2019 SOIL VAPOR EXTRACTION AND PACKER TESTING PILOT STUDY REPORT
MOHONK ROAD INDUSTRIAL PLANT SITE
NYSDEC SITE NO. 356023

WORK ASSIGNMENT NO. D007619-48

Prepared for:

New York State Department of Environmental Conservation
Albany, New York

Prepared by:

MACTEC Engineering and Geology, P.C.
Portland, Maine

MACTEC: 3611191234

MAY 2020

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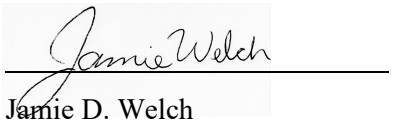

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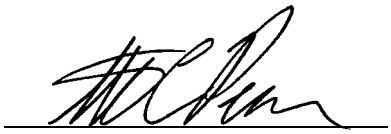

Stuart C Pearson, P.E.
Project Manager/Principal Professional

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

1,1,1-TCA	1,1,1 Trichloroethane
1,1-DCE	1,1-Dichloroethene
amsl	Above Mean Sea Level
bgs	Below ground surface
bTOC	Below top of casing
bTOR	Below top of riser
cfm	Cubic feet per minute
COC	Contaminants of Concern
DTW	Depth to Water
ft	feet/foot
ft mcl	feet above main sea level
gpm	gallon(s) per minute
GWETS	groundwater extraction and treatment system
IC	institutional control
in	inch/inches
LTM	long term monitoring
MACTEC	MACTEC Engineering and Geology, P.C.
µg/l	microgram(s) per liter
MRIP	Mohonk Road Industrial Plant (Site)
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PCV	Polyvinylchloride
PID	photoionization detector
ROD	Record of Decision
ROI	Radius of Influence
RSO	remedial systems optimization
Site	Mohonk Road Industrial Plant Site
SVE	Soil Vapor Extraction
TCE	Trichloroethene
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
in wc	water column inches

1.0 SITE OVERVIEW

1.1 PHYSICAL SETTING

The Mohonk Road Industrial Plant (Site) (MRIP) site is located in the Hamlet of High Falls, Ulster County, New York, approximately seven miles north-northwest of the Village of New Paltz (Figure 1.1). The Site includes the original MRIP property at 186 Mohonk Road and surrounding properties impacted by the contaminated groundwater plume emanating from the Site.

1.2 SITE HISTORY AND DESCRIPTION

Industrial activities have taken place at the Site since the early 1960s, which included metal finishing, wet spray painting and the manufacture of store display fixtures, card punch machines and computer frames. The property currently contains a 43,000-square foot (ft), single-story building. A septic field serving this building was used to dispose of hazardous substance-containing wastes, such as solvents and wastes from paint and metal-working operations. Drums, paint sludge and other wastes were also buried in several locations on the MRIP Property. Figure 1.2 provides a layout of the Site.

In April 1994, a residential well near the MRIP property was sampled and was found to contain elevated levels of volatile organic compound (VOCs), with the primary contaminant found to be 1,1,1-trichloroethane (1,1,1-TCA), above the New York State (NYS) Class GA drinking water standards. An Immediate Investigation Work Assignment was implemented in 1994, and groundwater sampling results demonstrated that on-site interface wells, bedrock wells, and the in-service production wells, had 1,1,1-TCA and other compounds above groundwater standards, with the highest levels found in the overburden/bedrock interface wells directly downgradient of the underground septic tank area (i.e. MW-4; 82,000 micrograms per liter (µg/L).

Groundwater sampling results collected during a Remedial Investigation/Feasibility Study indicated that downgradient private water supplies contained 1,1,1-TCA concentrations ranging from non-detectable to 880 µg/L and total VOC concentrations ranging from 1.6 µg/L to 1,077 µg/L (Lawler, Matusky & Skelly Engineers [LMS], 1998). In addition, groundwater in the bedrock aquifer beneath the MRIP property exhibited VOC concentrations above the United States Environmental Protection

Agency (USEPA) Maximum Contaminant Level, and NYS Class GA Water Standards. Based on the findings of the initial investigations, 1,1,1-TCA, 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane, trichloroethene (TCE), tetrachloroethene, ethylbenzene and xylenes were identified as contaminants of concern (COCs). Data collected from groundwater sampling indicated that a dissolved-phase VOC plume extended approximately one mile north-northeast from the MRIP property.

1.3 CLEANUP GOALS AND REMEDIAL PROGRESS

The Record of Decision (ROD) was signed in 2000 (USEPA, 2000). The description of the selected remedy in the ROD as it pertains to contaminant reduction includes:

- Extraction of contaminated groundwater in the near field and far field plume to restore the aquifer to its most beneficial use (as a potable water supply), treatment with an air stripper, and discharge of the treated water to the nearby Rondout Creek and Coxing Kill Creek. The "near field plume" refers to that portion of the groundwater plume with total VOC concentrations greater than 1,000 µg/L, while the "far field plume" refers to the component of the groundwater plume with 10 µg/L to 1,000 µg/L total VOCs.
- The construction of a public water supply system to provide potable water to the residences and businesses in the Towns of Marbletown and Rosendale with impacted or threatened private supply wells. The primary water supply for the system will be the Catskill Aqueduct. In addition, the individual granular activated carbon filtration systems currently in use will be operated until the new public water supply system is operational.
- Implementation of a groundwater monitoring program to evaluate the effectiveness of the remedy. Figure 1.3 presents locations of site monitoring wells, which are used to collect groundwater samples.
- Institutional controls (IC) may be employed to prevent future use of the bedrock aquifer in the impacted or threatened area.
- Excavation of VOC-contaminated soils with concentrations above the cleanup criteria to prevent or minimize cross-media impacts from COCs in soil to groundwater.
- Off-site disposal of the contaminated soil at appropriately permitted facilities.

In September 2008, USEPA issued a ROD Amendment in which the far field treatment system component of the groundwater remedy was replaced by monitored natural attenuation (USEPA, 2008). The Remedial Action Objectives were updated to reflect activities completed including:

- Restoring the aquifer to its most beneficial use, i.e., as a source of potable water, and restore it as a natural resource;
- Eliminating further off-MRIP property contaminated groundwater migration; and

- Eliminating inhalation and ingestion of, and dermal contact with, contaminated groundwater associated with the Site that does not meet state or exceed federal drinking water standards.

The following remedies were implemented to address the contamination originating from the MRIP Site.

- Installation of a near field groundwater extraction and treatment system (GWETS);
- Excavation of contaminated soils;
- Installation of a soil vapor extraction (SVE) system;
- Installation of a vapor intrusion mitigation system;
- Implementation of ICs;
- Operation, maintenance and monitoring of GWETS and SVE system.

1.4 PREVIOUS INVESTIGATIONS

In 2015, MACTEC Engineering and Consulting, P.C., now MACTEC Engineering and Geology, P.C., (MACTEC) conducted a data gap investigation to better understand the contaminant distribution at the Site and associated conceptual site model, address identified data gaps, and provide additional data that can be used to effectively modify the existing remedial measure, if needed. Field activities completed during the data gap investigation included bedrock borehole geophysics, packer groundwater sampling from extraction wells, direct push Membrane Interface Probe soil sampling, and test pitting, as well as completion of a site survey. The data gap investigation was completed as outlined in the 2015 Data Gap Investigation Field Activities Plan (MACTEC, 2015), and results are summarized below.

Direct push sampling results indicated that concentrations of 1,1,1-TCA and TCE were above the Protection of Groundwater SCO (0.68 and 0.47 mg/kg, respectively) at points throughout the former SVE area. Detections of 1,1,1-TCA ranged from 82-11,000 µg/kg, well above the SCO of 680 µg/kg, with TCE detections ranging from 85-1,900 µg/kg. The main COC at the site is 1,1,1-TCA and the following discussion will focus on that contaminant. Despite these elevated concentrations, the onsite SVE system that was removing this contamination had been decommissioned, leaving residual contamination in place.

Packer sampling results showed that groundwater contamination generally decreased with depth, with the greatest concentrations of VOCs (1,1,1-TCA at 94 to 170 µg/L) observed in fractures from

80 to 100 ft below ground surface (bgs). Despite the highest level of contamination at 80 to 100 ft bgs, extraction wells remove groundwater from depths up to 180 ft (lowest water bearing fracture, ERT-1), indicating that less contaminated water is being extracted. Not only could the lower fractures be diluting the more contaminated fractures, but the well could be acting as a preferential pathway for contamination to move deeper into the bedrock matrix.

Following this field investigation, MACTEC reviewed limited data available from a former SVE system and reviewed available operations and maintenance data from the GWETS that was undergoing upgrades at the time. Review of this data, along with data obtained during the data gap investigation report were presented in the Remedial System Optimization (RSO) Report (MACTEC, 2016), which provided recommendations for optimizing the GWETS pumping depths and possibly reinstating the former SVE system.

The following sections outline pilot study field activities completed in 2019 in support of the 2016 RSO Report.

2.0 SOIL VAPOR EXTRACTION PILOT STUDY

2.1 PURPOSE

An SVE system was operated on the Site from February 2008 until late 2011 or early 2012. The system, although reportedly effective at removing contaminant mass under low groundwater conditions, was terminated because of poor recovery during seasonally high water. There is minimal operational data available regarding the former system in terms of air flow, vacuum influence, vapor concentrations, or how the vapor was treated prior to discharge. MACTEC believed the SVE system may have been terminated prematurely; an SVE pilot test was developed to determine the usability of the existing bedrock SVE wells, how groundwater effects soil vapor capture, and whether dual-phase extraction is effective at lowering the groundwater table enough to enhance soil vapor capture during seasonally high water levels. Overburden SVE wells were not used for this test they were previously decommissioned.

2.2 FIELD EQUIPMENT

The following field equipment was used to perform the SVE tests:

- A trailer mounted SVE system containing:
    - an extraction well manifold, which combines flow from SVE wells, including valves to isolate each well individually;
    - a liquid-vapor knockout tank, to remove liquid from extracted soil vapor before it enters the blower and activated carbon vessel;
    - a blower equipped with an 8 HP motor capable of achieving 350 cubic feet per minute (cfm) at 85 inches of water column (in wc) of vacuum at 50 Hz motor speed;
    - a vapor phase carbon vessel capable of removing site COCs from extracted soil vapor prior to atmospheric discharge;
    - a discharge air stack to discharge treated vapor approximately 10’ above ground surface;
    - a dilution air valve to adjust well head vacuum without adjusting motor speed;
    - an analog vacuum gauge, to read instantaneous vacuum on the system and verify electronic meter readings;
    - and electronic controls and programs to control system components and collect system data.
- Atlas Copco model QAS 25 Portable AC generator for powering of SVE system and groundwater pumps (for lowering water table).

- Five transition couplings (one 6 inch (in) x4 in Fernco reducer and one 4 in x 2 in Fernco reducer with short length of 4-in polyvinylchloride (PVC) pipe between), used to reduce the 6-in SVE well to 2 in to facilitate connection of SVE piping.
- SVE piping network of 2 in SCH-40 PVC piping extending from the top of each SVE well transition coupling to the SVE trailer, with 10' of flexible hose used to connect the SCH 40 pipe to the SVE trailer. Each well was connected to its own port on the exterior of the trailer, with flow from all wells combining at the manifold within the trailer.
- Flow, vacuum, and temperature monitoring points for individual wells and combined system readings; vapor sampling ports for individual wells and combined system samples.
- TSI 9565 Veloci-Calc flow meter and handheld manometer, used to gauge vacuum from 0.001-14.99 in wc , airflow, and temperature through the system.
- Pitot tube used to determine measure airflow to check Veloci-calc readings.
- RAE Systems ppbRAE 3000, used for real time estimations of volatile compound concentrations in soil vapor.

2.3 SUMMARY OF FIELD ACTIVITIES

SVE pilot study field activities were performed onsite from 22 to 31 July 2019. Field activities were originally broken into five phases: mobilization of personnel and equipment, SVE tests under static (non-depressed) groundwater conditions, groundwater pumping tests to determine flowrate needed to depress seasonally high groundwater to levels low enough to enhance SVE, dual-phase pumping tests to compare SVE during high water table to SVE during hydraulically lowered water table conditions, and demobilization of personnel and equipment. As explained below, due to the seasonally low groundwater table and lack of recharge upon pumping, the groundwater pumping and dual-phase extraction tests were not performed. The following subsections outline each phase of testing.

2.3.1 Soil Vapor Extraction Under Static Groundwater Conditions

The existing, onsite SVE wells are constructed as open borehole, bedrock wells drilled to approximately 55 ftbgs and cased through bedrock to approximately 20 ft bgs. Records indicate that, during seasonally high water, groundwater elevations rise to approximately 20 to 25 ft bgs, narrowing the available vadose zone necessary for soil vapor capture. Results from this test were to be compared to that of the test outlined in Section 2.3.3 to determine if lowering the groundwater level within the SVE area increased soil vapor capture and mass removal.

Upon arrival to the Site, depth to water (DTW) in SVE-19, -20, -21, -22, and -23 were measured prior to testing (Table 2.1). The water in the wells were subsequently purged and permitted to recharge for 4 hours and the DTW was measured again (Table 2.1). These measurements were conducted to estimate the pumping rates needed to expose the maximum area of bedrock to optimize the SVE. The recharge in each of the wells is extremely slow (0.03-0.08 ft/hr) and a pumping test would not be practical.

Table 2.1

SVE Well Recovery Test

Well	DTW (initial)	DTW after purge	DTW 4 hours after purge	Recovery amount after 4 hours (ft)
SVE-19	40.05	56.24	56.06	0.18
SVE-20	40.11	54.84	54.72	0.12
SVE-21	47.54	54.68	54.4	0.28
SVE-22	39.41	53.83	53.52	0.31
SVE-23	28.55	54.22	54.02	0.2

Note: all measurements are feet below top of casing

Due to the depth of groundwater upon arrival to the Site and lack of recharge upon pumping, an SVE test under static groundwater conditions was not possible and not performed. To effectively test soil vapor extraction with a reduced vadose zone due to elevated groundwater levels, depth to groundwater would need to be 20-30 ft below top of casing (bTOC), which was not achievable during this test.

2.3.2 Groundwater Pumping Test

As outlined in Section 2.3.1 above, groundwater elevations upon arrival to the site were already lower than expected, and after pumping down the wells, wells did not recharge. After 24 hours, the maximum recharge was observed in well SVE-21 at 4.01 ft, which was not enough to justify performing a pumping test, as depth to water in all wells was still greater than 50 ft. Therefore, no sustained groundwater pumping test was performed.

2.3.3 SVE Under Lowered Groundwater Conditions

The following subsections outline SVE tests performed under lowered groundwater conditions.

2.3.3.1 SVE Ramp-up Testing

After pumping down the five SVE wells and evaluation of the groundwater recharge rate, the SVE test under lowered groundwater conditions began. First, an abbreviated ramp-up test was performed on all wells to gauge flow rates, vacuum, and photo ionization detector (PID) readings from each well individually, and to develop a better understanding of how the SVE system itself functions. Results of the initial ramp-up test can be found in Table 2.2 and were used to adjust the steps to be performed in the expanded ramp-up test. In general, airflow from each well decreased as vacuum on the wellhead increased, opposite of what was expected.

Following the initial ramp-up test, the expanded ramp-up test was completed. Results of the expanded test are shown in Table 2.3. In summary, all five SVE wells were connected to the SVE manifold and opened to system vacuum. Vacuum was incrementally increased by either closing the dilution valve, increasing the blower speed, or a combination of the two, at approximately 1-hour increments. Vacuum increments applied to all wellheads were as follows: 2.3, 8.7, 14.7, 19, 26, and 34 in wc. During each step, air flow, vacuum, temperature, and PID readings were taken from each wellhead to record how increased vacuum affected extracted airflow. Results indicate that airflow increased with additional vacuum, but flowrates were lower than expected, with the highest individual well flowrate of 3.35 cfm observed at SVE-20 during the maximum vacuum setpoint of approximately 34 in wc. Typical extraction rates for an effective SVE system can range from 10 to 100 cfm per well.

Analytical samples of extracted soil vapor were collected twice during the SVE ramp-up test. The first sample was collected five minutes into vapor extraction and under low vacuum, intended to represent short term, accumulated vapor concentration. The second sample was collected immediately following completion of the test, intended to represent longer-term vapor concentrations. Both samples were collected with Summa canisters equipped with five-minute regulators and were collected directly from the wellhead transition coupling. Results of these samples are summarized in Table 2.4, and full laboratory data packages are presented in Appendix A. As

observed in results from samples 356023-SV-T1A (initial) and 356023-SV-T1B (long-term), which were collected from the extraction well manifold and represent the combined system, concentrations of 1,1,1-TCA, 1,1-DCE, and TCE increased with time and vacuum. While vapor phase contaminants could accumulate in the bottom of the wells, results indicate that higher concentrations of Site contaminants still exist in the bedrock matrix, as all vapor within the wells was removed early in the test.

2.3.3.2 SVE Radius of Influence Testing

Following completion of the ramp-up test with all extraction wells, a radius of influence test was performed. The purpose of the radius of influence test was to determine how the SVE wells interact with each other and how wide spread the radius of influence is from each extraction point. This interaction is assessed by applying vacuum to one well with the other four wells sealed at the surface, and by gauging vacuum from within the sealed wellheads. Positive vacuum readings indicate that the well is influenced by vapor extraction while no vacuum readings indicate that the well is not hydraulically connected to the active extraction well.

Prior to performing the radius of influence test, Aztech engineers were dispatched to the site to assess the SVE system performance, as results from the ramp-up test were not expected and MACTEC personnel wanted to determine that the lack of airflow and high vacuum was not due to SVE system malfunction. While no issues were found with the system, Aztech engineers notified MACTEC personnel that the upper amperage of the blower could be safely increased to 24-amps, higher than the 21-amp max that was previously used at request of Aztech technicians. This allowed MACTEC personnel to test higher vacuum levels during radius of influence and air inflow testing.

Results of the SVE radius of influence test are shown in Table 2.5 and explained in more detail below; results are explained in order from most cross-well influence to least.

- SVE-22 showed good connection with SVE-19 (>15 in wc at wellhead), SVE-21 (>15 in wc at wellhead) and SVE-23 (6.53 in wc at wellhead) at maximum tested system vacuum (70.5 in wc). No connection with SVE-20 was observed.
- SVE-19 showed good connection with SVE-22 (>15in wc @ wellhead) and SVE-21 (7.61 in wc @ wellhead) and some connection with SVE-23 (0.5 in wc @ wellhead) at maximum tested system vacuum (72 in wc). No connection with SVE-20 was observed.

- SVE-21 showed some connection with SVE-22 (4.35 in wc @ wellhead) and SVE-19 (2.05 in wc @ wellhead) and little connection to SVE-23 (0.57 in wc @ wellhead) at maximum tested system vacuum (72 in wc). No connection with SVE-20 was observed.
- SVE-23 showed little connection with SVE-22 (1.12 in wc @ wellhead) at maximum tested system vacuum (71 in wc). No vacuum influence was observed at wells SVE-19, -20, or -21.
- SVE-20 showed little to no connection with SVE-22 (0.027 in wc @ wellhead) at maximum tested system vacuum. No other vacuum influence was observed. SVE-20 proved to be the SVE well with the least connection to other wells.

Interactions observed between the wells are presented in the graphic below. The graphic presents active extraction wells (the well through which vapor is extracted from) on the vertical axis, with well head influence on the horizontal axis. Green, red, and yellow shading are used to indicate magnitude of vacuum influence, with green cells indicating a high level of influence (good connection between wells), red indicating low influence (little to no interaction between wells) and yellow indicating moderate influence. For example, the first row indicates that, when extracting vapor from SVE-19, good connection was made with SVE-22, moderate connection was made with SVE-21, and little to no connection was made with SVE-20 and SVE-23.

		Influenced Well				
		SVE-19	SVE-20	SVE-21	SVE-22	SVE-23
Active Extraction Well	SVE-19					
	SVE-20					
	SVE-21					
	SVE-22					
	SVE-23					

Notes:

Color schematic as follows:

Good influence, vacuum readings 10-15+ in wc

Moderate influence, vacuum readings 1-9.99 in wc

Little influence, vacuum readings 0-0.99 in wc

Only maximum recorded vacuum readings presented.

Following radius of influence testing, analytical samples were collected from wells SVE-21, -22, and -23, as these well exhibited the highest PID readings during the initial ramp up test. Vapor samples were collected immediately following the test, while the blower was still connected to the respective wellhead. All samples were collected with Summa canisters equipped with five-minute regulators and were collected directly from the wellhead. Results of these samples are summarized in Table 2.4 and full laboratory data packages are presented in Appendix A. Samples 356023-SV-21, 356023-SV-22, and 356023-23 were collected from each respective well following the radius of influence test and represent individual well long-term vapor concentrations. Results for all three wells indicated that site COCs still persist within the bedrock matrix, with concentrations highest in well SVE-21, the southernmost bedrock SVE well.

Based on radius of influence testing, wells SVE-19, -21, and -22 are hydraulically connected, but wells SVE-20 and -23 showed little to moderate hydraulic connection with other SVE wells. Despite the connection between SVE-19, -21, and -22, maximum airflow observed was 4.14 cfm, recorded when applying 70 in wc vacuum to SVE-22.

2.3.3.3 SVE Inflow Testing

An additional SVE test under depressed groundwater conditions was performed to attempt to increase air movement through the bedrock. Although SVE airflow was limited during the radius of influence tests, tests indicated that air is moving between wells SVE-19, -21, and -22 through the bedrock. Due to this hydraulic connection, enhancement to the flow rate was investigated by applying vacuum to one well head (SVE-19, -21, or -22) with the other wells open to the atmosphere to pull air into the ground, through the bedrock, and out through the extraction well, increasing system airflow contaminated volatilize contaminants. The test began with vacuum was applied to one well with the other four wells sealed at the surface (same as the ROI test). System vacuum was gauged. Well caps from non-extraction wells were then removed. After allowing the system to re-equilibrate, airflow into the ground and system airflow were gauged from all wells. Theoretically, if airflow is recorded moving into the wells, the system airflow should increase respectively. Different configurations were tested with system and well airflow and vacuum recorded during all steps. Tests were conducted with extraction individually on wells SVE-19, -21, and -22, as they showed the most connection during the radius of influence testing. Results for the inflow test are presented in Table 2.6 and explained below.

- SVE-19 was tested first, with 73 in wc vacuum applied to the well head. With all other wells sealed, SVE-21 and SVE-22 once again showed the most hydraulic connection, with vacuum readings of 7.35 in wc and >15 in wc, respectively. Upon testing individual wells, SVE-22 was the only well to show recordable airflow into the well at 2.37 cfm; extracted airflow did not increase.
- SVE-21 was tested next, with 73 in wc vacuum applied to the wellhead. With all other wells sealed, SVE-19 and SVE-22 showed the most hydraulic connection, with vacuum readings of 2.6 in wc and 5.8 in wc, respectively. Upon testing individual wells, SVE-19 and -22 showed maximum airflows into the wells of 0.65 cfm and 1.22 cfm. Extracted system airflow increased to 2.17 cfm (+0.64 cfm) and 2.30 cfm (+0.77 cfm), respectively.
- SVE-22 was the final test, with 68 in wc vacuum applied to the wellhead. With all other wells sealed, SVE-19 and SVE-21 showed the most hydraulic connection, with vacuum readings of >15 in wc and 10.41 in wc, respectively. Upon testing individual wells, SVE-19 and -21 showed maximum airflows into the wells of 1.46 cfm and 1.14 cfm, respectively. Extracted airflow did not increase when wells were opened.

2.4 RESULTS

Over the course of the pilot testing period, three tests were conducted to assess SVE flowrates, contaminant concentrations, and interconnection between SVE wells. The first test assessed the SVE system vacuum capacity as a whole. Even under high vacuum, very little air could be extracted from the bedrock matrix, which would limit full-scale SVE efficiency (high vacuum required for little airflow and contaminant removal).

The second test performed assessed the interconnection between the SVE wells. Results indicated that wells SVE-19, -21, and -22 were hydraulically inter-connected, SVE-23 was moderately connected to SVE-22, and SVE-20 was not hydraulically connected to any other SVE wells. Extracted flow rates remained low even when high vacuum was applied to single wells.

The final test evaluated if the hydraulic connection between the SVE wells could be used to increase soil vapor flow across the bedrock matrix by allowing air to flow into four wells while extracting from one well. Once again, results showed that wells SVE-19, -21, and -22 were connected as influence was observed, but there was not enough influence to produce a consistent increase in the system extraction rate. Therefore, there is not enough available air flow from the existing wells to make SVE possible.

2.5 CONCLUSIONS

The following conclusion were made based on results obtained during the soil vapor extraction pilot test:

- Although soil vapor samples indicate elevated levels of Site COCs remain in subsurface vapors, remediation by SVE will not be efficient utilizing the existing bedrock SVE wells, as sufficient airflow could not be extracted from the bedrock matrix. In order to increase soil vapor capture, additional SVE wells or a fracture opening enhancement would be required, but is not recommended due to expense or potential negative effects on the groundwater concentrations.

- While results from the radius of influence test were repeatable during inflow testing, and vacuum influence was observed between wells SVE-19, -21, and -22, the air inflow test was unsuccessful as an increase in extracted system airflow was not observed when non-extraction well caps were removed. Therefore, it is unlikely that SVE will be successful in this area, even if non-extraction wells introduce ambient air at the depth of contaminated fractures.

- Although soil vapor capture with existing SVE wells would be inefficient and have limited effectiveness, vapor samples collected during pilot study activities indicate that elevated concentrations of site COCs, up to 190,000 µg/m^3 1,1,1-TCA, 23,000 µg/m^3 1,1-DCE, and 5,300 µg/m^3 TCE, still exist in the area around the bedrock SVE wells, indicating that contamination is still present.

3.0 EXTRACTION WELL PACKER SAMPLING PILOT STUDY

Packered extraction well pumping tests took place between 26 August and 13 September 2019. Work was completed in accordance with the Field Activities Plan dated 21 August 2019 (MACTEC, 2019a).

One week prior to start of the pumping test, the GWETS was shut off to allow groundwater to stabilize to static levels. The stabilization of groundwater elevations both before pumping tests began and in between pumping tests was measured with pressure transducers. Graphs of these data are included in Appendix D. Each well (ERT-1, MW-5R and MW-7R) was tested individually for 72 hours, with a minimum of 72 hours between pumping tests to allow for re-stabilization of groundwater. Prior to starting the test on each well, a packer was lowered to a pre-determined elevation, intended to seal the well off just below the target fracture. The pump was then placed just above the packer, and the associated transducer was calibrated to run the pump on level controlled setpoints (pump turns off when water level hits a low level setpoint and on when water level hits a high level setpoint).

3.1 BACKGROUND AND PURPOSE

The ROD states that the remedy for the site includes: "Extraction of contaminated groundwater in the nearfield and far field plume to restore the aquifer to its most beneficial use (as a potable water supply) ….". Following the ROD Amendment in 2008 which changed the selected remedy in the far field from groundwater extraction to monitored natural attenuation, the remedial action objectives were updated and included the objective: "eliminate further off-MRIP property contaminated groundwater migration".

The Site/source area is located at the top of a groundwater recharge area. As a result, vertical hydraulic gradients are naturally downward, and recharge to the groundwater is only by precipitation; no groundwater is flowing onto the Site recharging the aquifer.

Packer sampling conducted as part of the RSO data gap investigation in the fall of 2015 in ERT-1, MW-5R and MW-7R showed that 1,1,1-TCA concentrations generally decrease with depth, with the

greatest concentrations found at fracture depths of 75 ft in ERT-1 (170 µg/l), 93 ft in MW-5R (94 µg/l) and 98 ft in MW-7R (130 µg/l) (MACTEC, 2016). These data are summarized on Table 3-5 in the RSO report which is provided in Appendix B of this report. The current operating configuration is that the submersible pumps are positioned at depths of 183.5 ft, 111 ft and 159.5 ft in ERT-1, MW-5R and MW-7R, respectively. The testing also revealed that the deepest water-bearing fractures identified in wells MW-7R and ERT-1 generally had the highest specific capacity of identified fractures within each borehole. The exception to this condition is that the shallowest fracture in MW-5R had the highest specific capacity.

The packer tests conducted in the fall of 2019 were to determine whether pumping from a shallower fracture zone would result in an increase in influent concentrations while not exacerbating the natural downward vertical hydraulic gradient and thus reduce the vertical spread of contaminants while still maintaining hydraulic control of the source area groundwater.

3.2 FIELD EQUIPMENT

The packered extraction well pilot study field activities were performed onsite between 26 August and 13 September 2019. Before the start of the testing, a synoptic round of water level measurements was conducted in select wells (Appendix C). The following field equipment was onsite for the duration of the field activities:

- A Lansas 999-04 6" well packer was used for all three wells during this series of tests.
- Troll data loggers that were placed in nine observation wells (ERT-2, ERT-3, ERT-4, MW-4, MW-5B, MW-6B, MW-7B, MW-11B and MW-11C) for recording water levels throughout the testing period.

3.3 SUMMARY OF FIELD ACTIVITIES

ERT-1 testing began 26 August and ended 29 August with the following conditions:

- Well Elevation: 303.94 ft above mean sea level (amsl)
- Well depth: 195 ft bTOC
- Current pump depth: 183.5 ft bTOC
- Packer top was set at a depth of 124 ft bTOC, targeting fractures at depths 75 ft and 115 ft bTOC
- Pump reset at 120 ft (63.5 ft higher than current configuration)

- Baseline water levels measured in select wells prior to start of testing
- Flow rates were varied between 9.6 and 23.2 gallons per minute (gpm)
- Eleven groundwater samples were collected over testing period of 3 days
- Data loggers recorded water levels throughout the test period (Appendix E)
- Manual water levels were recorded throughout the test period (Appendix C).

MW-5R testing began 3 September and ended 6 September with the following conditions:

- Well Elevation: 313.63 ft amsl
- Well depth: 125 ft bTOC
- Current pump depth: 111 ft bTOC
- Packer top was set at a depth of 103 ft bTOC, targeting the fracture at 93 ft bTOC
- Pump reset at 96 ft (15 ft higher than current configuration)
- Flow rates were varied between 11.7 and 22.8 gpm
- Ten groundwater samples were collected over testing period of 3 days
- Data logger recorded water levels throughout the test period (Appendix E)
- Manual water levels were recorded throughout the test period (Appendix C).

MW-7R testing began 9 September and ended 12 September with the following conditions:

- Well Elevation: 314.3 ft amsl
- Well depth: 180 ft bTOC
- Current pump depth: 159.5 ft bTOC
- Packer top set at depth of 108.5 ft bTOC, targeting fractures at depths 81ft and 98 ft bTOC
- Pump reset at 101.5 ft (58 ft higher than current configuration)
- Flow rates were varied between 10.7 and 11.4 gpm
- Eleven groundwater samples were collected over testing period of 3 days
- Data logger recorded water levels throughout the test period (Appendix E)
- Manual water levels were recorded throughout the test period (Appendix C).

3.4 RESULTS

The results of the packered extraction well pilot test for 1,1,1-TCA concentrations and hydraulic effects are presented in the following subsections.

3.4.1 Effect on 1,1,1-TCA Concentrations

A summary of the sampling is provided in Table 3.1. Complete laboratory data packages are provided in Appendix A. For comparison purposes, monthly influent concentrations of 1,1,1-TCA for the three extraction wells measured throughout 2018 were averaged and are also shown on Table 3.1. The average 1,1,1-TCA concentrations in the three extraction wells at the end of the testing were higher than the average concentrations in the respective wells measured in 2018. Flow rates were varied throughout the testing period to evaluate if flow rate effected influent concentration. There did not appear to be a noticeable change in concentration with flow rate. The greatest difference between the 2018 average concentrations and packer sampling results were for wells MW-5R and MW-7R. The packer-sampled average results for MW-5R were more than seven times greater than the average influent concentration for that well in 2018. Similarly, packer-sampled average results for MW-7R were more than five times that of the average 2018 results. Packer sampling results for ERT-1 were nearly 50% more than that of the average influent concentration for 2018.

The 2018 results from the extraction wells (Table 3.1) are the result of pumping from the entire open borehole. The increase in concentration of 1,1,1-TCA resulting by packer sampling shallow isolated fractures suggests: 1) that the greatest mass of contamination is bound up in shallow fractures; and 2) that the deeper fractures contribute a sufficient volume of less-contaminated water resulting in a five to seven times dilution in 1,1,1-TCA concentration.

Following completion of the packer testing, the packers were removed but the pumps were placed back in their respective wells at the same elevation used for packer sampling (i.e., higher in the well). The pumps were left operating in this configuration for approximately two weeks. Before pulling the pumps and re-installing them at their original depths, samples from each of the wells were collected. The results, which are provided in Appendix B and shown on Table 3.1**,** indicate that 1,1,1-TCA concentrations were, with the exception of well ERT-1, higher than the average influent concentrations from 2018, but lower than samples collected from isolated fractures higher in the wells during the packer testing and sampling. These results further emphasize how dilution from less-contaminated fractures affect influent concentrations when pumping from the entire borehole.

Packer sampling in MW-7R yielded the highest concentration of 1,1,1-TCA in the wells tested (350 µg/l). Based on the water elevation contour map presented in the 2019 Long Term Monitoring (LTM)

report and constructed using July 2019 water level measurements collected during a period when the extraction wells were off, flow lines from MW-7R in the upgradient direction originate on the southwest side of the facility building (MACTEC, 2019b). It is possible that residual contamination is present in soil and shallow bedrock at the southwest end of the building.

The attitude of the targeted fractures (for packer sampling) is similar for MW-7R and ERT-1 with a northwest dip between 3 to 15 degrees (Appendix B). The fracture (one) from the target zone in MW-5R is dipping to the southwest at 13 degrees. An alternative explanation for observed concentrations is that if dense non-aqueous phase liquid entered the bedrock in the vicinity of MW-5R (i.e., the former septic system and presumed contaminant release area), the contaminants may have gravity drained southward along the dip of the fracture. Upon intercepting the bedding plane fractures that dip to the northwest (orientation of fractures tested in both ERT-1 and MW-7R), movement of contaminants to the northwest would occur due to the natural hydraulic gradient in that direction and the compounding effects of pumping.

3.4.2 Hydraulic Effect

Similar to the RSO testing results shown in Appendix B, the specific capacity (i.e., gallons per minute/foot of drawdown) exhibited during the recent packer testing showed that MW-7R had the lowest, followed by ERT-1 and then MW-5R (Table 3.1). In ERT-1 and MW-5R, specific capacity generally declined throughout testing suggesting that fracture dewatering was occurring.

MW-5R likely exhibits the highest specific capacity because of the presence of fractures that dip to the southwest and northwest which, if continuous, will result in their intersection (Table 3.5 from the RSO Report included in Appendix B). The two water-bearing fractures identified in the boring have opposite dip directions and likely intersect each other in proximity to the borehole. Boreholes in which water-bearing intersecting fractures are present tend to produce more water because the fractures tend to cross-cut other water-bearing fractures.

Wells ERT-1 and ERT-2 are close to the same depth (195 vs 200 ft, respectively) and under non-pumping conditions, they are both located approximately on the same hydraulic equipotential line (Figure 3.1). Because of this, their static (pre-test) water levels are very similar with only a difference of 0.39 ft between that water levels (Table 3.1).

Table 3.2

Vertical Flow Evaluation

Monitoring Period	ERT-1 Water Elevation	ERT-1 Well Depth	ERT-2 Water Elevation	ERT-2 Well Depth
Pre-Test	268.34	195	268.73	200
Test End	250.72	124*	258.54	200

*Note: Effective depth of well with packer installed

Table 3.2 illustrates a head difference of approximately 8 ft between the wells at the end of the pumping test in ERT-1 resulting in localized upward vertical flow from the deeper bedrock.

During the test, wells ERT-1 and MW-5R never reached their low level setpoint despite elevated pumping rates, and MW-7R operated nearly the entire time on level setpoints. While normal system operation extracts approximately 9 gpm from each well, ERT-1 was pumped at rates ranging from 10 to 26 gpm over the three days of testing and MW-5R was pumped at rates ranging from 11 to 23 gpm (Appendix E). This data indicates that MW-5R and ERT-1 in the modified configuration can pump significantly more than 9 gpm each, at least until aquifer storage is depleted.

In contrast, because of cycling, MW-7R was off for 2,200 minutes of the 4,300-minute test. When MW-7R was pumping, it pumped at a rate of 11 to 12 gpm, however the well continued to drawdown at that rate until the low level set point was reached at which point the pumping stopped to allow for recharge to occur. In general, MW-7R pumped for 50 minutes at this rate then shut off for 40 to 70 minutes until the well recharged enough to activate the high-level set point. This indicates that the yield of MW-7R is much less than 11 gpm.

Graphs of the water levels versus flow rate in the three extractions wells over the past year (December 2018 to December 2019) indicate static water levels vary throughout the year (Appendix D). On all three graphs there are two distinct groundwater recovery periods when the extraction wells were not pumping for a period of time (e.g., beginning of April and mid-July). In both instances the recovery curve appears almost complete. However, the groundwater elevation differences between the two curves within each of the wells ranges between 13 and 18 ft. The recovery period in April likely

represents a "wet static", and the recovery period in July represents a "dry static". This varying static water levels at the Site is a function of how much water is in storage within the aquifer at the Site at any given time. The seasonal differences in static water levels indicate the extraction wells are likely pumping at a rate, at least periodically, that is greater than the recharge rate of the aquifer (i.e., aquifer dewatering is occurring).

Water level response in monitoring wells was recorded using data loggers in nine wells and the recovery wells. Graphs of the depth to water for the monitoring wells and recovery wells over the testing period are provided in Appendix E and summarized below on Table 3.3. No measurable response to pumping was indicated in overburden well MW-4 and bedrock well MW-5B. MW-4 showed a general draining of the overburden aquifer throughout the testing period. In contrast, bedrock monitoring wells ERT-3 and ERT-2 responded similarly to pumping of the recovery wells. Monitoring wells MW-11B and MW-11C also responded similarly in response to pumping. This suggests that the predominantly low-angle fractures are laterally extensive. Recovery well MW-7R appears to have the least effect with respect to producing drawdown across the site and ERT-4 showed consistently the least amount of drawdown in the monitoring wells regardless of which recovery well was pumping.

Table 3.3
Approximate Drawdown and Distance From Test Well (ft)

			ERT-1		MW-5R		MW-7R	
	Well Type	Depth	drawdown	distance	drawdown	distance	drawdown	distance
ERT-3	BR	220	12.5	218	7	513	3	207
MW-5B	BR	36.2	NE	331	NE	112	NE	651
MW-4	OB	21.5	NE	327	NE	203	NE	591
ERT-2	BR	200	13.5	197	7	532	3	227
ERT-4	BR	50	0.7	359	0.9	171	0.6	642
MW-6B	BR	100	4.5	552	6	267	1	827
MW-7B	BR	100	10	406	5	708	>25	11
MW-11B	BR	181	5.5	880	5	652	1	1296
MW-11C	BR	220	5.5	727	5.5	459	1	1139
ERT-1	BR	195	**13.9**	0	7.69	350	8.57	416
MW-5R	BR	125	7.73	350	**10.62**	0	6.23	719
MW-7R	BR	180	1.25	416	0.91	716	**8.65**	0

NE: no effect from pumping

bold: pumping water level at end of test

It should be noted that the drawdown in ERT-2 and ERT-3 was approximately the same as in ERT-1 when it was pumping even though the wells are nearly 200 ft apart. This indicates that there is a fracture directly connecting both wells. This type of hydraulic response is inconsistent with porous media groundwater flow and consistent with non-porous media fracture flow. In other words, at this scale, porous media hydraulics are not applicable.

Reviewing twelve groundwater contour maps starting from 1997 up through 2019 showed periods when the extraction system caused groundwater levels to be depressed enough to be mapped as a contour depression (indicating hydraulic control) and periods when no depression was indicated (Appendix F**)**. The contour maps that didn't demonstrate capture appear to be associated with plant shut down, although this couldn't be confirmed in all cases. Six of the maps (1997, 1998, 1999, 2001, 2015 and 2019) showed no capture and the water elevation in the area of the three extraction wells was generally 245 to 290 feet above mean sea level (ft msl). In contrast, groundwater elevation when capture was obvious ranged from 220 to 240 ft msl with four of the six maps showing an elevation of approximately 220 ft msl in the area of the three extraction wells. The well pumps during

the pilot test were placed at elevations 183 ft, 217 ft and 217 ft msl in ERT-1, MW-5R and MW-7R, respectively. With the pumps positioned at these depths, the ability to drawdown and maintain a target groundwater elevation of 220 ft should be achievable.

3.5 CONCLUSIONS

The following conclusion were reached from the packered extraction well pumping tests:

- Sampling results indicate that pumping from a higher elevation and cutting off flow from lower, presumably less contaminated fractures, increased the concentration of site contaminates of concern in treatment plant influent.
- The lack of marked reduction in concentration over the duration of testing suggests that matrix diffusion may not play a significant role in the detected concentrations.
- ERT-1 and MW-5R were able to maintain 15 gpm each in the reduced well depth configuration; however, the flow may be less if modified wells are all pumping.
- The pump in MW-7R cycled on and off throughout the entire test due to the low specific capacity of the targeted shallow fractures. The fracture identified toward the bottom of the well in MW-7R has the highest specific capacity of the four fractures identified in the well. The lower fracture likely accounts for the majority of water when the entire borehole is pumped resulting in dilution of the more contaminated shallow fractures.
- Water levels vary (13 to 18 ft) due to depletion (or recharge) of aquifer storage. This may affect the degree of hydraulic capture created by the extraction wells.
- The variation in water levels due to seasonal fluctuations in recharge likely results in natural dewatering of shallow contaminated fractures. The extraction system has no effect on unsaturated fractures.
- Because the Site is located on a groundwater recharge area, vertical hydraulic gradients are downward. Pumping from the shallow fractures appears to cause upward flow from deeper in the aquifer as demonstrated by water level elevations in wells ERT-1 and ERT-2. Based on these observations, pumping shallow in the aquifer will reduce the downward vertical spreading of contaminants.
- Based on historical maps, groundwater elevation associated with hydraulic capture in vicinity of the extraction wells is approximately 220 ft msl. With pumps positioned at a shallower level, a groundwater elevation of 220 msl should be able to be achieved along with a reduction or reversing of the natural downward vertical gradients present at the site.

4.0 RECOMMENDATIONS

4.1 SOIL VAPOR EXTRACTION SYSTEM RECOMMENDATIONS

Given the inability to extract sufficient vapor, reinstating the former bedrock SVE system with existing SVE wells is not recommended. However, vapor samples collected during pilot study have concentrations of up to 190,000 µg/m^3 1,1,1-TCA, 23,000 µg/m^3 1,1-DCE, and 5,300 µg/m^3 TCE, indicating that contamination is likely still present and potentially contributing to groundwater contamination. While soil vapor capture from bedrock wells is ineffective, concentrations of site COCs in bedrock groundwater in this area is unknown. Although recharge is extremely slow, groundwater capture from the SVE wells could be effective at removing contaminant mass depending on the concentrations observed. MACTEC recommends further investigating the potential of groundwater capture from the existing SVE wells by performing the following activities on a monthly basis:

- Purge SVE wells dry.
    - Collect depth to water measurements before and after purging
    - Determine volume of water purged
    - Collect grab sample of purge water for analysis of VOCs.
    - Collect depth to water measurements four-hours after purging of well (to estimate seasonal change in recharge rate).

Purge water may be transported to the GWETS for treatment.

Data obtained from routine purging and sampling of the SVE wells will determine:

- how seasonality affects groundwater levels and groundwater recharge in the SVE area;
- how seasonality affects contaminant concentration in bedrock SVE well groundwater;
- whether contaminant mass removal by purging wells and treating purge water is logistically effective.
    - If not, partial or total grouting of wells will be required to prevent potential vertical migration of contaminants into deeper bedrock.

In their current state and with current site knowledge, the bedrock SVE wells are not effective at soil vapor or groundwater extraction, but additional information is required before the wells should be decommissioned by grouting, as vapor analytical results indicate that high levels of contaminants

still exist in the SVE well area. Additional recommendations will be provided following receipt of multiple months of groundwater measurements and analytical results.

4.2 EXTRACTION WELL NETWORK MODIFICATIONS

While the pilot study was successful at proving that higher elevation fractures yielded higher concentrations of site contaminants in extracted groundwater and that lower fractures could be contributing to dilution of the extracted groundwater, the test was not conducted over a long enough period of time to determine whether hydraulic control of the plume could be maintained year-round, especially during times of seasonally low water. Because of this, MACTEC recommends the following:

- Replace pumps with appropriately sized pumps that are better suited to pumping at variable rates between 5 and 15 gpm at both the upper (pilot study) setting and the original, lower setting.
    - This may require upgraded VFDs for pump controls, as the current pumps are oversized, as well as programming changes for pump operation.
- Prior to making permanent changes, modify each extraction well by installing inflatable packers in each well to hydraulically isolate the lower portion of the wells and conduct a long-term pilot test to verify that influent concentrations increase and hydraulic capture is maintained.
- Program pumps to collectively operate at maximum flow capacity of the treatment plant until a low-set point is reached, then the pumps would transition over to level operation.

4.3 GROUNDWATER EXTRACTION AND TREATMENT SYSTEM MODIFICATIONS

As identified in section 4.2 above, MACTEC recommends installing appropriately sized extraction well pumps to replace the existing, oversized pumps. Current pumps are able to maintain a *minimum* flowrate of 9 gpm, while proposed changes may drop the required flowrates below 9 gpm. While no GWETS upgrades are expected, if new pumps are installed, new VFDs may be required to operate the pumps, as the existing VFDs may be oversized. The air stripper's capacity to remove the elevated concentrations of site contaminants will also need to be reassessed, and a larger capacity air stripper may be required. If a larger air stripper is required, a larger blower may also be required.

During long term monitoring sampling in July 2019, it was discovered that elevated concentrations of 1,4 dioxane are present in Site groundwater at levels up to 6.4 µg/l (MW-4). New York state does not currently have any discharge criteria in place for 1,4 dioxane, but the proposed MCL of 1 µg/l was met or exceeded in 14 of 17 samples collected onsite during LTM activities. Although not currently required and not identified in the pilot study, the GWETS may require upgrades to removed 1,4 dioxane.

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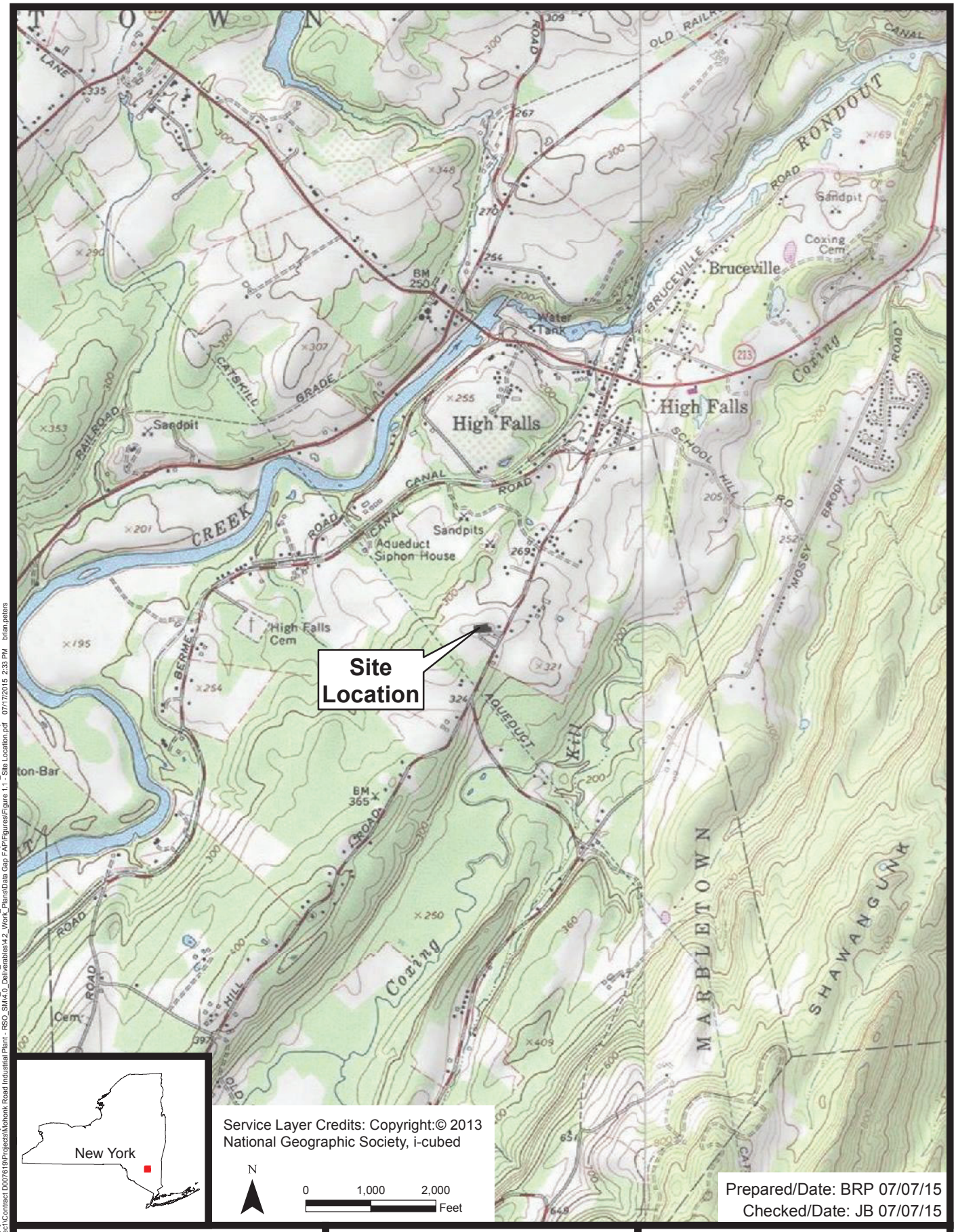
FIGURES



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Site Location Map

Project 3611191234 Figure 1.1

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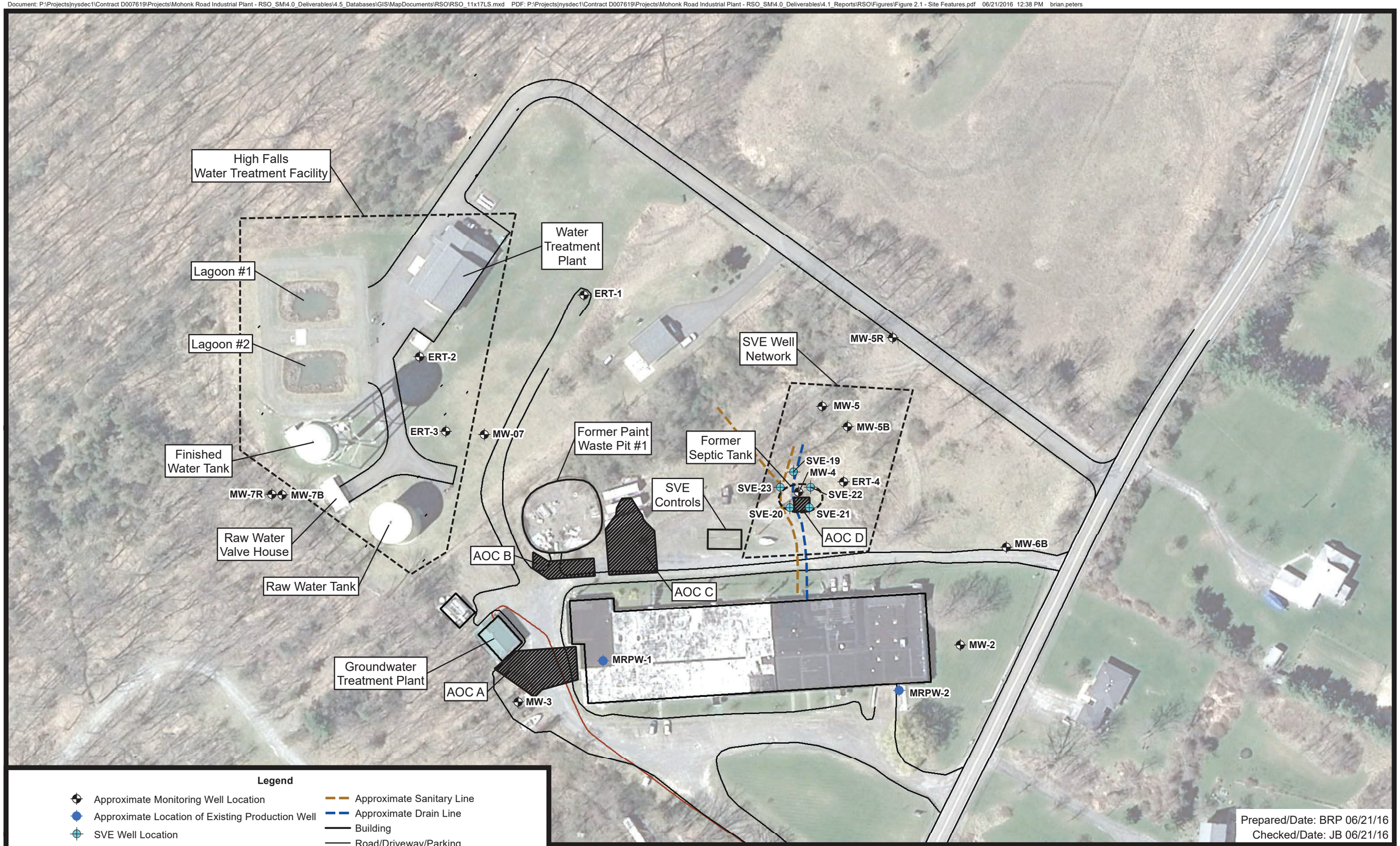

Legend

- Approximate Monitoring Well Location
- Approximate Location of Existing Production Well
- SVE Well Location
- Approximate Sanitary Line
- Approximate Drain Line
- Building
- Road/Driveway/Parking
- Treatment System Discharge

N

0 50 100 Feet

Ulster County color digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: http://www.nysgis.state.ny.us

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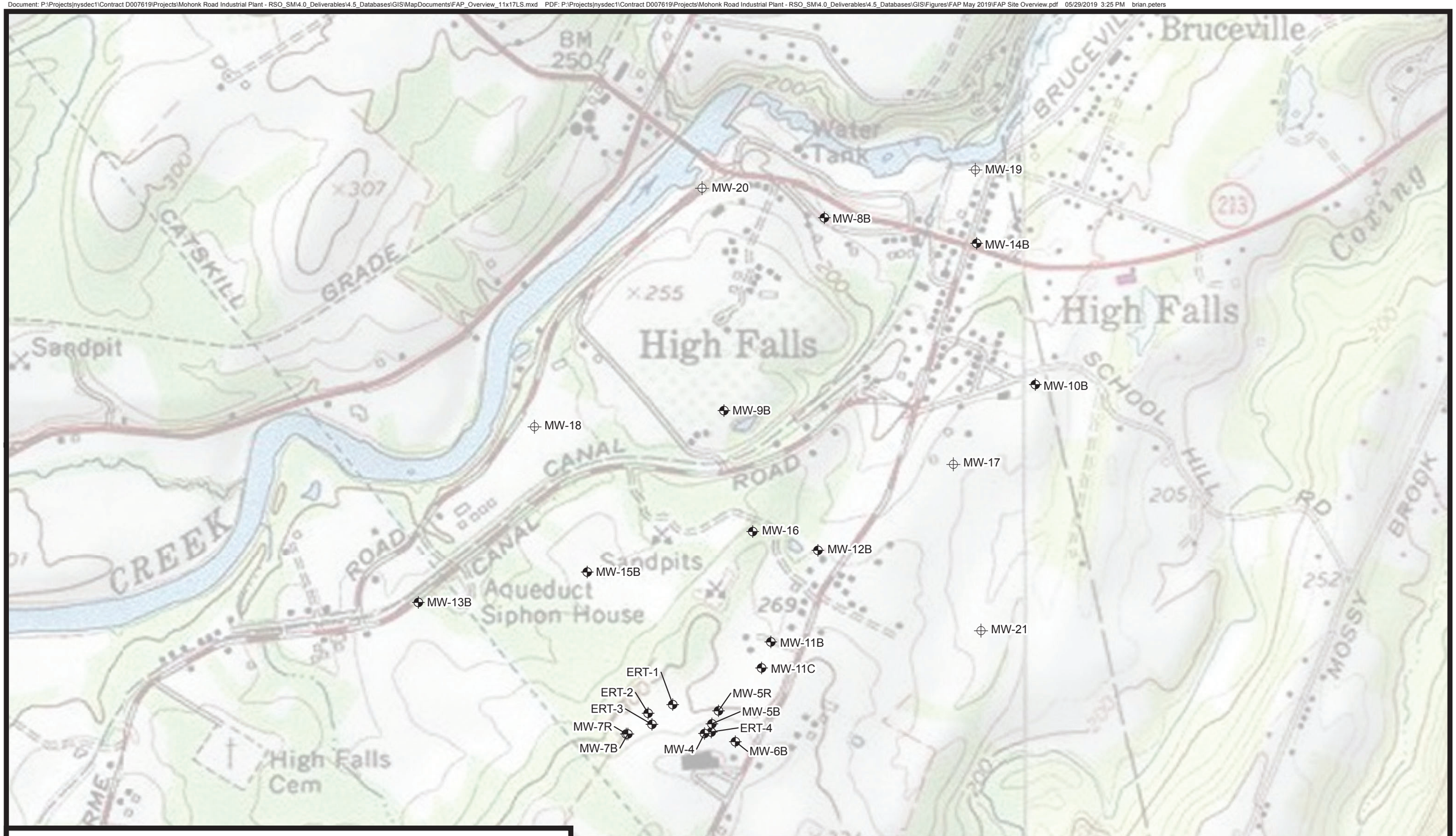
Site Layout

Project 3611191234 Figure 1.2



Legend

- Standard Monitoring Well
- FLUTe Monitoring Well

N

0 350 700 Feet

Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

Prepared/Date: BRP 05/29/19
Checked/Date: TG 05/29/19

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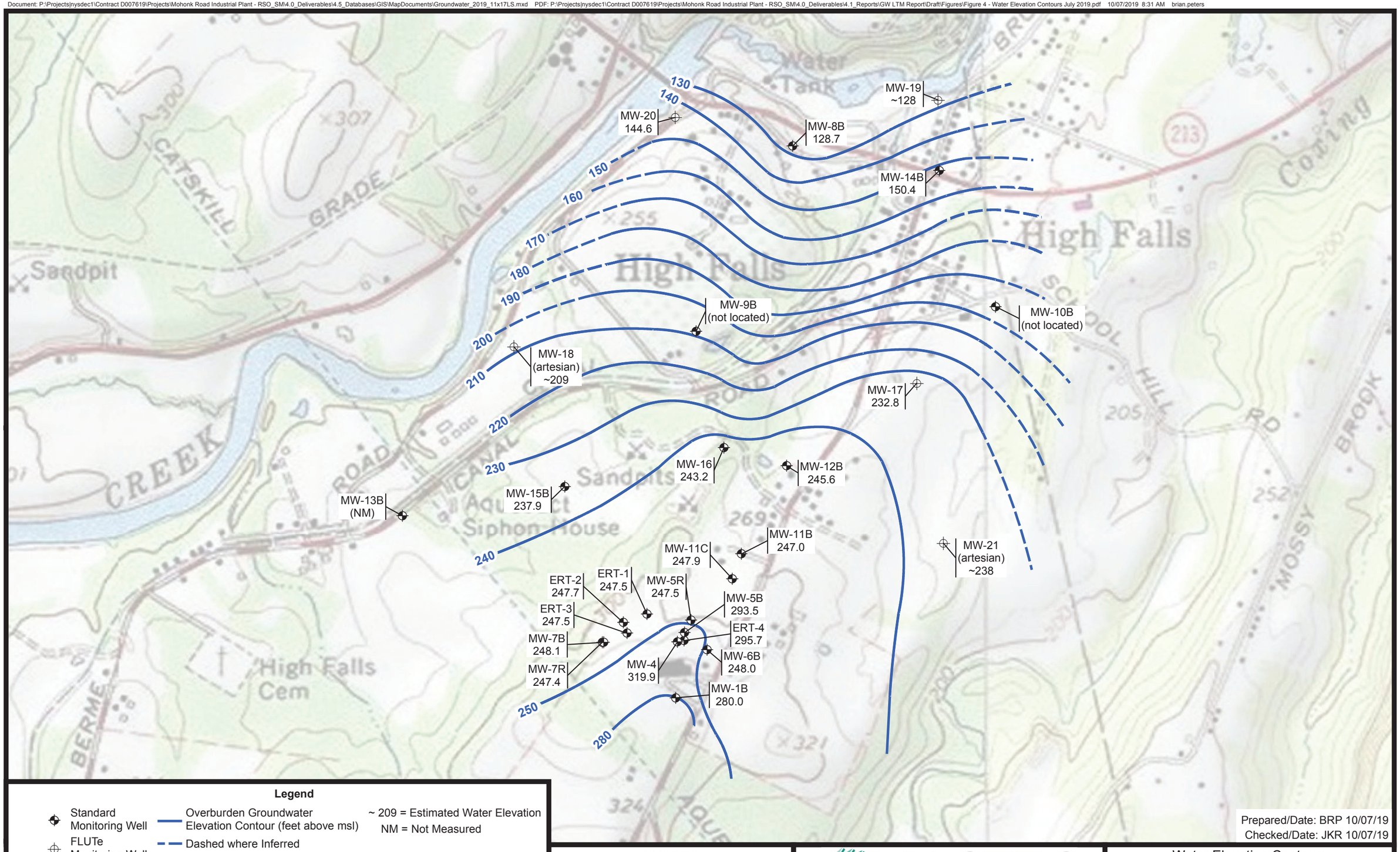
Well Location Map

Project 3611191234 Figure 1.3



Legend

- Standard Monitoring Well
- FLUTe Monitoring Well
- Overburden Groundwater Elevation Contour (feet above msl)
- Dashed where Inferred
- ~ 209 = Estimated Water Elevation
- NM = Not Measured

N

0 350 700 Feet

Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

Prepared/Date: BRP 10/07/19
Checked/Date: JKR 10/07/19

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Water Elevation Contours
July 2019
Project 3611191234 Figure 3.1

TABLES

Table 2.2 - Preliminary SVE Test Results

All wells connected to SVE manifold and receiving same vacuum from SVE system, results used to adjust full scale test

Time	Dilution Valve Setting	Amperage	SVE-19			SVE-20			SVE-21			SVE-22			SVE-23			Combined (@ manifold)		
			Flow (cfm)	Vacuum ("H2O)	PID (ppm)	Flow (cfm)	Vacuum ("H2O)	PID (ppm)	Flow (cfm)	Vacuum ("H2O)	PID (ppm)	Flow (cfm)	Vacuum ("H2O)	PID (ppm)	Flow (cfm)	Vacuum ("H2O)	PID (ppm)	Flow (cfm)	Vacuum ("H2O)	PID (ppm)
15:37	Full Open	10	7.40	0.825	111.3	7.6	0.842	267	4.91	0.82	39.11	6.10	0.816	59.61	5.14	0.824	194.5	7.65	0.84	NM
16:05	1/2 Closed	10	0.71	10.73	205.6	0.01	10.66	158.6	0.01	10.70	108.8	1.08	10.63	72.99	0.01	10.75	261	11.4	10.88	NM
16:25	3/4 Closed	12.6	0.91	14.47	48.6	0.62	14.90	11.03	0.01	14.46	155.8	1.03	14.48	0.134	0.01	14.49	450	NM	NM	NM
16:55	Closed	8.4	0.81	14.93	10.2	0.09	14.89	14.9	0.13	14.90	55.4	0.77	14.93	19.29	0.10	14.91	217.6	6.8	14.92	NM
17:25	Closed	12	1.06	NM	NM	0.40	NM	NM	0.52	NM	NM	1.15	NM	NM	0.04	NM	NM	NM	NM	NM

Project: Mohonk Road Industrial Plant
Client: NYSDEC
Location: Hamlet of High Falls, Marbletown, New York
Consultant: MACTEC Engineering & Consulting
Date: 7/24/19 **Techinician(s): Lauren Tierney, Tom Gerhard**

MACTEC

Table 2.3

Soil Vapor Extraction Test Under Non-pumping Conditions

Time		System Parameters					SVE-19				SVE-20				SVE-21				SVE-22				SVE-23				
Time Elapsed Since Step-up (min)	Time (HH:MM)	Temperature from Meat Thermometer (°F)	Vacuum Pressure-Velocicalc ("H_2O)	Vacuum Pressure-Gauge on SVE-19 ("H2O)	Suction PID (ppm)	Air Flow (cfm)	Air Flow (cfm)	Vacuum @ Wellhead ("H2O)	Temperature (°F)	PID (ppm)	Air Flow (cfm)	Vacuum @ Wellhead ("H2O)	Temperature (°F)	PID (ppm)	Air Flow (cfm)	Vacuum @ Wellhead ("H2O)	Temperature (°F)	PID (ppm)	Air Flow (cfm)	Vacuum @ Wellhead ("H2O)	Temperature (°F)	PID (ppm)	Air Flow (cfm)	Vacuum @ Wellhead ("H2O)	Temperature (°F)	PID (ppm)	Comments (ex: Note when sample collected for lab analysis)
0	**8:40**	Dilution Valve Half Open, Blower VFD = 5 Amps																									
6	**8:46**	62	2.28	NM	55.97	1.73	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	08:51- Collected sample 356023-SV-T1A, see log book.
14	**8:54**	62	2.27	NM	116.40	1.70	0.01	2.27	80	288.1	0.01	2.27	84.5	82.01	0.01	2.27	80	30.81	0.01	2.27	81	73.19	0.01	2.26	82.5	180.4	SVE-19 in shade, all other wells in sun
44	**9:24**	68	2.25	NM	50.30	2.35	0.01	2.25	NM	309.2	0.01	2.26	NM	88.45	0.01	2.26	NM	57.31	0.01	2.26	NM	94.22	0.01	2.26	NM	148.1	
60	**9:40**	71	2.3	NM	32.03	2.45	0.01	2.30	NM	226.1	0.01	2.3	NM	13.01	0.01	2.33	NM	31.99	0.01	2.30	NM	101.4	0.01	2.23	NM	113.2	
0	**10:00**	Dilution Valve Closed, Blower VFD = 5 Amps																									
2	**10:02**	70	8.56	10	38.46	5.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
15	**10:15**	75	8.85	10	36.27	3.70	0.59	8.86	85	167.4	0.30	8.85	92	87.07	0.06	8.59	91.5	121.9	0.58	8.59	90	97.82	0.34	8.85	91	190.4	SVE-19 in shade, all others in sun.
46	**10:46**	75	8.87	10	35.15	3.60	0.60	8.78	NM	174.1	0.20	8.81	NM	45.02	0.19	8.87	NM	81.15	0.44	8.81	NM	73.06	0.30	8.87	NM	126.8	
68	**11:08**	75	8.69	10	27.12	3.70	0.60	8.88	NM	162.3	0.20	8.83	NM	30.42	0.13	8.86	NM	92.70	0.40	8.85	NM	68.90	0.12	8.83	NM	103.0	
0	**12:00**	Dilution Valve Closed, Blower VFD = 8 Amps																									
3	**12:03**	77	14.68	15	31.68	5.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
17	**12:17**	77	14.85	15	21.20	5.32	0.67	14.71	87.5	123.9	0.55	14.58	87	31.99	0.38	14.68	95.5	178.9	0.75	14.66	94	52.22	0.32	14.76	88	228.7	SVE-21 and -22 in sun, all others in shade
50	**12:50**	79	14.69	15	19.50	5.50	0.65	14.65	NM	108.5	0.60	14.58	NM	30.19	0.42	14.58	NM	155.4	0.70	14.55	NM	51.93	0.47	14.75	NM	76.99	
70	**13:10**	79	14.88	15	19.05	5.40	0.60	14.84	NM	94.35	0.75	14.58	NM	36.82	0.41	14.86	NM	130.1	0.80	14.86	NM	45.03	0.58	14.65	NM	95.20	
0	**13:30**	Dilution Valve Closed, Blower VFD = 10 Amps																									
3	**13:33**	80	>15 (Over Limit)	19	19.39	6.50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
10	**13:40**	80	>15 (Over Limit)	19	16.28	6.35	1.03	>15 (Over)	89	99.66	0.85	>15 (Over)	84.5	69.24	0.62	>15 (Over)	95	245.8	0.91	>15 (Over)	89	55.79	0.75	>15 (Over)	88.5	121.7	SVE-21 and -22 in sun, all others in shade
38	**14:08**	80	>15 (Over Limit)	19	17.38	6.01	0.80	>15 (Over)	NM	73.71	0.75	>15 (Over)	NM	52.4	0.61	>15 (Over)	NM	133.6	0.80	>15 (Over)	NM	43.01	0.70	>15 (Over)	NM	104.3	
50	**14:20**	80	>15 (Over Limit)	19	14.83	5.95	0.75	>15 (Over)	NM	58.98	0.85	>15 (Over)	NM	43.37	0.65	>15 (Over)	NM	107.7	0.80	>15 (Over)	NM	53.72	0.55	>15 (Over)	NM	105.9	
0	**14:44**	Dilution Valve Closed, Blower VFD = 15 Amps																									
2	**14:46**	80	>15 (Over Limit)	26	19.49	7.70	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
13	**14:57**	80	>15 (Over Limit)	26	16.25	9.95	1.65	>15 (Over)	89	73.61	2.10	>15 (Over)	85	78.46	1.62	>15 (Over)	88	270.1	1.95	>15 (Over)	85.5	48.61	1.60	>15 (Over)	87	125.4	All wells in shade
40	**15:24**	82	>15 (Over Limit)	26	14.80	10.10	1.75	>15 (Over)	NM	63.24	2.41	>15 (Over)	NM	51.3	2.40	>15 (Over)	NM	222.7	1.90	>15 (Over)	NM	47.50	1.82	>15 (Over)	NM	96.59	
55	**15:39**	82	>15 (Over Limit)	26	21.69	10.40	1.82	>15 (Over)	NM	70.23	2.10	>15 (Over)	NM	50.39	1.75	>15 (Over)	NM	179.0	1.95	>15 (Over)	NM	45.37	1.65	>15 (Over)	NM	93.55	
0	**16:01**	Dilution Valve Closed, Blower VFD = 20 Amps																									
6	**16:07**	84	>15 (Over Limit)	34	NM	13.50	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
19	**16:20**	84	>15 (Over Limit)	34	21.47*	13.50	2.52	>15 (Over)	88.5	103	3.06	>15 (Over)	83.5	32.02	2.55	>15 (Over)	84	452.4	2.65	>15 (Over)	85.5	115.7	2.93	>15 (Over)	82.5	105.0	Used a geopump for PID readings to overcome system vacuum.
59	**17:00**	88	>15 (Over Limit)	34	53.72*	13.23	2.65	>15 (Over)	NM	90.56	3.21	>15 (Over)	NM	79.01	2.67	>15 (Over)	NM	407.4	2.52	>15 (Over)	NM	54.62	2.84	>15 (Over)	NM	59.70	17:37- Collected sample 356023-SV-T1B
74	**17:15**	88	>15 (Over Limit)	34	66.19*	13.44	2.86	>15 (Over)	NM	92.10	3.35	>15 (Over)	NM	48.81	2.75	>15 (Over)	NM	403.1	2.64	>15 (Over)	NM	134.6	2.65	>15 (Over)	NM	71.99	

Notes:
Goal of Test: Determine maximum allowable airflow, pressure, and associated PID readings from the vadose zone under non-pumping groundwater conditions (to be compared with airflow/pressure/PID readings during lowered groundwater (pumping) conditions)
min = minutes
°F = degrees fahrenheit
"H2O = vacuum measure in inches of water column
ppm = parts per million
cfm = cubic feet per minute.
*-Collected through geopump to overcome system vacuum
NM = not measured

Comments From Test:

Velocicalc handheld manometer has a maximum vacuum limit of 15 "H2O. This limit was reached with the dilution valve closed all the way and the blower VFD set to 8 amps. During testing, all wells were within the same vacuum range, and the analog vacuum gauge installed within the SVE trailer continuously read within the same range. All tests with vacuum measurments below 15 "H2O were gauged for vacuum using the analog vacuum meter.

Table 2.4 - Soil Vapor Extraction Analytical Sample Results

				Media	SV		SV		SV		SV		SV	
				Location	SVE-21		SVE-22		SVE-23		SVE-T1A		SVE-T1B	
				Sample Date	7/26/2019		7/26/2019		7/26/2019		7/24/2019		7/24/2019	
				Sample ID	356023-SV-21		356023-SV-22		356023-SV-23		356023-SV-T1A		356023-SV-T1B	
				Qc Code	FS		FS		FS		FS		FS	
Parameter	**Method**	**Casno**	**Units**	**Fraction**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	TO15	71-55-6	ug/m3	N	**190000**		**17000**		**20000**		**20000**		**150000**	
1,1-Dichloroethane	TO15	75-34-3	ug/m3	N	**1500**		120	U	120	U	650	U	1100	U
1,1-Dichloroethene	TO15	75-35-4	ug/m3	N	**23000**		**1700**		**3500**		**3000**		**21000**	
2-Butanone	TO15	78-93-3	ug/m3	N	3900	U	**2400**		**16000**	D	**28000**		**5700**	
Hexane	TO15	110-54-3	ug/m3	N	2900	U	**630**		250	U	1400	U	2400	U
Isooctane	TO15	540-84-1	ug/m3	N	3900	U	**540**		**380**		1900	U	3200	U
Trichloroethene	TO15	79-01-6	ug/m3	N	**5300**		**1300**		**290**		**760**		**4800**	

Table 2.5 - Soil Vapor Extraction Radius of Influence Test Results

Project: Mohonk Road Industrial Plant
Client: NYSDEC
Location: Hamlet of High Falls, Marbletown, New York
Consultant: MACTEC Engineering & Consulting
Date: 7/26/19 **Technician:** Tom Gerhard & Lauren Tierney

				SVE-20 Test: System Measurments					SVE-20 Test: Wellhead Measurments					Radius of Influence Vacuum Measurments ("H2O)				
Time of Ramp-Up	Time of Readings	Hertz Setpoint	Amperage	System Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Temperature from VelociCalc (°F)	Vacuum from VelociCalc ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Calculated Airflow (velocity*A) (cfm)	SVE-19	SVE-21	SVE-22	SVE-23	Comments
7:50	8:03	53.5	23.2	65	9	6.89	1.01	46	77.5	6.79	1.79	82	1.91	-0.122	-0.048	0.04	-0.013	Dilution Valve Open 100%
8:17	8:31	52.6	23.5	72	41	39.6	2.57	117	NC	>15	0.19	9	0.21	-0.143	-0.043	0.037	-0.024	Dilution Valve Open ~50%
8:43	8:57	44.7	24	78	59	71.5	3.37	152	NC	>15	0.14	6	0.14	-0.13	-0.041	0.027	-0.023	Dilution Valve Open ~25%, ferncos collapsed
9:06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	End of Test

				SVE-21 Test: System Measurments					SVE-21 Test: Wellhead Measurments					Radius of Influence Vacuum Measurments ("H2O)				
Time of Ramp-Up	Time of Readings	Hertz Setpoint	Amperage	System Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Temperature from VelociCalc (°F)	Vacuum from VelociCalc ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Calculated Airflow (velocity*A) (cfm)	SVE-19	SVE-20	SVE-22	SVE-23	Comments
9:15	9:30	53.5	22.8	78	9	6.33	2.01	92	91.5	6.35	1.81	89	2.07	-0.134	0.006	0.031	-0.015	Dilution Valve Open 100%. Wellhead in sun
9:42	9:56	53.1	23.8	80	39	40.4	5.5	251	NM	>15	0.99	45	1.05	0.15	-0.024	1.93	0.041	Dilution Valve Open ~50%
10:10	10:21	45.6	23.9	85	70	72.2	6.93	320	NM	>15	1.02	48	1.12	2.05	-0.009	4.35	0.57	Dilution Valve Open ~25%, ferncos collapsed
10:32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	End of Test
After completion of the Radius of Influence test, Sample 356023-SV-21 was collected from the wellhead at 10:35. Prior to sample collection, the dilution valve was opened to 100% which dropped wellhead vacuum to 5.08 WCI.																		

				SVE-22 Test: System Measurments					SVE-22 Test: Wellhead Measurments					Radius of Influence Vacuum Measurments ("H2O)				
Time of Ramp-Up	Time of Readings	Hertz Setpoint	Amperage	System Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Temperature from VelociCalc (°F)	Vacuum from VelociCalc ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Calculated Airflow (velocity*A) (cfm)	SVE-19	SVE-20	SVE-21	SVE-23	Comments
10:42	10:53	54.5	23.7	85	9	6.372	1.19	55	93.5	6.65	0.56	26	0.61	1.12	-0.011	1.05	-0.025	Dilution Valve Open 100%
11:09	11:21	50	22.4	89	40	41.1	4.54	206	NM	>15	2.68	123	2.87	11.75	-0.002	11.15	3.12	Dilution Valve Open ~50%
11:33	11:43	47.1	23.9	90	70	70.5	6.51	299	NM	>15	4.14	191	4.45	>15	0.002	>15	6.53	Dilution Valve Open ~25%, ferncos collapsed
11:51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	End of Test
After completion of the Radius of Influence test, Sample 356023-SV-22 was collected from the wellhead at 11:54. Prior to sample collection, the dilution valve was opened to 100% which dropped wellhead vacuum to 4.87 WCI.																		

				SVE-23 Test: System Measurments					SVE-23 Test: Wellhead Measurments					Radius of Influence Vacuum Measurments ("H2O)				
Time of Ramp-Up	Time of Readings	Hertz Setpoint	Amperage	System Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Temperature from VelociCalc (°F)	Vacuum from VelociCalc ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Calculated Airflow (velocity*A) (cfm)	SVE-19	SVE-20	SVE-21	SVE-22	Comments
12:40	12:50	54.5	23.7	90	9	6.63	1.02	45	88	6.72	0.23	11	0.26	1.06	0.001	0.464	1.721	Dilution Valve Open 100%
13:02	13:14	52.6	23.1	90	40	41.3	2.72	124	NM	>15	0.52	23	0.54	-0.135	0.001	0.107	1.401	Dilution Valve Open ~50%
13:21	13:32	47	23.8	92	70	71.2	4.57	210	NM	>15	0.21	9	0.21	-0.197	-0.005	-0.009	1.116	Dilution Valve Open ~25%, ferncos collapsed
13:39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	End of Test
After completion of the Radius of Influence test, Sample 356023-SV-23 was collected from the wellhead at 13:41. Prior to sample collection, the dilution valve was opened to 100% which dropped wellhead vacuum to 4.87 WCI.																		

				SVE-19 Test: System Measurments					SVE-19 Test: Wellhead Measurments					Radius of Influence Vacuum Measurments ("H2O)				
Time of Ramp-Up	Time of Readings	Hertz Setpoint	Amperage	System Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Temperature from VelociCalc (°F)	Vacuum from VelociCalc ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	Calculated Airflow (velocity*A) (cfm)	SVE-20	SVE-21	SVE-22	SVE-23	Comments
13:50	14:02	54.8	23.8	92	9	6.37	1.34	63	91.5	6.43	0.42	19	0.44	-0.009	0.08	2.39	0.213	Dilution Valve Open 100%, Wellhead in sun
14:13	14:23	53.5	23.9	94	40	40.4	4.33	198	NM	>15	2.26	103	2.40	-0.001	2.71	11.51	0.1	Dilution Valve Open ~50%
14:31	14:41	48.9	24	96	70	72	5.77	266	NM	>15	3.55	162	3.77	-0.001	7.61	>15	0.498	Dilution Valve Open ~25%, ferncos collapsed
14:46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	End of Test

Notes:
All negative (-) vacuum readings indicate positive pressure, i.e. the well is blowing air out.

Table 2.6 - Soil Vapor Extraction Inflow Test Results

Project: Mohonk Road Industrial Plant
Client: NYSDEC
Location: Hamlet of High Falls, Marbletown, New York
Consultant: MACTEC Engineering & Consulting
Date: 7/31/19 **Technician:** Tom Gerhard & Lauren Tierney

Time of Readings	Elapsed Time from configuration change (minutes)	Hertz Setpoint	Amperage	System Measurments (collected in trailer after manifold)					SVE-19 Test: Wellhead Measurments				Flow Measurments into well from top of cap when OPEN (cfm)				Velocity into well from top of cap when OPEN (ft/min)				Vacuum Measurments from VelociCalc when CLOSED ("H2O)				Comments
				Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	PID Reading (ppm)	Differential Pressue from Pitot Tube ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	SVE-20	SVE-21	SVE-22	SVE-23	SVE-20	SVE-21	SVE-22	SVE-23	SVE-20	SVE-21	SVE-22	SVE-23	
13:52	**0:12**	**44.6**	**23.2**	80	70	73.7	7.22	331	18.66	0.004	4.45	204	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	-0.023	7.35	>15	0.282	Baseline, all other wells closed
14:15	**0:10**	**44.6**	**23.2**	82	70	73.2	7.54	346	11.55	0.004	4.55	208	0.02	0.05	2.24	0.04	1	2	102	2	OPEN	OPEN	OPEN	OPEN	All other wells opened at 14:02
14:35	**0:10**	**45.3**	**23.4**	82	70	73.7	7.27	333	15.85	0.003	4.07	186	CLOSED	0.76	CLOSED	CLOSED	CLOSED	35	CLOSED	CLOSED	-0.02	OPEN	>15	0.238	Isolate SVE-21 at 14:25
14:53	**0:11**	**45.3**	**23.4**	84	70	73.7	7.41	341	12.32	0.004	4.37	200	CLOSED	CLOSED	2.37	CLOSED	CLOSED	CLOSED	108	CLOSED	-0.019	5.019	OPEN	0.004	Isolate SVE-22 at 14:42

Time of Readings	Elapsed Time from configuration change (minutes)	Hertz Setpoint	Amperage	System Measurments (collected in trailer after manifold)					SVE-21 Test: Wellhead Measurments				Flow Measurments into well from top of cap when OPEN (cfm)				Velocity into well from top of cap when OPEN (ft/min)				Vacuum Measurments from VelociCalc when CLOSED ("H2O)				Comments
				Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	PID Reading (ppm)	Differential Pressue from Pitot Tube ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	SVE-19	SVE-20	SVE-22	SVE-23	SVE-19	SVE-20	SVE-22	SVE-23	SVE-19	SVE-20	SVE-22	SVE-23	
12:03	**0:13**	**42.3**	**23.5**	NM	68	NM	NM	NM	27.85	0.003	1.53	70	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	2.596	0.185	5.80	0.37	Baseline, all other wells closed
12:30	**0:10**	**43.5**	**23.4**	82	70	73.5	9.76	445	24.61	0.001	2.09	96	0.01	0.01	1.06	0.02	1	1	49	1	OPEN	OPEN	OPEN	OPEN	All other wells open at 12:20
12:48	**0:10**	**43.8**	**23.2**	82	70	72.7	10.84	497	17.33	0.001	2.30	108	CLOSED	CLOSED	1.22	CLOSED	CLOSED	CLOSED	56	CLOSED	2.237	0.009	OPEN	0.235	Isolate SVE-22 at 12:38
13:12	**0:15**	**43.8**	**23.2**	82	70	72.7	10.15	465	16.41	0.001	2.17	99	0.65	CLOSED	CLOSED	CLOSED	30	CLOSED	CLOSED	CLOSED	OPEN	-0.002	8.432	0.377	Isolate SVE-19 at 12:57

Time of Readings	Elapsed Time from configuration change (minutes)	Hertz Setpoint	Amperage	System Measurments (collected in trailer after manifold)					SVE-22 Test: Wellhead Measurments				Flow Measurments into well from top of cap when OPEN (cfm)				Velocity into well from top of cap when OPEN (ft/min)				Vacuum Measurments from VelociCalc when CLOSED ("H2O)				Comments
				Temperature from meat thermometer (°F)	System Vacuum from analog gauge ("H2O)	System Vacuum from HMI ("H2O)	System Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	PID Reading (ppm)	Differential Pressue from Pitot Tube ("H2O)	Airflow from VelociCalc (cfm)	Air Velocity from VelociCalc (ft/min)	SVE-19	SVE-20	SVE-21	SVE-23	SVE-19	SVE-20	SVE-21	SVE-23	SVE-19	SVE-20	SVE-21	SVE-23	
8:55	**0:15**	**42.7**	**23.9**	NM	70	67.0	NM	NM	NR	0.006	4.10	26	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED	>15	-0.013	10.41	0.65	Baseline, all other wells closed
9:22	**0:10**	**42.7**	**22.7**	86	65	68.2	9.98	455	19.83	0.006	4.25	193	1.33	0.03	1.02	0.01	NM	NM	NM	M	OPEN	OPEN	OPEN	OPEN	All other wells open at 09:10
9:50	**0:12**	**42.7**	**22.7**	88	65	68.2	9.40	431	18.35	0.004	4.05	185	CLOSED	CLOSED	1.14	CLOSED	CLOSED	CLOSED	52	CLOSED	>15	-0.006	OPEN	0.744	Isolate SVE-21 at 09:38
10:17	**0:12**	**42.7**	**22.7**	82	65	68.2	9.01	413	16.80	0.002	3.74	172	1.46	CLOSED	CLOSED	CLOSED	67	CLOSED	CLOSED	CLOSED	OPEN	0.001	12.803	0.772	Isolate SVE-19 at 10:05
10:40	**0:12**	**42.7**	**22.7**	84	65	68.2	7.96	365	14.57	0.003	3.80	174	CLOSED	CLOSED	CLOSED	0.03	CLOSED	CLOSED	CLOSED	NM	>15	0.018	>15	OPEN	Isolate SVE-23 at 10:28

Table 3.1 - Packer Test Analytical Results

Well	Date	Time	Depth to Water (ft bTOC)	Flow (gpm)	Specific Capacity (gpm/ft drawdown	1,1,1-TCA (µg/L)	2018 Monthly Average 1,1,1-TCA (µg/L)	December 2018 Post-Test with Pump in Modified Position (No Packer) (µg/L)
ERT-1	26-Aug	13:15	35.31	0		NS		
		16:25	40.7	9.8	1.82	170		
		17:40	44.14	9.75	1.10	100		
	27-Aug	7:50	46.99	9.55	0.82	99		
		11:35	61.26	23.1	0.89	88		
		16:31	63.23	23.1	0.83	99		
	28-Aug	7:29	67.18	23	0.72	93		
		11:56	68.21	23	0.70	88		
		16:37	55.35	10	0.50	79		
	29-Aug	7:32	53.37	10.4	0.58	89		
		11:48	53.68	10.2	0.56	90		
		15:15	53.22	10.4	0.58	98		
					Average	**99**	**67**	**41**
MW-5R	3-Sep	11:00	48.5	0		NS		
		13:10	47.81	11.8		320		
		16:30	52.54	11.8	2.92	230		
	4-Sep	7:30	54.95	11.6	1.80	240		
		12:05	55.1	11.7	1.77	260		
		16:35	59.35	22.8	2.10	240		
	5-Sep	7:25	62.61	22.6	1.60	220		
		12:00	63.56	22.6	1.50	250		
		16:40	60.42	10.9	0.91	210		
	6-Sep	7:32	59.5	10.8	0.98	230		
		12:15	59.5	10.8	0.98	230		
					Average	**243**	**33**	**93**
MW-7R	9-Sep	14:00	52.18	0		NS		
	9-Sep	16:40	75.14	10.2	0.44	330		
		18:05	94.09	11.5	0.27	330		
	10-Sep	7:45	93.22	11.4	0.28	350		
		12:45	94.65	11.4	0.27	340		
		16:50	99.91	11.2	0.23	310		
	11-Sep	7:50	91.94	11.4	0.29	290		
		12:15	90.29	11.5	0.30	310		
		16:55	94.96	11.4	0.27	300		
	12-Sep	7:55	98.17	11.5	0.25	300		
		12:30	96.02	11.4	0.26	260		
		16:15	95.68	11.4	0.26	280		
					Average	**309**	**57**	**86**

Notes:

Complete flow and water level measurements are provide in Appendix E.

ft = feet

bTOC = below top of casing

gpm = gallons per minute

µg/L = micrograms per liter

Prepared by: HA 2/20/2020
Checked by: JDW 2/25/2020

APPENDIX A

LABORATORY RESULTS

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

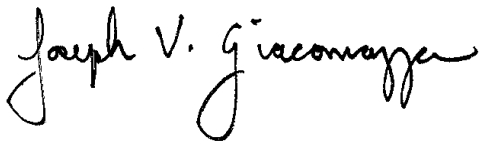
Job Number: 480-158436-1

Job Description: Mohonk Rd. #356023 Groundwaters

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, NY 12233-7014

Attention: Charles Gregory



Approved for release.
Joe V Giacomazza
Project Management Assistant II
9/13/2019 4:15 PM

Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
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09/13/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Job Narrative
480-158436-1

Comments
No additional comments.

Receipt
The samples were received on 8/30/2019 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-490741 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 356023-GW-ERT-1-115-1 (480-158436-1), 356023-GW-ERT-1-115-2 (480-158436-2), 356023-GW-ERT-1-115-3 (480-158436-3), 356023-GW-ERT-1-115-4 (480-158436-4), 356023-GW-ERT-1-115-5 (480-158436-5), 356023-GW-ERT-1-115-6 (480-158436-6), 356023-GW-ERT-1-115-7 (480-158436-7), 356023-GW-ERT-1-115-8 (480-158436-8), 356023-GW-ERT-1-115-9 (480-158436-9), 356023-GW-ERT-1-115-10 (480-158436-10) and 356023-GW-ERT-1-115-11 (480-158436-11).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-ERT-1-115-1 (480-158436-1), 356023-GW-ERT-1-115-2 (480-158436-2), 356023-GW-ERT-1-115-3 (480-158436-3), 356023-GW-ERT-1-115-5 (480-158436-5), 356023-GW-ERT-1-115-6 (480-158436-6), 356023-GW-ERT-1-115-7 (480-158436-7), 356023-GW-ERT-1-115-9 (480-158436-9), 356023-GW-ERT-1-115-10 (480-158436-10) and 356023-GW-ERT-1-115-11 (480-158436-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: 356023-GW-ERT-1-115-4 (480-158436-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-490780 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 356023-GW-ERT-1-115-4 (480-158436-4) and TRIP BLANK-1 (480-158436-12).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-490780 recovered outside control limits for the following analytes: Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted:356023-GW-ERT-1-115-4 (480-158436-4) and TRIP BLANK-1 (480-158436-12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: New York State D.E.C. Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-158436-1	356023-GW-ERT-1-115-1	Water	08/26/19 16:25	08/30/19 09:40	
480-158436-2	356023-GW-ERT-1-115-2	Water	08/26/19 17:40	08/30/19 09:40	
480-158436-3	356023-GW-ERT-1-115-3	Water	08/27/19 07:50	08/30/19 09:40	
480-158436-4	356023-GW-ERT-1-115-4	Water	08/27/19 11:35	08/30/19 09:40	
480-158436-5	356023-GW-ERT-1-115-5	Water	08/27/19 16:31	08/30/19 09:40	
480-158436-6	356023-GW-ERT-1-115-6	Water	08/28/19 07:29	08/30/19 09:40	
480-158436-7	356023-GW-ERT-1-115-7	Water	08/28/19 11:56	08/30/19 09:40	
480-158436-8	356023-GW-ERT-1-115-8	Water	08/28/19 16:37	08/30/19 09:40	
480-158436-9	356023-GW-ERT-1-115-9	Water	08/29/19 07:32	08/30/19 09:40	
480-158436-10	356023-GW-ERT-1-115-10	Water	08/29/19 11:48	08/30/19 09:40	
480-158436-11	356023-GW-ERT-1-115-11	Water	08/29/19 15:15	08/30/19 09:40	
480-158436-12	TRIP BLANK-1	Water	08/29/19 17:00	08/30/19 09:40	

Detection Summary

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-ERT-1-115-1 — Lab Sample ID: 480-158436-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	170		4.0	3.3	ug/L	4		8260C	Total/NA
1,1-Dichloroethane	30		4.0	1.5	ug/L	4		8260C	Total/NA
1,1-Dichloroethene	36		4.0	1.2	ug/L	4		8260C	Total/NA
Methylene Chloride	1.9	J	4.0	1.8	ug/L	4		8260C	Total/NA
Trichloroethene	16		4.0	1.8	ug/L	4		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-2 — Lab Sample ID: 480-158436-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	100		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	17		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	24		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.96	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	10		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-3 — Lab Sample ID: 480-158436-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	99		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	14		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	26		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.95	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	10		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-4 — Lab Sample ID: 480-158436-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	100	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	15		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	27		1.0	0.29	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.87	J	1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	9.6		1.0	0.46	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - DL	88		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane - DL	13		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene - DL	23		2.0	0.58	ug/L	2		8260C	Total/NA
Trichloroethene - DL	8.4		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-5 — Lab Sample ID: 480-158436-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	99		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	14		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	26		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.88	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	8.8		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-6 — Lab Sample ID: 480-158436-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	93		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	15		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	25		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.94	J	2.0	0.88	ug/L	2		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 356023-GW-ERT-1-115-6 (Continued) — Lab Sample ID: 480-158436-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	8.1		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-7 — Lab Sample ID: 480-158436-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	88		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	15		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	23		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.97	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	7.3		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-8 — Lab Sample ID: 480-158436-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	79		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	13		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	20		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	6.3		1.0	0.46	ug/L	1		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-9 — Lab Sample ID: 480-158436-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	89		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	16		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	22		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.94	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	7.5		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-10 — Lab Sample ID: 480-158436-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	90		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	16		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	22		2.0	0.58	ug/L	2		8260C	Total/NA
Trichloroethene	7.8		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: 356023-GW-ERT-1-115-11 — Lab Sample ID: 480-158436-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	88		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	17		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	21		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	0.90	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	7.3		2.0	0.92	ug/L	2		8260C	Total/NA

Client Sample ID: TRIP BLANK-1 — Lab Sample ID: 480-158436-12

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Client Sample ID: 356023-GW-ERT-1-115-1
Lab Sample ID: 480-158436-1

Date Collected: 08/26/19 16:25
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**170**		4.0	3.3	ug/L			09/07/19 15:38	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			09/07/19 15:38	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			09/07/19 15:38	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			09/07/19 15:38	4
1,1-Dichloroethane	**30**		4.0	1.5	ug/L			09/07/19 15:38	4
1,1-Dichloroethene	**36**		4.0	1.2	ug/L			09/07/19 15:38	4
1,2,3-Trichlorobenzene	ND		4.0	1.6	ug/L			09/07/19 15:38	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			09/07/19 15:38	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			09/07/19 15:38	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			09/07/19 15:38	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			09/07/19 15:38	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			09/07/19 15:38	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			09/07/19 15:38	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			09/07/19 15:38	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			09/07/19 15:38	4
1,4-Dioxane	ND		160	37	ug/L			09/07/19 15:38	4
2-Butanone (MEK)	ND		40	5.3	ug/L			09/07/19 15:38	4
2-Hexanone	ND		20	5.0	ug/L			09/07/19 15:38	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			09/07/19 15:38	4
Acetone	ND		40	12	ug/L			09/07/19 15:38	4
Benzene	ND		4.0	1.6	ug/L			09/07/19 15:38	4
Bromochloromethane	ND		4.0	3.5	ug/L			09/07/19 15:38	4
Bromodichloromethane	ND		4.0	1.6	ug/L			09/07/19 15:38	4
Bromoform	ND		4.0	1.0	ug/L			09/07/19 15:38	4
Bromomethane	ND		4.0	2.8	ug/L			09/07/19 15:38	4
Carbon disulfide	ND		4.0	0.76	ug/L			09/07/19 15:38	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			09/07/19 15:38	4
Chlorobenzene	ND		4.0	3.0	ug/L			09/07/19 15:38	4
Chloroethane	ND		4.0	1.3	ug/L			09/07/19 15:38	4
Chloroform	ND		4.0	1.4	ug/L			09/07/19 15:38	4
Chloromethane	ND		4.0	1.4	ug/L			09/07/19 15:38	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			09/07/19 15:38	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			09/07/19 15:38	4
Cyclohexane	ND		4.0	0.72	ug/L			09/07/19 15:38	4
Dibromochloromethane	ND		4.0	1.3	ug/L			09/07/19 15:38	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			09/07/19 15:38	4
Ethylbenzene	ND		4.0	3.0	ug/L			09/07/19 15:38	4
Isopropylbenzene	ND		4.0	3.2	ug/L			09/07/19 15:38	4
Methyl acetate	ND		10	5.2	ug/L			09/07/19 15:38	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			09/07/19 15:38	4
Methylcyclohexane	ND		4.0	0.64	ug/L			09/07/19 15:38	4
Methylene Chloride	**1.9**	**J**	4.0	1.8	ug/L			09/07/19 15:38	4
Styrene	ND		4.0	2.9	ug/L			09/07/19 15:38	4
Tetrachloroethene	ND		4.0	1.4	ug/L			09/07/19 15:38	4
Toluene	ND		4.0	2.0	ug/L			09/07/19 15:38	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			09/07/19 15:38	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			09/07/19 15:38	4
Trichloroethene	**16**		4.0	1.8	ug/L			09/07/19 15:38	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			09/07/19 15:38	4

Client Sample ID: 356023-GW-ERT-1-115-1 Lab Sample ID: 480-158436-1

Date Collected: 08/26/19 16:25 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		4.0	3.6	ug/L			09/07/19 15:38	4
Xylenes, Total	ND		8.0	2.6	ug/L			09/07/19 15:38	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/07/19 15:38*	*4*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/07/19 15:38*	*4*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*09/07/19 15:38*	*4*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/07/19 15:38*	*4*

Client Sample ID: 356023-GW-ERT-1-115-2 Lab Sample ID: 480-158436-2

Date Collected: 08/26/19 17:40 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**100**		2.0	1.6	ug/L			09/07/19 16:04	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 16:04	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 16:04	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 16:04	2
1,1-Dichloroethane	**17**		2.0	0.76	ug/L			09/07/19 16:04	2
1,1-Dichloroethene	**24**		2.0	0.58	ug/L			09/07/19 16:04	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 16:04	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 16:04	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 16:04	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 16:04	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 16:04	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 16:04	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 16:04	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 16:04	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 16:04	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 16:04	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 16:04	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 16:04	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 16:04	2
Acetone	ND		20	6.0	ug/L			09/07/19 16:04	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 16:04	2
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 16:04	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 16:04	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 16:04	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 16:04	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 16:04	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 16:04	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 16:04	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 16:04	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 16:04	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 16:04	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 16:04	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 16:04	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 16:04	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 16:04	2

Client Sample ID: 356023-GW-ERT-1-115-2
Lab Sample ID: 480-158436-2

Date Collected: 08/26/19 17:40
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 16:04	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 16:04	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 16:04	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 16:04	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 16:04	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 16:04	2
Methylene Chloride	**0.96**	**J**	2.0	0.88	ug/L			09/07/19 16:04	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 16:04	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 16:04	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 16:04	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 16:04	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 16:04	2
Trichloroethene	**10**		2.0	0.92	ug/L			09/07/19 16:04	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 16:04	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 16:04	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 16:04	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*09/07/19 16:04*	*2*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/07/19 16:04*	*2*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/07/19 16:04*	*2*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/07/19 16:04*	*2*

Client Sample ID: 356023-GW-ERT-1-115-3
Lab Sample ID: 480-158436-3

Date Collected: 08/27/19 07:50
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**99**		2.0	1.6	ug/L			09/07/19 16:28	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 16:28	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 16:28	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 16:28	2
1,1-Dichloroethane	**14**		2.0	0.76	ug/L			09/07/19 16:28	2
1,1-Dichloroethene	**26**		2.0	0.58	ug/L			09/07/19 16:28	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 16:28	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 16:28	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 16:28	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 16:28	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 16:28	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 16:28	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 16:28	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 16:28	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 16:28	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 16:28	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 16:28	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 16:28	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 16:28	2
Acetone	ND		20	6.0	ug/L			09/07/19 16:28	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 16:28	2

Client Sample ID: 356023-GW-ERT-1-115-3
Lab Sample ID: 480-158436-3

Date Collected: 08/27/19 07:50
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 16:28	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 16:28	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 16:28	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 16:28	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 16:28	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 16:28	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 16:28	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 16:28	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 16:28	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 16:28	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 16:28	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 16:28	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 16:28	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 16:28	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 16:28	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 16:28	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 16:28	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 16:28	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 16:28	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 16:28	2
Methylene Chloride	**0.95**	**J**	2.0	0.88	ug/L			09/07/19 16:28	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 16:28	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 16:28	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 16:28	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 16:28	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 16:28	2
Trichloroethene	**10**		2.0	0.92	ug/L			09/07/19 16:28	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 16:28	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 16:28	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 16:28	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/07/19 16:28*	*2*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/07/19 16:28*	*2*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*09/07/19 16:28*	*2*
Toluene-d8 (Surr)	*96*		*80 - 120*		*09/07/19 16:28*	*2*

Client Sample ID: 356023-GW-ERT-1-115-4
Lab Sample ID: 480-158436-4

Date Collected: 08/27/19 11:35
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**100**	**E**	1.0	0.82	ug/L			09/07/19 16:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/07/19 16:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/07/19 16:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/07/19 16:52	1
1,1-Dichloroethane	**15**		1.0	0.38	ug/L			09/07/19 16:52	1
1,1-Dichloroethene	**27**		1.0	0.29	ug/L			09/07/19 16:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/07/19 16:52	1

Client Sample ID: 356023-GW-ERT-1-115-4 Lab Sample ID: 480-158436-4

Date Collected: 08/27/19 11:35 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/07/19 16:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/07/19 16:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/07/19 16:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/07/19 16:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/07/19 16:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/07/19 16:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/07/19 16:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/07/19 16:52	1
1,4-Dioxane	ND		40	9.3	ug/L			09/07/19 16:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/07/19 16:52	1
2-Hexanone	ND		5.0	1.2	ug/L			09/07/19 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/07/19 16:52	1
Acetone	ND		10	3.0	ug/L			09/07/19 16:52	1
Benzene	ND		1.0	0.41	ug/L			09/07/19 16:52	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/07/19 16:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/07/19 16:52	1
Bromoform	ND		1.0	0.26	ug/L			09/07/19 16:52	1
Bromomethane	ND		1.0	0.69	ug/L			09/07/19 16:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/07/19 16:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/07/19 16:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/07/19 16:52	1
Chloroethane	ND		1.0	0.32	ug/L			09/07/19 16:52	1
Chloroform	ND		1.0	0.34	ug/L			09/07/19 16:52	1
Chloromethane	ND		1.0	0.35	ug/L			09/07/19 16:52	1
cis-1,2-Dichloroethene	**0.87**	**J**	1.0	0.81	ug/L			09/07/19 16:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/07/19 16:52	1
Cyclohexane	ND		1.0	0.18	ug/L			09/07/19 16:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/07/19 16:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/07/19 16:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/07/19 16:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/07/19 16:52	1
Methyl acetate	ND		2.5	1.3	ug/L			09/07/19 16:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/07/19 16:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/07/19 16:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/07/19 16:52	1
Styrene	ND		1.0	0.73	ug/L			09/07/19 16:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/07/19 16:52	1
Toluene	ND		1.0	0.51	ug/L			09/07/19 16:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/07/19 16:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/07/19 16:52	1
Trichloroethene	**9.6**		1.0	0.46	ug/L			09/07/19 16:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/07/19 16:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/07/19 16:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/07/19 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/07/19 16:52*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/07/19 16:52*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/07/19 16:52*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/07/19 16:52*	*1*

Client Sample ID: 356023-GW-ERT-1-115-4
Lab Sample ID: 480-158436-4

Date Collected: 08/27/19 11:35
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**88**		2.0	1.6	ug/L			09/08/19 11:53	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/08/19 11:53	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/08/19 11:53	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/08/19 11:53	2
1,1-Dichloroethane	**13**		2.0	0.76	ug/L			09/08/19 11:53	2
1,1-Dichloroethene	**23**		2.0	0.58	ug/L			09/08/19 11:53	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/08/19 11:53	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/08/19 11:53	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/08/19 11:53	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/08/19 11:53	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/08/19 11:53	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/08/19 11:53	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/08/19 11:53	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/08/19 11:53	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/08/19 11:53	2
1,4-Dioxane	ND		80	19	ug/L			09/08/19 11:53	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/08/19 11:53	2
2-Hexanone	ND		10	2.5	ug/L			09/08/19 11:53	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/08/19 11:53	2
Acetone	ND		20	6.0	ug/L			09/08/19 11:53	2
Benzene	ND		2.0	0.82	ug/L			09/08/19 11:53	2
Bromochloromethane	ND		2.0	1.7	ug/L			09/08/19 11:53	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/08/19 11:53	2
Bromoform	ND		2.0	0.52	ug/L			09/08/19 11:53	2
Bromomethane	ND		2.0	1.4	ug/L			09/08/19 11:53	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/08/19 11:53	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/08/19 11:53	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/08/19 11:53	2
Chloroethane	ND	*	2.0	0.64	ug/L			09/08/19 11:53	2
Chloroform	ND		2.0	0.68	ug/L			09/08/19 11:53	2
Chloromethane	ND		2.0	0.70	ug/L			09/08/19 11:53	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/08/19 11:53	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/08/19 11:53	2
Cyclohexane	ND		2.0	0.36	ug/L			09/08/19 11:53	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/08/19 11:53	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/08/19 11:53	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/08/19 11:53	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/08/19 11:53	2
Methyl acetate	ND		5.0	2.6	ug/L			09/08/19 11:53	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/08/19 11:53	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/08/19 11:53	2
Methylene Chloride	ND		2.0	0.88	ug/L			09/08/19 11:53	2
Styrene	ND		2.0	1.5	ug/L			09/08/19 11:53	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/08/19 11:53	2
Toluene	ND		2.0	1.0	ug/L			09/08/19 11:53	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/08/19 11:53	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/08/19 11:53	2
Trichloroethene	**8.4**		2.0	0.92	ug/L			09/08/19 11:53	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/08/19 11:53	2

Client Sample ID: 356023-GW-ERT-1-115-4 Lab Sample ID: 480-158436-4

Date Collected: 08/27/19 11:35 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		2.0	1.8	ug/L			09/08/19 11:53	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/08/19 11:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*09/08/19 11:53*	*2*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*09/08/19 11:53*	*2*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*09/08/19 11:53*	*2*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/08/19 11:53*	*2*

Client Sample ID: 356023-GW-ERT-1-115-5 Lab Sample ID: 480-158436-5

Date Collected: 08/27/19 16:31 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**99**		2.0	1.6	ug/L			09/07/19 17:15	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 17:15	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 17:15	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 17:15	2
1,1-Dichloroethane	**14**		2.0	0.76	ug/L			09/07/19 17:15	2
1,1-Dichloroethene	**26**		2.0	0.58	ug/L			09/07/19 17:15	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 17:15	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 17:15	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 17:15	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 17:15	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 17:15	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 17:15	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 17:15	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 17:15	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 17:15	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 17:15	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 17:15	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 17:15	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 17:15	2
Acetone	ND		20	6.0	ug/L			09/07/19 17:15	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 17:15	2
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 17:15	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 17:15	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 17:15	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 17:15	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 17:15	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 17:15	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 17:15	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 17:15	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 17:15	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 17:15	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 17:15	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 17:15	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 17:15	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 17:15	2

Client Sample ID: 356023-GW-ERT-1-115-5
Lab Sample ID: 480-158436-5

Date Collected: 08/27/19 16:31
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 17:15	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 17:15	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 17:15	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 17:15	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 17:15	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 17:15	2
Methylene Chloride	**0.88**	**J**	2.0	0.88	ug/L			09/07/19 17:15	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 17:15	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 17:15	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 17:15	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 17:15	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 17:15	2
Trichloroethene	**8.8**		2.0	0.92	ug/L			09/07/19 17:15	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 17:15	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 17:15	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 17:15	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/07/19 17:15*	*2*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/07/19 17:15*	*2*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/07/19 17:15*	*2*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/07/19 17:15*	*2*

Client Sample ID: 356023-GW-ERT-1-115-6
Lab Sample ID: 480-158436-6

Date Collected: 08/28/19 07:29
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**93**		2.0	1.6	ug/L			09/07/19 17:39	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 17:39	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 17:39	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 17:39	2
1,1-Dichloroethane	**15**		2.0	0.76	ug/L			09/07/19 17:39	2
1,1-Dichloroethene	**25**		2.0	0.58	ug/L			09/07/19 17:39	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 17:39	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 17:39	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 17:39	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 17:39	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 17:39	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 17:39	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 17:39	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 17:39	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 17:39	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 17:39	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 17:39	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 17:39	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 17:39	2
Acetone	ND		20	6.0	ug/L			09/07/19 17:39	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 17:39	2

Client Sample ID: 356023-GW-ERT-1-115-6
Lab Sample ID: 480-158436-6

Date Collected: 08/28/19 07:29
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 17:39	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 17:39	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 17:39	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 17:39	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 17:39	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 17:39	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 17:39	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 17:39	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 17:39	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 17:39	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 17:39	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 17:39	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 17:39	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 17:39	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 17:39	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 17:39	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 17:39	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 17:39	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 17:39	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 17:39	2
Methylene Chloride	**0.94**	**J**	2.0	0.88	ug/L			09/07/19 17:39	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 17:39	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 17:39	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 17:39	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 17:39	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 17:39	2
Trichloroethene	**8.1**		2.0	0.92	ug/L			09/07/19 17:39	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 17:39	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 17:39	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 17:39	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*09/07/19 17:39*	*2*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*09/07/19 17:39*	*2*
Dibromofluoromethane (Surr)	*111*		*75 - 123*		*09/07/19 17:39*	*2*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/07/19 17:39*	*2*

Client Sample ID: 356023-GW-ERT-1-115-7
Lab Sample ID: 480-158436-7

Date Collected: 08/28/19 11:56
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**88**		2.0	1.6	ug/L			09/07/19 18:03	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 18:03	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 18:03	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 18:03	2
1,1-Dichloroethane	**15**		2.0	0.76	ug/L			09/07/19 18:03	2
1,1-Dichloroethene	**23**		2.0	0.58	ug/L			09/07/19 18:03	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 18:03	2

Client Sample ID: 356023-GW-ERT-1-115-7
Lab Sample ID: 480-158436-7

Date Collected: 08/28/19 11:56
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 18:03	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 18:03	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 18:03	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 18:03	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 18:03	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 18:03	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 18:03	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 18:03	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 18:03	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 18:03	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 18:03	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 18:03	2
Acetone	ND		20	6.0	ug/L			09/07/19 18:03	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 18:03	2
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 18:03	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 18:03	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 18:03	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 18:03	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 18:03	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 18:03	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 18:03	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 18:03	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 18:03	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 18:03	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 18:03	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 18:03	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 18:03	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 18:03	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 18:03	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 18:03	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 18:03	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 18:03	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 18:03	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 18:03	2
Methylene Chloride	**0.97**	**J**	2.0	0.88	ug/L			09/07/19 18:03	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 18:03	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 18:03	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 18:03	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 18:03	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 18:03	2
Trichloroethene	**7.3**		2.0	0.92	ug/L			09/07/19 18:03	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 18:03	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 18:03	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 18:03	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/07/19 18:03*	*2*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/07/19 18:03*	*2*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*09/07/19 18:03*	*2*
Toluene-d8 (Surr)	*96*		*80 - 120*		*09/07/19 18:03*	*2*

Client Sample ID: 356023-GW-ERT-1-115-8
Lab Sample ID: 480-158436-8

Date Collected: 08/28/19 16:37
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**79**		1.0	0.82	ug/L			09/07/19 18:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/07/19 18:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/07/19 18:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/07/19 18:26	1
1,1-Dichloroethane	**13**		1.0	0.38	ug/L			09/07/19 18:26	1
1,1-Dichloroethene	**20**		1.0	0.29	ug/L			09/07/19 18:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/07/19 18:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/07/19 18:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/07/19 18:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/07/19 18:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/07/19 18:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/07/19 18:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/07/19 18:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/07/19 18:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/07/19 18:26	1
1,4-Dioxane	ND		40	9.3	ug/L			09/07/19 18:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/07/19 18:26	1
2-Hexanone	ND		5.0	1.2	ug/L			09/07/19 18:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/07/19 18:26	1
Acetone	ND		10	3.0	ug/L			09/07/19 18:26	1
Benzene	ND		1.0	0.41	ug/L			09/07/19 18:26	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/07/19 18:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/07/19 18:26	1
Bromoform	ND		1.0	0.26	ug/L			09/07/19 18:26	1
Bromomethane	ND		1.0	0.69	ug/L			09/07/19 18:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/07/19 18:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/07/19 18:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/07/19 18:26	1
Chloroethane	ND		1.0	0.32	ug/L			09/07/19 18:26	1
Chloroform	ND		1.0	0.34	ug/L			09/07/19 18:26	1
Chloromethane	ND		1.0	0.35	ug/L			09/07/19 18:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/07/19 18:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/07/19 18:26	1
Cyclohexane	ND		1.0	0.18	ug/L			09/07/19 18:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/07/19 18:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/07/19 18:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/07/19 18:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/07/19 18:26	1
Methyl acetate	ND		2.5	1.3	ug/L			09/07/19 18:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/07/19 18:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/07/19 18:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/07/19 18:26	1
Styrene	ND		1.0	0.73	ug/L			09/07/19 18:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/07/19 18:26	1
Toluene	ND		1.0	0.51	ug/L			09/07/19 18:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/07/19 18:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/07/19 18:26	1
Trichloroethene	**6.3**		1.0	0.46	ug/L			09/07/19 18:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/07/19 18:26	1

Client Sample ID: 356023-GW-ERT-1-115-8 Lab Sample ID: 480-158436-8

Date Collected: 08/28/19 16:37 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			09/07/19 18:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/07/19 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/07/19 18:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*09/07/19 18:26*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/07/19 18:26*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/07/19 18:26*	*1*

Client Sample ID: 356023-GW-ERT-1-115-9 Lab Sample ID: 480-158436-9

Date Collected: 08/29/19 07:32 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**89**		2.0	1.6	ug/L			09/07/19 18:50	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 18:50	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 18:50	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 18:50	2
1,1-Dichloroethane	**16**		2.0	0.76	ug/L			09/07/19 18:50	2
1,1-Dichloroethene	**22**		2.0	0.58	ug/L			09/07/19 18:50	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 18:50	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 18:50	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 18:50	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 18:50	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 18:50	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 18:50	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 18:50	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 18:50	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 18:50	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 18:50	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 18:50	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 18:50	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 18:50	2
Acetone	ND		20	6.0	ug/L			09/07/19 18:50	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 18:50	2
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 18:50	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 18:50	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 18:50	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 18:50	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 18:50	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 18:50	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 18:50	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 18:50	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 18:50	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 18:50	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 18:50	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 18:50	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 18:50	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 18:50	2

Client Sample ID: 356023-GW-ERT-1-115-9
Lab Sample ID: 480-158436-9

Date Collected: 08/29/19 07:32
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 18:50	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 18:50	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 18:50	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 18:50	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 18:50	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 18:50	2
Methylene Chloride	**0.94**	**J**	2.0	0.88	ug/L			09/07/19 18:50	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 18:50	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 18:50	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 18:50	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 18:50	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 18:50	2
Trichloroethene	**7.5**		2.0	0.92	ug/L			09/07/19 18:50	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 18:50	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 18:50	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 18:50	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/07/19 18:50*	*2*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/07/19 18:50*	*2*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/07/19 18:50*	*2*
Toluene-d8 (Surr)	*96*		*80 - 120*		*09/07/19 18:50*	*2*

Client Sample ID: 356023-GW-ERT-1-115-10
Lab Sample ID: 480-158436-10

Date Collected: 08/29/19 11:48
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**90**		2.0	1.6	ug/L			09/07/19 19:14	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 19:14	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 19:14	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 19:14	2
1,1-Dichloroethane	**16**		2.0	0.76	ug/L			09/07/19 19:14	2
1,1-Dichloroethene	**22**		2.0	0.58	ug/L			09/07/19 19:14	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 19:14	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 19:14	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 19:14	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 19:14	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 19:14	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 19:14	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 19:14	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 19:14	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 19:14	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 19:14	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 19:14	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 19:14	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 19:14	2
Acetone	ND		20	6.0	ug/L			09/07/19 19:14	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 19:14	2

Client Sample ID: 356023-GW-ERT-1-115-10 Lab Sample ID: 480-158436-10

Date Collected: 08/29/19 11:48 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 19:14	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 19:14	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 19:14	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 19:14	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 19:14	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 19:14	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 19:14	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 19:14	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 19:14	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 19:14	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 19:14	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 19:14	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 19:14	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 19:14	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 19:14	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 19:14	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 19:14	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 19:14	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 19:14	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 19:14	2
Methylene Chloride	ND		2.0	0.88	ug/L			09/07/19 19:14	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 19:14	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 19:14	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 19:14	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 19:14	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 19:14	2
Trichloroethene	**7.8**		2.0	0.92	ug/L			09/07/19 19:14	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 19:14	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 19:14	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 19:14	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/07/19 19:14*	*2*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/07/19 19:14*	*2*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/07/19 19:14*	*2*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/07/19 19:14*	*2*

Client Sample ID: 356023-GW-ERT-1-115-11 Lab Sample ID: 480-158436-11

Date Collected: 08/29/19 15:15 **Matrix: Water**
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**88**		2.0	1.6	ug/L			09/07/19 19:38	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			09/07/19 19:38	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			09/07/19 19:38	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			09/07/19 19:38	2
1,1-Dichloroethane	**17**		2.0	0.76	ug/L			09/07/19 19:38	2
1,1-Dichloroethene	**21**		2.0	0.58	ug/L			09/07/19 19:38	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 19:38	2

Client Sample ID: 356023-GW-ERT-1-115-11
Lab Sample ID: 480-158436-11
Date Collected: 08/29/19 15:15
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			09/07/19 19:38	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			09/07/19 19:38	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			09/07/19 19:38	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 19:38	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			09/07/19 19:38	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			09/07/19 19:38	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			09/07/19 19:38	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			09/07/19 19:38	2
1,4-Dioxane	ND		80	19	ug/L			09/07/19 19:38	2
2-Butanone (MEK)	ND		20	2.6	ug/L			09/07/19 19:38	2
2-Hexanone	ND		10	2.5	ug/L			09/07/19 19:38	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			09/07/19 19:38	2
Acetone	ND		20	6.0	ug/L			09/07/19 19:38	2
Benzene	ND		2.0	0.82	ug/L			09/07/19 19:38	2
Bromochloromethane	ND		2.0	1.7	ug/L			09/07/19 19:38	2
Bromodichloromethane	ND		2.0	0.78	ug/L			09/07/19 19:38	2
Bromoform	ND		2.0	0.52	ug/L			09/07/19 19:38	2
Bromomethane	ND		2.0	1.4	ug/L			09/07/19 19:38	2
Carbon disulfide	ND		2.0	0.38	ug/L			09/07/19 19:38	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			09/07/19 19:38	2
Chlorobenzene	ND		2.0	1.5	ug/L			09/07/19 19:38	2
Chloroethane	ND		2.0	0.64	ug/L			09/07/19 19:38	2
Chloroform	ND		2.0	0.68	ug/L			09/07/19 19:38	2
Chloromethane	ND		2.0	0.70	ug/L			09/07/19 19:38	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			09/07/19 19:38	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			09/07/19 19:38	2
Cyclohexane	ND		2.0	0.36	ug/L			09/07/19 19:38	2
Dibromochloromethane	ND		2.0	0.64	ug/L			09/07/19 19:38	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			09/07/19 19:38	2
Ethylbenzene	ND		2.0	1.5	ug/L			09/07/19 19:38	2
Isopropylbenzene	ND		2.0	1.6	ug/L			09/07/19 19:38	2
Methyl acetate	ND		5.0	2.6	ug/L			09/07/19 19:38	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			09/07/19 19:38	2
Methylcyclohexane	ND		2.0	0.32	ug/L			09/07/19 19:38	2
Methylene Chloride	**0.90**	**J**	2.0	0.88	ug/L			09/07/19 19:38	2
Styrene	ND		2.0	1.5	ug/L			09/07/19 19:38	2
Tetrachloroethene	ND		2.0	0.72	ug/L			09/07/19 19:38	2
Toluene	ND		2.0	1.0	ug/L			09/07/19 19:38	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			09/07/19 19:38	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			09/07/19 19:38	2
Trichloroethene	**7.3**		2.0	0.92	ug/L			09/07/19 19:38	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			09/07/19 19:38	2
Vinyl chloride	ND		2.0	1.8	ug/L			09/07/19 19:38	2
Xylenes, Total	ND		4.0	1.3	ug/L			09/07/19 19:38	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/07/19 19:38*	*2*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/07/19 19:38*	*2*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/07/19 19:38*	*2*
Toluene-d8 (Surr)	*96*		*80 - 120*		*09/07/19 19:38*	*2*

Client Sample ID: TRIP BLANK-1
Lab Sample ID: 480-158436-12

Date Collected: 08/29/19 17:00
Matrix: Water

Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/08/19 12:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/08/19 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/08/19 12:17	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/08/19 12:17	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/08/19 12:17	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/08/19 12:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/08/19 12:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/08/19 12:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/08/19 12:17	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/08/19 12:17	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/08/19 12:17	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/08/19 12:17	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/08/19 12:17	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/08/19 12:17	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/08/19 12:17	1
1,4-Dioxane	ND		40	9.3	ug/L			09/08/19 12:17	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/08/19 12:17	1
2-Hexanone	ND		5.0	1.2	ug/L			09/08/19 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/08/19 12:17	1
Acetone	ND		10	3.0	ug/L			09/08/19 12:17	1
Benzene	ND		1.0	0.41	ug/L			09/08/19 12:17	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/08/19 12:17	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/08/19 12:17	1
Bromoform	ND		1.0	0.26	ug/L			09/08/19 12:17	1
Bromomethane	ND		1.0	0.69	ug/L			09/08/19 12:17	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/08/19 12:17	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/08/19 12:17	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/08/19 12:17	1
Chloroethane	ND	*	1.0	0.32	ug/L			09/08/19 12:17	1
Chloroform	ND		1.0	0.34	ug/L			09/08/19 12:17	1
Chloromethane	ND		1.0	0.35	ug/L			09/08/19 12:17	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/08/19 12:17	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/08/19 12:17	1
Cyclohexane	ND		1.0	0.18	ug/L			09/08/19 12:17	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/08/19 12:17	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/08/19 12:17	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/08/19 12:17	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/08/19 12:17	1
Methyl acetate	ND		2.5	1.3	ug/L			09/08/19 12:17	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/08/19 12:17	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/08/19 12:17	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/08/19 12:17	1
Styrene	ND		1.0	0.73	ug/L			09/08/19 12:17	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/08/19 12:17	1
Toluene	ND		1.0	0.51	ug/L			09/08/19 12:17	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/08/19 12:17	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/08/19 12:17	1
Trichloroethene	ND		1.0	0.46	ug/L			09/08/19 12:17	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/08/19 12:17	1

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: TRIP BLANK-1
Lab Sample ID: 480-158436-12
Date Collected: 08/29/19 17:00
Matrix: Water
Date Received: 08/30/19 09:40

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			09/08/19 12:17	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/08/19 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/08/19 12:17*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*09/08/19 12:17*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*09/08/19 12:17*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/08/19 12:17*	*1*

Surrogate Summary

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-158436-1	356023-GW-ERT-1-115-1	103	103	109	98
480-158436-2	356023-GW-ERT-1-115-2	102	102	104	94
480-158436-3	356023-GW-ERT-1-115-3	104	101	109	96
480-158436-4	356023-GW-ERT-1-115-4	103	102	108	95
480-158436-4 - DL	356023-GW-ERT-1-115-4	102	99	105	93
480-158436-5	356023-GW-ERT-1-115-5	103	102	108	95
480-158436-6	356023-GW-ERT-1-115-6	107	100	111	94
480-158436-7	356023-GW-ERT-1-115-7	106	103	109	96
480-158436-8	356023-GW-ERT-1-115-8	104	100	108	92
480-158436-9	356023-GW-ERT-1-115-9	104	103	106	96
480-158436-10	356023-GW-ERT-1-115-10	104	103	108	95
480-158436-11	356023-GW-ERT-1-115-11	103	102	108	96
480-158436-12	TRIP BLANK-1	105	106	109	95
LCS 480-490741/5	Lab Control Sample	100	101	107	94
LCS 480-490780/5	Lab Control Sample	101	104	109	96
MB 480-490741/7	Method Blank	99	98	102	94
MB 480-490780/7	Method Blank	100	97	106	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-490741/7
Matrix: Water
Analysis Batch: 490741

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/07/19 13:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/07/19 13:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/07/19 13:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/07/19 13:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/07/19 13:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/07/19 13:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/07/19 13:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/07/19 13:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/07/19 13:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/07/19 13:54	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/07/19 13:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/07/19 13:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/07/19 13:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/07/19 13:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/07/19 13:54	1
1,4-Dioxane	ND		40	9.3	ug/L			09/07/19 13:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/07/19 13:54	1
2-Hexanone	ND		5.0	1.2	ug/L			09/07/19 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/07/19 13:54	1
Acetone	ND		10	3.0	ug/L			09/07/19 13:54	1
Benzene	ND		1.0	0.41	ug/L			09/07/19 13:54	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/07/19 13:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/07/19 13:54	1
Bromoform	ND		1.0	0.26	ug/L			09/07/19 13:54	1
Bromomethane	ND		1.0	0.69	ug/L			09/07/19 13:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/07/19 13:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/07/19 13:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/07/19 13:54	1
Chloroethane	ND		1.0	0.32	ug/L			09/07/19 13:54	1
Chloroform	ND		1.0	0.34	ug/L			09/07/19 13:54	1
Chloromethane	ND		1.0	0.35	ug/L			09/07/19 13:54	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/07/19 13:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/07/19 13:54	1
Cyclohexane	ND		1.0	0.18	ug/L			09/07/19 13:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/07/19 13:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/07/19 13:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/07/19 13:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/07/19 13:54	1
Methyl acetate	ND		2.5	1.3	ug/L			09/07/19 13:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/07/19 13:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/07/19 13:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/07/19 13:54	1
Styrene	ND		1.0	0.73	ug/L			09/07/19 13:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/07/19 13:54	1
Toluene	ND		1.0	0.51	ug/L			09/07/19 13:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/07/19 13:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/07/19 13:54	1
Trichloroethene	ND		1.0	0.46	ug/L			09/07/19 13:54	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-490741/7
Matrix: Water
Analysis Batch: 490741

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/07/19 13:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/07/19 13:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/07/19 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*09/07/19 13:54*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/07/19 13:54*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*09/07/19 13:54*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/07/19 13:54*	*1*

Lab Sample ID: LCS 480-490741/5
Matrix: Water
Analysis Batch: 490741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.5		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		99	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.6		ug/L		110	61 - 148
1,1,2-Trichloroethane	25.0	24.9		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	25.5		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	27.5		ug/L		110	66 - 127
1,2,3-Trichlorobenzene	25.0	25.6		ug/L		102	75 - 123
1,2,4-Trichlorobenzene	25.0	25.0		ug/L		100	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	56 - 134
1,2-Dibromoethane	25.0	25.6		ug/L		102	77 - 120
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 120
1,4-Dioxane	500	451		ug/L		90	50 - 150
2-Butanone (MEK)	125	120		ug/L		96	57 - 140
2-Hexanone	125	116		ug/L		93	65 - 127
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	71 - 125
Acetone	125	128		ug/L		102	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromochloromethane	25.0	26.7		ug/L		107	72 - 130
Bromodichloromethane	25.0	25.8		ug/L		103	80 - 122
Bromoform	25.0	26.7		ug/L		107	61 - 132
Bromomethane	25.0	30.5		ug/L		122	55 - 144
Carbon disulfide	25.0	27.0		ug/L		108	59 - 134
Carbon tetrachloride	25.0	26.7		ug/L		107	72 - 134
Chlorobenzene	25.0	24.4		ug/L		97	80 - 120
Chloroethane	25.0	33.4		ug/L		134	69 - 136
Chloroform	25.0	25.9		ug/L		104	73 - 127
Chloromethane	25.0	27.6		ug/L		110	68 - 124
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	25.3		ug/L		101	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-490741/5
Matrix: Water
Analysis Batch: 490741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	25.0	23.3		ug/L		93	59 - 135
Dibromochloromethane	25.0	25.4		ug/L		102	75 - 125
Dichlorodifluoromethane	25.0	32.3		ug/L		129	59 - 135
Ethylbenzene	25.0	24.6		ug/L		98	77 - 123
Isopropylbenzene	25.0	24.7		ug/L		99	77 - 122
Methyl acetate	50.0	42.2		ug/L		84	74 - 133
Methyl tert-butyl ether	25.0	26.3		ug/L		105	77 - 120
Methylcyclohexane	25.0	25.1		ug/L		100	68 - 134
Methylene Chloride	25.0	25.9		ug/L		104	75 - 124
Styrene	25.0	24.7		ug/L		99	80 - 120
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	24.5		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	27.0		ug/L		108	73 - 127
trans-1,3-Dichloropropene	25.0	23.9		ug/L		96	80 - 120
Trichloroethene	25.0	27.2		ug/L		109	74 - 123
Trichlorofluoromethane	25.0	31.0		ug/L		124	62 - 150
Vinyl chloride	25.0	28.1		ug/L		112	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: MB 480-490780/7
Matrix: Water
Analysis Batch: 490780

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/08/19 11:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/08/19 11:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/08/19 11:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/08/19 11:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/08/19 11:21	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/08/19 11:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/08/19 11:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/08/19 11:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/08/19 11:21	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/08/19 11:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/08/19 11:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/08/19 11:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/08/19 11:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/08/19 11:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/08/19 11:21	1
1,4-Dioxane	ND		40	9.3	ug/L			09/08/19 11:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/08/19 11:21	1
2-Hexanone	ND		5.0	1.2	ug/L			09/08/19 11:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/08/19 11:21	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-490780/7
Matrix: Water
Analysis Batch: 490780

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			09/08/19 11:21	1
Benzene	ND		1.0	0.41	ug/L			09/08/19 11:21	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/08/19 11:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/08/19 11:21	1
Bromoform	ND		1.0	0.26	ug/L			09/08/19 11:21	1
Bromomethane	ND		1.0	0.69	ug/L			09/08/19 11:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/08/19 11:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/08/19 11:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/08/19 11:21	1
Chloroethane	ND		1.0	0.32	ug/L			09/08/19 11:21	1
Chloroform	ND		1.0	0.34	ug/L			09/08/19 11:21	1
Chloromethane	ND		1.0	0.35	ug/L			09/08/19 11:21	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/08/19 11:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/08/19 11:21	1
Cyclohexane	ND		1.0	0.18	ug/L			09/08/19 11:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/08/19 11:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/08/19 11:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/08/19 11:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/08/19 11:21	1
Methyl acetate	ND		2.5	1.3	ug/L			09/08/19 11:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/08/19 11:21	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/08/19 11:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/08/19 11:21	1
Styrene	ND		1.0	0.73	ug/L			09/08/19 11:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/08/19 11:21	1
Toluene	ND		1.0	0.51	ug/L			09/08/19 11:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/08/19 11:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/08/19 11:21	1
Trichloroethene	ND		1.0	0.46	ug/L			09/08/19 11:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/08/19 11:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/08/19 11:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/08/19 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*09/08/19 11:21*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/08/19 11:21*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/08/19 11:21*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/08/19 11:21*	*1*

Lab Sample ID: LCS 480-490780/5
Matrix: Water
Analysis Batch: 490780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.4		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.2		ug/L		109	61 - 148
1,1,2-Trichloroethane	25.0	24.6		ug/L		98	76 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-490780/5
Matrix: Water
Analysis Batch: 490780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	27.2		ug/L		109	66 - 127
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	75 - 123
1,2,4-Trichlorobenzene	25.0	24.2		ug/L		97	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.3		ug/L		89	56 - 134
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		99	80 - 124
1,2-Dichloroethane	25.0	25.1		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	77 - 120
1,4-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 120
1,4-Dioxane	500	472		ug/L		94	50 - 150
2-Butanone (MEK)	125	119		ug/L		95	57 - 140
2-Hexanone	125	115		ug/L		92	65 - 127
4-Methyl-2-pentanone (MIBK)	125	111		ug/L		89	71 - 125
Acetone	125	121		ug/L		97	56 - 142
Benzene	25.0	25.7		ug/L		103	71 - 124
Bromochloromethane	25.0	26.8		ug/L		107	72 - 130
Bromodichloromethane	25.0	25.3		ug/L		101	80 - 122
Bromoform	25.0	25.9		ug/L		104	61 - 132
Bromomethane	25.0	29.8		ug/L		119	55 - 144
Carbon disulfide	25.0	26.5		ug/L		106	59 - 134
Carbon tetrachloride	25.0	26.1		ug/L		104	72 - 134
Chlorobenzene	25.0	23.9		ug/L		96	80 - 120
Chloroethane	25.0	34.9	*	ug/L		140	69 - 136
Chloroform	25.0	25.0		ug/L		100	73 - 127
Chloromethane	25.0	27.5		ug/L		110	68 - 124
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	24.9		ug/L		99	74 - 124
Cyclohexane	25.0	23.3		ug/L		93	59 - 135
Dibromochloromethane	25.0	25.0		ug/L		100	75 - 125
Dichlorodifluoromethane	25.0	32.2		ug/L		129	59 - 135
Ethylbenzene	25.0	23.9		ug/L		96	77 - 123
Isopropylbenzene	25.0	23.8		ug/L		95	77 - 122
Methyl acetate	50.0	40.8		ug/L		82	74 - 133
Methyl tert-butyl ether	25.0	25.4		ug/L		102	77 - 120
Methylcyclohexane	25.0	24.9		ug/L		99	68 - 134
Methylene Chloride	25.0	25.4		ug/L		102	75 - 124
Styrene	25.0	23.9		ug/L		96	80 - 120
Tetrachloroethene	25.0	24.8		ug/L		99	74 - 122
Toluene	25.0	23.7		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	26.5		ug/L		106	73 - 127
trans-1,3-Dichloropropene	25.0	23.2		ug/L		93	80 - 120
Trichloroethene	25.0	25.9		ug/L		103	74 - 123
Trichlorofluoromethane	25.0	31.9		ug/L		128	62 - 150
Vinyl chloride	25.0	28.4		ug/L		114	65 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-490780/5
Matrix: Water
Analysis Batch: 490780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	104		73 - 120
Dibromofluoromethane (Surr)	109		75 - 123
Toluene-d8 (Surr)	96		80 - 120

QC Association Summary

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

GC/MS VOA

Analysis Batch: 490741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-158436-1	356023-GW-ERT-1-115-1	Total/NA	Water	8260C	
480-158436-2	356023-GW-ERT-1-115-2	Total/NA	Water	8260C	
480-158436-3	356023-GW-ERT-1-115-3	Total/NA	Water	8260C	
480-158436-4	356023-GW-ERT-1-115-4	Total/NA	Water	8260C	
480-158436-5	356023-GW-ERT-1-115-5	Total/NA	Water	8260C	
480-158436-6	356023-GW-ERT-1-115-6	Total/NA	Water	8260C	
480-158436-7	356023-GW-ERT-1-115-7	Total/NA	Water	8260C	
480-158436-8	356023-GW-ERT-1-115-8	Total/NA	Water	8260C	
480-158436-9	356023-GW-ERT-1-115-9	Total/NA	Water	8260C	
480-158436-10	356023-GW-ERT-1-115-10	Total/NA	Water	8260C	
480-158436-11	356023-GW-ERT-1-115-11	Total/NA	Water	8260C	
MB 480-490741/7	Method Blank	Total/NA	Water	8260C	
LCS 480-490741/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 490780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-158436-4 - DL	356023-GW-ERT-1-115-4	Total/NA	Water	8260C	
480-158436-12	TRIP BLANK-1	Total/NA	Water	8260C	
MB 480-490780/7	Method Blank	Total/NA	Water	8260C	
LCS 480-490780/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-ERT-1-115-1
Lab Sample ID: 480-158436-1
Date Collected: 08/26/19 16:25
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	490741	09/07/19 15:38	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-2
Lab Sample ID: 480-158436-2
Date Collected: 08/26/19 17:40
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 16:04	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-3
Lab Sample ID: 480-158436-3
Date Collected: 08/27/19 07:50
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 16:28	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-4
Lab Sample ID: 480-158436-4
Date Collected: 08/27/19 11:35
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	490741	09/07/19 16:52	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	2	490780	09/08/19 11:53	RJF	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-5
Lab Sample ID: 480-158436-5
Date Collected: 08/27/19 16:31
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 17:15	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-6
Lab Sample ID: 480-158436-6
Date Collected: 08/28/19 07:29
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 17:39	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-7
Lab Sample ID: 480-158436-7
Date Collected: 08/28/19 11:56
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 18:03	AMM	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-ERT-1-115-8
Lab Sample ID: 480-158436-8
Date Collected: 08/28/19 16:37
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	490741	09/07/19 18:26	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-9
Lab Sample ID: 480-158436-9
Date Collected: 08/29/19 07:32
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 18:50	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-10
Lab Sample ID: 480-158436-10
Date Collected: 08/29/19 11:48
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 19:14	AMM	TAL BUF

Client Sample ID: 356023-GW-ERT-1-115-11
Lab Sample ID: 480-158436-11
Date Collected: 08/29/19 15:15
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	490741	09/07/19 19:38	AMM	TAL BUF

Client Sample ID: TRIP BLANK-1
Lab Sample ID: 480-158436-12
Date Collected: 08/29/19 17:00
Matrix: Water
Date Received: 08/30/19 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	490780	09/08/19 12:17	RJF	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-158436-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (20) ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
356023-GW-ERT-1-115-1	480-158436-1	109	103	98	103
356023-GW-ERT-1-115-2	480-158436-2	104	102	94	102
356023-GW-ERT-1-115-3	480-158436-3	109	104	96	101
356023-GW-ERT-1-115-4	480-158436-4	108	103	95	102
356023-GW-ERT-1-115-4 DL	480-158436-4 DL	105	102	93	99
356023-GW-ERT-1-115-5	480-158436-5	108	103	95	102
356023-GW-ERT-1-115-6	480-158436-6	111	107	94	100
356023-GW-ERT-1-115-7	480-158436-7	109	106	96	103
356023-GW-ERT-1-115-8	480-158436-8	108	104	92	100
356023-GW-ERT-1-115-9	480-158436-9	106	104	96	103
356023-GW-ERT-1-115-10	480-158436-10	108	104	95	103
356023-GW-ERT-1-115-11	480-158436-11	108	103	96	102
TRIP BLANK-1	480-158436-12	109	105	95	106
	MB 480-490741/7	102	99	94	98
	MB 480-490780/7	106	100	93	97
	LCS 480-490741/5	107	100	94	101
	LCS 480-490780/5	109	101	96	104

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T4583.D

Lab ID: LCS 480-490741/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	26.5	106	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.9	99	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.6	110	61-148	
1,1,2-Trichloroethane	25.0	24.9	99	76-122	
1,1-Dichloroethane	25.0	25.5	102	77-120	
1,1-Dichloroethene	25.0	27.5	110	66-127	
1,2,3-Trichlorobenzene	25.0	25.6	102	75-123	
1,2,4-Trichlorobenzene	25.0	25.0	100	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.9	92	56-134	
1,2-Dibromoethane	25.0	25.6	102	77-120	
1,2-Dichlorobenzene	25.0	25.7	103	80-124	
1,2-Dichloroethane	25.0	25.2	101	75-120	
1,2-Dichloropropane	25.0	25.3	101	76-120	
1,3-Dichlorobenzene	25.0	24.8	99	77-120	
1,4-Dichlorobenzene	25.0	25.3	101	80-120	
1,4-Dioxane	500	451	90	50-150	
2-Butanone (MEK)	125	120	96	57-140	
2-Hexanone	125	116	93	65-127	
4-Methyl-2-pentanone (MIBK)	125	115	92	71-125	
Acetone	125	128	102	56-142	
Benzene	25.0	25.8	103	71-124	
Bromochloromethane	25.0	26.7	107	72-130	
Bromodichloromethane	25.0	25.8	103	80-122	
Bromoform	25.0	26.7	107	61-132	
Bromomethane	25.0	30.5	122	55-144	
Carbon disulfide	25.0	27.0	108	59-134	
Carbon tetrachloride	25.0	26.7	107	72-134	
Chlorobenzene	25.0	24.4	97	80-120	
Chloroethane	25.0	33.4	134	69-136	
Chloroform	25.0	25.9	104	73-127	
Chloromethane	25.0	27.6	110	68-124	
cis-1,2-Dichloroethene	25.0	26.1	104	74-124	
cis-1,3-Dichloropropene	25.0	25.3	101	74-124	
Cyclohexane	25.0	23.3	93	59-135	
Dibromochloromethane	25.0	25.4	102	75-125	
Dichlorodifluoromethane	25.0	32.3	129	59-135	
Ethylbenzene	25.0	24.6	98	77-123	
Isopropylbenzene	25.0	24.7	99	77-122	
Methyl acetate	50.0	42.2	84	74-133	
Methyl tert-butyl ether	25.0	26.3	105	77-120	
Methylcyclohexane	25.0	25.1	100	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T4583.D

Lab ID: LCS 480-490741/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	25.9	104	75-124	
Styrene	25.0	24.7	99	80-120	
Tetrachloroethene	25.0	26.0	104	74-122	
Toluene	25.0	24.5	98	80-122	
trans-1,2-Dichloroethene	25.0	27.0	108	73-127	
trans-1,3-Dichloropropene	25.0	23.9	96	80-120	
Trichloroethene	25.0	27.2	109	74-123	
Trichlorofluoromethane	25.0	31.0	124	62-150	
Vinyl chloride	25.0	28.1	112	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T4611.D

Lab ID: LCS 480-490780/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	26.4	106	73-126	
1,1,2,2-Tetrachloroethane	25.0	23.8	95	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.2	109	61-148	
1,1,2-Trichloroethane	25.0	24.6	98	76-122	
1,1-Dichloroethane	25.0	25.0	100	77-120	
1,1-Dichloroethene	25.0	27.2	109	66-127	
1,2,3-Trichlorobenzene	25.0	24.7	99	75-123	
1,2,4-Trichlorobenzene	25.0	24.2	97	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.3	89	56-134	
1,2-Dibromoethane	25.0	24.6	98	77-120	
1,2-Dichlorobenzene	25.0	24.9	99	80-124	
1,2-Dichloroethane	25.0	25.1	100	75-120	
1,2-Dichloropropane	25.0	24.3	97	76-120	
1,3-Dichlorobenzene	25.0	24.3	97	77-120	
1,4-Dichlorobenzene	25.0	24.9	100	80-120	
1,4-Dioxane	500	472	94	50-150	
2-Butanone (MEK)	125	119	95	57-140	
2-Hexanone	125	115	92	65-127	
4-Methyl-2-pentanone (MIBK)	125	111	89	71-125	
Acetone	125	121	97	56-142	
Benzene	25.0	25.7	103	71-124	
Bromochloromethane	25.0	26.8	107	72-130	
Bromodichloromethane	25.0	25.3	101	80-122	
Bromoform	25.0	25.9	104	61-132	
Bromomethane	25.0	29.8	119	55-144	
Carbon disulfide	25.0	26.5	106	59-134	
Carbon tetrachloride	25.0	26.1	104	72-134	
Chlorobenzene	25.0	23.9	96	80-120	
Chloroethane	25.0	34.9	140	69-136	*
Chloroform	25.0	25.0	100	73-127	
Chloromethane	25.0	27.5	110	68-124	
cis-1,2-Dichloroethene	25.0	25.9	104	74-124	
cis-1,3-Dichloropropene	25.0	24.9	99	74-124	
Cyclohexane	25.0	23.3	93	59-135	
Dibromochloromethane	25.0	25.0	100	75-125	
Dichlorodifluoromethane	25.0	32.2	129	59-135	
Ethylbenzene	25.0	23.9	96	77-123	
Isopropylbenzene	25.0	23.8	95	77-122	
Methyl acetate	50.0	40.8	82	74-133	
Methyl tert-butyl ether	25.0	25.4	102	77-120	
Methylcyclohexane	25.0	24.9	99	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T4611.D

Lab ID: LCS 480-490780/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	25.4	102	75-124	
Styrene	25.0	23.9	96	80-120	
Tetrachloroethene	25.0	24.8	99	74-122	
Toluene	25.0	23.7	95	80-122	
trans-1,2-Dichloroethene	25.0	26.5	106	73-127	
trans-1,3-Dichloropropene	25.0	23.2	93	80-120	
Trichloroethene	25.0	25.9	103	74-123	
Trichlorofluoromethane	25.0	31.9	128	62-150	
Vinyl chloride	25.0	28.4	114	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab File ID: T4585.D Lab Sample ID: MB 480-490741/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5975T Date Analyzed: 09/07/2019 13:54

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-490741/5	T4583.D	09/07/2019 13:05
356023-GW-ERT-1-115-1	480-158436-1	T4589.D	09/07/2019 15:38
356023-GW-ERT-1-115-2	480-158436-2	T4590.D	09/07/2019 16:04
356023-GW-ERT-1-115-3	480-158436-3	T4591.D	09/07/2019 16:28
356023-GW-ERT-1-115-4	480-158436-4	T4592.D	09/07/2019 16:52
356023-GW-ERT-1-115-5	480-158436-5	T4593.D	09/07/2019 17:15
356023-GW-ERT-1-115-6	480-158436-6	T4594.D	09/07/2019 17:39
356023-GW-ERT-1-115-7	480-158436-7	T4595.D	09/07/2019 18:03
356023-GW-ERT-1-115-8	480-158436-8	T4596.D	09/07/2019 18:26
356023-GW-ERT-1-115-9	480-158436-9	T4597.D	09/07/2019 18:50
356023-GW-ERT-1-115-10	480-158436-10	T4598.D	09/07/2019 19:14
356023-GW-ERT-1-115-11	480-158436-11	T4599.D	09/07/2019 19:38

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab File ID: T4613.D Lab Sample ID: MB 480-490780/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5975T Date Analyzed: 09/08/2019 11:21

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-490780/5	T4611.D	09/08/2019 10:33
356023-GW-ERT-1-115-4 DL	480-158436-4 DL	T4614.D	09/08/2019 11:53
TRIP BLANK-1	480-158436-12	T4615.D	09/08/2019 12:17

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab File ID: T3672.D BFB Injection Date: 08/07/2019

Instrument ID: HP5975T BFB Injection Time: 14:49

Analysis Batch No.: 485855

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.4	
75	30.0 - 60.0 % of mass 95	49.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	80.3	
175	5.0 - 9.0 % of mass 174	6.0	(7.4) 1
176	95.0 - 101.0 % of mass 174	76.4	(95.2) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-485855/5	T3676.D	08/07/2019	16:28
	IC 480-485855/6	T3677.D	08/07/2019	16:52
	IC 480-485855/7	T3678.D	08/07/2019	17:16
	IC 480-485855/8	T3679.D	08/07/2019	17:39
	IC 480-485855/9	T3680.D	08/07/2019	18:03
	ICIS 480-485855/10	T3681.D	08/07/2019	18:27
	IC 480-485855/11	T3682.D	08/07/2019	18:51
	IC 480-485855/12	T3683.D	08/07/2019	19:14

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab File ID: T4580.D BFB Injection Date: 09/07/2019

Instrument ID: HP5975T BFB Injection Time: 11:43

Analysis Batch No.: 490741

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.1
75	30.0 - 60.0 % of mass 95	53.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	79.0
175	5.0 - 9.0 % of mass 174	5.8 (7.3) 1
176	95.0 - 101.0 % of mass 174	79.6 (100.7) 1
177	5.0 - 9.0 % of mass 176	4.2 (5.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-490741/3	T4581.D	09/07/2019	12:17
	LCS 480-490741/5	T4583.D	09/07/2019	13:05
	MB 480-490741/7	T4585.D	09/07/2019	13:54
356023-GW-ERT-1-115-1	480-158436-1	T4589.D	09/07/2019	15:38
356023-GW-ERT-1-115-2	480-158436-2	T4590.D	09/07/2019	16:04
356023-GW-ERT-1-115-3	480-158436-3	T4591.D	09/07/2019	16:28
356023-GW-ERT-1-115-4	480-158436-4	T4592.D	09/07/2019	16:52
356023-GW-ERT-1-115-5	480-158436-5	T4593.D	09/07/2019	17:15
356023-GW-ERT-1-115-6	480-158436-6	T4594.D	09/07/2019	17:39
356023-GW-ERT-1-115-7	480-158436-7	T4595.D	09/07/2019	18:03
356023-GW-ERT-1-115-8	480-158436-8	T4596.D	09/07/2019	18:26
356023-GW-ERT-1-115-9	480-158436-9	T4597.D	09/07/2019	18:50
356023-GW-ERT-1-115-10	480-158436-10	T4598.D	09/07/2019	19:14
356023-GW-ERT-1-115-11	480-158436-11	T4599.D	09/07/2019	19:38

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab File ID: T4608.D BFB Injection Date: 09/08/2019

Instrument ID: HP5975T BFB Injection Time: 09:21

Analysis Batch No.: 490780

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.2	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	50.0 - 120.00 % of mass 95	83.3	
175	5.0 - 9.0 % of mass 174	6.4	(7.7) 1
176	95.0 - 101.0 % of mass 174	80.4	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-490780/3	T4609.D	09/08/2019	09:45
	LCS 480-490780/5	T4611.D	09/08/2019	10:33
	MB 480-490780/7	T4613.D	09/08/2019	11:21
356023-GW-ERT-1-115-4 DL	480-158436-4 DL	T4614.D	09/08/2019	11:53
TRIP BLANK-1	480-158436-12	T4615.D	09/08/2019	12:17

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Sample No.: ICIS 480-485855/10 Date Analyzed: 08/07/2019 18:27

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): T3681.D Heated Purge: (Y/N) N

Calibration ID: 37379

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		174088	4.80	640954	7.10	342260	8.96
UPPER LIMIT		348176	5.30	1281908	7.60	684520	9.46
LOWER LIMIT		87044	4.30	320477	6.60	171130	8.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-490741/3		158172	4.80	615756	7.09	338605	8.96
CCVIS 480-490780/3		164128	4.80	648176	7.09	348019	8.96

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Sample No.: CCVIS 480-490741/3 Date Analyzed: 09/07/2019 12:17

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): T4581.D Heated Purge: (Y/N) N

Calibration ID: 37376

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		158172	4.80	615756	7.09	338605	8.96
UPPER LIMIT		316344	5.30	1231512	7.59	677210	9.46
LOWER LIMIT		79086	4.30	307878	6.59	169303	8.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-490741/5		158093	4.80	629082	7.09	338539	8.96
MB 480-490741/7		162413	4.79	633061	7.09	337888	8.96
480-158436-1	356023-GW-ERT-1-115-1	154699	4.80	598830	7.09	324841	8.96
480-158436-2	356023-GW-ERT-1-115-2	158871	4.80	620985	7.09	333841	8.96
480-158436-3	356023-GW-ERT-1-115-3	154935	4.80	611563	7.09	333971	8.96
480-158436-4	356023-GW-ERT-1-115-4	153829	4.80	611446	7.09	329075	8.96
480-158436-5	356023-GW-ERT-1-115-5	154974	4.80	607148	7.09	330207	8.96
480-158436-6	356023-GW-ERT-1-115-6	148584	4.80	610358	7.09	323705	8.96
480-158436-7	356023-GW-ERT-1-115-7	151386	4.80	598050	7.09	326765	8.96
480-158436-8	356023-GW-ERT-1-115-8	151665	4.80	616422	7.09	330997	8.96
480-158436-9	356023-GW-ERT-1-115-9	152477	4.80	588491	7.09	328073	8.96
480-158436-10	356023-GW-ERT-1-115-10	151849	4.80	594850	7.09	321126	8.96
480-158436-11	356023-GW-ERT-1-115-11	152628	4.80	593184	7.09	321226	8.96

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Sample No.: CCVIS 480-490780/3 Date Analyzed: 09/08/2019 09:45

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): T4609.D Heated Purge: (Y/N) N

Calibration ID: 37376

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		164128	4.80	648176	7.09	348019	8.96
UPPER LIMIT		328256	5.30	1296352	7.59	696038	9.46
LOWER LIMIT		82064	4.30	324088	6.59	174010	8.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-490780/5		155174	4.80	617454	7.09	334312	8.96
MB 480-490780/7		155170	4.80	617657	7.09	342493	8.96
480-158436-4 DL	356023-GW-ERT-1-115-4 DL	160176	4.80	624358	7.09	334608	8.96
480-158436-12	TRIP BLANK-1	151789	4.80	594682	7.09	322073	8.96

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-1 Lab Sample ID: 480-158436-1

Matrix: Water Lab File ID: T4589.D

Analysis Method: 8260C Date Collected: 08/26/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 15:38

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	170		4.0	3.3
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.84
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.92
75-34-3	1,1-Dichloroethane	30		4.0	1.5
75-35-4	1,1-Dichloroethene	36		4.0	1.2
87-61-6	1,2,3-Trichlorobenzene	ND		4.0	1.6
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	1.6
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.0	1.6
106-93-4	1,2-Dibromoethane	ND		4.0	2.9
95-50-1	1,2-Dichlorobenzene	ND		4.0	3.2
107-06-2	1,2-Dichloroethane	ND		4.0	0.84
78-87-5	1,2-Dichloropropane	ND		4.0	2.9
541-73-1	1,3-Dichlorobenzene	ND		4.0	3.1
106-46-7	1,4-Dichlorobenzene	ND		4.0	3.4
123-91-1	1,4-Dioxane	ND		160	37
78-93-3	2-Butanone (MEK)	ND		40	5.3
591-78-6	2-Hexanone	ND		20	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	8.4
67-64-1	Acetone	ND		40	12
71-43-2	Benzene	ND		4.0	1.6
74-97-5	Bromochloromethane	ND		4.0	3.5
75-27-4	Bromodichloromethane	ND		4.0	1.6
75-25-2	Bromoform	ND		4.0	1.0
74-83-9	Bromomethane	ND		4.0	2.8
75-15-0	Carbon disulfide	ND		4.0	0.76
56-23-5	Carbon tetrachloride	ND		4.0	1.1
108-90-7	Chlorobenzene	ND		4.0	3.0
75-00-3	Chloroethane	ND		4.0	1.3
67-66-3	Chloroform	ND		4.0	1.4
74-87-3	Chloromethane	ND		4.0	1.4
156-59-2	cis-1,2-Dichloroethene	ND		4.0	3.2
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	1.4
110-82-7	Cyclohexane	ND		4.0	0.72
124-48-1	Dibromochloromethane	ND		4.0	1.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-1 Lab Sample ID: 480-158436-1

Matrix: Water Lab File ID: T4589.D

Analysis Method: 8260C Date Collected: 08/26/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 15:38

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		4.0	2.7
100-41-4	Ethylbenzene	ND		4.0	3.0
98-82-8	Isopropylbenzene	ND		4.0	3.2
79-20-9	Methyl acetate	ND		10	5.2
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.64
108-87-2	Methylcyclohexane	ND		4.0	0.64
75-09-2	Methylene Chloride	1.9	J	4.0	1.8
100-42-5	Styrene	ND		4.0	2.9
127-18-4	Tetrachloroethene	ND		4.0	1.4
108-88-3	Toluene	ND		4.0	2.0
156-60-5	trans-1,2-Dichloroethene	ND		4.0	3.6
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	1.5
79-01-6	Trichloroethene	16		4.0	1.8
75-69-4	Trichlorofluoromethane	ND		4.0	3.5
75-01-4	Vinyl chloride	ND		4.0	3.6
1330-20-7	Xylenes, Total	ND		8.0	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D
Lims ID: 480-158436-B-1
Client ID: 356023-GW-ERT-1-115-1
Sample Type: Client
Inject. Date: 07-Sep-2019 15:38:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 4.0000
Sample Info: 480-158436-B-1
Misc. Info.: 480-0083938-011
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:49:29 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:49:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	154699	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	598830	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	324841	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	211419	27.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	269058	25.8	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	752536	24.4	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	244573	25.8	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	U
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	94	58624	8.91	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	95	4236	0.4834	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	97	123948	7.57	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	81	3692	0.4066	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	85	2737	0.1883	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	512540	41.9	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	95	31273	3.90	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

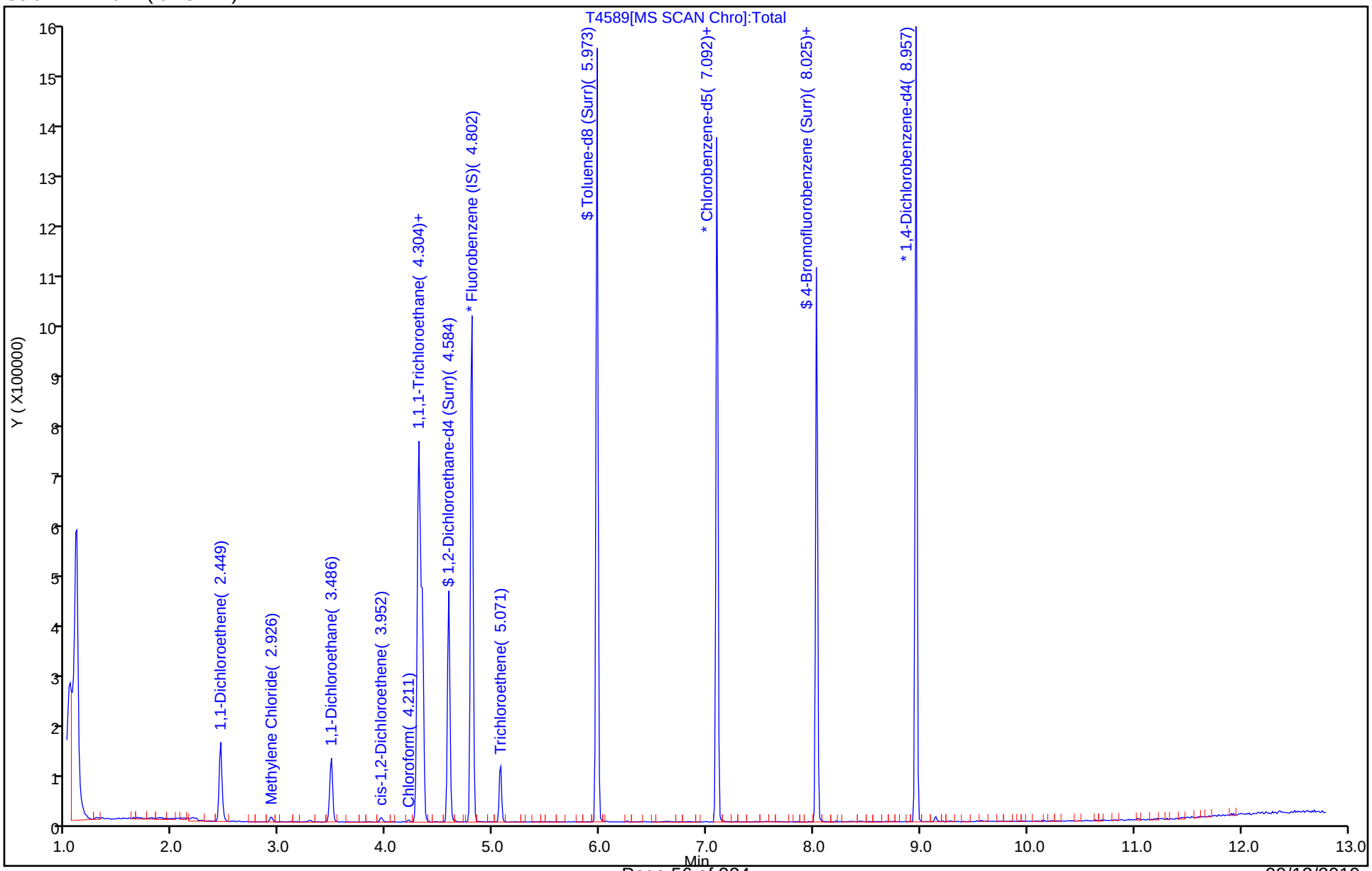
Report Date: 08-Sep-2019 08:49:30 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D

Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1	Worklist Smp#:	11
Client ID:	356023-GW-ERT-1-115-1				
Purge Vol:	5.000 mL	Dil. Factor:	4.0000	ALS Bottle#:	11
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

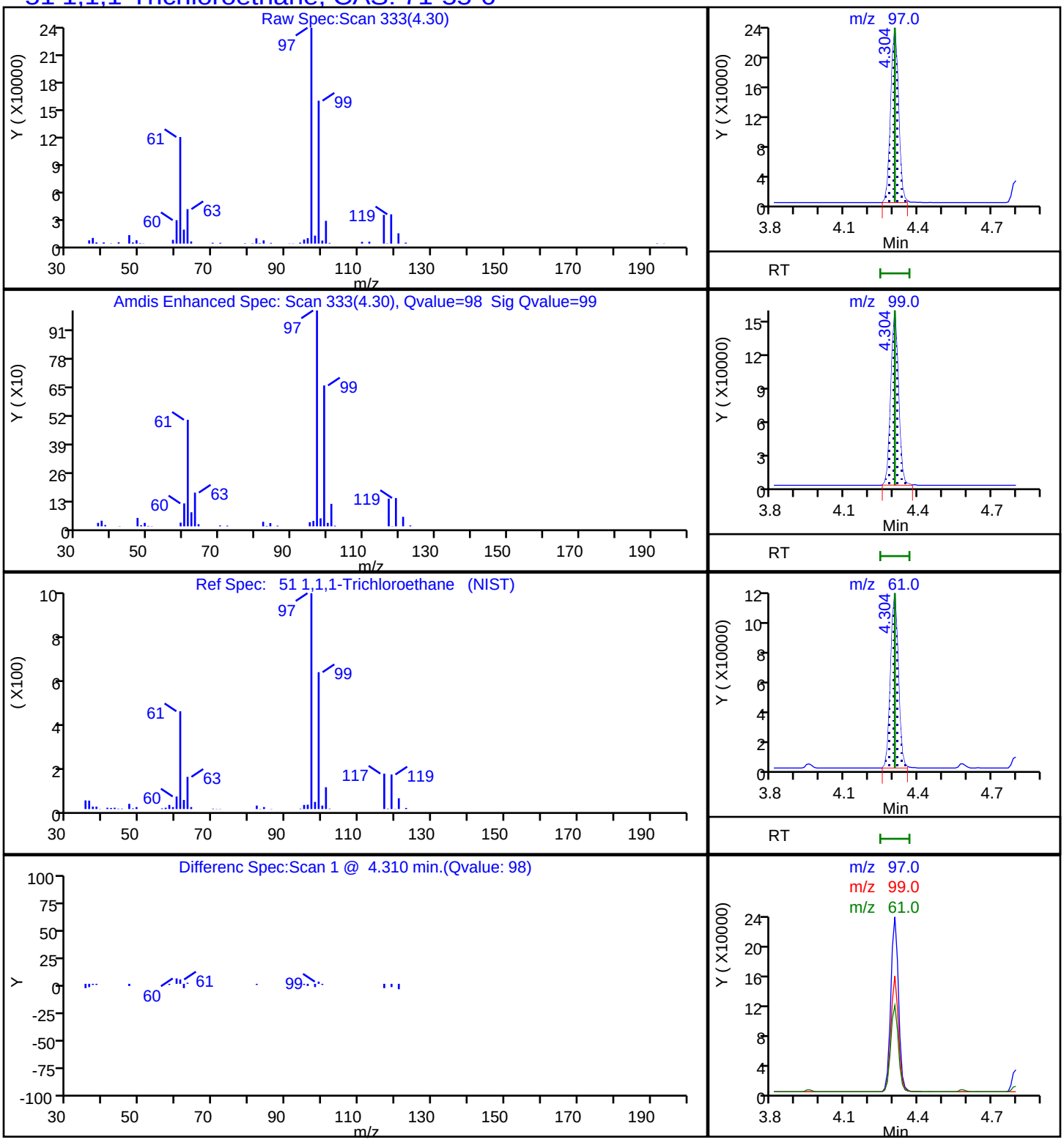


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D

Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

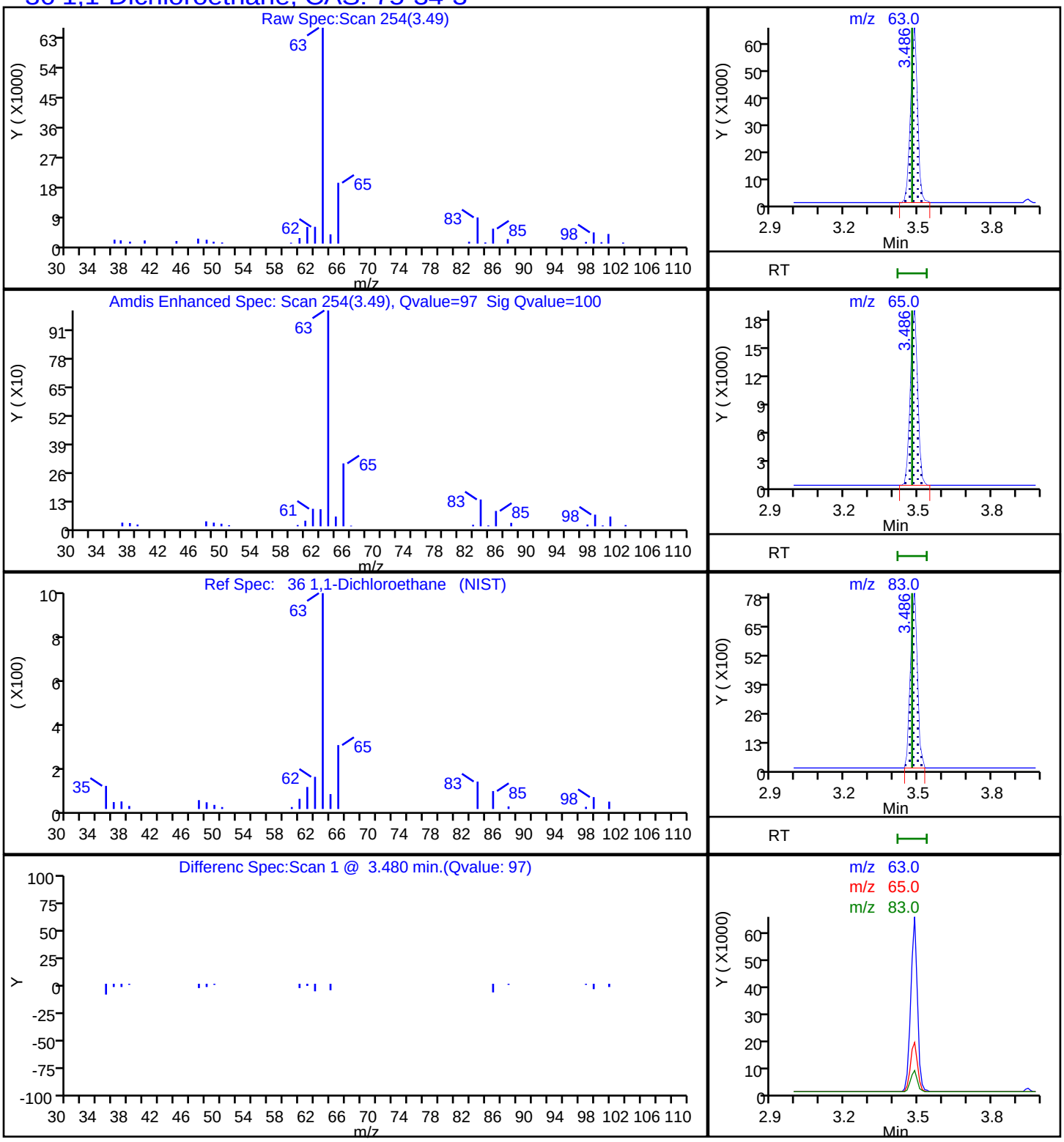


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D

Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

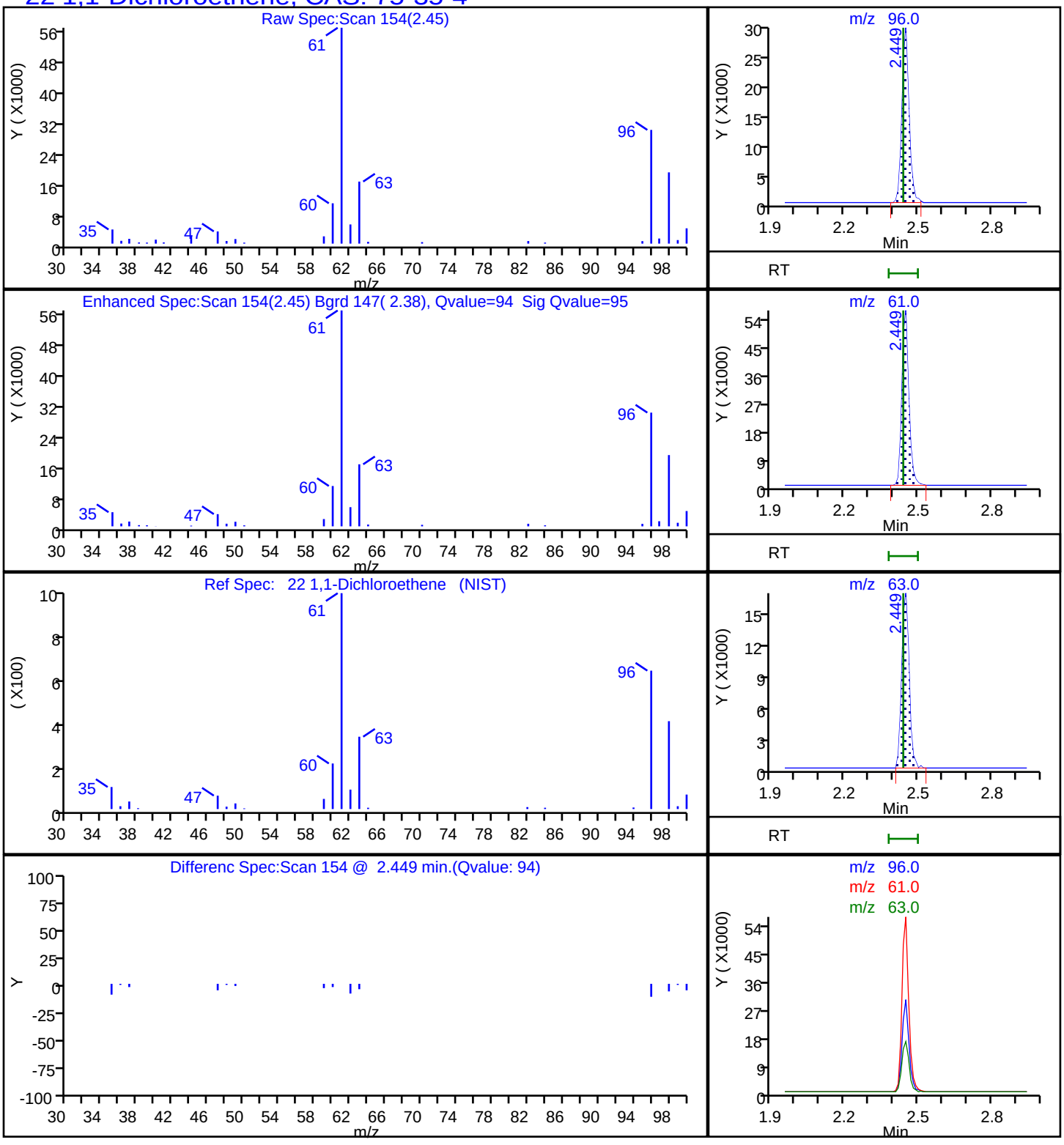


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D

Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1
Client ID:	356023-GW-ERT-1-115-1		
Operator ID:	OI	ALS Bottle#:	11 Worklist Smp#: 11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



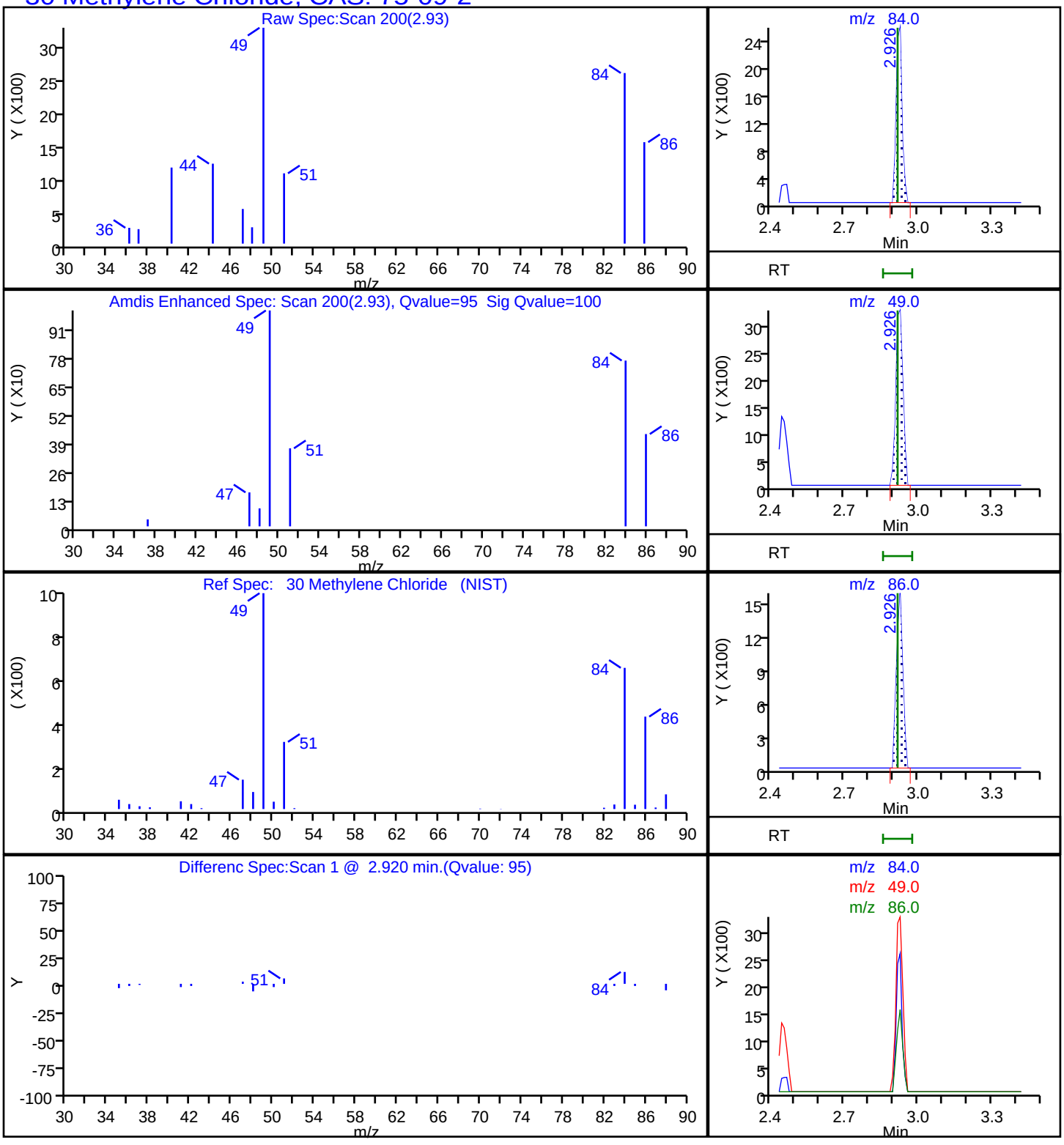
Report Date: 08-Sep-2019 08:49:30 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D

Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2



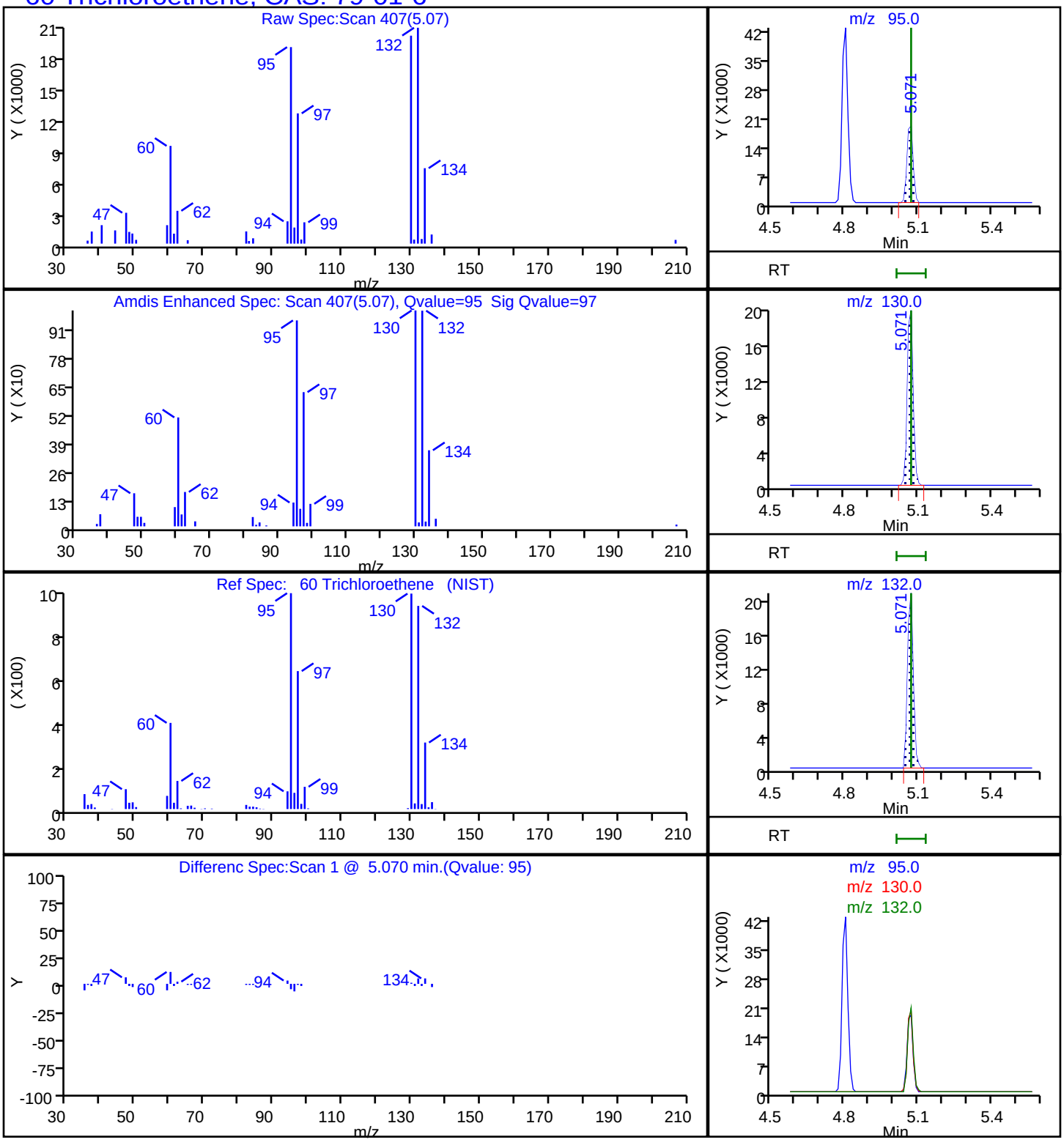
Report Date: 08-Sep-2019 08:49:30 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D

Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



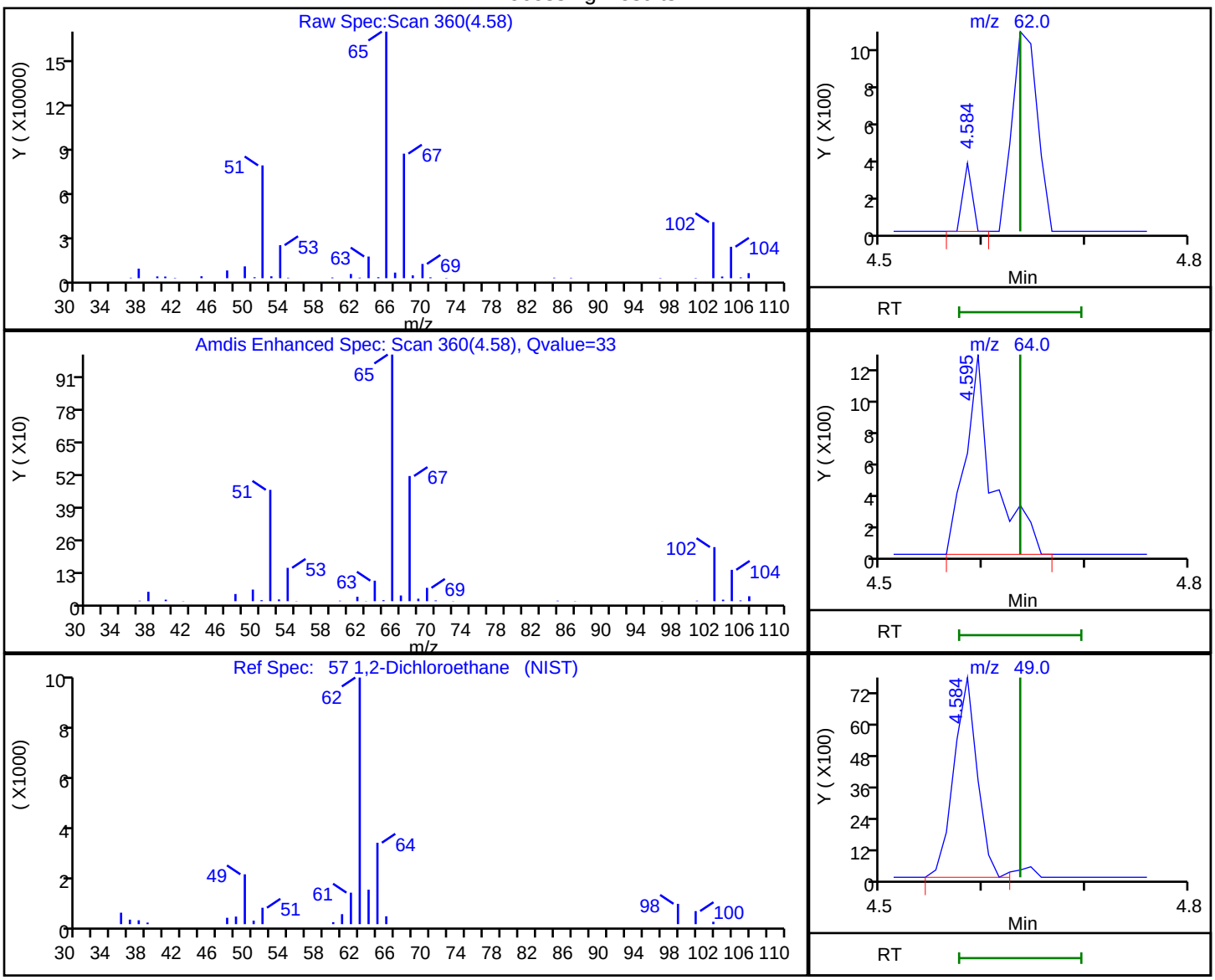
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D				
Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

57 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.58	62.00	231	0.017127
4.59	64.00	2334	
4.58	49.00	12409	

Reviewer: moffata, 08-Sep-2019 08:49:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

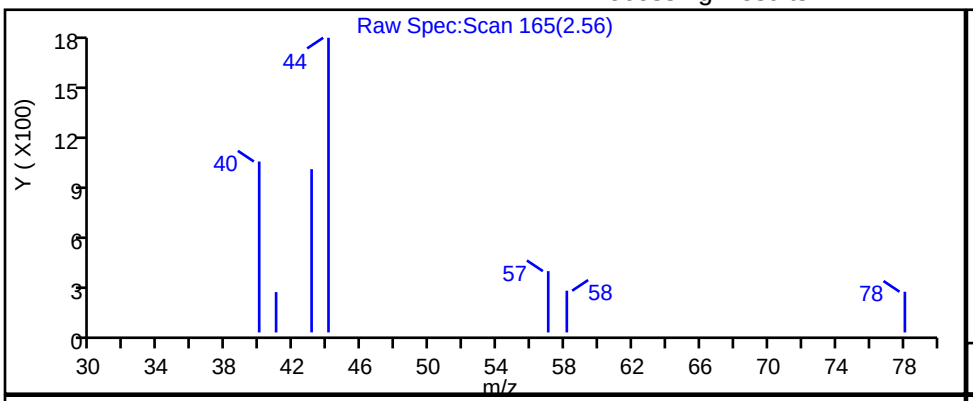
User Disabled Compound Report

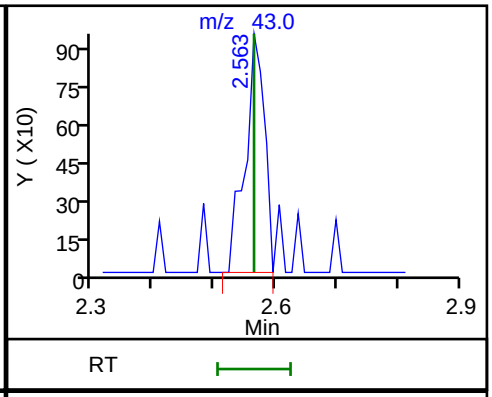
Eurofins TestAmerica, Buffalo

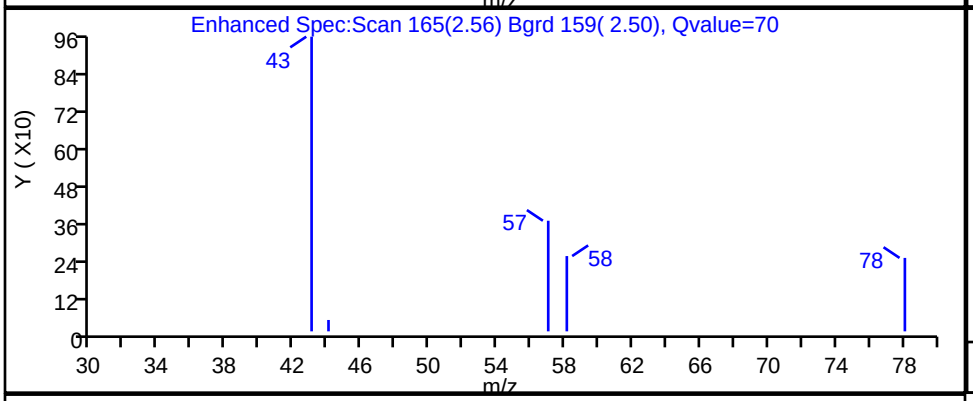
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D				
Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

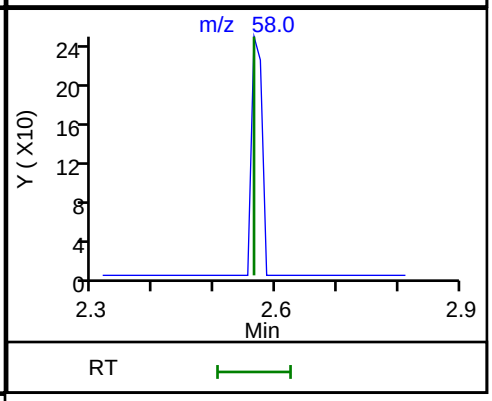
23 Acetone, CAS: 67-64-1

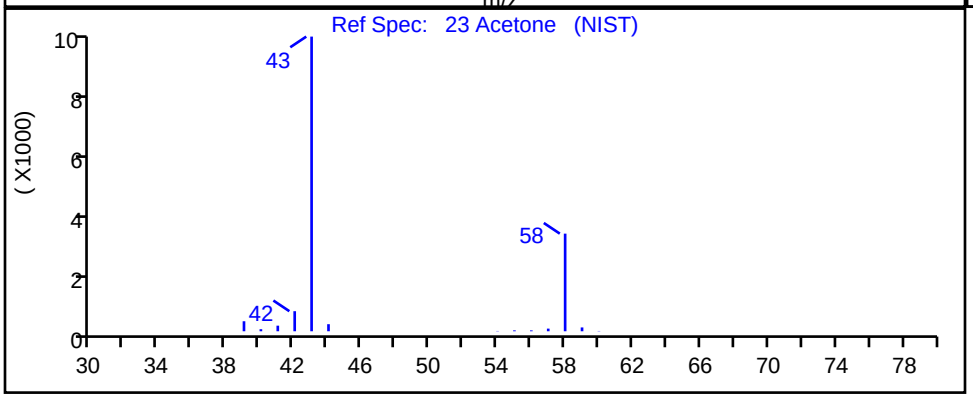
Processing Results











RT	Mass	Response	Amount
2.56	43.00	2109	0.456730
2.56	58.00	0	

Reviewer: moffata, 08-Sep-2019 08:49:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

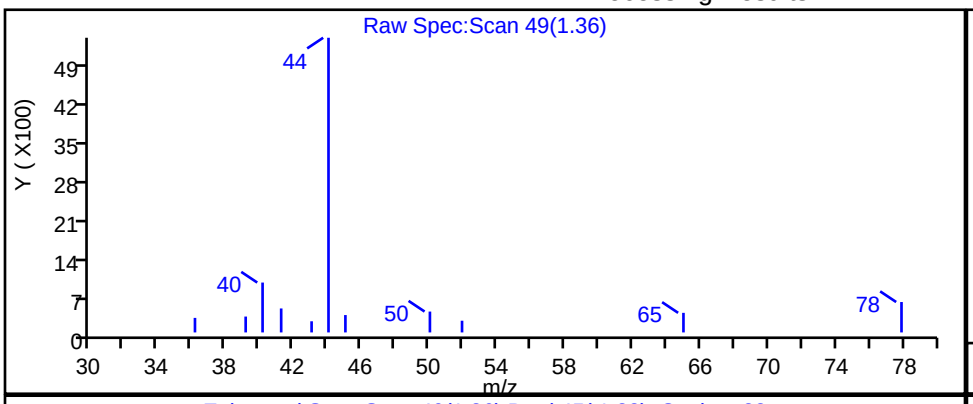
User Disabled Compound Report

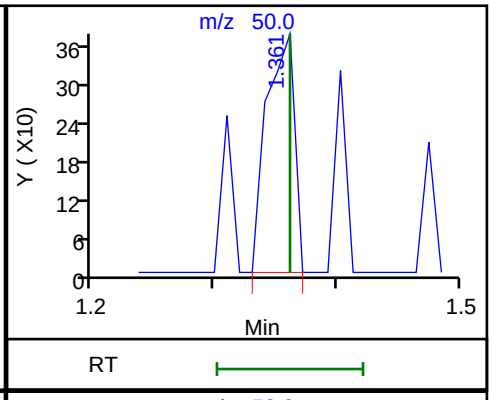
Eurofins TestAmerica, Buffalo

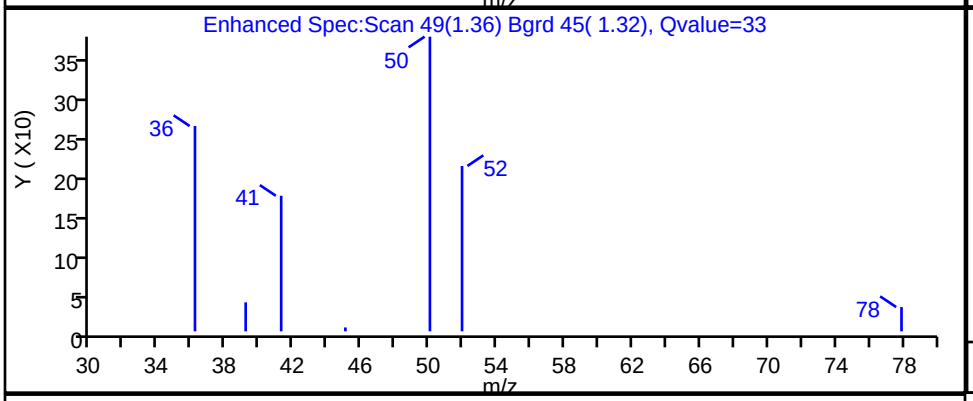
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4589.D				
Injection Date:	07-Sep-2019 15:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-1	Lab Sample ID:	480-158436-1		
Client ID:	356023-GW-ERT-1-115-1				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

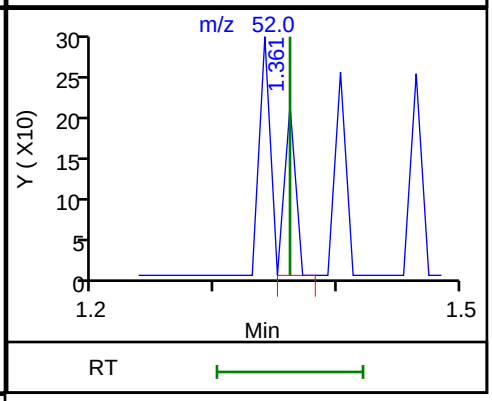
13 Chloromethane, CAS: 74-87-3

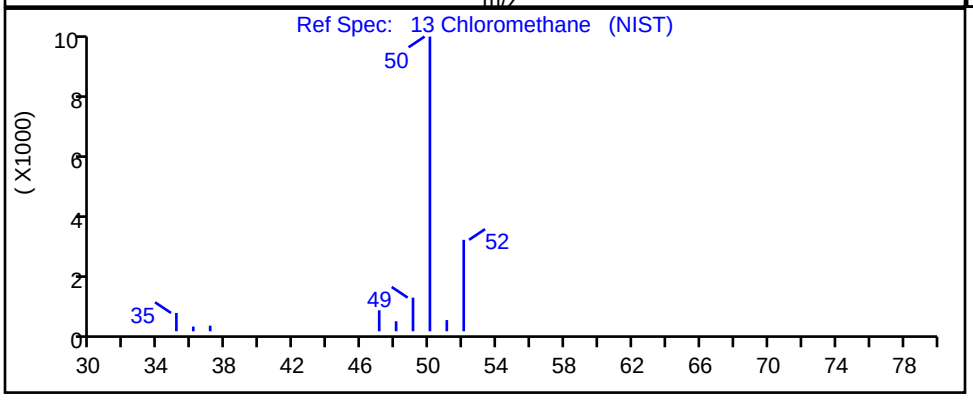
Processing Results











RT	Mass	Response	Amount
1.36	50.00	598	0.041903
1.36	52.00	131	

Reviewer: moffata, 08-Sep-2019 08:49:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-2 Lab Sample ID: 480-158436-2

Matrix: Water Lab File ID: T4590.D

Analysis Method: 8260C Date Collected: 08/26/2019 17:40

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 16:04

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	100		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	17		2.0	0.76
75-35-4	1,1-Dichloroethene	24		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-2 Lab Sample ID: 480-158436-2

Matrix: Water Lab File ID: T4590.D

Analysis Method: 8260C Date Collected: 08/26/2019 17:40

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 16:04

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.96	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	10		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D
Lims ID: 480-158436-B-2
Client ID: 356023-GW-ERT-1-115-2
Sample Type: Client
Inject. Date: 07-Sep-2019 16:04:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-2
Misc. Info.: 480-0083938-012
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:49:53 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:49:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	158871	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	620985	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	333841	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	92	208560	26.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	272945	25.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	750311	23.5	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	250199	25.5	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	93	79813	11.8	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	96	4337	0.4819	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	97	146072	8.69	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	5268	0.5649	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	91	3133	0.2099	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	647712	51.6	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	93	41137	4.99	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

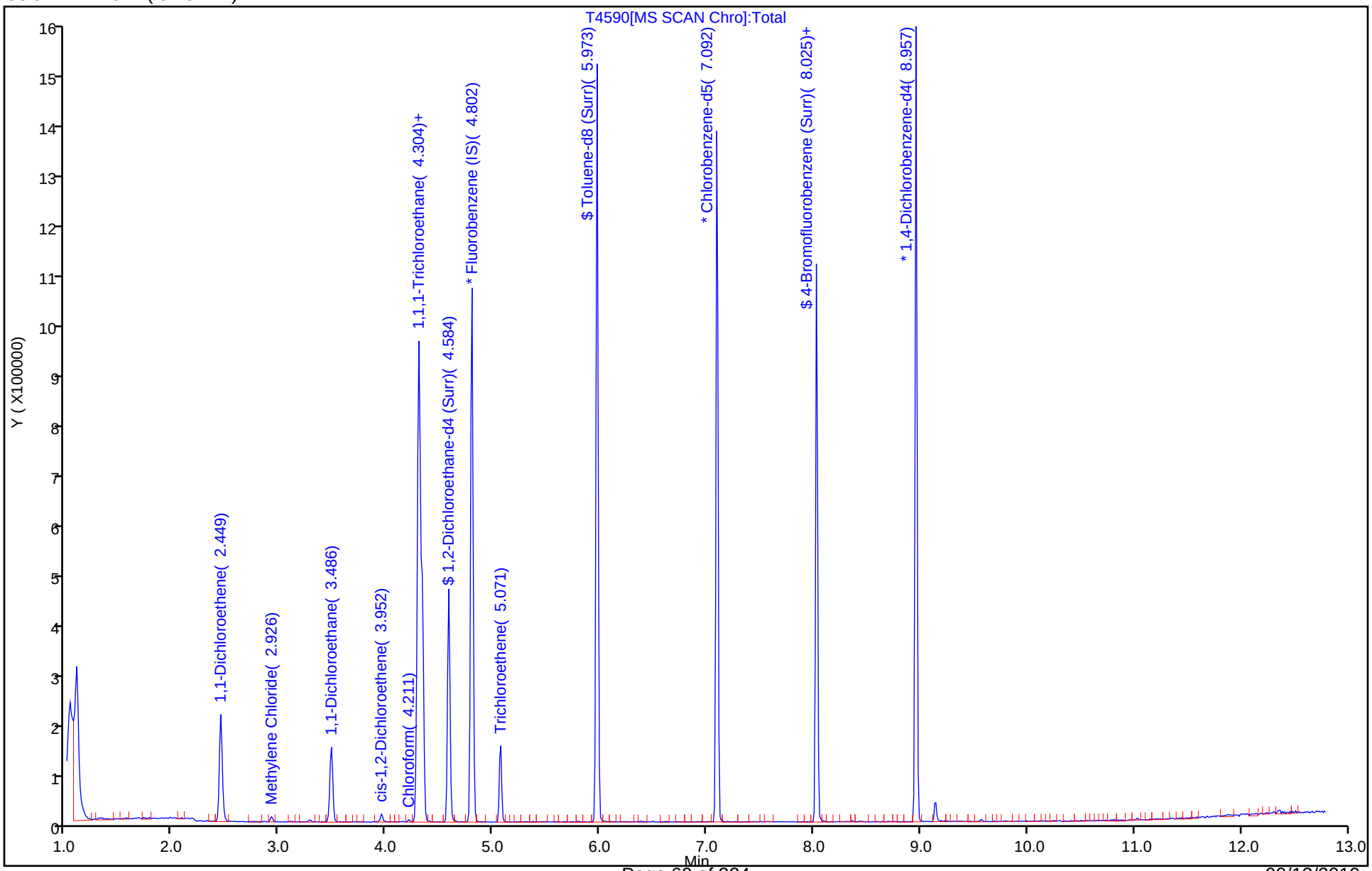
Report Date: 08-Sep-2019 08:49:53 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D

Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2	Worklist Smp#:	12
Client ID:	356023-GW-ERT-1-115-2				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	12
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

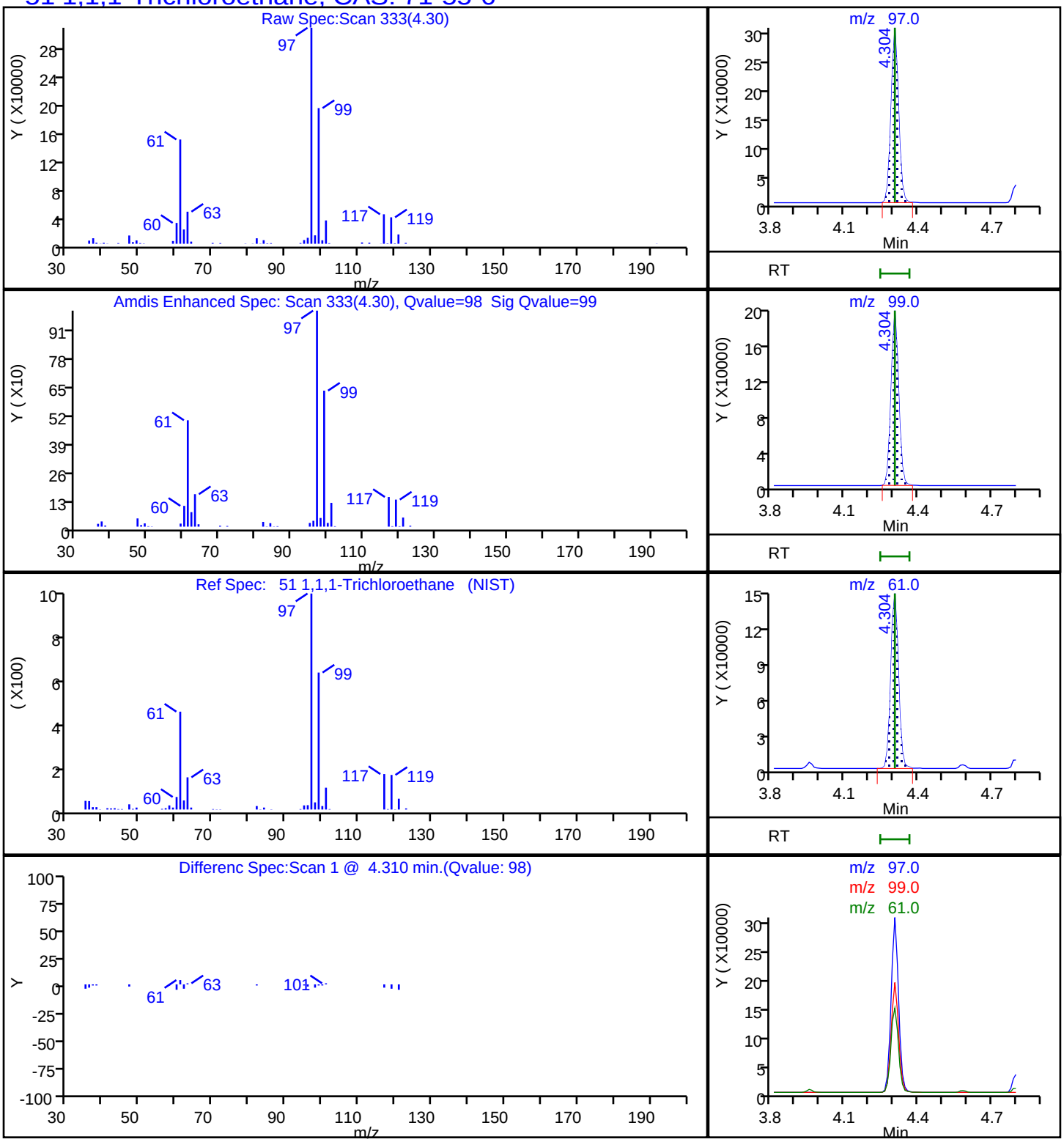


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D

Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2		
Client ID:	356023-GW-ERT-1-115-2				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

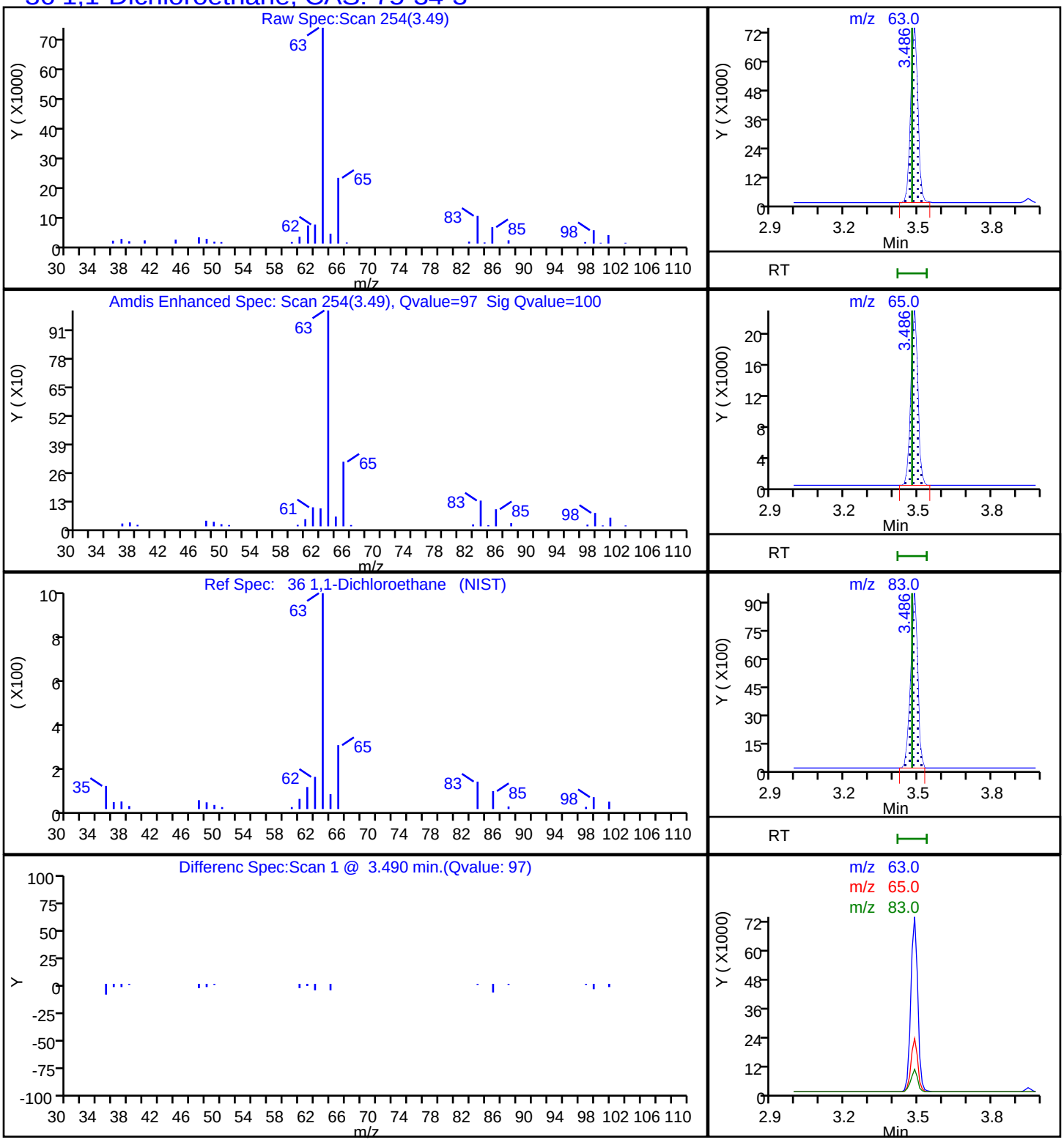


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D

Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2		
Client ID:	356023-GW-ERT-1-115-2				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

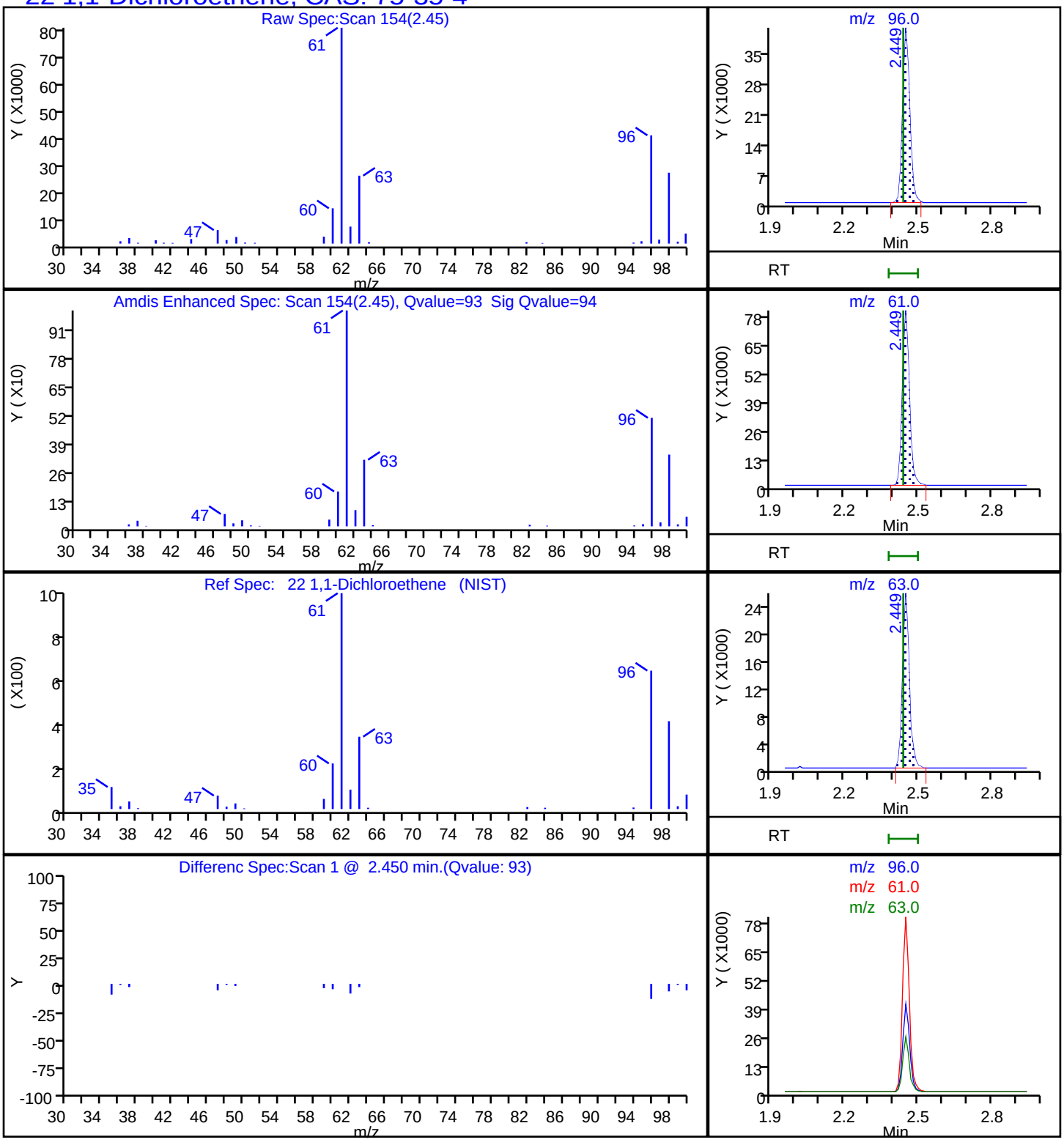


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D

Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2		
Client ID:	356023-GW-ERT-1-115-2				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4



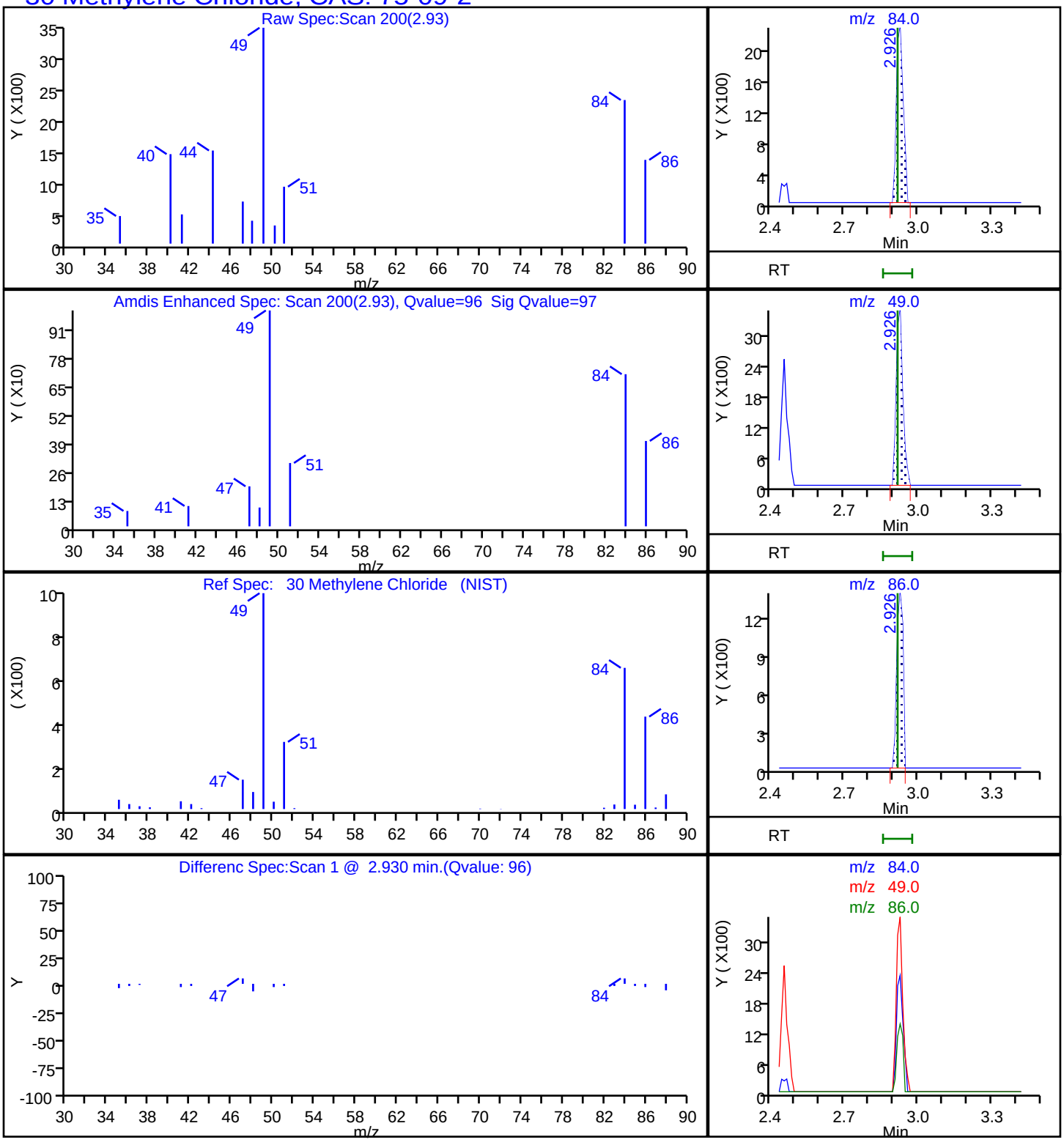
Report Date: 08-Sep-2019 08:49:53 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D

Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2		
Client ID:	356023-GW-ERT-1-115-2				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

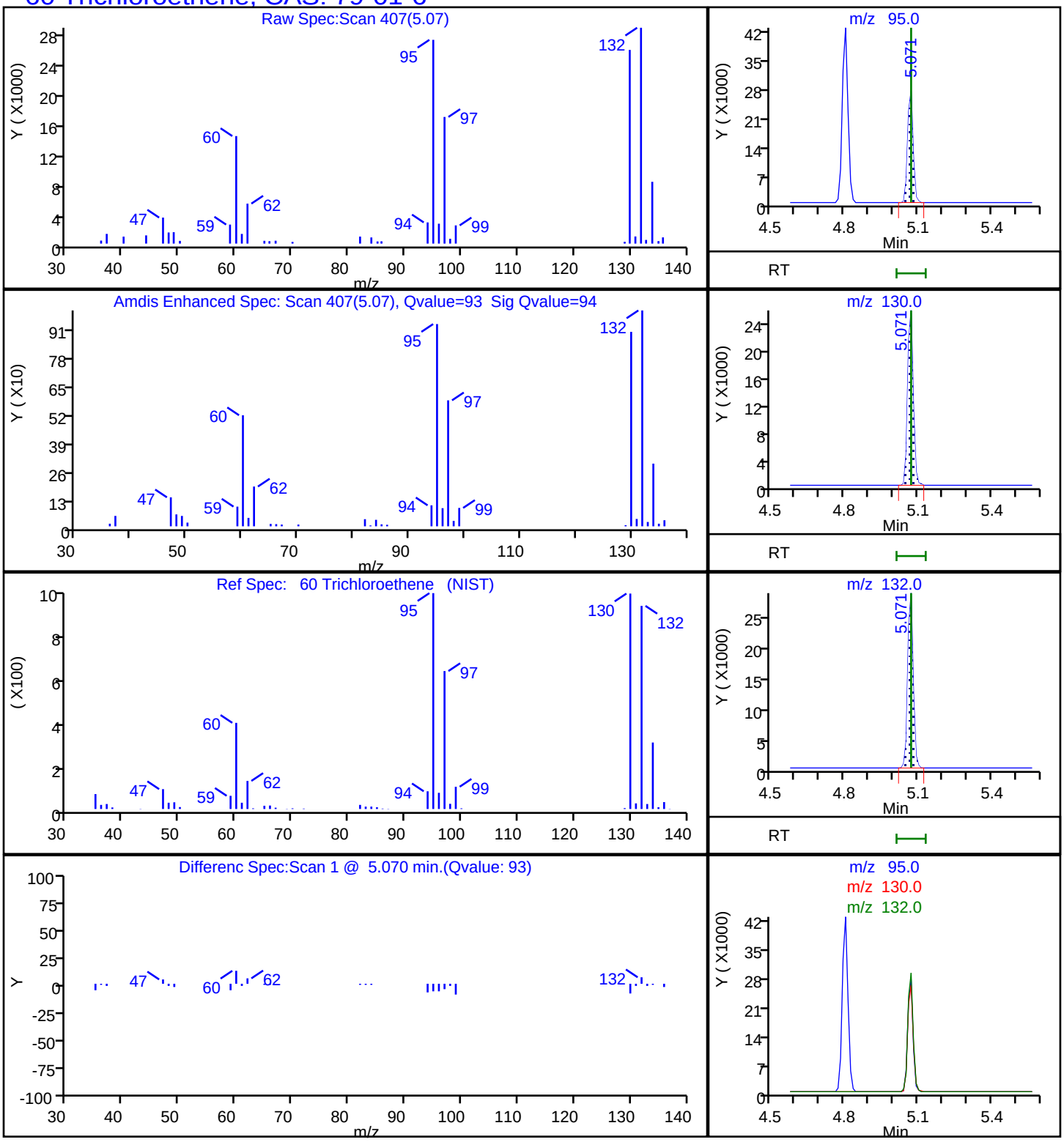


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D

Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2
Client ID:	356023-GW-ERT-1-115-2		
Operator ID:	OI	ALS Bottle#:	12 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



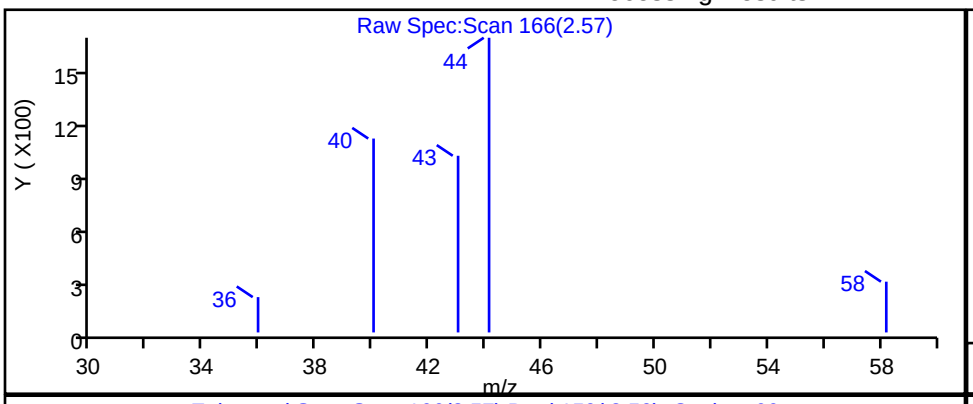
User Disabled Compound Report

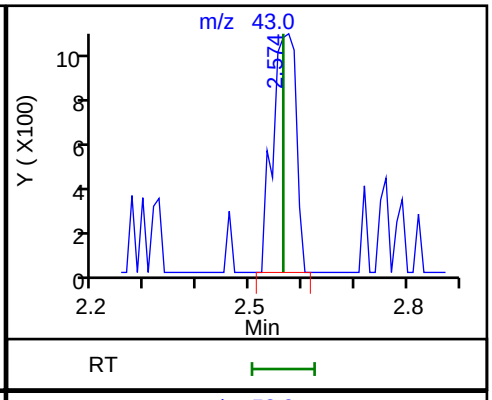
Eurofins TestAmerica, Buffalo

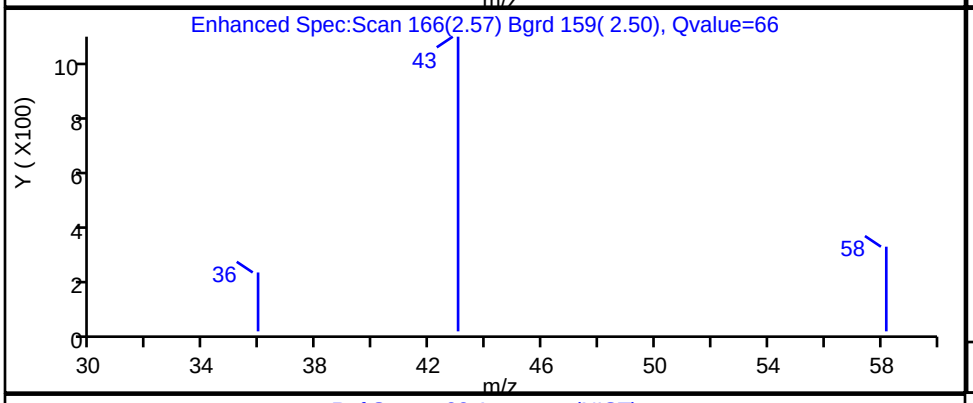
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4590.D				
Injection Date:	07-Sep-2019 16:04:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-2	Lab Sample ID:	480-158436-2		
Client ID:	356023-GW-ERT-1-115-2				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

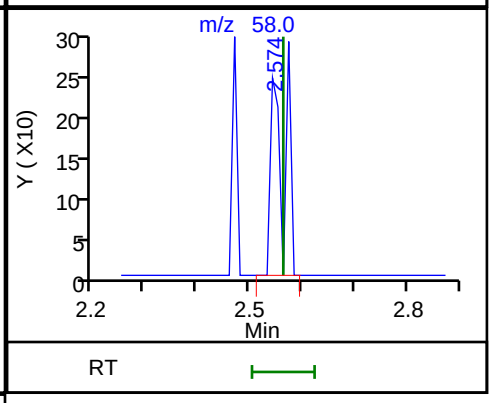
23 Acetone, CAS: 67-64-1

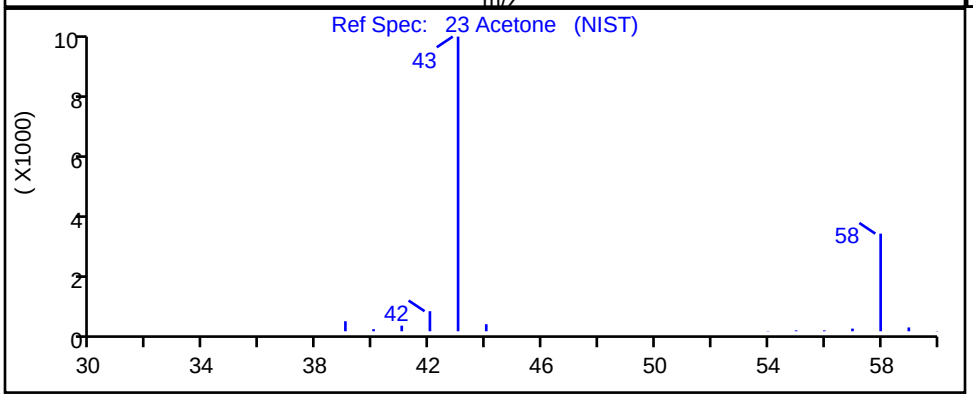
Processing Results











RT	Mass	Response	Amount
2.57	43.00	3141	0.662360
2.57	58.00	461	

Reviewer: moffata, 08-Sep-2019 08:49:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-3 Lab Sample ID: 480-158436-3

Matrix: Water Lab File ID: T4591.D

Analysis Method: 8260C Date Collected: 08/27/2019 07:50

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 16:28

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	99		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	14		2.0	0.76
75-35-4	1,1-Dichloroethene	26		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-3 Lab Sample ID: 480-158436-3

Matrix: Water Lab File ID: T4591.D

Analysis Method: 8260C Date Collected: 08/27/2019 07:50

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 16:28

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.95	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	10		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D
Lims ID: 480-158436-B-3
Client ID: 356023-GW-ERT-1-115-3
Sample Type: Client
Inject. Date: 07-Sep-2019 16:28:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-3
Misc. Info.: 480-0083938-013
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:49:53 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:50:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	154935	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	611563	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	333971	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	93	212885	27.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	271406	26.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	755270	24.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	244470	25.3	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	95	85450	13.0	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43	2.553	2.563	-0.010	75	3394	0.7339	
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.916	2.916	0.000	92	4168	0.4749	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.476	3.475	0.001	97	114502	6.98	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	80	4163	0.4577	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	92	2808	0.1929	
51 1,1,1-Trichloroethane	97	4.305	4.304	0.001	98	608085	49.7	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.061	5.071	-0.010	96	40639	5.06	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

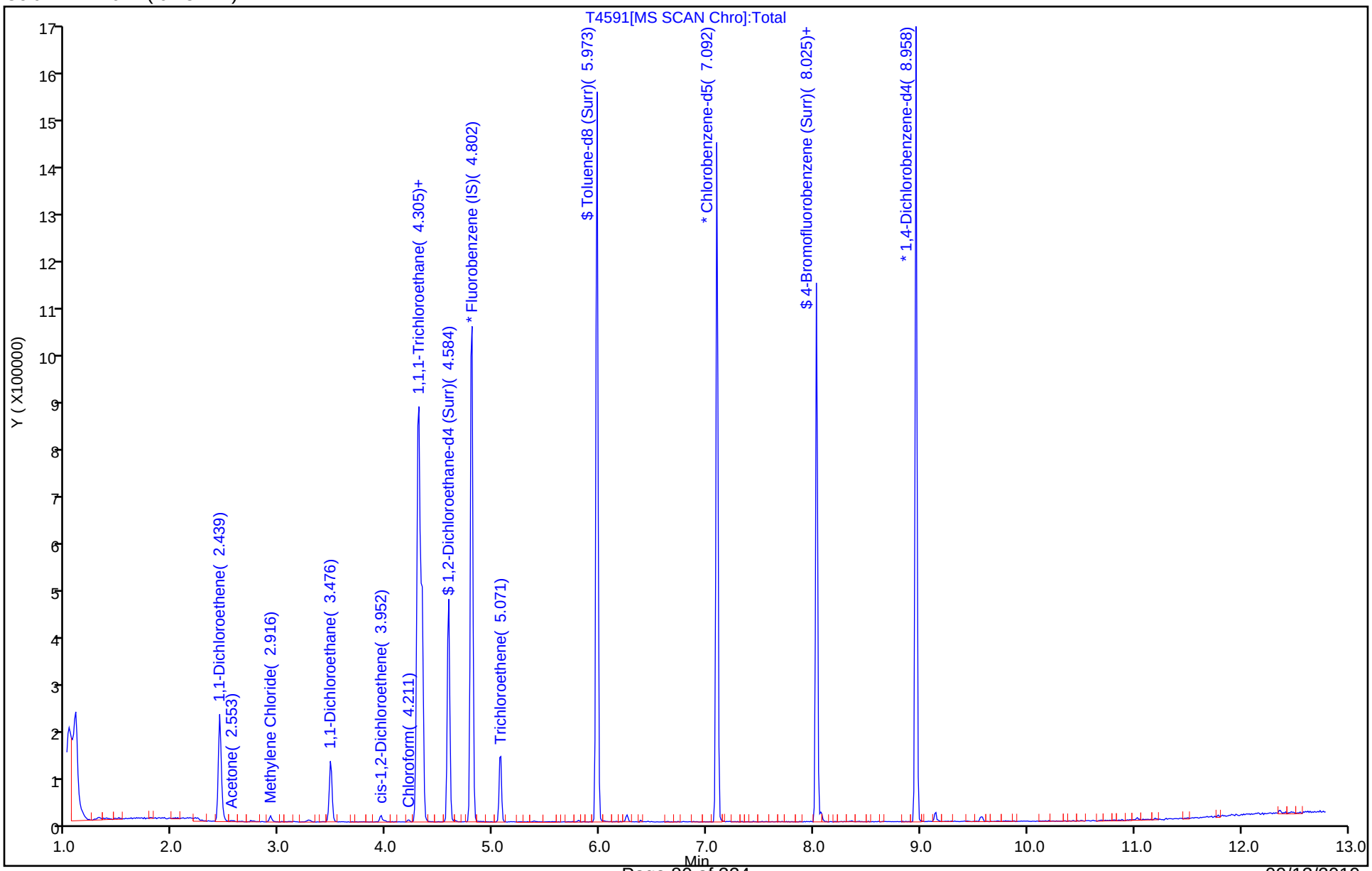
Report Date: 08-Sep-2019 08:50:26 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D

Injection Date:	07-Sep-2019 16:28:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-3	Lab Sample ID:	480-158436-3	Worklist Smp#:	13
Client ID:	356023-GW-ERT-1-115-3				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	13
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

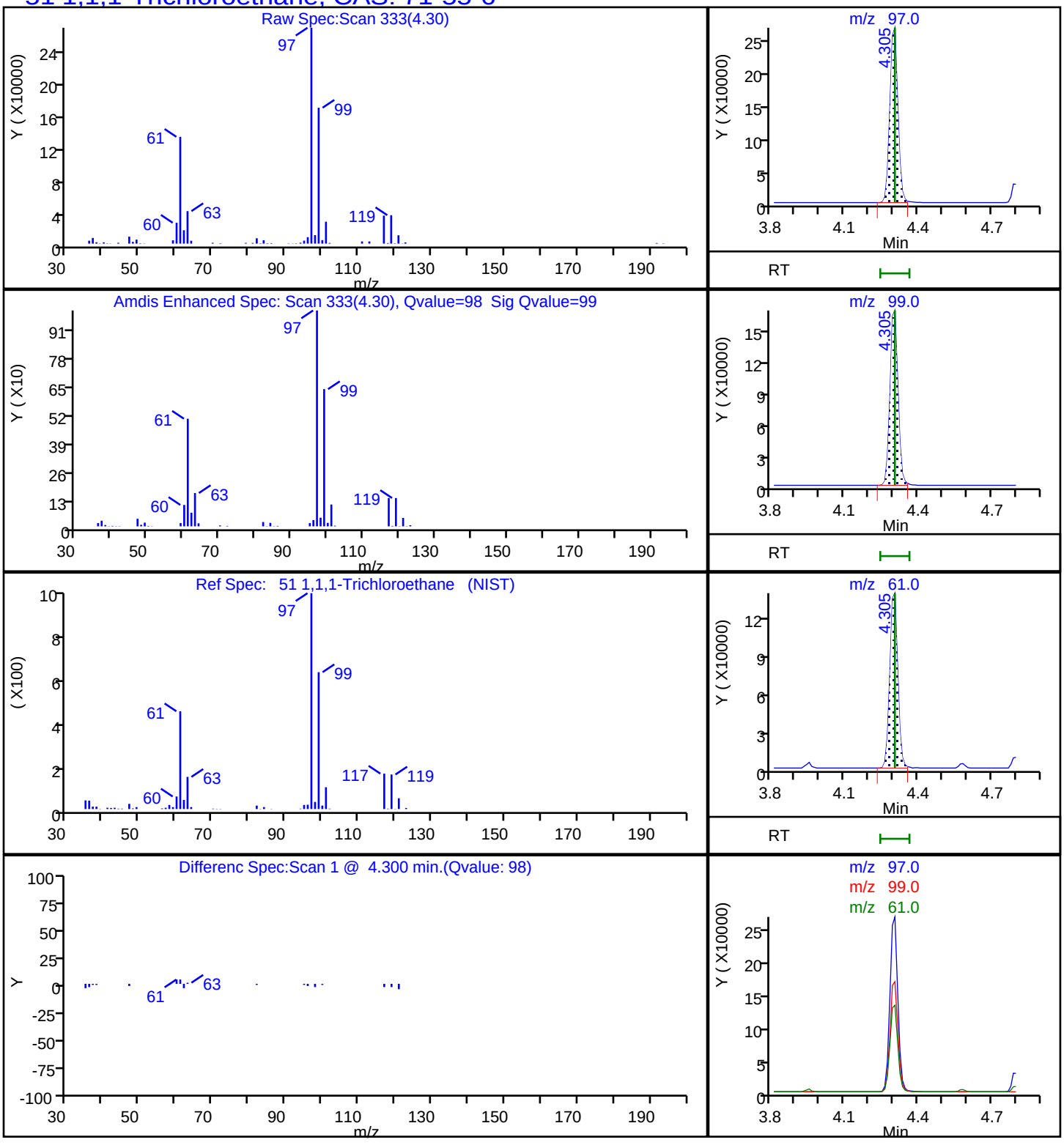


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D

Injection Date:	07-Sep-2019 16:28:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-3	Lab Sample ID:	480-158436-3		
Client ID:	356023-GW-ERT-1-115-3				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

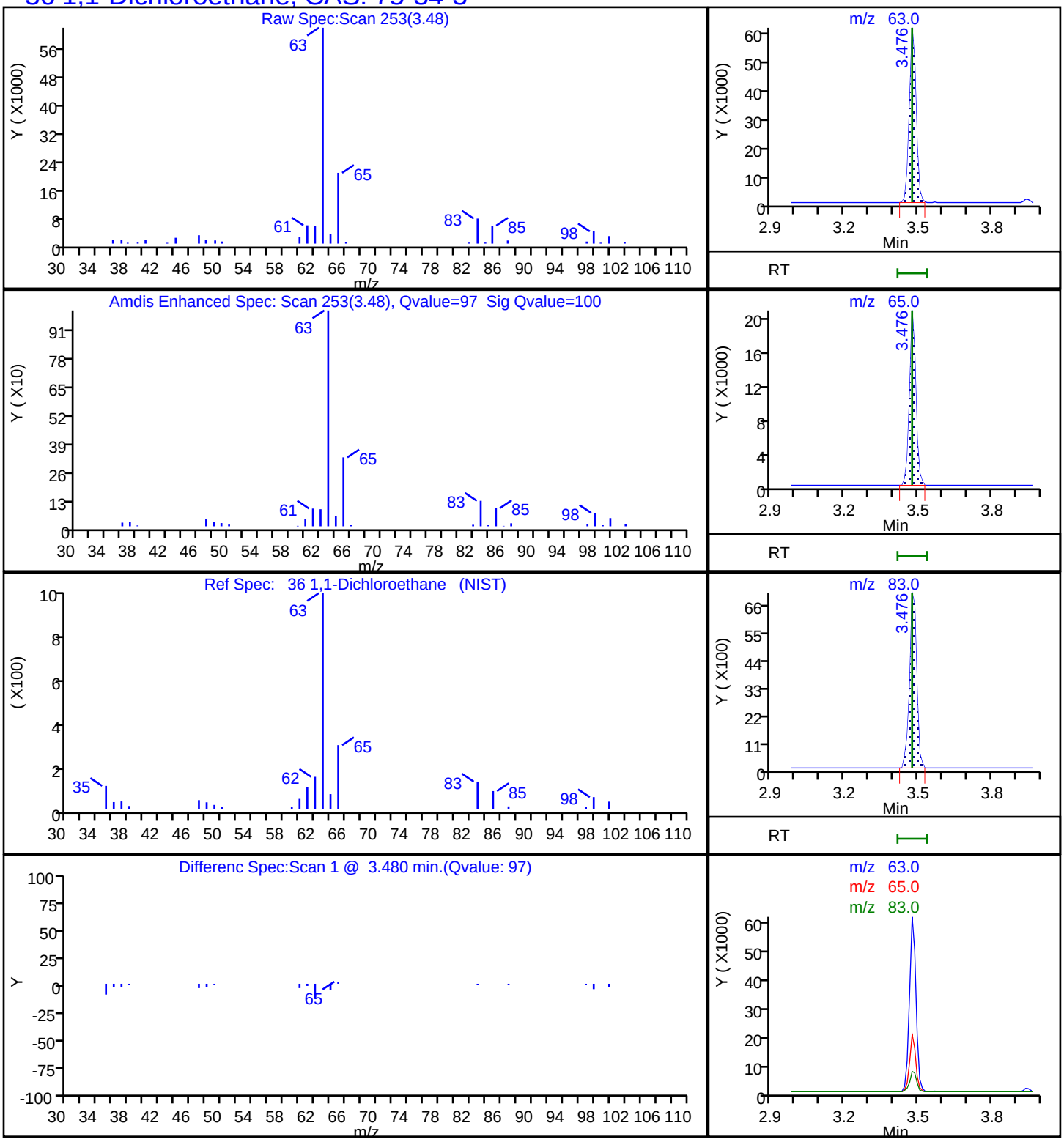


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D

Injection Date:	07-Sep-2019 16:28:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-3	Lab Sample ID:	480-158436-3		
Client ID:	356023-GW-ERT-1-115-3				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

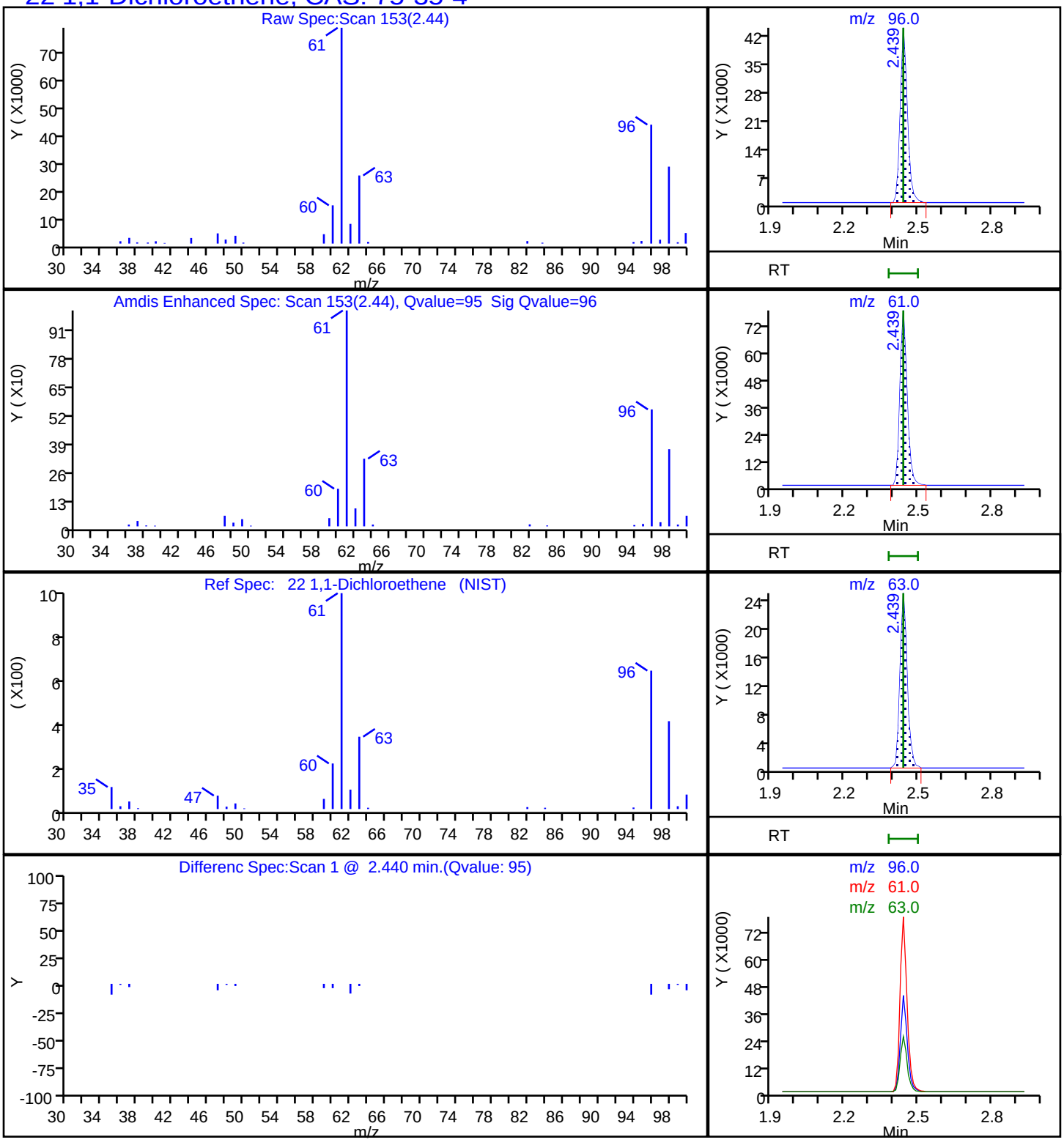


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D

Injection Date:	07-Sep-2019 16:28:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-3	Lab Sample ID:	480-158436-3		
Client ID:	356023-GW-ERT-1-115-3				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

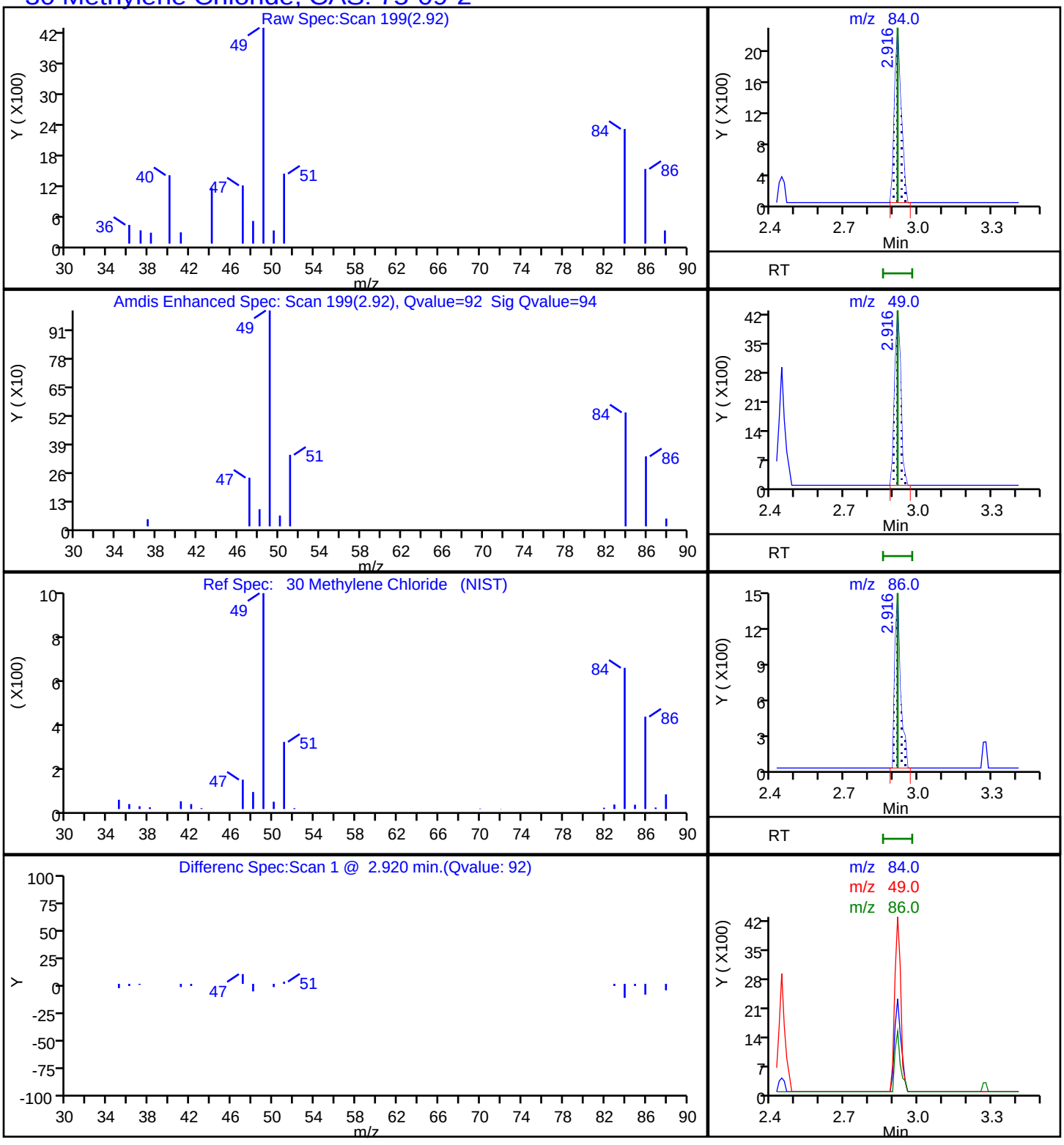


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D

Injection Date:	07-Sep-2019 16:28:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-3	Lab Sample ID:	480-158436-3		
Client ID:	356023-GW-ERT-1-115-3				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2



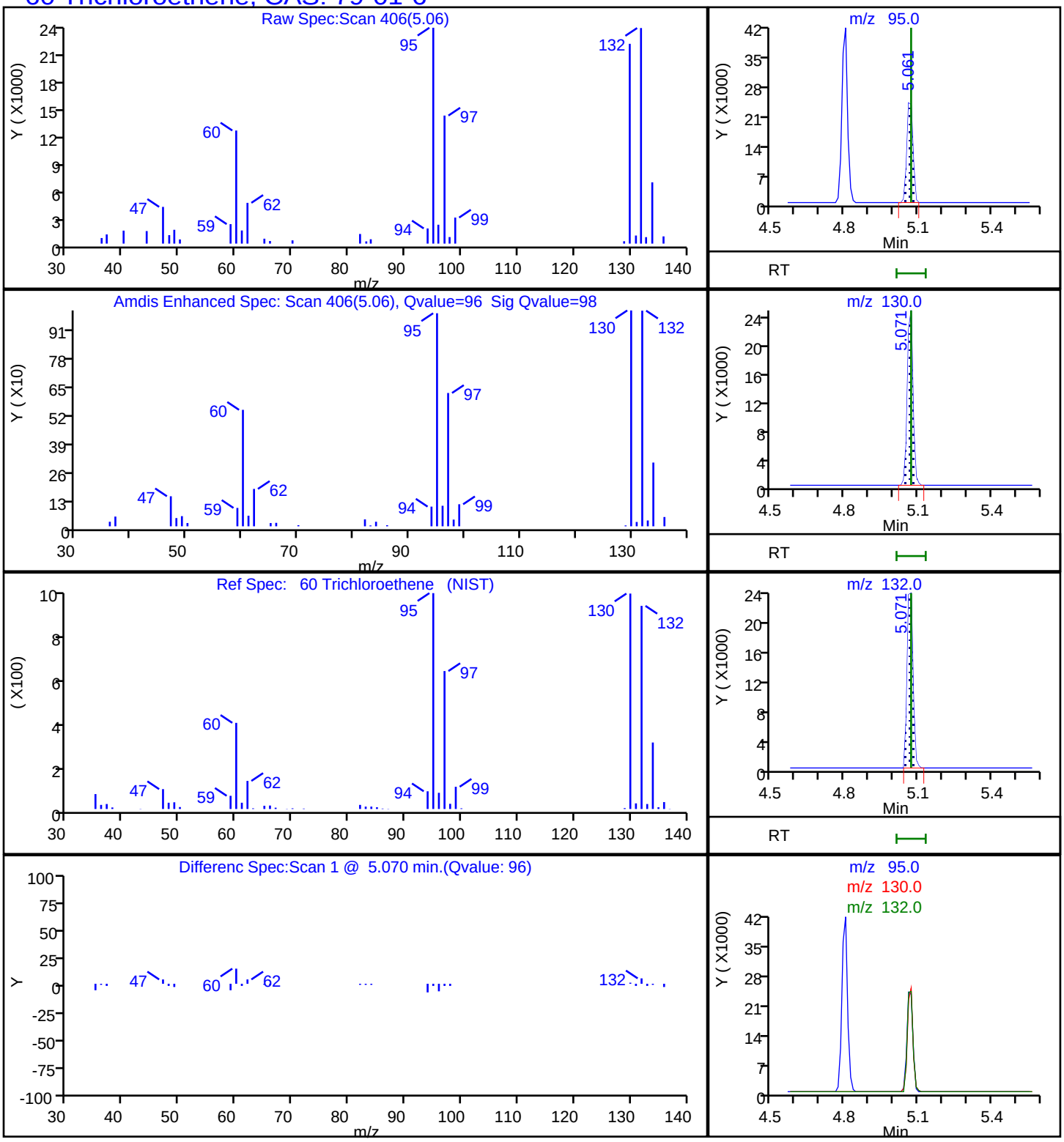
Report Date: 08-Sep-2019 08:50:26 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4591.D

Injection Date:	07-Sep-2019 16:28:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-3	Lab Sample ID:	480-158436-3		
Client ID:	356023-GW-ERT-1-115-3				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-4 Lab Sample ID: 480-158436-4

Matrix: Water Lab File ID: T4592.D

Analysis Method: 8260C Date Collected: 08/27/2019 11:35

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 16:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	*1,1,1-Trichloroethane*	*100*	*E*	*1.0*	*0.82*
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	15		1.0	0.38
75-35-4	1,1-Dichloroethene	27		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	0.87	J	1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-4 Lab Sample ID: 480-158436-4

Matrix: Water Lab File ID: T4592.D

Analysis Method: 8260C Date Collected: 08/27/2019 11:35

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 16:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	9.6		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D
Lims ID: 480-158436-B-4
Client ID: 356023-GW-ERT-1-115-4
Sample Type: Client
Inject. Date: 07-Sep-2019 16:52:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-158436-B-4
Misc. Info.: 480-0083938-014
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:52:32 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:52:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	153829	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	611446	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	329075	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	93	209993	27.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	266886	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	743454	23.6	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	247631	25.6	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	U
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.450	2.439	0.011	94	175486	26.8	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	87	1652	0.1896	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	97	239041	14.7	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	82	7829	0.8670	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	91	4317	0.2987	
51 1,1,1-Trichloroethane	97	4.305	4.304	0.000	98	1257974	103.5	E
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.061	5.071	-0.010	93	76641	9.61	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

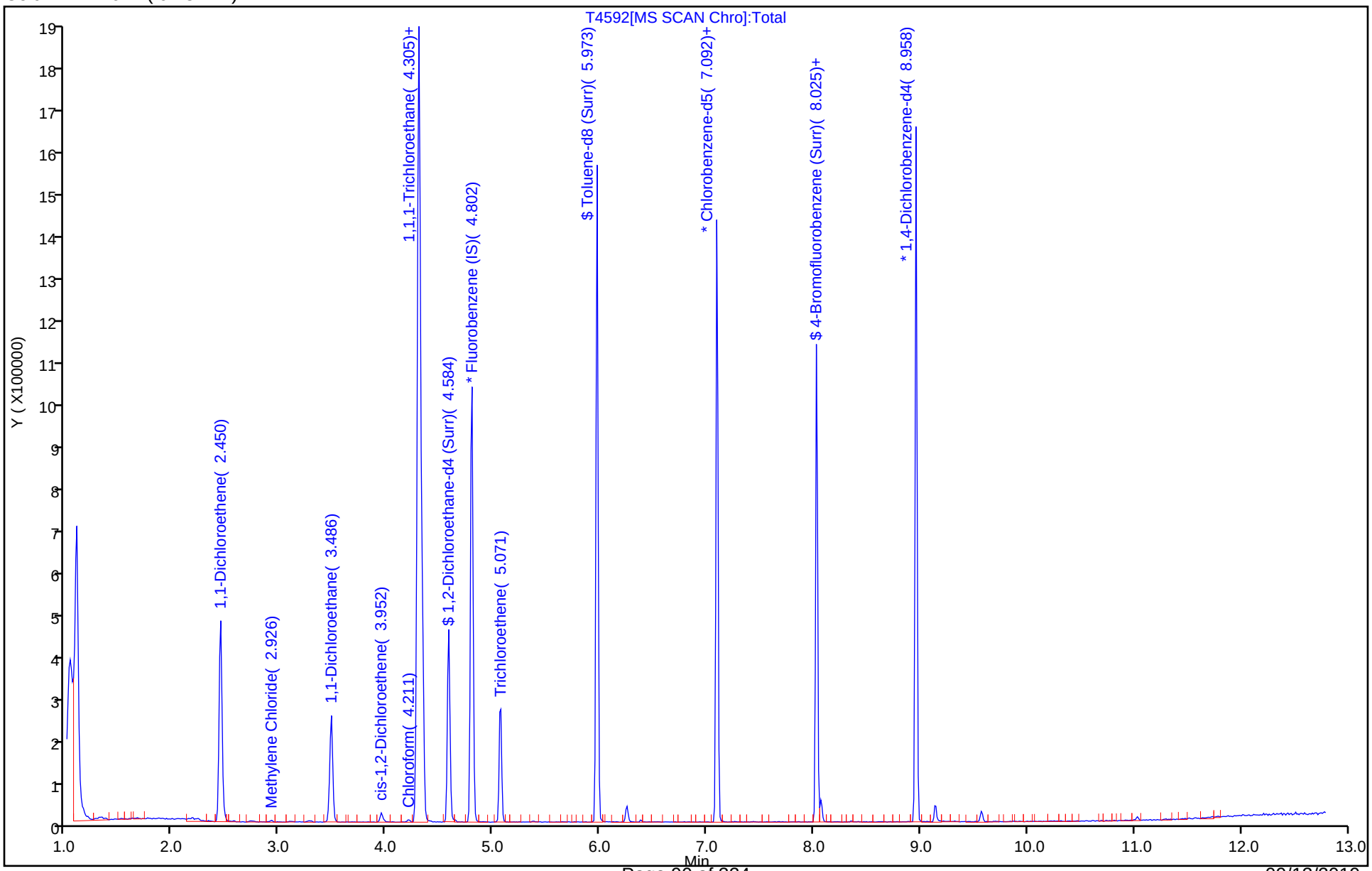
Report Date: 08-Sep-2019 08:52:32 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D

Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4	Worklist Smp#:	14
Client ID:	356023-GW-ERT-1-115-4				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

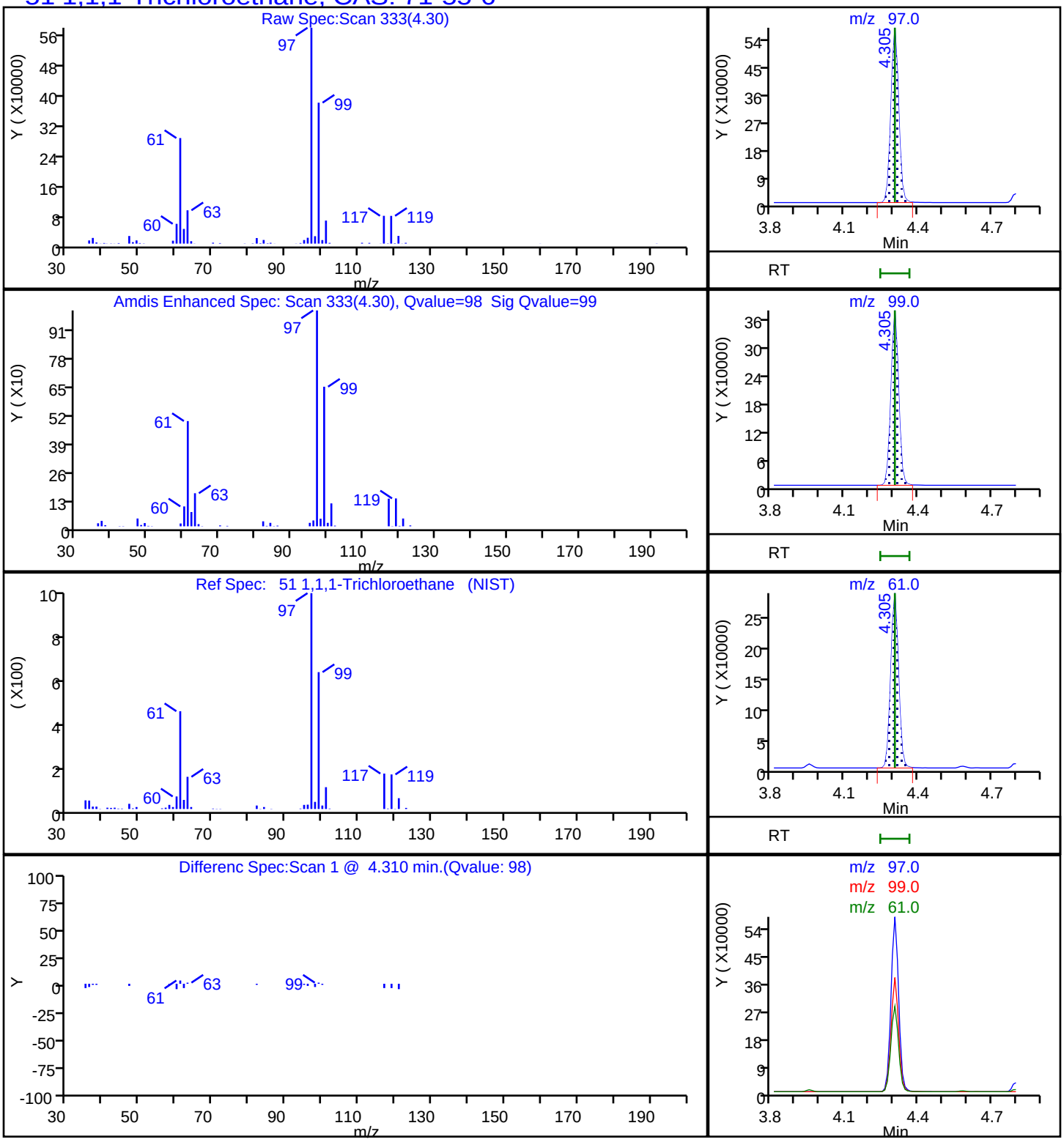


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D

Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

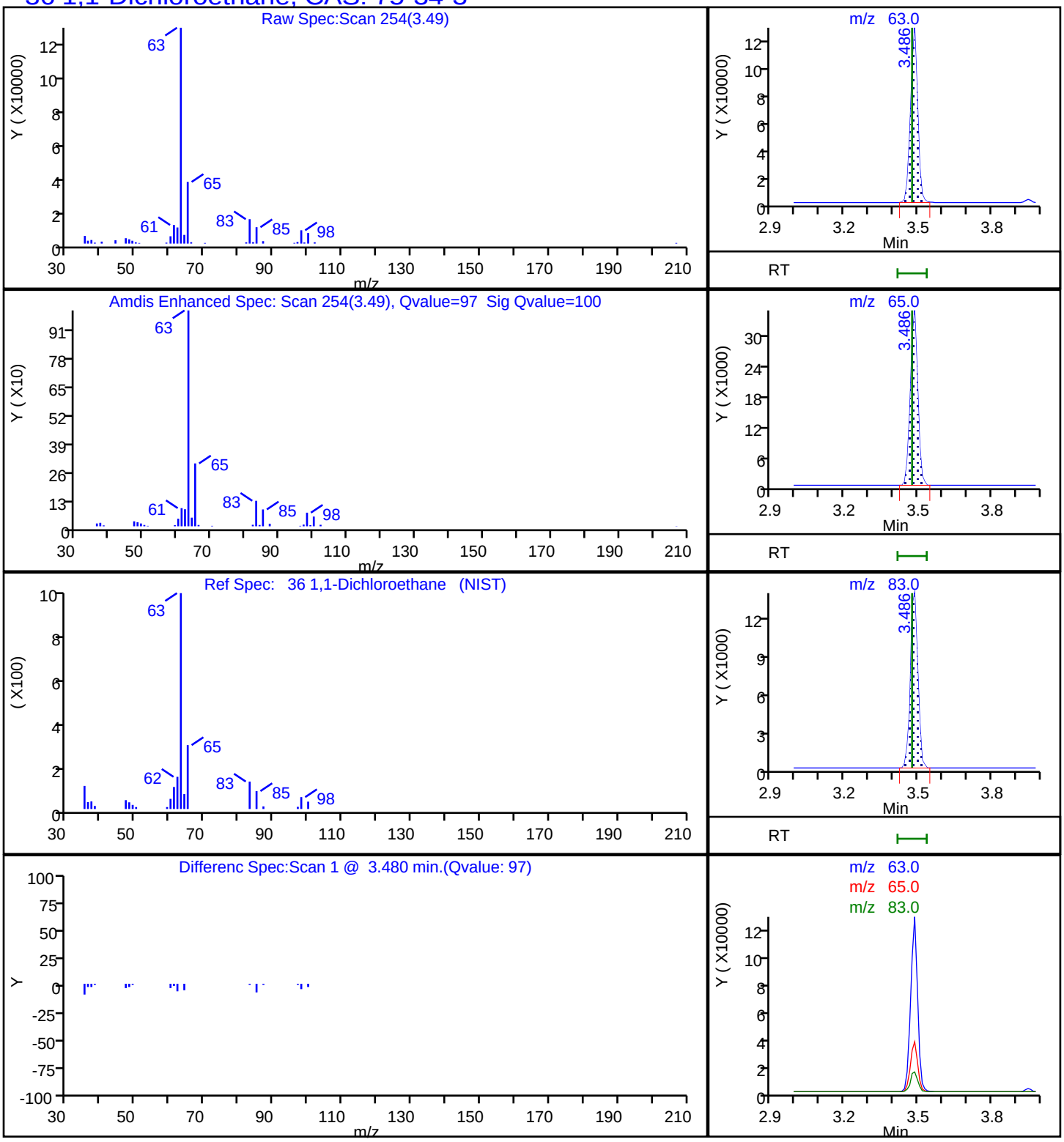


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D

Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

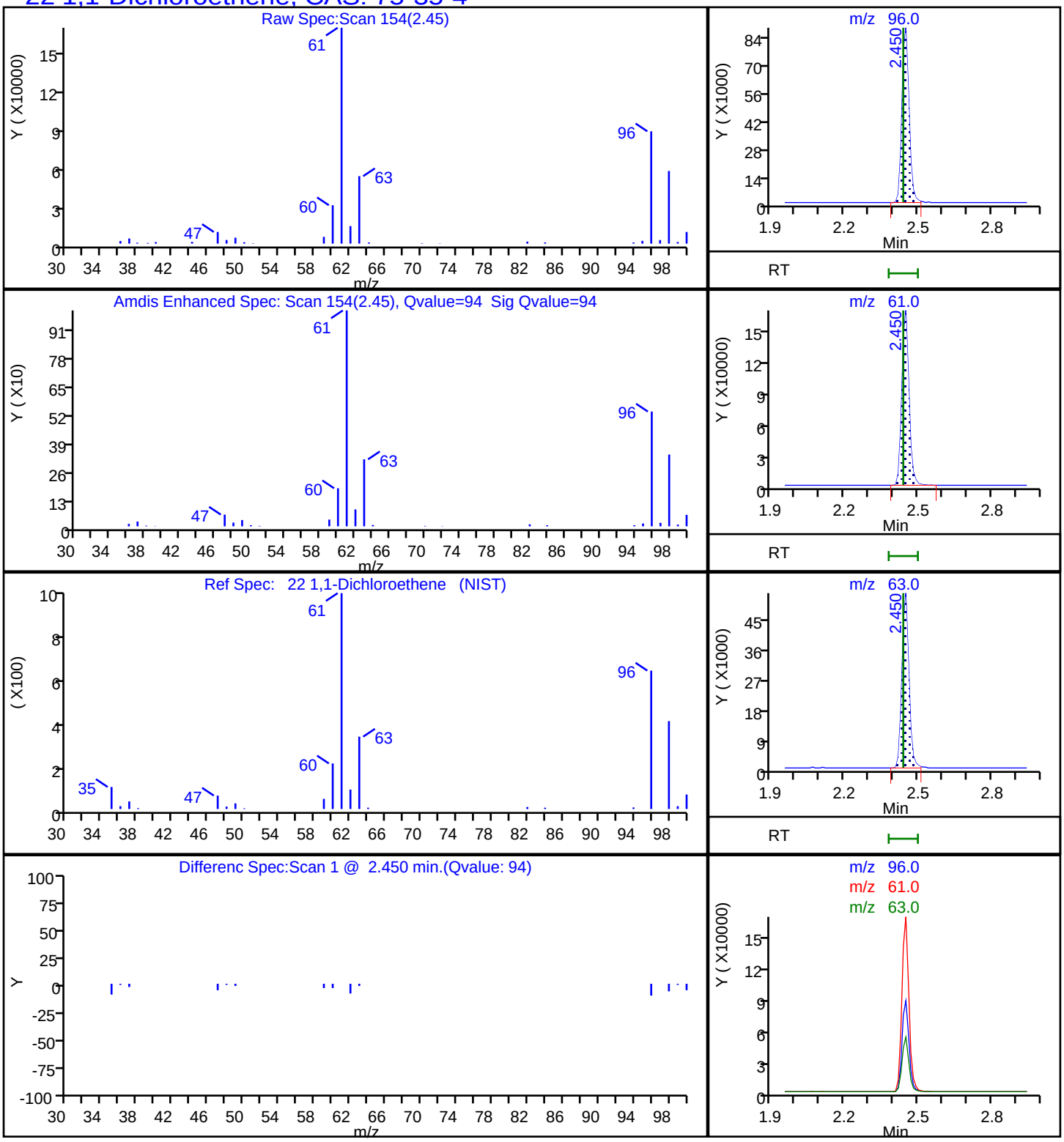


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D

Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

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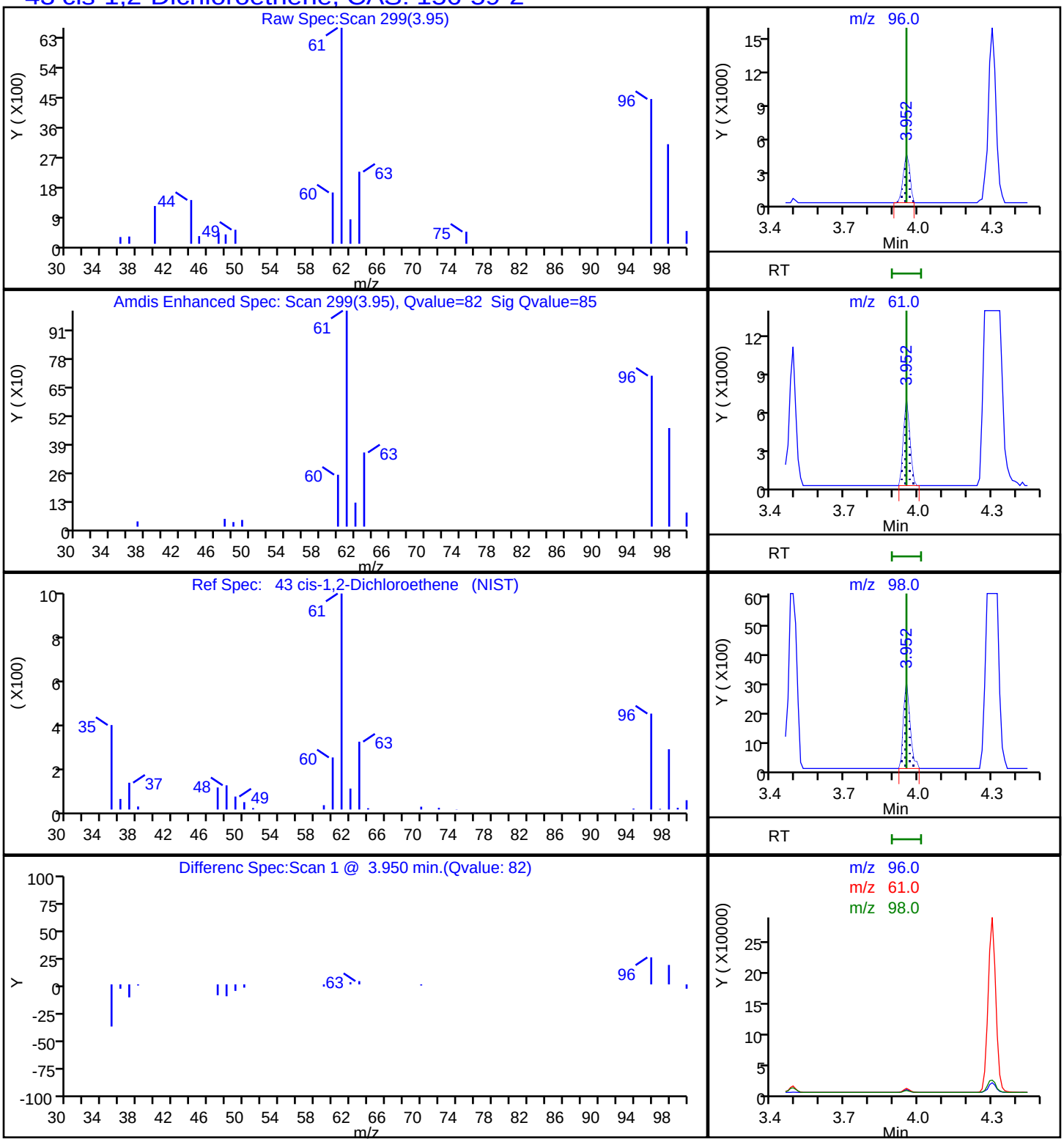
Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

43 cis-1,2-Dichloroethene, CAS: 156-59-2

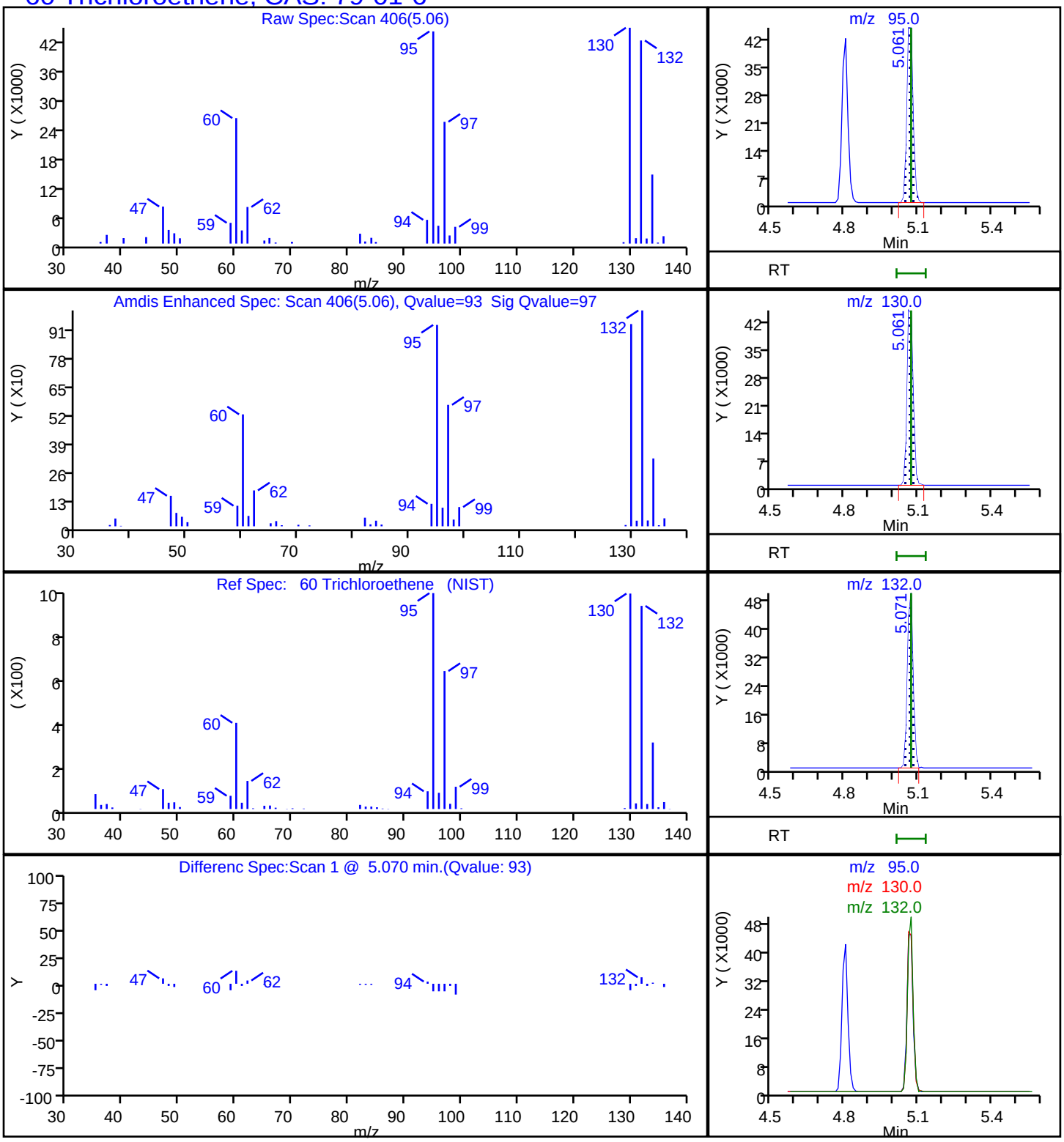


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D

Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4
Client ID:	356023-GW-ERT-1-115-4		
Operator ID:	OI	ALS Bottle#:	14 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



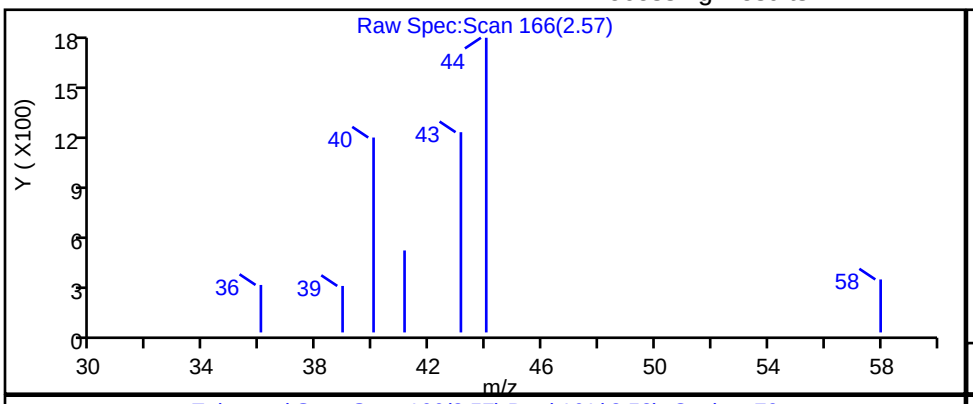
User Disabled Compound Report

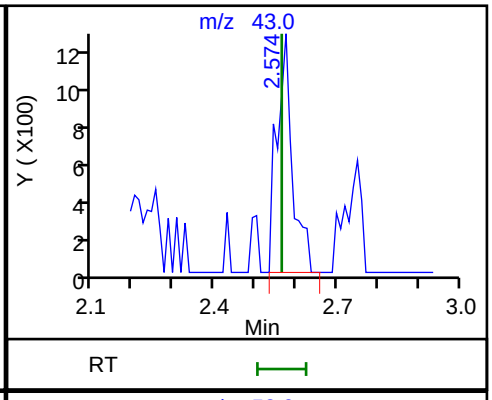
Eurofins TestAmerica, Buffalo

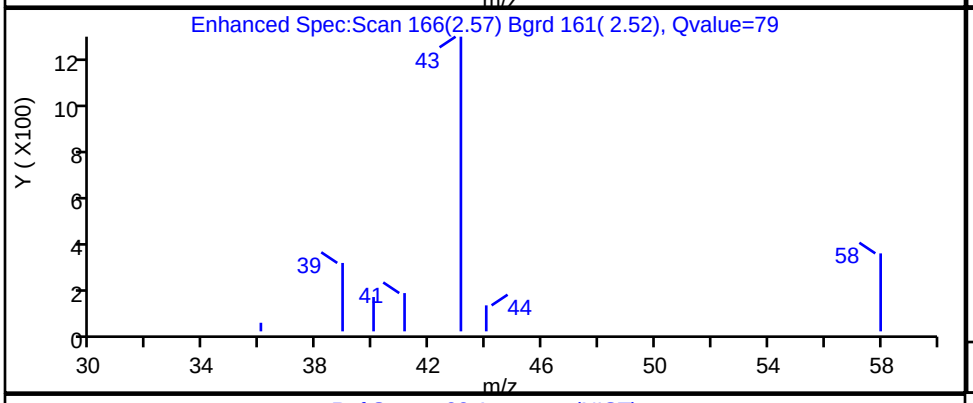
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D				
Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

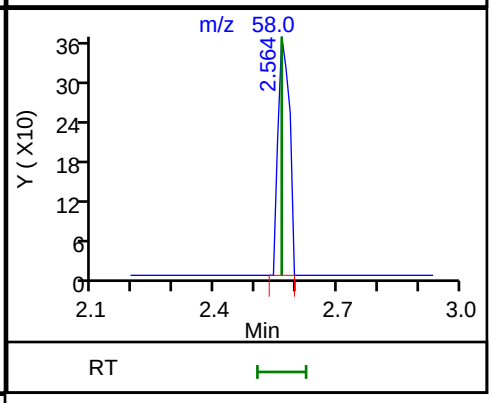
23 Acetone, CAS: 67-64-1

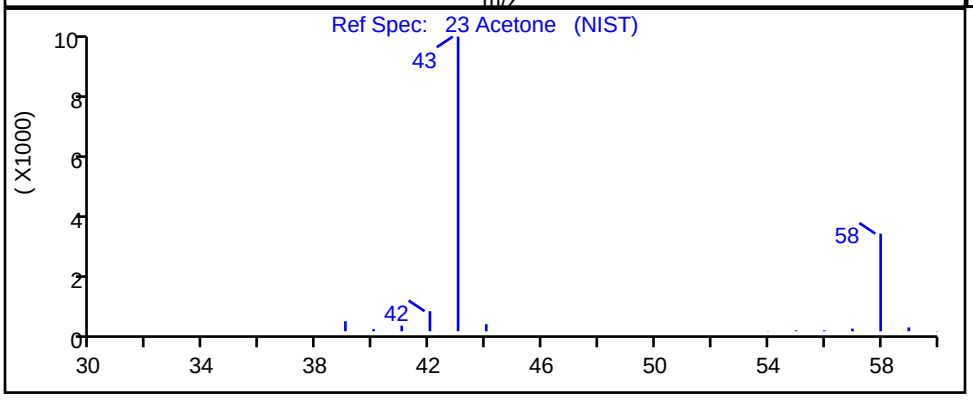
Processing Results











RT	Mass	Response	Amount
2.57	43.00	3184	0.693435
2.56	58.00	712	

Reviewer: moffata, 08-Sep-2019 08:52:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

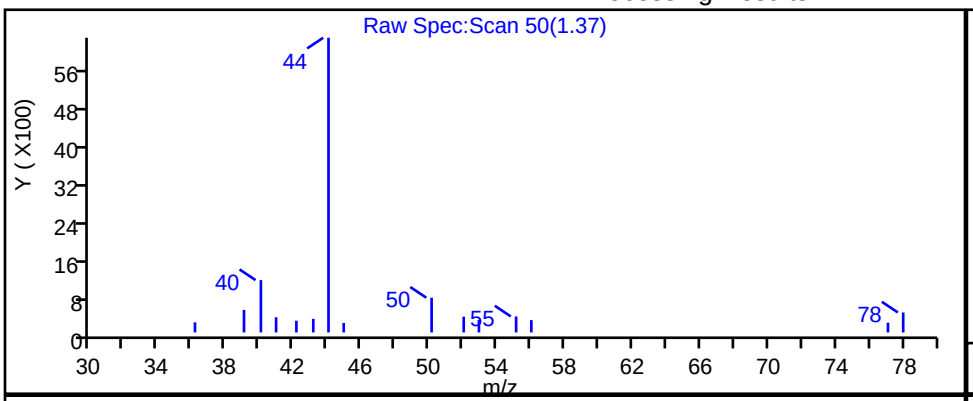
User Disabled Compound Report

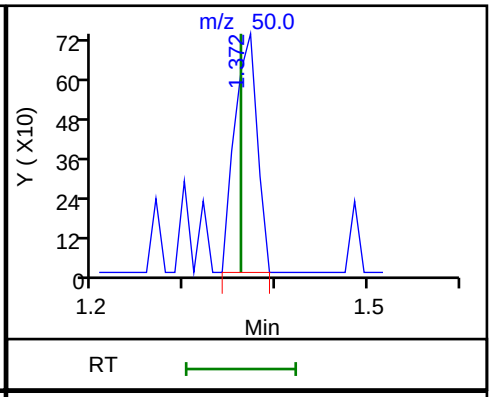
Eurofins TestAmerica, Buffalo

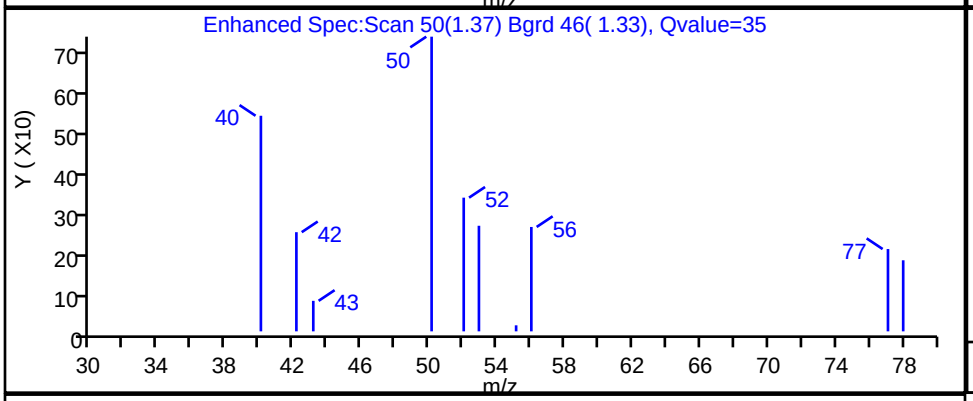
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4592.D				
Injection Date:	07-Sep-2019 16:52:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

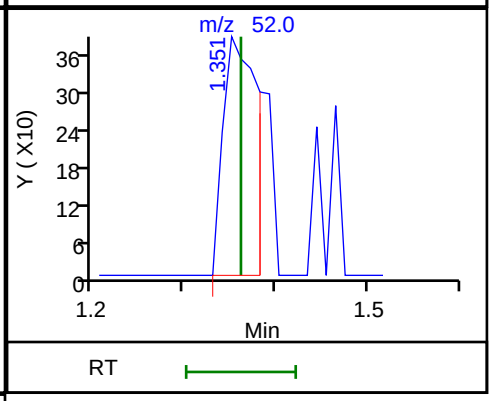
13 Chloromethane, CAS: 74-87-3

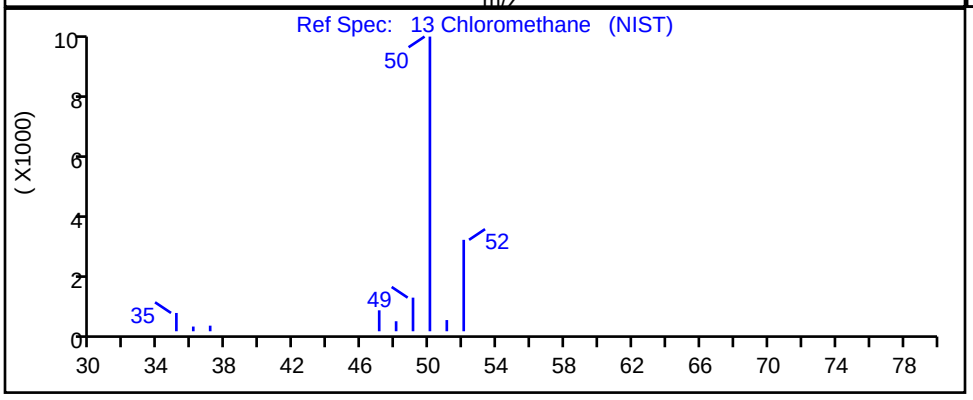
Processing Results











RT	Mass	Response	Amount
1.37	50.00	1258	0.088650
1.35	52.00	989	

Reviewer: moffata, 08-Sep-2019 08:52:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-4 DL Lab Sample ID: 480-158436-4 DL

Matrix: Water Lab File ID: T4614.D

Analysis Method: 8260C Date Collected: 08/27/2019 11:35

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 11:53

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	88		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	13		2.0	0.76
75-35-4	1,1-Dichloroethene	23		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND	*	2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-4 DL Lab Sample ID: 480-158436-4 DL

Matrix: Water Lab File ID: T4614.D

Analysis Method: 8260C Date Collected: 08/27/2019 11:35

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 11:53

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	*Dichlorodifluoromethane*	*ND*		*2.0*	*1.4*
100-41-4	*Ethylbenzene*	*ND*		*2.0*	*1.5*
98-82-8	*Isopropylbenzene*	*ND*		*2.0*	*1.6*
79-20-9	*Methyl acetate*	*ND*		*5.0*	*2.6*
1634-04-4	*Methyl tert-butyl ether*	*ND*		*2.0*	*0.32*
108-87-2	*Methylcyclohexane*	*ND*		*2.0*	*0.32*
75-09-2	*Methylene Chloride*	*ND*		*2.0*	*0.88*
100-42-5	*Styrene*	*ND*		*2.0*	*1.5*
127-18-4	*Tetrachloroethene*	*ND*		*2.0*	*0.72*
108-88-3	*Toluene*	*ND*		*2.0*	*1.0*
156-60-5	*trans-1,2-Dichloroethene*	*ND*		*2.0*	*1.8*
10061-02-6	*trans-1,3-Dichloropropene*	*ND*		*2.0*	*0.74*
79-01-6	*Trichloroethene*	*8.4*		*2.0*	*0.92*
75-69-4	*Trichlorofluoromethane*	*ND*		*2.0*	*1.8*
75-01-4	*Vinyl chloride*	*ND*		*2.0*	*1.8*
1330-20-7	*Xylenes, Total*	*ND*		*4.0*	*1.3*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	99		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D
Lims ID: 480-158436-C-4
Client ID: 356023-GW-ERT-1-115-4
Sample Type: Client
Inject. Date: 08-Sep-2019 11:53:30 ALS Bottle#: 1 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-C-4
Misc. Info.: 480-0083944-008
Operator ID: AM Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 09-Sep-2019 08:18:57 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0318

First Level Reviewer: farrellr Date: 09-Sep-2019 08:18:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	160176	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	624358	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	334608	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.336	-0.001	93	211767	26.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	274863	25.4	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	746231	23.2	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	244224	24.7	
11 Dichlorodifluoromethane	85		1.216				ND	
13 Chloromethane	50		1.372				ND	
14 Vinyl chloride	62		1.465				ND	
15 Bromomethane	94		1.724				ND	
16 Chloroethane	64		1.776				ND	
17 Trichlorofluoromethane	101		2.014				ND	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	95	78652	11.5	
20 1,1,2-Trichloro-1,2,2-trif	101		2.460				ND	
23 Acetone	43	2.563	2.564	-0.001	71	5375	1.12	
25 Carbon disulfide	76		2.636				ND	U
28 Methyl acetate	43		2.833				ND	
30 Methylene Chloride	84	2.926	2.926	0.000	92	3011	0.3318	
33 Methyl tert-butyl ether	73		3.113				ND	
32 trans-1,2-Dichloroethene	96		3.123				ND	
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	111556	6.58	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	84	3803	0.4045	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	90	2868	0.1906	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	559005	44.2	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.418				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.646				ND	Ua

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	93	34901	4.20	
62 Methylcyclohexane	83		5.165				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.771				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.590				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

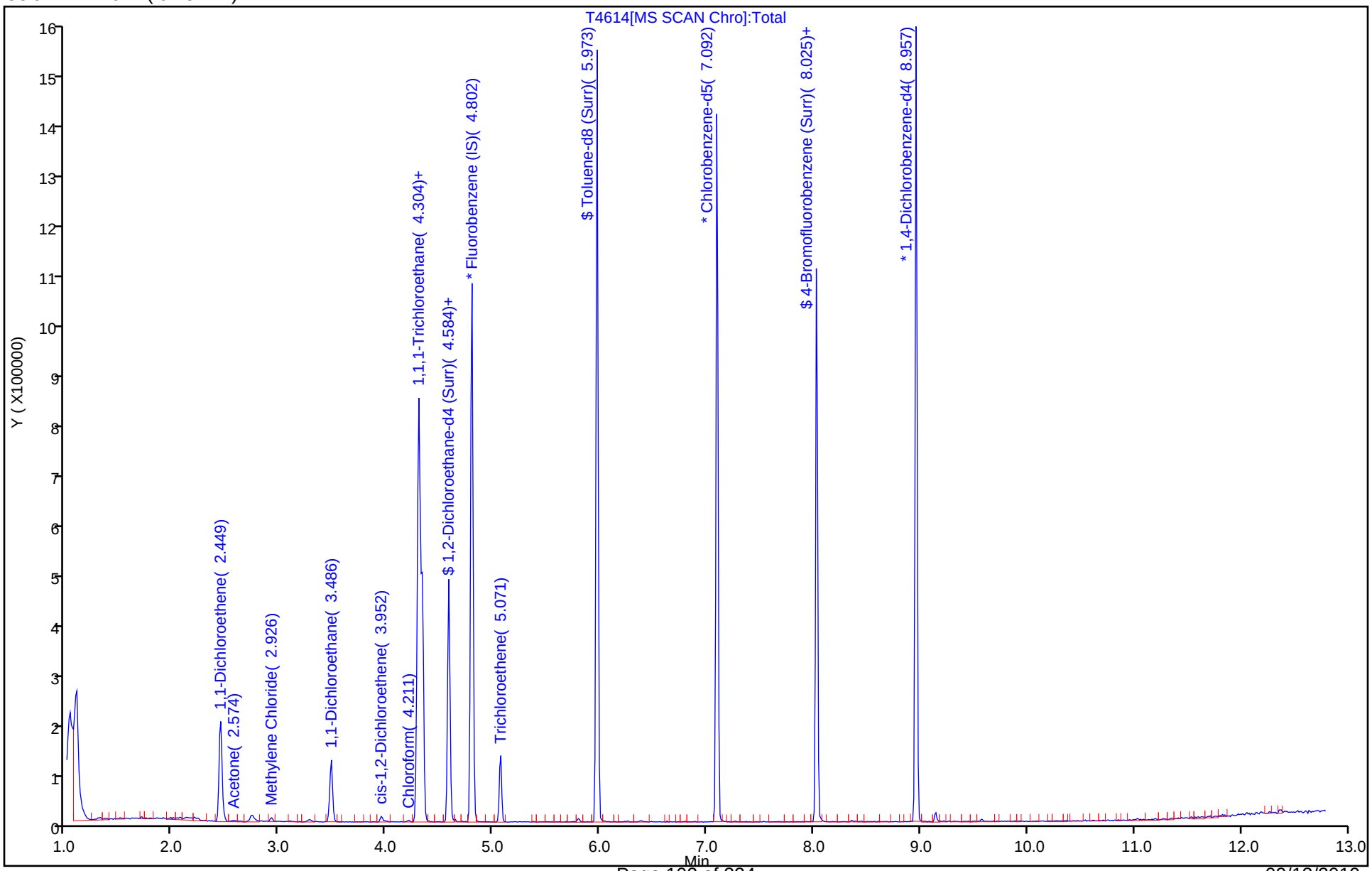
Report Date: 09-Sep-2019 08:18:57 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D

Injection Date:	08-Sep-2019 11:53:30	Instrument ID:	HP5975T	Operator ID:	AM
Lims ID:	480-158436-C-4	Lab Sample ID:	480-158436-4	Worklist Smp#:	8
Client ID:	356023-GW-ERT-1-115-4				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	1
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

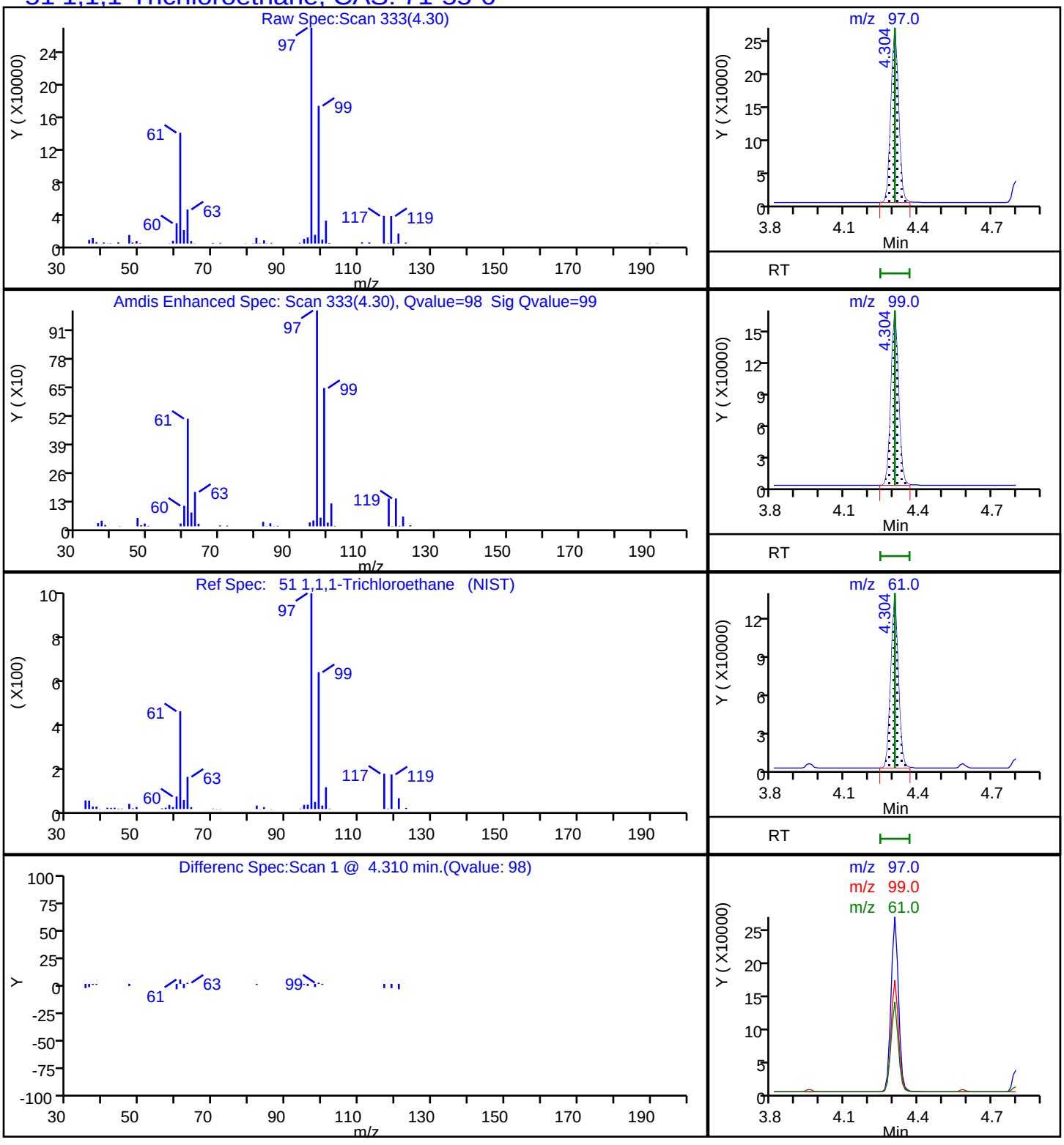


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D

Injection Date:	08-Sep-2019 11:53:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-C-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	AM	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

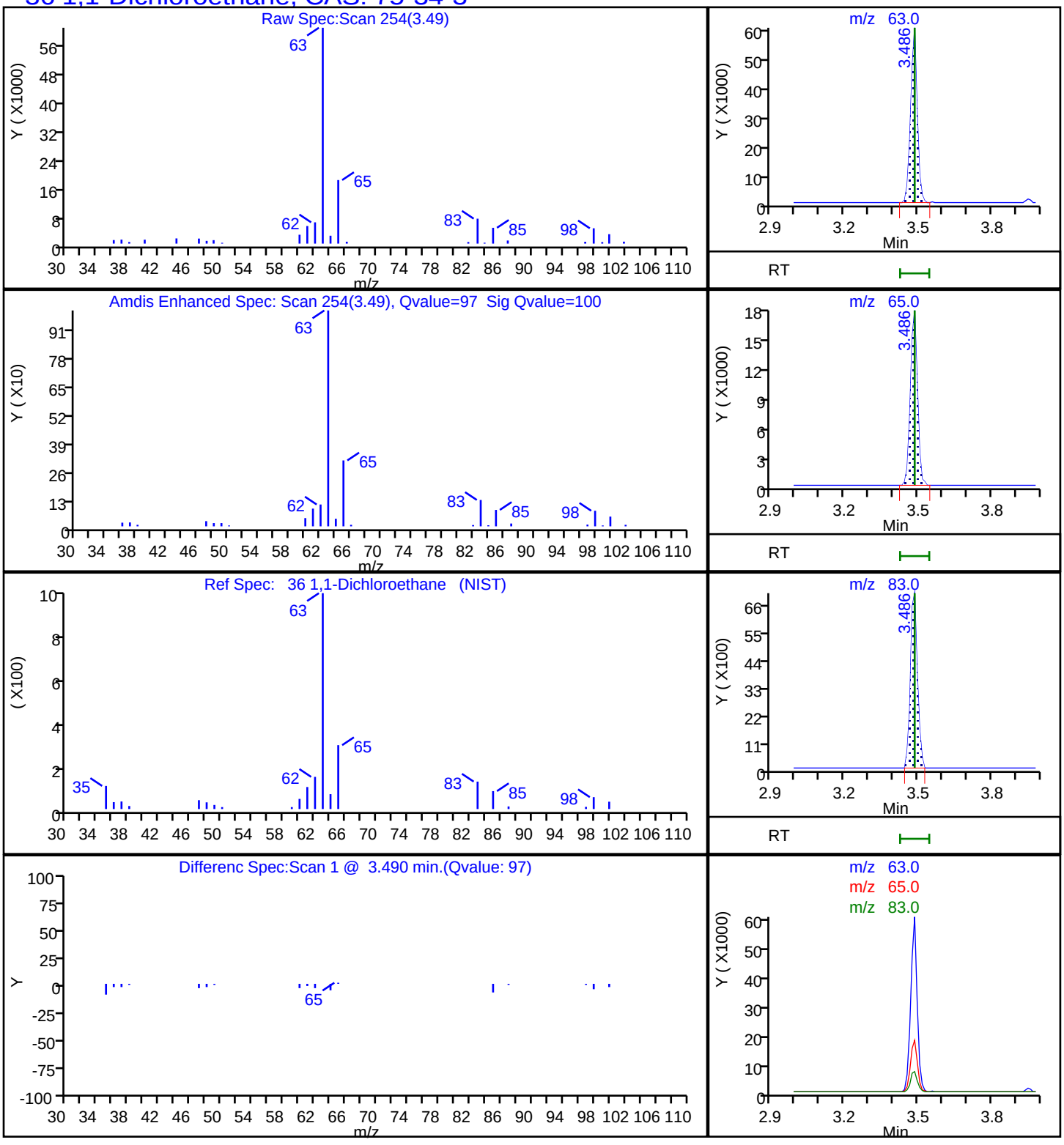


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D

Injection Date:	08-Sep-2019 11:53:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-C-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	AM	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

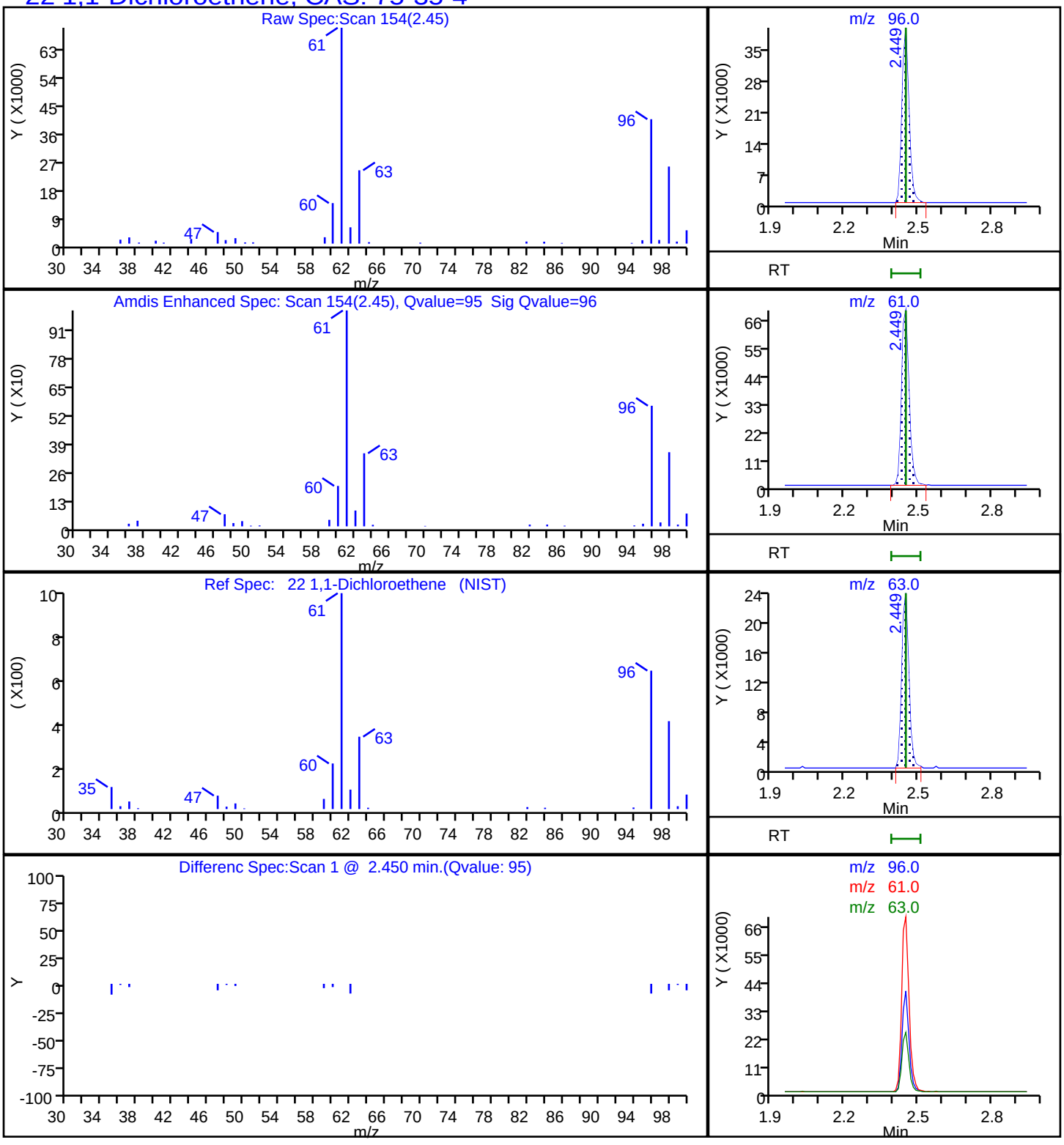


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D

Injection Date:	08-Sep-2019 11:53:30	Instrument ID:	HP5975T
Lims ID:	480-158436-C-4	Lab Sample ID:	480-158436-4
Client ID:	356023-GW-ERT-1-115-4		
Operator ID:	AM	ALS Bottle#:	1 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

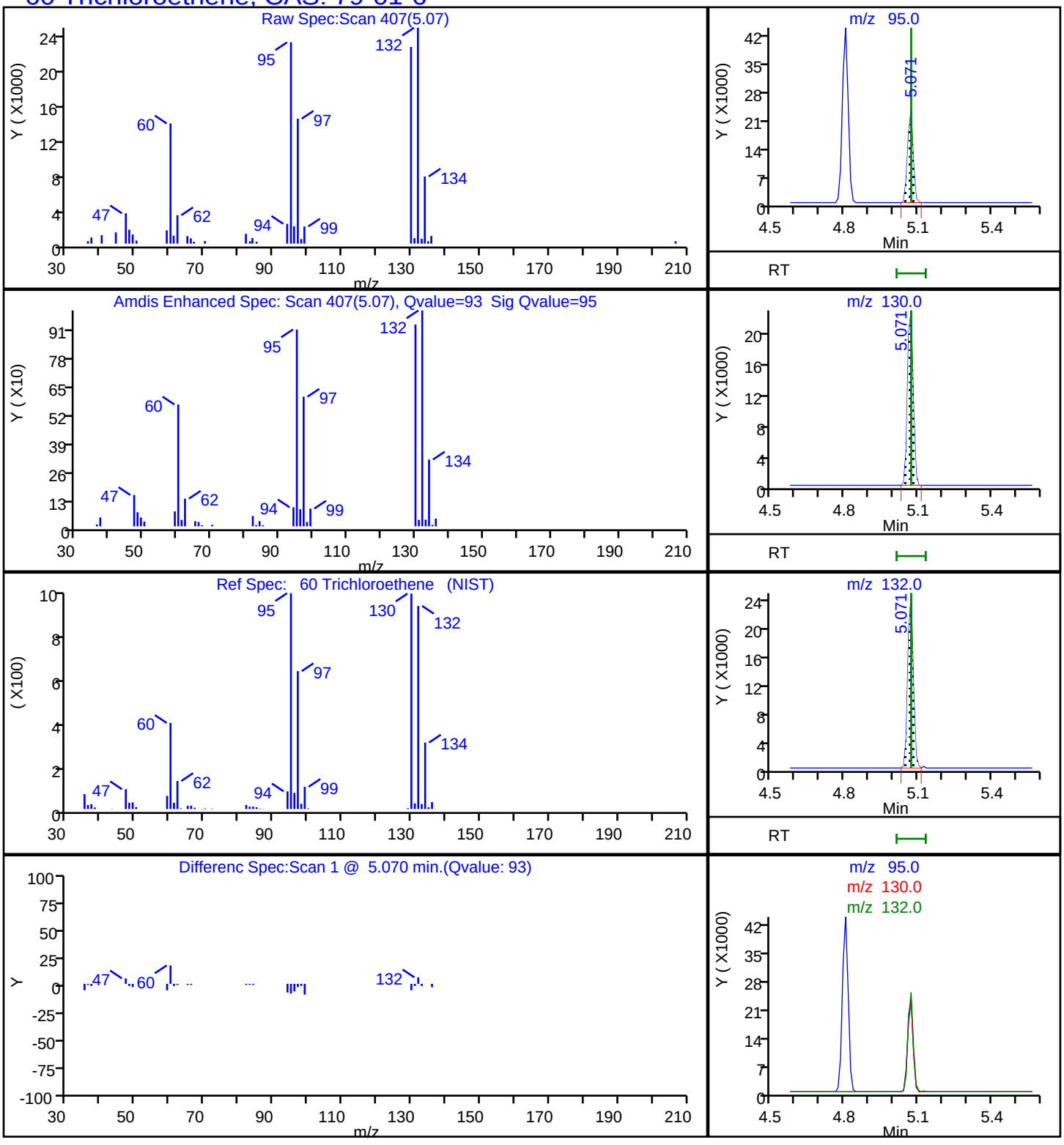


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D

Injection Date:	08-Sep-2019 11:53:30	Instrument ID:	HP5975T
Lims ID:	480-158436-C-4	Lab Sample ID:	480-158436-4
Client ID:	356023-GW-ERT-1-115-4		
Operator ID:	AM	ALS Bottle#:	1 Worklist Smp#: 8
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



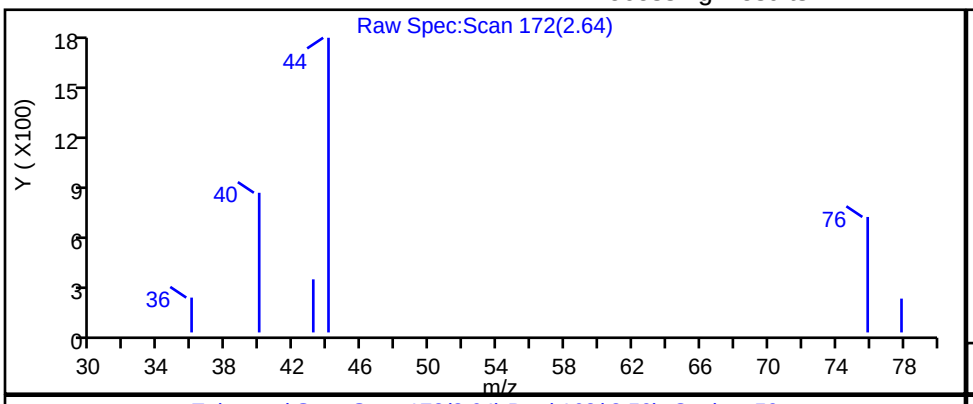
User Disabled Compound Report

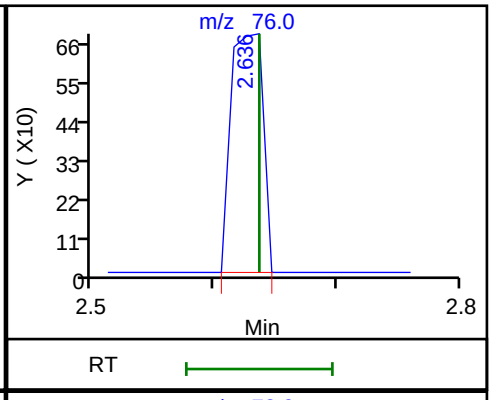
Eurofins TestAmerica, Buffalo

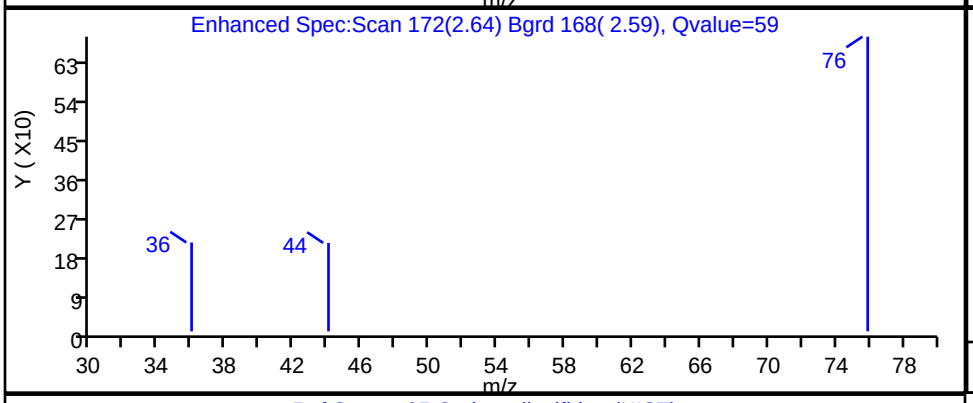
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4614.D				
Injection Date:	08-Sep-2019 11:53:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-C-4	Lab Sample ID:	480-158436-4		
Client ID:	356023-GW-ERT-1-115-4				
Operator ID:	AM	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

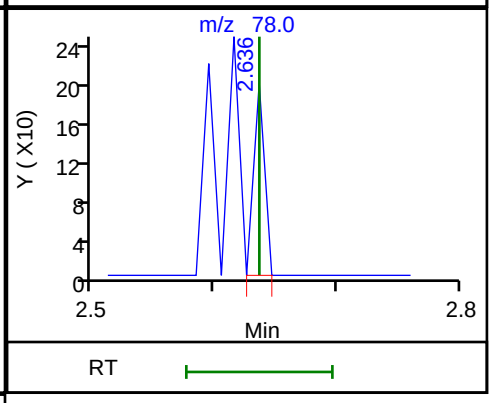
25 Carbon disulfide, CAS: 75-15-0

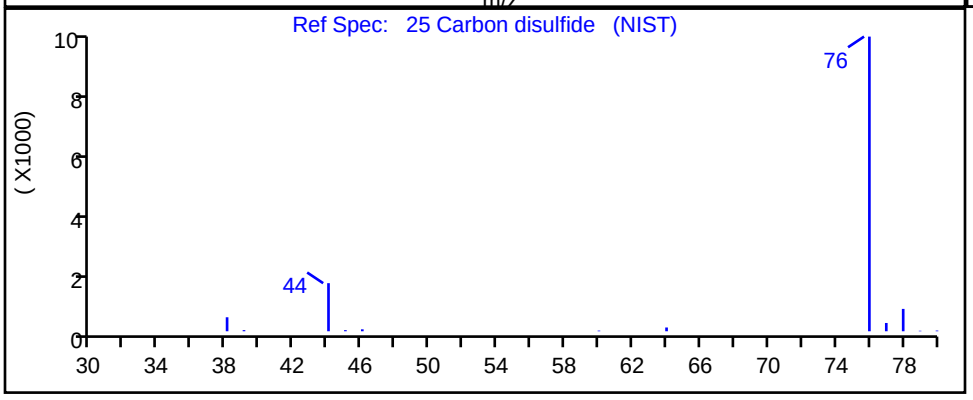
Processing Results











RT	Mass	Response	Amount
2.64	76.00	1246	0.048582
2.64	78.00	124	

Reviewer: farrellr, 09-Sep-2019 08:17:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-5 Lab Sample ID: 480-158436-5

Matrix: Water Lab File ID: T4593.D

Analysis Method: 8260C Date Collected: 08/27/2019 16:31

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 17:15

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	99		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	14		2.0	0.76
75-35-4	1,1-Dichloroethene	26		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-5 Lab Sample ID: 480-158436-5

Matrix: Water Lab File ID: T4593.D

Analysis Method: 8260C Date Collected: 08/27/2019 16:31

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 17:15

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.88	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	8.8		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D
Lims ID: 480-158436-B-5
Client ID: 356023-GW-ERT-1-115-5
Sample Type: Client
Inject. Date: 07-Sep-2019 17:15:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-5
Misc. Info.: 480-0083938-015
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:53:08 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:54:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	154974	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	607148	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	330207	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	92	211527	27.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	268880	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	745040	23.8	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	244090	25.4	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	U
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	93	84589	12.8	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	96	3869	0.4407	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	116632	7.11	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	84	3640	0.4001	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	94	2889	0.1984	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	607123	49.6	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	94	35352	4.40	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

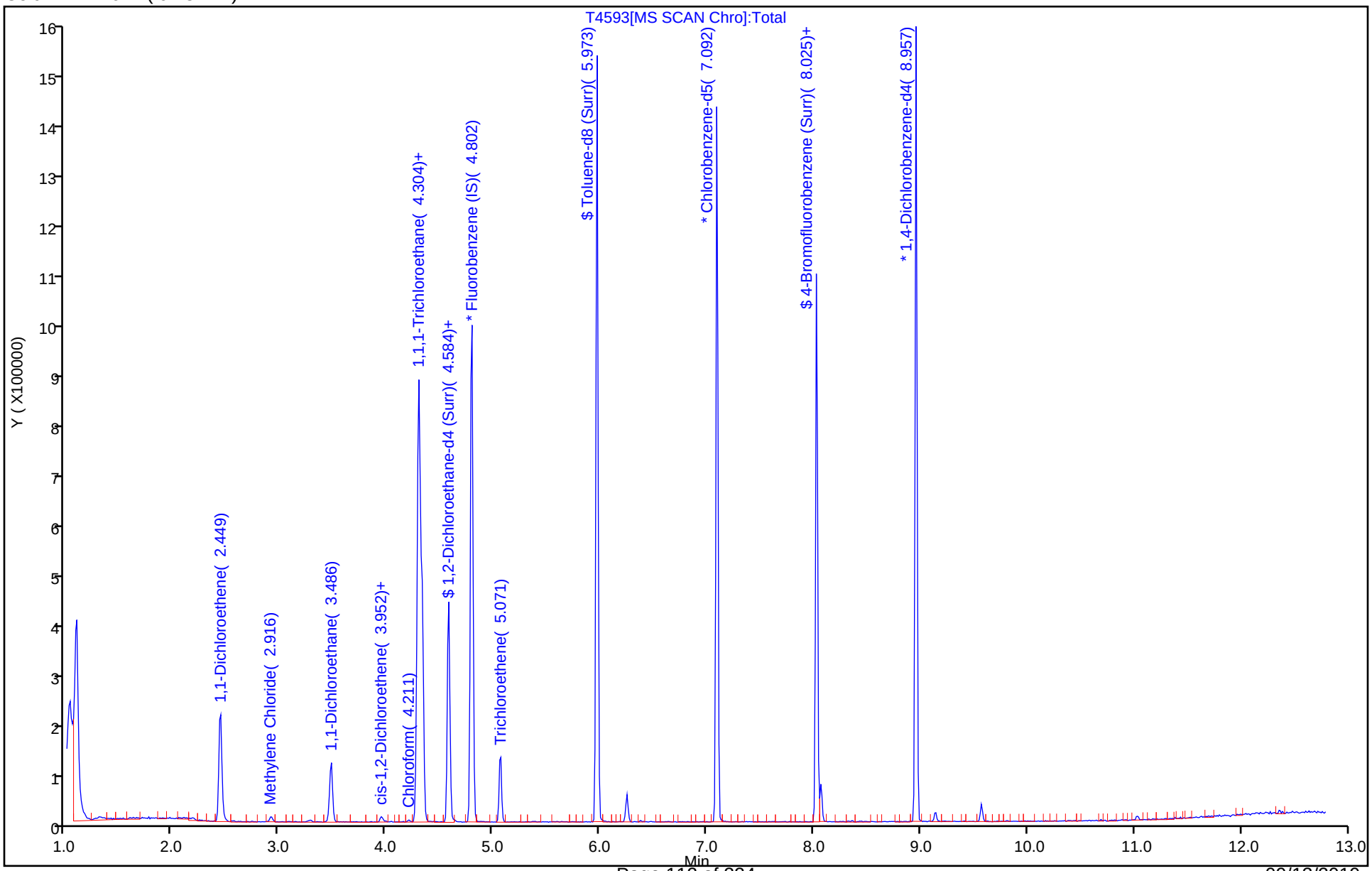
Report Date: 08-Sep-2019 08:54:11 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D

Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5	Worklist Smp#:	15
Client ID:	356023-GW-ERT-1-115-5				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	15
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

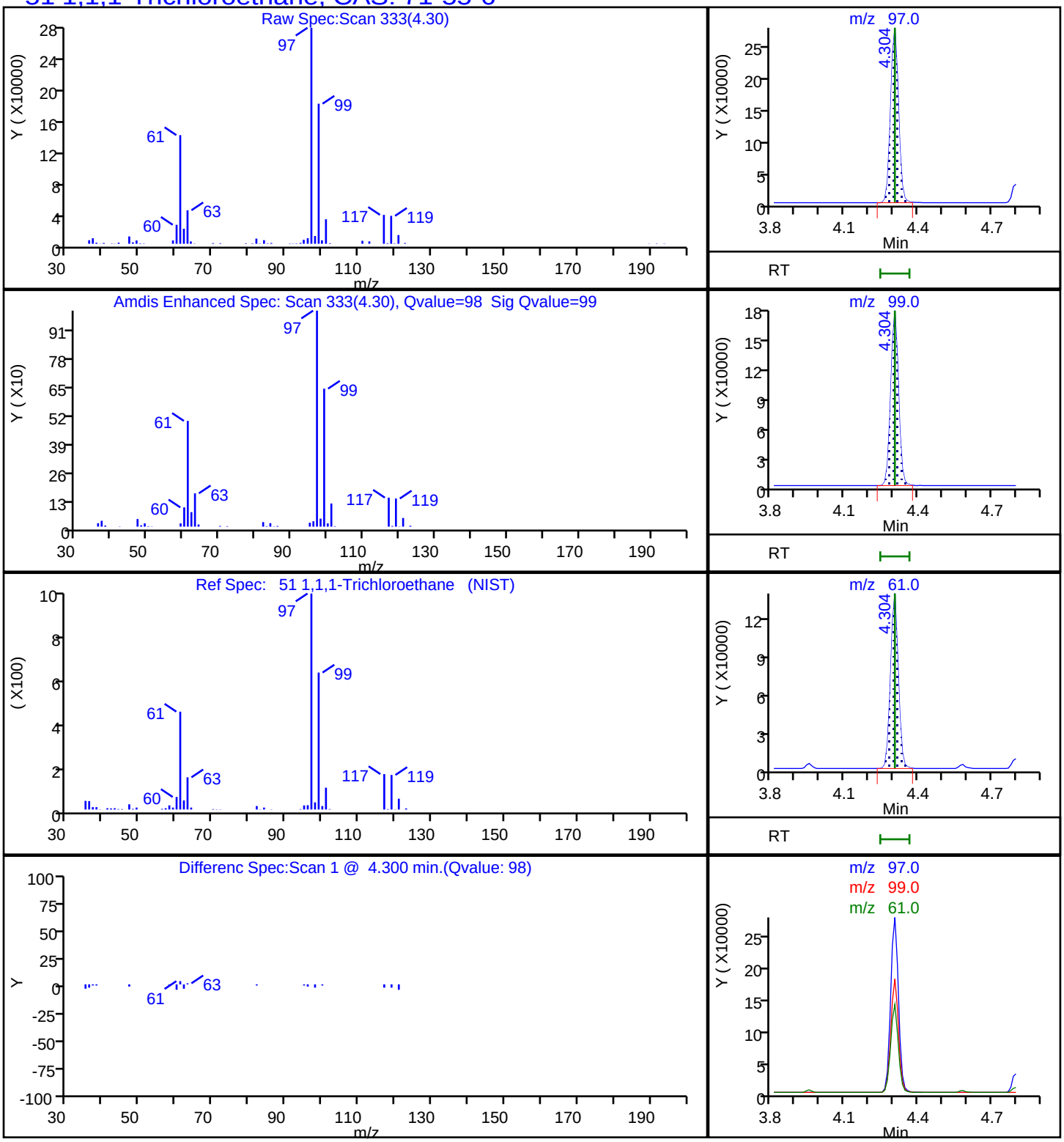


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D

Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5		
Client ID:	356023-GW-ERT-1-115-5				
Operator ID:	OI	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

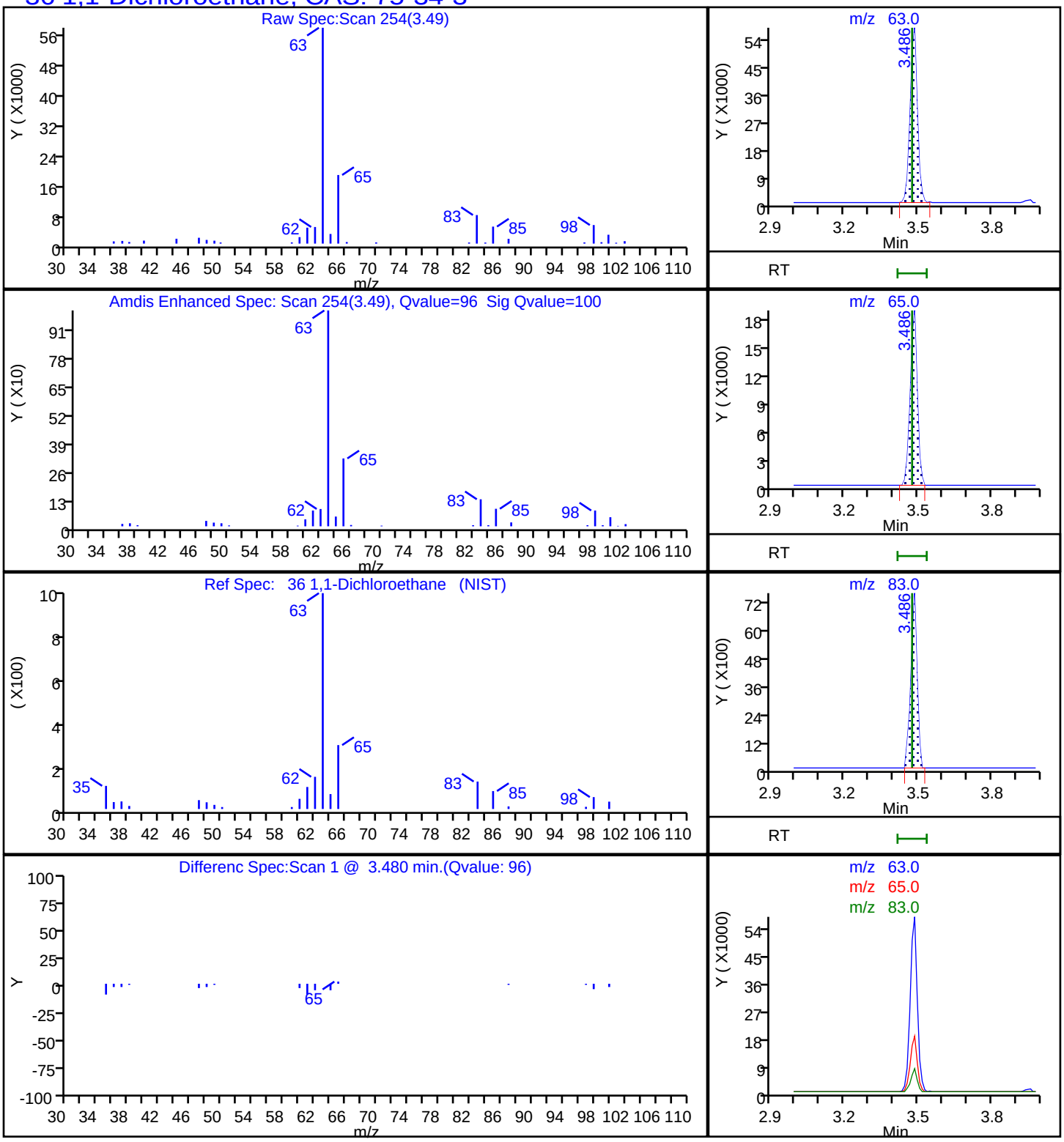


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D

Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5		
Client ID:	356023-GW-ERT-1-115-5				
Operator ID:	OI	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

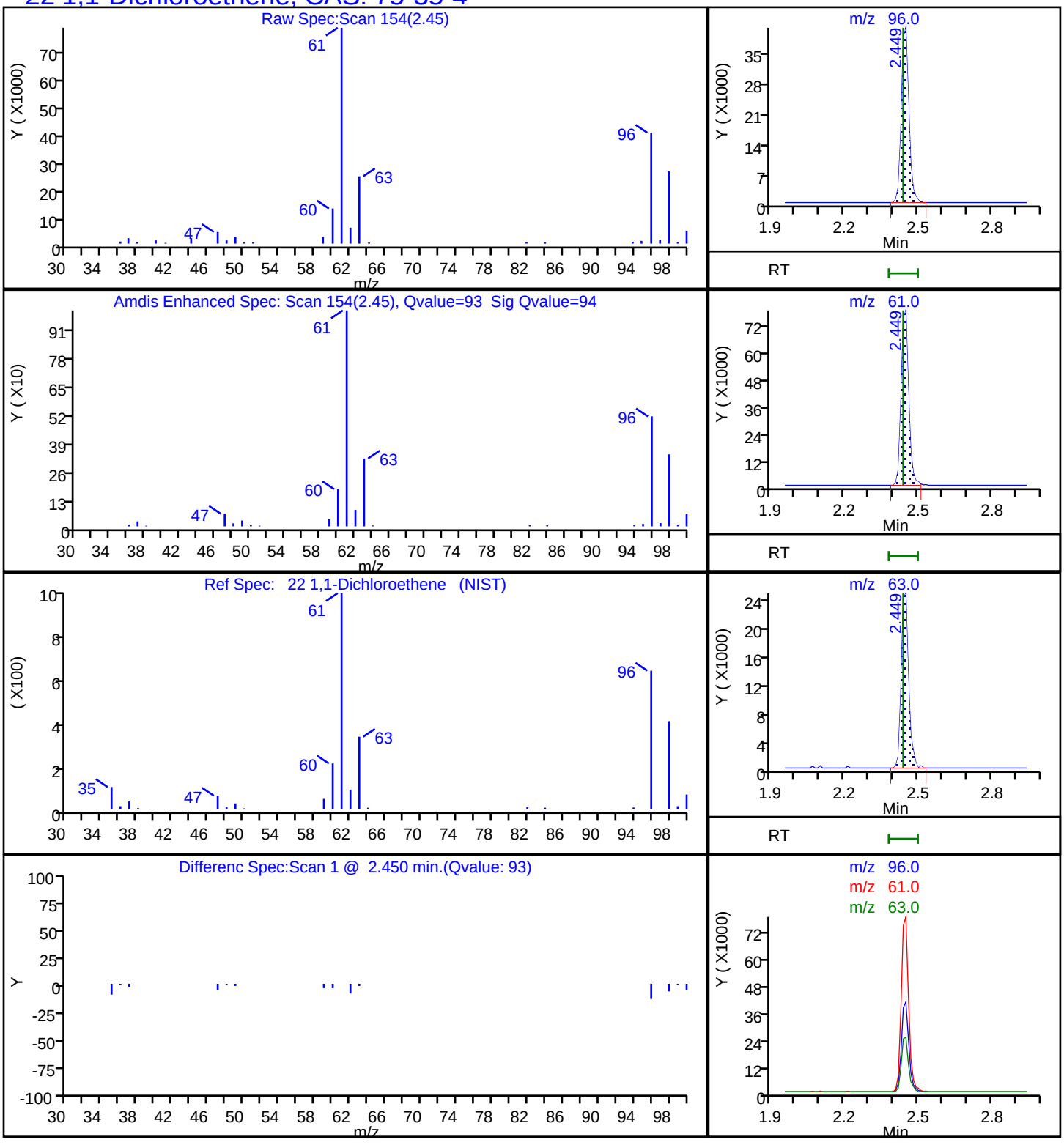


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D

Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5
Client ID:	356023-GW-ERT-1-115-5		
Operator ID:	OI	ALS Bottle#:	15 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

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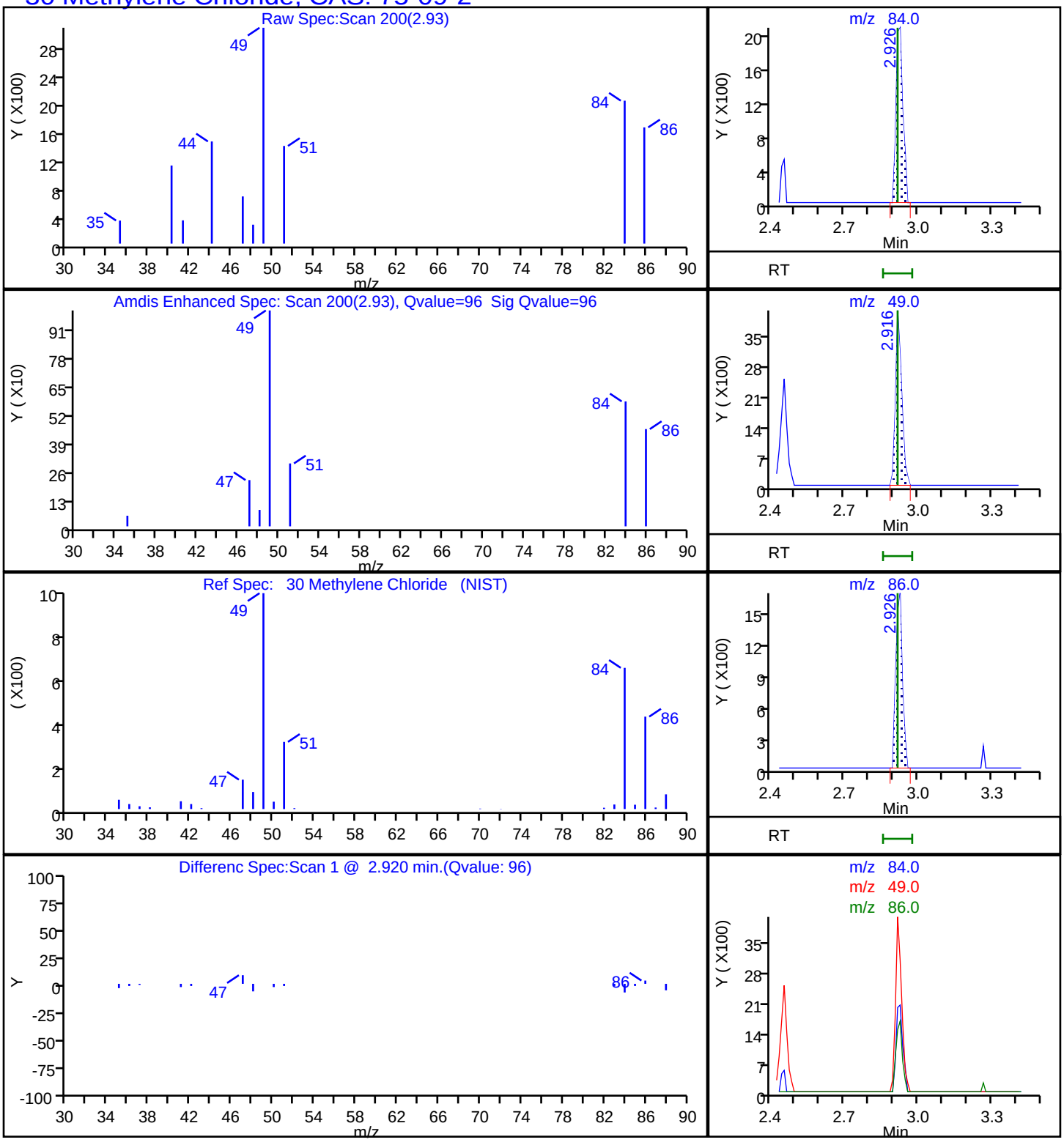
Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5
Client ID:	356023-GW-ERT-1-115-5		
Operator ID:	OI	ALS Bottle#:	15 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

30 Methylene Chloride, CAS: 75-09-2

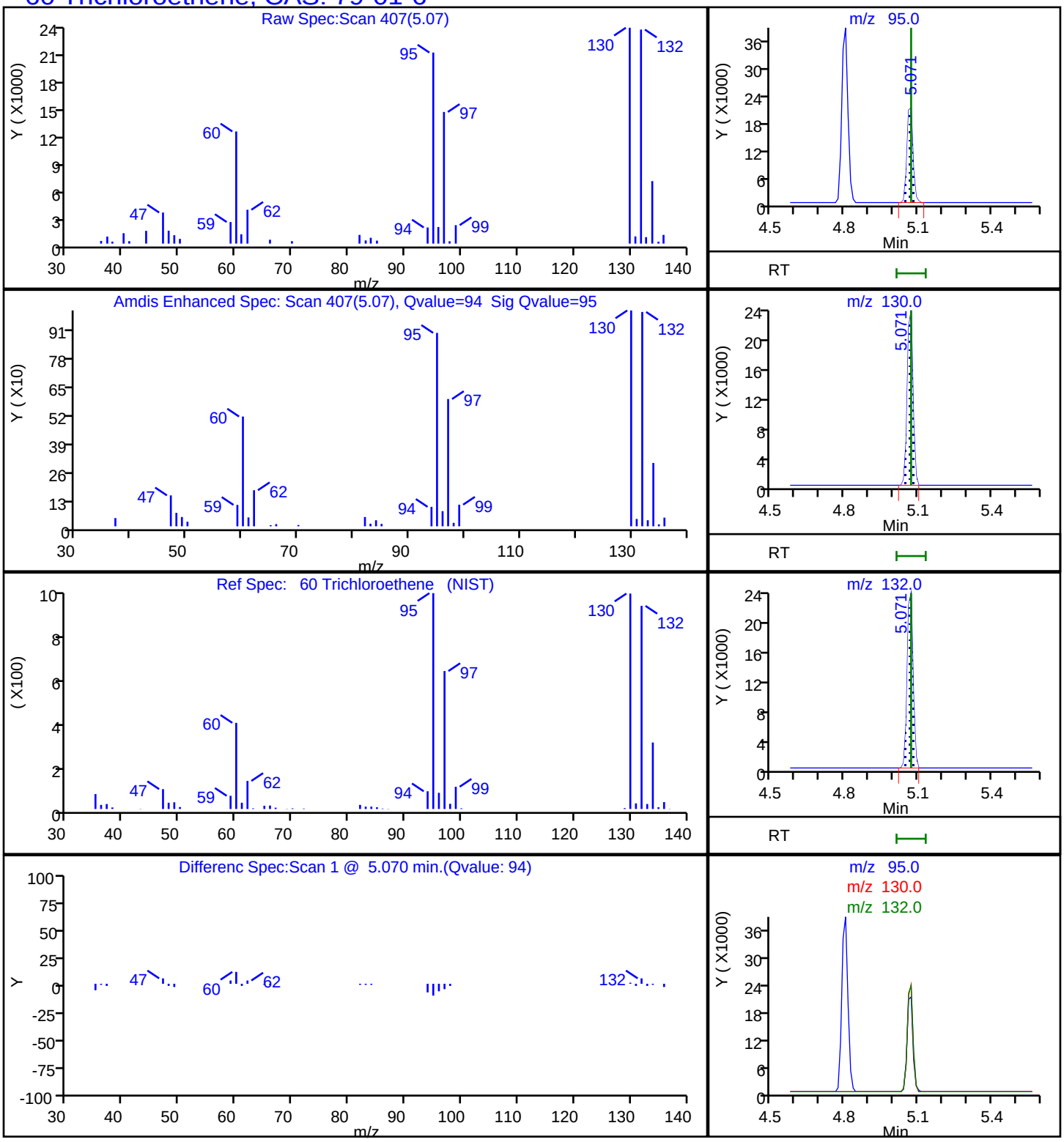


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D

Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5
Client ID:	356023-GW-ERT-1-115-5		
Operator ID:	OI	ALS Bottle#:	15 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



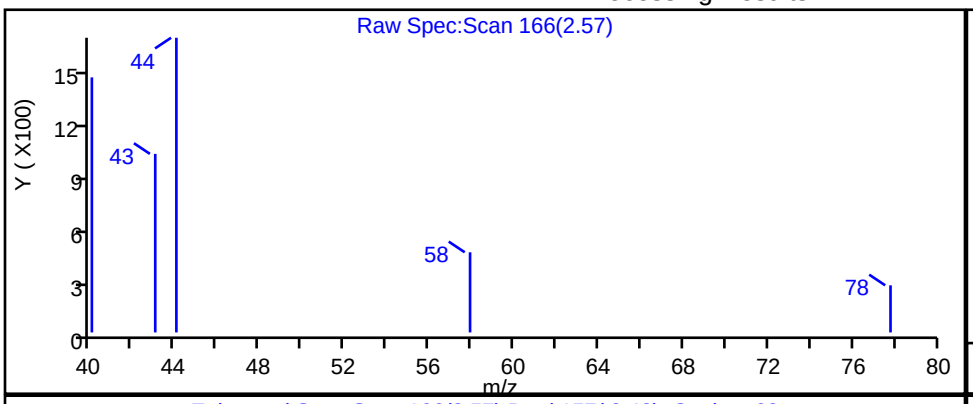
User Disabled Compound Report

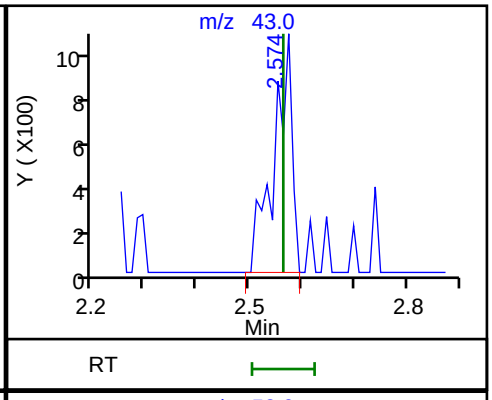
Eurofins TestAmerica, Buffalo

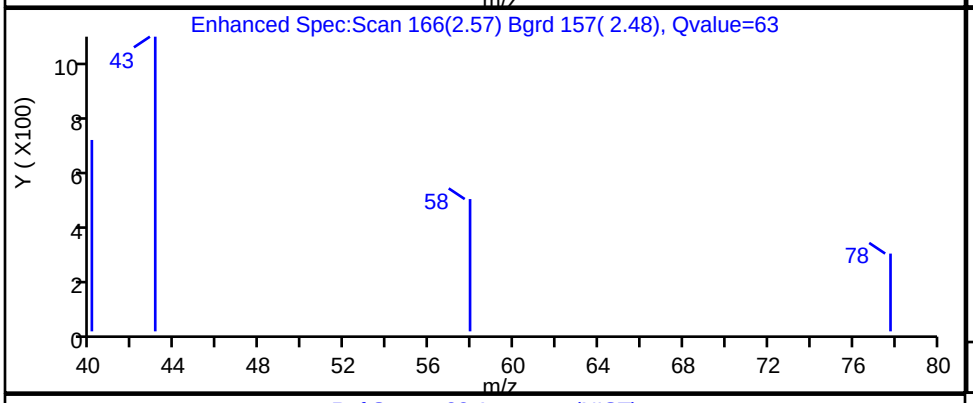
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D		
Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5
Client ID:	356023-GW-ERT-1-115-5		
Operator ID:	OI	ALS Bottle#:	15 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

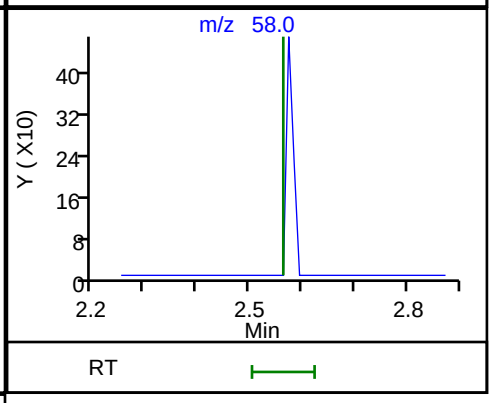
23 Acetone, CAS: 67-64-1

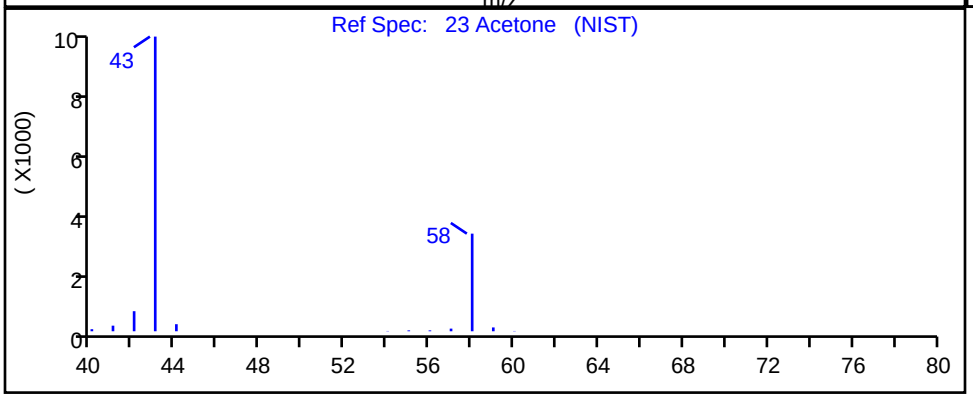
Processing Results











RT	Mass	Response	Amount
2.57	43.00	2471	0.534176
2.56	58.00	0	

Reviewer: moffata, 08-Sep-2019 08:52:42

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

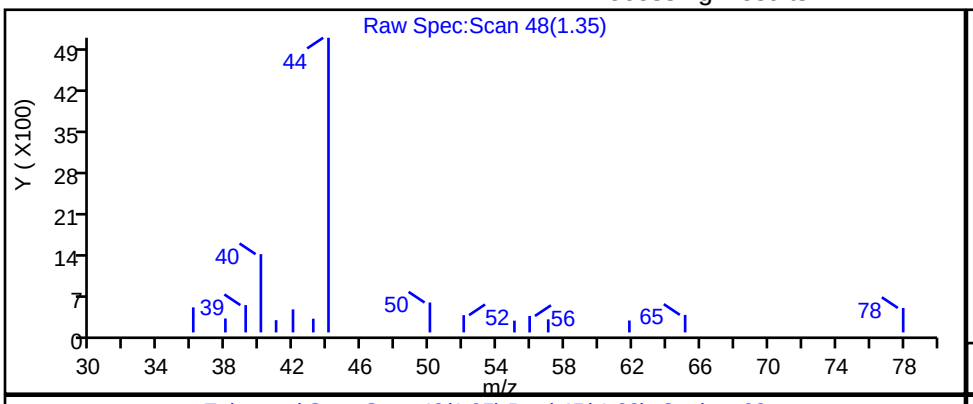
User Disabled Compound Report

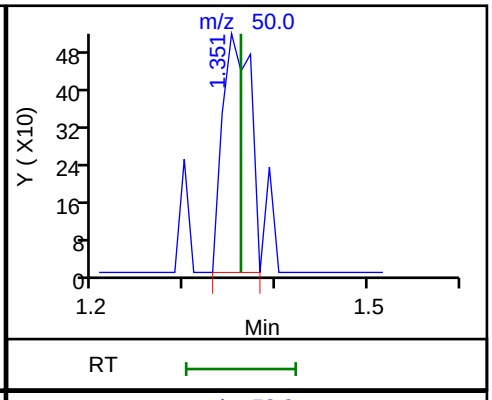
Eurofins TestAmerica, Buffalo

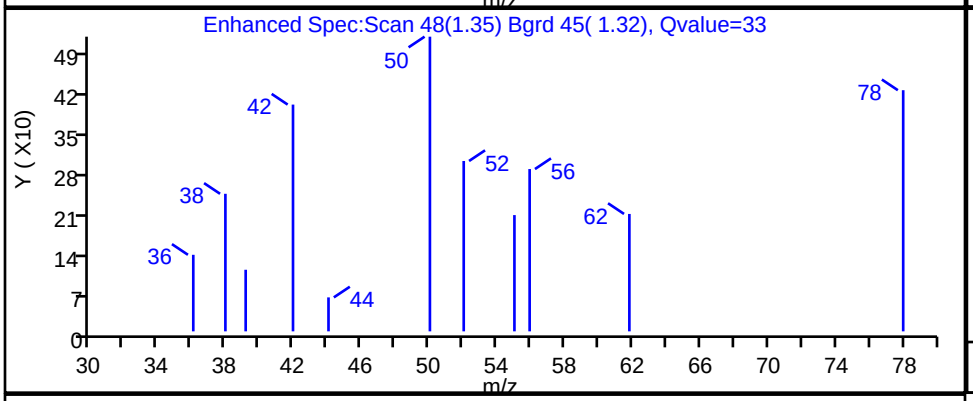
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4593.D				
Injection Date:	07-Sep-2019 17:15:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-5	Lab Sample ID:	480-158436-5		
Client ID:	356023-GW-ERT-1-115-5				
Operator ID:	OI	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

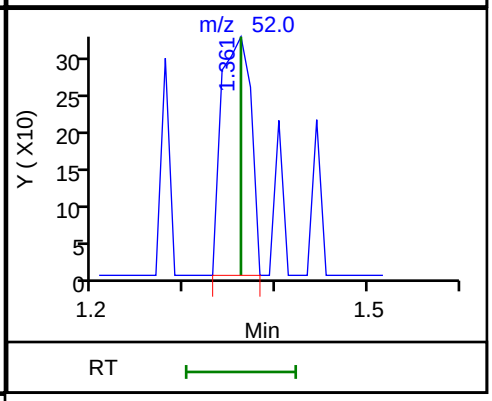
13 Chloromethane, CAS: 74-87-3

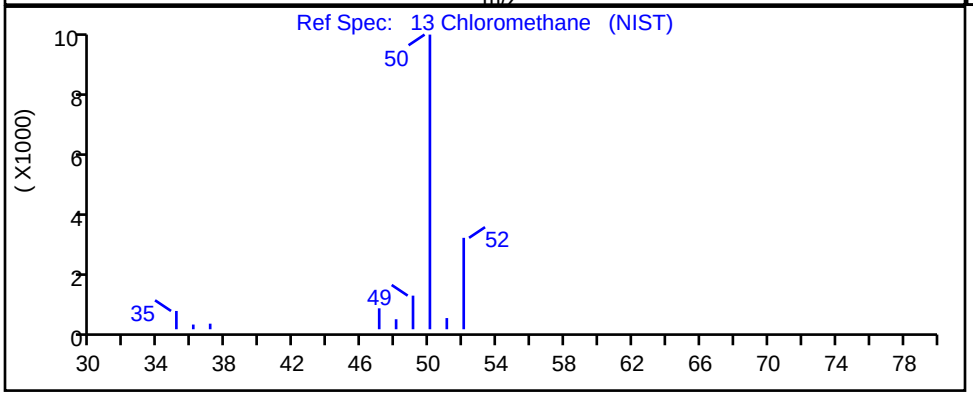
Processing Results











RT	Mass	Response	Amount
1.35	50.00	1089	0.076173
1.36	52.00	714	

Reviewer: moffata, 08-Sep-2019 08:52:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-6 Lab Sample ID: 480-158436-6

Matrix: Water Lab File ID: T4594.D

Analysis Method: 8260C Date Collected: 08/28/2019 07:29

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 17:39

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	93		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	15		2.0	0.76
75-35-4	1,1-Dichloroethene	25		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-6 Lab Sample ID: 480-158436-6

Matrix: Water Lab File ID: T4594.D

Analysis Method: 8260C Date Collected: 08/28/2019 07:29

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 17:39

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.94	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	8.1		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	111		75-123
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D
Lims ID: 480-158436-B-6
Client ID: 356023-GW-ERT-1-115-6
Sample Type: Client
Inject. Date: 07-Sep-2019 17:39:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-6
Misc. Info.: 480-0083938-016
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:56:03 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:56:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	148584	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	610358	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	323705	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	208019	27.8	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	269086	26.8	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	95	739580	23.5	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	240750	24.9	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	96	78490	12.4	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	96	3950	0.4693	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	97	117170	7.45	
43 cis-1,2-Dichloroethene	96	3.962	3.952	0.010	80	3343	0.3833	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	90	2715	0.1945	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	545019	46.4	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	93	31119	4.04	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

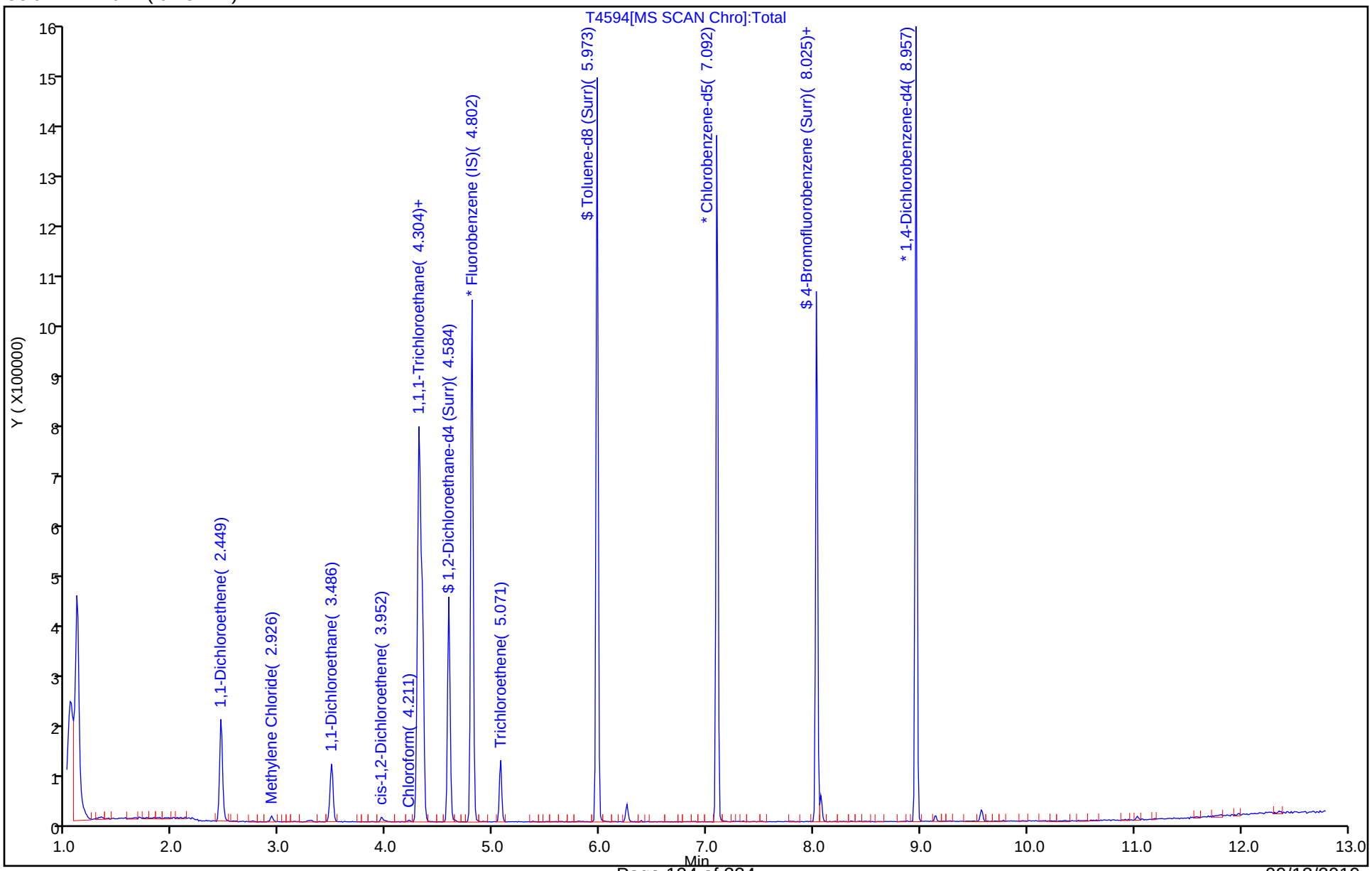
Report Date: 08-Sep-2019 08:56:04 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D

Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6	Worklist Smp#:	16
Client ID:	356023-GW-ERT-1-115-6				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	16
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

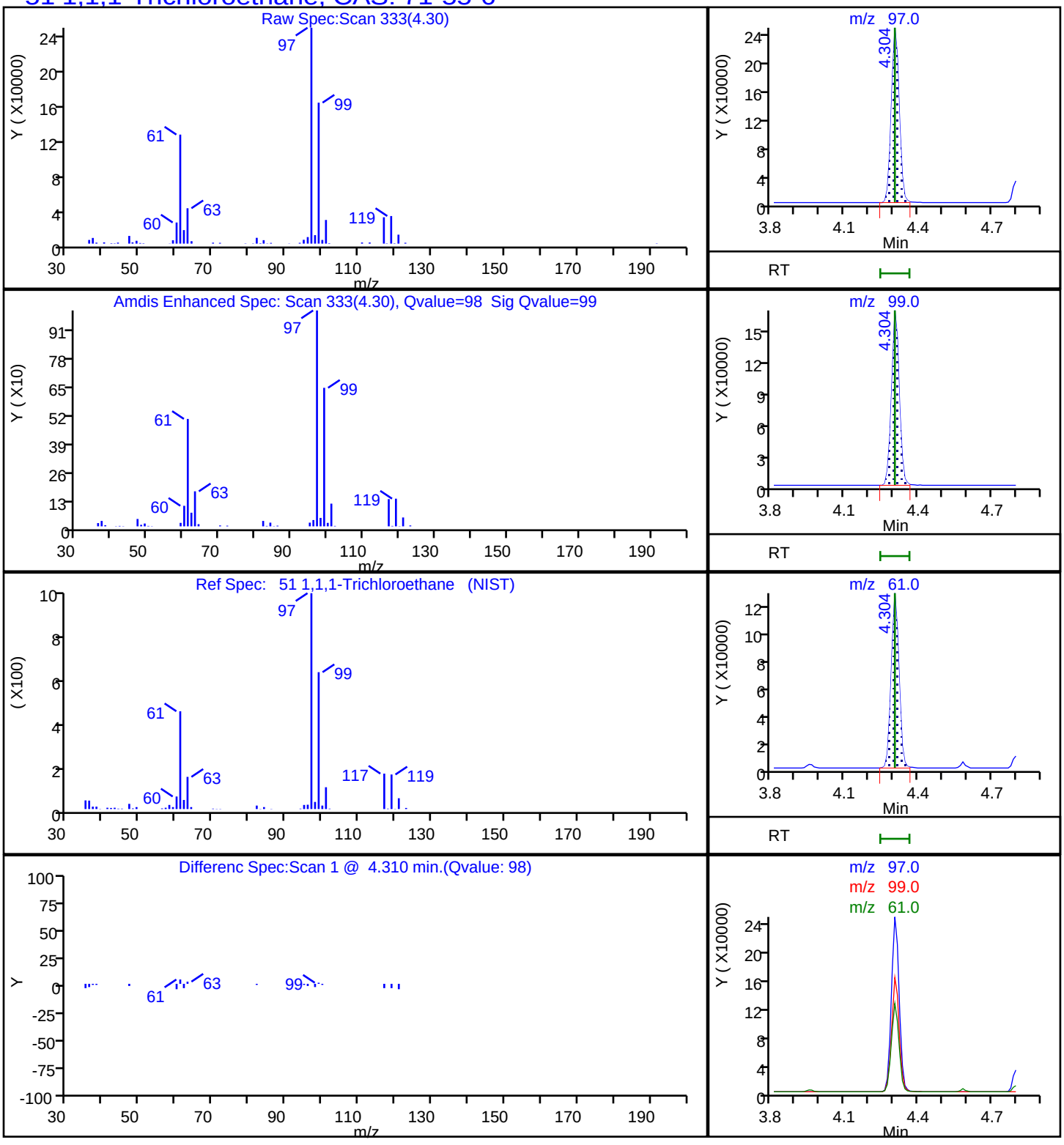


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D

Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6		
Client ID:	356023-GW-ERT-1-115-6				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

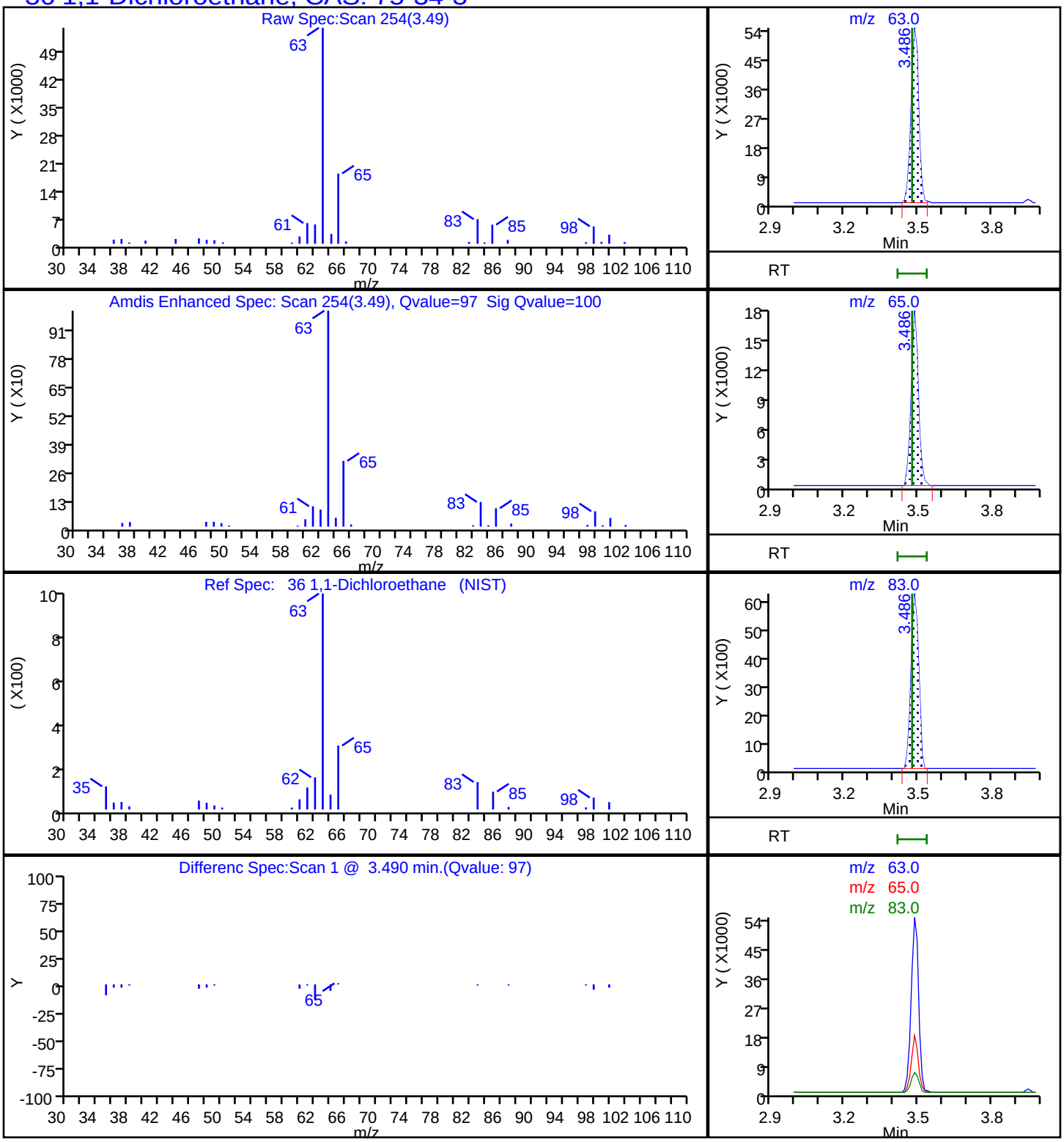


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D

Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6
Client ID:	356023-GW-ERT-1-115-6		
Operator ID:	OI	ALS Bottle#:	16 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3

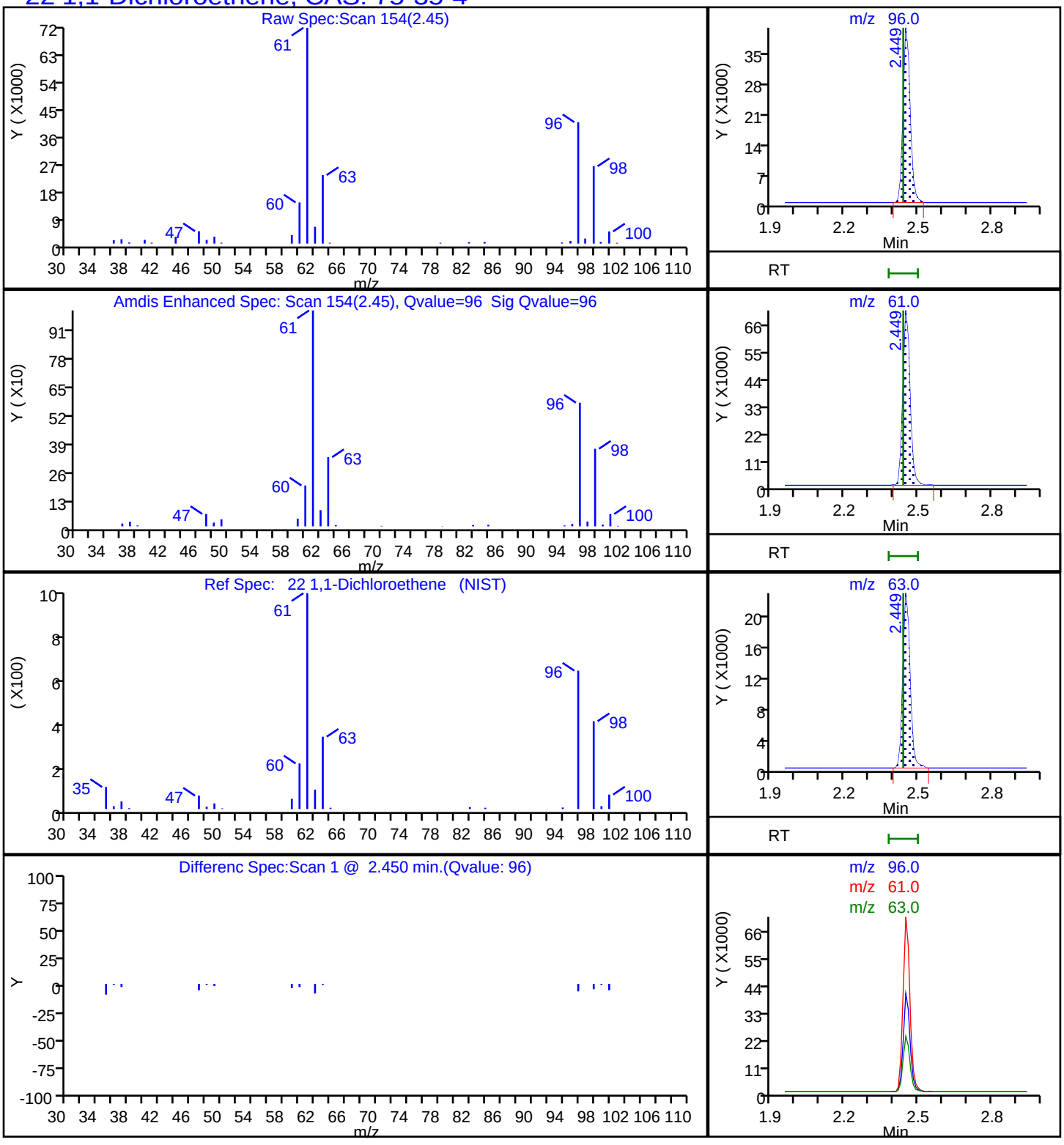


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D

Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6		
Client ID:	356023-GW-ERT-1-115-6				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

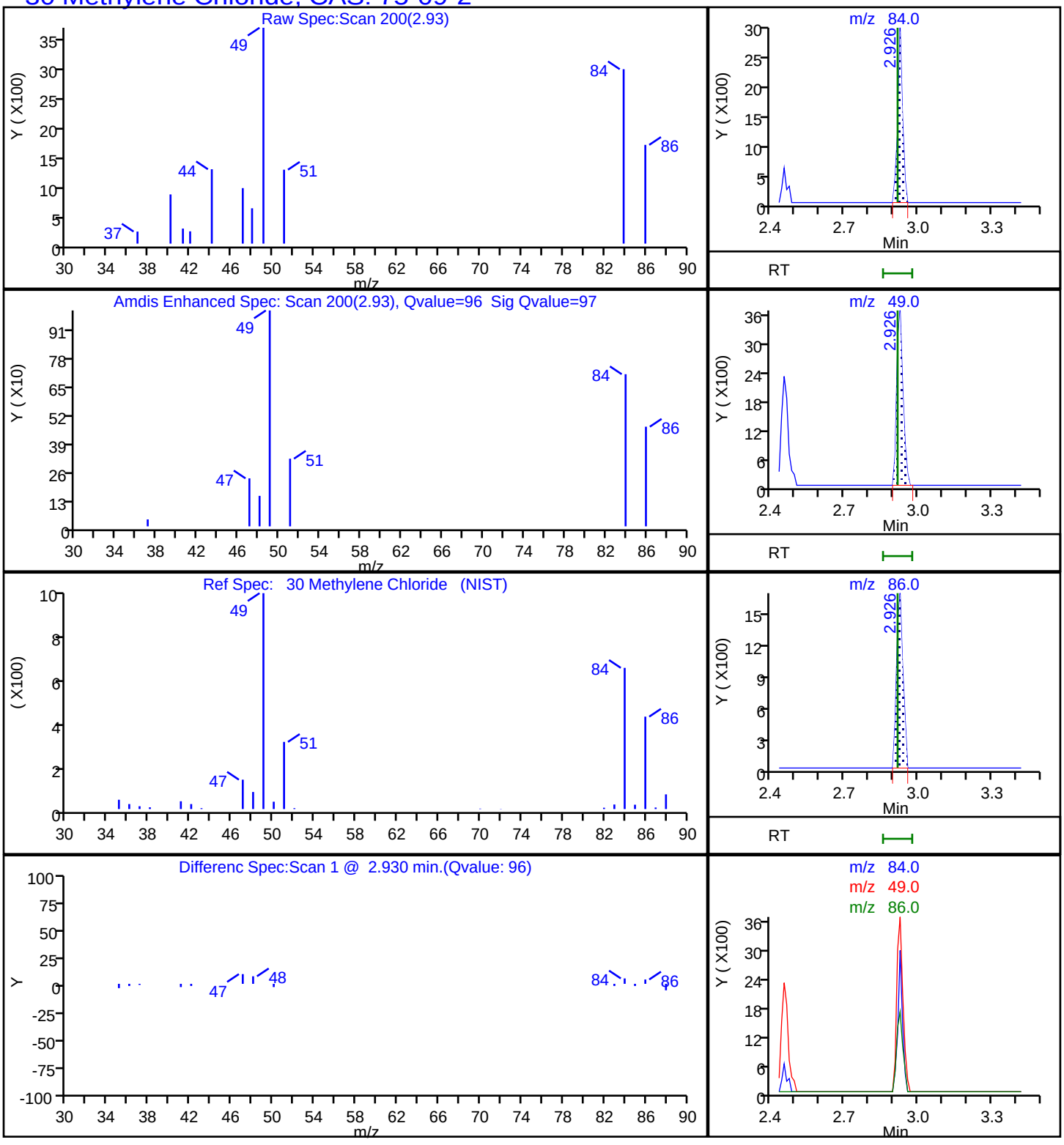


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D

Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6
Client ID:	356023-GW-ERT-1-115-6		
Operator ID:	OI	ALS Bottle#:	16 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

30 Methylene Chloride, CAS: 75-09-2

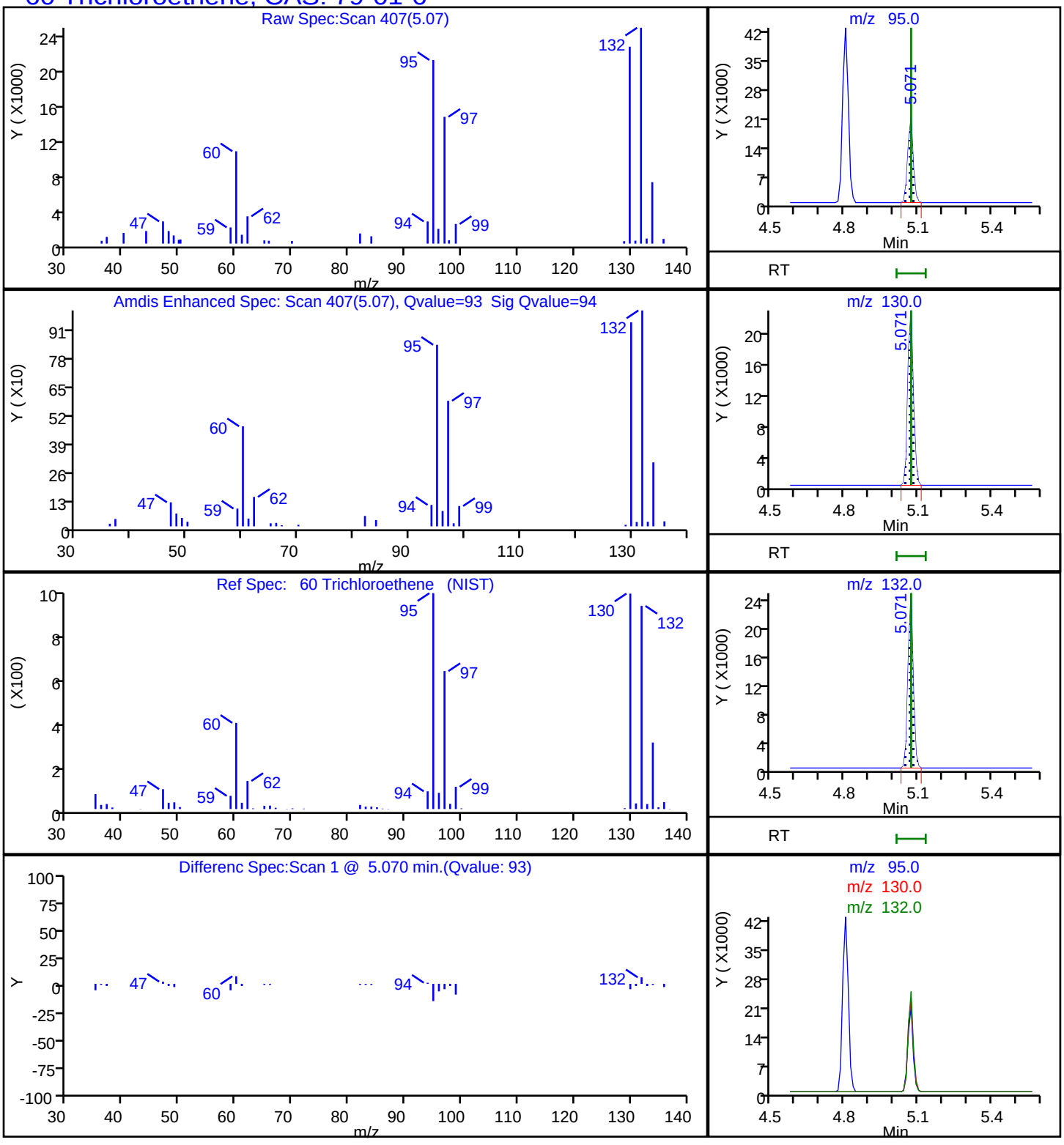


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D

Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6
Client ID:	356023-GW-ERT-1-115-6		
Operator ID:	OI	ALS Bottle#:	16 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



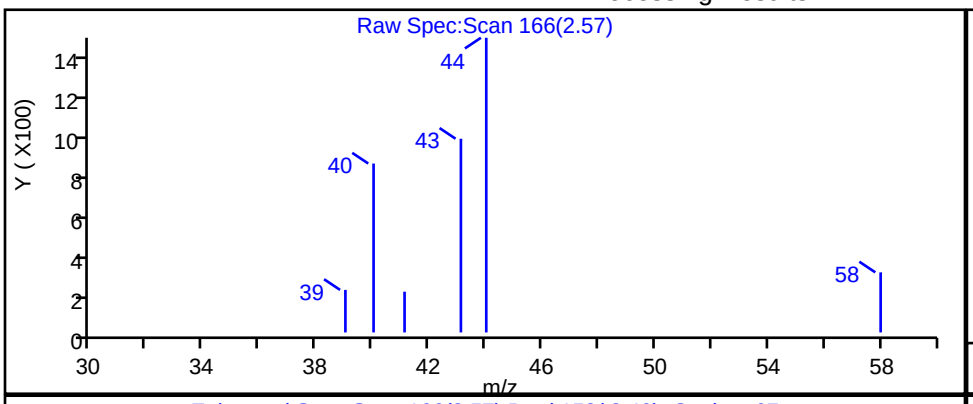
User Disabled Compound Report

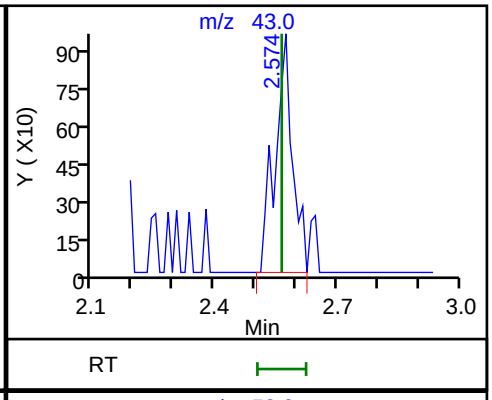
Eurofins TestAmerica, Buffalo

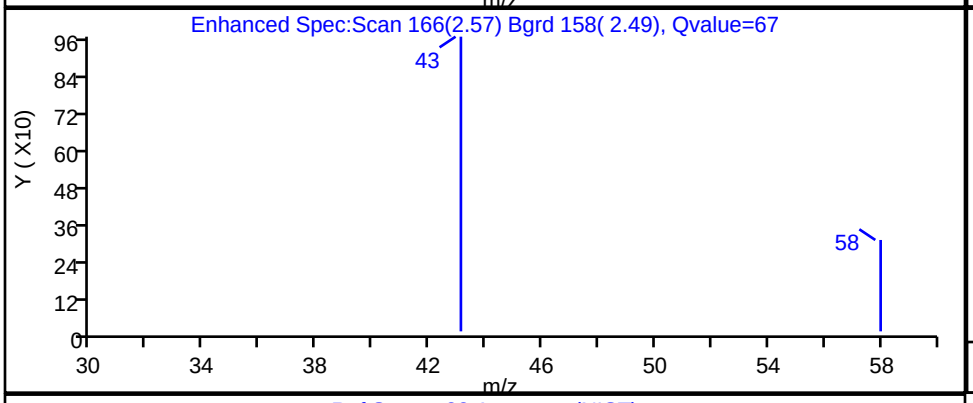
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4594.D				
Injection Date:	07-Sep-2019 17:39:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-6	Lab Sample ID:	480-158436-6		
Client ID:	356023-GW-ERT-1-115-6				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

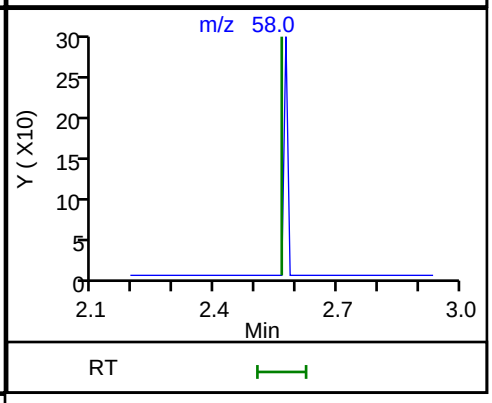
23 Acetone, CAS: 67-64-1

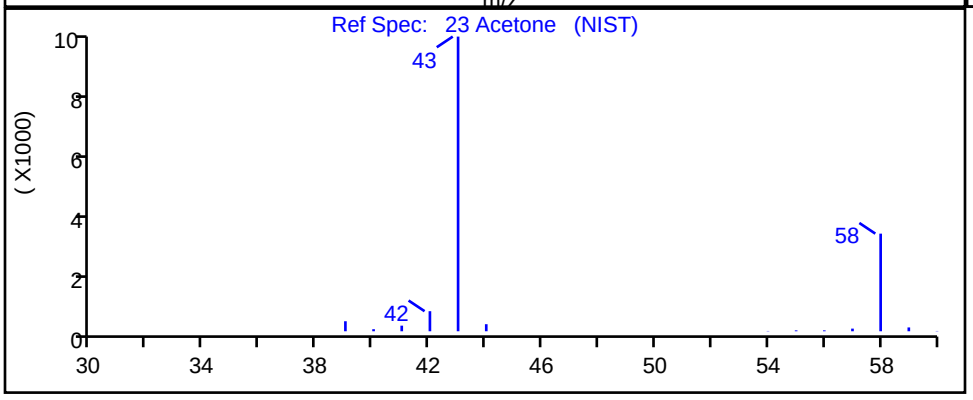
Processing Results











RT	Mass	Response	Amount
2.57	43.00	2858	0.644408
2.56	58.00	0	

Reviewer: moffata, 08-Sep-2019 08:54:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-7 Lab Sample ID: 480-158436-7

Matrix: Water Lab File ID: T4595.D

Analysis Method: 8260C Date Collected: 08/28/2019 11:56

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 18:03

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	88		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	15		2.0	0.76
75-35-4	1,1-Dichloroethene	23		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-7 Lab Sample ID: 480-158436-7

Matrix: Water Lab File ID: T4595.D

Analysis Method: 8260C Date Collected: 08/28/2019 11:56

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 18:03

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.97	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	7.3		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D
Lims ID: 480-158436-B-7
Client ID: 356023-GW-ERT-1-115-7
Sample Type: Client
Inject. Date: 07-Sep-2019 18:03:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-7
Misc. Info.: 480-0083938-017
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:58:11 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:58:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	151386	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	598050	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	97	326765	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	92	208013	27.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	270844	26.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	93	737309	24.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	242537	25.6	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	94	72816	11.3	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	93	4160	0.4851	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	118385	7.39	
43 cis-1,2-Dichloroethene	96	3.962	3.952	0.010	79	3328	0.3745	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83		4.211				ND	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	524852	43.9	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	92	28786	3.67	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

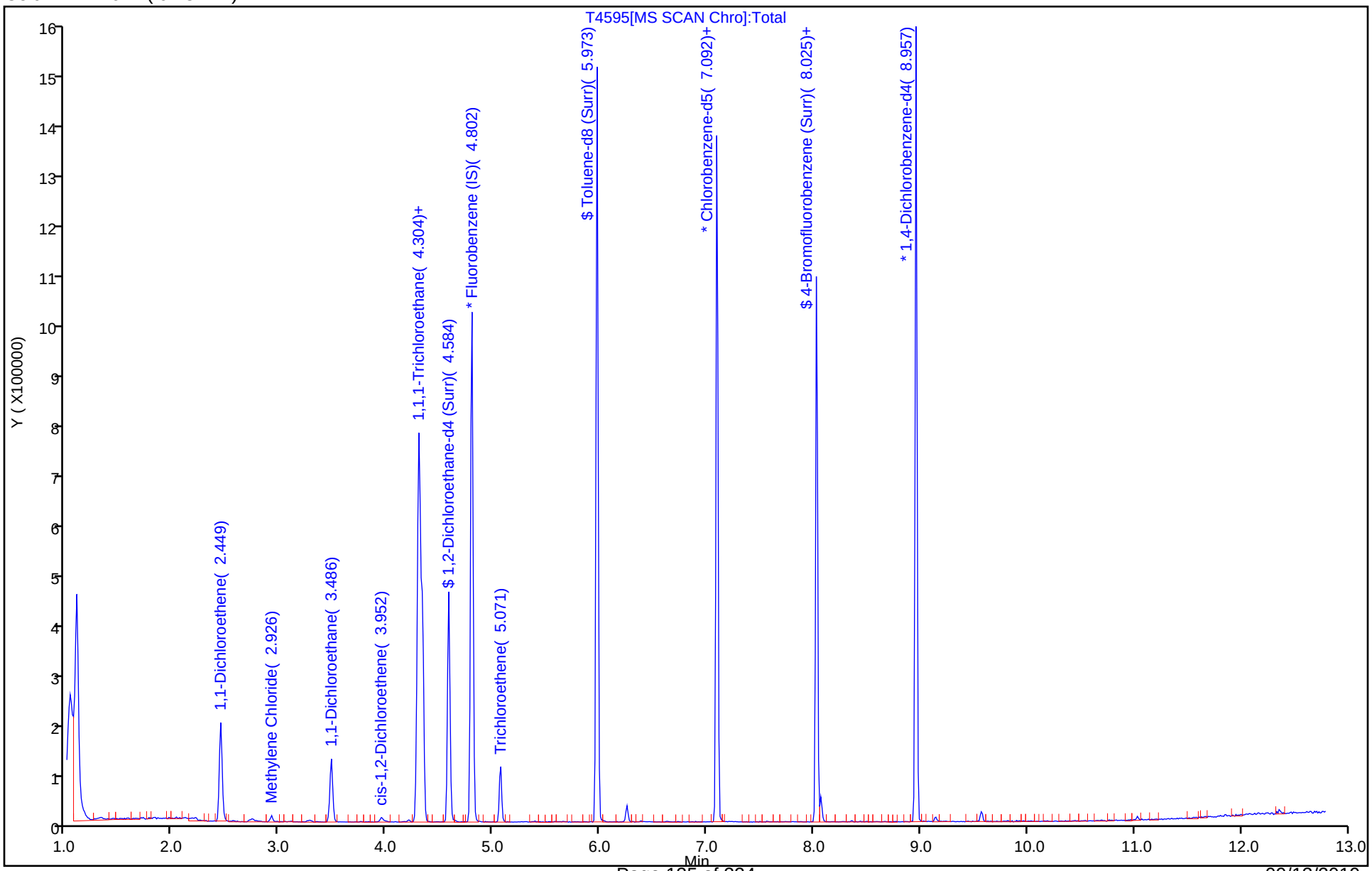
Report Date: 08-Sep-2019 08:58:18 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D

Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7	Worklist Smp#:	17
Client ID:	356023-GW-ERT-1-115-7				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	17
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

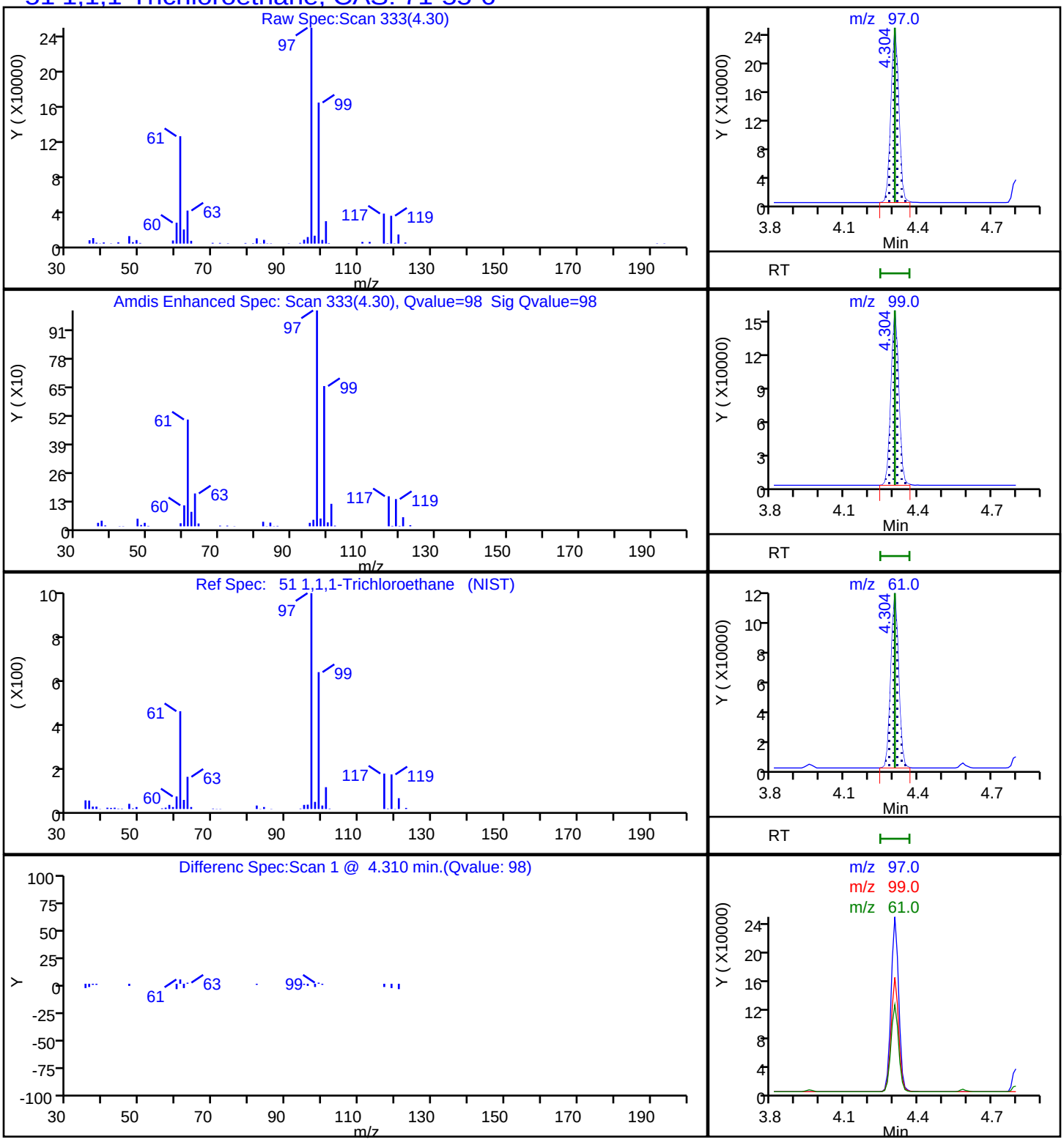


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D

Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7
Client ID:	356023-GW-ERT-1-115-7		
Operator ID:	OI	ALS Bottle#:	17 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6

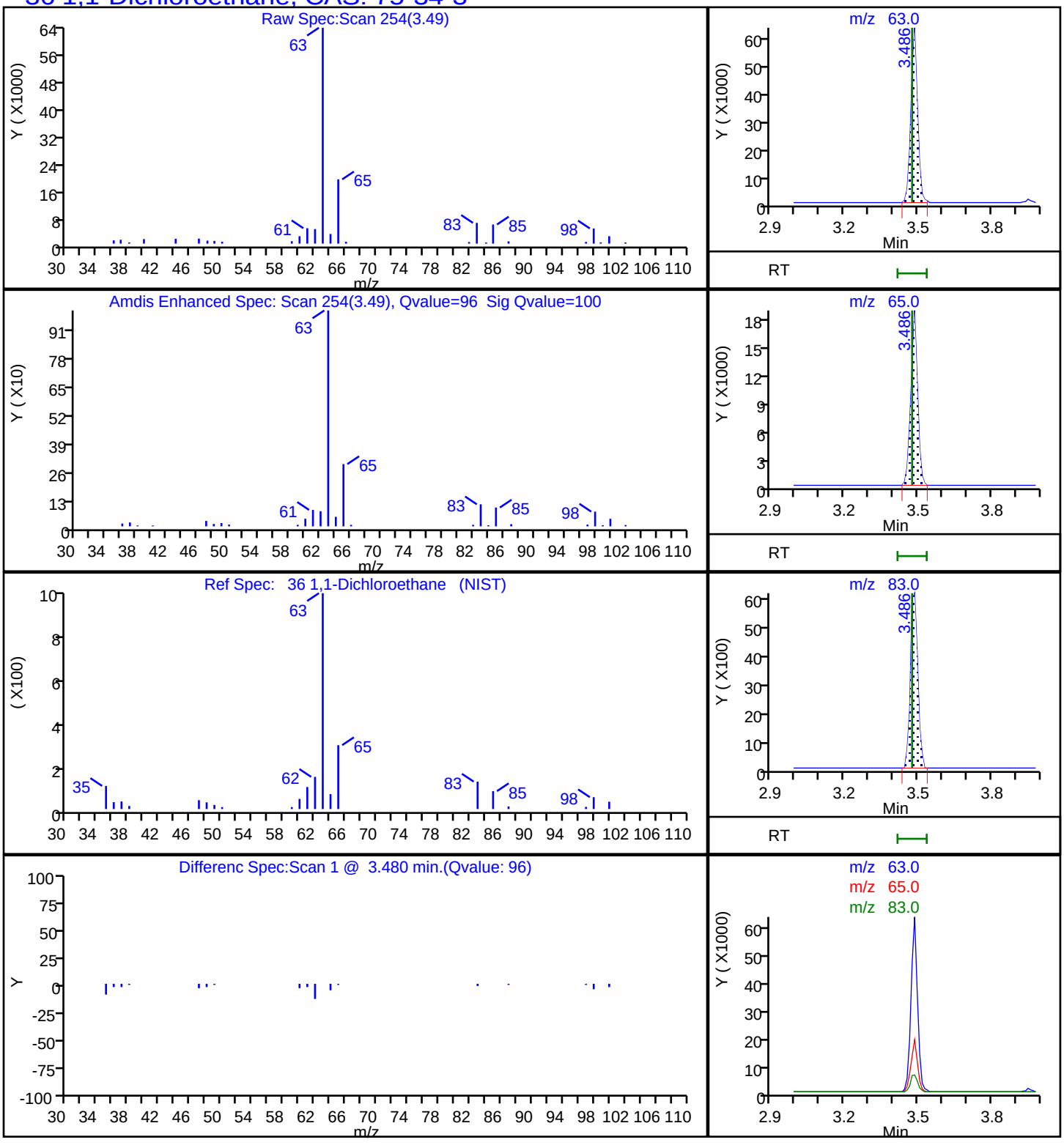


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D

Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7		
Client ID:	356023-GW-ERT-1-115-7				
Operator ID:	OI	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

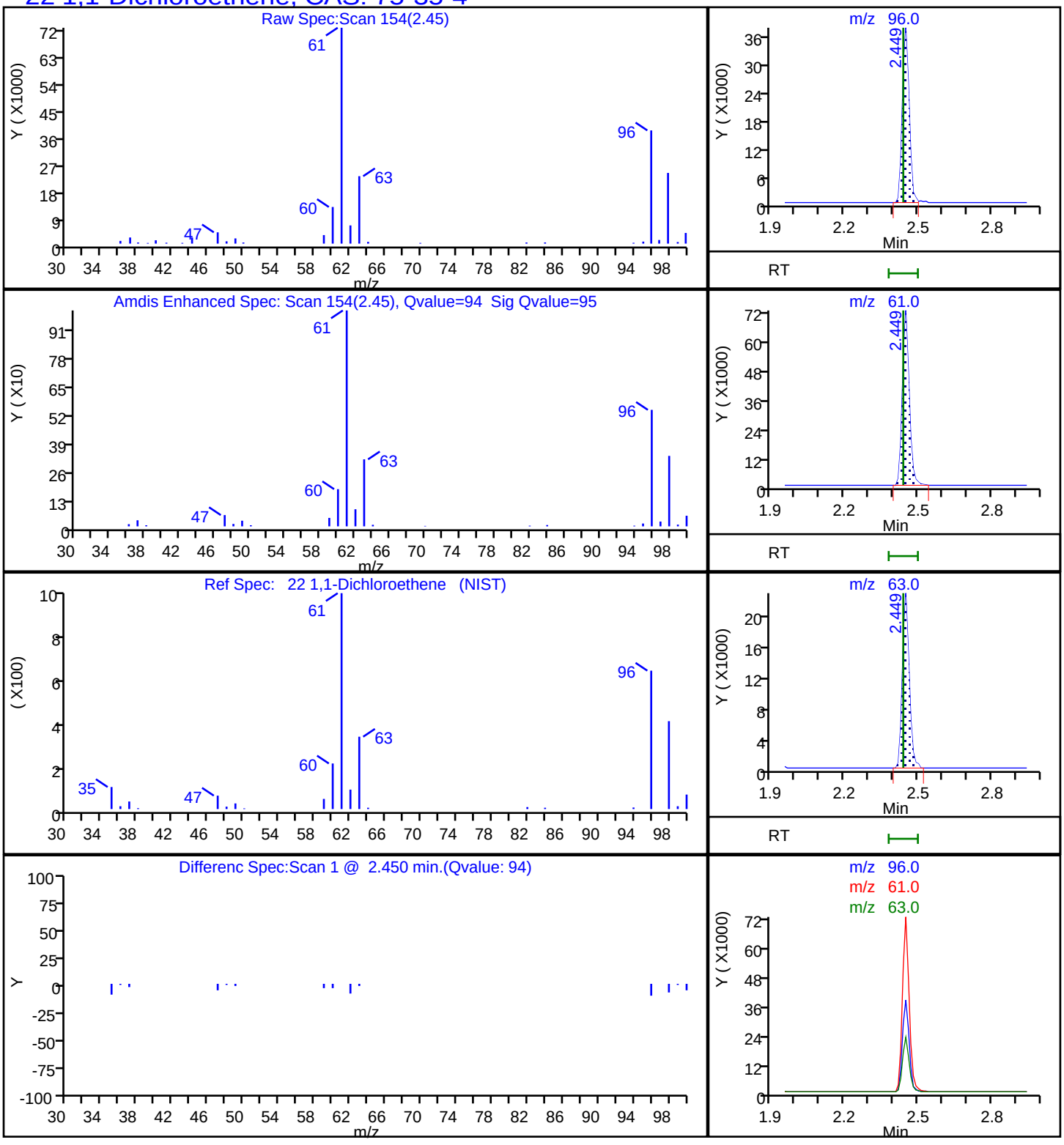


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D

Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7
Client ID:	356023-GW-ERT-1-115-7		
Operator ID:	OI	ALS Bottle#:	17 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



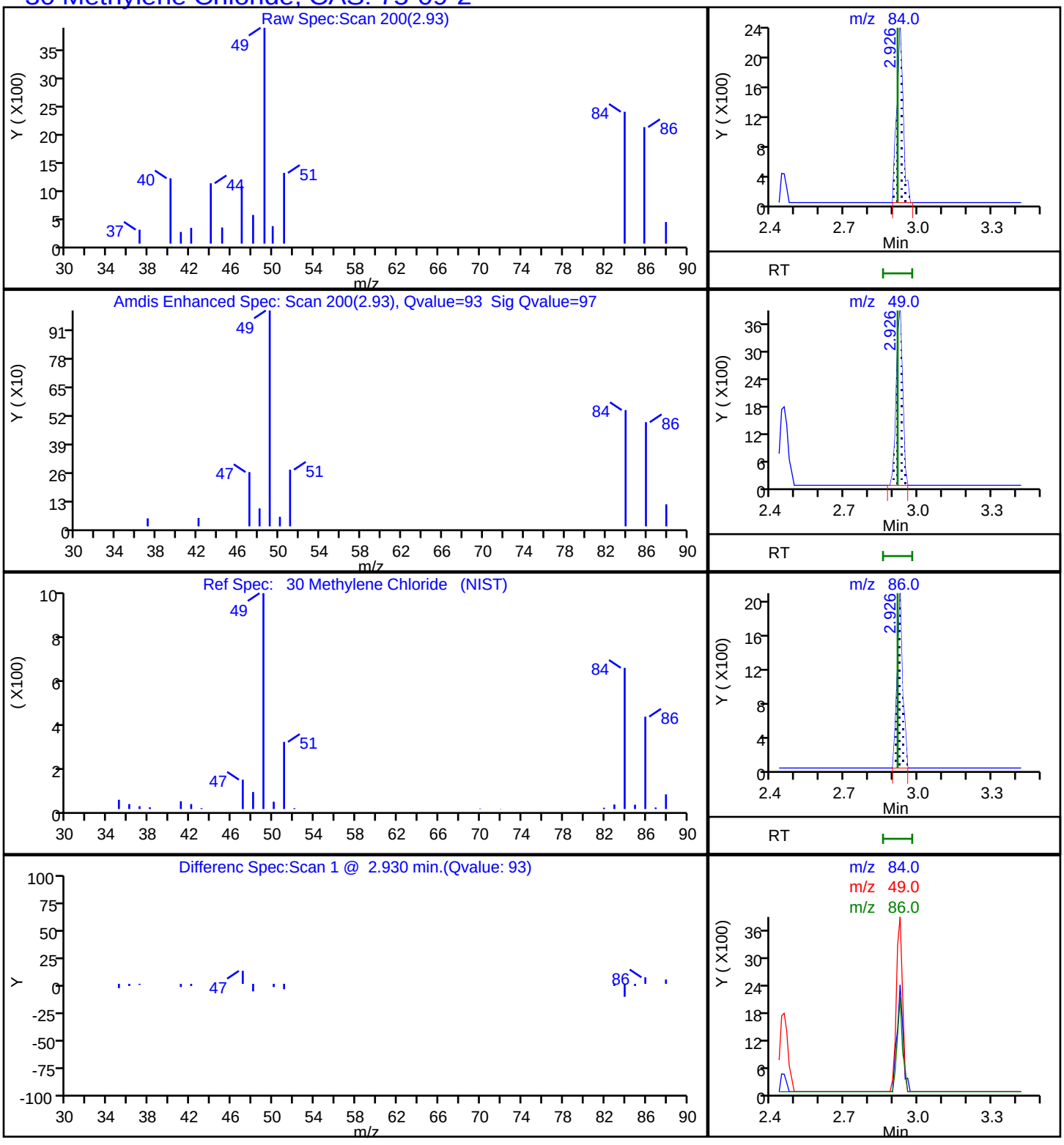
Report Date: 08-Sep-2019 08:58:18 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D

Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7		
Client ID:	356023-GW-ERT-1-115-7				
Operator ID:	OI	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

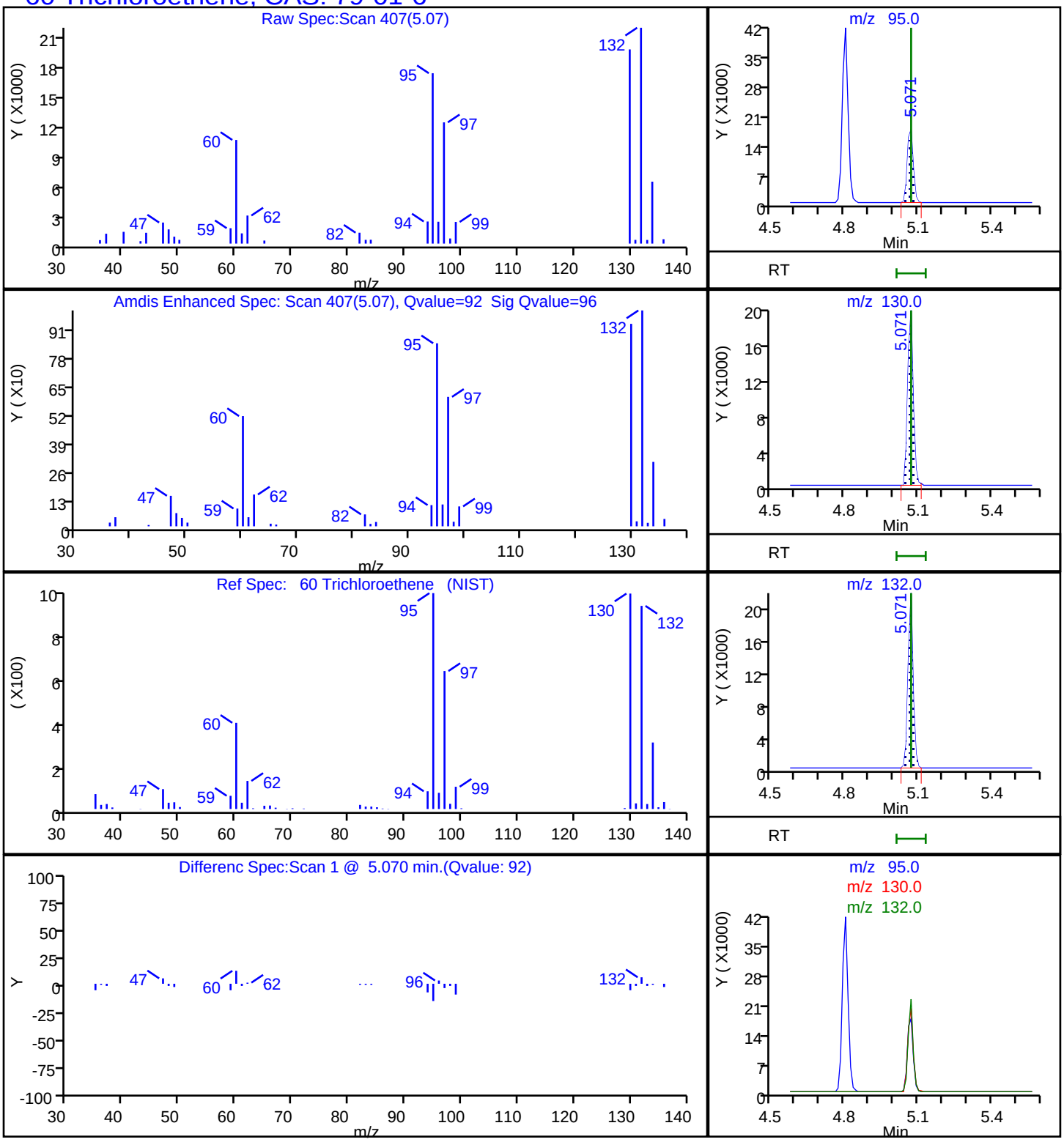


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D

Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7
Client ID:	356023-GW-ERT-1-115-7		
Operator ID:	OI	ALS Bottle#:	17 Worklist Smp#: 17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



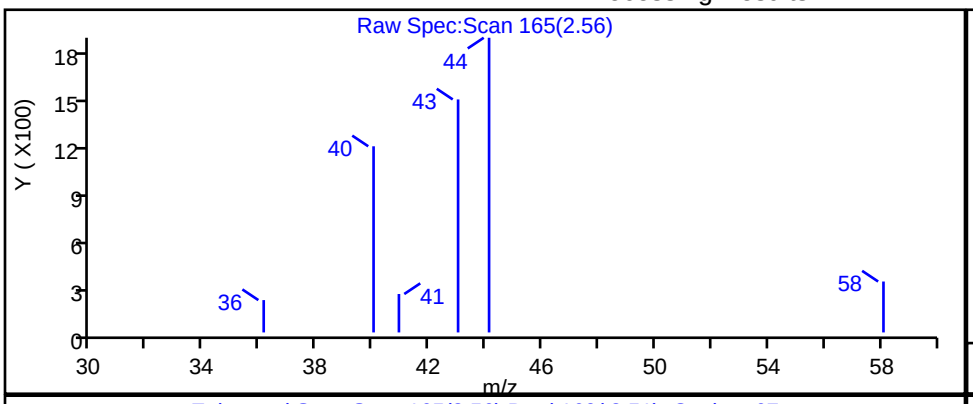
User Disabled Compound Report

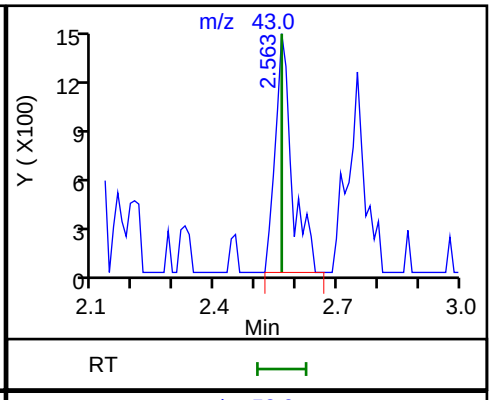
Eurofins TestAmerica, Buffalo

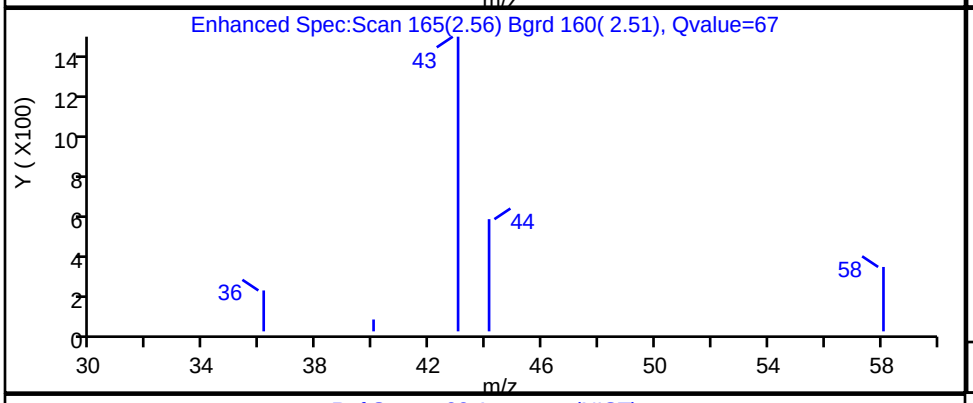
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4595.D				
Injection Date:	07-Sep-2019 18:03:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-7	Lab Sample ID:	480-158436-7		
Client ID:	356023-GW-ERT-1-115-7				
Operator ID:	OI	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

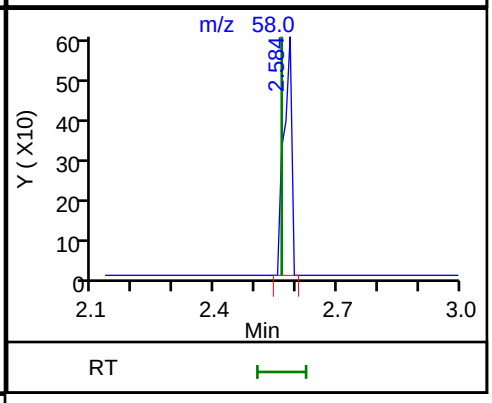
23 Acetone, CAS: 67-64-1

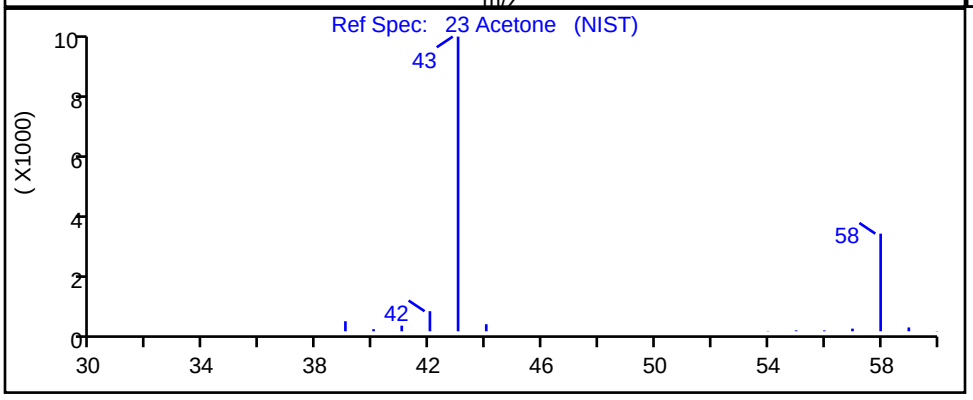
Processing Results











RT	Mass	Response	Amount
2.56	43.00	4276	0.946286
2.58	58.00	825	

Reviewer: moffata, 08-Sep-2019 08:57:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-8 Lab Sample ID: 480-158436-8

Matrix: Water Lab File ID: T4596.D

Analysis Method: 8260C Date Collected: 08/28/2019 16:37

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	79		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	13		1.0	0.38
75-35-4	1,1-Dichloroethene	20		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-8 Lab Sample ID: 480-158436-8

Matrix: Water Lab File ID: T4596.D

Analysis Method: 8260C Date Collected: 08/28/2019 16:37

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 18:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	6.3		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D
Lims ID: 480-158436-B-8
Client ID: 356023-GW-ERT-1-115-8
Sample Type: Client
Inject. Date: 07-Sep-2019 18:26:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-158436-B-8
Misc. Info.: 480-0083938-018
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:59:14 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:59:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	151665	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	616422	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	330997	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	92	206911	27.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	266571	26.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	728809	23.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	244632	25.1	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	U
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.450	2.439	0.011	94	128518	19.9	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	45	959	0.1116	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	97	204728	12.8	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	81	6220	0.6987	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	91	3398	0.2385	
51 1,1,1-Trichloroethane	97	4.305	4.304	0.001	98	950878	79.3	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	94	49604	6.31	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

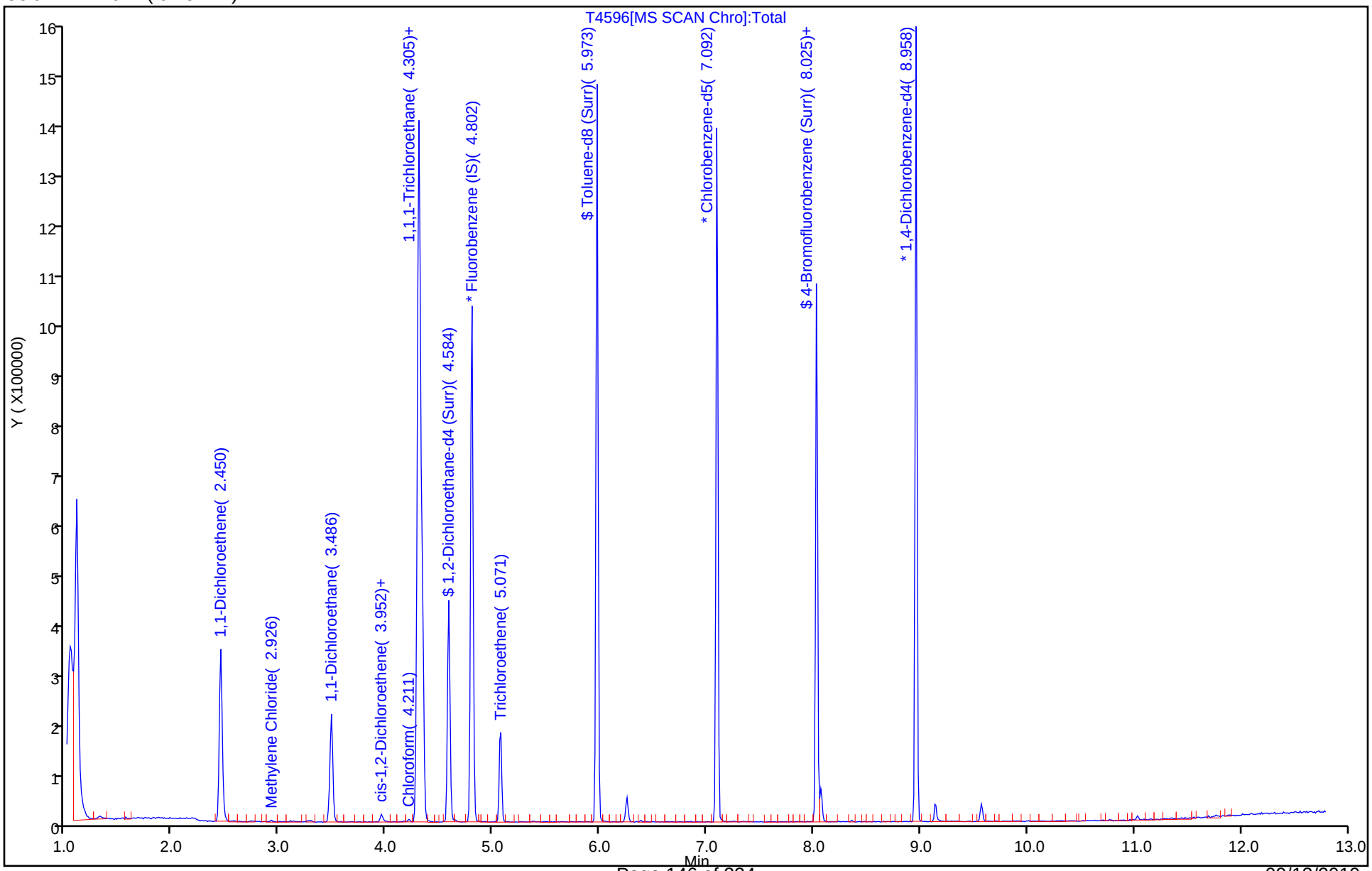
Report Date: 08-Sep-2019 08:59:15 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D

Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8	Worklist Smp#:	18
Client ID:	356023-GW-ERT-1-115-8				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

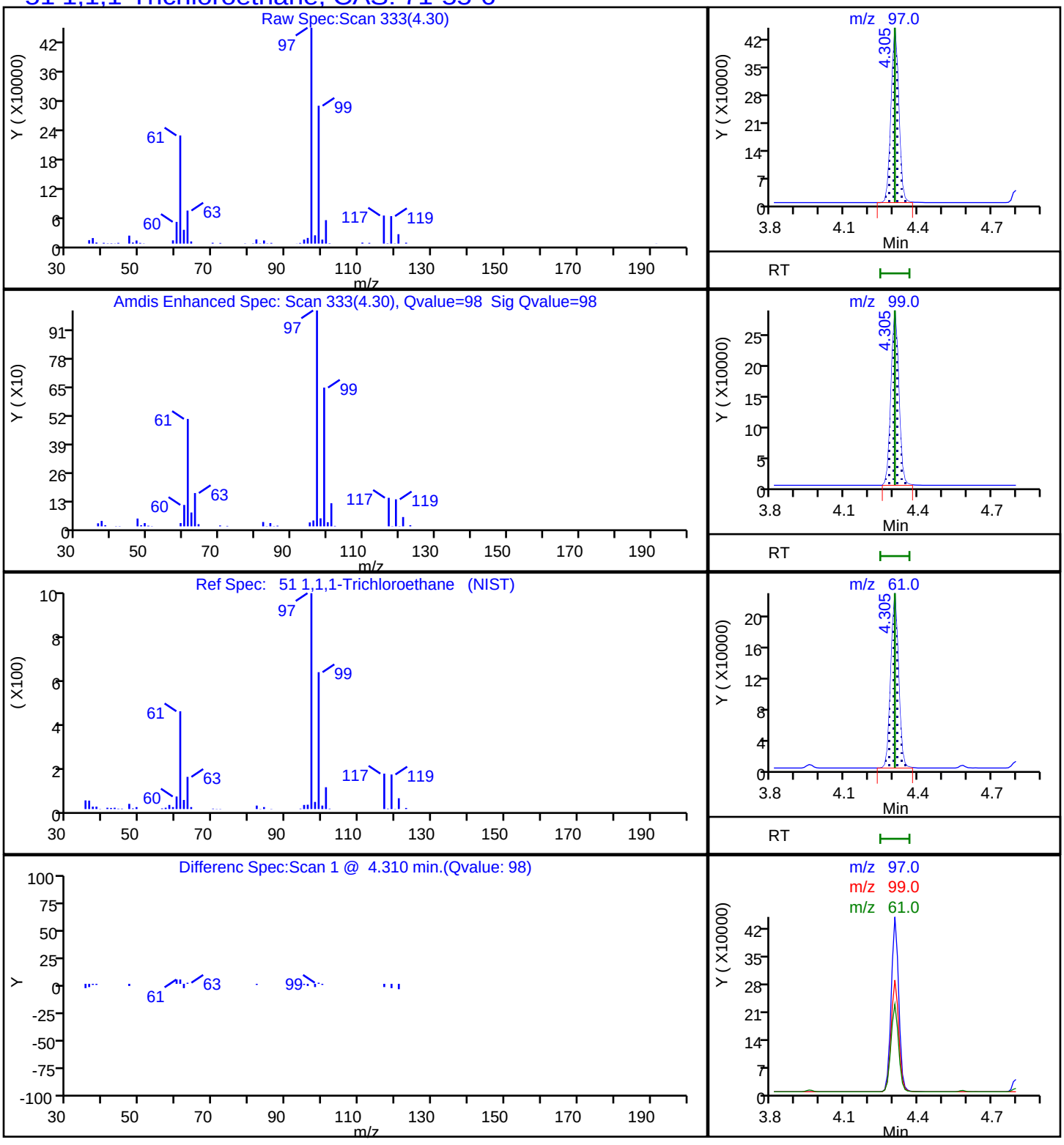


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D

Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8		
Client ID:	356023-GW-ERT-1-115-8				
Operator ID:	OI	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

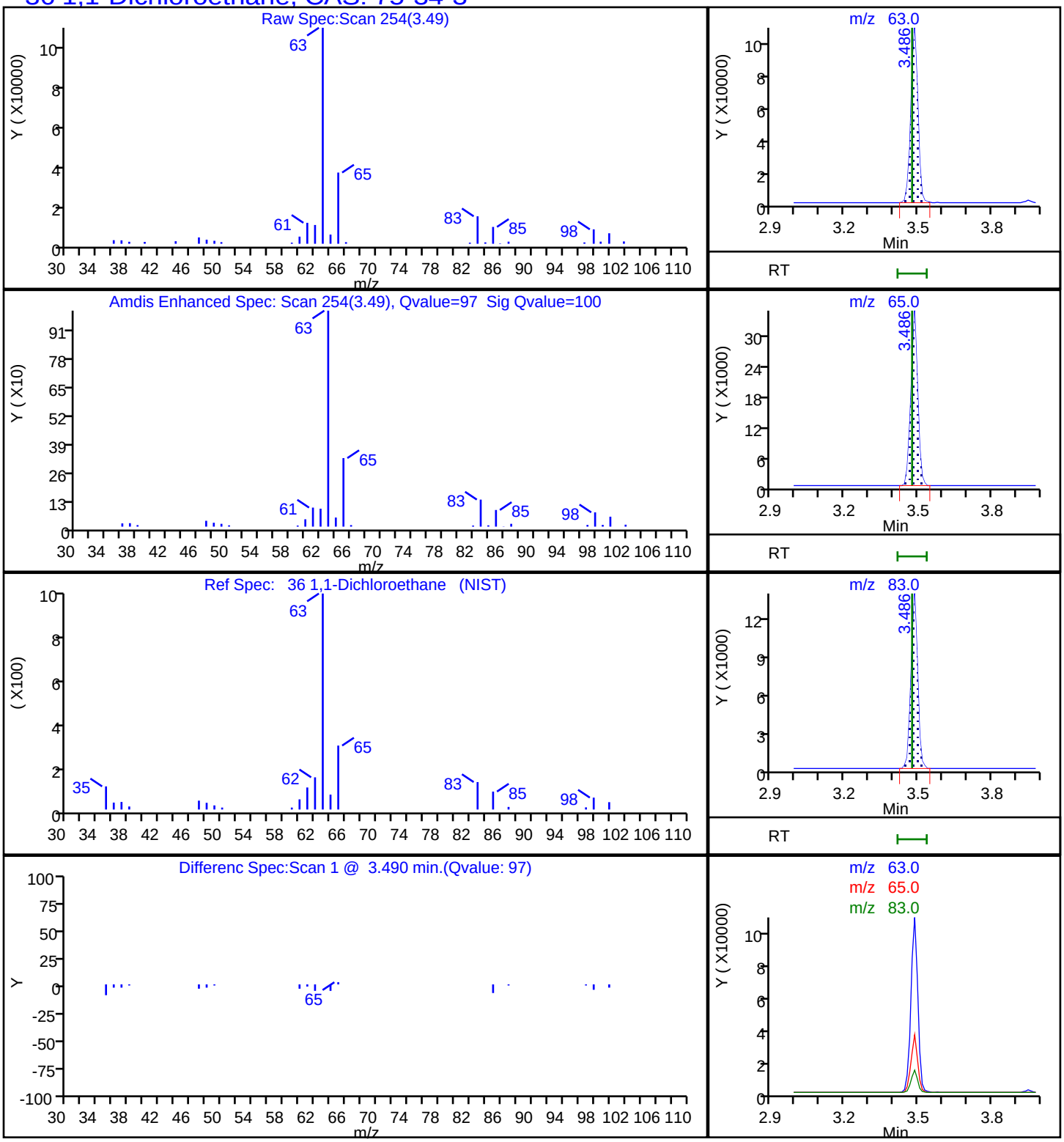


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D

Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8
Client ID:	356023-GW-ERT-1-115-8		
Operator ID:	OI	ALS Bottle#:	18 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3

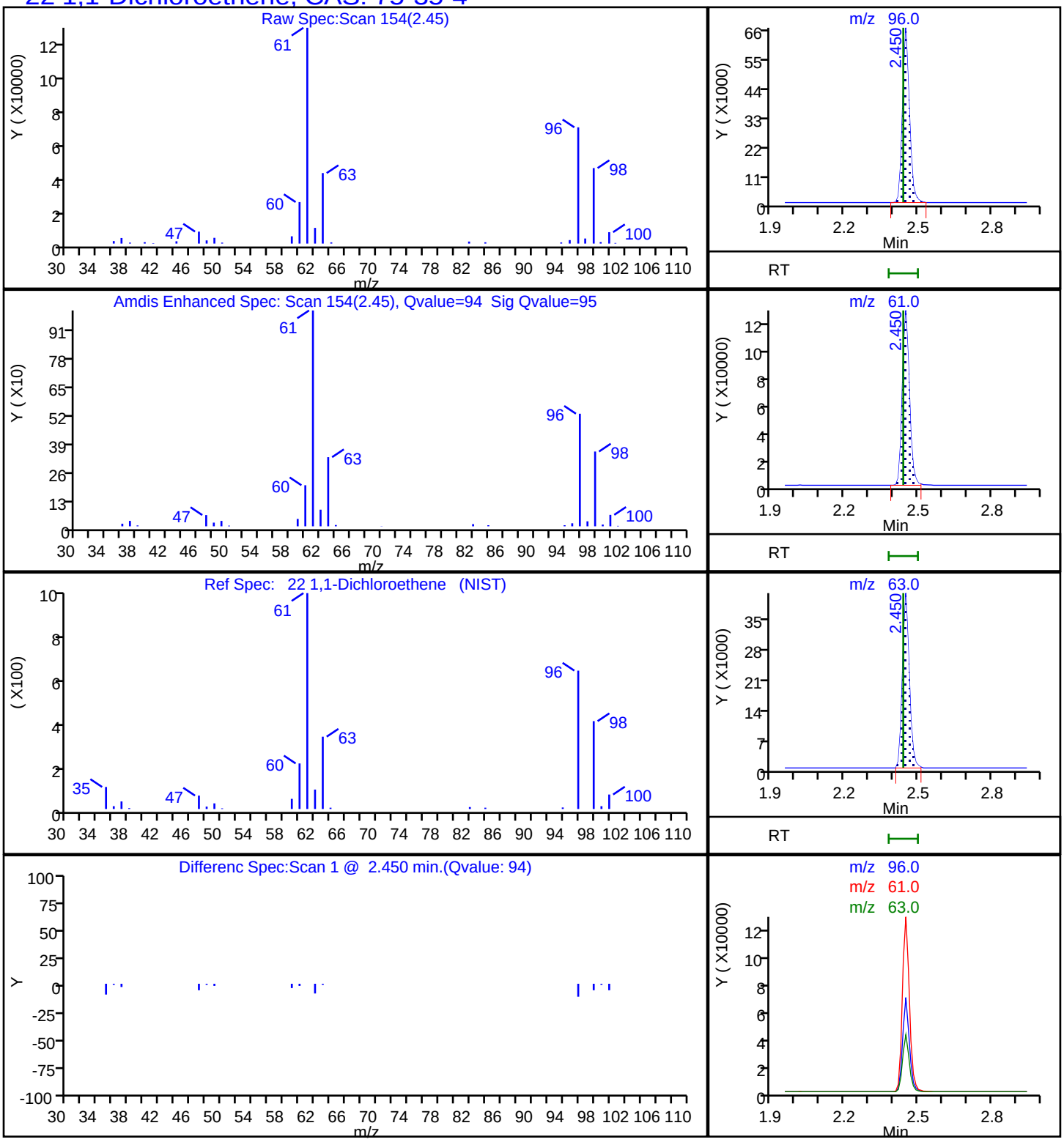


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D

Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8		
Client ID:	356023-GW-ERT-1-115-8				
Operator ID:	OI	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4



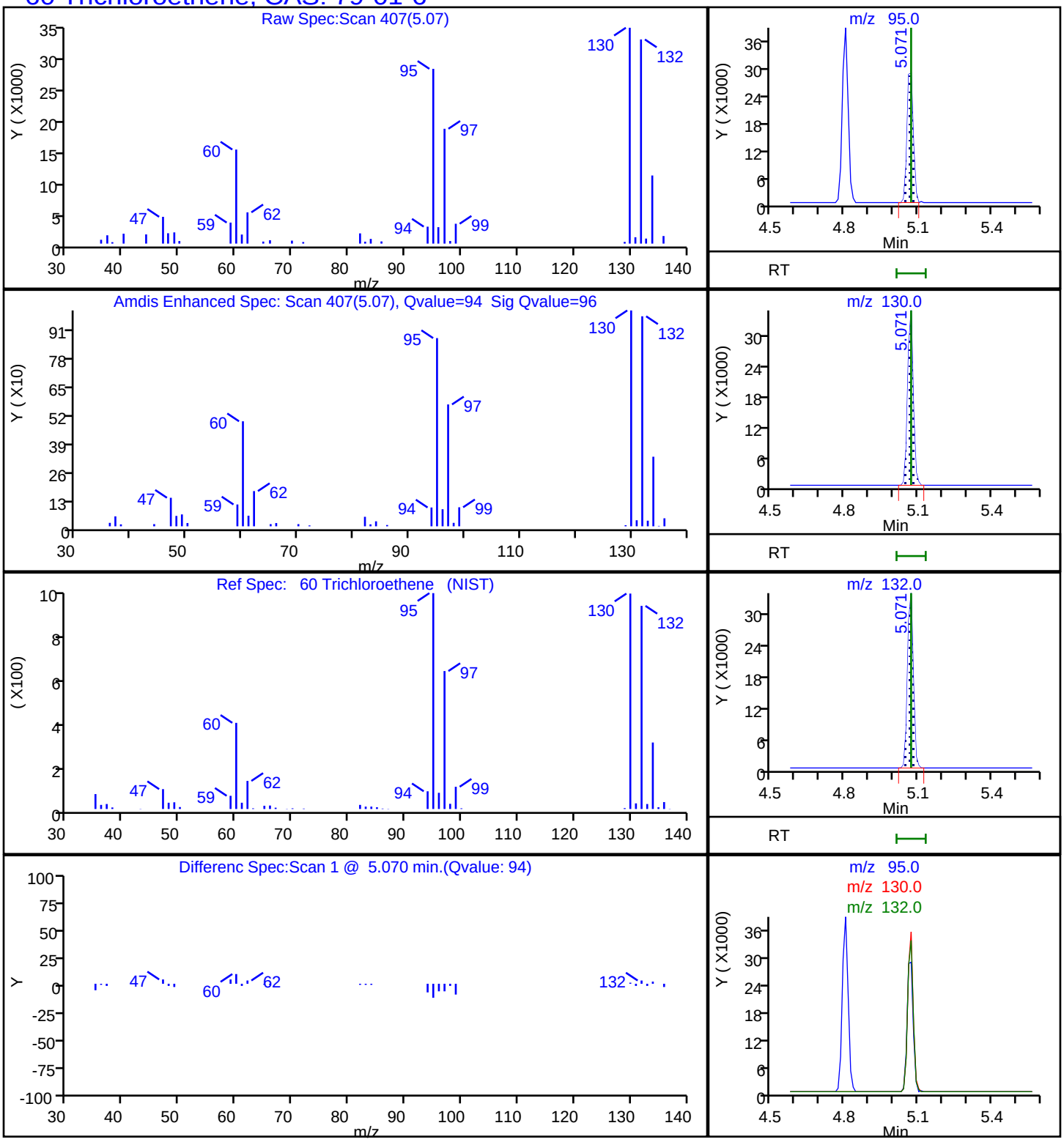
Report Date: 08-Sep-2019 08:59:15 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D

Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8		
Client ID:	356023-GW-ERT-1-115-8				
Operator ID:	OI	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



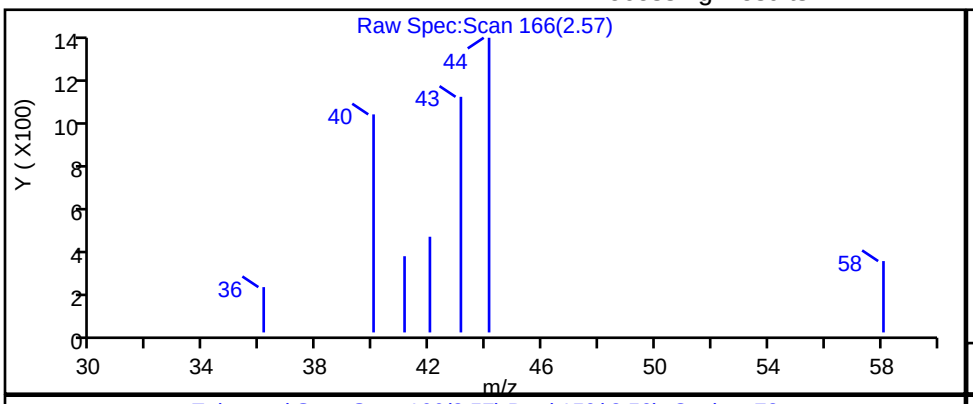
User Disabled Compound Report

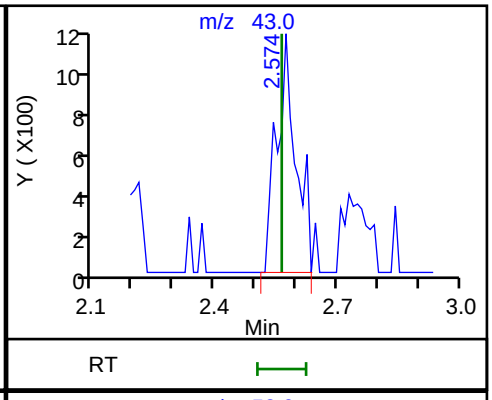
Eurofins TestAmerica, Buffalo

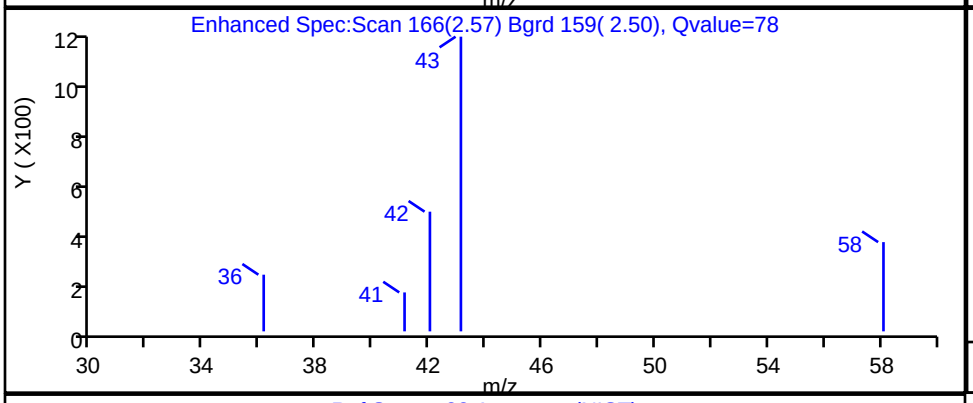
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D				
Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8		
Client ID:	356023-GW-ERT-1-115-8				
Operator ID:	OI	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

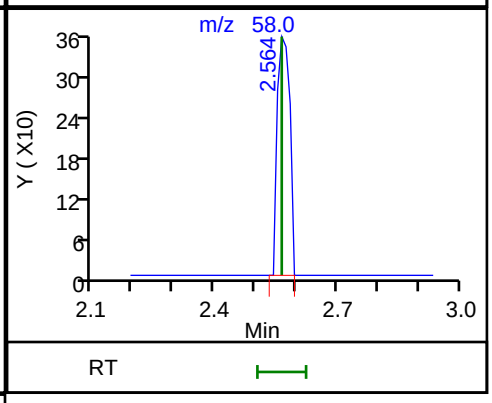
23 Acetone, CAS: 67-64-1

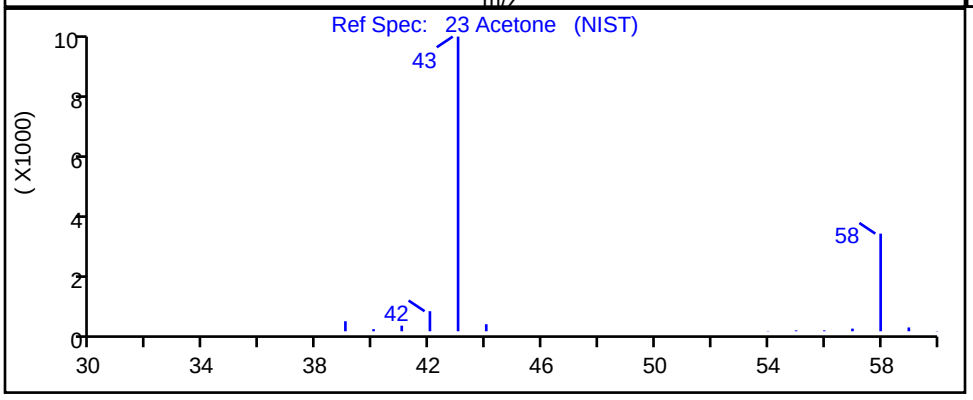
Processing Results











RT	Mass	Response	Amount
2.57	43.00	3662	0.808916
2.56	58.00	756	

Reviewer: moffata, 08-Sep-2019 08:58:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

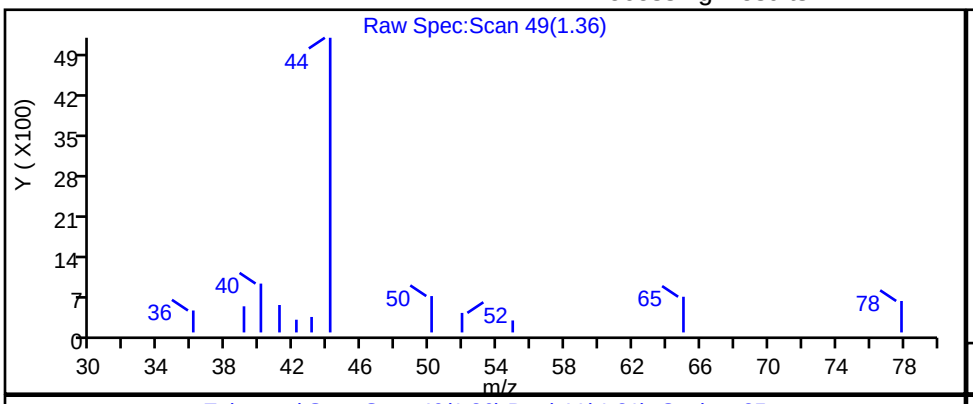
User Disabled Compound Report

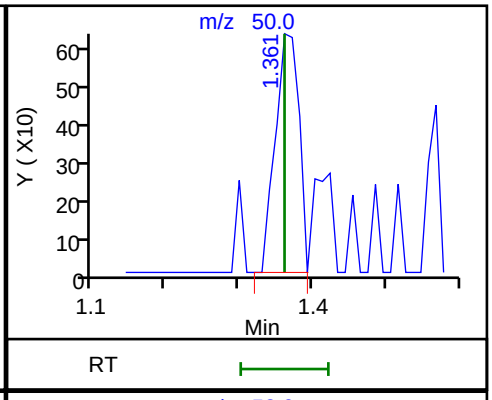
Eurofins TestAmerica, Buffalo

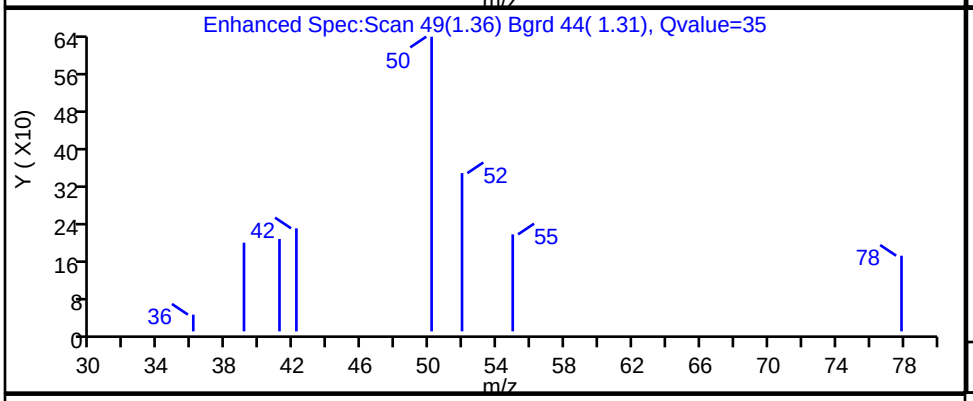
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4596.D				
Injection Date:	07-Sep-2019 18:26:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-8	Lab Sample ID:	480-158436-8		
Client ID:	356023-GW-ERT-1-115-8				
Operator ID:	OI	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

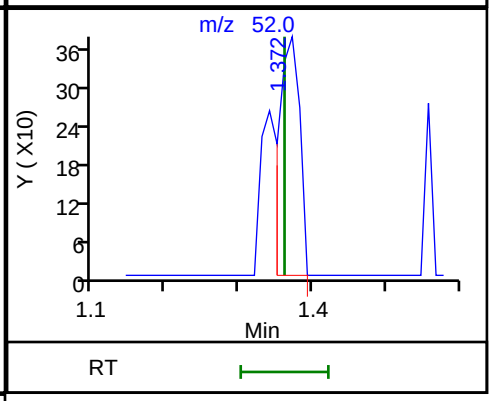
13 Chloromethane, CAS: 74-87-3

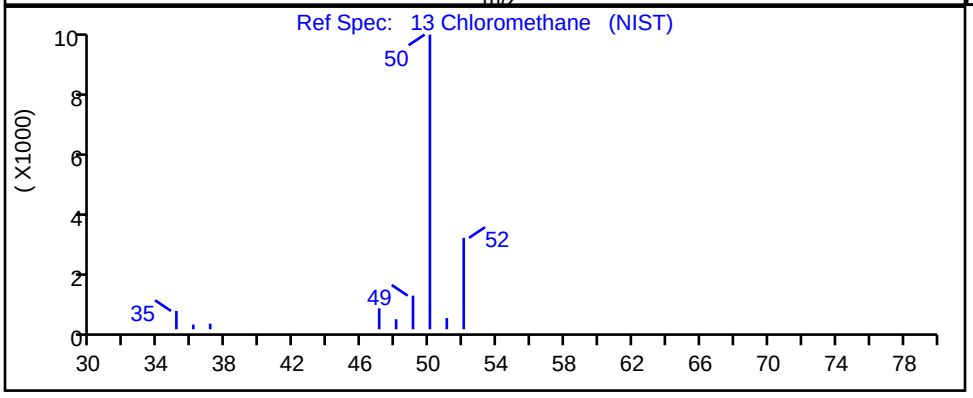
Processing Results











RT	Mass	Response	Amount
1.36	50.00	1425	0.101851
1.37	52.00	744	

Reviewer: moffata, 08-Sep-2019 08:58:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-9 Lab Sample ID: 480-158436-9

Matrix: Water Lab File ID: T4597.D

Analysis Method: 8260C Date Collected: 08/29/2019 07:32

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 18:50

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	89		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	16		2.0	0.76
75-35-4	1,1-Dichloroethene	22		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-9 Lab Sample ID: 480-158436-9

Matrix: Water Lab File ID: T4597.D

Analysis Method: 8260C Date Collected: 08/29/2019 07:32

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 18:50

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.94	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	7.5		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D
Lims ID: 480-158436-B-9
Client ID: 356023-GW-ERT-1-115-9
Sample Type: Client
Inject. Date: 07-Sep-2019 18:50:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-9
Misc. Info.: 480-0083938-019
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 08:59:44 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 08:59:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	152477	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	588491	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	328073	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	92	202999	26.4	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	268328	26.1	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	729159	24.1	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	240024	25.8	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	93	70904	10.9	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.916	2.916	0.000	95	4074	0.4717	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	131777	8.17	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	3769	0.4211	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	89	2712	0.1893	
51 1,1,1-Trichloroethane	97	4.305	4.304	0.001	98	537222	44.6	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.061	5.071	-0.010	94	29787	3.77	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	U
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

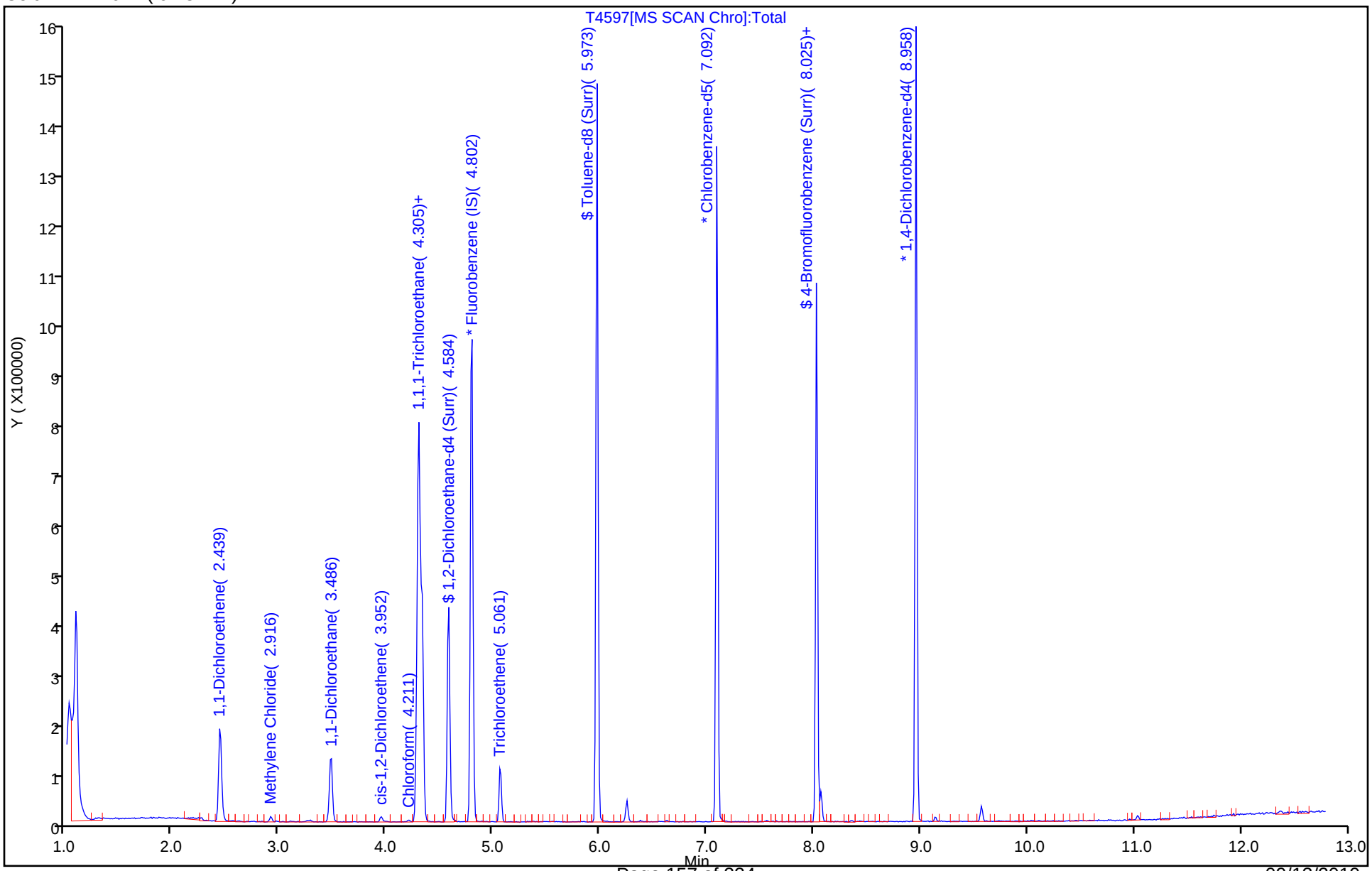
Report Date: 08-Sep-2019 08:59:44 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D

Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9	Worklist Smp#:	19
Client ID:	356023-GW-ERT-1-115-9				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	19
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

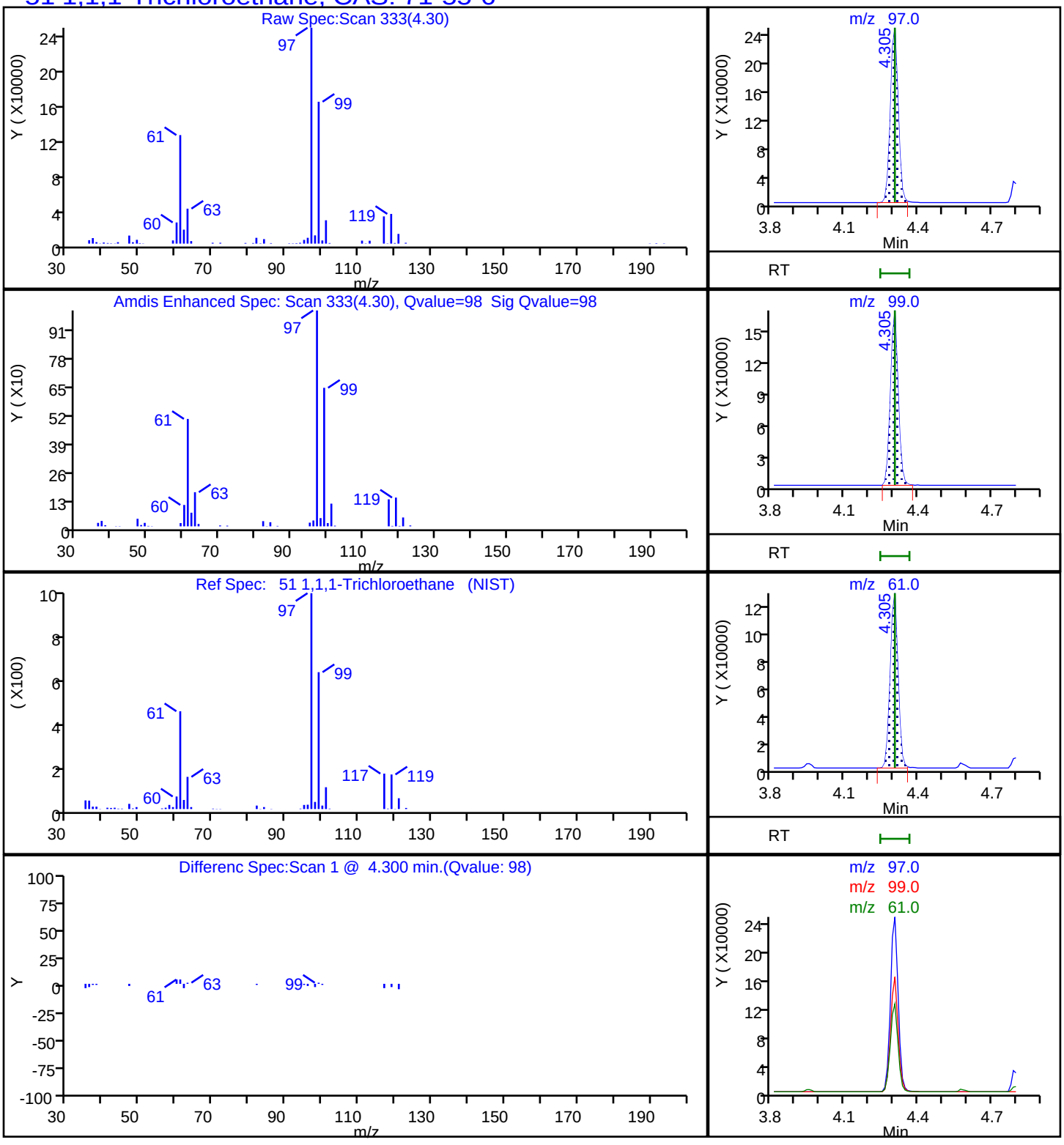


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D

Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9		
Client ID:	356023-GW-ERT-1-115-9				
Operator ID:	OI	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

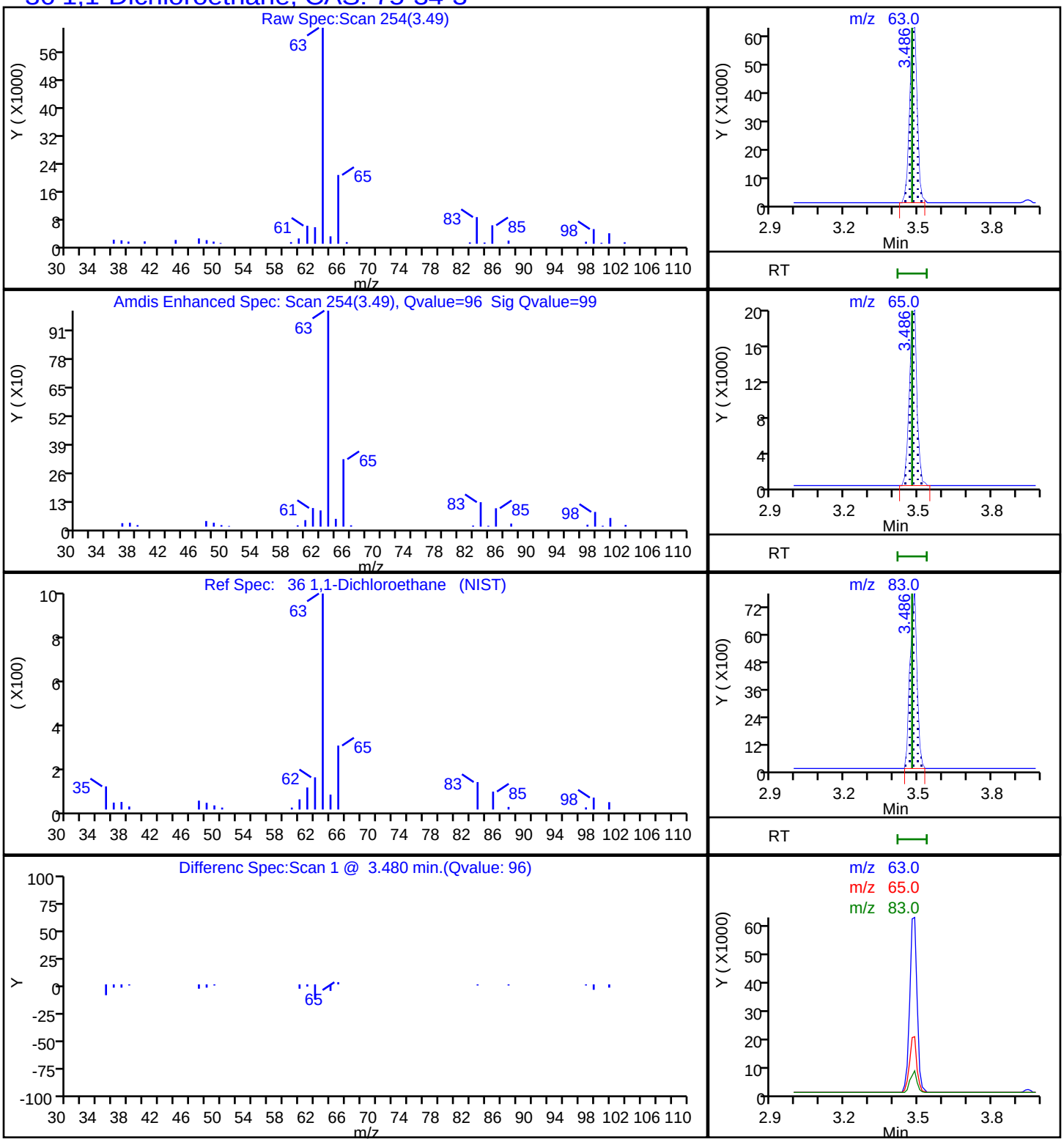


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D

Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9		
Client ID:	356023-GW-ERT-1-115-9				
Operator ID:	OI	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

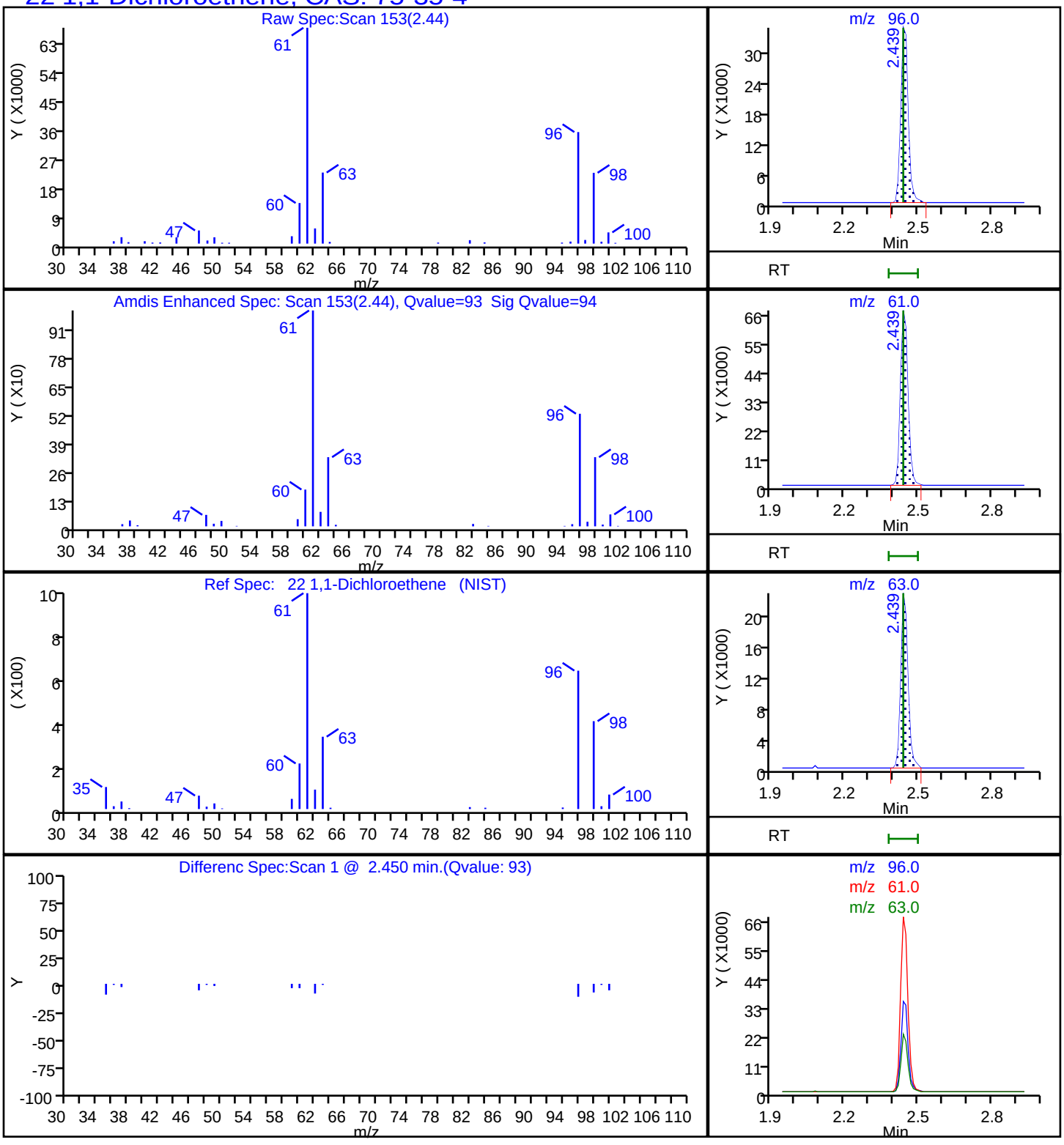


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D

Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9		
Client ID:	356023-GW-ERT-1-115-9				
Operator ID:	OI	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

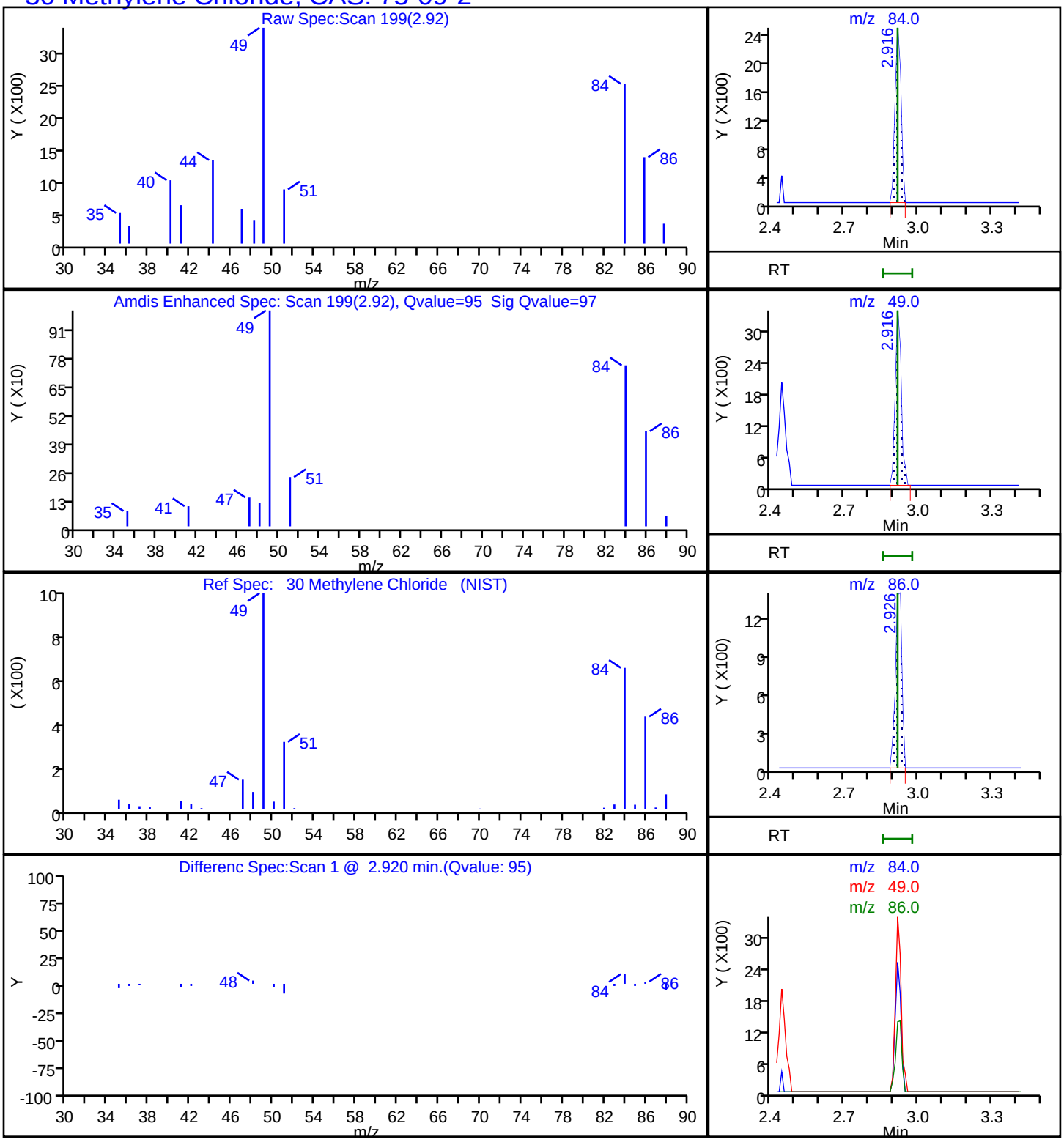


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D

Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9		
Client ID:	356023-GW-ERT-1-115-9				
Operator ID:	OI	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

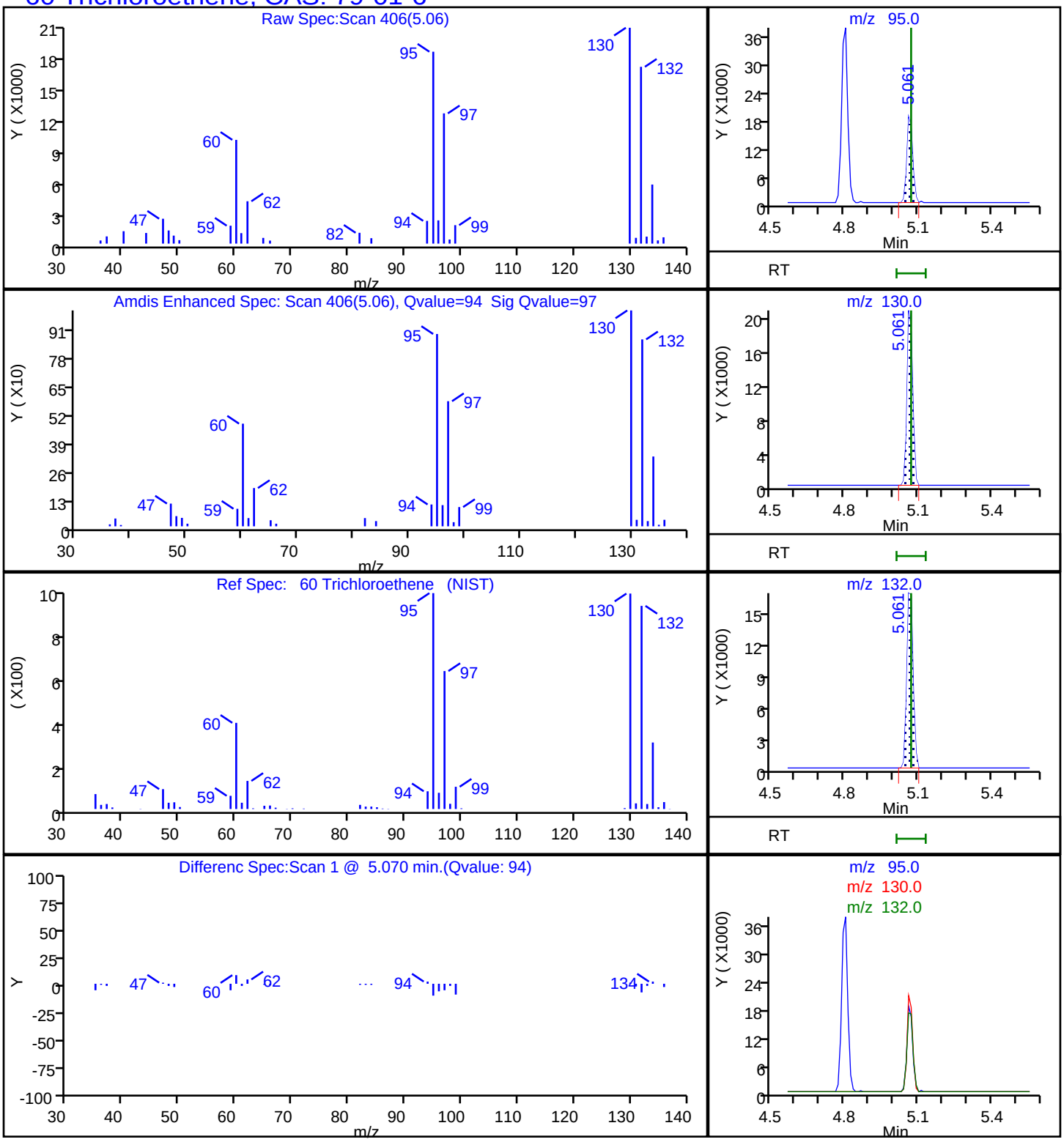


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D

Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9
Client ID:	356023-GW-ERT-1-115-9		
Operator ID:	OI	ALS Bottle#:	19 Worklist Smp#: 19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



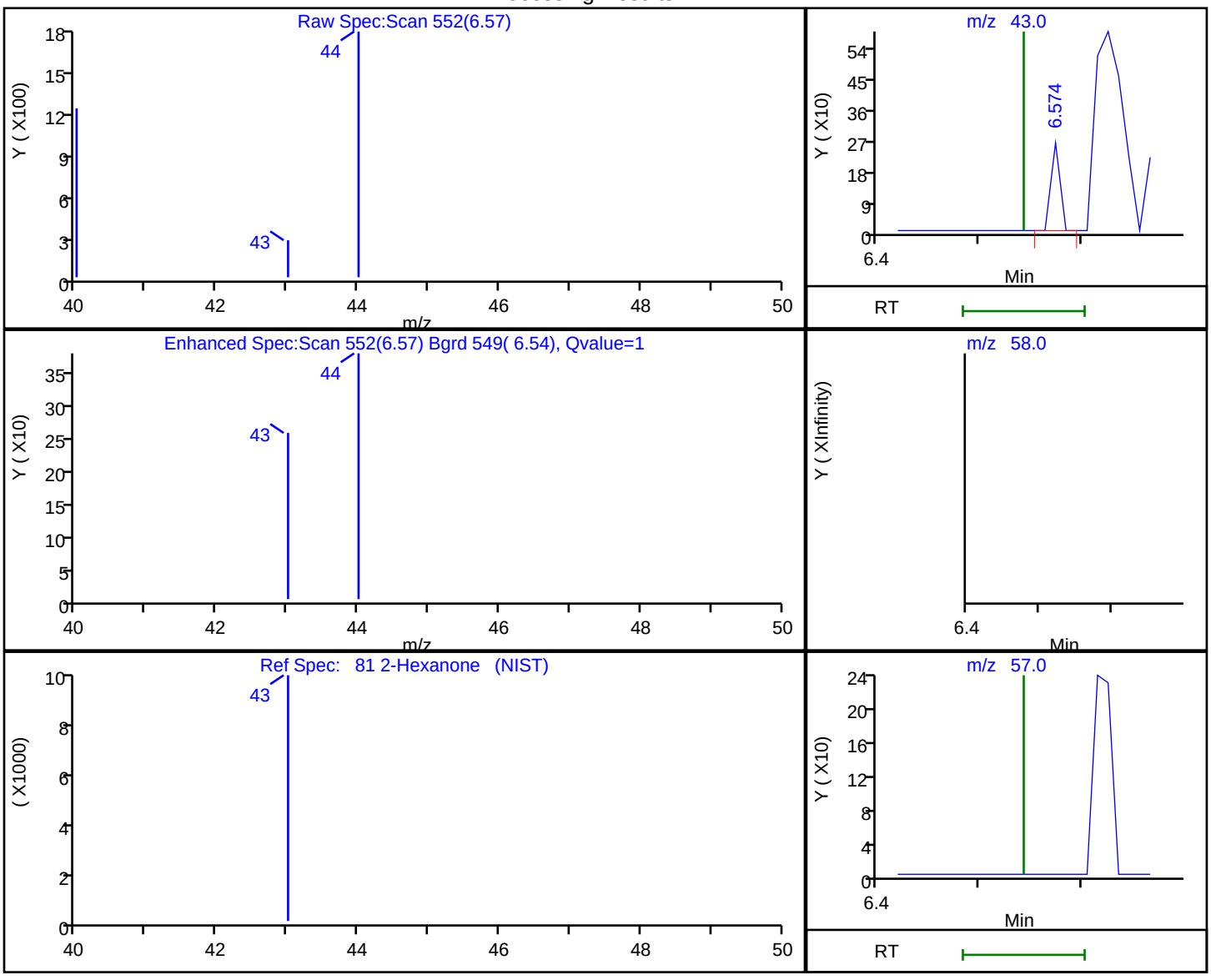
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D				
Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9		
Client ID:	356023-GW-ERT-1-115-9				
Operator ID:	OI	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

81 2-Hexanone, CAS: 591-78-6

Processing Results



RT	Mass	Response	Amount
6.57	43.00	160	0.014602
6.54	58.00	0	
6.54	57.00	0	

Reviewer: moffata, 08-Sep-2019 08:59:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

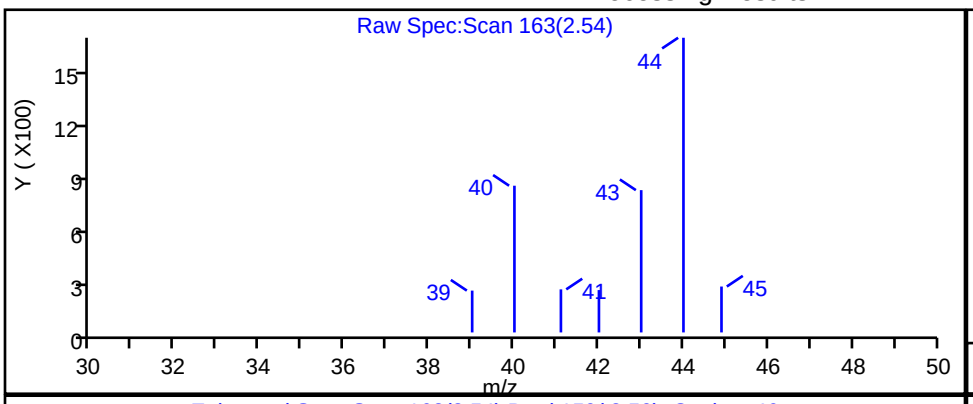
User Disabled Compound Report

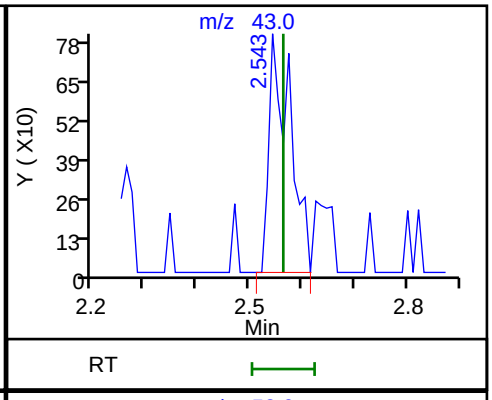
Eurofins TestAmerica, Buffalo

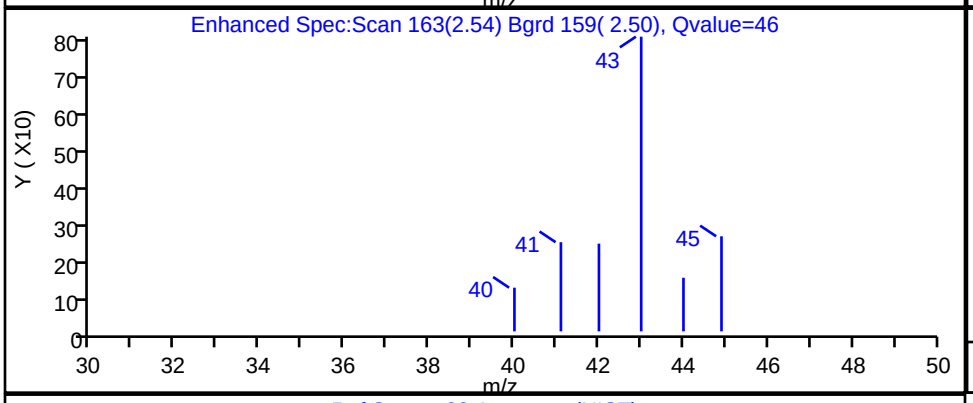
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4597.D				
Injection Date:	07-Sep-2019 18:50:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-9	Lab Sample ID:	480-158436-9		
Client ID:	356023-GW-ERT-1-115-9				
Operator ID:	OI	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

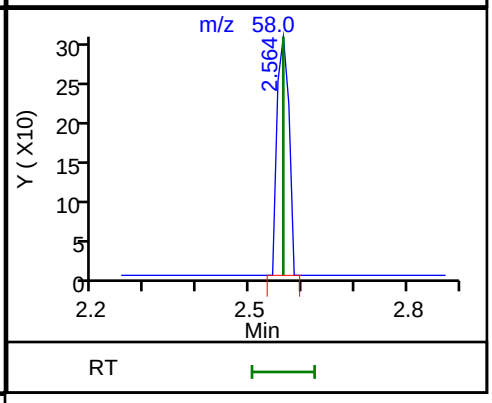
23 Acetone, CAS: 67-64-1

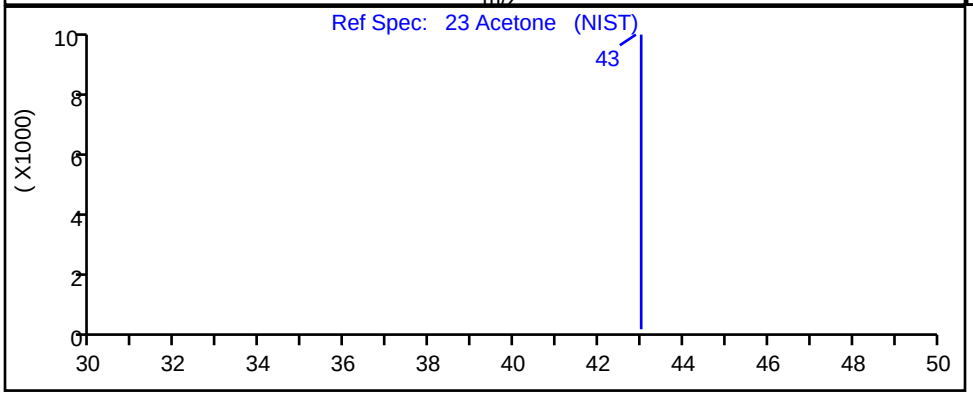
Processing Results











RT	Mass	Response	Amount
2.54	43.00	2262	0.497003
2.56	58.00	489	

Reviewer: moffata, 08-Sep-2019 08:59:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-10 Lab Sample ID: 480-158436-10

Matrix: Water Lab File ID: T4598.D

Analysis Method: 8260C Date Collected: 08/29/2019 11:48

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 19:14

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	90		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	16		2.0	0.76
75-35-4	1,1-Dichloroethene	22		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-10 Lab Sample ID: 480-158436-10

Matrix: Water Lab File ID: T4598.D

Analysis Method: 8260C Date Collected: 08/29/2019 11:48

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 19:14

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	ND		2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	7.8		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D
Lims ID: 480-158436-B-10
Client ID: 356023-GW-ERT-1-115-10
Sample Type: Client
Inject. Date: 07-Sep-2019 19:14:30 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-10
Misc. Info.: 480-0083938-020
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 09:00:27 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 09:00:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	151849	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	594850	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	321126	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	205630	26.9	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	266009	26.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	725951	23.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	242397	25.8	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	95	69451	10.8	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	92	2683	0.3119	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	131006	8.15	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	81	3812	0.4277	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	87	3126	0.2191	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	538780	44.9	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	96	30678	3.90	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

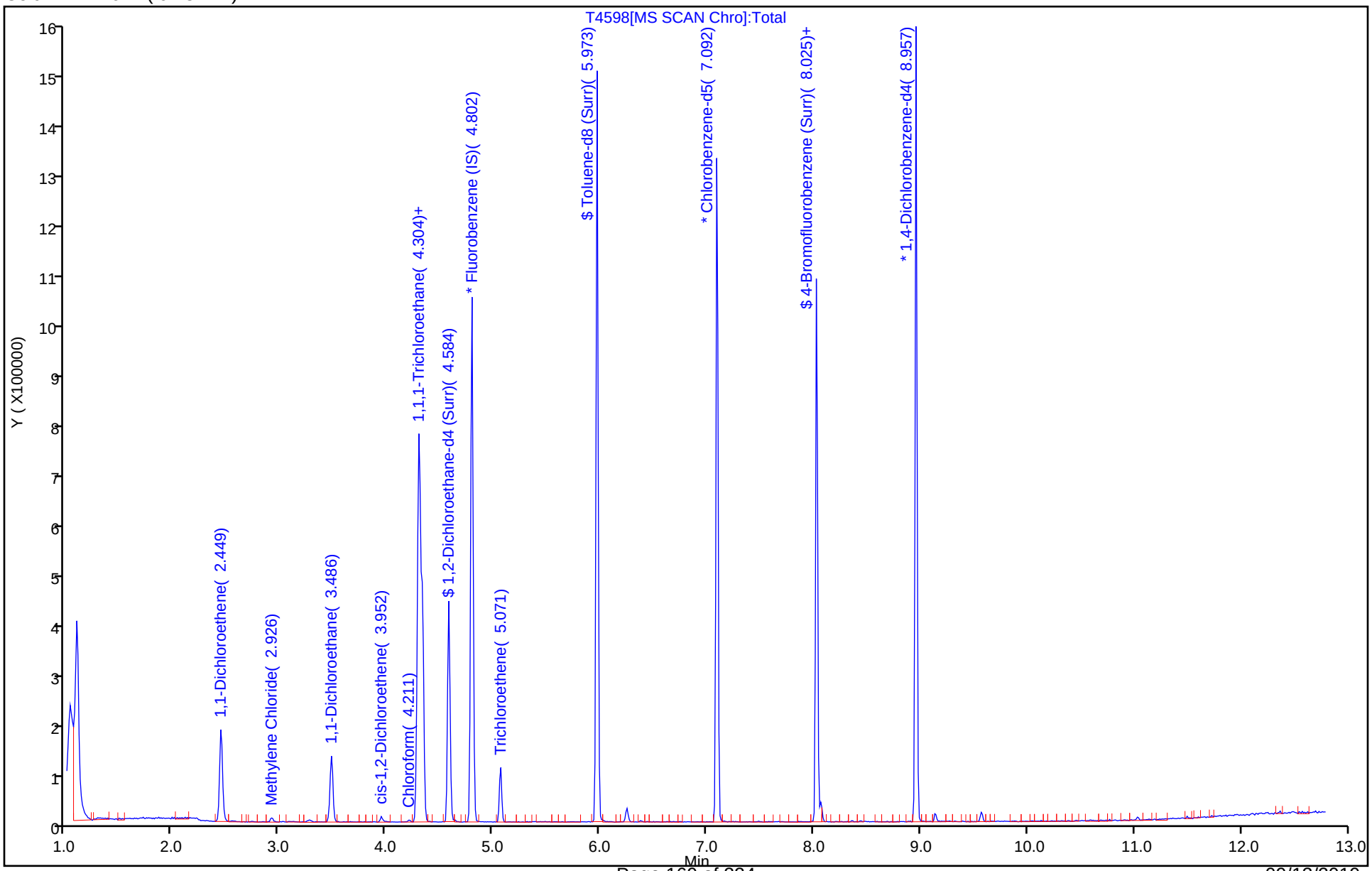
Report Date: 08-Sep-2019 09:00:34 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D

Injection Date:	07-Sep-2019 19:14:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-10	Lab Sample ID:	480-158436-10	Worklist Smp#:	20
Client ID:	356023-GW-ERT-1-115-10				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	20
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

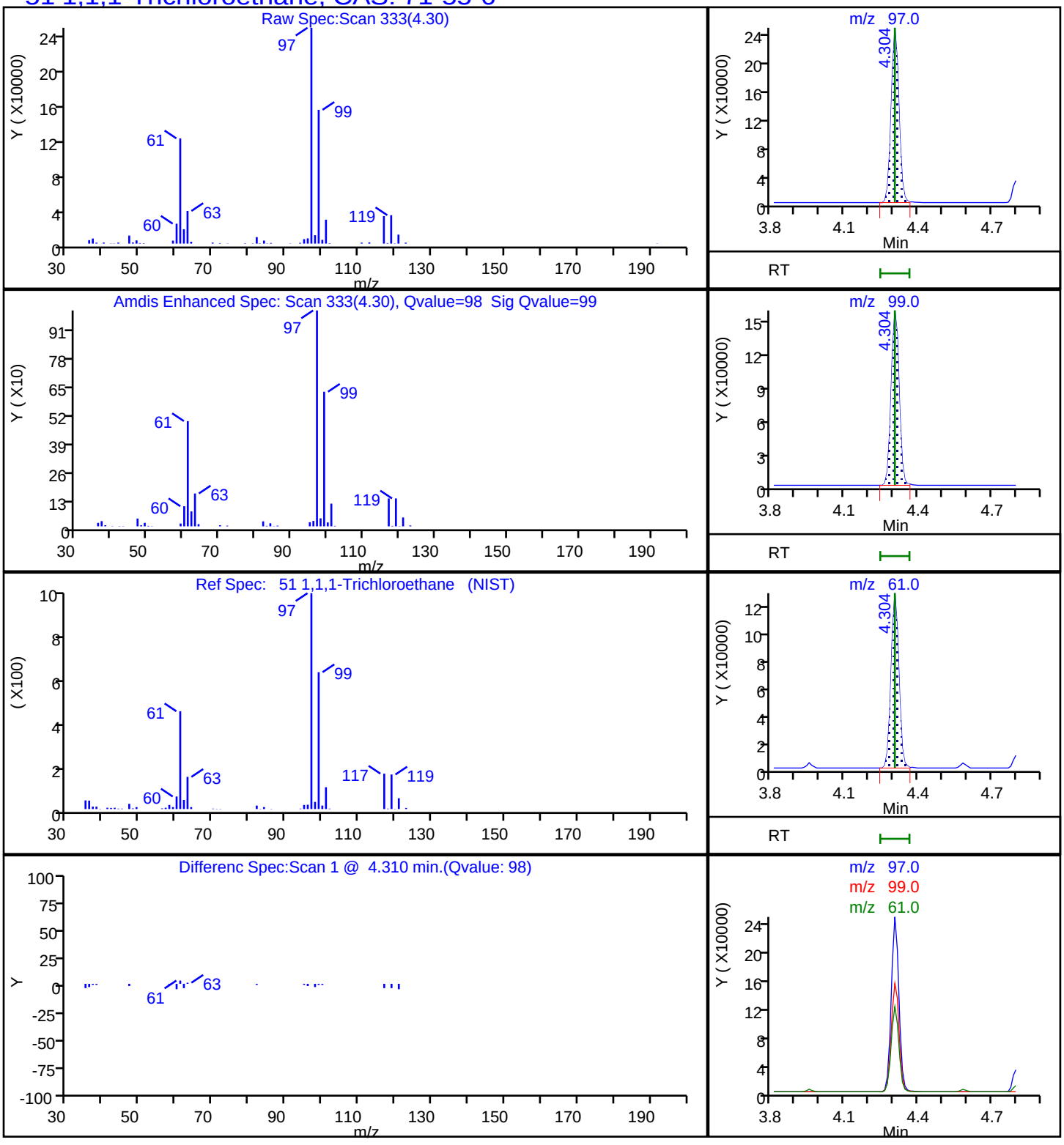


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D

Injection Date:	07-Sep-2019 19:14:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-10	Lab Sample ID:	480-158436-10		
Client ID:	356023-GW-ERT-1-115-10				
Operator ID:	OI	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

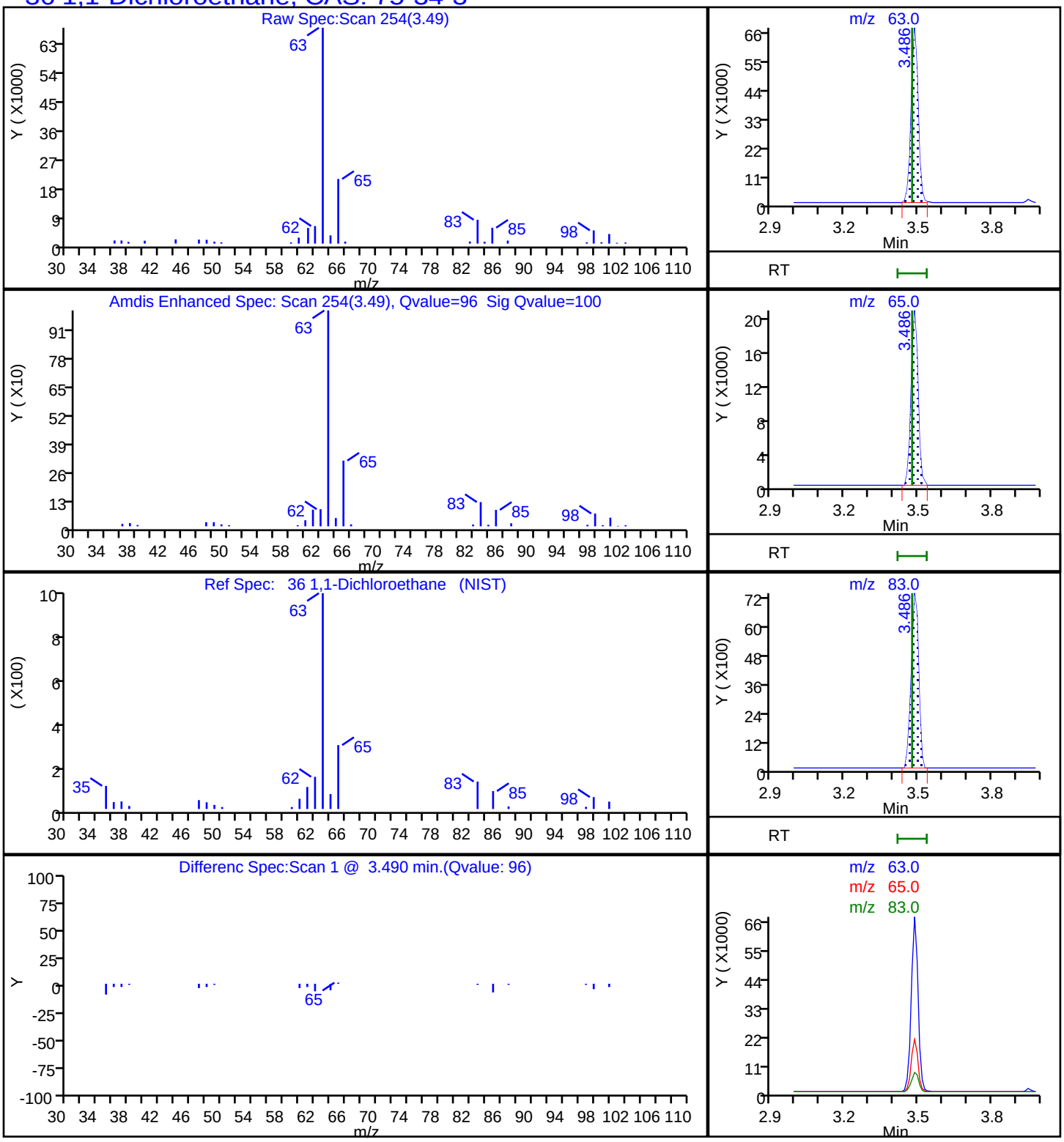


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D

Injection Date:	07-Sep-2019 19:14:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-10	Lab Sample ID:	480-158436-10		
Client ID:	356023-GW-ERT-1-115-10				
Operator ID:	OI	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

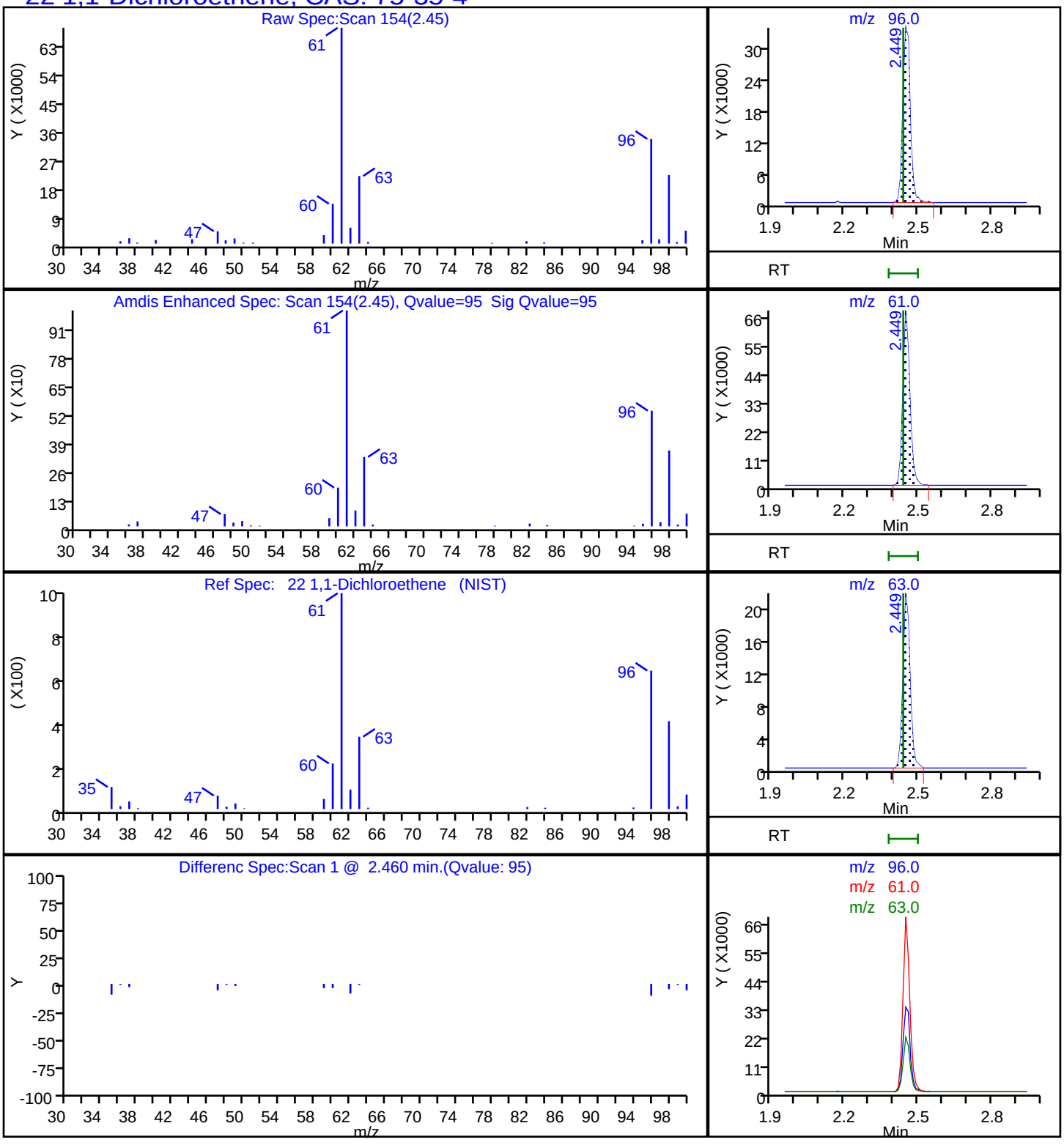


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D

Injection Date:	07-Sep-2019 19:14:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-10	Lab Sample ID:	480-158436-10
Client ID:	356023-GW-ERT-1-115-10		
Operator ID:	OI	ALS Bottle#:	20 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

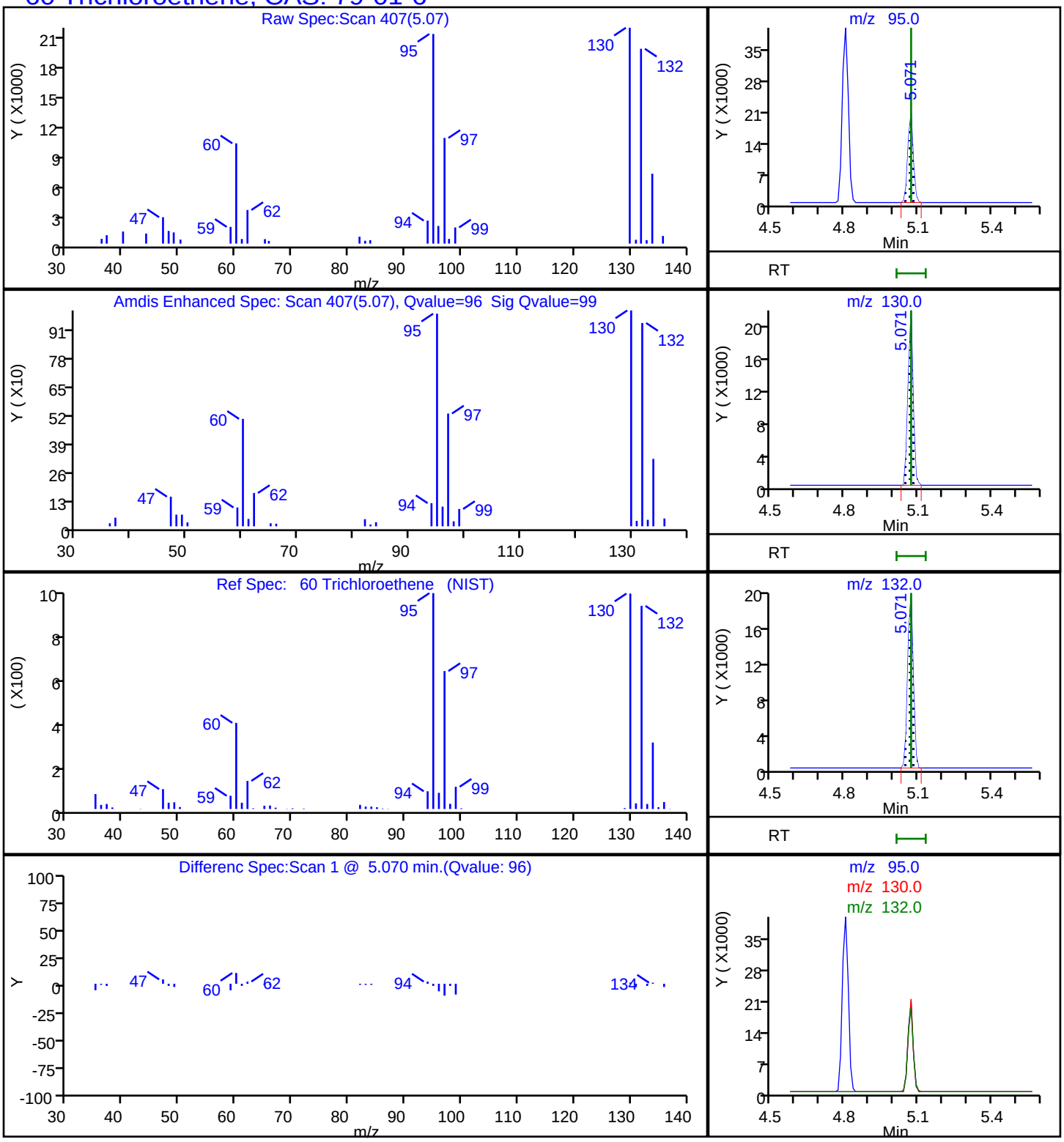


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D

Injection Date:	07-Sep-2019 19:14:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-10	Lab Sample ID:	480-158436-10
Client ID:	356023-GW-ERT-1-115-10		
Operator ID:	OI	ALS Bottle#:	20 Worklist Smp#: 20
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



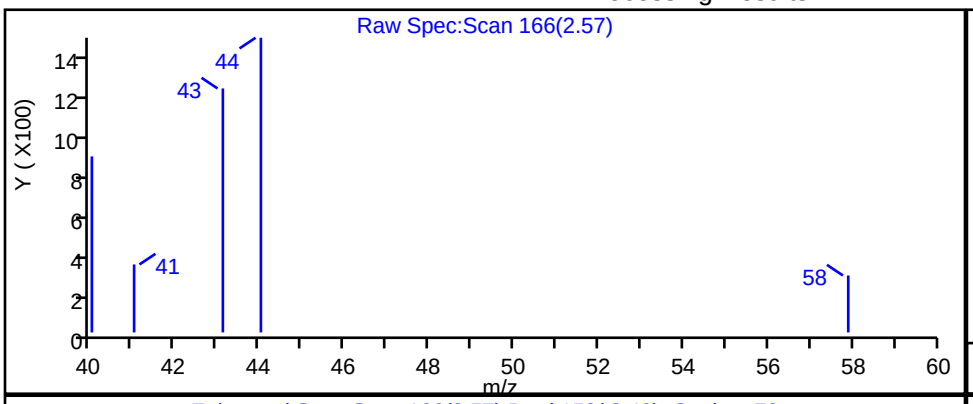
User Disabled Compound Report

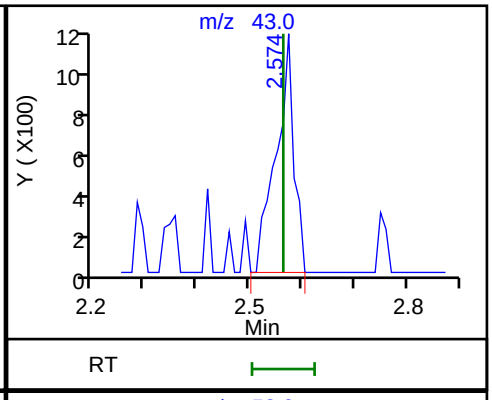
Eurofins TestAmerica, Buffalo

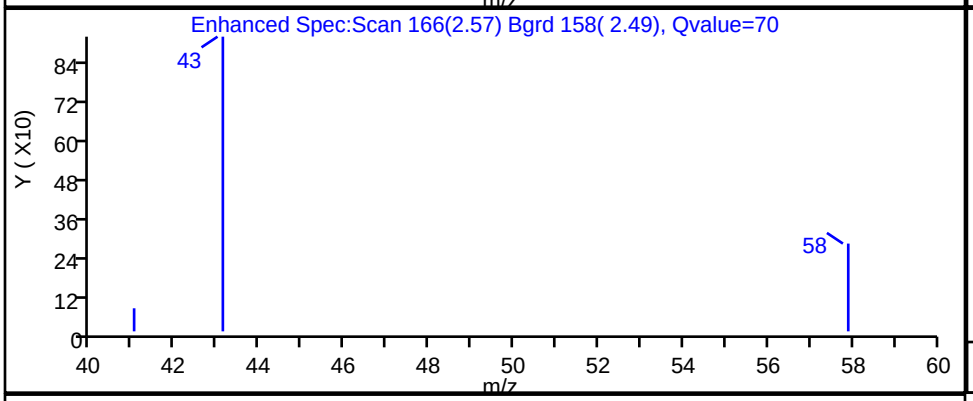
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4598.D				
Injection Date:	07-Sep-2019 19:14:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-10	Lab Sample ID:	480-158436-10		
Client ID:	356023-GW-ERT-1-115-10				
Operator ID:	OI	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

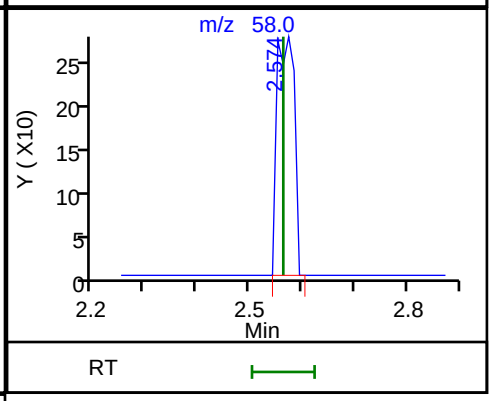
23 Acetone, CAS: 67-64-1

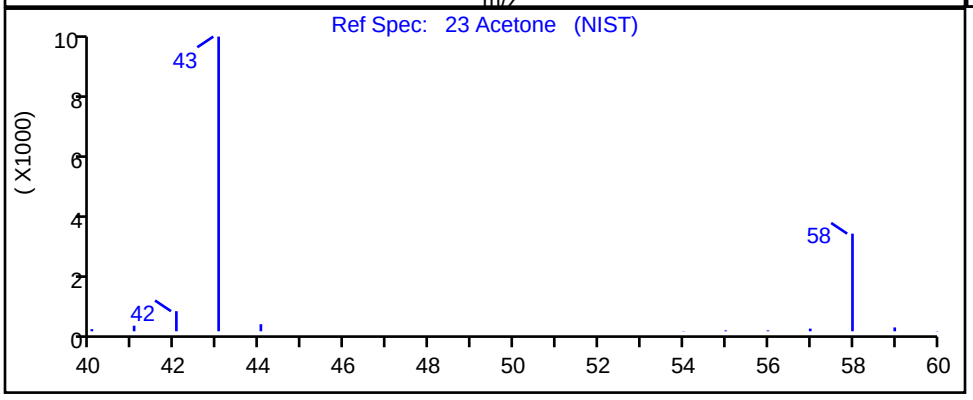
Processing Results











RT	Mass	Response	Amount
2.57	43.00	2779	0.613122
2.57	58.00	634	

Reviewer: moffata, 08-Sep-2019 08:59:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-11 Lab Sample ID: 480-158436-11

Matrix: Water Lab File ID: T4599.D

Analysis Method: 8260C Date Collected: 08/29/2019 15:15

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 19:38

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	88		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	17		2.0	0.76
75-35-4	1,1-Dichloroethene	21		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND		2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND		2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: 356023-GW-ERT-1-115-11 Lab Sample ID: 480-158436-11

Matrix: Water Lab File ID: T4599.D

Analysis Method: 8260C Date Collected: 08/29/2019 15:15

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 19:38

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	0.90	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	7.3		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D
Lims ID: 480-158436-B-11
Client ID: 356023-GW-ERT-1-115-11
Sample Type: Client
Inject. Date: 07-Sep-2019 19:38:30 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 480-158436-B-11
Misc. Info.: 480-0083938-021
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 09:01:17 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 09:01:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	152628	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	593184	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	321226	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	93	207063	26.9	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	264682	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	729961	23.9	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	238343	25.4	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	U
14 Vinyl chloride	62		1.444				ND	
15 Bromomethane	94		1.703				ND	
16 Chloroethane	64		1.765				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	93	68007	10.5	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439				ND	
23 Acetone	43		2.563				ND	
25 Carbon disulfide	76		2.626				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84	2.926	2.916	0.010	94	3911	0.4524	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	134184	8.31	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	82	3182	0.3552	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.211	0.000	84	2054	0.1432	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	531483	44.1	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	96	28717	3.63	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

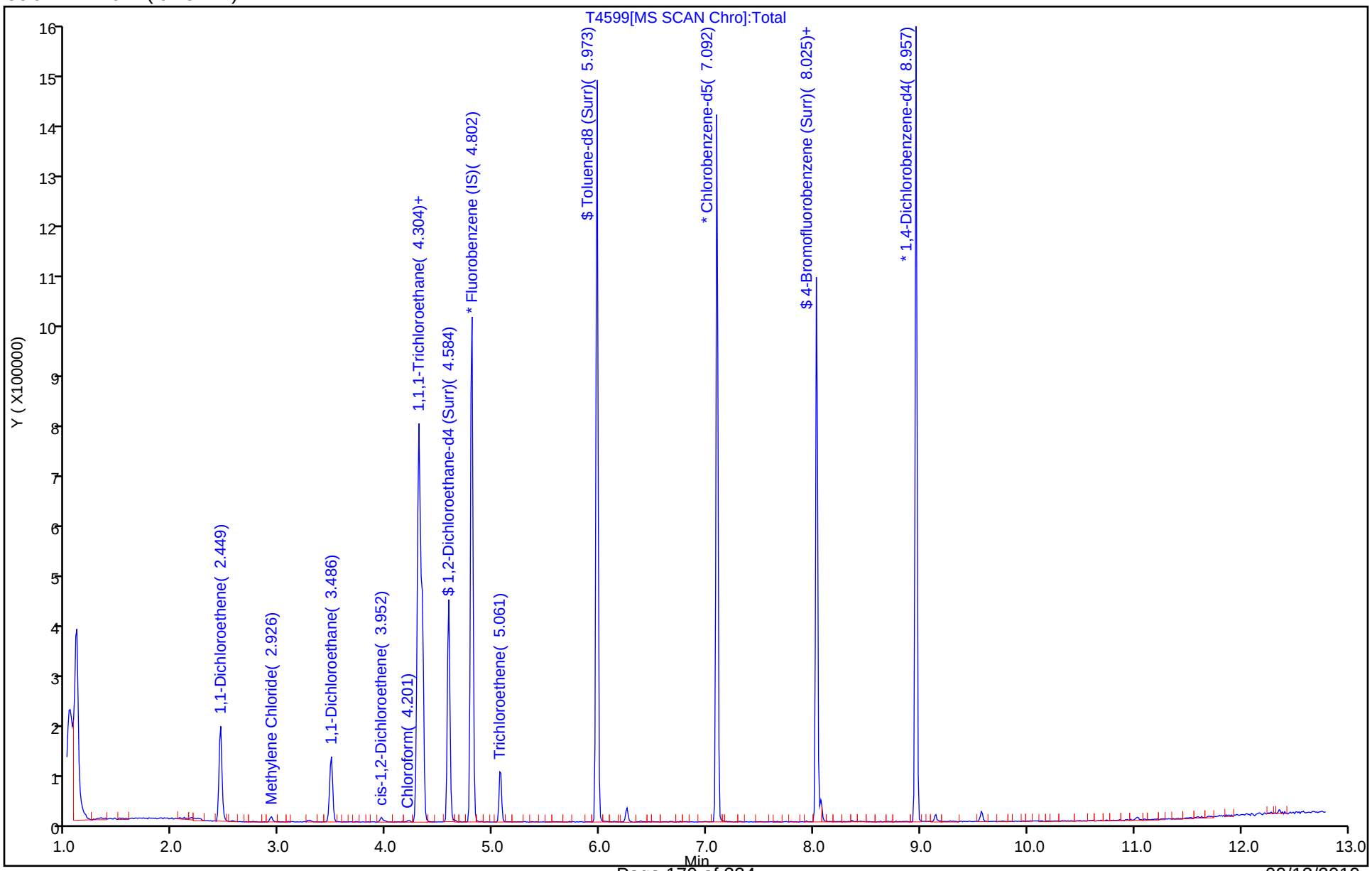
Report Date: 08-Sep-2019 09:01:18 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D

Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11	Worklist Smp#:	21
Client ID:	356023-GW-ERT-1-115-11				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	21
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



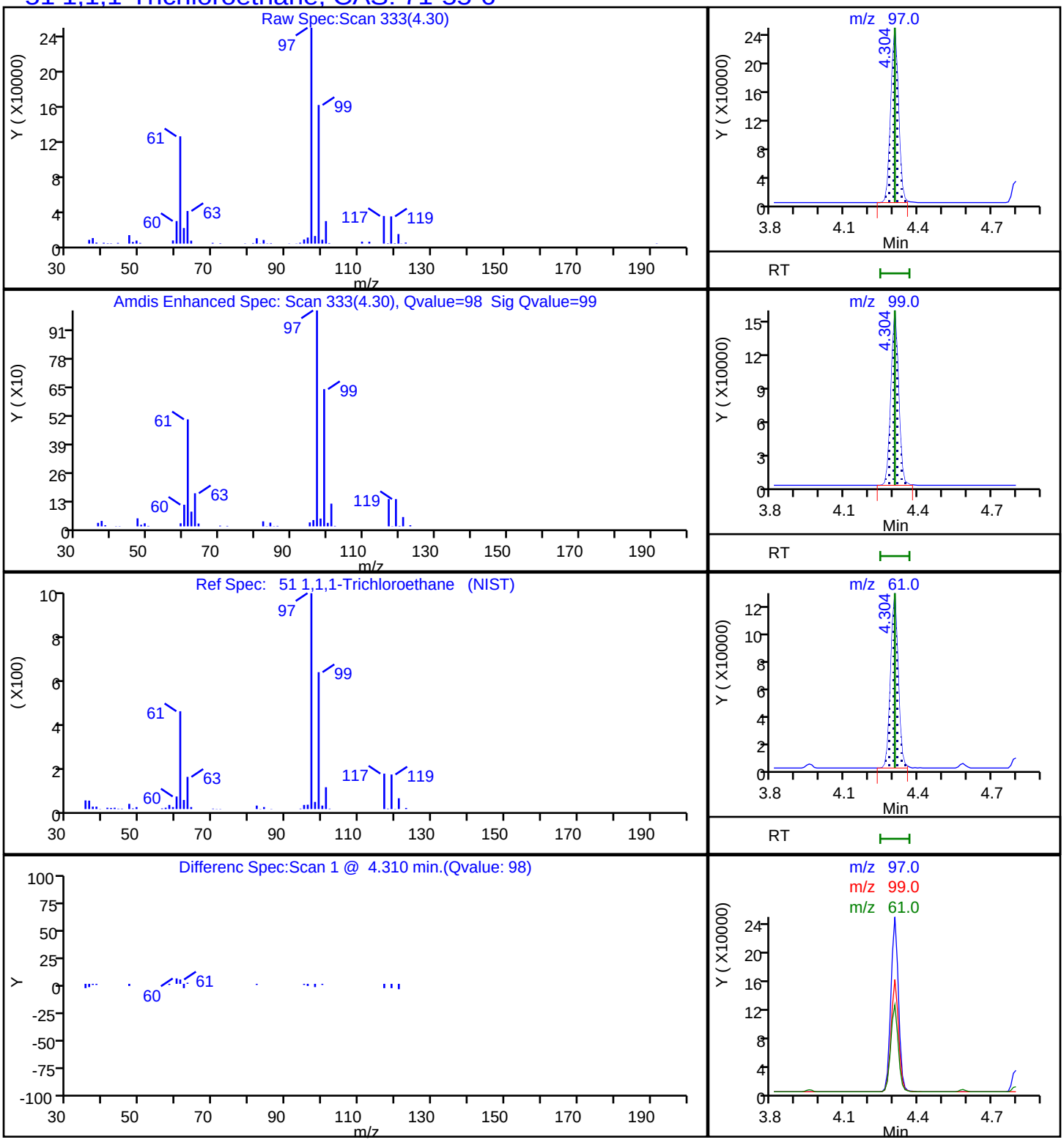
Report Date: 08-Sep-2019 09:01:18 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D

Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11		
Client ID:	356023-GW-ERT-1-115-11				
Operator ID:	OI	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

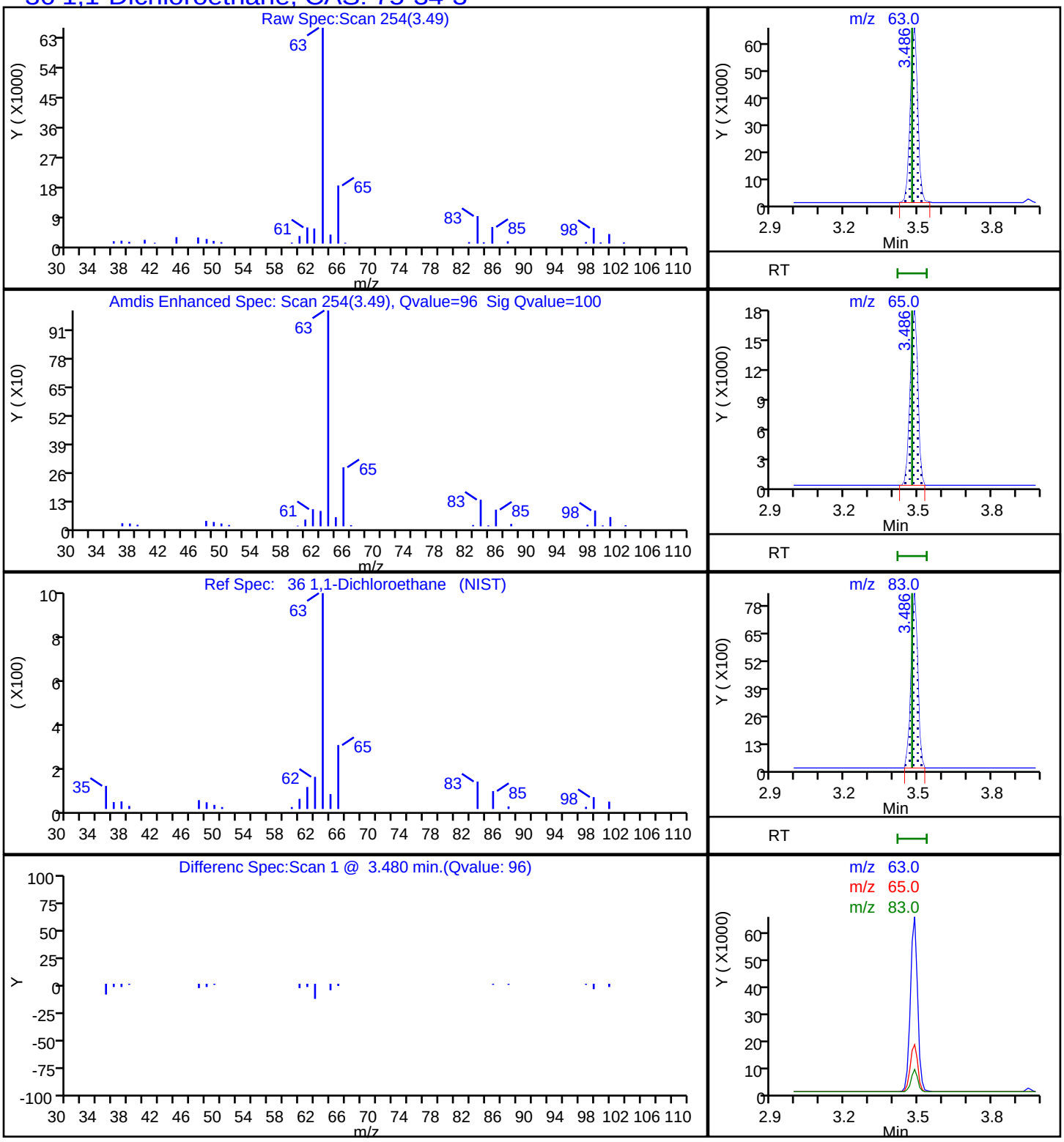


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D

Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11
Client ID:	356023-GW-ERT-1-115-11		
Operator ID:	OI	ALS Bottle#:	21 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3

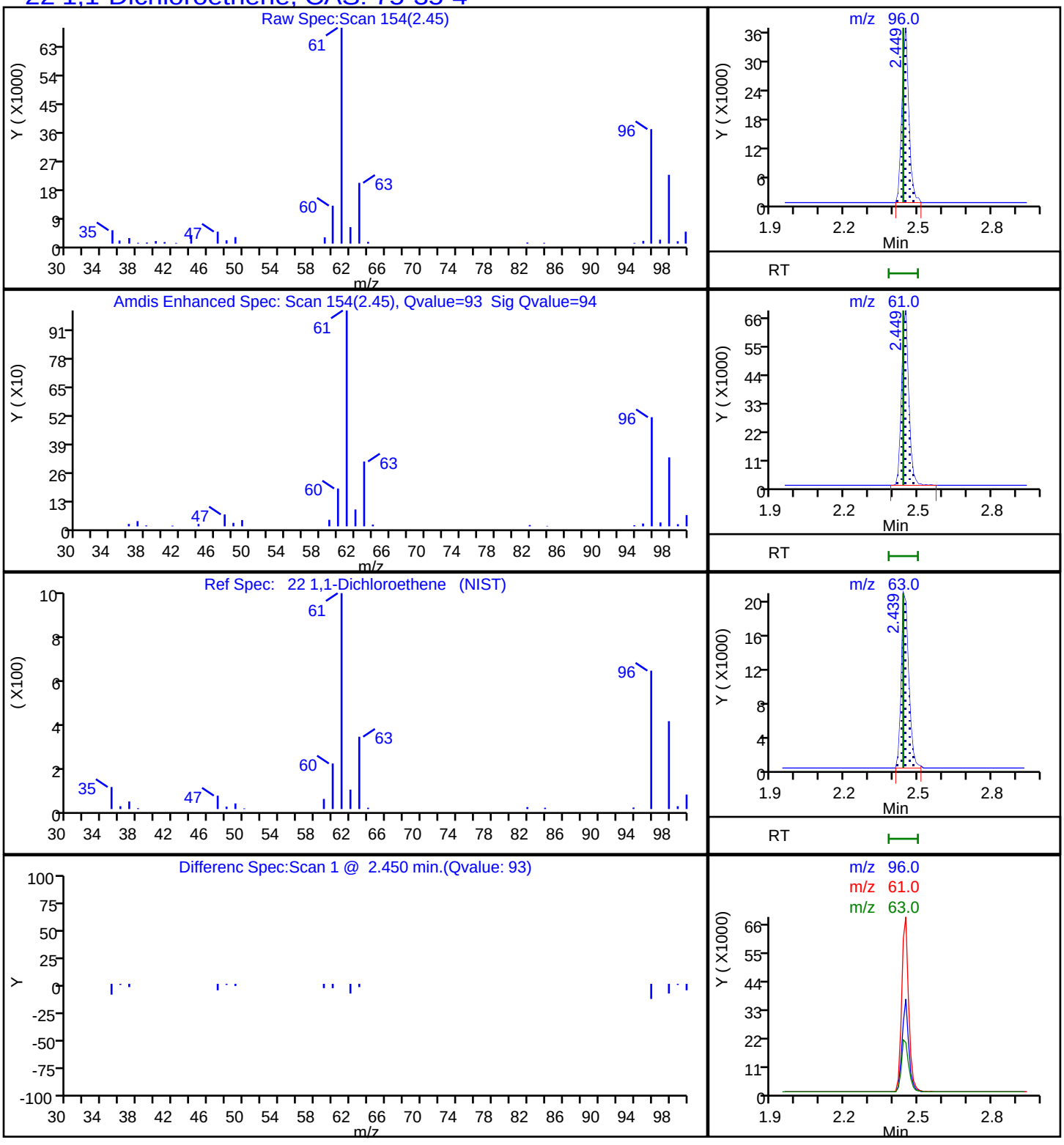


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D

Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11
Client ID:	356023-GW-ERT-1-115-11		
Operator ID:	OI	ALS Bottle#:	21 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

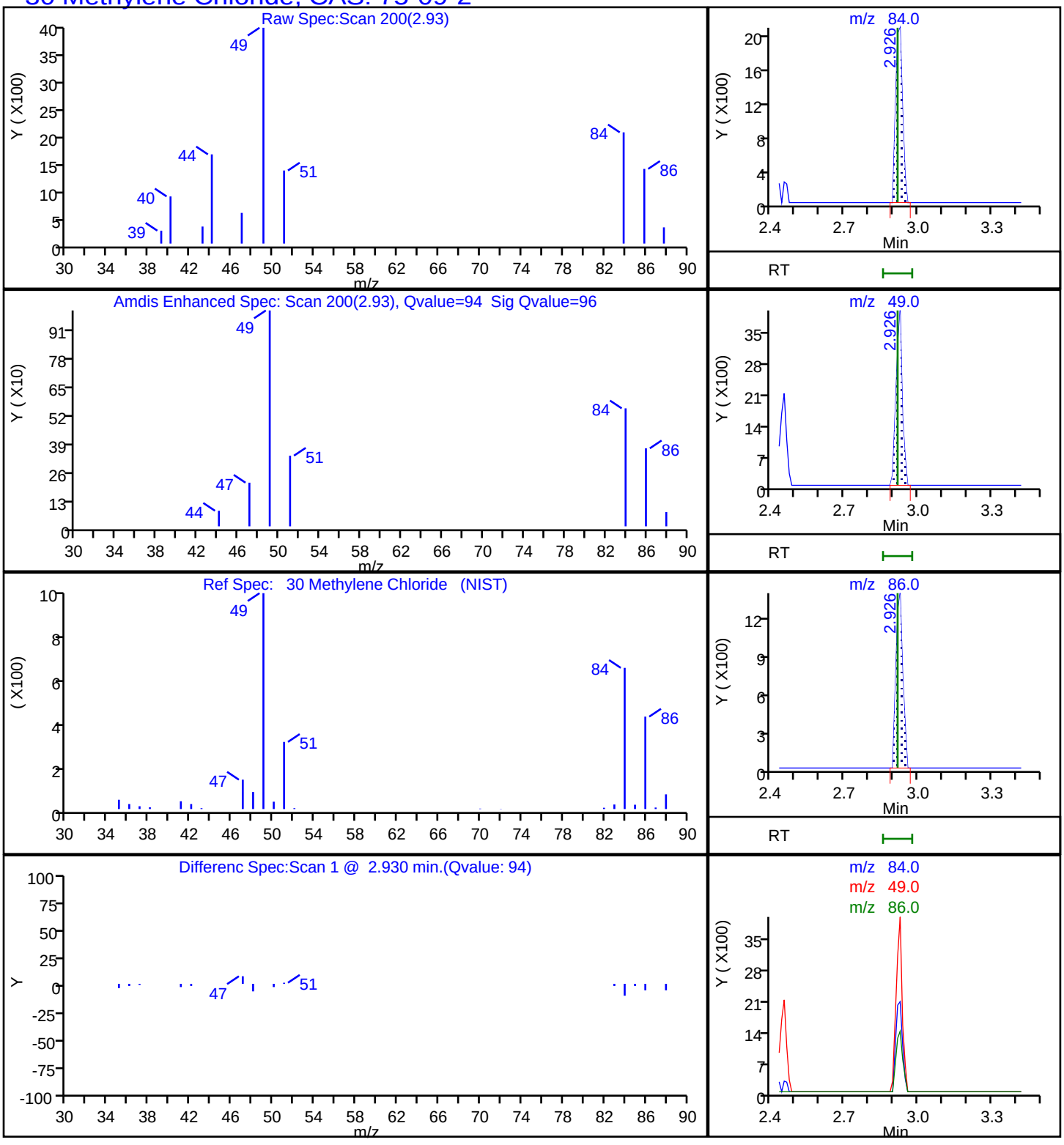


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D

Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11
Client ID:	356023-GW-ERT-1-115-11		
Operator ID:	OI	ALS Bottle#:	21 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

30 Methylene Chloride, CAS: 75-09-2

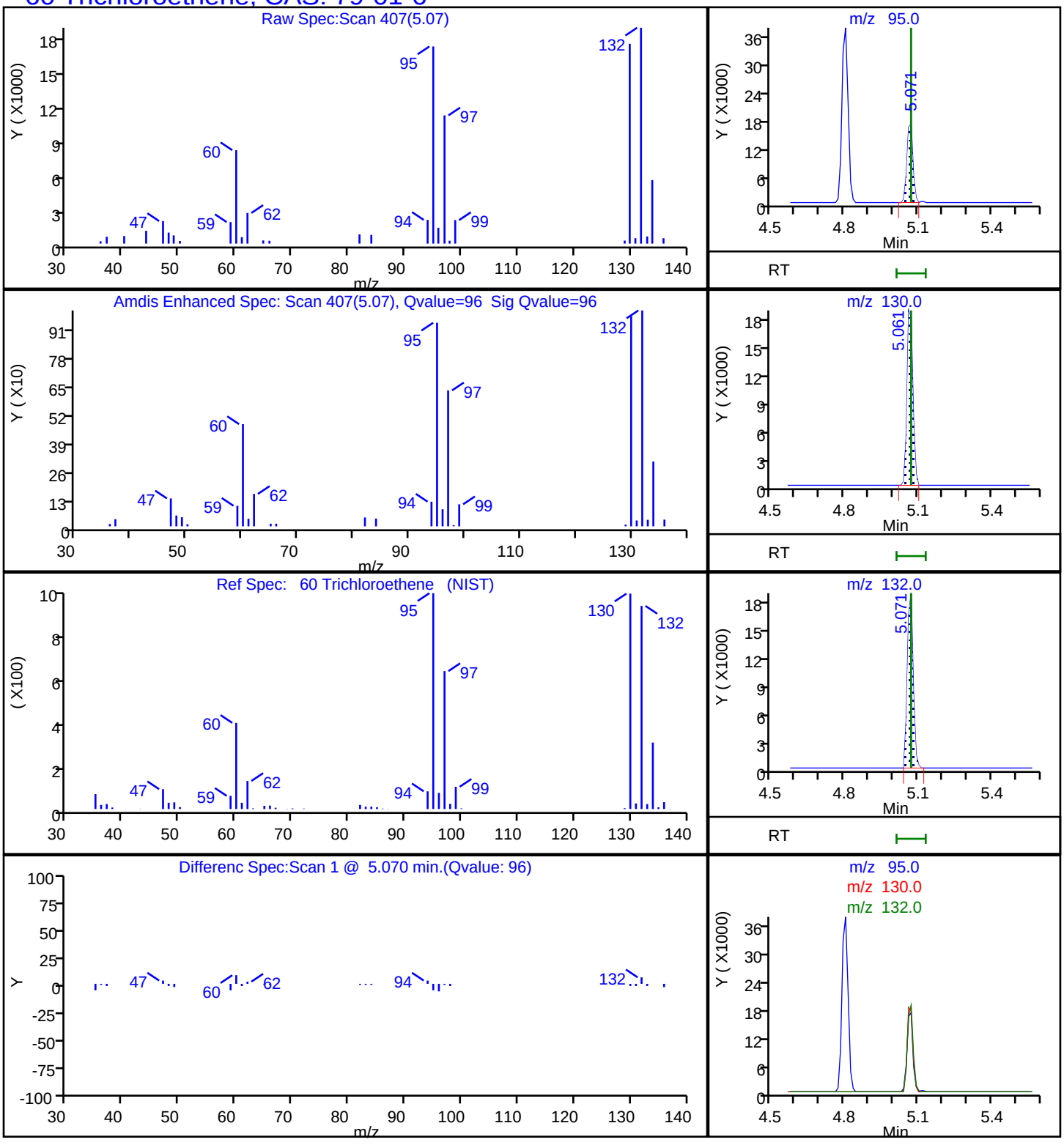


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D

Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11
Client ID:	356023-GW-ERT-1-115-11		
Operator ID:	OI	ALS Bottle#:	21 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



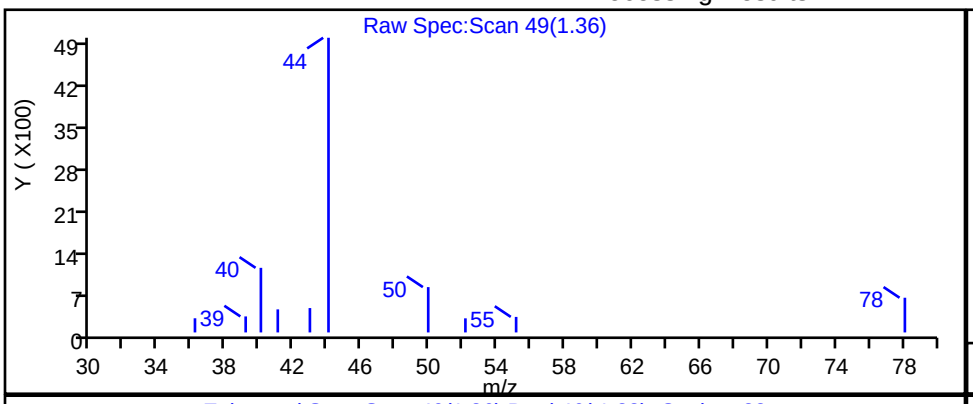
User Disabled Compound Report

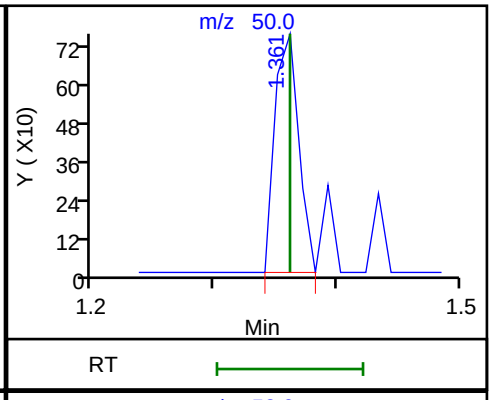
Eurofins TestAmerica, Buffalo

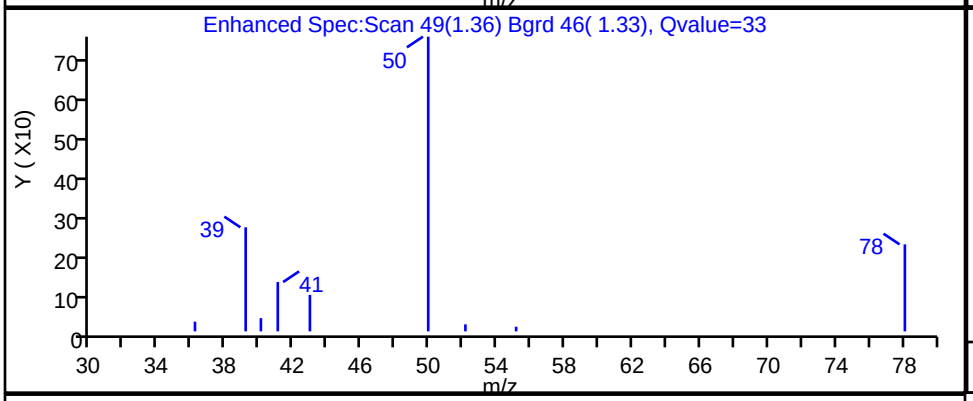
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4599.D				
Injection Date:	07-Sep-2019 19:38:30	Instrument ID:	HP5975T		
Lims ID:	480-158436-B-11	Lab Sample ID:	480-158436-11		
Client ID:	356023-GW-ERT-1-115-11				
Operator ID:	OI	ALS Bottle#:	21	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

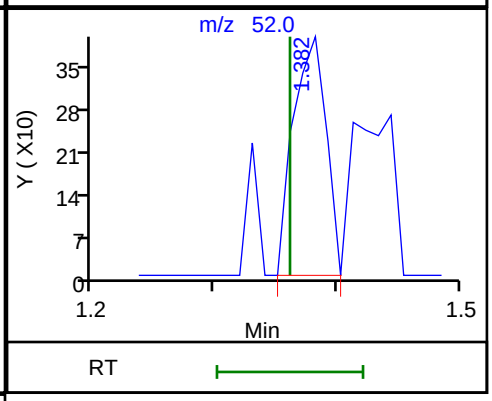
13 Chloromethane, CAS: 74-87-3

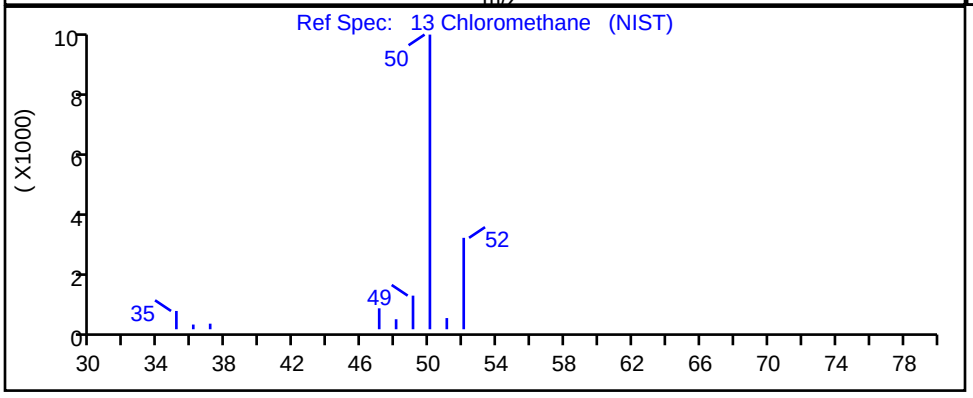
Processing Results











RT	Mass	Response	Amount
1.36	50.00	1030	0.073154
1.38	52.00	736	

Reviewer: moffata, 08-Sep-2019 09:00:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: TRIP BLANK-1 Lab Sample ID: 480-158436-12

Matrix: Water Lab File ID: T4615.D

Analysis Method: 8260C Date Collected: 08/29/2019 17:00

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 12:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND	*	1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: TRIP BLANK-1 Lab Sample ID: 480-158436-12

Matrix: Water Lab File ID: T4615.D

Analysis Method: 8260C Date Collected: 08/29/2019 17:00

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 12:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4615.D
Lims ID: 480-158436-C-12
Client ID: TRIP BLANK-1
Sample Type: Client
Inject. Date: 08-Sep-2019 12:17:30 ALS Bottle#: 2 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-158436-B-12
Misc. Info.: 480-0083944-009
Operator ID: AM Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 09-Sep-2019 08:21:29 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0318

First Level Reviewer: farrellr Date: 09-Sep-2019 08:21:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	151789	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	594682	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.957	0.001	96	322073	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	92	208871	27.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	267739	26.1	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	93	725755	23.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	248994	26.5	
11 Dichlorodifluoromethane	85		1.216				ND	
13 Chloromethane	50		1.372				ND	
14 Vinyl chloride	62		1.465				ND	
15 Bromomethane	94		1.724				ND	
16 Chloroethane	64		1.776				ND	
17 Trichlorofluoromethane	101		2.014				ND	
22 1,1-Dichloroethene	96		2.450				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.460				ND	
23 Acetone	43	2.553	2.564	-0.011	87	4294	0.9477	
25 Carbon disulfide	76		2.636				ND	
28 Methyl acetate	43		2.833				ND	
30 Methylene Chloride	84	2.916	2.926	-0.010	91	2585	0.3006	
33 Methyl tert-butyl ether	73		3.113				ND	
32 trans-1,2-Dichloroethene	96		3.123				ND	
36 1,1-Dichloroethane	63		3.486				ND	
43 cis-1,2-Dichloroethene	96		3.952				ND	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83		4.211				ND	Ua
51 1,1,1-Trichloroethane	97		4.304				ND	
52 Cyclohexane	56		4.304				ND	
53 Carbon tetrachloride	117		4.418				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.646				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		5.071				ND	
62 Methylcyclohexane	83		5.165				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.771				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.590				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.906				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.009				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

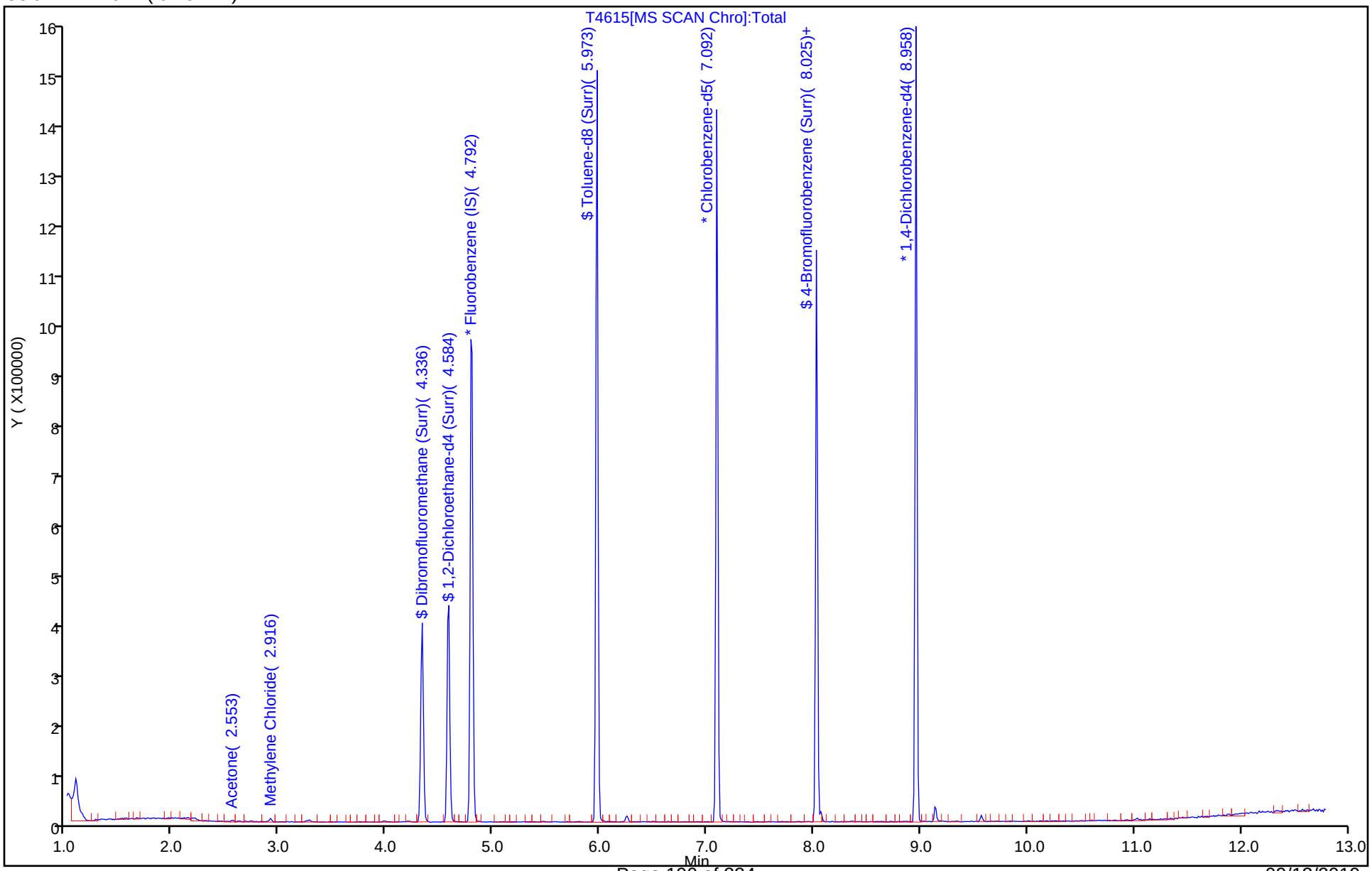
Report Date: 09-Sep-2019 08:21:29 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4615.D

Injection Date:	08-Sep-2019 12:17:30	Instrument ID:	HP5975T	Operator ID:	AM
Lims ID:	480-158436-C-12	Lab Sample ID:	480-158436-12	Worklist Smp#:	9
Client ID:	TRIP BLANK-1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-485855/5	T3676.D
Level 2	IC 480-485855/6	T3677.D
Level 3	IC 480-485855/7	T3678.D
Level 4	IC 480-485855/8	T3679.D
Level 5	IC 480-485855/9	T3680.D
Level 6	ICIS 480-485855/10	T3681.D
Level 7	IC 480-485855/11	T3682.D
Level 8	IC 480-485855/12	T3683.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.7246 1.2622	1.3718 1.5007	1.6523 1.3910	1.4307	1.0522	Ave		1.4232			0.1000	14.9		20.0			
Chloromethane	2.4163 2.1928	2.6073 2.3182	2.2590 2.2176	2.3475	2.0913	Ave		2.3062			0.1000	6.8		20.0			
Butadiene	2.3677 1.7273	2.3068 1.9859	2.0896 1.8184	1.9786	1.5157	Ave		1.9737				14.5		20.0			
Vinyl chloride	2.0133 1.6549	1.8396 1.8433	1.8561 1.6852	1.7582	1.5124	Ave		1.7704			0.1000	8.6		20.0			
Bromomethane	1.0357 0.8067	0.8180 0.8871	1.0231 0.8362	0.8621	0.7580	Ave		0.8784			0.1000	11.5		20.0			
Chloroethane	+++++ 0.8408	0.8070 0.9051	0.8339 0.8702	0.7653	0.7403	Ave		0.8232			0.1000	7.0		20.0			
Dichlorofluoromethane	2.6044 2.0850	1.9088 2.2124	2.3845 2.1162	2.1038	1.9823	Ave		2.1747				10.3		20.0			
Trichlorofluoromethane	2.1192 1.6844	1.7095 2.0097	1.9058 1.8479	1.7894	1.4162	Ave		1.8102			0.1000	11.9		20.0			
Ethyl ether	1.5456 1.4971	1.4749 1.4983	1.4496 1.4824	1.3897	1.3925	Ave		1.4663				3.7		20.0			
Acrolein	0.3365 0.3312	0.3770 0.3330	0.3865 0.3254	0.3193	0.3183	Ave		0.3409				7.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.3509 1.2032	1.2170 1.1778	1.4037 1.1394	1.2471	0.9805	Ave		1.2150			0.1000	10.7		20.0			
1,1-Dichloroethene	+++++ 1.0652	1.0404 1.0409	1.2006 1.0345	1.1070	0.9527	Ave		1.0630			0.1000	7.2		20.0			
Acetone	0.7782 0.7361	0.7724 0.7388	0.7744 0.7333	0.7307	0.7059	Ave		0.7462			0.1000	3.5		20.0			
Iodomethane	2.1507 2.1532	2.1421 2.1275	2.1978 2.0808	2.1071	2.0329	Ave		2.1240				2.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	4.6114 4.0582	3.9739 3.9221	4.0147 3.8430	3.9562	3.6448	Ave		4.0030			0.1000	6.9		20.0			
Allyl chloride	3.1776 2.8038	2.7025 2.8106	2.8902 2.6532	2.8521	2.6010	Ave		2.8114				6.4		20.0			
Methyl acetate	2.5752 2.0273	2.0537 2.0283	2.1690 1.9603	2.0059	1.9710	Ave		2.0988			0.1000	9.7		20.0			
Methylene Chloride	+++++ 1.3446	1.6244 1.3260	1.5830 1.2960	1.3994	1.3397	Ave		1.4162			0.1000	9.3		20.0			
2-Methyl-2-propanol	0.3288 0.3646	0.3577 0.3607	0.3322 0.3587	0.3329	0.3443	Ave		0.3475				4.2		20.0			
Methyl tert-butyl ether	4.3506 4.0383	4.0826 4.0204	3.8390 3.9720	3.9372	3.8921	Ave		4.0165			0.1000	3.9		20.0			
trans-1,2-Dichloroethene	1.6725 1.2821	1.3042 1.2553	1.2695 1.2193	1.2755	1.1722	Ave		1.3063			0.1000	11.8		20.0			
Acrylonitrile	0.9678 0.9422	0.9683 0.9509	0.9744 0.9128	0.8971	0.9390	Ave		0.9441				2.9		20.0			
Hexane	10.245 2.5302	5.6622 2.3975	4.2903 2.3322	3.2293	2.4299	Lin1	3.3332	2.3189							0.9990		0.9900
1,1-Dichloroethane	3.0878 2.6036	2.6021 2.5955	2.6538 2.5047	2.6120	2.5052	Ave		2.6456			0.2000	7.0		20.0			
Vinyl acetate	3.7391 4.0400	4.1160 4.0837	3.7765 4.0217	3.8848	3.8902	Ave		3.9440				3.6		20.0			
2,2-Dichloropropane	2.2796 1.8364	2.0463 1.7801	2.0213 1.7193	1.9036	1.6832	Ave		1.9087				10.4		20.0			
cis-1,2-Dichloroethene	1.7298 1.3861	1.5836 1.4058	1.5089 1.3776	1.4009	1.3473	Ave		1.4675			0.1000	9.0		20.0			
2-Butanone (MEK)	1.2179 1.2424	1.2481 1.2290	1.1883 1.2157	1.2328	1.2201	Ave		1.2243			0.1000	1.5		20.0			
Bromochloromethane	0.8927 0.7638	0.8176 0.7512	0.7275 0.7344	0.7161	0.7444	Ave		0.7685				7.7		20.0			
Tetrahydrofuran	1.0108 0.8660	0.8843 0.8584	0.9441 0.8469	0.8742	0.8546	Ave		0.8924				6.3		20.0			
Chloroform	+++++ 2.2235	2.8845 2.2258	2.5006 2.1187	2.2830	2.2056	Ave		2.3488			0.2000	11.2		20.0			
1,1,1-Trichloroethane	2.4334 1.9880	1.8896 1.9038	1.8825 1.8598	2.0145	1.8368	Ave		1.9761			0.1000	9.8		20.0			
Cyclohexane	3.6498 3.0295	3.4120 2.8597	3.3301 2.8141	3.1727	2.6077	Ave		3.1094			0.1000	11.2		20.0			
Carbon tetrachloride	2.0395 1.7816	1.8821 1.7681	1.8359 1.7244	1.6678	1.5571	Ave		1.7821			0.1000	8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	1.9193 1.7420	1.7863 1.6657	1.8066 1.6424	1.7451	1.5570	Ave		1.7330				6.4		20.0			
Benzene	5.6229 5.0549	5.3277 4.9997	5.2169 4.8455	4.9834	4.8741	Ave		5.1156			0.5000	5.1		20.0			
Isobutyl alcohol	0.1590 0.1599	0.1423 0.1619	0.1425 0.1610	0.1500	0.1555	Ave		0.1540				5.2		20.0			
1,2-Dichloroethane	2.5254 2.1833	2.1312 2.1226	2.1348 2.0672	2.1147	2.1577	Ave		2.1796			0.1000	6.6		20.0			
n-Heptane	3.1297 2.6986	2.9796 2.6073	3.0264 2.5212	2.8184	2.3419	Ave		2.7654				9.8		20.0			
Trichloroethene	1.2660 1.3254	1.3979 1.2699	1.3674 1.2612	1.2813	1.2006	Ave		1.2962			0.2000	4.9		20.0			
Methylcyclohexane	2.7662 2.1855	2.4207 2.1314	2.4400 2.1000	2.2865	1.8395	Ave		2.2712			0.1000	12.2		20.0			
1,2-Dichloropropane	+++++ 1.5480	1.5430 1.5270	1.5701 1.5163	1.4872	1.5104	Ave		1.5289			0.1000	1.8		20.0			
Dibromomethane	0.9633 0.8771	0.8592 0.8689	0.8404 0.8697	0.8987	0.8404	Ave		0.8772			0.1000	4.5		20.0			
1,4-Dioxane	0.0062 0.0070	0.0070 0.0070	0.0076 0.0072	0.0065	0.0072	Ave		0.0070				6.1		20.0			
Bromodichloromethane	1.9588 1.6482	1.7829 1.6678	1.5419 1.6873	1.6038	1.5415	Ave		1.6790			0.2000	8.2		20.0			
2-Chloroethyl vinyl ether	1.1468 1.2213	1.1831 1.2180	1.1225 1.2382	1.1472	1.1928	Ave		1.1838				3.5		20.0			
cis-1,3-Dichloropropene	2.1716 2.1557	2.2966 2.1358	1.9900 2.1558	2.0269	1.9912	Ave		2.1154			0.2000	5.0		20.0			
4-Methyl-2-pentanone (MIBK)	0.6424 0.6938	0.6887 0.6805	0.6604 0.6607	0.6514	0.6753	Ave		0.6691			0.1000	2.7		20.0			
Toluene	0.9442 0.8601	0.9857 0.8426	0.8856 0.8307	0.8447	0.8204	Ave		0.8768			0.4000	6.7		20.0			
trans-1,3-Dichloropropene	0.5448 0.5454	0.5613 0.5550	0.5075 0.5610	0.5225	0.5369	Ave		0.5418			0.1000	3.5		20.0			
Ethyl methacrylate	0.5273 0.5517	0.5438 0.5686	0.5048 0.5623	0.5276	0.5592	Ave		0.5432				4.0		20.0			
1,1,2-Trichloroethane	0.2350 0.2757	0.2806 0.2797	0.2857 0.2670	0.2734	0.2643	Ave		0.2702			0.1000	5.9		20.0			
Tetrachloroethene	0.3927 0.3609	0.4010 0.3594	0.3855 0.3502	0.3579	0.3380	Ave		0.3682			0.2000	6.0		20.0			
1,3-Dichloropropane	0.6309 0.5760	0.5996 0.5661	0.5623 0.5611	0.5625	0.5727	Ave		0.5789				4.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.4348 0.4895	0.4457 0.4916	0.4517 0.4733	0.4502	0.4870	Ave		0.4655			0.1000	4.8		20.0			
Dibromochloromethane	0.3373 0.3632	0.3578 0.3702	0.3202 0.3809	0.3258	0.3414	Ave		0.3496			0.1000	6.2		20.0			
1,2-Dibromoethane	0.3523 0.3531	0.3424 0.3614	0.3817 0.3593	0.3403	0.3618	Ave		0.3565				3.6		20.0			
Chlorobenzene	1.0902 0.9511	1.0595 0.9432	1.0082 0.9280	0.9180	0.9524	Ave		0.9813			0.5000	6.5		20.0			
Ethylbenzene	1.7618 1.6367	1.8224 1.6023	1.6861 1.5729	1.5932	1.5832	Ave		1.6573			0.1000	5.5		20.0			
1,1,1,2-Tetrachloroethane	0.3602 0.3517	0.3460 0.3600	0.3427 0.3544	0.3382	0.3428	Ave		0.3495				2.4		20.0			
m,p-Xylene	0.6081 0.6662	0.7336 0.6321	0.6899 0.6235	0.6248	0.6357	Ave		0.6517			0.1000	6.5		20.0			
o-Xylene	0.6316 0.6366	0.6808 0.6334	0.6140 0.6319	0.6041	0.6307	Ave		0.6329			0.3000	3.5		20.0			
Styrene	1.1649 1.0871	1.1135 1.0834	1.0834 1.0661	1.0280	1.0659	Ave		1.0865			0.3000	3.7		20.0			
Bromoform	0.1847 0.2403	0.2392 0.2555	0.2129 0.2687	0.2120	0.2292	Ave		0.2303			0.1000	11.6		20.0			
Isopropylbenzene	3.3813 3.1579	3.0945 3.0763	3.1761 3.0441	3.1017	2.9914	Ave		3.1279			0.1000	3.8		20.0			
Bromobenzene	0.7152 0.7685	0.7891 0.7760	0.7418 0.7537	0.7494	0.7623	Ave		0.7570				3.0		20.0			
1,1,2,2-Tetrachloroethane	1.0244 0.9609	0.8835 0.9661	0.8843 0.9590	0.8862	0.9440	Ave		0.9386			0.3000	5.4		20.0			
N-Propylbenzene	4.0272 3.7532	3.8704 3.6409	3.8611 3.5667	3.6728	3.5198	Ave		3.7390				4.6		20.0			
1,2,3-Trichloropropane	0.3153 0.3219	0.3530 0.3180	0.2701 0.3132	0.3083	0.3142	Ave		0.3142				7.2		20.0			
trans-1,4-Dichloro-2-butene	0.5192 0.4283	0.4737 0.4379	0.3920 0.4347	0.4007	0.4291	Ave		0.4395				9.2		20.0			
2-Chlorotoluene	0.8477 0.7373	0.7929 0.7223	0.7069 0.7090	0.7254	0.7163	Ave		0.7447				6.7		20.0			
1,3,5-Trimethylbenzene	2.7677 2.7117	2.7127 2.6433	2.7742 2.6246	2.7122	2.6106	Ave		2.6946				2.3		20.0			
4-Chlorotoluene	2.4274 2.3300	2.4441 2.3010	2.6972 2.2242	2.2825	2.5665	Ave		2.4091				6.6		20.0			
tert-Butylbenzene	0.6671 0.5925	0.6291 0.5751	0.5802 0.5868	0.5728	0.5381	Ave		0.5927				6.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.8881 2.7753	2.7814 2.7468	2.7743 2.7025	2.6479	2.6843	Ave		2.7501				2.7		20.0			
sec-Butylbenzene	3.3813 3.3986	3.3932 3.3642	3.3529 3.3196	3.3306	3.1295	Ave		3.3337				2.6		20.0			
4-Isopropyltoluene	2.8866 2.9698	2.8764 2.9324	2.9590 2.9004	2.9406	2.8184	Ave		2.9104				1.7		20.0			
1,3-Dichlorobenzene	1.7451 1.5245	1.6305 1.5045	1.5452 1.4729	1.4801	1.5014	Ave		1.5505			0.6000	6.0		20.0			
1,4-Dichlorobenzene	1.5492 1.5168	1.6048 1.5567	1.5586 1.5142	1.5465	1.5328	Ave		1.5474			0.5000	1.9		20.0			
n-Butylbenzene	2.9128 2.6766	2.7166 2.6218	2.6000 2.6056	2.6542	2.5246	Ave		2.6640				4.3		20.0			
1,2-Dichlorobenzene	1.4386 1.5183	1.5954 1.5345	1.5338 1.5142	1.5278	1.5355	Ave		1.5248			0.4000	2.8		20.0			
1,2-Dibromo-3-Chloropropane	0.2026 0.2193	0.1802 0.2258	0.1961 0.2311	0.1977	0.2293	Ave		0.2103			0.0500	8.9		20.0			
1,2,4-Trichlorobenzene	1.2061 1.1075	1.1365 1.1277	1.1797 1.1353	1.0396	1.0977	Ave		1.1288			0.2000	4.5		20.0			
Hexachlorobutadiene	0.4828 0.5196	0.4560 0.4940	0.5039 0.5192	0.5018	0.4669	Ave		0.4930				4.7		20.0			
Naphthalene	3.2973 3.6194	3.5500 3.6602	3.2886 3.6168	3.3481	3.6047	Ave		3.4981				4.5		20.0			
1,2,3-Trichlorobenzene	1.0400 1.1307	1.1812 1.1514	1.1787 1.1240	1.0818	1.1145	Ave		1.1253				4.2		20.0			
Dibromofluoromethane (Surr)	1.2843 1.2879	1.2432 1.2618	1.2306 1.2569	1.2565	1.2514	Ave		1.2591				1.5		20.0			
1,2-Dichloroethane-d4 (Surr)	1.7013 1.7341	1.6436 1.7225	1.6506 1.6586	1.7083	1.6785	Ave		1.6872				2.0		20.0			
Toluene-d8 (Surr)	1.3153 1.2969	1.2840 1.2799	1.2927 1.2631	1.2734	1.2871	Ave		1.2866				1.2		20.0			
4-Bromofluorobenzene (Surr)	0.4054 0.3971	0.3976 0.4008	0.3940 0.3839	0.3932	0.3916	Ave		0.3955				1.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-485855/5	T3676.D
Level 2	IC 480-485855/6	T3677.D
Level 3	IC 480-485855/7	T3678.D
Level 4	IC 480-485855/8	T3679.D
Level 5	IC 480-485855/9	T3680.D
Level 6	ICIS 480-485855/10	T3681.D
Level 7	IC 480-485855/11	T3682.D
Level 8	IC 480-485855/12	T3683.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	4934 219734	10036 526052	24242 972175	51220	76355	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	6913 381746	19074 812620	33143 1549910	84043	151762	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	6774 300709	16876 696129	30657 1270913	70835	109991	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	5760 288097	13458 646147	27231 1177804	62946	109752	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	2963 140435	5984 310966	15011 584459	30863	55008	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	+++++ 146378	5904 317277	12235 608194	27400	53723	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	7451 362978	13964 775501	34984 1479090	75320	143852	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6063 293231	12506 704467	27961 1291544	64061	102770	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	4422 260623	10790 525210	21267 1036111	49754	101050	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	4813 288276	13790 583671	28354 1137255	57155	115488	2.00 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	3865 209458	8903 412854	20594 796385	44649	71154	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	+++++ 185432	7611 364853	17614 723065	39631	69138	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	11132 640709	28253 1294924	56810 2562619	130803	256115	2.00 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	6153 374839	15671 745754	32245 1454328	75438	147523	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	13193 706487	29072 1374825	58901 2686015	141635	264499	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	9091 488101	19771 985194	42403 1854391	102110	188749	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	14735 705850	30048 1421935	63644 2740172	143625	286066	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Ave	+++++ 234072	11884 464793	23225 905838	50101	97221	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	9406 634747	26171 1264251	48737 2506995	119194	249826	4.00 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	12447 703013	29867 1409296	56324 2776130	140957	282450	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	4785 223197	9541 440011	18625 852196	45665	85068	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	27689 1640233	70838 3333332	142965 6379639	321175	681436	4.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Lin1	29312 440471	41423 840413	62945 1630033	115612	176336	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	8834 453253	19036 909814	38935 1750608	93514	181799	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	21395 1406634	60223 2862968	110814 5621797	278158	564613	0.800 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	6522 319697	14970 623997	29655 1201699	68151	122149	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	4949 241296	11585 492779	22138 962861	50155	97775	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	17422 1081413	45655 2154017	87170 4248591	220672	442703	2.00 125	5.00 250	10.0 500	25.0	50.0
Bromochloromethane	FB	Ave	2554 132966	5981 263307	10673 513299	25637	54023	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	5784 301520	12938 601789	27702 1183829	62592	124030	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	+++++ 387081	21102 780209	36688 1480801	81734	160058	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	6962 346091	13824 667344	27619 1299888	72121	133295	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	10442 527403	24961 1002406	48857 1966840	113587	189240	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	5835 310149	13769 619779	26936 1205221	59709	113001	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	5491 303260	13068 583880	26505 1147901	62476	112992	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	16087 879995	38976 1752561	76540 3386638	178412	353708	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	11370 696049	26032 1418418	52284 2813034	134259	282167	10.0 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	7225 380085	15591 744030	31321 1444826	75709	156585	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	8954 469799	21798 913938	44402 1762115	100903	169947	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	3622 230739	10227 445129	20061 881500	45872	87127	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	7914 380469	17709 747131	35798 1467768	81859	133494	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	+++++ 269484	11288 535277	23036 1059801	53242	109610	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2756 152698	6286 304571	12330 607884	32175	60984	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	1311 90352	3690 182171	8075 367534	17664	38120	8.00 500	20.0 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	5604 286927	13043 584632	22622 1179294	57418	111869	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	3281 212614	8655 426961	16469 865434	41071	86563	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	6213 375290	16801 748667	29196 1506726	72564	144502	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	33934 2223491	90736 4400425	175479 8485420	439549	893481	2.00 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	9975 551291	25974 1089662	47066 2133968	114004	217091	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	5756 349546	14791 717708	26972 1441046	70518	142058	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	5571 353627	14330 735373	26825 1444356	71201	147963	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	2483 176692	7394 361747	15181 685969	36901	69928	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4149 231321	10567 464797	20485 899701	48302	89438	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	6665 369214	15800 732085	29883 1441338	75918	151534	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	22968 1568679	58720 3178901	120038 6078544	303783	644371	2.00 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3563 232811	9428 478806	17016 978518	43973	90336	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	3722 226344	9022 467322	20284 923026	45926	95734	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11517 609590	27918 1219740	53582 2383838	123887	252008	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	18612 1049028	48023 2072138	89609 4040311	215017	418912	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3805 225444	9117 465591	18215 910379	45641	90711	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	6424 427031	19330 817397	36663 1601583	84326	168219	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	6673 408002	17940 819158	32631 1623295	81534	166890	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	12307 696774	29341 1401093	57578 2738649	138734	282051	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	1951 154000	6303 330420	11316 690313	28617	60637	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	19322 1080831	44071 2098157	91645 4137961	222166	417767	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	4087 263034	11238 529276	21406 1024531	53676	106462	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5854 328891	12582 658910	25516 1303649	63478	131836	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	23013 1284560	55122 2483223	111412 4848393	263079	491573	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1802 110171	5027 216857	7793 425762	22085	43877	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	2967 146597	6746 298674	11311 590919	28704	59929	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	4844 252363	11293 492624	20397 963839	51957	100036	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	15816 928113	38634 1802791	80048 3567755	194269	364588	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	13871 797471	34808 1569376	77828 3023509	163493	358431	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	3812 202795	8959 392225	16742 797715	41032	75149	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	16504 949886	39613 1873386	80051 3673724	189665	374889	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	19322 1163193	48325 2294472	96749 4512481	238567	437064	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	16495 1016459	40965 1999970	85381 3942736	210627	393618	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	9972 521791	23221 1026100	44586 2002202	106016	209682	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1 Analy Batch No.: 485855

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2019 16:28 Calibration End Date: 08/07/2019 19:14 Calibration ID: 37379

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	8853 519139	22855 1061754	44972 2058340	110773	214061	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	16645 916102	38690 1788128	75022 3541951	190114	352576	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	8221 519663	22721 1046608	44259 2058352	109432	214445	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1158 75060	2566 154017	5658 314180	14159	32018	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	6892 379055	16186 769096	34041 1543275	74468	153297	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	2759 177825	6494 336918	14541 705768	35945	65210	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	18842 1238775	50559 2496398	94893 4916558	239816	503427	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	5943 386993	16823 785312	34012 1527936	77484	155653	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	229645 224211	227374 221144	225685 219613	224924	227028	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	304205 301894	300611 301903	302713 289816	305789	304516	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	868477 831244	845900 827599	858756 811128	859307	851403	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	267709 254527	261950 259179	261736 246515	265313	259017	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Lims ID: IC 0.4
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Aug-2019 16:28:30 ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.4
Misc. Info.: 480-0083215-005
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:07 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 08:45:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	178811	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.102	7.103	0.000	88	660279	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	97	357152	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	93	229645	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.595	4.595	0.000	0	304205	25.0	25.2	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	868477	25.0	25.6	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	267709	25.0	25.6	
11 Dichlorodifluoromethane	85	1.237	1.216	0.021	1	4934	0.4000	0.4847	
13 Chloromethane	50	1.382	1.372	0.010	84	6913	0.4000	0.4191	M
151 Butadiene	54	1.455	1.444	0.011	91	6774	0.4000	0.4798	M
14 Vinyl chloride	62	1.465	1.465	0.000	85	5760	0.4000	0.4549	
15 Bromomethane	94	1.724	1.714	0.010	43	2963	0.4000	0.4716	M
16 Chloroethane	64	1.776	1.776	0.000	60	4136	0.4000	0.7024	
18 Dichlorofluoromethane	67	2.004	2.004	0.000	64	7451	0.4000	0.4790	M
17 Trichlorofluoromethane	101	2.014	2.014	0.000	28	6063	0.4000	0.4683	M
19 Ethyl ether	59	2.252	2.242	0.010	80	4422	0.4000	0.4217	
21 Acrolein	56	2.439	2.429	0.010	79	4813	2.00	1.97	M
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.450	-0.001	66	3865	0.4000	0.4448	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	93	4288	0.4000	0.5640	
23 Acetone	43	2.584	2.574	0.010	99	11132	2.00	2.09	
24 Iodomethane	142	2.605	2.605	0.000	76	6153	0.4000	0.4050	
25 Carbon disulfide	76	2.646	2.636	0.010	84	13193	0.4000	0.4608	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	85	9091	0.4000	0.4521	
28 Methyl acetate	43	2.843	2.833	0.010	93	14735	0.8000	0.9816	M
30 Methylene Chloride	84	2.926	2.926	0.000	95	7627	0.4000	0.7530	
31 2-Methyl-2-propanol	59	3.113	3.102	0.011	64	9406	4.00	3.78	
33 Methyl tert-butyl ether	73	3.133	3.113	0.020	89	12447	0.4000	0.4333	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	94	4785	0.4000	0.5121	
34 Acrylonitrile	53	3.185	3.175	0.010	98	27689	4.00	4.10	
35 Hexane	57	3.289	3.289	0.000	92	29312	0.4000	0.3299	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	93	8834	0.4000	0.4669	
39 Vinyl acetate	43	3.538	3.527	0.011	97	21395	0.8000	0.7584	M
42 2,2-Dichloropropane	77	3.931	3.931	0.000	86	6522	0.4000	0.4777	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	4949	0.4000	0.4715	
44 2-Butanone (MEK)	43	3.993	3.983	0.010	96	17422	2.00	1.99	
47 Chlorobromomethane	128	4.149	4.149	0.000	91	2554	0.4000	0.4647	
48 Tetrahydrofuran	42	4.180	4.159	0.021	77	5784	0.8000	0.9062	
50 Chloroform	83	4.211	4.211	0.000	93	10240	0.4000	0.6095	
52 Cyclohexane	56	4.304	4.304	0.000	92	10442	0.4000	0.4695	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	80	6962	0.4000	0.4926	
53 Carbon tetrachloride	117	4.418	4.418	0.000	90	5835	0.4000	0.4578	
54 1,1-Dichloropropene	75	4.429	4.418	0.011	86	5491	0.4000	0.4430	
55 Benzene	78	4.595	4.595	0.000	42	16087	0.4000	0.4397	
56 Isobutyl alcohol	43	4.615	4.605	0.010	81	11370	10.0	10.3	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	94	7225	0.4000	0.4635	a
59 n-Heptane	43	4.719	4.719	0.000	90	8954	0.4000	0.4527	M
60 Trichloroethene	95	5.082	5.071	0.011	89	3622	0.4000	0.3907	
62 Methylcyclohexane	83	5.164	5.165	-0.001	91	7914	0.4000	0.4872	
63 1,2-Dichloropropane	63	5.268	5.268	0.000	94	6007	0.4000	0.5493	a
65 Dibromomethane	93	5.382	5.372	0.010	92	2756	0.4000	0.4393	
66 1,4-Dioxane	88	5.382	5.372	0.010	14	1311	8.00	7.12	M
67 Dichlorobromomethane	83	5.486	5.486	0.000	93	5604	0.4000	0.4666	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	88	3281	0.4000	0.3875	a
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	91	6213	0.4000	0.4106	
72 4-Methyl-2-pentanone (MIBK	43	5.921	5.911	0.010	99	33934	2.00	1.92	
73 Toluene	92	6.025	6.025	0.000	96	9975	0.4000	0.4308	
75 trans-1,3-Dichloropropene	75	6.242	6.232	0.010	93	5756	0.4000	0.4023	
77 Ethyl methacrylate	69	6.263	6.263	0.000	91	5571	0.4000	0.3883	a
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	83	2483	0.4000	0.3480	
79 Tetrachloroethene	166	6.429	6.429	0.000	88	4149	0.4000	0.4266	
80 1,3-Dichloropropane	76	6.512	6.501	0.011	94	6665	0.4000	0.4359	
81 2-Hexanone	43	6.553	6.543	0.010	94	22968	2.00	1.87	
82 Chlorodibromomethane	129	6.688	6.688	0.000	94	3563	0.4000	0.3859	
83 Ethylene Dibromide	107	6.771	6.771	0.000	98	3722	0.4000	0.3953	
86 Chlorobenzene	112	7.123	7.123	0.000	94	11517	0.4000	0.4444	
88 Ethylbenzene	91	7.185	7.185	0.000	98	18612	0.4000	0.4252	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.196	-0.011	90	3805	0.4000	0.4122	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	6424	0.4000	0.3732	
91 o-Xylene	106	7.589	7.590	-0.001	96	6673	0.4000	0.3992	
92 Styrene	104	7.610	7.610	0.000	91	12307	0.4000	0.4289	
93 Bromoform	173	7.807	7.807	0.000	60	1951	0.4000	0.3207	M
95 Isopropylbenzene	105	7.869	7.869	0.000	96	19322	0.4000	0.4324	
97 Bromobenzene	156	8.149	8.149	0.000	94	4087	0.4000	0.3779	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.191	-0.011	90	5854	0.4000	0.4366	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	23013	0.4000	0.4308	
100 1,2,3-Trichloropropane	110	8.211	8.222	-0.011	21	1802	0.4000	0.4014	M
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	74	2967	0.4000	0.4726	
105 2-Chlorotoluene	126	8.294	8.294	0.000	97	4844	0.4000	0.4553	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	93	15816	0.4000	0.4109	
102 4-Chlorotoluene	91	8.377	8.377	0.000	97	13871	0.4000	0.4030	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	3812	0.4000	0.4502	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	97	16504	0.4000	0.4201	a

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	19322	0.4000	0.4057	a
111 4-Isopropyltoluene	119	8.895	8.895	0.000	96	16495	0.4000	0.3967	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	92	9972	0.4000	0.4502	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	59	8853	0.4000	0.4005	
115 n-Butylbenzene	91	9.237	9.237	0.000	99	16645	0.4000	0.4374	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	88	8221	0.4000	0.3774	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	12	1158	0.4000	0.3855	
119 1,2,4-Trichlorobenzene	180	10.615	10.605	0.010	94	6892	0.4000	0.4274	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	91	2759	0.4000	0.3917	
121 Naphthalene	128	10.823	10.823	0.000	90	18842	0.4000	0.3770	M
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	91	5943	0.4000	0.3697	
S 126 Xylenes, Total	1				0			0.7724	
S 123 1,3-Dichloropropene, Total	1				0			0.8129	
S 125 Total BTEX	1				0			2.07	
S 124 1,2-Dichloroethene, Total	1				0			0.9836	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00162	Amount Added:	0.40	Units: uL	
GAS CORP mix_00354	Amount Added:	0.40	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added:	1.00	Units: uL	Run Reagent

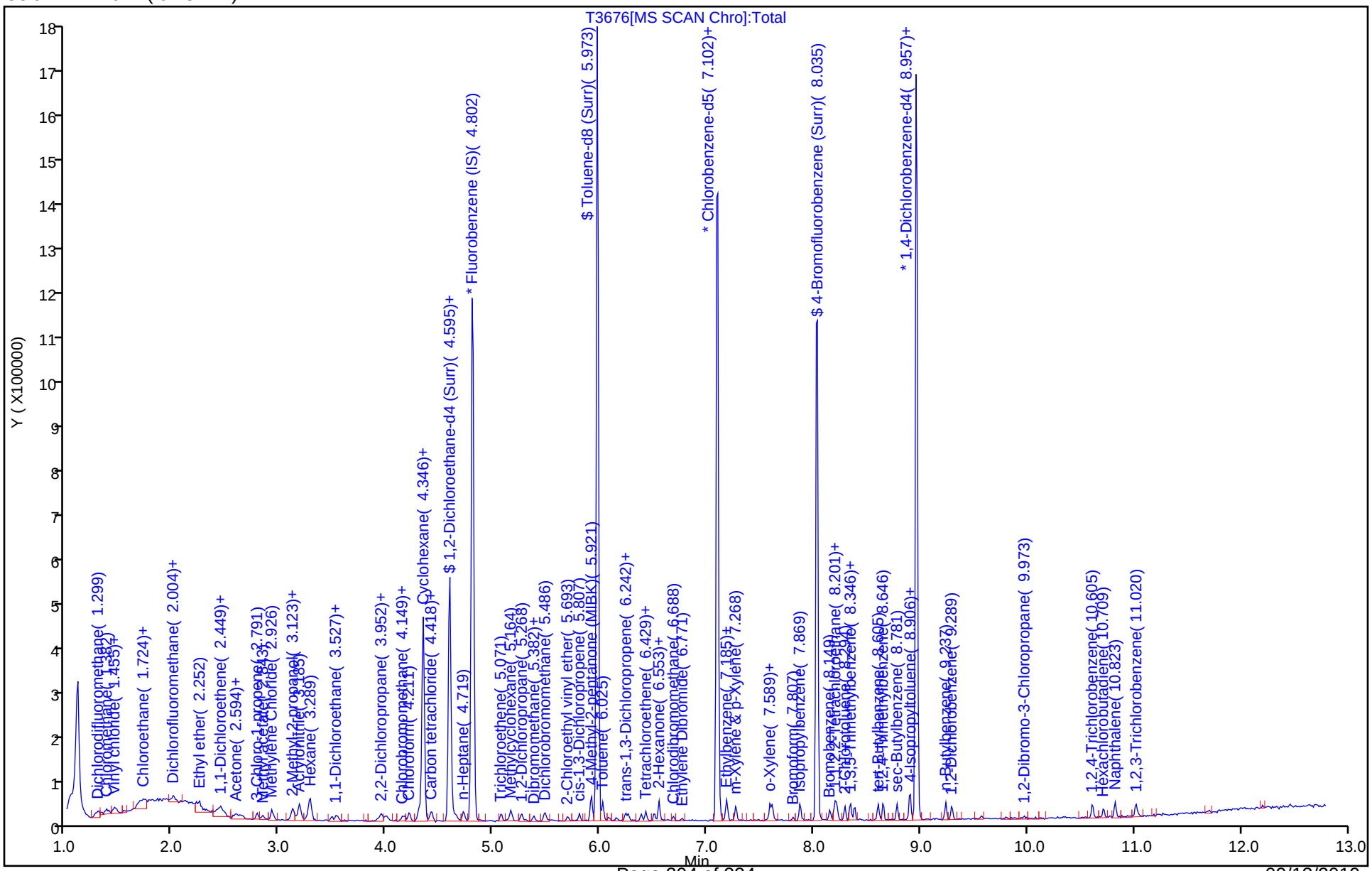
Report Date: 08-Aug-2019 15:53:10 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D

Injection Date:	07-Aug-2019 16:28:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC 0.4			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

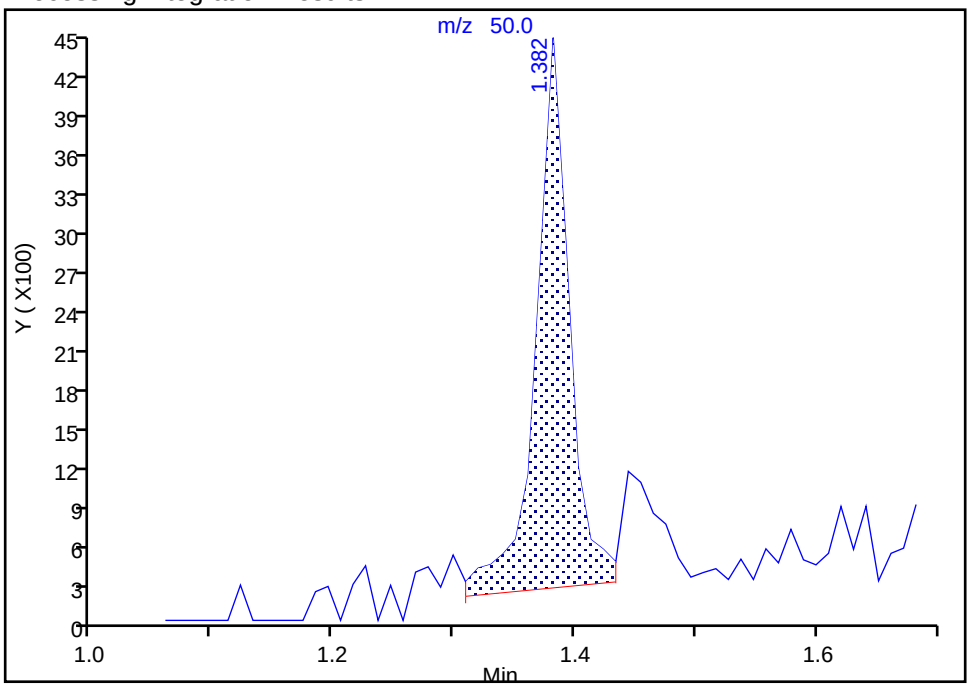
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

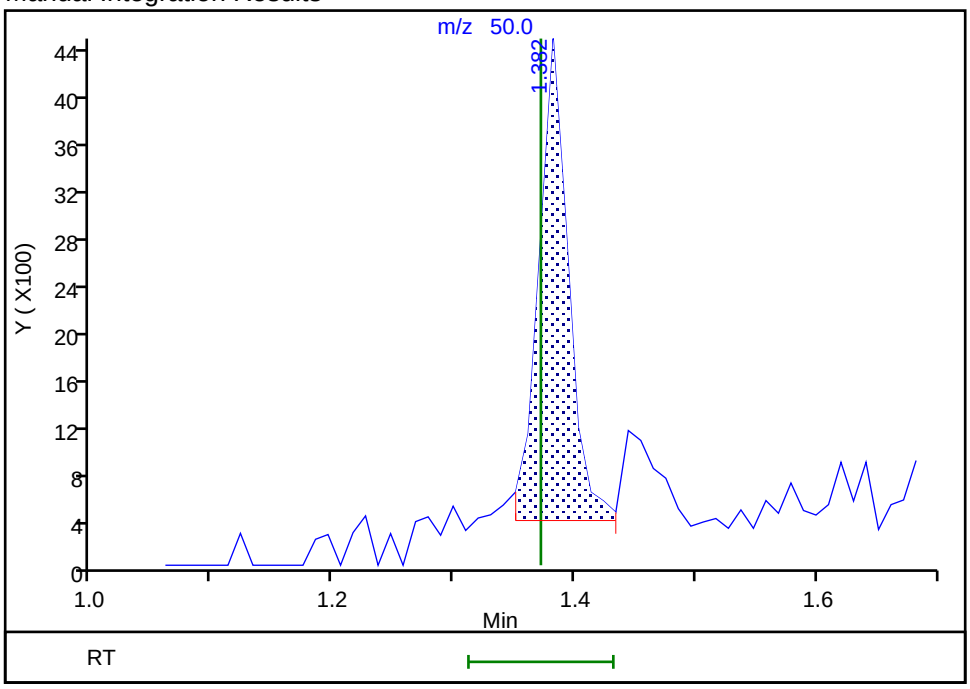
Processing Integration Results

RT: 1.38
Area: 8097
Amount: 0.477562
Amount Units: ug/L



Manual Integration Results

RT: 1.38
Area: 6913
Amount: 0.419089
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:36:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

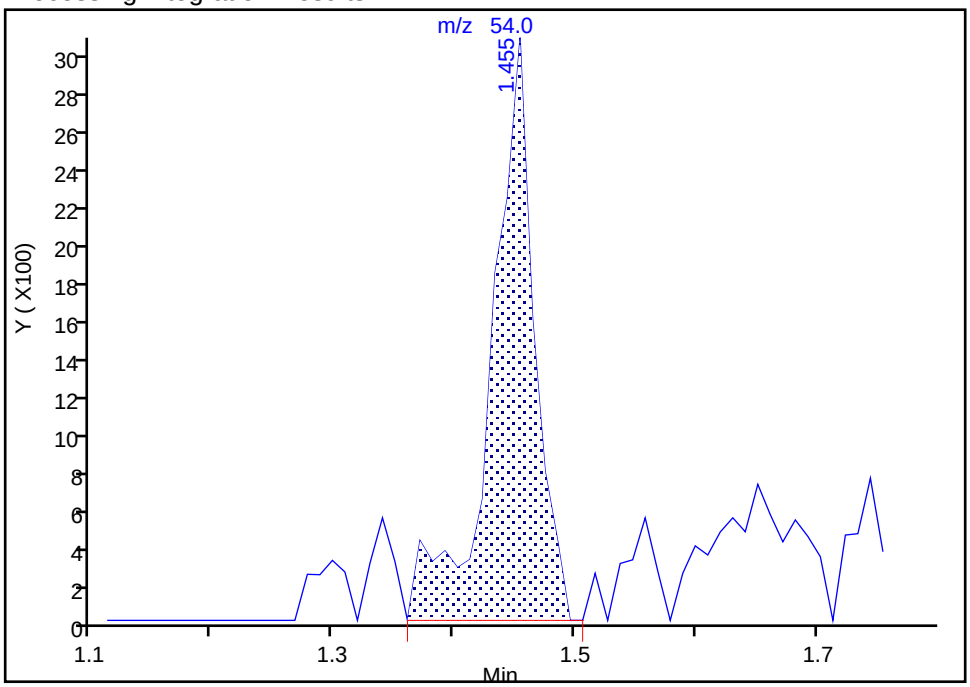
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

151 Butadiene, CAS: 106-99-0

Signal: 1

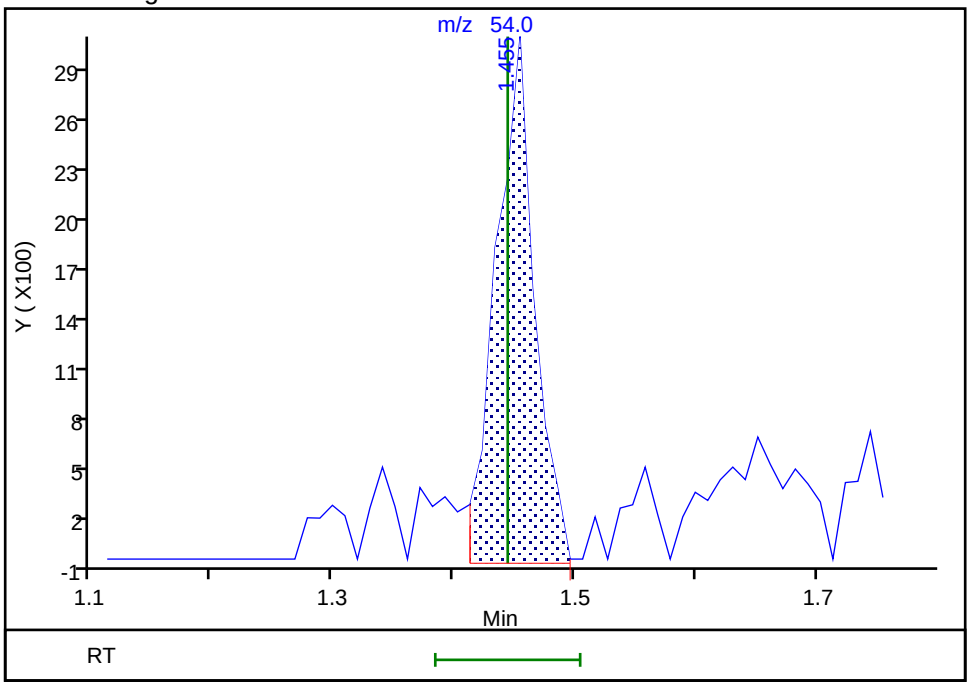
Processing Integration Results

RT: 1.45
Area: 7477
Amount: 0.521525
Amount Units: ug/L



Manual Integration Results

RT: 1.45
Area: 6774
Amount: 0.479843
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:37:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

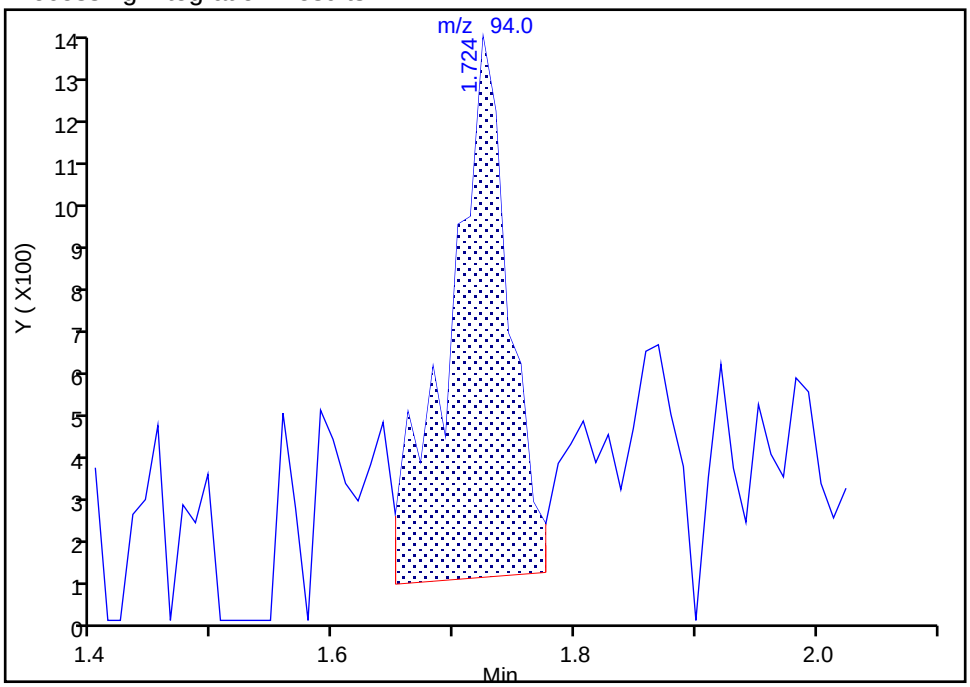
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

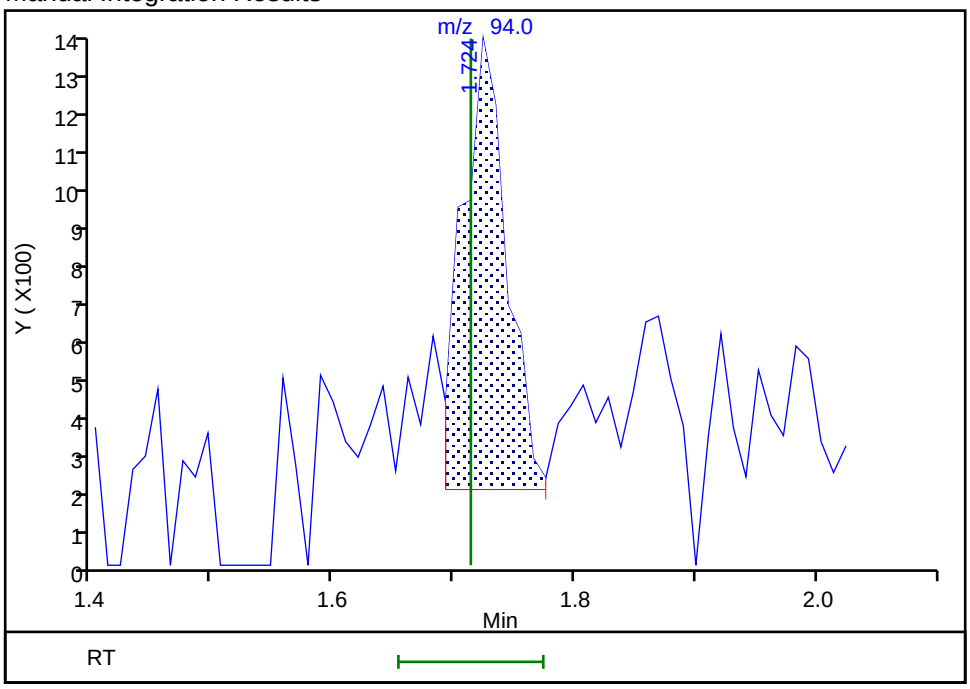
Processing Integration Results

RT: 1.72
Area: 4285
Amount: 0.399591
Amount Units: ug/L



Manual Integration Results

RT: 1.72
Area: 2963
Amount: 0.471634
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:37:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

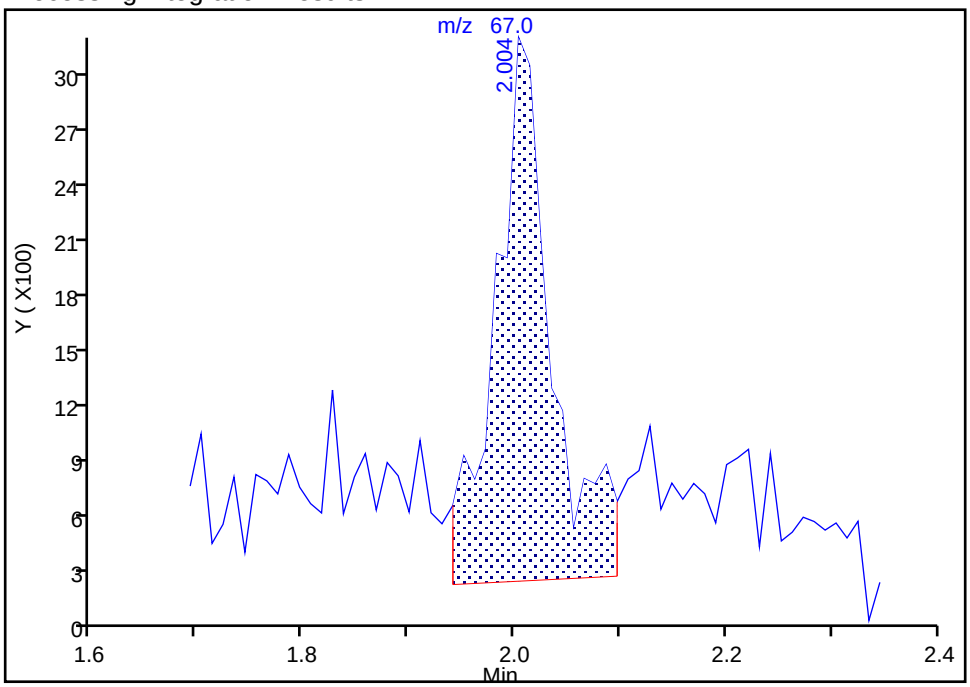
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

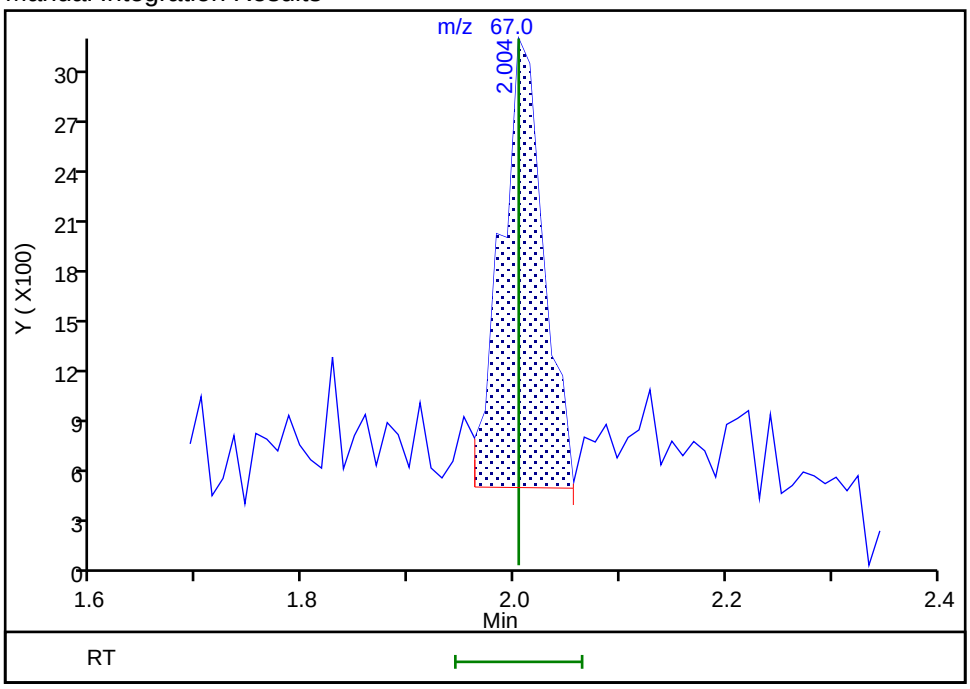
Processing Integration Results

RT: 2.00
Area: 10955
Amount: 0.406786
Amount Units: ug/L



Manual Integration Results

RT: 2.00
Area: 7451
Amount: 0.479035
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:38:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

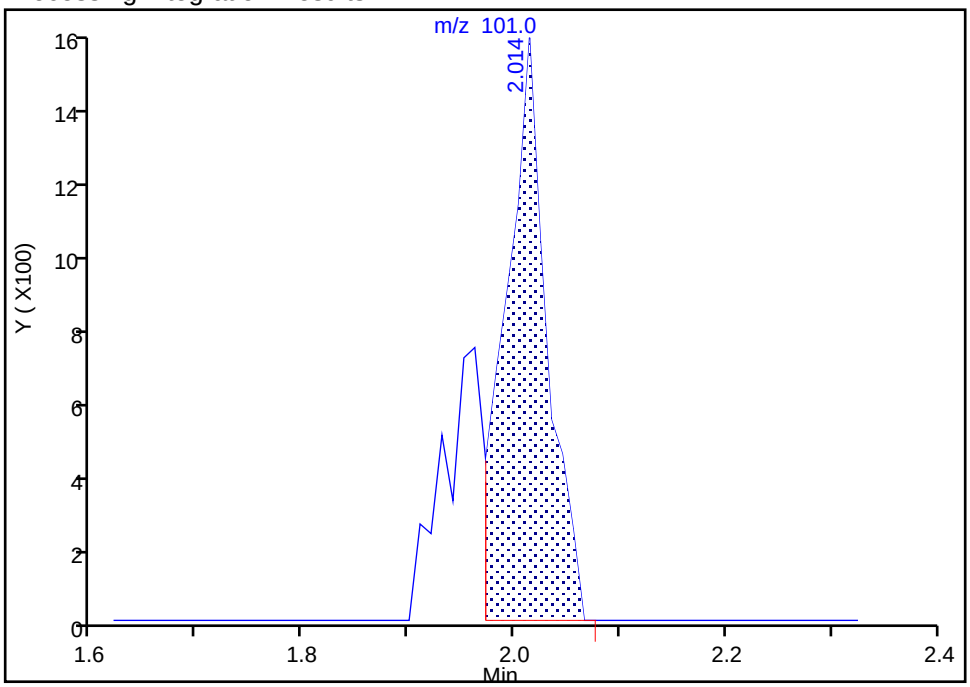
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

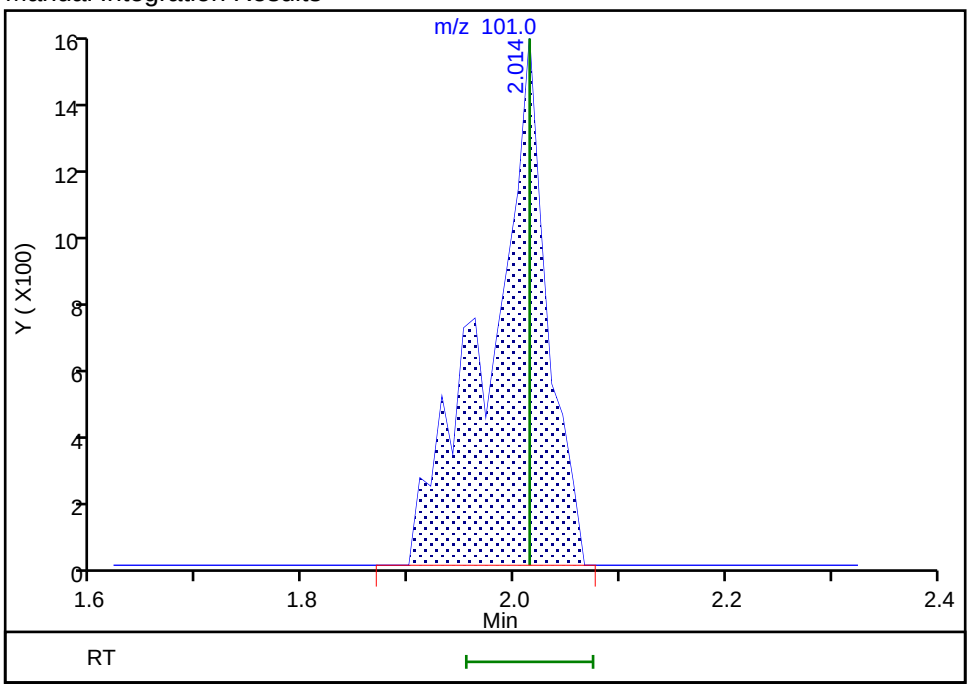
Processing Integration Results

RT: 2.01
Area: 4340
Amount: 0.349739
Amount Units: ug/L



Manual Integration Results

RT: 2.01
Area: 6063
Amount: 0.468269
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:40:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

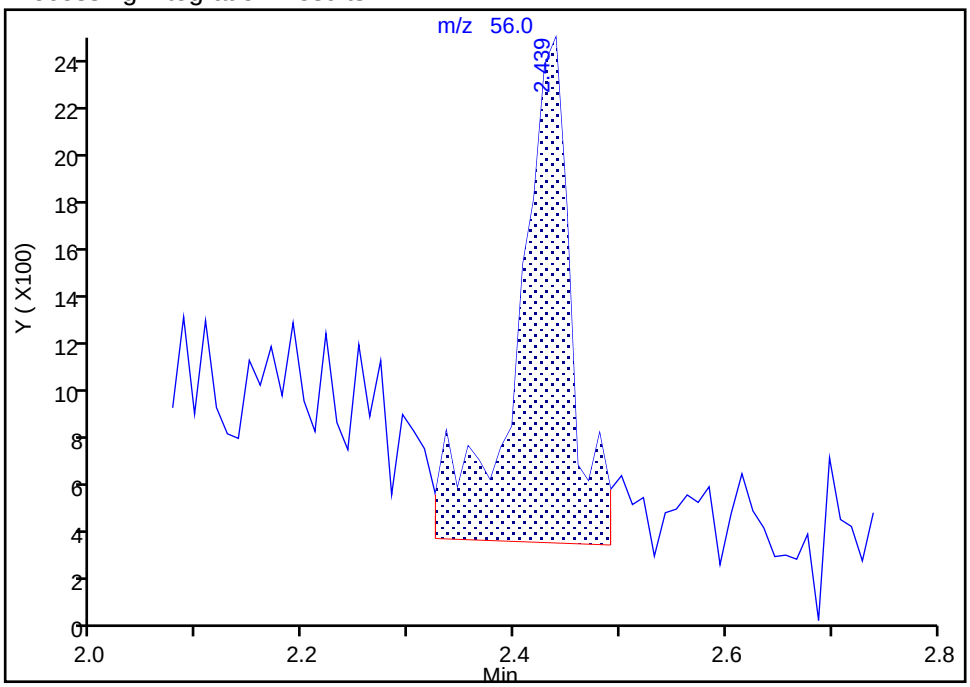
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

21 Acrolein, CAS: 107-02-8

Signal: 1

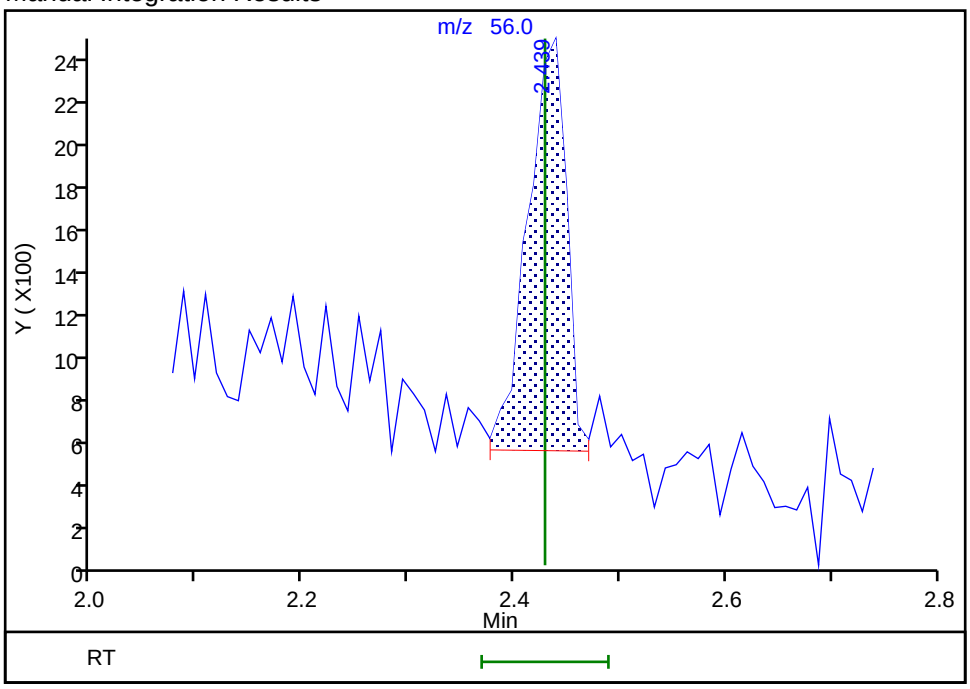
Processing Integration Results

RT: 2.44
Area: 7476
Amount: 2.135123
Amount Units: ug/L



Manual Integration Results

RT: 2.44
Area: 4813
Amount: 1.973956
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:40:21
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

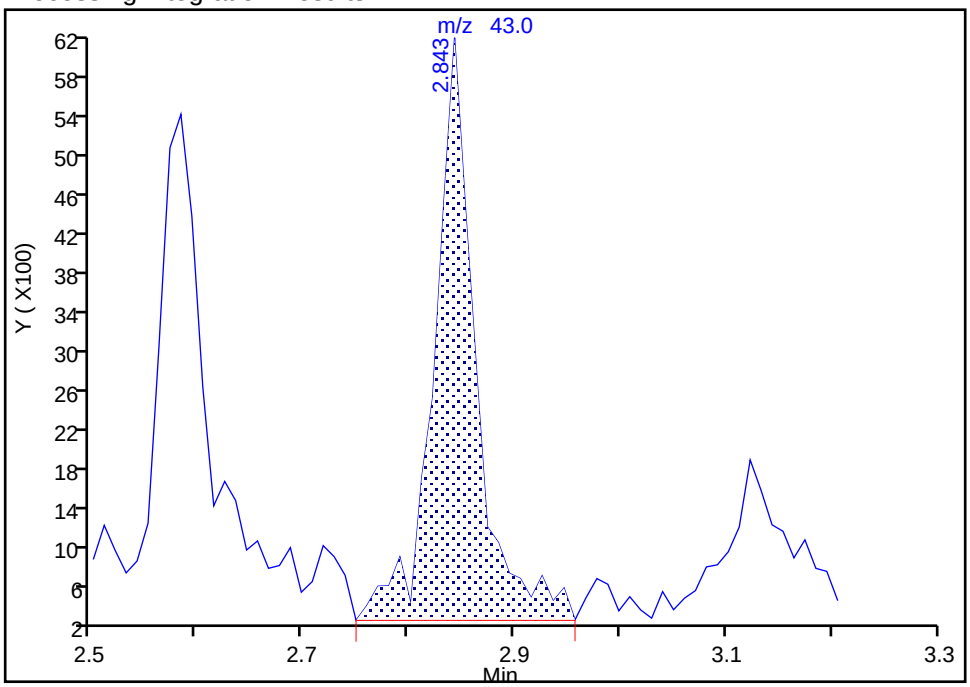
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

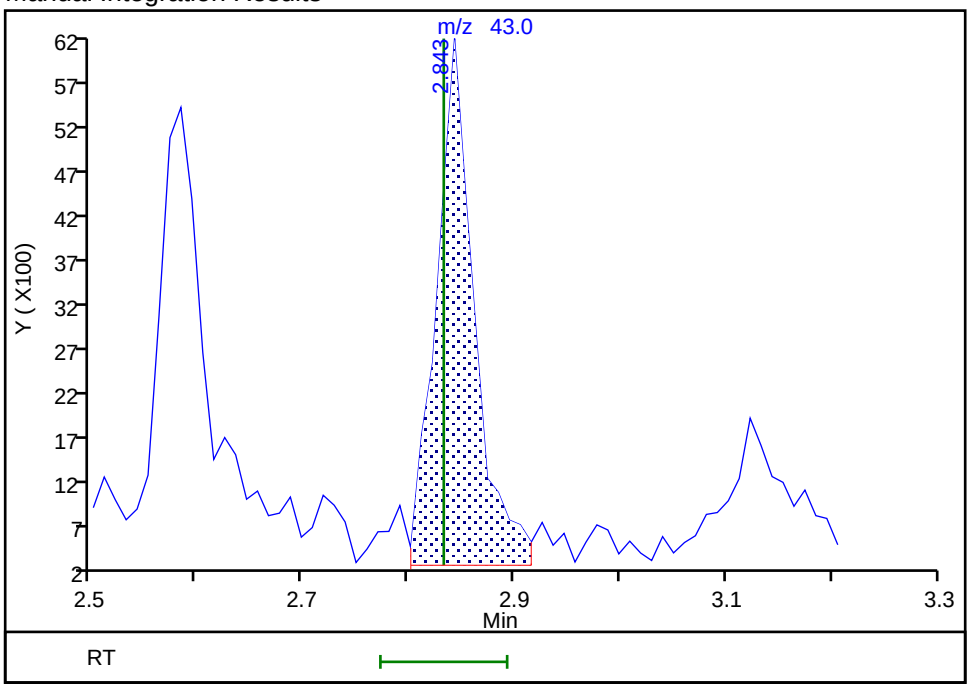
Processing Integration Results

RT: 2.84
Area: 16024
Amount: 0.848400
Amount Units: ug/L



Manual Integration Results

RT: 2.84
Area: 14735
Amount: 0.981574
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:40:53
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

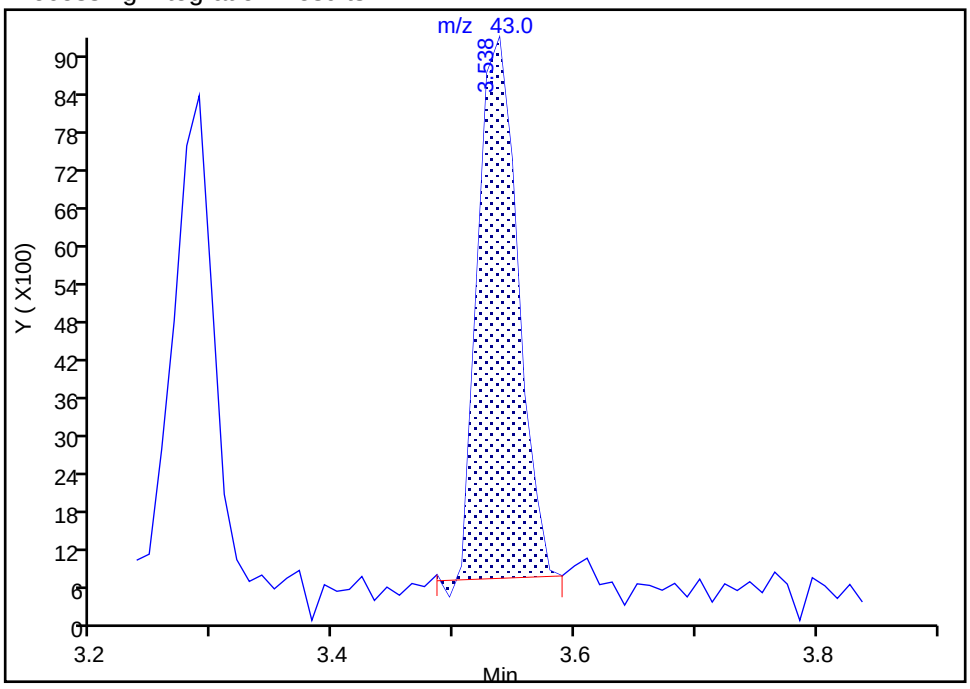
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

39 Vinyl acetate, CAS: 108-05-4

Signal: 1

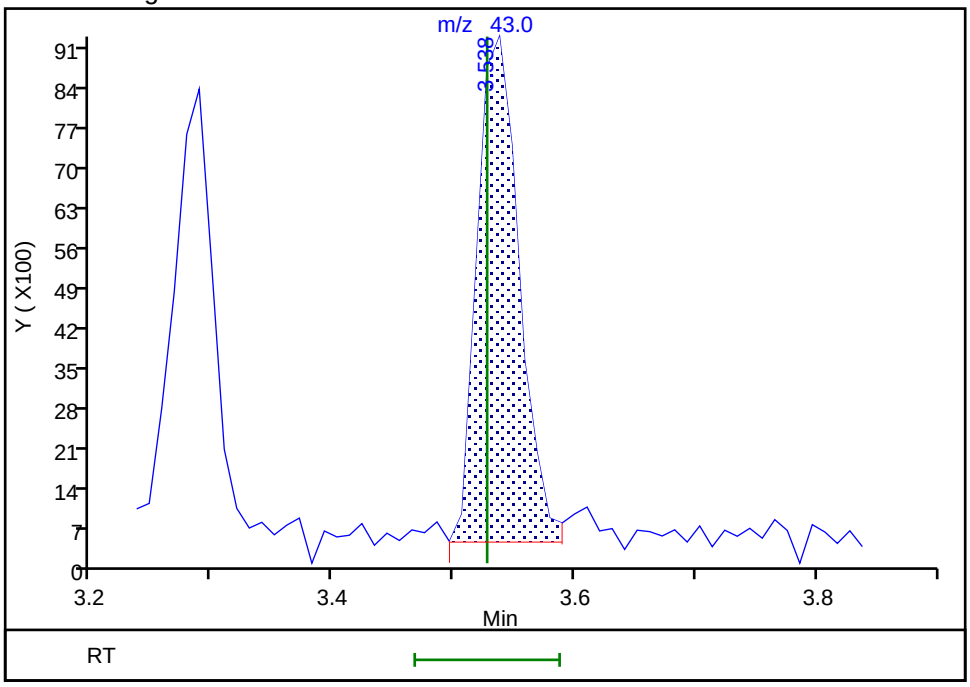
Processing Integration Results

RT: 3.54
Area: 19598
Amount: 0.701721
Amount Units: ug/L



Manual Integration Results

RT: 3.54
Area: 21395
Amount: 0.758439
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:41:33
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

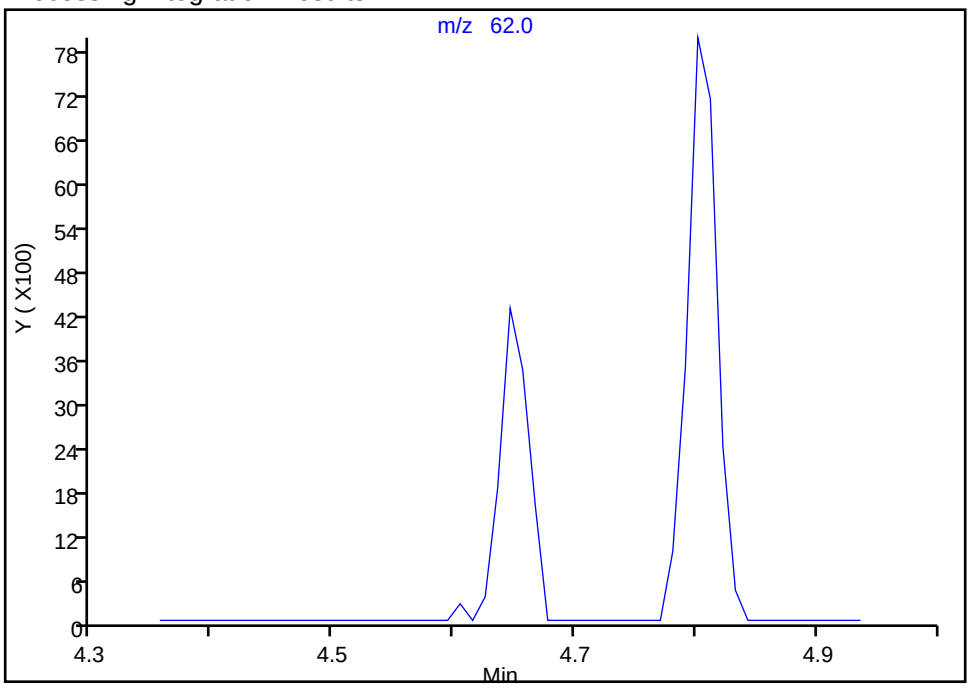
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

57 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

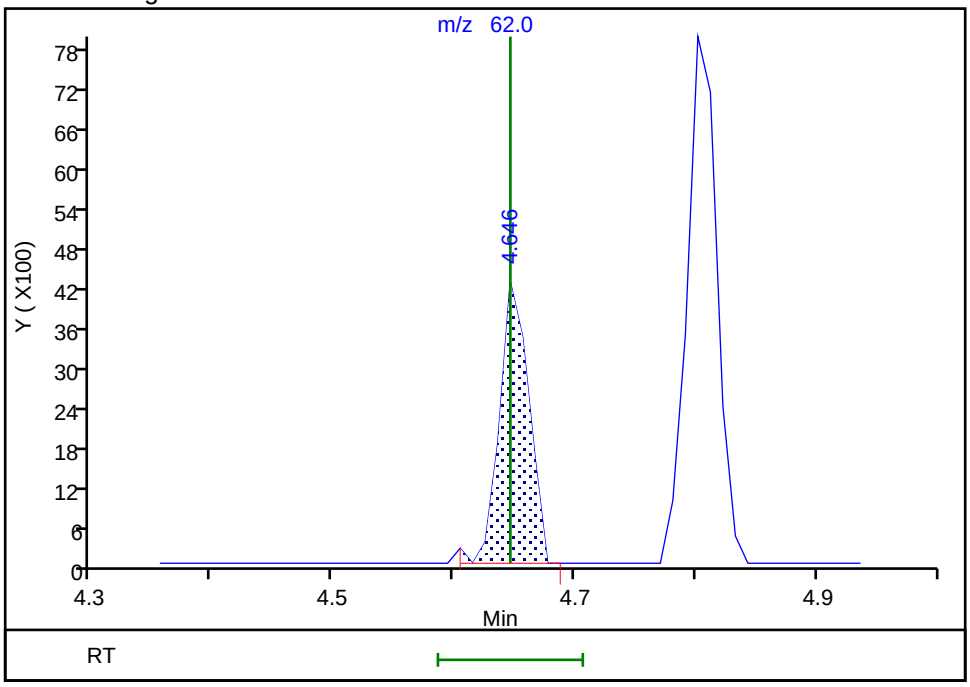
Not Detected
Expected RT: 4.65

Processing Integration Results



Manual Integration Results

RT: 4.65
Area: 7225
Amount: 0.463453
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:41:49
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

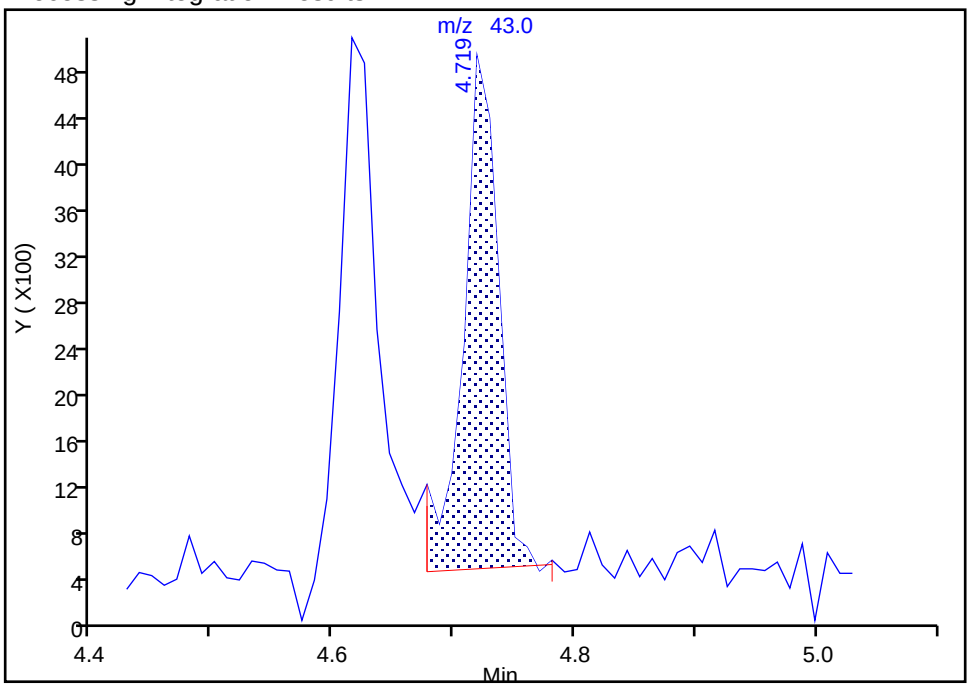
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

59 n-Heptane, CAS: 142-82-5

Signal: 1

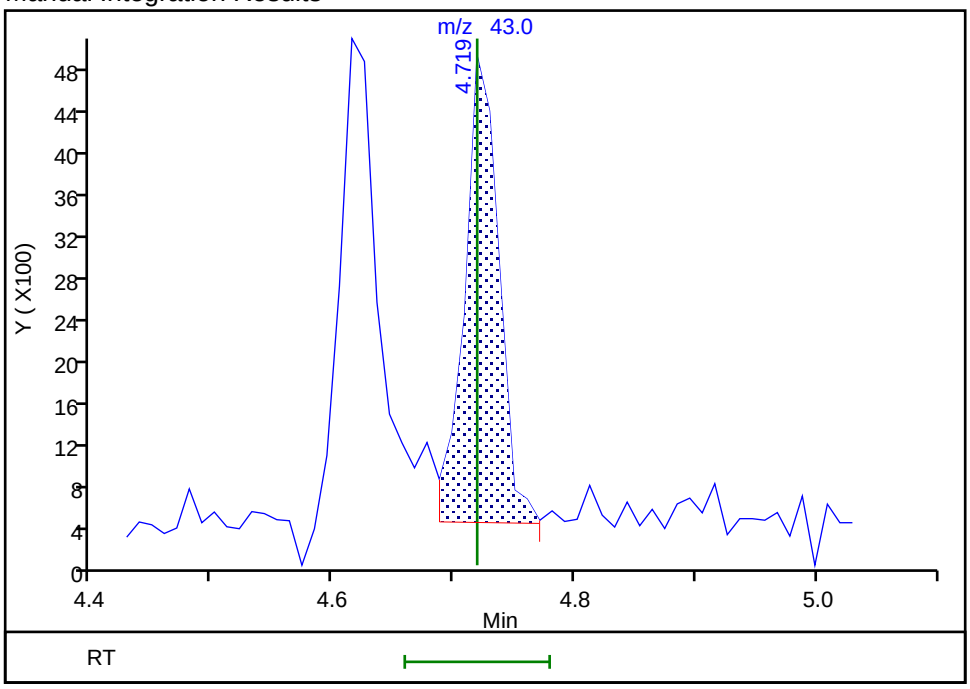
Processing Integration Results

RT: 4.72
Area: 9195
Amount: 0.463117
Amount Units: ug/L



Manual Integration Results

RT: 4.72
Area: 8954
Amount: 0.452696
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:42:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

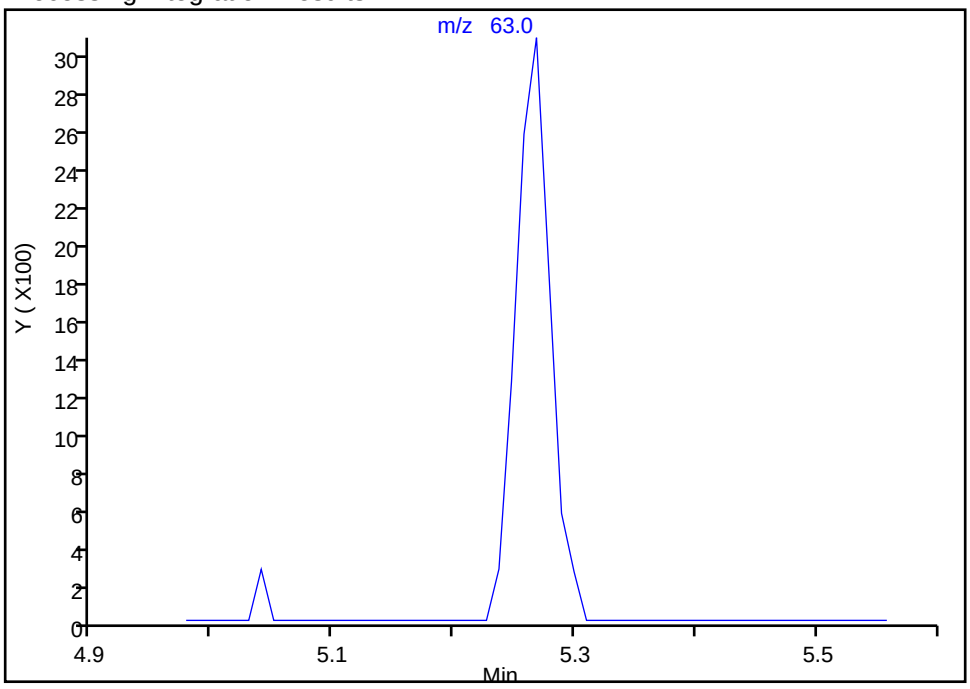
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

63 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

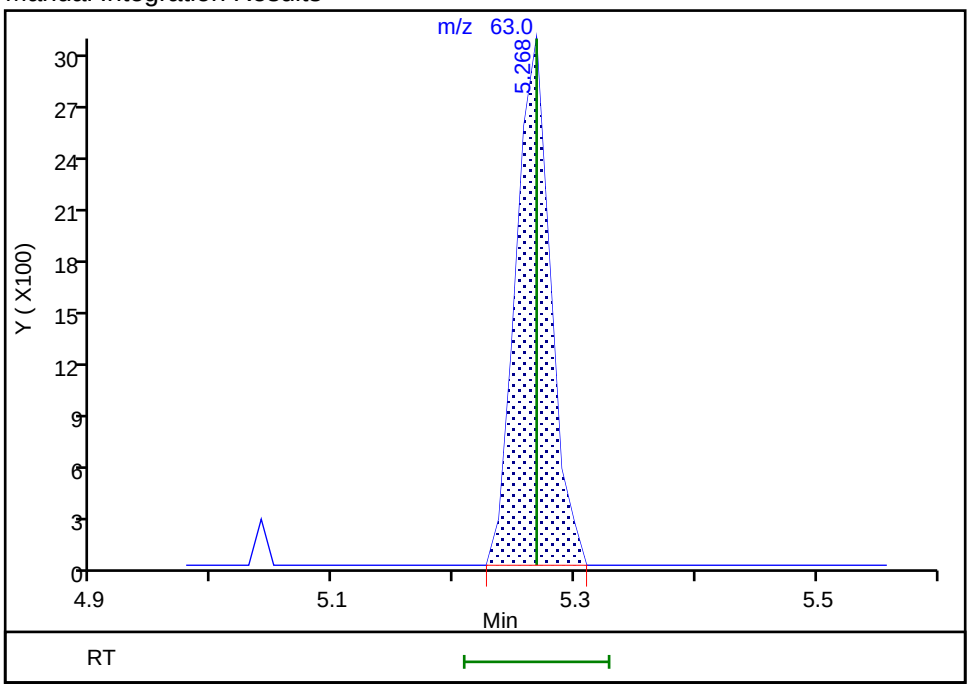
Not Detected
Expected RT: 5.27

Processing Integration Results



Manual Integration Results

RT: 5.27
Area: 6007
Amount: 0.549333
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:44:06
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

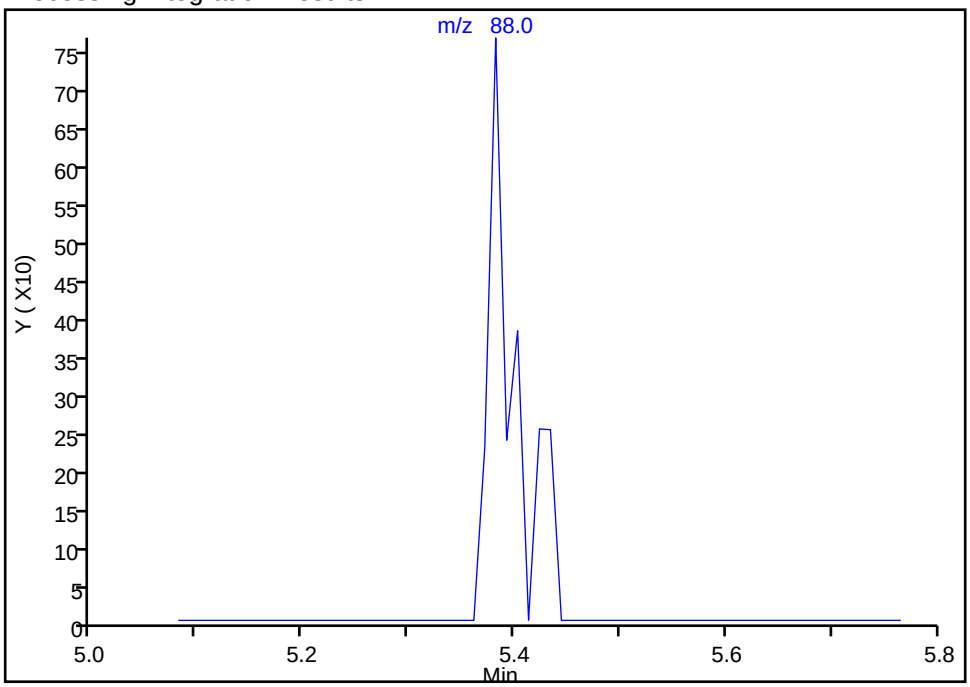
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

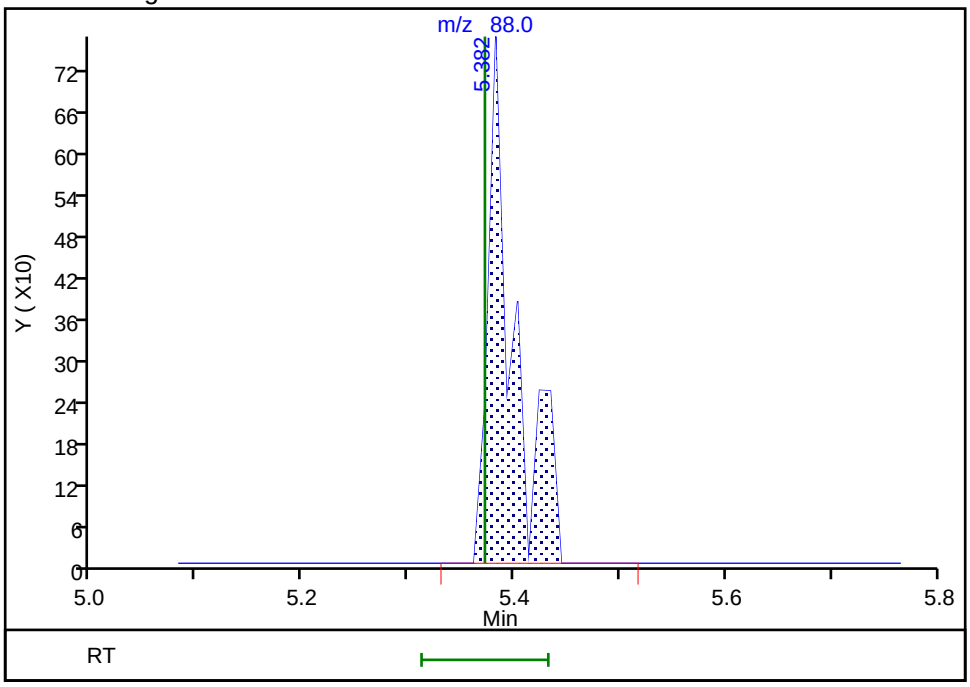
Not Detected
Expected RT: 5.37

Processing Integration Results



Manual Integration Results

RT: 5.38
Area: 1311
Amount: 7.117032
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:44:12
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

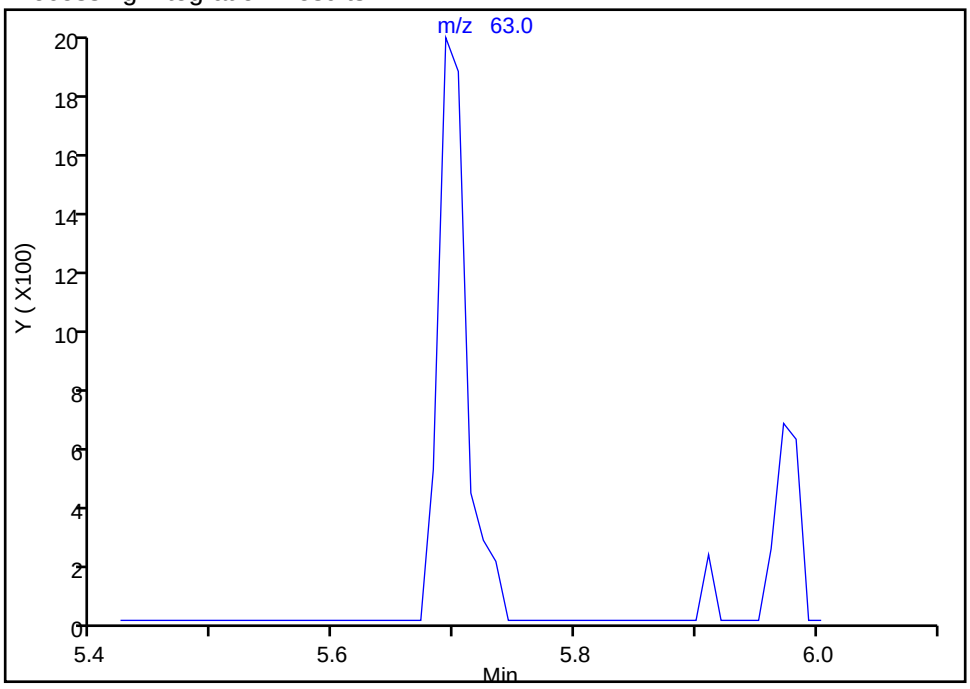
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

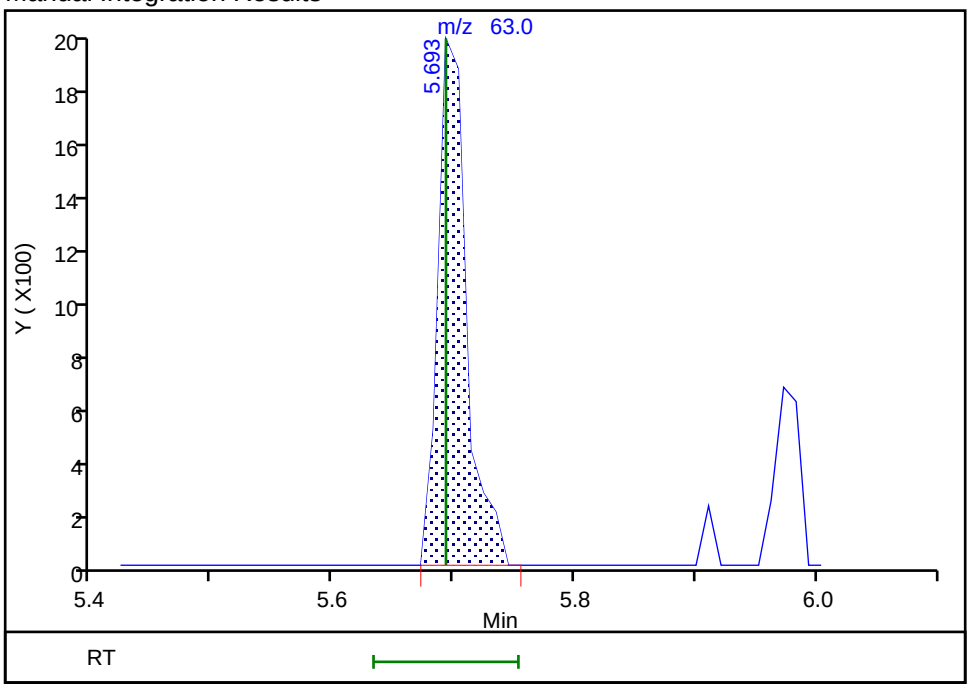
Not Detected
Expected RT: 5.69

Processing Integration Results



Manual Integration Results

RT: 5.69
Area: 3281
Amount: 0.387518
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:44:27
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

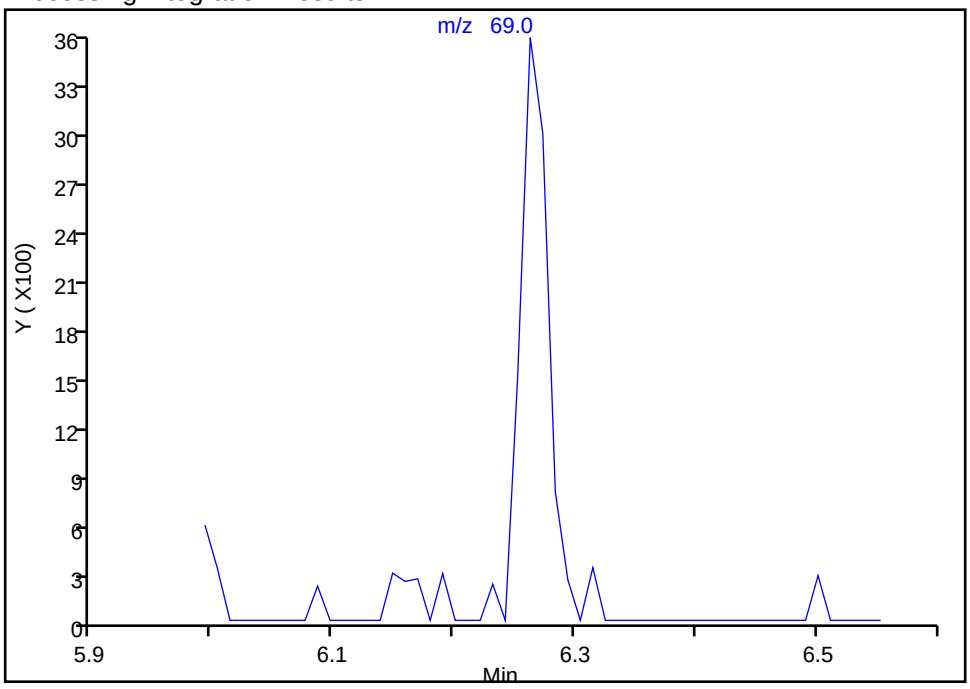
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

77 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

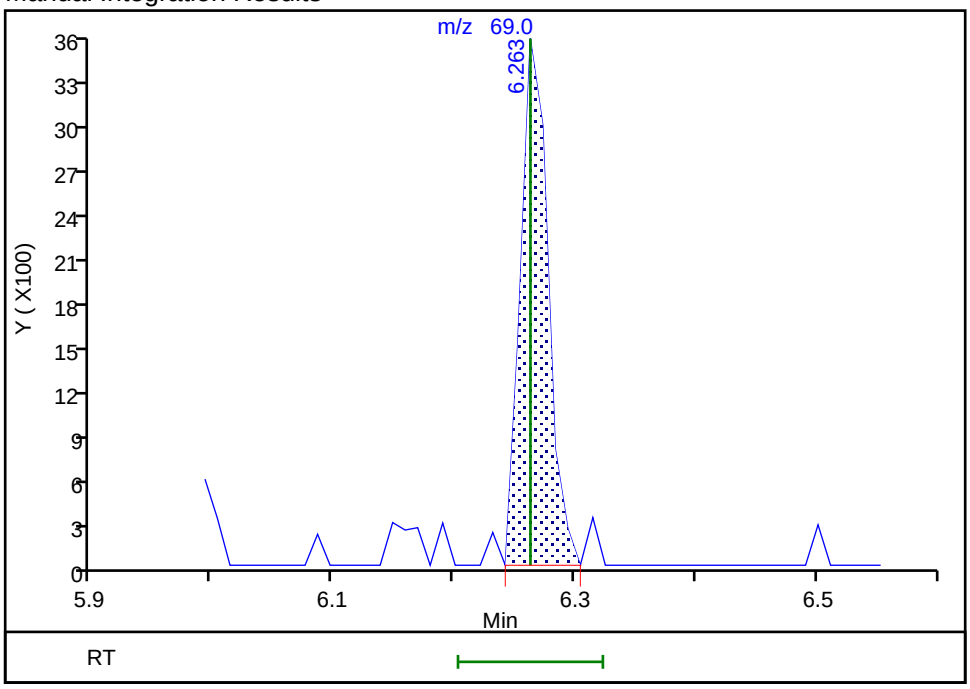
Not Detected
Expected RT: 6.26

Processing Integration Results



Manual Integration Results

RT: 6.26
Area: 5571
Amount: 0.388344
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:44:33
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

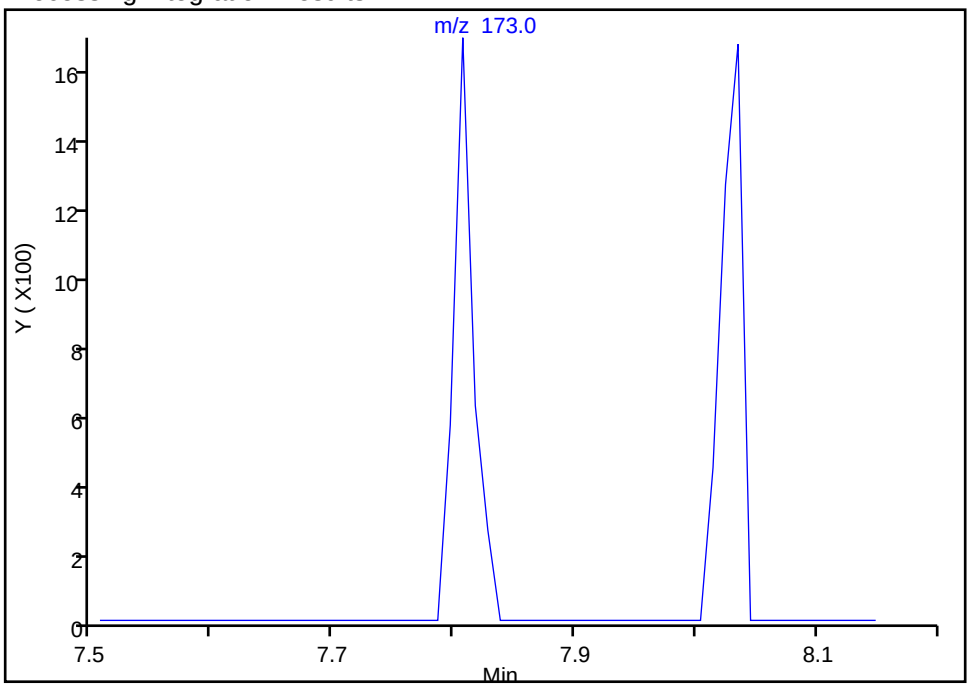
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

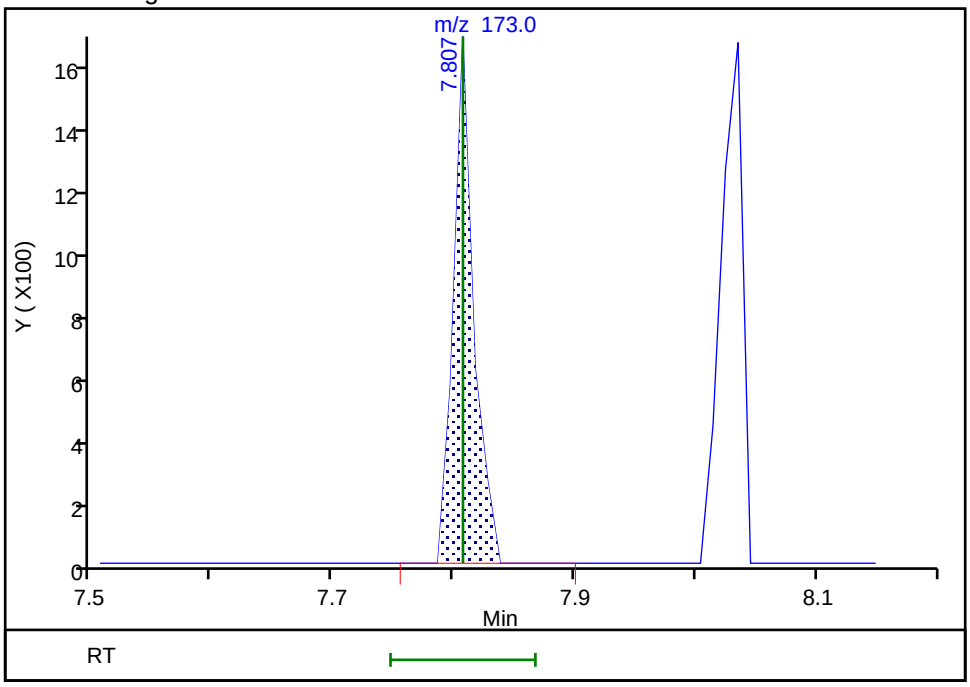
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.81
Area: 1951
Amount: 0.320739
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:44:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

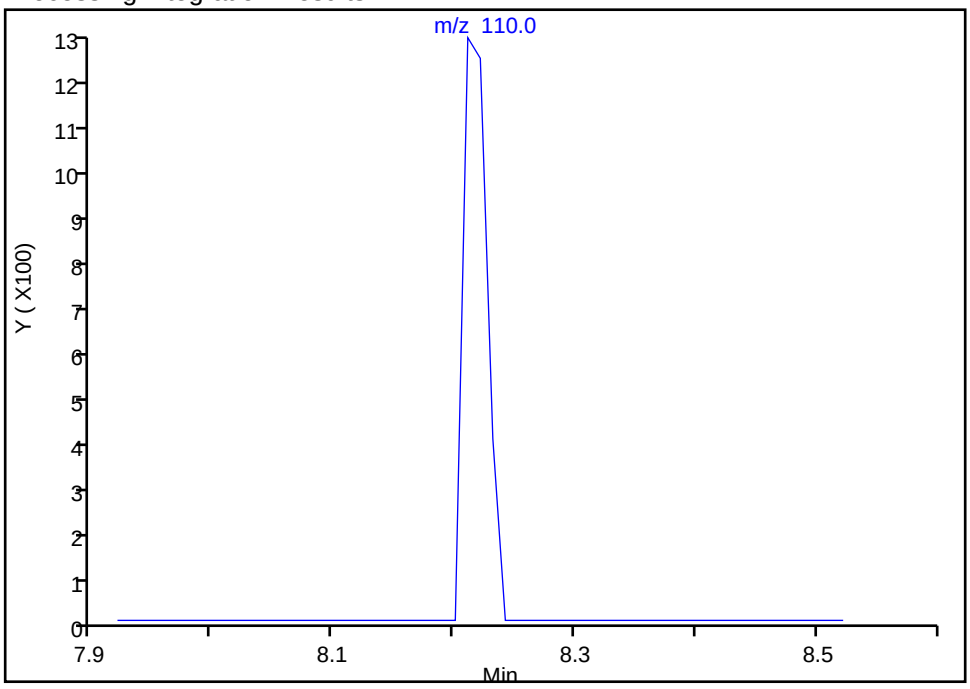
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

100 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

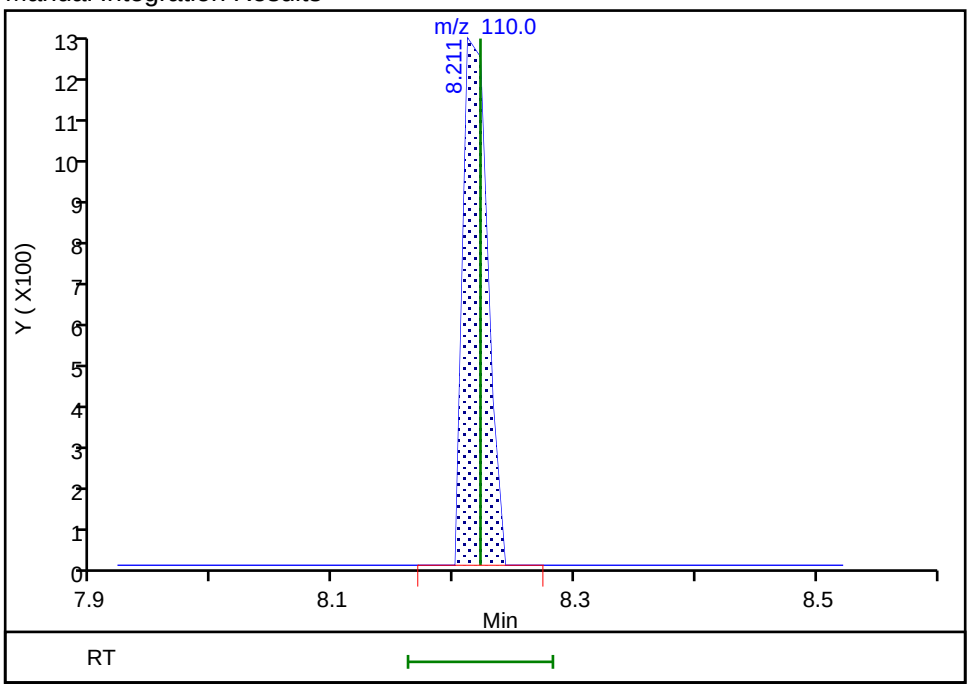
Not Detected
Expected RT: 8.22

Processing Integration Results



Manual Integration Results

RT: 8.21
Area: 1802
Amount: 0.401398
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:44:49
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

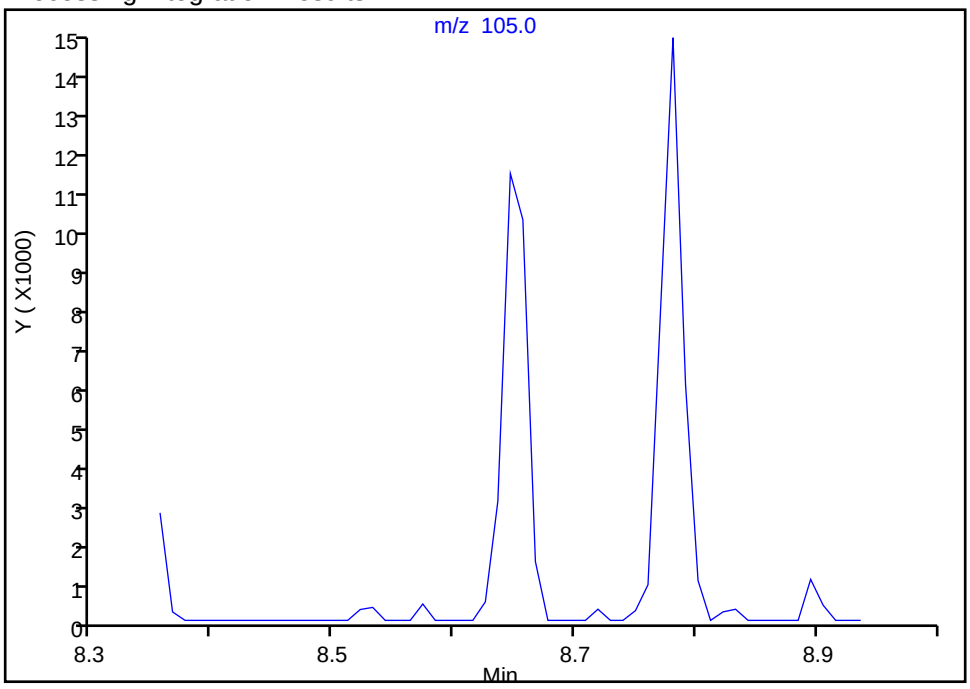
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

107 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

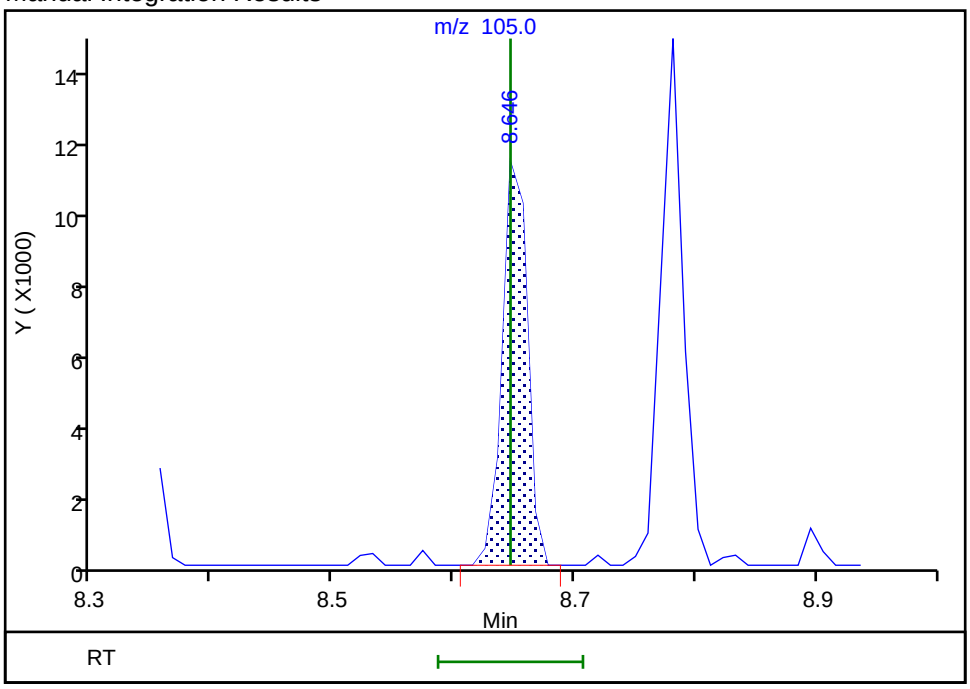
Not Detected
Expected RT: 8.65

Processing Integration Results



Manual Integration Results

RT: 8.65
Area: 16504
Amount: 0.420078
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:45:02
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

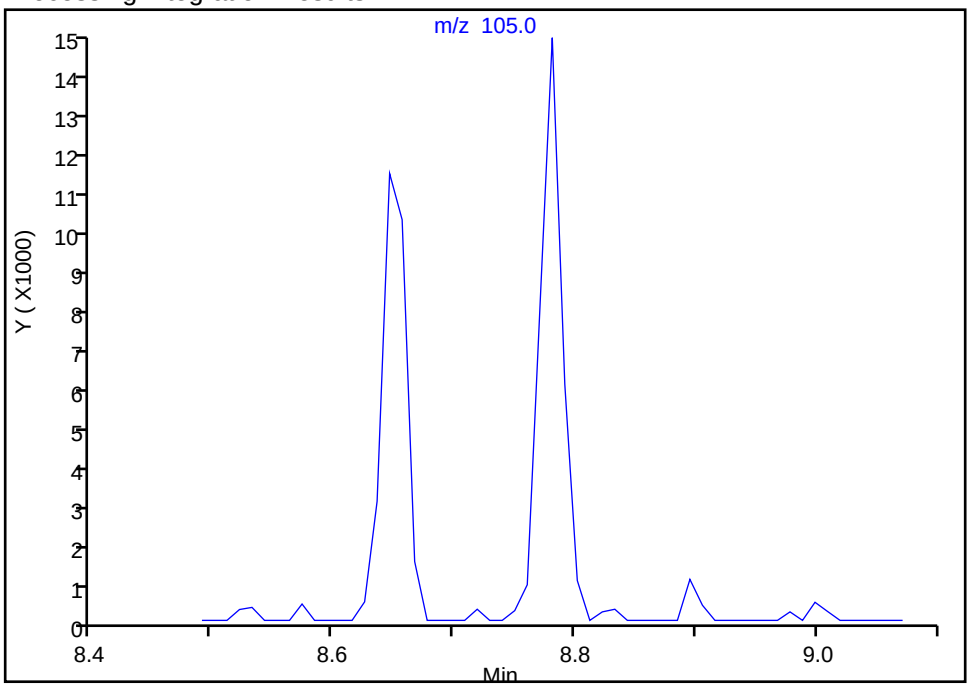
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

109 sec-Butylbenzene, CAS: 135-98-8

Signal: 1

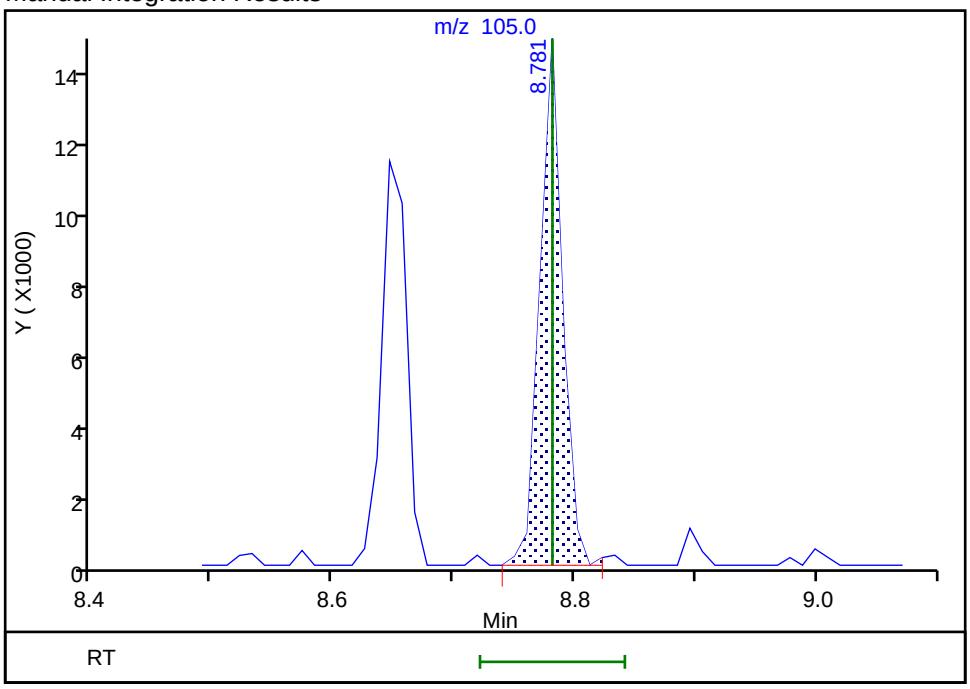
Not Detected
Expected RT: 8.78

Processing Integration Results



Manual Integration Results

RT: 8.78
Area: 19322
Amount: 0.405704
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:45:05
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

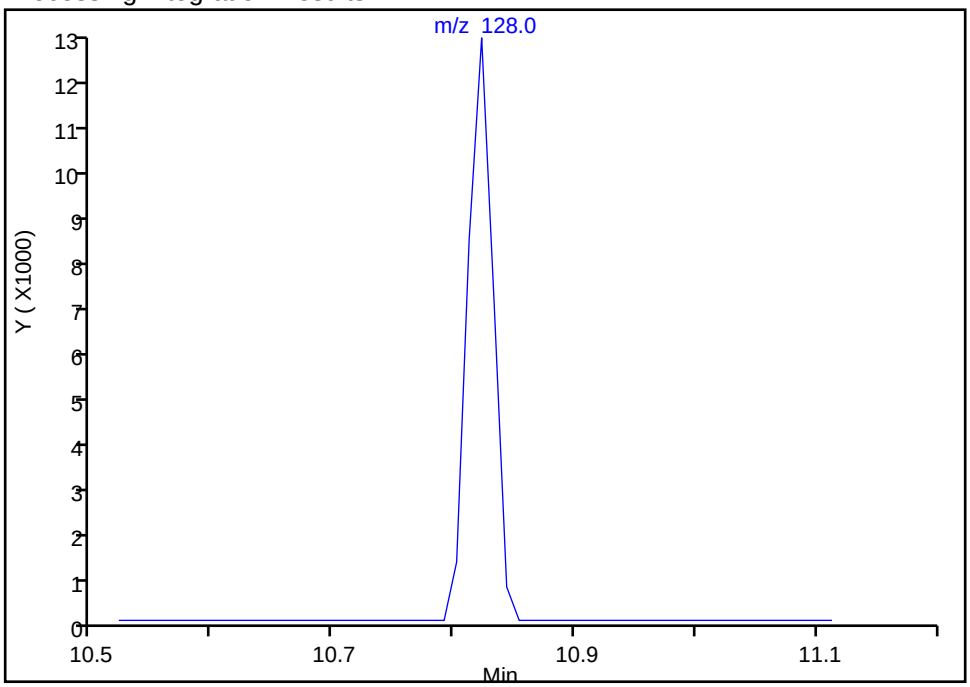
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3676.D
Injection Date: 07-Aug-2019 16:28:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: LH ALS Bottle#: 31 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

121 Naphthalene, CAS: 91-20-3

Signal: 1

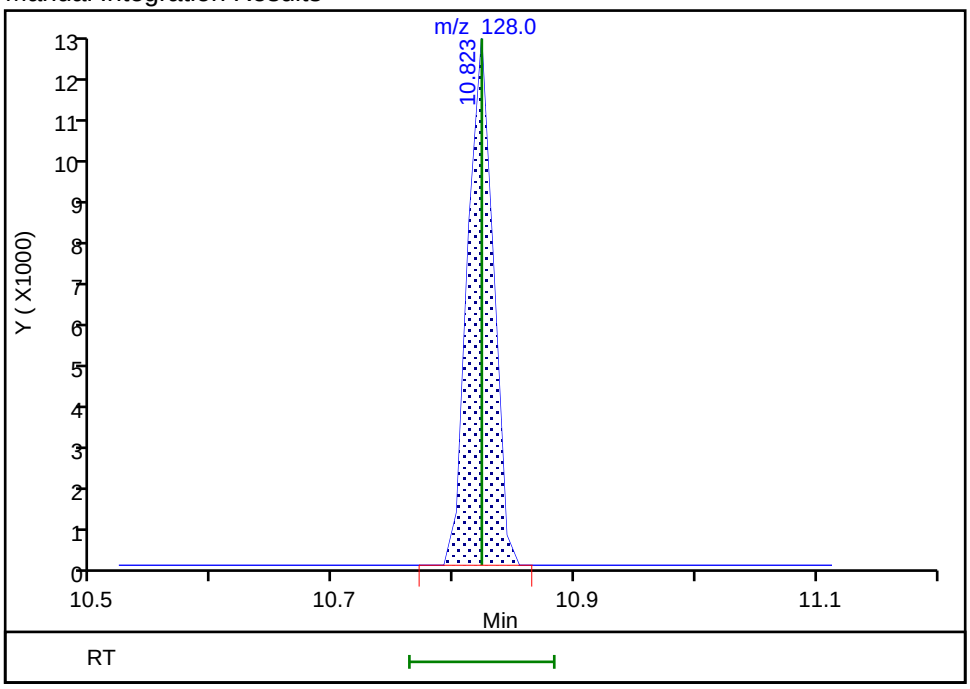
Not Detected
Expected RT: 10.82

Processing Integration Results



Manual Integration Results

RT: 10.82
Area: 18842
Amount: 0.377031
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:45:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Aug-2019 16:52:30 ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0083215-006
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:13 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 08:50:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	182893	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.103	-0.010	88	658781	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	97	356047	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	92	227374	25.0	24.7	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.594	4.595	-0.001	0	300611	25.0	24.4	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	845900	25.0	25.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	261950	25.0	25.1	
11 Dichlorodifluoromethane	85	1.216	1.216	0.000	95	10036	1.00	0.9639	
13 Chloromethane	50	1.372	1.372	0.000	98	19074	1.00	1.13	M
151 Butadiene	54	1.444	1.444	0.000	89	16876	1.00	1.17	
14 Vinyl chloride	62	1.454	1.465	-0.011	92	13458	1.00	1.04	
15 Bromomethane	94	1.714	1.714	0.000	91	5984	1.00	0.9312	M
16 Chloroethane	64	1.765	1.776	-0.011	72	5904	1.00	0.9803	M
18 Dichlorofluoromethane	67	2.004	2.004	0.000	95	13964	1.00	0.8777	M
17 Trichlorofluoromethane	101	2.004	2.014	-0.010	54	12506	1.00	0.9443	
19 Ethyl ether	59	2.242	2.242	0.000	92	10790	1.00	1.01	
21 Acrolein	56	2.429	2.429	0.000	94	13790	5.00	5.53	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.450	-0.011	61	8903	1.00	1.00	
22 1,1-Dichloroethene	96	2.439	2.450	-0.011	93	7611	1.00	0.9787	
23 Acetone	43	2.584	2.574	0.010	20	28253	5.00	5.18	M
24 Iodomethane	142	2.594	2.605	-0.011	98	15671	1.00	1.01	
25 Carbon disulfide	76	2.626	2.636	-0.010	97	29072	1.00	0.99	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	90	19771	1.00	0.9613	M
28 Methyl acetate	43	2.843	2.833	0.010	99	30048	2.00	1.96	M
30 Methylene Chloride	84	2.926	2.926	0.000	93	11884	1.00	1.15	
31 2-Methyl-2-propanol	59	3.123	3.102	0.021	64	26171	10.0	10.3	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	94	29867	1.00	1.02	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	89	9541	1.00	1.00	
34 Acrylonitrile	53	3.185	3.175	0.010	96	70838	10.0	10.3	
35 Hexane	57	3.278	3.289	-0.011	93	41423	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	19036	1.00	0.9836	
39 Vinyl acetate	43	3.537	3.527	0.010	97	60223	2.00	2.09	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	85	14970	1.00	1.07	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	11585	1.00	1.08	
44 2-Butanone (MEK)	43	3.993	3.983	0.010	97	45655	5.00	5.10	
47 Chlorobromomethane	128	4.149	4.149	0.000	93	5981	1.00	1.06	
48 Tetrahydrofuran	42	4.170	4.159	0.011	95	12938	2.00	1.98	
50 Chloroform	83	4.211	4.211	0.000	96	21102	1.00	1.23	
52 Cyclohexane	56	4.304	4.304	0.000	91	24961	1.00	1.10	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	72	13824	1.00	0.9563	
53 Carbon tetrachloride	117	4.418	4.418	0.000	93	13769	1.00	1.06	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	87	13068	1.00	1.03	
55 Benzene	78	4.594	4.595	-0.001	45	38976	1.00	1.04	
56 Isobutyl alcohol	43	4.615	4.605	0.010	92	26032	25.0	23.1	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	37	15591	1.00	0.9778	
59 n-Heptane	43	4.719	4.719	0.000	93	21798	1.00	1.08	
60 Trichloroethene	95	5.071	5.071	0.000	94	10227	1.00	1.08	
62 Methylcyclohexane	83	5.164	5.165	-0.001	95	17709	1.00	1.07	
63 1,2-Dichloropropane	63	5.268	5.268	0.000	91	11288	1.00	1.01	
65 Dibromomethane	93	5.372	5.372	0.000	94	6286	1.00	0.9795	
66 1,4-Dioxane	88	5.382	5.372	0.010	46	3690	20.0	20.1	
67 Dichlorobromomethane	83	5.486	5.486	0.000	93	13043	1.00	1.06	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	87	8655	1.00	1.00	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	90	16801	1.00	1.09	
72 4-Methyl-2-pentanone (MIBK	43	5.921	5.911	0.010	97	90736	5.00	5.15	
73 Toluene	92	6.025	6.025	0.000	98	25974	1.00	1.12	
75 trans-1,3-Dichloropropene	75	6.242	6.232	0.010	97	14791	1.00	1.04	
77 Ethyl methacrylate	69	6.263	6.263	0.000	96	14330	1.00	1.00	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	93	7394	1.00	1.04	
79 Tetrachloroethene	166	6.429	6.429	0.000	92	10567	1.00	1.09	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	97	15800	1.00	1.04	
81 2-Hexanone	43	6.553	6.543	0.010	99	58720	5.00	4.79	
82 Chlorodibromomethane	129	6.688	6.688	0.000	87	9428	1.00	1.02	
83 Ethylene Dibromide	107	6.771	6.771	0.000	98	9022	1.00	0.9603	
86 Chlorobenzene	112	7.123	7.123	0.000	96	27918	1.00	1.08	
88 Ethylbenzene	91	7.185	7.185	0.000	98	48023	1.00	1.10	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.196	-0.011	89	9117	1.00	0.9899	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	19330	1.00	1.13	
91 o-Xylene	106	7.589	7.590	-0.001	94	17940	1.00	1.08	
92 Styrene	104	7.610	7.610	0.000	97	29341	1.00	1.02	
93 Bromoform	173	7.807	7.807	0.000	77	6303	1.00	1.04	M
95 Isopropylbenzene	105	7.869	7.869	0.000	96	44071	1.00	0.9893	
97 Bromobenzene	156	8.149	8.149	0.000	99	11238	1.00	1.04	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.191	-0.011	96	12582	1.00	0.9413	
99 N-Propylbenzene	91	8.201	8.201	0.000	98	55122	1.00	1.04	
100 1,2,3-Trichloropropane	110	8.211	8.222	-0.011	87	5027	1.00	1.12	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	76	6746	1.00	1.08	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	11293	1.00	1.06	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	94	38634	1.00	1.01	
102 4-Chlorotoluene	91	8.387	8.377	0.010	98	34808	1.00	1.01	
106 tert-Butylbenzene	134	8.605	8.605	0.000	92	8959	1.00	1.06	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	96	39613	1.00	1.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	48325	1.00	1.02	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	40965	1.00	0.9883	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	98	23221	1.00	1.05	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	94	22855	1.00	1.04	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	38690	1.00	1.02	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	22721	1.00	1.05	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	83	2566	1.00	0.8569	
119 1,2,4-Trichlorobenzene	180	10.615	10.605	0.010	92	16186	1.00	1.01	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	91	6494	1.00	0.9249	
121 Naphthalene	128	10.823	10.823	0.000	97	50559	1.00	1.01	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	96	16823	1.00	1.05	
S 126 Xylenes, Total	1				0			2.20	
S 123 1,3-Dichloropropene, Total	1				0			2.12	
S 125 Total BTEX	1				0			5.47	
S 124 1,2-Dichloroethene, Total	1				0			2.08	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00162	Amount Added:	1.00	Units: uL	
GAS CORP mix_00354	Amount Added:	1.00	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 08-Aug-2019 15:53:15 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D

Injection Date:	07-Aug-2019 16:52:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

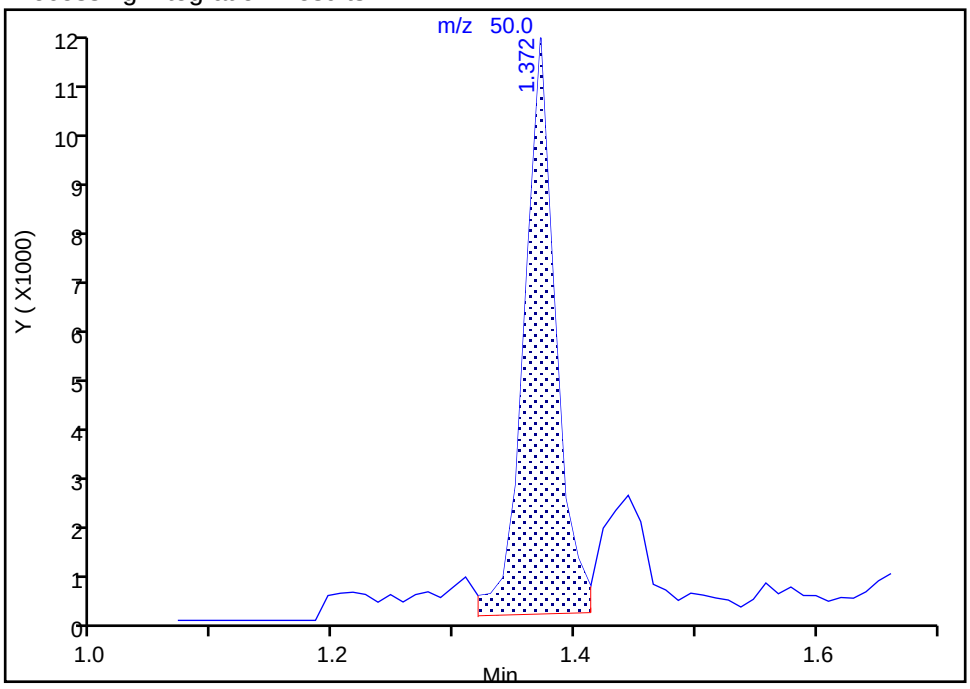
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

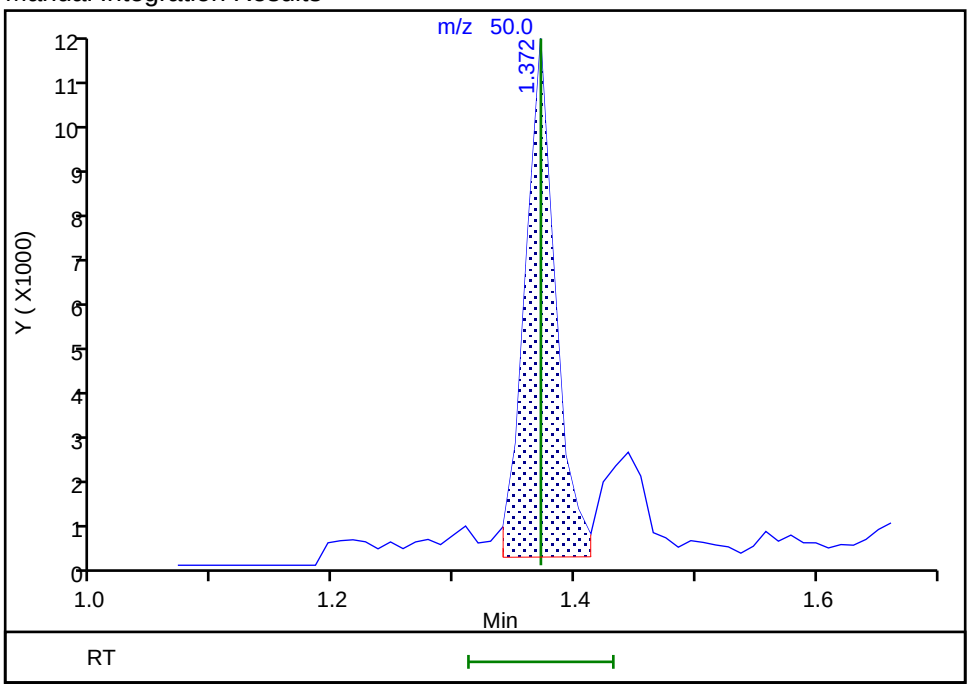
Processing Integration Results

RT: 1.37
Area: 19807
Amount: 1.167625
Amount Units: ug/L



Manual Integration Results

RT: 1.37
Area: 19074
Amount: 1.130521
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:46:13
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

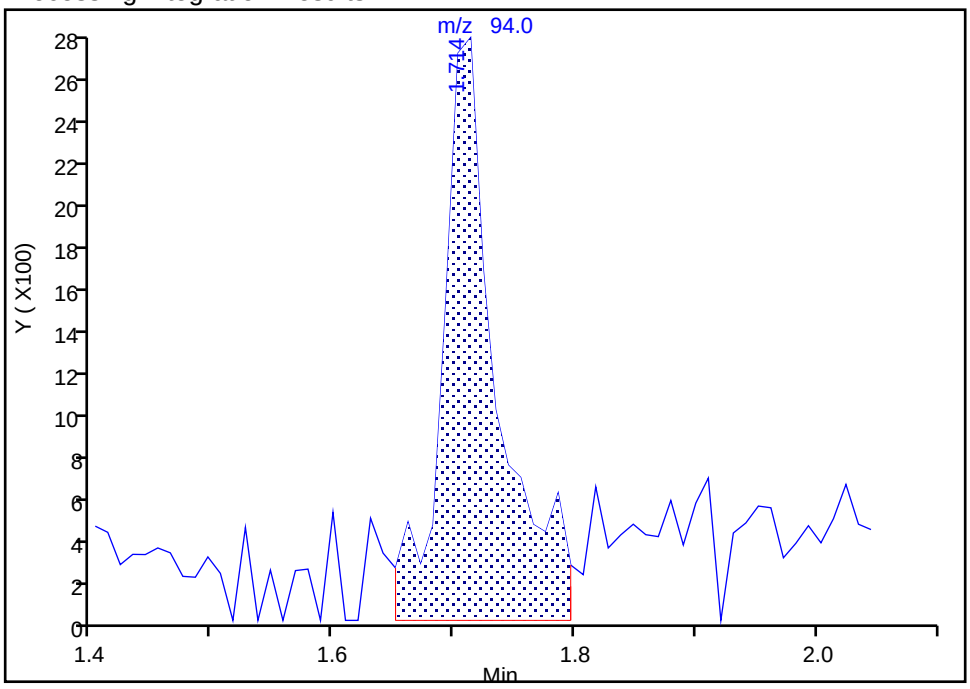
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

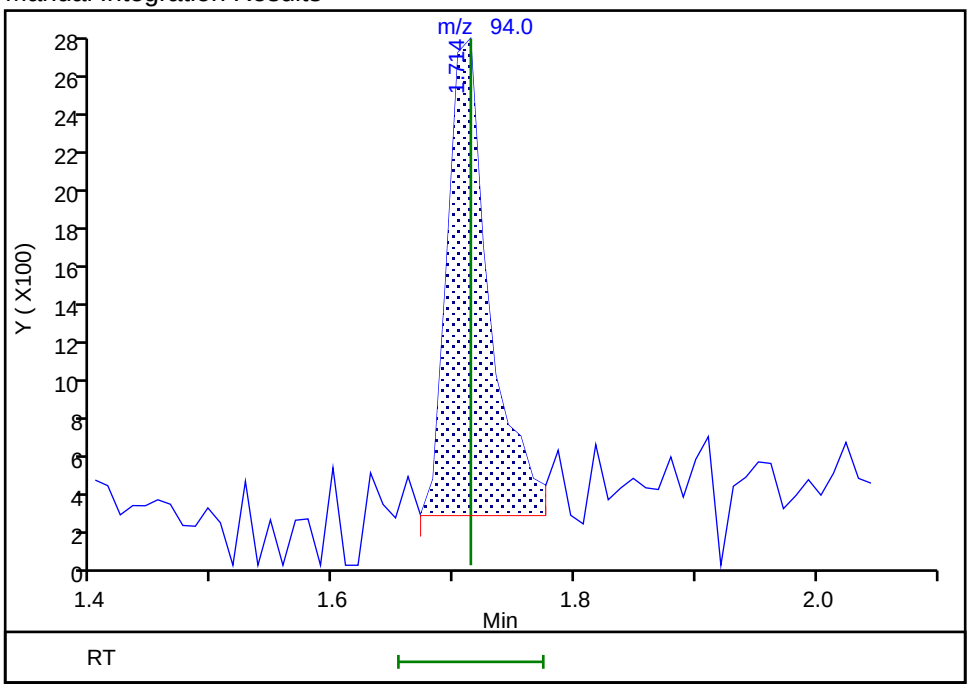
Processing Integration Results

RT: 1.71
Area: 8711
Amount: 1.290766
Amount Units: ug/L



Manual Integration Results

RT: 1.71
Area: 5984
Amount: 0.931241
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:46:35
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

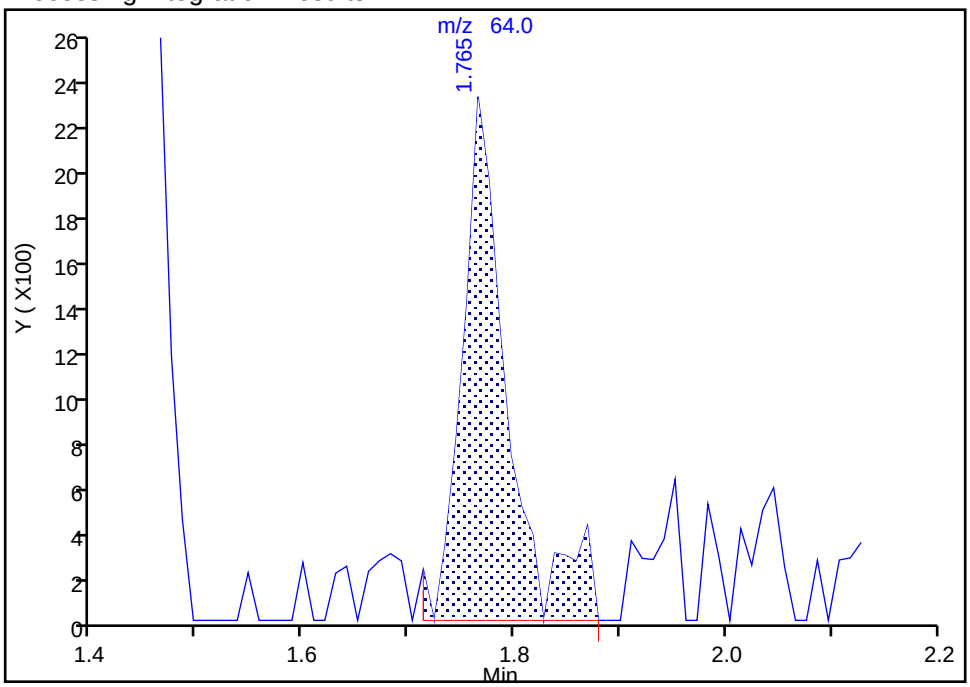
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

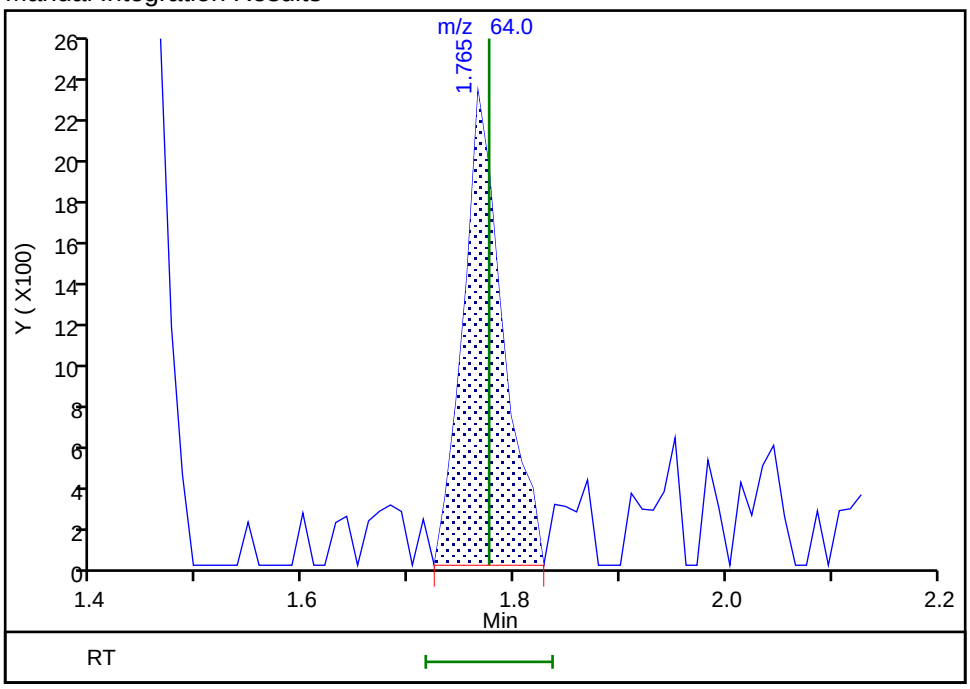
Processing Integration Results

RT: 1.77
Area: 6809
Amount: 1.106805
Amount Units: ug/L



Manual Integration Results

RT: 1.77
Area: 5904
Amount: 0.980299
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:46:46
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

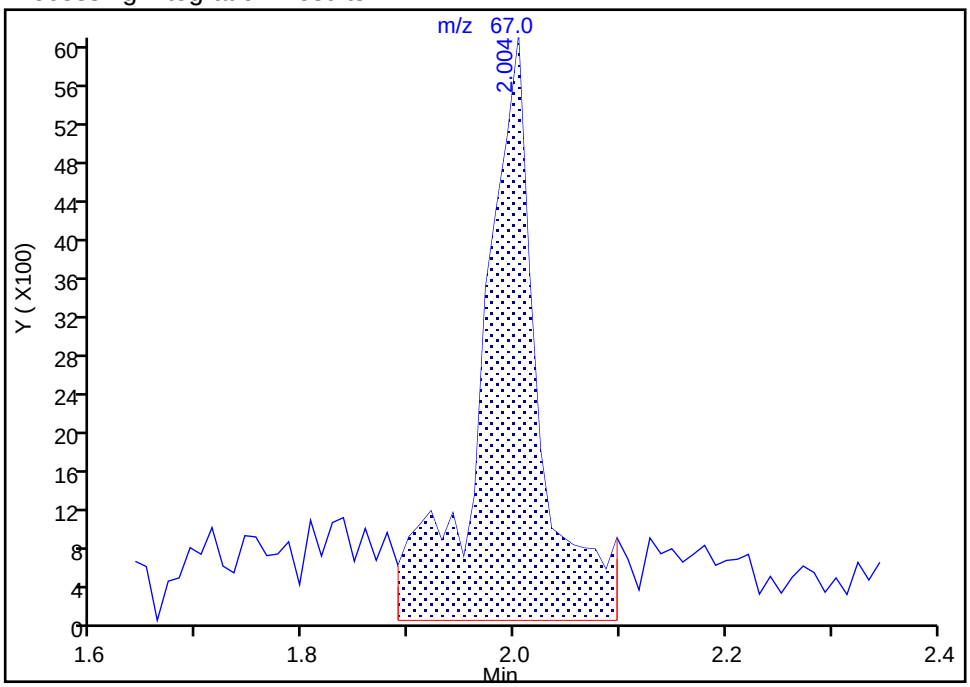
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

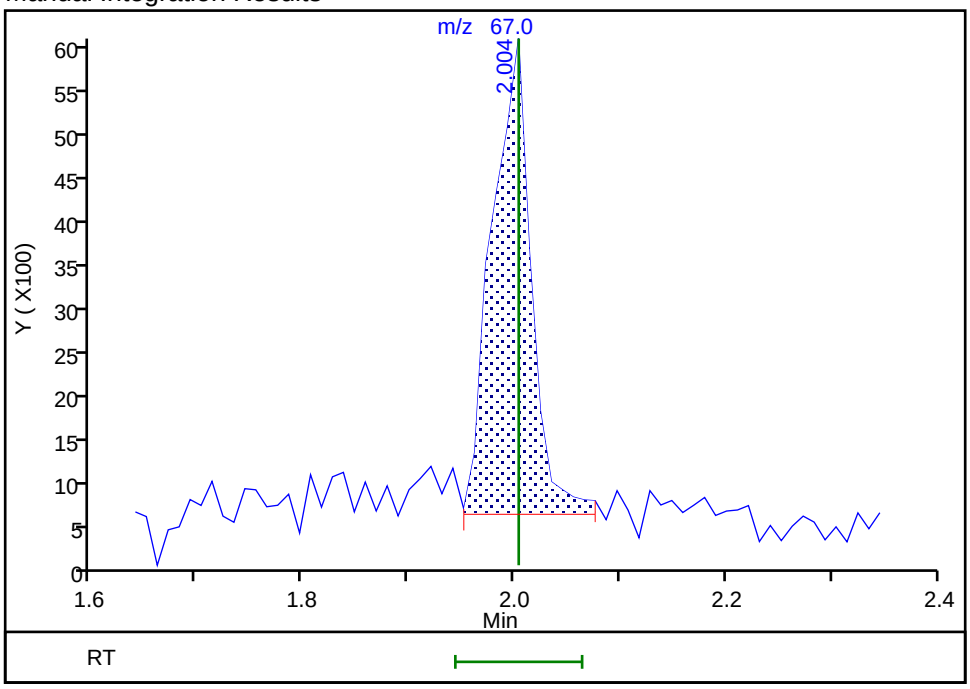
Processing Integration Results

RT: 2.00
Area: 22908
Amount: 1.345372
Amount Units: ug/L



Manual Integration Results

RT: 2.00
Area: 13964
Amount: 0.877728
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:46:59
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

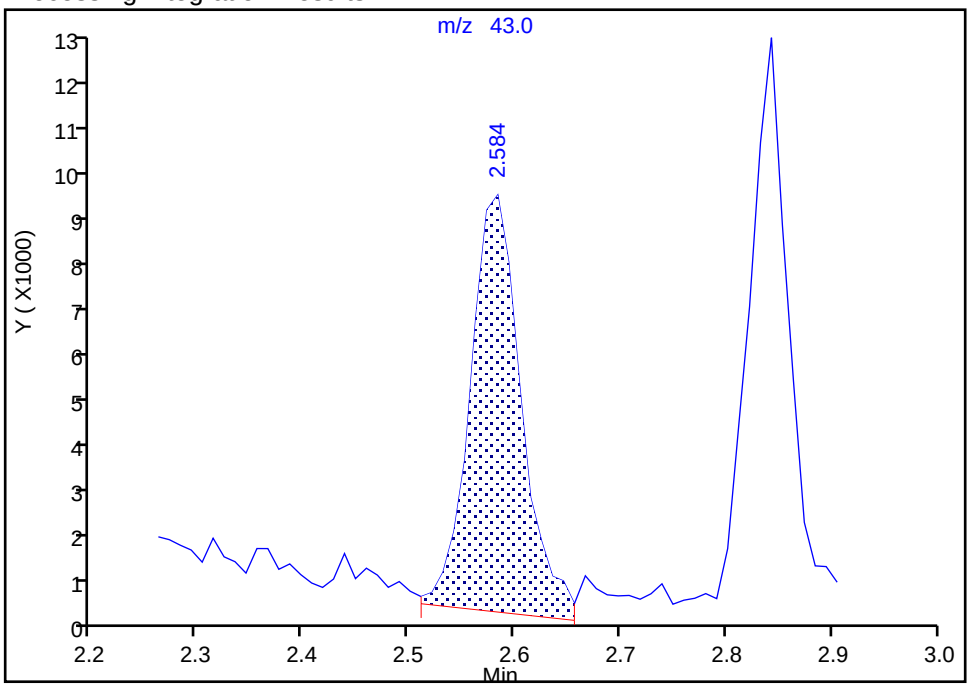
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

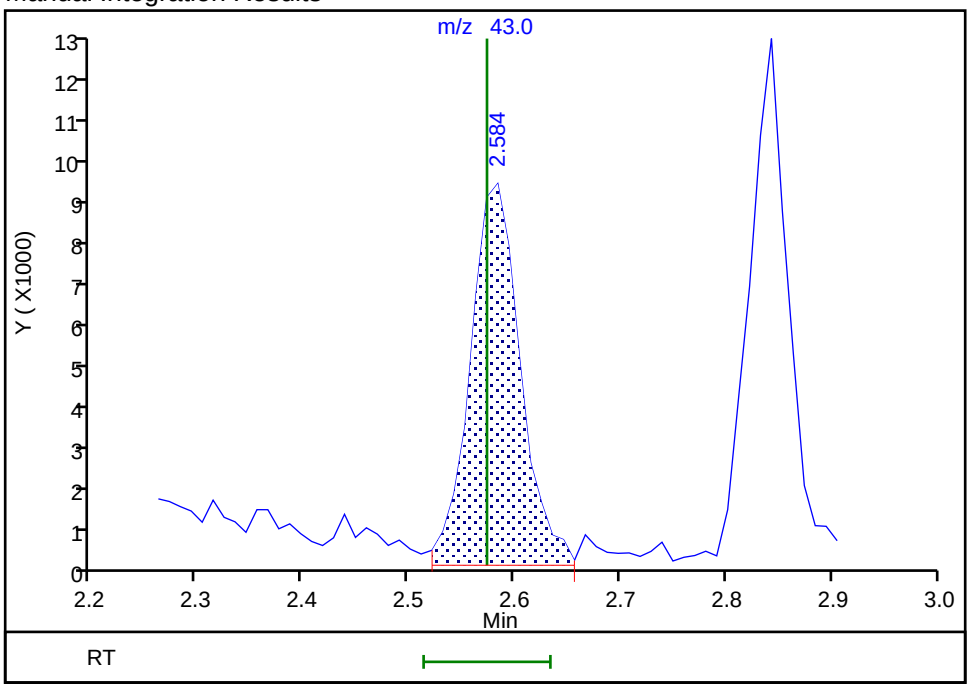
Processing Integration Results

RT: 2.58
Area: 29035
Amount: 5.299597
Amount Units: ug/L



Manual Integration Results

RT: 2.58
Area: 28253
Amount: 5.175331
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:48:49
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

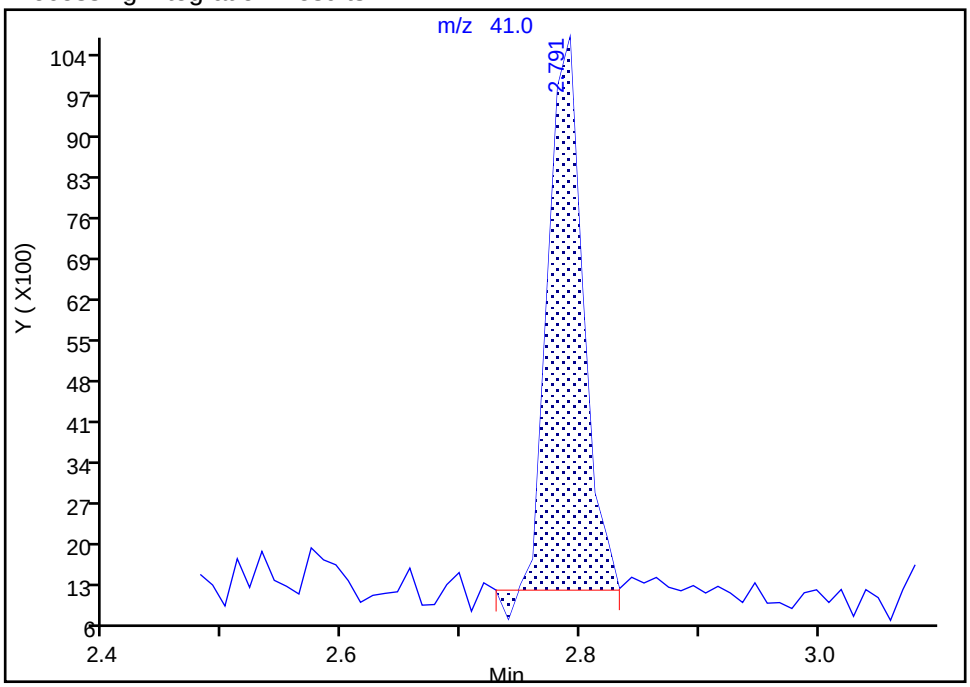
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

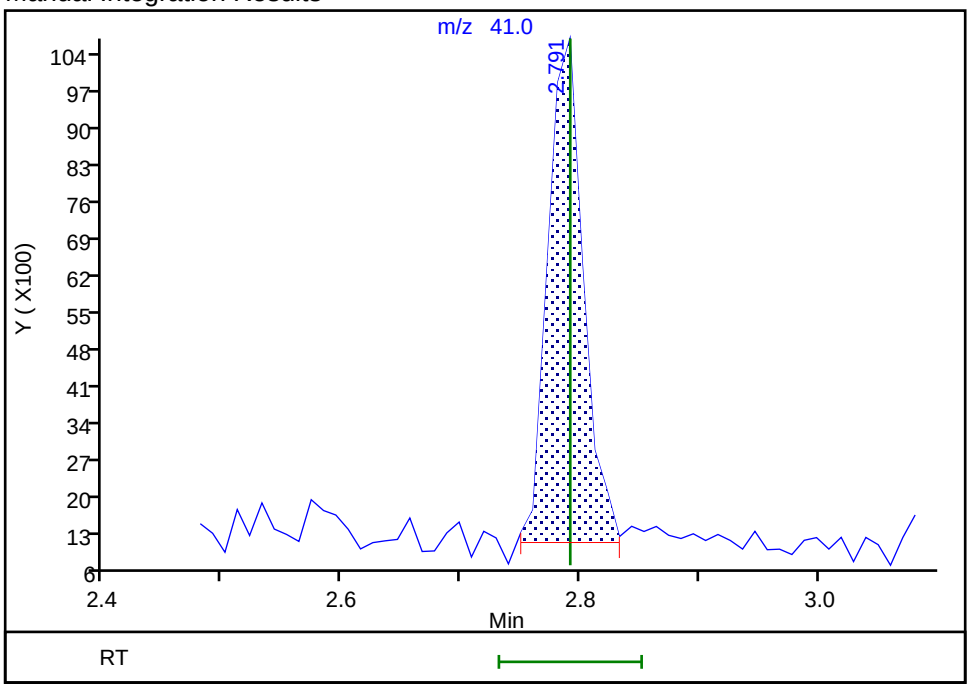
Processing Integration Results

RT: 2.79
Area: 18977
Amount: 0.927159
Amount Units: ug/L



Manual Integration Results

RT: 2.79
Area: 19771
Amount: 0.961290
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:49:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

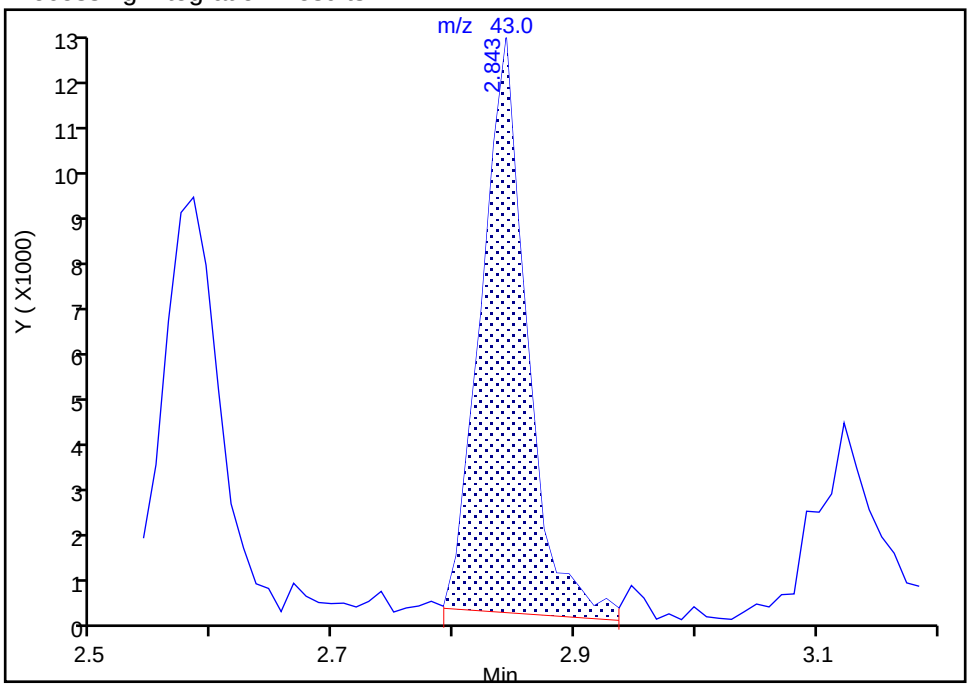
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

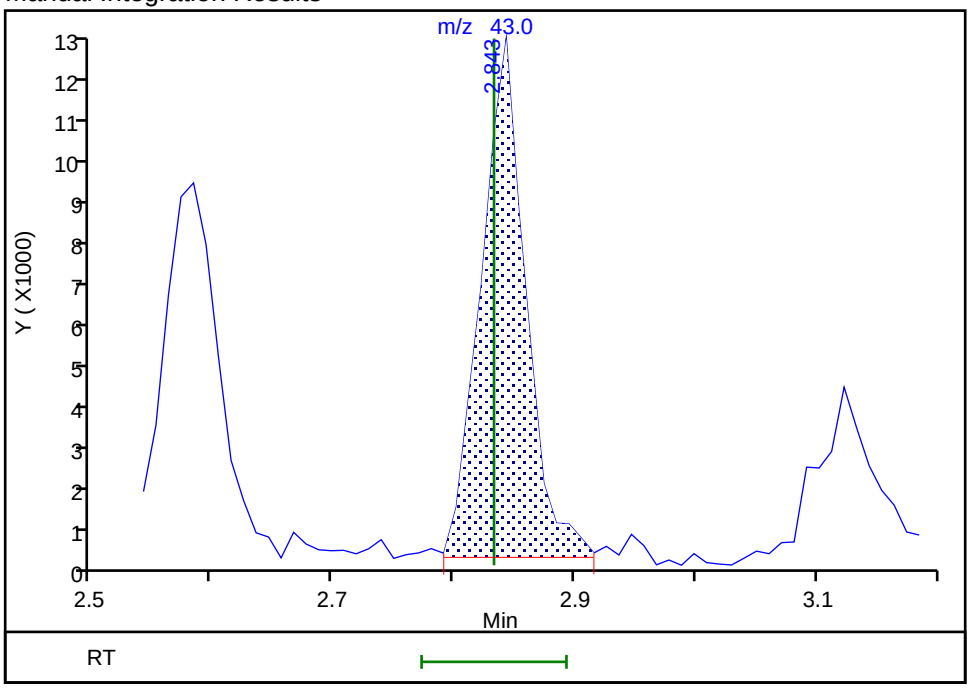
Processing Integration Results

RT: 2.84
Area: 30886
Amount: 2.004717
Amount Units: ug/L



Manual Integration Results

RT: 2.84
Area: 30048
Amount: 1.956978
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:49:16
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

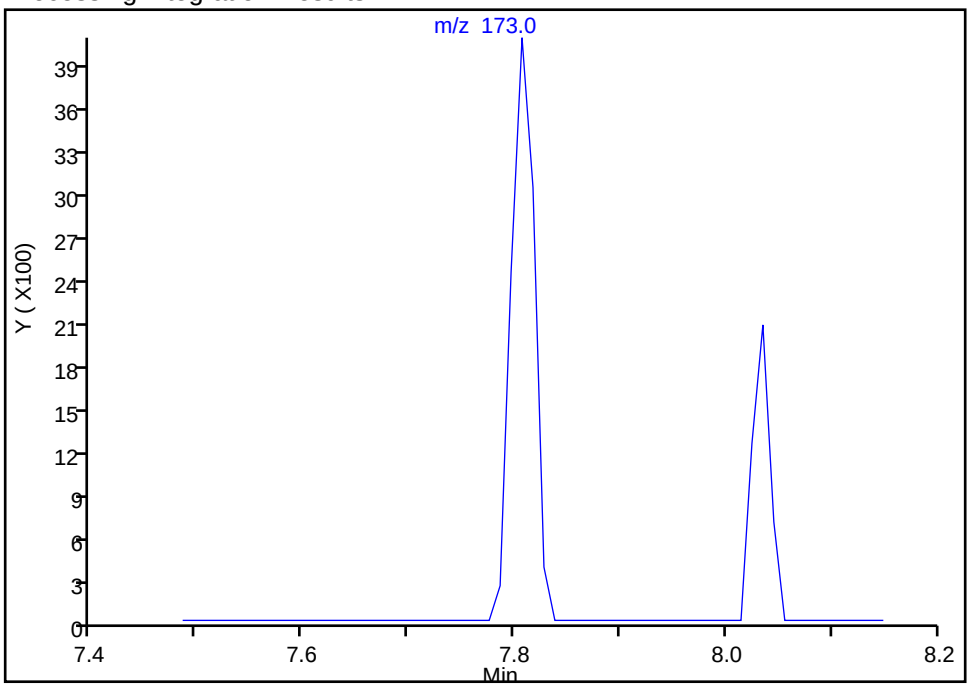
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3677.D
Injection Date: 07-Aug-2019 16:52:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 32 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

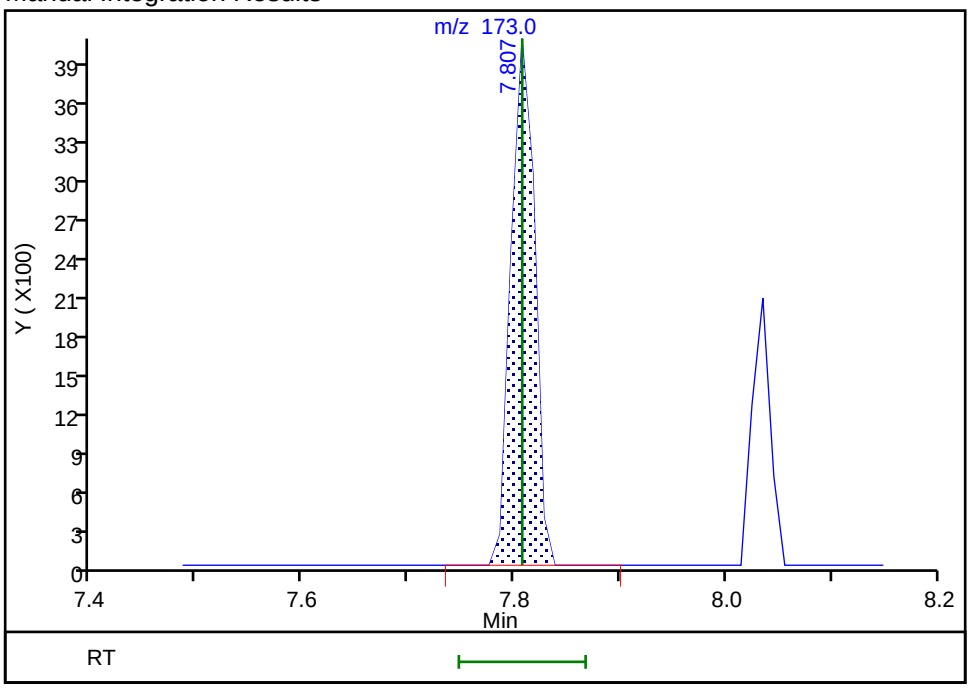
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.81
Area: 6303
Amount: 1.038552
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:49:38
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3678.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Aug-2019 17:16:30 ALS Bottle#: 33 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0083215-007
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:19 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 08:51:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	183393	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.102	7.103	0.000	87	664304	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	360687	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	93	225685	25.0	24.4	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.595	4.595	0.000	0	302713	25.0	24.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	858756	25.0	25.1	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	261736	25.0	24.9	
11 Dichlorodifluoromethane	85	1.216	1.216	0.000	98	24242	2.00	2.32	
13 Chloromethane	50	1.372	1.372	0.000	98	33143	2.00	1.96	
151 Butadiene	54	1.444	1.444	0.000	89	30657	2.00	2.12	
14 Vinyl chloride	62	1.465	1.465	0.000	96	27231	2.00	2.10	
15 Bromomethane	94	1.714	1.714	0.000	91	15011	2.00	2.33	
16 Chloroethane	64	1.765	1.776	-0.011	95	12235	2.00	2.03	
18 Dichlorofluoromethane	67	2.004	2.004	0.000	94	34984	2.00	2.19	
17 Trichlorofluoromethane	101	2.004	2.014	-0.010	65	27961	2.00	2.11	
19 Ethyl ether	59	2.253	2.242	0.010	96	21267	2.00	1.98	
21 Acrolein	56	2.429	2.429	0.000	88	28354	10.0	11.3	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.450	-0.011	60	20594	2.00	2.31	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	92	17614	2.00	2.26	
23 Acetone	43	2.584	2.574	0.010	99	56810	10.0	10.4	
24 Iodomethane	142	2.605	2.605	0.000	100	32245	2.00	2.07	
25 Carbon disulfide	76	2.626	2.636	-0.010	99	58901	2.00	2.01	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	89	42403	2.00	2.06	
28 Methyl acetate	43	2.843	2.833	0.010	100	63644	4.00	4.13	
30 Methylene Chloride	84	2.926	2.926	0.000	94	23225	2.00	2.24	
31 2-Methyl-2-propanol	59	3.113	3.102	0.011	67	48737	20.0	19.1	
33 Methyl tert-butyl ether	73	3.123	3.113	0.010	87	56324	2.00	1.91	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	91	18625	2.00	1.94	
34 Acrylonitrile	53	3.185	3.175	0.010	100	142965	20.0	20.6	
35 Hexane	57	3.278	3.289	-0.011	93	62945	2.00	2.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	96	38935	2.00	2.01	
39 Vinyl acetate	43	3.538	3.527	0.011	98	110814	4.00	3.83	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	91	29655	2.00	2.12	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	85	22138	2.00	2.06	
44 2-Butanone (MEK)	43	3.994	3.983	0.011	97	87170	10.0	9.71	
47 Chlorobromomethane	128	4.149	4.149	0.000	91	10673	2.00	1.89	
48 Tetrahydrofuran	42	4.170	4.159	0.011	97	27702	4.00	4.23	
50 Chloroform	83	4.211	4.211	0.000	94	36688	2.00	2.13	
52 Cyclohexane	56	4.304	4.304	0.000	89	48857	2.00	2.14	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	73	27619	2.00	1.91	
53 Carbon tetrachloride	117	4.418	4.418	0.000	95	26936	2.00	2.06	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	89	26505	2.00	2.08	
55 Benzene	78	4.595	4.595	0.000	52	76540	2.00	2.04	
56 Isobutyl alcohol	43	4.615	4.605	0.010	96	52284	50.0	46.3	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	95	31321	2.00	1.96	
59 n-Heptane	43	4.719	4.719	0.000	97	44402	2.00	2.19	
60 Trichloroethene	95	5.071	5.071	0.000	93	20061	2.00	2.11	
62 Methylcyclohexane	83	5.165	5.165	0.000	97	35798	2.00	2.15	
63 1,2-Dichloropropane	63	5.258	5.268	-0.010	91	23036	2.00	2.05	
65 Dibromomethane	93	5.372	5.372	0.000	95	12330	2.00	1.92	
66 1,4-Dioxane	88	5.382	5.372	0.010	48	8075	40.0	43.6	
67 Dichlorobromomethane	83	5.486	5.486	0.000	96	22622	2.00	1.84	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	91	16469	2.00	1.90	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	90	29196	2.00	1.88	
72 4-Methyl-2-pentanone (MIBK	43	5.921	5.911	0.010	98	175479	10.0	9.87	
73 Toluene	92	6.025	6.025	0.000	97	47066	2.00	2.02	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	92	26972	2.00	1.87	
77 Ethyl methacrylate	69	6.263	6.263	0.000	94	26825	2.00	1.86	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	94	15181	2.00	2.11	
79 Tetrachloroethene	166	6.429	6.429	0.000	95	20485	2.00	2.09	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	98	29883	2.00	1.94	
81 2-Hexanone	43	6.553	6.543	0.010	98	120038	10.0	9.70	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	17016	2.00	1.83	
83 Ethylene Dibromide	107	6.771	6.771	0.000	97	20284	2.00	2.14	
86 Chlorobenzene	112	7.123	7.123	0.000	92	53582	2.00	2.05	
88 Ethylbenzene	91	7.185	7.185	0.000	98	89609	2.00	2.03	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.196	-0.011	92	18215	2.00	1.96	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	36663	2.00	2.12	
91 o-Xylene	106	7.589	7.590	-0.001	97	32631	2.00	1.94	
92 Styrene	104	7.610	7.610	0.000	97	57578	2.00	1.99	
93 Bromoform	173	7.807	7.807	0.000	94	11316	2.00	1.85	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	91645	2.00	2.03	
97 Bromobenzene	156	8.149	8.149	0.000	97	21406	2.00	1.96	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.191	-0.011	96	25516	2.00	1.88	
99 N-Propylbenzene	91	8.201	8.201	0.000	98	111412	2.00	2.07	
100 1,2,3-Trichloropropane	110	8.222	8.222	0.000	86	7793	2.00	1.72	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	74	11311	2.00	1.78	
105 2-Chlorotoluene	126	8.294	8.294	0.000	95	20397	2.00	1.90	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	94	80048	2.00	2.06	
102 4-Chlorotoluene	91	8.387	8.377	0.010	99	77828	2.00	2.24	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	16742	2.00	1.96	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	-0.001	97	80051	2.00	2.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	96749	2.00	2.01	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	85381	2.00	2.03	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	96	44586	2.00	1.99	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	95	44972	2.00	2.01	
115 n-Butylbenzene	91	9.237	9.237	0.000	97	75022	2.00	1.95	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	44259	2.00	2.01	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	78	5658	2.00	1.87	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	92	34041	2.00	2.09	
120 Hexachlorobutadiene	225	10.709	10.719	-0.010	96	14541	2.00	2.04	
121 Naphthalene	128	10.823	10.823	0.000	97	94893	2.00	1.88	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	96	34012	2.00	2.09	
S 126 Xylenes, Total	1				0			4.06	
S 123 1,3-Dichloropropene, Total	1				0			3.75	
S 125 Total BTEX	1				0			10.2	
S 124 1,2-Dichloroethene, Total	1				0			4.00	

Reagents:

GAS CORP mix_00354	Amount Added:	2.00	Units: uL	
8260 CORP mix_00162	Amount Added:	2.00	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added:	1.00	Units: uL	Run Reagent

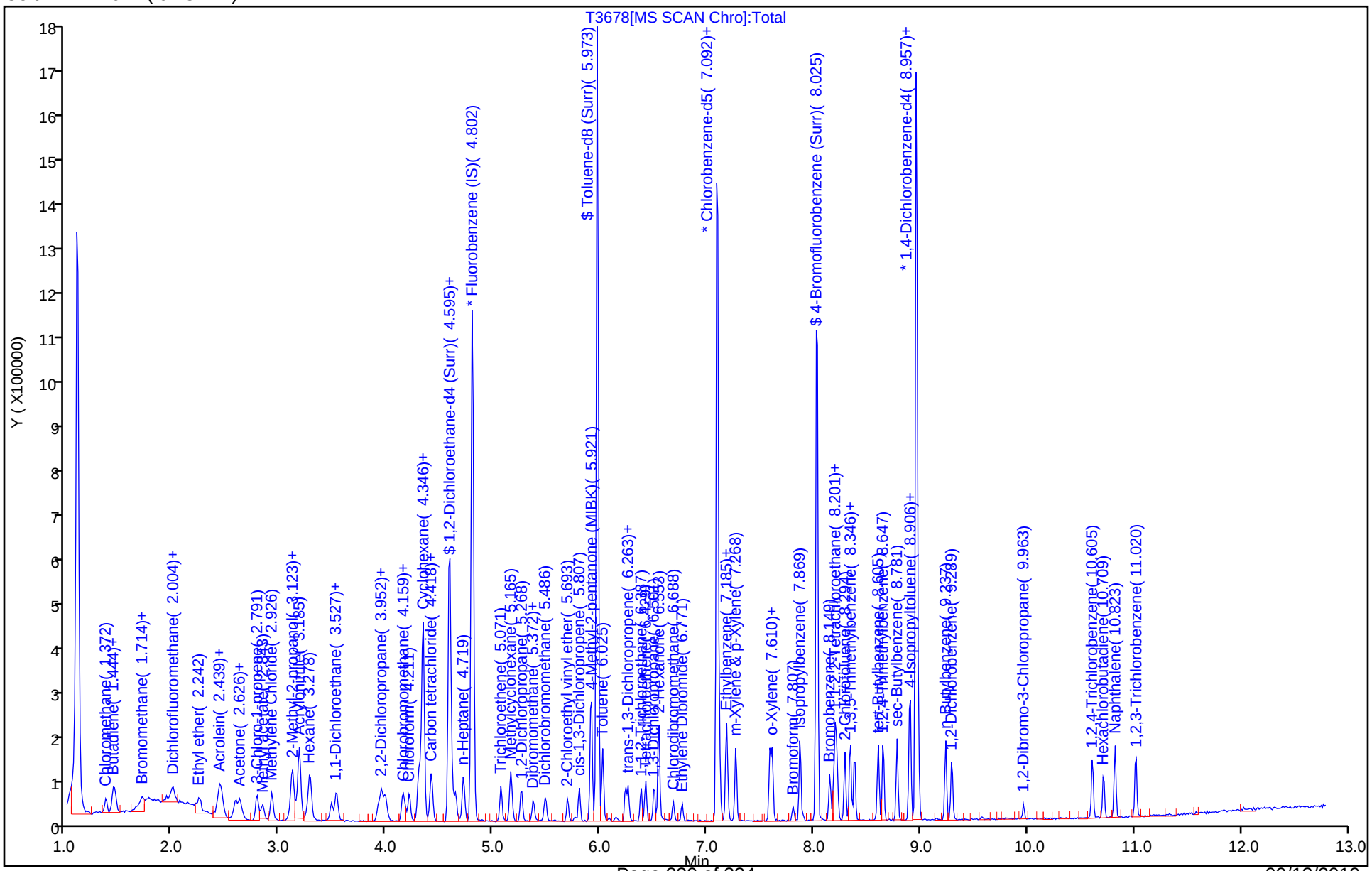
Report Date: 08-Aug-2019 15:53:21 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3678.D

Injection Date:	07-Aug-2019 17:16:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC 2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3679.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Aug-2019 17:39:30 ALS Bottle#: 34 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0083215-008
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:23 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 08:52:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	179006	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.103	-0.010	88	674796	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	97	358141	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.346	-0.011	92	224924	25.0	24.9	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.595	-0.011	0	305789	25.0	25.3	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	859307	25.0	24.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	265313	25.0	24.9	
11 Dichlorodifluoromethane	85	1.206	1.216	-0.010	98	51220	5.00	5.03	
13 Chloromethane	50	1.361	1.372	-0.011	99	84043	5.00	5.09	
151 Butadiene	54	1.434	1.444	-0.010	89	70835	5.00	5.01	
14 Vinyl chloride	62	1.455	1.465	-0.011	97	62946	5.00	4.97	
15 Bromomethane	94	1.703	1.714	-0.011	94	30863	5.00	4.91	
16 Chloroethane	64	1.755	1.776	-0.021	94	27400	5.00	4.65	
18 Dichlorofluoromethane	67	1.993	2.004	-0.011	96	75320	5.00	4.84	
17 Trichlorofluoromethane	101	2.004	2.014	-0.010	59	64061	5.00	4.94	
19 Ethyl ether	59	2.242	2.242	0.000	99	49754	5.00	4.74	
21 Acrolein	56	2.418	2.429	-0.011	99	57155	25.0	23.4	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.450	-0.001	59	44649	5.00	5.13	
22 1,1-Dichloroethene	96	2.439	2.450	-0.011	94	39631	5.00	5.21	
23 Acetone	43	2.563	2.574	-0.011	99	130803	25.0	24.5	
24 Iodomethane	142	2.594	2.605	-0.011	100	75438	5.00	4.96	
25 Carbon disulfide	76	2.626	2.636	-0.010	100	141635	5.00	4.94	
27 3-Chloro-1-propene	41	2.781	2.791	-0.010	90	102110	5.00	5.07	
28 Methyl acetate	43	2.833	2.833	0.000	100	143625	10.0	9.56	
30 Methylene Chloride	84	2.916	2.926	-0.010	96	50101	5.00	4.94	
31 2-Methyl-2-propanol	59	3.102	3.102	0.000	71	119194	50.0	47.9	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	90	140957	5.00	4.90	
32 trans-1,2-Dichloroethene	96	3.113	3.123	-0.010	92	45665	5.00	4.88	
34 Acrylonitrile	53	3.175	3.175	0.000	99	321175	50.0	47.5	
35 Hexane	57	3.278	3.289	-0.011	93	115612	5.00	5.53	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	93514	5.00	4.94	
39 Vinyl acetate	43	3.527	3.527	0.000	97	278158	10.0	9.85	
42 2,2-Dichloropropane	77	3.921	3.931	-0.010	92	68151	5.00	4.99	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	86	50155	5.00	4.77	
44 2-Butanone (MEK)	43	3.983	3.983	0.000	98	220672	25.0	25.2	
47 Chlorobromomethane	128	4.149	4.149	0.000	91	25637	5.00	4.66	
48 Tetrahydrofuran	42	4.159	4.159	0.000	97	62592	10.0	9.80	
50 Chloroform	83	4.211	4.211	0.000	96	81734	5.00	4.86	
52 Cyclohexane	56	4.304	4.304	0.000	91	113587	5.00	5.10	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	77	72121	5.00	5.10	
53 Carbon tetrachloride	117	4.418	4.418	0.000	97	59709	5.00	4.68	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	93	62476	5.00	5.03	
55 Benzene	78	4.584	4.595	-0.011	85	178412	5.00	4.87	
56 Isobutyl alcohol	43	4.605	4.605	0.000	96	134259	125.0	121.7	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	97	75709	5.00	4.85	
59 n-Heptane	43	4.719	4.719	0.000	98	100903	5.00	5.10	
60 Trichloroethene	95	5.071	5.071	0.000	95	45872	5.00	4.94	
62 Methylcyclohexane	83	5.164	5.165	-0.001	97	81859	5.00	5.03	
63 1,2-Dichloropropane	63	5.258	5.268	-0.010	93	53242	5.00	4.86	
65 Dibromomethane	93	5.372	5.372	0.000	96	32175	5.00	5.12	
66 1,4-Dioxane	88	5.372	5.372	0.000	47	17664	100.0	93.8	M
67 Dichlorobromomethane	83	5.486	5.486	0.000	96	57418	5.00	4.78	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	93	41071	5.00	4.85	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	91	72564	5.00	4.79	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	98	439549	25.0	24.3	
73 Toluene	92	6.025	6.025	0.000	97	114004	5.00	4.82	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	98	70518	5.00	4.82	
77 Ethyl methacrylate	69	6.263	6.263	0.000	96	71201	5.00	4.86	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	93	36901	5.00	5.06	
79 Tetrachloroethene	166	6.429	6.429	0.000	95	48302	5.00	4.86	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	97	75918	5.00	4.86	
81 2-Hexanone	43	6.543	6.543	0.000	98	303783	25.0	24.2	
82 Chlorodibromomethane	129	6.688	6.688	0.000	91	43973	5.00	4.66	
83 Ethylene Dibromide	107	6.771	6.771	0.000	95	45926	5.00	4.77	
86 Chlorobenzene	112	7.123	7.123	0.000	96	123887	5.00	4.68	
88 Ethylbenzene	91	7.185	7.185	0.000	98	215017	5.00	4.81	
89 1,1,1,2-Tetrachloroethane	131	7.196	7.196	0.000	92	45641	5.00	4.84	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	84326	5.00	4.79	
91 o-Xylene	106	7.589	7.590	-0.001	98	81534	5.00	4.77	
92 Styrene	104	7.610	7.610	0.000	96	138734	5.00	4.73	
93 Bromoform	173	7.807	7.807	0.000	94	28617	5.00	4.60	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	222166	5.00	4.96	
97 Bromobenzene	156	8.149	8.149	0.000	95	53676	5.00	4.95	
98 1,1,2,2-Tetrachloroethane	83	8.190	8.191	-0.001	94	63478	5.00	4.72	
99 N-Propylbenzene	91	8.201	8.201	0.000	98	263079	5.00	4.91	
100 1,2,3-Trichloropropane	110	8.222	8.222	0.000	88	22085	5.00	4.91	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	76	28704	5.00	4.56	
105 2-Chlorotoluene	126	8.294	8.294	0.000	95	51957	5.00	4.87	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	94	194269	5.00	5.03	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	163493	5.00	4.74	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	41032	5.00	4.83	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	97	189665	5.00	4.81	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	238567	5.00	5.00	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	210627	5.00	5.05	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	106016	5.00	4.77	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	96	110773	5.00	5.00	
115 n-Butylbenzene	91	9.237	9.237	0.000	97	190114	5.00	4.98	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	109432	5.00	5.01	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	79	14159	5.00	4.70	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	74468	5.00	4.61	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	97	35945	5.00	5.09	
121 Naphthalene	128	10.823	10.823	0.000	97	239816	5.00	4.79	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	96	77484	5.00	4.81	
S 126 Xylenes, Total	1				0			9.57	
S 123 1,3-Dichloropropene, Total	1				0			9.61	
S 125 Total BTEX	1				0			24.1	
S 124 1,2-Dichloroethene, Total	1				0			9.66	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00162	Amount Added:	5.00	Units: uL	
GAS CORP mix_00354	Amount Added:	5.00	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added:	1.00	Units: uL	Run Reagent

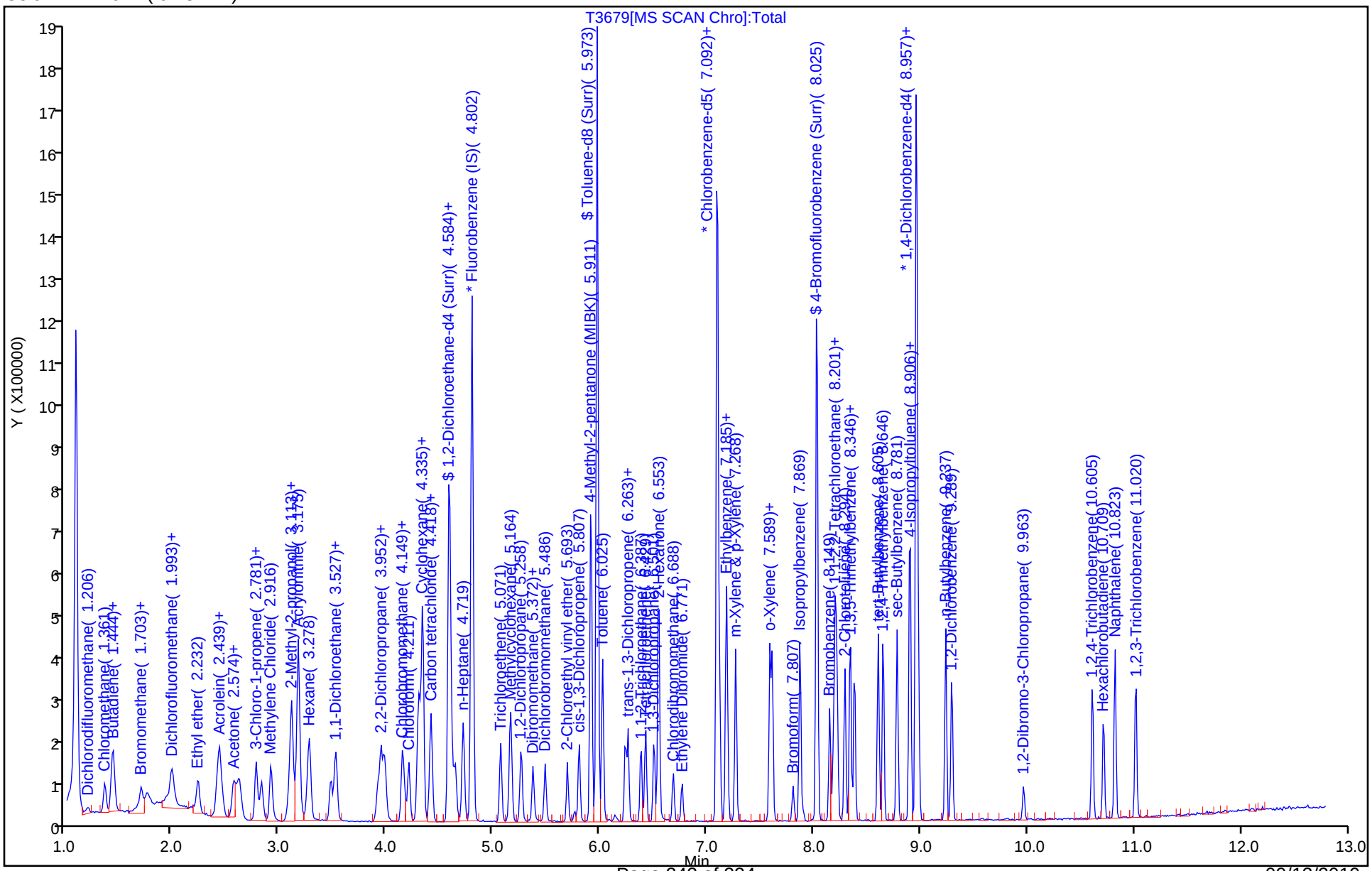
Report Date: 08-Aug-2019 15:53:25 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3679.D

Injection Date:	07-Aug-2019 17:39:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC 3			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

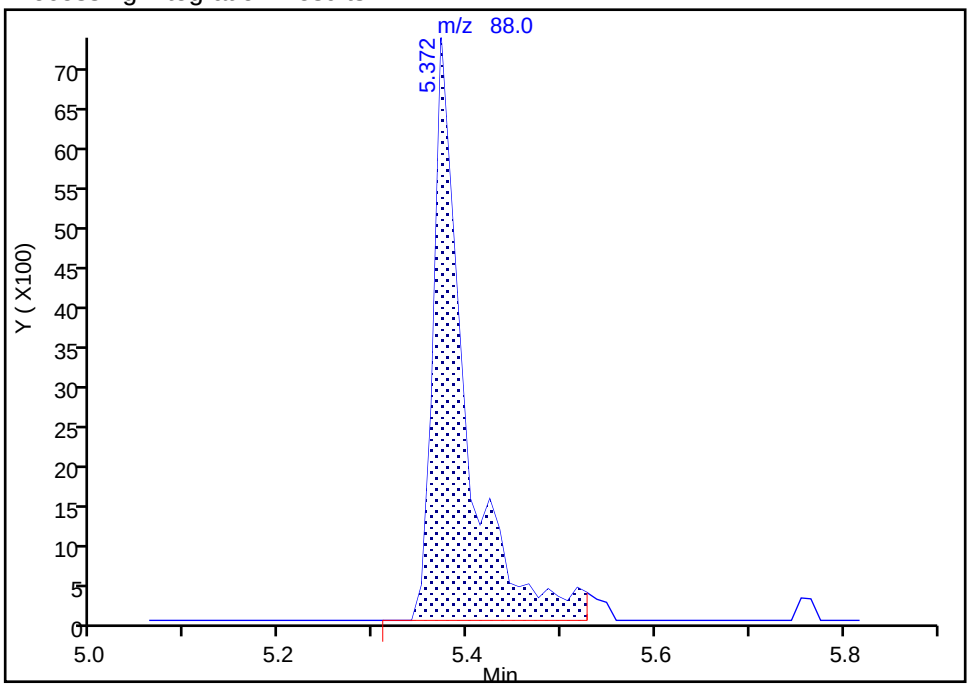
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3679.D
Injection Date: 07-Aug-2019 17:39:30 Instrument ID: HP5975T
Lims ID: IC 3
Client ID:
Operator ID: LH ALS Bottle#: 34 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

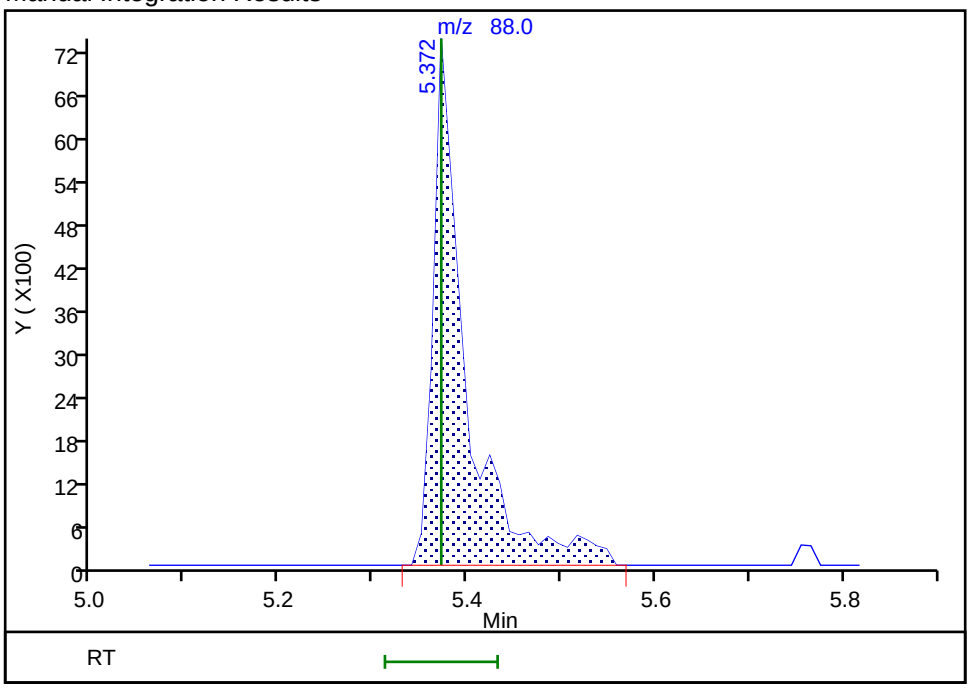
Processing Integration Results

RT: 5.37
Area: 17358
Amount: 92.391961
Amount Units: ug/L



Manual Integration Results

RT: 5.37
Area: 17664
Amount: 93.829685
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:52:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3680.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Aug-2019 18:03:30 ALS Bottle#: 35 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0083215-009
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:28 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 08:54:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	181423	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.102	7.103	0.000	88	661513	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	97	349145	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	94	227028	25.0	24.8	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.595	-0.011	0	304516	25.0	24.9	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	851403	25.0	25.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	259017	25.0	24.8	
11 Dichlorodifluoromethane	85	1.227	1.216	0.011	98	76355	10.0	7.39	
13 Chloromethane	50	1.372	1.372	0.000	99	151762	10.0	9.07	
151 Butadiene	54	1.444	1.444	0.000	89	109991	10.0	7.68	
14 Vinyl chloride	62	1.455	1.465	-0.011	97	109752	10.0	8.54	
15 Bromomethane	94	1.714	1.714	0.000	91	55008	10.0	8.63	M
16 Chloroethane	64	1.776	1.776	0.000	97	53723	10.0	8.99	
18 Dichlorofluoromethane	67	1.993	2.004	-0.011	96	143852	10.0	9.12	
17 Trichlorofluoromethane	101	2.004	2.014	-0.010	58	102770	10.0	7.82	
19 Ethyl ether	59	2.252	2.242	0.010	97	101050	10.0	9.50	
21 Acrolein	56	2.429	2.429	0.000	99	115488	50.0	46.7	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.450	-0.011	56	71154	10.0	8.07	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	92	69138	10.0	8.96	
23 Acetone	43	2.574	2.574	0.000	99	256115	50.0	47.3	
24 Iodomethane	142	2.605	2.605	0.000	98	147523	10.0	9.57	
25 Carbon disulfide	76	2.626	2.636	-0.010	100	264499	10.0	9.11	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	90	188749	10.0	9.25	
28 Methyl acetate	43	2.833	2.833	0.000	100	286066	20.0	18.8	
30 Methylene Chloride	84	2.926	2.926	0.000	95	97221	10.0	9.46	
31 2-Methyl-2-propanol	59	3.113	3.102	0.011	67	249826	100.0	99.1	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	94	282450	10.0	9.69	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	92	85068	10.0	8.97	
34 Acrylonitrile	53	3.185	3.175	0.010	99	681436	100.0	99.5	
35 Hexane	57	3.289	3.289	0.000	93	176336	10.0	9.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	96	181799	10.0	9.47	
39 Vinyl acetate	43	3.527	3.527	0.000	97	564613	20.0	19.7	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	92	122149	10.0	8.82	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	86	97775	10.0	9.18	
44 2-Butanone (MEK)	43	3.983	3.983	0.000	98	442703	50.0	49.8	
47 Chlorobromomethane	128	4.149	4.149	0.000	94	54023	10.0	9.69	
48 Tetrahydrofuran	42	4.159	4.159	0.000	95	124030	20.0	19.2	
50 Chloroform	83	4.211	4.211	0.000	95	160058	10.0	9.39	
52 Cyclohexane	56	4.304	4.304	0.000	91	189240	10.0	8.39	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	96	133295	10.0	9.30	
53 Carbon tetrachloride	117	4.418	4.418	0.000	97	113001	10.0	8.74	
54 1,1-Dichloropropene	75	4.429	4.418	0.011	92	112992	10.0	8.98	
55 Benzene	78	4.595	4.595	-0.001	88	353708	10.0	9.53	
56 Isobutyl alcohol	43	4.605	4.605	0.000	95	282167	250.0	252.5	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	96	156585	10.0	9.90	
59 n-Heptane	43	4.719	4.719	0.000	97	169947	10.0	8.47	
60 Trichloroethene	95	5.071	5.071	0.000	94	87127	10.0	9.26	
62 Methylcyclohexane	83	5.164	5.165	-0.001	96	133494	10.0	8.10	
63 1,2-Dichloropropane	63	5.258	5.268	-0.010	95	109610	10.0	9.88	
65 Dibromomethane	93	5.372	5.372	0.000	95	60984	10.0	9.58	
66 1,4-Dioxane	88	5.372	5.372	0.000	96	38120	200.0	206.6	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	111869	10.0	9.18	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	93	86563	10.0	10.1	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	90	144502	10.0	9.41	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	98	893481	50.0	50.5	
73 Toluene	92	6.025	6.025	0.000	97	217091	10.0	9.36	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	98	142058	10.0	9.91	
77 Ethyl methacrylate	69	6.263	6.263	0.000	95	147963	10.0	10.3	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	94	69928	10.0	9.78	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	89438	10.0	9.18	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	99	151534	10.0	9.89	
81 2-Hexanone	43	6.543	6.543	0.000	99	644371	50.0	52.3	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	90336	10.0	9.77	
83 Ethylene Dibromide	107	6.771	6.771	0.000	97	95734	10.0	10.1	
86 Chlorobenzene	112	7.123	7.123	0.000	94	252008	10.0	9.71	
88 Ethylbenzene	91	7.185	7.185	0.000	98	418912	10.0	9.55	
89 1,1,1,2-Tetrachloroethane	131	7.196	7.196	0.000	94	90711	10.0	9.81	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	168219	10.0	9.75	
91 o-Xylene	106	7.589	7.590	-0.001	98	166890	10.0	9.97	
92 Styrene	104	7.610	7.610	0.000	96	282051	10.0	9.81	
93 Bromoform	173	7.807	7.807	0.000	95	60637	10.0	9.95	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	417767	10.0	9.56	
97 Bromobenzene	156	8.149	8.149	0.000	96	106462	10.0	10.1	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.191	-0.011	95	131836	10.0	10.1	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	491573	10.0	9.41	
100 1,2,3-Trichloropropane	110	8.211	8.222	-0.011	90	43877	10.0	10.0	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	80	59929	10.0	9.76	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	100036	10.0	9.62	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	94	364588	10.0	9.69	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	358431	10.0	10.7	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	75149	10.0	9.08	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	97	374889	10.0	9.76	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	437064	10.0	9.39	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	393618	10.0	9.68	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	98	209682	10.0	9.68	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	94	214061	10.0	9.91	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	352576	10.0	9.48	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	214445	10.0	10.1	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	76	32018	10.0	10.9	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	153297	10.0	9.72	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	97	65210	10.0	9.47	
121 Naphthalene	128	10.823	10.823	0.000	97	503427	10.0	10.3	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	95	155653	10.0	9.90	
S 126 Xylenes, Total	1				0			19.7	
S 123 1,3-Dichloropropene, Total	1				0			19.3	
S 125 Total BTEX	1				0			48.2	
S 124 1,2-Dichloroethene, Total	1				0			18.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00162	Amount Added:	5.00	Units: uL	
GAS CORP mix_00354	Amount Added:	5.00	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added:	1.00	Units: uL	Run Reagent

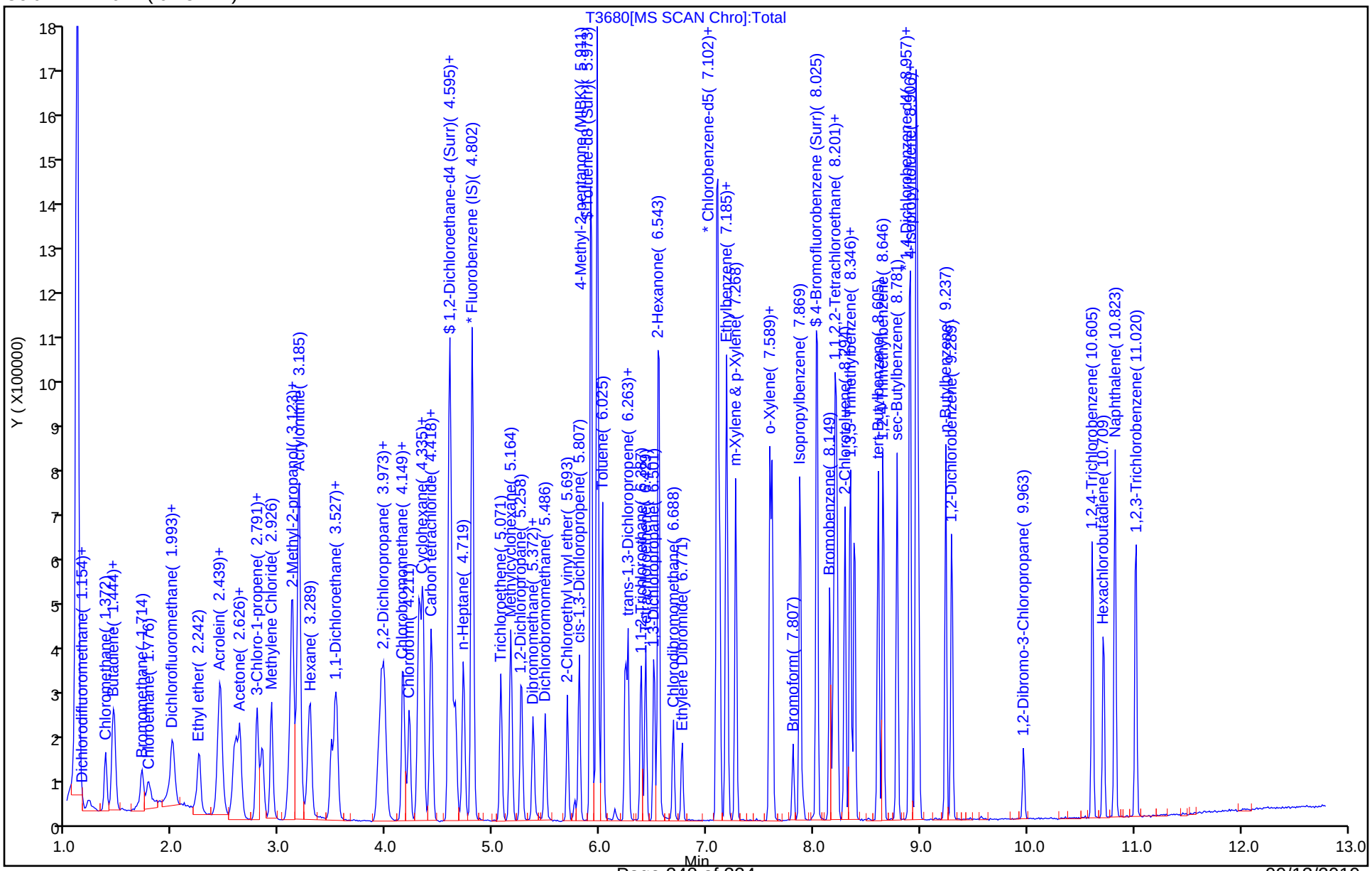
Report Date: 08-Aug-2019 15:53:30 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3680.D

Injection Date:	07-Aug-2019 18:03:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC 4			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

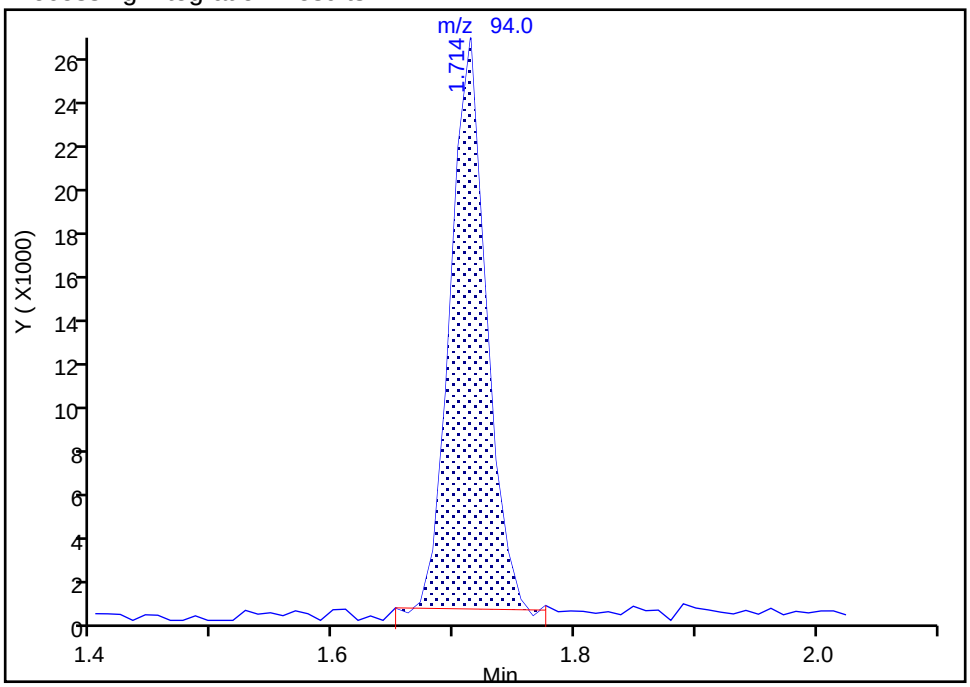
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3680.D
Injection Date: 07-Aug-2019 18:03:30 Instrument ID: HP5975T
Lims ID: IC 4
Client ID:
Operator ID: LH ALS Bottle#: 35 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

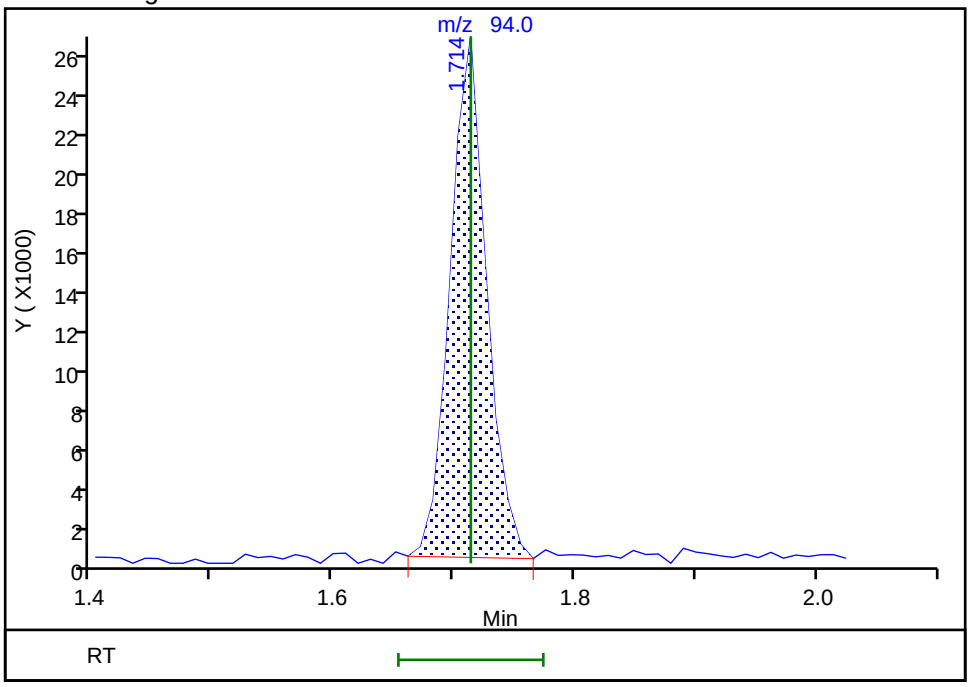
Processing Integration Results

RT: 1.71
Area: 53579
Amount: 8.429240
Amount Units: ug/L



Manual Integration Results

RT: 1.71
Area: 55008
Amount: 8.629804
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:53:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3681.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 07-Aug-2019 18:27:30 ALS Bottle#: 36 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0083215-010
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:33 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 10:15:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	174088	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.103	7.103	0.000	87	640954	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	342260	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	95	224211	25.0	25.6	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.595	4.595	0.000	0	301894	25.0	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	831244	25.0	25.2	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	254527	25.0	25.1	
11 Dichlorodifluoromethane	85	1.216	1.216	0.000	99	219734	25.0	22.2	
13 Chloromethane	50	1.372	1.372	0.000	99	381746	25.0	23.8	
151 Butadiene	54	1.444	1.444	0.000	89	300709	25.0	21.9	
14 Vinyl chloride	62	1.465	1.465	0.000	98	288097	25.0	23.4	
15 Bromomethane	94	1.714	1.714	0.000	92	140435	25.0	23.0	
16 Chloroethane	64	1.776	1.776	0.000	97	146378	25.0	25.5	
18 Dichlorofluoromethane	67	2.004	2.004	0.000	97	362978	25.0	24.0	
17 Trichlorofluoromethane	101	2.014	2.014	0.000	97	293231	25.0	23.3	
19 Ethyl ether	59	2.242	2.242	0.000	99	260623	25.0	25.5	
21 Acrolein	56	2.429	2.429	0.000	99	288276	125.0	121.4	
20 1,1,2-Trichloro-1,2,2-trif	101	2.450	2.450	0.000	94	209458	25.0	24.8	
22 1,1-Dichloroethene	96	2.450	2.450	0.000	94	185432	25.0	25.1	
23 Acetone	43	2.574	2.574	0.000	99	640709	125.0	123.3	
24 Iodomethane	142	2.605	2.605	0.000	99	374839	25.0	25.3	
25 Carbon disulfide	76	2.636	2.636	0.000	100	706487	25.0	25.3	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	89	488101	25.0	24.9	
28 Methyl acetate	43	2.833	2.833	0.000	99	705850	50.0	48.3	
30 Methylene Chloride	84	2.926	2.926	0.000	95	234072	25.0	23.7	
31 2-Methyl-2-propanol	59	3.102	3.102	0.000	99	634747	250.0	262.3	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	96	703013	25.0	25.1	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	94	223197	25.0	24.5	
34 Acrylonitrile	53	3.175	3.175	0.000	99	1640233	250.0	249.5	
35 Hexane	57	3.289	3.289	0.000	94	440471	25.0	25.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	453253	25.0	24.6	
39 Vinyl acetate	43	3.527	3.527	0.000	97	1406634	50.0	51.2	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	92	319697	25.0	24.1	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	87	241296	25.0	23.6	
44 2-Butanone (MEK)	43	3.983	3.983	0.000	98	1081413	125.0	126.8	
47 Chlorobromomethane	128	4.149	4.149	0.000	92	132966	25.0	24.8	
48 Tetrahydrofuran	42	4.159	4.159	0.000	94	301520	50.0	48.5	
50 Chloroform	83	4.211	4.211	0.000	95	387081	25.0	23.7	
52 Cyclohexane	56	4.304	4.304	0.000	94	527403	25.0	24.4	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	96	346091	25.0	25.2	
53 Carbon tetrachloride	117	4.418	4.418	0.000	97	310149	25.0	25.0	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	91	303260	25.0	25.1	
55 Benzene	78	4.595	4.595	0.000	95	879995	25.0	24.7	
56 Isobutyl alcohol	43	4.605	4.605	0.000	94	696049	625.0	649.0	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	96	380085	25.0	25.0	
59 n-Heptane	43	4.719	4.719	0.000	97	469799	25.0	24.4	
60 Trichloroethene	95	5.071	5.071	0.000	95	230739	25.0	25.6	
62 Methylcyclohexane	83	5.165	5.165	0.000	97	380469	25.0	24.1	
63 1,2-Dichloropropane	63	5.268	5.268	0.000	95	269484	25.0	25.3	
65 Dibromomethane	93	5.372	5.372	0.000	97	152698	25.0	25.0	
66 1,4-Dioxane	88	5.372	5.372	0.000	51	90352	500.0	505.3	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	286927	25.0	24.5	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	92	212614	25.0	25.8	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	91	375290	25.0	25.5	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	98	2223491	125.0	129.6	
73 Toluene	92	6.025	6.025	0.000	97	551291	25.0	24.5	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	98	349546	25.0	25.2	
77 Ethyl methacrylate	69	6.263	6.263	0.000	96	353627	25.0	25.4	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	93	176692	25.0	25.5	
79 Tetrachloroethene	166	6.429	6.429	0.000	95	231321	25.0	24.5	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	98	369214	25.0	24.9	
81 2-Hexanone	43	6.543	6.543	0.000	98	1568679	125.0	131.4	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	232811	25.0	26.0	
83 Ethylene Dibromide	107	6.771	6.771	0.000	99	226344	25.0	24.8	
86 Chlorobenzene	112	7.123	7.123	0.000	93	609590	25.0	24.2	
88 Ethylbenzene	91	7.185	7.185	0.000	99	1049028	25.0	24.7	
89 1,1,1,2-Tetrachloroethane	131	7.196	7.196	0.000	95	225444	25.0	25.2	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	427031	25.0	25.6	
91 o-Xylene	106	7.590	7.590	0.000	98	408002	25.0	25.1	
92 Styrene	104	7.610	7.610	0.000	94	696774	25.0	25.0	
93 Bromoform	173	7.807	7.807	0.000	95	154000	25.0	26.1	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1080831	25.0	25.2	
97 Bromobenzene	156	8.149	8.149	0.000	97	263034	25.0	25.4	
98 1,1,2,2-Tetrachloroethane	83	8.191	8.191	0.000	96	328891	25.0	25.6	
99 N-Propylbenzene	91	8.201	8.201	0.000	98	1284560	25.0	25.1	
100 1,2,3-Trichloropropane	110	8.222	8.222	0.000	88	110171	25.0	25.6	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	77	146597	25.0	24.4	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	252363	25.0	24.8	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	95	928113	25.0	25.2	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	797471	25.0	24.2	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	202795	25.0	25.0	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	97	949886	25.0	25.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	1163193	25.0	25.5	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1016459	25.0	25.5	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	98	521791	25.0	24.6	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	95	519139	25.0	24.5	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	916102	25.0	25.1	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	519663	25.0	24.9	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	79	75060	25.0	26.1	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	379055	25.0	24.5	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	97	177825	25.0	26.3	
121 Naphthalene	128	10.823	10.823	0.000	97	1238775	25.0	25.9	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	96	386993	25.0	25.1	

Reagents:

8260 CORP mix_00162	Amount Added: 12.50	Units: uL	
GAS CORP mix_00354	Amount Added: 12.50	Units: uL	
T_8260_Surr_00195	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added: 1.00	Units: uL	Run Reagent

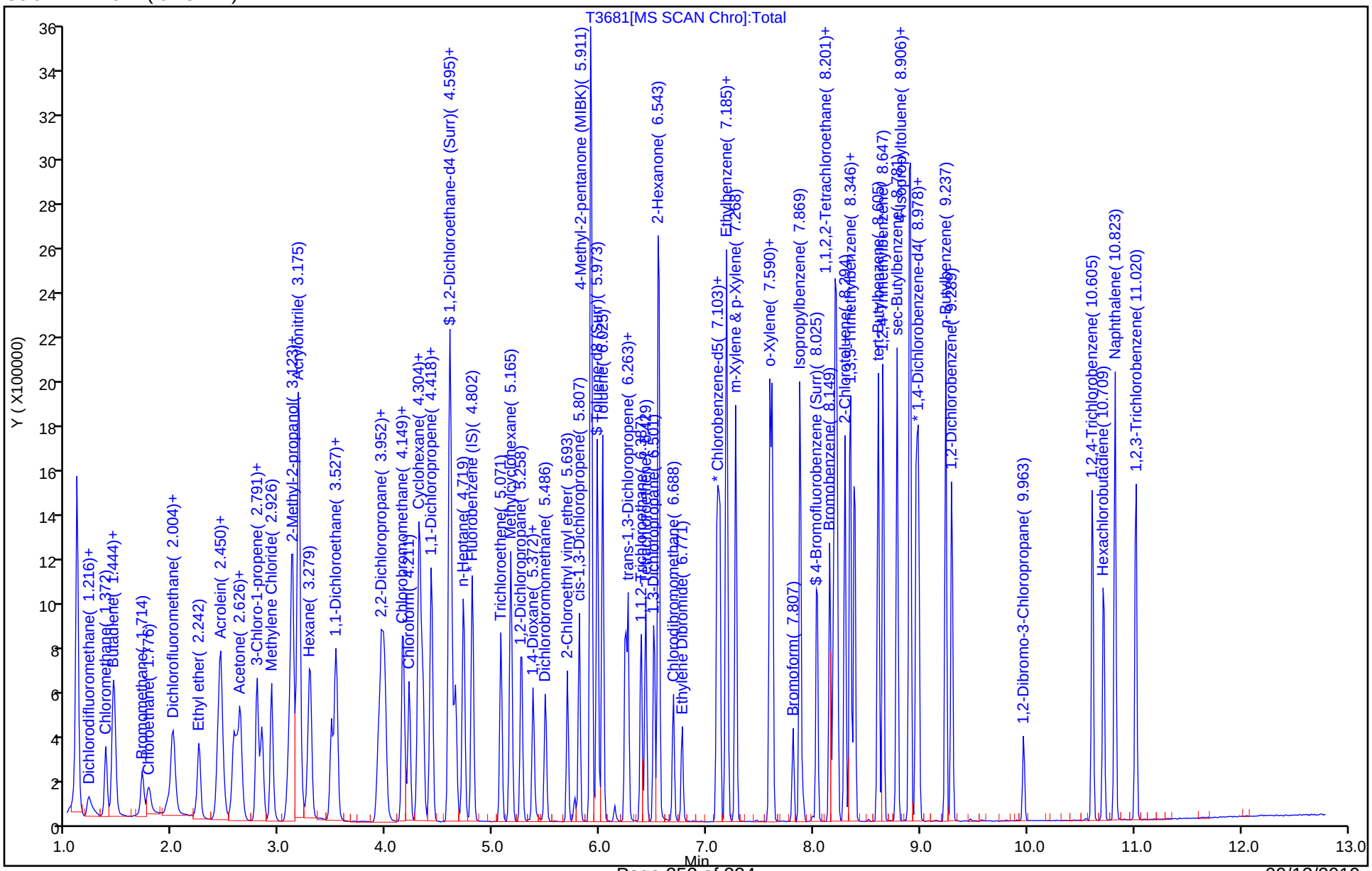
Report Date: 08-Aug-2019 15:53:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3681.D

Injection Date:	07-Aug-2019 18:27:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	ICIS 5			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3682.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 07-Aug-2019 18:51:30 ALS Bottle#: 37 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0083215-011
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:40 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 08:54:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	175266	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.102	7.103	0.000	86	646612	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	341017	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	93	221144	25.0	25.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.595	-0.011	0	301903	25.0	25.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	827599	25.0	24.9	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	259179	25.0	25.3	
11 Dichlorodifluoromethane	85	1.216	1.216	0.000	99	526052	50.0	52.7	
13 Chloromethane	50	1.372	1.372	0.000	99	812620	50.0	50.3	
151 Butadiene	54	1.444	1.444	0.000	90	696129	50.0	50.3	
14 Vinyl chloride	62	1.465	1.465	0.000	98	646147	50.0	52.1	
15 Bromomethane	94	1.714	1.714	0.000	92	310966	50.0	50.5	
16 Chloroethane	64	1.776	1.776	0.000	98	317277	50.0	55.0	
18 Dichlorofluoromethane	67	2.004	2.004	0.000	98	775501	50.0	50.9	
17 Trichlorofluoromethane	101	2.014	2.014	0.000	98	704467	50.0	55.5	
19 Ethyl ether	59	2.242	2.242	0.000	98	525210	50.0	51.1	
21 Acrolein	56	2.418	2.429	-0.011	100	583671	250.0	244.2	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.450	-0.001	95	412854	50.0	48.5	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	93	364853	50.0	49.0	
23 Acetone	43	2.574	2.574	0.000	99	1294924	250.0	247.5	
24 Iodomethane	142	2.605	2.605	0.000	99	745754	50.0	50.1	
25 Carbon disulfide	76	2.636	2.636	0.000	100	1374825	50.0	49.0	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	90	985194	50.0	50.0	
28 Methyl acetate	43	2.833	2.833	0.000	100	1421935	100.0	96.6	
30 Methylene Chloride	84	2.926	2.926	0.000	96	464793	50.0	46.8	
31 2-Methyl-2-propanol	59	3.092	3.102	-0.010	99	1264251	500.0	519.0	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	95	1409296	50.0	50.0	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	94	440011	50.0	48.0	
34 Acrylonitrile	53	3.175	3.175	0.000	98	3333332	500.0	503.6	
35 Hexane	57	3.289	3.289	0.000	93	840413	50.0	50.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	96	909814	50.0	49.1	
39 Vinyl acetate	43	3.527	3.527	0.000	97	2862968	100.0	103.5	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	94	623997	50.0	46.6	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	86	492779	50.0	47.9	
44 2-Butanone (MEK)	43	3.983	3.983	0.000	98	2154017	250.0	251.0	
47 Chlorobromomethane	128	4.149	4.149	0.000	92	263307	50.0	48.9	
48 Tetrahydrofuran	42	4.159	4.159	0.000	93	601789	100.0	96.2	
50 Chloroform	83	4.211	4.211	0.000	96	780209	50.0	47.4	
52 Cyclohexane	56	4.304	4.304	0.000	94	1002406	50.0	46.0	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	96	667344	50.0	48.2	
53 Carbon tetrachloride	117	4.418	4.418	0.000	97	619779	50.0	49.6	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	91	583880	50.0	48.1	
55 Benzene	78	4.594	4.595	-0.001	96	1752561	50.0	48.9	
56 Isobutyl alcohol	43	4.605	4.605	0.000	96	1418418	1250.0	1313.6	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	96	744030	50.0	48.7	
59 n-Heptane	43	4.719	4.719	0.000	97	913938	50.0	47.1	
60 Trichloroethene	95	5.071	5.071	0.000	95	445129	50.0	49.0	
62 Methylcyclohexane	83	5.164	5.165	-0.001	98	747131	50.0	46.9	
63 1,2-Dichloropropane	63	5.268	5.268	0.000	93	535277	50.0	49.9	
65 Dibromomethane	93	5.372	5.372	0.000	96	304571	50.0	49.5	
66 1,4-Dioxane	88	5.372	5.372	0.000	53	182171	1000.0	1009.9	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	584632	50.0	49.7	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	92	426961	50.0	51.4	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	92	748667	50.0	50.5	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	98	4400425	250.0	254.3	
73 Toluene	92	6.025	6.025	0.000	98	1089662	50.0	48.1	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	98	717708	50.0	51.2	
77 Ethyl methacrylate	69	6.263	6.263	0.000	94	735373	50.0	52.3	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	93	361747	50.0	51.8	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	464797	50.0	48.8	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	98	732085	50.0	48.9	
81 2-Hexanone	43	6.543	6.543	0.000	98	3178901	250.0	264.0	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	478806	50.0	53.0	
83 Ethylene Dibromide	107	6.771	6.771	0.000	99	467322	50.0	50.7	
86 Chlorobenzene	112	7.123	7.123	0.000	93	1219740	50.0	48.1	
88 Ethylbenzene	91	7.185	7.185	0.000	98	2072138	50.0	48.3	
89 1,1,1,2-Tetrachloroethane	131	7.196	7.196	0.000	95	465591	50.0	51.5	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	817397	50.0	48.5	
91 o-Xylene	106	7.589	7.590	-0.001	98	819158	50.0	50.0	
92 Styrene	104	7.610	7.610	0.000	95	1401093	50.0	49.9	
93 Bromoform	173	7.807	7.807	0.000	95	330420	50.0	55.5	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	2098157	50.0	49.2	
97 Bromobenzene	156	8.149	8.149	0.000	97	529276	50.0	51.3	
98 1,1,2,2-Tetrachloroethane	83	8.190	8.191	-0.001	95	658910	50.0	51.5	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	2483223	50.0	48.7	
100 1,2,3-Trichloropropane	110	8.222	8.222	0.000	88	216857	50.0	50.6	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	80	298674	50.0	49.8	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	492624	50.0	48.5	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	95	1802791	50.0	49.0	
102 4-Chlorotoluene	91	8.387	8.377	0.010	98	1569376	50.0	47.8	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	392225	50.0	48.5	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	98	1873386	50.0	49.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	2294472	50.0	50.5	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1999970	50.0	50.4	
110 1,3-Dichlorobenzene	146	8.905	8.906	-0.001	98	1026100	50.0	48.5	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	1061754	50.0	50.3	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	1788128	50.0	49.2	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	1046608	50.0	50.3	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	84	154017	50.0	53.7	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	769096	50.0	50.0	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	97	336918	50.0	50.1	
121 Naphthalene	128	10.823	10.823	0.000	97	2496398	50.0	52.3	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	96	785312	50.0	51.2	
S 126 Xylenes, Total	1				0			98.5	
S 123 1,3-Dichloropropene, Total	1				0			101.7	
S 125 Total BTEX	1				0			243.8	
S 124 1,2-Dichloroethene, Total	1				0			95.9	

Reagents:

8260 CORP mix_00162	Amount Added: 25.00	Units: uL		
GAS CORP mix_00354	Amount Added: 25.00	Units: uL		
T_8260_Surr_00195	Amount Added: 1.00	Units: uL	Run Reagent	
T_8260_IS_00224	Amount Added: 1.00	Units: uL	Run Reagent	

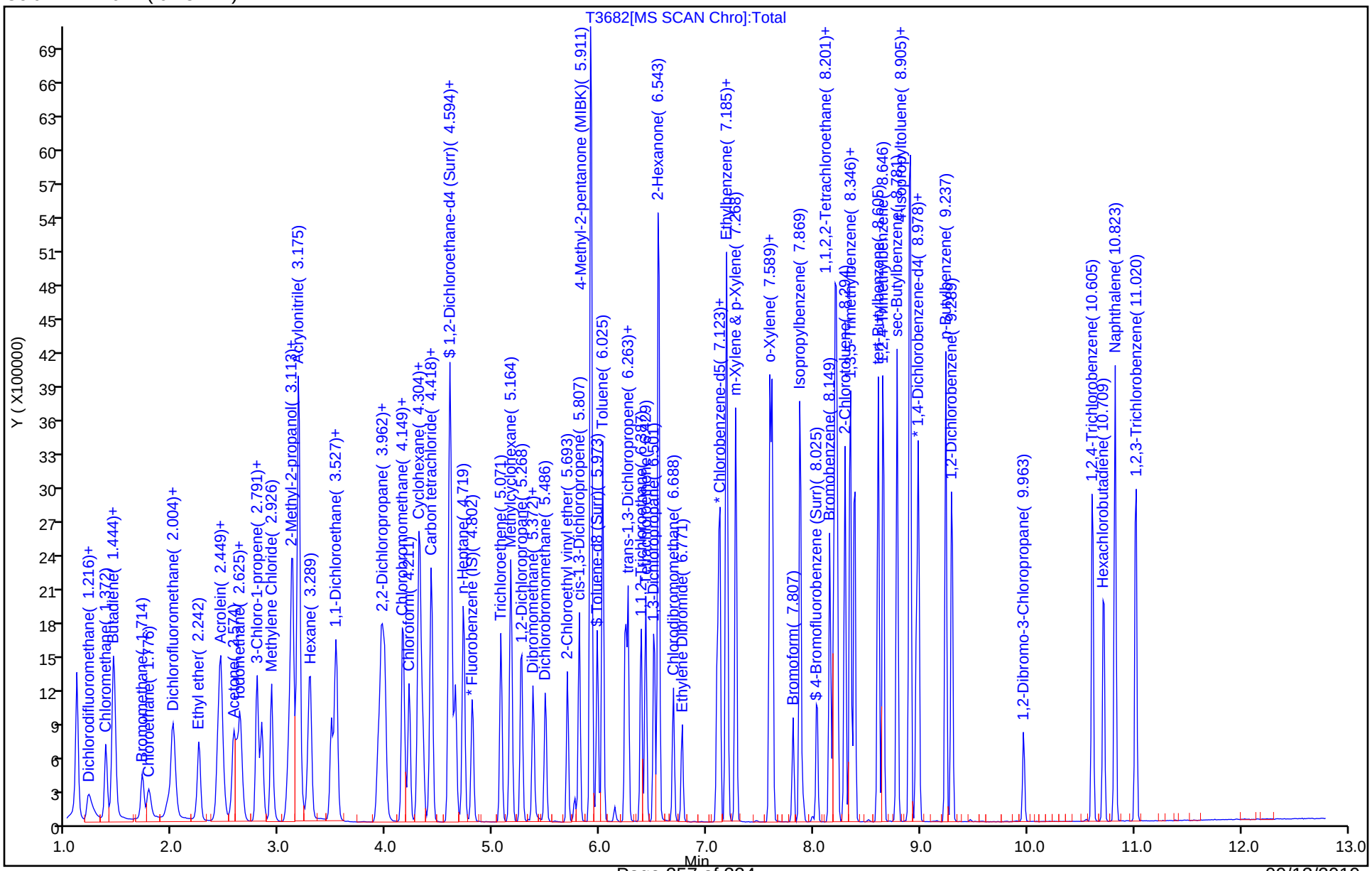
Report Date: 08-Aug-2019 15:53:42 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3682.D

Injection Date:	07-Aug-2019 18:51:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC 6			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3683.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 07-Aug-2019 19:14:30 ALS Bottle#: 38 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0083215-012
Operator ID: LH Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:53:46 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 08-Aug-2019 09:06:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	174732	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.102	7.103	0.000	87	642189	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	95	339840	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.346	4.346	0.000	94	219613	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.595	-0.011	0	289816	25.0	24.6	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	811128	25.0	24.5	
$ 7 4-Bromofluorobenzene (Surr	174	8.035	8.035	0.000	0	246515	25.0	24.3	
11 Dichlorodifluoromethane	85	1.206	1.216	-0.010	99	972175	100.0	97.7	
13 Chloromethane	50	1.372	1.372	0.000	99	1549910	100.0	96.2	
151 Butadiene	54	1.434	1.444	-0.010	89	1270913	100.0	92.1	
14 Vinyl chloride	62	1.455	1.465	-0.010	98	1177804	100.0	95.2	
15 Bromomethane	94	1.714	1.714	0.000	92	584459	100.0	95.2	
16 Chloroethane	64	1.776	1.776	0.000	97	608194	100.0	105.7	
18 Dichlorofluoromethane	67	1.993	2.004	-0.011	98	1479090	100.0	97.3	
17 Trichlorofluoromethane	101	2.014	2.014	0.000	98	1291544	100.0	102.1	
19 Ethyl ether	59	2.242	2.242	0.000	98	1036111	100.0	101.1	
21 Acrolein	56	2.418	2.429	-0.011	99	1137255	500.0	477.3	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.450	-0.001	59	796385	100.0	93.8	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	93	723065	100.0	97.3	
23 Acetone	43	2.563	2.574	-0.011	100	2562619	500.0	491.3	
24 Iodomethane	142	2.595	2.605	-0.010	99	1454328	100.0	98.0	
25 Carbon disulfide	76	2.626	2.636	-0.010	100	2686015	100.0	96.0	
27 3-Chloro-1-propene	41	2.781	2.791	-0.010	90	1854391	100.0	94.4	
28 Methyl acetate	43	2.833	2.833	0.000	100	2740172	200.0	186.8	
30 Methylene Chloride	84	2.926	2.926	0.000	96	905838	100.0	91.5	
31 2-Methyl-2-propanol	59	3.092	3.102	-0.010	95	2506995	1000.0	1032.3	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	97	2776130	100.0	98.9	M
32 trans-1,2-Dichloroethene	96	3.113	3.123	-0.010	93	852196	100.0	93.3	
34 Acrylonitrile	53	3.175	3.175	0.000	99	6379639	1000.0	966.8	
35 Hexane	57	3.278	3.289	-0.011	93	1630033	100.0	99.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	1750608	100.0	94.7	
39 Vinyl acetate	43	3.527	3.527	0.000	97	5621797	200.0	203.9	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	91	1201699	100.0	90.1	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	86	962861	100.0	93.9	
44 2-Butanone (MEK)	43	3.983	3.983	0.000	98	4248591	500.0	496.5	
47 Chlorobromomethane	128	4.149	4.149	0.000	92	513299	100.0	95.6	
48 Tetrahydrofuran	42	4.159	4.159	0.000	94	1183829	200.0	189.8	
50 Chloroform	83	4.211	4.211	0.000	95	1480801	100.0	90.2	
52 Cyclohexane	56	4.304	4.304	0.000	93	1966840	100.0	90.5	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	97	1299888	100.0	94.1	
53 Carbon tetrachloride	117	4.418	4.418	0.000	98	1205221	100.0	96.8	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	92	1147901	100.0	94.8	
55 Benzene	78	4.595	4.595	0.000	97	3386638	100.0	94.7	
56 Isobutyl alcohol	43	4.605	4.605	0.000	95	2813034	2500.0	2613.1	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	96	1444826	100.0	94.8	
59 n-Heptane	43	4.719	4.719	0.000	97	1762115	100.0	91.2	
60 Trichloroethene	95	5.071	5.071	0.000	95	881500	100.0	97.3	
62 Methylcyclohexane	83	5.165	5.165	0.000	98	1467768	100.0	92.5	
63 1,2-Dichloropropane	63	5.268	5.268	0.000	95	1059801	100.0	99.2	
65 Dibromomethane	93	5.372	5.372	0.000	97	607884	100.0	99.1	
66 1,4-Dioxane	88	5.372	5.372	0.000	52	367534	2000.0	2051.4	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	1179294	100.0	100.5	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	92	865434	100.0	104.6	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	92	1506726	100.0	101.9	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	98	8485420	500.0	493.7	
73 Toluene	92	6.025	6.025	0.000	98	2133968	100.0	94.8	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	98	1441046	100.0	103.5	
77 Ethyl methacrylate	69	6.263	6.263	0.000	95	1444356	100.0	103.5	
78 1,1,2-Trichloroethane	83	6.387	6.387	0.000	94	685969	100.0	98.8	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	899701	100.0	95.1	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	98	1441338	100.0	96.9	
81 2-Hexanone	43	6.543	6.543	0.000	98	6078544	500.0	508.4	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	978518	100.0	109.0	
83 Ethylene Dibromide	107	6.771	6.771	0.000	98	923026	100.0	100.8	
86 Chlorobenzene	112	7.123	7.123	0.000	94	2383838	100.0	94.6	
88 Ethylbenzene	91	7.185	7.185	0.000	99	4040311	100.0	94.9	
89 1,1,1,2-Tetrachloroethane	131	7.196	7.196	0.000	95	910379	100.0	101.4	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	1601583	100.0	95.7	
91 o-Xylene	106	7.590	7.590	0.000	98	1623295	100.0	99.8	
92 Styrene	104	7.610	7.610	0.000	95	2738649	100.0	98.1	
93 Bromoform	173	7.807	7.807	0.000	96	690313	100.0	116.7	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	4137961	100.0	97.3	
97 Bromobenzene	156	8.149	8.149	0.000	96	1024531	100.0	99.6	
98 1,1,2,2-Tetrachloroethane	83	8.191	8.191	0.000	95	1303649	100.0	102.2	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	4848393	100.0	95.4	
100 1,2,3-Trichloropropane	110	8.222	8.222	0.000	87	425762	100.0	99.7	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	78	590919	100.0	98.9	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	963839	100.0	95.2	
104 1,3,5-Trimethylbenzene	105	8.346	8.346	0.000	96	3567755	100.0	97.4	
102 4-Chlorotoluene	91	8.387	8.377	0.010	98	3023509	100.0	92.3	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	797715	100.0	99.0	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	97	3673724	100.0	98.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	4512481	100.0	99.6	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	3942736	100.0	99.7	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	2002202	100.0	95.0	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	97	2058340	100.0	97.9	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	3541951	100.0	97.8	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	2058352	100.0	99.3	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	83	314180	100.0	109.9	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	1543275	100.0	100.6	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	98	705768	100.0	105.3	
121 Naphthalene	128	10.823	10.823	0.000	98	4916558	100.0	103.4	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	96	1527936	100.0	99.9	
S 126 Xylenes, Total	1				0			195.5	
S 123 1,3-Dichloropropene, Total	1				0			205.4	
S 125 Total BTEX	1				0			479.9	
S 124 1,2-Dichloroethene, Total	1				0			187.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00162	Amount Added:	50.00	Units: uL	
GAS CORP mix_00354	Amount Added:	50.00	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00224	Amount Added:	1.00	Units: uL	Run Reagent

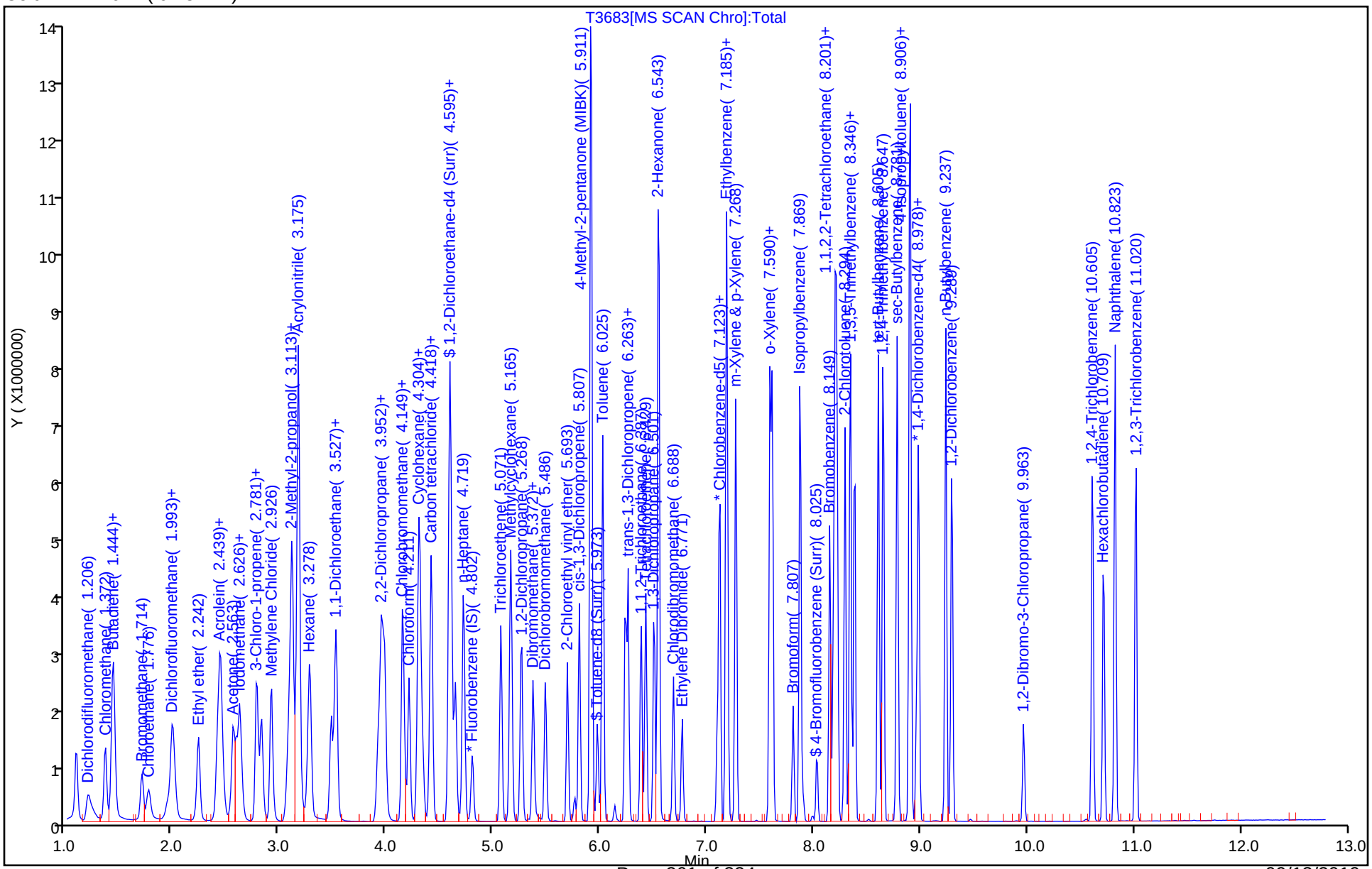
Report Date: 08-Aug-2019 15:53:48 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3683.D

Injection Date:	07-Aug-2019 19:14:30	Instrument ID:	HP5975T	Operator ID:	LH
Lims ID:	IC 7			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

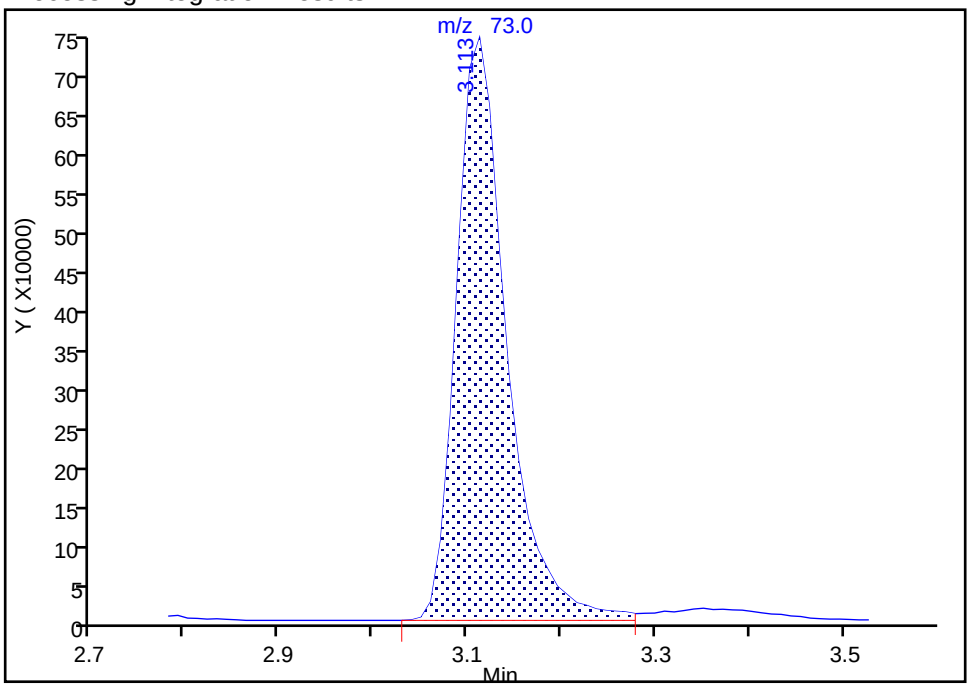
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3683.D
Injection Date: 07-Aug-2019 19:14:30 Instrument ID: HP5975T
Lims ID: IC 7
Client ID:
Operator ID: LH ALS Bottle#: 38 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

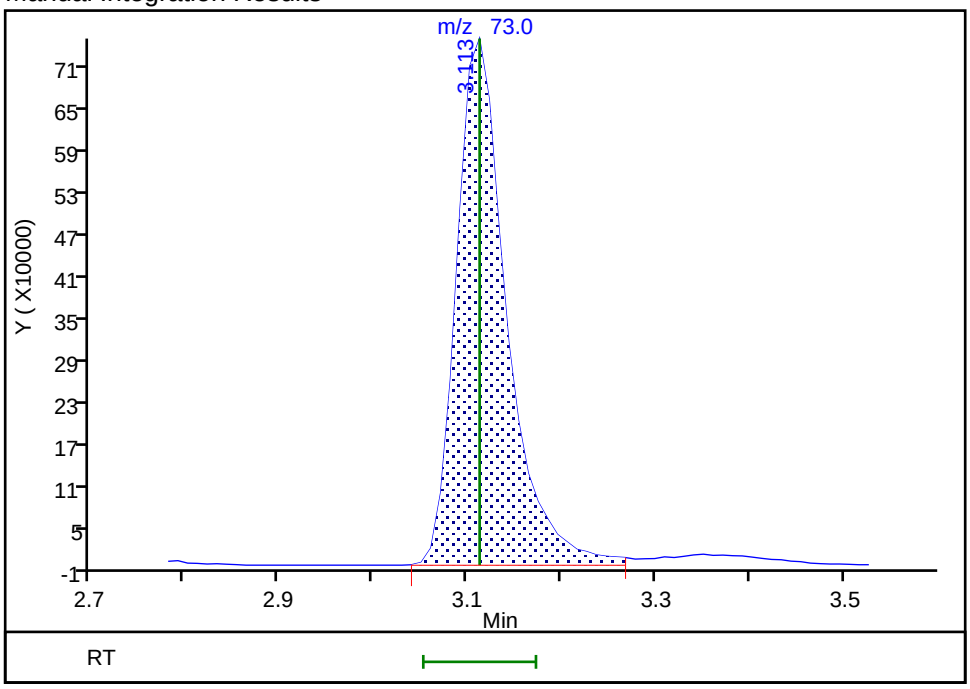
Processing Integration Results

RT: 3.11
Area: 2779561
Amount: 98.997904
Amount Units: ug/L



Manual Integration Results

RT: 3.11
Area: 2776130
Amount: 98.890810
Amount Units: ug/L



Reviewer: nowakk, 08-Aug-2019 08:55:20
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab Sample ID: CCVIS 480-490741/3 Calibration Date: 09/07/2019 12:17

Instrument ID: HP5975T Calib Start Date: 08/07/2019 16:28

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/07/2019 19:14

Lab File ID: T4581.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.423	1.920	0.1000	33.7	25.0	34.9	50.0
Chloromethane	Ave	2.306	2.589	0.1000	28.1	25.0	12.3	20.0
Butadiene	Ave	1.974	2.294		29.1	25.0	16.2	20.0
Vinyl chloride	Ave	1.770	2.124	0.1000	30.0	25.0	20.0	20.0
Bromomethane	Ave	0.8784	1.138	0.1000	32.4	25.0	29.6	50.0
Chloroethane	Ave	0.8232	1.184	0.1000	35.9	25.0	43.8	50.0
Dichlorofluoromethane	Ave	2.175	2.509		28.8	25.0	15.4	20.0
Trichlorofluoromethane	Ave	1.810	2.289	0.1000	31.6	25.0	26.5*	20.0
Ethyl ether	Ave	1.466	1.567		26.7	25.0	6.9	20.0
Acrolein	Ave	0.3409	0.2838		104	125	-16.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.215	1.390	0.1000	28.6	25.0	14.4	20.0
1,1-Dichloroethene	Ave	1.063	1.253	0.1000	29.5	25.0	17.9	20.0
Acetone	Ave	0.7462	0.7872	0.1000	132	125	5.5	50.0
Iodomethane	Ave	2.124	2.479		29.2	25.0	16.7	20.0
Carbon disulfide	Ave	4.003	4.447	0.1000	27.8	25.0	11.1	20.0
Allyl chloride	Ave	2.811	2.711		24.1	25.0	-3.6	20.0
Methyl acetate	Ave	2.099	1.792	0.1000	42.7	50.0	-14.6	50.0
Methylene Chloride	Ave	1.416	1.479	0.1000	26.1	25.0	4.5	20.0
2-Methyl-2-propanol	Ave	0.3475	0.3339		240	250	-3.9	50.0
Methyl tert-butyl ether	Ave	4.017	4.220	0.1000	26.3	25.0	5.1	20.0
trans-1,2-Dichloroethene	Ave	1.306	1.455	0.1000	27.8	25.0	11.4	20.0
Acrylonitrile	Ave	0.9441	0.9424		250	250	-0.2	20.0
Hexane	Lin1		2.589		26.5	25.0	5.9	20.0
1,1-Dichloroethane	Ave	2.646	2.772	0.2000	26.2	25.0	4.8	20.0
Vinyl acetate	Ave	3.944	4.214		53.4	50.0	6.8	20.0
2,2-Dichloropropane	Ave	1.909	2.041		26.7	25.0	6.9	20.0
cis-1,2-Dichloroethene	Ave	1.468	1.586	0.1000	27.0	25.0	8.1	20.0
2-Butanone (MEK)	Ave	1.224	1.200	0.1000	122	125	-2.0	20.0
Bromochloromethane	Ave	0.7685	0.8384		27.3	25.0	9.1	20.0
Tetrahydrofuran	Ave	0.8924	0.8078		45.3	50.0	-9.5	20.0
Chloroform	Ave	2.349	2.460	0.2000	26.2	25.0	4.7	20.0
1,1,1-Trichloroethane	Ave	1.976	2.194	0.1000	27.8	25.0	11.0	20.0
Cyclohexane	Ave	3.109	3.035	0.1000	24.4	25.0	-2.4	20.0
Carbon tetrachloride	Ave	1.782	1.975	0.1000	27.7	25.0	10.8	20.0
1,1-Dichloropropene	Ave	1.733	1.896		27.3	25.0	9.4	20.0
Benzene	Ave	5.116	5.474	0.5000	26.8	25.0	7.0	20.0
Isobutyl alcohol	Ave	0.1540	0.1370		556	625	-11.1	50.0
1,2-Dichloroethane	Ave	2.180	2.270	0.1000	26.0	25.0	4.2	20.0
n-Heptane	Ave	2.765	2.699		24.4	25.0	-2.4	20.0
Trichloroethene	Ave	1.296	1.440	0.2000	27.8	25.0	11.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab Sample ID: CCVIS 480-490741/3 Calibration Date: 09/07/2019 12:17

Instrument ID: HP5975T Calib Start Date: 08/07/2019 16:28

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/07/2019 19:14

Lab File ID: T4581.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.271	2.364	0.1000	26.0	25.0	4.1	20.0
1,2-Dichloropropane	Ave	1.529	1.561	0.1000	25.5	25.0	2.1	20.0
1,4-Dioxane	Ave	0.0070	0.0066		470	500	-5.9	50.0
Dibromomethane	Ave	0.8772	0.9496	0.1000	27.1	25.0	8.2	20.0
Bromodichloromethane	Ave	1.679	1.784	0.2000	26.6	25.0	6.2	20.0
2-Chloroethyl vinyl ether	Ave	1.184	1.215		25.7	25.0	2.6	20.0
cis-1,3-Dichloropropene	Ave	2.115	2.213	0.2000	26.2	25.0	4.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6691	0.6139	0.1000	115	125	-8.3	20.0
Toluene	Ave	0.8768	0.9016	0.4000	25.7	25.0	2.8	20.0
trans-1,3-Dichloropropene	Ave	0.5418	0.5273	0.1000	24.3	25.0	-2.7	20.0
Ethyl methacrylate	Ave	0.5432	0.5321		24.5	25.0	-2.0	20.0
1,1,2-Trichloroethane	Ave	0.2702	0.2754	0.1000	25.5	25.0	1.9	20.0
Tetrachloroethene	Ave	0.3682	0.4035	0.2000	27.4	25.0	9.6	20.0
1,3-Dichloropropane	Ave	0.5789	0.5751		24.8	25.0	-0.7	20.0
2-Hexanone	Ave	0.4655	0.4412	0.1000	118	125	-5.2	20.0
Dibromochloromethane	Ave	0.3496	0.3700	0.1000	26.5	25.0	5.8	20.0
1,2-Dibromoethane	Ave	0.3565	0.3752		26.3	25.0	5.2	20.0
Chlorobenzene	Ave	0.9813	0.9908	0.5000	25.2	25.0	1.0	20.0
Ethylbenzene	Ave	1.657	1.697	0.1000	25.6	25.0	2.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3593		25.7	25.0	2.8	20.0
m,p-Xylene	Ave	0.6517	0.6610	0.1000	25.4	25.0	1.4	20.0
o-Xylene	Ave	0.6329	0.6555	0.3000	25.9	25.0	3.6	20.0
Styrene	Ave	1.087	1.105	0.3000	25.4	25.0	1.7	20.0
Bromoform	Ave	0.2303	0.2500	0.1000	27.1	25.0	8.5	50.0
Isopropylbenzene	Ave	3.128	3.185	0.1000	25.5	25.0	1.8	20.0
Bromobenzene	Ave	0.7570	0.7938		26.2	25.0	4.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9386	0.9140	0.3000	24.3	25.0	-2.6	20.0
N-Propylbenzene	Ave	3.739	3.715		24.8	25.0	-0.6	20.0
1,2,3-Trichloropropane	Ave	0.3142	0.3212		25.6	25.0	2.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.4395	0.3600		20.5	25.0	-18.1	50.0
2-Chlorotoluene	Ave	0.7447	0.7336		24.6	25.0	-1.5	20.0
1,3,5-Trimethylbenzene	Ave	2.695	2.699		25.0	25.0	0.2	20.0
4-Chlorotoluene	Ave	2.409	2.548		26.4	25.0	5.8	20.0
tert-Butylbenzene	Ave	0.5927	0.5846		24.7	25.0	-1.4	20.0
1,2,4-Trimethylbenzene	Ave	2.750	2.750		25.0	25.0	-0.0	20.0
sec-Butylbenzene	Ave	3.334	3.439		25.8	25.0	3.2	20.0
4-Isopropyltoluene	Ave	2.910	3.058		26.3	25.0	5.1	20.0
1,3-Dichlorobenzene	Ave	1.551	1.577	0.6000	25.4	25.0	1.7	20.0
1,4-Dichlorobenzene	Ave	1.547	1.596	0.5000	25.8	25.0	3.1	20.0
n-Butylbenzene	Ave	2.664	2.691		25.3	25.0	1.0	20.0
1,2-Dichlorobenzene	Ave	1.525	1.574	0.4000	25.8	25.0	3.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab Sample ID: CCVIS 480-490741/3 Calibration Date: 09/07/2019 12:17

Instrument ID: HP5975T Calib Start Date: 08/07/2019 16:28

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/07/2019 19:14

Lab File ID: T4581.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2103	0.1938	0.0500	23.0	25.0	-7.8	50.0
1,2,4-Trichlorobenzene	Ave	1.129	1.130	0.2000	25.0	25.0	0.1	20.0
Hexachlorobutadiene	Ave	0.4930	0.5258		26.7	25.0	6.6	20.0
Naphthalene	Ave	3.498	3.445		24.6	25.0	-1.5	20.0
1,2,3-Trichlorobenzene	Ave	1.125	1.096		24.4	25.0	-2.6	20.0
Dibromofluoromethane (Surr)	Ave	1.259	1.313		26.1	25.0	4.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.687	1.697		25.2	25.0	0.6	20.0
Toluene-d8 (Surr)	Ave	1.287	1.231		23.9	25.0	-4.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.3955	0.3943		24.9	25.0	-0.3	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4581.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 07-Sep-2019 12:17:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0083938-003
Operator ID: OI Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 07-Sep-2019 12:40:55 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: izquierdoo Date: 07-Sep-2019 12:40:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	158172	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	86	615756	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	94	338605	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	0.000	94	207641	25.0	26.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	268489	25.0	25.2	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	758223	25.0	23.9	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	242789	25.0	24.9	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	303706	25.0	33.7	
13 Chloromethane	50	1.361	1.361	0.000	99	409533	25.0	28.1	
151 Butadiene	54	1.434	1.434	0.000	90	362865	25.0	29.1	
14 Vinyl chloride	62	1.444	1.444	0.000	97	335932	25.0	30.0	
15 Bromomethane	94	1.703	1.703	0.000	92	180042	25.0	32.4	
16 Chloroethane	64	1.765	1.765	0.000	99	187227	25.0	35.9	
18 Dichlorofluoromethane	67	1.993	1.993	0.000	98	396903	25.0	28.8	
17 Trichlorofluoromethane	101	2.004	2.004	0.000	98	362104	25.0	31.6	
19 Ethyl ether	59	2.232	2.232	0.000	97	247817	25.0	26.7	
21 Acrolein	56	2.418	2.418	0.000	100	224441	125.0	104.1	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	94	198218	25.0	29.5	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.439	0.000	93	219898	25.0	28.6	
23 Acetone	43	2.563	2.563	0.000	100	622541	125.0	131.9	
24 Iodomethane	142	2.594	2.594	0.000	100	392125	25.0	29.2	
25 Carbon disulfide	76	2.626	2.626	0.000	100	703402	25.0	27.8	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	89	428780	25.0	24.1	
28 Methyl acetate	43	2.822	2.822	0.000	99	566804	50.0	42.7	
30 Methylene Chloride	84	2.916	2.916	0.000	97	234012	25.0	26.1	
31 2-Methyl-2-propanol	59	3.081	3.081	0.000	99	528051	250.0	240.2	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	98	667545	25.0	26.3	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	94	230164	25.0	27.8	
34 Acrylonitrile	53	3.175	3.175	0.000	99	1490617	250.0	249.6	
35 Hexane	57	3.278	3.278	0.000	94	409467	25.0	26.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	438426	25.0	26.2	
39 Vinyl acetate	43	3.517	3.517	0.000	97	1333093	50.0	53.4	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	93	322803	25.0	26.7	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	85	250807	25.0	27.0	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	98	948694	125.0	122.5	
47 Chlorobromomethane	128	4.149	4.149	0.000	96	132605	25.0	27.3	
48 Tetrahydrofuran	42	4.159	4.159	0.000	91	255534	50.0	45.3	
50 Chloroform	83	4.211	4.211	0.000	95	389062	25.0	26.2	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	96	347050	25.0	27.8	
52 Cyclohexane	56	4.304	4.304	0.000	94	480064	25.0	24.4	
53 Carbon tetrachloride	117	4.408	4.408	0.000	97	312317	25.0	27.7	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	93	299855	25.0	27.3	
55 Benzene	78	4.584	4.584	0.000	95	865799	25.0	26.8	
56 Isobutyl alcohol	43	4.594	4.594	0.000	94	541718	625.0	555.9	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	97	359096	25.0	26.0	
59 n-Heptane	43	4.719	4.719	0.000	95	426916	25.0	24.4	
60 Trichloroethene	95	5.071	5.071	0.000	95	227791	25.0	27.8	
62 Methylcyclohexane	83	5.164	5.164	0.000	97	373872	25.0	26.0	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	94	246932	25.0	25.5	
65 Dibromomethane	93	5.372	5.372	0.000	95	150195	25.0	27.1	
66 1,4-Dioxane	88	5.372	5.372	0.000	55	80807	500.0	470.4	M
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	282157	25.0	26.6	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	93	192139	25.0	25.7	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	92	350108	25.0	26.2	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	97	1890168	125.0	114.7	
73 Toluene	92	6.025	6.025	0.000	98	555187	25.0	25.7	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	97	324688	25.0	24.3	
77 Ethyl methacrylate	69	6.263	6.263	0.000	94	327650	25.0	24.5	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	169603	25.0	25.5	
79 Tetrachloroethene	166	6.429	6.429	0.000	97	248456	25.0	27.4	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	96	354120	25.0	24.8	
81 2-Hexanone	43	6.543	6.543	0.000	97	1358342	125.0	118.5	
82 Chlorodibromomethane	129	6.688	6.688	0.000	91	227828	25.0	26.5	
83 Ethylene Dibromide	107	6.760	6.760	0.000	98	231010	25.0	26.3	
86 Chlorobenzene	112	7.113	7.113	0.000	95	610118	25.0	25.2	
88 Ethylbenzene	91	7.175	7.175	0.000	98	1045231	25.0	25.6	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	221222	25.0	25.7	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	406991	25.0	25.4	
91 o-Xylene	106	7.589	7.589	0.000	98	403595	25.0	25.9	
92 Styrene	104	7.610	7.610	0.000	95	680283	25.0	25.4	
93 Bromoform	173	7.807	7.807	0.000	96	153930	25.0	27.1	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1078305	25.0	25.5	
97 Bromobenzene	156	8.149	8.149	0.000	94	268782	25.0	26.2	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	95	309487	25.0	24.3	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1257998	25.0	24.8	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	90	108772	25.0	25.6	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	77	121891	25.0	20.5	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	248414	25.0	24.6	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	95	914033	25.0	25.0	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	862669	25.0	26.4	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	197952	25.0	24.7	
107 1,2,4-Trimethylbenzene	105	8.646	8.646	0.000	97	930998	25.0	25.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	1164518	25.0	25.8	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1035492	25.0	26.3	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	99	533996	25.0	25.4	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	95	540474	25.0	25.8	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	911131	25.0	25.3	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	98	533104	25.0	25.8	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	82	65635	25.0	23.0	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	382640	25.0	25.0	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	178029	25.0	26.7	
121 Naphthalene	128	10.823	10.823	0.000	97	1166555	25.0	24.6	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	96	371188	25.0	24.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00164	Amount Added:	12.50	Units: uL	
GAS CORP mix_00359	Amount Added:	12.50	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

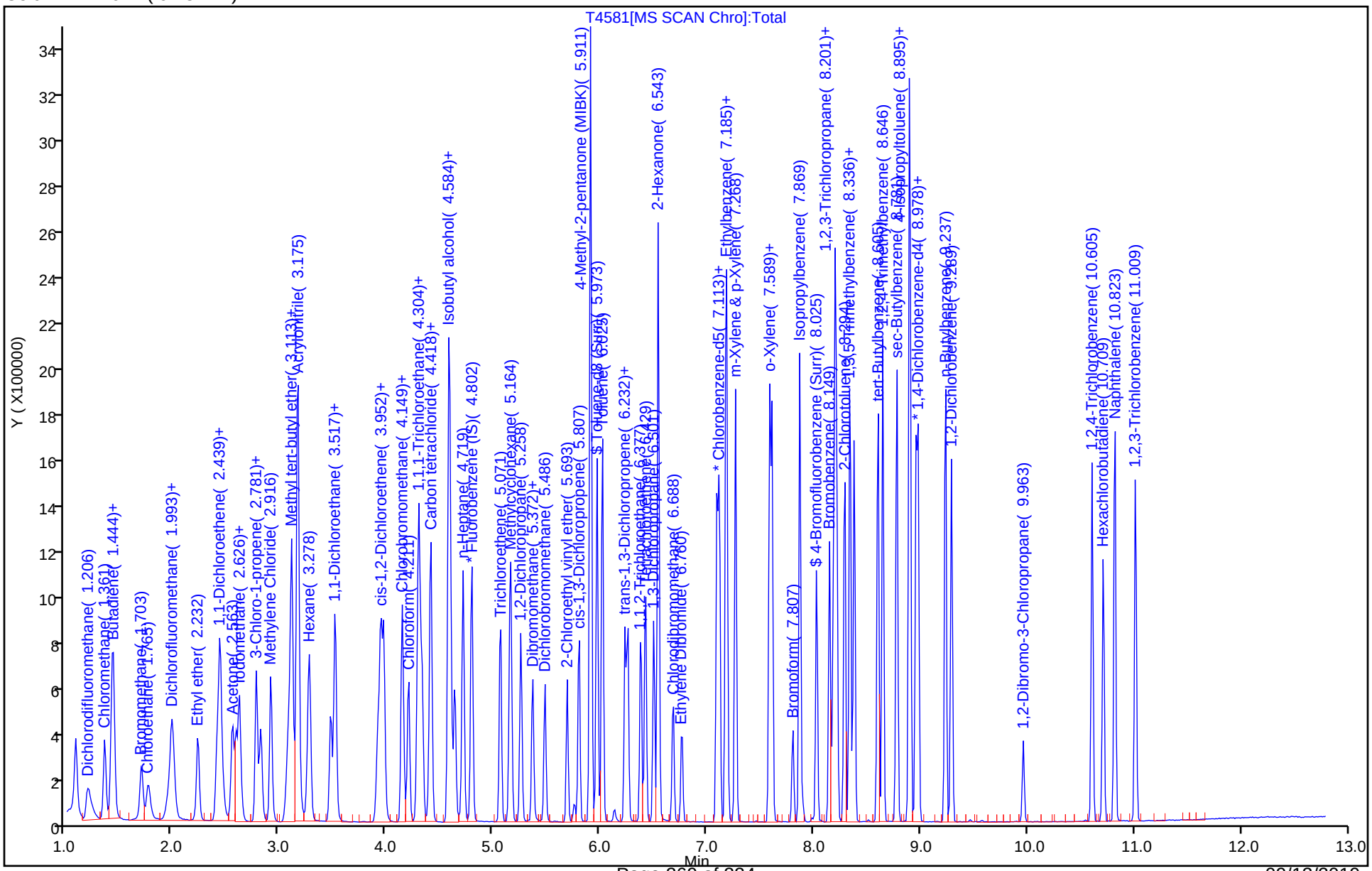
Report Date: 07-Sep-2019 12:40:57 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4581.D

Injection Date:	07-Sep-2019 12:17:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

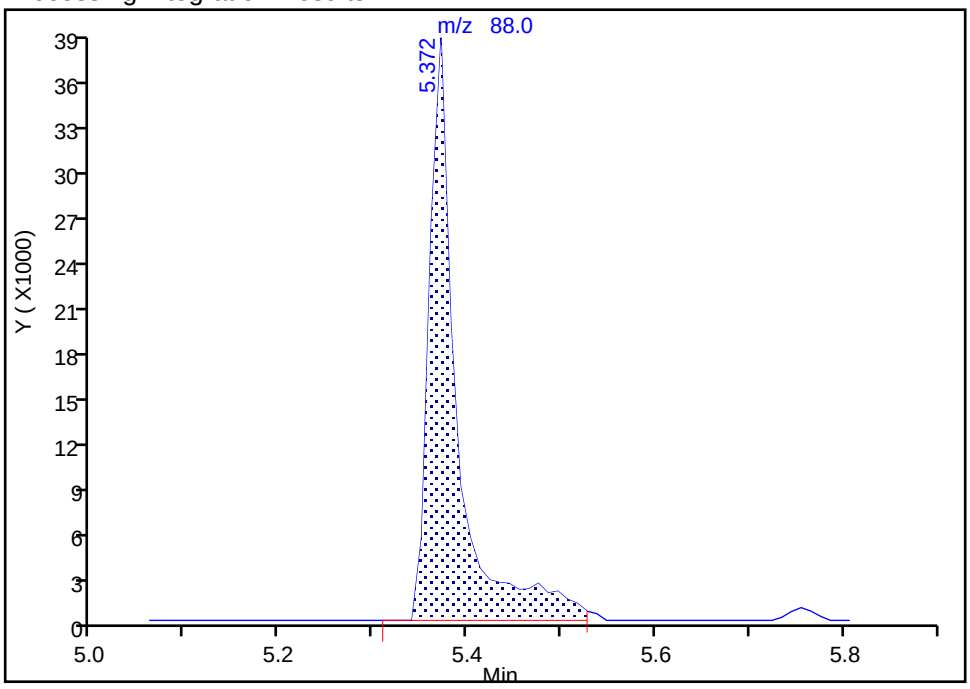
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4581.D
Injection Date: 07-Sep-2019 12:17:30 Instrument ID: HP5975T
Lims ID: CCVIS
Client ID:
Operator ID: OI ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

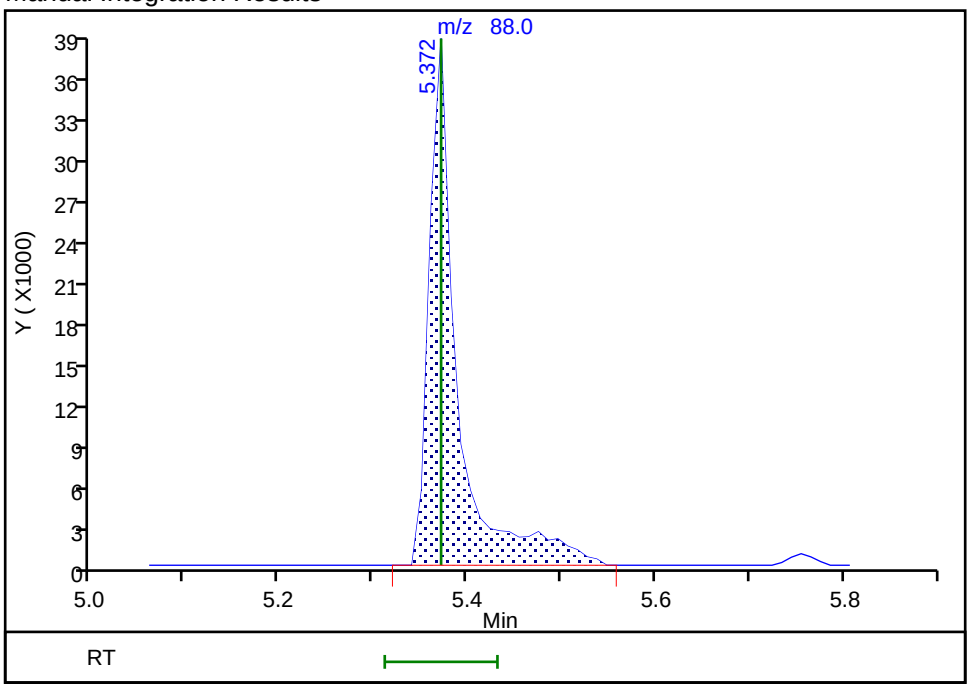
Processing Integration Results

RT: 5.37
Area: 80526
Amount: 468.7607
Amount Units: ug/L



Manual Integration Results

RT: 5.37
Area: 80807
Amount: 470.3964
Amount Units: ug/L



Reviewer: izquierdoo, 07-Sep-2019 12:40:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab Sample ID: CCVIS 480-490780/3 Calibration Date: 09/08/2019 09:45

Instrument ID: HP5975T Calib Start Date: 08/07/2019 16:28

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/07/2019 19:14

Lab File ID: T4609.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.423	1.825	0.1000	32.1	25.0	28.2	50.0
Chloromethane	Ave	2.306	2.529	0.1000	27.4	25.0	9.7	20.0
Butadiene	Ave	1.974	2.123		26.9	25.0	7.5	20.0
Vinyl chloride	Ave	1.770	2.056	0.1000	29.0	25.0	16.2	20.0
Bromomethane	Ave	0.8784	1.079	0.1000	30.7	25.0	22.9	50.0
Chloroethane	Ave	0.8232	1.129	0.1000	34.3	25.0	37.2	50.0
Dichlorofluoromethane	Ave	2.175	2.442		28.1	25.0	12.3	20.0
Trichlorofluoromethane	Ave	1.810	2.311	0.1000	31.9	25.0	27.7*	20.0
Ethyl ether	Ave	1.466	1.522		25.9	25.0	3.8	20.0
Acrolein	Ave	0.3409	0.2558		93.8	125	-25.0	50.0
1,1-Dichloroethene	Ave	1.063	1.171	0.1000	27.5	25.0	10.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.215	1.353	0.1000	27.8	25.0	11.3	20.0
Acetone	Ave	0.7462	0.7795	0.1000	131	125	4.5	50.0
Iodomethane	Ave	2.124	2.367		27.9	25.0	11.4	20.0
Carbon disulfide	Ave	4.003	4.209	0.1000	26.3	25.0	5.2	20.0
Allyl chloride	Ave	2.811	2.592		23.0	25.0	-7.8	20.0
Methyl acetate	Ave	2.099	1.743	0.1000	41.5	50.0	-17.0	50.0
Methylene Chloride	Ave	1.416	1.429	0.1000	25.2	25.0	0.9	20.0
2-Methyl-2-propanol	Ave	0.3475	0.3293		237	250	-5.2	50.0
Methyl tert-butyl ether	Ave	4.017	4.052	0.1000	25.2	25.0	0.9	20.0
trans-1,2-Dichloroethene	Ave	1.306	1.378	0.1000	26.4	25.0	5.5	20.0
Acrylonitrile	Ave	0.9441	0.8788		233	250	-6.9	20.0
Hexane	Lin1		2.548		26.0	25.0	4.1	20.0
1,1-Dichloroethane	Ave	2.646	2.660	0.2000	25.1	25.0	0.5	20.0
Vinyl acetate	Ave	3.944	3.990		50.6	50.0	1.2	20.0
2,2-Dichloropropane	Ave	1.909	1.907		25.0	25.0	-0.0	20.0
cis-1,2-Dichloroethene	Ave	1.468	1.495	0.1000	25.5	25.0	1.8	20.0
2-Butanone (MEK)	Ave	1.224	1.154	0.1000	118	125	-5.8	20.0
Bromochloromethane	Ave	0.7685	0.7928		25.8	25.0	3.2	20.0
Tetrahydrofuran	Ave	0.8924	0.7603		42.6	50.0	-14.8	20.0
Chloroform	Ave	2.349	2.319	0.2000	24.7	25.0	-1.3	20.0
1,1,1-Trichloroethane	Ave	1.976	2.058	0.1000	26.0	25.0	4.2	20.0
Cyclohexane	Ave	3.109	2.932	0.1000	23.6	25.0	-5.7	20.0
1,1-Dichloropropene	Ave	1.733	1.758		25.4	25.0	1.4	20.0
Carbon tetrachloride	Ave	1.782	1.870	0.1000	26.2	25.0	4.9	20.0
Benzene	Ave	5.116	5.180	0.5000	25.3	25.0	1.3	20.0
Isobutyl alcohol	Ave	0.1540	0.1329		539	625	-13.7	50.0
1,2-Dichloroethane	Ave	2.180	2.151	0.1000	24.7	25.0	-1.3	20.0
n-Heptane	Ave	2.765	2.731		24.7	25.0	-1.3	20.0
Trichloroethene	Ave	1.296	1.370	0.2000	26.4	25.0	5.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab Sample ID: CCVIS 480-490780/3 Calibration Date: 09/08/2019 09:45

Instrument ID: HP5975T Calib Start Date: 08/07/2019 16:28

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/07/2019 19:14

Lab File ID: T4609.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.271	2.276	0.1000	25.0	25.0	0.2	20.0
1,2-Dichloropropane	Ave	1.529	1.509	0.1000	24.7	25.0	-1.3	20.0
1,4-Dioxane	Ave	0.0070	0.0064		458	500	-8.5	50.0
Dibromomethane	Ave	0.8772	0.9117	0.1000	26.0	25.0	3.9	20.0
Bromodichloromethane	Ave	1.679	1.673	0.2000	24.9	25.0	-0.4	20.0
2-Chloroethyl vinyl ether	Ave	1.184	1.172		24.8	25.0	-1.0	20.0
cis-1,3-Dichloropropene	Ave	2.115	2.081	0.2000	24.6	25.0	-1.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6691	0.5942	0.1000	111	125	-11.2	20.0
Toluene	Ave	0.8768	0.8395	0.4000	23.9	25.0	-4.2	20.0
trans-1,3-Dichloropropene	Ave	0.5418	0.5066	0.1000	23.4	25.0	-6.5	20.0
Ethyl methacrylate	Ave	0.5432	0.5026		23.1	25.0	-7.5	20.0
1,1,2-Trichloroethane	Ave	0.2702	0.2633	0.1000	24.4	25.0	-2.5	20.0
Tetrachloroethene	Ave	0.3682	0.3706	0.2000	25.2	25.0	0.6	20.0
1,3-Dichloropropane	Ave	0.5789	0.5508		23.8	25.0	-4.9	20.0
2-Hexanone	Ave	0.4655	0.4298	0.1000	115	125	-7.7	20.0
Dibromochloromethane	Ave	0.3496	0.3420	0.1000	24.5	25.0	-2.2	20.0
1,2-Dibromoethane	Ave	0.3565	0.3455		24.2	25.0	-3.1	20.0
Chlorobenzene	Ave	0.9813	0.9249	0.5000	23.6	25.0	-5.8	20.0
Ethylbenzene	Ave	1.657	1.578	0.1000	23.8	25.0	-4.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3495	0.3405		24.4	25.0	-2.6	20.0
m,p-Xylene	Ave	0.6517	0.6250	0.1000	24.0	25.0	-4.1	20.0
o-Xylene	Ave	0.6329	0.6273	0.3000	24.8	25.0	-0.9	20.0
Styrene	Ave	1.087	1.048	0.3000	24.1	25.0	-3.5	20.0
Bromoform	Ave	0.2303	0.2328	0.1000	25.3	25.0	1.1	50.0
Isopropylbenzene	Ave	3.128	3.006	0.1000	24.0	25.0	-3.9	20.0
Bromobenzene	Ave	0.7570	0.7647		25.3	25.0	1.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9386	0.8790	0.3000	23.4	25.0	-6.3	20.0
N-Propylbenzene	Ave	3.739	3.542		23.7	25.0	-5.3	20.0
1,2,3-Trichloropropane	Ave	0.3142	0.3115		24.8	25.0	-0.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.4395	0.3663		20.8	25.0	-16.6	50.0
2-Chlorotoluene	Ave	0.7447	0.7213		24.2	25.0	-3.1	20.0
1,3,5-Trimethylbenzene	Ave	2.695	2.591		24.0	25.0	-3.8	20.0
4-Chlorotoluene	Ave	2.409	2.477		25.7	25.0	2.8	20.0
tert-Butylbenzene	Ave	0.5927	0.5671		23.9	25.0	-4.3	20.0
1,2,4-Trimethylbenzene	Ave	2.750	2.639		24.0	25.0	-4.1	20.0
sec-Butylbenzene	Ave	3.334	3.285		24.6	25.0	-1.5	20.0
4-Isopropyltoluene	Ave	2.910	2.897		24.9	25.0	-0.5	20.0
1,3-Dichlorobenzene	Ave	1.551	1.531	0.6000	24.7	25.0	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.547	1.555	0.5000	25.1	25.0	0.5	20.0
n-Butylbenzene	Ave	2.664	2.545		23.9	25.0	-4.5	20.0
1,2-Dichlorobenzene	Ave	1.525	1.529	0.4000	25.1	25.0	0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Lab Sample ID: CCVIS 480-490780/3 Calibration Date: 09/08/2019 09:45

Instrument ID: HP5975T Calib Start Date: 08/07/2019 16:28

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/07/2019 19:14

Lab File ID: T4609.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2103	0.1852	0.0500	22.0	25.0	-11.9	50.0
1,2,4-Trichlorobenzene	Ave	1.129	1.104	0.2000	24.5	25.0	-2.2	20.0
Hexachlorobutadiene	Ave	0.4930	0.4932		25.0	25.0	0.0	20.0
Naphthalene	Ave	3.498	3.361		24.0	25.0	-3.9	20.0
1,2,3-Trichlorobenzene	Ave	1.125	1.092		24.3	25.0	-2.9	20.0
Dibromofluoromethane (Surr)	Ave	1.259	1.306		25.9	25.0	3.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.687	1.678		24.9	25.0	-0.5	20.0
Toluene-d8 (Surr)	Ave	1.287	1.222		23.7	25.0	-5.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.3955	0.3876		24.5	25.0	-2.0	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4609.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Sep-2019 09:45:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0083944-003
Operator ID: AM Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 10:08:43 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 10:08:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	164128	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	648176	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	95	348019	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	94	214324	25.0	25.9	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	275407	25.0	24.9	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	792076	25.0	23.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	251249	25.0	24.5	
11 Dichlorodifluoromethane	85	1.216	1.216	0.000	99	299476	25.0	32.1	
13 Chloromethane	50	1.372	1.372	0.000	99	415083	25.0	27.4	
151 Butadiene	54	1.444	1.444	0.000	90	348393	25.0	26.9	
14 Vinyl chloride	62	1.465	1.465	0.000	97	337527	25.0	29.0	
15 Bromomethane	94	1.724	1.724	0.000	90	177170	25.0	30.7	
16 Chloroethane	64	1.776	1.776	0.000	98	185340	25.0	34.3	
18 Dichlorofluoromethane	67	2.004	2.004	0.000	97	400771	25.0	28.1	
17 Trichlorofluoromethane	101	2.014	2.014	0.000	98	379326	25.0	31.9	
19 Ethyl ether	59	2.242	2.242	0.000	96	249769	25.0	25.9	
21 Acrolein	56	2.418	2.418	0.000	100	209951	125.0	93.8	
22 1,1-Dichloroethene	96	2.450	2.450	0.000	93	192228	25.0	27.5	
20 1,1,2-Trichloro-1,2,2-trif	101	2.460	2.460	0.000	94	221991	25.0	27.8	
23 Acetone	43	2.564	2.564	0.000	100	639675	125.0	130.6	
24 Iodomethane	142	2.605	2.605	0.000	99	388497	25.0	27.9	
25 Carbon disulfide	76	2.636	2.636	0.000	100	690875	25.0	26.3	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	90	425360	25.0	23.0	
28 Methyl acetate	43	2.833	2.833	0.000	99	572087	50.0	41.5	
30 Methylene Chloride	84	2.926	2.926	0.000	97	234614	25.0	25.2	
31 2-Methyl-2-propanol	59	3.082	3.082	0.000	98	540432	250.0	236.9	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	99	665008	25.0	25.2	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	95	226148	25.0	26.4	
34 Acrylonitrile	53	3.175	3.175	0.000	99	1442398	250.0	232.7	
35 Hexane	57	3.279	3.279	0.000	93	418147	25.0	26.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	436574	25.0	25.1	
39 Vinyl acetate	43	3.527	3.527	0.000	97	1309661	50.0	50.6	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	92	313047	25.0	25.0	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	245289	25.0	25.5	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	946902	125.0	117.8	
47 Chlorobromomethane	128	4.149	4.149	0.000	95	130122	25.0	25.8	
48 Tetrahydrofuran	42	4.159	4.159	0.000	92	249581	50.0	42.6	
50 Chloroform	83	4.211	4.211	0.000	95	380565	25.0	24.7	
52 Cyclohexane	56	4.304	4.304	0.000	95	481215	25.0	23.6	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	96	337847	25.0	26.0	
53 Carbon tetrachloride	117	4.418	4.418	0.000	97	306914	25.0	26.2	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	92	288521	25.0	25.4	
55 Benzene	78	4.584	4.584	0.000	95	850175	25.0	25.3	
56 Isobutyl alcohol	43	4.605	4.605	0.000	95	545488	625.0	539.5	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	97	352989	25.0	24.7	
59 n-Heptane	43	4.719	4.719	0.000	95	448165	25.0	24.7	
60 Trichloroethene	95	5.071	5.071	0.000	96	224916	25.0	26.4	
62 Methylcyclohexane	83	5.165	5.165	0.000	98	373490	25.0	25.0	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	94	247620	25.0	24.7	
65 Dibromomethane	93	5.372	5.372	0.000	96	149639	25.0	26.0	
66 1,4-Dioxane	88	5.372	5.372	0.000	50	82736	500.0	457.5	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	274587	25.0	24.9	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	92	192411	25.0	24.8	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	92	341552	25.0	24.6	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	98	1925639	125.0	111.0	
73 Toluene	92	6.025	6.025	0.000	98	544160	25.0	23.9	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	97	328378	25.0	23.4	
77 Ethyl methacrylate	69	6.263	6.263	0.000	94	325790	25.0	23.1	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	95	170674	25.0	24.4	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	240209	25.0	25.2	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	96	357006	25.0	23.8	
81 2-Hexanone	43	6.543	6.543	0.000	97	1392805	125.0	115.4	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	221669	25.0	24.5	
83 Ethylene Dibromide	107	6.771	6.771	0.000	99	223965	25.0	24.2	
86 Chlorobenzene	112	7.113	7.113	0.000	94	599480	25.0	23.6	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1022677	25.0	23.8	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	220717	25.0	24.4	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	405106	25.0	24.0	
91 o-Xylene	106	7.590	7.590	0.000	97	406578	25.0	24.8	
92 Styrene	104	7.610	7.610	0.000	95	679397	25.0	24.1	
93 Bromoform	173	7.807	7.807	0.000	96	150877	25.0	25.3	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1046244	25.0	24.0	
97 Bromobenzene	156	8.149	8.149	0.000	95	266126	25.0	25.3	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	305916	25.0	23.4	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1232839	25.0	23.7	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	108411	25.0	24.8	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	85	127494	25.0	20.8	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	251020	25.0	24.2	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	901789	25.0	24.0	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	862054	25.0	25.7	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	197358	25.0	23.9	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	97	918267	25.0	24.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	1143344	25.0	24.6	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1008149	25.0	24.9	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	98	532806	25.0	24.7	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	95	541070	25.0	25.1	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	885739	25.0	23.9	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	98	531961	25.0	25.1	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	83	64434	25.0	22.0	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	384356	25.0	24.5	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	171656	25.0	25.0	
121 Naphthalene	128	10.823	10.823	0.000	97	1169617	25.0	24.0	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	95	380119	25.0	24.3	

Reagents:

8260 CORP mix_00164	Amount Added: 12.50	Units: uL	
GAS CORP mix_00359	Amount Added: 12.50	Units: uL	
T_8260_Surr_00195	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added: 1.00	Units: uL	Run Reagent

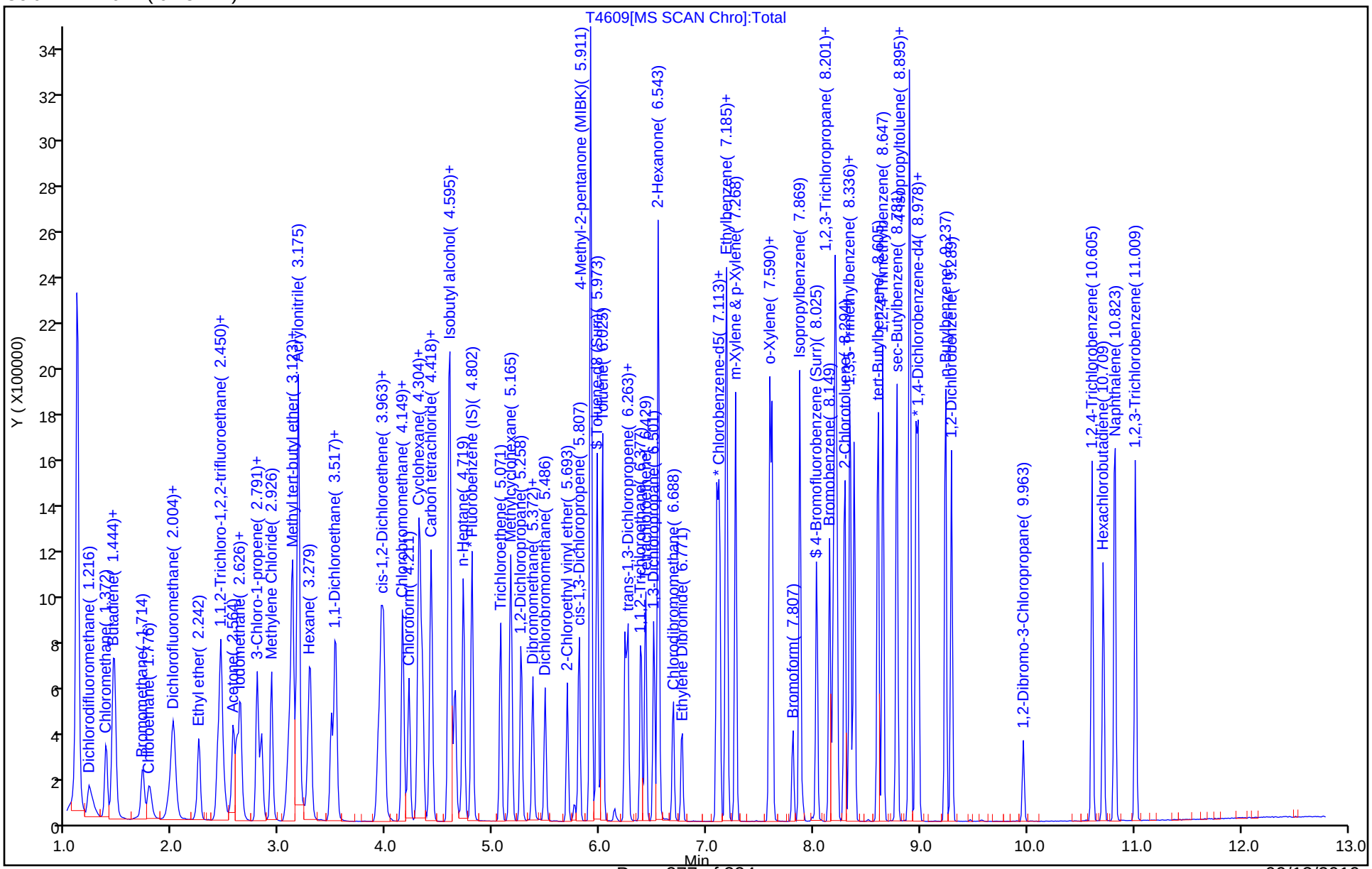
Report Date: 08-Sep-2019 10:08:45 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4609.D

Injection Date:	08-Sep-2019 09:45:30	Instrument ID:	HP5975T	Operator ID:	AM
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3672.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 07-Aug-2019 14:49:30 ALS Bottle#: 27 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0083215-003
Operator ID: LH Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Aug-2019 15:52:28 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: HillL Date: 07-Aug-2019 14:59:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 5 BFB	95	5.492	5.492	0.000	0	269504	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

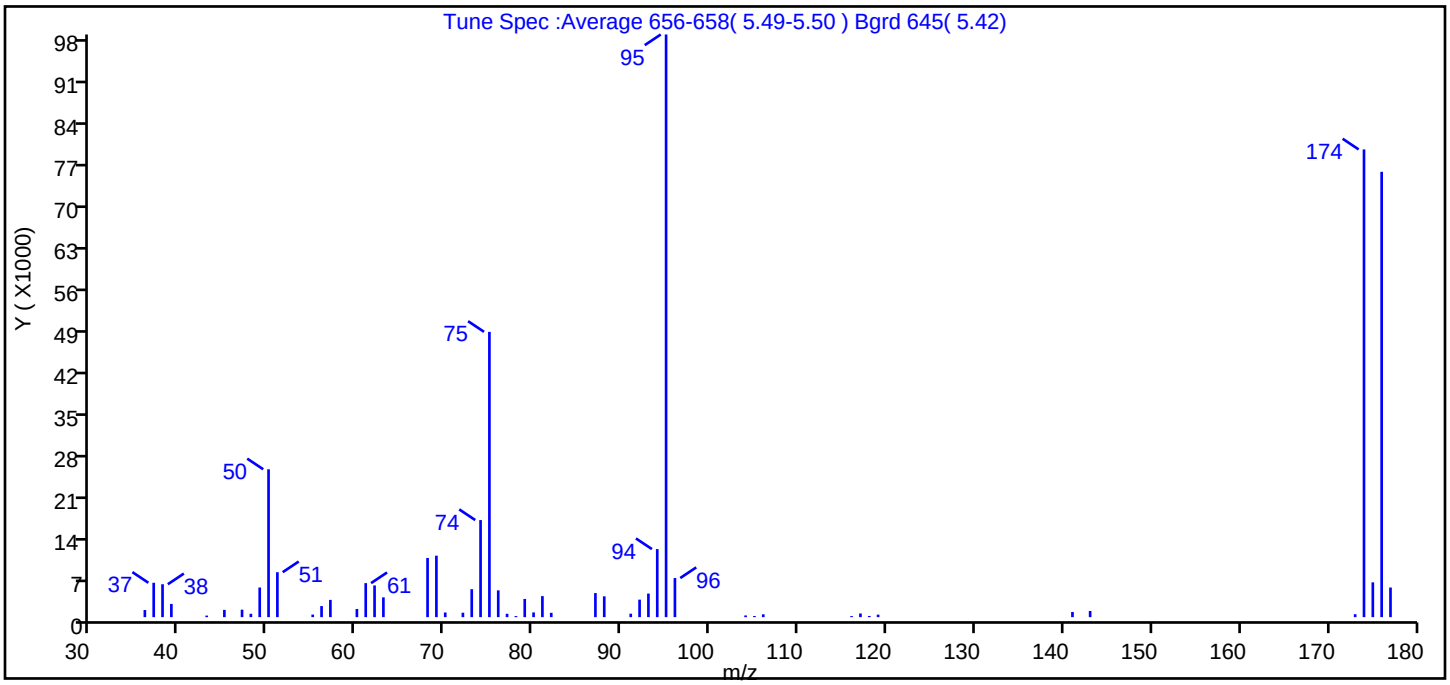
MV_BFB_STK_00073 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3672.D
Injection Date: 07-Aug-2019 14:49:30 Instrument ID: HP5975T
Lims ID: BFB
Client ID:
Operator ID: LH ALS Bottle#: 27 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.4
75	30 to 60% of m/z 95	49.0
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	80.3
175	5 to 9% of m/z 174	6.0 (7.4)
176	Greater than 95% but less than 101% of m/z 174	76.4 (95.2)
177	5 to 9% of m/z 176	5.1 (6.7)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3672.D\T-8260.rslt\spectra.d
Injection Date: 07-Aug-2019 14:49:30
Spectrum: Tune Spec :Average 656-658(5.49-5.50) Bgrd 645(5.42)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 54

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1199	60.00	1374	79.00	3072	106.00	479
37.00	5799	61.00	5737	80.00	797	116.00	175
38.00	5553	62.00	5350	81.00	3547	117.00	617
39.00	2231	63.00	3334	82.00	731	118.00	197
43.00	263	68.00	9985	87.00	4060	119.00	423
45.00	1228	69.00	10371	88.00	3512	141.00	874
47.00	1259	70.00	784	91.00	583	143.00	1045
48.00	568	72.00	748	92.00	2954	173.00	496
49.00	4999	73.00	4716	93.00	3976	174.00	78904
50.00	24944	74.00	16378	94.00	11480	175.00	5869
51.00	7585	75.00	48128	95.00	98296	176.00	75128
55.00	433	76.00	4519	96.00	6597	177.00	4998
56.00	1870	77.00	567	104.00	285		
57.00	2911	78.00	183	105.00	191		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4580.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	07-Sep-2019 11:43:30	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0083938-002				
Operator ID:	OI	Instrument ID:	HP5975T		
Method:	\\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	07-Sep-2019 12:02:26	Calib Date:	07-Aug-2019 23:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0333				
First Level Reviewer: izquierdoo		Date:	07-Sep-2019 12:02:26		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 5 BFB	95	5.474	5.474	0.000	83	72288	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

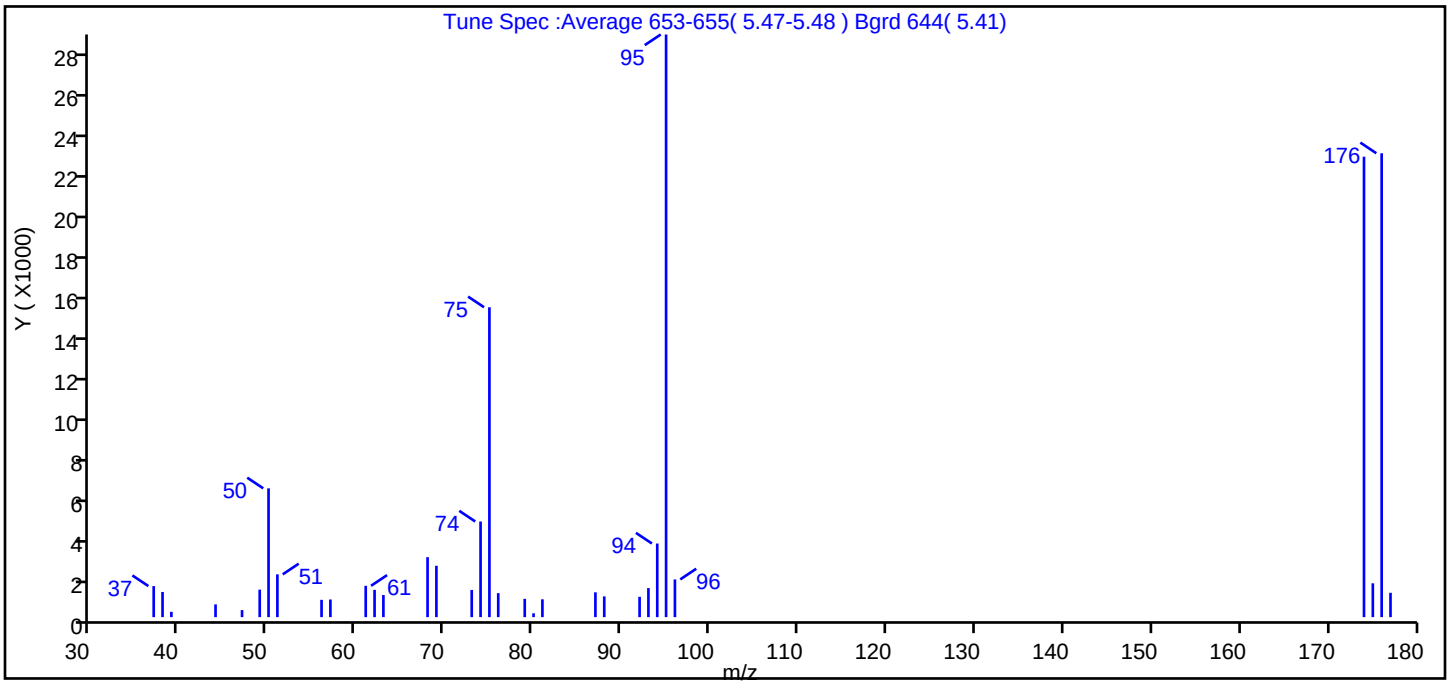
BFB_WRK_00091 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4580.D
Injection Date: 07-Sep-2019 11:43:30 Instrument ID: HP5975T
Lims ID: BFB
Client ID:
Operator ID: OI ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.1
75	30 to 60% of m/z 95	53.2
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	79.0
175	5 to 9% of m/z 174	5.8 (7.3)
176	Greater than 95% but less than 101% of m/z 174	79.6 (100.7)
177	5 to 9% of m/z 176	4.2 (5.2)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4580.D\T-8260.rslt\spectra.d
Injection Date: 07-Sep-2019 11:43:30
Spectrum: Tune Spec :Average 653-655(5.47-5.48) Bgrd 644(5.41)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 33

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1527	57.00	868	76.00	1181	95.00	28648
38.00	1238	61.00	1541	79.00	900	96.00	1855
39.00	262	62.00	1341	80.00	189	174.00	22640
44.00	627	63.00	1088	81.00	877	175.00	1664
47.00	346	68.00	2949	87.00	1221	176.00	22808
49.00	1353	69.00	2525	88.00	1021	177.00	1197
50.00	6333	73.00	1337	92.00	999		
51.00	2104	74.00	4703	93.00	1429		
56.00	851	75.00	15236	94.00	3620		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4608.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Sep-2019 09:21:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0083944-002
Operator ID: AM Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 09:30:35 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 09:30:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 5 BFB	95	5.456	5.456	0.000	87	253706	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

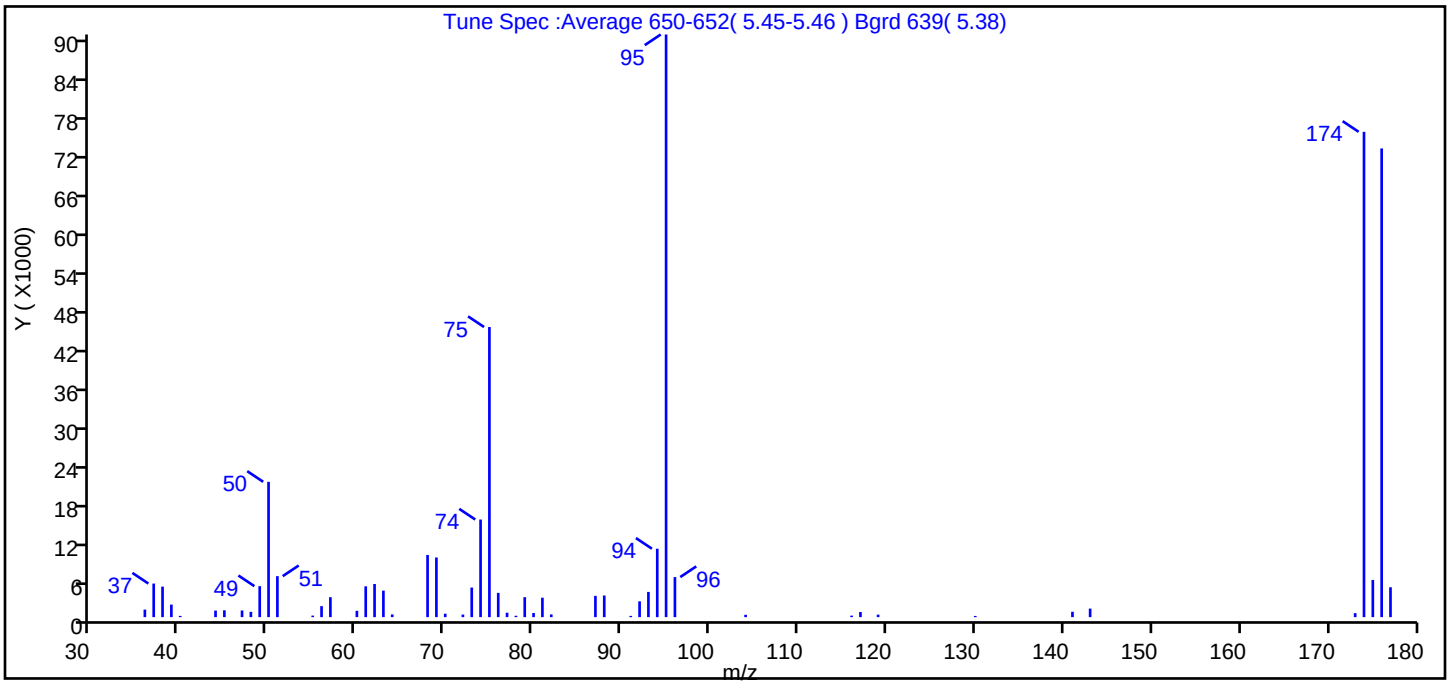
BFB_WRK_00091 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4608.D
Injection Date: 08-Sep-2019 09:21:30 Instrument ID: HP5975T
Lims ID: BFB
Client ID:
Operator ID: AM ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.2
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	83.3
175	5 to 9% of m/z 174	6.4 (7.7)
176	Greater than 95% but less than 101% of m/z 174	80.4 (96.6)
177	5 to 9% of m/z 176	5.1 (6.4)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4608.D\T-8260.rslt\spectra.d
Injection Date: 08-Sep-2019 09:21:30
Spectrum: Tune Spec :Average 650-652(5.45-5.46) Bgrd 639(5.38)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 54

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1170	57.00	3091	77.00	687	104.00	362
37.00	5197	60.00	980	78.00	216	116.00	235
38.00	4723	61.00	4768	79.00	3090	117.00	794
39.00	1942	62.00	5125	80.00	640	119.00	386
40.00	193	63.00	4104	81.00	3005	130.00	186
44.00	1016	64.00	420	82.00	421	141.00	834
45.00	1061	68.00	9619	87.00	3289	143.00	1322
47.00	1033	69.00	9230	88.00	3345	173.00	620
48.00	822	70.00	531	91.00	194	174.00	75088
49.00	4794	72.00	400	92.00	2449	175.00	5755
50.00	20936	73.00	4577	93.00	3903	176.00	72520
51.00	6341	74.00	15103	94.00	10588	177.00	4625
55.00	237	75.00	44888	95.00	90152		
56.00	1702	76.00	3755	96.00	6200		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-490741/7

Matrix: Water Lab File ID: T4585.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 13:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-490741/7

Matrix: Water Lab File ID: T4585.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 13:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4585.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-Sep-2019 13:54:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0083938-007
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 07-Sep-2019 14:11:22 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: izquierdoo Date: 07-Sep-2019 14:11:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.792	4.802	-0.010	98	162413	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	633061	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	337888	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.326	0.000	92	208692	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	272573	25.0	24.9	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	766277	25.0	23.5	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	246153	25.0	24.6	
11 Dichlorodifluoromethane	85		1.206					ND	
12 Chlorodifluoromethane	51		1.227					ND	
13 Chloromethane	50		1.361					ND	
151 Butadiene	54		1.434					ND	
14 Vinyl chloride	62		1.444					ND	
15 Bromomethane	94		1.703					ND	
16 Chloroethane	64		1.765					ND	
18 Dichlorofluoromethane	67		1.993					ND	
17 Trichlorofluoromethane	101		2.004					ND	
19 Ethyl ether	59		2.232					ND	
148 Ethanol	45		2.263					ND	
84 Propene oxide	58		2.325					ND	
21 Acrolein	56		2.418					ND	
22 1,1-Dichloroethene	96		2.439					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.439					ND	
23 Acetone	43		2.563					ND	
24 Iodomethane	142		2.594					ND	
25 Carbon disulfide	76		2.626					ND	
26 Isopropyl alcohol	45		2.729					ND	
27 3-Chloro-1-propene	41		2.781					ND	
28 Methyl acetate	43		2.822					ND	
29 Acetonitrile	40		2.843					ND	
30 Methylene Chloride	84	2.916	2.916	0.000	96	1757		0.1910	
31 2-Methyl-2-propanol	59		3.081					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
33 Methyl tert-butyl ether	73		3.102					ND	
32 trans-1,2-Dichloroethene	96		3.113					ND	
34 Acrylonitrile	53		3.175					ND	
35 Hexane	57		3.278					ND	Ua
36 1,1-Dichloroethane	63		3.475					ND	
37 Isopropyl ether	45		3.486					ND	
39 Vinyl acetate	43		3.517					ND	
139 Halothane	117		3.527					ND	
38 2-Chloro-1,3-butadiene	53		3.527					ND	
40 1,1-Dimethoxyethane	75		3.548					ND	
41 Tert-butyl ethyl ether	59		3.776					ND	
42 2,2-Dichloropropane	77		3.921					ND	
43 cis-1,2-Dichloroethene	96		3.952					ND	
44 2-Butanone (MEK)	43		3.973					ND	
45 Ethyl acetate	43		3.994					ND	
46 Propionitrile	54		4.066					ND	
47 Chlorobromomethane	128		4.149					ND	
49 Methacrylonitrile	41		4.149					ND	
48 Tetrahydrofuran	42		4.159					ND	
50 Chloroform	83	4.211	4.211	0.000	89	1969		0.1290	
51 1,1,1-Trichloroethane	97		4.304					ND	
52 Cyclohexane	56		4.304					ND	
53 Carbon tetrachloride	117		4.408					ND	
54 1,1-Dichloropropene	75		4.418					ND	
152 Isooctane	57		4.574					ND	
55 Benzene	78		4.584					ND	
56 Isobutyl alcohol	43		4.594					ND	
57 1,2-Dichloroethane	62		4.636					ND	
147 t-Amyl alcohol	59		4.646					ND	
58 Tert-amyl methyl ether	73		4.646					ND	
59 n-Heptane	43		4.719					ND	
1 1,4-Difluorobenzene	114		4.885					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.978					ND	
60 Trichloroethene	95		5.071					ND	
61 n-Butanol	56		5.082					ND	
142 Ethyl acrylate	55		5.154					ND	
62 Methylcyclohexane	83		5.164					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.165					ND	
63 1,2-Dichloropropane	63		5.258					ND	
64 Methyl methacrylate	41		5.330					ND	
65 Dibromomethane	93		5.372					ND	
66 1,4-Dioxane	88		5.372					ND	
67 Dichlorobromomethane	83		5.486					ND	
68 2-Nitropropane	43		5.683					ND	
69 2-Chloroethyl vinyl ether	63		5.693					ND	
70 Epichlorohydrin	57		5.766					ND	
71 cis-1,3-Dichloropropene	75		5.807					ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911					ND	
73 Toluene	92		6.025					ND	
74 2-Methylthiophene	97		6.128					ND	
75 trans-1,3-Dichloropropene	75		6.232					ND	
76 3-Methylthiophene	97		6.253					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
77 Ethyl methacrylate	69		6.263					ND	
78 1,1,2-Trichloroethane	83		6.377					ND	
79 Tetrachloroethene	166		6.429					ND	
80 1,3-Dichloropropane	76		6.501					ND	
81 2-Hexanone	43		6.543					ND	
155 n-Butyl acetate	43		6.615					ND	
82 Chlorodibromomethane	129		6.688					ND	
83 Ethylene Dibromide	107		6.760					ND	
146 1-Chlorohexane	55		7.071					ND	U
85 3-Chlorobenzotrifluoride	180		7.082					ND	
86 Chlorobenzene	112		7.113					ND	
87 4-Chlorobenzotrifluoride	180		7.123					ND	
88 Ethylbenzene	91		7.175					ND	
89 1,1,1,2-Tetrachloroethane	131		7.185					ND	
90 m-Xylene & p-Xylene	106		7.268					ND	
91 o-Xylene	106		7.589					ND	
92 Styrene	104		7.610					ND	
93 Bromoform	173		7.807					ND	
94 2-Chlorobenzotrifluoride	180		7.818					ND	
95 Isopropylbenzene	105		7.869					ND	
96 Cyclohexanone	55		8.014					ND	U
97 Bromobenzene	156		8.149					ND	
98 1,1,2,2-Tetrachloroethane	83		8.180					ND	
99 N-Propylbenzene	91		8.201					ND	
100 1,2,3-Trichloropropane	110		8.211					ND	
101 trans-1,4-Dichloro-2-buten	53		8.222					ND	
105 2-Chlorotoluene	126		8.294					ND	
104 1,3,5-Trimethylbenzene	105		8.336					ND	
103 3-Chlorotoluene	126		8.346					ND	
102 4-Chlorotoluene	91		8.377					ND	
106 tert-Butylbenzene	134		8.605					ND	
107 1,2,4-Trimethylbenzene	105		8.646					ND	
108 Pentachloroethane	167		8.657					ND	
109 sec-Butylbenzene	105		8.781					ND	
111 4-Isopropyltoluene	119		8.895					ND	
110 1,3-Dichlorobenzene	146		8.906					ND	
112 Dicyclopentadiene	66		8.958					ND	
113 1,4-Dichlorobenzene	146		8.978					ND	
114 1,2,3-Trimethylbenzene	105		8.999					ND	
150 Benzyl chloride	126		9.103					ND	
115 n-Butylbenzene	91		9.237					ND	
116 1,2-Dichlorobenzene	146		9.289					ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963					ND	
118 1,3,5-Trichlorobenzene	180		10.077					ND	
119 1,2,4-Trichlorobenzene	180		10.605					ND	
120 Hexachlorobutadiene	225		10.709					ND	
121 Naphthalene	128		10.823					ND	
122 1,2,3-Trichlorobenzene	180		11.009					ND	
149 2-Methylnaphthalene	142		11.683					ND	MUa
143 Propene oxide TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
135 Hexachloroethane	117		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
137 Methyl acrylate	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
S 125 Total BTEX	1		30.000					ND	
S 124 1,2-Dichloroethene, Total	1		30.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
S 123 1,3-Dichloropropene, Total	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

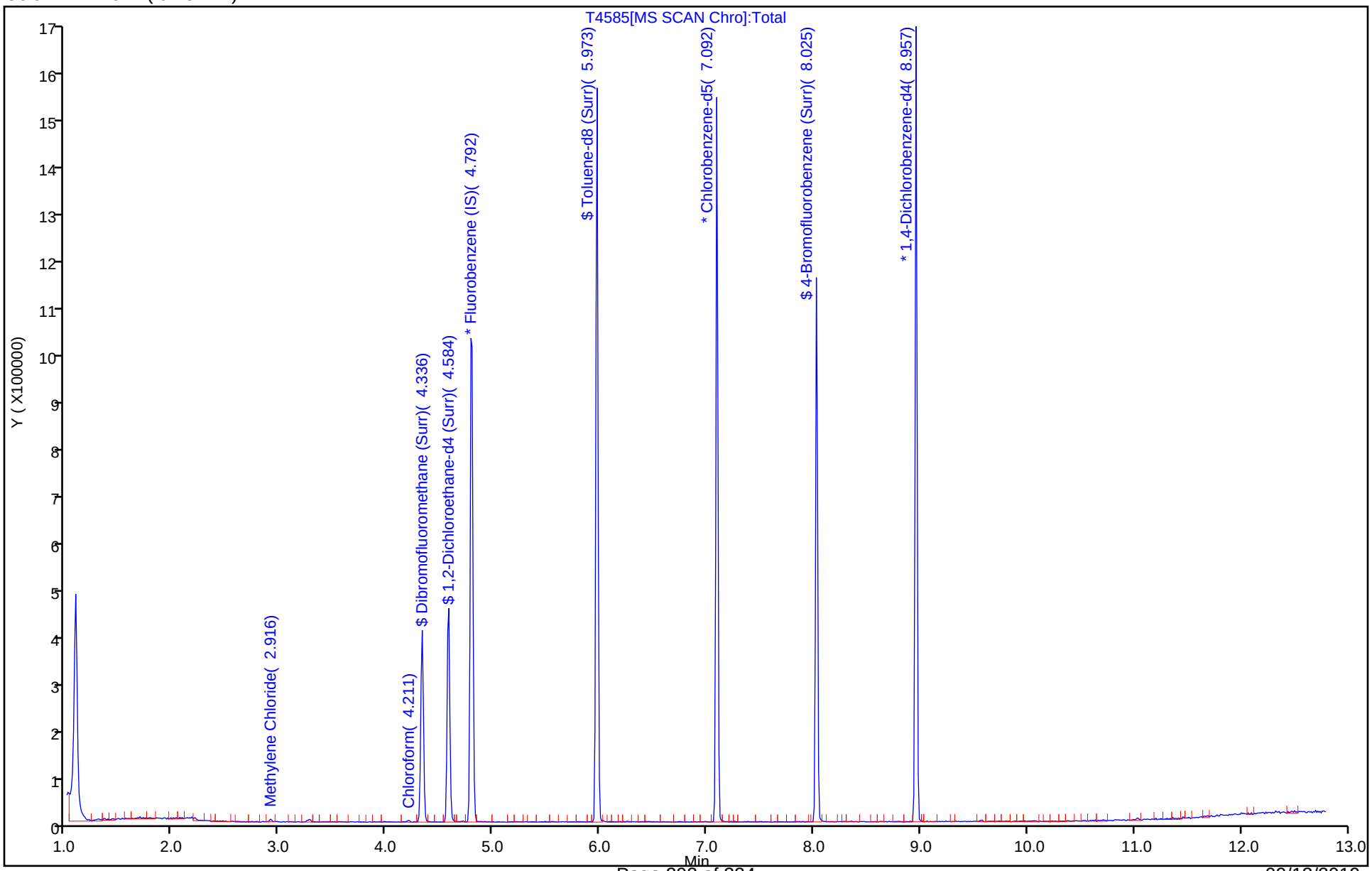
Report Date: 07-Sep-2019 14:11:23 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4585.D

Injection Date:	07-Sep-2019 13:54:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-490780/7

Matrix: Water Lab File ID: T4613.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 11:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-490780/7

Matrix: Water Lab File ID: T4613.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 11:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4613.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-Sep-2019 11:21:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0083944-007
Operator ID: AM Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 11:38:00 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 12:05:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	155170	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	617657	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	342493	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	207741	25.0	26.6	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	263100	25.0	25.1	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	737937	25.0	23.2	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	236785	25.0	24.2	
12 Chlorodifluoromethane	51		1.216					ND	
11 Dichlorodifluoromethane	85		1.216					ND	
13 Chloromethane	50		1.372					ND	
151 Butadiene	54		1.444					ND	
14 Vinyl chloride	62		1.465					ND	
15 Bromomethane	94		1.724					ND	
16 Chloroethane	64		1.776					ND	
18 Dichlorofluoromethane	67		2.004					ND	
17 Trichlorofluoromethane	101		2.014					ND	
19 Ethyl ether	59		2.242					ND	
148 Ethanol	45		2.273					ND	
84 Propene oxide	58		2.325					ND	
21 Acrolein	56		2.418					ND	
22 1,1-Dichloroethene	96		2.450					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.460					ND	
23 Acetone	43		2.564					ND	
24 Iodomethane	142		2.605					ND	
25 Carbon disulfide	76		2.636					ND	
26 Isopropyl alcohol	45		2.729					ND	
27 3-Chloro-1-propene	41		2.791					ND	
28 Methyl acetate	43		2.833					ND	
29 Acetonitrile	40		2.843					ND	
30 Methylene Chloride	84	2.916	2.926	-0.010	93	1485		0.1689	
31 2-Methyl-2-propanol	59		3.082					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
33 Methyl tert-butyl ether	73		3.113					ND	
32 trans-1,2-Dichloroethene	96		3.123					ND	
34 Acrylonitrile	53		3.175					ND	
35 Hexane	57		3.279					ND	
37 Isopropyl ether	45		3.486					ND	
36 1,1-Dichloroethane	63		3.486					ND	
38 2-Chloro-1,3-butadiene	53		3.527					ND	
139 Halothane	117		3.527					ND	
39 Vinyl acetate	43		3.527					ND	
40 1,1-Dimethoxyethane	75		3.548					ND	
41 Tert-butyl ethyl ether	59		3.776					ND	
42 2,2-Dichloropropane	77		3.931					ND	
43 cis-1,2-Dichloroethene	96		3.952					ND	
44 2-Butanone (MEK)	43		3.973					ND	
45 Ethyl acetate	43		3.994					ND	
46 Propionitrile	54		4.066					ND	
49 Methacrylonitrile	41		4.149					ND	
47 Chlorobromomethane	128		4.149					ND	
48 Tetrahydrofuran	42		4.159					ND	
50 Chloroform	83	4.211	4.211	0.000	83	1757		0.1205	
52 Cyclohexane	56		4.304					ND	
51 1,1,1-Trichloroethane	97		4.304					ND	
53 Carbon tetrachloride	117		4.418					ND	
54 1,1-Dichloropropene	75		4.418					ND	
152 Isooctane	57		4.574					ND	
55 Benzene	78		4.584					ND	
56 Isobutyl alcohol	43		4.605					ND	
147 t-Amyl alcohol	59		4.646					ND	
58 Tert-amyl methyl ether	73		4.646					ND	
57 1,2-Dichloroethane	62		4.646					ND	
59 n-Heptane	43		4.719					ND	
1 1,4-Difluorobenzene	114		4.885					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.978					ND	
60 Trichloroethene	95		5.071					ND	
61 n-Butanol	56		5.082					ND	
142 Ethyl acrylate	55		5.154					ND	
62 Methylcyclohexane	83		5.165					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.165					ND	
63 1,2-Dichloropropane	63		5.258					ND	
64 Methyl methacrylate	41		5.330					ND	
65 Dibromomethane	93		5.372					ND	
66 1,4-Dioxane	88		5.372					ND	
67 Dichlorobromomethane	83		5.486					ND	
68 2-Nitropropane	43		5.683					ND	
69 2-Chloroethyl vinyl ether	63		5.693					ND	
70 Epichlorohydrin	57		5.766					ND	
71 cis-1,3-Dichloropropene	75		5.807					ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911					ND	
73 Toluene	92		6.025					ND	
74 2-Methylthiophene	97		6.128					ND	
75 trans-1,3-Dichloropropene	75		6.232					ND	
76 3-Methylthiophene	97		6.253					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
77 Ethyl methacrylate	69		6.263					ND	
78 1,1,2-Trichloroethane	83		6.377					ND	
79 Tetrachloroethene	166		6.429					ND	
80 1,3-Dichloropropane	76		6.501					ND	
81 2-Hexanone	43		6.543					ND	
155 n-Butyl acetate	43		6.615					ND	
82 Chlorodibromomethane	129		6.688					ND	
83 Ethylene Dibromide	107		6.771					ND	
146 1-Chlorohexane	55		7.071					ND	
85 3-Chlorobenzotrifluoride	180		7.082					ND	
86 Chlorobenzene	112		7.113					ND	
87 4-Chlorobenzotrifluoride	180		7.123					ND	
88 Ethylbenzene	91		7.175					ND	
89 1,1,1,2-Tetrachloroethane	131		7.185					ND	
90 m-Xylene & p-Xylene	106		7.268					ND	
91 o-Xylene	106		7.590					ND	
92 Styrene	104		7.610					ND	
93 Bromoform	173		7.807					ND	
94 2-Chlorobenzotrifluoride	180		7.818					ND	
95 Isopropylbenzene	105		7.869					ND	
96 Cyclohexanone	55		8.014					ND	U
97 Bromobenzene	156		8.149					ND	
98 1,1,2,2-Tetrachloroethane	83		8.180					ND	
99 N-Propylbenzene	91		8.201					ND	
100 1,2,3-Trichloropropane	110		8.211					ND	
101 trans-1,4-Dichloro-2-buten	53		8.222					ND	
105 2-Chlorotoluene	126		8.294					ND	
104 1,3,5-Trimethylbenzene	105		8.336					ND	
103 3-Chlorotoluene	126		8.346					ND	
102 4-Chlorotoluene	91		8.377					ND	
106 tert-Butylbenzene	134		8.605					ND	
107 1,2,4-Trimethylbenzene	105		8.647					ND	
108 Pentachloroethane	167		8.657					ND	
109 sec-Butylbenzene	105		8.781					ND	
111 4-Isopropyltoluene	119		8.895					ND	
110 1,3-Dichlorobenzene	146		8.906					ND	
112 Dicyclopentadiene	66		8.957					ND	
113 1,4-Dichlorobenzene	146		8.978					ND	
114 1,2,3-Trimethylbenzene	105		8.999					ND	
150 Benzyl chloride	126		9.103					ND	
115 n-Butylbenzene	91		9.237					ND	
116 1,2-Dichlorobenzene	146		9.289					ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963					ND	
118 1,3,5-Trichlorobenzene	180		10.087					ND	
119 1,2,4-Trichlorobenzene	180		10.605					ND	
120 Hexachlorobutadiene	225		10.709					ND	
121 Naphthalene	128		10.823					ND	
122 1,2,3-Trichlorobenzene	180		11.009					ND	
149 2-Methylnaphthalene	142		11.683					ND	
135 Hexachloroethane	117		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
137 Methyl acrylate	1		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
S 123 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 Total BTEX	1		30.000					ND	
S 124 1,2-Dichloroethene, Total	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

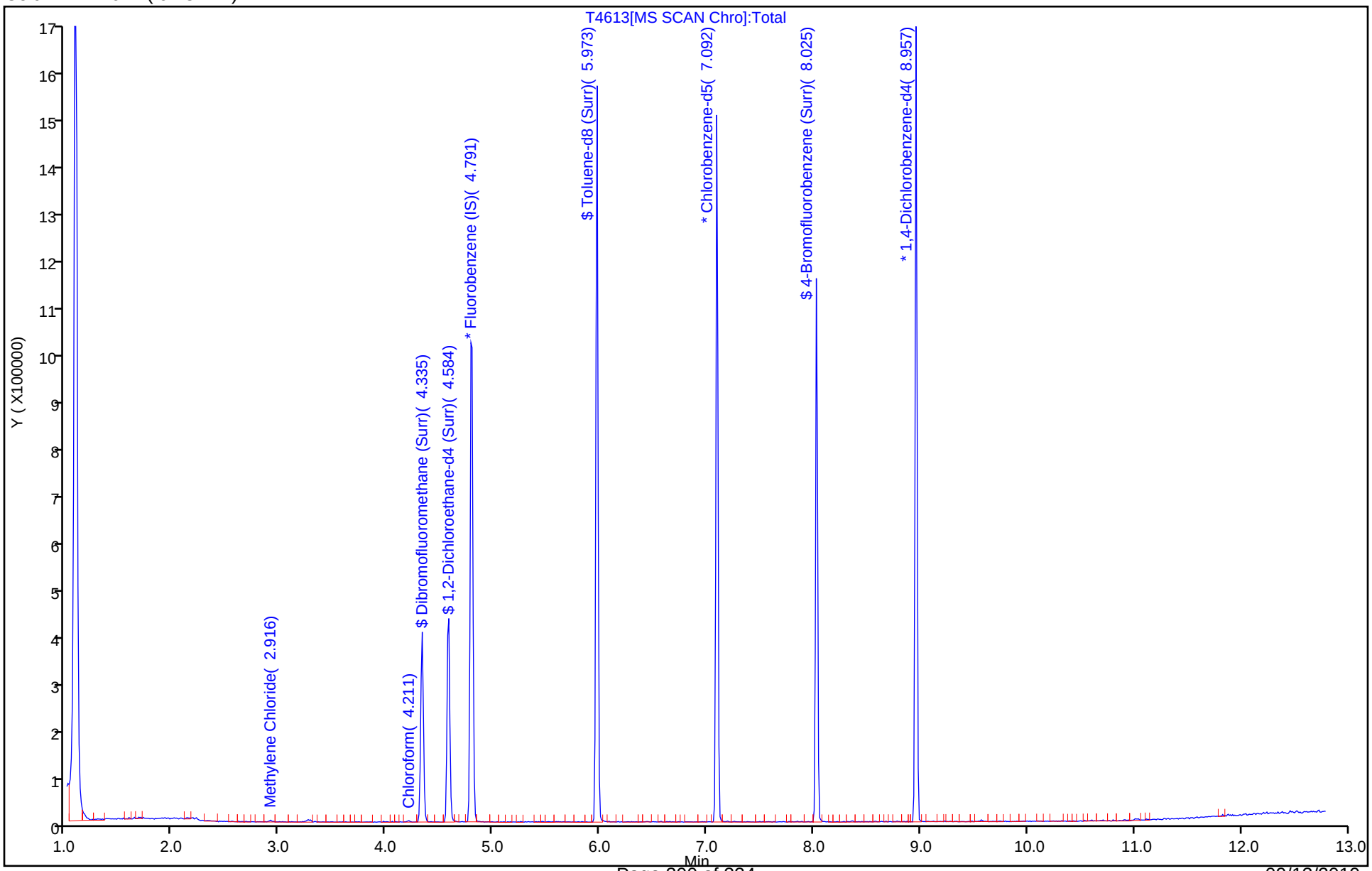
Report Date: 08-Sep-2019 12:05:44 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4613.D

Injection Date:	08-Sep-2019 11:21:30	Instrument ID:	HP5975T	Operator ID:	AM
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

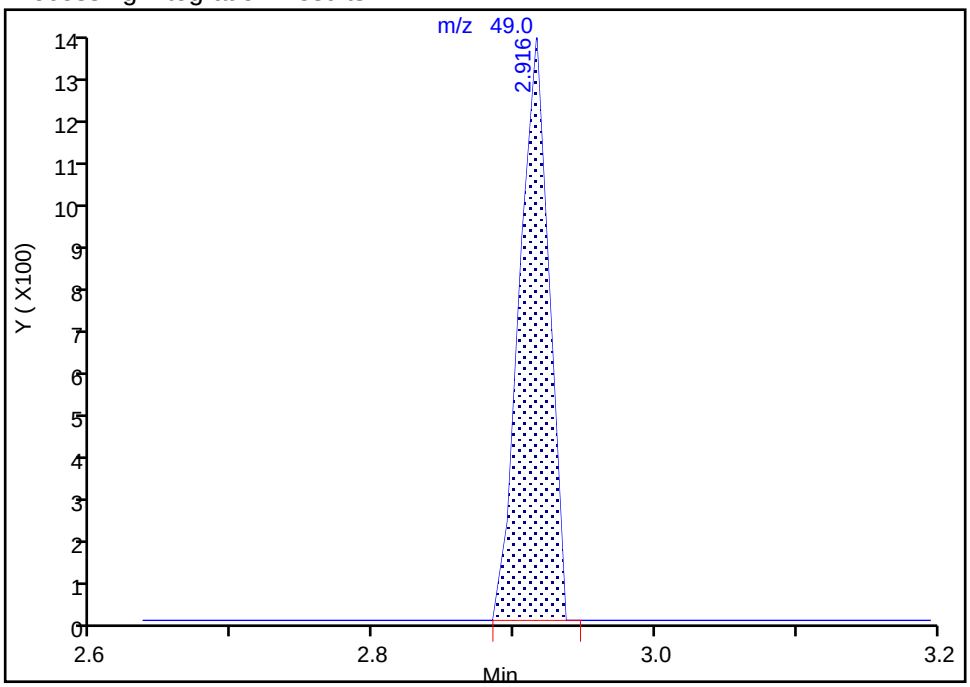
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4613.D
Injection Date: 08-Sep-2019 11:21:30 Instrument ID: HP5975T
Lims ID: MB
Client ID:
Operator ID: AM ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

30 Methylene Chloride, CAS: 75-09-2

Signal: 2

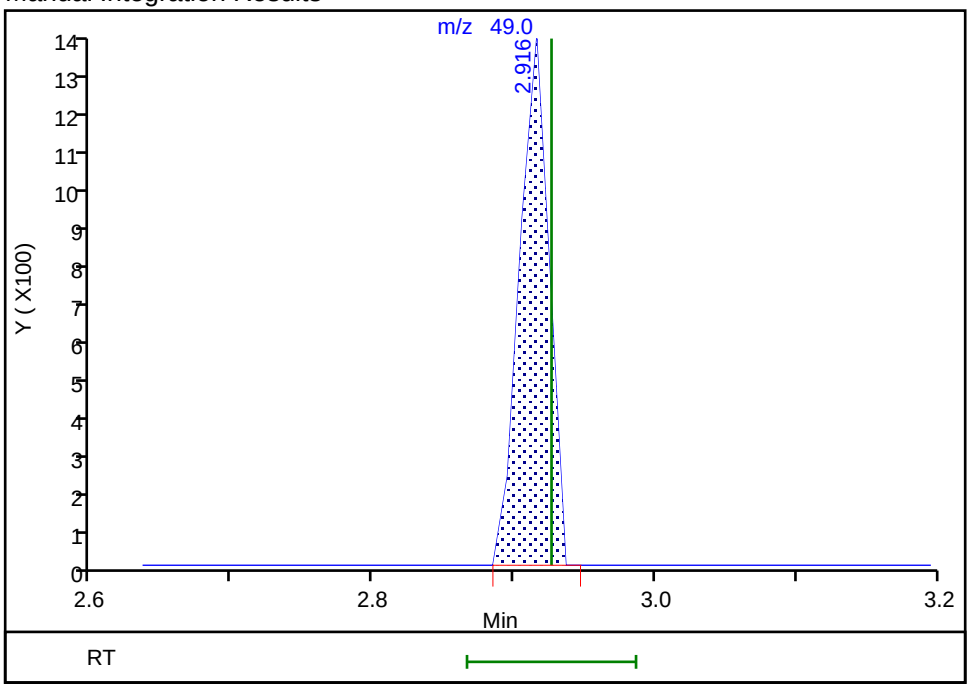
Processing Integration Results

RT: 2.92
Area: 1990
Amount: 0.168945
Amount Units: ug/L



Manual Integration Results

RT: 2.92
Area: 1990
Amount: 0.168945
Amount Units: ug/L



Reviewer: moffata, 08-Sep-2019 11:36:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-490741/5

Matrix: Water Lab File ID: T4583.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	26.5		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.9		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	27.6		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.9		1.0	0.23
75-34-3	1,1-Dichloroethane	25.5		1.0	0.38
75-35-4	1,1-Dichloroethene	27.5		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	25.6		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	25.0		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.9		1.0	0.39
106-93-4	1,2-Dibromoethane	25.6		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.7		1.0	0.79
107-06-2	1,2-Dichloroethane	25.2		1.0	0.21
78-87-5	1,2-Dichloropropane	25.3		1.0	0.72
541-73-1	1,3-Dichlorobenzene	24.8		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.3		1.0	0.84
123-91-1	1,4-Dioxane	451		40	9.3
78-93-3	2-Butanone (MEK)	120		10	1.3
591-78-6	2-Hexanone	116		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	115		5.0	2.1
67-64-1	Acetone	128		10	3.0
71-43-2	Benzene	25.8		1.0	0.41
74-97-5	Bromochloromethane	26.7		1.0	0.87
75-27-4	Bromodichloromethane	25.8		1.0	0.39
75-25-2	Bromoform	26.7		1.0	0.26
74-83-9	Bromomethane	30.5		1.0	0.69
75-15-0	Carbon disulfide	27.0		1.0	0.19
56-23-5	Carbon tetrachloride	26.7		1.0	0.27
108-90-7	Chlorobenzene	24.4		1.0	0.75
75-00-3	Chloroethane	33.4		1.0	0.32
67-66-3	Chloroform	25.9		1.0	0.34
74-87-3	Chloromethane	27.6		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	26.1		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.3		1.0	0.36
110-82-7	Cyclohexane	23.3		1.0	0.18
124-48-1	Dibromochloromethane	25.4		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-490741/5

Matrix: Water Lab File ID: T4583.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/07/2019 13:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490741 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	32.3		1.0	0.68
100-41-4	Ethylbenzene	24.6		1.0	0.74
98-82-8	Isopropylbenzene	24.7		1.0	0.79
79-20-9	Methyl acetate	42.2		2.5	1.3
1634-04-4	Methyl tert-butyl ether	26.3		1.0	0.16
108-87-2	Methylcyclohexane	25.1		1.0	0.16
75-09-2	Methylene Chloride	25.9		1.0	0.44
100-42-5	Styrene	24.7		1.0	0.73
127-18-4	Tetrachloroethene	26.0		1.0	0.36
108-88-3	Toluene	24.5		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	27.0		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	23.9		1.0	0.37
79-01-6	Trichloroethene	27.2		1.0	0.46
75-69-4	Trichlorofluoromethane	31.0		1.0	0.88
75-01-4	Vinyl chloride	28.1		1.0	0.90
1330-20-7	Xylenes, Total	50.2		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4583.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Sep-2019 13:05:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0083938-005
Operator ID: OI Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 07-Sep-2019 13:23:52 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: izquierdoo Date: 07-Sep-2019 13:23:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	158093	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	86	629082	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	95	338539	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	94	213901	25.0	26.9	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	266586	25.0	25.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	93	762662	25.0	23.6	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	251324	25.0	25.3	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	290349	25.0	32.3	
13 Chloromethane	50	1.361	1.361	0.000	100	402629	25.0	27.6	
151 Butadiene	54	1.434	1.434	0.000	89	343222	25.0	27.5	
14 Vinyl chloride	62	1.444	1.444	0.000	98	314186	25.0	28.1	
15 Bromomethane	94	1.703	1.703	0.000	92	169641	25.0	30.5	
16 Chloroethane	64	1.766	1.765	0.001	98	173977	25.0	33.4	
18 Dichlorofluoromethane	67	1.983	1.993	-0.010	96	383925	25.0	27.9	
17 Trichlorofluoromethane	101	2.004	2.004	0.000	96	354517	25.0	31.0	
19 Ethyl ether	59	2.232	2.232	0.000	97	246451	25.0	26.6	
21 Acrolein	56	2.408	2.418	-0.010	99	217813	125.0	101.0	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	93	185019	25.0	27.5	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.439	0.000	58	211963	25.0	27.6	
23 Acetone	43	2.553	2.553	-0.010	100	603054	125.0	127.8	M
24 Iodomethane	142	2.584	2.594	-0.010	99	379517	25.0	28.3	
25 Carbon disulfide	76	2.615	2.626	-0.011	100	683648	25.0	27.0	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	90	420681	25.0	23.7	
28 Methyl acetate	43	2.823	2.822	0.001	99	559471	50.0	42.2	
30 Methylene Chloride	84	2.916	2.916	0.000	97	232002	25.0	25.9	
31 2-Methyl-2-propanol	59	3.071	3.081	-0.010	98	530491	250.0	241.4	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	98	668209	25.0	26.3	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	95	222931	25.0	27.0	
34 Acrylonitrile	53	3.165	3.175	-0.010	98	1475850	250.0	247.2	
35 Hexane	57	3.279	3.278	0.001	92	384584	25.0	24.8	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	426130	25.0	25.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Vinyl acetate	43	3.517	3.517	0.000	97	1316306	50.0	52.8	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	93	303644	25.0	25.2	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	242195	25.0	26.1	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	928715	125.0	120.0	
47 Chlorobromomethane	128	4.149	4.149	0.000	96	129817	25.0	26.7	
48 Tetrahydrofuran	42	4.149	4.159	-0.010	93	249940	50.0	44.3	
50 Chloroform	83	4.201	4.211	-0.010	95	385027	25.0	25.9	
51 1,1,1-Trichloroethane	97	4.294	4.304	-0.010	97	331418	25.0	26.5	
52 Cyclohexane	56	4.305	4.304	0.001	95	458306	25.0	23.3	
53 Carbon tetrachloride	117	4.408	4.408	0.000	96	301131	25.0	26.7	
54 1,1-Dichloropropene	75	4.419	4.418	0.001	92	288510	25.0	26.3	
55 Benzene	78	4.584	4.584	0.000	96	836164	25.0	25.8	
56 Isobutyl alcohol	43	4.595	4.594	0.001	94	539861	625.0	554.3	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	97	347257	25.0	25.2	
59 n-Heptane	43	4.719	4.719	0.000	95	425800	25.0	24.3	
60 Trichloroethene	95	5.061	5.071	-0.010	95	223128	25.0	27.2	
62 Methylcyclohexane	83	5.165	5.164	0.001	97	359839	25.0	25.1	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	94	244838	25.0	25.3	
65 Dibromomethane	93	5.362	5.372	-0.010	94	150344	25.0	27.1	
66 1,4-Dioxane	88	5.372	5.372	0.000	48	79182	500.0	451.2	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	274312	25.0	25.8	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	92	192838	25.0	25.8	
71 cis-1,3-Dichloropropene	75	5.797	5.807	-0.010	93	338693	25.0	25.3	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	97	1938929	125.0	115.2	
73 Toluene	92	6.025	6.025	0.000	98	541292	25.0	24.5	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	93	325900	25.0	23.9	
77 Ethyl methacrylate	69	6.263	6.263	0.000	95	333433	25.0	24.4	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	95	169069	25.0	24.9	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	240830	25.0	26.0	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	95	351152	25.0	24.1	
81 2-Hexanone	43	6.543	6.543	0.000	97	1363395	125.0	116.4	
82 Chlorodibromomethane	129	6.688	6.688	0.000	91	223840	25.0	25.4	
83 Ethylene Dibromide	107	6.761	6.760	0.001	98	229279	25.0	25.6	
86 Chlorobenzene	112	7.113	7.113	0.000	95	601819	25.0	24.4	
88 Ethylbenzene	91	7.175	7.175	0.000	98	1024586	25.0	24.6	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	214870	25.0	24.4	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	413259	25.0	25.2	
91 o-Xylene	106	7.590	7.589	0.001	97	398522	25.0	25.0	
92 Styrene	104	7.610	7.610	0.000	96	674743	25.0	24.7	
93 Bromoform	173	7.807	7.807	0.000	96	154910	25.0	26.7	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1046400	25.0	24.7	
97 Bromobenzene	156	8.149	8.149	0.000	94	271412	25.0	26.5	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	95	315884	25.0	24.9	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1234848	25.0	24.4	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	90	108088	25.0	25.4	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	77	118503	25.0	19.9	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	245812	25.0	24.4	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	95	890588	25.0	24.4	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	854930	25.0	26.2	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	197002	25.0	24.5	
107 1,2,4-Trimethylbenzene	105	8.647	8.646	0.001	97	909092	25.0	24.4	
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	1142318	25.0	25.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1003231	25.0	25.5	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	98	521553	25.0	24.8	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	94	530799	25.0	25.3	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	888680	25.0	24.6	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	98	529660	25.0	25.7	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	85	65292	25.0	22.9	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	95	382803	25.0	25.0	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	173669	25.0	26.0	
121 Naphthalene	128	10.823	10.823	0.000	97	1178427	25.0	24.9	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	96	390192	25.0	25.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00164	Amount Added:	12.50	Units: uL	
GAS CORP mix_00359	Amount Added:	12.50	Units: uL	
T_8260_Surr_00195	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added:	1.00	Units: uL	Run Reagent

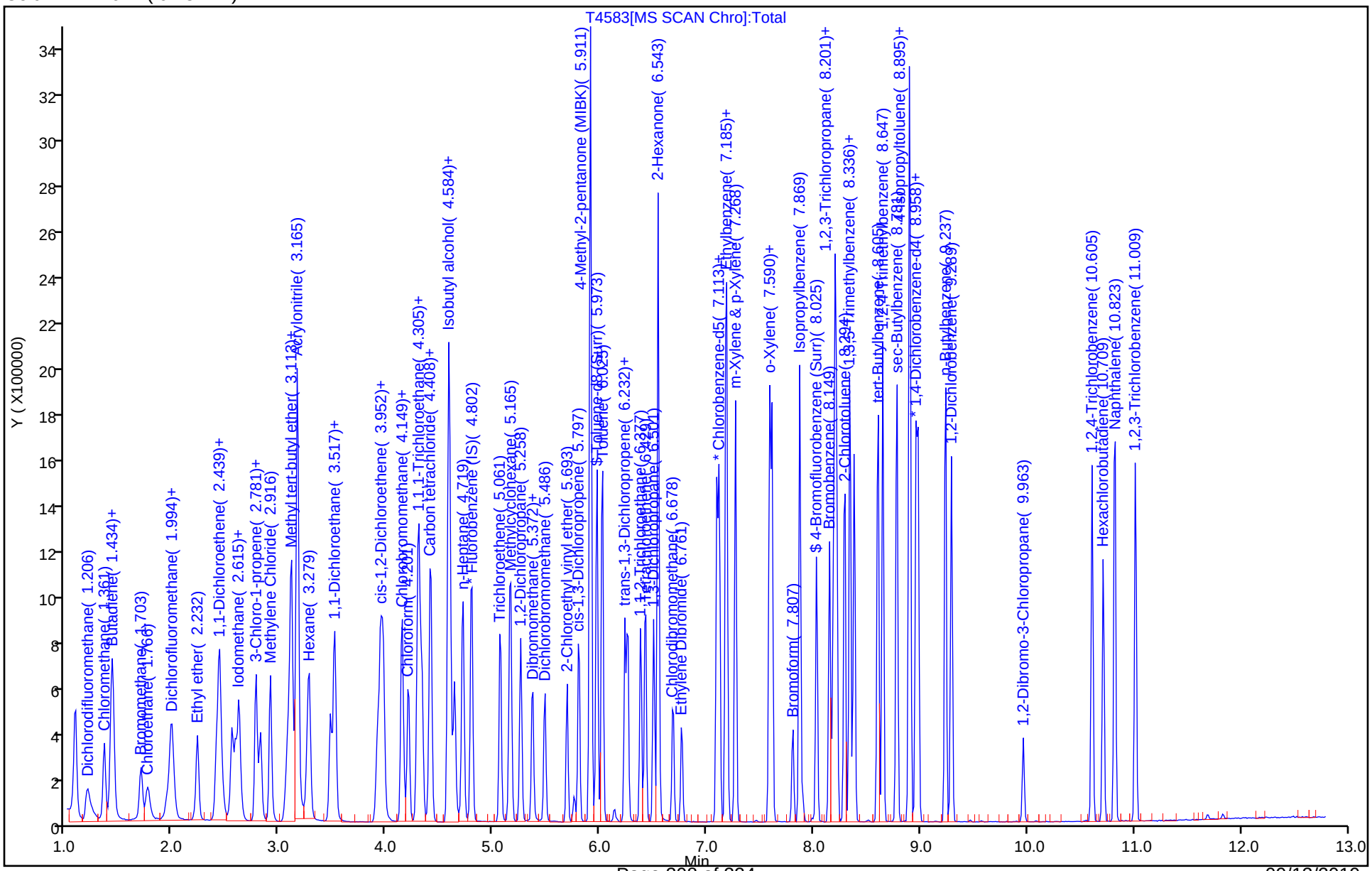
Report Date: 07-Sep-2019 13:23:54 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4583.D

Injection Date:	07-Sep-2019 13:05:30	Instrument ID:	HP5975T	Operator ID:	OI
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

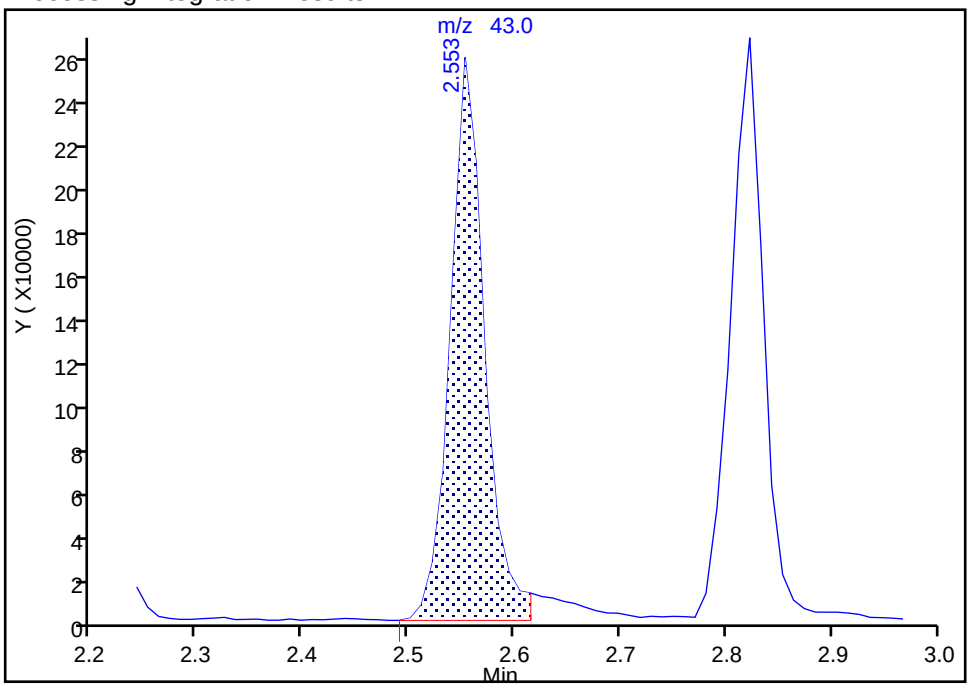
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190907-83938.b\T4583.D
Injection Date: 07-Sep-2019 13:05:30 Instrument ID: HP5975T
Lims ID: LCS
Client ID:
Operator ID: OI ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

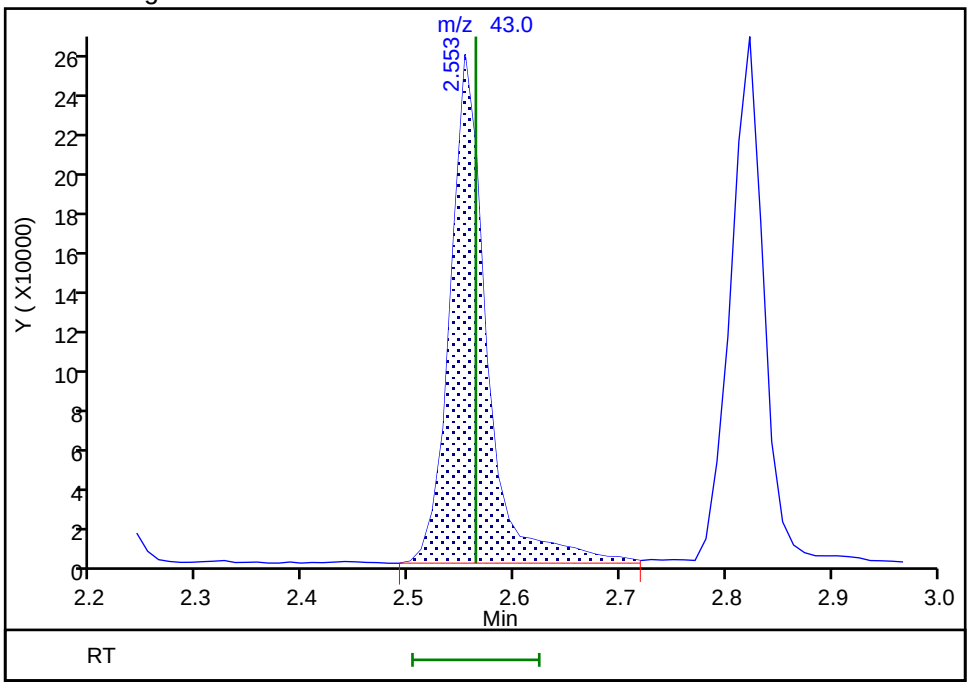
Processing Integration Results

RT: 2.55
Area: 568639
Amount: 120.5021
Amount Units: ug/L



Manual Integration Results

RT: 2.55
Area: 603054
Amount: 127.7951
Amount Units: ug/L



Reviewer: izquierdoo, 07-Sep-2019 13:23:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-490780/5

Matrix: Water Lab File ID: T4611.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 10:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	26.4		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	23.8		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	27.2		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.6		1.0	0.23
75-34-3	1,1-Dichloroethane	25.0		1.0	0.38
75-35-4	1,1-Dichloroethene	27.2		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	24.7		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	24.2		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.3		1.0	0.39
106-93-4	1,2-Dibromoethane	24.6		1.0	0.73
95-50-1	1,2-Dichlorobenzene	24.9		1.0	0.79
107-06-2	1,2-Dichloroethane	25.1		1.0	0.21
78-87-5	1,2-Dichloropropane	24.3		1.0	0.72
541-73-1	1,3-Dichlorobenzene	24.3		1.0	0.78
106-46-7	1,4-Dichlorobenzene	24.9		1.0	0.84
123-91-1	1,4-Dioxane	472		40	9.3
78-93-3	2-Butanone (MEK)	119		10	1.3
591-78-6	2-Hexanone	115		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	111		5.0	2.1
67-64-1	Acetone	121		10	3.0
71-43-2	Benzene	25.7		1.0	0.41
74-97-5	Bromochloromethane	26.8		1.0	0.87
75-27-4	Bromodichloromethane	25.3		1.0	0.39
75-25-2	Bromoform	25.9		1.0	0.26
74-83-9	Bromomethane	29.8		1.0	0.69
75-15-0	Carbon disulfide	26.5		1.0	0.19
56-23-5	Carbon tetrachloride	26.1		1.0	0.27
108-90-7	Chlorobenzene	23.9		1.0	0.75
75-00-3	Chloroethane	34.9		1.0	0.32
67-66-3	Chloroform	25.0		1.0	0.34
74-87-3	Chloromethane	27.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	25.9		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	24.9		1.0	0.36
110-82-7	Cyclohexane	23.3		1.0	0.18
124-48-1	Dibromochloromethane	25.0		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-490780/5

Matrix: Water Lab File ID: T4611.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/08/2019 10:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 490780 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	32.2		1.0	0.68
100-41-4	Ethylbenzene	23.9		1.0	0.74
98-82-8	Isopropylbenzene	23.8		1.0	0.79
79-20-9	Methyl acetate	40.8		2.5	1.3
1634-04-4	Methyl tert-butyl ether	25.4		1.0	0.16
108-87-2	Methylcyclohexane	24.9		1.0	0.16
75-09-2	Methylene Chloride	25.4		1.0	0.44
100-42-5	Styrene	23.9		1.0	0.73
127-18-4	Tetrachloroethene	24.8		1.0	0.36
108-88-3	Toluene	23.7		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	26.5		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	23.2		1.0	0.37
79-01-6	Trichloroethene	25.9		1.0	0.46
75-69-4	Trichlorofluoromethane	31.9		1.0	0.88
75-01-4	Vinyl chloride	28.4		1.0	0.90
1330-20-7	Xylenes, Total	48.5		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4611.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-Sep-2019 10:33:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0083944-005
Operator ID: AM Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 08-Sep-2019 11:38:00 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: moffata Date: 08-Sep-2019 12:06:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	155174	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	86	617454	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	95	334312	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	212320	25.0	27.2	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	265129	25.0	25.3	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	761802	25.0	24.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	254350	25.0	26.0	
11 Dichlorodifluoromethane	85	1.216	1.216	0.000	99	284255	25.0	32.2	
13 Chloromethane	50	1.372	1.372	0.000	98	394160	25.0	27.5	
151 Butadiene	54	1.444	1.444	0.000	90	342819	25.0	28.0	
14 Vinyl chloride	62	1.454	1.465	-0.011	98	312085	25.0	28.4	
15 Bromomethane	94	1.714	1.724	-0.010	91	162590	25.0	29.8	
16 Chloroethane	64	1.776	1.776	0.000	98	178457	25.0	34.9	
18 Dichlorofluoromethane	67	1.993	2.004	-0.011	96	380598	25.0	28.2	
17 Trichlorofluoromethane	101	2.004	2.014	-0.010	64	358930	25.0	31.9	
19 Ethyl ether	59	2.242	2.242	0.000	96	235768	25.0	25.9	
21 Acrolein	56	2.418	2.418	0.000	100	211943	125.0	100.2	
22 1,1-Dichloroethene	96	2.449	2.450	-0.001	93	179164	25.0	27.2	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.460	-0.011	60	205140	25.0	27.2	
23 Acetone	43	2.563	2.564	-0.001	99	559491	125.0	120.8	
24 Iodomethane	142	2.594	2.605	-0.011	99	366483	25.0	27.8	
25 Carbon disulfide	76	2.626	2.636	-0.010	100	657558	25.0	26.5	
27 3-Chloro-1-propene	41	2.791	2.791	0.000	90	404217	25.0	23.2	
28 Methyl acetate	43	2.833	2.833	0.000	99	530889	50.0	40.8	
30 Methylene Chloride	84	2.926	2.926	0.000	98	223059	25.0	25.4	
31 2-Methyl-2-propanol	59	3.081	3.082	-0.001	99	507599	250.0	235.3	
33 Methyl tert-butyl ether	73	3.113	3.113	0.000	99	633202	25.0	25.4	
32 trans-1,2-Dichloroethene	96	3.123	3.123	0.000	94	214546	25.0	26.5	
34 Acrylonitrile	53	3.175	3.175	0.000	99	1476962	250.0	252.0	
35 Hexane	57	3.278	3.279	-0.001	92	395035	25.0	26.0	
36 1,1-Dichloroethane	63	3.486	3.486	0.000	97	411017	25.0	25.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Vinyl acetate	43	3.517	3.527	-0.010	97	1216701	50.0	49.7	
42 2,2-Dichloropropane	77	3.931	3.931	0.000	91	295455	25.0	24.9	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	84	236253	25.0	25.9	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	98	906264	125.0	119.3	
47 Chlorobromomethane	128	4.149	4.149	0.000	96	127977	25.0	26.8	
48 Tetrahydrofuran	42	4.159	4.159	0.000	91	239906	50.0	43.3	
50 Chloroform	83	4.211	4.211	0.000	95	363816	25.0	25.0	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	324221	25.0	26.4	
52 Cyclohexane	56	4.304	4.304	0.000	95	449626	25.0	23.3	
53 Carbon tetrachloride	117	4.418	4.418	0.000	97	288727	25.0	26.1	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	94	279148	25.0	26.0	
55 Benzene	78	4.584	4.584	0.000	95	814750	25.0	25.7	
56 Isobutyl alcohol	43	4.594	4.605	-0.011	93	513269	625.0	536.9	
57 1,2-Dichloroethane	62	4.646	4.646	0.000	97	338898	25.0	25.1	
59 n-Heptane	43	4.719	4.719	0.000	96	421390	25.0	24.5	
60 Trichloroethene	95	5.071	5.071	0.000	96	208078	25.0	25.9	
62 Methylcyclohexane	83	5.164	5.165	-0.001	97	350324	25.0	24.9	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	93	230636	25.0	24.3	
65 Dibromomethane	93	5.372	5.372	0.000	95	142034	25.0	26.1	
66 1,4-Dioxane	88	5.372	5.372	0.000	49	81310	500.0	472.0	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	263732	25.0	25.3	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	93	182471	25.0	24.8	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	92	326511	25.0	24.9	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	97	1834168	125.0	111.0	
73 Toluene	92	6.025	6.025	0.000	98	512812	25.0	23.7	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	94	311090	25.0	23.2	
77 Ethyl methacrylate	69	6.263	6.263	0.000	93	305762	25.0	22.8	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	163965	25.0	24.6	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	225422	25.0	24.8	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	96	339035	25.0	23.7	
81 2-Hexanone	43	6.543	6.543	0.000	97	1319085	125.0	114.7	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	216204	25.0	25.0	
83 Ethylene Dibromide	107	6.771	6.771	0.000	98	216755	25.0	24.6	
86 Chlorobenzene	112	7.113	7.113	0.000	94	580453	25.0	23.9	
88 Ethylbenzene	91	7.175	7.175	0.000	99	977363	25.0	23.9	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	206839	25.0	24.0	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	388618	25.0	24.1	
91 o-Xylene	106	7.589	7.589	-0.001	98	381849	25.0	24.4	
92 Styrene	104	7.610	7.610	0.000	96	641745	25.0	23.9	
93 Bromoform	173	7.807	7.807	0.000	96	147352	25.0	25.9	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	993966	25.0	23.8	
97 Bromobenzene	156	8.149	8.149	0.000	94	251200	25.0	24.8	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	95	298812	25.0	23.8	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1164561	25.0	23.3	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	90	103807	25.0	24.7	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	80	112508	25.0	19.1	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	240343	25.0	24.1	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	95	856184	25.0	23.8	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	739576	25.0	23.0	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	189886	25.0	24.0	
107 1,2,4-Trimethylbenzene	105	8.646	8.646	-0.001	97	865238	25.0	23.5	
109 sec-Butylbenzene	105	8.781	8.781	0.000	94	1085374	25.0	24.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	946881	25.0	24.3	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	98	504809	25.0	24.3	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	94	514820	25.0	24.9	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	862696	25.0	24.2	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	98	506716	25.0	24.9	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	79	62605	25.0	22.3	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	365587	25.0	24.2	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	161574	25.0	24.5	
121 Naphthalene	128	10.823	10.823	0.000	97	1122131	25.0	24.0	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	97	372147	25.0	24.7	

Reagents:

8260 CORP mix_00164	Amount Added: 12.50	Units: uL	
GAS CORP mix_00359	Amount Added: 12.50	Units: uL	
T_8260_Surr_00195	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00225	Amount Added: 1.00	Units: uL	Run Reagent

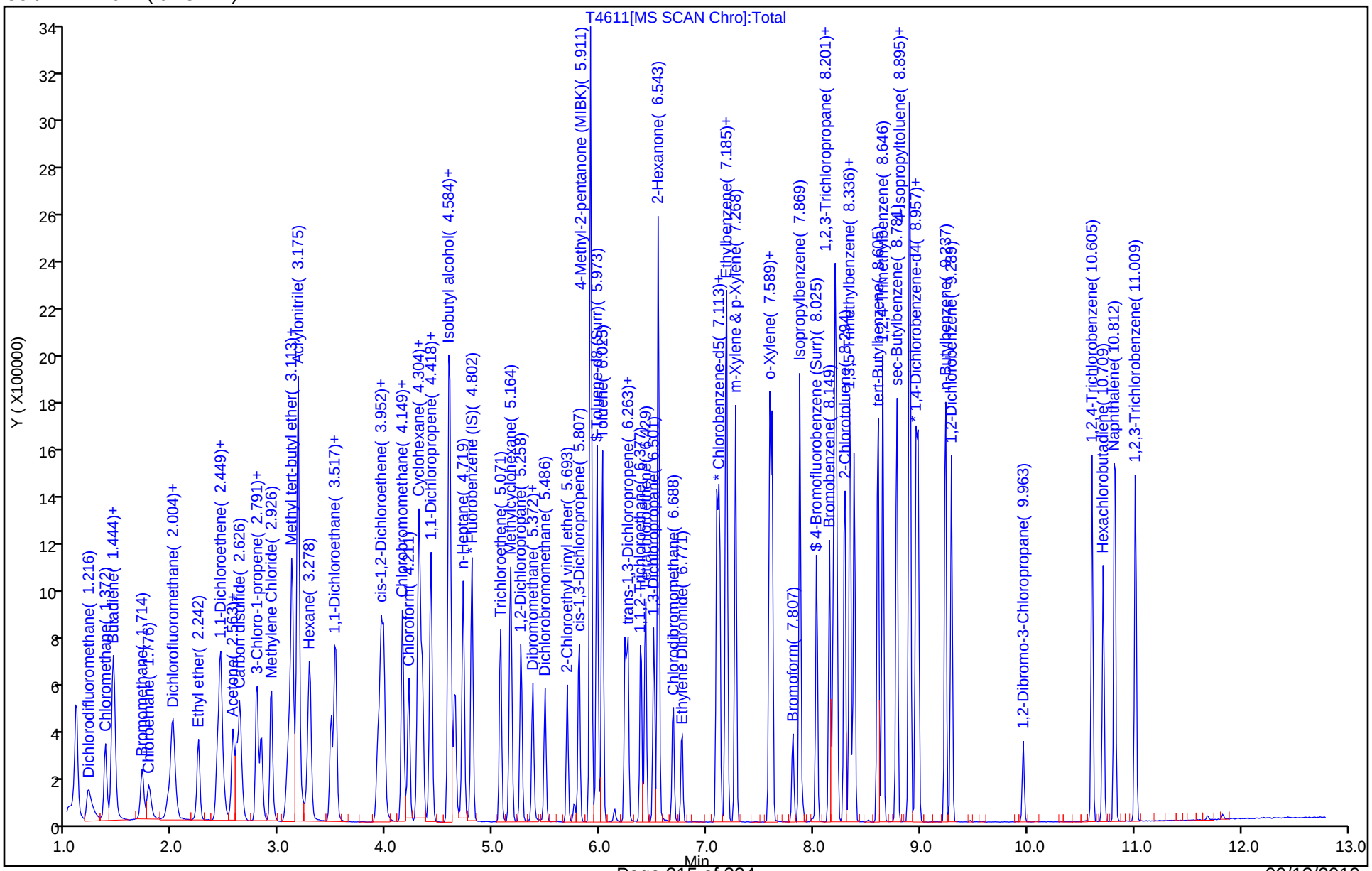
Report Date: 08-Sep-2019 12:06:19 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190908-83944.b\T4611.D

Injection Date:	08-Sep-2019 10:33:30	Instrument ID:	HP5975T	Operator ID:	AM
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Instrument ID: HP5975T Start Date: 08/07/2019 14:49

Analysis Batch Number: 485855 End Date: 08/08/2019 01:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-485855/3		08/07/2019 14:49	1	T3672.D	ZB-624 (20) 0.18(mm)
IC 480-485855/5		08/07/2019 16:28	1	T3676.D	ZB-624 (20) 0.18(mm)
IC 480-485855/6		08/07/2019 16:52	1	T3677.D	ZB-624 (20) 0.18(mm)
IC 480-485855/7		08/07/2019 17:16	1	T3678.D	ZB-624 (20) 0.18(mm)
IC 480-485855/8		08/07/2019 17:39	1	T3679.D	ZB-624 (20) 0.18(mm)
IC 480-485855/9		08/07/2019 18:03	1	T3680.D	ZB-624 (20) 0.18(mm)
ICIS 480-485855/10		08/07/2019 18:27	1	T3681.D	ZB-624 (20) 0.18(mm)
IC 480-485855/11		08/07/2019 18:51	1	T3682.D	ZB-624 (20) 0.18(mm)
IC 480-485855/12		08/07/2019 19:14	1	T3683.D	ZB-624 (20) 0.18(mm)
MDLV 480-485855/14		08/07/2019 20:02	1		ZB-624 (20) 0.18(mm)
IC 480-485855/17		08/07/2019 21:13	1		ZB-624 (20) 0.18(mm)
IC 480-485855/18		08/07/2019 21:37	1		ZB-624 (20) 0.18(mm)
IC 480-485855/19		08/07/2019 22:01	1		ZB-624 (20) 0.18(mm)
IC 480-485855/20		08/07/2019 22:24	1		ZB-624 (20) 0.18(mm)
IC 480-485855/21		08/07/2019 22:48	1		ZB-624 (20) 0.18(mm)
IC 480-485855/22		08/07/2019 23:12	1		ZB-624 (20) 0.18(mm)
IC 480-485855/23		08/07/2019 23:35	1		ZB-624 (20) 0.18(mm)
MDLV 480-485855/25		08/08/2019 00:23	1		ZB-624 (20) 0.18(mm)
ICV 480-485855/26		08/08/2019 00:47	1		ZB-624 (20) 0.18(mm)
ICV 480-485855/27		08/08/2019 01:10	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Instrument ID: HP5975T Start Date: 09/07/2019 11:43

Analysis Batch Number: 490741 End Date: 09/07/2019 22:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-490741/2		09/07/2019 11:43	1	T4580.D	ZB-624 (20) 0.18(mm)
CCVIS 480-490741/3		09/07/2019 12:17	1	T4581.D	ZB-624 (20) 0.18(mm)
CCV 480-490741/4		09/07/2019 12:41	1		ZB-624 (20) 0.18(mm)
LCS 480-490741/5		09/07/2019 13:05	1	T4583.D	ZB-624 (20) 0.18(mm)
RL 480-490741/6		09/07/2019 13:30	1		ZB-624 (20) 0.18(mm)
MB 480-490741/7		09/07/2019 13:54	1	T4585.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 14:26	4		ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 14:50	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 15:14	1		ZB-624 (20) 0.18(mm)
480-158436-1		09/07/2019 15:38	4	T4589.D	ZB-624 (20) 0.18(mm)
480-158436-2		09/07/2019 16:04	2	T4590.D	ZB-624 (20) 0.18(mm)
480-158436-3		09/07/2019 16:28	2	T4591.D	ZB-624 (20) 0.18(mm)
480-158436-4		09/07/2019 16:52	1	T4592.D	ZB-624 (20) 0.18(mm)
480-158436-5		09/07/2019 17:15	2	T4593.D	ZB-624 (20) 0.18(mm)
480-158436-6		09/07/2019 17:39	2	T4594.D	ZB-624 (20) 0.18(mm)
480-158436-7		09/07/2019 18:03	2	T4595.D	ZB-624 (20) 0.18(mm)
480-158436-8		09/07/2019 18:26	1	T4596.D	ZB-624 (20) 0.18(mm)
480-158436-9		09/07/2019 18:50	2	T4597.D	ZB-624 (20) 0.18(mm)
480-158436-10		09/07/2019 19:14	2	T4598.D	ZB-624 (20) 0.18(mm)
480-158436-11		09/07/2019 19:38	2	T4599.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 20:25	2		ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 20:49	4		ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 21:13	125		ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 21:37	125		ZB-624 (20) 0.18(mm)
ZZZZZ		09/07/2019 22:00	125		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Instrument ID: HP5975T Start Date: 09/08/2019 09:21

Analysis Batch Number: 490780 End Date: 09/08/2019 20:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-490780/2		09/08/2019 09:21	1	T4608.D	ZB-624 (20) 0.18(mm)
CCVIS 480-490780/3		09/08/2019 09:45	1	T4609.D	ZB-624 (20) 0.18(mm)
CCV 480-490780/4		09/08/2019 10:09	1		ZB-624 (20) 0.18(mm)
LCS 480-490780/5		09/08/2019 10:33	1	T4611.D	ZB-624 (20) 0.18(mm)
RL 480-490780/6		09/08/2019 10:57	1		ZB-624 (20) 0.18(mm)
MB 480-490780/7		09/08/2019 11:21	1	T4613.D	ZB-624 (20) 0.18(mm)
480-158436-4 DL		09/08/2019 11:53	2	T4614.D	ZB-624 (20) 0.18(mm)
480-158436-12		09/08/2019 12:17	1	T4615.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 12:41	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 13:05	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 13:29	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 13:53	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 14:17	10		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 14:40	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 15:04	50		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 15:28	25		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 15:52	25		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 16:15	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 16:39	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 17:03	4		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 17:27	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 17:50	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 18:14	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 18:38	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 19:02	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 19:25	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 19:49	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/08/2019 20:13	1		ZB-624 (20) 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Batch Number: 490741 Batch Start Date: 09/07/19 11:43 Batch Analyst: Moffat, Alyssa M

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00164	BFB_WRK 00091	GAS CORP mix 00359
BFB 480-490741/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-490741/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-490741/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-490741/7		8260C		5 mL	5 mL				
480-158436-B-1	356023-GW-ERT-1-115-1	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-2	356023-GW-ERT-1-115-2	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-3	356023-GW-ERT-1-115-3	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-4	356023-GW-ERT-1-115-4	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-5	356023-GW-ERT-1-115-5	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-6	356023-GW-ERT-1-115-6	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-7	356023-GW-ERT-1-115-7	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-8	356023-GW-ERT-1-115-8	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-9	356023-GW-ERT-1-115-9	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-10	356023-GW-ERT-1-115-10	8260C	T	5 mL	5 mL	<2 SU			
480-158436-B-11	356023-GW-ERT-1-115-11	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00225	T_8260_Surr 00195	AnalysisComment			
BFB 480-490741/2		8260C							
CCVIS 480-490741/3		8260C		1 uL	1 uL				
LCS 480-490741/5		8260C		1 uL	1 uL				
MB 480-490741/7		8260C		1 uL	1 uL				
480-158436-B-1	356023-GW-ERT-1-115-1	8260C	T	1 uL	1 uL	Targets			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Batch Number: 490741 Batch Start Date: 09/07/19 11:43 Batch Analyst: Moffat, Alyssa M

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00225	T_8260_Surr 00195	AnalysisComment			
480-158436-B-2	356023-GW-ERT-1-115-2	8260C	T	1 uL	1 uL	Targets			
480-158436-B-3	356023-GW-ERT-1-115-3	8260C	T	1 uL	1 uL	Targets			
480-158436-B-4	356023-GW-ERT-1-115-4	8260C	T	1 uL	1 uL	RADL			
480-158436-B-5	356023-GW-ERT-1-115-5	8260C	T	1 uL	1 uL	Targets			
480-158436-B-6	356023-GW-ERT-1-115-6	8260C	T	1 uL	1 uL	Targets			
480-158436-B-7	356023-GW-ERT-1-115-7	8260C	T	1 uL	1 uL	Targets			
480-158436-B-8	356023-GW-ERT-1-115-8	8260C	T	1 uL	1 uL				
480-158436-B-9	356023-GW-ERT-1-115-9	8260C	T	1 uL	1 uL	Targets			
480-158436-B-10	356023-GW-ERT-1-115-10	8260C	T	1 uL	1 uL	Targets			
480-158436-B-11	356023-GW-ERT-1-115-11	8260C	T	1 uL	1 uL	Targets			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158436-1

SDG No.:

Batch Number: 490780 Batch Start Date: 09/08/19 09:21 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00164	BFB_WRK 00091	GAS CORP mix 00359
BFB 480-490780/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-490780/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-490780/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-490780/7		8260C		5 mL	5 mL				
480-158436-C-4	356023-GW-ERT-1-115-4	8260C	T	5 mL	5 mL	<2 SU			
480-158436-C-12	TRIP BLANK-1	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00225	T_8260_Surr 00195				
BFB 480-490780/2		8260C							
CCVIS 480-490780/3		8260C		1 uL	1 uL				
LCS 480-490780/5		8260C		1 uL	1 uL				
MB 480-490780/7		8260C		1 uL	1 uL				
480-158436-C-4	356023-GW-ERT-1-115-4	8260C	T	1 uL	1 uL				
480-158436-C-12	TRIP BLANK-1	8260C	T	1 uL	1 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody Record 315409

20492

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Jamie Welch	Site Contact: Julie Riccardi	Date: 8/29/19	COC No:
Company Name: Wood E+IS	Tel/Fax: 207 828 3200	Lab Contact: Judy Stone	Carrier: FedEx	1 of 1 COCs
Address: 511 Congress St	Analysis Turnaround Time			Sampler:
City/State/Zip: Portland / ME / 04101	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 207 828 3200	TAT if different from Below _____			Walk-in:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: Mohonk Rd Industrial Plant	☐ 1 week			Job / SDG No.:
Site: NYSDEC # 356023	☐ 2 days			
P O # 3611191234.02	☐ 1 day			

480-158436 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C TCL CAM+42	Sample Specific Notes:
356023-GW-ERT-1-115-1	8/26/19	1625	G	GW	3	N	N	X	
356023-GW-ERT-1-115-2	8/26/19	1740	G	GW	3	N	N	X	
356023-GW-ERT-1-115-3	8/27/19	0750	G	GW	3	N	N	X	
356023-GW-ERT-1-115-4	8/27/19	1135	G	GW	3	N	N	X	
356023-GW-ERT-1-115-5	8/27/19	1631	G	GW	3	N	N	X	
356023-GW-ERT-1-115-6	8/28/19	0729	G	GW	3	N	N	X	
356023-GW-ERT-1-115-7	8/28/19	1156	G	GW	3	N	N	X	
356023-GW-ERT-1-115-8	8/28/19	1637	G	GW	3	N	N	X	
356023-GW-ERT-1-115-9	8/29/19	0732	G	GW	3	N	N	X	
356023-GW-ERT-1-115-10	8/29/19	1148	G	GW	3	N	N	X	
356023-GW-ERT-1-115-11	8/29/19	1515	G	GW	3	N	N	X	
Trip Blank 1	8/29/19	1700	QC	TB	3	N	N	X	
								2	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Lab standard Protocol
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Category B deliverable, EQuIS EZ EDD

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.8 Corr'd: _____ | Therm ID No.: #1 ICE

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Laura Kierney	Wood E+IS	8/29/19 1630	FedEx	FedEx	8/29/19 1630
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Cmilow Cmolo	Company: TA	Date/Time: 08/30/19 0940

09/13/2019

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-158436-1

Login Number: 158436 **List Source: Eurofins TestAmerica, Buffalo**
List Number: 1
Creator: Harper, Marcus D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	WOOD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

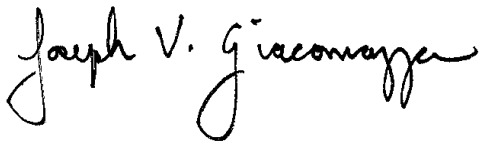
Job Number: 480-158822-1

Job Description: Mohonk Rd. #356023 Groundwaters

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, NY 12233-7014

Attention: Charles Gregory



Approved for release.
Joe V Giacomazza
Project Management Assistant II
9/20/2019 1:01 PM

Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
09/20/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

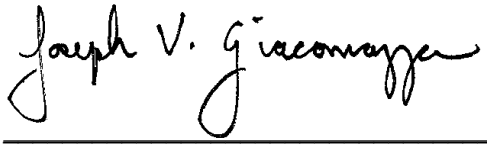
The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Job Number: 480-158822-1

Job Description: Mohonk Rd. #356023 Groundwaters

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Joe V Giacomazza
Project Management Assistant II
9/20/2019 1:01 PM

Designee for
Judy L Stone

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Job Narrative
480-158822-1

Comments
No additional comments.

Receipt
The samples were received on 9/7/2019 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-5R-93-3 (480-158822-3), 356023-GW-MW-5R-93-4 (480-158822-4) and 356023-GW-MW-5R-93-5 (480-158822-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-5R-93-1 (480-158822-1) and 356023-GW-MW-5R-93-2 (480-158822-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatile samples were analyzed with significant headspace in the sample container(s): 356023-GW-MW-5R-93-1 (480-158822-1) and 356023-GW-MW-5R-93-2 (480-158822-2). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-5R-93-6 (480-158822-6), 356023-GW-MW-5R-93-7 (480-158822-7) and 356023-GW-MW-5R-93-8 (480-158822-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The initial calibration curve analyzed in analytical batch 480-491176 and associated with analytical batch 480-492066 was outside method criteria for the following analyte: 1,2,3-Trichlorobenzene. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-5R-93-9 (480-158822-9) and 356023-GW-MW-5R-93-10 (480-158822-10). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-158822-1	356023-GW-MW-5R-93-1	Water	09/03/19 13:10	09/07/19 09:30	
480-158822-2	356023-GW-MW-5R-93-2	Water	09/03/19 16:30	09/07/19 09:30	
480-158822-3	356023-GW-MW-5R-93-3	Water	09/04/19 07:30	09/07/19 09:30	
480-158822-4	356023-GW-MW-5R-93-4	Water	09/04/19 12:05	09/07/19 09:30	
480-158822-5	356023-GW-MW-5R-93-5	Water	09/04/19 16:35	09/07/19 09:30	
480-158822-6	356023-GW-MW-5R-93-6	Water	09/05/19 07:25	09/07/19 09:30	
480-158822-7	356023-GW-MW-5R-93-7	Water	09/05/19 12:00	09/07/19 09:30	
480-158822-8	356023-GW-MW-5R-93-8	Water	09/05/19 16:40	09/07/19 09:30	
480-158822-9	356023-GW-MW-5R-93-9	Water	09/06/19 07:32	09/07/19 09:30	
480-158822-10	356023-GW-MW-5R-93-10	Water	09/06/19 12:15	09/07/19 09:30	
480-158822-11	TRIP BLANK 2	Water	09/03/19 12:00	09/07/19 09:30	

Detection Summary

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-MW-5R-93-1 — Lab Sample ID: 480-158822-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	320		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	20		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	71		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	19		10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-2 — Lab Sample ID: 480-158822-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	230		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	17		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	51		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	16		10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-3 — Lab Sample ID: 480-158822-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	240		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	17		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	68		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	16		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-4 — Lab Sample ID: 480-158822-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	260		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	19		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	68		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	17		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-5 — Lab Sample ID: 480-158822-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	240		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	17		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	68		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	17		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-6 — Lab Sample ID: 480-158822-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	220		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	16		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	54		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	15		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-7 — Lab Sample ID: 480-158822-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	250		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	18		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	63		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	16		5.0	2.3	ug/L	5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-MW-5R-93-8
Lab Sample ID: 480-158822-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	210		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	17		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	51		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	15		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-9
Lab Sample ID: 480-158822-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	230		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	18		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	55		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	15		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: 356023-GW-MW-5R-93-10
Lab Sample ID: 480-158822-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	230		5.0	4.1	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	17		5.0	1.9	ug/L	5		8260C	Total/NA
1,1-Dichloroethene	55		5.0	1.5	ug/L	5		8260C	Total/NA
Trichloroethene	16		5.0	2.3	ug/L	5		8260C	Total/NA

Client Sample ID: TRIP BLANK 2
Lab Sample ID: 480-158822-11

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Client Sample ID: 356023-GW-MW-5R-93-1
Lab Sample ID: 480-158822-1

Date Collected: 09/03/19 13:10
Matrix: Water
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**320**		10	8.2	ug/L			09/14/19 20:52	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/14/19 20:52	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/14/19 20:52	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/14/19 20:52	10
1,1-Dichloroethane	**20**		10	3.8	ug/L			09/14/19 20:52	10
1,1-Dichloroethene	**71**		10	2.9	ug/L			09/14/19 20:52	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/14/19 20:52	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/14/19 20:52	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/14/19 20:52	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/14/19 20:52	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/14/19 20:52	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/14/19 20:52	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/14/19 20:52	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/14/19 20:52	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/14/19 20:52	10
1,4-Dioxane	ND		400	93	ug/L			09/14/19 20:52	10
2-Butanone (MEK)	ND		100	13	ug/L			09/14/19 20:52	10
2-Hexanone	ND		50	12	ug/L			09/14/19 20:52	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/14/19 20:52	10
Acetone	ND		100	30	ug/L			09/14/19 20:52	10
Benzene	ND		10	4.1	ug/L			09/14/19 20:52	10
Bromochloromethane	ND		10	8.7	ug/L			09/14/19 20:52	10
Bromodichloromethane	ND		10	3.9	ug/L			09/14/19 20:52	10
Bromoform	ND		10	2.6	ug/L			09/14/19 20:52	10
Bromomethane	ND		10	6.9	ug/L			09/14/19 20:52	10
Carbon disulfide	ND		10	1.9	ug/L			09/14/19 20:52	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/14/19 20:52	10
Chlorobenzene	ND		10	7.5	ug/L			09/14/19 20:52	10
Chloroethane	ND		10	3.2	ug/L			09/14/19 20:52	10
Chloroform	ND		10	3.4	ug/L			09/14/19 20:52	10
Chloromethane	ND		10	3.5	ug/L			09/14/19 20:52	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/14/19 20:52	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/14/19 20:52	10
Cyclohexane	ND		10	1.8	ug/L			09/14/19 20:52	10
Dibromochloromethane	ND		10	3.2	ug/L			09/14/19 20:52	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/14/19 20:52	10
Ethylbenzene	ND		10	7.4	ug/L			09/14/19 20:52	10
Isopropylbenzene	ND		10	7.9	ug/L			09/14/19 20:52	10
Methyl acetate	ND		25	13	ug/L			09/14/19 20:52	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/14/19 20:52	10
Methylcyclohexane	ND		10	1.6	ug/L			09/14/19 20:52	10
Methylene Chloride	ND		10	4.4	ug/L			09/14/19 20:52	10
Styrene	ND		10	7.3	ug/L			09/14/19 20:52	10
Tetrachloroethene	ND		10	3.6	ug/L			09/14/19 20:52	10
Toluene	ND		10	5.1	ug/L			09/14/19 20:52	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/14/19 20:52	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/14/19 20:52	10
Trichloroethene	**19**		10	4.6	ug/L			09/14/19 20:52	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/14/19 20:52	10

Client Sample ID: 356023-GW-MW-5R-93-1 Lab Sample ID: 480-158822-1

Date Collected: 09/03/19 13:10 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		10	9.0	ug/L			09/14/19 20:52	10
Xylenes, Total	ND		20	6.6	ug/L			09/14/19 20:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/14/19 20:52*	*10*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/14/19 20:52*	*10*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*09/14/19 20:52*	*10*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/14/19 20:52*	*10*

Client Sample ID: 356023-GW-MW-5R-93-2 Lab Sample ID: 480-158822-2

Date Collected: 09/03/19 16:30 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**230**		10	8.2	ug/L			09/14/19 21:16	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/14/19 21:16	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/14/19 21:16	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/14/19 21:16	10
1,1-Dichloroethane	**17**		10	3.8	ug/L			09/14/19 21:16	10
1,1-Dichloroethene	**51**		10	2.9	ug/L			09/14/19 21:16	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/14/19 21:16	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/14/19 21:16	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/14/19 21:16	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/14/19 21:16	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/14/19 21:16	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/14/19 21:16	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/14/19 21:16	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/14/19 21:16	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/14/19 21:16	10
1,4-Dioxane	ND		400	93	ug/L			09/14/19 21:16	10
2-Butanone (MEK)	ND		100	13	ug/L			09/14/19 21:16	10
2-Hexanone	ND		50	12	ug/L			09/14/19 21:16	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/14/19 21:16	10
Acetone	ND		100	30	ug/L			09/14/19 21:16	10
Benzene	ND		10	4.1	ug/L			09/14/19 21:16	10
Bromochloromethane	ND		10	8.7	ug/L			09/14/19 21:16	10
Bromodichloromethane	ND		10	3.9	ug/L			09/14/19 21:16	10
Bromoform	ND		10	2.6	ug/L			09/14/19 21:16	10
Bromomethane	ND		10	6.9	ug/L			09/14/19 21:16	10
Carbon disulfide	ND		10	1.9	ug/L			09/14/19 21:16	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/14/19 21:16	10
Chlorobenzene	ND		10	7.5	ug/L			09/14/19 21:16	10
Chloroethane	ND		10	3.2	ug/L			09/14/19 21:16	10
Chloroform	ND		10	3.4	ug/L			09/14/19 21:16	10
Chloromethane	ND		10	3.5	ug/L			09/14/19 21:16	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/14/19 21:16	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/14/19 21:16	10
Cyclohexane	ND		10	1.8	ug/L			09/14/19 21:16	10
Dibromochloromethane	ND		10	3.2	ug/L			09/14/19 21:16	10

Client Sample ID: 356023-GW-MW-5R-93-2 Lab Sample ID: 480-158822-2

Date Collected: 09/03/19 16:30 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/14/19 21:16	10
Ethylbenzene	ND		10	7.4	ug/L			09/14/19 21:16	10
Isopropylbenzene	ND		10	7.9	ug/L			09/14/19 21:16	10
Methyl acetate	ND		25	13	ug/L			09/14/19 21:16	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/14/19 21:16	10
Methylcyclohexane	ND		10	1.6	ug/L			09/14/19 21:16	10
Methylene Chloride	ND		10	4.4	ug/L			09/14/19 21:16	10
Styrene	ND		10	7.3	ug/L			09/14/19 21:16	10
Tetrachloroethene	ND		10	3.6	ug/L			09/14/19 21:16	10
Toluene	ND		10	5.1	ug/L			09/14/19 21:16	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/14/19 21:16	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/14/19 21:16	10
Trichloroethene	**16**		10	4.6	ug/L			09/14/19 21:16	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/14/19 21:16	10
Vinyl chloride	ND		10	9.0	ug/L			09/14/19 21:16	10
Xylenes, Total	ND		20	6.6	ug/L			09/14/19 21:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/14/19 21:16*	*10*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*09/14/19 21:16*	*10*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/14/19 21:16*	*10*
Toluene-d8 (Surr)	*104*		*80 - 120*		*09/14/19 21:16*	*10*

Client Sample ID: 356023-GW-MW-5R-93-3 Lab Sample ID: 480-158822-3

Date Collected: 09/04/19 07:30 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**240**		5.0	4.1	ug/L			09/14/19 13:10	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/14/19 13:10	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/14/19 13:10	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/14/19 13:10	5
1,1-Dichloroethane	**17**		5.0	1.9	ug/L			09/14/19 13:10	5
1,1-Dichloroethene	**68**		5.0	1.5	ug/L			09/14/19 13:10	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/14/19 13:10	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/14/19 13:10	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/14/19 13:10	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/14/19 13:10	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/14/19 13:10	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/14/19 13:10	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/14/19 13:10	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/14/19 13:10	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/14/19 13:10	5
1,4-Dioxane	ND		200	47	ug/L			09/14/19 13:10	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/14/19 13:10	5
2-Hexanone	ND		25	6.2	ug/L			09/14/19 13:10	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/14/19 13:10	5
Acetone	ND		50	15	ug/L			09/14/19 13:10	5
Benzene	ND		5.0	2.1	ug/L			09/14/19 13:10	5

Client Sample ID: 356023-GW-MW-5R-93-3 Lab Sample ID: 480-158822-3

Date Collected: 09/04/19 07:30 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		5.0	4.4	ug/L			09/14/19 13:10	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/14/19 13:10	5
Bromoform	ND		5.0	1.3	ug/L			09/14/19 13:10	5
Bromomethane	ND		5.0	3.5	ug/L			09/14/19 13:10	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/14/19 13:10	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/14/19 13:10	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/14/19 13:10	5
Chloroethane	ND		5.0	1.6	ug/L			09/14/19 13:10	5
Chloroform	ND		5.0	1.7	ug/L			09/14/19 13:10	5
Chloromethane	ND		5.0	1.8	ug/L			09/14/19 13:10	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/14/19 13:10	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/14/19 13:10	5
Cyclohexane	ND		5.0	0.90	ug/L			09/14/19 13:10	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/14/19 13:10	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/14/19 13:10	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/14/19 13:10	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/14/19 13:10	5
Methyl acetate	ND		13	6.5	ug/L			09/14/19 13:10	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/14/19 13:10	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/14/19 13:10	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/14/19 13:10	5
Styrene	ND		5.0	3.7	ug/L			09/14/19 13:10	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/14/19 13:10	5
Toluene	ND		5.0	2.6	ug/L			09/14/19 13:10	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/14/19 13:10	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/14/19 13:10	5
Trichloroethene	**16**		5.0	2.3	ug/L			09/14/19 13:10	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/14/19 13:10	5
Vinyl chloride	ND		5.0	4.5	ug/L			09/14/19 13:10	5
Xylenes, Total	ND		10	3.3	ug/L			09/14/19 13:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*09/14/19 13:10*	*5*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/14/19 13:10*	*5*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*09/14/19 13:10*	*5*
Toluene-d8 (Surr)	*97*		*80 - 120*		*09/14/19 13:10*	*5*

Client Sample ID: 356023-GW-MW-5R-93-4 Lab Sample ID: 480-158822-4

Date Collected: 09/04/19 12:05 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**260**		5.0	4.1	ug/L			09/14/19 13:33	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/14/19 13:33	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/14/19 13:33	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/14/19 13:33	5
1,1-Dichloroethane	**19**		5.0	1.9	ug/L			09/14/19 13:33	5
1,1-Dichloroethene	**68**		5.0	1.5	ug/L			09/14/19 13:33	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/14/19 13:33	5

Client Sample ID: 356023-GW-MW-5R-93-4 Lab Sample ID: 480-158822-4

Date Collected: 09/04/19 12:05 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/14/19 13:33	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/14/19 13:33	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/14/19 13:33	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/14/19 13:33	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/14/19 13:33	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/14/19 13:33	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/14/19 13:33	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/14/19 13:33	5
1,4-Dioxane	ND		200	47	ug/L			09/14/19 13:33	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/14/19 13:33	5
2-Hexanone	ND		25	6.2	ug/L			09/14/19 13:33	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/14/19 13:33	5
Acetone	ND		50	15	ug/L			09/14/19 13:33	5
Benzene	ND		5.0	2.1	ug/L			09/14/19 13:33	5
Bromochloromethane	ND		5.0	4.4	ug/L			09/14/19 13:33	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/14/19 13:33	5
Bromoform	ND		5.0	1.3	ug/L			09/14/19 13:33	5
Bromomethane	ND		5.0	3.5	ug/L			09/14/19 13:33	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/14/19 13:33	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/14/19 13:33	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/14/19 13:33	5
Chloroethane	ND		5.0	1.6	ug/L			09/14/19 13:33	5
Chloroform	ND		5.0	1.7	ug/L			09/14/19 13:33	5
Chloromethane	ND		5.0	1.8	ug/L			09/14/19 13:33	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/14/19 13:33	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/14/19 13:33	5
Cyclohexane	ND		5.0	0.90	ug/L			09/14/19 13:33	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/14/19 13:33	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/14/19 13:33	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/14/19 13:33	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/14/19 13:33	5
Methyl acetate	ND		13	6.5	ug/L			09/14/19 13:33	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/14/19 13:33	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/14/19 13:33	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/14/19 13:33	5
Styrene	ND		5.0	3.7	ug/L			09/14/19 13:33	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/14/19 13:33	5
Toluene	ND		5.0	2.6	ug/L			09/14/19 13:33	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/14/19 13:33	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/14/19 13:33	5
Trichloroethene	**17**		5.0	2.3	ug/L			09/14/19 13:33	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/14/19 13:33	5
Vinyl chloride	ND		5.0	4.5	ug/L			09/14/19 13:33	5
Xylenes, Total	ND		10	3.3	ug/L			09/14/19 13:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*09/14/19 13:33*	*5*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/14/19 13:33*	*5*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*09/14/19 13:33*	*5*
Toluene-d8 (Surr)	*96*		*80 - 120*		*09/14/19 13:33*	*5*

Client Sample ID: 356023-GW-MW-5R-93-5
Lab Sample ID: 480-158822-5

Date Collected: 09/04/19 16:35
Matrix: Water
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**240**		5.0	4.1	ug/L			09/14/19 13:56	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/14/19 13:56	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/14/19 13:56	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/14/19 13:56	5
1,1-Dichloroethane	**17**		5.0	1.9	ug/L			09/14/19 13:56	5
1,1-Dichloroethene	**68**		5.0	1.5	ug/L			09/14/19 13:56	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/14/19 13:56	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/14/19 13:56	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/14/19 13:56	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/14/19 13:56	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/14/19 13:56	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/14/19 13:56	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/14/19 13:56	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/14/19 13:56	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/14/19 13:56	5
1,4-Dioxane	ND		200	47	ug/L			09/14/19 13:56	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/14/19 13:56	5
2-Hexanone	ND		25	6.2	ug/L			09/14/19 13:56	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/14/19 13:56	5
Acetone	ND		50	15	ug/L			09/14/19 13:56	5
Benzene	ND		5.0	2.1	ug/L			09/14/19 13:56	5
Bromochloromethane	ND		5.0	4.4	ug/L			09/14/19 13:56	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/14/19 13:56	5
Bromoform	ND		5.0	1.3	ug/L			09/14/19 13:56	5
Bromomethane	ND		5.0	3.5	ug/L			09/14/19 13:56	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/14/19 13:56	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/14/19 13:56	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/14/19 13:56	5
Chloroethane	ND		5.0	1.6	ug/L			09/14/19 13:56	5
Chloroform	ND		5.0	1.7	ug/L			09/14/19 13:56	5
Chloromethane	ND		5.0	1.8	ug/L			09/14/19 13:56	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/14/19 13:56	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/14/19 13:56	5
Cyclohexane	ND		5.0	0.90	ug/L			09/14/19 13:56	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/14/19 13:56	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/14/19 13:56	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/14/19 13:56	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/14/19 13:56	5
Methyl acetate	ND		13	6.5	ug/L			09/14/19 13:56	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/14/19 13:56	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/14/19 13:56	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/14/19 13:56	5
Styrene	ND		5.0	3.7	ug/L			09/14/19 13:56	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/14/19 13:56	5
Toluene	ND		5.0	2.6	ug/L			09/14/19 13:56	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/14/19 13:56	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/14/19 13:56	5
Trichloroethene	**17**		5.0	2.3	ug/L			09/14/19 13:56	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/14/19 13:56	5

Client Sample ID: 356023-GW-MW-5R-93-5 Lab Sample ID: 480-158822-5

Date Collected: 09/04/19 16:35 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		5.0	4.5	ug/L			09/14/19 13:56	5
Xylenes, Total	ND		10	3.3	ug/L			09/14/19 13:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*09/14/19 13:56*	*5*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*09/14/19 13:56*	*5*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*09/14/19 13:56*	*5*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/14/19 13:56*	*5*

Client Sample ID: 356023-GW-MW-5R-93-6 Lab Sample ID: 480-158822-6

Date Collected: 09/05/19 07:25 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**220**		5.0	4.1	ug/L			09/15/19 19:36	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/15/19 19:36	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/15/19 19:36	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/15/19 19:36	5
1,1-Dichloroethane	**16**		5.0	1.9	ug/L			09/15/19 19:36	5
1,1-Dichloroethene	**54**		5.0	1.5	ug/L			09/15/19 19:36	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/15/19 19:36	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/15/19 19:36	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/15/19 19:36	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/15/19 19:36	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/15/19 19:36	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/15/19 19:36	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/15/19 19:36	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/15/19 19:36	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/15/19 19:36	5
1,4-Dioxane	ND		200	47	ug/L			09/15/19 19:36	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/15/19 19:36	5
2-Hexanone	ND		25	6.2	ug/L			09/15/19 19:36	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/15/19 19:36	5
Acetone	ND		50	15	ug/L			09/15/19 19:36	5
Benzene	ND		5.0	2.1	ug/L			09/15/19 19:36	5
Bromochloromethane	ND		5.0	4.4	ug/L			09/15/19 19:36	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/15/19 19:36	5
Bromoform	ND		5.0	1.3	ug/L			09/15/19 19:36	5
Bromomethane	ND		5.0	3.5	ug/L			09/15/19 19:36	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/15/19 19:36	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/15/19 19:36	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/15/19 19:36	5
Chloroethane	ND		5.0	1.6	ug/L			09/15/19 19:36	5
Chloroform	ND		5.0	1.7	ug/L			09/15/19 19:36	5
Chloromethane	ND		5.0	1.8	ug/L			09/15/19 19:36	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/15/19 19:36	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/15/19 19:36	5
Cyclohexane	ND		5.0	0.90	ug/L			09/15/19 19:36	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/15/19 19:36	5

Client Sample ID: 356023-GW-MW-5R-93-6 Lab Sample ID: 480-158822-6

Date Collected: 09/05/19 07:25 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/15/19 19:36	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/15/19 19:36	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/15/19 19:36	5
Methyl acetate	ND		13	6.5	ug/L			09/15/19 19:36	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/15/19 19:36	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/15/19 19:36	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/15/19 19:36	5
Styrene	ND		5.0	3.7	ug/L			09/15/19 19:36	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/15/19 19:36	5
Toluene	ND		5.0	2.6	ug/L			09/15/19 19:36	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/15/19 19:36	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/15/19 19:36	5
Trichloroethene	**15**		5.0	2.3	ug/L			09/15/19 19:36	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/15/19 19:36	5
Vinyl chloride	ND		5.0	4.5	ug/L			09/15/19 19:36	5
Xylenes, Total	ND		10	3.3	ug/L			09/15/19 19:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/15/19 19:36*	*5*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*09/15/19 19:36*	*5*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/15/19 19:36*	*5*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/15/19 19:36*	*5*

Client Sample ID: 356023-GW-MW-5R-93-7 Lab Sample ID: 480-158822-7

Date Collected: 09/05/19 12:00 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**250**		5.0	4.1	ug/L			09/15/19 20:00	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/15/19 20:00	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/15/19 20:00	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/15/19 20:00	5
1,1-Dichloroethane	**18**		5.0	1.9	ug/L			09/15/19 20:00	5
1,1-Dichloroethene	**63**		5.0	1.5	ug/L			09/15/19 20:00	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/15/19 20:00	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/15/19 20:00	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/15/19 20:00	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/15/19 20:00	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/15/19 20:00	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/15/19 20:00	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/15/19 20:00	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/15/19 20:00	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/15/19 20:00	5
1,4-Dioxane	ND		200	47	ug/L			09/15/19 20:00	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/15/19 20:00	5
2-Hexanone	ND		25	6.2	ug/L			09/15/19 20:00	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/15/19 20:00	5
Acetone	ND		50	15	ug/L			09/15/19 20:00	5
Benzene	ND		5.0	2.1	ug/L			09/15/19 20:00	5

Client Sample ID: 356023-GW-MW-5R-93-7
Lab Sample ID: 480-158822-7

Date Collected: 09/05/19 12:00
Matrix: Water
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		5.0	4.4	ug/L			09/15/19 20:00	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/15/19 20:00	5
Bromoform	ND		5.0	1.3	ug/L			09/15/19 20:00	5
Bromomethane	ND		5.0	3.5	ug/L			09/15/19 20:00	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/15/19 20:00	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/15/19 20:00	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/15/19 20:00	5
Chloroethane	ND		5.0	1.6	ug/L			09/15/19 20:00	5
Chloroform	ND		5.0	1.7	ug/L			09/15/19 20:00	5
Chloromethane	ND		5.0	1.8	ug/L			09/15/19 20:00	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/15/19 20:00	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/15/19 20:00	5
Cyclohexane	ND		5.0	0.90	ug/L			09/15/19 20:00	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/15/19 20:00	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/15/19 20:00	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/15/19 20:00	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/15/19 20:00	5
Methyl acetate	ND		13	6.5	ug/L			09/15/19 20:00	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/15/19 20:00	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/15/19 20:00	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/15/19 20:00	5
Styrene	ND		5.0	3.7	ug/L			09/15/19 20:00	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/15/19 20:00	5
Toluene	ND		5.0	2.6	ug/L			09/15/19 20:00	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/15/19 20:00	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/15/19 20:00	5
Trichloroethene	**16**		5.0	2.3	ug/L			09/15/19 20:00	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/15/19 20:00	5
Vinyl chloride	ND		5.0	4.5	ug/L			09/15/19 20:00	5
Xylenes, Total	ND		10	3.3	ug/L			09/15/19 20:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*09/15/19 20:00*	*5*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*09/15/19 20:00*	*5*
Dibromofluoromethane (Surr)	*114*		*75 - 123*		*09/15/19 20:00*	*5*
Toluene-d8 (Surr)	*105*		*80 - 120*		*09/15/19 20:00*	*5*

Client Sample ID: 356023-GW-MW-5R-93-8
Lab Sample ID: 480-158822-8

Date Collected: 09/05/19 16:40
Matrix: Water
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**210**		5.0	4.1	ug/L			09/15/19 20:24	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/15/19 20:24	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/15/19 20:24	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/15/19 20:24	5
1,1-Dichloroethane	**17**		5.0	1.9	ug/L			09/15/19 20:24	5
1,1-Dichloroethene	**51**		5.0	1.5	ug/L			09/15/19 20:24	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/15/19 20:24	5

Client Sample ID: 356023-GW-MW-5R-93-8 Lab Sample ID: 480-158822-8

Date Collected: 09/05/19 16:40 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/15/19 20:24	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/15/19 20:24	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/15/19 20:24	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/15/19 20:24	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/15/19 20:24	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/15/19 20:24	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/15/19 20:24	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/15/19 20:24	5
1,4-Dioxane	ND		200	47	ug/L			09/15/19 20:24	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/15/19 20:24	5
2-Hexanone	ND		25	6.2	ug/L			09/15/19 20:24	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/15/19 20:24	5
Acetone	ND		50	15	ug/L			09/15/19 20:24	5
Benzene	ND		5.0	2.1	ug/L			09/15/19 20:24	5
Bromochloromethane	ND		5.0	4.4	ug/L			09/15/19 20:24	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/15/19 20:24	5
Bromoform	ND		5.0	1.3	ug/L			09/15/19 20:24	5
Bromomethane	ND		5.0	3.5	ug/L			09/15/19 20:24	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/15/19 20:24	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/15/19 20:24	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/15/19 20:24	5
Chloroethane	ND		5.0	1.6	ug/L			09/15/19 20:24	5
Chloroform	ND		5.0	1.7	ug/L			09/15/19 20:24	5
Chloromethane	ND		5.0	1.8	ug/L			09/15/19 20:24	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/15/19 20:24	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/15/19 20:24	5
Cyclohexane	ND		5.0	0.90	ug/L			09/15/19 20:24	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/15/19 20:24	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/15/19 20:24	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/15/19 20:24	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/15/19 20:24	5
Methyl acetate	ND		13	6.5	ug/L			09/15/19 20:24	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/15/19 20:24	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/15/19 20:24	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/15/19 20:24	5
Styrene	ND		5.0	3.7	ug/L			09/15/19 20:24	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/15/19 20:24	5
Toluene	ND		5.0	2.6	ug/L			09/15/19 20:24	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/15/19 20:24	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/15/19 20:24	5
Trichloroethene	**15**		5.0	2.3	ug/L			09/15/19 20:24	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/15/19 20:24	5
Vinyl chloride	ND		5.0	4.5	ug/L			09/15/19 20:24	5
Xylenes, Total	ND		10	3.3	ug/L			09/15/19 20:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/15/19 20:24*	*5*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/15/19 20:24*	*5*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/15/19 20:24*	*5*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/15/19 20:24*	*5*

Client Sample ID: 356023-GW-MW-5R-93-9
Lab Sample ID: 480-158822-9

Date Collected: 09/06/19 07:32
Matrix: Water
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**230**		5.0	4.1	ug/L			09/16/19 18:47	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/16/19 18:47	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/16/19 18:47	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/16/19 18:47	5
1,1-Dichloroethane	**18**		5.0	1.9	ug/L			09/16/19 18:47	5
1,1-Dichloroethene	**55**		5.0	1.5	ug/L			09/16/19 18:47	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/16/19 18:47	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/16/19 18:47	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/16/19 18:47	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/16/19 18:47	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/16/19 18:47	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/16/19 18:47	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/16/19 18:47	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/16/19 18:47	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/16/19 18:47	5
1,4-Dioxane	ND		200	47	ug/L			09/16/19 18:47	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/16/19 18:47	5
2-Hexanone	ND		25	6.2	ug/L			09/16/19 18:47	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/16/19 18:47	5
Acetone	ND		50	15	ug/L			09/16/19 18:47	5
Benzene	ND		5.0	2.1	ug/L			09/16/19 18:47	5
Bromochloromethane	ND		5.0	4.4	ug/L			09/16/19 18:47	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/16/19 18:47	5
Bromoform	ND		5.0	1.3	ug/L			09/16/19 18:47	5
Bromomethane	ND		5.0	3.5	ug/L			09/16/19 18:47	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/16/19 18:47	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/16/19 18:47	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/16/19 18:47	5
Chloroethane	ND		5.0	1.6	ug/L			09/16/19 18:47	5
Chloroform	ND		5.0	1.7	ug/L			09/16/19 18:47	5
Chloromethane	ND		5.0	1.8	ug/L			09/16/19 18:47	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/16/19 18:47	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/16/19 18:47	5
Cyclohexane	ND		5.0	0.90	ug/L			09/16/19 18:47	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/16/19 18:47	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/16/19 18:47	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/16/19 18:47	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/16/19 18:47	5
Methyl acetate	ND		13	6.5	ug/L			09/16/19 18:47	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/16/19 18:47	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/16/19 18:47	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/16/19 18:47	5
Styrene	ND		5.0	3.7	ug/L			09/16/19 18:47	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/16/19 18:47	5
Toluene	ND		5.0	2.6	ug/L			09/16/19 18:47	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/16/19 18:47	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/16/19 18:47	5
Trichloroethene	**15**		5.0	2.3	ug/L			09/16/19 18:47	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/16/19 18:47	5

Client Sample ID: 356023-GW-MW-5R-93-9 Lab Sample ID: 480-158822-9

Date Collected: 09/06/19 07:32 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		5.0	4.5	ug/L			09/16/19 18:47	5
Xylenes, Total	ND		10	3.3	ug/L			09/16/19 18:47	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*09/16/19 18:47*	*5*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*09/16/19 18:47*	*5*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*09/16/19 18:47*	*5*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/16/19 18:47*	*5*

Client Sample ID: 356023-GW-MW-5R-93-10 Lab Sample ID: 480-158822-10

Date Collected: 09/06/19 12:15 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**230**		5.0	4.1	ug/L			09/16/19 19:12	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			09/16/19 19:12	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			09/16/19 19:12	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			09/16/19 19:12	5
1,1-Dichloroethane	**17**		5.0	1.9	ug/L			09/16/19 19:12	5
1,1-Dichloroethene	**55**		5.0	1.5	ug/L			09/16/19 19:12	5
1,2,3-Trichlorobenzene	ND		5.0	2.1	ug/L			09/16/19 19:12	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			09/16/19 19:12	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			09/16/19 19:12	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			09/16/19 19:12	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/16/19 19:12	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			09/16/19 19:12	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			09/16/19 19:12	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			09/16/19 19:12	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			09/16/19 19:12	5
1,4-Dioxane	ND		200	47	ug/L			09/16/19 19:12	5
2-Butanone (MEK)	ND		50	6.6	ug/L			09/16/19 19:12	5
2-Hexanone	ND		25	6.2	ug/L			09/16/19 19:12	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			09/16/19 19:12	5
Acetone	ND		50	15	ug/L			09/16/19 19:12	5
Benzene	ND		5.0	2.1	ug/L			09/16/19 19:12	5
Bromochloromethane	ND		5.0	4.4	ug/L			09/16/19 19:12	5
Bromodichloromethane	ND		5.0	2.0	ug/L			09/16/19 19:12	5
Bromoform	ND		5.0	1.3	ug/L			09/16/19 19:12	5
Bromomethane	ND		5.0	3.5	ug/L			09/16/19 19:12	5
Carbon disulfide	ND		5.0	0.95	ug/L			09/16/19 19:12	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			09/16/19 19:12	5
Chlorobenzene	ND		5.0	3.8	ug/L			09/16/19 19:12	5
Chloroethane	ND		5.0	1.6	ug/L			09/16/19 19:12	5
Chloroform	ND		5.0	1.7	ug/L			09/16/19 19:12	5
Chloromethane	ND		5.0	1.8	ug/L			09/16/19 19:12	5
cis-1,2-Dichloroethene	ND		5.0	4.1	ug/L			09/16/19 19:12	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			09/16/19 19:12	5
Cyclohexane	ND		5.0	0.90	ug/L			09/16/19 19:12	5
Dibromochloromethane	ND		5.0	1.6	ug/L			09/16/19 19:12	5

Client Sample ID: 356023-GW-MW-5R-93-10 Lab Sample ID: 480-158822-10

Date Collected: 09/06/19 12:15 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			09/16/19 19:12	5
Ethylbenzene	ND		5.0	3.7	ug/L			09/16/19 19:12	5
Isopropylbenzene	ND		5.0	4.0	ug/L			09/16/19 19:12	5
Methyl acetate	ND		13	6.5	ug/L			09/16/19 19:12	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/16/19 19:12	5
Methylcyclohexane	ND		5.0	0.80	ug/L			09/16/19 19:12	5
Methylene Chloride	ND		5.0	2.2	ug/L			09/16/19 19:12	5
Styrene	ND		5.0	3.7	ug/L			09/16/19 19:12	5
Tetrachloroethene	ND		5.0	1.8	ug/L			09/16/19 19:12	5
Toluene	ND		5.0	2.6	ug/L			09/16/19 19:12	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			09/16/19 19:12	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			09/16/19 19:12	5
Trichloroethene	**16**		5.0	2.3	ug/L			09/16/19 19:12	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			09/16/19 19:12	5
Vinyl chloride	ND		5.0	4.5	ug/L			09/16/19 19:12	5
Xylenes, Total	ND		10	3.3	ug/L			09/16/19 19:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/16/19 19:12*	*5*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*09/16/19 19:12*	*5*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/16/19 19:12*	*5*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/16/19 19:12*	*5*

Client Sample ID: TRIP BLANK 2 Lab Sample ID: 480-158822-11

Date Collected: 09/03/19 12:00 **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/19 21:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/14/19 21:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/14/19 21:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/19 21:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/19 21:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/19 21:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/19 21:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/19 21:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/14/19 21:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/14/19 21:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/19 21:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/19 21:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/19 21:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/19 21:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/19 21:41	1
1,4-Dioxane	ND		40	9.3	ug/L			09/14/19 21:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/14/19 21:41	1
2-Hexanone	ND		5.0	1.2	ug/L			09/14/19 21:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/14/19 21:41	1
Acetone	ND		10	3.0	ug/L			09/14/19 21:41	1
Benzene	ND		1.0	0.41	ug/L			09/14/19 21:41	1

Client Sample ID: TRIP BLANK 2 — Lab Sample ID: 480-158822-11

Date Collected: 09/03/19 12:00 — **Matrix: Water**
Date Received: 09/07/19 09:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.87	ug/L			09/14/19 21:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/14/19 21:41	1
Bromoform	ND		1.0	0.26	ug/L			09/14/19 21:41	1
Bromomethane	ND		1.0	0.69	ug/L			09/14/19 21:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/14/19 21:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/19 21:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/19 21:41	1
Chloroethane	ND		1.0	0.32	ug/L			09/14/19 21:41	1
Chloroform	ND		1.0	0.34	ug/L			09/14/19 21:41	1
Chloromethane	ND		1.0	0.35	ug/L			09/14/19 21:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/14/19 21:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/14/19 21:41	1
Cyclohexane	ND		1.0	0.18	ug/L			09/14/19 21:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/14/19 21:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/14/19 21:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/19 21:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/19 21:41	1
Methyl acetate	ND		2.5	1.3	ug/L			09/14/19 21:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/19 21:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/14/19 21:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/19 21:41	1
Styrene	ND		1.0	0.73	ug/L			09/14/19 21:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/19 21:41	1
Toluene	ND		1.0	0.51	ug/L			09/14/19 21:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/14/19 21:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/14/19 21:41	1
Trichloroethene	ND		1.0	0.46	ug/L			09/14/19 21:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/19 21:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/14/19 21:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/14/19 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/14/19 21:41*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*09/14/19 21:41*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/14/19 21:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/14/19 21:41*	*1*

Surrogate Summary

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-158822-1	356023-GW-MW-5R-93-1	103	107	101	103
480-158822-2	356023-GW-MW-5R-93-2	104	105	107	104
480-158822-3	356023-GW-MW-5R-93-3	98	103	97	97
480-158822-4	356023-GW-MW-5R-93-4	101	102	102	96
480-158822-5	356023-GW-MW-5R-93-5	95	105	101	98
480-158822-6	356023-GW-MW-5R-93-6	106	106	106	103
480-158822-7	356023-GW-MW-5R-93-7	111	110	114	105
480-158822-8	356023-GW-MW-5R-93-8	105	103	103	100
480-158822-9	356023-GW-MW-5R-93-9	111	110	109	103
480-158822-10	356023-GW-MW-5R-93-10	108	107	107	103
480-158822-11	TRIP BLANK 2	103	104	103	102
LCS 480-492066/5	Lab Control Sample	101	109	100	101
LCS 480-492085/5	Lab Control Sample	99	105	97	98
LCS 480-492149/5	Lab Control Sample	106	108	107	104
LCS 480-492226/5	Lab Control Sample	106	115	103	104
MB 480-492066/7	Method Blank	101	108	102	100
MB 480-492085/7	Method Blank	99	105	100	100
MB 480-492149/7	Method Blank	105	113	110	106
MB 480-492226/7	Method Blank	108	105	107	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-492066/7
Matrix: Water
Analysis Batch: 492066

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/19 10:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/14/19 10:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/14/19 10:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/19 10:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/19 10:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/19 10:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/19 10:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/19 10:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/14/19 10:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/14/19 10:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/19 10:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/19 10:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/19 10:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/19 10:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/19 10:36	1
1,4-Dioxane	ND		40	9.3	ug/L			09/14/19 10:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/14/19 10:36	1
2-Hexanone	ND		5.0	1.2	ug/L			09/14/19 10:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/14/19 10:36	1
Acetone	ND		10	3.0	ug/L			09/14/19 10:36	1
Benzene	ND		1.0	0.41	ug/L			09/14/19 10:36	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/14/19 10:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/14/19 10:36	1
Bromoform	ND		1.0	0.26	ug/L			09/14/19 10:36	1
Bromomethane	ND		1.0	0.69	ug/L			09/14/19 10:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/14/19 10:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/19 10:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/19 10:36	1
Chloroethane	ND		1.0	0.32	ug/L			09/14/19 10:36	1
Chloroform	ND		1.0	0.34	ug/L			09/14/19 10:36	1
Chloromethane	ND		1.0	0.35	ug/L			09/14/19 10:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/14/19 10:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/14/19 10:36	1
Cyclohexane	ND		1.0	0.18	ug/L			09/14/19 10:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/14/19 10:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/14/19 10:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/19 10:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/19 10:36	1
Methyl acetate	ND		2.5	1.3	ug/L			09/14/19 10:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/19 10:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/14/19 10:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/19 10:36	1
Styrene	ND		1.0	0.73	ug/L			09/14/19 10:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/19 10:36	1
Toluene	ND		1.0	0.51	ug/L			09/14/19 10:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/14/19 10:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/14/19 10:36	1
Trichloroethene	ND		1.0	0.46	ug/L			09/14/19 10:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-492066/7
Matrix: Water
Analysis Batch: 492066

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/19 10:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/14/19 10:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/14/19 10:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*09/14/19 10:36*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*09/14/19 10:36*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*09/14/19 10:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/14/19 10:36*	*1*

Lab Sample ID: LCS 480-492066/5
Matrix: Water
Analysis Batch: 492066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.9		ug/L		108	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.9		ug/L		104	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.2		ug/L		121	61 - 148
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	76 - 122
1,1-Dichloroethane	25.0	26.9		ug/L		108	77 - 120
1,1-Dichloroethene	25.0	26.7		ug/L		107	66 - 127
1,2,3-Trichlorobenzene	25.0	21.9		ug/L		88	75 - 123
1,2,4-Trichlorobenzene	25.0	23.0		ug/L		92	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	56 - 134
1,2-Dibromoethane	25.0	27.2		ug/L		109	77 - 120
1,2-Dichlorobenzene	25.0	26.4		ug/L		105	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	26.0		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	80 - 120
1,4-Dioxane	500	443		ug/L		89	50 - 150
2-Butanone (MEK)	125	148		ug/L		119	57 - 140
2-Hexanone	125	136		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	125	142		ug/L		113	71 - 125
Acetone	125	125		ug/L		100	56 - 142
Benzene	25.0	25.7		ug/L		103	71 - 124
Bromochloromethane	25.0	26.4		ug/L		106	72 - 130
Bromodichloromethane	25.0	25.6		ug/L		102	80 - 122
Bromoform	25.0	24.7		ug/L		99	61 - 132
Bromomethane	25.0	21.6		ug/L		87	55 - 144
Carbon disulfide	25.0	26.7		ug/L		107	59 - 134
Carbon tetrachloride	25.0	27.8		ug/L		111	72 - 134
Chlorobenzene	25.0	27.5		ug/L		110	80 - 120
Chloroethane	25.0	22.4		ug/L		90	69 - 136
Chloroform	25.0	25.2		ug/L		101	73 - 127
Chloromethane	25.0	20.6		ug/L		82	68 - 124
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492066/5
Matrix: Water
Analysis Batch: 492066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	25.0	28.1		ug/L		113	59 - 135
Dibromochloromethane	25.0	26.6		ug/L		106	75 - 125
Dichlorodifluoromethane	25.0	17.3		ug/L		69	59 - 135
Ethylbenzene	25.0	27.4		ug/L		110	77 - 123
Isopropylbenzene	25.0	26.2		ug/L		105	77 - 122
Methyl acetate	50.0	53.4		ug/L		107	74 - 133
Methyl tert-butyl ether	25.0	26.3		ug/L		105	77 - 120
Methylcyclohexane	25.0	28.3		ug/L		113	68 - 134
Methylene Chloride	25.0	25.9		ug/L		104	75 - 124
Styrene	25.0	27.6		ug/L		111	80 - 120
Tetrachloroethene	25.0	28.4		ug/L		113	74 - 122
Toluene	25.0	26.7		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	27.3		ug/L		109	80 - 120
Trichloroethene	25.0	27.1		ug/L		108	74 - 123
Trichlorofluoromethane	25.0	24.1		ug/L		96	62 - 150
Vinyl chloride	25.0	21.7		ug/L		87	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 480-492085/7
Matrix: Water
Analysis Batch: 492085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/14/19 13:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/14/19 13:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/14/19 13:17	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/14/19 13:17	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/14/19 13:17	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/14/19 13:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/19 13:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/14/19 13:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/14/19 13:17	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/14/19 13:17	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/14/19 13:17	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/14/19 13:17	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/14/19 13:17	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/14/19 13:17	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/14/19 13:17	1
1,4-Dioxane	ND		40	9.3	ug/L			09/14/19 13:17	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/14/19 13:17	1
2-Hexanone	ND		5.0	1.2	ug/L			09/14/19 13:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/14/19 13:17	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-492085/7
Matrix: Water
Analysis Batch: 492085

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			09/14/19 13:17	1
Benzene	ND		1.0	0.41	ug/L			09/14/19 13:17	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/14/19 13:17	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/14/19 13:17	1
Bromoform	ND		1.0	0.26	ug/L			09/14/19 13:17	1
Bromomethane	ND		1.0	0.69	ug/L			09/14/19 13:17	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/14/19 13:17	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/14/19 13:17	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/14/19 13:17	1
Chloroethane	ND		1.0	0.32	ug/L			09/14/19 13:17	1
Chloroform	ND		1.0	0.34	ug/L			09/14/19 13:17	1
Chloromethane	ND		1.0	0.35	ug/L			09/14/19 13:17	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/14/19 13:17	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/14/19 13:17	1
Cyclohexane	ND		1.0	0.18	ug/L			09/14/19 13:17	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/14/19 13:17	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/14/19 13:17	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/14/19 13:17	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/14/19 13:17	1
Methyl acetate	ND		2.5	1.3	ug/L			09/14/19 13:17	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/14/19 13:17	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/14/19 13:17	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/14/19 13:17	1
Styrene	ND		1.0	0.73	ug/L			09/14/19 13:17	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/14/19 13:17	1
Toluene	ND		1.0	0.51	ug/L			09/14/19 13:17	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/14/19 13:17	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/14/19 13:17	1
Trichloroethene	ND		1.0	0.46	ug/L			09/14/19 13:17	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/14/19 13:17	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/14/19 13:17	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/14/19 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*09/14/19 13:17*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*09/14/19 13:17*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*09/14/19 13:17*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/14/19 13:17*	*1*

Lab Sample ID: LCS 480-492085/5
Matrix: Water
Analysis Batch: 492085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	22.7		ug/L		91	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.7		ug/L		91	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.4		ug/L		90	61 - 148
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	76 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492085/5
Matrix: Water
Analysis Batch: 492085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	22.0		ug/L		88	77 - 120
1,1-Dichloroethene	25.0	21.6		ug/L		86	66 - 127
1,2,3-Trichlorobenzene	25.0	22.4		ug/L		90	75 - 123
1,2,4-Trichlorobenzene	25.0	22.3		ug/L		89	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.2		ug/L		89	56 - 134
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
1,2-Dichlorobenzene	25.0	22.0		ug/L		88	80 - 124
1,2-Dichloroethane	25.0	22.5		ug/L		90	75 - 120
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3-Dichlorobenzene	25.0	22.4		ug/L		90	77 - 120
1,4-Dichlorobenzene	25.0	22.4		ug/L		89	80 - 120
1,4-Dioxane	500	507		ug/L		101	50 - 150
2-Butanone (MEK)	125	121		ug/L		97	57 - 140
2-Hexanone	125	129		ug/L		103	65 - 127
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	71 - 125
Acetone	125	108		ug/L		86	56 - 142
Benzene	25.0	22.6		ug/L		90	71 - 124
Bromochloromethane	25.0	23.7		ug/L		95	72 - 130
Bromodichloromethane	25.0	23.9		ug/L		96	80 - 122
Bromoform	25.0	26.6		ug/L		107	61 - 132
Bromomethane	25.0	20.7		ug/L		83	55 - 144
Carbon disulfide	25.0	21.7		ug/L		87	59 - 134
Carbon tetrachloride	25.0	22.7		ug/L		91	72 - 134
Chlorobenzene	25.0	23.1		ug/L		92	80 - 120
Chloroethane	25.0	20.7		ug/L		83	69 - 136
Chloroform	25.0	22.0		ug/L		88	73 - 127
Chloromethane	25.0	20.8		ug/L		83	68 - 124
cis-1,2-Dichloroethene	25.0	22.6		ug/L		91	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	22.3		ug/L		89	59 - 135
Dibromochloromethane	25.0	24.1		ug/L		96	75 - 125
Dichlorodifluoromethane	25.0	22.6		ug/L		91	59 - 135
Ethylbenzene	25.0	23.2		ug/L		93	77 - 123
Isopropylbenzene	25.0	23.1		ug/L		93	77 - 122
Methyl acetate	50.0	45.8		ug/L		92	74 - 133
Methyl tert-butyl ether	25.0	22.9		ug/L		92	77 - 120
Methylcyclohexane	25.0	23.1		ug/L		92	68 - 134
Methylene Chloride	25.0	21.5		ug/L		86	75 - 124
Styrene	25.0	25.1		ug/L		100	80 - 120
Tetrachloroethene	25.0	23.2		ug/L		93	74 - 122
Toluene	25.0	22.3		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	73 - 127
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	80 - 120
Trichloroethene	25.0	23.4		ug/L		94	74 - 123
Trichlorofluoromethane	25.0	22.1		ug/L		89	62 - 150
Vinyl chloride	25.0	22.6		ug/L		90	65 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492085/5
Matrix: Water
Analysis Batch: 492085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 480-492149/7
Matrix: Water
Analysis Batch: 492149

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/19 12:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/15/19 12:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/15/19 12:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/19 12:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/19 12:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/19 12:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/19 12:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/19 12:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/15/19 12:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/15/19 12:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/19 12:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/19 12:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/19 12:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/19 12:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/19 12:57	1
1,4-Dioxane	ND		40	9.3	ug/L			09/15/19 12:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/15/19 12:57	1
2-Hexanone	ND		5.0	1.2	ug/L			09/15/19 12:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/15/19 12:57	1
Acetone	ND		10	3.0	ug/L			09/15/19 12:57	1
Benzene	ND		1.0	0.41	ug/L			09/15/19 12:57	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/15/19 12:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/15/19 12:57	1
Bromoform	ND		1.0	0.26	ug/L			09/15/19 12:57	1
Bromomethane	ND		1.0	0.69	ug/L			09/15/19 12:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/15/19 12:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/19 12:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/19 12:57	1
Chloroethane	ND		1.0	0.32	ug/L			09/15/19 12:57	1
Chloroform	ND		1.0	0.34	ug/L			09/15/19 12:57	1
Chloromethane	ND		1.0	0.35	ug/L			09/15/19 12:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/15/19 12:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/15/19 12:57	1
Cyclohexane	ND		1.0	0.18	ug/L			09/15/19 12:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/15/19 12:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/15/19 12:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/19 12:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/19 12:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-492149/7
Matrix: Water
Analysis Batch: 492149

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		2.5	1.3	ug/L			09/15/19 12:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/19 12:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/15/19 12:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/19 12:57	1
Styrene	ND		1.0	0.73	ug/L			09/15/19 12:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/19 12:57	1
Toluene	ND		1.0	0.51	ug/L			09/15/19 12:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/19 12:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/15/19 12:57	1
Trichloroethene	ND		1.0	0.46	ug/L			09/15/19 12:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/19 12:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/19 12:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/15/19 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/15/19 12:57*	*1*
4-Bromofluorobenzene (Surr)	*113*		*73 - 120*		*09/15/19 12:57*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*09/15/19 12:57*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*09/15/19 12:57*	*1*

Lab Sample ID: LCS 480-492149/5
Matrix: Water
Analysis Batch: 492149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.5		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.0		ug/L		104	61 - 148
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	26.1		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	25.1		ug/L		100	66 - 127
1,2,3-Trichlorobenzene	25.0	26.9		ug/L		108	75 - 123
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.0		ug/L		96	56 - 134
1,2-Dibromoethane	25.0	25.6		ug/L		102	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	25.1		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	26.0		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 120
1,4-Dioxane	500	540		ug/L		108	50 - 150
2-Butanone (MEK)	125	131		ug/L		105	57 - 140
2-Hexanone	125	128		ug/L		103	65 - 127
4-Methyl-2-pentanone (MIBK)	125	137		ug/L		110	71 - 125
Acetone	125	129		ug/L		103	56 - 142
Benzene	25.0	25.3		ug/L		101	71 - 124
Bromochloromethane	25.0	27.8		ug/L		111	72 - 130
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492149/5
Matrix: Water
Analysis Batch: 492149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	25.0	27.5		ug/L		110	61 - 132
Bromomethane	25.0	22.8		ug/L		91	55 - 144
Carbon disulfide	25.0	25.5		ug/L		102	59 - 134
Carbon tetrachloride	25.0	26.0		ug/L		104	72 - 134
Chlorobenzene	25.0	25.2		ug/L		101	80 - 120
Chloroethane	25.0	22.6		ug/L		90	69 - 136
Chloroform	25.0	25.4		ug/L		102	73 - 127
Chloromethane	25.0	24.3		ug/L		97	68 - 124
cis-1,2-Dichloroethene	25.0	26.8		ug/L		107	74 - 124
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	74 - 124
Cyclohexane	25.0	26.6		ug/L		106	59 - 135
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	26.2		ug/L		105	59 - 135
Ethylbenzene	25.0	25.5		ug/L		102	77 - 123
Isopropylbenzene	25.0	25.5		ug/L		102	77 - 122
Methyl acetate	50.0	53.2		ug/L		106	74 - 133
Methyl tert-butyl ether	25.0	26.7		ug/L		107	77 - 120
Methylcyclohexane	25.0	26.4		ug/L		106	68 - 134
Methylene Chloride	25.0	25.5		ug/L		102	75 - 124
Styrene	25.0	27.2		ug/L		109	80 - 120
Tetrachloroethene	25.0	25.7		ug/L		103	74 - 122
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	25.6		ug/L		102	73 - 127
trans-1,3-Dichloropropene	25.0	25.7		ug/L		103	80 - 120
Trichloroethene	25.0	26.3		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	24.7		ug/L		99	62 - 150
Vinyl chloride	25.0	24.5		ug/L		98	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 480-492226/7
Matrix: Water
Analysis Batch: 492226

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/16/19 11:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/16/19 11:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/16/19 11:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/16/19 11:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/16/19 11:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/16/19 11:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/16/19 11:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/16/19 11:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/16/19 11:40	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-492226/7
Matrix: Water
Analysis Batch: 492226

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/16/19 11:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/16/19 11:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/16/19 11:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/16/19 11:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/16/19 11:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/16/19 11:40	1
1,4-Dioxane	ND		40	9.3	ug/L			09/16/19 11:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/16/19 11:40	1
2-Hexanone	ND		5.0	1.2	ug/L			09/16/19 11:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/16/19 11:40	1
Acetone	ND		10	3.0	ug/L			09/16/19 11:40	1
Benzene	ND		1.0	0.41	ug/L			09/16/19 11:40	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/16/19 11:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/16/19 11:40	1
Bromoform	ND		1.0	0.26	ug/L			09/16/19 11:40	1
Bromomethane	ND		1.0	0.69	ug/L			09/16/19 11:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/16/19 11:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/16/19 11:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/16/19 11:40	1
Chloroethane	ND		1.0	0.32	ug/L			09/16/19 11:40	1
Chloroform	ND		1.0	0.34	ug/L			09/16/19 11:40	1
Chloromethane	ND		1.0	0.35	ug/L			09/16/19 11:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/16/19 11:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/16/19 11:40	1
Cyclohexane	ND		1.0	0.18	ug/L			09/16/19 11:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/16/19 11:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/16/19 11:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/16/19 11:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/16/19 11:40	1
Methyl acetate	ND		2.5	1.3	ug/L			09/16/19 11:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/16/19 11:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/16/19 11:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/16/19 11:40	1
Styrene	ND		1.0	0.73	ug/L			09/16/19 11:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/16/19 11:40	1
Toluene	ND		1.0	0.51	ug/L			09/16/19 11:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/16/19 11:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/16/19 11:40	1
Trichloroethene	ND		1.0	0.46	ug/L			09/16/19 11:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/16/19 11:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/16/19 11:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/16/19 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/16/19 11:40*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*09/16/19 11:40*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/16/19 11:40*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/16/19 11:40*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492226/5
Matrix: Water
Analysis Batch: 492226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.0		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.6		ug/L		94	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.2		ug/L		93	61 - 148
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	22.3		ug/L		89	66 - 127
1,2,3-Trichlorobenzene	25.0	24.6		ug/L		98	75 - 123
1,2,4-Trichlorobenzene	25.0	24.0		ug/L		96	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.3		ug/L		89	56 - 134
1,2-Dibromoethane	25.0	25.4		ug/L		101	77 - 120
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	25.2		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 120
1,4-Dioxane	500	501		ug/L		100	50 - 150
2-Butanone (MEK)	125	128		ug/L		102	57 - 140
2-Hexanone	125	139		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	71 - 125
Acetone	125	114		ug/L		91	56 - 142
Benzene	25.0	23.8		ug/L		95	71 - 124
Bromochloromethane	25.0	25.1		ug/L		100	72 - 130
Bromodichloromethane	25.0	25.9		ug/L		104	80 - 122
Bromoform	25.0	28.0		ug/L		112	61 - 132
Bromomethane	25.0	19.4		ug/L		78	55 - 144
Carbon disulfide	25.0	22.1		ug/L		89	59 - 134
Carbon tetrachloride	25.0	24.1		ug/L		97	72 - 134
Chlorobenzene	25.0	24.9		ug/L		100	80 - 120
Chloroethane	25.0	19.6		ug/L		78	69 - 136
Chloroform	25.0	23.8		ug/L		95	73 - 127
Chloromethane	25.0	21.6		ug/L		87	68 - 124
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	26.8		ug/L		107	74 - 124
Cyclohexane	25.0	24.8		ug/L		99	59 - 135
Dibromochloromethane	25.0	26.2		ug/L		105	75 - 125
Dichlorodifluoromethane	25.0	23.4		ug/L		94	59 - 135
Ethylbenzene	25.0	24.8		ug/L		99	77 - 123
Isopropylbenzene	25.0	24.4		ug/L		98	77 - 122
Methyl acetate	50.0	49.4		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.5		ug/L		98	77 - 120
Methylcyclohexane	25.0	24.5		ug/L		98	68 - 134
Methylene Chloride	25.0	22.5		ug/L		90	75 - 124
Styrene	25.0	27.4		ug/L		109	80 - 120
Tetrachloroethene	25.0	24.6		ug/L		98	74 - 122
Toluene	25.0	24.0		ug/L		96	80 - 122
trans-1,2-Dichloroethene	25.0	22.7		ug/L		91	73 - 127
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	80 - 120
Trichloroethene	25.0	24.7		ug/L		99	74 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-492226/5
Matrix: Water
Analysis Batch: 492226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Trichlorofluoromethane			25.0	22.9		ug/L		92	62 - 150		
Vinyl chloride			25.0	21.3		ug/L		85	65 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*115*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*104*		*80 - 120*

QC Association Summary

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

GC/MS VOA

Analysis Batch: 492066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-158822-3	356023-GW-MW-5R-93-3	Total/NA	Water	8260C	
480-158822-4	356023-GW-MW-5R-93-4	Total/NA	Water	8260C	
480-158822-5	356023-GW-MW-5R-93-5	Total/NA	Water	8260C	
MB 480-492066/7	Method Blank	Total/NA	Water	8260C	
LCS 480-492066/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 492085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-158822-1	356023-GW-MW-5R-93-1	Total/NA	Water	8260C	
480-158822-2	356023-GW-MW-5R-93-2	Total/NA	Water	8260C	
480-158822-11	TRIP BLANK 2	Total/NA	Water	8260C	
MB 480-492085/7	Method Blank	Total/NA	Water	8260C	
LCS 480-492085/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 492149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-158822-6	356023-GW-MW-5R-93-6	Total/NA	Water	8260C	
480-158822-7	356023-GW-MW-5R-93-7	Total/NA	Water	8260C	
480-158822-8	356023-GW-MW-5R-93-8	Total/NA	Water	8260C	
MB 480-492149/7	Method Blank	Total/NA	Water	8260C	
LCS 480-492149/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 492226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-158822-9	356023-GW-MW-5R-93-9	Total/NA	Water	8260C	
480-158822-10	356023-GW-MW-5R-93-10	Total/NA	Water	8260C	
MB 480-492226/7	Method Blank	Total/NA	Water	8260C	
LCS 480-492226/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-MW-5R-93-1
Lab Sample ID: 480-158822-1
Date Collected: 09/03/19 13:10
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	492085	09/14/19 20:52	AMM	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-2
Lab Sample ID: 480-158822-2
Date Collected: 09/03/19 16:30
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	492085	09/14/19 21:16	AMM	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-3
Lab Sample ID: 480-158822-3
Date Collected: 09/04/19 07:30
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492066	09/14/19 13:10	AMM	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-4
Lab Sample ID: 480-158822-4
Date Collected: 09/04/19 12:05
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492066	09/14/19 13:33	AMM	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-5
Lab Sample ID: 480-158822-5
Date Collected: 09/04/19 16:35
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492066	09/14/19 13:56	AMM	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-6
Lab Sample ID: 480-158822-6
Date Collected: 09/05/19 07:25
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492149	09/15/19 19:36	BTP	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-7
Lab Sample ID: 480-158822-7
Date Collected: 09/05/19 12:00
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492149	09/15/19 20:00	BTP	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-MW-5R-93-8
Lab Sample ID: 480-158822-8
Date Collected: 09/05/19 16:40
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492149	09/15/19 20:24	BTP	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-9
Lab Sample ID: 480-158822-9
Date Collected: 09/06/19 07:32
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492226	09/16/19 18:47	BTP	TAL BUF

Client Sample ID: 356023-GW-MW-5R-93-10
Lab Sample ID: 480-158822-10
Date Collected: 09/06/19 12:15
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	492226	09/16/19 19:12	BTP	TAL BUF

Client Sample ID: TRIP BLANK 2
Lab Sample ID: 480-158822-11
Date Collected: 09/03/19 12:00
Matrix: Water
Date Received: 09/07/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	492085	09/14/19 21:41	AMM	TAL BUF

Laboratory References:
TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-158822-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
356023-GW-MW-5R-93-1	480-158822-1	101	103	103	107
356023-GW-MW-5R-93-2	480-158822-2	107	104	104	105
356023-GW-MW-5R-93-3	480-158822-3	97	98	97	103
356023-GW-MW-5R-93-4	480-158822-4	102	101	96	102
356023-GW-MW-5R-93-5	480-158822-5	101	95	98	105
356023-GW-MW-5R-93-6	480-158822-6	106	106	103	106
356023-GW-MW-5R-93-7	480-158822-7	114	111	105	110
356023-GW-MW-5R-93-8	480-158822-8	103	105	100	103
356023-GW-MW-5R-93-9	480-158822-9	109	111	103	110
356023-GW-MW-5R-93-10	480-158822-10	107	108	103	107
TRIP BLANK 2	480-158822-11	103	103	102	104
	MB 480-492066/7	102	101	100	108
	MB 480-492085/7	100	99	100	105
	MB 480-492149/7	110	105	106	113
	MB 480-492226/7	107	108	101	105
	LCS 480-492066/5	100	101	101	109
	LCS 480-492085/5	97	99	98	105
	LCS 480-492149/5	107	106	104	108
	LCS 480-492226/5	103	106	104	115

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S8950.D

Lab ID: LCS 480-492066/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	26.9	108	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.2	121	61-148	
1,1,2-Trichloroethane	25.0	26.2	105	76-122	
1,1-Dichloroethane	25.0	26.9	108	77-120	
1,1-Dichloroethene	25.0	26.7	107	66-127	
1,2,3-Trichlorobenzene	25.0	21.9	88	75-123	
1,2,4-Trichlorobenzene	25.0	23.0	92	79-122	
1,2-Dibromo-3-Chloropropane	25.0	24.7	99	56-134	
1,2-Dibromoethane	25.0	27.2	109	77-120	
1,2-Dichlorobenzene	25.0	26.4	105	80-124	
1,2-Dichloroethane	25.0	26.0	104	75-120	
1,2-Dichloropropane	25.0	26.0	104	76-120	
1,3-Dichlorobenzene	25.0	26.1	104	77-120	
1,4-Dichlorobenzene	25.0	26.3	105	80-120	
1,4-Dioxane	500	443	89	50-150	
2-Butanone (MEK)	125	148	119	57-140	
2-Hexanone	125	136	109	65-127	
4-Methyl-2-pentanone (MIBK)	125	142	113	71-125	
Acetone	125	125	100	56-142	
Benzene	25.0	25.7	103	71-124	
Bromochloromethane	25.0	26.4	106	72-130	
Bromodichloromethane	25.0	25.6	102	80-122	
Bromoform	25.0	24.7	99	61-132	
Bromomethane	25.0	21.6	87	55-144	
Carbon disulfide	25.0	26.7	107	59-134	
Carbon tetrachloride	25.0	27.8	111	72-134	
Chlorobenzene	25.0	27.5	110	80-120	
Chloroethane	25.0	22.4	90	69-136	
Chloroform	25.0	25.2	101	73-127	
Chloromethane	25.0	20.6	82	68-124	
cis-1,2-Dichloroethene	25.0	25.6	102	74-124	
cis-1,3-Dichloropropene	25.0	25.1	100	74-124	
Cyclohexane	25.0	28.1	113	59-135	
Dibromochloromethane	25.0	26.6	106	75-125	
Dichlorodifluoromethane	25.0	17.3	69	59-135	
Ethylbenzene	25.0	27.4	110	77-123	
Isopropylbenzene	25.0	26.2	105	77-122	
Methyl acetate	50.0	53.4	107	74-133	
Methyl tert-butyl ether	25.0	26.3	105	77-120	
Methylcyclohexane	25.0	28.3	113	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S8950.D

Lab ID: LCS 480-492066/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	25.9	104	75-124	
Styrene	25.0	27.6	111	80-120	
Tetrachloroethene	25.0	28.4	113	74-122	
Toluene	25.0	26.7	107	80-122	
trans-1,2-Dichloroethene	25.0	26.2	105	73-127	
trans-1,3-Dichloropropene	25.0	27.3	109	80-120	
Trichloroethene	25.0	27.1	108	74-123	
Trichlorofluoromethane	25.0	24.1	96	62-150	
Vinyl chloride	25.0	21.7	87	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: L0976.D

Lab ID: LCS 480-492085/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	22.7	91	73-126	
1,1,2,2-Tetrachloroethane	25.0	22.7	91	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.4	90	61-148	
1,1,2-Trichloroethane	25.0	23.7	95	76-122	
1,1-Dichloroethane	25.0	22.0	88	77-120	
1,1-Dichloroethene	25.0	21.6	86	66-127	
1,2,3-Trichlorobenzene	25.0	22.4	90	75-123	
1,2,4-Trichlorobenzene	25.0	22.3	89	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.2	89	56-134	
1,2-Dibromoethane	25.0	24.6	98	77-120	
1,2-Dichlorobenzene	25.0	22.0	88	80-124	
1,2-Dichloroethane	25.0	22.5	90	75-120	
1,2-Dichloropropane	25.0	24.0	96	76-120	
1,3-Dichlorobenzene	25.0	22.4	90	77-120	
1,4-Dichlorobenzene	25.0	22.4	89	80-120	
1,4-Dioxane	500	507	101	50-150	
2-Butanone (MEK)	125	121	97	57-140	
2-Hexanone	125	129	103	65-127	
4-Methyl-2-pentanone (MIBK)	125	122	97	71-125	
Acetone	125	108	86	56-142	
Benzene	25.0	22.6	90	71-124	
Bromochloromethane	25.0	23.7	95	72-130	
Bromodichloromethane	25.0	23.9	96	80-122	
Bromoform	25.0	26.6	107	61-132	
Bromomethane	25.0	20.7	83	55-144	
Carbon disulfide	25.0	21.7	87	59-134	
Carbon tetrachloride	25.0	22.7	91	72-134	
Chlorobenzene	25.0	23.1	92	80-120	
Chloroethane	25.0	20.7	83	69-136	
Chloroform	25.0	22.0	88	73-127	
Chloromethane	25.0	20.8	83	68-124	
cis-1,2-Dichloroethene	25.0	22.6	91	74-124	
cis-1,3-Dichloropropene	25.0	25.7	103	74-124	
Cyclohexane	25.0	22.3	89	59-135	
Dibromochloromethane	25.0	24.1	96	75-125	
Dichlorodifluoromethane	25.0	22.6	91	59-135	
Ethylbenzene	25.0	23.2	93	77-123	
Isopropylbenzene	25.0	23.1	93	77-122	
Methyl acetate	50.0	45.8	92	74-133	
Methyl tert-butyl ether	25.0	22.9	92	77-120	
Methylcyclohexane	25.0	23.1	92	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: L0976.D

Lab ID: LCS 480-492085/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	21.5	86	75-124	
Styrene	25.0	25.1	100	80-120	
Tetrachloroethene	25.0	23.2	93	74-122	
Toluene	25.0	22.3	89	80-122	
trans-1,2-Dichloroethene	25.0	21.7	87	73-127	
trans-1,3-Dichloropropene	25.0	25.4	102	80-120	
Trichloroethene	25.0	23.4	94	74-123	
Trichlorofluoromethane	25.0	22.1	89	62-150	
Vinyl chloride	25.0	22.6	90	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: L1033.D

Lab ID: LCS 480-492149/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	26.5	106	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.6	98	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.0	104	61-148	
1,1,2-Trichloroethane	25.0	24.8	99	76-122	
1,1-Dichloroethane	25.0	26.1	104	77-120	
1,1-Dichloroethene	25.0	25.1	100	66-127	
1,2,3-Trichlorobenzene	25.0	26.9	108	75-123	
1,2,4-Trichlorobenzene	25.0	26.4	106	79-122	
1,2-Dibromo-3-Chloropropane	25.0	24.0	96	56-134	
1,2-Dibromoethane	25.0	25.6	102	77-120	
1,2-Dichlorobenzene	25.0	24.9	100	80-124	
1,2-Dichloroethane	25.0	25.1	100	75-120	
1,2-Dichloropropane	25.0	26.0	104	76-120	
1,3-Dichlorobenzene	25.0	24.8	99	77-120	
1,4-Dichlorobenzene	25.0	24.2	97	80-120	
1,4-Dioxane	500	540	108	50-150	
2-Butanone (MEK)	125	131	105	57-140	
2-Hexanone	125	128	103	65-127	
4-Methyl-2-pentanone (MIBK)	125	137	110	71-125	
Acetone	125	129	103	56-142	
Benzene	25.0	25.3	101	71-124	
Bromochloromethane	25.0	27.8	111	72-130	
Bromodichloromethane	25.0	26.1	104	80-122	
Bromoform	25.0	27.5	110	61-132	
Bromomethane	25.0	22.8	91	55-144	
Carbon disulfide	25.0	25.5	102	59-134	
Carbon tetrachloride	25.0	26.0	104	72-134	
Chlorobenzene	25.0	25.2	101	80-120	
Chloroethane	25.0	22.6	90	69-136	
Chloroform	25.0	25.4	102	73-127	
Chloromethane	25.0	24.3	97	68-124	
cis-1,2-Dichloroethene	25.0	26.8	107	74-124	
cis-1,3-Dichloropropene	25.0	26.4	106	74-124	
Cyclohexane	25.0	26.6	106	59-135	
Dibromochloromethane	25.0	26.2	105	75-125	
Dichlorodifluoromethane	25.0	26.2	105	59-135	
Ethylbenzene	25.0	25.5	102	77-123	
Isopropylbenzene	25.0	25.5	102	77-122	
Methyl acetate	50.0	53.2	106	74-133	
Methyl tert-butyl ether	25.0	26.7	107	77-120	
Methylcyclohexane	25.0	26.4	106	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: L1033.D

Lab ID: LCS 480-492149/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	25.5	102	75-124	
Styrene	25.0	27.2	109	80-120	
Tetrachloroethene	25.0	25.7	103	74-122	
Toluene	25.0	25.3	101	80-122	
trans-1,2-Dichloroethene	25.0	25.6	102	73-127	
trans-1,3-Dichloropropene	25.0	25.7	103	80-120	
Trichloroethene	25.0	26.3	105	74-123	
Trichlorofluoromethane	25.0	24.7	99	62-150	
Vinyl chloride	25.0	24.5	98	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: L1088.D

Lab ID: LCS 480-492226/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.0	100	73-126	
1,1,2,2-Tetrachloroethane	25.0	23.6	94	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.2	93	61-148	
1,1,2-Trichloroethane	25.0	25.0	100	76-122	
1,1-Dichloroethane	25.0	24.0	96	77-120	
1,1-Dichloroethene	25.0	22.3	89	66-127	
1,2,3-Trichlorobenzene	25.0	24.6	98	75-123	
1,2,4-Trichlorobenzene	25.0	24.0	96	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.3	89	56-134	
1,2-Dibromoethane	25.0	25.4	101	77-120	
1,2-Dichlorobenzene	25.0	24.5	98	80-124	
1,2-Dichloroethane	25.0	24.5	98	75-120	
1,2-Dichloropropane	25.0	25.2	101	76-120	
1,3-Dichlorobenzene	25.0	24.9	99	77-120	
1,4-Dichlorobenzene	25.0	24.5	98	80-120	
1,4-Dioxane	500	501	100	50-150	
2-Butanone (MEK)	125	128	102	57-140	
2-Hexanone	125	139	111	65-127	
4-Methyl-2-pentanone (MIBK)	125	132	106	71-125	
Acetone	125	114	91	56-142	
Benzene	25.0	23.8	95	71-124	
Bromochloromethane	25.0	25.1	100	72-130	
Bromodichloromethane	25.0	25.9	104	80-122	
Bromoform	25.0	28.0	112	61-132	
Bromomethane	25.0	19.4	78	55-144	
Carbon disulfide	25.0	22.1	89	59-134	
Carbon tetrachloride	25.0	24.1	97	72-134	
Chlorobenzene	25.0	24.9	100	80-120	
Chloroethane	25.0	19.6	78	69-136	
Chloroform	25.0	23.8	95	73-127	
Chloromethane	25.0	21.6	87	68-124	
cis-1,2-Dichloroethene	25.0	24.6	98	74-124	
cis-1,3-Dichloropropene	25.0	26.8	107	74-124	
Cyclohexane	25.0	24.8	99	59-135	
Dibromochloromethane	25.0	26.2	105	75-125	
Dichlorodifluoromethane	25.0	23.4	94	59-135	
Ethylbenzene	25.0	24.8	99	77-123	
Isopropylbenzene	25.0	24.4	98	77-122	
Methyl acetate	50.0	49.4	99	74-133	
Methyl tert-butyl ether	25.0	24.5	98	77-120	
Methylcyclohexane	25.0	24.5	98	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Matrix: Water Level: Low Lab File ID: L1088.D

Lab ID: LCS 480-492226/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	22.5	90	75-124	
Styrene	25.0	27.4	109	80-120	
Tetrachloroethene	25.0	24.6	98	74-122	
Toluene	25.0	24.0	96	80-122	
trans-1,2-Dichloroethene	25.0	22.7	91	73-127	
trans-1,3-Dichloropropene	25.0	27.0	108	80-120	
Trichloroethene	25.0	24.7	99	74-123	
Trichlorofluoromethane	25.0	22.9	92	62-150	
Vinyl chloride	25.0	21.3	85	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: S8952.D Lab Sample ID: MB 480-492066/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973S Date Analyzed: 09/14/2019 10:36

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-492066/5	S8950.D	09/14/2019 09:50
356023-GW-MW-5R-93-3	480-158822-3	S8959.D	09/14/2019 13:10
356023-GW-MW-5R-93-4	480-158822-4	S8960.D	09/14/2019 13:33
356023-GW-MW-5R-93-5	480-158822-5	S8961.D	09/14/2019 13:56

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L0978.D Lab Sample ID: MB 480-492085/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5977L Date Analyzed: 09/14/2019 13:17

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-492085/5	L0976.D	09/14/2019 12:29
356023-GW-MW-5R-93-1	480-158822-1	L0996.D	09/14/2019 20:52
356023-GW-MW-5R-93-2	480-158822-2	L0997.D	09/14/2019 21:16
TRIP BLANK 2	480-158822-11	L0998.D	09/14/2019 21:41

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L1035.D Lab Sample ID: MB 480-492149/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5977L Date Analyzed: 09/15/2019 12:57

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-492149/5	L1033.D	09/15/2019 12:09
356023-GW-MW-5R-93-6	480-158822-6	L1051.D	09/15/2019 19:36
356023-GW-MW-5R-93-7	480-158822-7	L1052.D	09/15/2019 20:00
356023-GW-MW-5R-93-8	480-158822-8	L1053.D	09/15/2019 20:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L1090.D Lab Sample ID: MB 480-492226/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5977L Date Analyzed: 09/16/2019 11:40

GC Column: ZB-624 (30) VOA ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-492226/5	L1088.D	09/16/2019 10:42
356023-GW-MW-5R-93-9	480-158822-9	L1107.D	09/16/2019 18:47
356023-GW-MW-5R-93-10	480-158822-10	L1108.D	09/16/2019 19:12

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: S8766.D BFB Injection Date: 09/10/2019

Instrument ID: HP5973S BFB Injection Time: 13:48

Analysis Batch No.: 491176

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	88.2	
175	5.0 - 9.0 % of mass 174	7.0	(7.9) 1
176	95.0 - 101.0 % of mass 174	84.8	(96.2) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-491176/7	S8768.D	09/10/2019	14:39
	IC 480-491176/8	S8769.D	09/10/2019	15:02
	IC 480-491176/9	S8770.D	09/10/2019	15:25
	IC 480-491176/10	S8771.D	09/10/2019	15:48
	IC 480-491176/11	S8772.D	09/10/2019	16:11
	ICIS 480-491176/12	S8773.D	09/10/2019	16:34
	IC 480-491176/13	S8774.D	09/10/2019	16:57
	IC 480-491176/14	S8775.D	09/10/2019	17:20

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: S8947.D BFB Injection Date: 09/14/2019

Instrument ID: HP5973S BFB Injection Time: 08:39

Analysis Batch No.: 492066

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.1	
75	30.0 - 60.0 % of mass 95	47.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	89.7	
175	5.0 - 9.0 % of mass 174	6.7	(7.5) 1
176	95.0 - 101.0 % of mass 174	87.7	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-492066/3	S8948.D	09/14/2019	09:03
	LCS 480-492066/5	S8950.D	09/14/2019	09:50
	MB 480-492066/7	S8952.D	09/14/2019	10:36
356023-GW-MW-5R-93-3	480-158822-3	S8959.D	09/14/2019	13:10
356023-GW-MW-5R-93-4	480-158822-4	S8960.D	09/14/2019	13:33
356023-GW-MW-5R-93-5	480-158822-5	S8961.D	09/14/2019	13:56

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L0947.D BFB Injection Date: 09/13/2019

Instrument ID: HP5977L BFB Injection Time: 15:11

Analysis Batch No.: 491936

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.5	
75	30.0 - 60.0 % of mass 95	48.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	80.7	
175	5.0 - 9.0 % of mass 174	5.7	(7.0) 1
176	95.0 - 101.0 % of mass 174	77.6	(96.1) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-491936/7	L0949.D	09/13/2019	16:10
	IC 480-491936/8	L0950.D	09/13/2019	16:34
	IC 480-491936/9	L0951.D	09/13/2019	16:58
	IC 480-491936/10	L0952.D	09/13/2019	17:22
	IC 480-491936/11	L0953.D	09/13/2019	17:46
	ICIS 480-491936/12	L0954.D	09/13/2019	18:10
	IC 480-491936/13	L0955.D	09/13/2019	18:34
	IC 480-491936/14	L0956.D	09/13/2019	18:58

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L0973.D BFB Injection Date: 09/14/2019

Instrument ID: HP5977L BFB Injection Time: 11:10

Analysis Batch No.: 492085

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.2	
75	30.0 - 60.0 % of mass 95	46.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	77.3	
175	5.0 - 9.0 % of mass 174	6.0	(7.7) 1
176	95.0 - 101.0 % of mass 174	73.5	(95.1) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-492085/3	L0974.D	09/14/2019	11:40
	LCS 480-492085/5	L0976.D	09/14/2019	12:29
	MB 480-492085/7	L0978.D	09/14/2019	13:17
356023-GW-MW-5R-93-1	480-158822-1	L0996.D	09/14/2019	20:52
356023-GW-MW-5R-93-2	480-158822-2	L0997.D	09/14/2019	21:16
TRIP BLANK 2	480-158822-11	L0998.D	09/14/2019	21:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L1030.D BFB Injection Date: 09/15/2019

Instrument ID: HP5977L BFB Injection Time: 10:52

Analysis Batch No.: 492149

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.3	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	6.0	(7.4) 1
176	95.0 - 101.0 % of mass 174	77.6	(96.1) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-492149/3	L1031.D	09/15/2019	11:21
	LCS 480-492149/5	L1033.D	09/15/2019	12:09
	MB 480-492149/7	L1035.D	09/15/2019	12:57
356023-GW-MW-5R-93-6	480-158822-6	L1051.D	09/15/2019	19:36
356023-GW-MW-5R-93-7	480-158822-7	L1052.D	09/15/2019	20:00
356023-GW-MW-5R-93-8	480-158822-8	L1053.D	09/15/2019	20:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab File ID: L1085.D BFB Injection Date: 09/16/2019

Instrument ID: HP5977L BFB Injection Time: 09:12

Analysis Batch No.: 492226

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	48.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	79.2	
175	5.0 - 9.0 % of mass 174	5.3	(6.7) 1
176	95.0 - 101.0 % of mass 174	76.9	(97.1) 1
177	5.0 - 9.0 % of mass 176	3.9	(5.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-492226/3	L1086.D	09/16/2019	09:38
	LCS 480-492226/5	L1088.D	09/16/2019	10:42
	MB 480-492226/7	L1090.D	09/16/2019	11:40
356023-GW-MW-5R-93-9	480-158822-9	L1107.D	09/16/2019	18:47
356023-GW-MW-5R-93-10	480-158822-10	L1108.D	09/16/2019	19:12

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Sample No.: ICIS 480-491176/12 Date Analyzed: 09/10/2019 16:34

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S8773.D Heated Purge: (Y/N) N

Calibration ID: 37555

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		143736	5.45	283614	8.44	325070	10.83
UPPER LIMIT		287472	5.95	567228	8.94	650140	11.33
LOWER LIMIT		71868	4.95	141807	7.94	162535	10.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-492066/3		121159	5.45	255166	8.44	278498	10.83

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Sample No.: CCVIS 480-492066/3 Date Analyzed: 09/14/2019 09:03

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S8948.D Heated Purge: (Y/N) N

Calibration ID: 37552

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		121159	5.45	255166	8.44	278498	10.83
UPPER LIMIT		242318	5.95	510332	8.94	556996	11.33
LOWER LIMIT		60580	4.95	127583	7.94	139249	10.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-492066/5		126455	5.45	246439	8.44	287017	10.83
MB 480-492066/7		121360	5.45	249505	8.44	289725	10.83
480-158822-3	356023-GW-MW-5R-93-3	121989	5.45	251809	8.44	284162	10.83
480-158822-4	356023-GW-MW-5R-93-4	117876	5.45	251821	8.44	287865	10.83
480-158822-5	356023-GW-MW-5R-93-5	122450	5.45	244528	8.44	284567	10.83

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Sample No.: ICIS 480-491936/12 Date Analyzed: 09/13/2019 18:10

Instrument ID: HP5977L GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): L0954.D Heated Purge: (Y/N) N

Calibration ID: 37626

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		178908	6.55	669120	9.52	345952	11.80
UPPER LIMIT		357816	7.05	1338240	10.02	691904	12.30
LOWER LIMIT		89454	6.05	334560	9.02	172976	11.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-492085/3		183768	6.55	671709	9.51	337706	11.79
CCVIS 480-492149/3		155718	6.55	571836	9.51	318502	11.80
CCVIS 480-492226/3		127942	6.55	505342	9.51	276200	11.80

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Sample No.: CCVIS 480-492085/3 Date Analyzed: 09/14/2019 11:40

Instrument ID: HP5977L GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): L0974.D Heated Purge: (Y/N) N

Calibration ID: 37629

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		183768	6.55	671709	9.51	337706	11.79
UPPER LIMIT		367536	7.05	1343418	10.01	675412	12.29
LOWER LIMIT		91884	6.05	335855	9.01	168853	11.29
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-492085/5		176309	6.55	699134	9.52	372008	11.80
MB 480-492085/7		175475	6.55	661270	9.52	338957	11.80
480-158822-1	356023-GW-MW-5R-93-1	172376	6.55	662680	9.52	337783	11.80
480-158822-2	356023-GW-MW-5R-93-2	165826	6.55	596885	9.52	333723	11.80
480-158822-11	TRIP BLANK 2	163112	6.55	606569	9.52	322839	11.80

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Sample No.: CCVIS 480-492149/3 Date Analyzed: 09/15/2019 11:21

Instrument ID: HP5977L GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): L1031.D Heated Purge: (Y/N) N

Calibration ID: 37629

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		155718	6.55	571836	9.51	318502	11.80
UPPER LIMIT		311436	7.05	1143672	10.01	637004	12.30
LOWER LIMIT		77859	6.05	285918	9.01	159251	11.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-492149/5		144189	6.55	535258	9.51	296744	11.80
MB 480-492149/7		143553	6.55	517303	9.52	297060	11.80
480-158822-6	356023-GW-MW-5R-93-6	137605	6.55	521700	9.51	280684	11.79
480-158822-7	356023-GW-MW-5R-93-7	126181	6.55	446765	9.51	254139	11.80
480-158822-8	356023-GW-MW-5R-93-8	140624	6.55	552315	9.52	293437	11.80

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Sample No.: CCVIS 480-492226/3 Date Analyzed: 09/16/2019 09:38

Instrument ID: HP5977L GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): L1086.D Heated Purge: (Y/N) N

Calibration ID: 37629

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		127942	6.55	505342	9.51	276200	11.80
UPPER LIMIT		255884	7.05	1010684	10.01	552400	12.30
LOWER LIMIT		63971	6.05	252671	9.01	138100	11.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-492226/5		136427	6.55	529955	9.51	287615	11.80
MB 480-492226/7		125061	6.55	473234	9.52	258719	11.80
480-158822-9	356023-GW-MW-5R-93-9	114507	6.55	429836	9.52	236102	11.80
480-158822-10	356023-GW-MW-5R-93-10	116244	6.55	431531	9.52	223429	11.80

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-1 Lab Sample ID: 480-158822-1

Matrix: Water Lab File ID: L0996.D

Analysis Method: 8260C Date Collected: 09/03/2019 13:10

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 20:52

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	320		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	20		10	3.8
75-35-4	1,1-Dichloroethene	71		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-1 Lab Sample ID: 480-158822-1

Matrix: Water Lab File ID: L0996.D

Analysis Method: 8260C Date Collected: 09/03/2019 13:10

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 20:52

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	19		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	101		75-123
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D
Lims ID: 480-158822-C-1
Client ID: 356023-GW-MW-5R-93-1
Sample Type: Client
Inject. Date: 14-Sep-2019 20:52:47 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-158822-C-1
Misc. Info.: 480-0084141-025
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 08:55:50 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0311

First Level Reviewer: moffata Date: 15-Sep-2019 08:55:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	172376	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	662680	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.794	0.003	96	337783	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.980	0.003	93	231598	25.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.296	-0.001	98	290662	25.7	
$ 6 Toluene-d8 (Surr)	98	8.016	8.018	0.000	94	868502	25.8	
$ 7 4-Bromofluorobenzene (Surr	174	10.716	10.720	-0.001	97	254080	26.7	
10 Dichlorodifluoromethane	85		2.202				ND	
13 Chloromethane	50		2.476				ND	
14 Vinyl chloride	62		2.614				ND	
18 Bromomethane	94		2.997				ND	
19 Chloroethane	64		3.109				ND	
21 Trichlorofluoromethane	101		3.366				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.868				ND	
30 1,1-Dichloroethene	96	3.906	3.900	0.006	95	55492	7.06	
31 Acetone	43		3.993				ND	U
35 Carbon disulfide	76		4.144				ND	
38 Methyl acetate	43		4.270				ND	
39 Methylene Chloride	84		4.398				ND	
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.620				ND	
50 1,1-Dichloroethane	63	5.019	5.022	-0.003	96	34750	1.96	
58 cis-1,2-Dichloroethene	96		5.546				ND	
57 2-Butanone (MEK)	43		5.546				ND	
60 Chlorobromomethane	128		5.781				ND	
62 Chloroform	83		5.826				ND	
64 1,1,1-Trichloroethane	97	5.971	5.968	0.003	99	413005	31.8	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.106				ND	
70 Benzene	78		6.312				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.877	6.877	0.000	95	17435	1.93	
76 Methylcyclohexane	83		7.009				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.238				ND	
83 Dichlorobromomethane	83		7.386				ND	
85 cis-1,3-Dichloropropene	75		7.784				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.890				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.324				ND	
93 1,1,2-Trichloroethane	83		8.533				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.958				ND	
101 Ethylene Dibromide	107		9.090				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.717				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.180				ND	
110 Bromoform	173		10.459				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.816				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.836				ND	
130 1,2,4-Trichlorobenzene	180		13.508				ND	
133 1,2,3-Trichlorobenzene	180		13.993				ND	
S 143 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

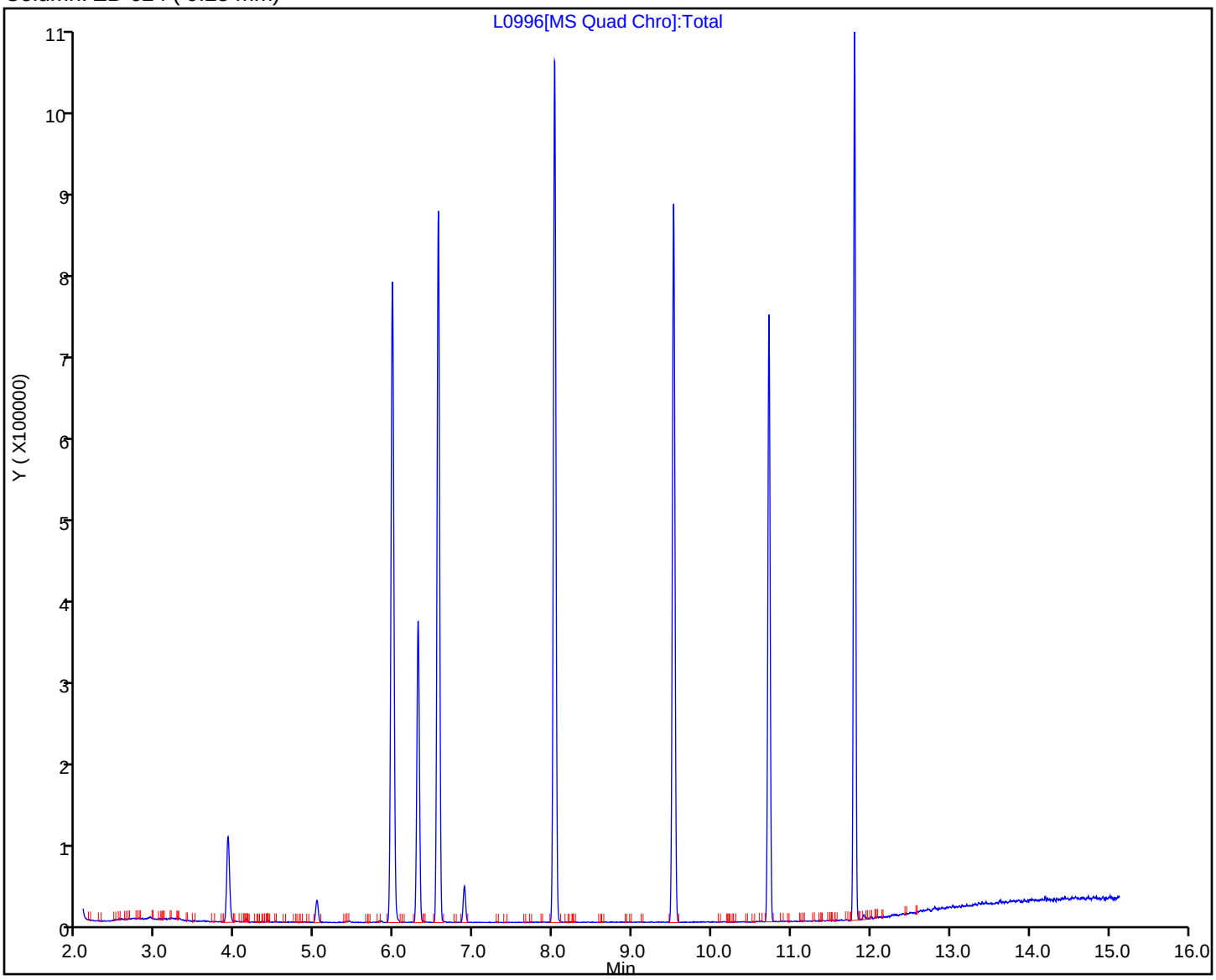
Report Date: 15-Sep-2019 08:55:50 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D

Injection Date:	14-Sep-2019 20:52:47	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-1	Lab Sample ID:	480-158822-1		
Client ID:	356023-GW-MW-5R-93-1				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		

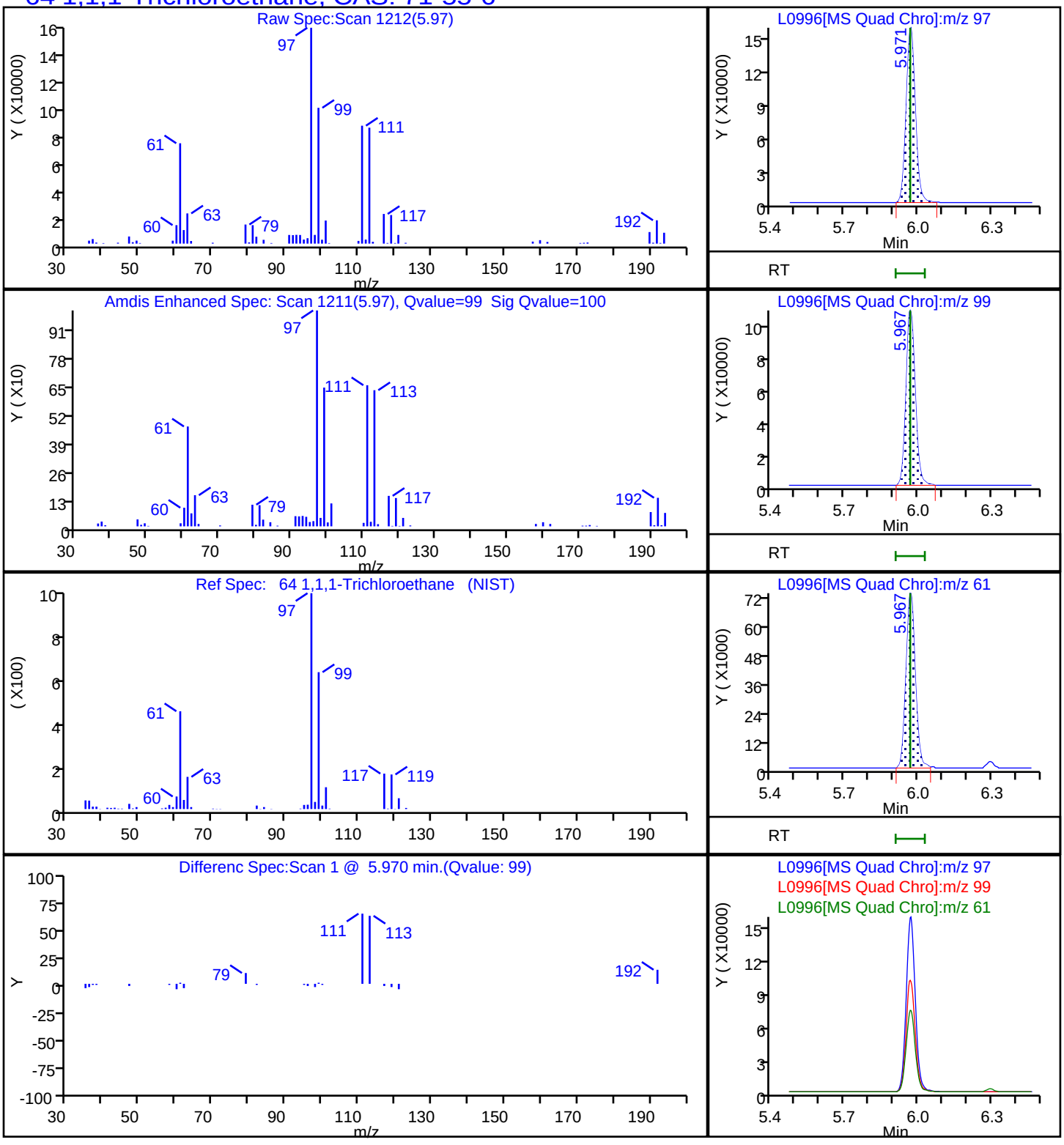
Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D				
Injection Date:	14-Sep-2019 20:52:47	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-1	Lab Sample ID:	480-158822-1		
Client ID:	356023-GW-MW-5R-93-1				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

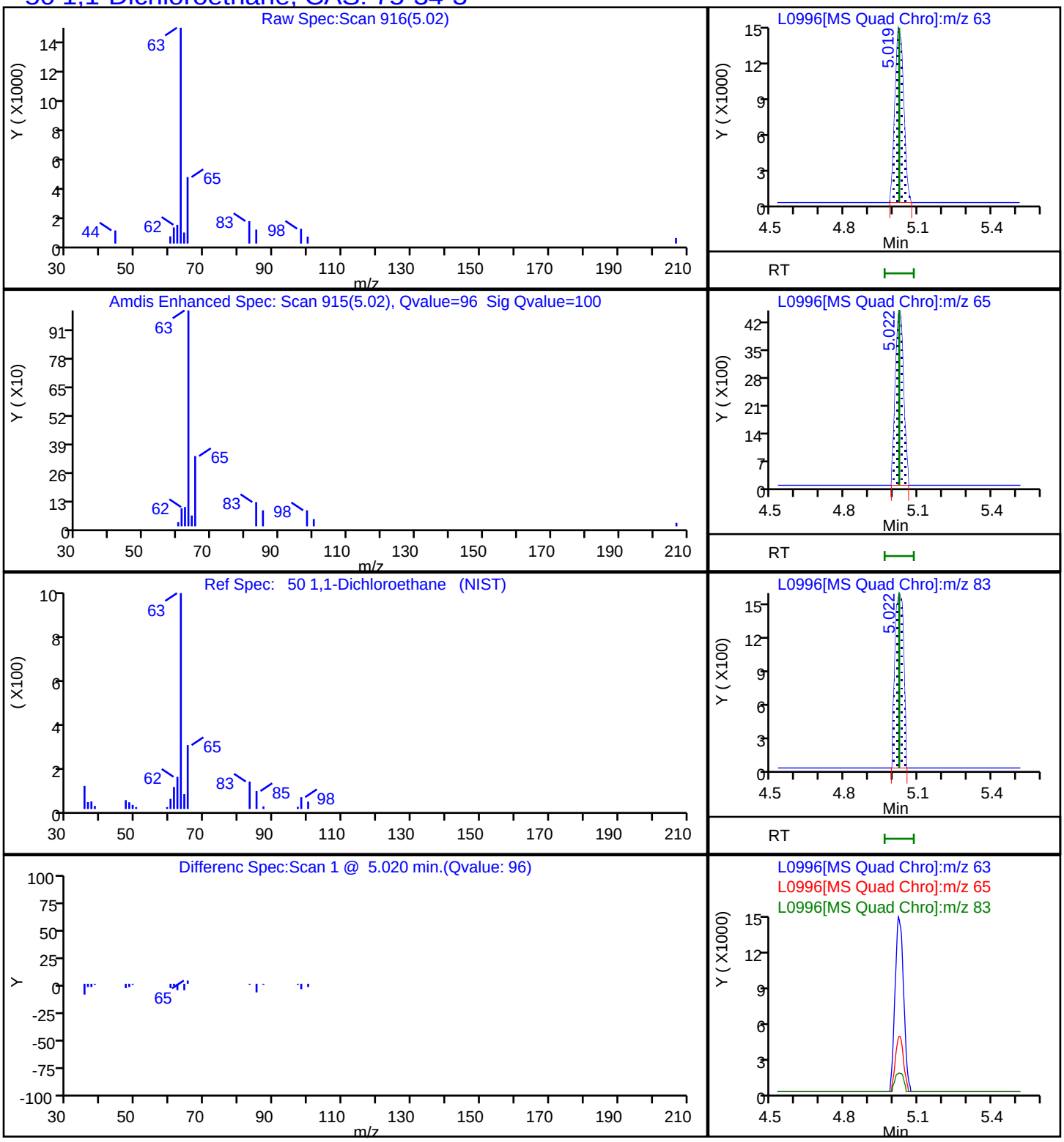
64 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D				
Injection Date:	14-Sep-2019 20:52:47	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-1	Lab Sample ID:	480-158822-1		
Client ID:	356023-GW-MW-5R-93-1				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

50 1,1-Dichloroethane, CAS: 75-34-3



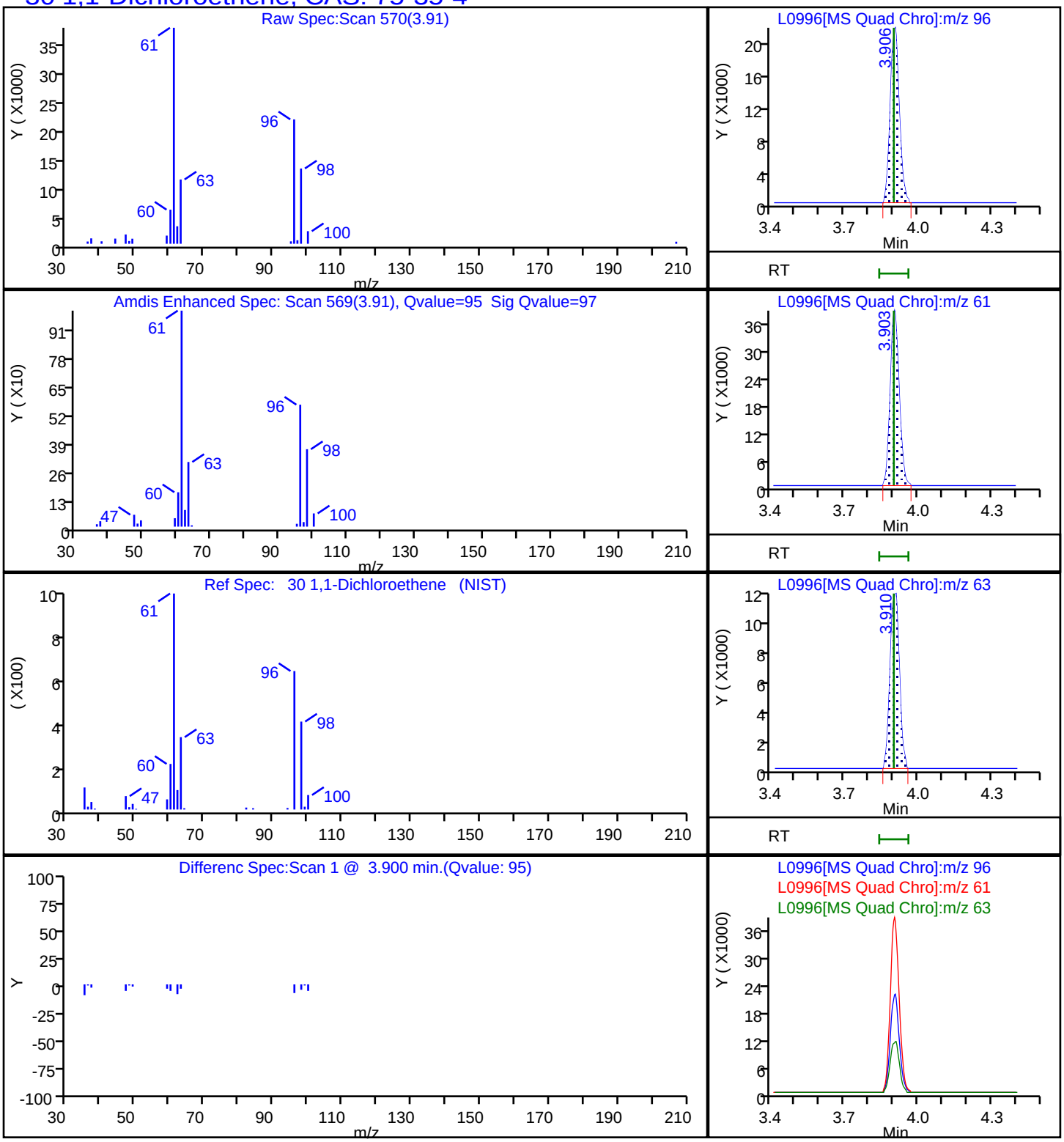
Report Date: 15-Sep-2019 08:55:50 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D

Injection Date:	14-Sep-2019 20:52:47	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-1	Lab Sample ID:	480-158822-1		
Client ID:	356023-GW-MW-5R-93-1				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

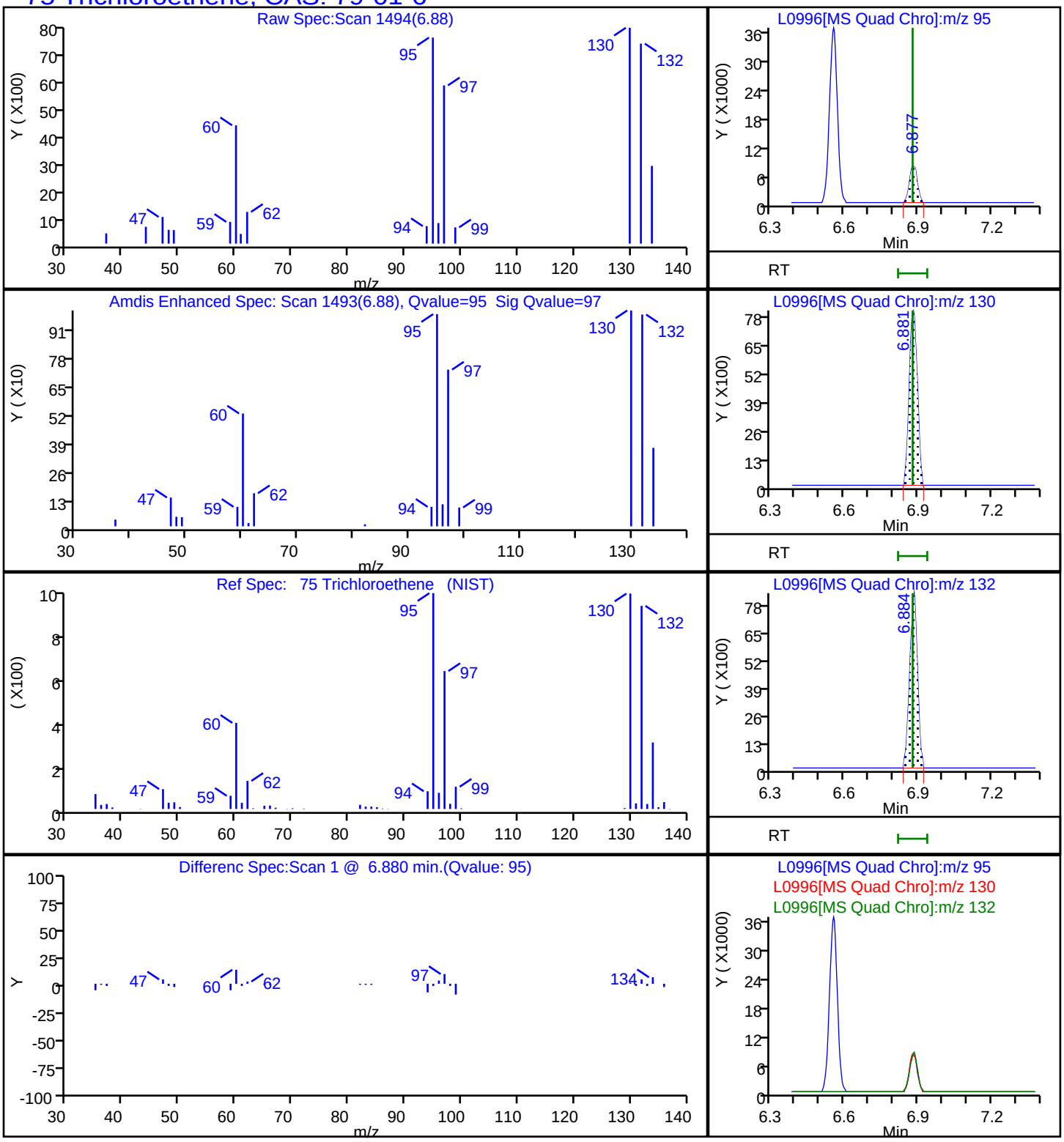
30 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D				
Injection Date:	14-Sep-2019 20:52:47	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-1	Lab Sample ID:	480-158822-1		
Client ID:	356023-GW-MW-5R-93-1				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



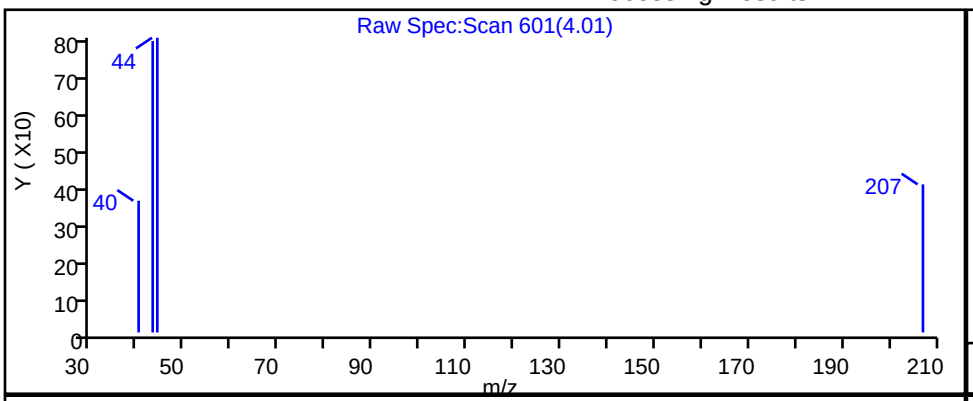
User Disabled Compound Report

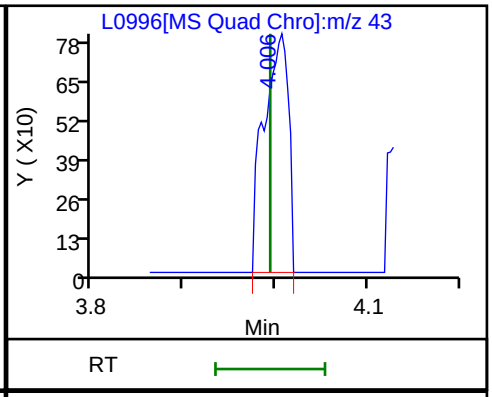
Eurofins TestAmerica, Buffalo

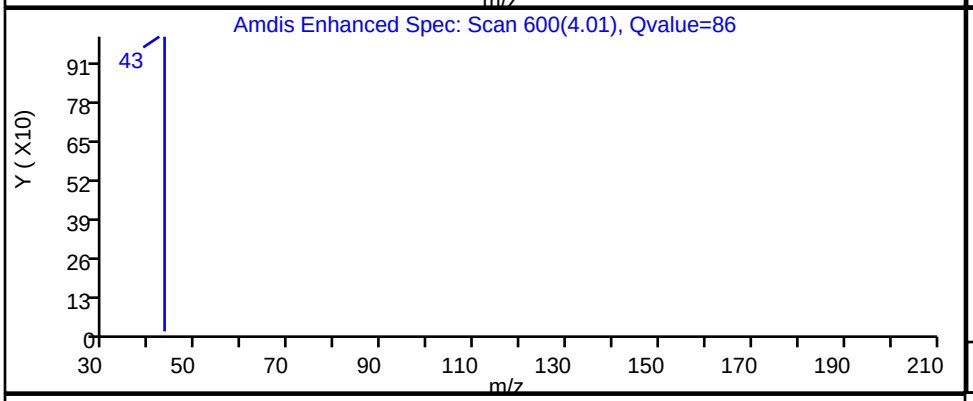
Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0996.D				
Injection Date:	14-Sep-2019 20:52:47	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-1	Lab Sample ID:	480-158822-1		
Client ID:	356023-GW-MW-5R-93-1				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

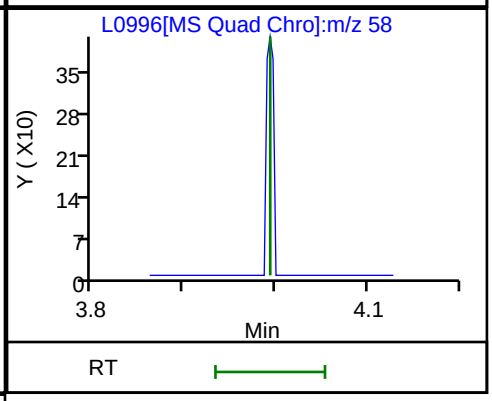
31 Acetone, CAS: 67-64-1

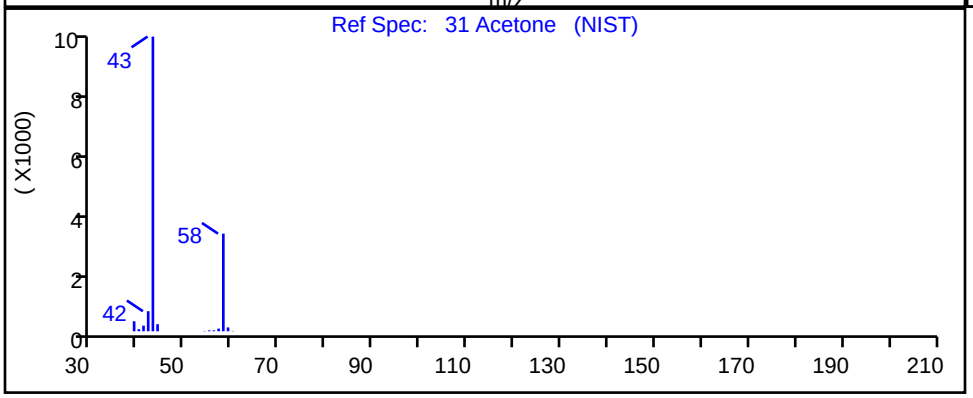
Processing Results











RT	Mass	Response	Amount
4.01	43.00	1491	0.260414
3.99	58.00	0	

Reviewer: moffata, 15-Sep-2019 08:55:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-2 Lab Sample ID: 480-158822-2

Matrix: Water Lab File ID: L0997.D

Analysis Method: 8260C Date Collected: 09/03/2019 16:30

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 21:16

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	230		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	17		10	3.8
75-35-4	1,1-Dichloroethene	51		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-2 Lab Sample ID: 480-158822-2

Matrix: Water Lab File ID: L0997.D

Analysis Method: 8260C Date Collected: 09/03/2019 16:30

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 21:16

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	16		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0997.D
Lims ID: 480-158822-C-2
Client ID: 356023-GW-MW-5R-93-2
Sample Type: Client
Inject. Date: 14-Sep-2019 21:16:45 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-158822-C-2
Misc. Info.: 480-0084141-026
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 08:55:50 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0311

First Level Reviewer: moffata Date: 15-Sep-2019 08:56:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	165826	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	596885	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.794	0.003	96	333723	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.980	0.003	94	234445	26.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.299	6.296	0.003	98	283283	26.0	
$ 6 Toluene-d8 (Surr)	98	8.019	8.018	0.003	93	789065	26.0	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.720	0.003	98	225511	26.3	
10 Dichlorodifluoromethane	85		2.202				ND	
13 Chloromethane	50		2.476				ND	
14 Vinyl chloride	62		2.614				ND	
18 Bromomethane	94		2.997				ND	
19 Chloroethane	64		3.109				ND	
21 Trichlorofluoromethane	101		3.366				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.868				ND	
30 1,1-Dichloroethene	96	3.903	3.900	0.003	96	38557	5.10	
31 Acetone	43		3.993				ND	
35 Carbon disulfide	76		4.144				ND	
38 Methyl acetate	43		4.270				ND	
39 Methylene Chloride	84		4.398				ND	
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.620				ND	
50 1,1-Dichloroethane	63	5.026	5.022	0.004	95	29665	1.74	
58 cis-1,2-Dichloroethene	96		5.546				ND	
57 2-Butanone (MEK)	43		5.546				ND	
60 Chlorobromomethane	128		5.781				ND	
62 Chloroform	83		5.826				ND	
64 1,1,1-Trichloroethane	97	5.971	5.968	0.003	99	292955	23.4	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.106				ND	
70 Benzene	78		6.312				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.881	6.877	0.004	93	14329	1.65	
76 Methylcyclohexane	83		7.009				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.238				ND	
83 Dichlorobromomethane	83		7.386				ND	
85 cis-1,3-Dichloropropene	75		7.784				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.890				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.324				ND	
93 1,1,2-Trichloroethane	83		8.533				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.958				ND	
101 Ethylene Dibromide	107		9.090				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.717				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.180				ND	
110 Bromoform	173		10.459				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.816				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.836				ND	
130 1,2,4-Trichlorobenzene	180		13.508				ND	
133 1,2,3-Trichlorobenzene	180		13.993				ND	
S 143 Xylenes, Total	1		30.000				ND	

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

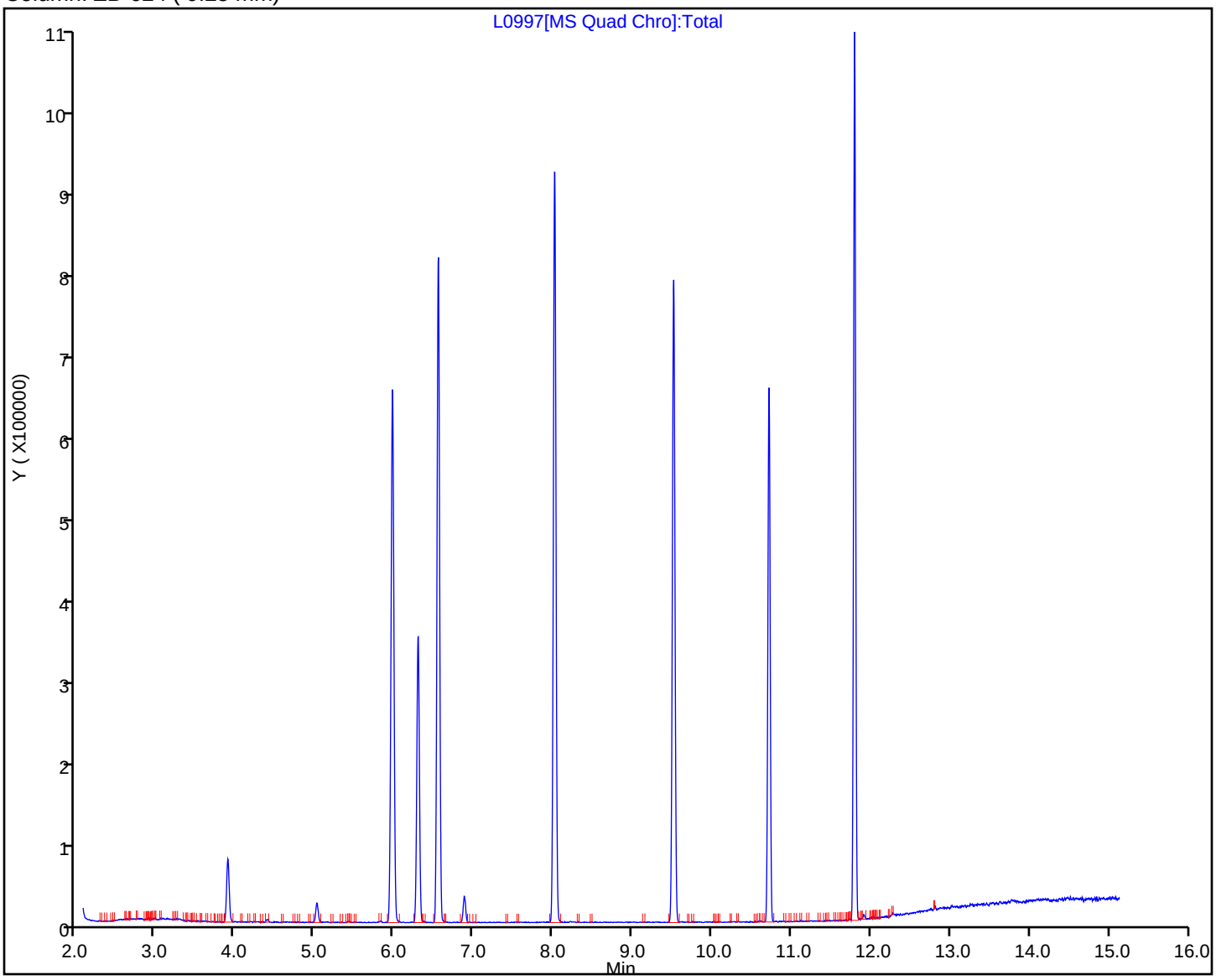
Report Date: 15-Sep-2019 08:56:09 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0997.D

Injection Date:	14-Sep-2019 21:16:45	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-2	Lab Sample ID:	480-158822-2		
Client ID:	356023-GW-MW-5R-93-2				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		

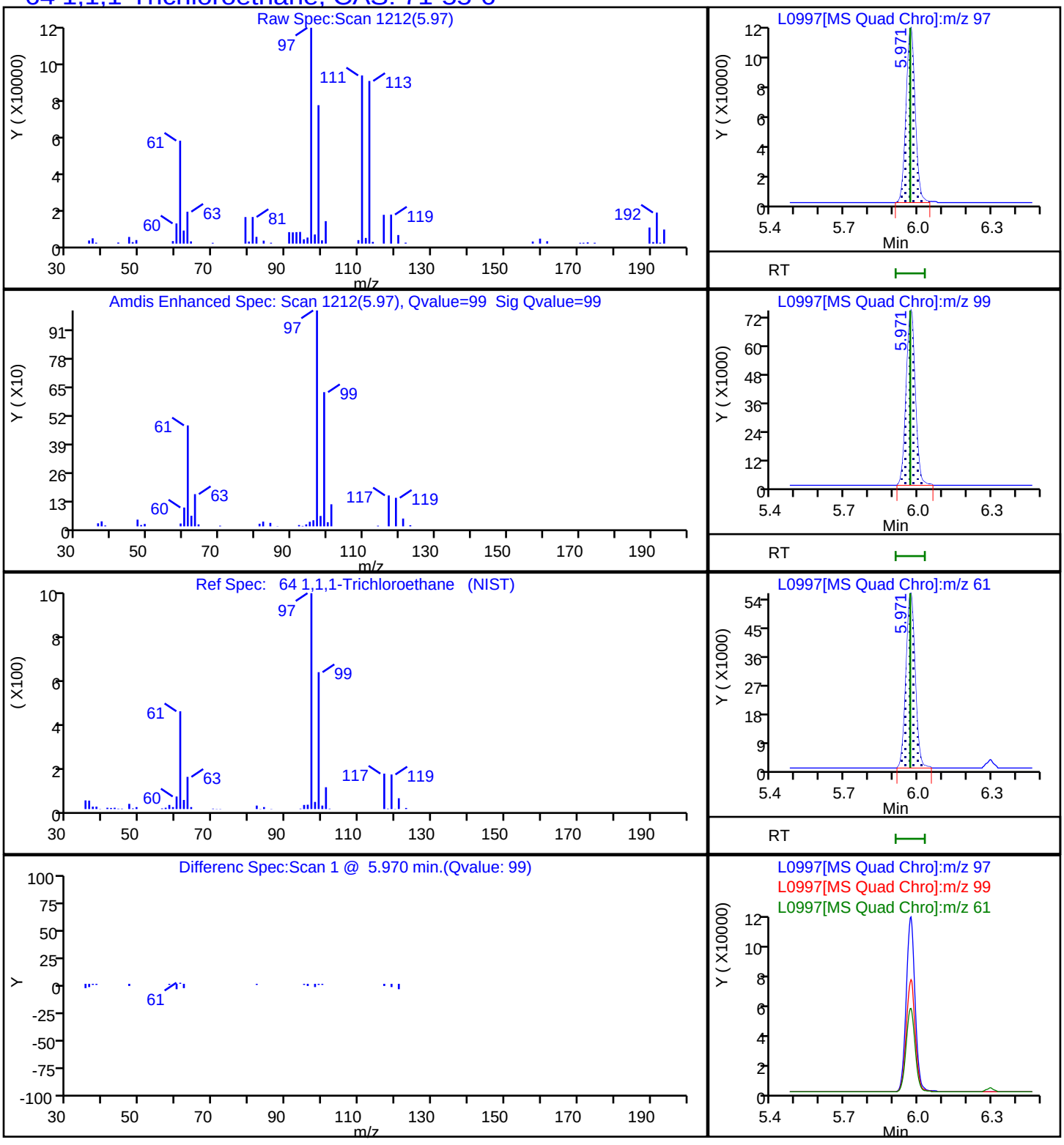
Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0997.D				
Injection Date:	14-Sep-2019 21:16:45	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-2	Lab Sample ID:	480-158822-2		
Client ID:	356023-GW-MW-5R-93-2				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

64 1,1,1-Trichloroethane, CAS: 71-55-6

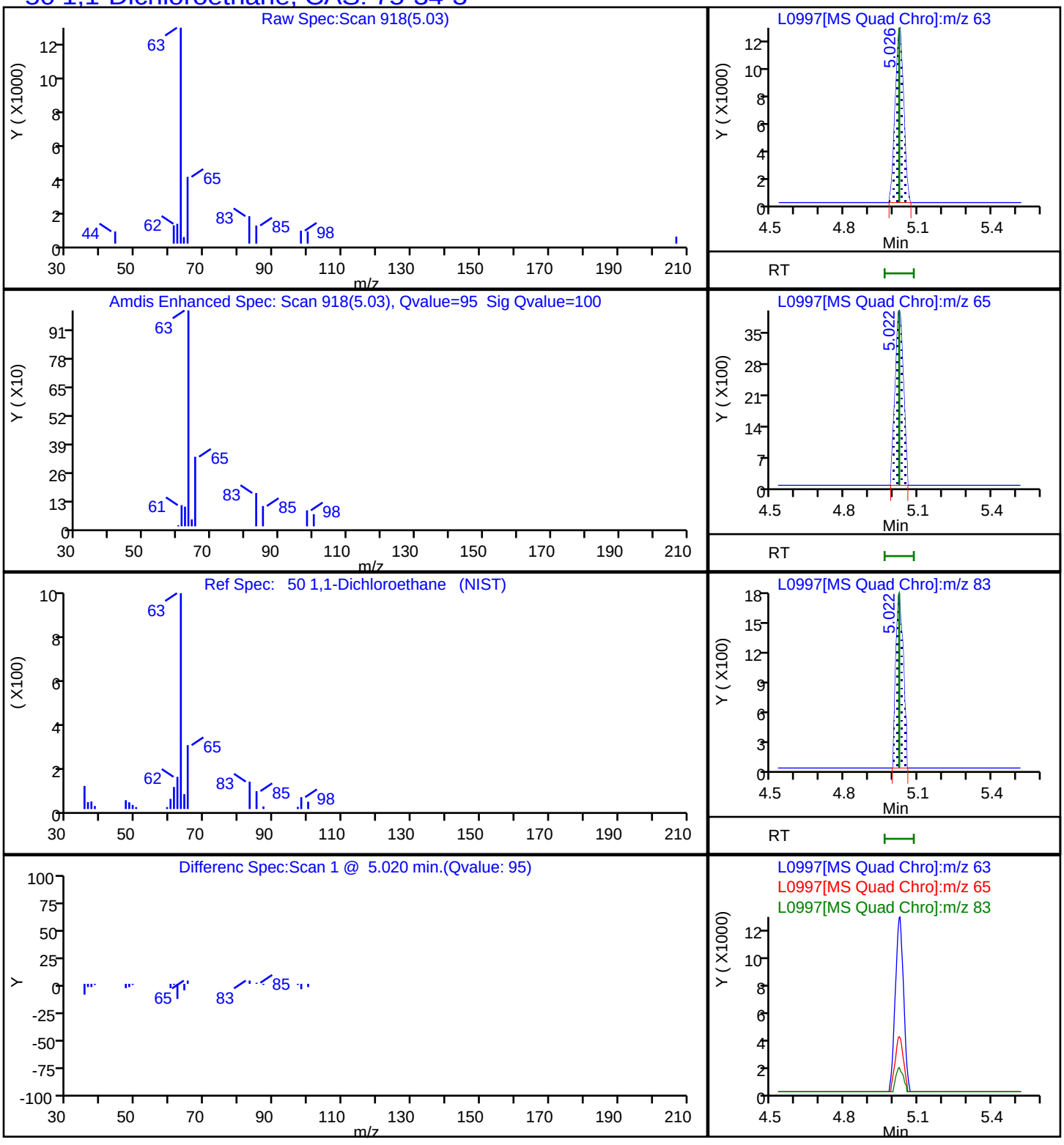


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0997.D

Injection Date:	14-Sep-2019 21:16:45	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-2	Lab Sample ID:	480-158822-2		
Client ID:	356023-GW-MW-5R-93-2				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

50 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

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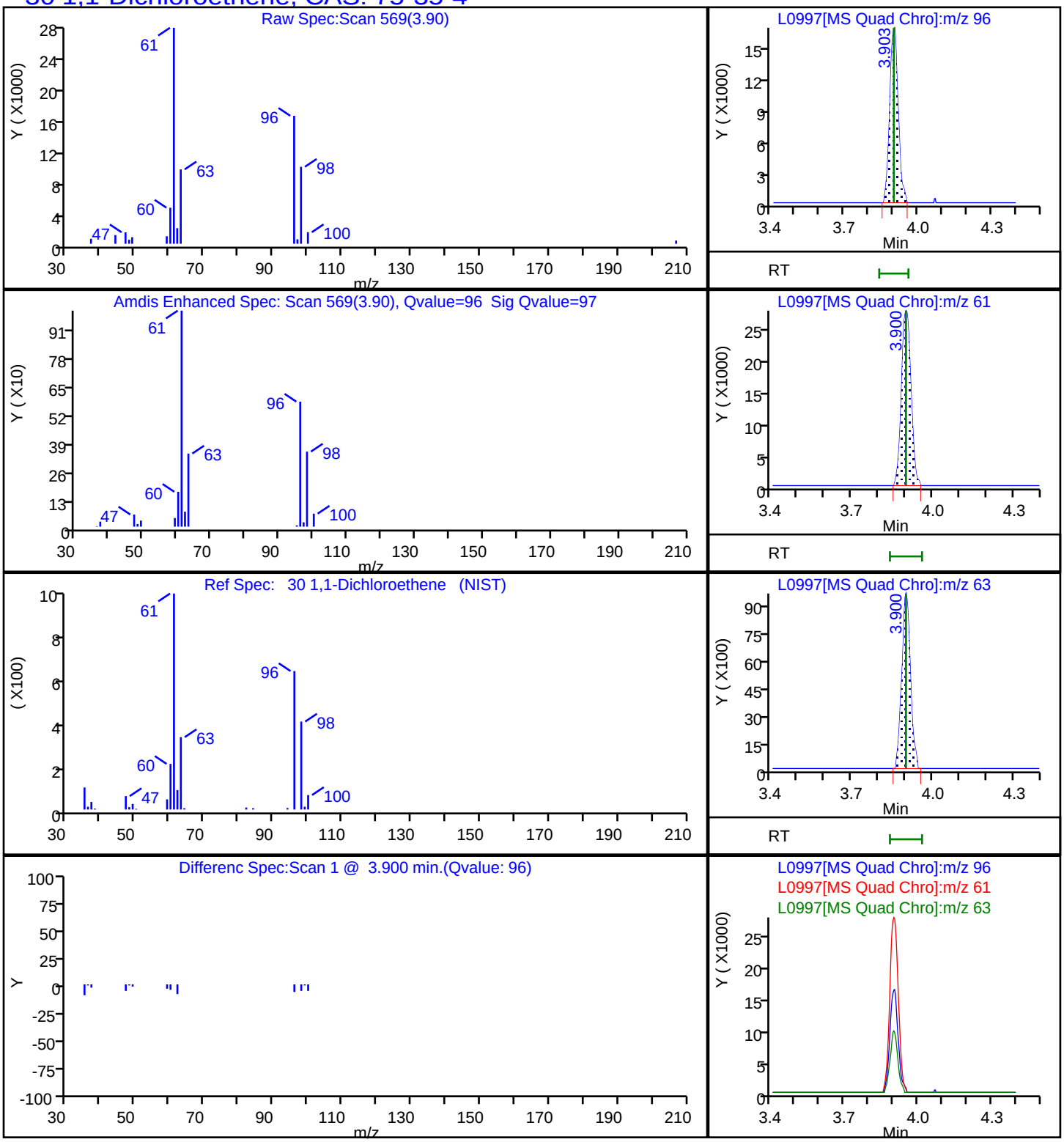
Injection Date:	14-Sep-2019 21:16:45	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-2	Lab Sample ID:	480-158822-2		
Client ID:	356023-GW-MW-5R-93-2				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

30 1,1-Dichloroethene, CAS: 75-35-4

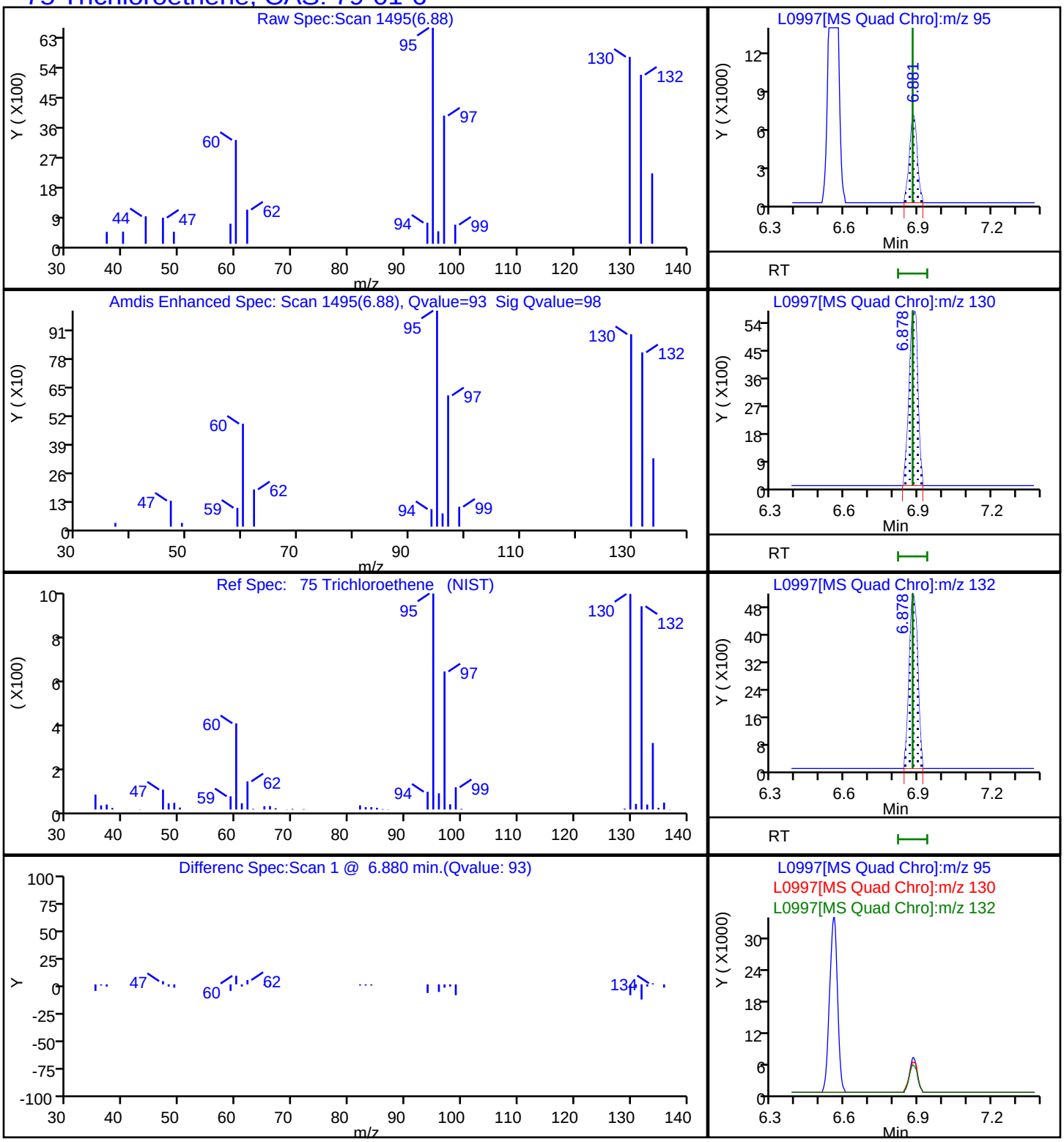


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0997.D

Injection Date:	14-Sep-2019 21:16:45	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-2	Lab Sample ID:	480-158822-2		
Client ID:	356023-GW-MW-5R-93-2				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-3 Lab Sample ID: 480-158822-3

Matrix: Water Lab File ID: S8959.D

Analysis Method: 8260C Date Collected: 09/04/2019 07:30

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:10

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	240		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	17		5.0	1.9
75-35-4	1,1-Dichloroethene	68		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-3 Lab Sample ID: 480-158822-3

Matrix: Water Lab File ID: S8959.D

Analysis Method: 8260C Date Collected: 09/04/2019 07:30

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:10

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	16		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	97		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8959.D
Lims ID: 480-158822-B-3
Client ID: 356023-GW-MW-5R-93-3
Sample Type: Client
Inject. Date: 14-Sep-2019 13:10:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-B-3
Misc. Info.: 480-0084133-015
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 08:12:29 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: moffata Date: 15-Sep-2019 08:12:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	121989	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	251809	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	284162	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.871	4.865	0.006	58	149286	24.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.181	5.175	0.006	96	95727	24.6	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	604180	24.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	233236	25.8	
10 Dichlorodifluoromethane	85		1.270				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.939				ND	
17 Trichlorofluoromethane	101		2.164				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.657				ND	
22 1,1-Dichloroethene	96	2.675	2.657	0.018	94	81804	13.7	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.089				ND	
30 Methylene Chloride	84		3.186				ND	
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.837	3.837	0.000	87	42347	3.47	
45 cis-1,2-Dichloroethene	96		4.397				ND	
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83	4.719	4.713	0.006	20	1798	0.1472	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	95	500420	48.6	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.956				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.789	5.784	0.005	87	22854	3.24	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.033				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.325				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.730				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.766				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.023				ND	
S 124 Xylenes, Total	1		30.000				ND	

Reagents:

S_8260_IS_00325	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00326	Amount Added: 1.00	Units: uL	Run Reagent

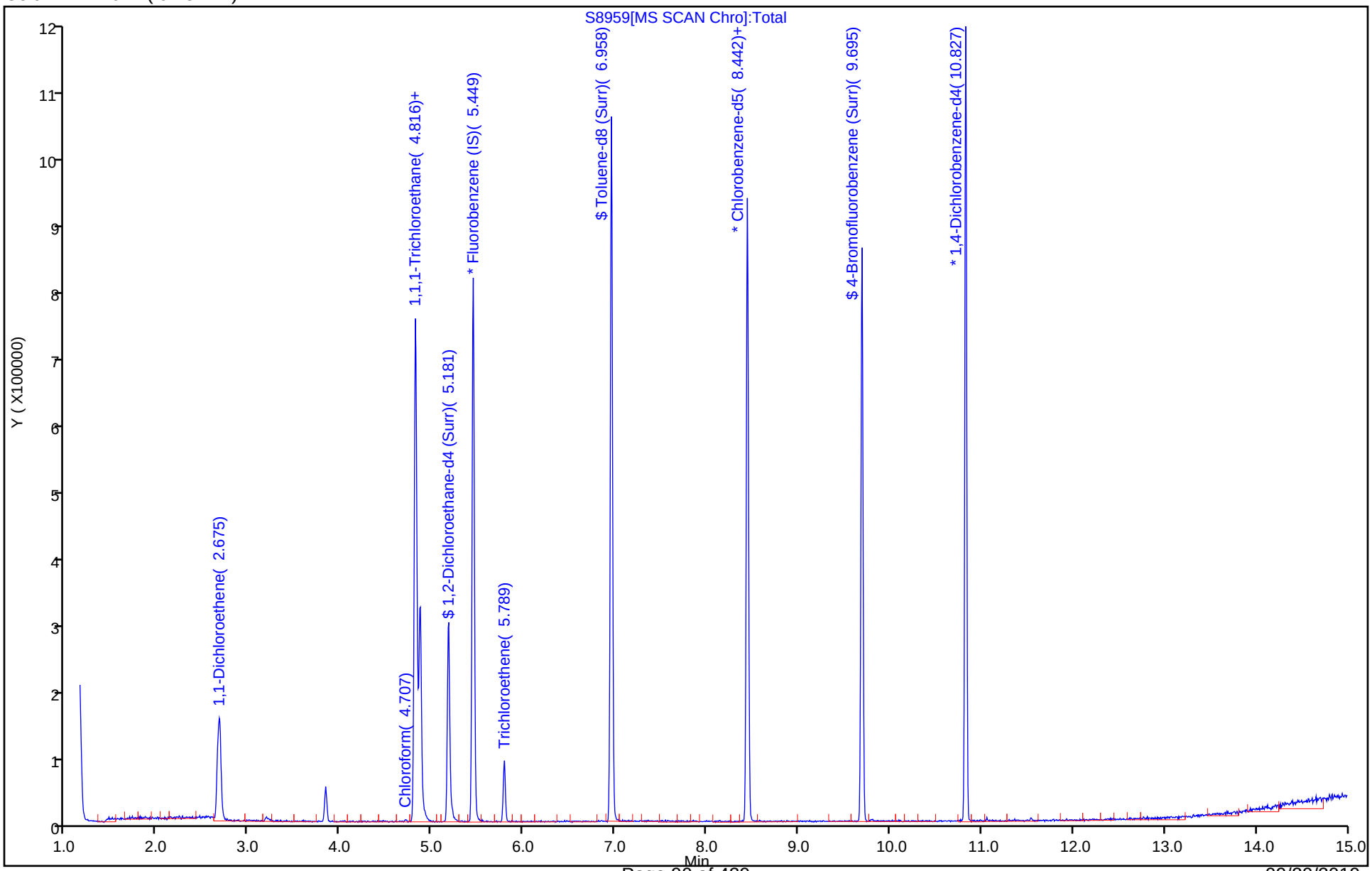
Report Date: 15-Sep-2019 08:12:29 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8959.D

Injection Date:	14-Sep-2019 13:10:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-158822-B-3	Lab Sample ID:	480-158822-3	Worklist Smp#:	15
Client ID:	356023-GW-MW-5R-93-3				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	14
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

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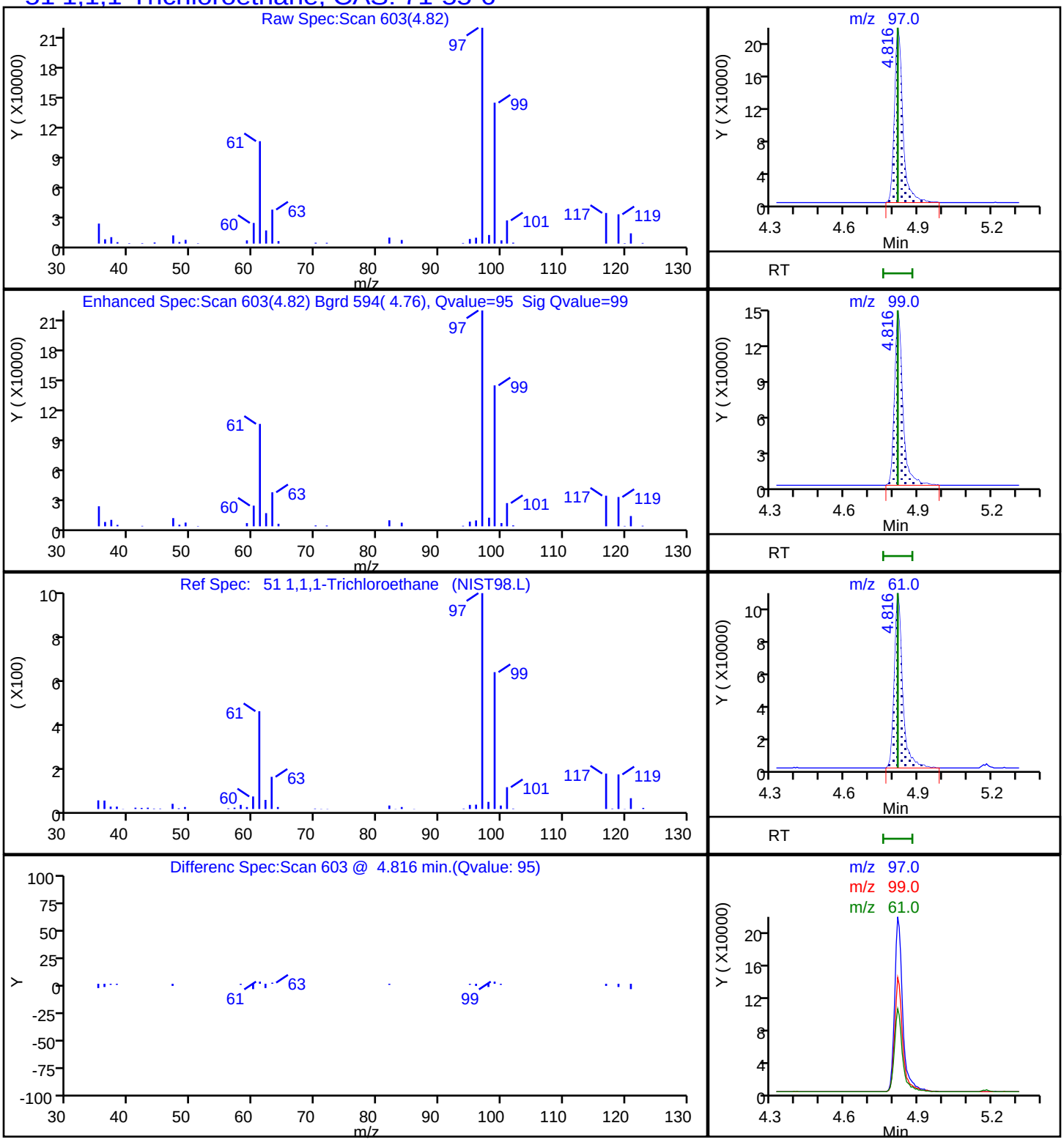
Injection Date:	14-Sep-2019 13:10:30	Instrument ID:	HP5973S
Lims ID:	480-158822-B-3	Lab Sample ID:	480-158822-3
Client ID:	356023-GW-MW-5R-93-3		
Operator ID:	OI	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



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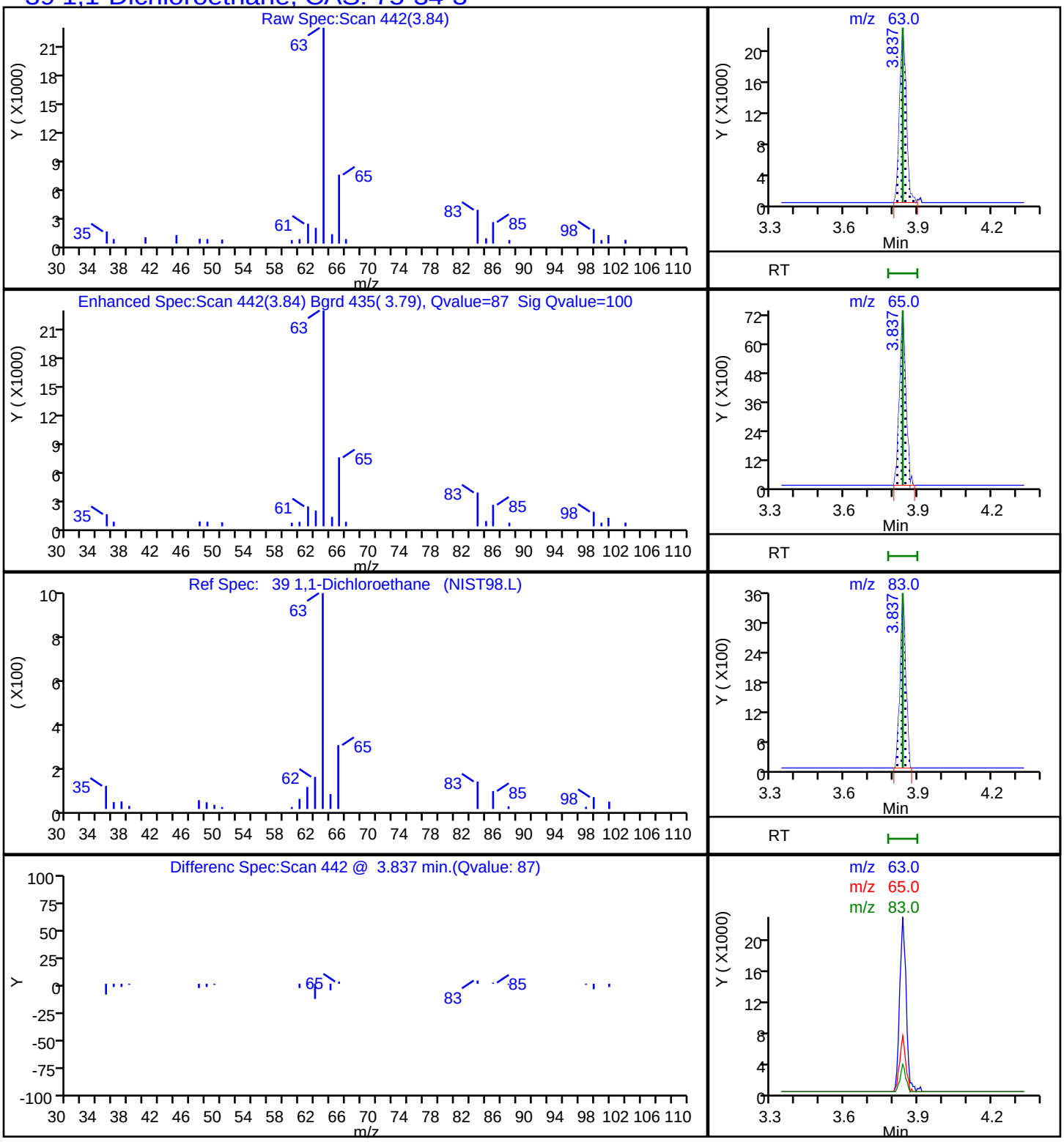
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

39 1,1-Dichloroethane, CAS: 75-34-3



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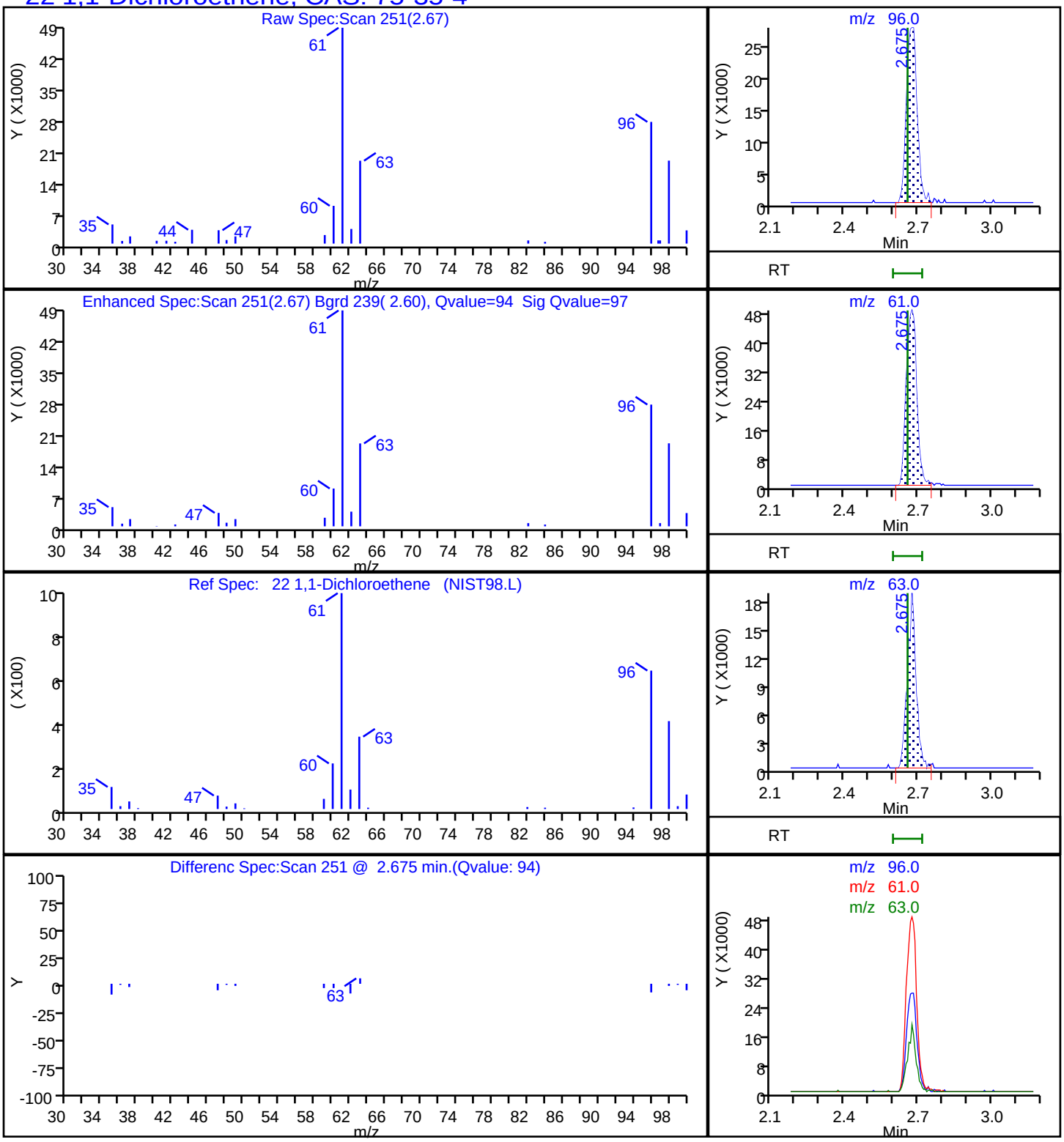
Injection Date:	14-Sep-2019 13:10:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-3	Lab Sample ID:	480-158822-3		
Client ID:	356023-GW-MW-5R-93-3				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

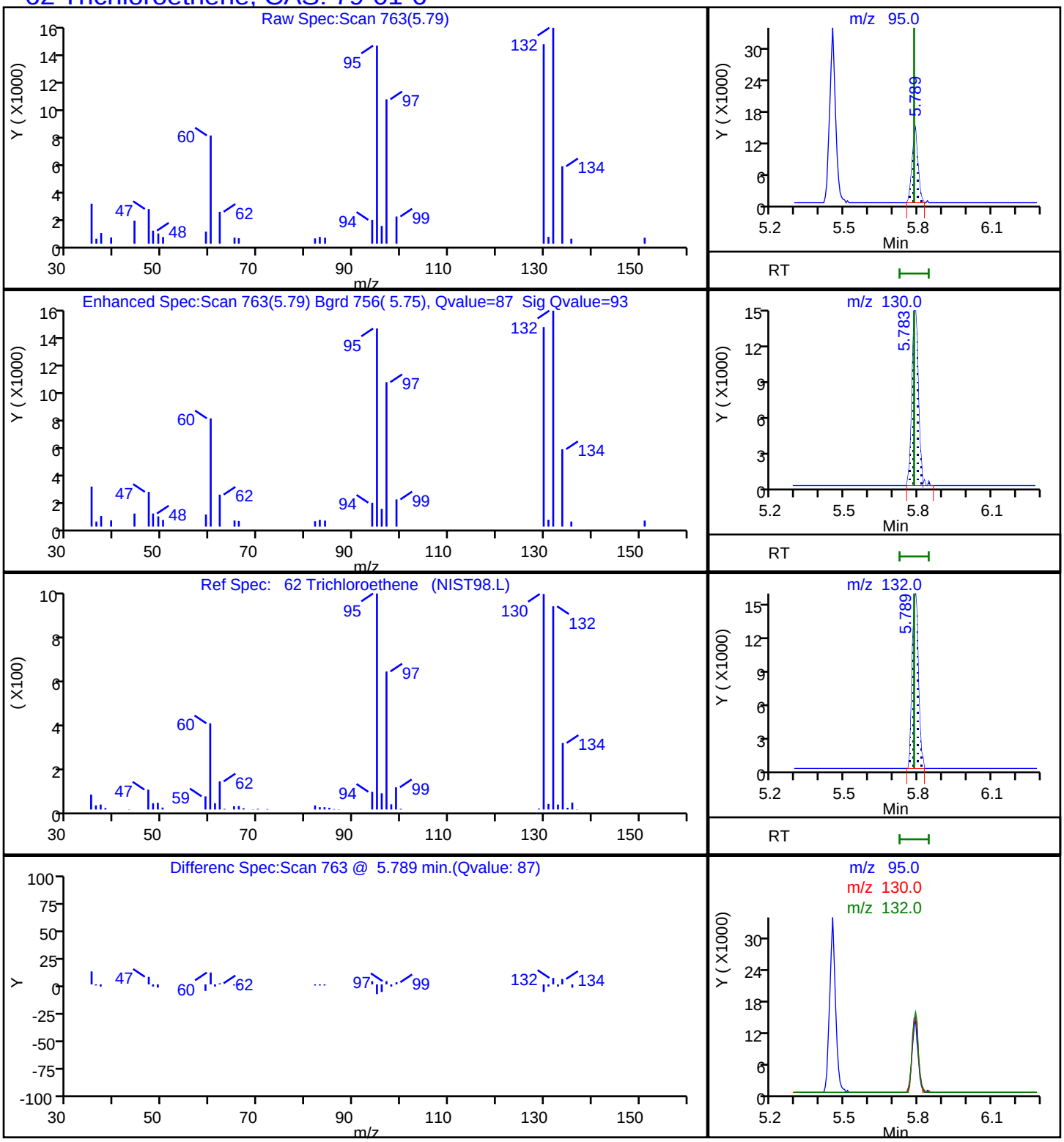


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8959.D

Injection Date:	14-Sep-2019 13:10:30	Instrument ID:	HP5973S
Lims ID:	480-158822-B-3	Lab Sample ID:	480-158822-3
Client ID:	356023-GW-MW-5R-93-3		
Operator ID:	OI	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

62 Trichloroethene, CAS: 79-01-6



Eurofins TestAmerica, Buffalo

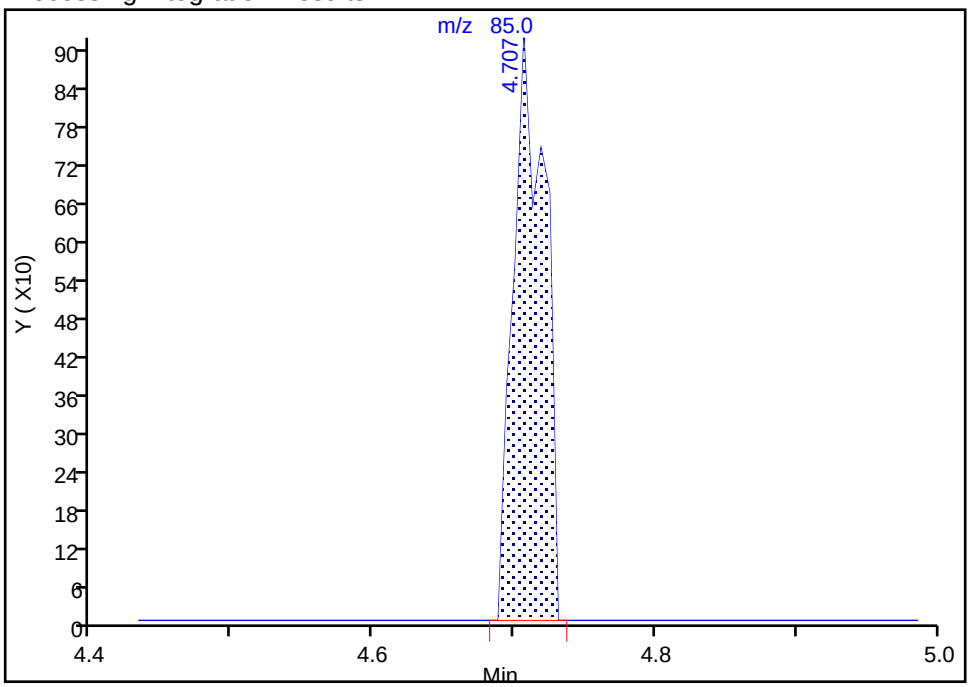
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8959.D				
Injection Date:	14-Sep-2019 13:10:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-3	Lab Sample ID:	480-158822-3		
Client ID:	356023-GW-MW-5R-93-3				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

50 Chloroform, CAS: 67-66-3

Signal: 2

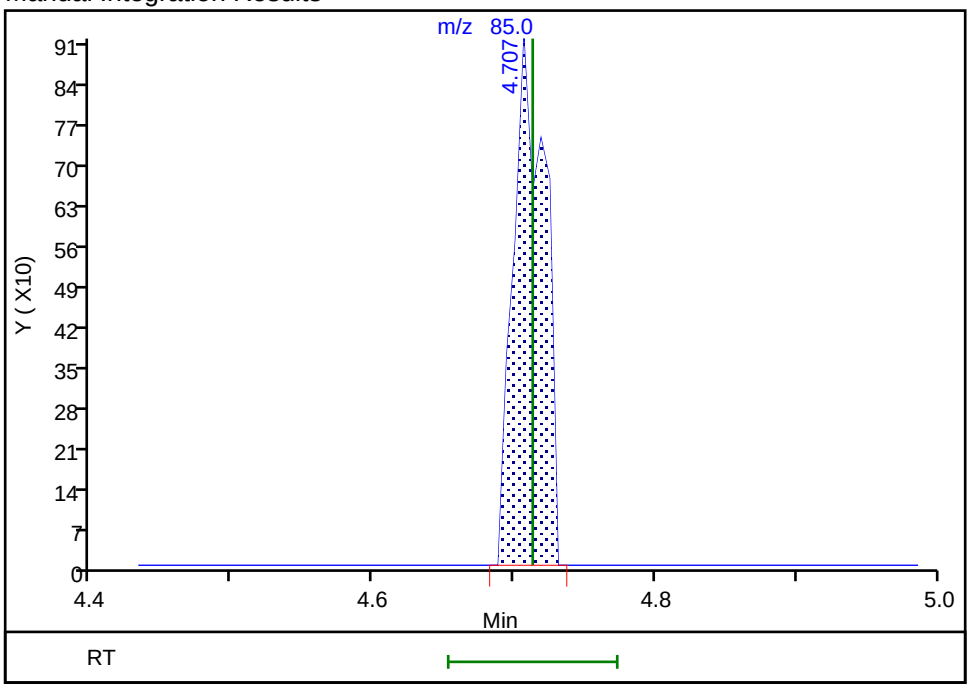
Processing Integration Results

RT: 4.71
Area: 1426
Amount: 0.147234
Amount Units: ug/L



Manual Integration Results

RT: 4.71
Area: 1426
Amount: 0.147234
Amount Units: ug/L



Reviewer: moffata, 15-Sep-2019 08:12:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-4 Lab Sample ID: 480-158822-4

Matrix: Water Lab File ID: S8960.D

Analysis Method: 8260C Date Collected: 09/04/2019 12:05

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:33

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	260		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	19		5.0	1.9
75-35-4	1,1-Dichloroethene	68		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-4 Lab Sample ID: 480-158822-4

Matrix: Water Lab File ID: S8960.D

Analysis Method: 8260C Date Collected: 09/04/2019 12:05

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:33

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	17		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8960.D
Lims ID: 480-158822-B-4
Client ID: 356023-GW-MW-5R-93-4
Sample Type: Client
Inject. Date: 14-Sep-2019 13:33:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-B-4
Misc. Info.: 480-0084133-016
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 08:12:29 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: moffata Date: 15-Sep-2019 08:12:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	117876	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	251821	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	287865	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.871	4.865	0.006	55	153028	25.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.181	5.175	0.006	96	94871	25.2	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	84	595642	23.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	230692	25.6	
10 Dichlorodifluoromethane	85		1.270				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.939				ND	
17 Trichlorofluoromethane	101		2.164				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.657				ND	
22 1,1-Dichloroethene	96	2.675	2.657	0.018	98	78976	13.6	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.089				ND	
30 Methylene Chloride	84		3.186				ND	
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	87	43964	3.72	
45 cis-1,2-Dichloroethene	96		4.397				ND	
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83		4.713				ND	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	95	510102	51.3	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.956				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.783	5.784	-0.001	90	23789	3.49	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.033				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.325				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.730				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.766				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.023				ND	
S 124 Xylenes, Total	1		30.000				ND	

Reagents:

S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00326	Amount Added:	1.00	Units: uL	Run Reagent

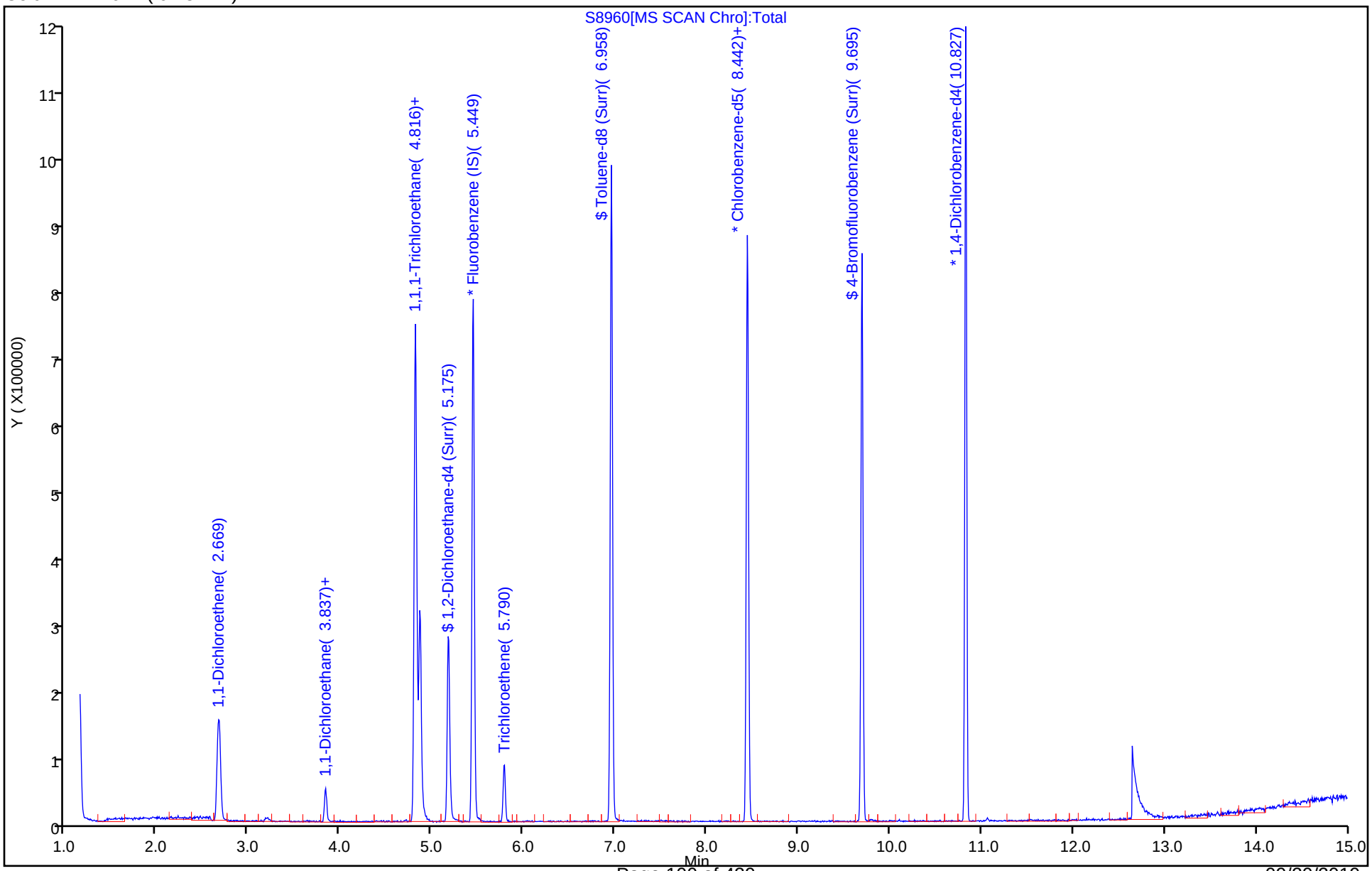
Report Date: 15-Sep-2019 08:12:49 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8960.D

Injection Date:	14-Sep-2019 13:33:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-158822-B-4	Lab Sample ID:	480-158822-4	Worklist Smp#:	16
Client ID:	356023-GW-MW-5R-93-4				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	15
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

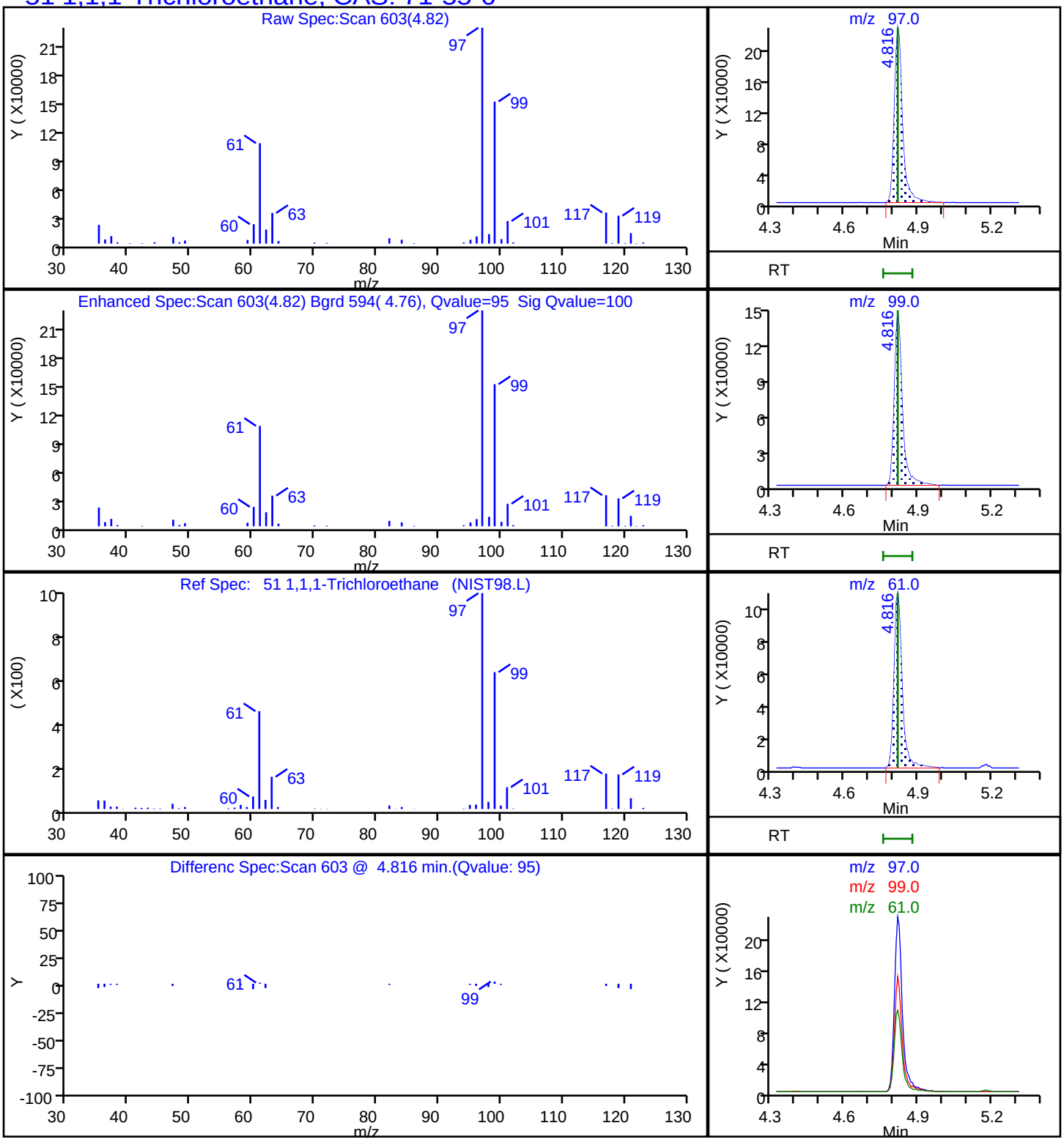
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8960.D				
Injection Date:	14-Sep-2019 13:33:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-4	Lab Sample ID:	480-158822-4		
Client ID:	356023-GW-MW-5R-93-4				
Operator ID:	OI	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

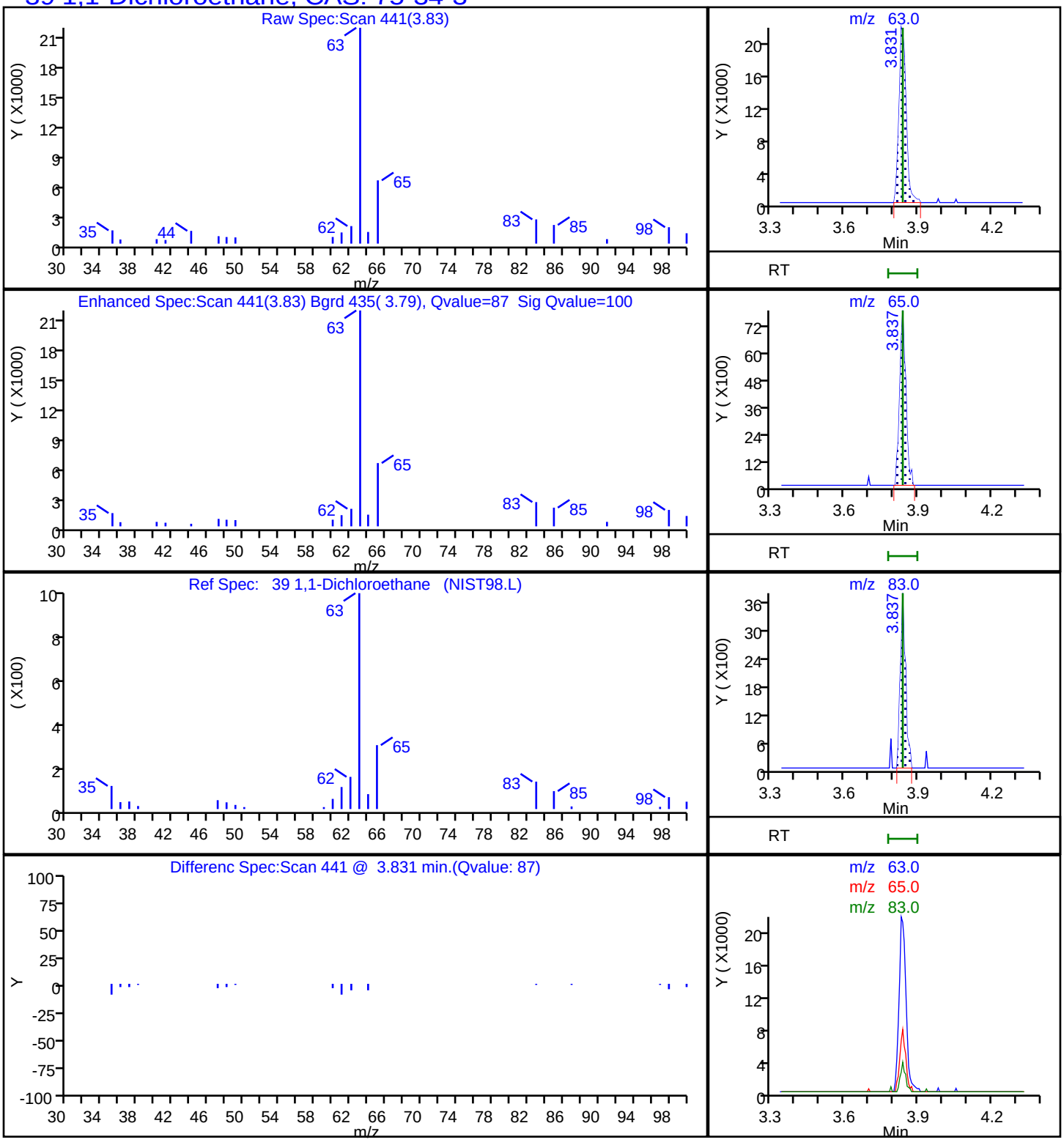


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8960.D

Injection Date:	14-Sep-2019 13:33:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-4	Lab Sample ID:	480-158822-4		
Client ID:	356023-GW-MW-5R-93-4				
Operator ID:	OI	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

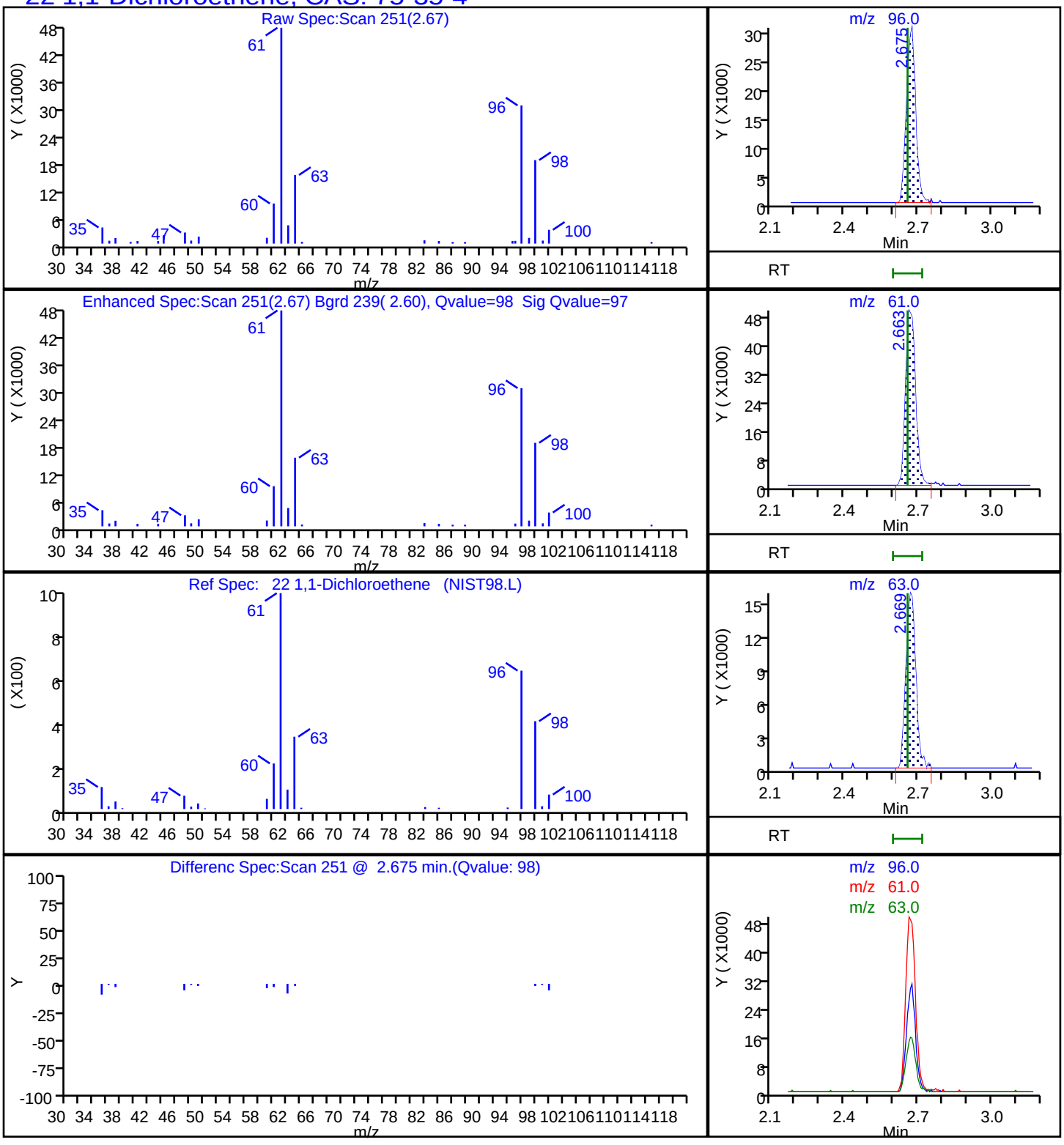
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8960.D		
Injection Date:	14-Sep-2019 13:33:30	Instrument ID:	HP5973S
Lims ID:	480-158822-B-4	Lab Sample ID:	480-158822-4
Client ID:	356023-GW-MW-5R-93-4		
Operator ID:	OI	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

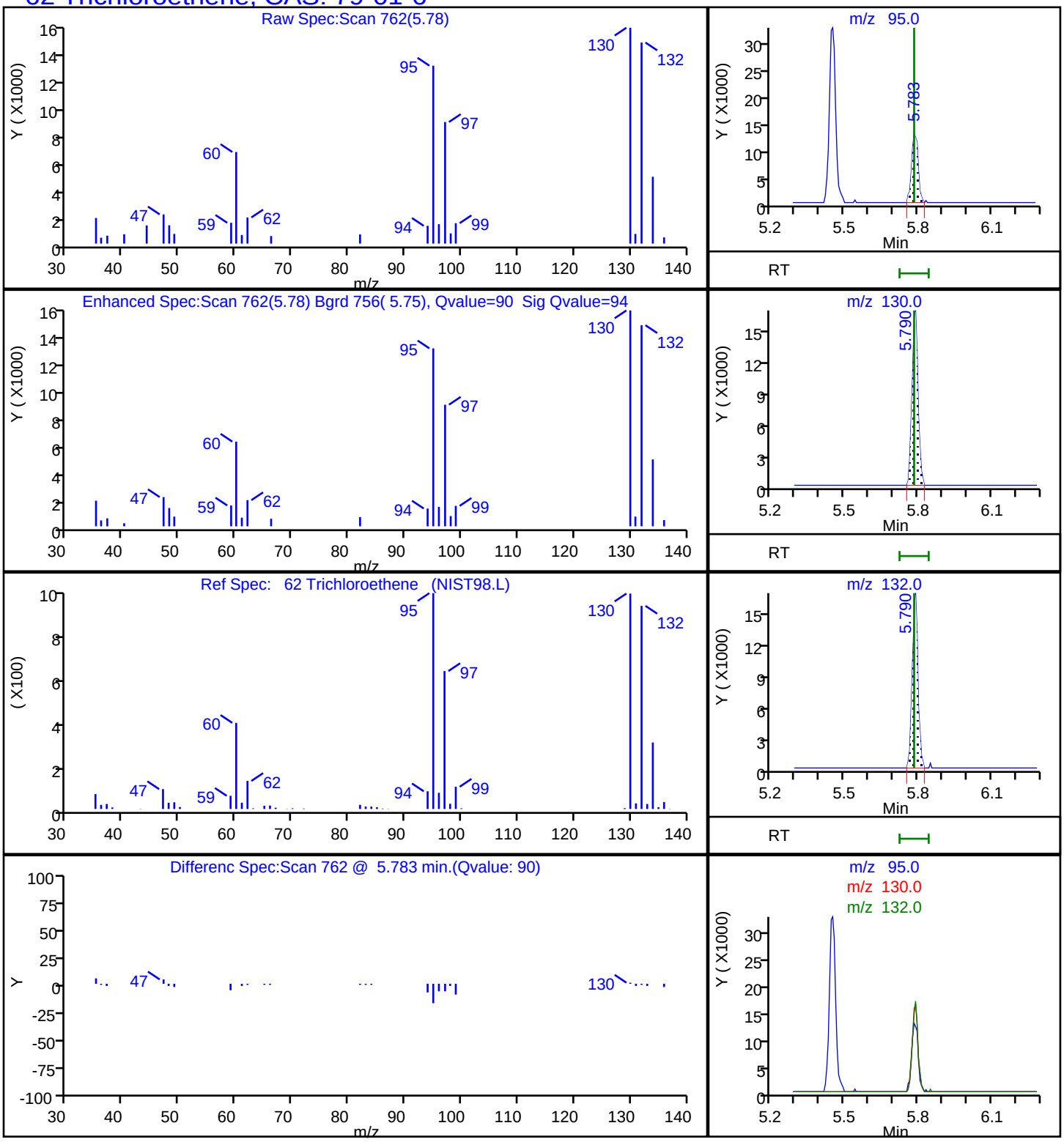


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8960.D

Injection Date:	14-Sep-2019 13:33:30	Instrument ID:	HP5973S
Lims ID:	480-158822-B-4	Lab Sample ID:	480-158822-4
Client ID:	356023-GW-MW-5R-93-4		
Operator ID:	OI	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	5.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

62 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-5 Lab Sample ID: 480-158822-5

Matrix: Water Lab File ID: S8961.D

Analysis Method: 8260C Date Collected: 09/04/2019 16:35

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:56

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	240		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	17		5.0	1.9
75-35-4	1,1-Dichloroethene	68		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-5 Lab Sample ID: 480-158822-5

Matrix: Water Lab File ID: S8961.D

Analysis Method: 8260C Date Collected: 09/04/2019 16:35

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:56

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	17		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	101		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D
Lims ID: 480-158822-B-5
Client ID: 356023-GW-MW-5R-93-5
Sample Type: Client
Inject. Date: 14-Sep-2019 13:56:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-B-5
Misc. Info.: 480-0084133-017
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 08:13:06 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: moffata Date: 15-Sep-2019 08:13:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	122450	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	244528	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	284567	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	55	156523	25.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	96	93007	23.8	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	92	594745	24.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	231179	26.4	
10 Dichlorodifluoromethane	85		1.270				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.939				ND	
17 Trichlorofluoromethane	101		2.164				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.657				ND	
22 1,1-Dichloroethene	96	2.675	2.657	0.018	94	81212	13.5	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.089				ND	
30 Methylene Chloride	84		3.186				ND	
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.837	3.837	0.000	85	41811	3.41	
45 cis-1,2-Dichloroethene	96		4.397				ND	
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83		4.713				ND	U
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	93	505262	48.9	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.956				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.784	5.784	0.000	83	23545	3.32	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.033				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.325				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.730				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.766				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.023				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00326	Amount Added:	1.00	Units: uL	Run Reagent

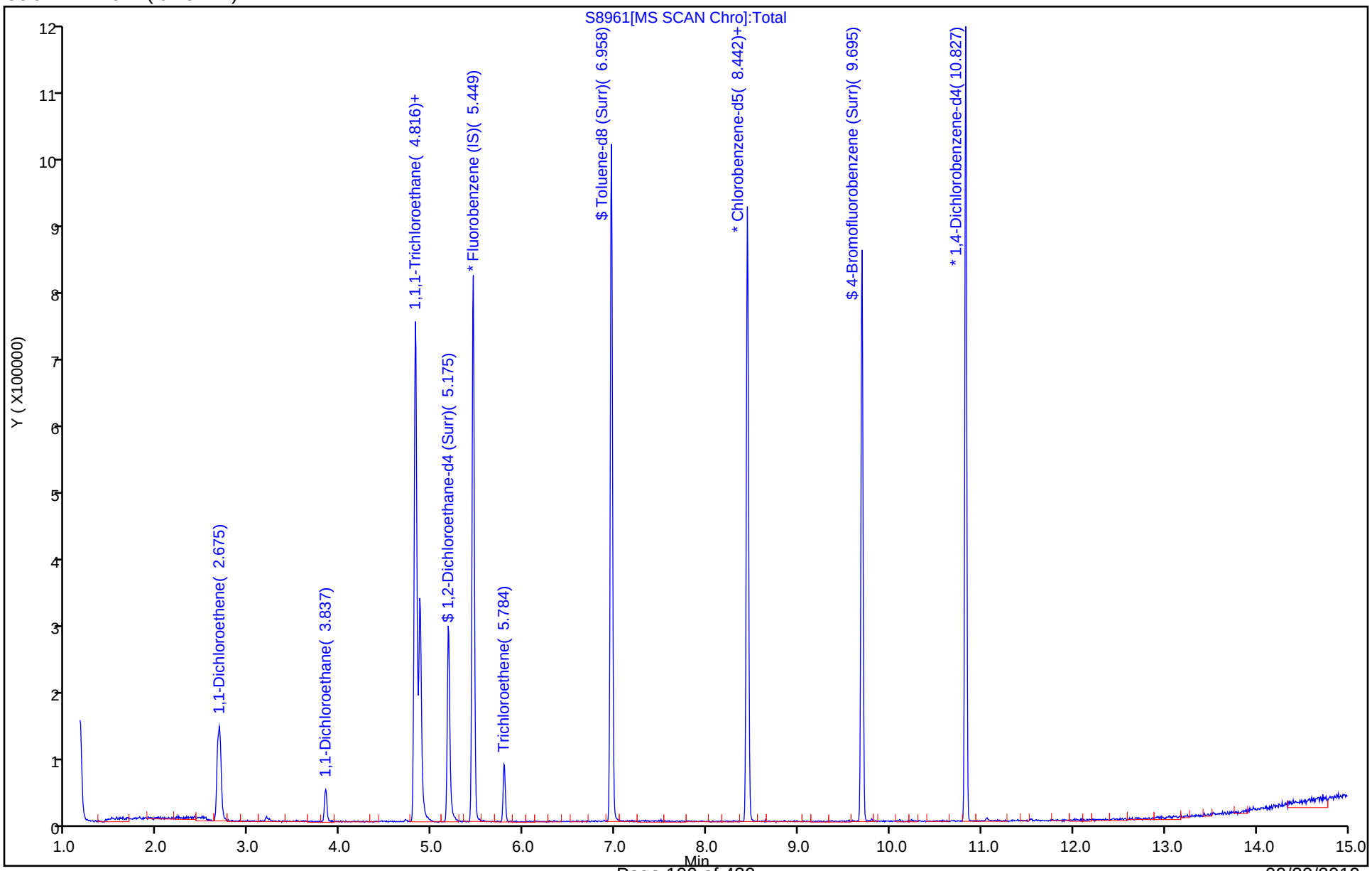
Report Date: 15-Sep-2019 08:13:07 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D

Injection Date:	14-Sep-2019 13:56:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-158822-B-5	Lab Sample ID:	480-158822-5	Worklist Smp#:	17
Client ID:	356023-GW-MW-5R-93-5				
Purge Vol:	5.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	16
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

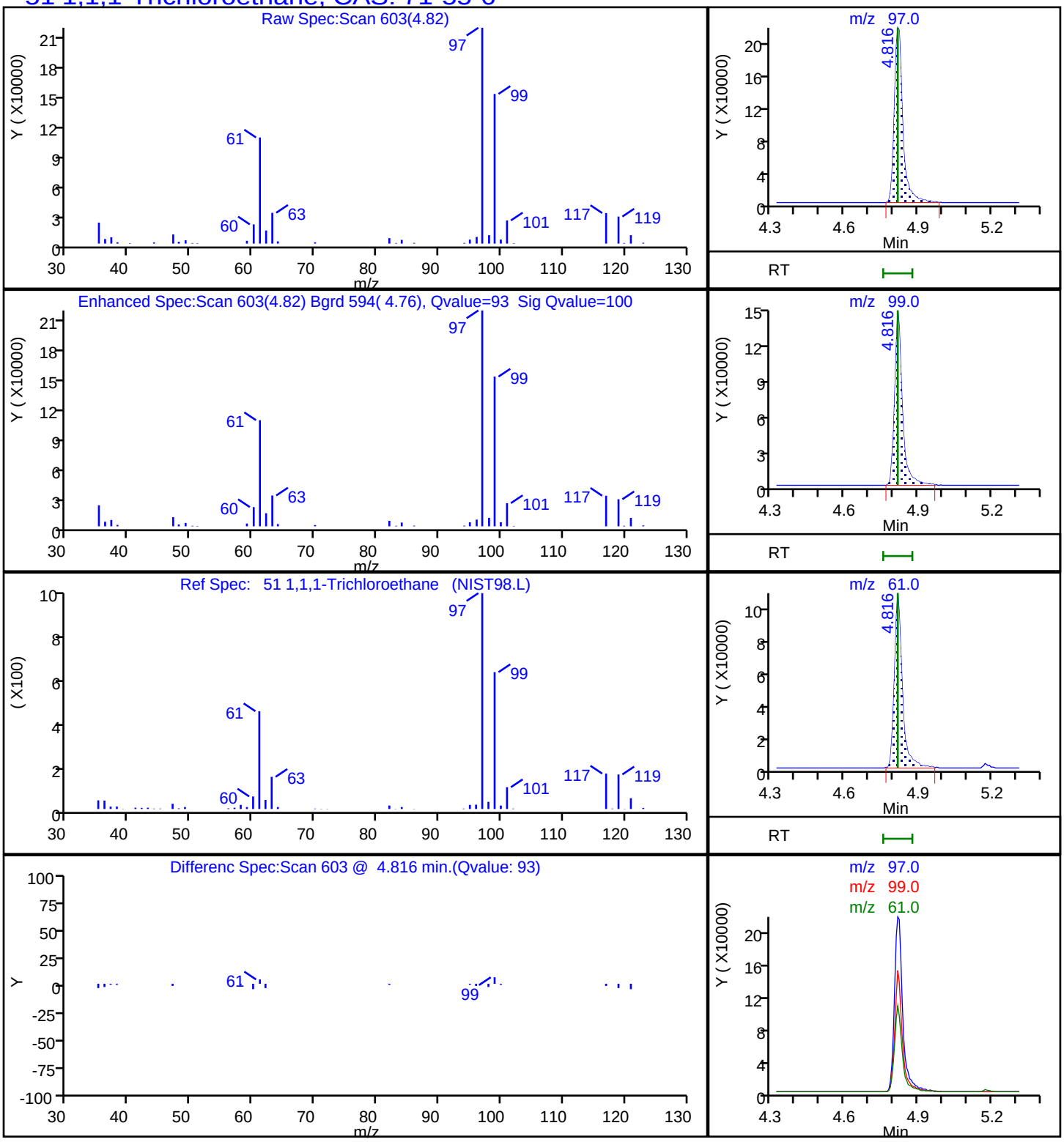


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D

Injection Date:	14-Sep-2019 13:56:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-5	Lab Sample ID:	480-158822-5		
Client ID:	356023-GW-MW-5R-93-5				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

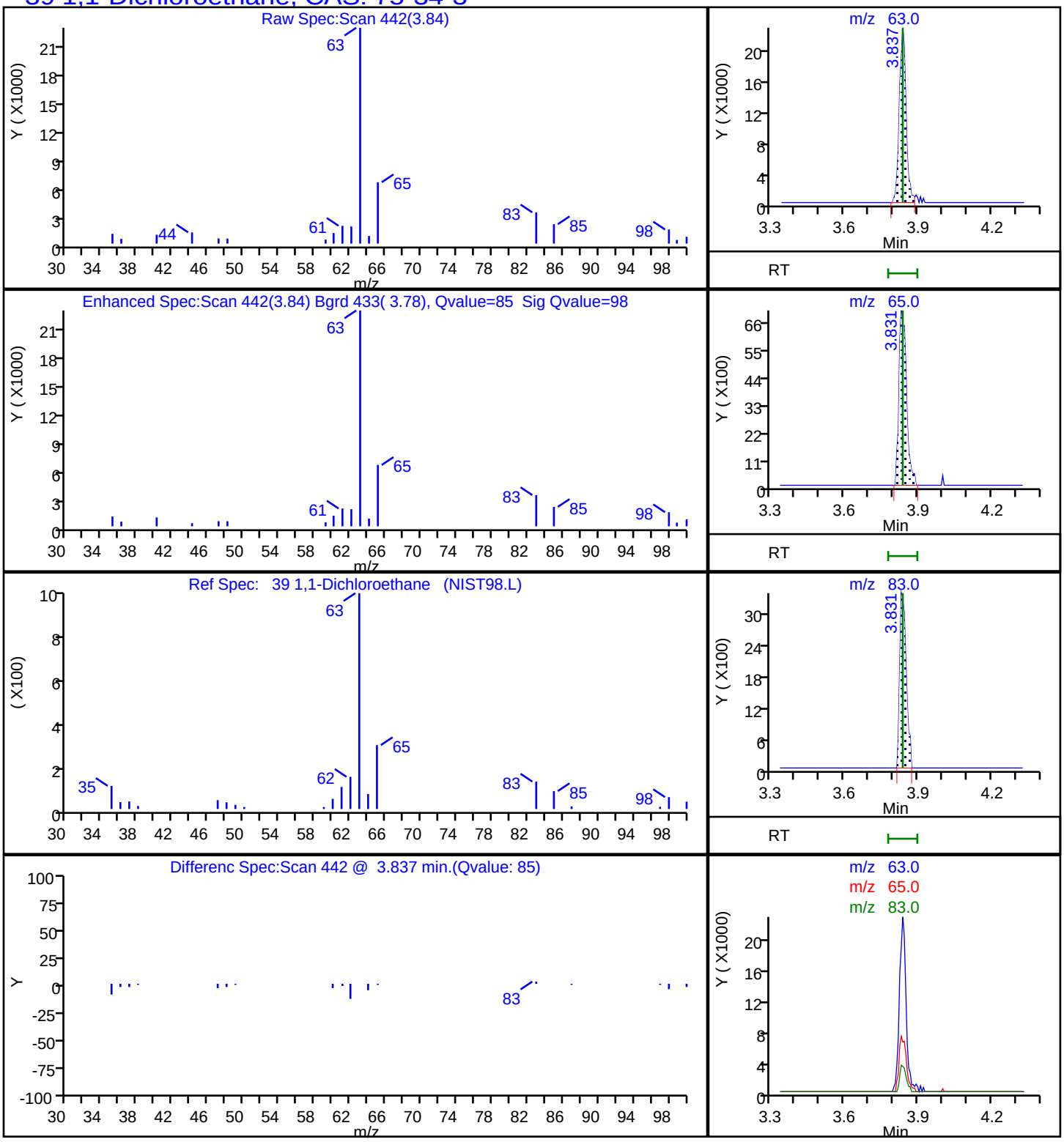
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D				
Injection Date:	14-Sep-2019 13:56:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-5	Lab Sample ID:	480-158822-5		
Client ID:	356023-GW-MW-5R-93-5				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

39 1,1-Dichloroethane, CAS: 75-34-3

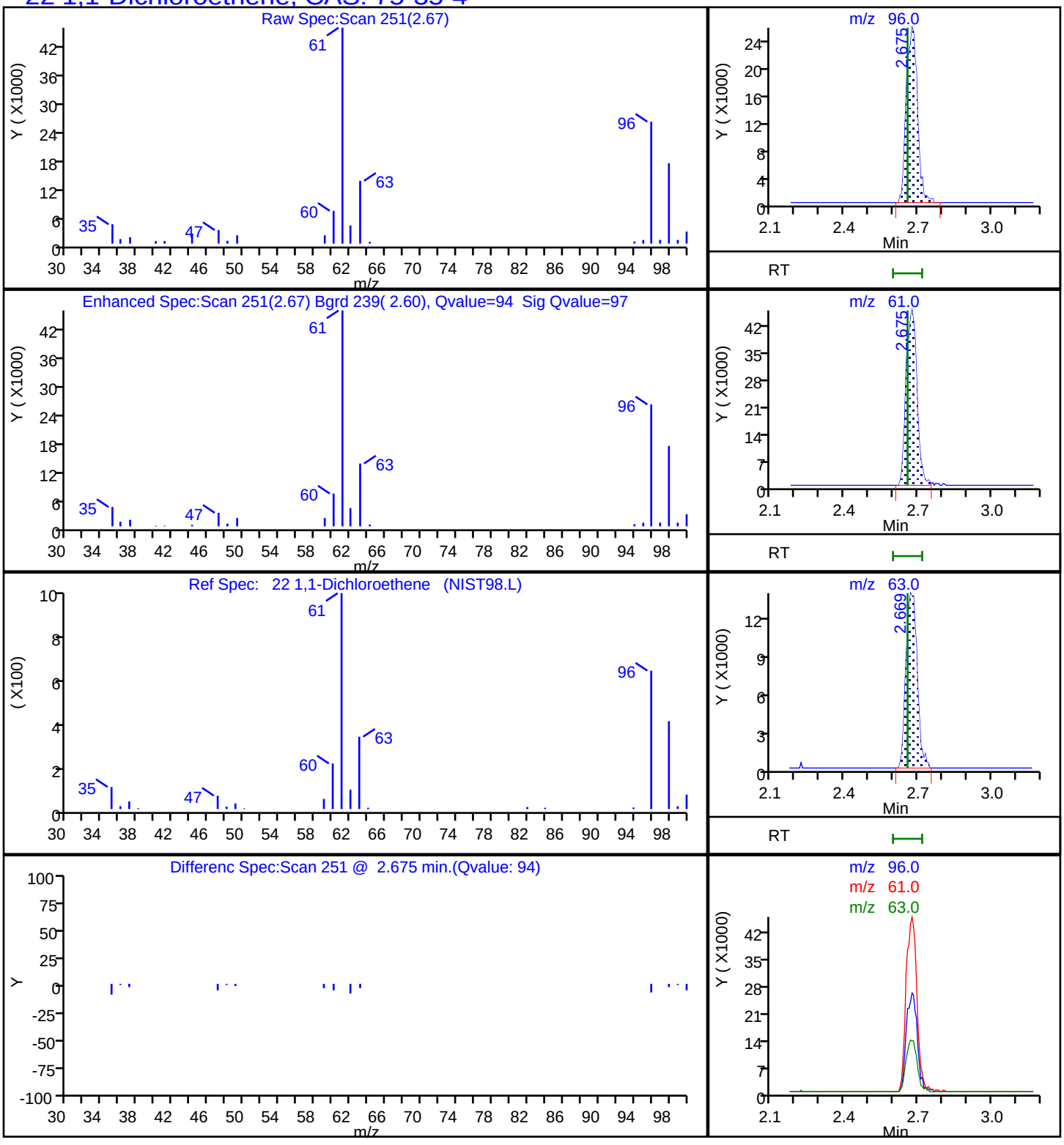


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D

Injection Date:	14-Sep-2019 13:56:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-5	Lab Sample ID:	480-158822-5		
Client ID:	356023-GW-MW-5R-93-5				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

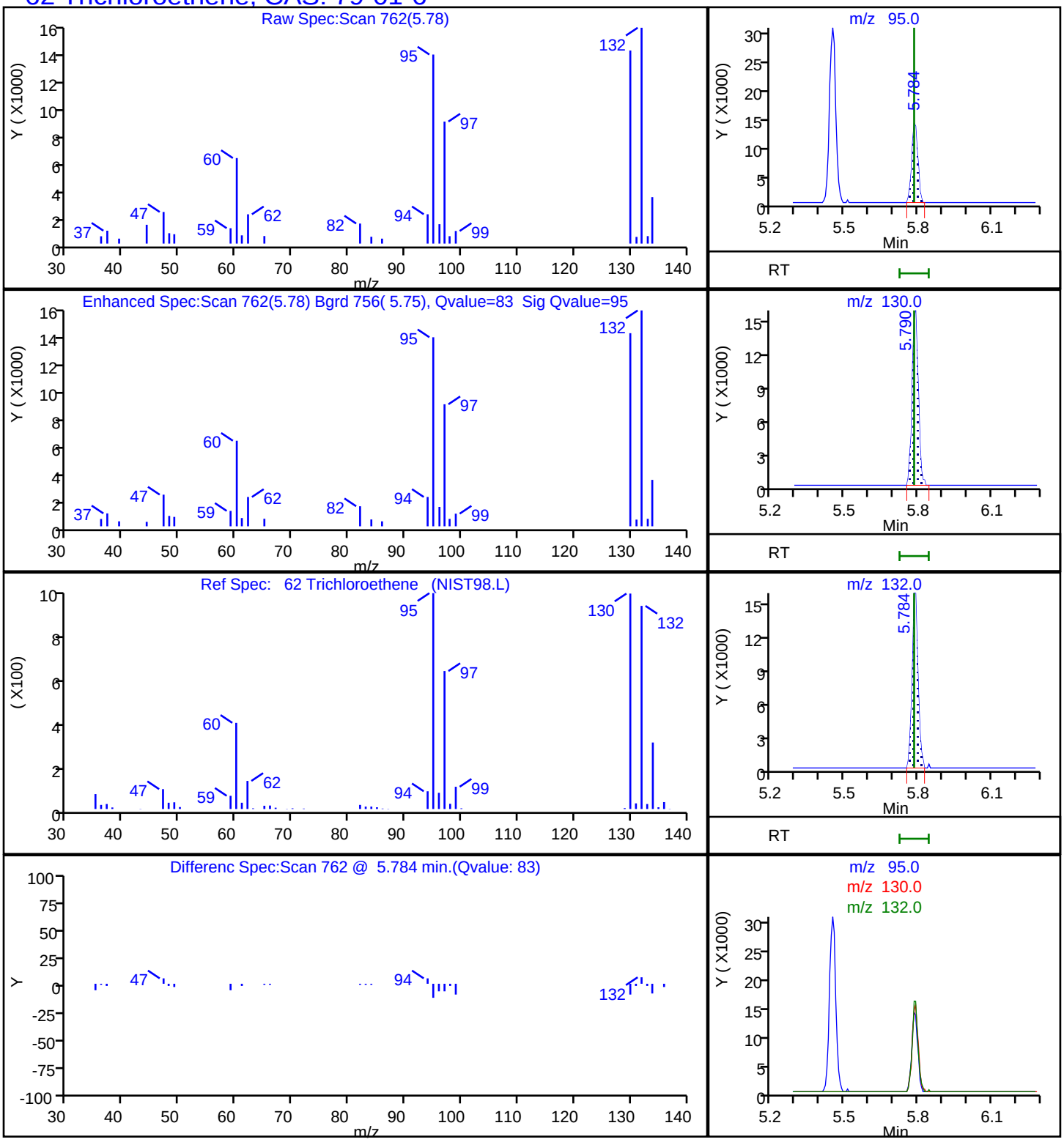


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D

Injection Date:	14-Sep-2019 13:56:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-5	Lab Sample ID:	480-158822-5		
Client ID:	356023-GW-MW-5R-93-5				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

62 Trichloroethene, CAS: 79-01-6



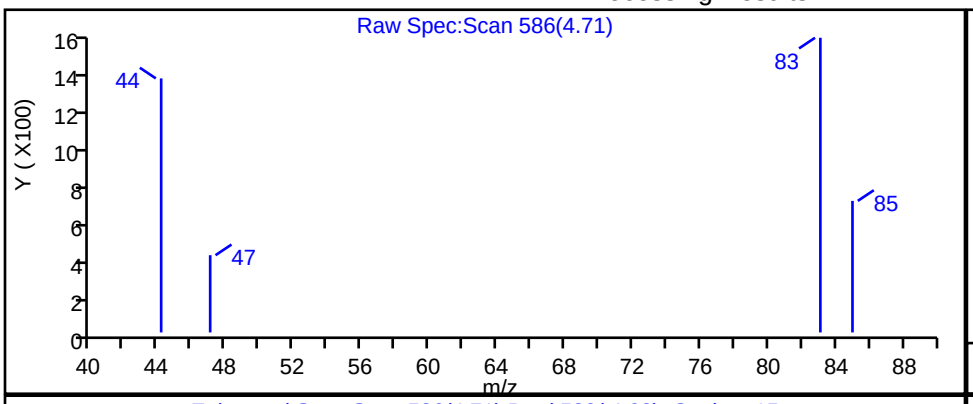
User Disabled Compound Report

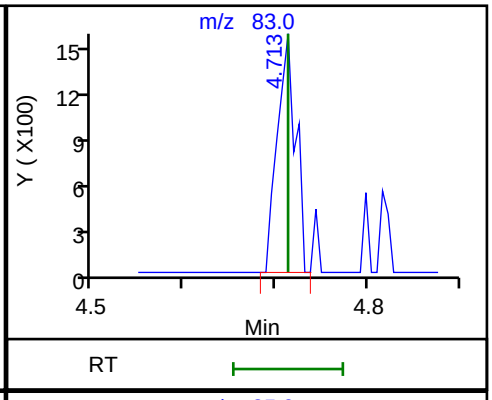
Eurofins TestAmerica, Buffalo

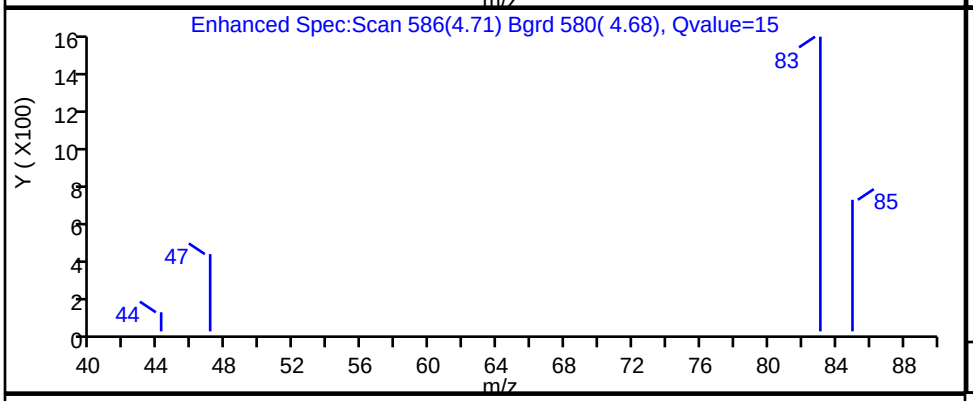
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8961.D				
Injection Date:	14-Sep-2019 13:56:30	Instrument ID:	HP5973S		
Lims ID:	480-158822-B-5	Lab Sample ID:	480-158822-5		
Client ID:	356023-GW-MW-5R-93-5				
Operator ID:	OI	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

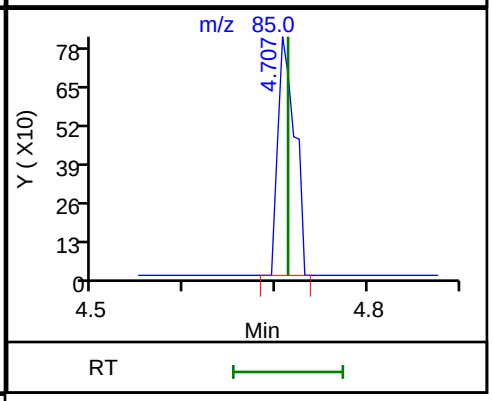
50 Chloroform, CAS: 67-66-3

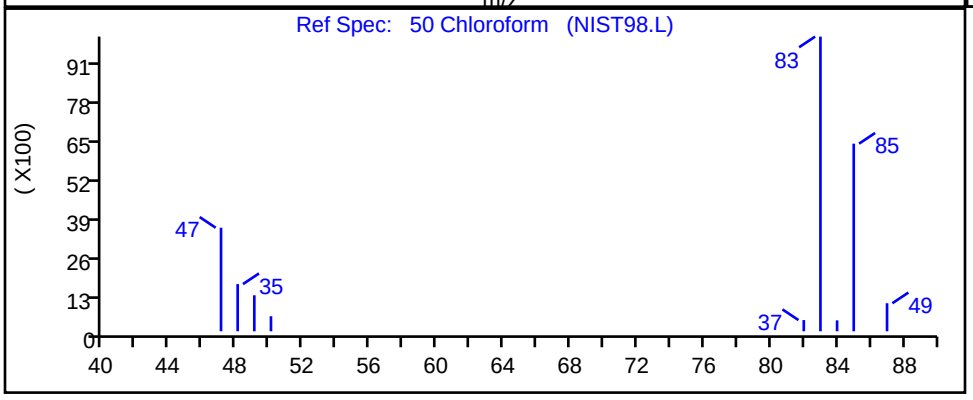
Processing Results











RT	Mass	Response	Amount
4.71	83.00	2129	0.173683
4.71	85.00	1041	

Reviewer: moffata, 15-Sep-2019 08:13:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-6 Lab Sample ID: 480-158822-6

Matrix: Water Lab File ID: L1051.D

Analysis Method: 8260C Date Collected: 09/05/2019 07:25

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 19:36

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	220		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	16		5.0	1.9
75-35-4	1,1-Dichloroethene	54		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-6 Lab Sample ID: 480-158822-6

Matrix: Water Lab File ID: L1051.D

Analysis Method: 8260C Date Collected: 09/05/2019 07:25

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 19:36

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	15		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D
Lims ID: 480-158822-B-6
Client ID: 356023-GW-MW-5R-93-6
Sample Type: Client
Inject. Date: 15-Sep-2019 19:36:08 ALS Bottle#: 0 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-B-6
Misc. Info.: 480-0084156-023
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Sep-2019 08:40:53 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: phillipsb Date: 16-Sep-2019 08:40:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.549	0.004	99	137605	25.0	
* 2 Chlorobenzene-d5	117	9.514	9.514	0.000	87	521700	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.794	11.797	-0.003	96	280684	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.981	5.980	0.004	93	192812	26.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.295	0.001	98	240348	26.6	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	683217	25.8	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.004	99	198239	26.5	
10 Dichlorodifluoromethane	85		2.199				ND	
13 Chloromethane	50		2.472				ND	
14 Vinyl chloride	62		2.607				ND	
18 Bromomethane	94		2.990				ND	
19 Chloroethane	64		3.102				ND	
21 Trichlorofluoromethane	101		3.360				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.865				ND	
30 1,1-Dichloroethene	96	3.903	3.897	0.006	94	68243	10.9	
31 Acetone	43		3.993				ND	U
35 Carbon disulfide	76		4.141				ND	
38 Methyl acetate	43		4.266				ND	
39 Methylene Chloride	84	4.402	4.395	0.007	94	5449	0.0817	
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.617				ND	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	96	46516	3.28	
58 cis-1,2-Dichloroethene	96		5.546				ND	
57 2-Butanone (MEK)	43		5.546				ND	
60 Chlorobromomethane	128		5.778				ND	
62 Chloroform	83		5.823				ND	
64 1,1,1-Trichloroethane	97	5.968	5.967	0.001	99	452399	43.6	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.102				ND	
70 Benzene	78		6.311				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.881	6.877	0.004	96	21862	3.03	
76 Methylcyclohexane	83		7.009				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.237				ND	
83 Dichlorobromomethane	83		7.385				ND	
85 cis-1,3-Dichloropropene	75		7.781				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.327				ND	
93 1,1,2-Trichloroethane	83		8.533				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.954				ND	
101 Ethylene Dibromide	107		9.093				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.716				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.179				ND	
110 Bromoform	173		10.456				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.816				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835				ND	
130 1,2,4-Trichlorobenzene	180		13.507				ND	
133 1,2,3-Trichlorobenzene	180		13.993				ND	
S 143 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 16-Sep-2019 08:40:54 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D

Injection Date: 15-Sep-2019 19:36:08 Instrument ID: HP5977L

Lims ID: 480-158822-B-6 Lab Sample ID: 480-158822-6

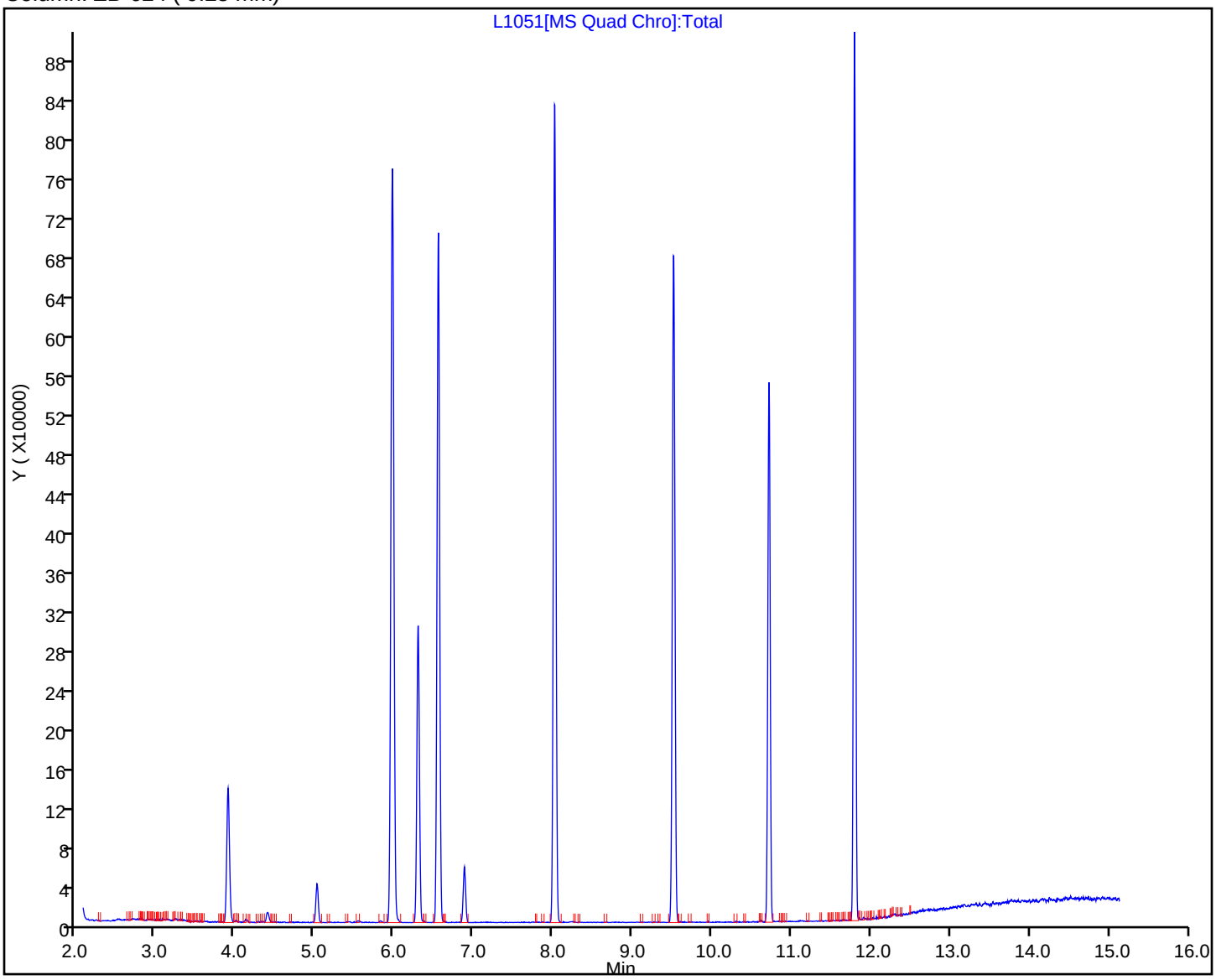
Client ID: 356023-GW-MW-5R-93-6

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 5.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

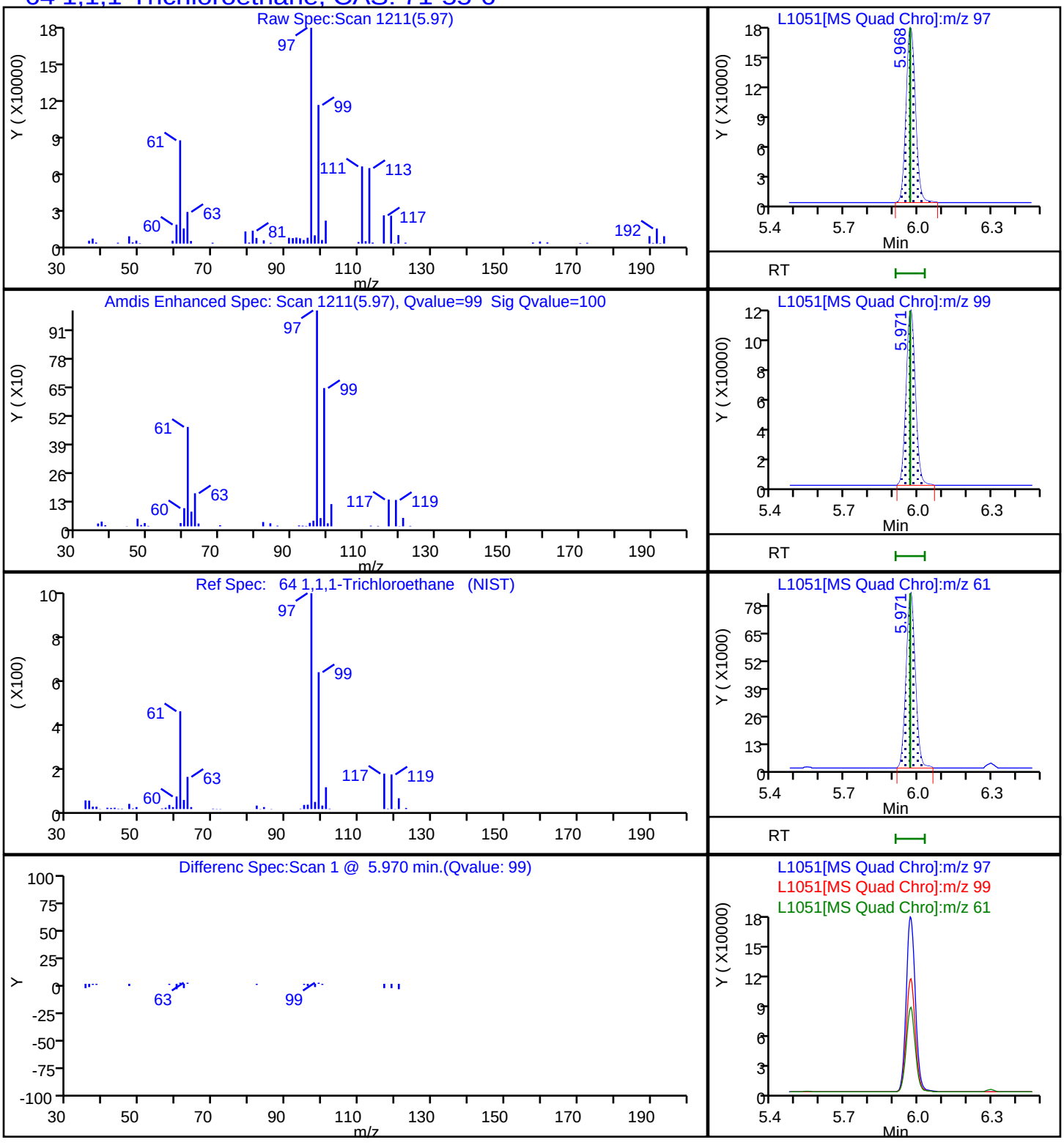
Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D				
Injection Date:	15-Sep-2019 19:36:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-6	Lab Sample ID:	480-158822-6		
Client ID:	356023-GW-MW-5R-93-6				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

64 1,1,1-Trichloroethane, CAS: 71-55-6



Report Date: 16-Sep-2019 08:40:54 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D

Injection Date: 15-Sep-2019 19:36:08 Instrument ID: HP5977L

Lims ID: 480-158822-B-6 Lab Sample ID: 480-158822-6

Client ID: 356023-GW-MW-5R-93-6

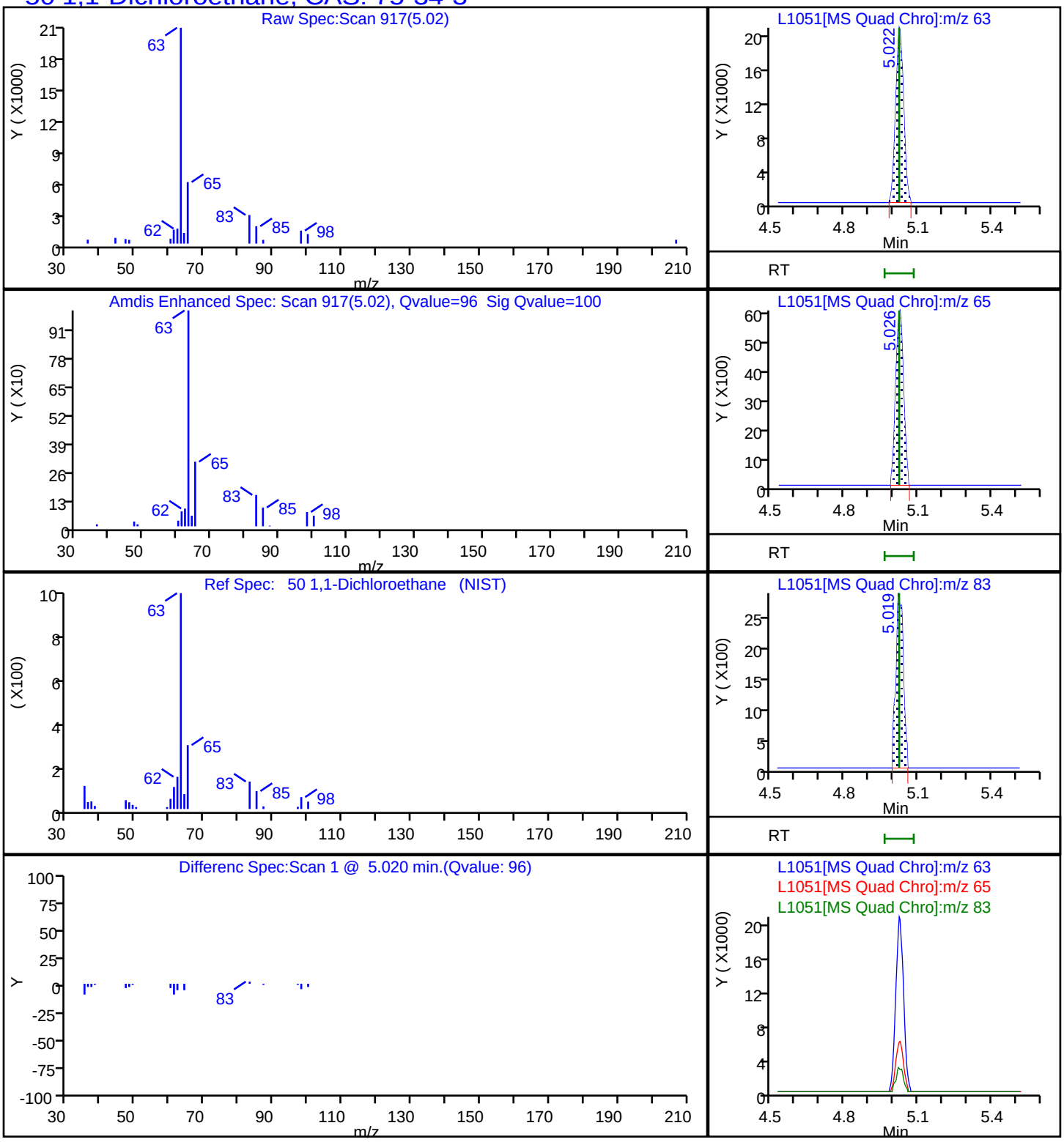
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 23

Purge Vol: 5.000 mL Dil. Factor: 5.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm) Detector MS Quad

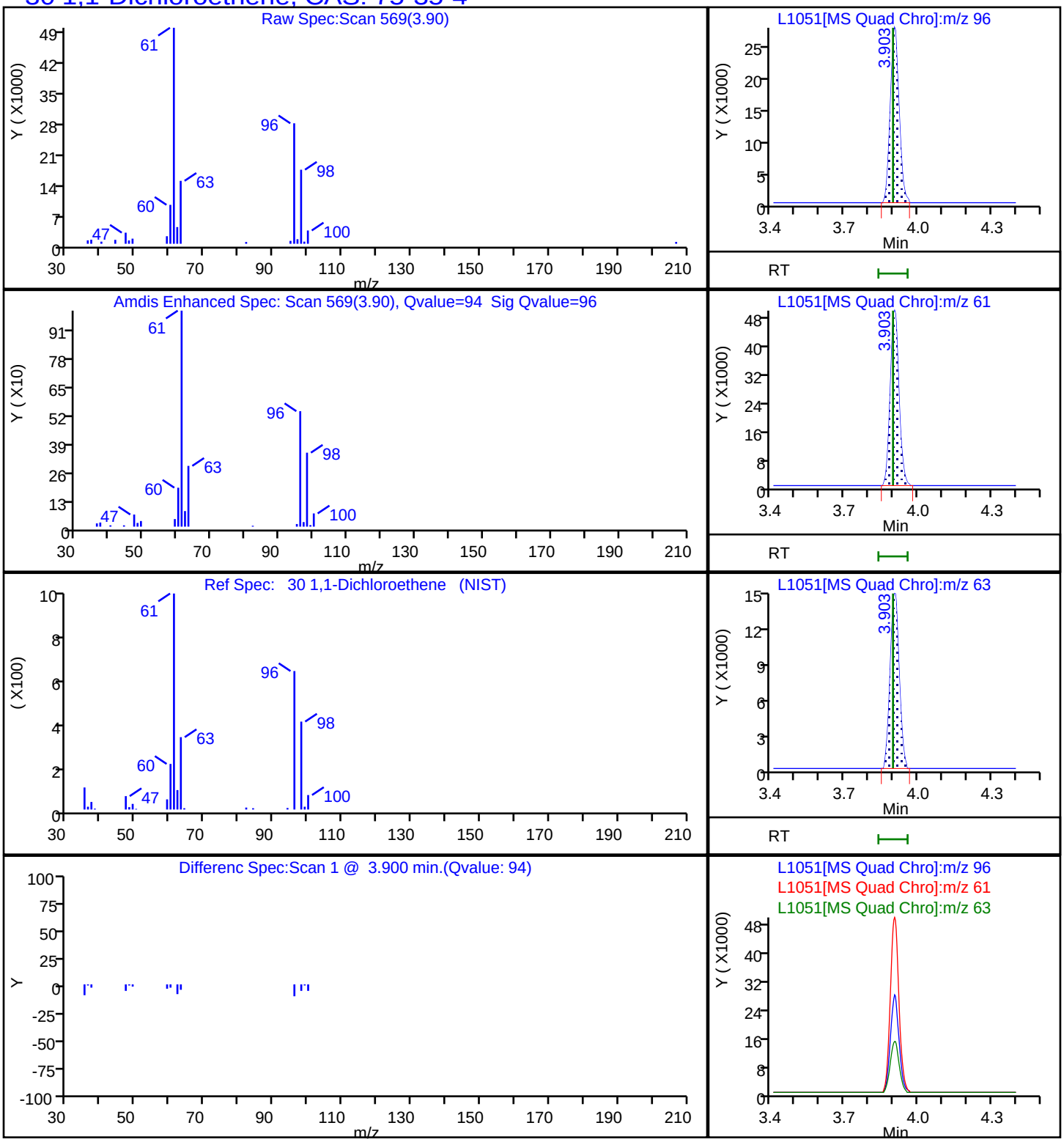
50 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D				
Injection Date:	15-Sep-2019 19:36:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-6	Lab Sample ID:	480-158822-6		
Client ID:	356023-GW-MW-5R-93-6				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

30 1,1-Dichloroethene, CAS: 75-35-4

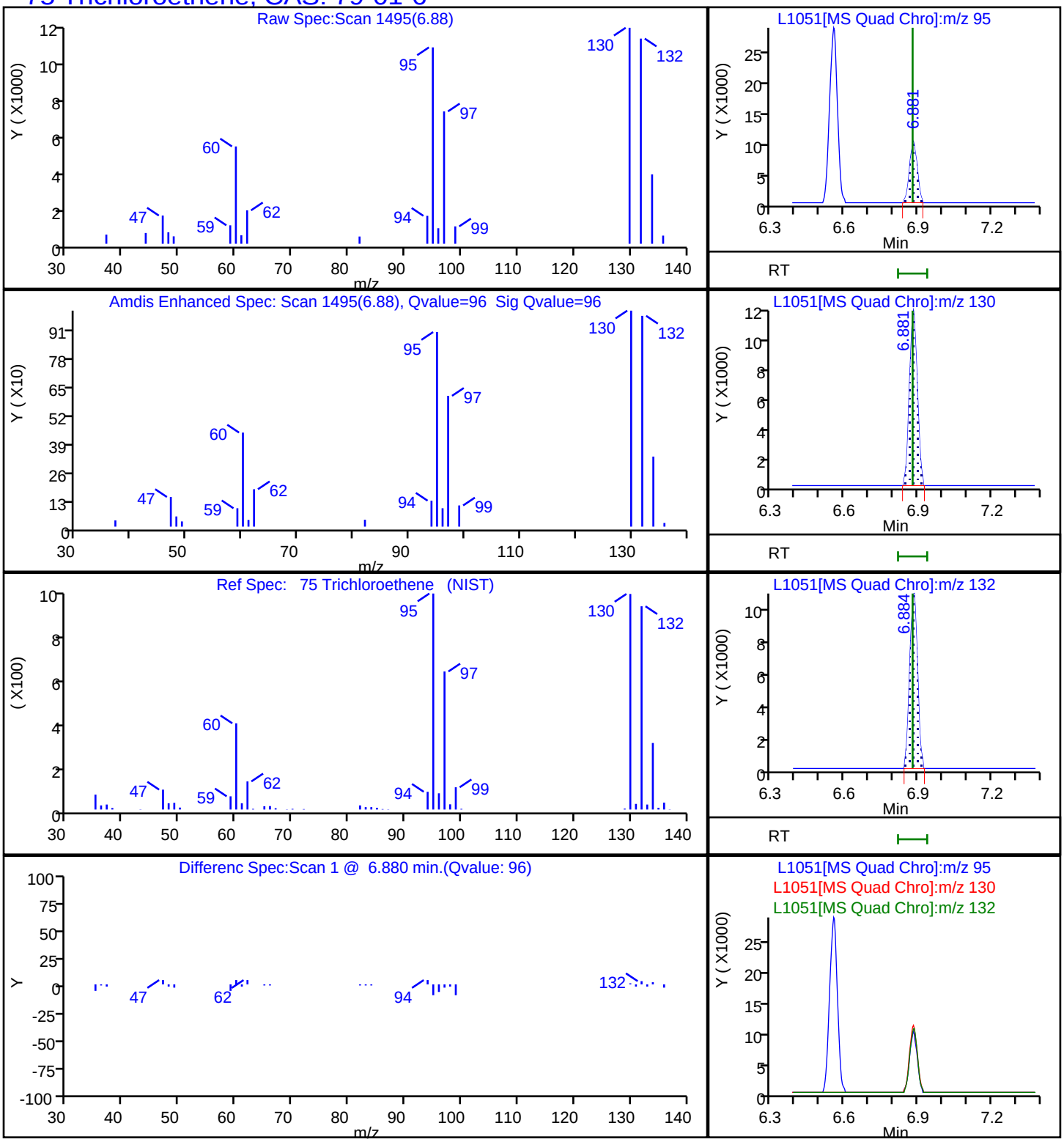


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D

Injection Date:	15-Sep-2019 19:36:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-6	Lab Sample ID:	480-158822-6		
Client ID:	356023-GW-MW-5R-93-6				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



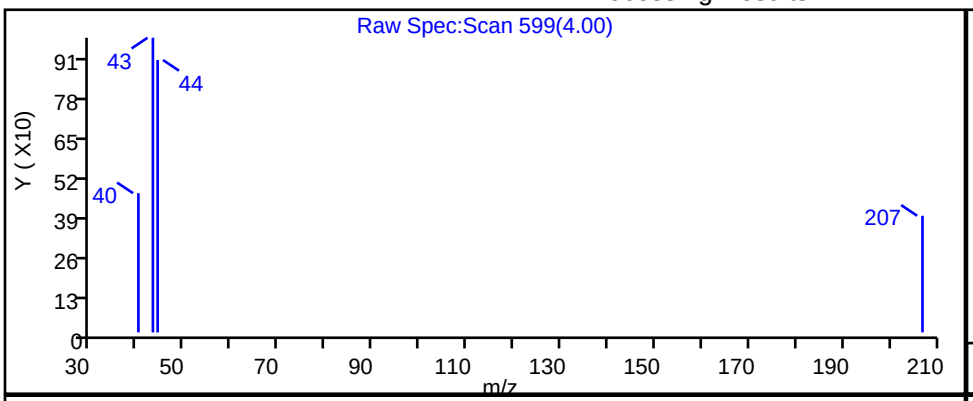
User Disabled Compound Report

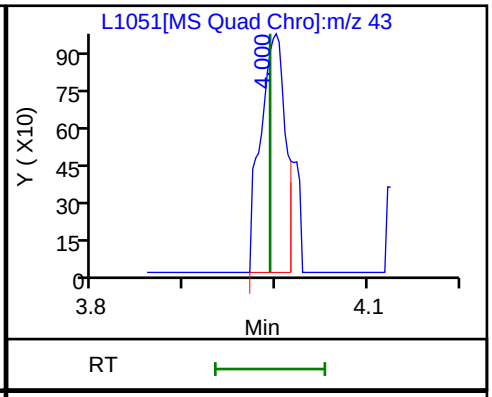
Eurofins TestAmerica, Buffalo

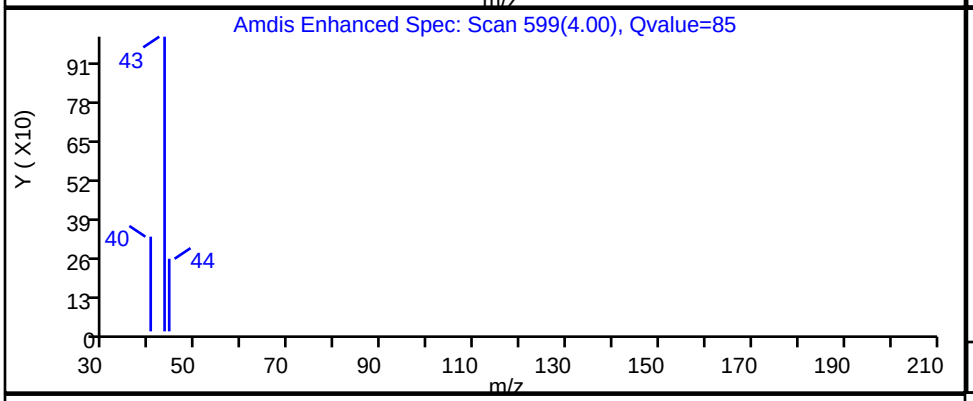
Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1051.D				
Injection Date:	15-Sep-2019 19:36:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-6	Lab Sample ID:	480-158822-6		
Client ID:	356023-GW-MW-5R-93-6				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

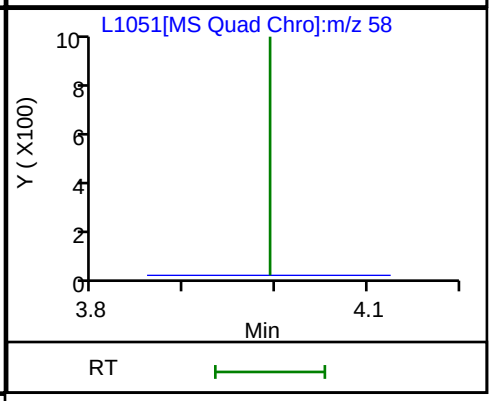
31 Acetone, CAS: 67-64-1

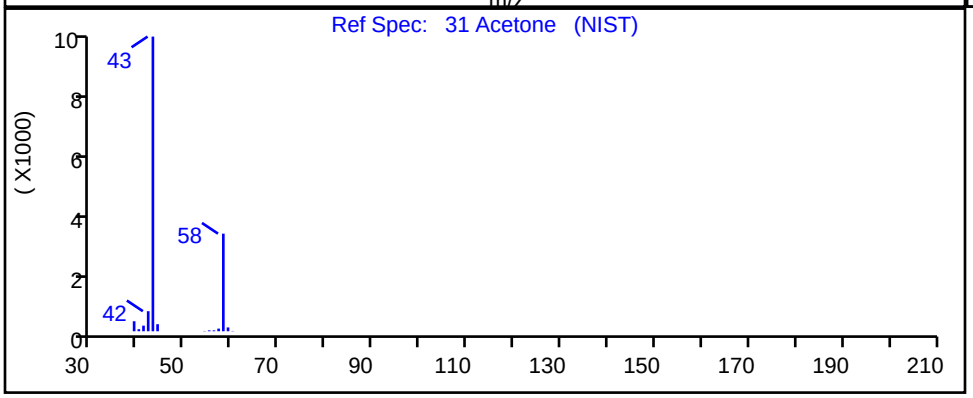
Processing Results











RT	Mass	Response	Amount
4.00	43.00	1842	0.403013
3.99	58.00	0	

Reviewer: phillipsb, 16-Sep-2019 08:40:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-7 Lab Sample ID: 480-158822-7

Matrix: Water Lab File ID: L1052.D

Analysis Method: 8260C Date Collected: 09/05/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 20:00

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	250		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	18		5.0	1.9
75-35-4	1,1-Dichloroethene	63		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-7 Lab Sample ID: 480-158822-7

Matrix: Water Lab File ID: L1052.D

Analysis Method: 8260C Date Collected: 09/05/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 20:00

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	16		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
460-00-4	4-Bromofluorobenzene (Surr)	110		73-120
1868-53-7	Dibromofluoromethane (Surr)	114		75-123
2037-26-5	Toluene-d8 (Surr)	105		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1052.D
Lims ID: 480-158822-B-7
Client ID: 356023-GW-MW-5R-93-7
Sample Type: Client
Inject. Date: 15-Sep-2019 20:00:08 ALS Bottle#: 0 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-B-7
Misc. Info.: 480-0084156-024
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Sep-2019 08:40:53 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: phillipsb Date: 16-Sep-2019 08:41:59

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
*	1 Fluorobenzene (IS)	70	6.553	6.549	0.004	99	126181	25.0	
*	2 Chlorobenzene-d5	117	9.514	9.514	0.000	87	446765	25.0	
*	3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	254139	25.0	
$	4 Dibromofluoromethane (Surr	113	5.980	5.980	0.003	93	190151	28.4	
$	5 1,2-Dichloroethane-d4 (Sur	65	6.299	6.295	0.004	98	230012	27.7	
$	6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	595820	26.3	
$	7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.004	98	175949	27.4	
	10 Dichlorodifluoromethane	85		2.199				ND	
	13 Chloromethane	50		2.472				ND	
	14 Vinyl chloride	62		2.607				ND	
	18 Bromomethane	94		2.990				ND	
	19 Chloroethane	64		3.102				ND	
	21 Trichlorofluoromethane	101		3.360				ND	
	29 1,1,2-Trichloro-1,2,2-trif	101		3.865				ND	
	30 1,1-Dichloroethene	96	3.900	3.897	0.003	93	72013	12.5	
	31 Acetone	43	4.006	3.993	0.013	86	2704	0.6452	
	35 Carbon disulfide	76		4.141				ND	
	38 Methyl acetate	43		4.266				ND	
	39 Methylene Chloride	84		4.395				ND	
	41 Methyl tert-butyl ether	73		4.575				ND	
	42 trans-1,2-Dichloroethene	96		4.617				ND	
	50 1,1-Dichloroethane	63	5.025	5.022	0.003	96	46973	3.61	
	58 cis-1,2-Dichloroethene	96		5.546				ND	
	57 2-Butanone (MEK)	43		5.546				ND	
	60 Chlorobromomethane	128		5.778				ND	
	62 Chloroform	83		5.823				ND	
	64 1,1,1-Trichloroethane	97	5.971	5.967	0.004	99	466502	49.1	
	65 Cyclohexane	56		5.987				ND	
	66 Carbon tetrachloride	117		6.102				ND	
	70 Benzene	78		6.311				ND	
	72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.881	6.877	0.004	95	21162	3.20	
76 Methylcyclohexane	83		7.009				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.237				ND	
83 Dichlorobromomethane	83		7.385				ND	
85 cis-1,3-Dichloropropene	75		7.781				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.327				ND	
93 1,1,2-Trichloroethane	83		8.533				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.954				ND	
101 Ethylene Dibromide	107		9.093				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.716				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.179				ND	
110 Bromoform	173		10.456				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.816				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835				ND	
130 1,2,4-Trichlorobenzene	180		13.507				ND	
133 1,2,3-Trichlorobenzene	180		13.993				ND	
S 143 Xylenes, Total	1		30.000				ND	

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

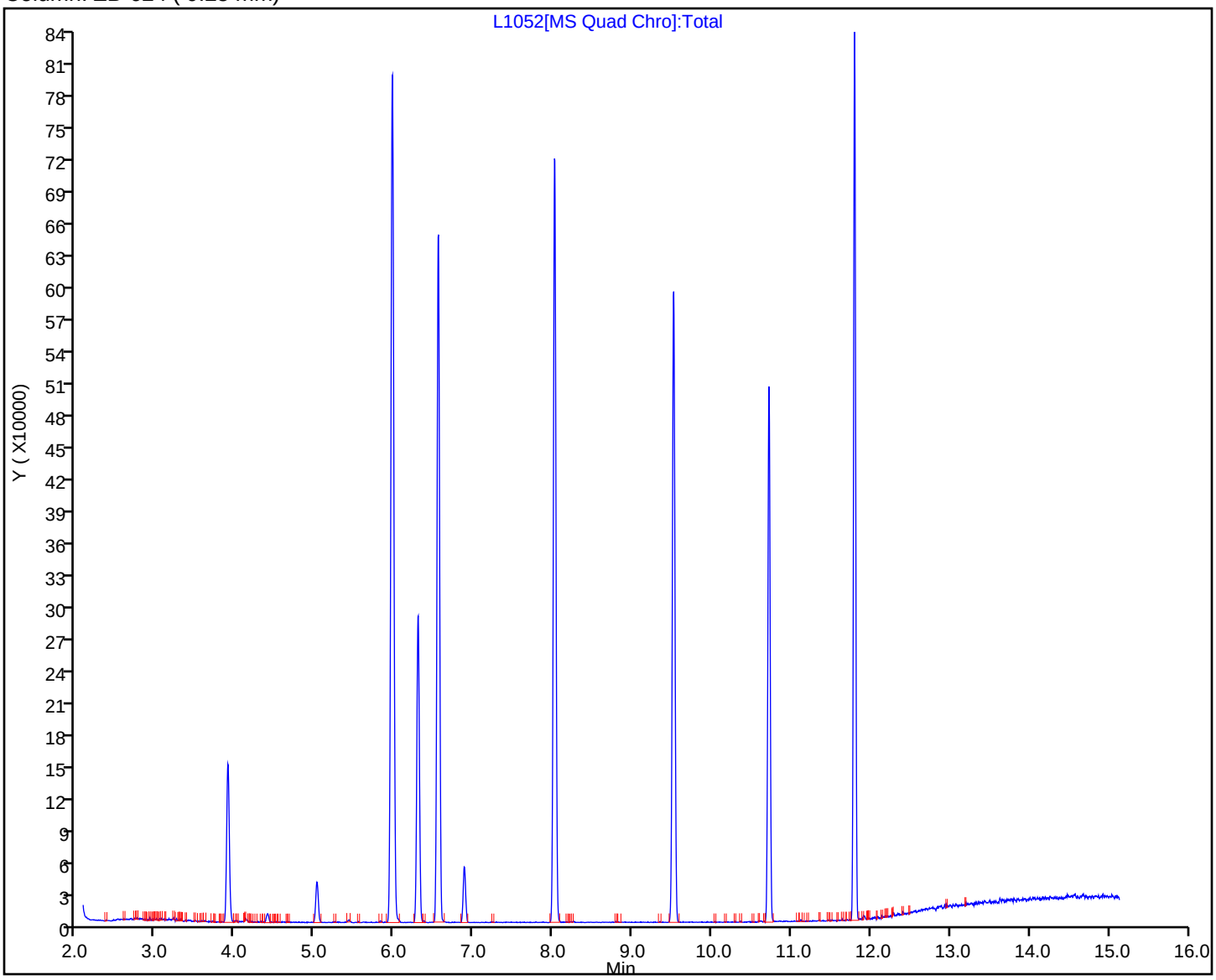
Report Date: 16-Sep-2019 08:42:00 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1052.D

Injection Date:	15-Sep-2019 20:00:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-7	Lab Sample ID:	480-158822-7		
Client ID:	356023-GW-MW-5R-93-7				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		

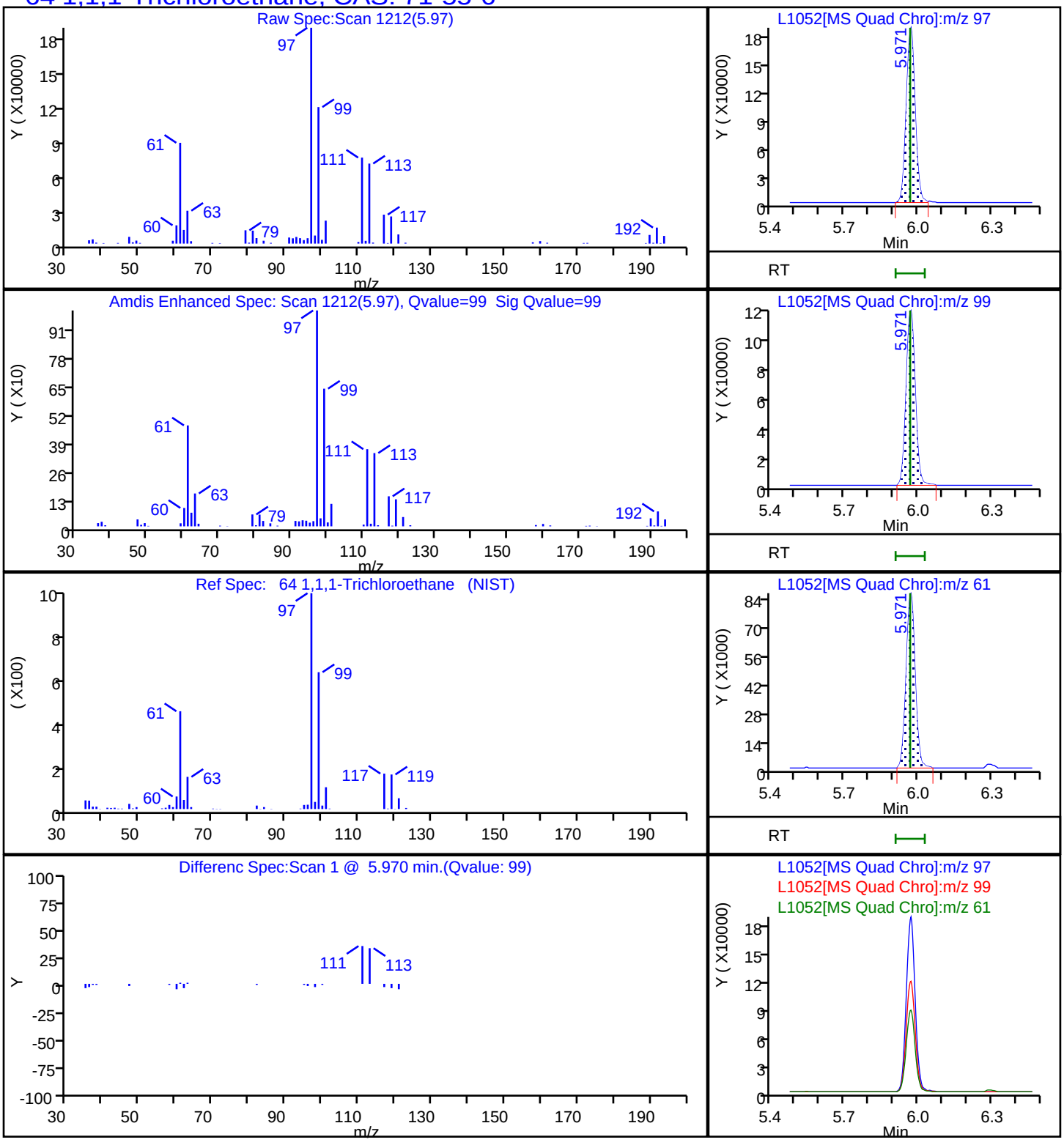
Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1052.D				
Injection Date:	15-Sep-2019 20:00:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-7	Lab Sample ID:	480-158822-7		
Client ID:	356023-GW-MW-5R-93-7				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

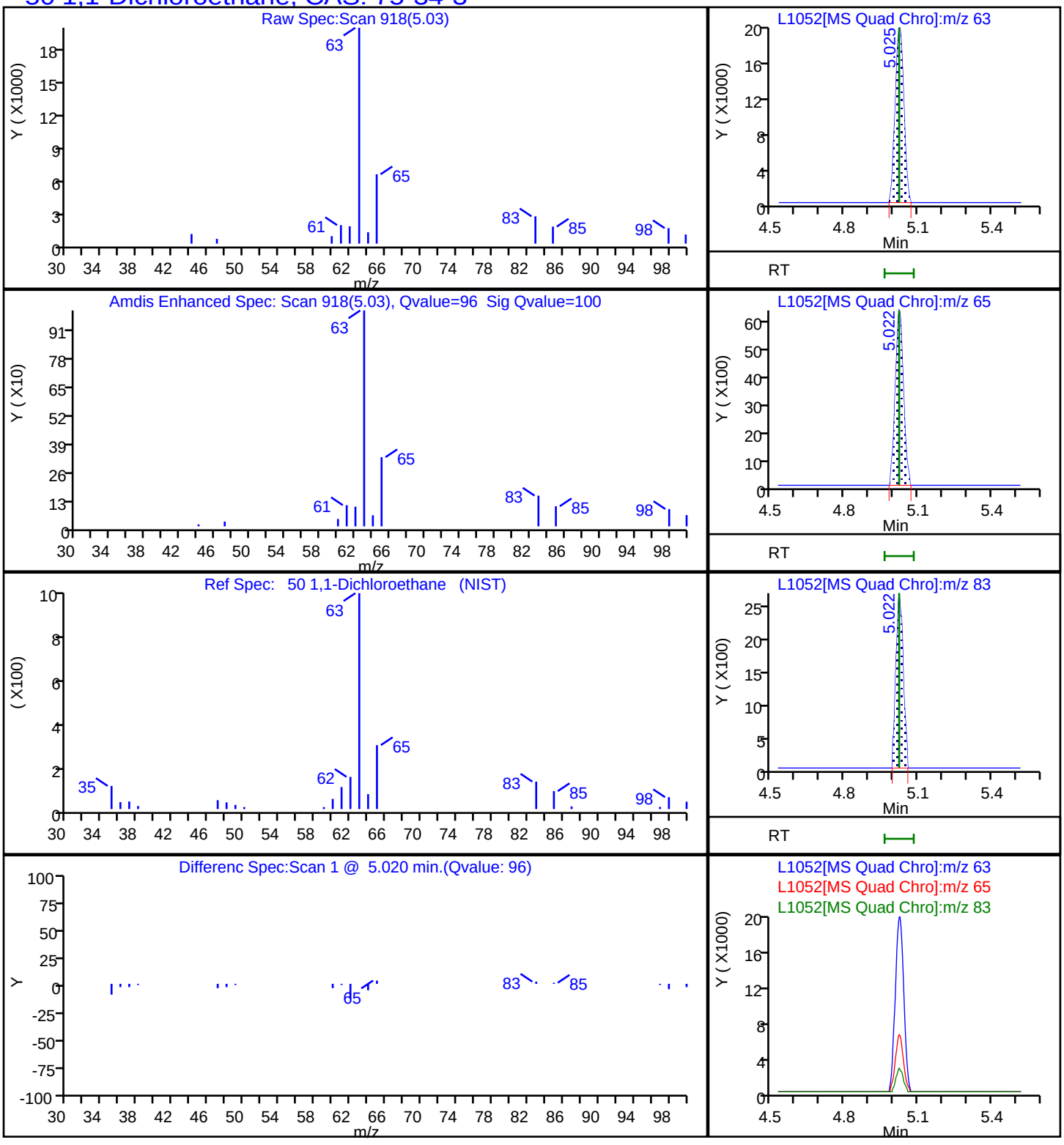
64 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1052.D				
Injection Date:	15-Sep-2019 20:00:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-7	Lab Sample ID:	480-158822-7		
Client ID:	356023-GW-MW-5R-93-7				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

50 1,1-Dichloroethane, CAS: 75-34-3

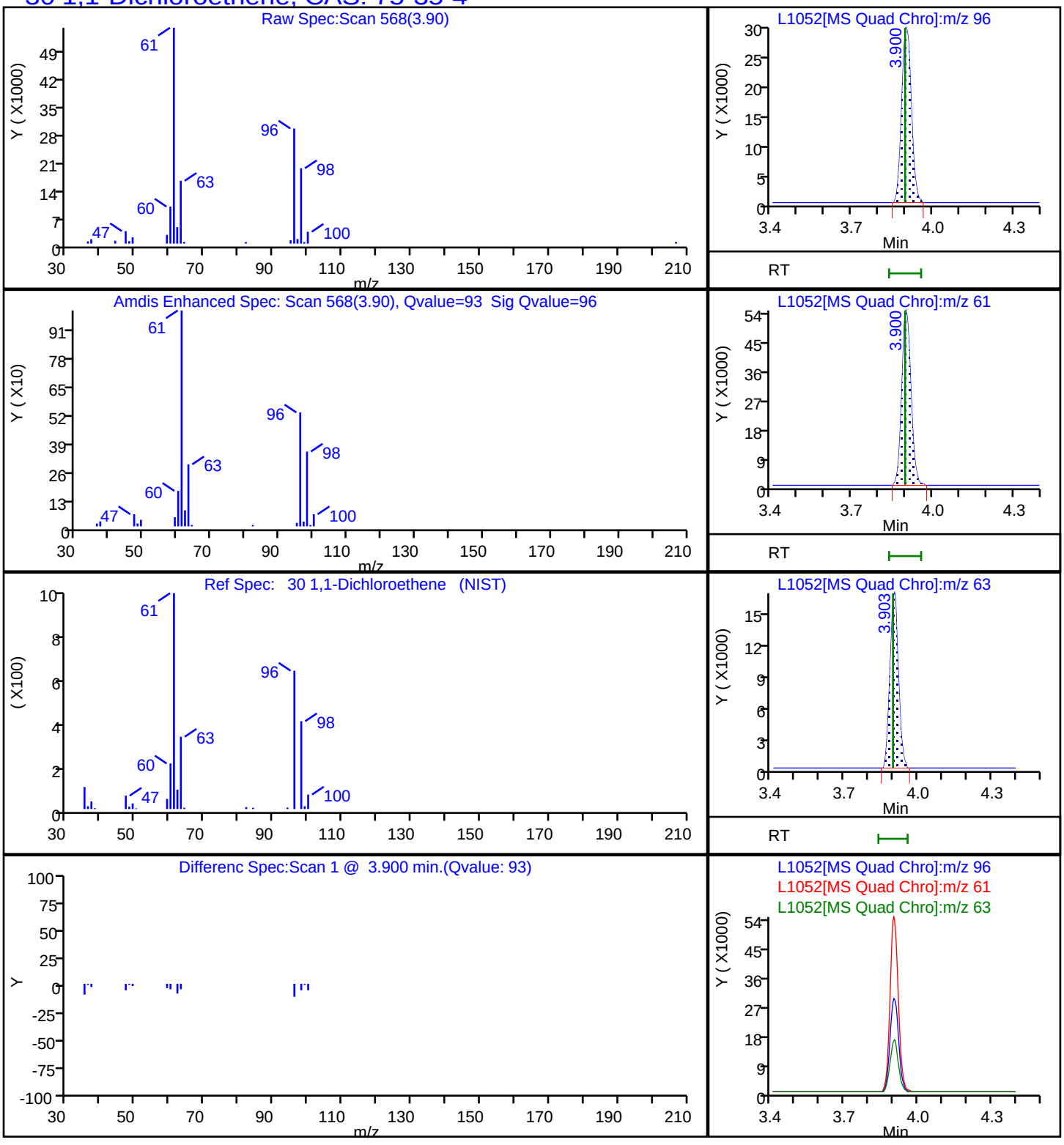


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1052.D

Injection Date:	15-Sep-2019 20:00:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-7	Lab Sample ID:	480-158822-7		
Client ID:	356023-GW-MW-5R-93-7				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

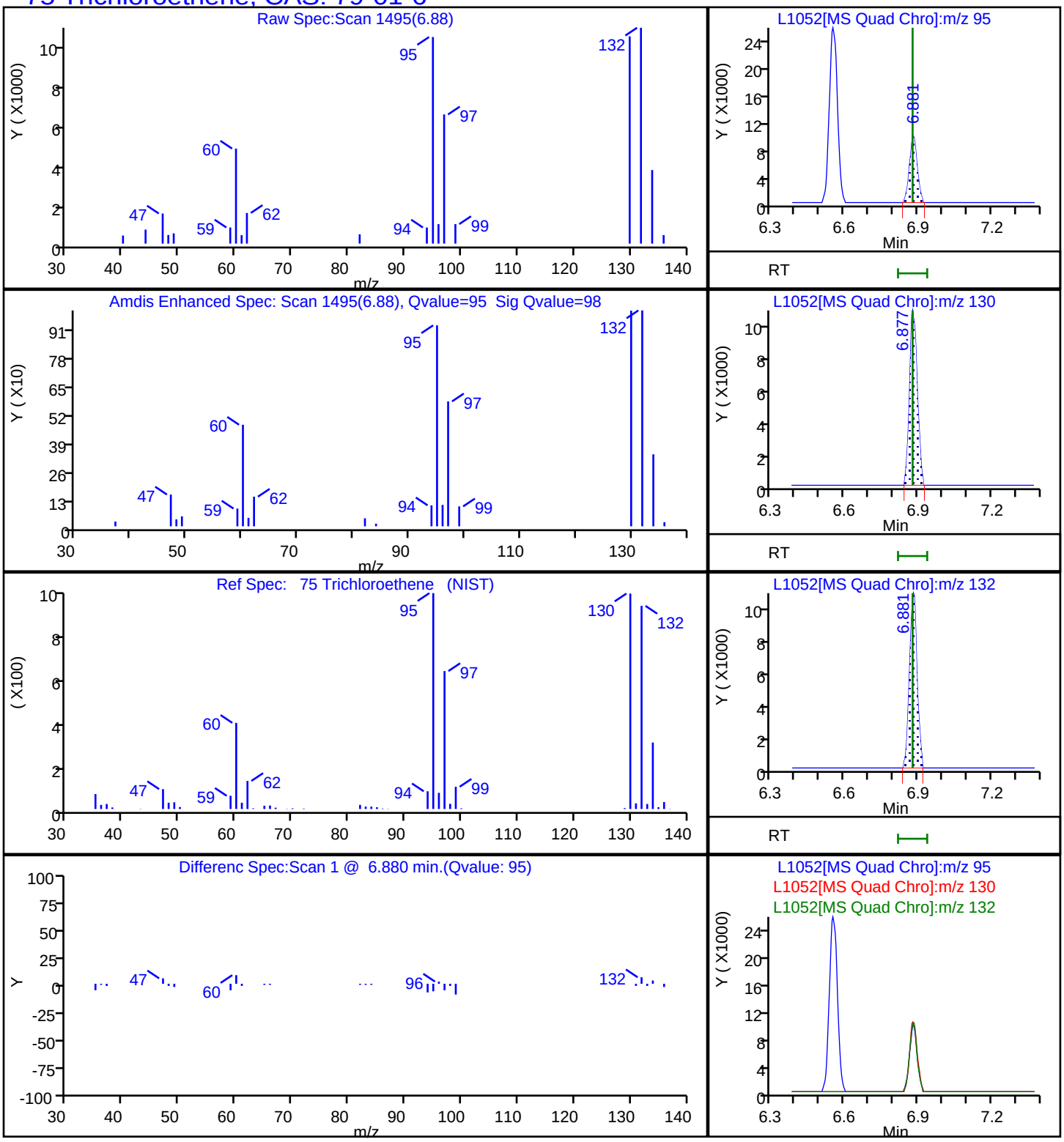
30 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1052.D				
Injection Date:	15-Sep-2019 20:00:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-7	Lab Sample ID:	480-158822-7		
Client ID:	356023-GW-MW-5R-93-7				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-8 Lab Sample ID: 480-158822-8

Matrix: Water Lab File ID: L1053.D

Analysis Method: 8260C Date Collected: 09/05/2019 16:40

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 20:24

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	210		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	17		5.0	1.9
75-35-4	1,1-Dichloroethene	51		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-8 Lab Sample ID: 480-158822-8

Matrix: Water Lab File ID: L1053.D

Analysis Method: 8260C Date Collected: 09/05/2019 16:40

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 20:24

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	15		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D
Lims ID: 480-158822-B-8
Client ID: 356023-GW-MW-5R-93-8
Sample Type: Client
Inject. Date: 15-Sep-2019 20:24:33 ALS Bottle#: 0 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-B-8
Misc. Info.: 480-0084156-025
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Sep-2019 08:42:54 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: phillipsb Date: 16-Sep-2019 08:42:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.549	0.004	99	140624	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	552315	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	293437	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.980	0.000	92	191424	25.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.299	6.295	0.004	98	242667	26.3	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	702000	25.0	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.001	98	204387	25.8	
10 Dichlorodifluoromethane	85		2.199				ND	
13 Chloromethane	50		2.472				ND	
14 Vinyl chloride	62		2.607				ND	
18 Bromomethane	94		2.990				ND	
19 Chloroethane	64		3.102				ND	
21 Trichlorofluoromethane	101		3.360				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.865				ND	
30 1,1-Dichloroethene	96	3.897	3.897	0.000	95	65323	10.2	
31 Acetone	43		3.993				ND	U
35 Carbon disulfide	76		4.141				ND	
38 Methyl acetate	43		4.266				ND	
39 Methylene Chloride	84		4.395				ND	
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.617				ND	
50 1,1-Dichloroethane	63	5.029	5.022	0.007	97	49288	3.40	
58 cis-1,2-Dichloroethene	96		5.546				ND	
57 2-Butanone (MEK)	43		5.546				ND	
60 Chlorobromomethane	128		5.778				ND	
62 Chloroform	83		5.823				ND	
64 1,1,1-Trichloroethane	97	5.971	5.967	0.004	99	442276	41.7	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.102				ND	
70 Benzene	78		6.311				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.878	6.877	0.001	95	22045	2.99	
76 Methylcyclohexane	83		7.009				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.237				ND	
83 Dichlorobromomethane	83		7.385				ND	
85 cis-1,3-Dichloropropene	75		7.781				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.327				ND	
93 1,1,2-Trichloroethane	83		8.533				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.954				ND	
101 Ethylene Dibromide	107		9.093				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.716				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.179				ND	
110 Bromoform	173		10.456				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.816				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835				ND	
130 1,2,4-Trichlorobenzene	180		13.507				ND	
133 1,2,3-Trichlorobenzene	180		13.993				ND	
S 143 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 16-Sep-2019 08:42:55 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D

Injection Date: 15-Sep-2019 20:24:33 Instrument ID: HP5977L

Lims ID: 480-158822-B-8 Lab Sample ID: 480-158822-8

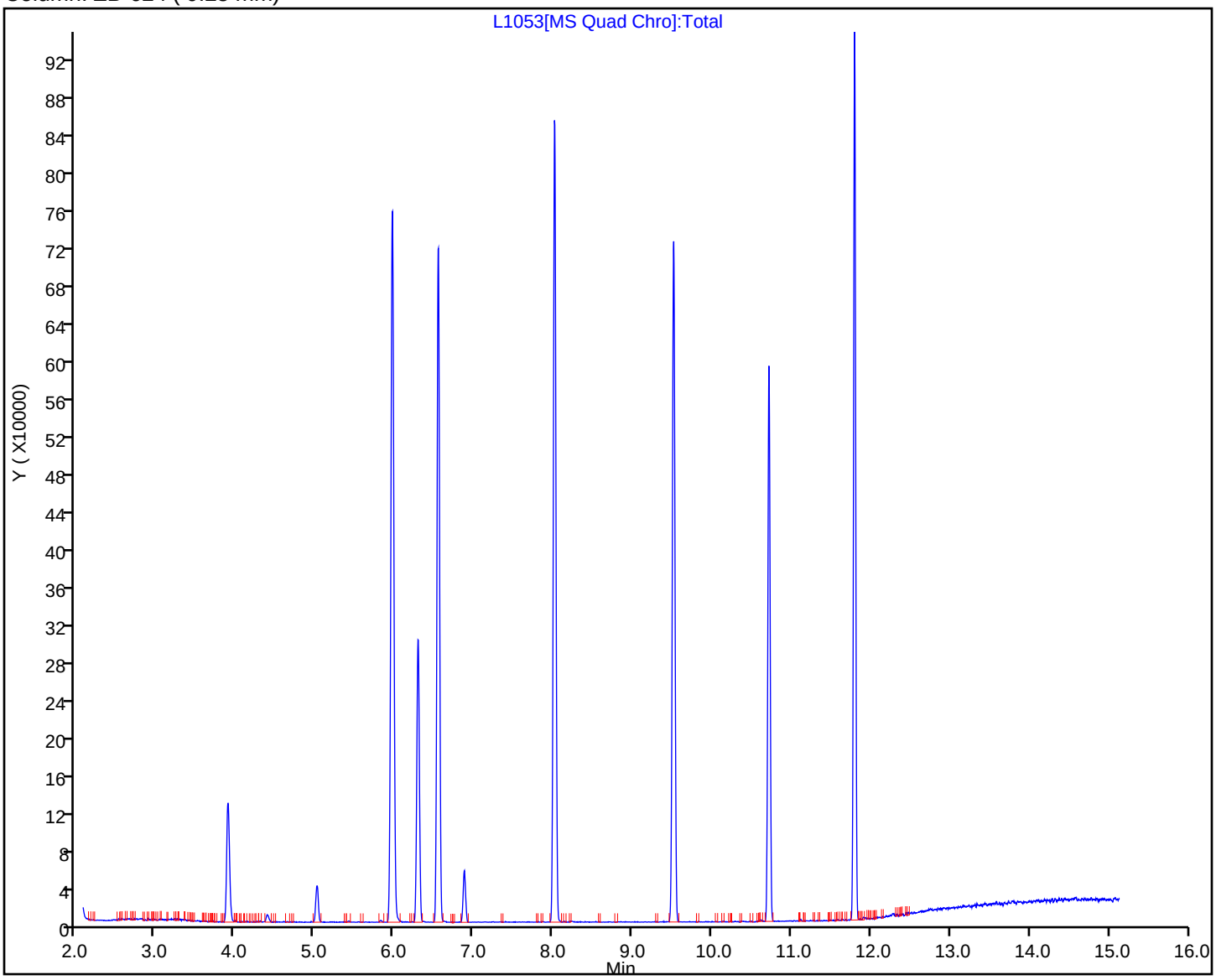
Client ID: 356023-GW-MW-5R-93-8

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 25

Purge Vol: 5.000 mL Dil. Factor: 5.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

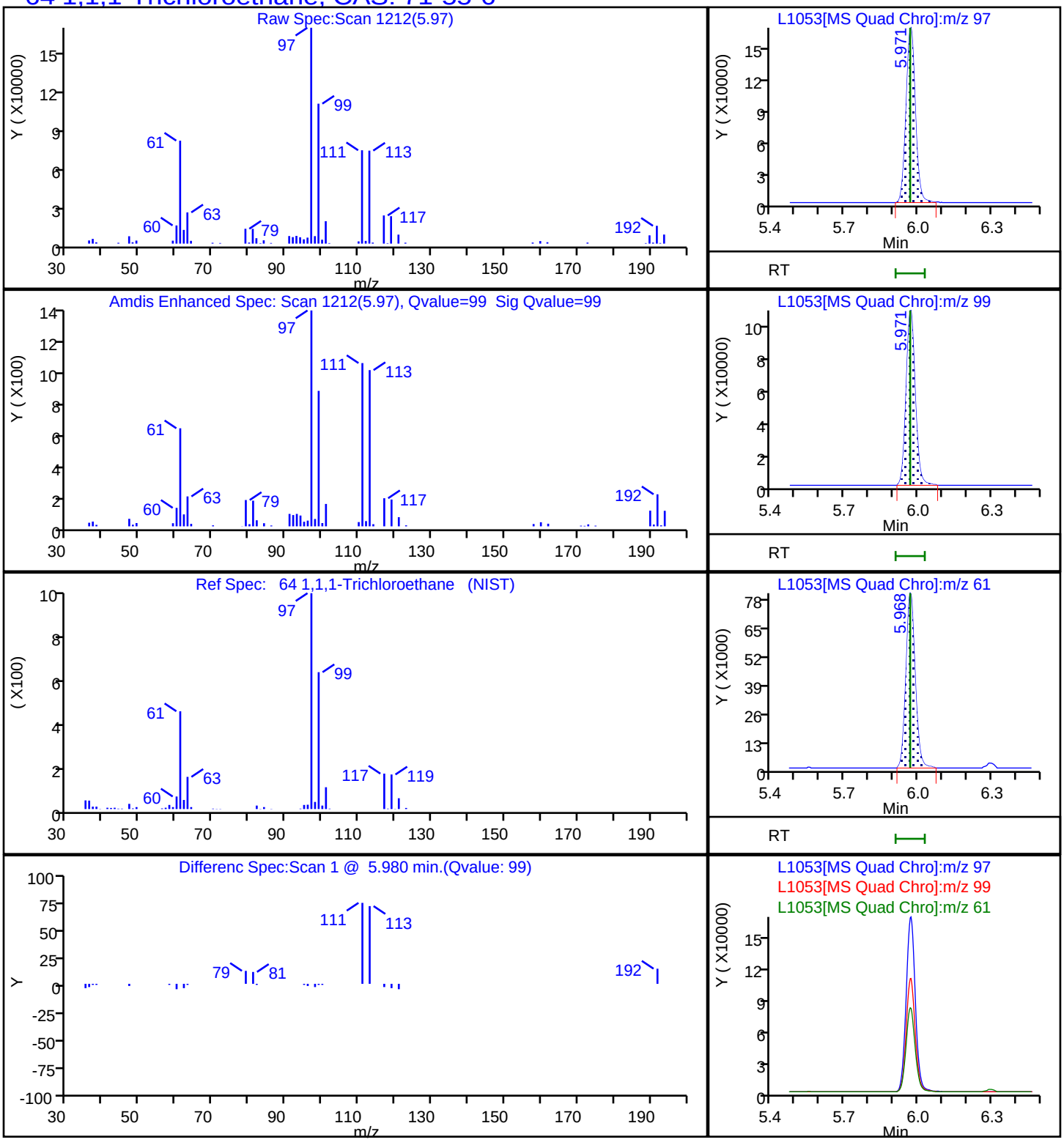
Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D				
Injection Date:	15-Sep-2019 20:24:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-8	Lab Sample ID:	480-158822-8		
Client ID:	356023-GW-MW-5R-93-8				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

64 1,1,1-Trichloroethane, CAS: 71-55-6

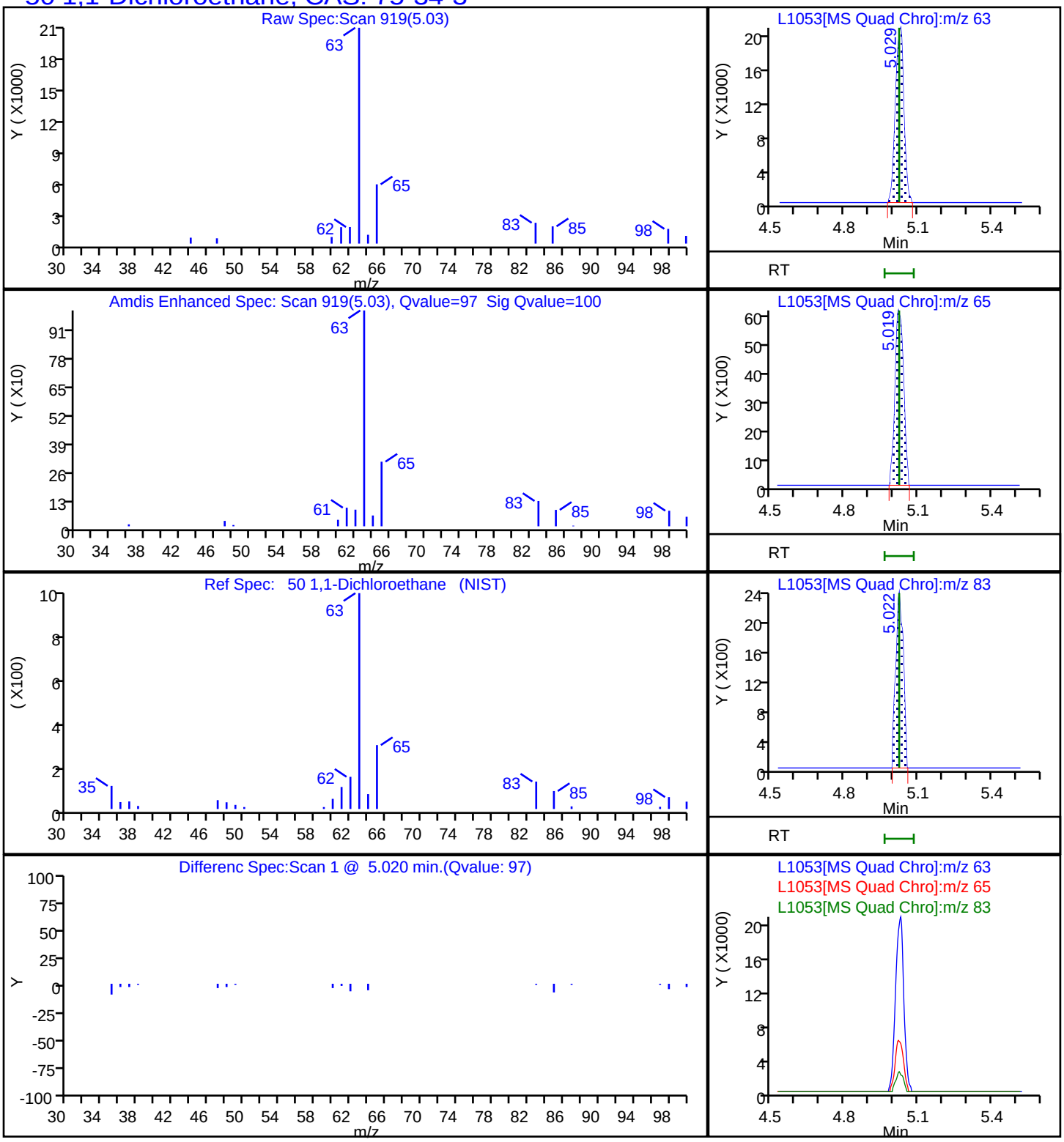


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D

Injection Date:	15-Sep-2019 20:24:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-8	Lab Sample ID:	480-158822-8		
Client ID:	356023-GW-MW-5R-93-8				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

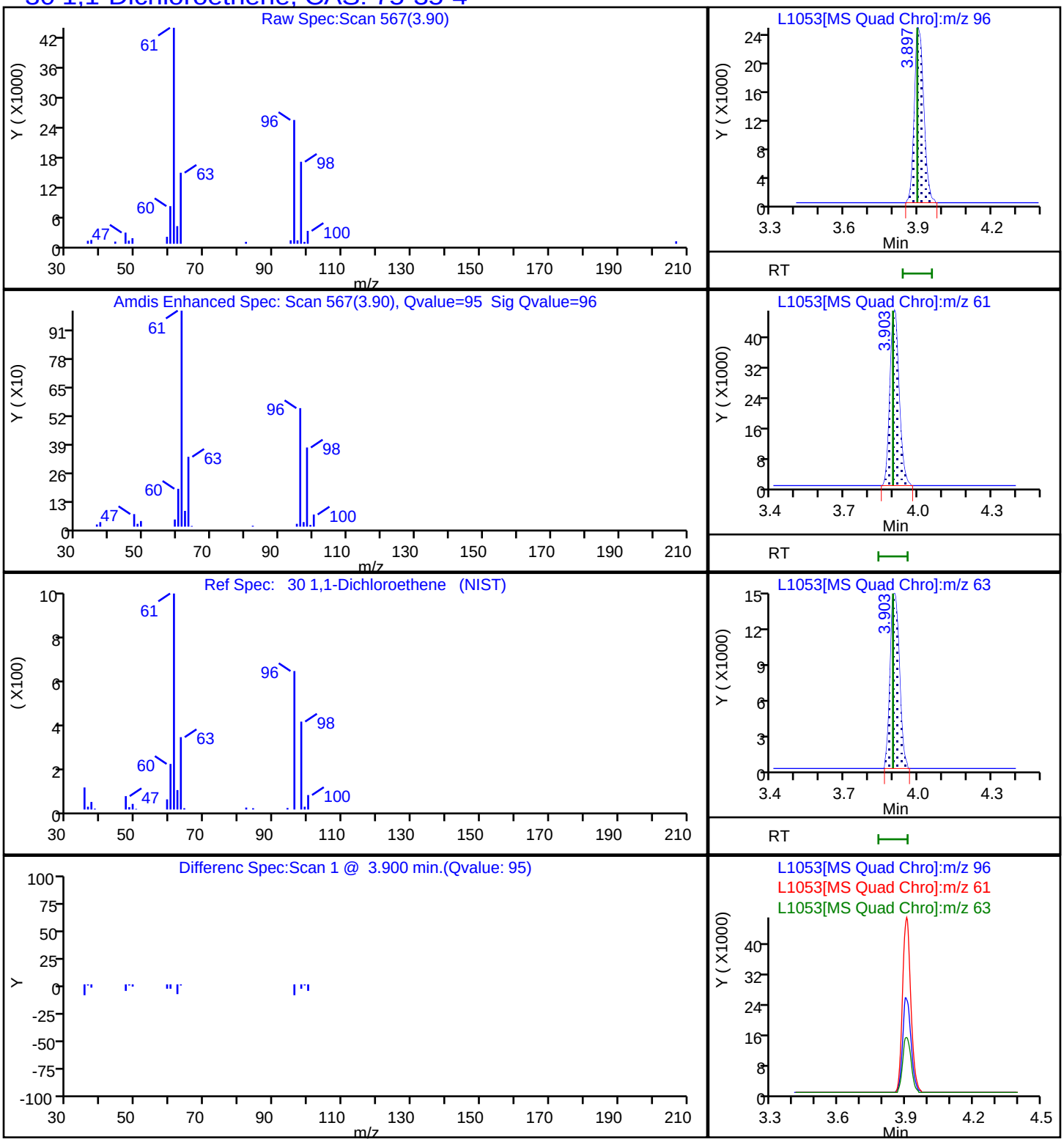
50 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D				
Injection Date:	15-Sep-2019 20:24:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-8	Lab Sample ID:	480-158822-8		
Client ID:	356023-GW-MW-5R-93-8				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

30 1,1-Dichloroethene, CAS: 75-35-4

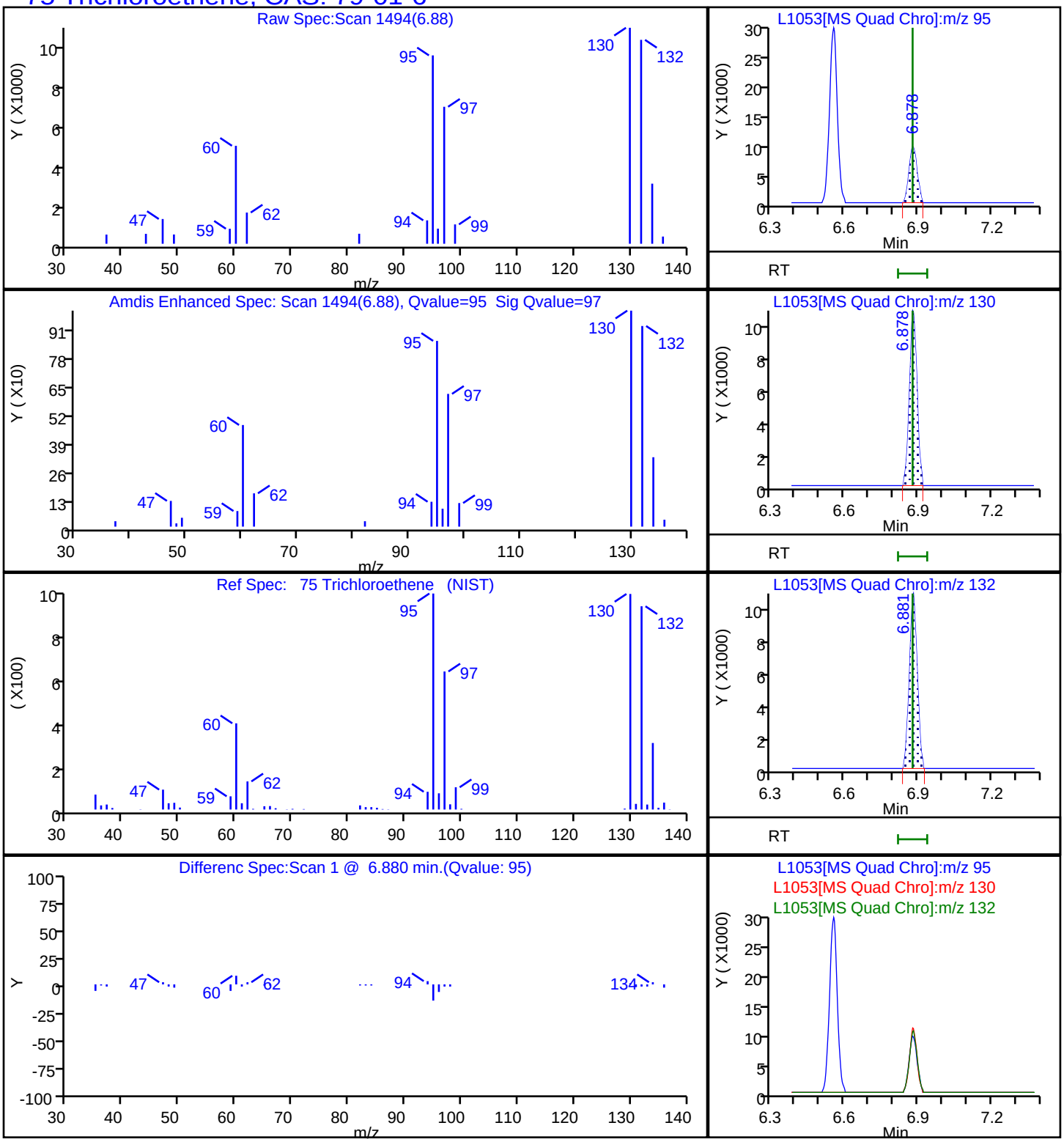


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D

Injection Date:	15-Sep-2019 20:24:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-8	Lab Sample ID:	480-158822-8		
Client ID:	356023-GW-MW-5R-93-8				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



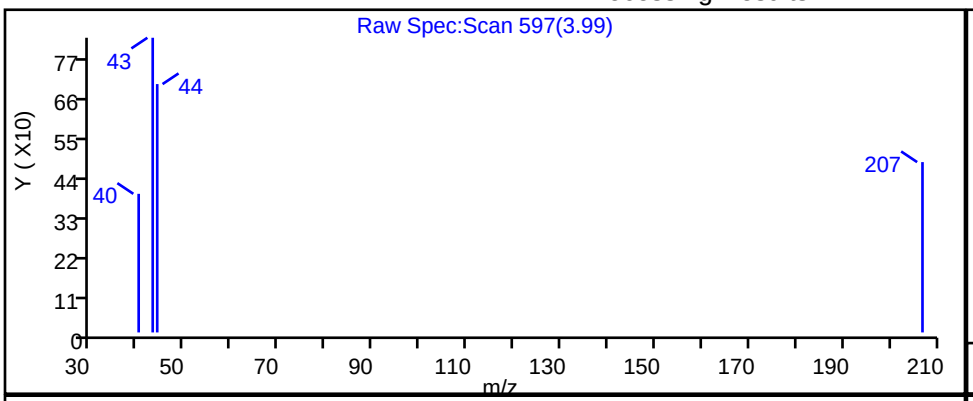
User Disabled Compound Report

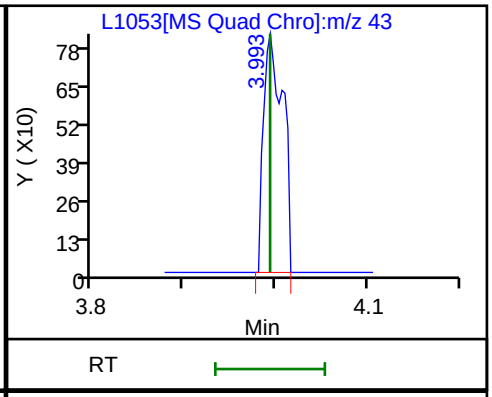
Eurofins TestAmerica, Buffalo

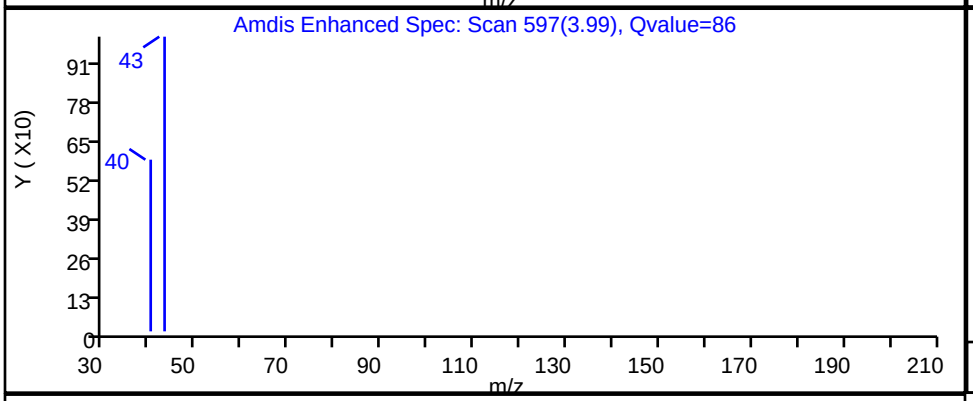
Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1053.D				
Injection Date:	15-Sep-2019 20:24:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-B-8	Lab Sample ID:	480-158822-8		
Client ID:	356023-GW-MW-5R-93-8				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

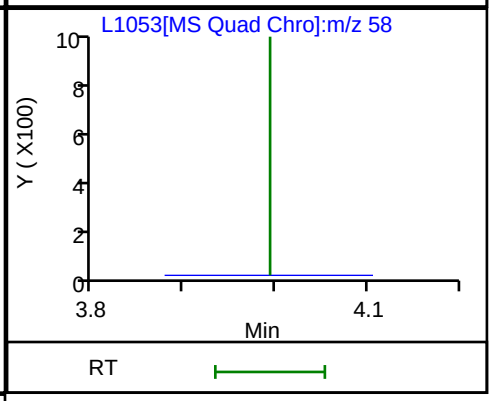
31 Acetone, CAS: 67-64-1

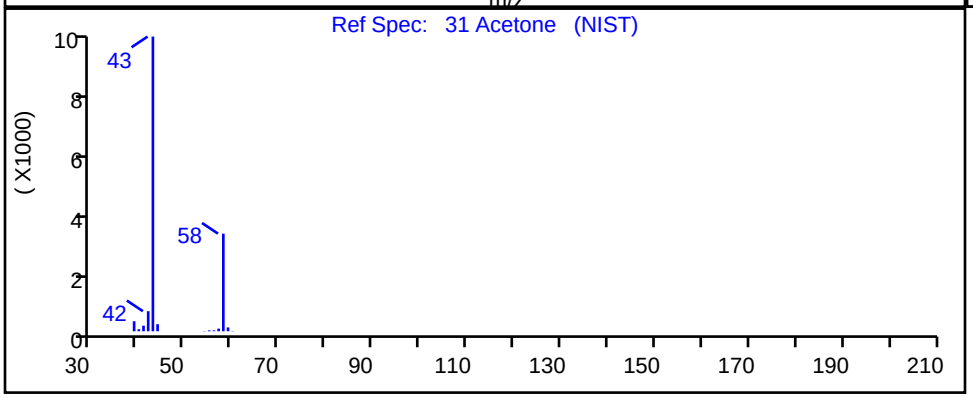
Processing Results











RT	Mass	Response	Amount
3.99	43.00	1212	0.259482
3.99	58.00	0	

Reviewer: phillipsb, 16-Sep-2019 08:42:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-9 Lab Sample ID: 480-158822-9

Matrix: Water Lab File ID: L1107.D

Analysis Method: 8260C Date Collected: 09/06/2019 07:32

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 18:47

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	230		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	18		5.0	1.9
75-35-4	1,1-Dichloroethene	55		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-9 Lab Sample ID: 480-158822-9

Matrix: Water Lab File ID: L1107.D

Analysis Method: 8260C Date Collected: 09/06/2019 07:32

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 18:47

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	15		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
460-00-4	4-Bromofluorobenzene (Surr)	110		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D
Lims ID: 480-158822-C-9
Client ID: 356023-GW-MW-5R-93-9
Sample Type: Client
Inject. Date: 16-Sep-2019 18:47:33 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-C-9
Misc. Info.: 480-0084170-027
Operator ID: BP Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Sep-2019 08:40:59 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0340

First Level Reviewer: phillipsb Date: 17-Sep-2019 08:40:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.549	0.000	99	114507	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	429836	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	236102	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.977	0.003	92	165740	27.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.295	0.000	98	207976	27.6	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	559942	25.6	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	99	169859	27.5	
10 Dichlorodifluoromethane	85		2.199				ND	
13 Chloromethane	50		2.472				ND	
14 Vinyl chloride	62		2.607				ND	
18 Bromomethane	94		2.987				ND	
19 Chloroethane	64		3.099				ND	
21 Trichlorofluoromethane	101		3.357				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.861				ND	
30 1,1-Dichloroethene	96	3.903	3.897	0.006	94	57131	10.9	
31 Acetone	43		3.990				ND	U
35 Carbon disulfide	76		4.138				ND	
38 Methyl acetate	43		4.267				ND	
39 Methylene Chloride	84		4.395				ND	U
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.617				ND	
50 1,1-Dichloroethane	63	5.022	5.019	0.003	96	41805	3.54	
58 cis-1,2-Dichloroethene	96		5.543				ND	
57 2-Butanone (MEK)	43		5.543				ND	
60 Chlorobromomethane	128		5.781				ND	
62 Chloroform	83		5.823				ND	
64 1,1,1-Trichloroethane	97	5.971	5.964	0.007	98	389485	45.1	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.102				ND	
70 Benzene	78		6.311				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.881	6.877	0.004	95	18042	3.00	
76 Methylcyclohexane	83		7.006				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.234				ND	
83 Dichlorobromomethane	83		7.385				ND	
85 cis-1,3-Dichloropropene	75		7.784				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.324				ND	
93 1,1,2-Trichloroethane	83		8.530				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.958				ND	
101 Ethylene Dibromide	107		9.093				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.717				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.180				ND	
110 Bromoform	173		10.459				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.819				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835				ND	
130 1,2,4-Trichlorobenzene	180		13.507				ND	
133 1,2,3-Trichlorobenzene	180		13.996				ND	
S 143 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

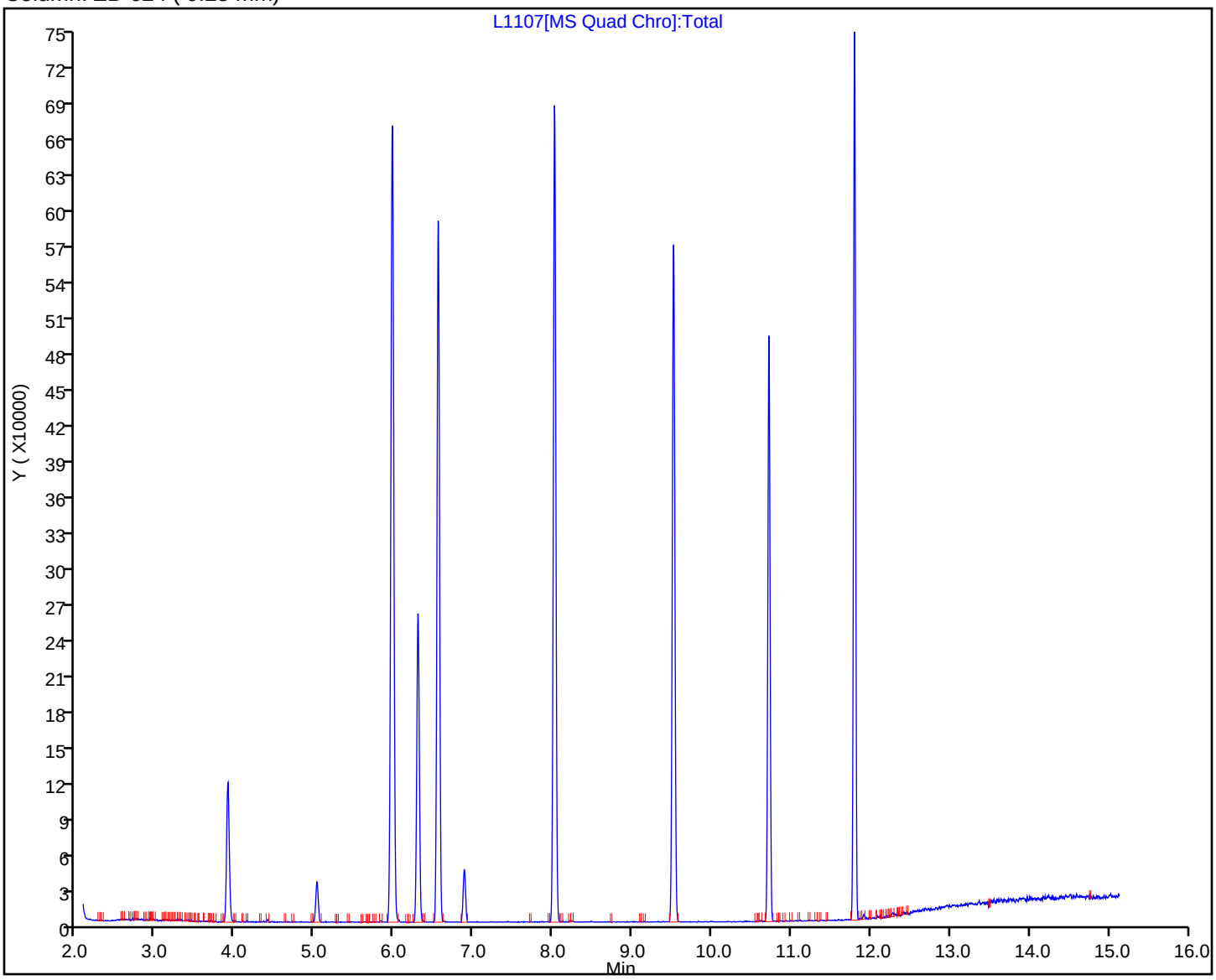
Report Date: 17-Sep-2019 08:40:59 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D

Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)

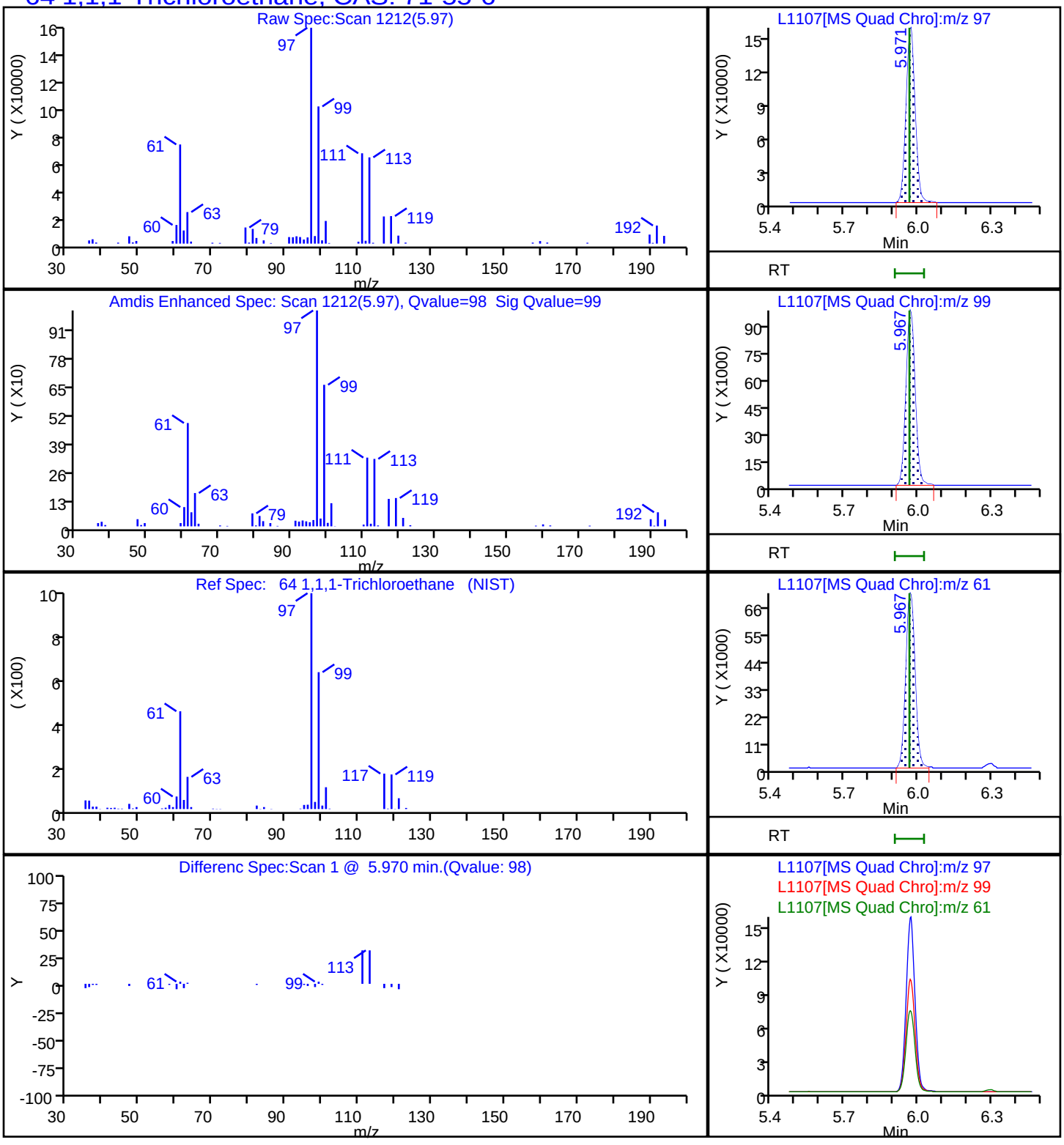


Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D

Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

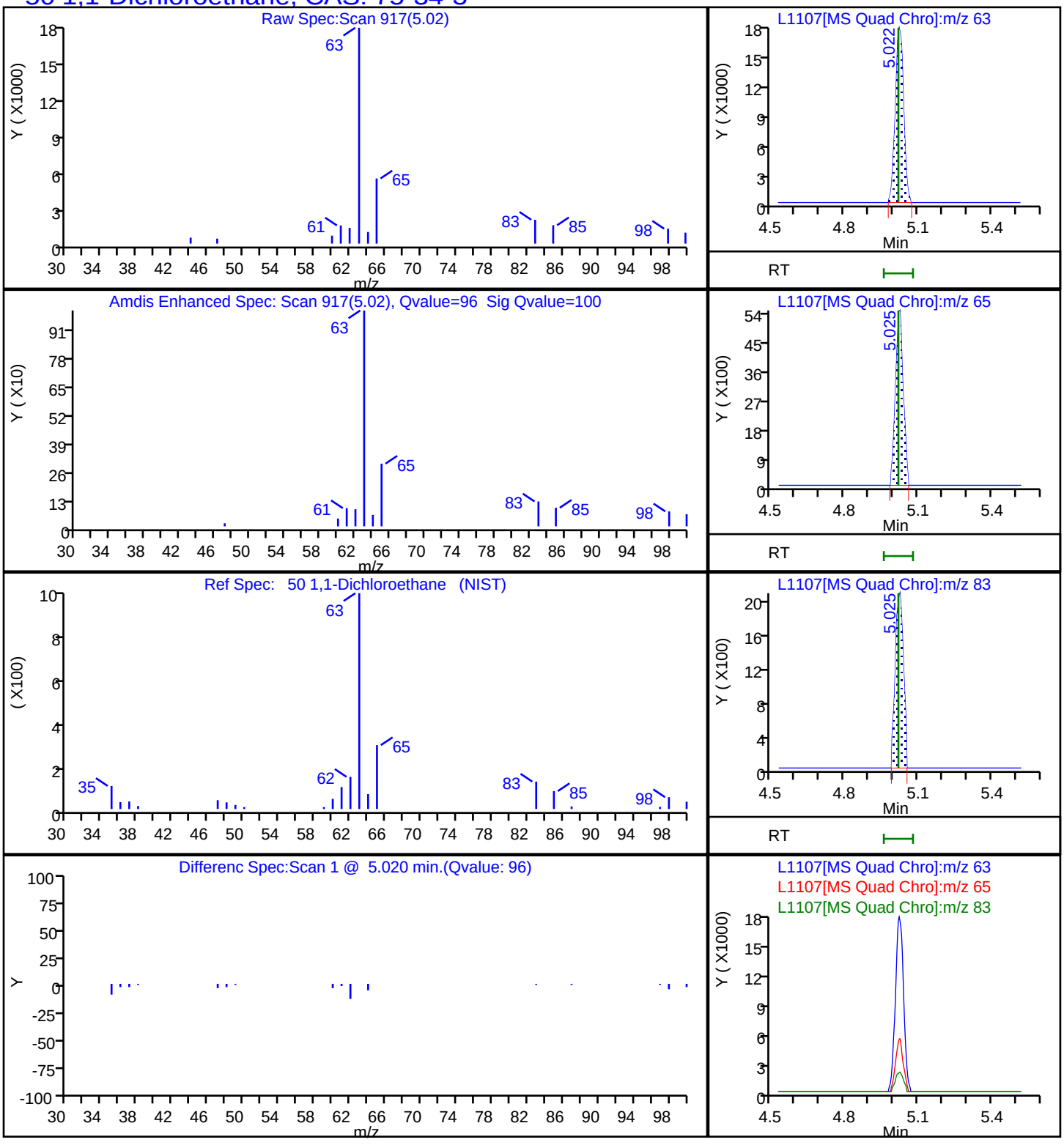
64 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D				
Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

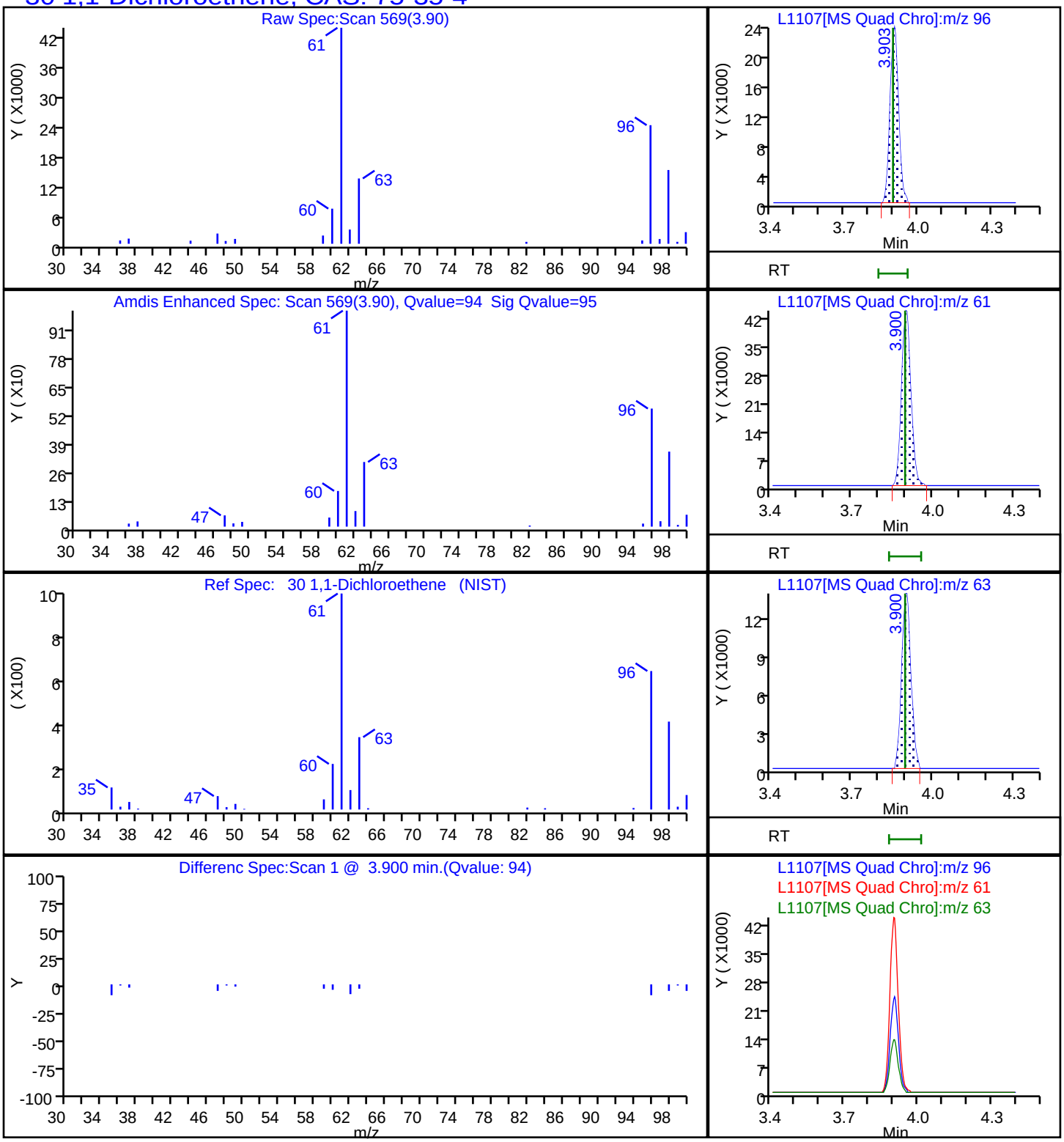
50 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D				
Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

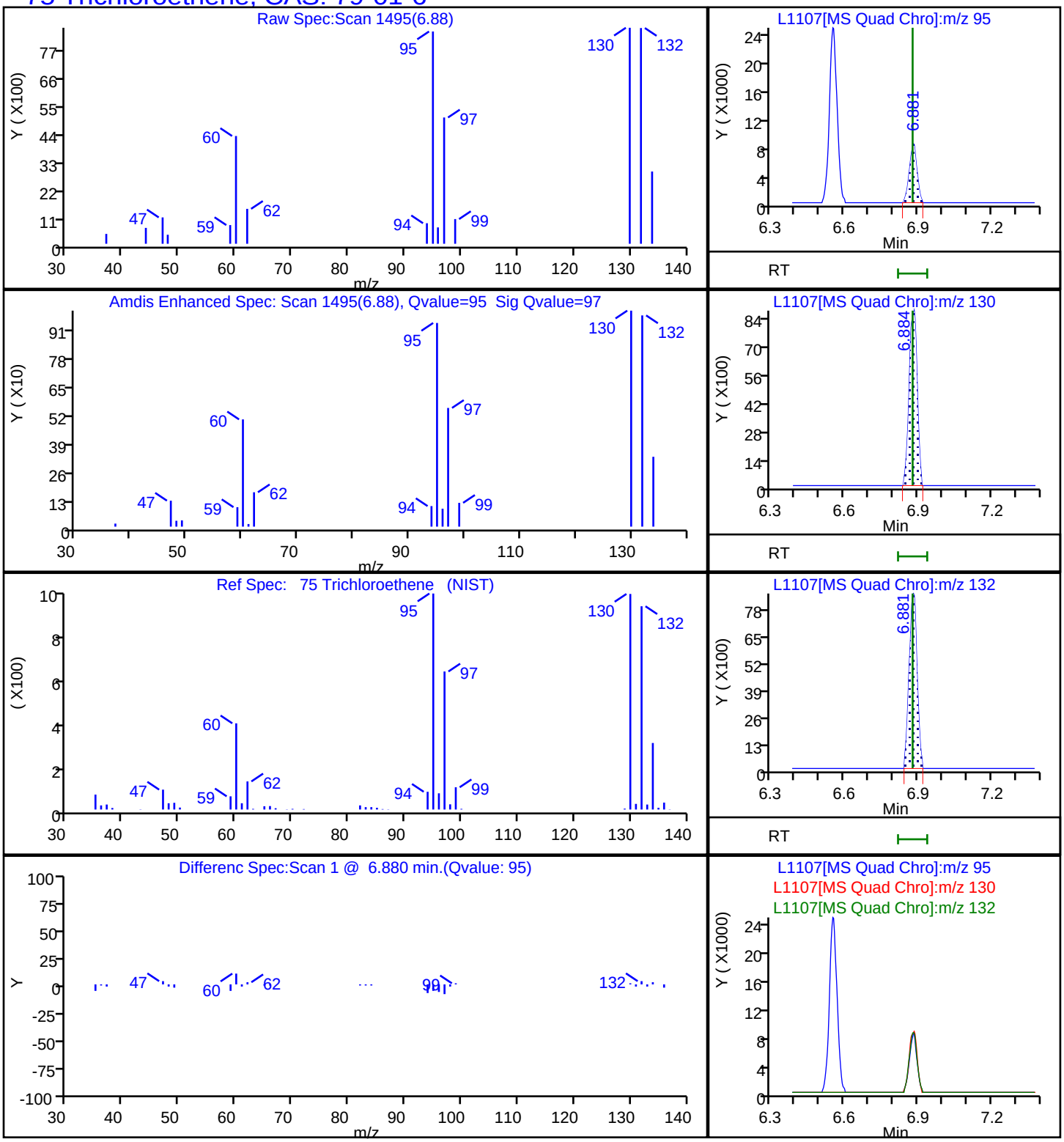
30 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D				
Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



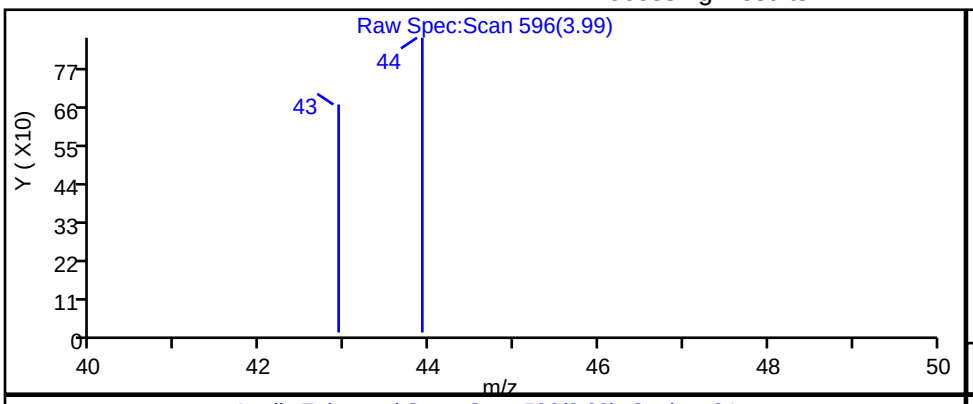
User Disabled Compound Report

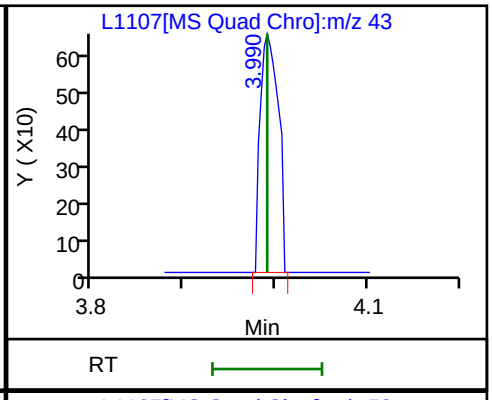
Eurofins TestAmerica, Buffalo

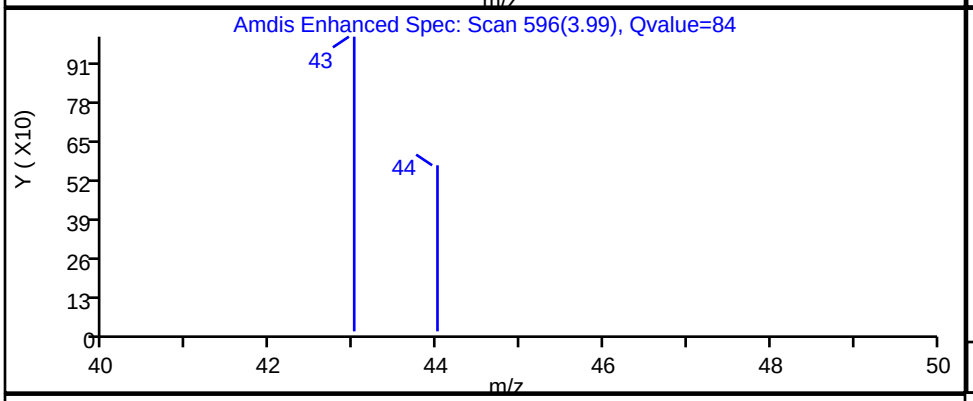
Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D				
Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

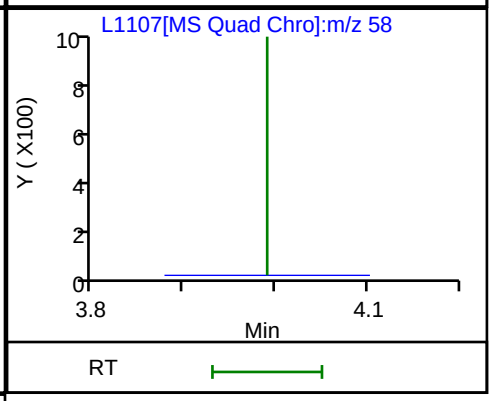
31 Acetone, CAS: 67-64-1

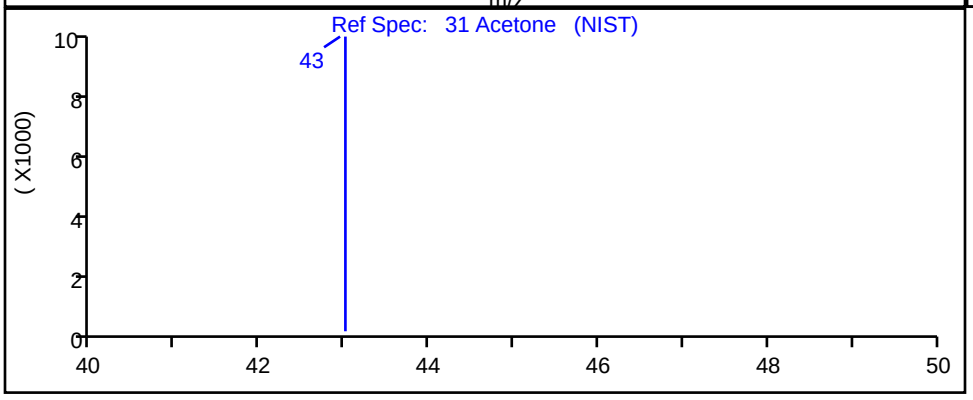
Processing Results











RT	Mass	Response	Amount
3.99	43.00	903	0.237421
3.99	58.00	0	

Reviewer: phillipsb, 17-Sep-2019 08:40:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

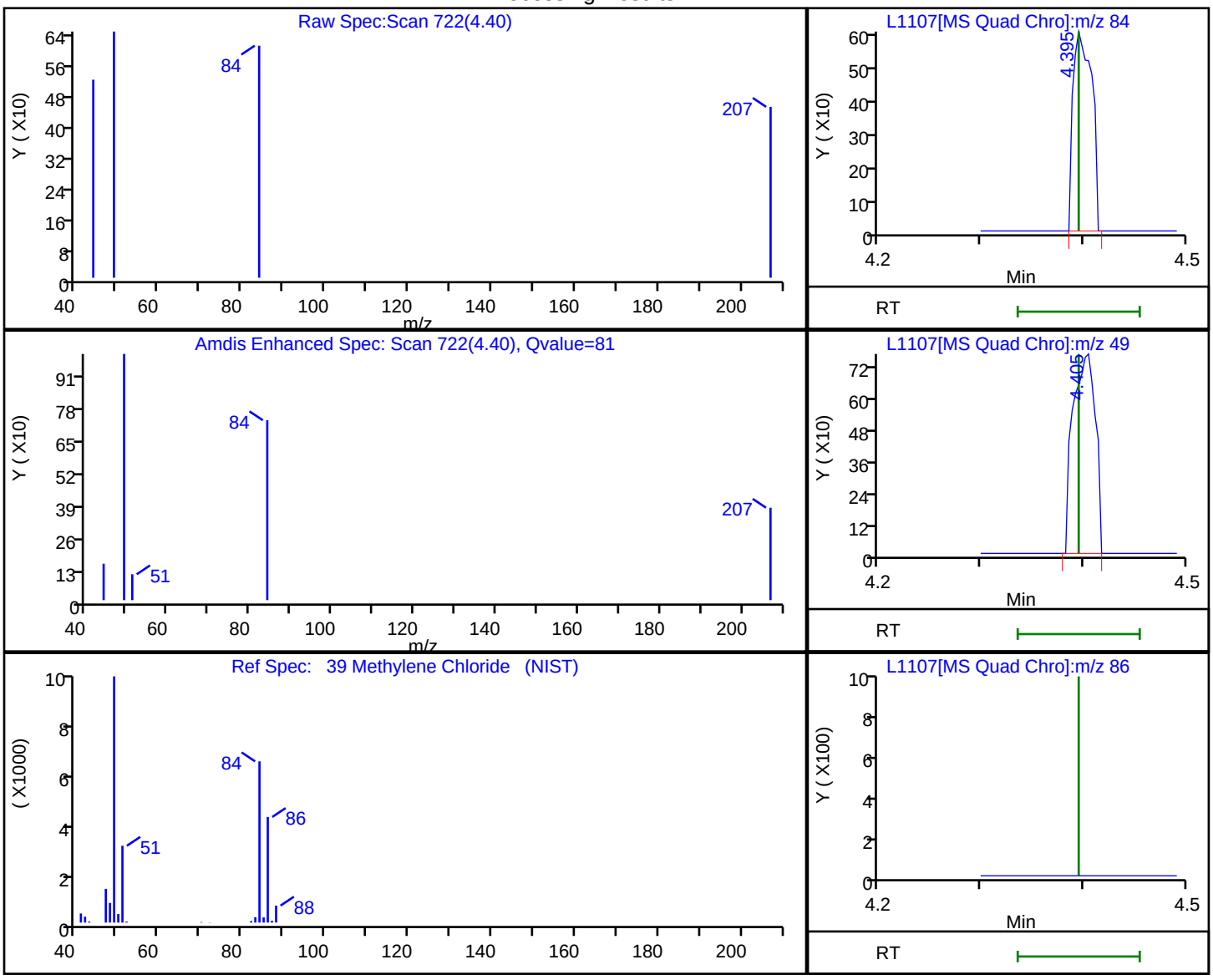
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1107.D				
Injection Date:	16-Sep-2019 18:47:33	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-9	Lab Sample ID:	480-158822-9		
Client ID:	356023-GW-MW-5R-93-9				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

39 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.40	84.00	777	-0.513816
4.40	49.00	1165	
4.40	86.00	0	

Reviewer: phillipsb, 17-Sep-2019 08:40:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-10 Lab Sample ID: 480-158822-10

Matrix: Water Lab File ID: L1108.D

Analysis Method: 8260C Date Collected: 09/06/2019 12:15

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 19:12

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	230		5.0	4.1
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	1.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6
79-00-5	1,1,2-Trichloroethane	ND		5.0	1.2
75-34-3	1,1-Dichloroethane	17		5.0	1.9
75-35-4	1,1-Dichloroethene	55		5.0	1.5
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	2.1
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	2.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.0
106-93-4	1,2-Dibromoethane	ND		5.0	3.7
95-50-1	1,2-Dichlorobenzene	ND		5.0	4.0
107-06-2	1,2-Dichloroethane	ND		5.0	1.1
78-87-5	1,2-Dichloropropane	ND		5.0	3.6
541-73-1	1,3-Dichlorobenzene	ND		5.0	3.9
106-46-7	1,4-Dichlorobenzene	ND		5.0	4.2
123-91-1	1,4-Dioxane	ND		200	47
78-93-3	2-Butanone (MEK)	ND		50	6.6
591-78-6	2-Hexanone	ND		25	6.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	11
67-64-1	Acetone	ND		50	15
71-43-2	Benzene	ND		5.0	2.1
74-97-5	Bromochloromethane	ND		5.0	4.4
75-27-4	Bromodichloromethane	ND		5.0	2.0
75-25-2	Bromoform	ND		5.0	1.3
74-83-9	Bromomethane	ND		5.0	3.5
75-15-0	Carbon disulfide	ND		5.0	0.95
56-23-5	Carbon tetrachloride	ND		5.0	1.4
108-90-7	Chlorobenzene	ND		5.0	3.8
75-00-3	Chloroethane	ND		5.0	1.6
67-66-3	Chloroform	ND		5.0	1.7
74-87-3	Chloromethane	ND		5.0	1.8
156-59-2	cis-1,2-Dichloroethene	ND		5.0	4.1
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	1.8
110-82-7	Cyclohexane	ND		5.0	0.90
124-48-1	Dibromochloromethane	ND		5.0	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: 356023-GW-MW-5R-93-10 Lab Sample ID: 480-158822-10

Matrix: Water Lab File ID: L1108.D

Analysis Method: 8260C Date Collected: 09/06/2019 12:15

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 19:12

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		5.0	3.4
100-41-4	Ethylbenzene	ND		5.0	3.7
98-82-8	Isopropylbenzene	ND		5.0	4.0
79-20-9	Methyl acetate	ND		13	6.5
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.80
108-87-2	Methylcyclohexane	ND		5.0	0.80
75-09-2	Methylene Chloride	ND		5.0	2.2
100-42-5	Styrene	ND		5.0	3.7
127-18-4	Tetrachloroethene	ND		5.0	1.8
108-88-3	Toluene	ND		5.0	2.6
156-60-5	trans-1,2-Dichloroethene	ND		5.0	4.5
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	1.9
79-01-6	Trichloroethene	16		5.0	2.3
75-69-4	Trichlorofluoromethane	ND		5.0	4.4
75-01-4	Vinyl chloride	ND		5.0	4.5
1330-20-7	Xylenes, Total	ND		10	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D
Lims ID: 480-158822-C-10
Client ID: 356023-GW-MW-5R-93-10
Sample Type: Client
Inject. Date: 16-Sep-2019 19:12:00 ALS Bottle#: 0 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 5.0000
Sample Info: 480-158822-C-10
Misc. Info.: 480-0084170-028
Operator ID: BP Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Sep-2019 08:41:53 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0340

First Level Reviewer: phillipsb Date: 17-Sep-2019 08:41:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.549	0.000	99	116244	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	431531	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	223429	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.977	0.000	93	165361	26.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.295	0.000	98	207150	27.1	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	94	564769	25.8	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.001	99	165918	26.8	
10 Dichlorodifluoromethane	85		2.199				ND	
13 Chloromethane	50		2.472				ND	
14 Vinyl chloride	62		2.607				ND	
18 Bromomethane	94		2.987				ND	
19 Chloroethane	64		3.099				ND	
21 Trichlorofluoromethane	101		3.357				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.861				ND	
30 1,1-Dichloroethene	96	3.900	3.897	0.003	93	58642	11.1	
31 Acetone	43		3.990				ND	U
35 Carbon disulfide	76		4.138				ND	
38 Methyl acetate	43		4.267				ND	
39 Methylene Chloride	84		4.395				ND	U
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.617				ND	
50 1,1-Dichloroethane	63	5.025	5.019	0.006	96	41752	3.49	
58 cis-1,2-Dichloroethene	96		5.543				ND	
57 2-Butanone (MEK)	43		5.543				ND	
60 Chlorobromomethane	128		5.781				ND	
62 Chloroform	83		5.823				ND	
64 1,1,1-Trichloroethane	97	5.967	5.964	0.003	98	396109	45.2	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.102				ND	
70 Benzene	78		6.311				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95	6.877	6.877	0.000	95	18936	3.11	
76 Methylcyclohexane	83		7.006				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.234				ND	
83 Dichlorobromomethane	83		7.385				ND	
85 cis-1,3-Dichloropropene	75		7.784				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.324				ND	
93 1,1,2-Trichloroethane	83		8.530				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.958				ND	
101 Ethylene Dibromide	107		9.093				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.717				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.180				ND	
110 Bromoform	173		10.459				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.819				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835				ND	
130 1,2,4-Trichlorobenzene	180		13.507				ND	
133 1,2,3-Trichlorobenzene	180		13.996				ND	
S 143 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 17-Sep-2019 08:41:54 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D

Injection Date: 16-Sep-2019 19:12:00 Instrument ID: HP5977L

Lims ID: 480-158822-C-10 Lab Sample ID: 480-158822-10

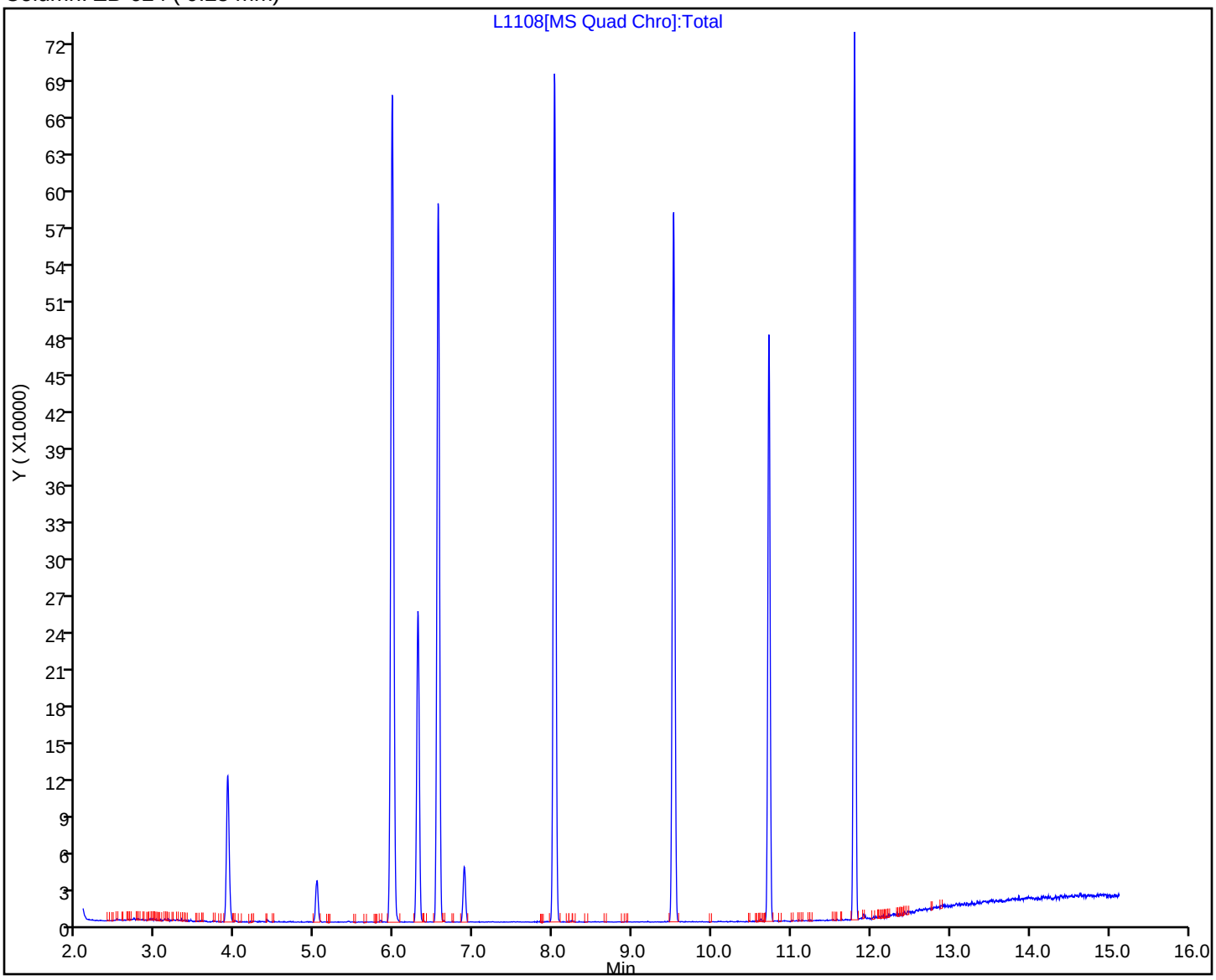
Client ID: 356023-GW-MW-5R-93-10

Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 28

Purge Vol: 5.000 mL Dil. Factor: 5.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

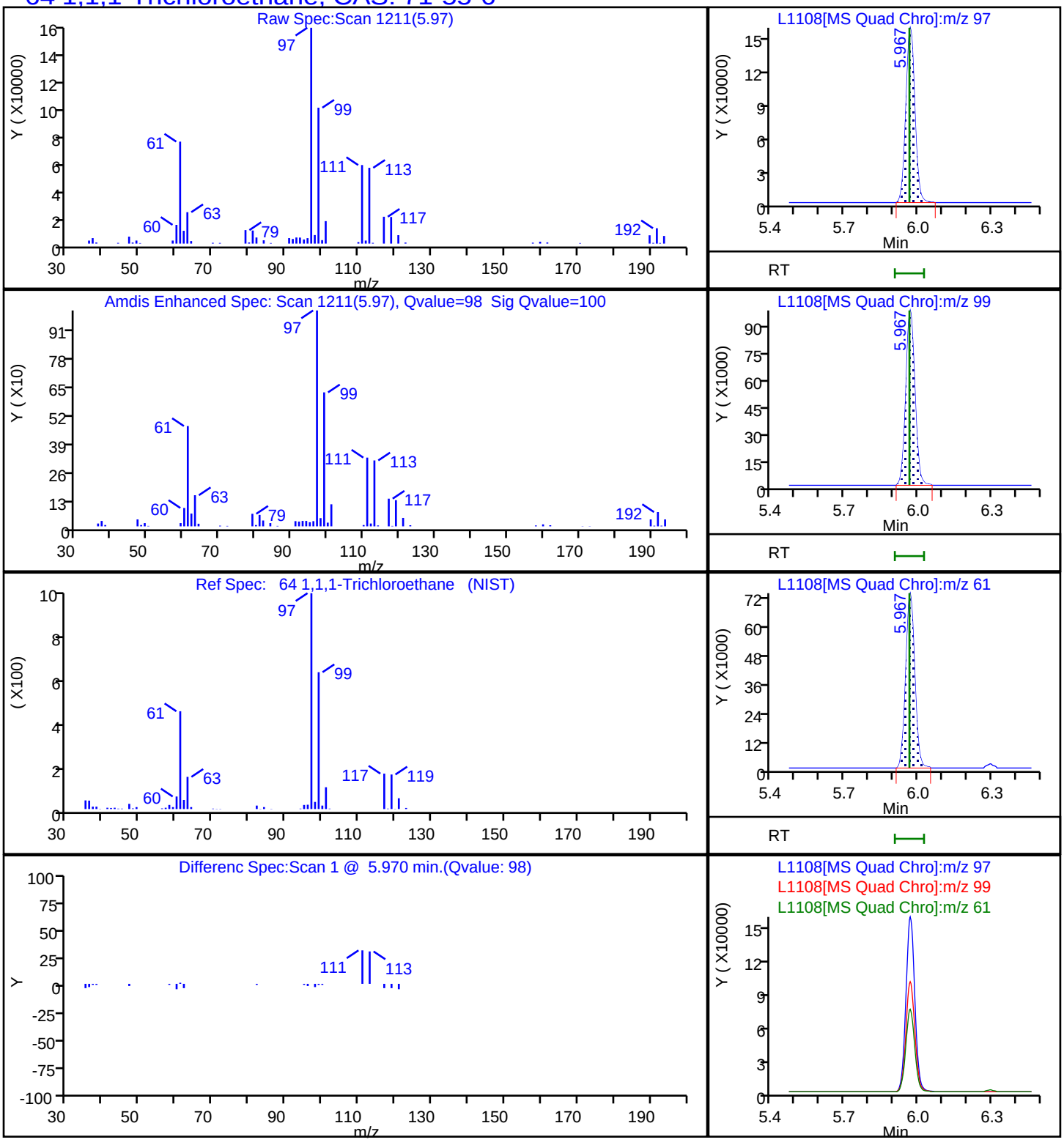
Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D				
Injection Date:	16-Sep-2019 19:12:00	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-10	Lab Sample ID:	480-158822-10		
Client ID:	356023-GW-MW-5R-93-10				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

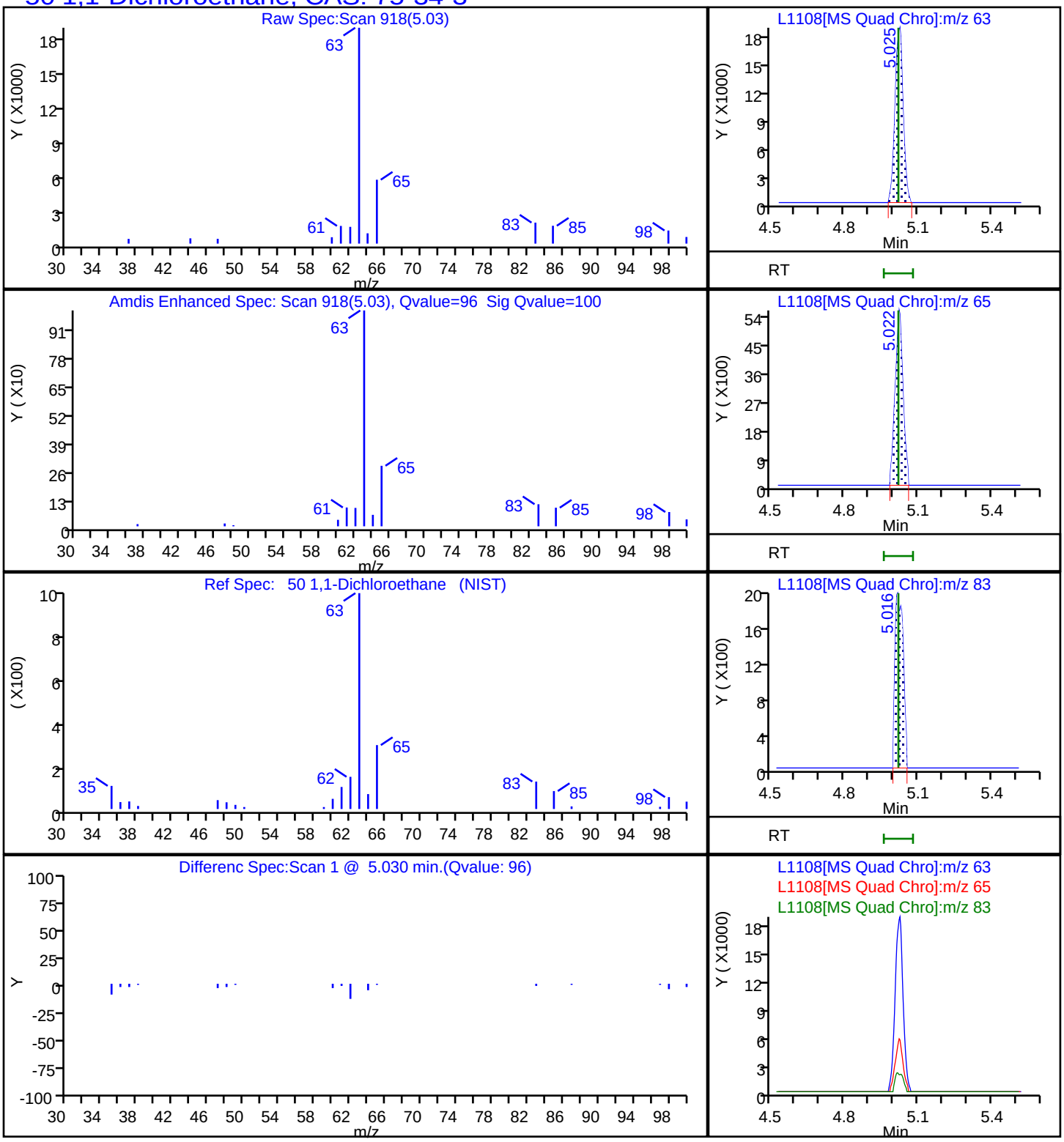
64 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D				
Injection Date:	16-Sep-2019 19:12:00	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-10	Lab Sample ID:	480-158822-10		
Client ID:	356023-GW-MW-5R-93-10				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

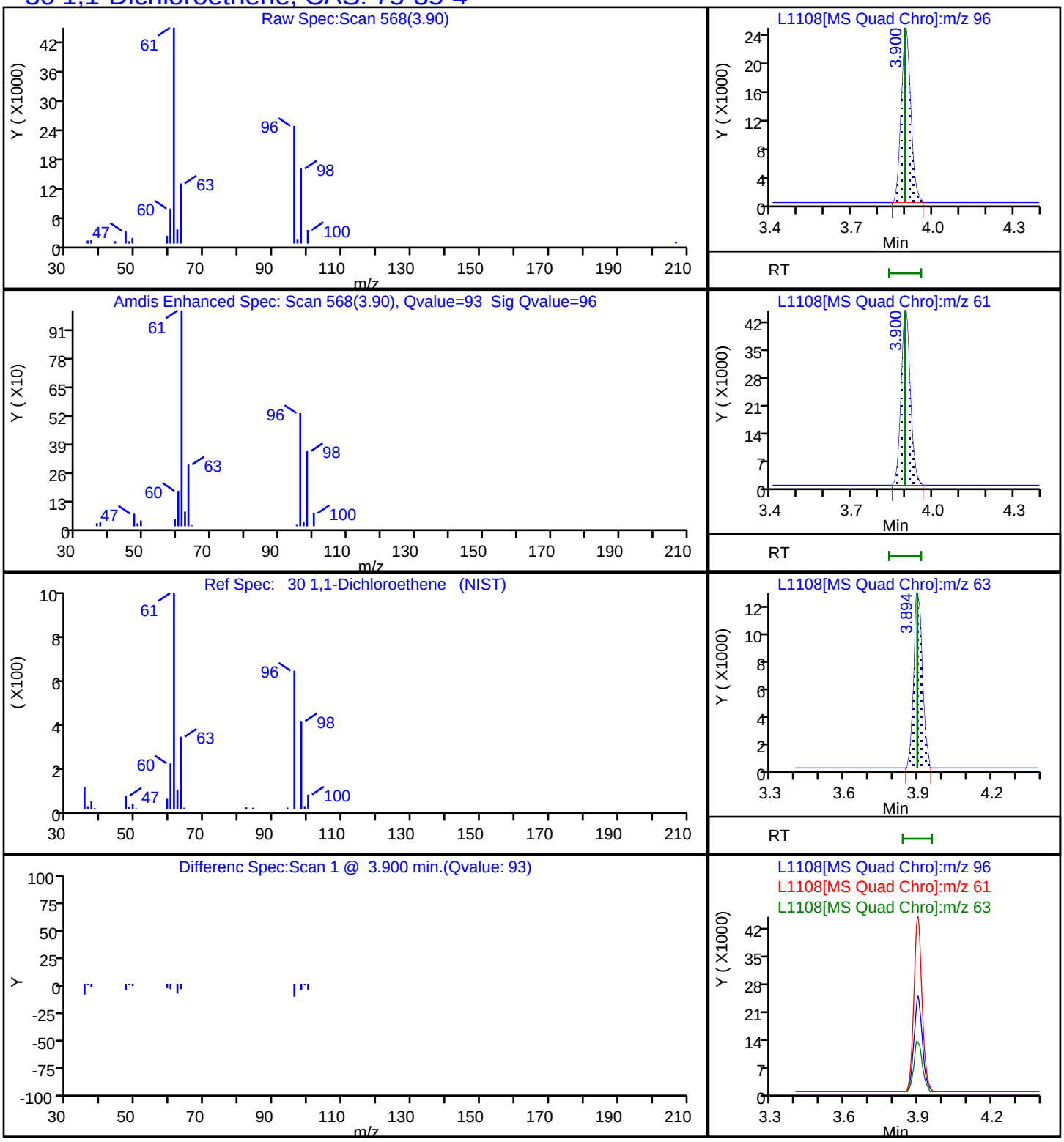
50 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D				
Injection Date:	16-Sep-2019 19:12:00	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-10	Lab Sample ID:	480-158822-10		
Client ID:	356023-GW-MW-5R-93-10				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

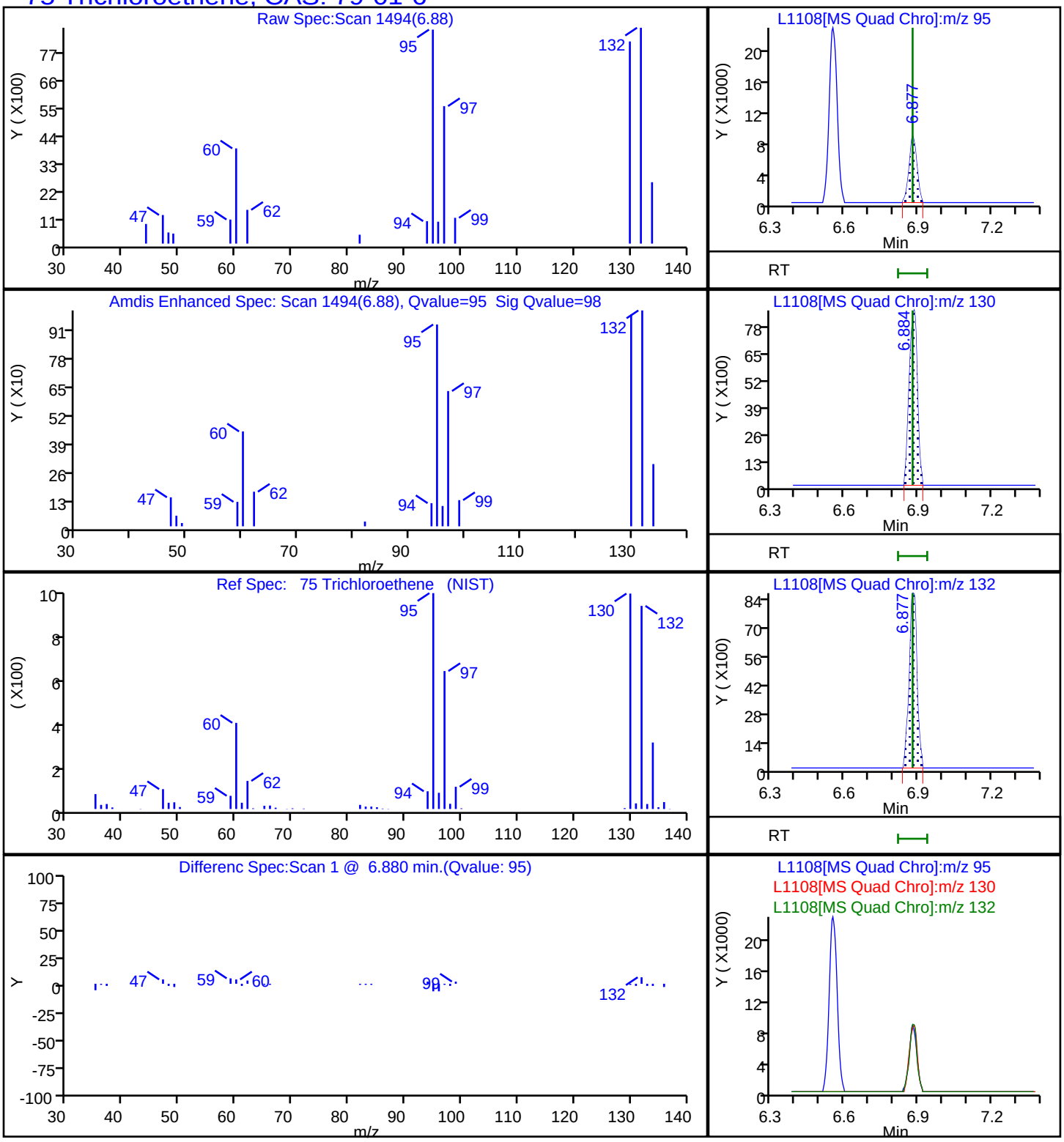
30 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D				
Injection Date:	16-Sep-2019 19:12:00	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-10	Lab Sample ID:	480-158822-10		
Client ID:	356023-GW-MW-5R-93-10				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

75 Trichloroethene, CAS: 79-01-6



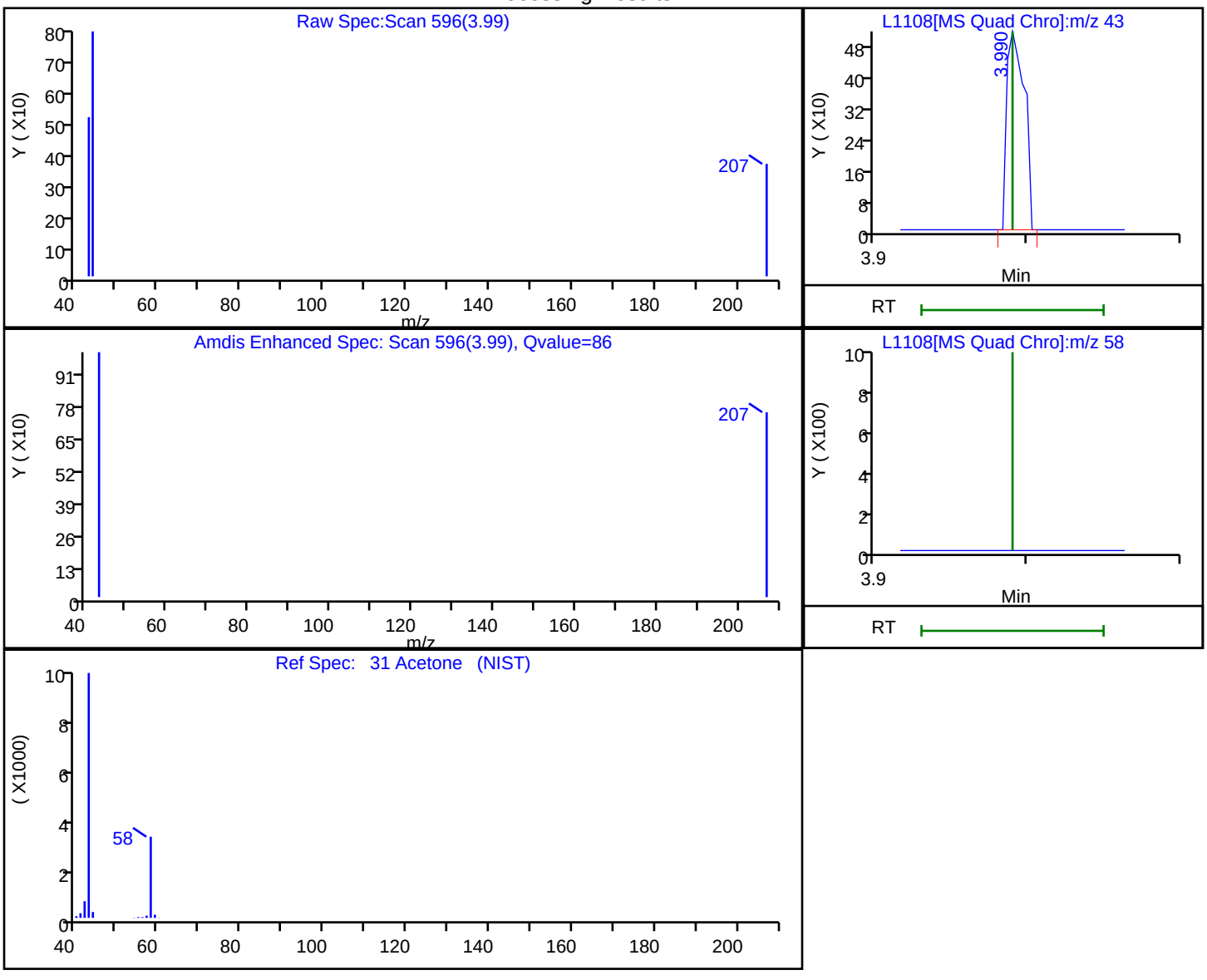
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D				
Injection Date:	16-Sep-2019 19:12:00	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-10	Lab Sample ID:	480-158822-10		
Client ID:	356023-GW-MW-5R-93-10				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

31 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.99	43.00	412	0.106706
3.99	58.00	0	

Reviewer: phillipsb, 17-Sep-2019 08:41:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

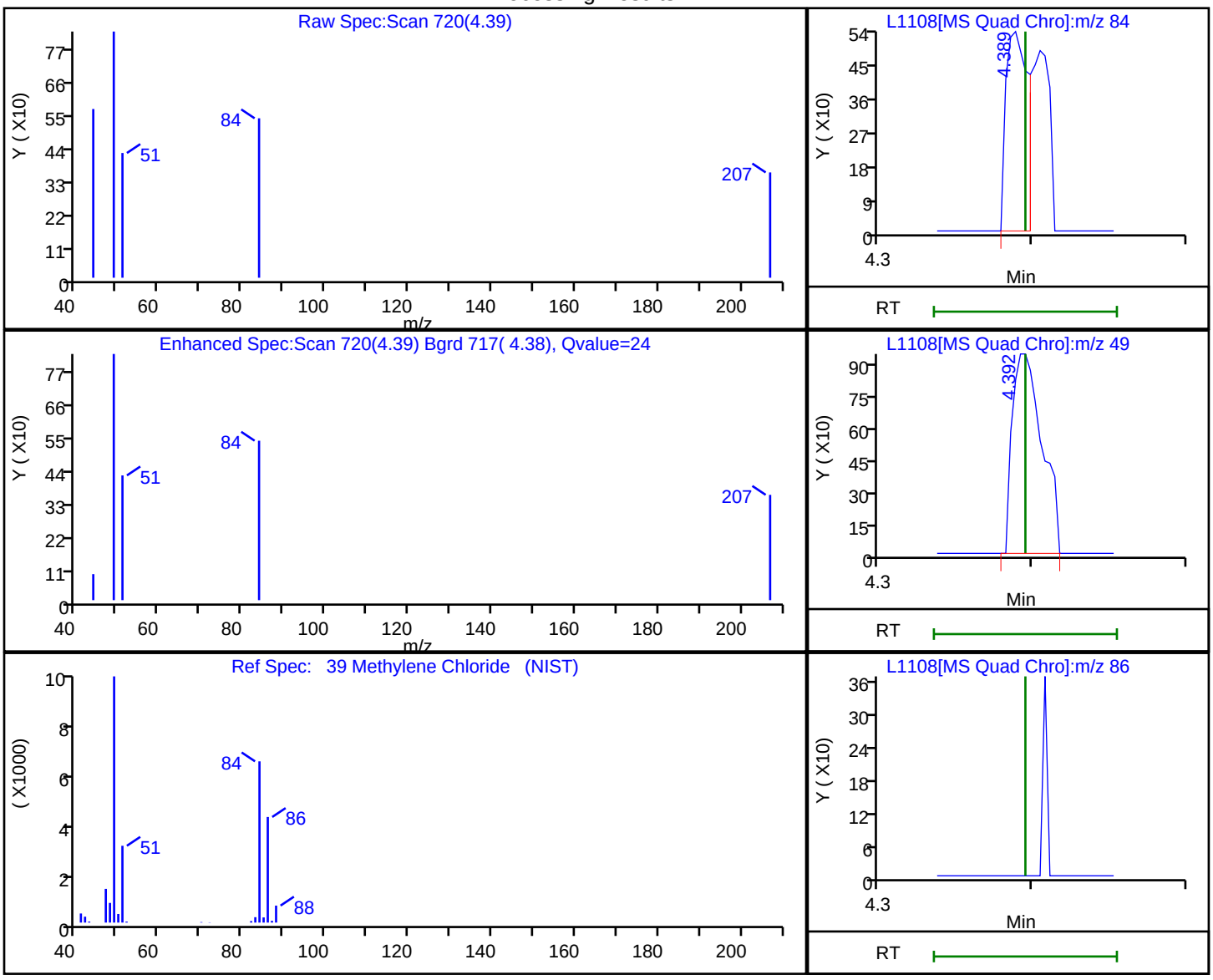
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1108.D				
Injection Date:	16-Sep-2019 19:12:00	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-10	Lab Sample ID:	480-158822-10		
Client ID:	356023-GW-MW-5R-93-10				
Operator ID:	BP	ALS Bottle#:	0	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	5.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS Quad		

39 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
4.39	84.00	537	-0.553123
4.39	49.00	1283	
4.40	86.00	0	

Reviewer: phillipsb, 17-Sep-2019 08:41:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: TRIP BLANK 2 Lab Sample ID: 480-158822-11

Matrix: Water Lab File ID: L0998.D

Analysis Method: 8260C Date Collected: 09/03/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 21:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: TRIP BLANK 2 Lab Sample ID: 480-158822-11

Matrix: Water Lab File ID: L0998.D

Analysis Method: 8260C Date Collected: 09/03/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 21:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0998.D
Lims ID: 480-158822-C-11
Client ID: TRIP BLANK 2
Sample Type: Client
Inject. Date: 14-Sep-2019 21:41:08 ALS Bottle#: 0 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-158822-C-11
Misc. Info.: 480-0084141-027
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 08:55:50 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0311

First Level Reviewer: moffata Date: 15-Sep-2019 08:56:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	163112	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	606569	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.794	0.003	96	322839	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.980	0.003	93	223429	25.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.296	0.000	98	277101	25.8	
$ 6 Toluene-d8 (Surr)	98	8.019	8.018	0.003	93	782988	25.4	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.720	0.000	99	226794	26.0	
10 Dichlorodifluoromethane	85		2.202				ND	
13 Chloromethane	50		2.476				ND	
14 Vinyl chloride	62		2.614				ND	
18 Bromomethane	94		2.997				ND	
19 Chloroethane	64		3.109				ND	
21 Trichlorofluoromethane	101		3.366				ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.868				ND	
30 1,1-Dichloroethene	96		3.900				ND	
31 Acetone	43	3.990	3.993	-0.003	96	4083	0.7536	
35 Carbon disulfide	76		4.144				ND	
38 Methyl acetate	43		4.270				ND	
39 Methylene Chloride	84		4.398				ND	
41 Methyl tert-butyl ether	73		4.575				ND	
42 trans-1,2-Dichloroethene	96		4.620				ND	
50 1,1-Dichloroethane	63		5.022				ND	
58 cis-1,2-Dichloroethene	96		5.546				ND	
57 2-Butanone (MEK)	43		5.546				ND	
60 Chlorobromomethane	128		5.781				ND	
62 Chloroform	83		5.826				ND	
64 1,1,1-Trichloroethane	97		5.968				ND	
65 Cyclohexane	56		5.987				ND	
66 Carbon tetrachloride	117		6.106				ND	
70 Benzene	78		6.312				ND	
72 1,2-Dichloroethane	62		6.363				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
75 Trichloroethene	95		6.877				ND	
76 Methylcyclohexane	83		7.009				ND	
77 1,2-Dichloropropane	63		7.125				ND	
81 1,4-Dioxane	88		7.238				ND	
83 Dichlorobromomethane	83		7.386				ND	
85 cis-1,3-Dichloropropene	75		7.784				ND	
87 4-Methyl-2-pentanone (MIBK	43		7.890				ND	
88 Toluene	92		8.083				ND	
91 trans-1,3-Dichloropropene	75		8.324				ND	
93 1,1,2-Trichloroethane	83		8.533				ND	
94 Tetrachloroethene	166		8.620				ND	
96 2-Hexanone	43		8.710				ND	
98 Chlorodibromomethane	129		8.958				ND	
101 Ethylene Dibromide	107		9.090				ND	
103 Chlorobenzene	112		9.546				ND	
104 Ethylbenzene	91		9.604				ND	
106 m-Xylene & p-Xylene	106		9.717				ND	
107 o-Xylene	106		10.154				ND	
109 Styrene	104		10.180				ND	
110 Bromoform	173		10.459				ND	
111 Isopropylbenzene	105		10.501				ND	
112 1,1,2,2-Tetrachloroethane	83		10.877				ND	
124 1,3-Dichlorobenzene	146		11.739				ND	
126 1,4-Dichlorobenzene	146		11.816				ND	
128 1,2-Dichlorobenzene	146		12.160				ND	
129 1,2-Dibromo-3-Chloropropan	75		12.836				ND	
130 1,2,4-Trichlorobenzene	180		13.508				ND	
133 1,2,3-Trichlorobenzene	180		13.993				ND	
S 143 Xylenes, Total	1		30.000				ND	

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

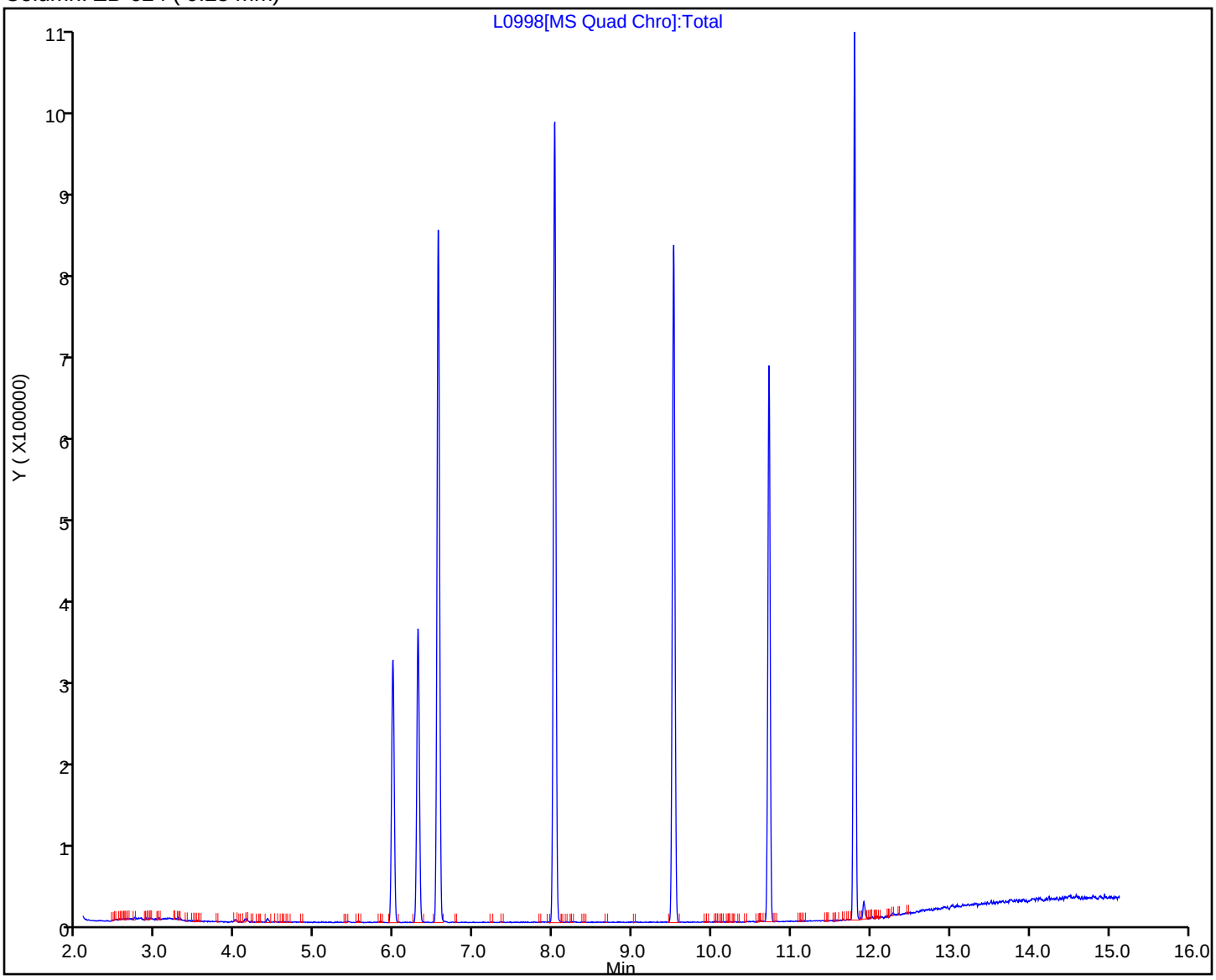
Report Date: 15-Sep-2019 08:56:27 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0998.D

Injection Date:	14-Sep-2019 21:41:08	Instrument ID:	HP5977L		
Lims ID:	480-158822-C-11	Lab Sample ID:	480-158822-11		
Client ID:	TRIP BLANK 2				
Operator ID:	OI	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	L-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-491176/7	S8768.D
Level 2	IC 480-491176/8	S8769.D
Level 3	IC 480-491176/9	S8770.D
Level 4	IC 480-491176/10	S8771.D
Level 5	IC 480-491176/11	S8772.D
Level 6	ICIS 480-491176/12	S8773.D
Level 7	IC 480-491176/13	S8774.D
Level 8	IC 480-491176/14	S8775.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.5947 1.6931	1.7035 1.9179	1.7705 1.7898	1.8106	1.8443	Ave		1.7656			0.1000	5.7		20.0			
Chloromethane	2.2895 1.7459	2.0763 2.0225	1.9929 1.7797	1.9852	1.8753	Ave		1.9709			0.1000	8.8		20.0			
Vinyl chloride	1.5351 1.4377	1.8385 1.7933	1.5670 1.6359	1.7450	1.6452	Ave		1.6497			0.1000	8.3		20.0			
Butadiene	2.0361 1.6789	1.9668 1.9797	1.9127 1.8025	1.9598	1.8407	Ave		1.8972				6.1		20.0			
Bromomethane	1.3902 1.0071	1.3045 1.1309	1.2679 1.0193	1.1024	1.1170	Ave		1.1674			0.1000	11.9		20.0			
Chloroethane	1.2376 0.9541	1.1784 1.0872	1.1914 1.0123	1.1103	1.0651	Ave		1.1046			0.1000	8.6		20.0			
Dichlorofluoromethane	2.9107 2.0350	2.7787 2.3323	2.3319 2.1115	2.3499	2.2707	Ave		2.3901				12.7		20.0			
Trichlorofluoromethane	2.3786 2.0328	2.2724 2.4936	2.1897 2.2491	2.3226	2.2634	Ave		2.2753			0.1000	5.9		20.0			
Ethyl ether	1.2675 1.3002	1.2815 1.3526	1.4739 1.3527	1.3614	1.3324	Ave		1.3403				4.8		20.0			
Acrolein	0.2247 0.2039	0.2475 0.2275	0.2539 0.2448	0.1948	0.1987	Ave		0.2245				10.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.1680 1.1938	1.0970 1.2626	1.4306 1.3476	1.3189	1.2227	Ave		1.2551			0.1000	8.6		20.0			
1,1-Dichloroethene	1.1045 1.1336	1.3289 1.1950	1.3631 1.2283	1.2988	1.1709	Ave		1.2279			0.1000	7.7		20.0			
Acetone	+++++ 0.4929	+++++ 0.5076	0.5619 0.4945	0.5350	0.5212	Ave		0.5189			0.1000	5.1		20.0			
Iodomethane	2.0884 2.2029	2.3582 2.3337	2.5905 2.3498	2.4384	2.3351	Ave		2.3371				6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	3.8142 3.7399	4.2764 3.9318	4.3389 4.0332	4.1634	3.8408	Ave		4.0173			0.1000	5.6		20.0			
Allyl chloride	2.0673 2.2982	2.6897 2.3950	2.7262 2.4561	2.5277	2.4446	Ave		2.4506				8.6		20.0			
Methyl acetate	1.1284 1.1380	1.2924 1.3037	1.2513 1.2874	1.3485	1.1663	Ave		1.2395			0.1000	6.8		20.0			
Methylene Chloride	3.8884 1.3336	2.5729 1.3755	2.0695 1.3647	1.6629	1.4698	Lin1	1.2895	1.3434			0.1000				1.0000		0.9900
2-Methyl-2-propanol	+++++ 0.1015	0.0961 0.1330	0.1101 0.1037	0.1051	0.0921	Ave		0.1059				12.6		20.0			
Methyl tert-butyl ether	3.9872 3.8383	4.2899 3.9185	4.3281 3.8736	4.0525	3.9508	Ave		4.0299			0.1000	4.6		20.0			
trans-1,2-Dichloroethene	1.2900 1.3343	1.4117 1.3981	1.5090 1.3969	1.4697	1.3685	Ave		1.3973			0.1000	5.0		20.0			
Acrylonitrile	0.6566 0.6130	0.6568 0.6362	0.5744 0.6259	0.6213	0.6070	Ave		0.6239				4.4		20.0			
Hexane	2.1730 2.0791	2.1493 2.1769	2.5367 2.3314	2.4034	2.2314	Ave		2.2602				6.7		20.0			
1,1-Dichloroethane	2.1310 2.4349	2.5828 2.5358	2.6556 2.5226	2.6383	2.5254	Ave		2.5033			0.2000	6.6		20.0			
Vinyl acetate	3.5750 3.4608	4.1118 3.7148	3.8231 3.8233	3.6831	3.6585	Ave		3.7313				5.2		20.0			
2,2-Dichloropropane	1.3267 1.3640	1.4231 1.4944	1.5763 1.4284	1.6134	1.5248	Ave		1.4689				6.9		20.0			
cis-1,2-Dichloroethene	1.3018 1.4642	1.5755 1.5483	1.6863 1.5189	1.6672	1.5478	Ave		1.5388			0.1000	7.8		20.0			
2-Butanone (MEK)	0.7074 0.6944	0.8539 0.7432	0.8053 0.7494	0.7239	0.7276	Ave		0.7507			0.1000	7.1		20.0			
Bromochloromethane	0.7405 0.7744	0.7843 0.8190	0.8808 0.8118	0.8506	0.8110	Ave		0.8090				5.4		20.0			
Tetrahydrofuran	0.6273 0.5111	0.5226 0.4908	0.6286 0.5122	0.4902	0.5442	Ave		0.5409				10.4		20.0			
Chloroform	2.7003 2.2825	2.6126 2.3683	2.7735 2.3934	2.5059	2.3847	Ave		2.5027			0.2000	7.0		20.0			
1,1,1-Trichloroethane	1.9404 1.9716	2.1794 2.1346	2.2309 2.1741	2.2036	2.0431	Ave		2.1097			0.1000	5.2		20.0			
Cyclohexane	2.6129 2.4542	2.5173 2.5845	2.8360 2.7819	2.7597	2.4797	Ave		2.6283			0.1000	5.6		20.0			
Carbon tetrachloride	1.5722 1.7516	1.9234 1.9285	2.0306 2.0465	2.0204	1.8401	Ave		1.8892			0.1000	8.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	2.0225 1.7698	1.7970 1.8532	2.0555 1.9133	1.9585	1.8314	Ave		1.9002				5.5		20.0			
Benzene	5.5739 5.1505	5.9247 5.4919	6.0277 5.5918	5.6287	5.4406	Ave		5.6037			0.5000	4.9		20.0			
Isobutyl alcohol	+++++ 0.0541	0.0742 0.0570	0.0661 0.0572	0.0582	0.0625	Ave		0.0613				11.3		20.0			
1,2-Dichloroethane	2.4184 2.0080	2.2268 2.0936	2.2611 2.1349	2.2442	2.1471	Ave		2.1918			0.1000	5.7		20.0			
n-Heptane	3.1312 2.5219	3.0018 2.5926	3.0814 2.9290	2.8901	2.6795	Ave		2.8534				8.0		20.0			
Trichloroethene	1.3451 1.3145	1.5141 1.4254	1.5663 1.4813	1.5282	1.4032	Ave		1.4472			0.2000	6.2		20.0			
Methylcyclohexane	2.3300 2.3872	2.3437 2.5401	2.6273 2.6912	2.6051	2.4078	Ave		2.4916			0.1000	5.7		20.0			
1,2-Dichloropropane	1.3441 1.3641	1.4716 1.4450	1.5920 1.4434	1.4713	1.4075	Ave		1.4424			0.1000	5.3		20.0			
Dibromomethane	0.8352 0.8779	0.8358 0.9031	0.9335 0.9224	0.9590	0.9413	Ave		0.9010			0.1000	5.2		20.0			
1,4-Dioxane	+++++ 0.0048	+++++ 0.0046	0.0040 0.0053	0.0048	0.0051	Ave		0.0048				9.3		20.0			
Bromodichloromethane	1.6873 1.7413	1.9355 1.8335	1.9445 1.8817	1.7748	1.7697	Ave		1.8210			0.2000	5.1		20.0			
2-Chloroethyl vinyl ether	+++++ 0.9551	1.0513 1.0416	1.0463 1.0983	1.0789	1.0222	Ave		1.0419				4.4		20.0			
cis-1,3-Dichloropropene	2.4365 2.2095	2.3621 2.3559	2.3731 2.4382	2.3543	2.2951	Ave		2.3531			0.2000	3.2		20.0			
4-Methyl-2-pentanone (MIBK)	0.9105 0.9118	0.9226 0.8397	0.9996 0.9037	1.0356	0.9766	Ave		0.9375			0.1000	6.7		20.0			
Toluene	1.8172 1.7029	1.9132 1.6941	1.8470 1.8732	1.9620	1.7137	Ave		1.8154			0.4000	5.6		20.0			
trans-1,3-Dichloropropene	1.0006 0.9930	1.0532 1.0253	1.0484 1.1414	1.0811	0.9658	Ave		1.0386			0.1000	5.4		20.0			
Ethyl methacrylate	0.8675 0.9903	0.9837 0.9621	0.9880 1.0686	1.0949	1.0179	Ave		0.9966				6.9		20.0			
1,1,2-Trichloroethane	0.5324 0.4893	0.5768 0.4951	0.6240 0.5327	0.5660	0.5227	Ave		0.5424			0.1000	8.3		20.0			
Tetrachloroethene	0.8234 0.8035	0.8299 0.7852	0.9177 0.8768	0.9226	0.7853	Ave		0.8430			0.2000	6.6		20.0			
1,3-Dichloropropane	0.9718 1.0422	1.1948 1.0579	1.2068 1.1694	1.1866	1.0647	Ave		1.1118				7.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.6035 0.6584	0.7383 0.6082	0.7021 0.6747	0.7554	0.7074	Ave		0.6810			0.1000	8.2		20.0			
Dibromochloromethane	0.6652 0.7003	0.6765 0.7161	0.6862 0.8039	0.7430	0.6816	Ave		0.7091			0.1000	6.4		20.0			
1,2-Dibromoethane	0.7071 0.6879	0.6979 0.6622	0.7720 0.7451	0.7416	0.6970	Ave		0.7138				5.0		20.0			
Chlorobenzene	1.9996 2.0048	2.1550 1.9819	2.2524 2.1397	2.1827	2.0282	Ave		2.0930			0.5000	4.9		20.0			
Ethylbenzene	3.1607 3.2200	3.3947 3.1991	3.5914 3.5187	3.6814	3.2619	Ave		3.3785			0.1000	5.9		20.0			
1,1,1,2-Tetrachloroethane	0.6049 0.7193	0.6965 0.7175	0.7808 0.7576	0.7758	0.7367	Ave		0.7236				7.8		20.0			
m,p-Xylene	1.6424 1.3193	1.4374 1.3140	1.3783 1.4318	1.4918	1.3598	Ave		1.4219			0.1000	7.6		20.0			
o-Xylene	1.4355 1.2854	1.3624 1.2716	1.4802 1.3407	1.4480	1.3327	Ave		1.3696			0.3000	5.6		20.0			
Styrene	2.0671 2.2005	2.2721 2.1669	2.2851 2.3083	2.4445	2.1691	Ave		2.2392			0.3000	5.1		20.0			
Bromoform	0.4055 0.4804	0.4795 0.4963	0.4766 0.5596	0.4984	0.4744	Ave		0.4838			0.1000	8.7		20.0			
Isopropylbenzene	3.0302 2.9151	3.1166 3.1525	3.3243 3.6001	3.1601	3.0008	Ave		3.1625			0.1000	6.8		20.0			
Bromobenzene	0.7856 0.8189	0.8128 0.8587	0.8886 0.9578	0.8006	0.8112	Ave		0.8418				6.8		20.0			
1,1,2,2-Tetrachloroethane	0.7241 0.7529	0.8176 0.7756	0.8649 0.8667	0.8135	0.7686	Ave		0.7980			0.3000	6.5		20.0			
N-Propylbenzene	3.5079 3.3885	3.3790 3.5936	3.7791 4.0700	3.7104	3.4003	Ave		3.6036				6.7		20.0			
1,2,3-Trichloropropane	0.2661 0.2701	0.3185 0.2709	0.3010 0.3022	0.2896	0.2771	Ave		0.2869				6.6		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2578	0.1562 0.2900	0.2144 +++++	0.2251	0.2453	Lin1	-0.157	0.2801							0.9960		0.9900
2-Chlorotoluene	0.7072 0.7434	0.7574 0.7449	0.8330 0.8461	0.8156	0.7456	Ave		0.7741				6.5		20.0			
1,3,5-Trimethylbenzene	2.4835 2.4482	2.6091 2.5379	2.8474 2.8466	2.7344	2.5844	Ave		2.6364				5.9		20.0			
4-Chlorotoluene	0.8657 0.7625	0.8326 0.8185	0.8752 0.9056	0.8194	0.7975	Ave		0.8346				5.5		20.0			
tert-Butylbenzene	0.5900 0.5897	0.6475 0.5918	0.7429 0.6720	0.6913	0.6241	Ave		0.6436				8.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.7828 2.5423	2.6317 2.5792	2.8511 2.8793	2.8671	2.6220	Ave		2.7194				5.1		20.0			
sec-Butylbenzene	3.3090 3.1046	3.1549 3.1312	3.4639 3.6085	3.5092	3.2832	Ave		3.3206				5.7		20.0			
1,3-Dichlorobenzene	1.6799 1.5590	1.7574 1.6158	1.7014 1.6906	1.6800	1.6090	Ave		1.6616			0.6000	3.8		20.0			
4-Isopropyltoluene	2.6748 2.8701	3.0880 2.8644	3.4185 3.2346	3.2763	3.1152	Ave		3.0677				8.1		20.0			
1,4-Dichlorobenzene	1.6396 1.5979	1.7307 1.6551	1.8548 1.7553	1.7230	1.6551	Ave		1.7014			0.5000	4.8		20.0			
n-Butylbenzene	2.3538 2.3862	2.5582 2.3661	2.8123 2.6136	2.7523	2.5555	Ave		2.5497				6.8		20.0			
1,2-Dichlorobenzene	1.6310 1.4673	1.6814 1.4321	1.7209 1.5282	1.6527	1.5568	Ave		1.5838			0.4000	6.6		20.0			
1,2-Dibromo-3-Chloropropane	0.1770 0.1460	0.1544 0.1302	0.1732 0.1628	0.1738	0.1720	Ave		0.1612			0.0500	10.2		20.0			
1,2,4-Trichlorobenzene	1.2640 0.9206	1.3028 0.8164	1.3892 0.9662	1.3018	1.1772	Ave		1.1423			0.2000	18.6		20.0			
Hexachlorobutadiene	0.5316 0.4046	0.6099 0.3521	0.5577 0.3984	0.5840	0.5268	Ave		0.4956				19.5		20.0			
Naphthalene	3.1849 2.3592	3.4217 2.0519	3.5503 2.7606	3.4122	3.1289	Ave		2.9837				18.2		20.0			
1,2,3-Trichlorobenzene	1.1709 0.7856	1.2283 0.6679	1.2428 0.8667	1.2175	1.0867	Ave		1.0333				22.0	*	20.0			
Dibromofluoromethane (Surr)	1.2796 1.2659	1.2494 1.3079	1.2524 1.2226	1.2499	1.3165	Ave		1.2680				2.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.8025 0.7898	0.7782 0.8104	0.8131 0.7641	0.7947	0.8320	Ave		0.7981				2.7		20.0			
Toluene-d8 (Surr)	2.4941 2.5107	2.4133 2.4452	2.4353 2.5002	2.5514	2.4564	Ave		2.4758				1.9		20.0			
4-Bromofluorobenzene (Surr)	0.8781 0.9033	0.8843 0.8637	0.9004 0.8663	0.9481	0.9266	Ave		0.8963				3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-491176/7	S8768.D
Level 2	IC 480-491176/8	S8769.D
Level 3	IC 480-491176/9	S8770.D
Level 4	IC 480-491176/10	S8771.D
Level 5	IC 480-491176/11	S8772.D
Level 6	ICIS 480-491176/12	S8773.D
Level 7	IC 480-491176/13	S8774.D
Level 8	IC 480-491176/14	S8775.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	4600 243366	9704 536840	19971 1063651	51233	101350	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	6604 250948	11828 566101	22479 1057634	56172	103053	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	4428 206649	10473 501942	17675 972167	49377	90408	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	5873 241313	11204 554135	21575 1071192	55455	101155	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	4010 144751	7431 316533	14302 605761	31193	61384	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	3570 137144	6713 304310	13439 601597	31416	58529	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	8396 292501	15829 652814	26303 1254804	66492	124781	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6861 292183	12945 697977	24699 1336570	65719	124379	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	3656 186889	7300 378602	16625 803869	38522	73222	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	3241 146574	7051 318340	14318 727387	27554	54603	2.50 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	3369 171590	6249 353407	16137 800828	37321	67189	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	3186 162932	7570 334485	15375 729934	36750	64347	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	+++++ 354222	+++++ 710382	31693 1469231	75694	143220	+++++ 125	+++++ 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	6024 316633	13434 653201	29220 1396414	68996	128320	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	11002 537556	24361 1100524	48942 2396847	117808	211062	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	5963 330341	15322 670379	30751 1459608	71524	134339	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	6510 327130	14725 729815	28228 1530111	76313	128183	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	11216 191682	14657 385016	23344 811028	47054	80769	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	+++++ 145899	5475 372217	12422 616280	29725	50608	+++++ 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	11501 551696	24438 1096809	48820 2301990	114669	217111	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	3721 191782	8042 391332	17021 830144	41586	75206	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	18940 881054	37418 1780740	64787 3719591	175798	333559	5.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	6268 298841	12244 609324	28613 1385509	68008	122623	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	6147 349976	14713 709767	29954 1499140	74652	138781	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	20624 994889	46847 2079569	86248 4544144	208432	402089	1.00 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	3827 196053	8107 418276	17780 848881	45654	83790	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	3755 210461	8975 433382	19021 902637	47176	85057	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	10203 499073	24322 1040111	45418 2226600	102424	199932	2.50 125	5.00 250	10.0 500	25.0	50.0
Bromochloromethane	FB	Ave	2136 111305	4468 229247	9935 482406	24068	44565	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	3619 146920	5954 274781	14180 608775	27743	59815	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	7789 328077	14883 662888	31284 1422353	70908	131049	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	5597 283391	12415 597476	25164 1291992	62354	112277	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	7537 352750	14340 723421	31989 1653234	78088	136269	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	4535 251773	10957 539798	22905 1216185	57170	101122	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	5834 254385	10237 518722	23185 1137021	55417	100644	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	16078 740315	33751 1537207	67991 3323060	159270	298979	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	+++++ 194434	10573 398796	18650 849535	41140	85904	+++++ 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	6976 288628	12685 586018	25505 1268690	63503	117991	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	9032 362492	17100 725690	34757 1740631	81778	147246	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	3880 188935	8625 398964	17667 880270	43243	77108	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	6721 343120	13351 710983	29635 1599325	73715	132317	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3877 196069	8383 404453	17957 857793	41631	77348	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2409 126189	4761 252785	10530 548164	27136	51729	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 27383	+++++ 53469	1863 122617	5260	11489	+++++ 500	+++++ 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	4867 250290	11026 513209	21933 1118227	50219	97248	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 137278	5989 291547	11802 652663	30529	56171	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	7028 317588	13456 659421	26768 1448982	66617	126121	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	27053 1292982	53693 2442732	116295 5257645	285978	549072	2.50 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	10799 482958	22270 985608	42979 2179638	108363	192706	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	5946 281620	12259 596524	24396 1328130	59708	108604	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	5155 280852	11450 559729	22990 1243394	60474	114462	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	3164 138784	6714 288022	14519 619776	31258	58774	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4893 227883	9660 456812	21354 1020167	50957	88303	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	5775 295596	13908 615455	28081 1360718	65537	119719	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	17931 933608	42967 1769206	81687 3925278	208617	397746	2.50 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3953 198603	7875 416629	15967 935407	41039	76643	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	4202 195089	8124 385235	17963 866939	40961	78378	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11883 568598	25084 1153068	52412 2489635	120550	228069	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	18783 913251	39515 1861207	83569 4094275	203327	366800	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3595 204016	8107 417419	18168 881488	42847	82841	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	9760 374180	16732 764482	32073 1665990	82395	152912	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	8531 364567	15858 739807	34444 1559958	79972	149859	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	12284 624088	26447 1260683	53172 2685871	135010	243909	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2410 136250	5582 288718	11089 651170	27529	53347	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	20442 947620	41896 1918970	88576 4074944	211948	396406	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5300 266190	10927 522674	23677 1084167	53697	107163	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4885 244740	10991 472111	23044 980962	54559	101538	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	23665 1101515	45424 2187444	100693 4606802	248859	449189	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1795 87804	4281 164886	8021 342065	19427	36604	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 83808	2100 176526	5712 +++++	15095	32405	+++++ 25.0	1.00 50.0	2.00 +++++	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	4771 241659	10181 453441	22195 957657	54704	98492	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	16754 795851	35074 1544843	75869 3222047	183400	341403	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	5840 247859	11192 498248	23320 1025022	54960	105351	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	3980 191702	8704 360211	19795 760630	46364	82441	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	18773 826431	35377 1569977	75969 3259070	192301	346365	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	22323 1009216	42411 1906010	92295 4084470	235363	433719	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	11333 506796	23624 983528	45333 1913584	112681	212557	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	18045 932987	41511 1743597	91085 3661267	219746	411530	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	11061 519426	23266 1007466	49421 1986880	115560	218645	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	15879 775667	34389 1440287	74934 2958294	184597	337582	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	11003 476973	22603 871753	45853 1729773	110849	205659	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1194 47459	2076 79267	4614 184235	11657	22720	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8527 299246	17514 496929	37016 1093591	87316	155505	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	3586 131531	8199 214301	14859 450940	39171	69593	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	21486 766890	45997 1249020	94597 3124773	228858	413334	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7899 255390	16512 406569	33114 980986	81659	143557	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	184547 181961	177930 183038	176581 181640	176829	180864	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	115735 113518	110828 113411	114642 113521	112440	114296	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	741072 712070	702289 711295	708338 727283	704578	690557	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	260925 256179	257322 251250	261883 252001	261817	260491	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Lims ID: IC 0.5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Sep-2019 14:39:30 ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.5
Misc. Info.: 480-0084010-007
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:11:44 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:45:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.449	-0.006	98	144225	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	297135	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	337309	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	65	184547	25.0	25.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	115735	25.0	25.1	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	92	741072	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	91	260925	25.0	24.5	
10 Dichlorodifluoromethane	85	1.264	1.263	0.001	55	4600	0.5000	0.4516	
12 Chloromethane	50	1.440	1.440	0.000	32	6604	0.5000	0.5808	
13 Vinyl chloride	62	1.543	1.537	0.006	11	4428	0.5000	0.4653	
151 Butadiene	54	1.543	1.543	0.000	91	5873	0.5000	0.5366	
14 Bromomethane	94	1.835	1.835	0.000	71	4010	0.5000	0.5954	
15 Chloroethane	64	1.927	1.926	0.001	55	3570	0.5000	0.5602	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	11	6861	0.5000	0.5227	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	36	8396	0.5000	0.6089	
18 Ethyl ether	59	2.432	2.437	-0.005	70	3656	0.5000	0.4728	
20 Acrolein	56	2.638	2.626	0.012	1	3241	2.50	2.50	
21 1,1,2-Trichloro-1,2,2-trif	101	2.651	2.650	0.001	26	3369	0.5000	0.4653	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	56	3186	0.5000	0.4498	
23 Acetone	43		2.784				ND	ND	MU
25 Iodomethane	142	2.815	2.821	-0.006	75	6024	0.5000	0.4468	
26 Carbon disulfide	76	2.851	2.851	0.000	93	11002	0.5000	0.4747	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	57	5963	0.5000	0.4218	
27 Methyl acetate	43	3.089	3.082	0.007	78	6510	1.00	0.9104	a
30 Methylene Chloride	84	3.186	3.186	0.000	83	11216	0.5000	0.4873	
31 2-Methyl-2-propanol	59	3.368	3.356	0.012	12	519	5.00	0.8492	
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	74	11501	0.5000	0.4947	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	64	3721	0.5000	0.4616	
33 Acrylonitrile	53	3.478	3.478	0.000	81	18940	5.00	5.26	M
35 Hexane	57	3.600	3.606	-0.006	82	6268	0.5000	0.4807	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	6	6147	0.5000	0.4256	
37 Vinyl acetate	43	3.892	3.891	0.001	95	20624	1.00	0.9581	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	12	3827	0.5000	0.4516	
45 cis-1,2-Dichloroethene	96	4.391	4.390	0.001	39	3755	0.5000	0.4230	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	87	10203	2.50	2.36	
48 Chlorobromomethane	128	4.634	4.634	0.000	41	2136	0.5000	0.4576	
49 Tetrahydrofuran	42	4.670	4.652	0.018	34	3619	1.00	1.16	
50 Chloroform	83	4.707	4.707	0.000	76	7789	0.5000	0.5395	
51 1,1,1-Trichloroethane	97	4.822	4.816	0.006	32	5597	0.5000	0.4599	
52 Cyclohexane	56	4.829	4.816	0.013	55	7537	0.5000	0.4971	
55 Carbon tetrachloride	117	4.944	4.950	-0.006	51	4535	0.5000	0.4161	M
54 1,1-Dichloropropene	75	4.962	4.968	-0.006	46	5834	0.5000	0.5322	
57 Benzene	78	5.169	5.175	-0.006	25	16078	0.5000	0.4973	
53 Isobutyl alcohol	43	5.206	5.199	0.007	27	2942	12.5	8.31	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	34	6976	0.5000	0.5517	
59 n-Heptane	43	5.352	5.345	0.007	75	9032	0.5000	0.5487	
62 Trichloroethene	95	5.790	5.783	0.007	60	3880	0.5000	0.4647	
64 Methylcyclohexane	83	5.905	5.899	0.006	68	6721	0.5000	0.4676	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	44	3877	0.5000	0.4659	
67 Dibromomethane	93	6.167	6.167	0.000	51	2409	0.5000	0.4634	
66 1,4-Dioxane	88		6.173				ND	ND	
68 Dichlorobromomethane	83	6.319	6.325	-0.006	31	4867	0.5000	0.4633	
69 2-Chloroethyl vinyl ether	63		6.599				ND	ND	U
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	45	7028	0.5000	0.5177	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	82	27053	2.50	2.43	
74 Toluene	92	7.025	7.018	0.007	66	10799	0.5000	0.5005	
77 trans-1,3-Dichloropropene	75	7.305	7.310	-0.005	49	5946	0.5000	0.4817	
75 Ethyl methacrylate	69	7.359	7.347	0.012	18	5155	0.5000	0.4352	a
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	35	3164	0.5000	0.4908	
81 Tetrachloroethene	166	7.554	7.548	0.006	57	4893	0.5000	0.4883	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	51	5775	0.5000	0.4370	
80 2-Hexanone	43	7.730	7.724	0.006	63	17931	2.50	2.22	
83 Chlorodibromomethane	129	7.889	7.894	-0.005	1	3953	0.5000	0.4690	M
84 Ethylene Dibromide	107	8.004	7.998	0.006	53	4202	0.5000	0.4953	
87 Chlorobenzene	112	8.473	8.472	0.001	39	11883	0.5000	0.4777	
88 Ethylbenzene	91	8.558	8.564	-0.006	74	18783	0.5000	0.4678	
89 1,1,1,2-Tetrachloroethane	131	8.558	8.570	-0.012	1	3595	0.5000	0.4180	M
90 m-Xylene & p-Xylene	106	8.686	8.685	0.001	63	9760	0.5000	0.5775	
91 o-Xylene	106	9.111	9.111	0.000	65	8531	0.5000	0.5241	
92 Styrene	104	9.142	9.142	0.000	72	12284	0.5000	0.4616	M
95 Bromoform	173	9.397	9.397	0.000	22	2410	0.5000	0.4191	
94 Isopropylbenzene	105	9.495	9.494	0.001	65	20442	0.5000	0.4791	
101 Bromobenzene	156	9.847	9.841	0.006	55	5300	0.5000	0.4666	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	8	4885	0.5000	0.4537	
99 N-Propylbenzene	91	9.920	9.920	0.000	86	23665	0.5000	0.4867	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	16	1795	0.5000	0.4636	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	8	1182	0.5000	0.8730	M
103 2-Chlorotoluene	126	10.030	10.024	0.006	73	4771	0.5000	0.4568	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	74	16754	0.5000	0.4710	
105 4-Chlorotoluene	126	10.133	10.139	-0.006	58	5840	0.5000	0.5186	
106 tert-Butylbenzene	134	10.419	10.413	0.006	59	3980	0.5000	0.4583	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	9	18773	0.5000	0.5116	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	66	22323	0.5000	0.4983	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	62	11333	0.5000	0.5055	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	74	18045	0.5000	0.4360	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	1	11061	0.5000	0.4818	M
115 n-Butylbenzene	91	11.149	11.149	0.000	74	15879	0.5000	0.4616	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	58	11003	0.5000	0.5149	
117 1,2-Dibromo-3-Chloropropan	75	11.928	11.934	-0.006	1	1194	0.5000	0.5491	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	49	8527	0.5000	0.5533	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	32	3586	0.5000	0.5362	
121 Naphthalene	128	12.816	12.816	0.000	82	21486	0.5000	0.5337	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	51	7899	0.5000	0.5666	
S 125 1,2-Dichloroethene, Total	1				0			0.8846	
S 123 Total BTEX	1				0			2.57	
S 124 Xylenes, Total	1				0			1.10	
S 126 1,3-Dichloropropene, Total	1				0			1.00	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

GAS CORP mix_00360	Amount Added:	0.50	Units: uL	
SS 8260 CORP_00077	Amount Added:	0.50	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

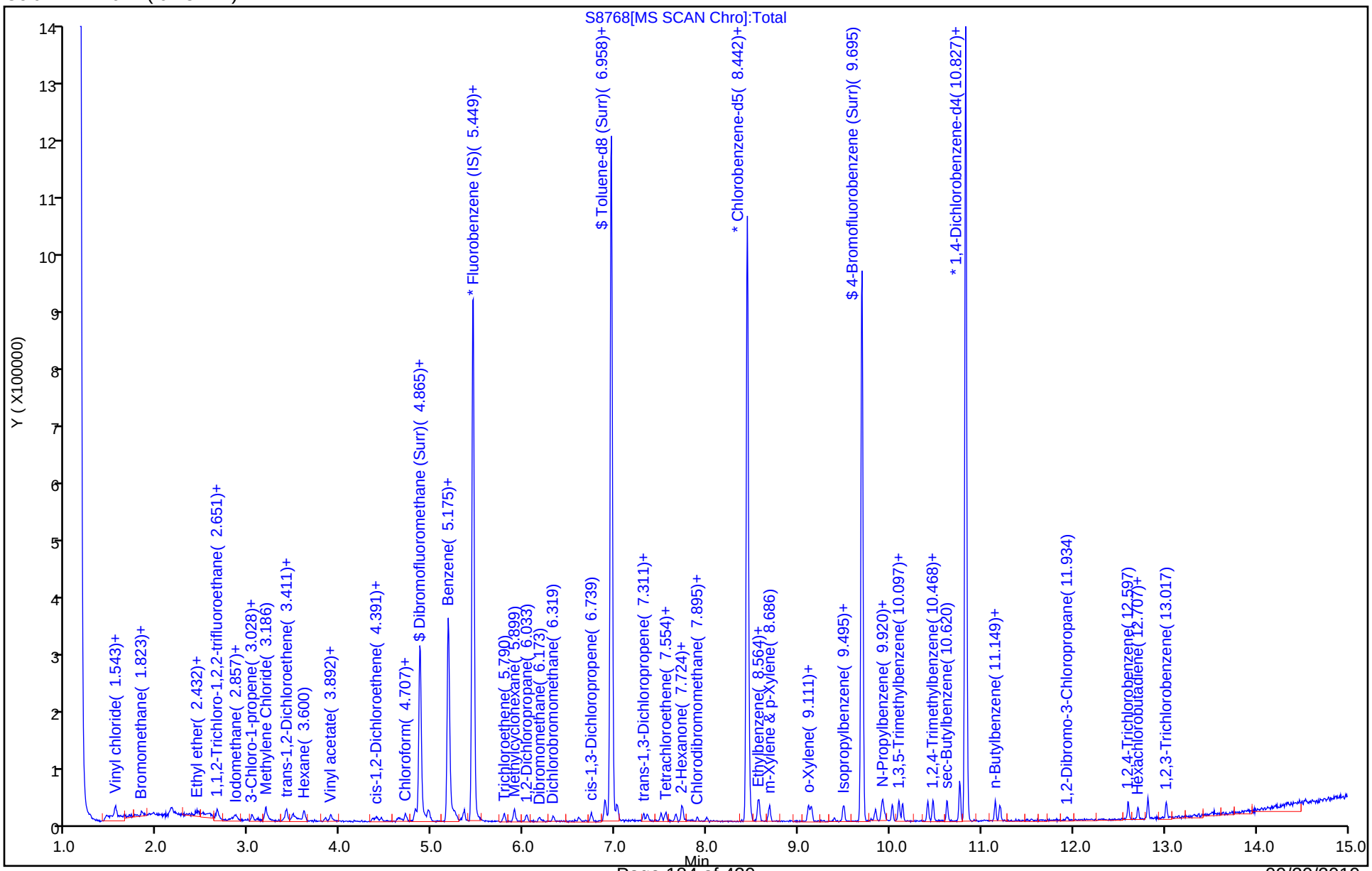
Report Date: 11-Sep-2019 11:11:46 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D

Injection Date:	10-Sep-2019 14:39:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 0.5			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

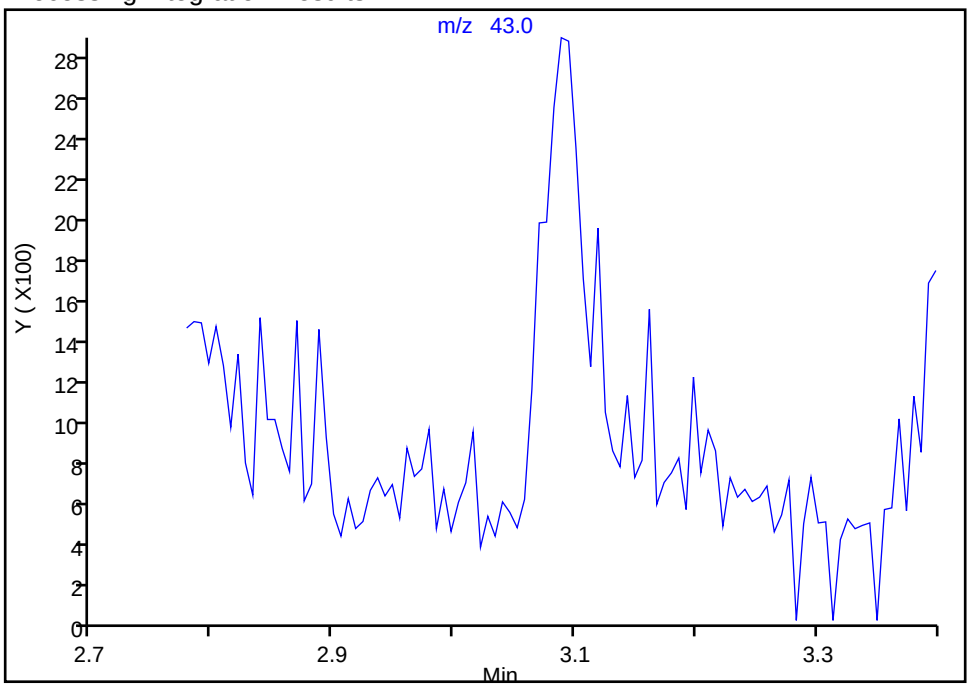
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

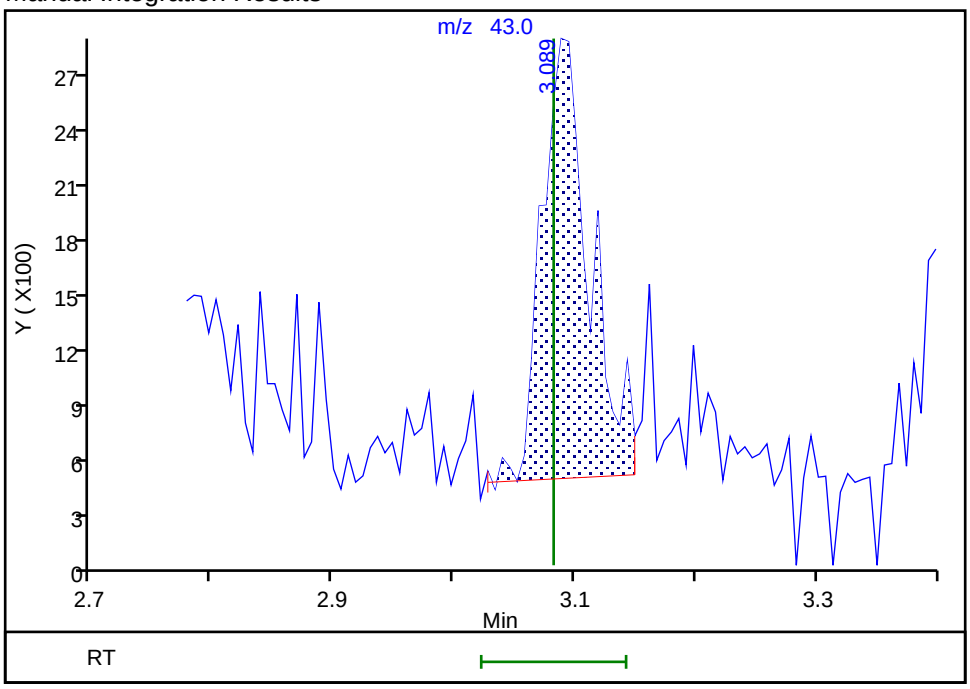
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 6510
Amount: 0.910409
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:41:14
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

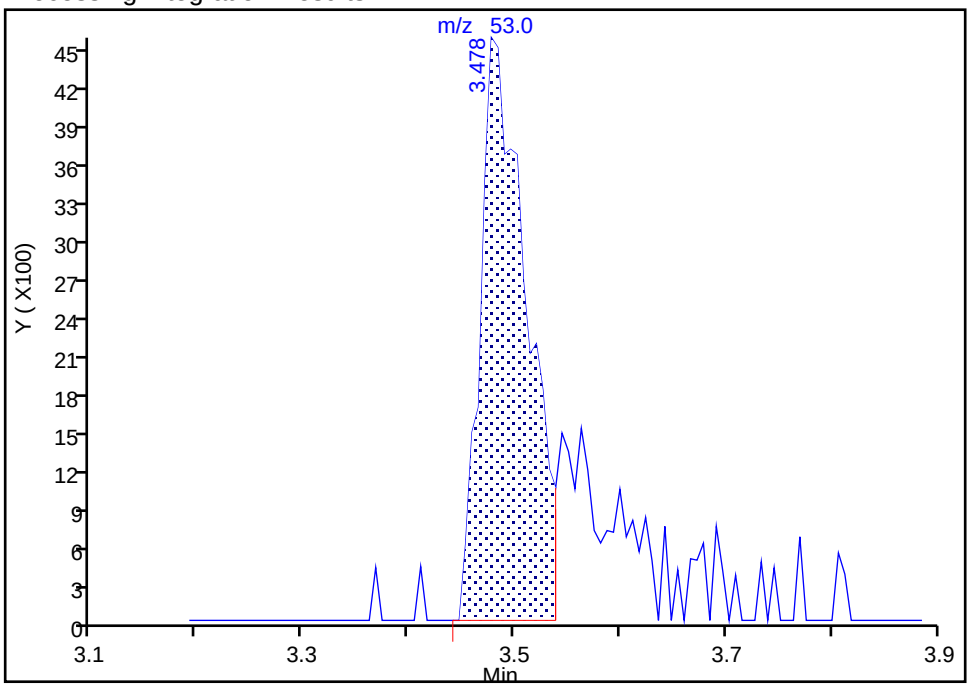
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

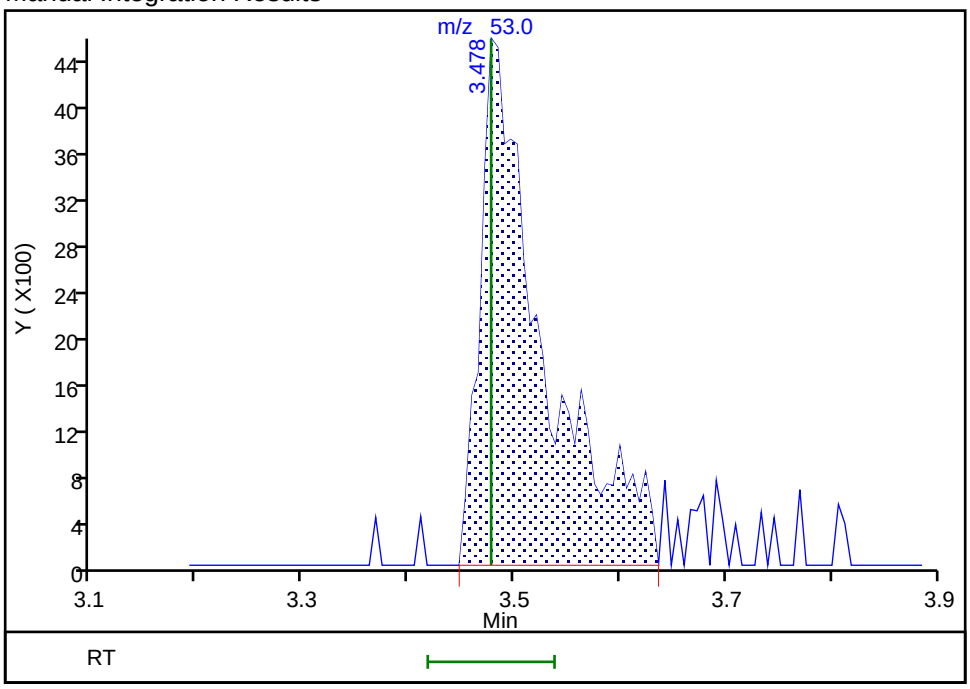
Processing Integration Results

RT: 3.48
Area: 13993
Amount: 4.080173
Amount Units: ug/L



Manual Integration Results

RT: 3.48
Area: 18940
Amount: 5.262205
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:42:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

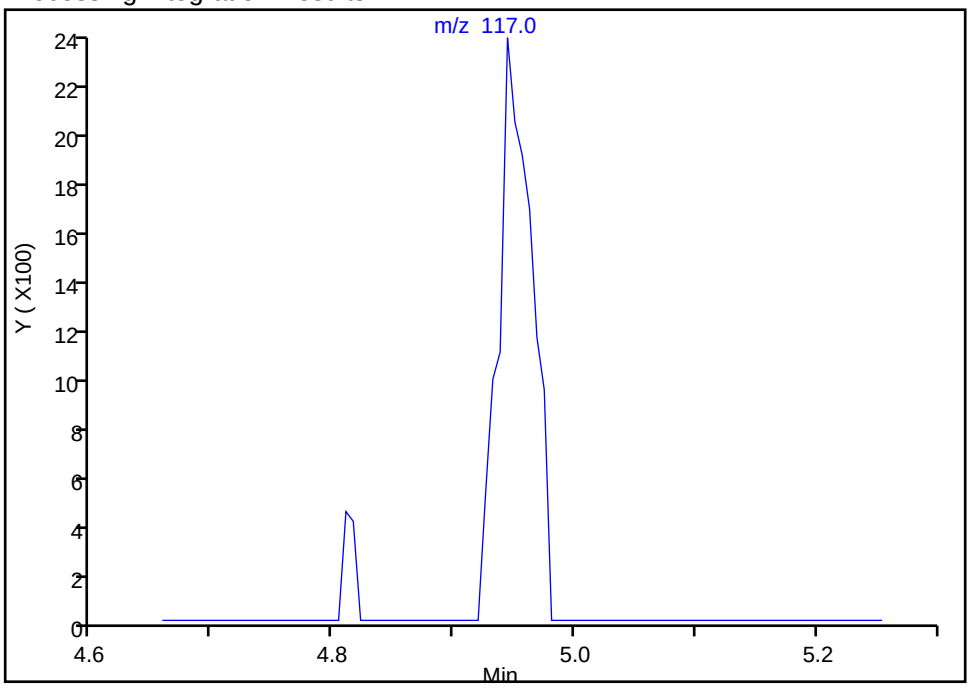
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

55 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

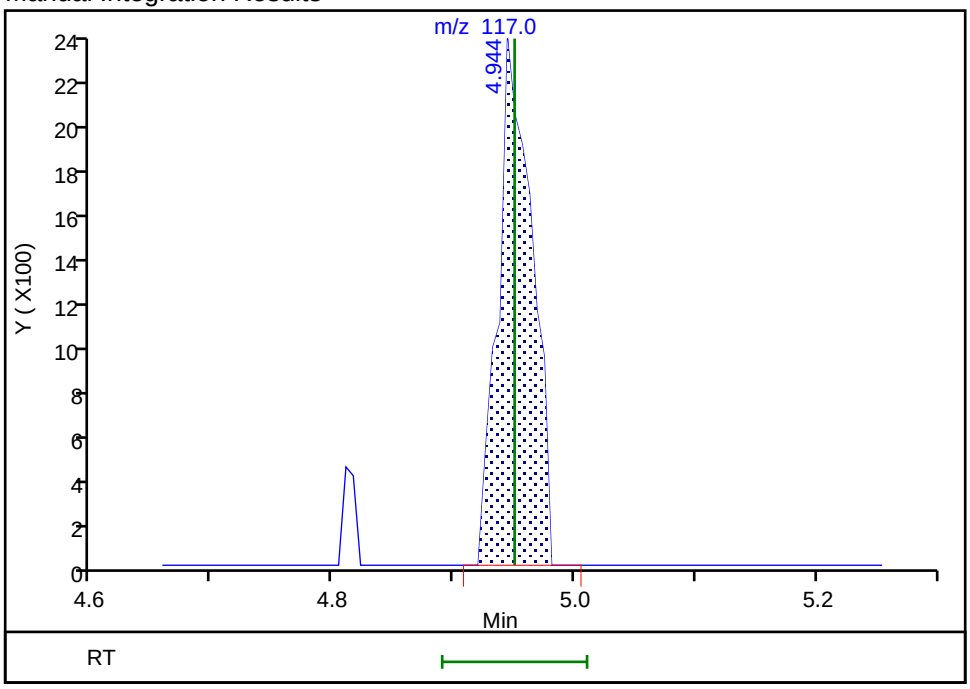
Not Detected
Expected RT: 4.95

Processing Integration Results



Manual Integration Results

RT: 4.94
Area: 4535
Amount: 0.416105
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:43:25
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

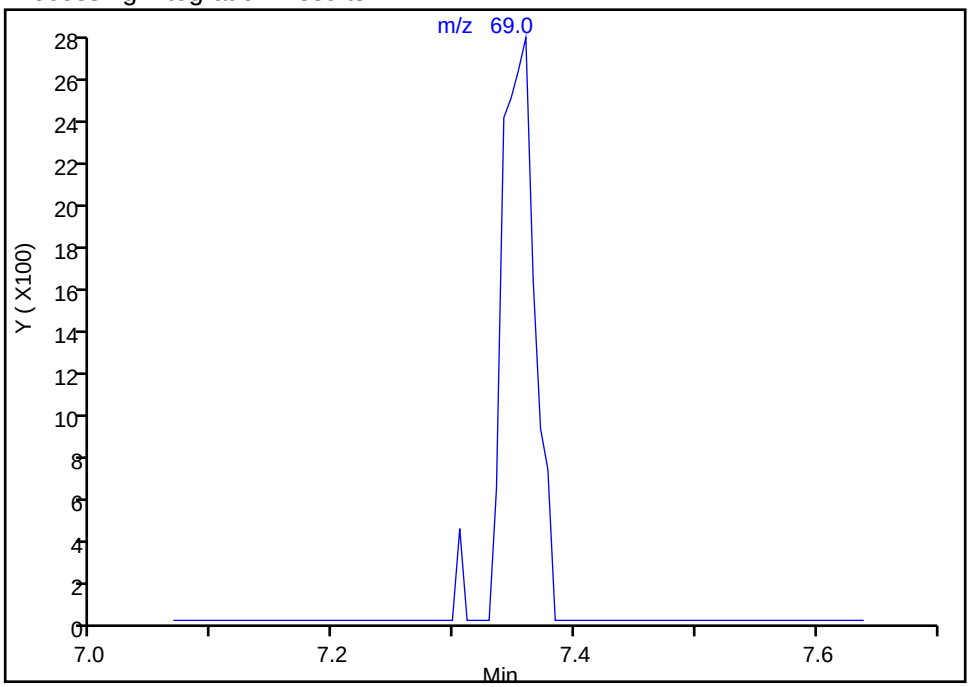
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

75 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

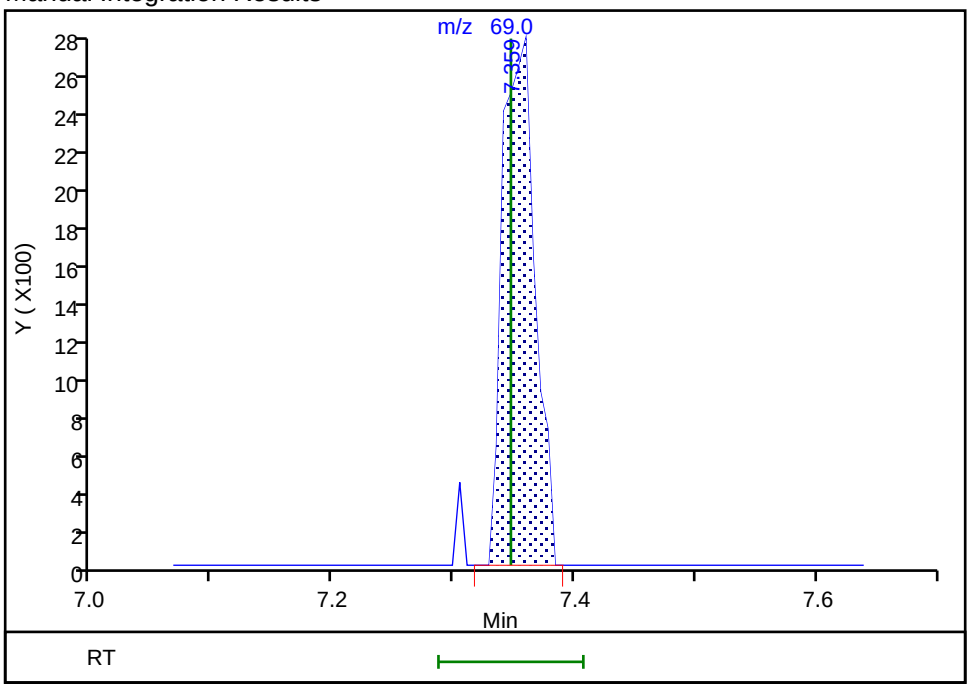
Not Detected
Expected RT: 7.35

Processing Integration Results



Manual Integration Results

RT: 7.36
Area: 5155
Amount: 0.435200
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:18
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

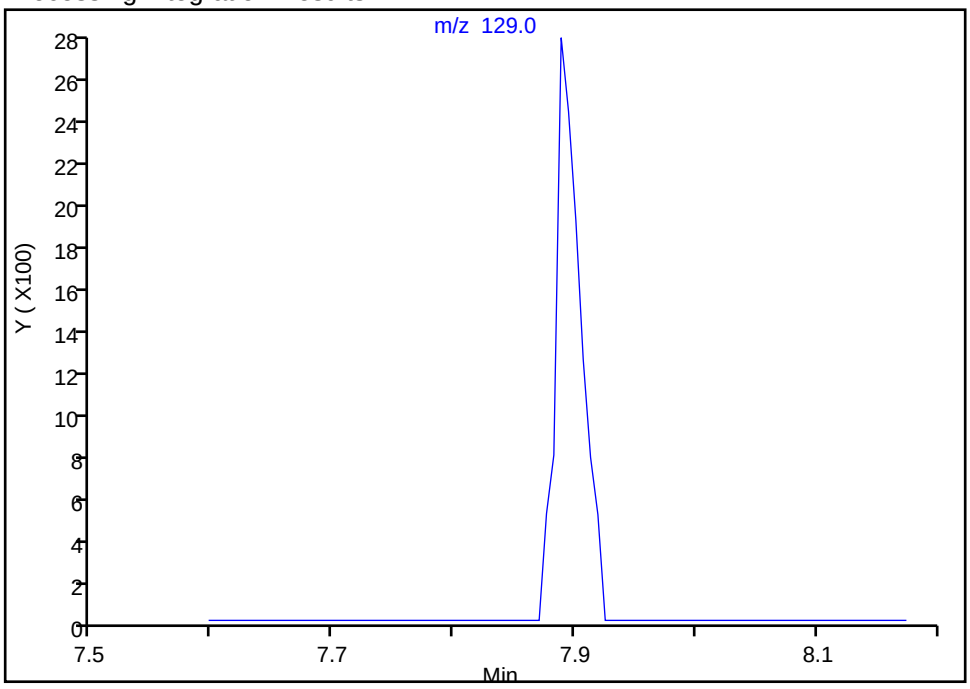
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

83 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

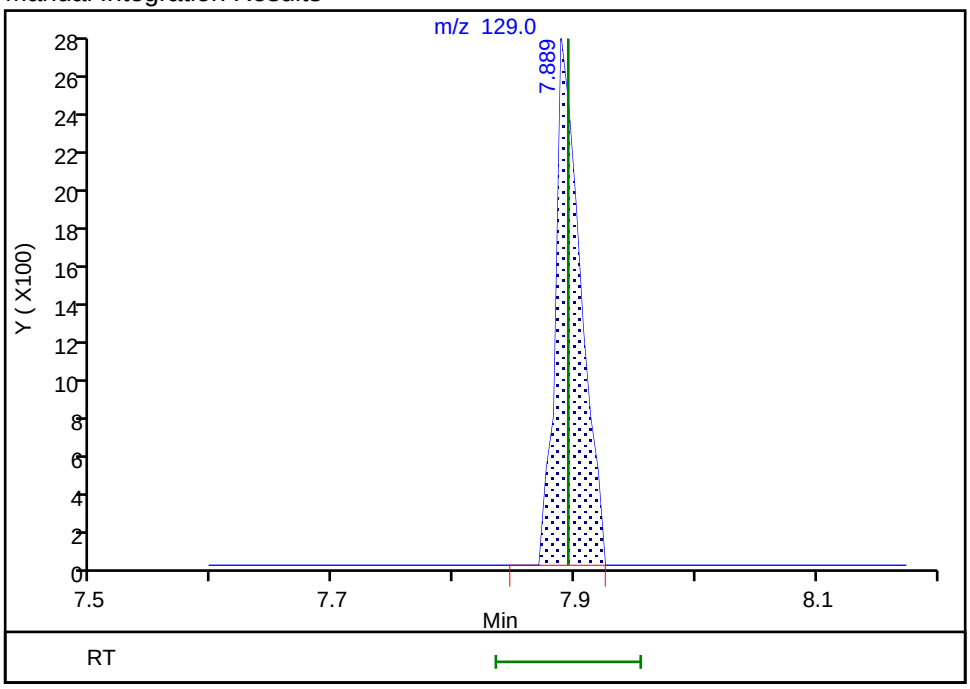
Not Detected
Expected RT: 7.89

Processing Integration Results



Manual Integration Results

RT: 7.89
Area: 3953
Amount: 0.469033
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

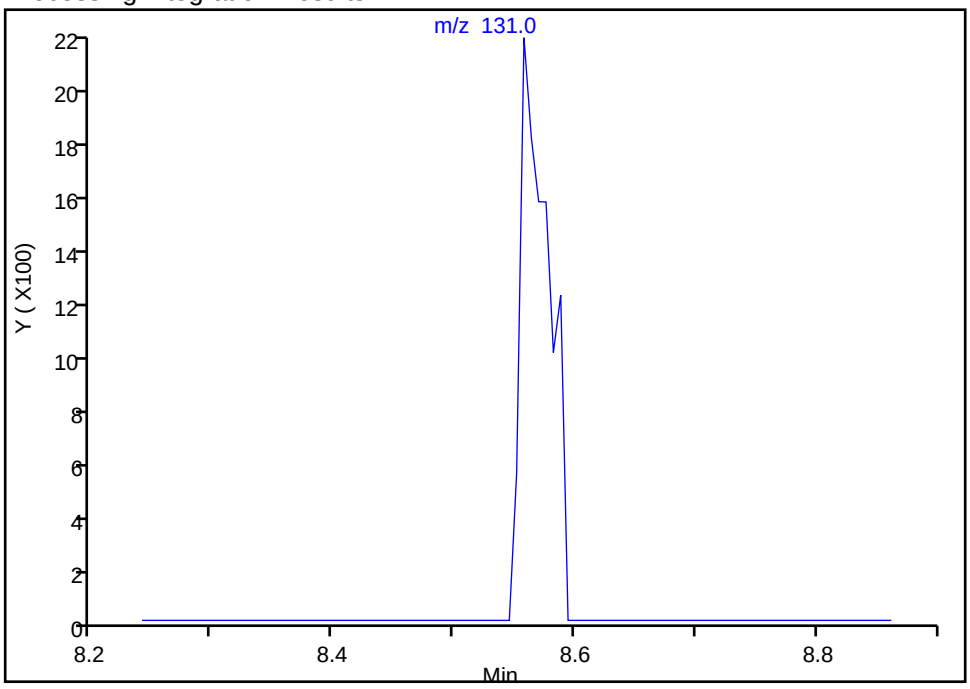
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Signal: 1

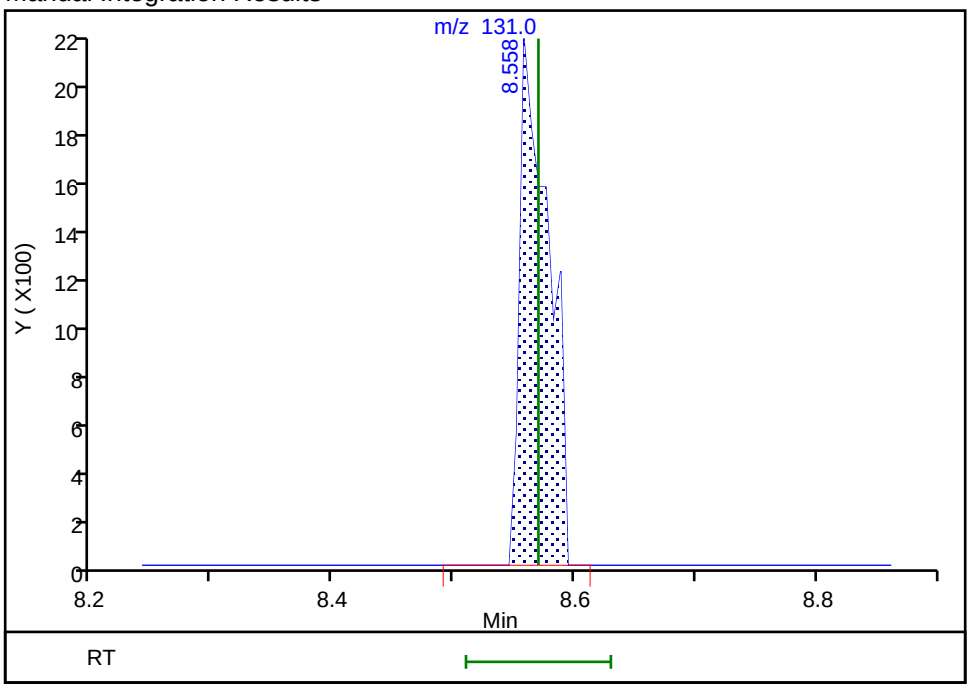
Not Detected
Expected RT: 8.57

Processing Integration Results



Manual Integration Results

RT: 8.56
Area: 3595
Amount: 0.417991
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

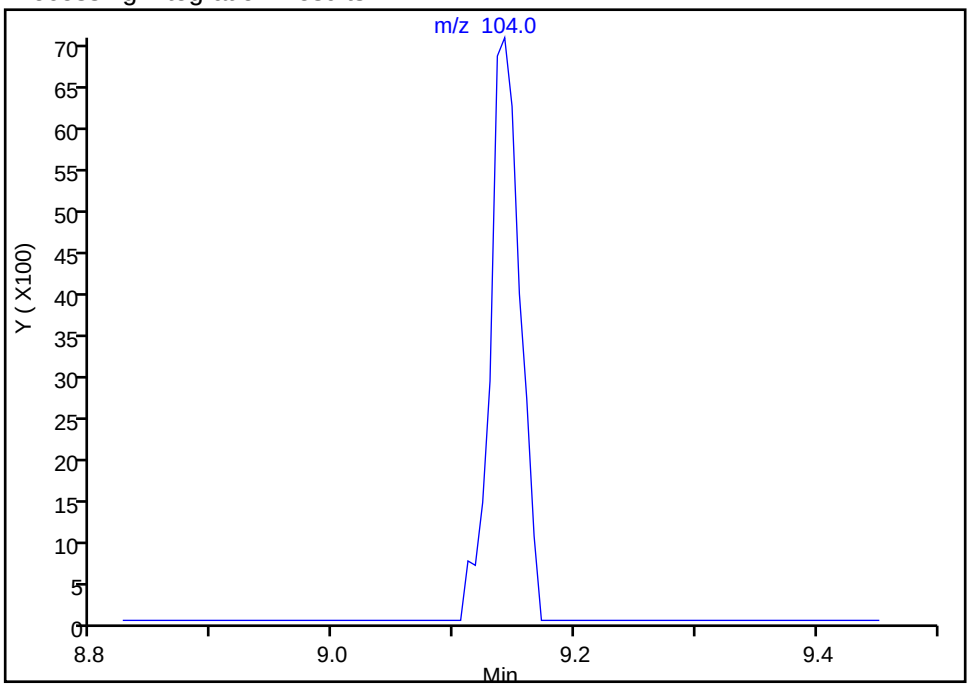
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

92 Styrene, CAS: 100-42-5

Signal: 1

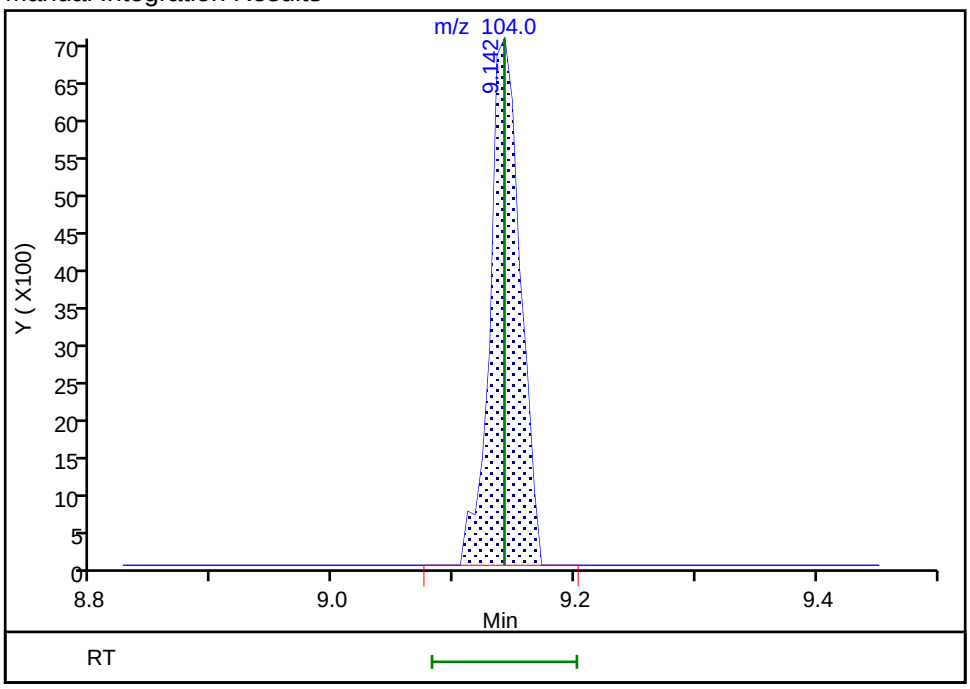
Not Detected
Expected RT: 9.14

Processing Integration Results



Manual Integration Results

RT: 9.14
Area: 12284
Amount: 0.461570
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

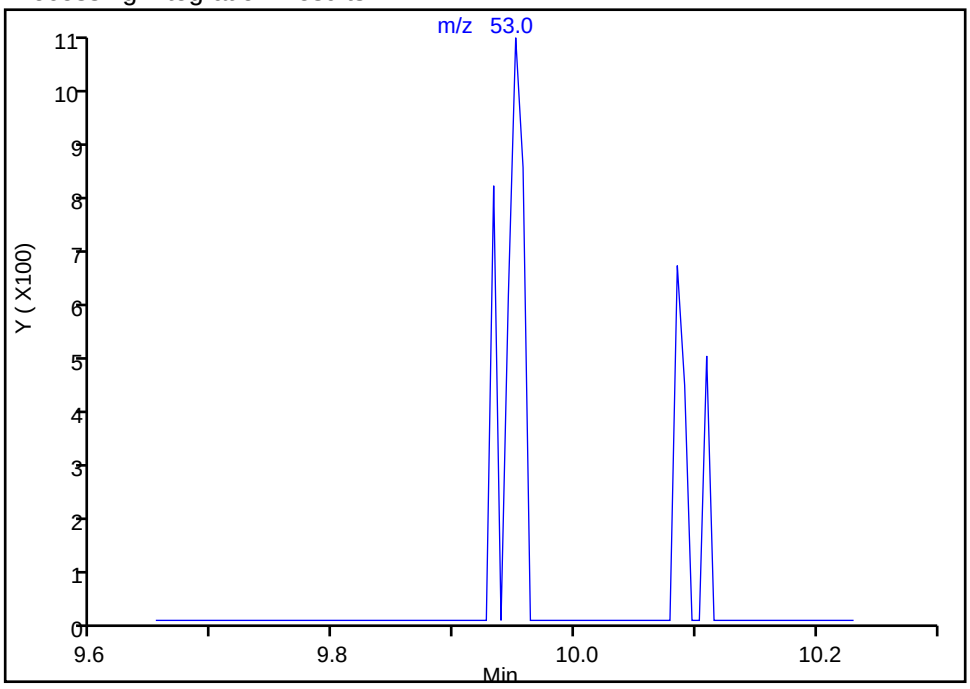
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

98 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

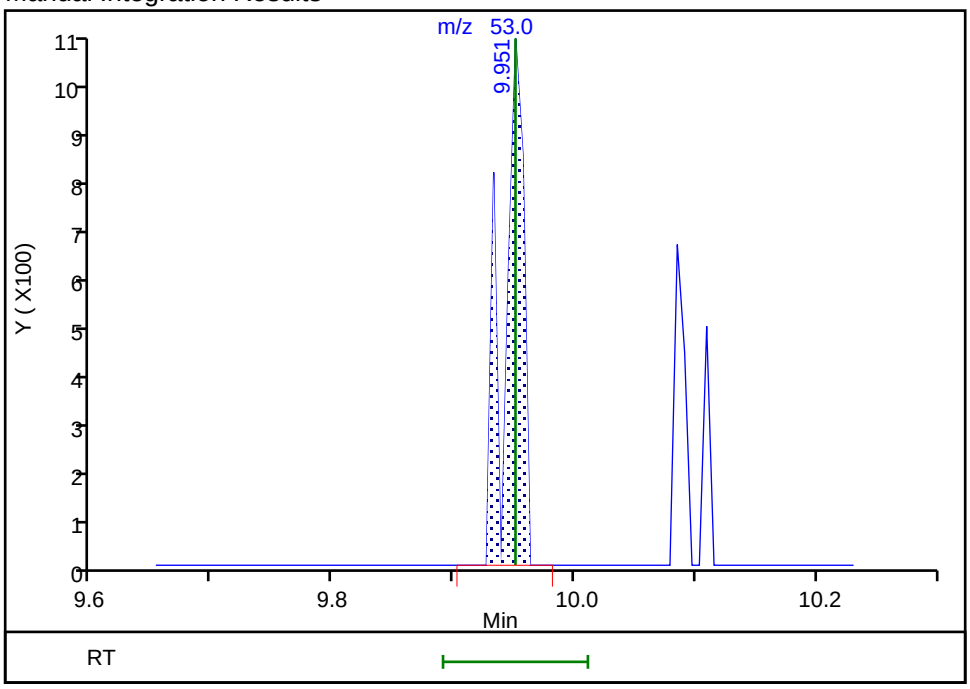
Not Detected
Expected RT: 9.95

Processing Integration Results



Manual Integration Results

RT: 9.95
Area: 1182
Amount: 0.873009
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:51
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

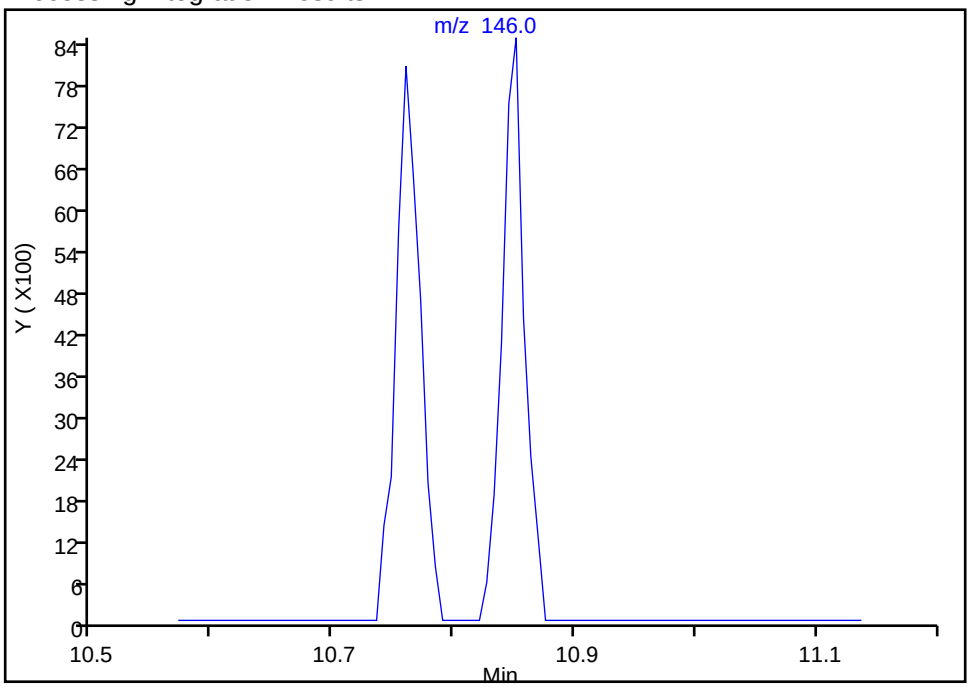
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

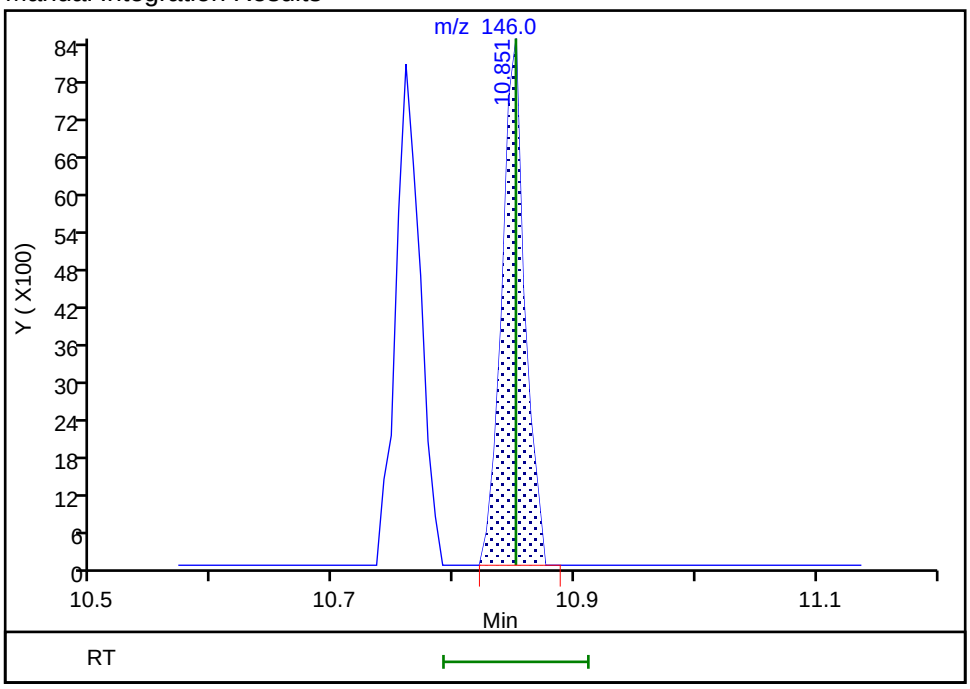
Not Detected
Expected RT: 10.85

Processing Integration Results



Manual Integration Results

RT: 10.85
Area: 11061
Amount: 0.481825
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:45:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

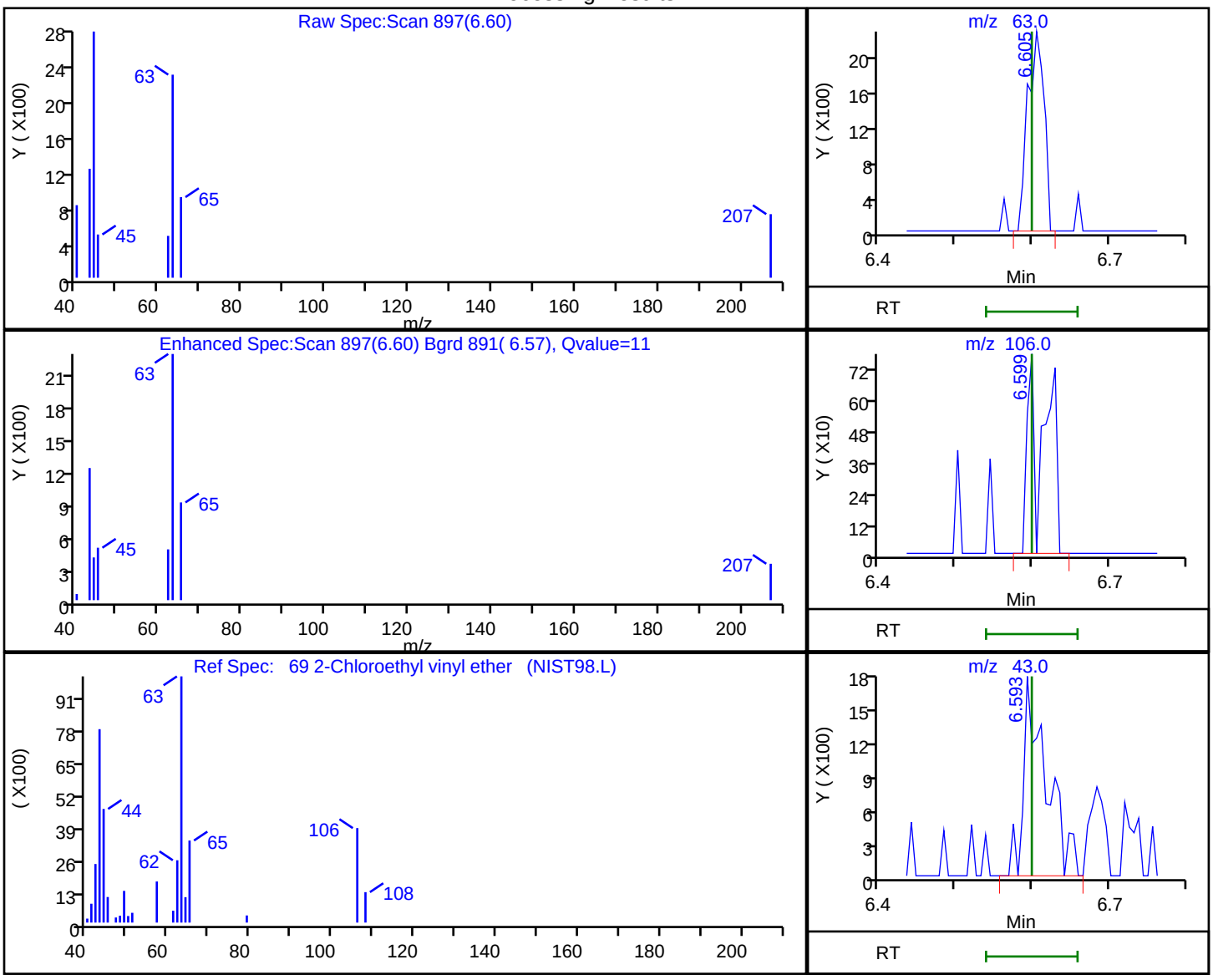
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Processing Results



RT	Mass	Response	Amount
6.60	63.00	3337	0.547600
6.60	106.00	1321	
6.59	43.00	3676	
6.60	65.00	0	

Reviewer: nowakk, 11-Sep-2019 08:44:08
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Sep-2019 15:02:30 ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0084010-008
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:11:51 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:52:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	142416	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	291002	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	93	336071	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	177930	25.0	24.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	110828	25.0	24.4	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	702289	25.0	24.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	91	257322	25.0	24.7	
10 Dichlorodifluoromethane	85	1.270	1.263	0.007	44	9704	1.00	0.9648	
12 Chloromethane	50	1.446	1.440	0.006	67	11828	1.00	1.05	
13 Vinyl chloride	62	1.543	1.537	0.006	29	10473	1.00	1.11	
151 Butadiene	54	1.543	1.543	0.000	91	11204	1.00	1.04	
14 Bromomethane	94	1.835	1.835	0.000	80	7431	1.00	1.12	
15 Chloroethane	64	1.933	1.926	0.007	60	6713	1.00	1.07	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	51	12945	1.00	1.00	
16 Dichlorofluoromethane	67	2.158	2.152	0.006	78	15829	1.00	1.16	
18 Ethyl ether	59	2.432	2.437	-0.005	72	7300	1.00	0.9561	
20 Acrolein	56	2.626	2.626	0.000	41	7051	5.00	5.51	
21 1,1,2-Trichloro-1,2,2-trif	101	2.657	2.650	0.007	30	6249	1.00	0.8740	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	85	7570	1.00	1.08	
23 Acetone	43	2.797	2.784	0.013	91	23015	5.00	7.79	Ma
25 Iodomethane	142	2.827	2.821	0.006	80	13434	1.00	1.01	
26 Carbon disulfide	76	2.851	2.851	0.000	94	24361	1.00	1.06	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	74	15322	1.00	1.10	
27 Methyl acetate	43	3.083	3.082	0.000	87	14725	2.00	2.09	Ma
30 Methylene Chloride	84	3.180	3.186	-0.006	87	14657	1.00	0.9554	
31 2-Methyl-2-propanol	59	3.405	3.356	0.049	32	5475	10.0	9.07	M
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	82	24438	1.00	1.06	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	87	8042	1.00	1.01	
33 Acrylonitrile	53	3.484	3.478	0.006	96	37418	10.0	10.5	M
35 Hexane	57	3.600	3.606	-0.006	81	12244	1.00	0.9510	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	55	14713	1.00	1.03	
37 Vinyl acetate	43	3.892	3.891	0.001	95	46847	2.00	2.20	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	59	8107	1.00	0.9688	
45 cis-1,2-Dichloroethene	96	4.397	4.390	0.007	37	8975	1.00	1.02	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	83	24322	5.00	5.69	
48 Chlorobromomethane	128	4.634	4.634	0.000	69	4468	1.00	0.9694	
49 Tetrahydrofuran	42	4.658	4.652	0.006	62	5954	2.00	1.93	
50 Chloroform	83	4.713	4.707	0.006	73	14883	1.00	1.04	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	66	12415	1.00	1.03	
52 Cyclohexane	56	4.816	4.816	0.000	71	14340	1.00	0.9578	
55 Carbon tetrachloride	117	4.956	4.950	0.006	62	10957	1.00	1.02	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	72	10237	1.00	0.9457	
57 Benzene	78	5.169	5.175	-0.006	45	33751	1.00	1.06	
53 Isobutyl alcohol	43	5.206	5.199	0.007	45	10573	25.0	30.3	M
58 1,2-Dichloroethane	62	5.248	5.248	0.000	57	12685	1.00	1.02	
59 n-Heptane	43	5.352	5.345	0.007	80	17100	1.00	1.05	
62 Trichloroethene	95	5.784	5.783	0.001	63	8625	1.00	1.05	
64 Methylcyclohexane	83	5.899	5.899	0.000	76	13351	1.00	0.9406	
65 1,2-Dichloropropane	63	6.021	6.033	-0.012	65	8383	1.00	1.02	
67 Dibromomethane	93	6.167	6.167	0.000	71	4761	1.00	0.9276	
66 1,4-Dioxane	88	6.167	6.173	-0.006	1	499	20.0	9.00	M
68 Dichlorobromomethane	83	6.325	6.325	0.000	71	11026	1.00	1.06	
69 2-Chloroethyl vinyl ether	63	6.605	6.599	0.006	70	5989	1.00	1.01	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	57	13456	1.00	1.00	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	93	53693	5.00	4.92	
74 Toluene	92	7.025	7.018	0.007	84	22270	1.00	1.05	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.001	81	12259	1.00	1.01	
75 Ethyl methacrylate	69	7.347	7.347	0.000	51	11450	1.00	0.9870	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	70	6714	1.00	1.06	
81 Tetrachloroethene	166	7.554	7.548	0.006	82	9660	1.00	0.9844	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	69	13908	1.00	1.07	
80 2-Hexanone	43	7.730	7.724	0.006	85	42967	5.00	5.42	
83 Chlorodibromomethane	129	7.895	7.894	0.001	41	7875	1.00	0.9541	
84 Ethylene Dibromide	107	8.004	7.998	0.006	56	8124	1.00	0.9777	
87 Chlorobenzene	112	8.473	8.472	0.001	69	25084	1.00	1.03	
88 Ethylbenzene	91	8.558	8.564	-0.006	87	39515	1.00	1.00	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	23	8107	1.00	0.9625	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	90	16732	1.00	1.01	
91 o-Xylene	106	9.111	9.111	0.000	83	15858	1.00	0.99	
92 Styrene	104	9.142	9.142	0.000	85	26447	1.00	1.01	
95 Bromoform	173	9.397	9.397	0.000	49	5582	1.00	0.99	
94 Isopropylbenzene	105	9.495	9.494	0.001	78	41896	1.00	0.9855	
101 Bromobenzene	156	9.841	9.841	0.000	76	10927	1.00	0.9656	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	57	10991	1.00	1.02	
99 N-Propylbenzene	91	9.920	9.920	0.000	93	45424	1.00	0.9377	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	48	4281	1.00	1.11	
98 trans-1,4-Dichloro-2-buten	53	9.945	9.951	-0.006	18	2100	1.00	1.12	
103 2-Chlorotoluene	126	10.030	10.024	0.006	80	10181	1.00	0.9783	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	81	35074	1.00	0.9896	
105 4-Chlorotoluene	126	10.139	10.139	0.000	67	11192	1.00	1.00	
106 tert-Butylbenzene	134	10.413	10.413	0.000	83	8704	1.00	1.01	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	26	35377	1.00	0.9677	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	68	42411	1.00	0.9501	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	69	23624	1.00	1.06	
110 4-Isopropyltoluene	119	10.760	10.766	-0.006	91	41511	1.00	1.01	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	84	23266	1.00	1.02	
115 n-Butylbenzene	91	11.149	11.149	0.000	89	34389	1.00	1.00	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	87	22603	1.00	1.06	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	17	2076	1.00	0.9582	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	79	17514	1.00	1.14	
120 Hexachlorobutadiene	225	12.713	12.707	0.006	48	8199	1.00	1.23	
121 Naphthalene	128	12.816	12.816	0.000	92	45997	1.00	1.15	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	77	16512	1.00	1.19	
S 125 1,2-Dichloroethene, Total	1				0			2.03	
S 123 Total BTEX	1				0			5.12	
S 124 Xylenes, Total	1				0			2.01	
S 126 1,3-Dichloropropene, Total	1				0			2.02	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00360	Amount Added:	1.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	1.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

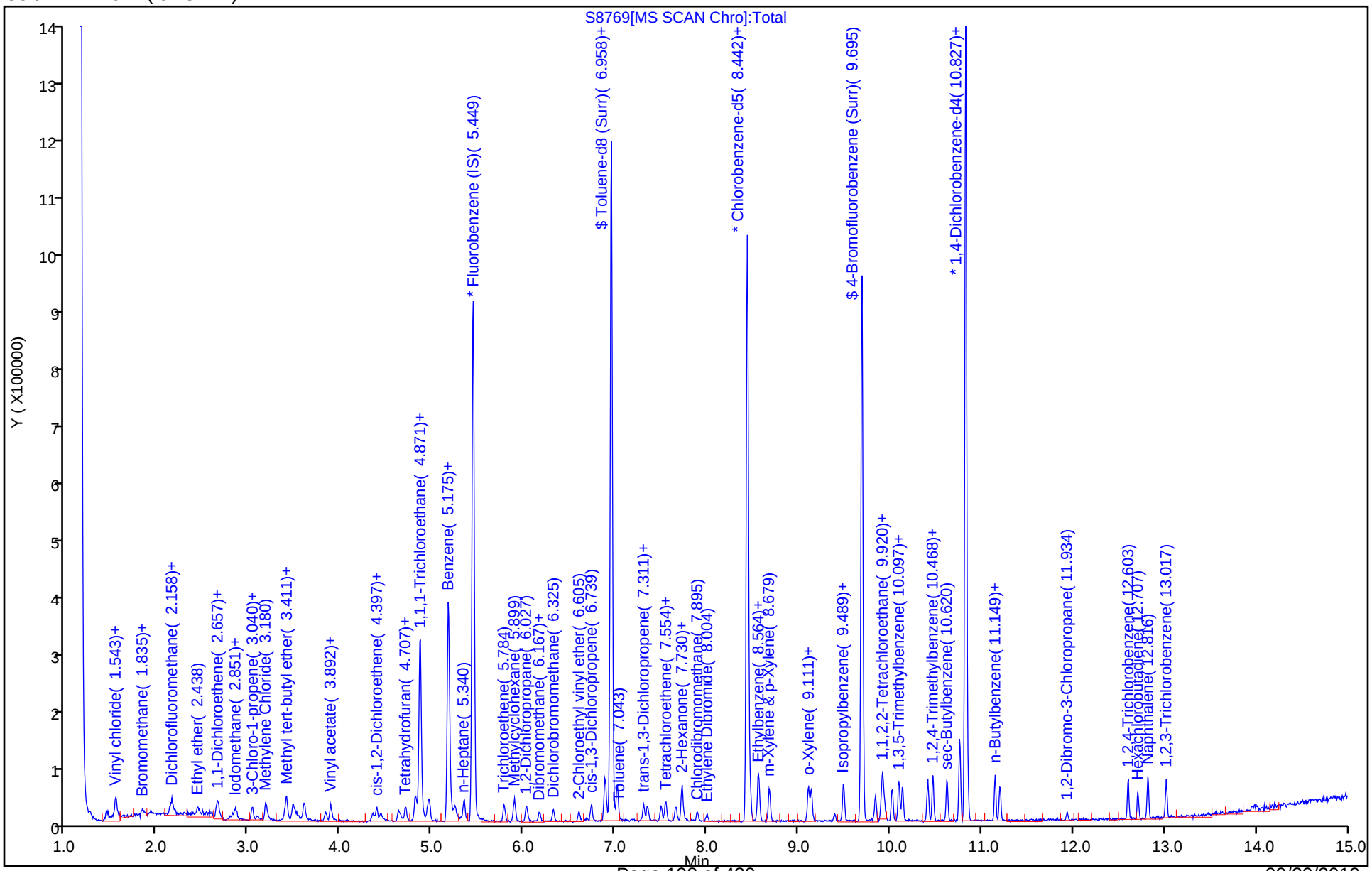
Report Date: 11-Sep-2019 11:11:53 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D

Injection Date:	10-Sep-2019 15:02:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

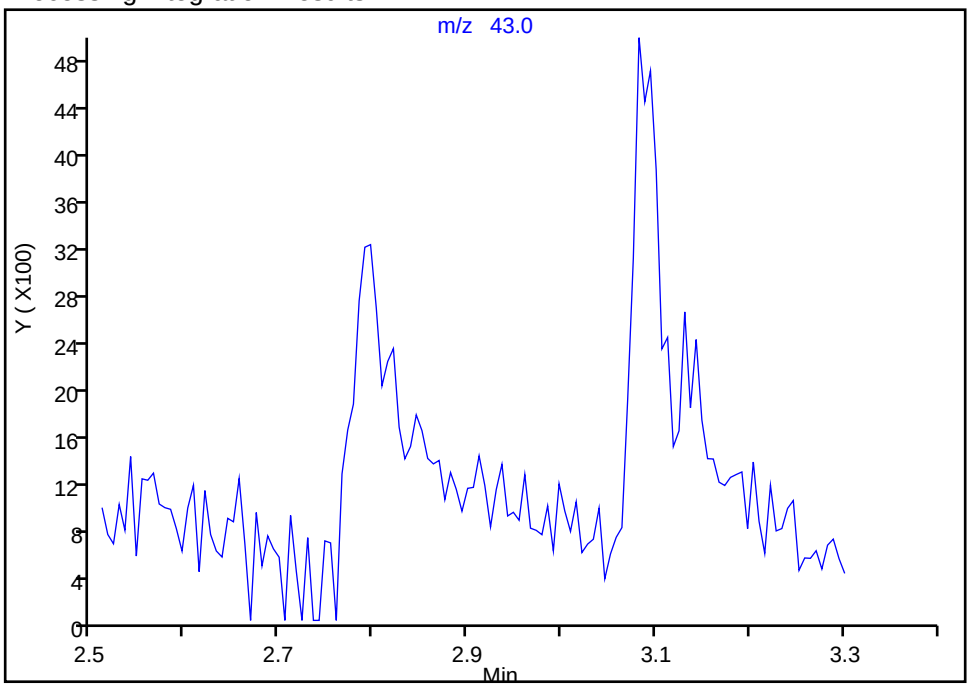
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

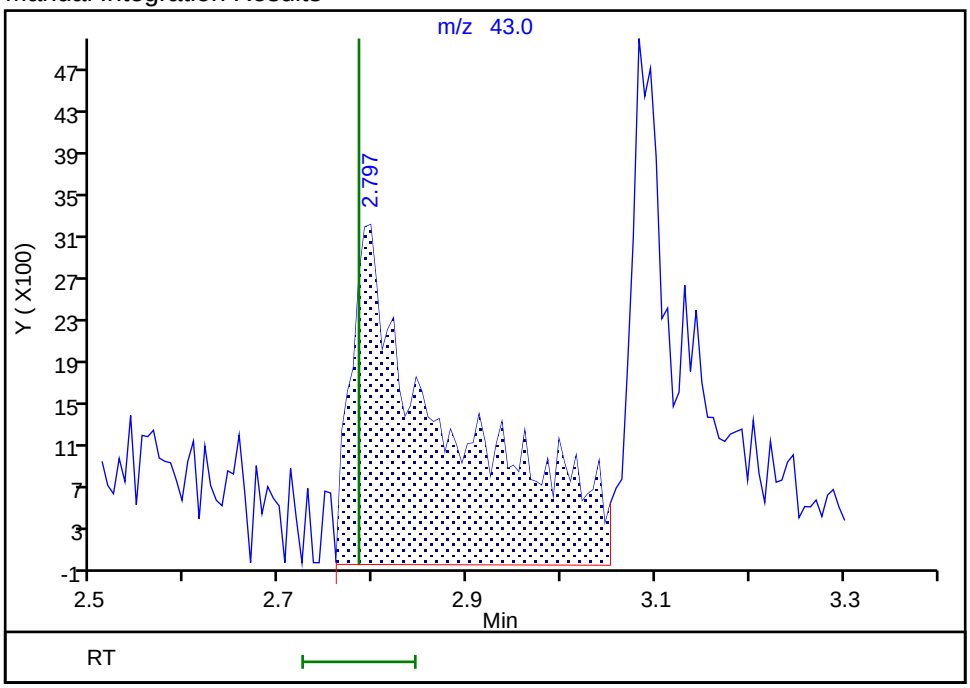
Not Detected
Expected RT: 2.78

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 23015
Amount: 7.786555
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:46:53
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

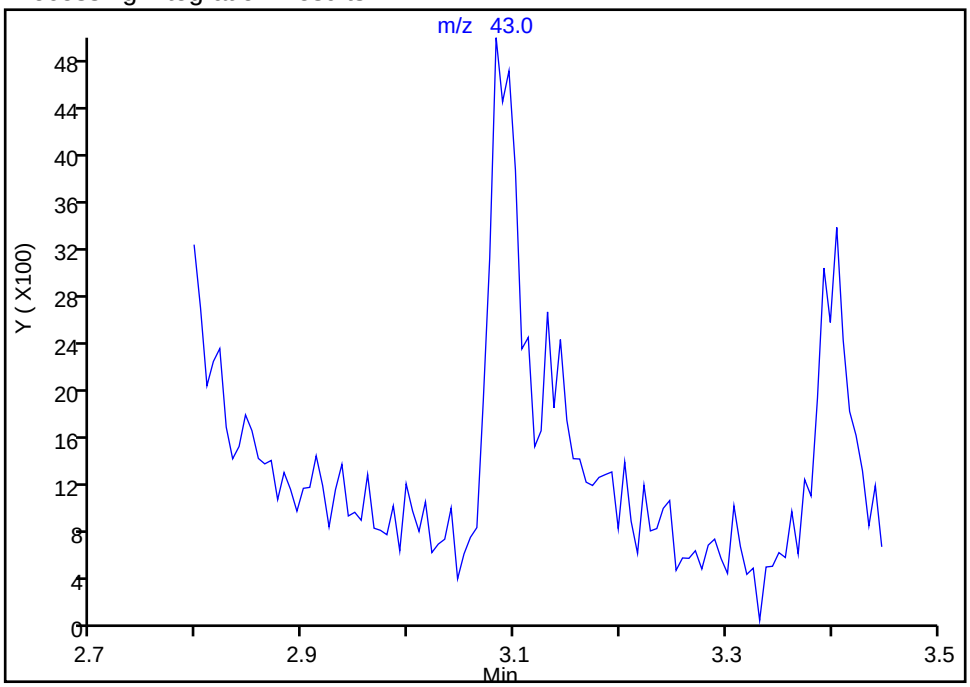
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

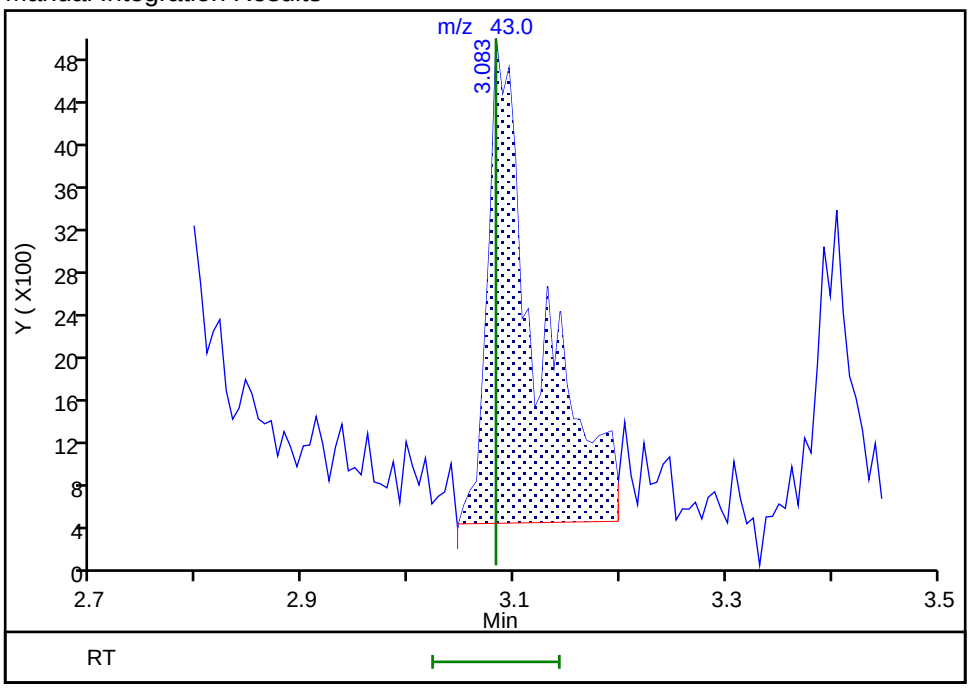
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.08
Area: 14725
Amount: 2.085417
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:47:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

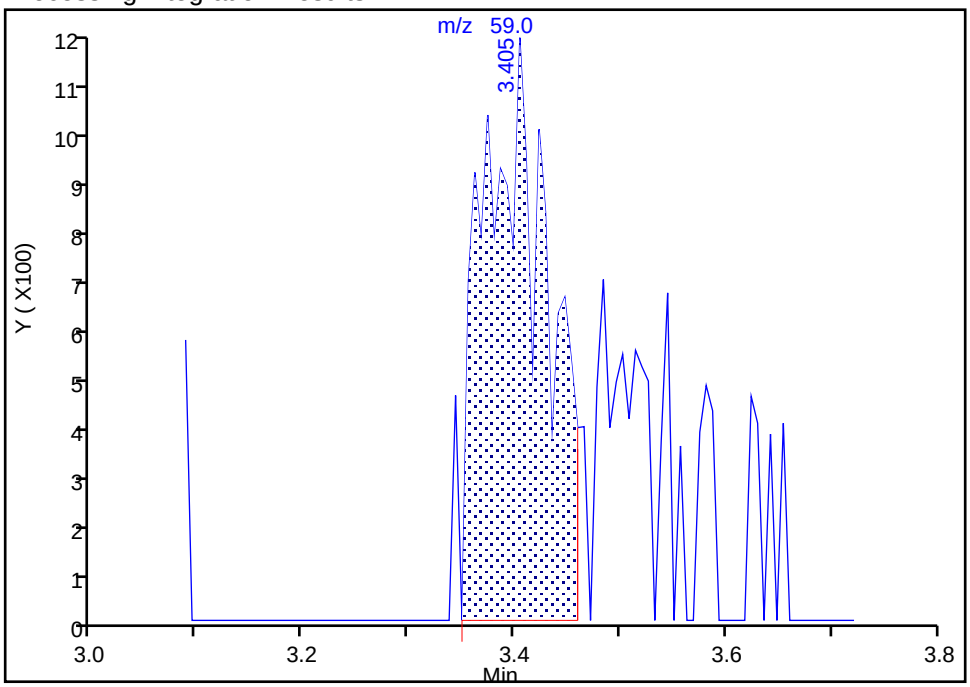
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

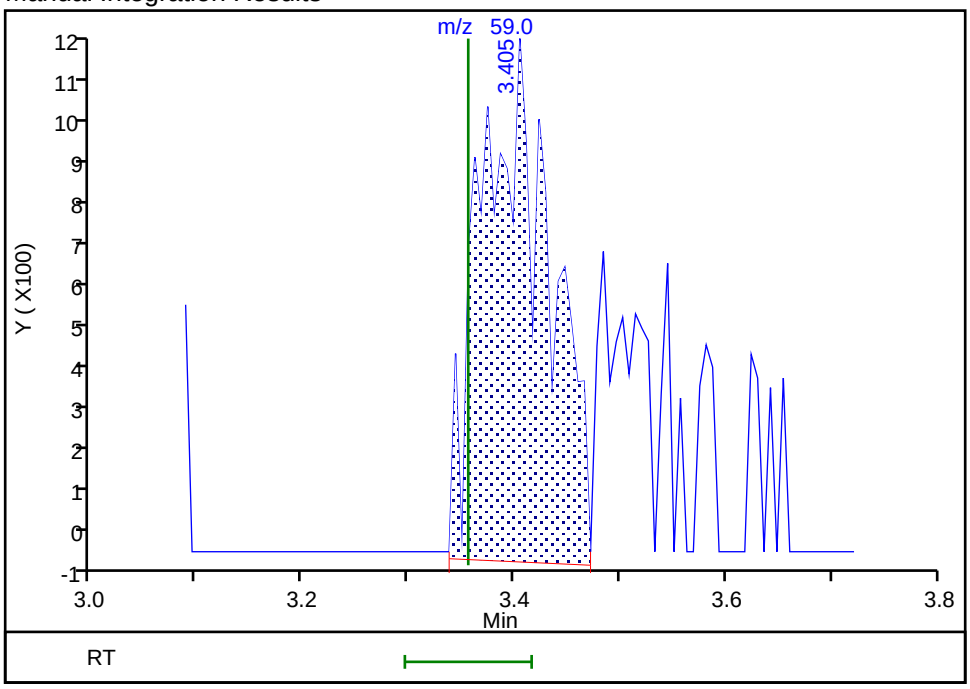
Processing Integration Results

RT: 3.40
Area: 4969
Amount: 8.291455
Amount Units: ug/L



Manual Integration Results

RT: 3.40
Area: 5475
Amount: 9.072205
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:48:00
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

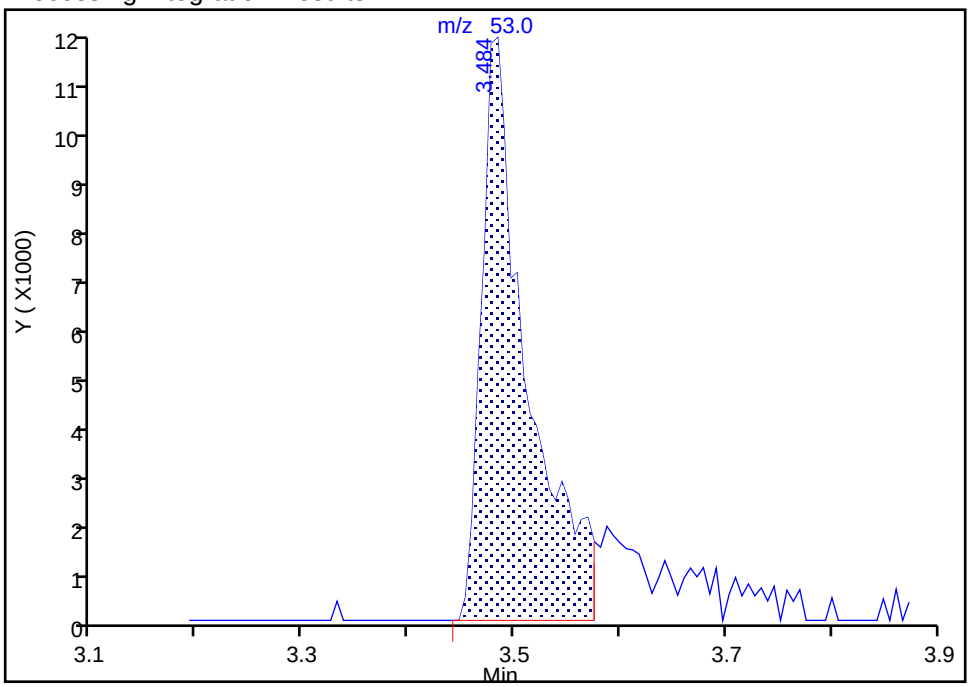
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

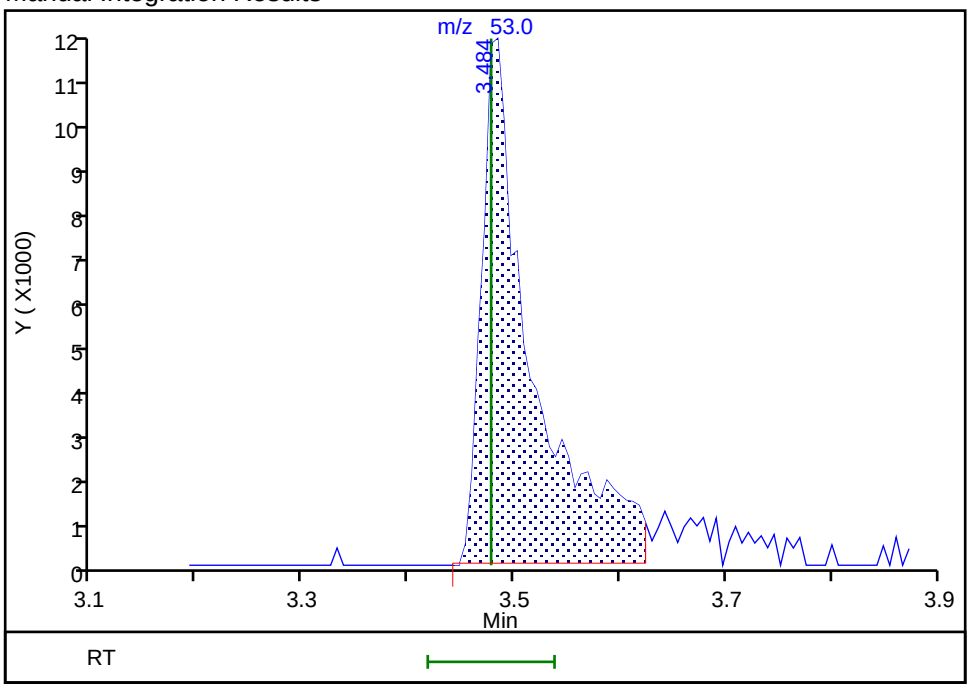
Processing Integration Results

RT: 3.48
Area: 33779
Amount: 9.627435
Amount Units: ug/L



Manual Integration Results

RT: 3.48
Area: 37418
Amount: 10.528104
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:48:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

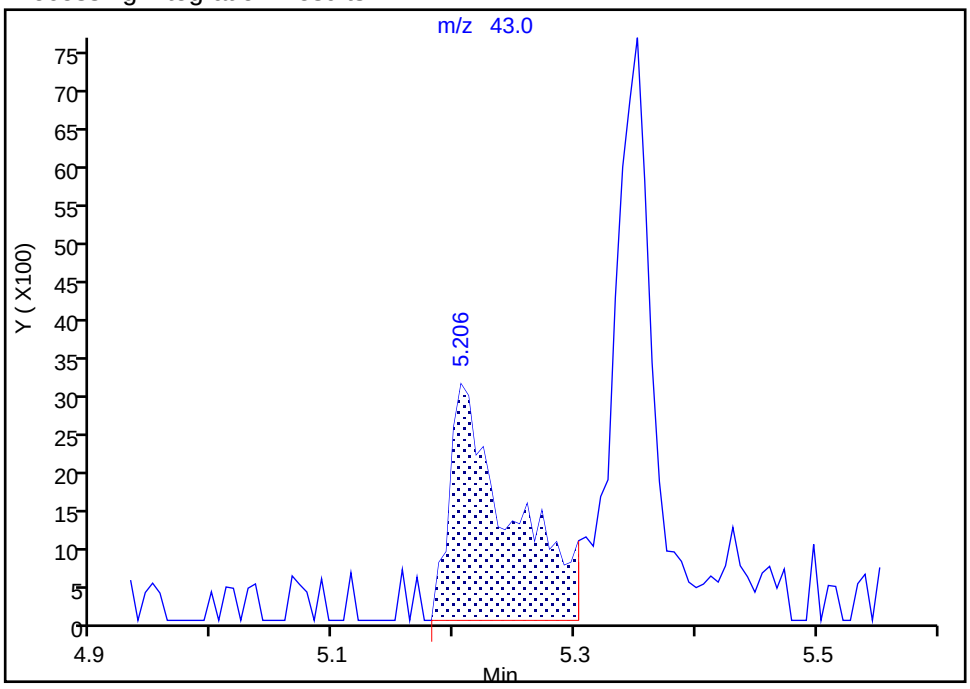
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

53 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

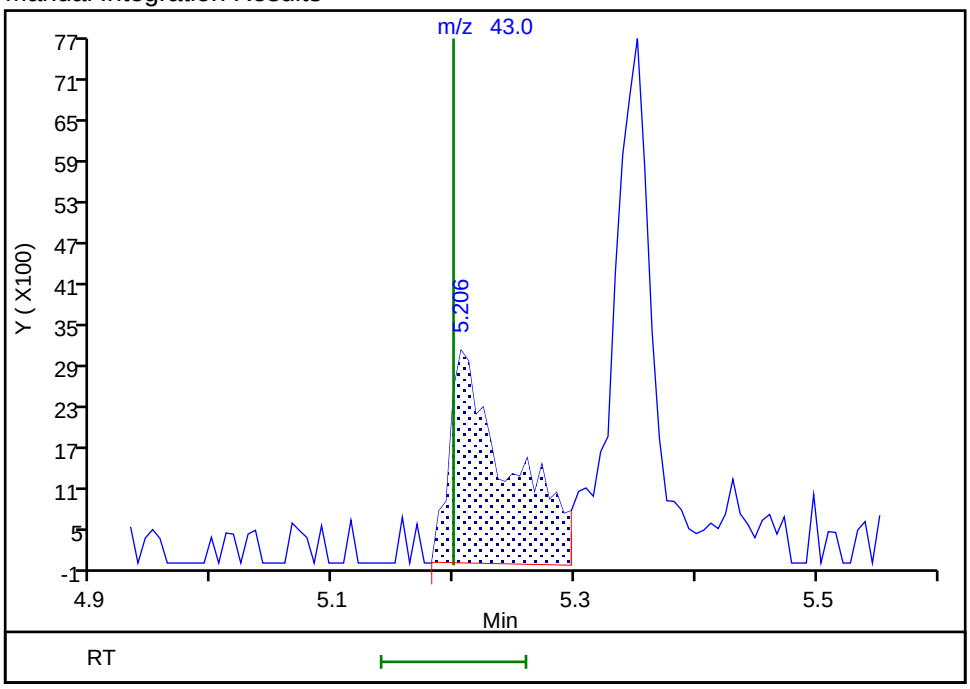
Processing Integration Results

RT: 5.21
Area: 10881
Amount: 32.353387
Amount Units: ug/L



Manual Integration Results

RT: 5.21
Area: 10573
Amount: 30.260328
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:49:18
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

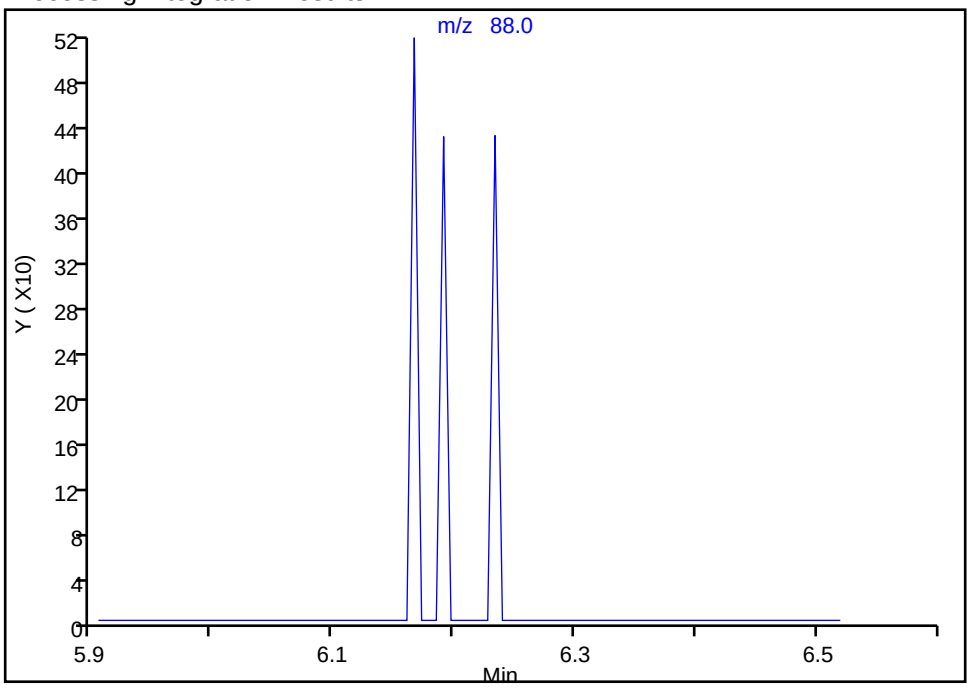
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

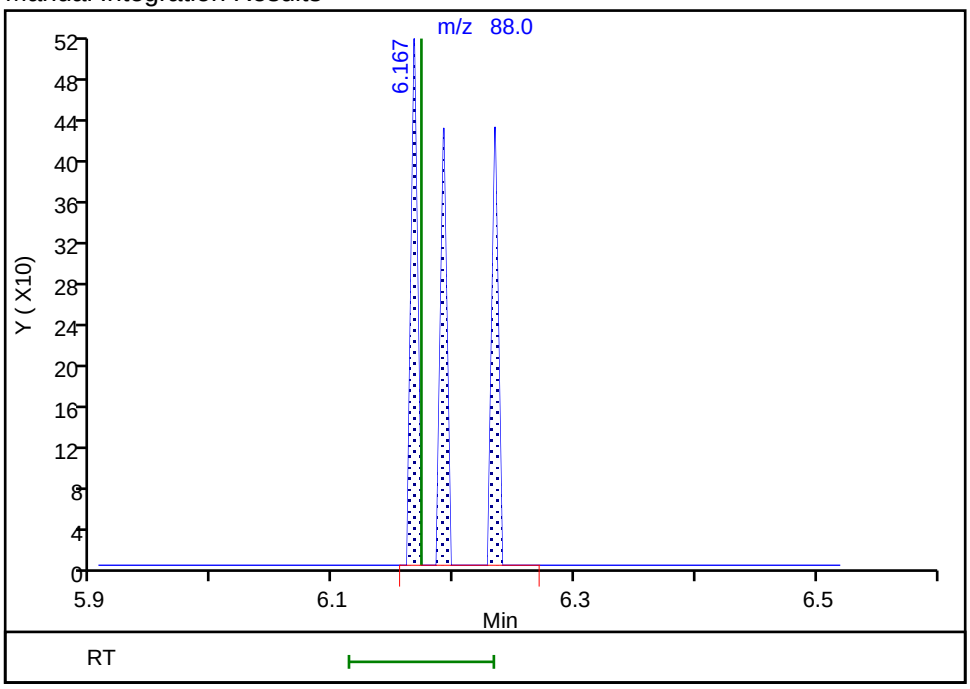
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.17
Area: 499
Amount: 9.004467
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:49:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Sep-2019 15:25:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0084010-009
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:11:57 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:58:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	140997	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	290866	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	93	333063	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	176581	25.0	24.7	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	114642	25.0	25.5	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	82	708338	25.0	24.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	261883	25.0	25.1	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	86	19971	2.00	2.01	
12 Chloromethane	50	1.440	1.440	0.000	88	22479	2.00	2.02	
13 Vinyl chloride	62	1.543	1.537	0.006	60	17675	2.00	1.90	
151 Butadiene	54	1.543	1.543	0.000	88	21575	2.00	2.02	
14 Bromomethane	94	1.841	1.835	0.006	74	14302	2.00	2.17	
15 Chloroethane	64	1.933	1.926	0.007	71	13439	2.00	2.16	
17 Trichlorofluoromethane	101	2.158	2.152	0.006	79	24699	2.00	1.92	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	89	26303	2.00	1.95	
18 Ethyl ether	59	2.444	2.437	0.007	88	16625	2.00	2.20	
20 Acrolein	56	2.632	2.626	0.006	74	14318	10.0	11.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.644	2.650	-0.006	72	16137	2.00	2.28	
22 1,1-Dichloroethene	96	2.650	2.656	-0.006	90	15375	2.00	2.22	
23 Acetone	43	2.784	2.784	0.000	87	31693	10.0	10.8	M
25 Iodomethane	142	2.821	2.821	0.000	89	29220	2.00	2.22	
26 Carbon disulfide	76	2.857	2.851	0.006	95	48942	2.00	2.16	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	82	30751	2.00	2.22	
27 Methyl acetate	43	3.082	3.082	0.000	95	28228	4.00	4.04	
30 Methylene Chloride	84	3.186	3.186	0.000	93	23344	2.00	2.12	
31 2-Methyl-2-propanol	59	3.362	3.356	0.006	59	12422	20.0	20.8	
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	83	48820	2.00	2.15	
34 trans-1,2-Dichloroethene	96	3.405	3.411	-0.006	86	17021	2.00	2.16	
33 Acrylonitrile	53	3.484	3.478	0.006	98	64787	20.0	18.4	
35 Hexane	57	3.606	3.606	0.000	89	28613	2.00	2.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	78	29954	2.00	2.12	
37 Vinyl acetate	43	3.892	3.891	0.001	96	86248	4.00	4.10	
44 2,2-Dichloropropane	77	4.360	4.354	0.006	79	17780	2.00	2.15	
45 cis-1,2-Dichloroethene	96	4.396	4.390	0.006	73	19021	2.00	2.19	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	90	45418	10.0	10.7	
48 Chlorobromomethane	128	4.634	4.634	0.000	77	9935	2.00	2.18	
49 Tetrahydrofuran	42	4.658	4.652	0.006	74	14180	4.00	4.65	
50 Chloroform	83	4.713	4.707	0.006	73	31284	2.00	2.22	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	78	25164	2.00	2.11	
52 Cyclohexane	56	4.822	4.816	0.006	87	31989	2.00	2.16	
55 Carbon tetrachloride	117	4.950	4.950	0.000	77	22905	2.00	2.15	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	81	23185	2.00	2.16	
57 Benzene	78	5.169	5.175	-0.006	58	67991	2.00	2.15	
53 Isobutyl alcohol	43	5.206	5.199	0.007	77	18650	50.0	53.9	
58 1,2-Dichloroethane	62	5.254	5.248	0.006	52	25505	2.00	2.06	
59 n-Heptane	43	5.345	5.345	0.000	87	34757	2.00	2.16	
62 Trichloroethene	95	5.784	5.783	0.001	88	17667	2.00	2.16	
64 Methylcyclohexane	83	5.899	5.899	0.000	88	29635	2.00	2.11	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	81	17957	2.00	2.21	
67 Dibromomethane	93	6.167	6.167	0.000	79	10530	2.00	2.07	
66 1,4-Dioxane	88	6.179	6.173	0.006	1	1863	40.0	33.6	M
68 Dichlorobromomethane	83	6.319	6.325	-0.006	89	21933	2.00	2.14	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	72	11802	2.00	2.01	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	73	26768	2.00	2.02	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	97	116295	10.0	10.7	
74 Toluene	92	7.018	7.018	0.000	91	42979	2.00	2.03	
77 trans-1,3-Dichloropropene	75	7.310	7.310	0.000	93	24396	2.00	2.02	
75 Ethyl methacrylate	69	7.353	7.347	0.006	65	22990	2.00	1.98	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	81	14519	2.00	2.30	
81 Tetrachloroethene	166	7.554	7.548	0.006	78	21354	2.00	2.18	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	84	28081	2.00	2.17	
80 2-Hexanone	43	7.730	7.724	0.006	81	81687	10.0	10.3	
83 Chlorodibromomethane	129	7.895	7.894	0.000	72	15967	2.00	1.94	
84 Ethylene Dibromide	107	8.004	7.998	0.006	70	17963	2.00	2.16	
87 Chlorobenzene	112	8.472	8.472	0.000	86	52412	2.00	2.15	
88 Ethylbenzene	91	8.564	8.564	0.000	97	83569	2.00	2.13	
89 1,1,1,2-Tetrachloroethane	131	8.576	8.570	0.006	50	18168	2.00	2.16	
90 m-Xylene & p-Xylene	106	8.679	8.685	-0.006	97	32073	2.00	1.94	
91 o-Xylene	106	9.111	9.111	0.000	95	34444	2.00	2.16	
92 Styrene	104	9.142	9.142	0.000	90	53172	2.00	2.04	
95 Bromoform	173	9.397	9.397	0.000	79	11089	2.00	1.97	
94 Isopropylbenzene	105	9.494	9.494	0.000	92	88576	2.00	2.10	
101 Bromobenzene	156	9.841	9.841	0.000	86	23677	2.00	2.11	
97 1,1,2,2-Tetrachloroethane	83	9.908	9.902	0.006	49	23044	2.00	2.17	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	100693	2.00	2.10	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.007	64	8021	2.00	2.10	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	57	5712	2.00	2.09	
103 2-Chlorotoluene	126	10.024	10.024	0.000	94	22195	2.00	2.15	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	79	75869	2.00	2.16	
105 4-Chlorotoluene	126	10.139	10.139	0.000	74	23320	2.00	2.10	
106 tert-Butylbenzene	134	10.413	10.413	0.000	87	19795	2.00	2.31	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	72	75969	2.00	2.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.620	10.626	-0.006	88	92295	2.00	2.09	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	70	45333	2.00	2.05	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	95	91085	2.00	2.23	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	90	49421	2.00	2.18	
115 n-Butylbenzene	91	11.149	11.149	0.000	90	74934	2.00	2.21	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	45853	2.00	2.17	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	44	4614	2.00	2.15	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	89	37016	2.00	2.43	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	81	14859	2.00	2.25	
121 Naphthalene	128	12.816	12.816	0.000	96	94597	2.00	2.38	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	89	33114	2.00	2.41	
S 125 1,2-Dichloroethene, Total	1				0			4.35	
S 123 Total BTEX	1				0			10.4	
S 124 Xylenes, Total	1				0			4.10	
S 126 1,3-Dichloropropene, Total	1				0			4.04	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	2.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	2.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

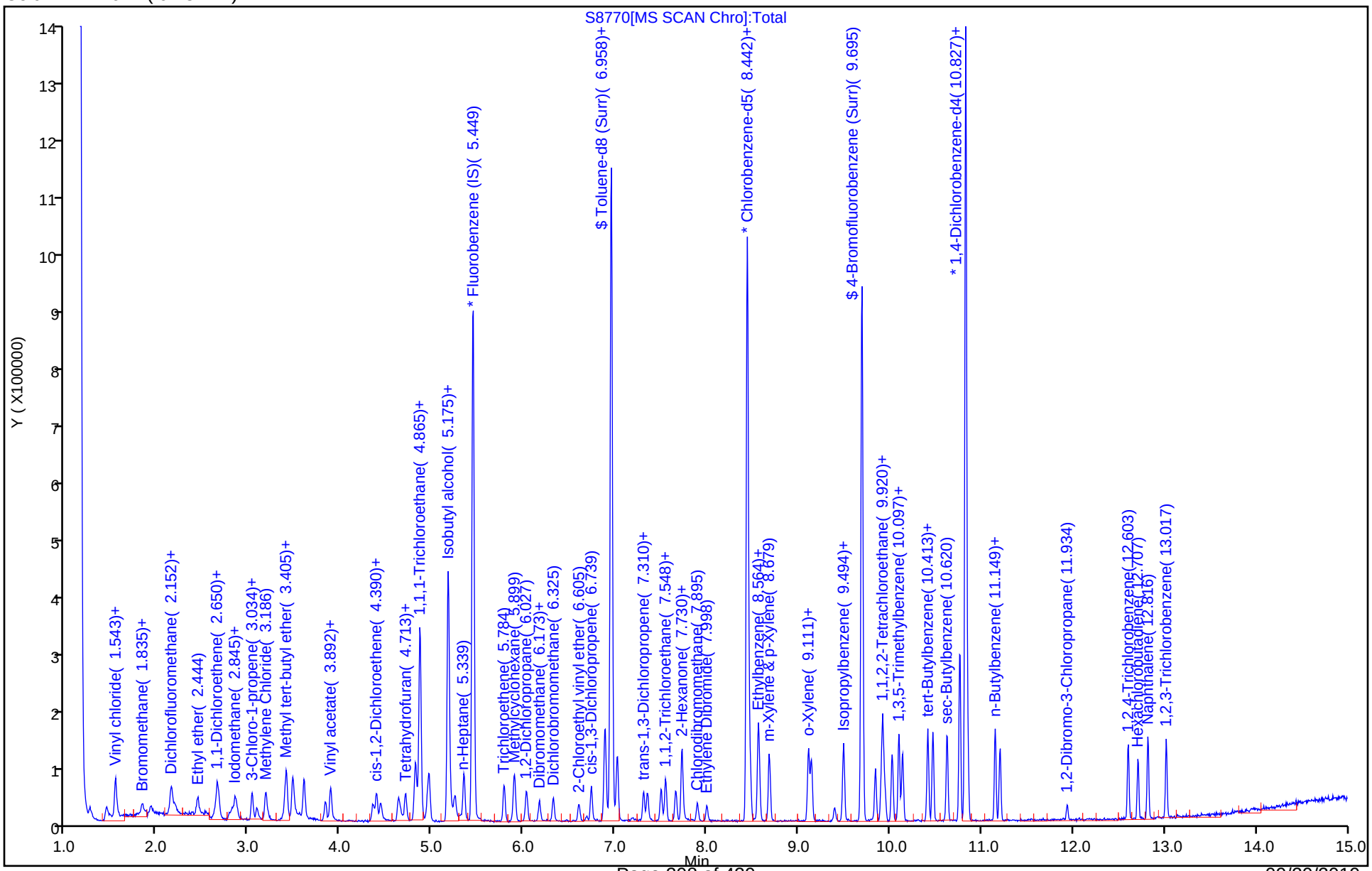
Report Date: 11-Sep-2019 11:11:58 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D

Injection Date:	10-Sep-2019 15:25:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 2			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

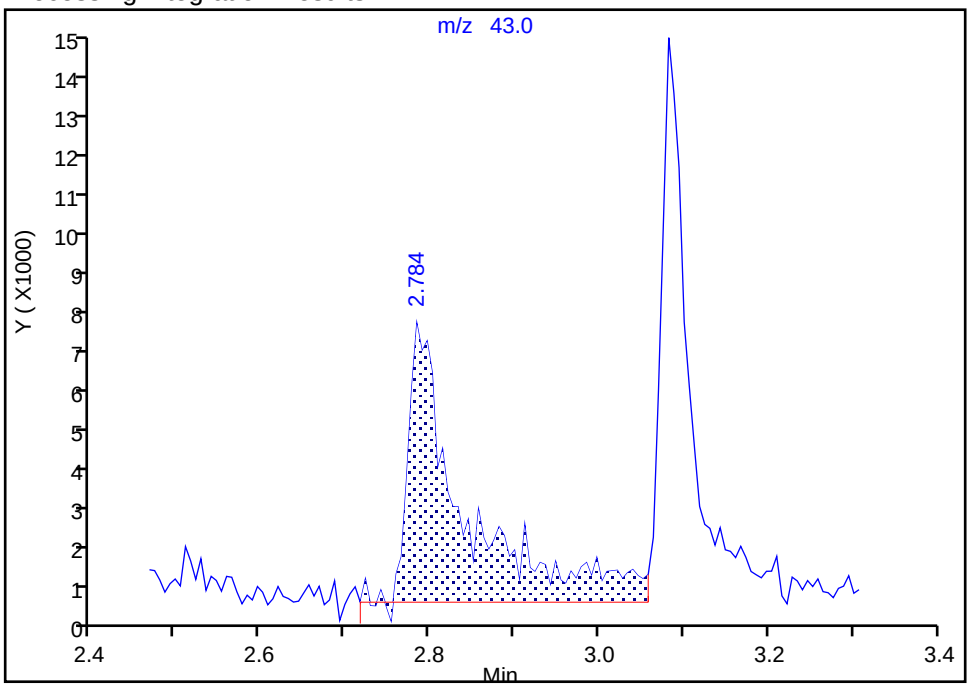
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D
Injection Date: 10-Sep-2019 15:25:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: kn ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

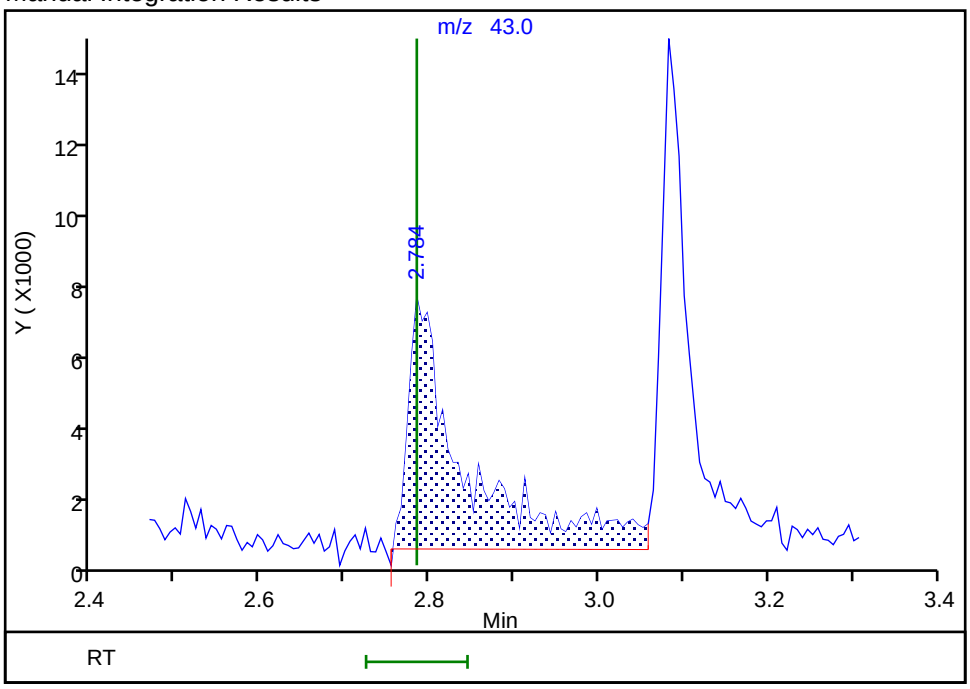
Processing Integration Results

RT: 2.78
Area: 31707
Amount: 9.292993
Amount Units: ug/L



Manual Integration Results

RT: 2.78
Area: 31693
Amount: 10.830453
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:57:32
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

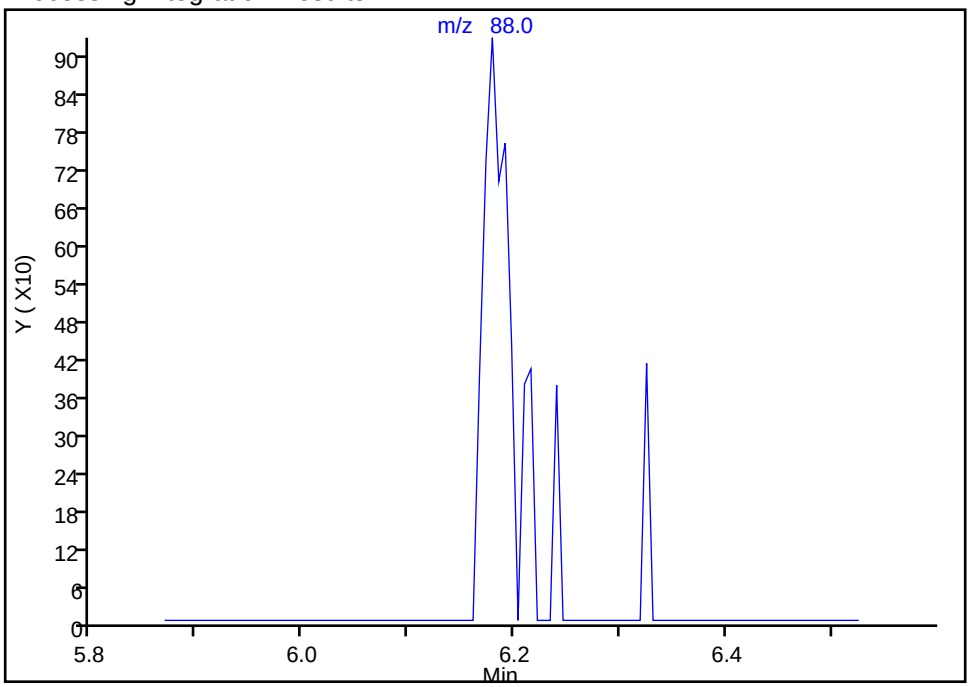
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D
Injection Date: 10-Sep-2019 15:25:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: kn ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

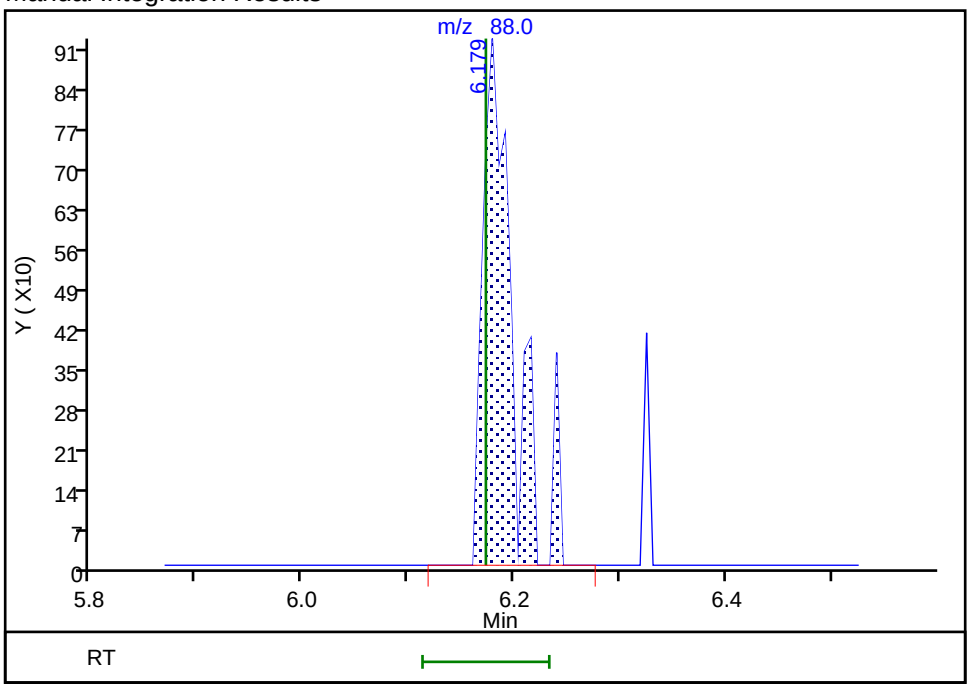
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.18
Area: 1863
Amount: 33.633597
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:58:00
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Sep-2019 15:48:30 ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0084010-010
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:03 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:04:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	141480	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	276154	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	90	335355	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	63	176829	25.0	24.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	95	112440	25.0	24.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	704578	25.0	25.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	261817	25.0	26.4	
10 Dichlorodifluoromethane	85	1.269	1.263	0.006	93	51233	5.00	5.13	
12 Chloromethane	50	1.446	1.440	0.006	99	56172	5.00	5.04	
13 Vinyl chloride	62	1.549	1.537	0.012	56	49377	5.00	5.29	
151 Butadiene	54	1.543	1.543	0.000	95	55455	5.00	5.17	
14 Bromomethane	94	1.835	1.835	0.000	79	31193	5.00	4.72	
15 Chloroethane	64	1.933	1.926	0.007	93	31416	5.00	5.03	
17 Trichlorofluoromethane	101	2.158	2.152	0.006	79	65719	5.00	5.10	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	94	66492	5.00	4.92	
18 Ethyl ether	59	2.444	2.437	0.007	94	38522	5.00	5.08	
20 Acrolein	56	2.632	2.626	0.006	86	27554	25.0	21.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.656	2.650	0.006	61	37321	5.00	5.25	
22 1,1-Dichloroethene	96	2.656	2.656	0.000	95	36750	5.00	5.29	
23 Acetone	43	2.790	2.784	0.006	96	75694	25.0	25.8	M
25 Iodomethane	142	2.827	2.821	0.006	92	68996	5.00	5.22	
26 Carbon disulfide	76	2.851	2.851	0.000	97	117808	5.00	5.18	
28 3-Chloro-1-propene	41	3.040	3.034	0.006	86	71524	5.00	5.16	
27 Methyl acetate	43	3.082	3.082	0.000	93	76313	10.0	10.9	M
30 Methylene Chloride	84	3.180	3.186	-0.006	94	47054	5.00	5.23	
31 2-Methyl-2-propanol	59	3.368	3.356	0.012	71	29725	50.0	49.6	M
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	91	114669	5.00	5.03	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	94	41586	5.00	5.26	
33 Acrylonitrile	53	3.478	3.478	0.000	97	175798	50.0	49.8	
35 Hexane	57	3.599	3.606	-0.007	89	68008	5.00	5.32	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	81	74652	5.00	5.27	
37 Vinyl acetate	43	3.891	3.891	0.000	97	208432	10.0	9.87	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	90	45654	5.00	5.49	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	79	47176	5.00	5.42	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	93	102424	25.0	24.1	
48 Chlorobromomethane	128	4.628	4.634	-0.006	92	24068	5.00	5.26	
49 Tetrahydrofuran	42	4.658	4.652	0.006	87	27743	10.0	9.06	
50 Chloroform	83	4.707	4.707	0.000	94	70908	5.00	5.01	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	89	62354	5.00	5.22	
52 Cyclohexane	56	4.822	4.816	0.006	90	78088	5.00	5.25	
55 Carbon tetrachloride	117	4.956	4.950	0.006	85	57170	5.00	5.35	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	89	55417	5.00	5.15	
57 Benzene	78	5.175	5.175	0.000	77	159270	5.00	5.02	
53 Isobutyl alcohol	43	5.205	5.199	0.006	91	41140	125.0	118.5	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	71	63503	5.00	5.12	
59 n-Heptane	43	5.345	5.345	0.000	94	81778	5.00	5.06	
62 Trichloroethene	95	5.783	5.783	0.000	91	43243	5.00	5.28	
64 Methylcyclohexane	83	5.899	5.899	0.000	90	73715	5.00	5.23	
65 1,2-Dichloropropane	63	6.027	6.033	-0.006	86	41631	5.00	5.10	
67 Dibromomethane	93	6.167	6.167	0.000	85	27136	5.00	5.32	
66 1,4-Dioxane	88	6.173	6.173	0.000	1	5260	100.0	100.0	
68 Dichlorobromomethane	83	6.319	6.325	-0.006	92	50219	5.00	4.87	
69 2-Chloroethyl vinyl ether	63	6.605	6.599	0.006	87	30529	5.00	5.18	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	82	66617	5.00	5.00	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	285978	25.0	27.6	
74 Toluene	92	7.024	7.018	0.006	73	108363	5.00	5.40	
77 trans-1,3-Dichloropropene	75	7.310	7.310	0.000	96	59708	5.00	5.20	
75 Ethyl methacrylate	69	7.353	7.347	0.006	88	60474	5.00	5.49	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	93	31258	5.00	5.22	
81 Tetrachloroethene	166	7.554	7.548	0.006	79	50957	5.00	5.47	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	93	65537	5.00	5.34	
80 2-Hexanone	43	7.730	7.724	0.006	95	208617	25.0	27.7	
83 Chlorodibromomethane	129	7.894	7.894	0.000	81	41039	5.00	5.24	
84 Ethylene Dibromide	107	7.998	7.998	0.000	90	40961	5.00	5.19	
87 Chlorobenzene	112	8.472	8.472	0.000	93	120550	5.00	5.21	
88 Ethylbenzene	91	8.564	8.564	0.000	98	203327	5.00	5.45	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	49	42847	5.00	5.36	
90 m-Xylene & p-Xylene	106	8.679	8.685	-0.006	95	82395	5.00	5.25	
91 o-Xylene	106	9.105	9.111	-0.006	95	79972	5.00	5.29	
92 Styrene	104	9.142	9.142	0.000	93	135010	5.00	5.46	
95 Bromoform	173	9.397	9.397	0.000	89	27529	5.00	5.15	
94 Isopropylbenzene	105	9.494	9.494	0.000	95	211948	5.00	5.00	
101 Bromobenzene	156	9.841	9.841	0.000	90	53697	5.00	4.76	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	93	54559	5.00	5.10	
99 N-Propylbenzene	91	9.920	9.920	0.000	97	248859	5.00	5.15	
100 1,2,3-Trichloropropane	110	9.939	9.939	-0.001	75	19427	5.00	5.05	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	63	15095	5.00	4.58	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	54704	5.00	5.27	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	83	183400	5.00	5.19	
105 4-Chlorotoluene	126	10.139	10.139	0.000	93	54960	5.00	4.91	
106 tert-Butylbenzene	134	10.413	10.413	0.000	88	46364	5.00	5.37	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	76	192301	5.00	5.27	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	92	235363	5.00	5.28	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	72	112681	5.00	5.06	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	219746	5.00	5.34	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	93	115560	5.00	5.06	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	184597	5.00	5.40	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	92	110849	5.00	5.22	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	65	11657	5.00	5.39	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	92	87316	5.00	5.70	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	90	39171	5.00	5.89	
121 Naphthalene	128	12.816	12.816	0.000	96	228858	5.00	5.72	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	95	81659	5.00	5.89	
S 125 1,2-Dichloroethene, Total	1				0			10.7	
S 123 Total BTEX	1				0			26.4	
S 124 Xylenes, Total	1				0			10.5	
S 126 1,3-Dichloropropene, Total	1				0			10.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	5.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	5.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

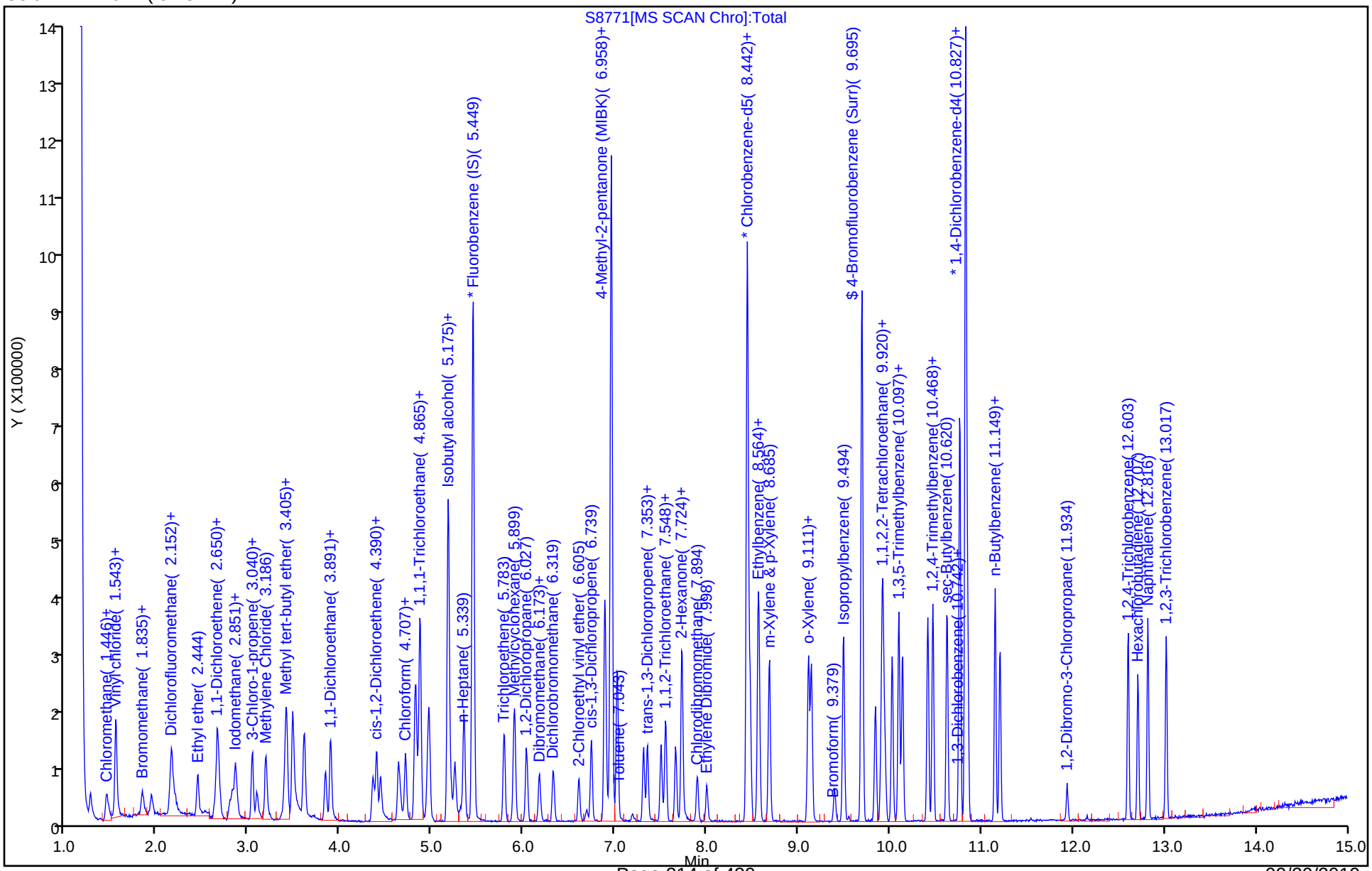
Report Date: 11-Sep-2019 11:12:04 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D

Injection Date:	10-Sep-2019 15:48:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 3			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

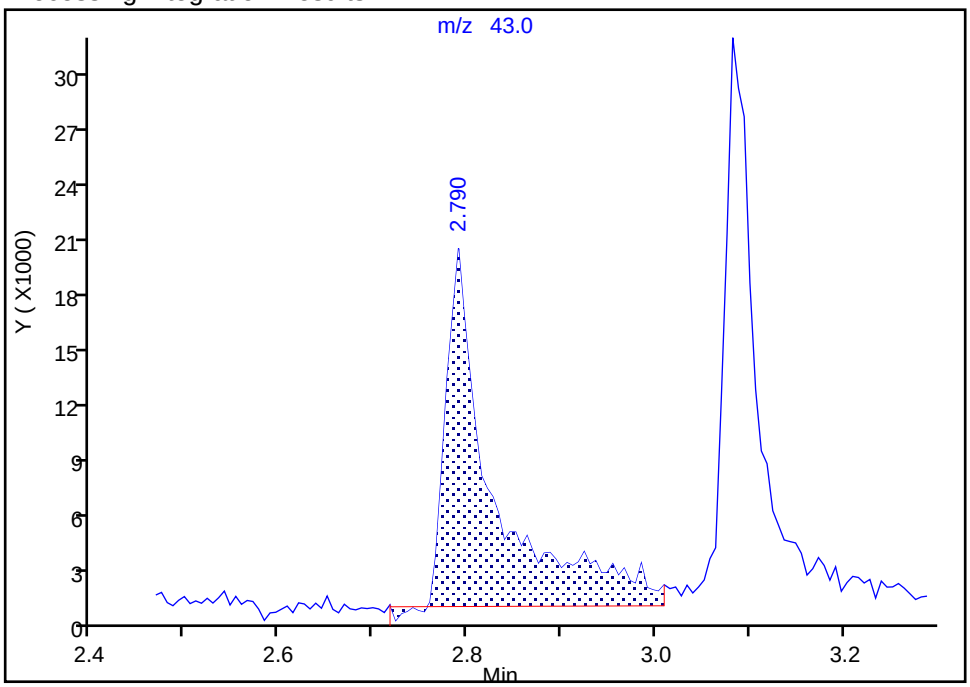
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Injection Date: 10-Sep-2019 15:48:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: kn ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

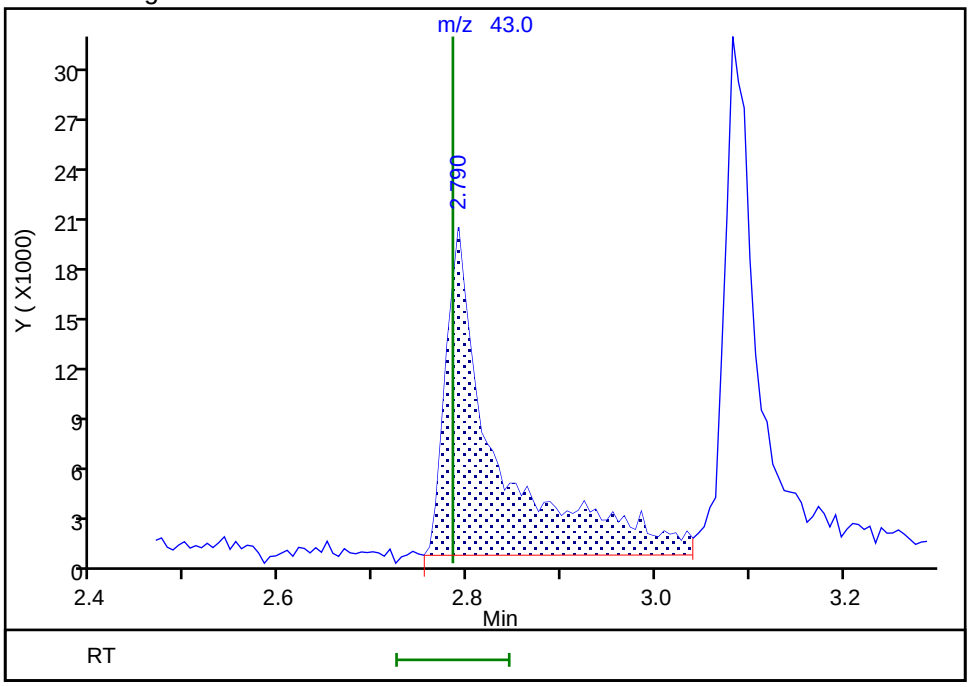
Processing Integration Results

RT: 2.79
Area: 68559
Amount: 22.500775
Amount Units: ug/L



Manual Integration Results

RT: 2.79
Area: 75694
Amount: 25.778613
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:00:50
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

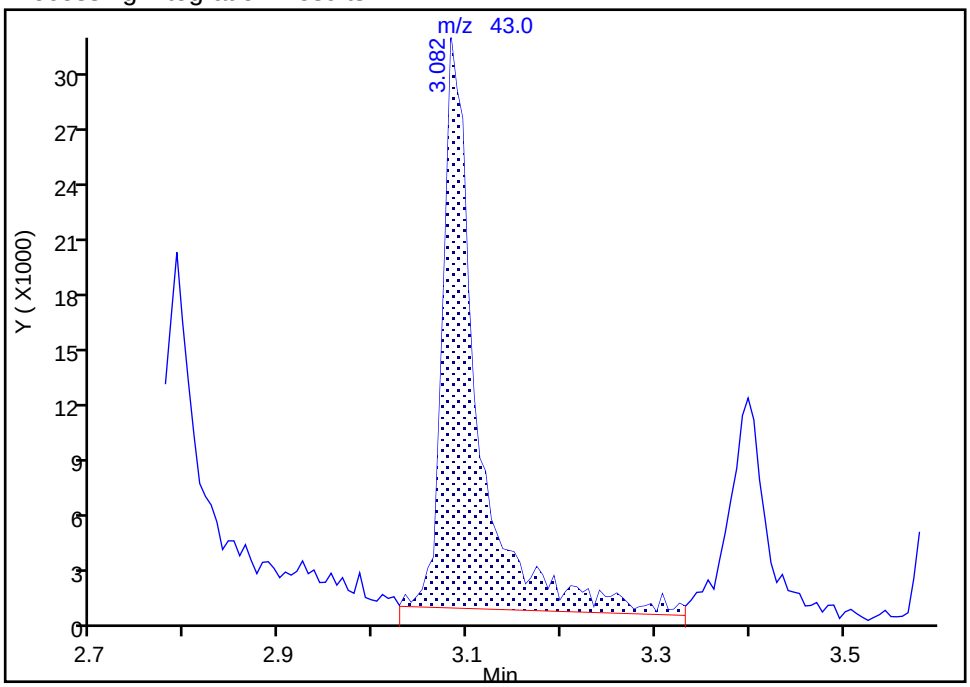
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Injection Date: 10-Sep-2019 15:48:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: kn ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

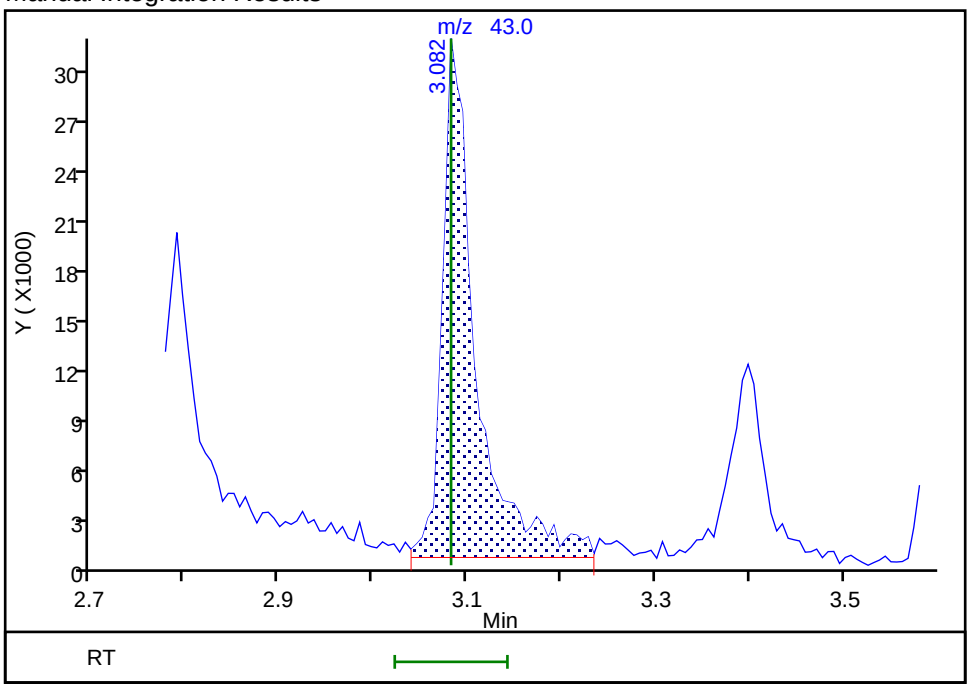
Processing Integration Results

RT: 3.08
Area: 78740
Amount: 11.176927
Amount Units: ug/L



Manual Integration Results

RT: 3.08
Area: 76313
Amount: 10.879270
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:01:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

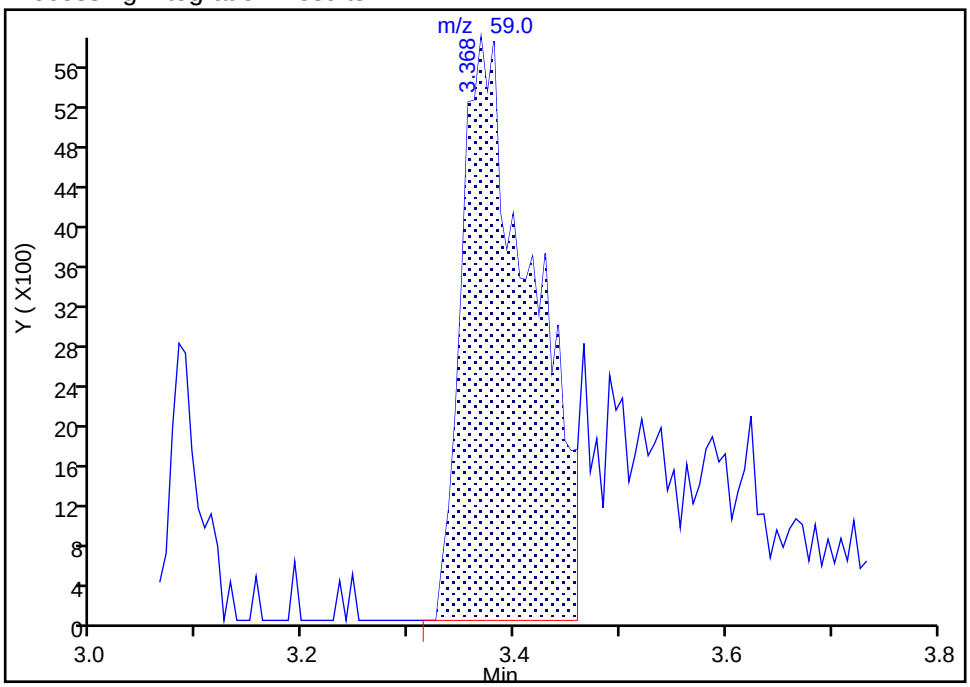
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Injection Date: 10-Sep-2019 15:48:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: kn ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

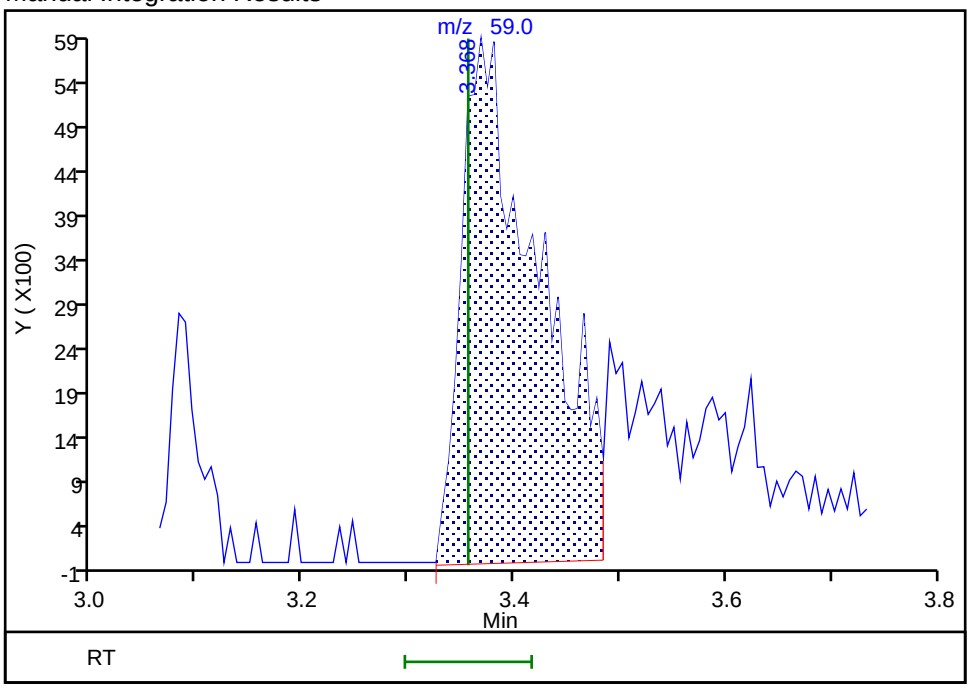
Processing Integration Results

RT: 3.37
Area: 27069
Amount: 44.836202
Amount Units: ug/L



Manual Integration Results

RT: 3.37
Area: 29725
Amount: 49.580889
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:01:40
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Sep-2019 16:11:30 ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0084010-011
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:08 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:09:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	137383	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	281122	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	81	330255	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	63	180864	25.0	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	85	114296	25.0	26.1	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	90	690557	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	260491	25.0	25.8	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	97	101350	10.0	10.4	
12 Chloromethane	50	1.440	1.440	0.000	99	103053	10.0	9.51	
13 Vinyl chloride	62	1.543	1.537	0.006	65	90408	10.0	9.97	
151 Butadiene	54	1.543	1.543	0.000	92	101155	10.0	9.70	
14 Bromomethane	94	1.829	1.835	-0.006	88	61384	10.0	9.57	
15 Chloroethane	64	1.927	1.926	0.001	97	58529	10.0	9.64	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	80	124379	10.0	9.95	
16 Dichlorofluoromethane	67	2.146	2.152	-0.006	95	124781	10.0	9.50	
18 Ethyl ether	59	2.438	2.437	0.001	93	73222	10.0	9.94	
20 Acrolein	56	2.626	2.626	0.000	94	54603	50.0	44.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.657	2.650	0.007	67	67189	10.0	9.74	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	98	64347	10.0	9.54	
23 Acetone	43	2.784	2.784	0.000	98	143220	50.0	50.2	M
25 Iodomethane	142	2.821	2.821	0.000	95	128320	10.0	10.0	
26 Carbon disulfide	76	2.851	2.851	0.000	99	211062	10.0	9.56	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	85	134339	10.0	9.98	
27 Methyl acetate	43	3.082	3.082	0.000	95	128183	20.0	18.8	
30 Methylene Chloride	84	3.180	3.186	-0.006	97	80769	10.0	9.98	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	89	50608	100.0	86.9	Ma
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	92	217111	10.0	9.80	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	93	75206	10.0	9.79	
33 Acrylonitrile	53	3.478	3.478	0.000	99	333559	100.0	97.3	
35 Hexane	57	3.600	3.606	-0.006	89	122623	10.0	9.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	96	138781	10.0	10.1	
37 Vinyl acetate	43	3.892	3.891	0.001	97	402089	20.0	19.6	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	91	83790	10.0	10.4	
45 cis-1,2-Dichloroethene	96	4.397	4.390	0.007	79	85057	10.0	10.1	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	199932	50.0	48.5	
48 Chlorobromomethane	128	4.634	4.634	0.000	92	44565	10.0	10.0	
49 Tetrahydrofuran	42	4.646	4.652	-0.006	89	59815	20.0	20.1	
50 Chloroform	83	4.707	4.707	0.000	84	131049	10.0	9.53	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	88	112277	10.0	9.68	
52 Cyclohexane	56	4.816	4.816	0.000	93	136269	10.0	9.43	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	101122	10.0	9.74	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	92	100644	10.0	9.64	
57 Benzene	78	5.175	5.175	0.000	93	298979	10.0	9.71	
53 Isobutyl alcohol	43	5.206	5.199	0.007	95	85904	250.0	254.9	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	78	117991	10.0	9.80	
59 n-Heptane	43	5.346	5.345	0.001	96	147246	10.0	9.39	
62 Trichloroethene	95	5.784	5.783	0.001	94	77108	10.0	9.70	
64 Methylcyclohexane	83	5.899	5.899	0.000	91	132317	10.0	9.66	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	89	77348	10.0	9.76	
67 Dibromomethane	93	6.167	6.167	0.000	86	51729	10.0	10.4	
66 1,4-Dioxane	88	6.179	6.173	0.006	4	11489	200.0	214.6	M
68 Dichlorobromomethane	83	6.325	6.325	0.000	96	97248	10.0	9.72	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	91	56171	10.0	9.81	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	83	126121	10.0	9.75	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	549072	50.0	52.1	
74 Toluene	92	7.019	7.018	0.001	82	192706	10.0	9.44	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.001	99	108604	10.0	9.30	
75 Ethyl methacrylate	69	7.347	7.347	0.000	87	114462	10.0	10.2	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	87	58774	10.0	9.64	
81 Tetrachloroethene	166	7.548	7.548	0.000	85	88303	10.0	9.31	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	96	119719	10.0	9.58	
80 2-Hexanone	43	7.724	7.724	0.000	96	397746	50.0	51.9	
83 Chlorodibromomethane	129	7.895	7.894	0.001	89	76643	10.0	9.61	
84 Ethylene Dibromide	107	7.998	7.998	0.000	97	78378	10.0	9.76	
87 Chlorobenzene	112	8.473	8.472	0.001	92	228069	10.0	9.69	
88 Ethylbenzene	91	8.558	8.564	-0.006	98	366800	10.0	9.65	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	82841	10.0	10.2	
90 m-Xylene & p-Xylene	106	8.679	8.685	-0.006	98	152912	10.0	9.56	
91 o-Xylene	106	9.111	9.111	0.000	96	149859	10.0	9.73	
92 Styrene	104	9.142	9.142	0.000	92	243909	10.0	9.69	
95 Bromoform	173	9.391	9.397	-0.006	93	53347	10.0	9.80	
94 Isopropylbenzene	105	9.495	9.494	0.001	95	396406	10.0	9.49	
101 Bromobenzene	156	9.841	9.841	0.000	92	107163	10.0	9.64	
97 1,1,2,2-Tetrachloroethane	83	9.908	9.902	0.006	58	101538	10.0	9.63	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	449189	10.0	9.44	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	56	36604	10.0	9.66	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	79	32405	10.0	9.32	
103 2-Chlorotoluene	126	10.024	10.024	0.000	97	98492	10.0	9.63	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	86	341403	10.0	9.80	
105 4-Chlorotoluene	126	10.133	10.139	-0.006	93	105351	10.0	9.56	
106 tert-Butylbenzene	134	10.413	10.413	0.000	91	82441	10.0	9.70	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	41	346365	10.0	9.64	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	92	433719	10.0	9.89	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	72	212557	10.0	9.68	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	97	411530	10.0	10.2	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	218645	10.0	9.73	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	337582	10.0	10.0	
116 1,2-Dichlorobenzene	146	11.198	11.204	-0.006	93	205659	10.0	9.83	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	69	22720	10.0	10.7	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	94	155505	10.0	10.3	
120 Hexachlorobutadiene	225	12.713	12.707	0.006	93	69593	10.0	10.6	
121 Naphthalene	128	12.816	12.816	0.000	97	413334	10.0	10.5	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	143557	10.0	10.5	
S 125 1,2-Dichloroethene, Total	1				0			19.9	
S 123 Total BTEX	1				0			48.1	
S 124 Xylenes, Total	1				0			19.3	
S 126 1,3-Dichloropropene, Total	1				0			19.1	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00360	Amount Added:	5.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	5.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

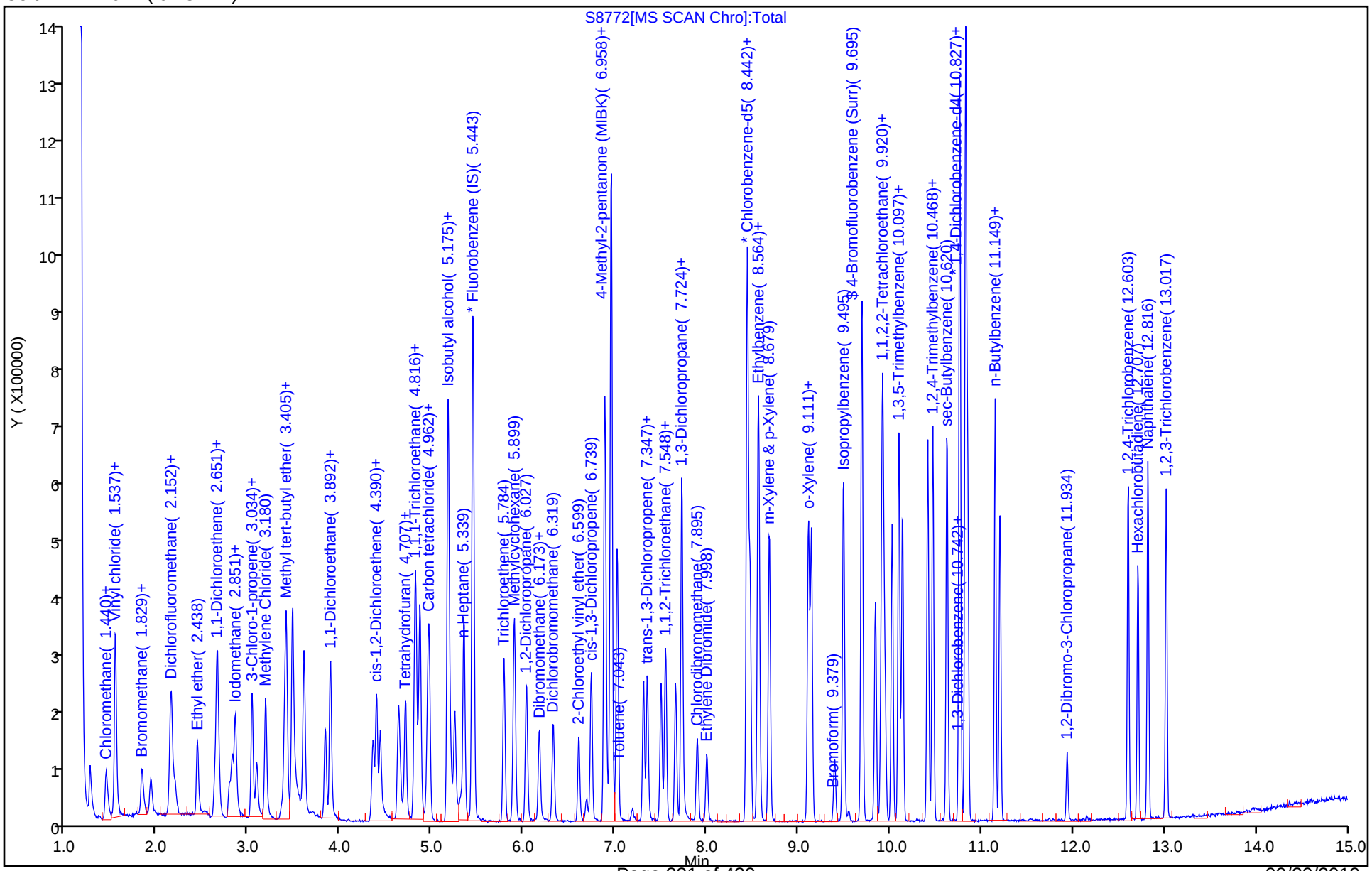
Report Date: 11-Sep-2019 11:12:10 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D

Injection Date:	10-Sep-2019 16:11:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 4			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

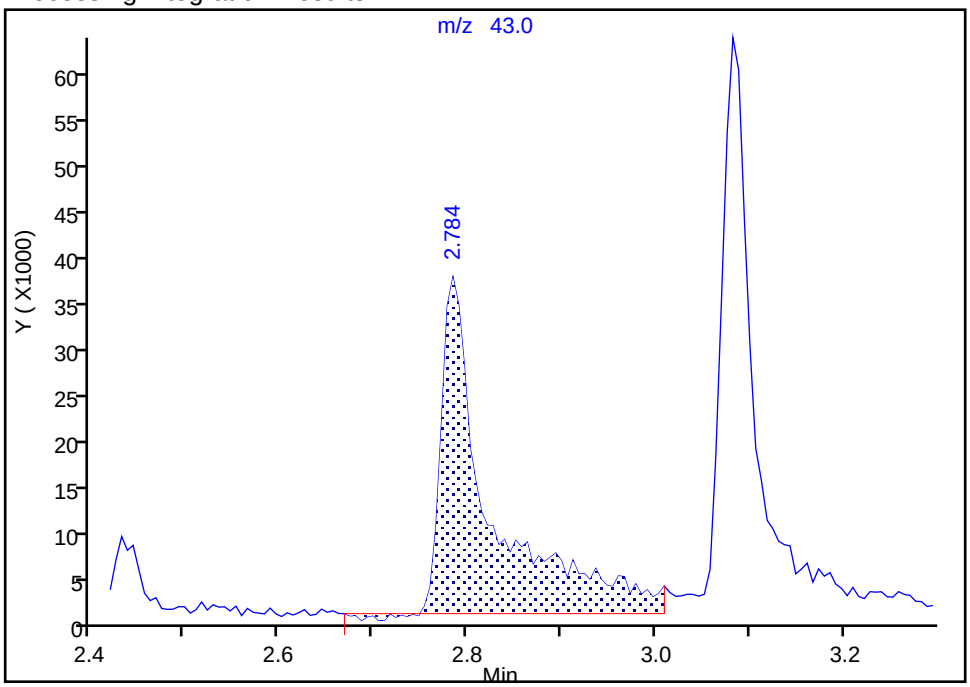
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Injection Date: 10-Sep-2019 16:11:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: kn ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

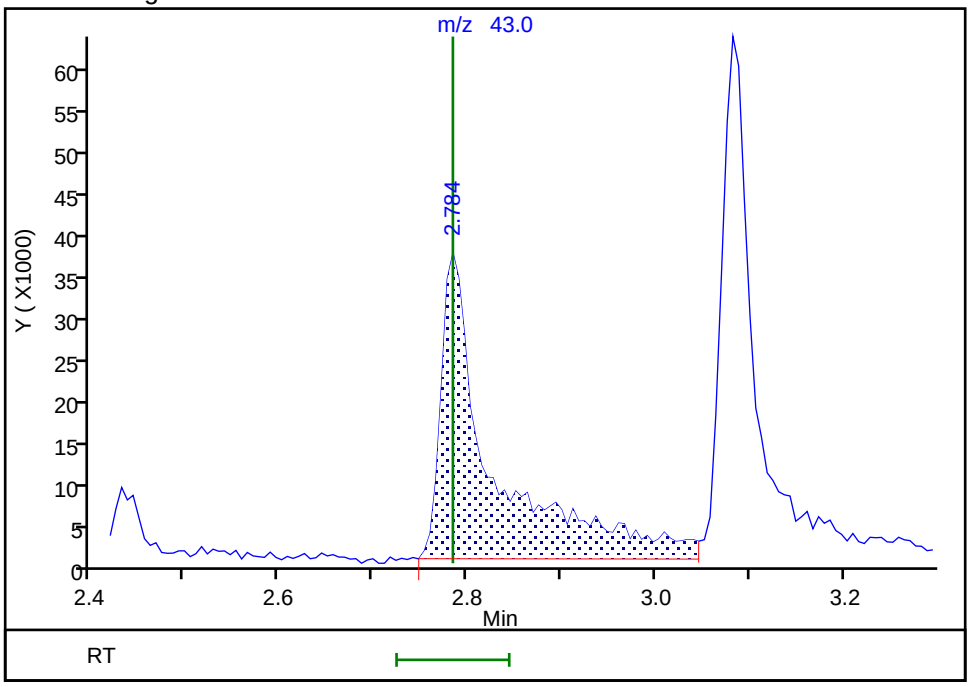
Processing Integration Results

RT: 2.78
Area: 133421
Amount: 46.947600
Amount Units: ug/L



Manual Integration Results

RT: 2.78
Area: 143220
Amount: 50.230074
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:05:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

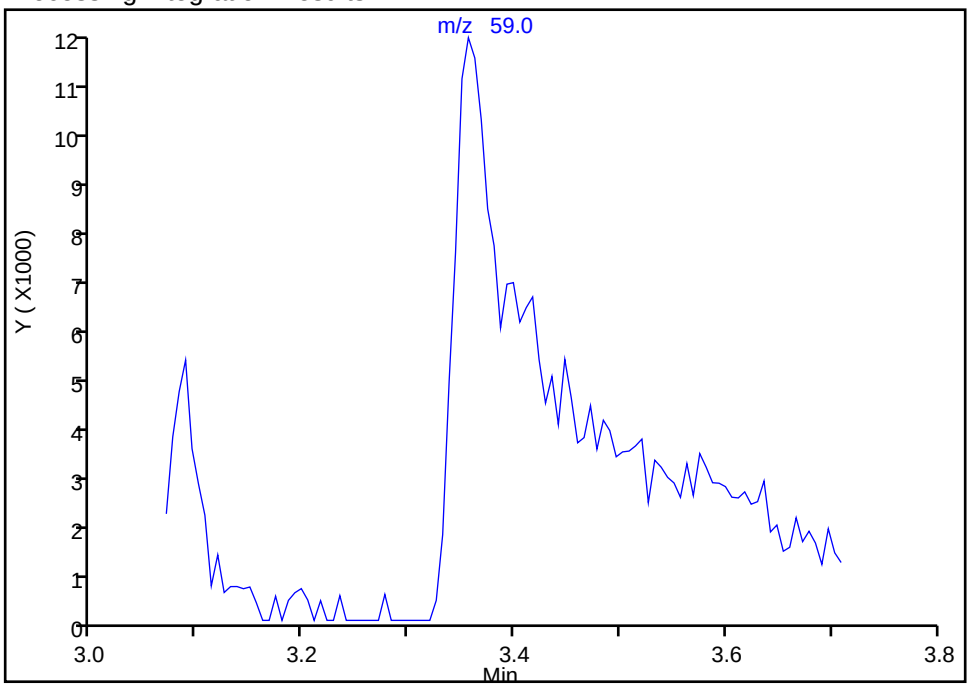
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Injection Date: 10-Sep-2019 16:11:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: kn ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

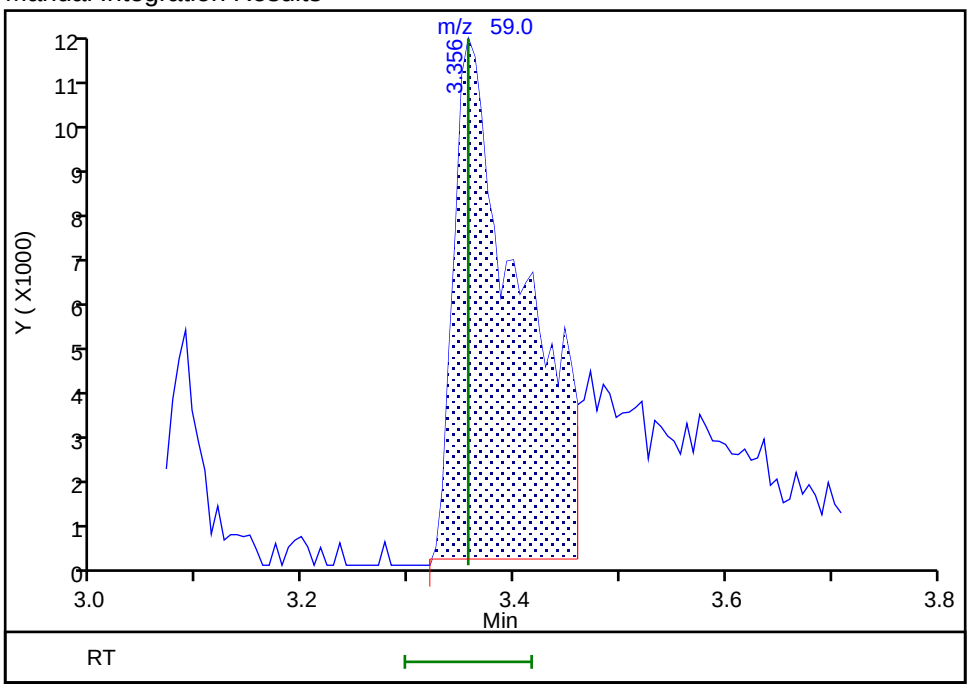
Not Detected
Expected RT: 3.36

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 50608
Amount: 86.930800
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:05:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

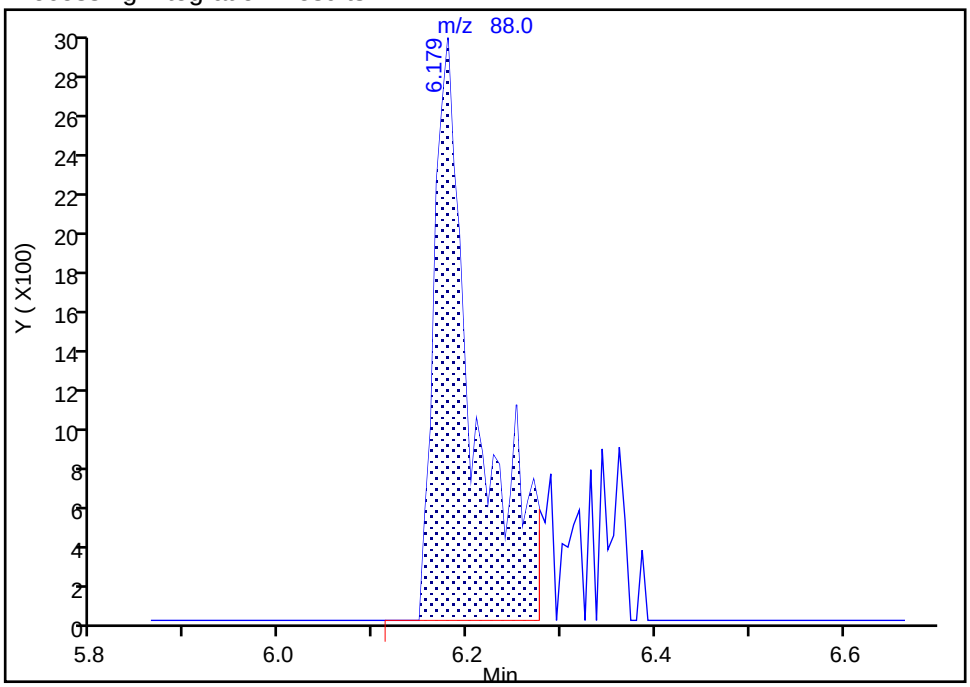
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Injection Date: 10-Sep-2019 16:11:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: kn ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

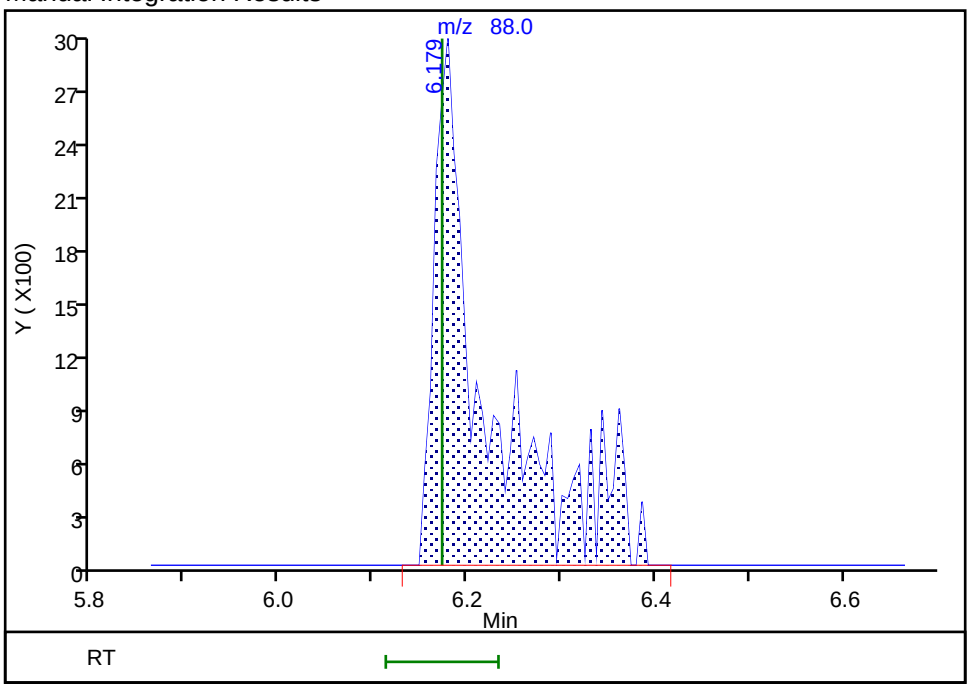
Processing Integration Results

RT: 6.18
Area: 8845
Amount: 195.7124
Amount Units: ug/L



Manual Integration Results

RT: 6.18
Area: 11489
Amount: 214.6055
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:06:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8773.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 10-Sep-2019 16:34:30 ALS Bottle#: 9 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0084010-012
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:14 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:37:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	143736	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	283614	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	54	325070	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	66	181961	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	57	113518	25.0	24.7	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	90	712070	25.0	25.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	256179	25.0	25.2	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	97	243366	25.0	24.0	
12 Chloromethane	50	1.440	1.440	0.000	99	250948	25.0	22.1	
13 Vinyl chloride	62	1.537	1.537	0.000	73	206649	25.0	21.8	
151 Butadiene	54	1.543	1.543	0.000	94	241313	25.0	22.1	
14 Bromomethane	94	1.835	1.835	0.000	90	144751	25.0	21.6	
15 Chloroethane	64	1.926	1.926	0.000	99	137144	25.0	21.6	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	78	292183	25.0	22.3	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	96	292501	25.0	21.3	
18 Ethyl ether	59	2.437	2.437	0.000	94	186889	25.0	24.3	
20 Acrolein	56	2.626	2.626	0.000	94	146574	125.0	113.6	
21 1,1,2-Trichloro-1,2,2-trif	101	2.650	2.650	0.000	67	171590	25.0	23.8	
22 1,1-Dichloroethene	96	2.656	2.656	0.000	96	162932	25.0	23.1	
23 Acetone	43	2.784	2.784	0.000	99	354222	125.0	118.7	
25 Iodomethane	142	2.821	2.821	0.000	98	316633	25.0	23.6	
26 Carbon disulfide	76	2.851	2.851	0.000	100	537556	25.0	23.3	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	86	330341	25.0	23.4	
27 Methyl acetate	43	3.082	3.082	0.000	96	327130	50.0	45.9	
30 Methylene Chloride	84	3.186	3.186	0.000	95	191682	25.0	23.9	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	96	145899	250.0	239.5	
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	91	551696	25.0	23.8	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	94	191782	25.0	23.9	
33 Acrylonitrile	53	3.478	3.478	0.000	98	881054	250.0	245.6	
35 Hexane	57	3.606	3.606	0.000	91	298841	25.0	23.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	97	349976	25.0	24.3	
37 Vinyl acetate	43	3.891	3.891	0.000	97	994889	50.0	46.4	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	92	196053	25.0	23.2	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	210461	25.0	23.8	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	499073	125.0	115.6	
48 Chlorobromomethane	128	4.634	4.634	0.000	95	111305	25.0	23.9	
49 Tetrahydrofuran	42	4.652	4.652	0.000	87	146920	50.0	47.2	
50 Chloroform	83	4.707	4.707	0.000	84	328077	25.0	22.8	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	87	283391	25.0	23.4	
52 Cyclohexane	56	4.816	4.816	0.000	93	352750	25.0	23.3	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	251773	25.0	23.2	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	92	254385	25.0	23.3	
57 Benzene	78	5.175	5.175	0.000	97	740315	25.0	23.0	
53 Isobutyl alcohol	43	5.199	5.199	0.000	93	194434	625.0	551.4	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	78	288628	25.0	22.9	
59 n-Heptane	43	5.345	5.345	0.000	93	362492	25.0	22.1	
62 Trichloroethene	95	5.783	5.783	0.000	94	188935	25.0	22.7	
64 Methylcyclohexane	83	5.899	5.899	0.000	90	343120	25.0	24.0	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	90	196069	25.0	23.6	
67 Dibromomethane	93	6.167	6.167	0.000	84	126189	25.0	24.4	
66 1,4-Dioxane	88	6.173	6.173	0.000	30	27383	500.0	507.0	
68 Dichlorobromomethane	83	6.325	6.325	0.000	98	250290	25.0	23.9	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	137278	25.0	22.9	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	85	317588	25.0	23.5	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	1292982	125.0	121.6	
74 Toluene	92	7.018	7.018	0.000	86	482958	25.0	23.5	
77 trans-1,3-Dichloropropene	75	7.310	7.310	0.000	97	281620	25.0	23.9	
75 Ethyl methacrylate	69	7.347	7.347	0.000	91	280852	25.0	24.8	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	93	138784	25.0	22.6	
81 Tetrachloroethene	166	7.548	7.548	0.000	86	227883	25.0	23.8	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	95	295596	25.0	23.4	
80 2-Hexanone	43	7.724	7.724	0.000	96	933608	125.0	120.8	
83 Chlorodibromomethane	129	7.894	7.894	0.000	90	198603	25.0	24.7	
84 Ethylene Dibromide	107	7.998	7.998	0.000	97	195089	25.0	24.1	
87 Chlorobenzene	112	8.472	8.472	0.000	94	568598	25.0	23.9	
88 Ethylbenzene	91	8.564	8.564	0.000	98	913251	25.0	23.8	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	204016	25.0	24.9	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	374180	25.0	23.2	
91 o-Xylene	106	9.111	9.111	0.000	97	364567	25.0	23.5	
92 Styrene	104	9.142	9.142	0.000	94	624088	25.0	24.6	
95 Bromoform	173	9.397	9.397	0.000	96	136250	25.0	24.8	
94 Isopropylbenzene	105	9.494	9.494	0.000	95	947620	25.0	23.0	
101 Bromobenzene	156	9.841	9.841	0.000	92	266190	25.0	24.3	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	90	244740	25.0	23.6	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	1101515	25.0	23.5	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	86	87804	25.0	23.5	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	84	83808	25.0	23.6	
103 2-Chlorotoluene	126	10.024	10.024	0.000	97	241659	25.0	24.0	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	86	795851	25.0	23.2	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	247859	25.0	22.8	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	191702	25.0	22.9	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	77	826431	25.0	23.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	1009216	25.0	23.4	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	74	506796	25.0	23.5	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	932987	25.0	23.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	519426	25.0	23.5	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	775667	25.0	23.4	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	476973	25.0	23.2	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	77	47459	25.0	22.6	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	95	299246	25.0	20.1	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	96	131531	25.0	20.4	
121 Naphthalene	128	12.816	12.816	0.000	97	766890	25.0	19.8	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	255390	25.0	19.0	

Reagents:

GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
SS 8260 CORP_00077	Amount Added: 12.50	Units: uL	
S_8260_IS_00325	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added: 1.00	Units: uL	Run Reagent

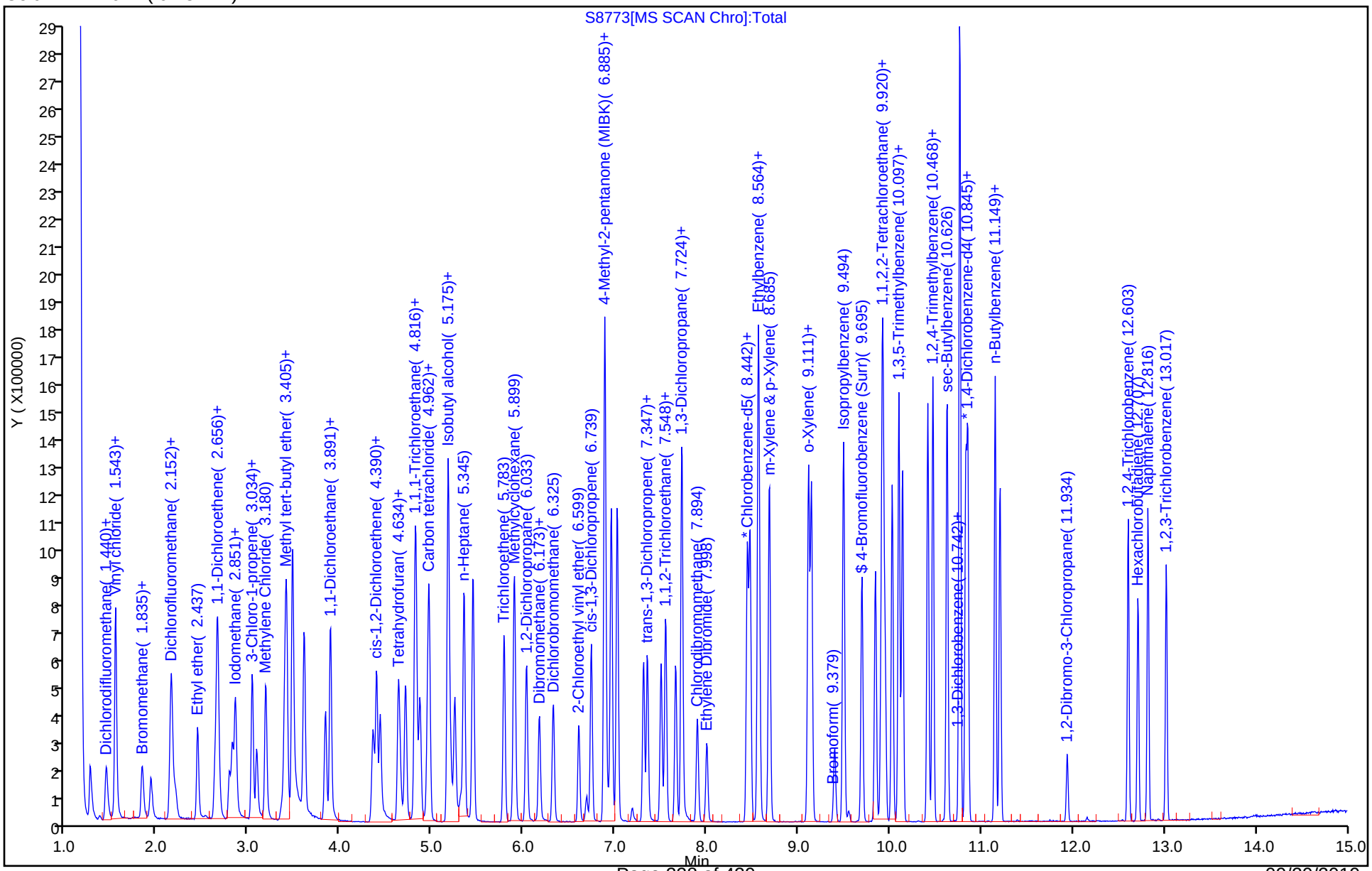
Report Date: 11-Sep-2019 11:12:16 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8773.D

Injection Date:	10-Sep-2019 16:34:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	ICIS 5			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8774.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Sep-2019 16:57:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0084010-013
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:19 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:12:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.449	-0.006	98	139952	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	81	290897	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	47	304353	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	64	183038	25.0	25.8	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	46	113411	25.0	25.4	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	82	711295	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	251250	25.0	24.1	
10 Dichlorodifluoromethane	85	1.264	1.263	0.001	98	536840	50.0	54.3	
12 Chloromethane	50	1.440	1.440	0.000	99	566101	50.0	51.3	
13 Vinyl chloride	62	1.537	1.537	0.000	68	501942	50.0	54.4	
151 Butadiene	54	1.537	1.543	-0.006	94	554135	50.0	52.2	
14 Bromomethane	94	1.829	1.835	-0.006	90	316533	50.0	48.4	
15 Chloroethane	64	1.927	1.926	0.001	99	304310	50.0	49.2	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	82	697977	50.0	54.8	
16 Dichlorofluoromethane	67	2.146	2.152	-0.006	96	652814	50.0	48.8	
18 Ethyl ether	59	2.438	2.437	0.001	93	378602	50.0	50.5	
20 Acrolein	56	2.620	2.626	-0.006	96	318340	250.0	253.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.651	2.650	0.001	66	353407	50.0	50.3	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	98	334485	50.0	48.7	
23 Acetone	43	2.784	2.784	0.000	98	710382	250.0	244.6	
25 Iodomethane	142	2.815	2.821	-0.006	98	653201	50.0	49.9	
26 Carbon disulfide	76	2.851	2.851	0.000	100	1100524	50.0	48.9	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	87	670379	50.0	48.9	
27 Methyl acetate	43	3.083	3.082	0.001	96	729815	100.0	105.2	
30 Methylene Chloride	84	3.180	3.186	-0.006	95	385016	50.0	50.2	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	97	372217	500.0	627.6	
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	92	1096809	50.0	48.6	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	95	391332	50.0	50.0	
33 Acrylonitrile	53	3.478	3.478	0.000	99	1780740	500.0	509.9	
35 Hexane	57	3.600	3.606	-0.006	91	609324	50.0	48.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	97	709767	50.0	50.6	
37 Vinyl acetate	43	3.886	3.891	-0.005	97	2079569	100.0	99.6	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	92	418276	50.0	50.9	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	433382	50.0	50.3	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	1040111	250.0	247.5	
48 Chlorobromomethane	128	4.628	4.634	-0.006	96	229247	50.0	50.6	
49 Tetrahydrofuran	42	4.646	4.652	-0.006	88	274781	100.0	90.7	
50 Chloroform	83	4.707	4.707	0.000	94	662888	50.0	47.3	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	88	597476	50.0	50.6	
52 Cyclohexane	56	4.816	4.816	0.000	94	723421	50.0	49.2	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	539798	50.0	51.0	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	92	518722	50.0	48.8	
57 Benzene	78	5.175	5.175	0.000	98	1537207	50.0	49.0	
53 Isobutyl alcohol	43	5.200	5.199	0.001	91	398796	1250.0	1161.5	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	586018	50.0	47.8	
59 n-Heptane	43	5.346	5.345	0.001	94	725690	50.0	45.4	
62 Trichloroethene	95	5.784	5.783	0.001	96	398964	50.0	49.2	
64 Methylcyclohexane	83	5.899	5.899	0.000	93	710983	50.0	51.0	
65 1,2-Dichloropropane	63	6.027	6.033	-0.006	91	404453	50.0	50.1	
67 Dibromomethane	93	6.167	6.167	0.000	89	252785	50.0	50.1	
66 1,4-Dioxane	88	6.173	6.173	0.000	31	53469	1000.0	965.2	
68 Dichlorobromomethane	83	6.319	6.325	-0.006	96	513209	50.0	50.3	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	291547	50.0	50.0	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	87	659421	50.0	50.1	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	2442732	250.0	223.9	
74 Toluene	92	7.025	7.018	0.007	89	985608	50.0	46.7	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.001	97	596524	50.0	49.4	
75 Ethyl methacrylate	69	7.353	7.347	0.006	88	559729	50.0	48.3	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	92	288022	50.0	45.6	
81 Tetrachloroethene	166	7.548	7.548	0.000	90	456812	50.0	46.6	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	96	615455	50.0	47.6	
80 2-Hexanone	43	7.724	7.724	0.000	95	1769206	250.0	223.3	
83 Chlorodibromomethane	129	7.895	7.894	0.001	88	416629	50.0	50.5	
84 Ethylene Dibromide	107	7.998	7.998	0.000	100	385235	50.0	46.4	
87 Chlorobenzene	112	8.473	8.472	0.001	94	1153068	50.0	47.3	
88 Ethylbenzene	91	8.564	8.564	0.000	98	1861207	50.0	47.3	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	417419	50.0	49.6	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	764482	50.0	46.2	
91 o-Xylene	106	9.111	9.111	0.000	97	739807	50.0	46.4	
92 Styrene	104	9.142	9.142	0.000	93	1260683	50.0	48.4	
95 Bromoform	173	9.397	9.397	0.000	96	288718	50.0	51.3	
94 Isopropylbenzene	105	9.495	9.494	0.001	95	1918970	50.0	49.8	
101 Bromobenzene	156	9.841	9.841	0.000	92	522674	50.0	51.0	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	85	472111	50.0	48.6	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	2187444	50.0	49.9	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	60	164886	50.0	47.2	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	85	176526	50.0	52.3	
103 2-Chlorotoluene	126	10.024	10.024	0.000	94	453441	50.0	48.1	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	84	1544843	50.0	48.1	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	498248	50.0	49.0	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	360211	50.0	46.0	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	42	1569977	50.0	47.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	92	1906010	50.0	47.1	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	76	983528	50.0	48.6	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	95	1743597	50.0	46.7	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	1007466	50.0	48.6	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	1440287	50.0	46.4	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	93	871753	50.0	45.2	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	82	79267	50.0	40.4	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	92	496929	50.0	35.7	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	96	214301	50.0	35.5	
121 Naphthalene	128	12.816	12.816	0.000	97	1249020	50.0	34.4	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	406569	50.0	32.3	
S 125 1,2-Dichloroethene, Total	1				0			100.3	
S 123 Total BTEX	1				0			235.6	
S 124 Xylenes, Total	1				0			92.6	
S 126 1,3-Dichloropropene, Total	1				0			99.4	

Reagents:

GAS CORP mix_00360	Amount Added: 25.00	Units: uL	
SS 8260 CORP_00077	Amount Added: 25.00	Units: uL	
S_8260_IS_00325	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added: 1.00	Units: uL	Run Reagent

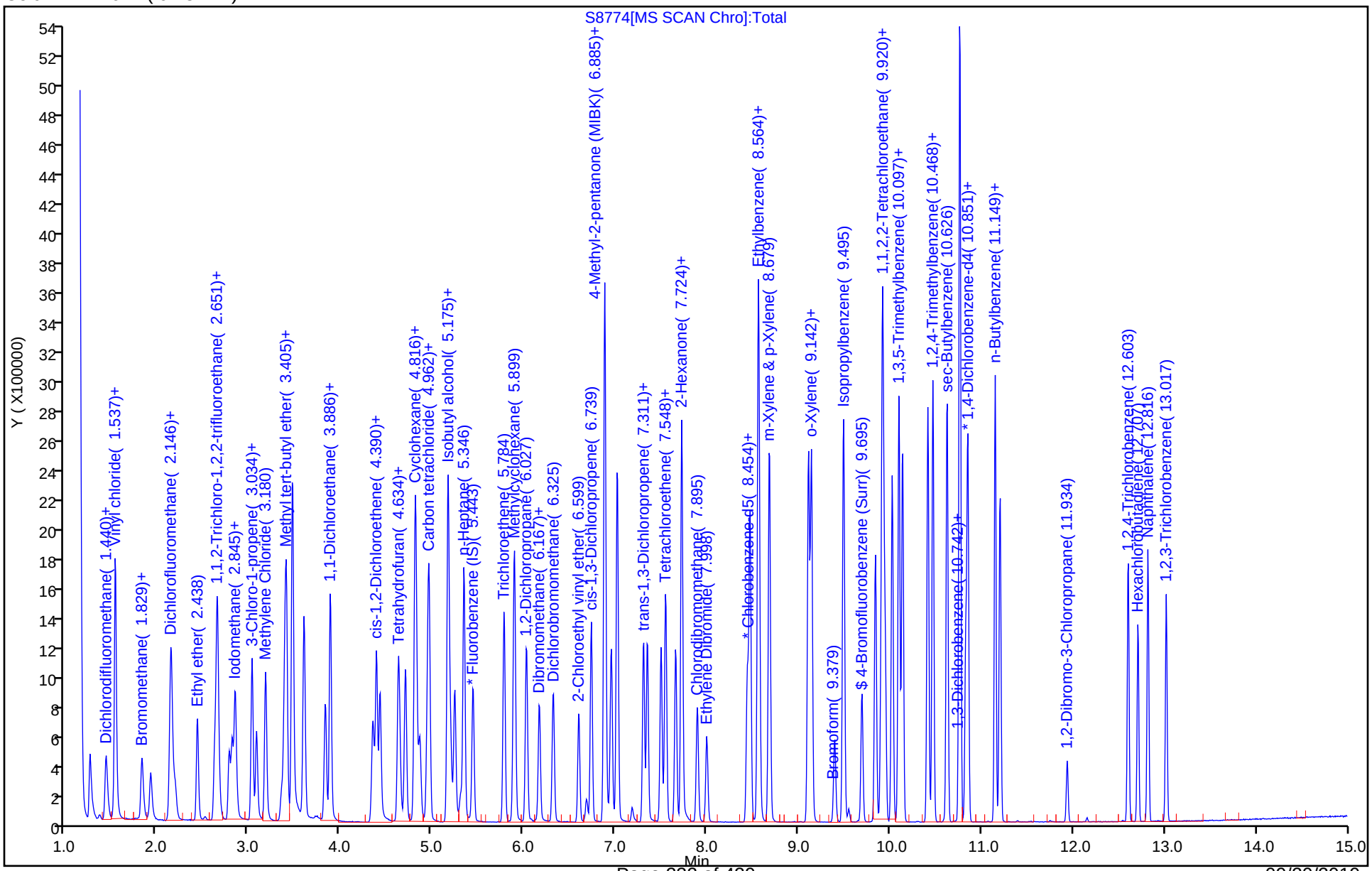
Report Date: 11-Sep-2019 11:12:21 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8774.D

Injection Date:	10-Sep-2019 16:57:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 6			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8775.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 10-Sep-2019 17:20:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0084010-014
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:25 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:19:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.449	-0.006	98	148568	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	290891	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	20	282975	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	64	181640	25.0	24.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	40	113521	25.0	23.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	56	727283	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	252001	25.0	24.2	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	99	1063651	100.0	101.4	
12 Chloromethane	50	1.440	1.440	0.000	100	1057634	100.0	90.3	
13 Vinyl chloride	62	1.537	1.537	0.000	69	972167	100.0	99.2	
151 Butadiene	54	1.543	1.543	0.000	91	1071192	100.0	95.0	
14 Bromomethane	94	1.829	1.835	-0.006	91	605761	100.0	87.3	
15 Chloroethane	64	1.927	1.926	0.001	99	601597	100.0	91.6	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	80	1336570	100.0	98.8	
16 Dichlorofluoromethane	67	2.146	2.152	-0.006	96	1254804	100.0	88.3	
18 Ethyl ether	59	2.438	2.437	0.001	93	803869	100.0	100.9	
20 Acrolein	56	2.626	2.626	0.000	92	727387	500.0	545.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.650	2.650	0.000	71	800828	100.0	107.4	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	96	729934	100.0	100.0	
23 Acetone	43	2.784	2.784	0.000	97	1469231	500.0	476.5	
25 Iodomethane	142	2.821	2.821	0.000	98	1396414	100.0	100.5	
26 Carbon disulfide	76	2.851	2.851	0.000	100	2396847	100.0	100.4	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	87	1459608	100.0	100.2	
27 Methyl acetate	43	3.082	3.082	0.000	96	1530111	200.0	207.7	
30 Methylene Chloride	84	3.180	3.186	-0.006	97	811028	100.0	100.6	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	94	616280	1000.0	978.9	
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	92	2301990	100.0	96.1	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	95	830144	100.0	100.0	
33 Acrylonitrile	53	3.478	3.478	0.000	99	3719591	1000.0	1003.2	
35 Hexane	57	3.600	3.606	-0.006	93	1385509	100.0	103.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	97	1499140	100.0	100.8	
37 Vinyl acetate	43	3.885	3.891	-0.006	97	4544144	200.0	204.9	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	93	848881	100.0	97.2	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	902637	100.0	98.7	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	2226600	500.0	499.1	
48 Chlorobromomethane	128	4.634	4.634	0.000	95	482406	100.0	100.3	
49 Tetrahydrofuran	42	4.646	4.652	-0.006	90	608775	200.0	189.4	
50 Chloroform	83	4.707	4.707	0.000	94	1422353	100.0	95.6	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	90	1291992	100.0	103.1	
52 Cyclohexane	56	4.822	4.816	0.006	93	1653234	100.0	105.8	
55 Carbon tetrachloride	117	4.950	4.950	0.000	89	1216185	100.0	108.3	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	91	1137021	100.0	100.7	
57 Benzene	78	5.175	5.175	0.000	98	3323060	100.0	99.8	
53 Isobutyl alcohol	43	5.200	5.199	0.001	92	849535	2500.0	2330.7	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	1268690	100.0	97.4	
59 n-Heptane	43	5.346	5.345	0.001	95	1740631	100.0	102.6	
62 Trichloroethene	95	5.784	5.783	0.001	94	880270	100.0	102.4	
64 Methylcyclohexane	83	5.899	5.899	0.000	92	1599325	100.0	108.0	
65 1,2-Dichloropropane	63	6.027	6.033	-0.006	91	857793	100.0	100.1	
67 Dibromomethane	93	6.167	6.167	0.000	89	548164	100.0	102.4	
66 1,4-Dioxane	88	6.173	6.173	0.000	29	122617	2000.0	2213.5	M
68 Dichlorobromomethane	83	6.325	6.325	0.000	98	1118227	100.0	103.3	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	652663	100.0	105.4	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	86	1448982	100.0	103.6	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	5257645	500.0	482.0	
74 Toluene	92	7.025	7.018	0.007	97	2179638	100.0	103.2	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.000	97	1328130	100.0	109.9	
75 Ethyl methacrylate	69	7.353	7.347	0.006	90	1243394	100.0	107.2	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	93	619776	100.0	98.2	
81 Tetrachloroethene	166	7.548	7.548	0.000	89	1020167	100.0	104.0	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	96	1360718	100.0	105.2	
80 2-Hexanone	43	7.724	7.724	0.000	95	3925278	500.0	495.4	
83 Chlorodibromomethane	129	7.895	7.894	0.001	90	935407	100.0	113.4	
84 Ethylene Dibromide	107	7.998	7.998	0.000	99	866939	100.0	104.4	
87 Chlorobenzene	112	8.472	8.472	0.000	94	2489635	100.0	102.2	
88 Ethylbenzene	91	8.564	8.564	0.000	98	4094275	100.0	104.2	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	48	881488	100.0	104.7	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	99	1665990	100.0	100.7	
91 o-Xylene	106	9.111	9.111	0.000	97	1559958	100.0	97.9	
92 Styrene	104	9.142	9.142	0.000	94	2685871	100.0	103.1	
95 Bromoform	173	9.397	9.397	0.000	96	651170	100.0	115.7	
94 Isopropylbenzene	105	9.495	9.494	0.000	95	4074944	100.0	113.8	
101 Bromobenzene	156	9.841	9.841	0.000	92	1084167	100.0	113.8	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	90	980962	100.0	108.6	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	4606802	100.0	112.9	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	85	342065	100.0	105.3	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	84	386206	100.0	122.4	
103 2-Chlorotoluene	126	10.024	10.024	0.000	95	957657	100.0	109.3	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	81	3222047	100.0	108.0	
105 4-Chlorotoluene	126	10.139	10.139	0.000	95	1025022	100.0	108.5	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	760630	100.0	104.4	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	76	3259070	100.0	105.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	4084470	100.0	108.7	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	72	1913584	100.0	101.7	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	3661267	100.0	105.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	96	1986880	100.0	103.2	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	2958294	100.0	102.5	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	1729773	100.0	96.5	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	84	184235	100.0	101.0	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	94	1093591	100.0	84.6	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	97	450940	100.0	80.4	
121 Naphthalene	128	12.816	12.816	0.000	97	3124773	100.0	92.5	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	95	980986	100.0	83.9	
S 125 1,2-Dichloroethene, Total	1				0			198.7	
S 123 Total BTEX	1				0			505.7	
S 124 Xylenes, Total	1				0			198.6	
S 126 1,3-Dichloropropene, Total	1				0			213.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	50.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	50.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

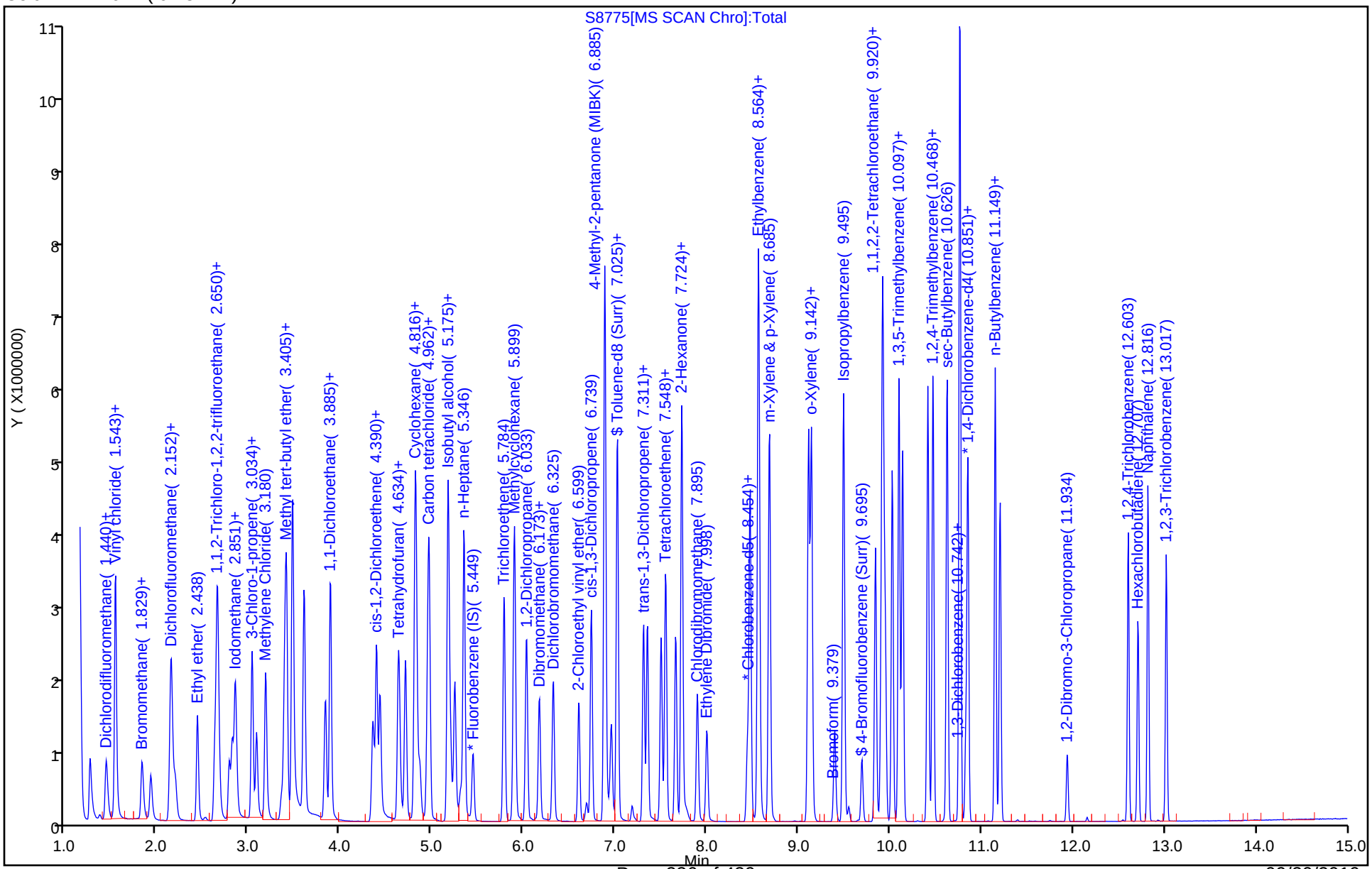
Report Date: 11-Sep-2019 11:12:27 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8775.D

Injection Date:	10-Sep-2019 17:20:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 7			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

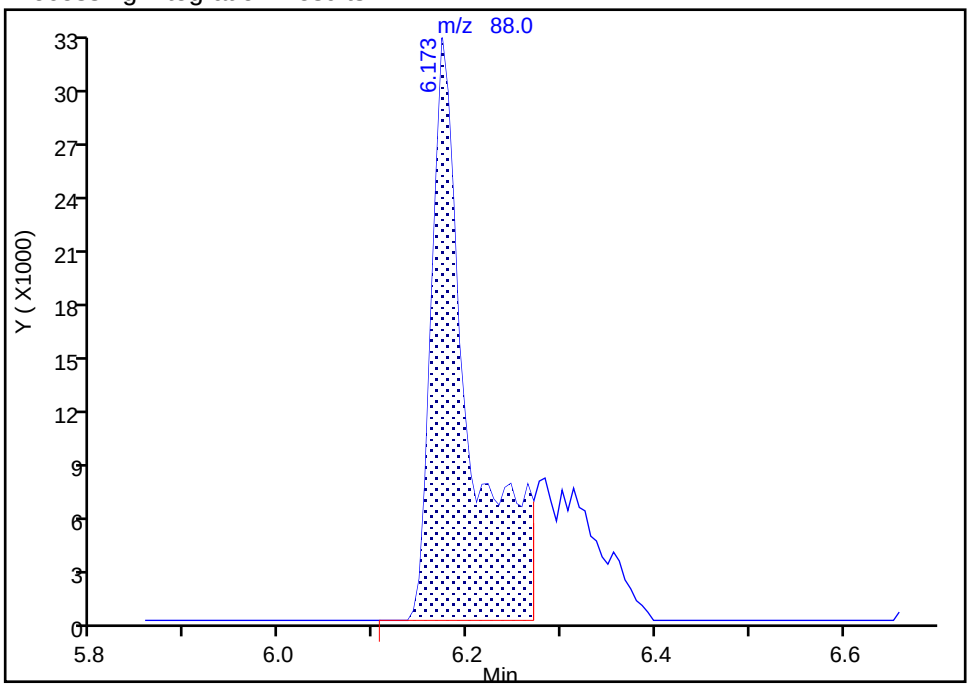
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8775.D
Injection Date: 10-Sep-2019 17:20:30 Instrument ID: HP5973S
Lims ID: IC 7
Client ID:
Operator ID: kn ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

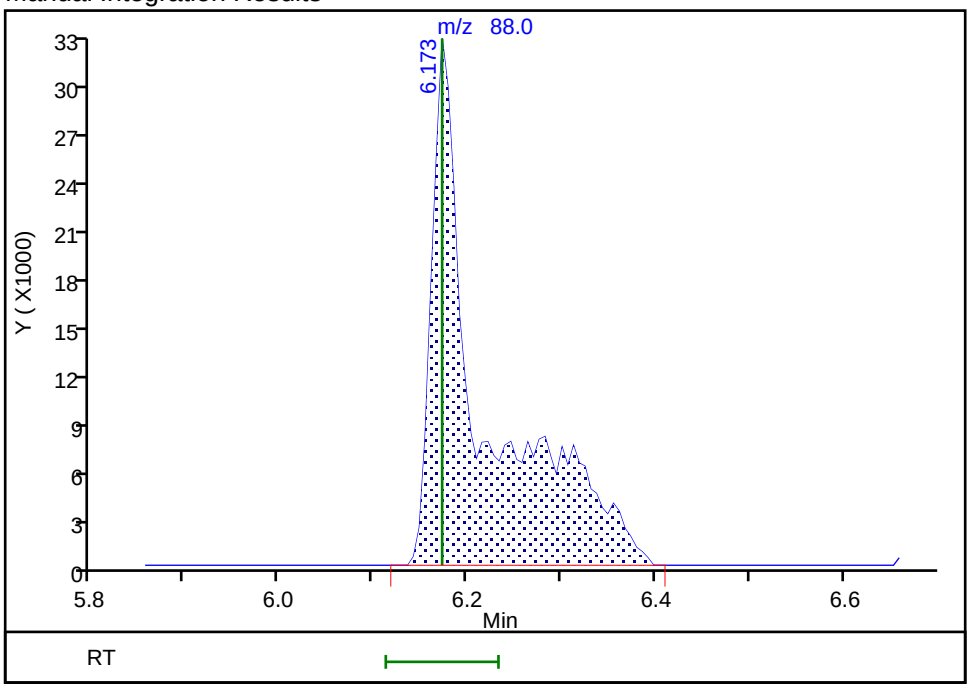
Processing Integration Results

RT: 6.17
Area: 90046
Amount: 1999.2363
Amount Units: ug/L



Manual Integration Results

RT: 6.17
Area: 122617
Amount: 2213.4710
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:12:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-491936/7	L0949.D
Level 2	IC 480-491936/8	L0950.D
Level 3	IC 480-491936/9	L0951.D
Level 4	IC 480-491936/10	L0952.D
Level 5	IC 480-491936/11	L0953.D
Level 6	ICIS 480-491936/12	L0954.D
Level 7	IC 480-491936/13	L0955.D
Level 8	IC 480-491936/14	L0956.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 1.4317	1.2855 1.5154	1.4619 1.5179	1.5809	1.3428	Ave		1.4480			0.1000	7.2		20.0			
Chloromethane	2.1458 1.9013	2.1113 1.8891	2.1747 1.9339	2.1288	1.9445	Ave		2.0287			0.1000	6.0		20.0			
Vinyl chloride	1.1487 1.5218	1.5093 1.5766	1.5886 1.6006	1.6904	1.5358	Ave		1.5215			0.1000	10.6		20.0			
Butadiene	1.7129 1.7700	1.9321 1.8158	2.0338 1.7989	2.0571	1.7479	Ave		1.8586				7.1		20.0			
Bromomethane	0.7542 0.8659	0.9200 0.8621	0.9930 0.8870	0.9796	0.8852	Ave		0.8934			0.1000	8.4		20.0			
Chloroethane	0.8844 0.8685	0.9922 0.8721	0.9701 0.8836	1.0258	0.8742	Ave		0.9214			0.1000	6.9		20.0			
Dichlorofluoromethane	1.8530 2.1162	2.2061 2.1214	2.3354 2.1655	2.2884	2.1026	Ave		2.1486				6.8		20.0			
Trichlorofluoromethane	+++++ 1.8713	1.8320 1.9404	1.9541 1.9616	2.0490	1.8170	Ave		1.9179			0.1000	4.3		20.0			
Ethyl ether	1.5090 1.4601	1.6216 1.4238	1.4917 1.4812	1.4666	1.4968	Ave		1.4938				3.9		20.0			
Acrolein	0.3635 0.3793	0.3546 0.3729	0.3674 0.3886	0.3692	0.3750	Ave		0.3713				2.8		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.9285 1.1578	1.1109 1.1546	1.1984 1.1120	1.1547	1.1103	Ave		1.1159			0.1000	7.3		20.0			
1,1-Dichloroethene	1.2383 1.1260	1.1094 1.1178	1.1503 1.1044	1.1230	1.1529	Ave		1.1403			0.1000	3.8		20.0			
Acetone	0.8882 0.8110	0.8362 0.7922	0.8439 0.8120	0.8166	0.8431	Ave		0.8304			0.1000	3.6		20.0			
Iodomethane	1.8211 2.0490	1.9417 2.0085	2.0499 2.0527	2.0331	2.0911	Ave		2.0059				4.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	3.7413 3.9474	3.8391 3.9259	4.1363 3.9029	3.9481	3.9365	Ave		3.9222			0.1000	2.8		20.0			
Allyl chloride	2.6252 2.3506	2.5439 2.3547	2.4467 2.3371	2.4001	2.4218	Ave		2.4350				4.2		20.0			
Methyl acetate	1.8164 1.7544	1.7633 1.6927	1.7552 1.7600	1.7720	1.7832	Ave		1.7622			0.1000	2.0		20.0			
Methylene Chloride	3.6083 1.4229	2.1761 1.3747	1.7853 1.3880	1.5699	1.5304	Lin1	0.8775	1.3776			0.1000				1.0000		0.9900
2-Methyl-2-propanol	0.3588 0.3501	0.3279 0.3443	0.3309 0.3634	0.3321	0.3437	Ave		0.3439				3.8		20.0			
Methyl tert-butyl ether	3.9629 4.0482	3.9496 4.0058	3.8391 4.1613	3.8840	4.0808	Ave		3.9914			0.1000	2.6		20.0			
trans-1,2-Dichloroethene	1.3770 1.3700	1.5106 1.3457	1.4067 1.3422	1.3774	1.4026	Ave		1.3915			0.1000	3.8		20.0			
Acrylonitrile	0.8803 0.9507	0.9318 0.9298	0.9542 0.9489	0.9525	0.9796	Ave		0.9410				3.1		20.0			
Hexane	1.9087 2.1061	1.9390 2.1203	2.0543 2.0886	2.0606	2.0023	Ave		2.0350				3.8		20.0			
Vinyl acetate	3.3125 3.7122	3.3509 3.7758	3.4774 3.9373	3.5420	3.7171	Ave		3.6031				6.1		20.0			
1,1-Dichloroethane	2.3880 2.5625	2.6004 2.5433	2.6749 2.5530	2.6058	2.6740	Ave		2.5752			0.2000	3.5		20.0			
2,2-Dichloropropane	+++++ 1.3237	1.3811 1.2783	1.3349 1.2152	1.3225	1.3361	Ave		1.3131				4.0		20.0			
cis-1,2-Dichloroethene	1.1840 1.4689	1.4721 1.4744	1.4969 1.4883	1.5070	1.5650	Ave		1.4571			0.1000	7.9		20.0			
2-Butanone (MEK)	1.2144 1.1524	1.1313 1.1624	1.1531 1.2155	1.1743	1.1922	Ave		1.1745			0.1000	2.6		20.0			
Bromochloromethane	0.5445 0.7450	0.7343 0.7483	0.7444 0.7686	0.7319	0.7660	Ave		0.7229				10.1		20.0			
Tetrahydrofuran	0.7854 0.7540	0.7443 0.7435	0.7163 0.7863	0.7600	0.7581	Ave		0.7560				3.0		20.0			
Chloroform	+++++ 2.3129	2.9800 2.2640	2.6591 2.3101	2.4454	2.4724	Lin1	0.7557	2.2901			0.2000				1.0000		0.9900
1,1,1-Trichloroethane	1.7017 1.9135	1.8613 1.8961	1.9562 1.9102	1.9071	1.9237	Ave		1.8837			0.1000	4.1		20.0			
Cyclohexane	+++++ 2.6247	2.3728 2.6224	2.4980 2.5519	2.4987	2.5250	Ave		2.5277			0.1000	3.4		20.0			
1,1-Dichloropropene	1.4900 1.7009	1.5709 1.7088	1.7963 1.7004	1.6485	1.7125	Ave		1.6660				5.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	1.5572 1.7337	1.7317 1.7292	1.7168 1.7122	1.7213	1.6892	Ave		1.6989			0.1000	3.5		20.0			
Isobutyl alcohol	0.1248 0.1396	0.1295 0.1395	0.1250 0.1475	0.1293	0.1367	Ave		0.1340				6.0		20.0			
Benzene	5.0777 5.0669	5.2386 5.0440	5.2091 5.1264	5.2097	5.1571	Ave		5.1412			0.5000	1.4		20.0			
1,2-Dichloroethane	2.2710 2.0457	2.2130 2.0287	2.0963 2.1110	2.1042	2.0772	Ave		2.1184			0.1000	3.9		20.0			
n-Heptane	1.5433 1.8924	1.7689 1.9019	1.8517 1.9649	1.7898	1.7823	Ave		1.8119				7.1		20.0			
Trichloroethene	1.1986 1.3173	1.2837 1.3354	1.3014 1.3603	1.3271	1.3654	Ave		1.3111			0.2000	4.1		20.0			
Methylcyclohexane	+++++ 2.1312	1.8908 2.1368	1.9181 2.1126	1.9796	1.9594	Ave		2.0184			0.1000	5.2		20.0			
1,2-Dichloropropane	1.2851 1.4122	1.3275 1.4440	1.4642 1.4855	1.4071	1.4894	Ave		1.4144			0.1000	5.2		20.0			
1,4-Dioxane	+++++ 0.0050	+++++ 0.0050	0.0038 0.0051	0.0053	0.0053	Ave		0.0049				11.8		20.0			
Dibromomethane	0.7816 0.8823	0.8684 0.8808	0.8184 0.9233	0.8843	0.8945	Ave		0.8667			0.1000	5.2		20.0			
Bromodichloromethane	1.5887 1.6912	1.6272 1.7180	1.5599 1.8051	1.6744	1.7194	Ave		1.6730			0.2000	4.7		20.0			
2-Chloroethyl vinyl ether	+++++ 1.0130	0.9077 1.0950	0.8901 1.1803	0.9161	0.9922	Ave		0.9992				10.8		20.0			
cis-1,3-Dichloropropene	1.6970 2.0484	1.7914 2.1019	1.7802 2.2119	1.8910	2.0440	Ave		1.9457			0.2000	9.3		20.0			
4-Methyl-2-pentanone (MIBK)	0.5127 0.5863	0.5067 0.5835	0.5423 0.5848	0.5634	0.5899	Ave		0.5587			0.1000	6.1		20.0			
Toluene	0.8281 0.8480	0.7850 0.8567	0.9364 0.8482	0.8551	0.8666	Ave		0.8530			0.4000	4.9		20.0			
Ethyl methacrylate	0.4017 0.4665	0.3806 0.4957	0.3942 0.5205	0.4088	0.4542	Ave		0.4403				11.7		20.0			
trans-1,3-Dichloropropene	0.3949 0.5103	0.4316 0.5302	0.4766 0.5402	0.4726	0.5124	Ave		0.4836			0.1000	10.4		20.0			
1,1,2-Trichloroethane	0.2259 0.2672	0.2687 0.2667	0.2599 0.2711	0.2563	0.2703	Ave		0.2608			0.1000	5.7		20.0			
Tetrachloroethene	0.3130 0.3427	0.3560 0.3470	0.3596 0.3423	0.3609	0.3509	Ave		0.3466			0.2000	4.4		20.0			
1,3-Dichloropropane	0.5436 0.5369	0.5109 0.5477	0.5499 0.5485	0.5218	0.5580	Ave		0.5397				2.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.3566 0.4031	0.3373 0.4115	0.3801 0.4142	0.4007	0.4159	Ave		0.3899			0.1000	7.5		20.0			
Dibromochloromethane	0.3078 0.3517	0.3124 0.3631	0.3330 0.3767	0.3320	0.3487	Ave		0.3407			0.1000	7.0		20.0			
1,2-Dibromoethane	0.2859 0.3422	0.3280 0.3482	0.3324 0.3591	0.3333	0.3444	Ave		0.3342				6.6		20.0			
Chlorobenzene	0.8406 0.9206	0.9228 0.9384	0.9321 0.9437	0.9176	0.9581	Ave		0.9217			0.5000	3.8		20.0			
Ethylbenzene	1.3727 1.5273	1.4479 1.5664	1.4973 1.5546	1.4856	1.5548	Ave		1.5008			0.1000	4.4		20.0			
1,1,1,2-Tetrachloroethane	0.2847 0.3463	0.3346 0.3508	0.3251 0.3515	0.3252	0.3479	Ave		0.3333				6.7		20.0			
m,p-Xylene	0.4863 0.6120	0.5538 0.6293	0.5921 0.6234	0.5852	0.6167	Ave		0.5874			0.1000	8.1		20.0			
o-Xylene	0.5205 0.6128	0.5160 0.6251	0.5487 0.6236	0.5753	0.6060	Ave		0.5785			0.3000	7.8		20.0			
Styrene	0.7987 0.9804	0.7596 1.0216	0.8482 1.0508	0.8919	0.9768	Ave		0.9160			0.3000	11.7		20.0			
Bromoform	0.2021 0.2467	0.1903 0.2628	0.2094 0.2768	0.2196	0.2393	Ave		0.2309			0.1000	13.2		20.0			
Isopropylbenzene	2.3377 3.0064	2.5293 3.1030	2.7301 3.1203	2.7558	2.9239	Ave		2.8133			0.1000	9.9		20.0			
1,1,2,2-Tetrachloroethane	0.9302 0.9488	0.8549 0.9944	0.9381 1.0013	0.9644	0.9871	Ave		0.9524			0.3000	5.0		20.0			
Bromobenzene	0.7657 0.7348	0.7013 0.7647	0.7363 0.7761	0.7106	0.7550	Ave		0.7431				3.6		20.0			
N-Propylbenzene	3.2614 3.4973	2.9338 3.6429	3.3348 3.6095	3.3723	3.4998	Ave		3.3940				6.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2886	0.1929 0.3189	0.2031 +++++	0.2344	0.2643	Lin1	-0.188	0.3086							0.9950		0.9900
1,2,3-Trichloropropane	+++++ 0.3107	0.2931 0.3252	0.3304 0.3296	0.3149	0.3279	Ave		0.3188				4.3		20.0			
2-Chlorotoluene	+++++ 0.7261	0.6528 0.7439	0.7071 0.7368	0.6902	0.7152	Ave		0.7103				4.4		20.0			
1,3,5-Trimethylbenzene	+++++ 2.5792	2.1448 2.6277	2.3499 2.6442	2.4044	2.5507	Ave		2.4716				7.4		20.0			
4-Chlorotoluene	1.9851 2.1417	1.9316 2.2424	2.0900 2.2574	2.1344	2.1504	Ave		2.1166				5.4		20.0			
tert-Butylbenzene	+++++ 0.5582	0.3775 0.5742	0.4968 0.5703	0.5001	0.5018	Lin1	-0.222	0.5707							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	+++++ 2.6159	2.0823 2.6894	2.4014 2.7183	2.4818	2.6189	Ave		2.5154				8.8		20.0			
sec-Butylbenzene	+++++ 3.1765	2.6120 3.2862	2.9201 3.2922	3.0089	3.1072	Ave		3.0576				7.8		20.0			
4-Isopropyltoluene	+++++ 2.7440	2.1504 2.8576	2.4328 2.8512	2.5911	2.6768	Ave		2.6148				9.7		20.0			
1,3-Dichlorobenzene	1.4266 1.4525	1.3818 1.4630	1.4369 1.4879	1.4127	1.4674	Ave		1.4411			0.6000	2.4		20.0			
1,4-Dichlorobenzene	1.5216 1.4603	1.3743 1.5063	1.4787 1.5267	1.4616	1.4867	Ave		1.4770			0.5000	3.3		20.0			
n-Butylbenzene	2.2566 2.4662	2.0639 2.5440	2.3187 2.5574	2.3311	2.4134	Ave		2.3689				6.9		20.0			
1,2-Dichlorobenzene	1.4257 1.4623	1.3931 1.4939	1.4386 1.5143	1.4488	1.4809	Ave		1.4572			0.4000	2.7		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.2123	0.2367 0.2243	0.2148 0.2372	0.2194	0.2160	Ave		0.2230			0.0500	4.6		20.0			
1,2,4-Trichlorobenzene	0.9761 1.0355	0.9436 1.0588	1.0118 1.0850	0.9856	1.0108	Ave		1.0134			0.2000	4.5		20.0			
Hexachlorobutadiene	0.3006 0.4227	0.3789 0.4356	0.4378 0.4495	0.3944	0.4066	Ave		0.4033				11.8		20.0			
Naphthalene	2.9703 3.2667	2.7455 3.3240	2.9456 3.4080	3.0155	3.1777	Ave		3.1066				7.2		20.0			
1,2,3-Trichlorobenzene	0.9208 0.9811	0.8383 1.0119	0.9087 1.0230	0.9238	0.9592	Ave		0.9458				6.4		20.0			
Dibromofluoromethane (Surr)	1.3133 1.3289	1.3262 1.3213	1.3370 1.3304	1.3183	1.3185	Ave		1.3242				0.6		20.0			
1,2-Dichloroethane-d4 (Surr)	1.6580 1.5983	1.6583 1.6418	1.6536 1.6199	1.6740	1.6416	Ave		1.6432				1.5		20.0			
Toluene-d8 (Surr)	1.3038 1.2433	1.2281 1.2946	1.2822 1.2532	1.2731	1.2797	Ave		1.2698				2.1		20.0			
4-Bromofluorobenzene (Surr)	0.3638 0.3463	0.3346 0.3839	0.3614 0.3731	0.3474	0.3614	Ave		0.3590				4.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-491936/7	L0949.D
Level 2	IC 480-491936/8	L0950.D
Level 3	IC 480-491936/9	L0951.D
Level 4	IC 480-491936/10	L0952.D
Level 5	IC 480-491936/11	L0953.D
Level 6	ICIS 480-491936/12	L0954.D
Level 7	IC 480-491936/13	L0955.D
Level 8	IC 480-491936/14	L0956.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 256139	9401 548130	21329 1050873	56059	97818	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	6325 340157	15440 683286	31729 1338877	75486	141646	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	3386 272260	11038 570254	23178 1108106	59941	111877	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	5049 316659	14130 656782	29672 1245429	72943	127326	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	2223 154915	6728 311821	14488 614070	34736	64481	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	2607 155374	7256 315458	14154 611744	36374	63681	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	5462 378598	16134 767310	34073 1499231	81146	153163	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	+++++ 334793	13398 701875	28510 1358081	72657	132360	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	4448 261217	11859 514989	21764 1025429	52005	109034	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	5358 339308	12965 674435	26805 1345017	65453	136592	2.00 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2737 207148	8124 417614	17485 769856	40944	80880	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	3650 201449	8113 404301	16783 764600	39821	83983	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	13090 725443	30575 1432635	61559 2810794	144779	307091	2.00 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	5368 366582	14200 726480	29907 1421109	72094	152324	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	11028 706227	28076 1420019	60347 2702051	140000	286757	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	7738 420539	18604 851716	35697 1618018	85107	176413	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	10708 627767	25791 1224552	51217 2436923	125666	259789	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	10636 254564	15914 497226	26047 960964	55670	111483	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	10575 626323	23982 1245396	48275 2515969	117752	250336	4.00 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	11681 724248	28884 1448922	56011 2880907	137726	297268	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	4059 245098	11047 486739	20524 929210	48841	102169	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	25947 1700952	68144 3363049	139216 6569694	337750	713587	4.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	5626 376807	14180 766916	29972 1445980	73069	145860	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	19528 1328278	49012 2731496	101468 5451672	251198	541541	0.800 50.0	2.00 100	4.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	7039 458445	19017 919940	39026 1767511	92402	194790	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2,2-Dichloropropane	FB	Ave	+++++ 236827	10100 462369	19476 841274	46894	97330	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	3490 262791	10766 533301	21839 1030387	53438	114000	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	17898 1030861	41366 2102209	84118 4207524	208210	434237	2.00 125	5.00 250	10.0 500	25.0	50.0
Bromochloromethane	FB	Ave	1605 133292	5370 270666	10860 532095	25954	55798	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	4630 269791	10886 537831	20900 1088751	53896	110445	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Lin1	+++++ 413800	21793 818905	38795 1599308	86715	180102	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	5016 342349	13612 685830	28540 1322488	67625	140132	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	+++++ 469575	17353 948556	36445 1766746	88605	183930	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	4392 304301	11488 618103	26207 1177184	58457	124746	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	4590 310179	12664 625470	25047 1185391	61037	123047	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Isobutyl alcohol	FB	Ave	9200 624223	23681 1261103	45582 2553400	114619	248965	10.0 625	25.0 1250	50.0 2500	125	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	14967 906515	38311 1824458	76000 3549062	184735	375669	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloroethane	FB	Ave	6694 365993	16184 733811	30584 1461477	74615	151315	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	4549 338562	12936 687948	27016 1360353	63467	129828	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	3533 235679	9388 483020	18987 941785	47058	99460	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	+++++ 381297	13828 772897	27985 1462614	70196	142729	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3788 252654	9708 522304	21362 1028465	49897	108492	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 66303	+++++ 135571	4072 273599	13953	28831	+++++ 500	+++++ 1000	40.0 2000	100	200
Dibromomethane	FB	Ave	2304 157856	6351 318609	11940 639246	31357	65157	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromodichloromethane	FB	Ave	4683 302568	11900 621424	22758 1249680	59375	125246	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 181236	6638 396059	12986 817127	32485	72273	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	5002 366481	13101 760263	25973 1531315	67053	148894	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	27828 1961448	70250 3990498	147064 7828431	373499	801253	2.00 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	8989 567410	21769 1171795	50783 2270720	113380	235427	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	4360 312154	10553 677984	21377 1393417	54198	123383	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	4286 341444	11968 725213	25849 1446151	62668	139195	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	2452 178764	7450 364798	14097 725801	33980	73425	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	3398 229338	9871 474648	19504 916444	47850	95336	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	5901 359280	14169 749097	29823 1468353	69192	151585	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	19356 1348539	46768 2814378	103061 5545011	265678	564926	2.00 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3341 235343	8664 496651	18058 1008400	44017	94717	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	3103 229002	9095 476284	18026 961452	44191	93575	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	9124 615986	25590 1283475	50553 2526571	121673	260278	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	14900 1021938	40152 2142371	81203 4161917	196978	422392	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3090 231714	9280 479806	17630 941140	43118	94507	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	5279 409470	15358 860786	32113 1668817	77589	167539	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	5650 410008	14309 854907	29759 1669441	76285	164623	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	8670 655999	21065 1397223	45998 2813035	118261	265377	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2194 165066	5278 359437	11358 740959	29115	65003	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	12847 1040066	37225 2157417	77416 4231504	190928	414967	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5112 328222	12582 691345	26603 1357854	66815	140095	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	4208 254222	10321 531676	20880 1052483	49234	107156	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	17923 1209902	43178 2532772	94565 4894953	233639	496707	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 99834	2839 221695	5759 +++++	16237	37507	+++++ 25.0	1.00 50.0	2.00 +++++	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 107490	4314 226073	9370 446977	21814	46543	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 251193	9607 517208	20052 999265	47821	101507	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 892284	31566 1826959	66636 3585936	166578	362007	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	10909 740926	28428 1559076	59266 3061414	147877	305190	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Lin1	+++++ 193108	5556 399236	14088 773413	34649	71219	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 904989	30647 1869848	68096 3686403	171940	371691	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 1098915	38443 2284787	82805 4464630	208462	440985	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 949306	31648 1986770	68988 3866628	179516	379903	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	7840 502487	20337 1017160	40746 2017828	97876	208260	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1 Analy Batch No.: 491936

SDG No.:

Instrument ID: HP5977L GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/13/2019 16:10 Calibration End Date: 09/13/2019 18:58 Calibration ID: 37626

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	8362 505186	20227 1047305	41930 2070413	101263	210995	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	12401 853184	30375 1768760	65752 3468247	161499	342518	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	7835 505877	20503 1038636	40794 2053544	100378	210176	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 73444	3483 155960	6092 321738	15197	30652	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	5364 358235	13887 736149	28692 1471354	68281	143451	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	1652 146218	5576 302857	12415 609649	27327	57701	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	16323 1130111	40407 2311070	83527 4621680	208916	451000	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	5060 339408	12338 703563	25769 1387308	64000	136129	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	241936 237754	242469 238954	243838 230263	233733	240117	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	305443 285946	303187 296928	301576 280378	296807	298958	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	884511 831891	851425 885358	869246 838777	843998	869120	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	246833 231687	231973 262522	244983 249724	230322	245456	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Lims ID: IC 0.4
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 13-Sep-2019 16:10:14 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.4
Misc. Info.: 480-0084114-007
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:44:37 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:28:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.550	6.550	0.000	99	184226	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	87	678415	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	343466	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.981	5.981	0.000	93	241936	25.0	24.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.299	6.296	0.003	98	305443	25.0	25.2	
$ 6 Toluene-d8 (Surr)	98	8.016	8.019	-0.003	93	884511	25.0	25.7	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.003	98	246833	25.0	25.3	
10 Dichlorodifluoromethane	85	2.202	2.206	-0.004	19	2534	0.4000	0.2375	
13 Chloromethane	50	2.473	2.479	-0.006	94	6325	0.4000	0.4231	
14 Vinyl chloride	62	2.611	2.611	0.000	94	3386	0.4000	0.3020	
15 Butadiene	54	2.620	2.620	0.000	87	5049	0.4000	0.3687	
18 Bromomethane	94	2.990	2.993	-0.003	41	2223	0.4000	0.3377	
19 Chloroethane	64	3.100	3.109	-0.009	68	2607	0.4000	0.3840	
20 Dichlorofluoromethane	67	3.344	3.344	0.000	94	5462	0.4000	0.3450	
21 Trichlorofluoromethane	101	3.363	3.366	-0.003	94	3943	0.4000	0.2790	M
26 Ethyl ether	59	3.640	3.643	-0.003	93	4448	0.4000	0.4041	
28 Acrolein	56	3.846	3.849	-0.003	95	5358	2.00	1.96	
29 1,1,2-Trichloro-1,2,2-trif	101	3.858	3.868	-0.010	0	2737	0.4000	0.3328	M
30 1,1-Dichloroethene	96	3.900	3.900	0.000	92	3650	0.4000	0.4344	
31 Acetone	43	3.993	3.997	-0.004	98	13090	2.00	2.14	
33 Iodomethane	142	4.090	4.090	0.000	94	5368	0.4000	0.3632	
35 Carbon disulfide	76	4.151	4.145	0.006	100	11028	0.4000	0.3816	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	92	7738	0.4000	0.4312	
38 Methyl acetate	43	4.270	4.270	0.000	98	10708	0.8000	0.8246	a
39 Methylene Chloride	84	4.399	4.399	0.000	98	10636	0.4000	0.4107	
40 2-Methyl-2-propanol	59	4.489	4.492	-0.003	97	10575	4.00	4.17	
41 Methyl tert-butyl ether	73	4.579	4.575	0.004	93	11681	0.4000	0.3971	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	94	4059	0.4000	0.3958	
44 Acrylonitrile	53	4.659	4.662	-0.003	98	25947	4.00	3.74	
47 Hexane	57	4.781	4.778	0.003	91	5626	0.4000	0.3752	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.022	5.019	0.003	97	19528	0.8000	0.7355	
50 1,1-Dichloroethane	63	5.016	5.022	-0.006	56	7039	0.4000	0.3709	
56 2,2-Dichloropropane	77		5.521				ND	ND	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	58	3490	0.4000	0.3250	
57 2-Butanone (MEK)	43	5.553	5.550	0.003	99	17898	2.00	2.07	
60 Chlorobromomethane	128	5.775	5.781	-0.006	73	1605	0.4000	0.3013	a
61 Tetrahydrofuran	42	5.804	5.794	0.010	89	4630	0.8000	0.8311	
62 Chloroform	83	5.823	5.826	-0.003	93	11728	0.4000	0.3650	
64 1,1,1-Trichloroethane	97	5.977	5.968	0.009	84	5016	0.4000	0.3613	M
65 Cyclohexane	56	5.984	5.987	-0.003	0	6327	0.4000	0.3397	M
67 1,1-Dichloropropene	75	6.103	6.103	0.000	85	4392	0.4000	0.3577	
66 Carbon tetrachloride	117	6.106	6.106	0.000	90	4590	0.4000	0.3666	
69 Isobutyl alcohol	43	6.202	6.206	-0.004	91	9200	10.0	9.32	
70 Benzene	78	6.312	6.315	-0.003	93	14967	0.4000	0.3951	
72 1,2-Dichloroethane	62	6.363	6.366	-0.003	96	6694	0.4000	0.4288	
73 n-Heptane	43	6.399	6.402	-0.004	94	4549	0.4000	0.3407	
75 Trichloroethene	95	6.884	6.881	0.003	0	3533	0.4000	0.3657	M
76 Methylcyclohexane	83	7.013	7.009	0.004	88	4945	0.4000	0.3325	
77 1,2-Dichloropropane	63	7.122	7.125	-0.003	0	3788	0.4000	0.3634	M
81 1,4-Dioxane	88		7.234				ND	ND	
82 Dibromomethane	93	7.273	7.273	0.000	94	2304	0.4000	0.3607	
83 Dichlorobromomethane	83	7.389	7.386	0.003	93	4683	0.4000	0.3799	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	0	2165	0.4000	0.2940	M
85 cis-1,3-Dichloropropene	75	7.788	7.784	0.004	88	5002	0.4000	0.3489	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	96	27828	2.00	1.84	
88 Toluene	92	8.087	8.083	0.004	98	8989	0.4000	0.3883	
90 Ethyl methacrylate	69	8.321	8.312	0.009	0	4360	0.4000	0.3649	M
91 trans-1,3-Dichloropropene	75	8.331	8.328	0.003	92	4286	0.4000	0.3266	
93 1,1,2-Trichloroethane	83	8.534	8.534	0.000	85	2452	0.4000	0.3465	
94 Tetrachloroethene	166	8.617	8.620	-0.003	92	3398	0.4000	0.3613	
95 1,3-Dichloropropane	76	8.710	8.707	0.003	57	5901	0.4000	0.4029	
96 2-Hexanone	43	8.717	8.710	0.007	90	19356	2.00	1.83	
98 Chlorodibromomethane	129	8.951	8.958	-0.007	0	3341	0.4000	0.3614	M
101 Ethylene Dibromide	107	9.093	9.093	0.000	96	3103	0.4000	0.3422	
103 Chlorobenzene	112	9.553	9.546	0.007	0	9124	0.4000	0.3648	M
104 Ethylbenzene	91	9.601	9.604	-0.003	97	14900	0.4000	0.3658	
105 1,1,1,2-Tetrachloroethane	131	9.624	9.627	-0.003	92	3090	0.4000	0.3417	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.000	0	5279	0.4000	0.3312	
107 o-Xylene	106	10.160	10.157	0.003	94	5650	0.4000	0.3599	
109 Styrene	104	10.180	10.180	0.000	0	8670	0.4000	0.3488	M
110 Bromoform	173	10.456	10.459	-0.003	89	2194	0.4000	0.3502	
111 Isopropylbenzene	105	10.501	10.505	-0.003	94	12847	0.4000	0.3324	
112 1,1,2,2-Tetrachloroethane	83	10.874	10.877	-0.003	87	5112	0.4000	0.3907	
113 Bromobenzene	156	10.887	10.887	0.000	82	4208	0.4000	0.4122	
114 N-Propylbenzene	91	10.906	10.906	0.000	98	17923	0.4000	0.3844	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.919	-0.003	60	808	0.4000	0.7994	M
116 1,2,3-Trichloropropane	110	10.939	10.932	0.007	0	1198	0.4000	0.2735	M
117 2-Chlorotoluene	126	11.045	11.041	0.004	93	3290	0.4000	0.3371	a
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	97	10461	0.4000	0.3081	
119 4-Chlorotoluene	91	11.138	11.141	-0.003	96	10909	0.4000	0.3751	a
120 tert-Butylbenzene	134	11.376	11.376	0.000	91	1826	0.4000	0.6226	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	94	11292	0.4000	0.3267	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	14060	0.4000	0.3347	
123 4-Isopropyltoluene	119	11.691	11.688	0.003	96	11356	0.4000	0.3161	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	93	7840	0.4000	0.3960	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	93	8362	0.4000	0.4121	a
127 n-Butylbenzene	91	12.054	12.054	0.000	97	12401	0.4000	0.3810	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	91	7835	0.4000	0.3914	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	82	1625	0.4000	0.5305	
130 1,2,4-Trichlorobenzene	180	13.508	13.508	0.000	91	5364	0.4000	0.3853	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	79	1652	0.4000	0.2982	
132 Naphthalene	128	13.768	13.765	0.003	98	16323	0.4000	0.3824	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	91	5060	0.4000	0.3894	
S 142 Total BTEX	1				0			1.84	
S 143 Xylenes, Total	1				0			0.6911	
S 144 1,3-Dichloropropene, Total	1				0			0.6755	
S 141 1,2-Dichloroethene, Total	1				0			0.7209	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	0.40	Units: uL	
GAS CORP mix_00360	Amount Added:	0.40	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:44:38 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D

Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L

Lims ID: IC 0.4

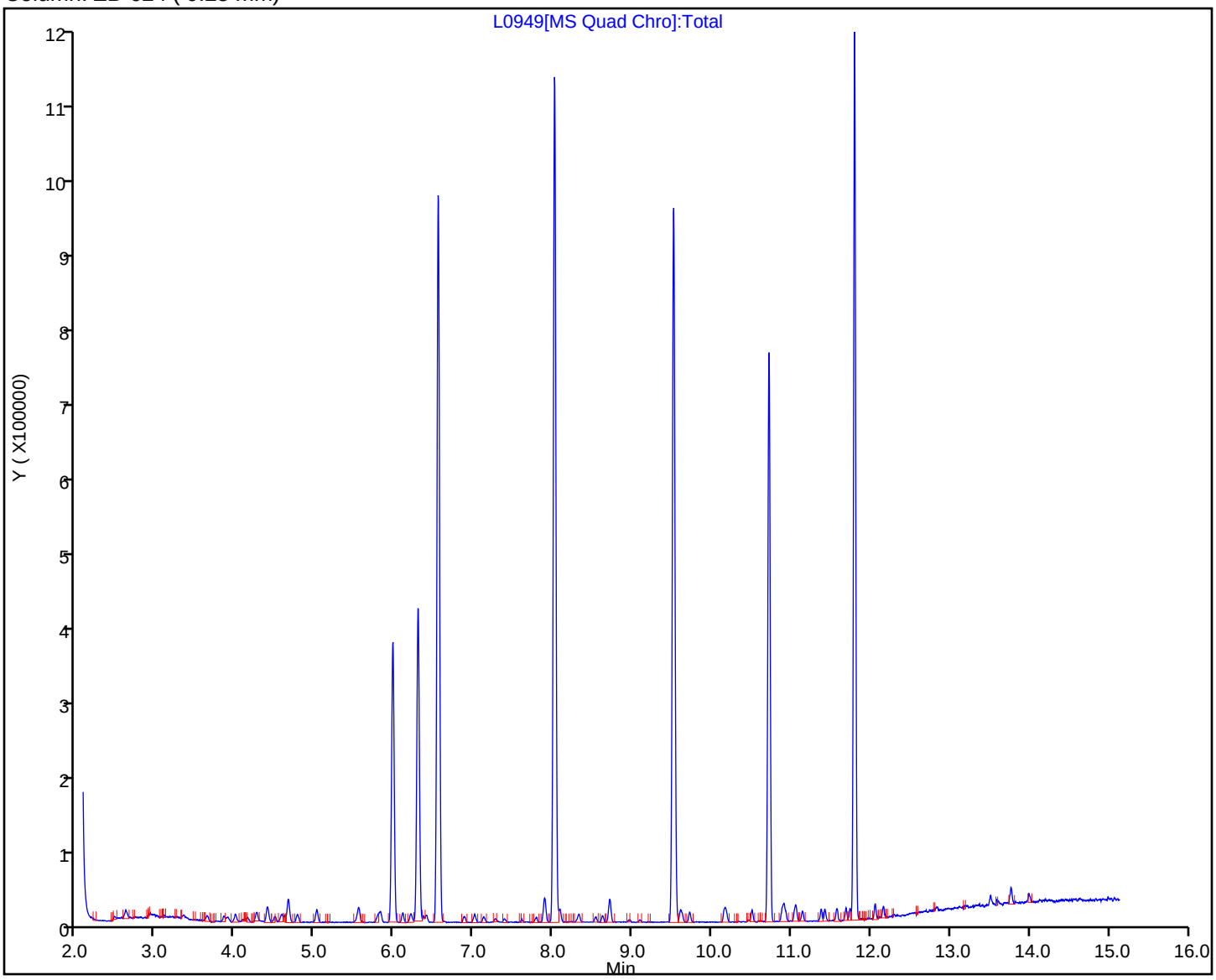
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

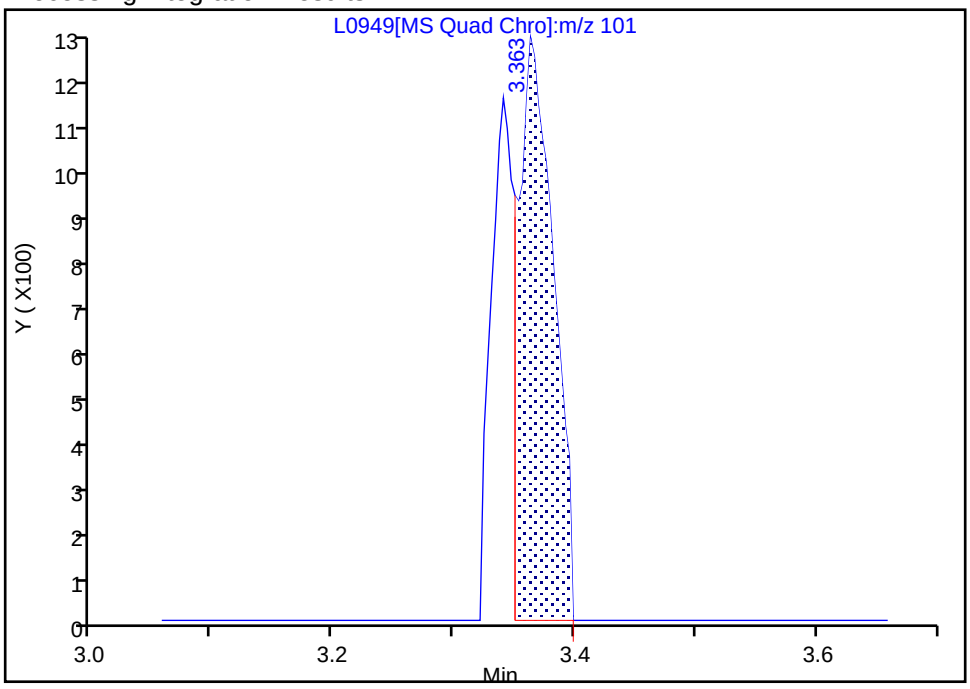
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

21 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

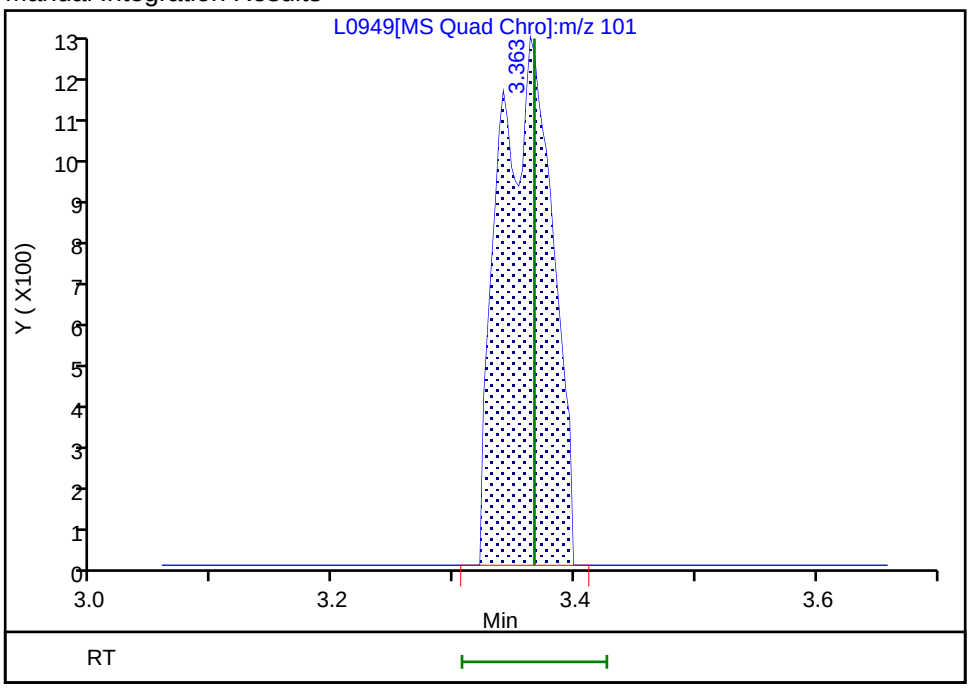
Processing Integration Results

RT: 3.36
Area: 2605
Amount: 0.331506
Amount Units: ug/L



Manual Integration Results

RT: 3.36
Area: 3943
Amount: 0.278985
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:24:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

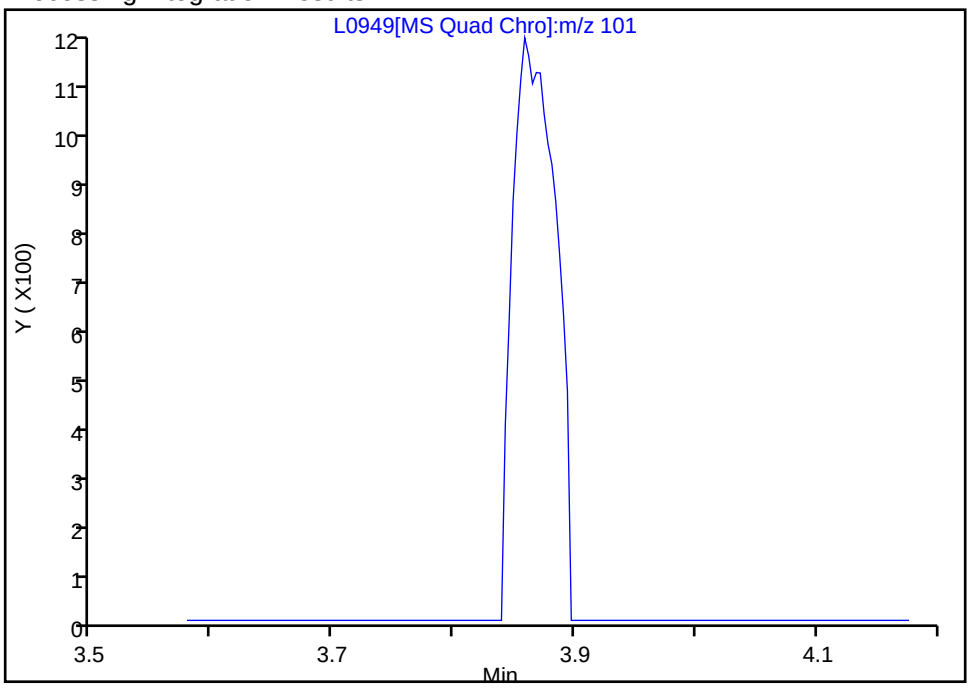
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

29 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

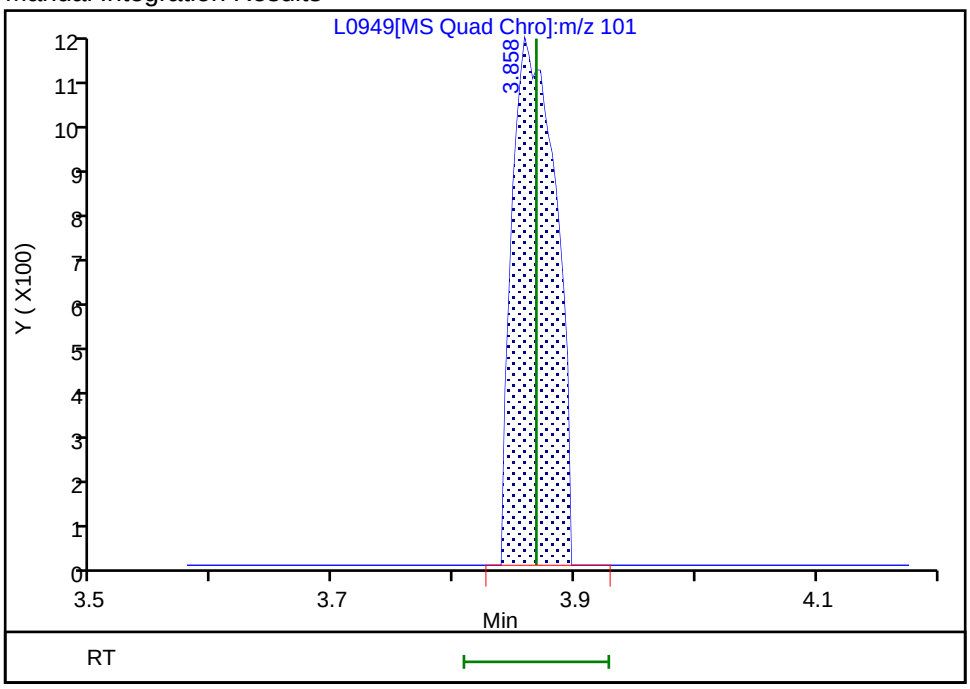
Not Detected
Expected RT: 3.87

Processing Integration Results



Manual Integration Results

RT: 3.86
Area: 2737
Amount: 0.332841
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:24:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

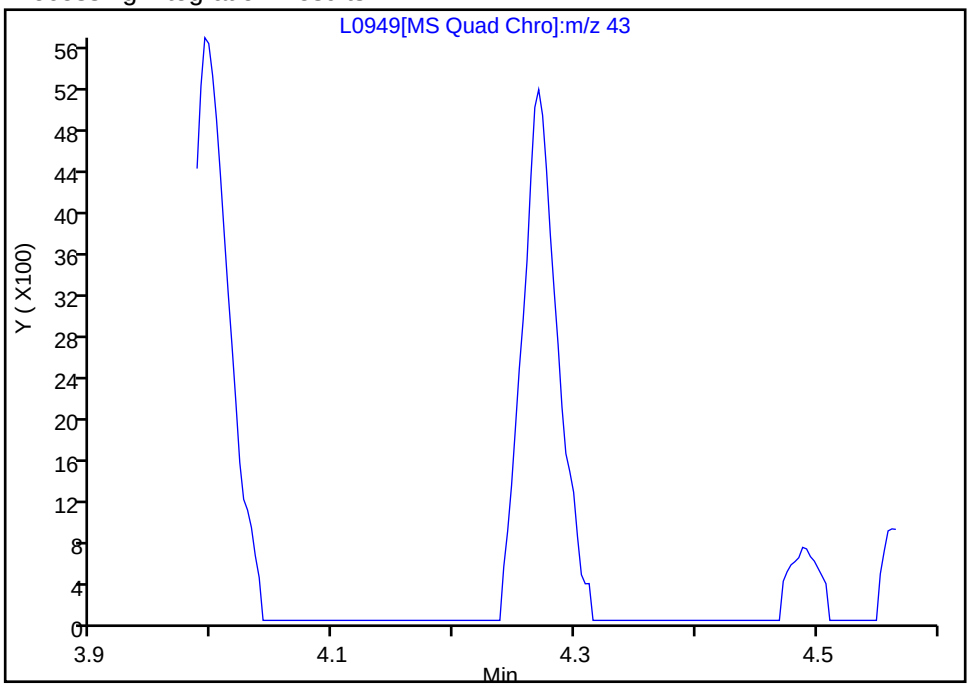
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

38 Methyl acetate, CAS: 79-20-9

Signal: 1

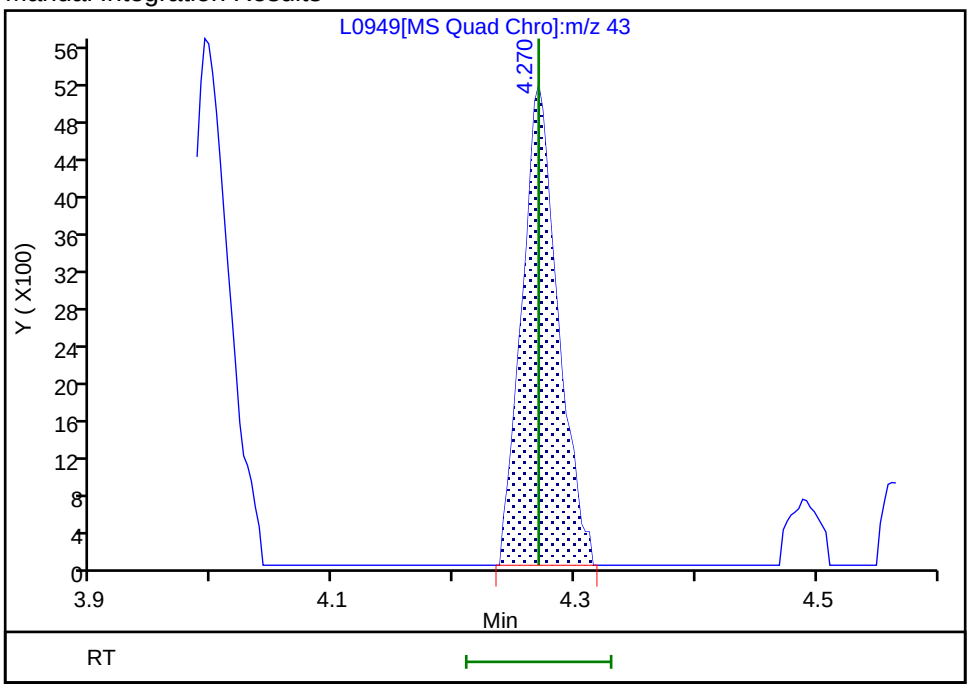
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.27
Area: 10708
Amount: 0.824621
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:24:29
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

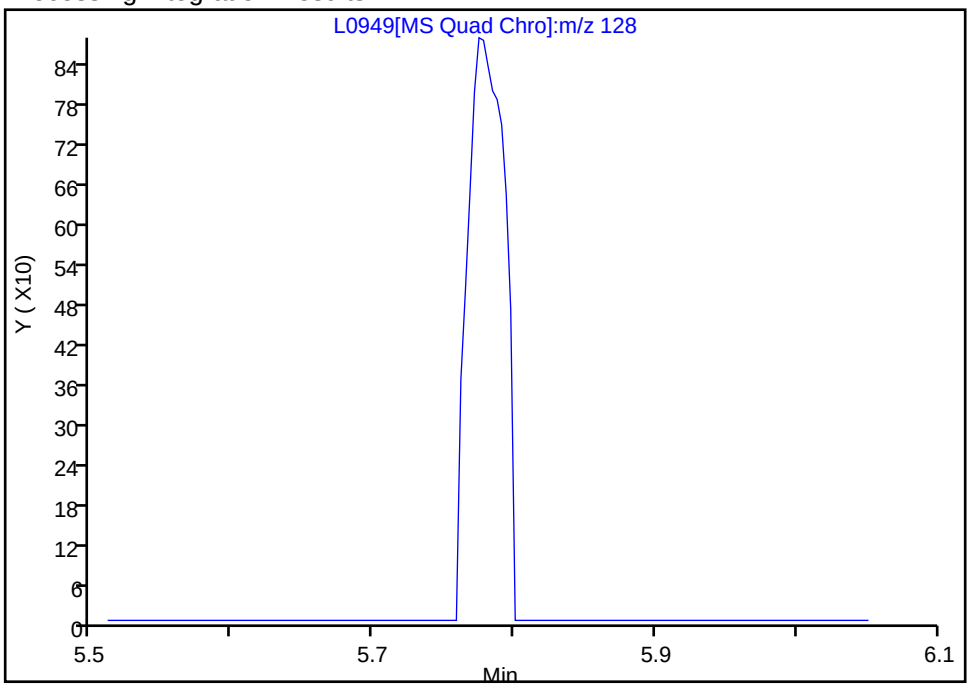
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

60 Chlorobromomethane, CAS: 74-97-5

Signal: 1

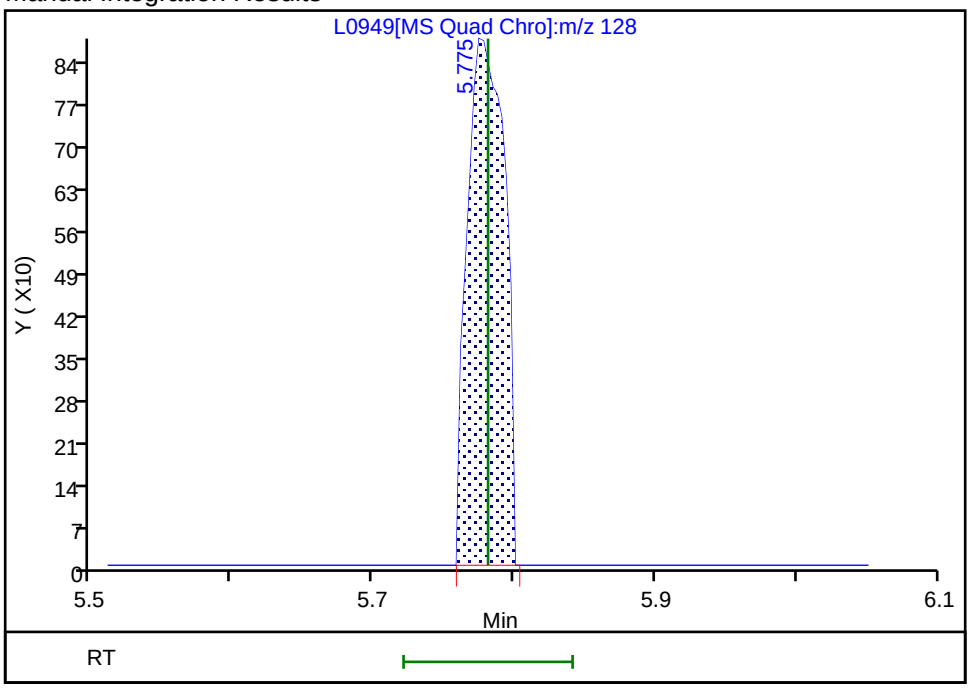
Not Detected
Expected RT: 5.78

Processing Integration Results



Manual Integration Results

RT: 5.77
Area: 1605
Amount: 0.301303
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:24:46
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

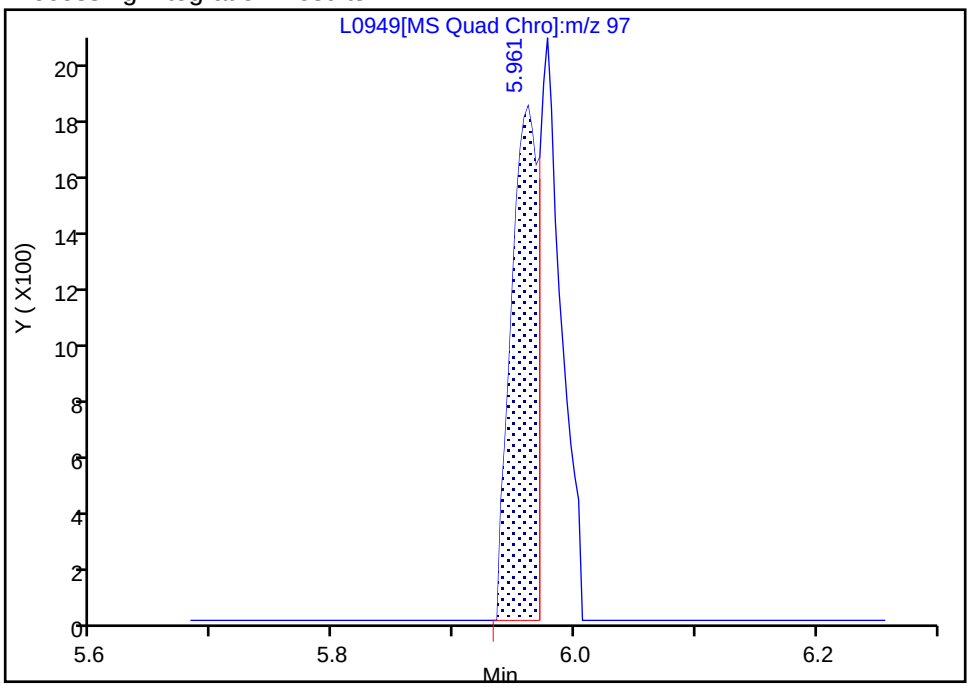
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

64 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

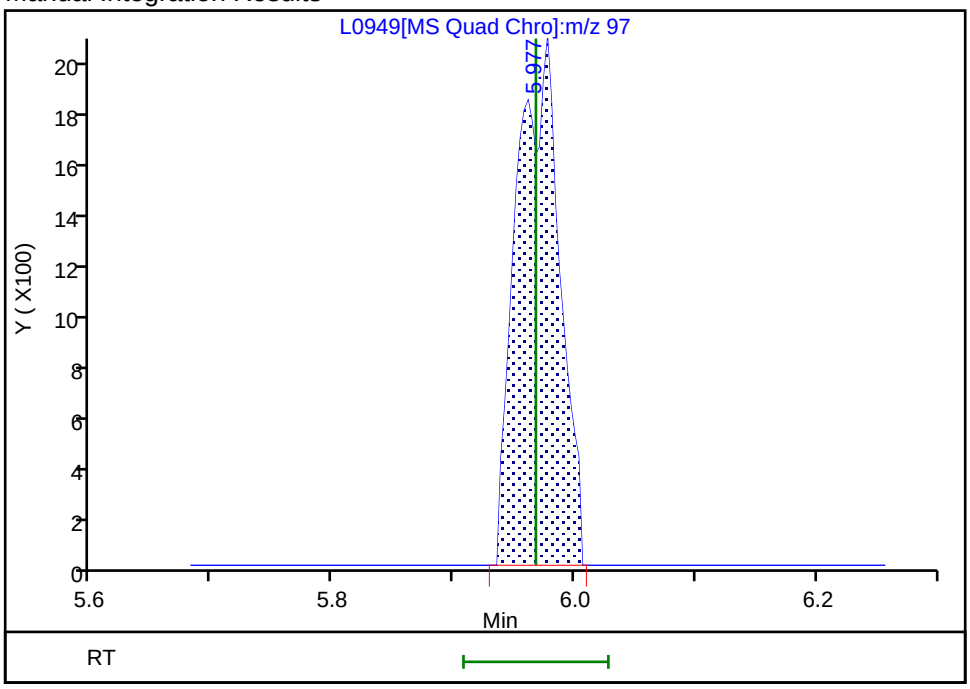
Processing Integration Results

RT: 5.96
Area: 2812
Amount: 0.318776
Amount Units: ug/L



Manual Integration Results

RT: 5.98
Area: 5016
Amount: 0.361350
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:25:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

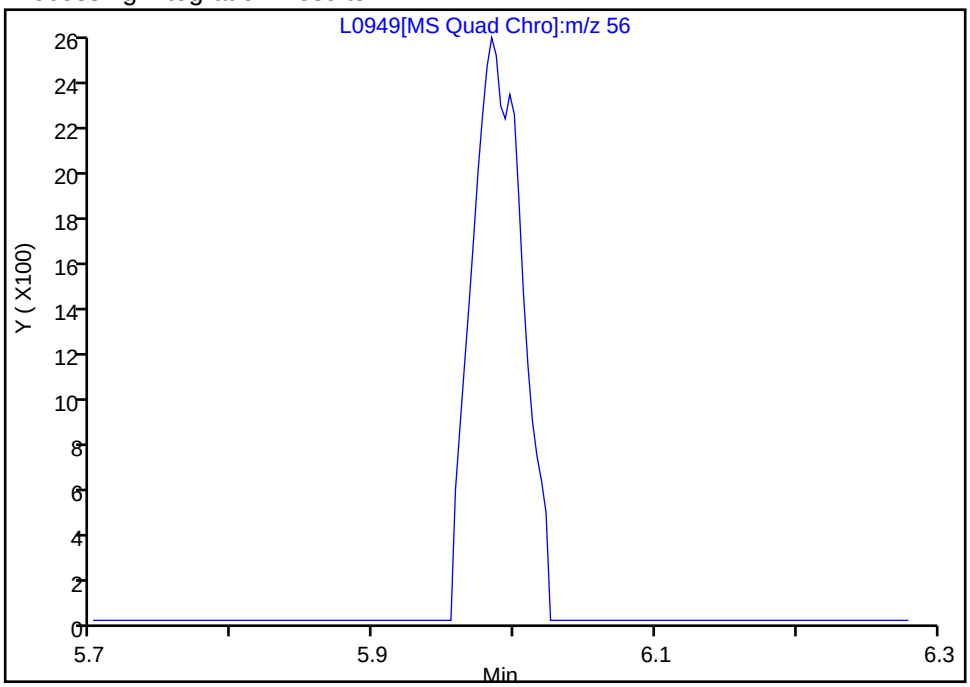
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

65 Cyclohexane, CAS: 110-82-7

Signal: 1

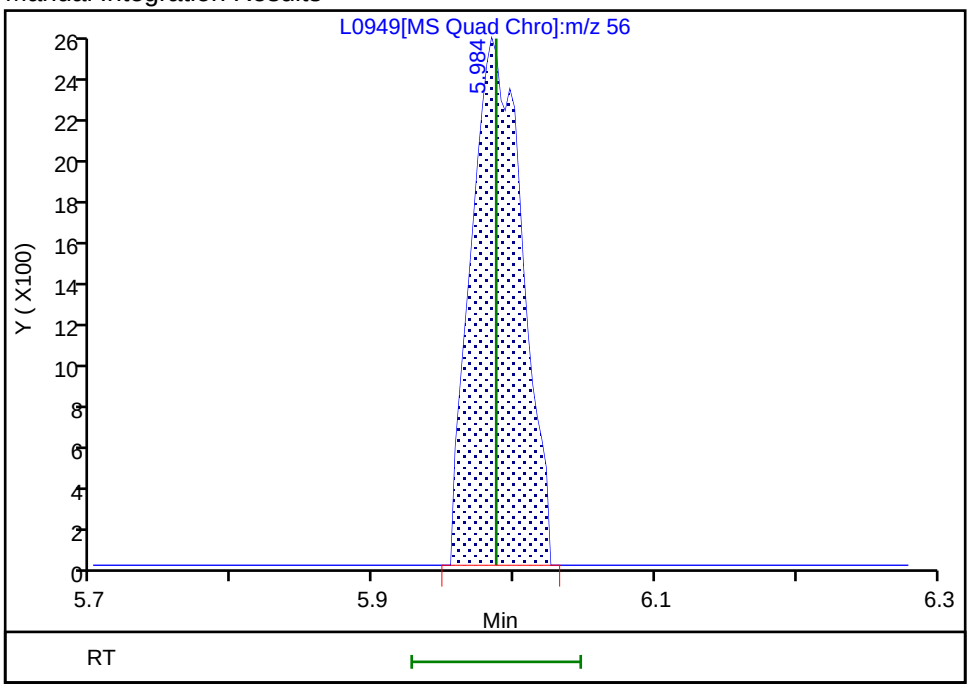
Not Detected
Expected RT: 5.99

Processing Integration Results



Manual Integration Results

RT: 5.98
Area: 6327
Amount: 0.339680
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:25:29
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

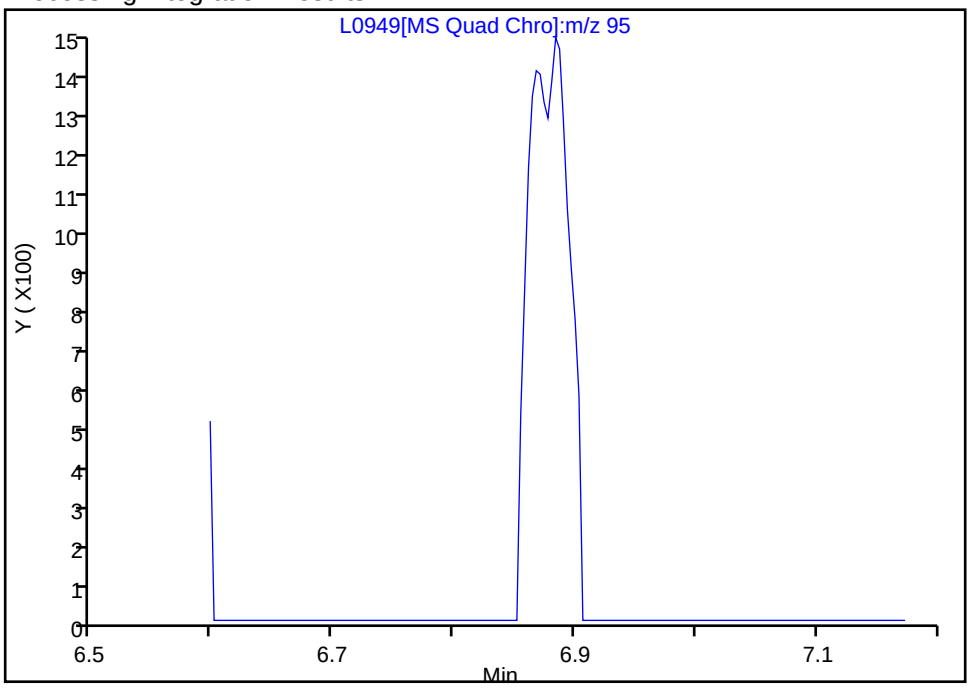
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

75 Trichloroethene, CAS: 79-01-6

Signal: 1

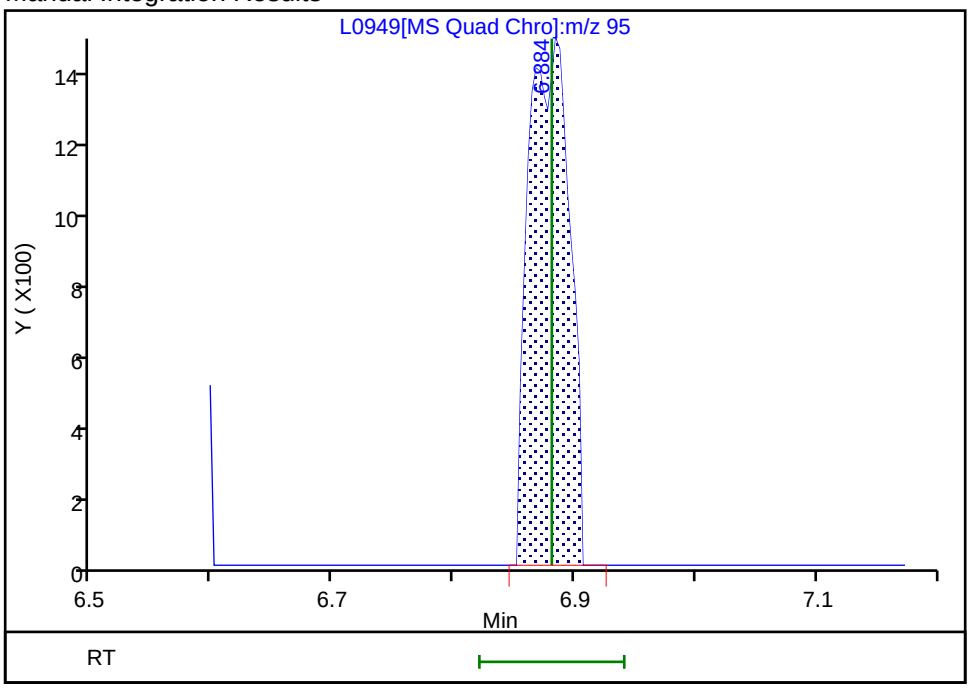
Not Detected
Expected RT: 6.88

Processing Integration Results



Manual Integration Results

RT: 6.88
Area: 3533
Amount: 0.365663
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:25:47
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

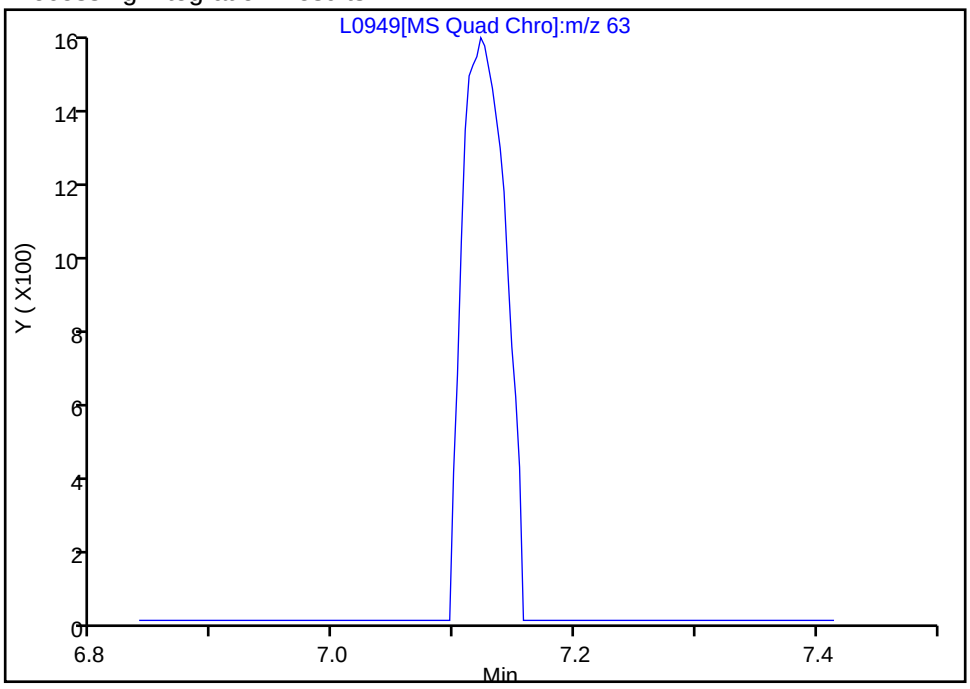
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

77 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

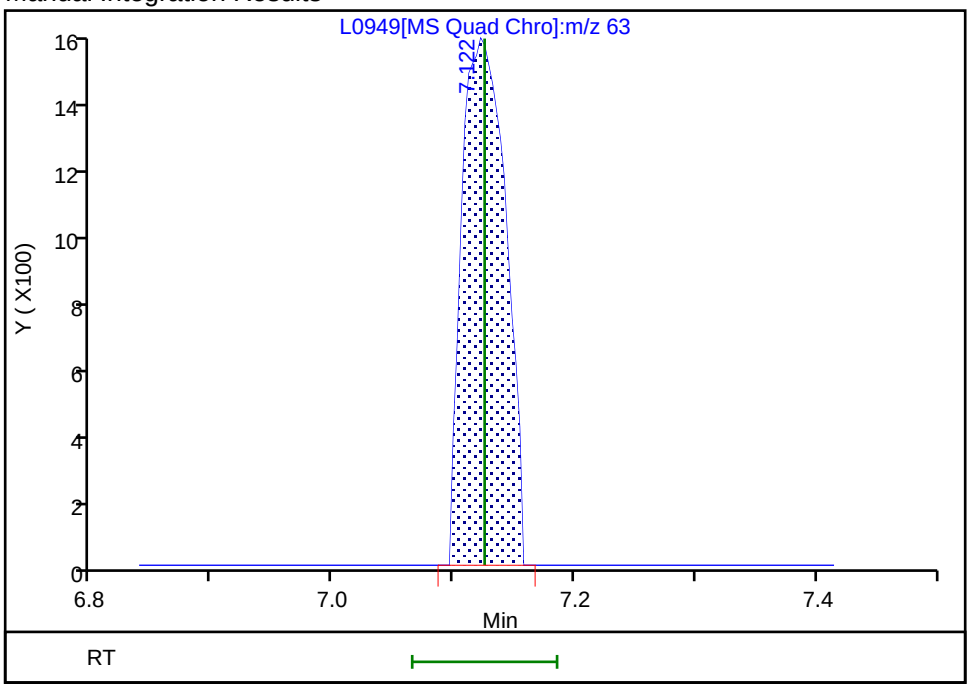
Not Detected
Expected RT: 7.13

Processing Integration Results



Manual Integration Results

RT: 7.12
Area: 3788
Amount: 0.363442
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:26:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

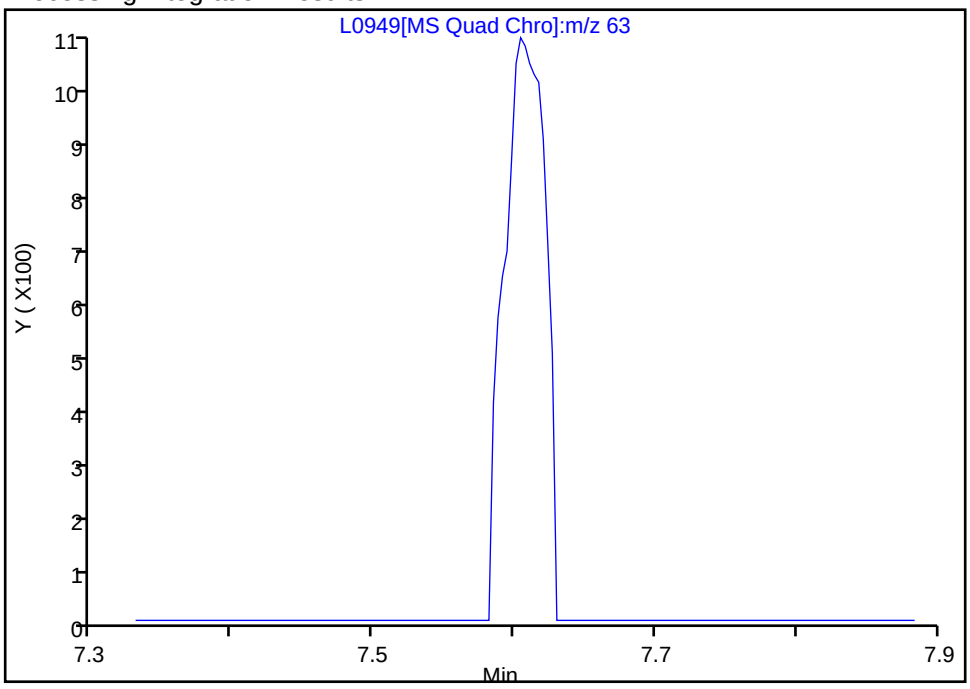
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

84 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

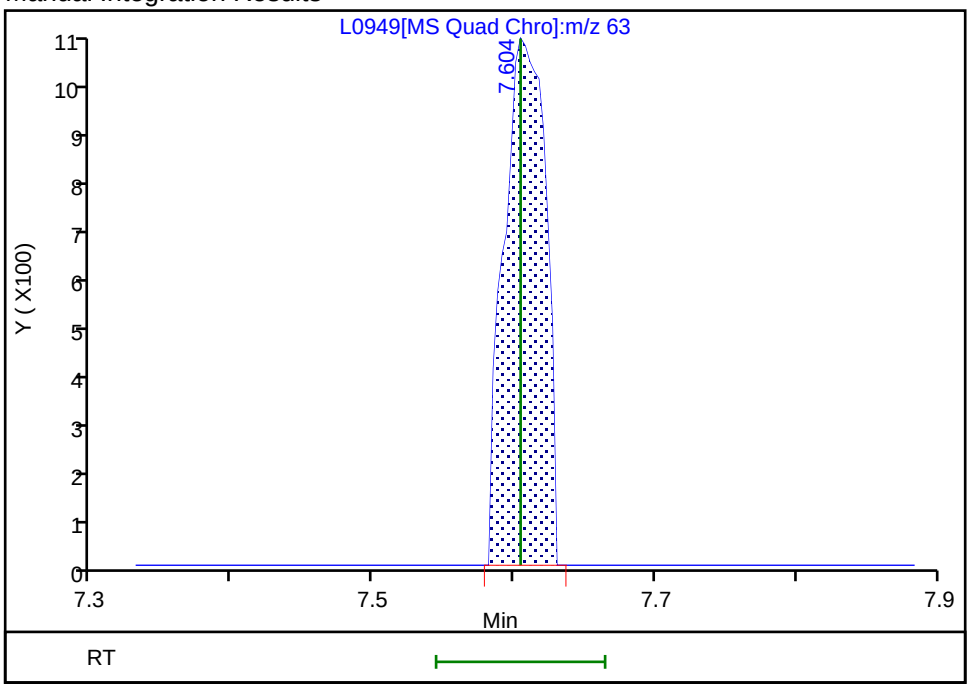
Not Detected
Expected RT: 7.60

Processing Integration Results



Manual Integration Results

RT: 7.60
Area: 2165
Amount: 0.294037
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:26:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

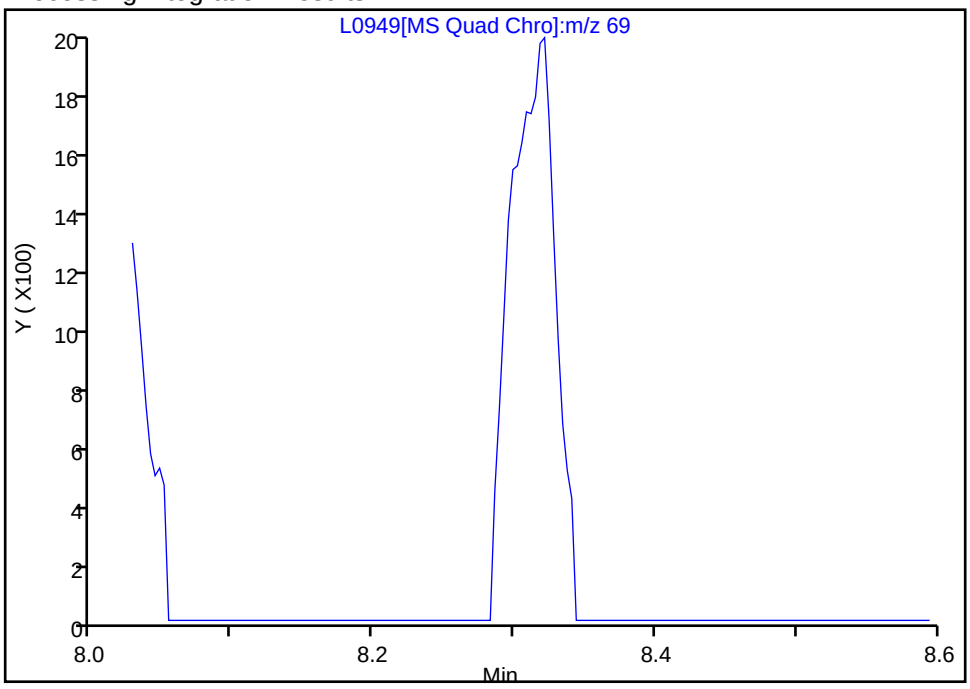
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

90 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

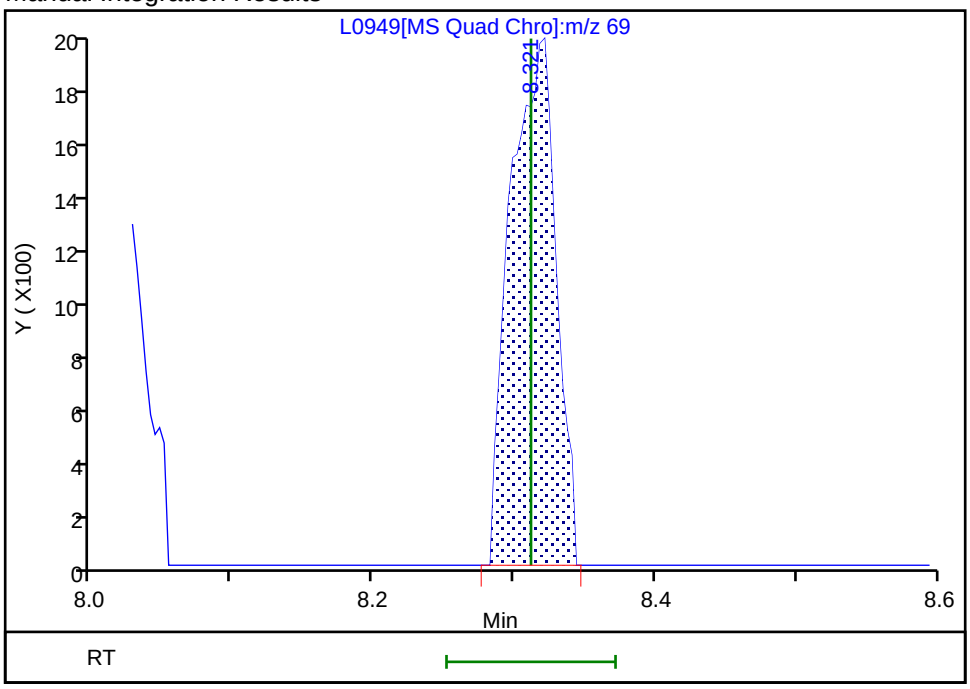
Not Detected
Expected RT: 8.31

Processing Integration Results



Manual Integration Results

RT: 8.32
Area: 4360
Amount: 0.364948
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:26:34
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

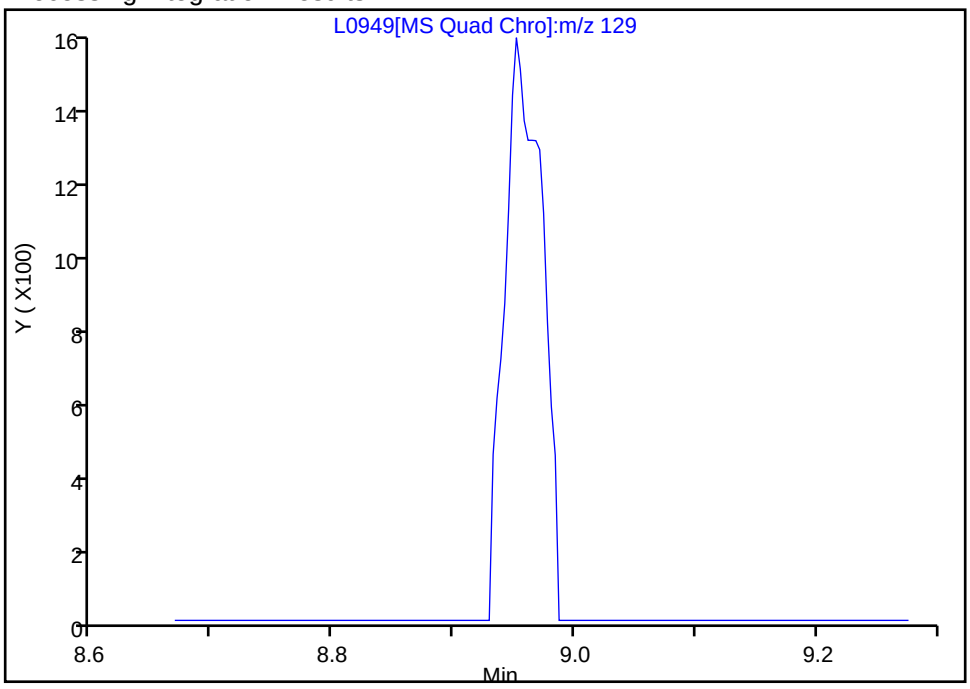
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

98 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

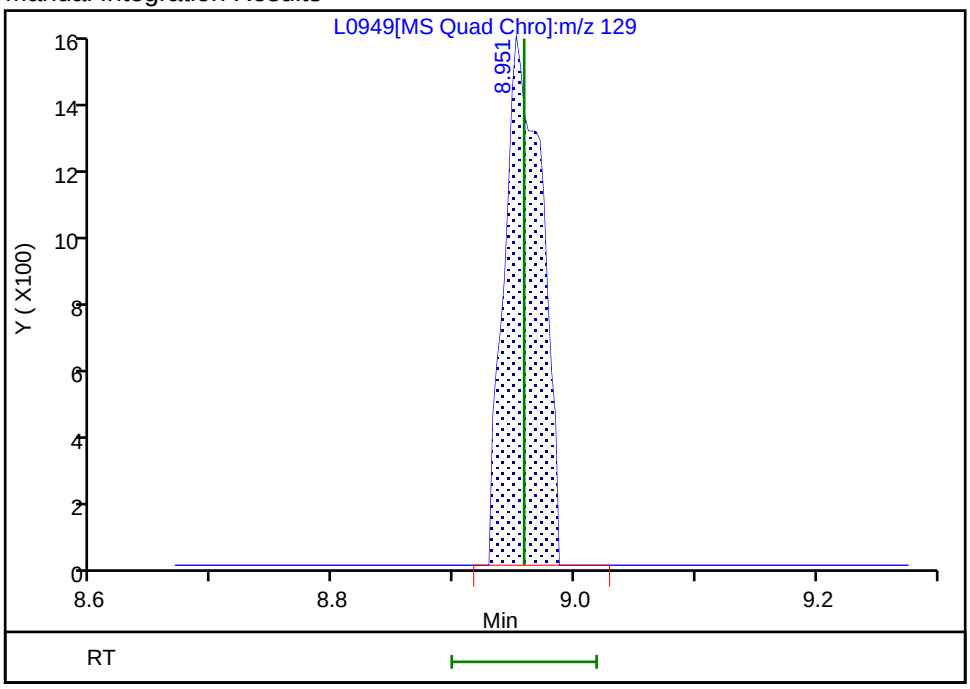
Not Detected
Expected RT: 8.96

Processing Integration Results



Manual Integration Results

RT: 8.95
Area: 3341
Amount: 0.361404
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:26:50
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

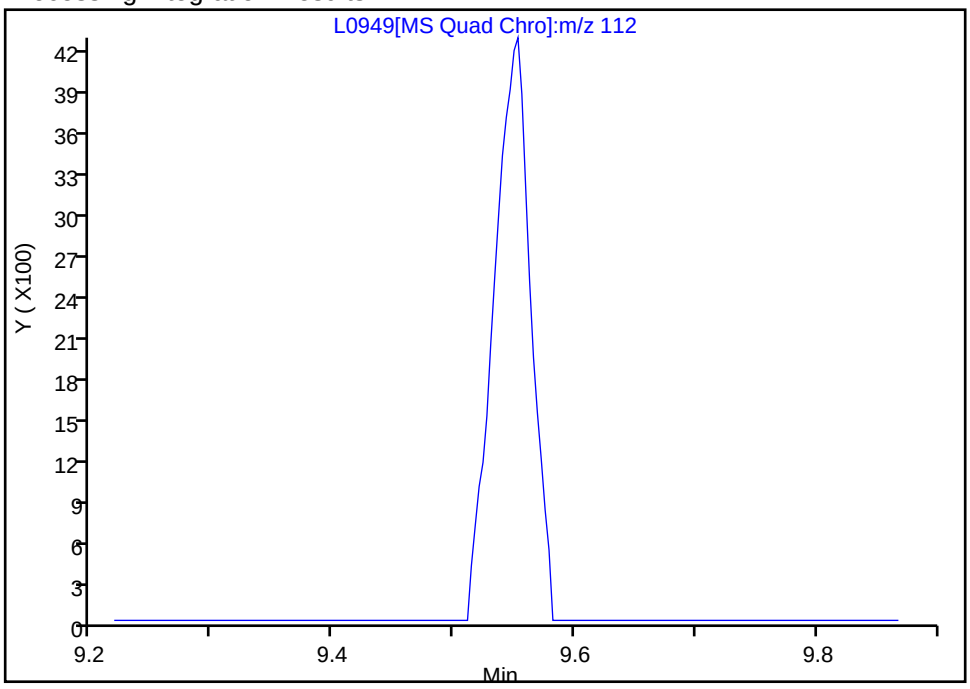
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

103 Chlorobenzene, CAS: 108-90-7

Signal: 1

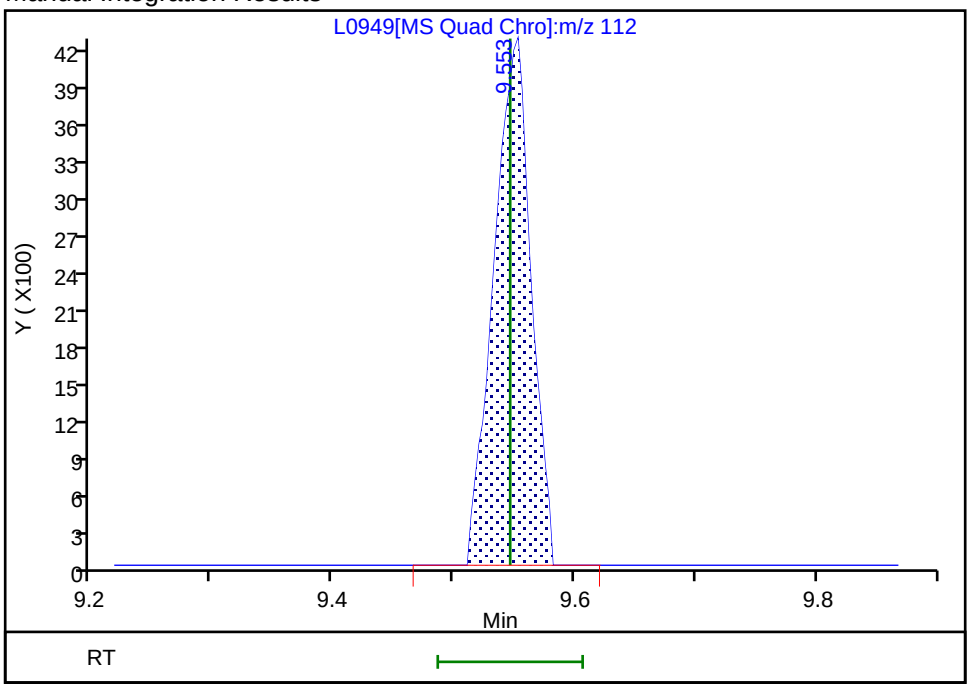
Not Detected
Expected RT: 9.55

Processing Integration Results



Manual Integration Results

RT: 9.55
Area: 9124
Amount: 0.364770
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:27:03
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

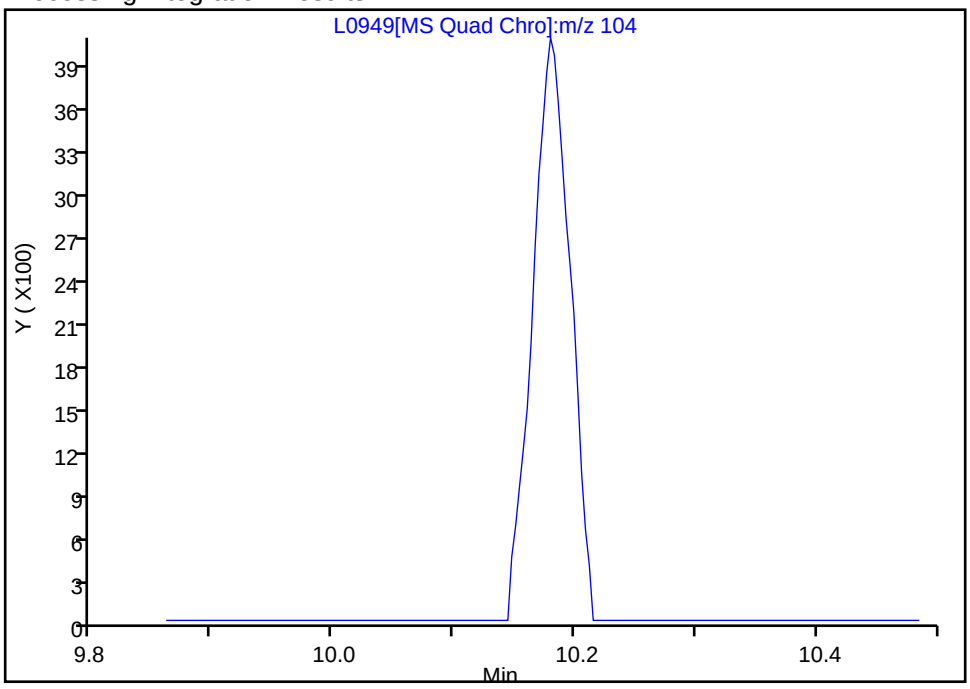
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

109 Styrene, CAS: 100-42-5

Signal: 1

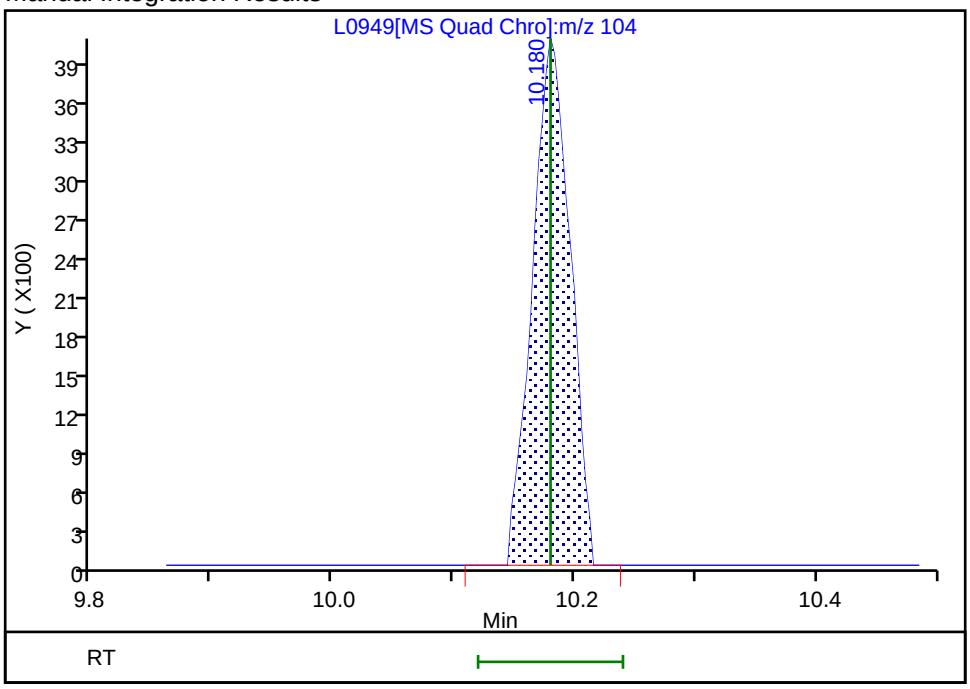
Not Detected
Expected RT: 10.18

Processing Integration Results



Manual Integration Results

RT: 10.18
Area: 8670
Amount: 0.348795
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:27:24
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

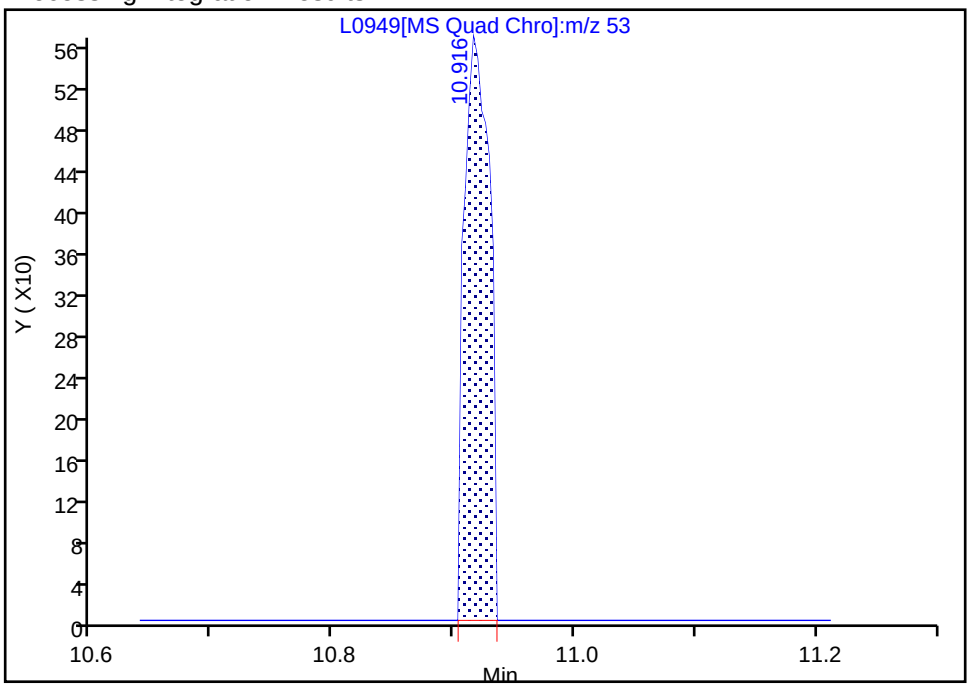
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

115 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

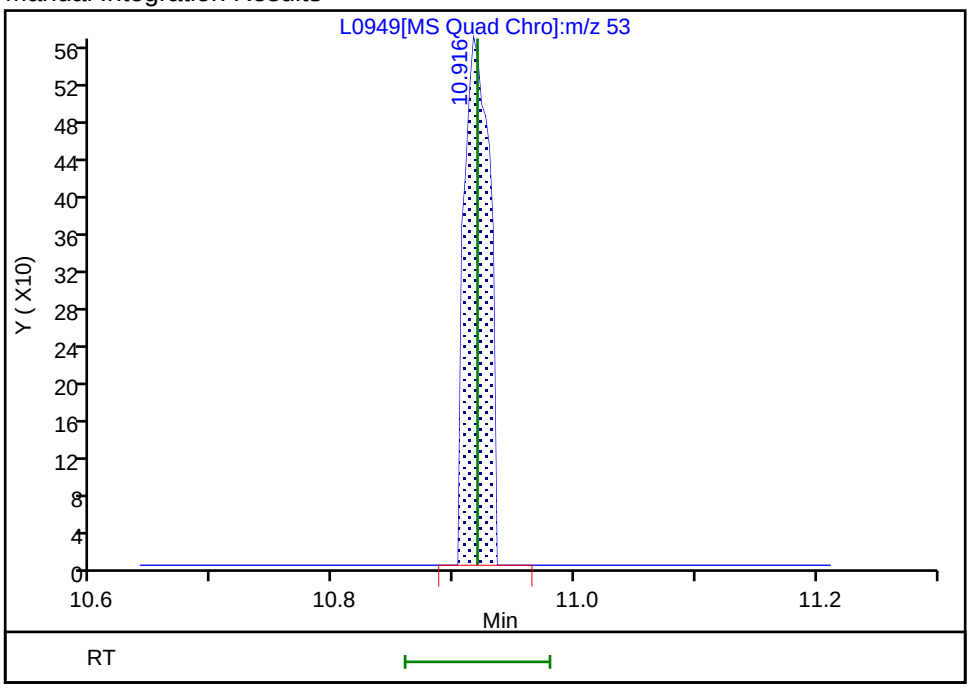
Processing Integration Results

RT: 10.92
Area: 808
Amount: 0.236088
Amount Units: ug/L



Manual Integration Results

RT: 10.92
Area: 808
Amount: 0.799412
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:27:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

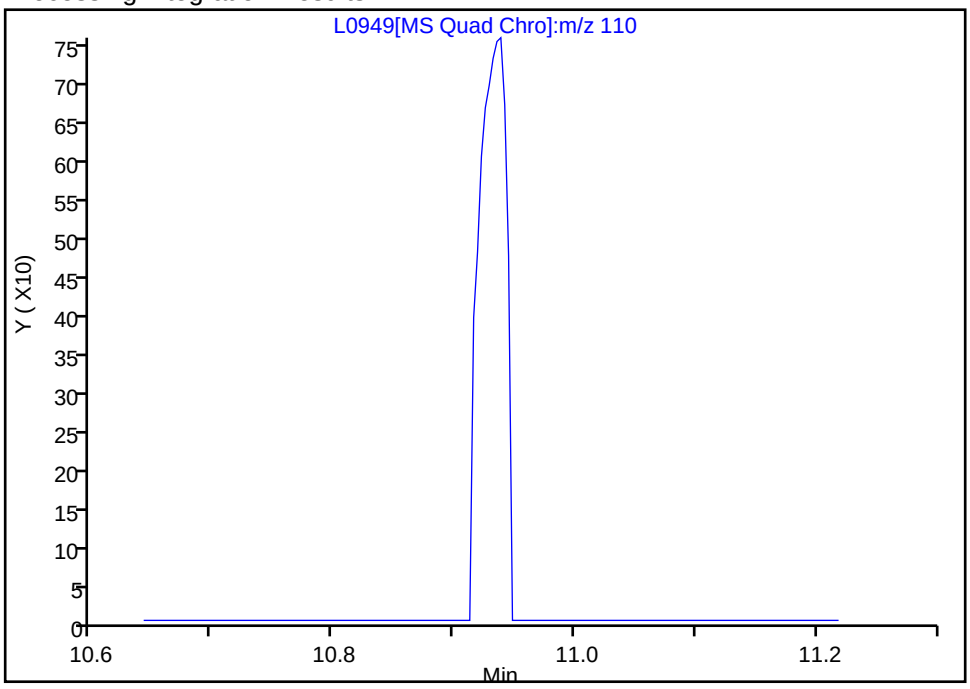
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

116 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

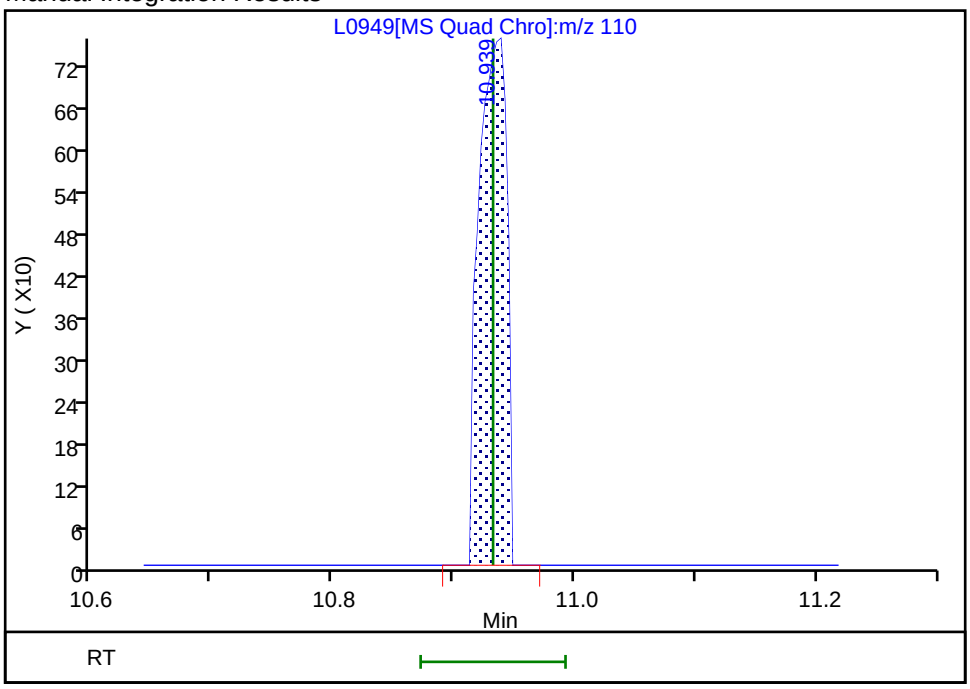
Not Detected
Expected RT: 10.93

Processing Integration Results



Manual Integration Results

RT: 10.94
Area: 1198
Amount: 0.273497
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:27:52
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

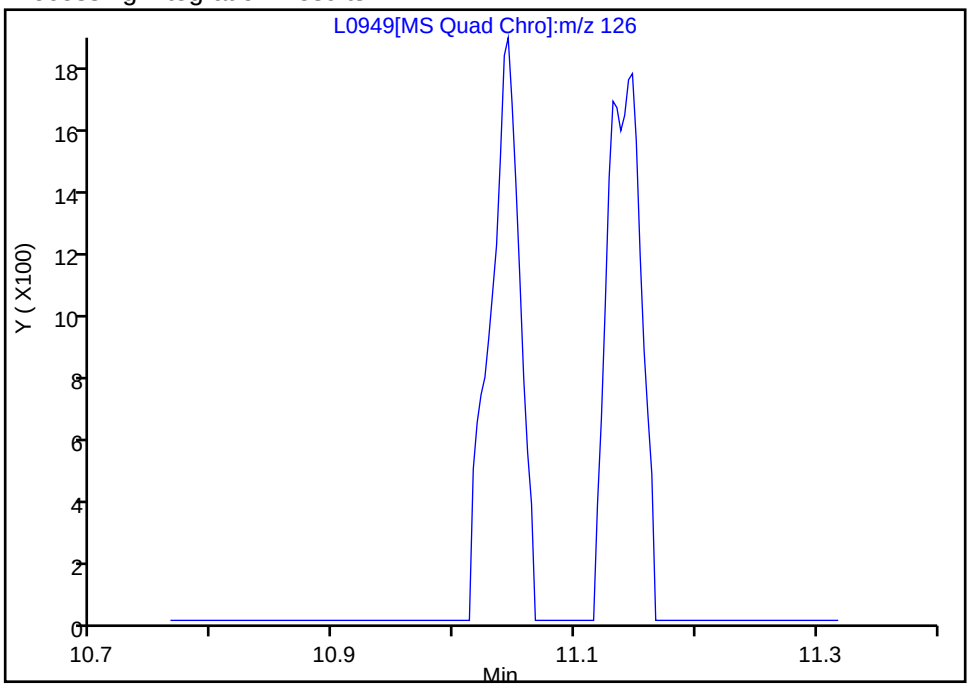
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

117 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

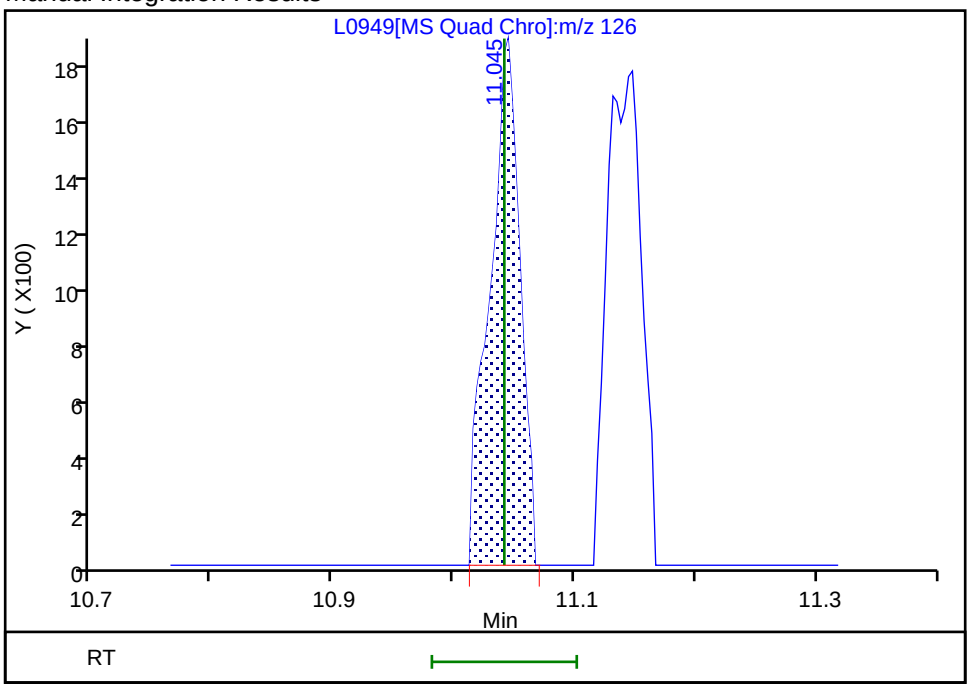
Not Detected
Expected RT: 11.04

Processing Integration Results



Manual Integration Results

RT: 11.04
Area: 3290
Amount: 0.337134
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:28:03
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

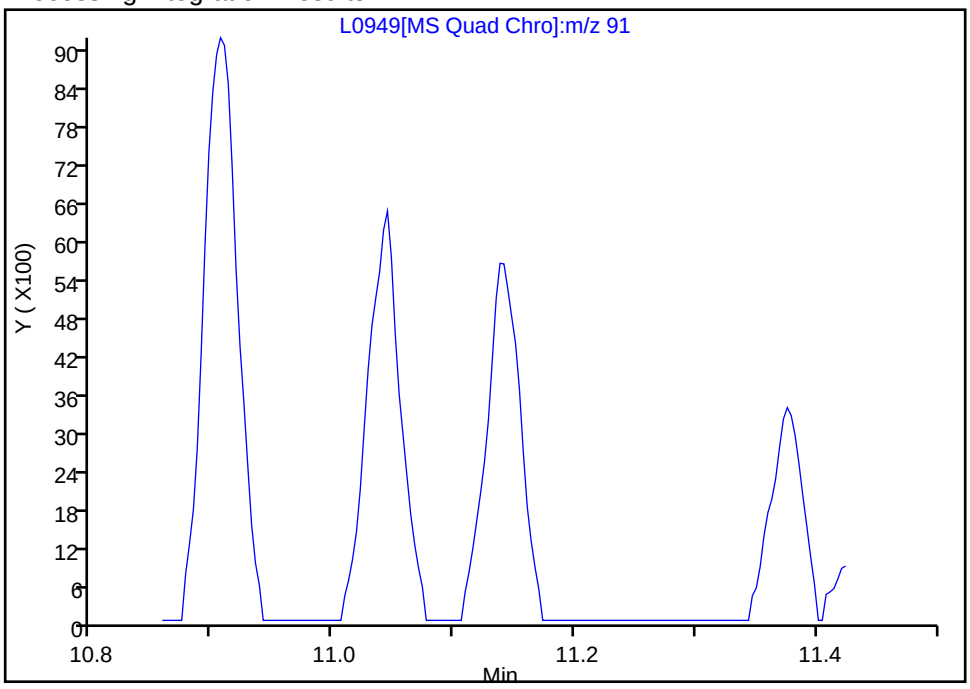
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

119 4-Chlorotoluene, CAS: 106-43-4

Signal: 1

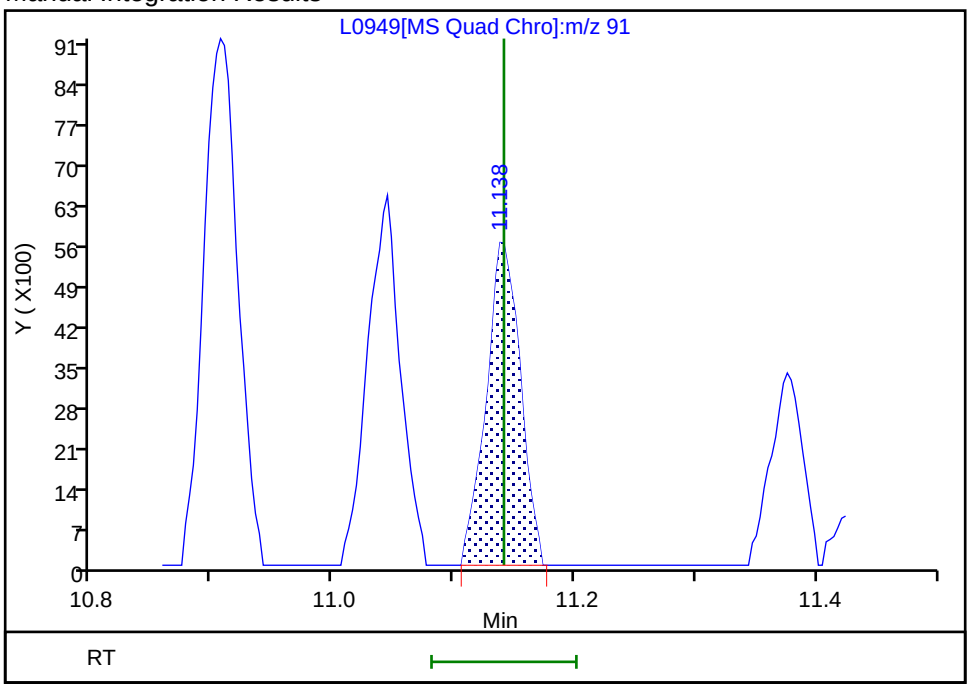
Not Detected
Expected RT: 11.14

Processing Integration Results



Manual Integration Results

RT: 11.14
Area: 10909
Amount: 0.375143
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:28:11
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

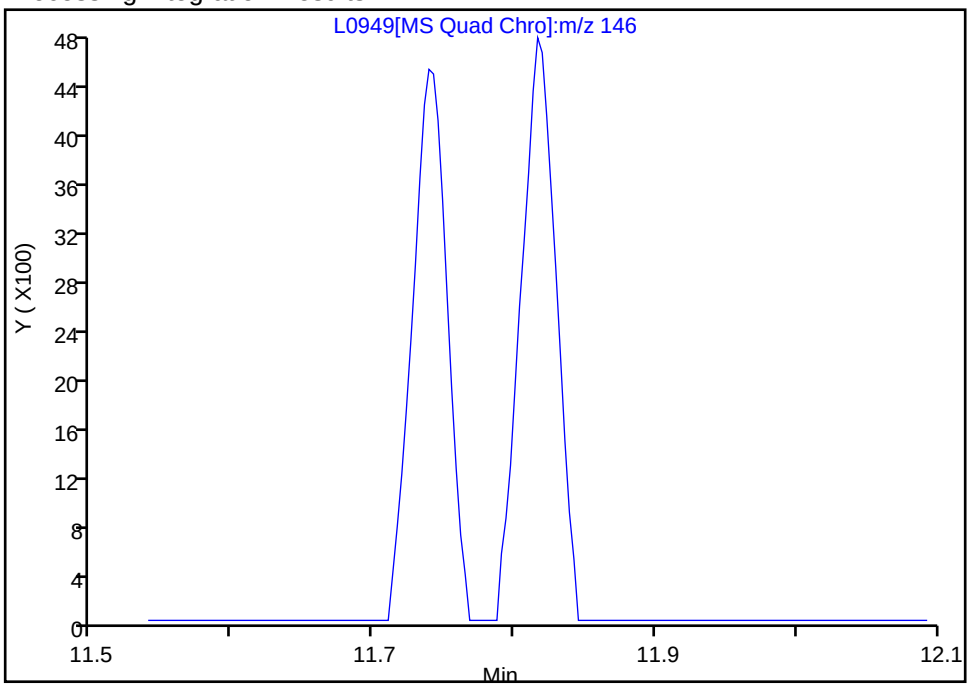
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0949.D
Injection Date: 13-Sep-2019 16:10:14 Instrument ID: HP5977L
Lims ID: IC 0.4
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

126 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

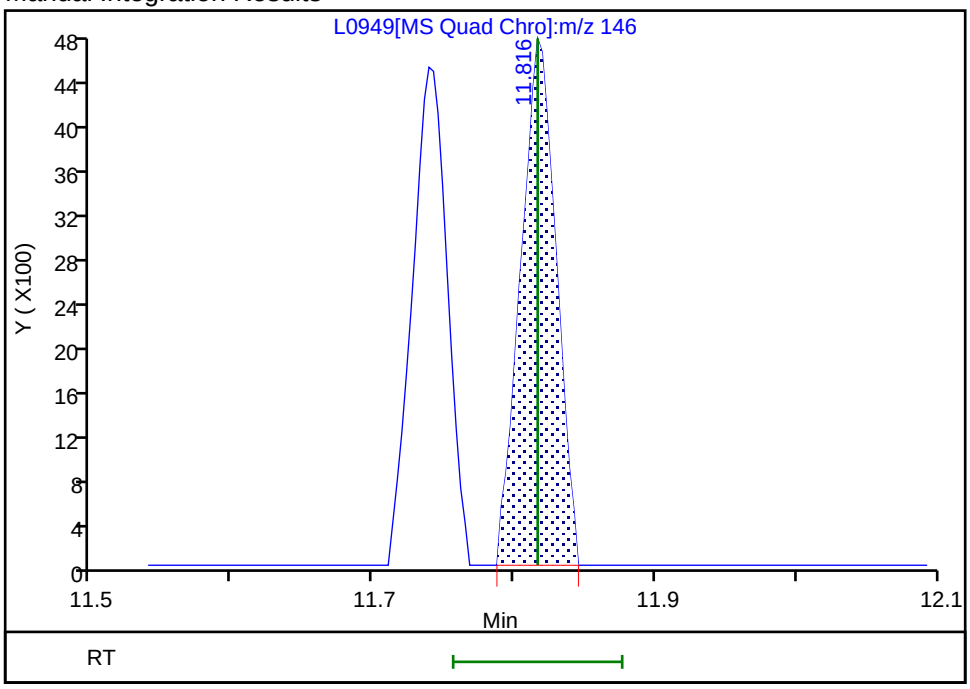
Not Detected
Expected RT: 11.82

Processing Integration Results



Manual Integration Results

RT: 11.82
Area: 8362
Amount: 0.412077
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:28:21
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 13-Sep-2019 16:34:13 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0084114-008
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:44:45 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:31:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	182830	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	87	693270	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	367939	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.981	0.000	93	242469	25.0	25.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.296	-0.001	99	303187	25.0	25.2	
$ 6 Toluene-d8 (Surr)	98	8.016	8.019	-0.003	94	851425	25.0	24.2	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.003	98	231973	25.0	23.3	
10 Dichlorodifluoromethane	85	2.202	2.206	-0.004	95	9401	1.00	0.8878	
13 Chloromethane	50	2.476	2.479	-0.003	97	15440	1.00	1.04	
14 Vinyl chloride	62	2.614	2.611	0.003	66	11038	1.00	0.99	
15 Butadiene	54	2.617	2.620	-0.003	88	14130	1.00	1.04	
18 Bromomethane	94	2.987	2.993	-0.006	87	6728	1.00	1.03	
19 Chloroethane	64	3.109	3.109	0.000	97	7256	1.00	1.08	a
20 Dichlorofluoromethane	67	3.340	3.344	-0.004	95	16134	1.00	1.03	
21 Trichlorofluoromethane	101	3.353	3.366	-0.013	95	13398	1.00	0.9552	
26 Ethyl ether	59	3.643	3.643	0.000	96	11859	1.00	1.09	
28 Acrolein	56	3.845	3.849	-0.004	97	12965	5.00	4.77	
29 1,1,2-Trichloro-1,2,2-trif	101	3.865	3.868	-0.003	92	8124	1.00	1.00	a
30 1,1-Dichloroethene	96	3.903	3.900	0.003	97	8113	1.00	0.9729	
31 Acetone	43	3.996	3.997	-0.001	98	30575	5.00	5.03	
33 Iodomethane	142	4.093	4.090	0.003	99	14200	1.00	0.9680	
35 Carbon disulfide	76	4.141	4.145	-0.004	99	28076	1.00	0.9788	a
37 3-Chloro-1-propene	41	4.260	4.257	0.003	90	18604	1.00	1.04	
38 Methyl acetate	43	4.273	4.270	0.003	99	25791	2.00	2.00	a
39 Methylene Chloride	84	4.398	4.399	-0.001	97	15914	1.00	0.9426	
40 2-Methyl-2-propanol	59	4.498	4.492	0.006	99	23982	10.0	9.54	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	97	28884	1.00	0.9895	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	96	11047	1.00	1.09	
44 Acrylonitrile	53	4.665	4.662	0.003	99	68144	10.0	9.90	
47 Hexane	57	4.778	4.778	0.000	93	14180	1.00	0.9528	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	49012	2.00	1.86	
50 1,1-Dichloroethane	63	5.025	5.022	0.003	59	19017	1.00	1.01	
56 2,2-Dichloropropane	77	5.520	5.521	-0.001	90	10100	1.00	1.05	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	61	10766	1.00	1.01	
57 2-Butanone (MEK)	43	5.549	5.550	-0.001	100	41366	5.00	4.82	
60 Chlorobromomethane	128	5.787	5.781	0.006	95	5370	1.00	1.02	
61 Tetrahydrofuran	42	5.797	5.794	0.003	89	10886	2.00	1.97	
62 Chloroform	83	5.823	5.826	-0.003	94	21793	1.00	0.9713	
64 1,1,1-Trichloroethane	97	5.967	5.968	-0.001	96	13612	1.00	0.9881	
65 Cyclohexane	56	5.984	5.987	-0.003	54	17353	1.00	0.9387	
67 1,1-Dichloropropene	75	6.102	6.103	-0.001	90	11488	1.00	0.9429	a
66 Carbon tetrachloride	117	6.106	6.106	0.000	91	12664	1.00	1.02	
69 Isobutyl alcohol	43	6.209	6.206	0.003	93	23681	25.0	24.2	
70 Benzene	78	6.315	6.315	0.000	96	38311	1.00	1.02	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	97	16184	1.00	1.04	
73 n-Heptane	43	6.402	6.402	0.000	90	12936	1.00	0.9762	
75 Trichloroethene	95	6.881	6.881	0.000	95	9388	1.00	0.9791	
76 Methylcyclohexane	83	7.009	7.009	0.000	90	13828	1.00	0.9368	
77 1,2-Dichloropropane	63	7.128	7.125	0.003	93	9708	1.00	0.9386	a
81 1,4-Dioxane	88	7.241	7.234	0.007	79	1606	20.0	11.8	Ma
82 Dibromomethane	93	7.273	7.273	0.000	97	6351	1.00	1.00	
83 Dichlorobromomethane	83	7.392	7.386	0.006	97	11900	1.00	0.9726	
84 2-Chloroethyl vinyl ether	63	7.610	7.604	0.006	87	6638	1.00	0.9084	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	91	13101	1.00	0.9207	
87 4-Methyl-2-pentanone (MIBK	43	7.893	7.890	0.003	96	70250	5.00	4.53	
88 Toluene	92	8.086	8.083	0.003	98	21769	1.00	0.9203	
90 Ethyl methacrylate	69	8.308	8.312	-0.004	92	10553	1.00	0.8644	
91 trans-1,3-Dichloropropene	75	8.324	8.328	-0.004	92	11968	1.00	0.8924	
93 1,1,2-Trichloroethane	83	8.533	8.534	-0.001	92	7450	1.00	1.03	
94 Tetrachloroethene	166	8.620	8.620	0.000	95	9871	1.00	1.03	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	58	14169	1.00	0.9468	
96 2-Hexanone	43	8.713	8.710	0.003	94	46768	5.00	4.33	
98 Chlorodibromomethane	129	8.961	8.958	0.003	86	8664	1.00	0.9171	
101 Ethylene Dibromide	107	9.096	9.093	0.003	93	9095	1.00	0.9814	
103 Chlorobenzene	112	9.549	9.546	0.003	96	25590	1.00	1.00	
104 Ethylbenzene	91	9.604	9.604	0.000	98	40152	1.00	0.9648	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	-0.001	92	9280	1.00	1.00	
106 m-Xylene & p-Xylene	106	9.717	9.720	-0.003	0	15358	1.00	0.9429	
107 o-Xylene	106	10.154	10.157	-0.003	96	14309	1.00	0.8920	
109 Styrene	104	10.176	10.180	-0.004	97	21065	1.00	0.8293	
110 Bromoform	173	10.456	10.459	-0.003	89	5278	1.00	0.8244	
111 Isopropylbenzene	105	10.501	10.505	-0.003	95	37225	1.00	0.8990	
112 1,1,2,2-Tetrachloroethane	83	10.880	10.877	0.003	95	12582	1.00	0.8976	
113 Bromobenzene	156	10.884	10.887	-0.003	93	10321	1.00	0.9437	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	43178	1.00	0.8644	
115 trans-1,4-Dichloro-2-buten	53	10.913	10.919	-0.006	74	2839	1.00	1.23	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	81	4314	1.00	0.9194	
117 2-Chlorotoluene	126	11.038	11.041	-0.003	95	9607	1.00	0.9190	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	93	31566	1.00	0.8678	
119 4-Chlorotoluene	91	11.141	11.141	0.000	97	28428	1.00	0.9126	
120 tert-Butylbenzene	134	11.376	11.376	0.000	93	5556	1.00	1.05	
121 1,2,4-Trimethylbenzene	105	11.427	11.424	0.003	96	30647	1.00	0.8278	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	38443	1.00	0.8543	
123 4-Isopropyltoluene	119	11.691	11.688	0.003	97	31648	1.00	0.8224	
124 1,3-Dichlorobenzene	146	11.742	11.739	0.003	96	20337	1.00	0.9589	
126 1,4-Dichlorobenzene	146	11.819	11.816	0.003	94	20227	1.00	0.9305	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	30375	1.00	0.8712	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	20503	1.00	0.9560	
129 1,2-Dibromo-3-Chloropropan	75	12.842	12.836	0.006	83	3483	1.00	1.06	
130 1,2,4-Trichlorobenzene	180	13.507	13.508	-0.001	94	13887	1.00	0.9311	
131 Hexachlorobutadiene	225	13.601	13.598	0.003	94	5576	1.00	0.9395	
132 Naphthalene	128	13.765	13.765	0.000	98	40407	1.00	0.8837	
133 1,2,3-Trichlorobenzene	180	13.999	13.996	0.003	92	12338	1.00	0.8863	
S 142 Total BTEX	1				0			4.74	
S 143 Xylenes, Total	1				0			1.83	
S 144 1,3-Dichloropropene, Total	1				0			1.81	
S 141 1,2-Dichloroethene, Total	1				0			2.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	1.00	Units: uL	
GAS CORP mix_00360	Amount Added:	1.00	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:44:46 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D

Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L

Lims ID: IC

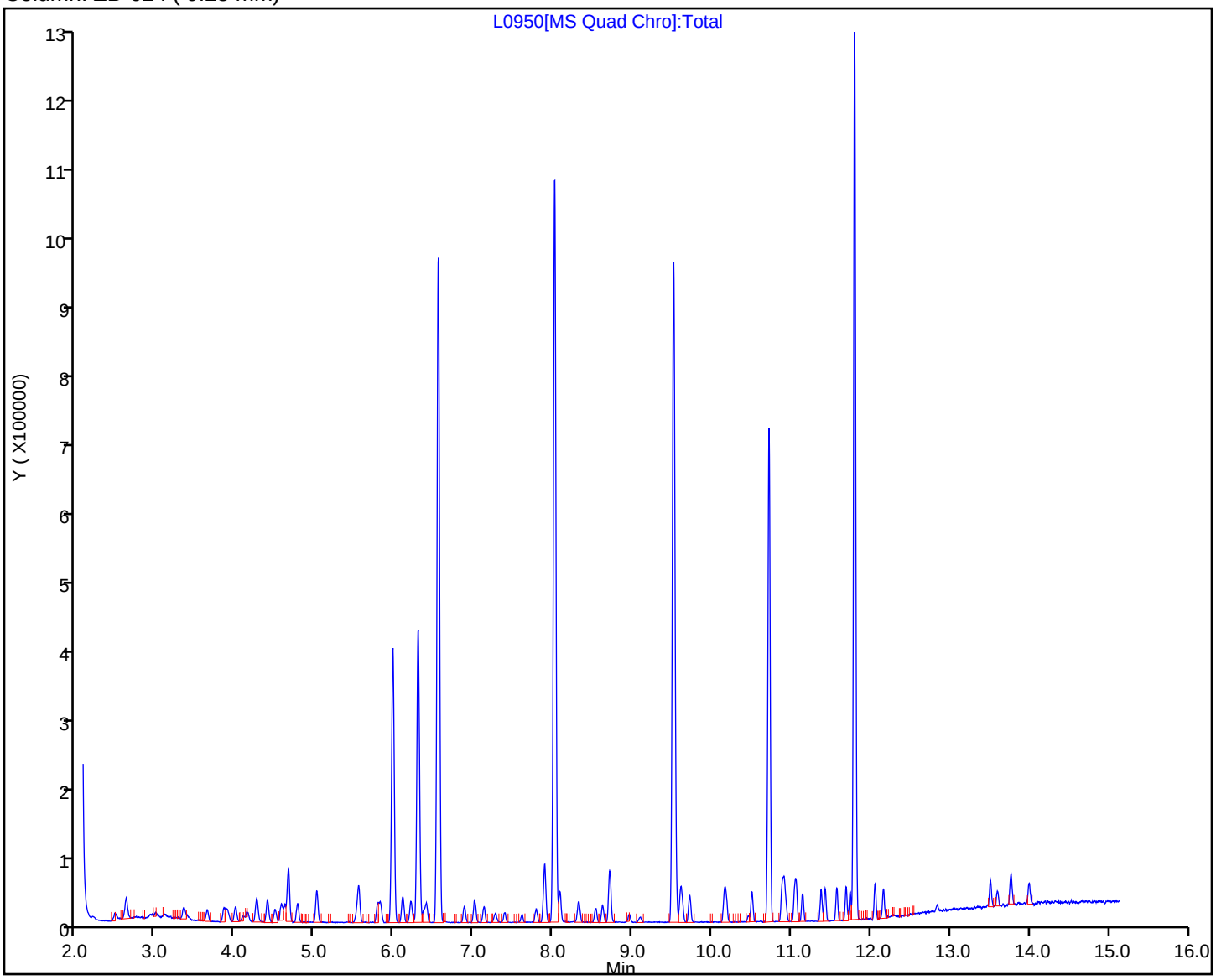
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

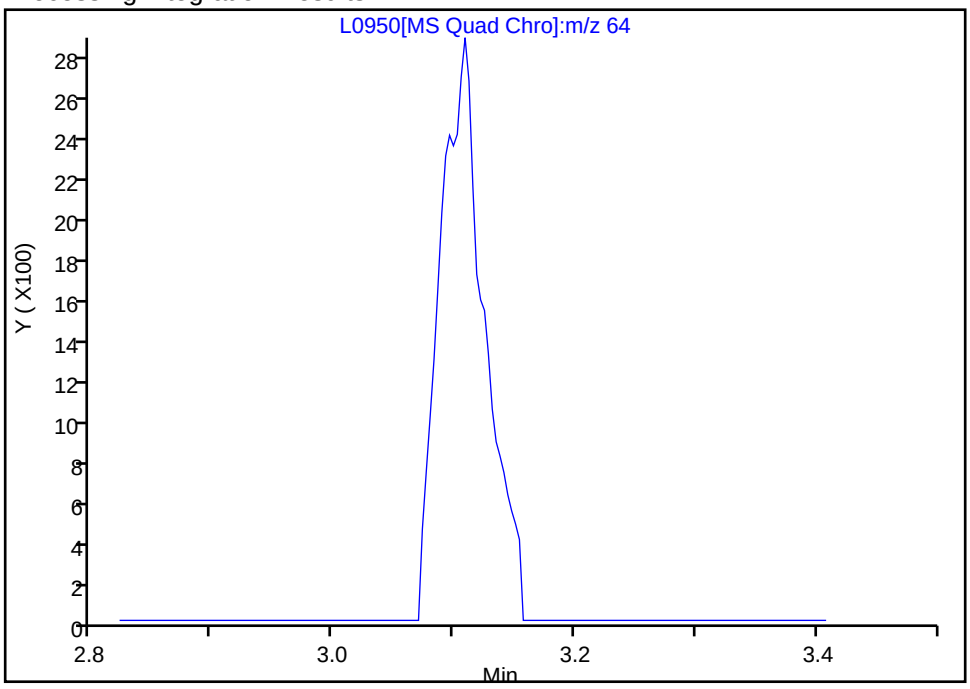
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

19 Chloroethane, CAS: 75-00-3

Signal: 1

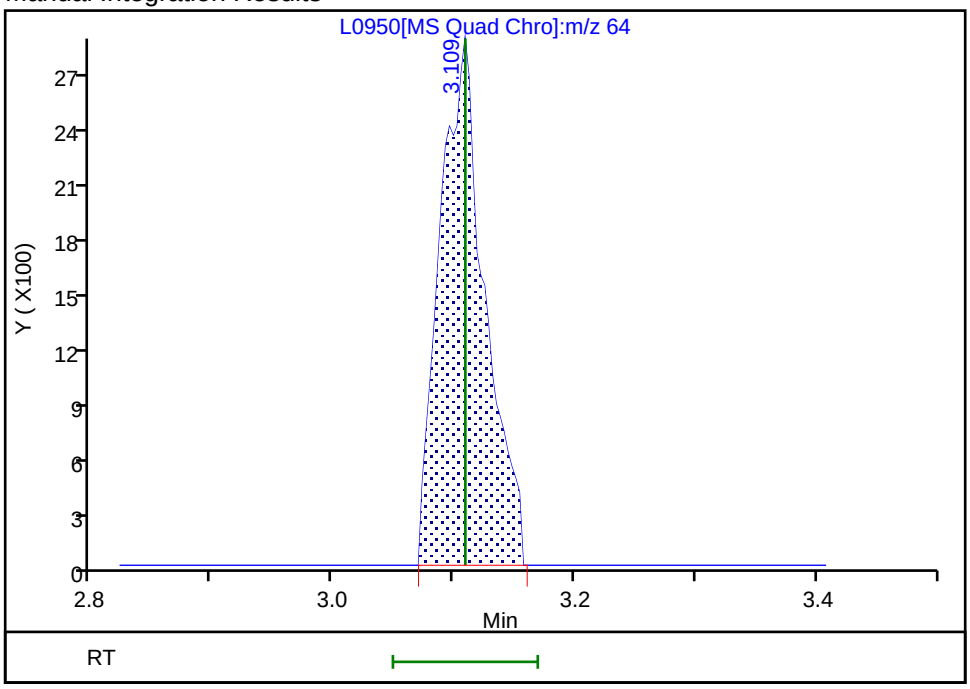
Not Detected
Expected RT: 3.11

Processing Integration Results



Manual Integration Results

RT: 3.11
Area: 7256
Amount: 1.076853
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:29:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo

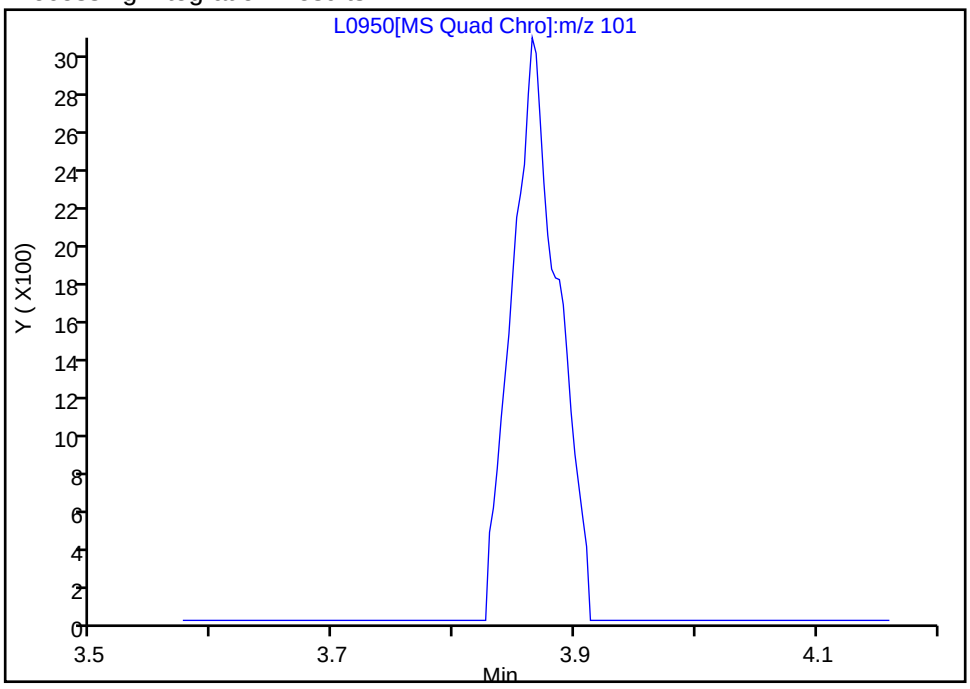
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

29 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

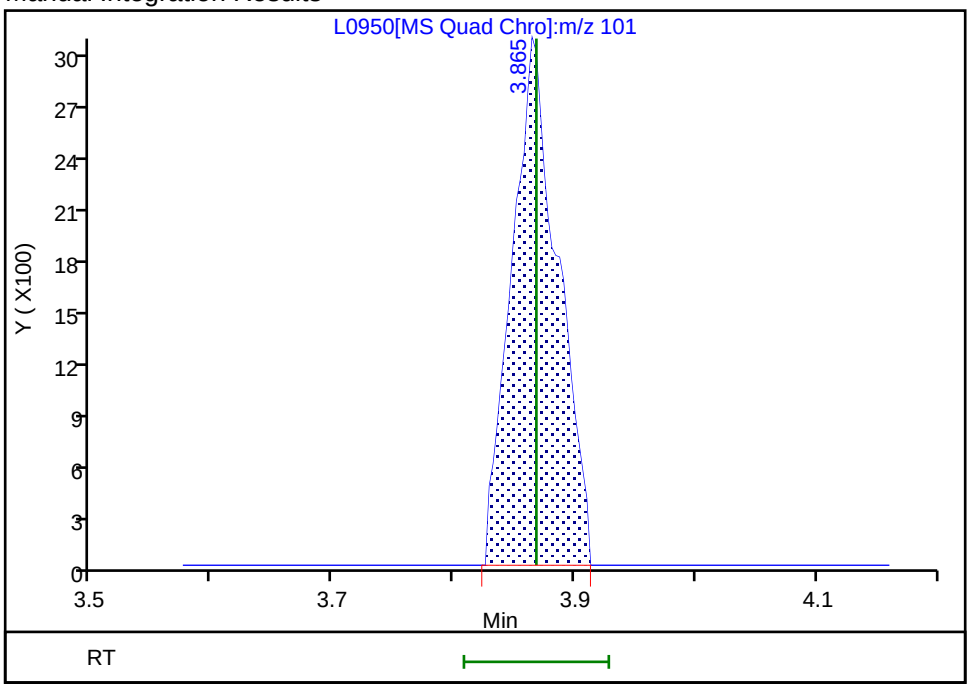
Not Detected
Expected RT: 3.87

Processing Integration Results



Manual Integration Results

RT: 3.86
Area: 8124
Amount: 0.995487
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:29:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

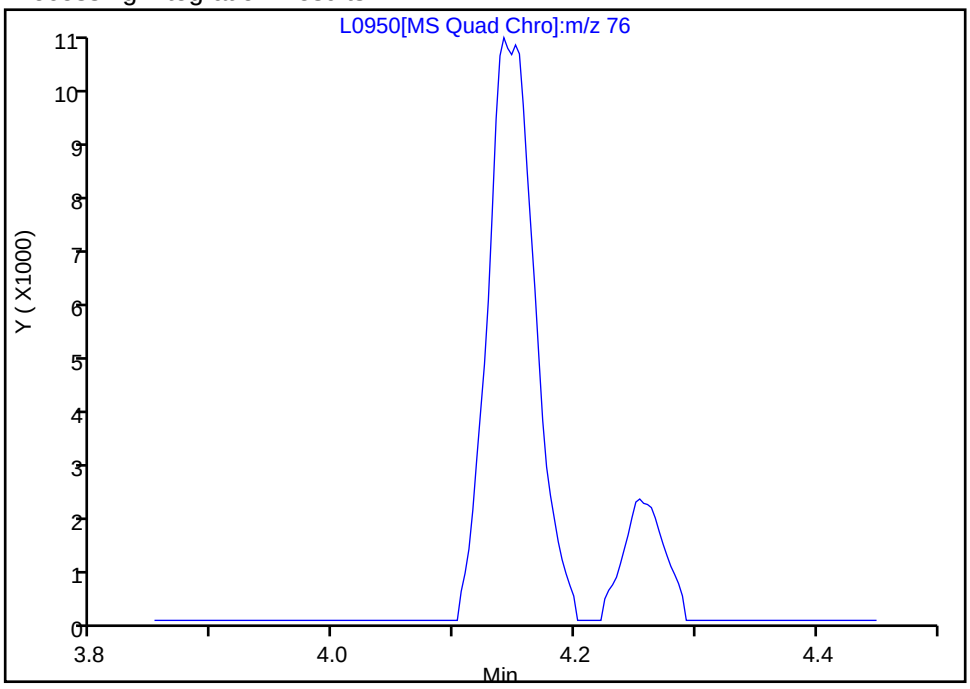
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

35 Carbon disulfide, CAS: 75-15-0

Signal: 1

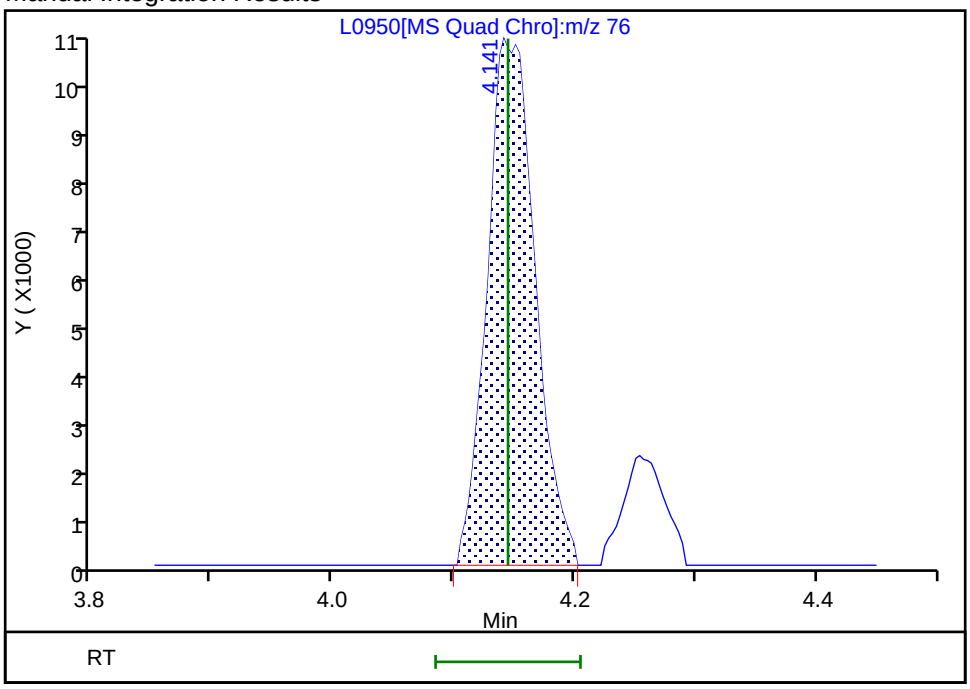
Not Detected
Expected RT: 4.14

Processing Integration Results



Manual Integration Results

RT: 4.14
Area: 28076
Amount: 0.978810
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:29:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

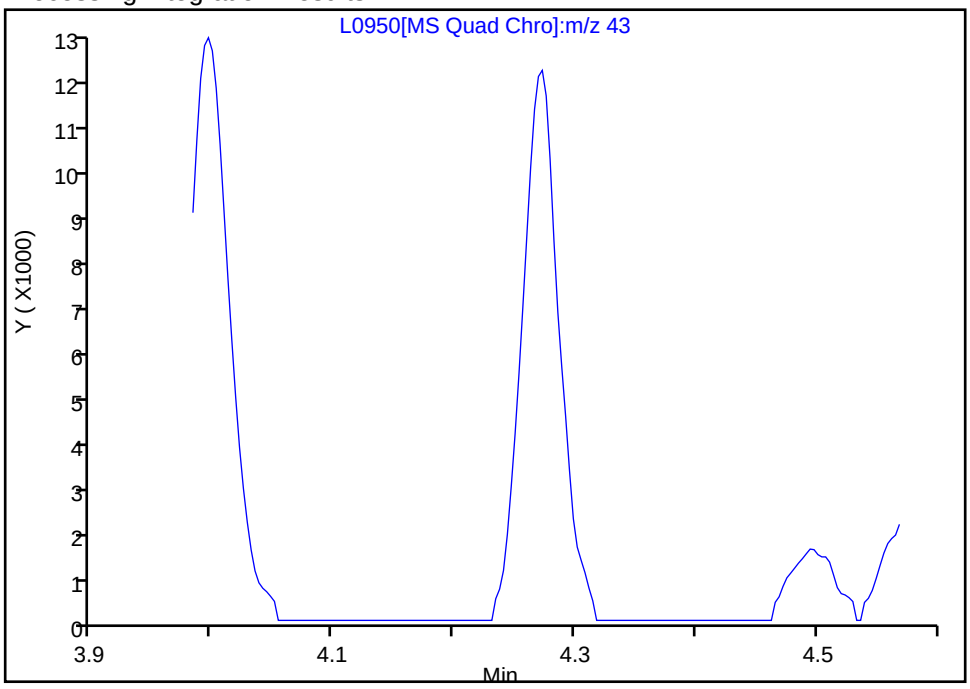
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

38 Methyl acetate, CAS: 79-20-9

Signal: 1

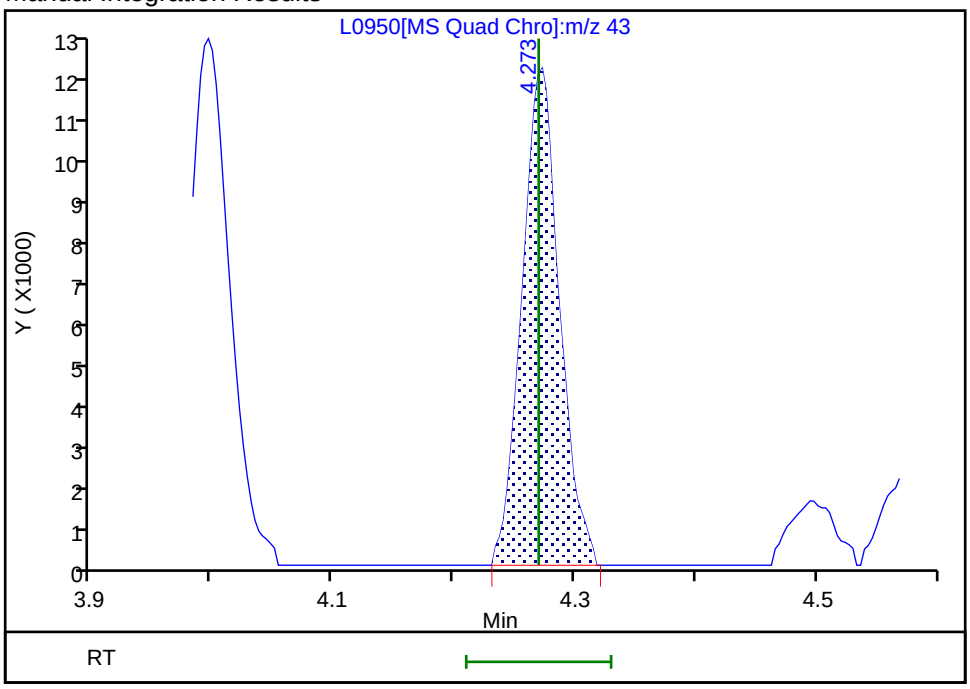
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.27
Area: 25791
Amount: 2.001324
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:29:41
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

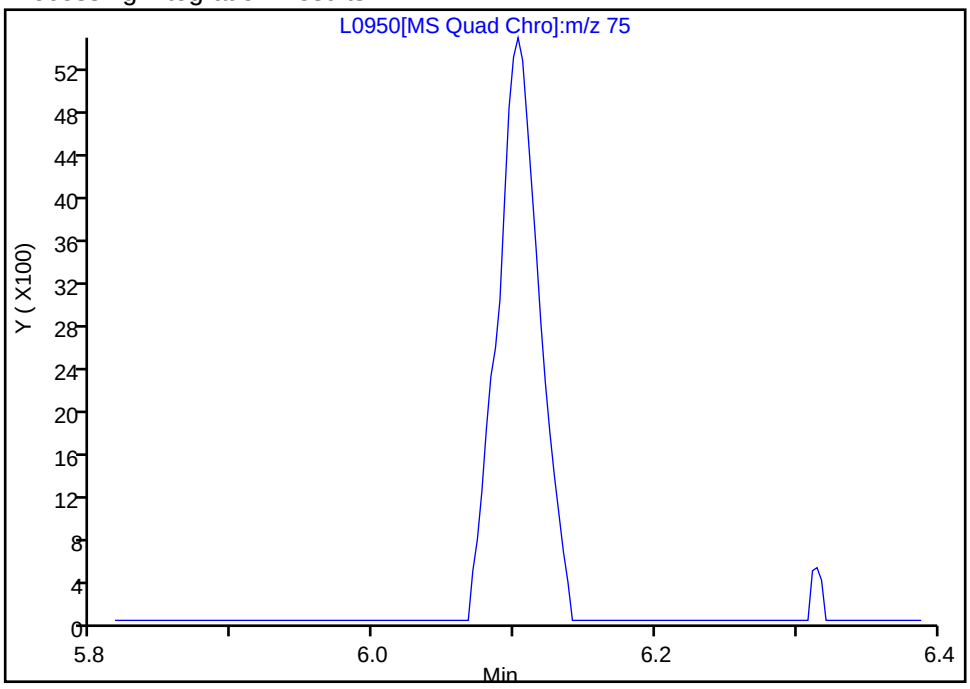
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

67 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

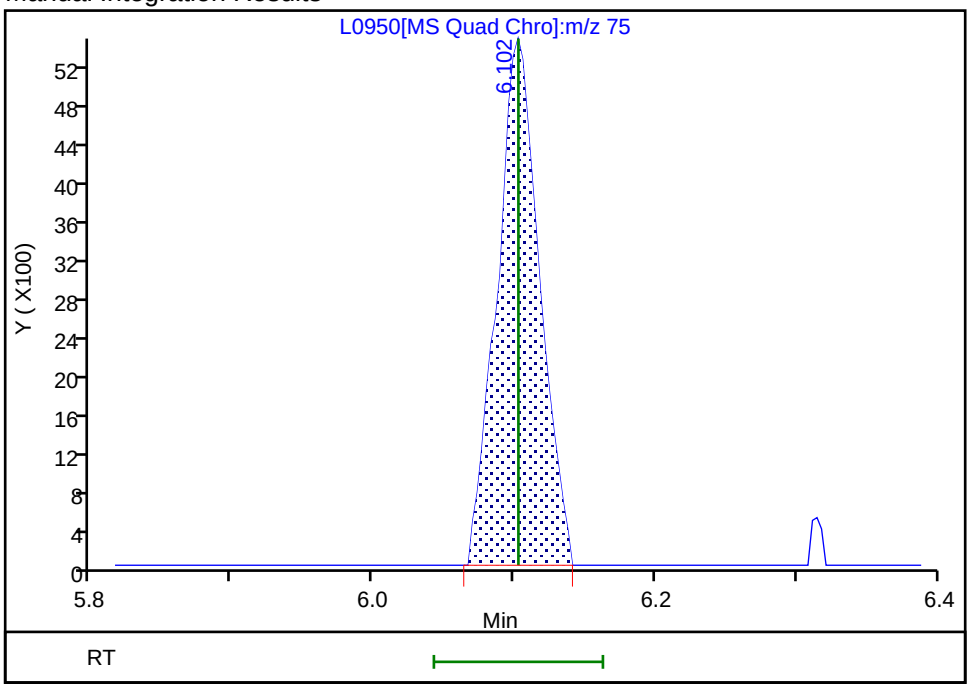
Not Detected
Expected RT: 6.10

Processing Integration Results



Manual Integration Results

RT: 6.10
Area: 11488
Amount: 0.942874
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:30:01
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

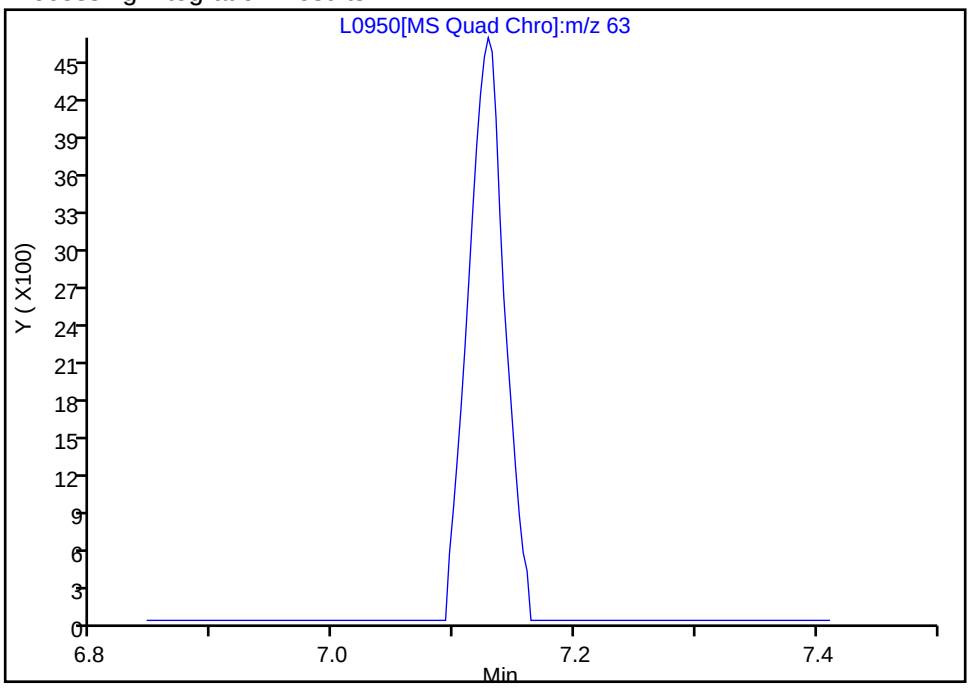
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

77 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

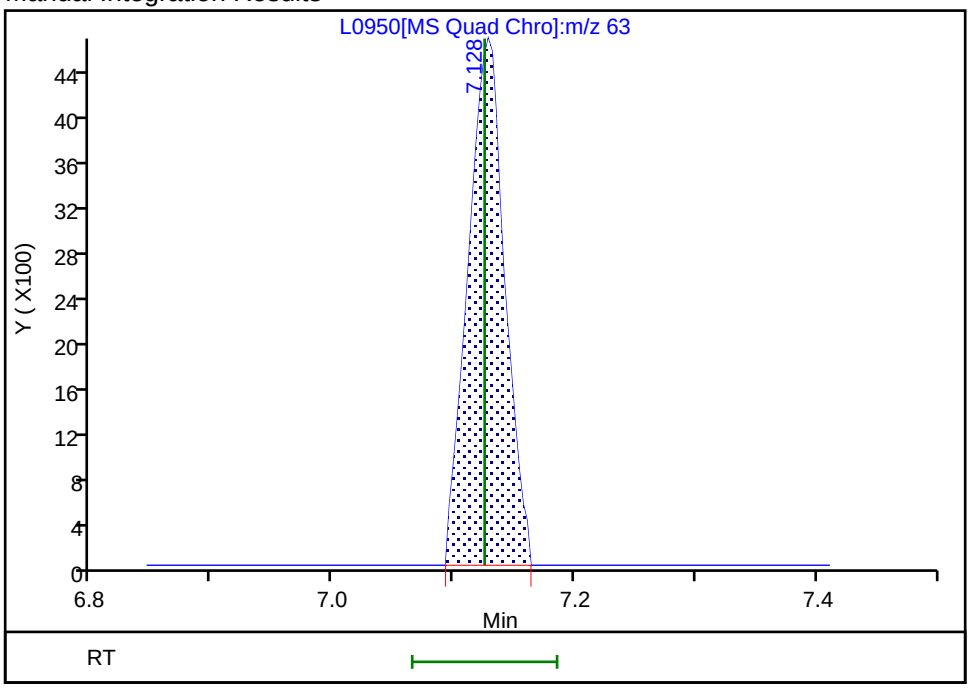
Not Detected
Expected RT: 7.13

Processing Integration Results



Manual Integration Results

RT: 7.13
Area: 9708
Amount: 0.938552
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:30:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

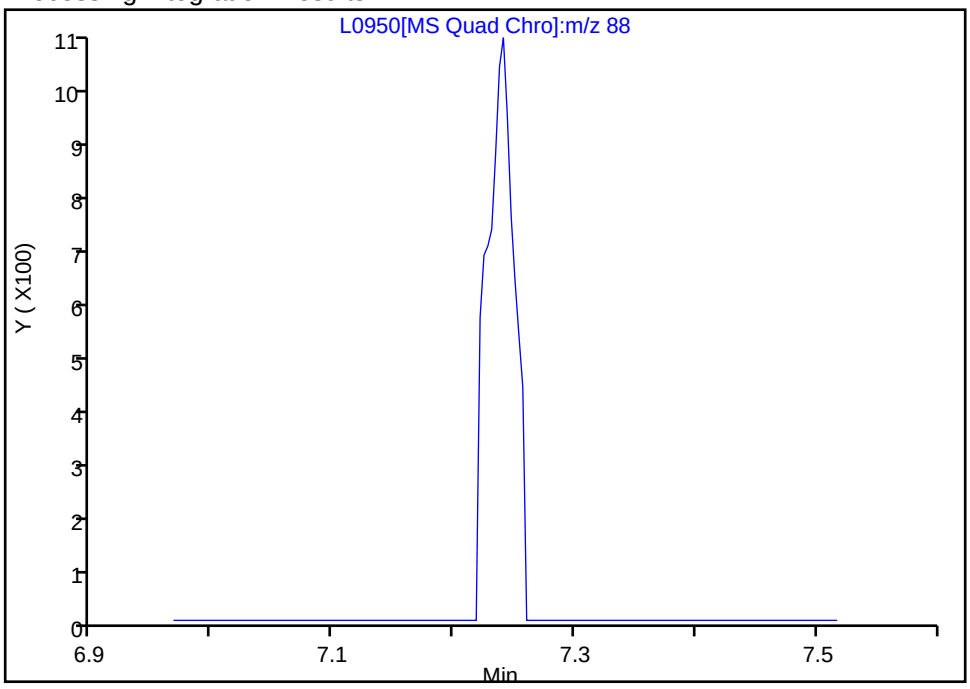
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0950.D
Injection Date: 13-Sep-2019 16:34:13 Instrument ID: HP5977L
Lims ID: IC
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

81 1,4-Dioxane, CAS: 123-91-1

Signal: 1

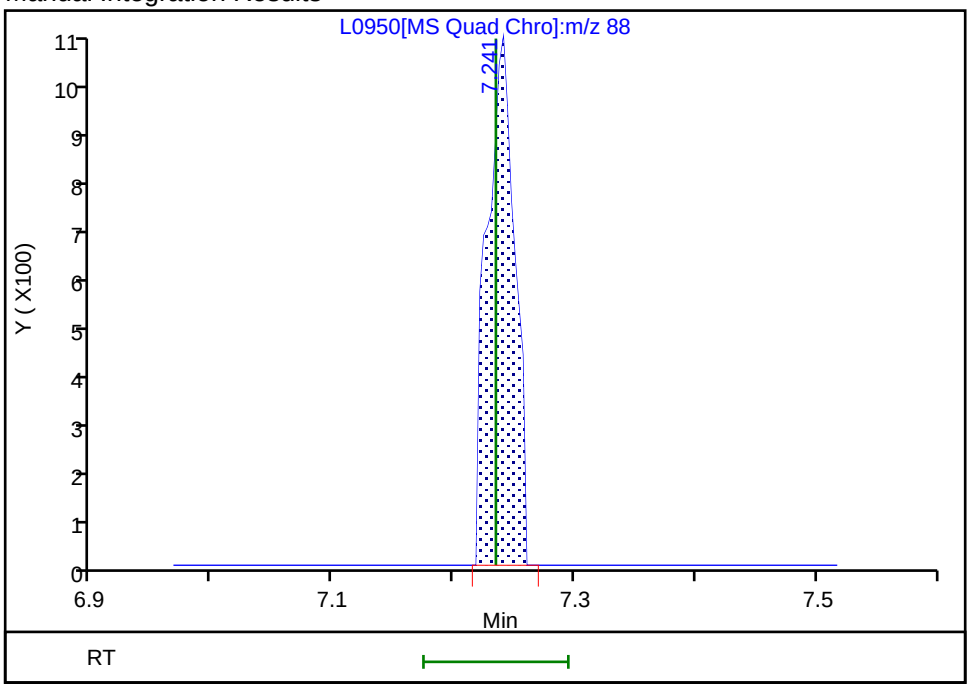
Not Detected
Expected RT: 7.23

Processing Integration Results



Manual Integration Results

RT: 7.24
Area: 1606
Amount: 11.842358
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:30:46
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0951.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 13-Sep-2019 16:58:12 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0084114-009
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:44:51 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:33:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	182372	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	87	677912	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	354461	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.981	0.000	94	243838	25.0	25.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.299	6.296	0.003	98	301576	25.0	25.2	
$ 6 Toluene-d8 (Surr)	98	8.019	8.019	0.000	93	869246	25.0	25.2	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.003	98	244983	25.0	25.2	
10 Dichlorodifluoromethane	85	2.209	2.206	0.003	96	21329	2.00	2.02	
13 Chloromethane	50	2.479	2.479	0.000	98	31729	2.00	2.14	
14 Vinyl chloride	62	2.608	2.611	-0.003	95	23178	2.00	2.09	
15 Butadiene	54	2.624	2.620	0.004	90	29672	2.00	2.19	
18 Bromomethane	94	3.022	2.993	0.029	90	14488	2.00	2.22	M
19 Chloroethane	64	3.109	3.109	0.000	99	14154	2.00	2.11	
20 Dichlorofluoromethane	67	3.341	3.344	-0.003	97	34073	2.00	2.17	
21 Trichlorofluoromethane	101	3.373	3.366	0.007	88	28510	2.00	2.04	
26 Ethyl ether	59	3.643	3.643	0.000	94	21764	2.00	2.00	
28 Acrolein	56	3.849	3.849	0.000	99	26805	10.0	9.90	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	94	17485	2.00	2.15	
30 1,1-Dichloroethene	96	3.903	3.900	0.003	97	16783	2.00	2.02	
31 Acetone	43	3.997	3.997	0.000	100	61559	10.0	10.2	
33 Iodomethane	142	4.090	4.090	0.000	99	29907	2.00	2.04	
35 Carbon disulfide	76	4.148	4.145	0.003	100	60347	2.00	2.11	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	89	35697	2.00	2.01	
38 Methyl acetate	43	4.270	4.270	0.000	99	51217	4.00	3.98	
39 Methylene Chloride	84	4.402	4.399	0.003	98	26047	2.00	1.95	
40 2-Methyl-2-propanol	59	4.492	4.492	0.000	98	48275	20.0	19.2	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	56011	2.00	1.92	
42 trans-1,2-Dichloroethene	96	4.624	4.620	0.004	97	20524	2.00	2.02	
44 Acrylonitrile	53	4.662	4.662	0.000	99	139216	20.0	20.3	
47 Hexane	57	4.778	4.778	0.000	90	29972	2.00	2.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	101468	4.00	3.86	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	94	39026	2.00	2.08	
56 2,2-Dichloropropane	77	5.521	5.521	0.000	91	19476	2.00	2.03	a
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	84	21839	2.00	2.05	
57 2-Butanone (MEK)	43	5.553	5.550	0.003	99	84118	10.0	9.82	
60 Chlorobromomethane	128	5.781	5.781	0.000	95	10860	2.00	2.06	
61 Tetrahydrofuran	42	5.797	5.794	0.003	88	20900	4.00	3.79	
62 Chloroform	83	5.826	5.826	0.000	93	38795	2.00	1.99	
64 1,1,1-Trichloroethane	97	5.968	5.968	0.000	97	28540	2.00	2.08	
65 Cyclohexane	56	5.984	5.987	-0.003	90	36445	2.00	1.98	
67 1,1-Dichloropropene	75	6.106	6.103	0.003	93	26207	2.00	2.16	
66 Carbon tetrachloride	117	6.106	6.106	0.000	85	25047	2.00	2.02	
69 Isobutyl alcohol	43	6.206	6.206	0.000	92	45582	50.0	46.6	
70 Benzene	78	6.315	6.315	0.000	93	76000	2.00	2.03	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	96	30584	2.00	1.98	
73 n-Heptane	43	6.398	6.402	-0.004	93	27016	2.00	2.04	
75 Trichloroethene	95	6.881	6.881	0.000	94	18987	2.00	1.99	
76 Methylcyclohexane	83	7.013	7.009	0.004	95	27985	2.00	1.90	
77 1,2-Dichloropropane	63	7.122	7.125	-0.003	94	21362	2.00	2.07	
81 1,4-Dioxane	88	7.238	7.234	0.004	90	4072	40.0	30.7	
82 Dibromomethane	93	7.270	7.273	-0.003	96	11940	2.00	1.89	
83 Dichlorobromomethane	83	7.389	7.386	0.003	93	22758	2.00	1.86	
84 2-Chloroethyl vinyl ether	63	7.607	7.604	0.003	92	12986	2.00	1.78	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	92	25973	2.00	1.83	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	97	147064	10.0	9.71	
88 Toluene	92	8.087	8.083	0.004	96	50783	2.00	2.20	
90 Ethyl methacrylate	69	8.315	8.312	0.003	91	21377	2.00	1.79	a
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	97	25849	2.00	1.97	
93 1,1,2-Trichloroethane	83	8.533	8.534	-0.001	93	14097	2.00	1.99	
94 Tetrachloroethene	166	8.624	8.620	0.004	94	19504	2.00	2.08	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	97	29823	2.00	2.04	
96 2-Hexanone	43	8.714	8.710	0.004	95	103061	10.0	9.75	
98 Chlorodibromomethane	129	8.958	8.958	0.000	88	18058	2.00	1.95	
101 Ethylene Dibromide	107	9.093	9.093	0.000	94	18026	2.00	1.99	
103 Chlorobenzene	112	9.546	9.546	0.000	96	50553	2.00	2.02	
104 Ethylbenzene	91	9.604	9.604	0.000	98	81203	2.00	2.00	
105 1,1,1,2-Tetrachloroethane	131	9.623	9.627	-0.004	94	17630	2.00	1.95	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.000	0	32113	2.00	2.02	
107 o-Xylene	106	10.154	10.157	-0.003	97	29759	2.00	1.90	
109 Styrene	104	10.180	10.180	0.000	96	45998	2.00	1.85	
110 Bromoform	173	10.456	10.459	-0.003	93	11358	2.00	1.81	
111 Isopropylbenzene	105	10.504	10.505	0.000	96	77416	2.00	1.94	
112 1,1,2,2-Tetrachloroethane	83	10.874	10.877	-0.003	94	26603	2.00	1.97	
113 Bromobenzene	156	10.887	10.887	0.000	94	20880	2.00	1.98	
114 N-Propylbenzene	91	10.906	10.906	0.000	98	94565	2.00	1.97	
115 trans-1,4-Dichloro-2-buten	53	10.922	10.919	0.003	67	5759	2.00	1.93	
116 1,2,3-Trichloropropane	110	10.929	10.932	-0.003	86	9370	2.00	2.07	
117 2-Chlorotoluene	126	11.045	11.041	0.004	96	20052	2.00	1.99	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	94	66636	2.00	1.90	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	59266	2.00	1.97	
120 tert-Butylbenzene	134	11.376	11.376	0.000	93	14088	2.00	2.13	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	96	68096	2.00	1.91	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	82805	2.00	1.91	
123 4-Isopropyltoluene	119	11.691	11.688	0.003	96	68988	2.00	1.86	
124 1,3-Dichlorobenzene	146	11.742	11.739	0.003	98	40746	2.00	1.99	
126 1,4-Dichlorobenzene	146	11.820	11.816	0.004	95	41930	2.00	2.00	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	65752	2.00	1.96	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	95	40794	2.00	1.97	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	79	6092	2.00	1.93	
130 1,2,4-Trichlorobenzene	180	13.511	13.508	0.003	94	28692	2.00	2.00	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	95	12415	2.00	2.17	
132 Naphthalene	128	13.765	13.765	0.000	97	83527	2.00	1.90	
133 1,2,3-Trichlorobenzene	180	13.993	13.996	-0.003	95	25769	2.00	1.92	
S 142 Total BTEX	1				0			10.1	
S 143 Xylenes, Total	1				0			3.91	
S 144 1,3-Dichloropropene, Total	1				0			3.80	
S 141 1,2-Dichloroethene, Total	1				0			4.08	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	2.00	Units: uL	
GAS CORP mix_00360	Amount Added:	2.00	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:44:52 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0951.D

Injection Date: 13-Sep-2019 16:58:12 Instrument ID: HP5977L

Lims ID: IC 2

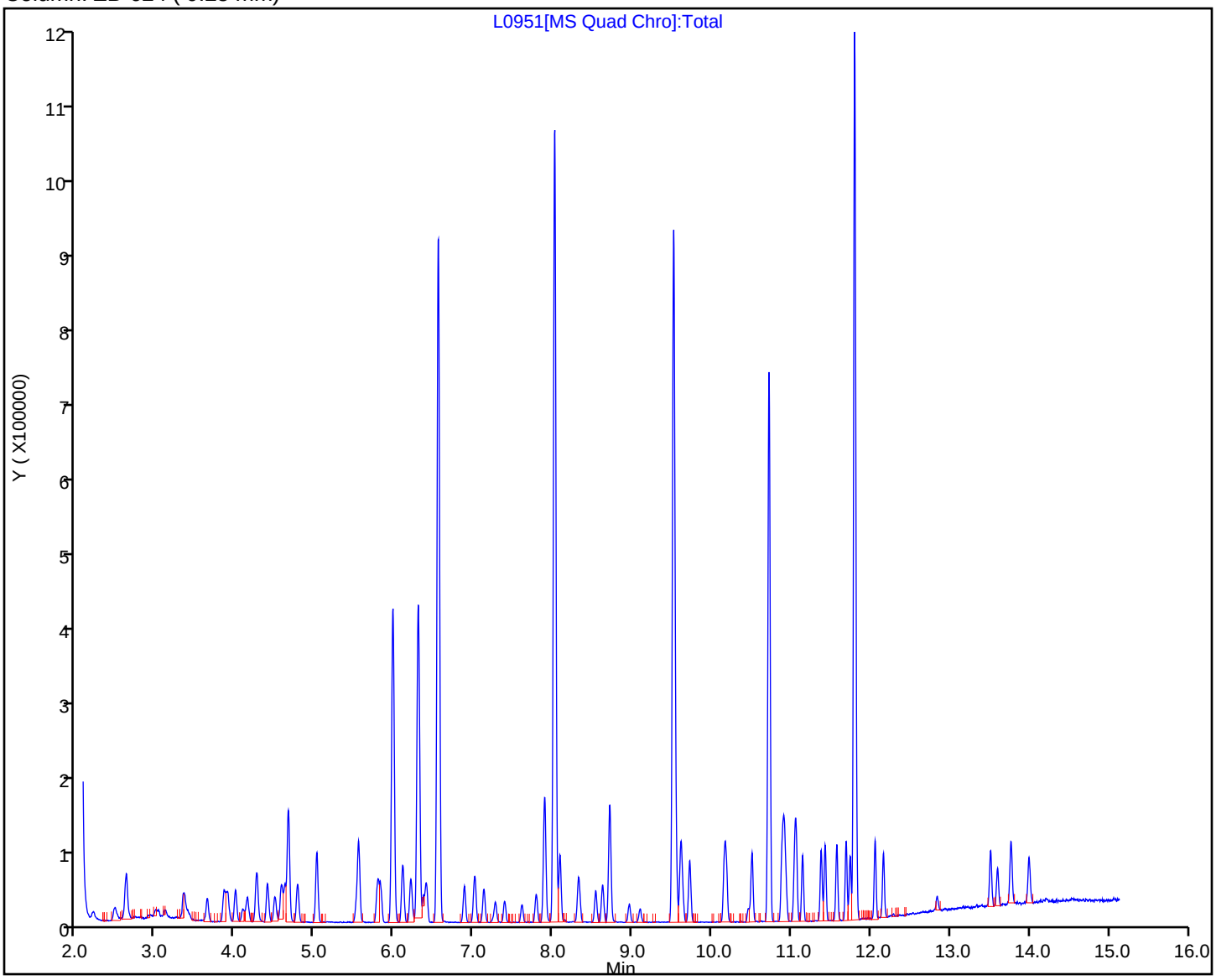
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 9

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

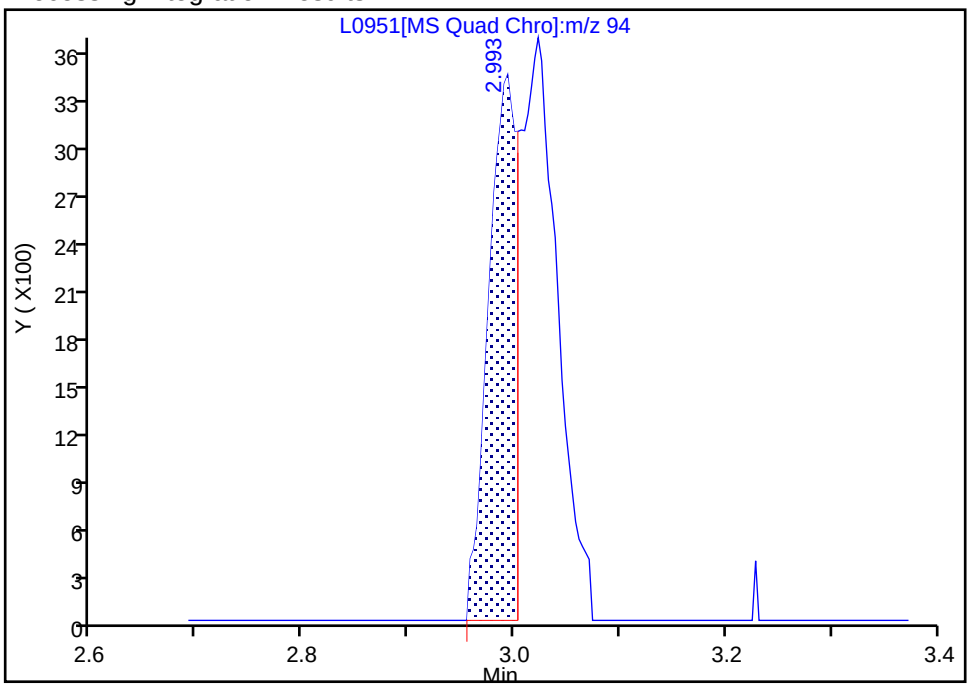
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0951.D
Injection Date: 13-Sep-2019 16:58:12 Instrument ID: HP5977L
Lims ID: IC 2
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

18 Bromomethane, CAS: 74-83-9

Signal: 1

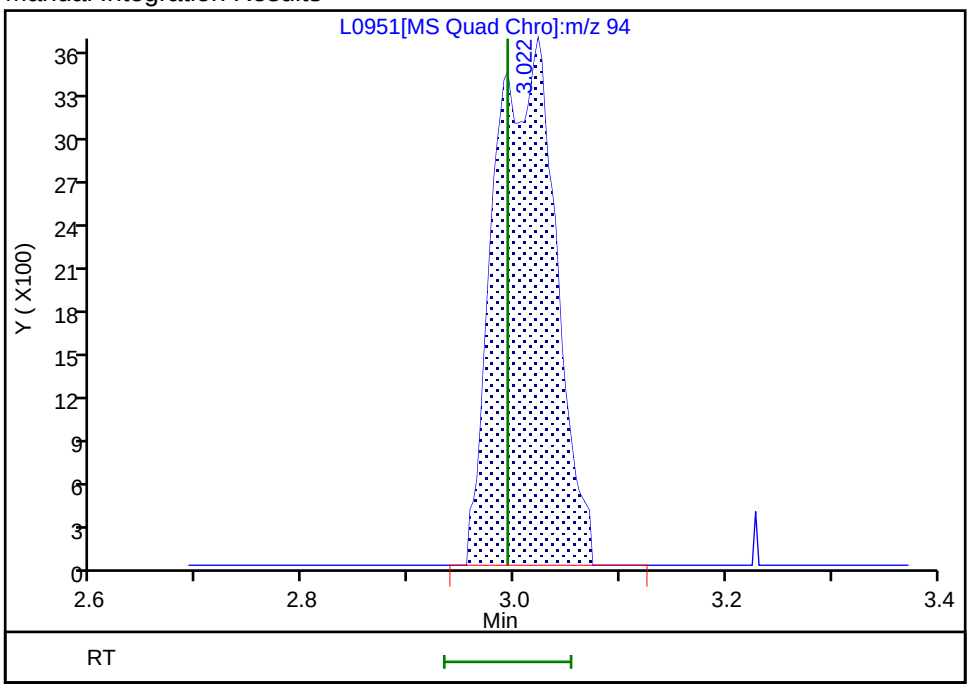
Processing Integration Results

RT: 2.99
Area: 6262
Amount: 1.093925
Amount Units: ug/L



Manual Integration Results

RT: 3.02
Area: 14488
Amount: 2.223119
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:32:00
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

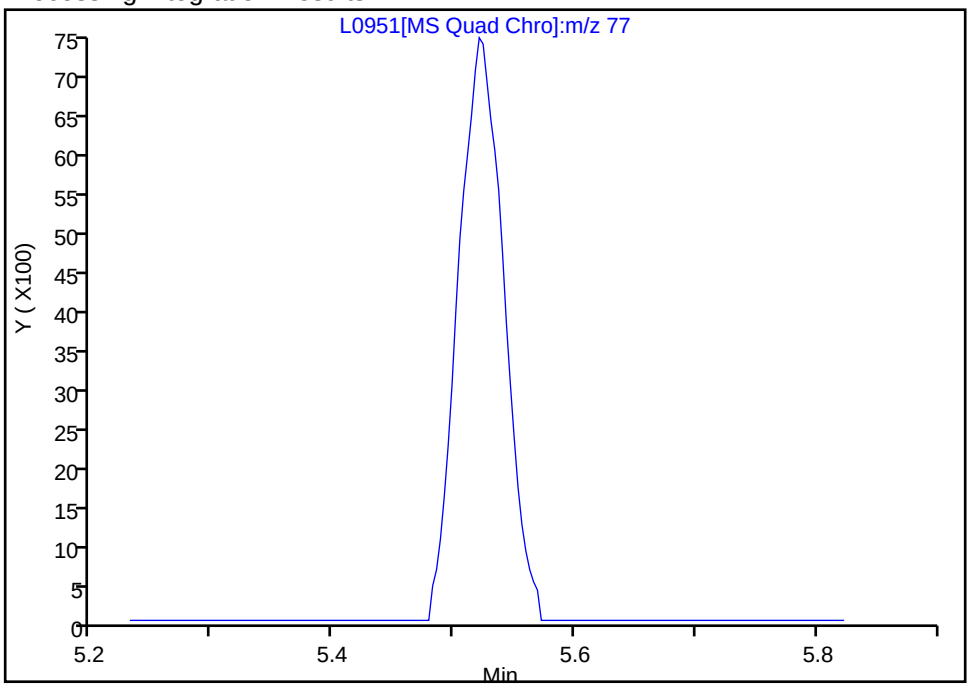
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0951.D
Injection Date: 13-Sep-2019 16:58:12 Instrument ID: HP5977L
Lims ID: IC 2
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

56 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

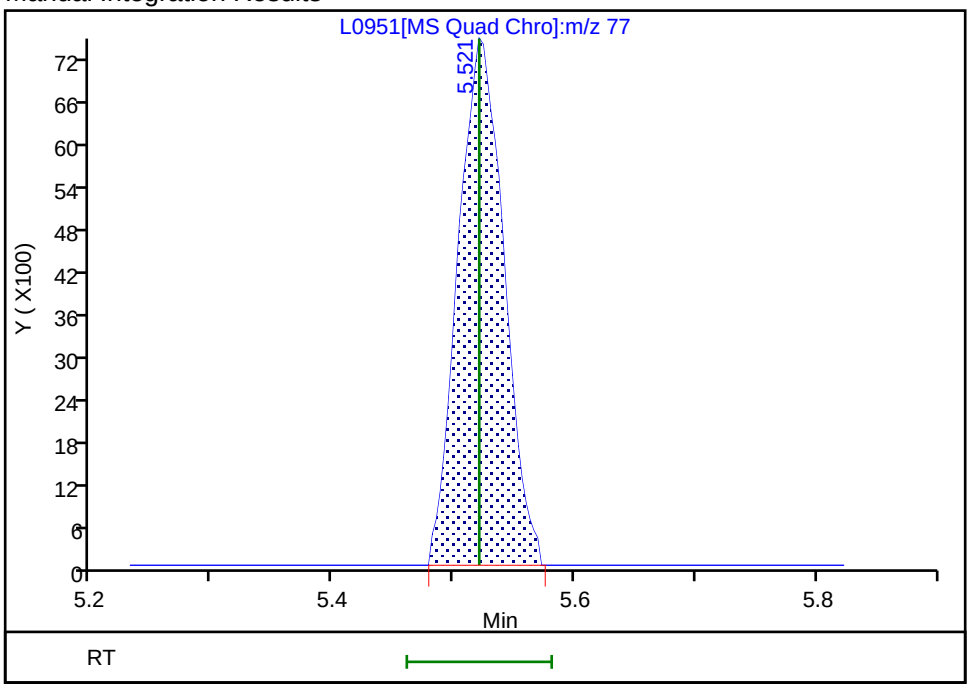
Not Detected
Expected RT: 5.52

Processing Integration Results



Manual Integration Results

RT: 5.52
Area: 19476
Amount: 2.033207
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:32:19
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

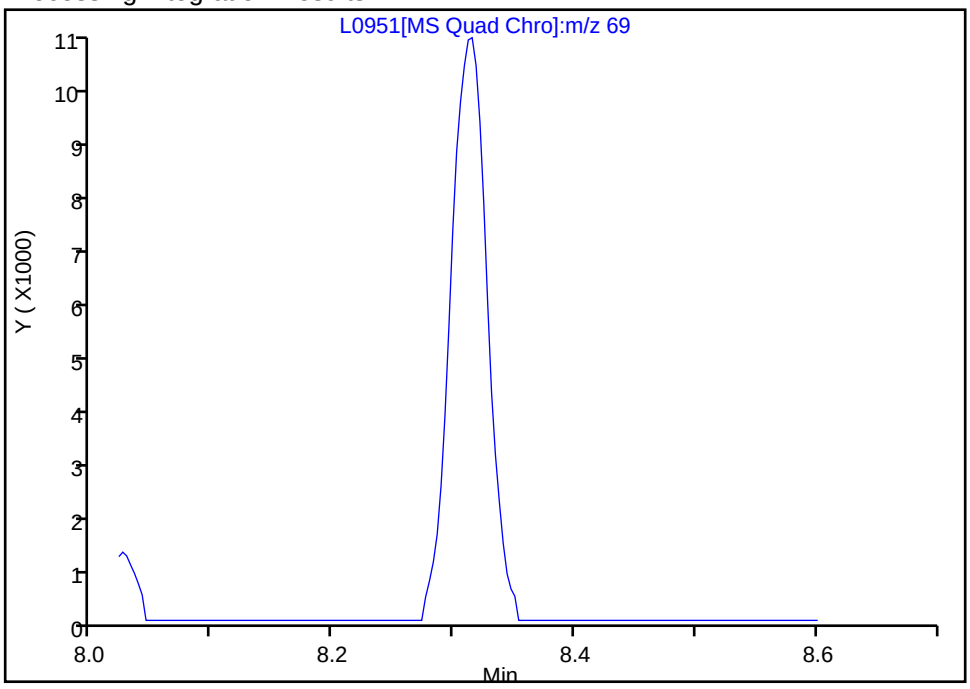
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0951.D
Injection Date: 13-Sep-2019 16:58:12 Instrument ID: HP5977L
Lims ID: IC 2
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

90 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

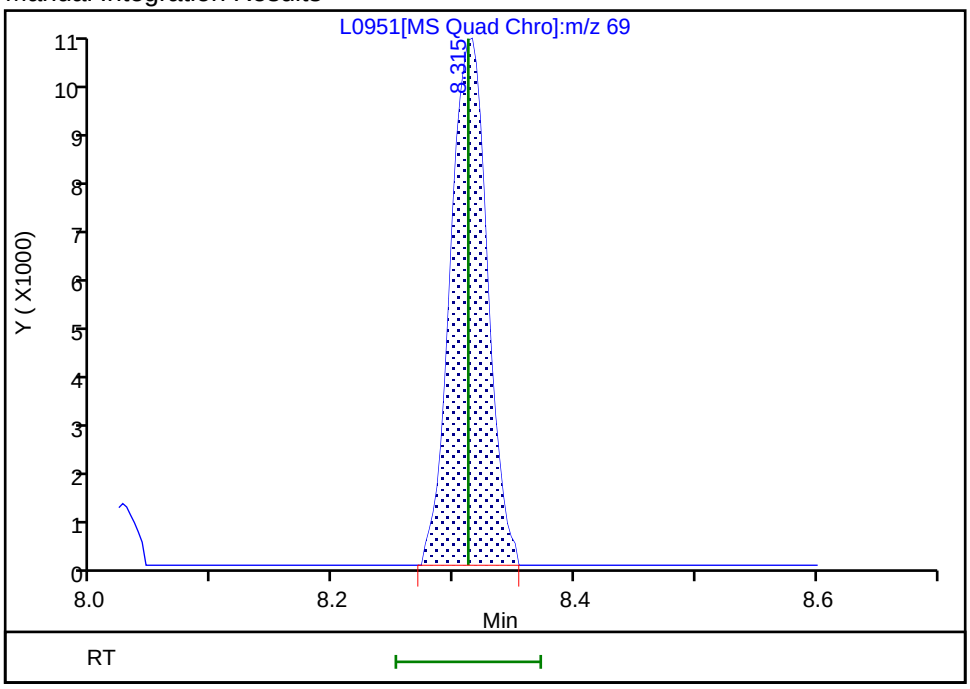
Not Detected
Expected RT: 8.31

Processing Integration Results



Manual Integration Results

RT: 8.31
Area: 21377
Amount: 1.790659
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:32:38
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0952.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 13-Sep-2019 17:22:14 ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0084114-010
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:44:57 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:35:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.550	-0.001	99	177299	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	87	662966	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	346407	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.981	0.000	95	233733	25.0	24.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.296	-0.001	97	296807	25.0	25.5	
$ 6 Toluene-d8 (Surr)	98	8.016	8.019	-0.003	93	843998	25.0	25.1	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	98	230322	25.0	24.2	
10 Dichlorodifluoromethane	85	2.199	2.206	-0.007	99	56059	5.00	5.46	
13 Chloromethane	50	2.476	2.479	-0.003	98	75486	5.00	5.25	
14 Vinyl chloride	62	2.604	2.611	-0.007	97	59941	5.00	5.56	
15 Butadiene	54	2.617	2.620	-0.003	90	72943	5.00	5.53	
18 Bromomethane	94	2.993	2.993	0.000	90	34736	5.00	5.48	
19 Chloroethane	64	3.103	3.109	-0.006	98	36374	5.00	5.57	a
20 Dichlorofluoromethane	67	3.337	3.344	-0.007	97	81146	5.00	5.33	
21 Trichlorofluoromethane	101	3.353	3.366	-0.013	97	72657	5.00	5.34	
26 Ethyl ether	59	3.640	3.643	-0.003	94	52005	5.00	4.91	
28 Acrolein	56	3.845	3.849	-0.004	100	65453	25.0	24.9	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	92	40944	5.00	5.17	
30 1,1-Dichloroethene	96	3.900	3.900	0.000	94	39821	5.00	4.92	
31 Acetone	43	3.996	3.997	-0.001	100	144779	25.0	24.6	
33 Iodomethane	142	4.087	4.090	-0.004	97	72094	5.00	5.07	
35 Carbon disulfide	76	4.144	4.145	-0.001	100	140000	5.00	5.03	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	92	85107	5.00	4.93	
38 Methyl acetate	43	4.270	4.270	0.000	99	125666	10.0	10.1	
39 Methylene Chloride	84	4.398	4.399	-0.001	99	55670	5.00	5.06	
40 2-Methyl-2-propanol	59	4.495	4.492	0.003	99	117752	50.0	48.3	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	137726	5.00	4.87	
42 trans-1,2-Dichloroethene	96	4.617	4.620	-0.003	96	48841	5.00	4.95	
44 Acrylonitrile	53	4.662	4.662	0.000	99	337750	50.0	50.6	
47 Hexane	57	4.778	4.778	0.000	90	73069	5.00	5.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	251198	10.0	9.83	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	78	92402	5.00	5.06	
56 2,2-Dichloropropane	77	5.521	5.521	0.000	95	46894	5.00	5.04	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	84	53438	5.00	5.17	
57 2-Butanone (MEK)	43	5.549	5.550	-0.001	99	208210	25.0	25.0	
60 Chlorobromomethane	128	5.781	5.781	0.000	94	25954	5.00	5.06	
61 Tetrahydrofuran	42	5.800	5.794	0.006	92	53896	10.0	10.1	
62 Chloroform	83	5.826	5.826	0.000	93	86715	5.00	5.01	
64 1,1,1-Trichloroethane	97	5.967	5.968	-0.001	98	67625	5.00	5.06	
65 Cyclohexane	56	5.987	5.987	0.000	93	88605	5.00	4.94	
67 1,1-Dichloropropene	75	6.103	6.103	0.000	91	58457	5.00	4.95	
66 Carbon tetrachloride	117	6.106	6.106	0.000	90	61037	5.00	5.07	
69 Isobutyl alcohol	43	6.205	6.206	-0.001	96	114619	125.0	120.6	
70 Benzene	78	6.315	6.315	0.000	98	184735	5.00	5.07	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	96	74615	5.00	4.97	
73 n-Heptane	43	6.402	6.402	0.000	92	63467	5.00	4.94	
75 Trichloroethene	95	6.881	6.881	0.000	97	47058	5.00	5.06	
76 Methylcyclohexane	83	7.009	7.009	0.000	95	70196	5.00	4.90	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	49897	5.00	4.97	
81 1,4-Dioxane	88	7.244	7.234	0.010	96	13953	100.0	107.6	
82 Dibromomethane	93	7.270	7.273	-0.003	96	31357	5.00	5.10	
83 Dichlorobromomethane	83	7.389	7.386	0.003	98	59375	5.00	5.00	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	91	32485	5.00	4.58	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	93	67053	5.00	4.86	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	96	373499	25.0	25.2	
88 Toluene	92	8.083	8.083	0.000	99	113380	5.00	5.01	
90 Ethyl methacrylate	69	8.311	8.312	-0.001	96	54198	5.00	4.64	
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	98	62668	5.00	4.89	
93 1,1,2-Trichloroethane	83	8.537	8.534	0.003	92	33980	5.00	4.91	
94 Tetrachloroethene	166	8.623	8.620	0.003	97	47850	5.00	5.21	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	84	69192	5.00	4.83	
96 2-Hexanone	43	8.713	8.710	0.003	93	265678	25.0	25.7	
98 Chlorodibromomethane	129	8.958	8.958	0.000	93	44017	5.00	4.87	
101 Ethylene Dibromide	107	9.096	9.093	0.003	98	44191	5.00	4.99	
103 Chlorobenzene	112	9.546	9.546	0.000	96	121673	5.00	4.98	
104 Ethylbenzene	91	9.604	9.604	0.000	98	196978	5.00	4.95	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	0.000	94	43118	5.00	4.88	
106 m-Xylene & p-Xylene	106	9.717	9.720	-0.003	0	77589	5.00	4.98	
107 o-Xylene	106	10.157	10.157	0.000	95	76285	5.00	4.97	
109 Styrene	104	10.180	10.180	0.000	96	118261	5.00	4.87	
110 Bromoform	173	10.459	10.459	0.000	93	29115	5.00	4.76	
111 Isopropylbenzene	105	10.504	10.505	0.000	95	190928	5.00	4.90	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	66815	5.00	5.06	
113 Bromobenzene	156	10.887	10.887	0.000	96	49234	5.00	4.78	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	233639	5.00	4.97	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.919	-0.003	71	16237	5.00	4.41	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	86	21814	5.00	4.94	
117 2-Chlorotoluene	126	11.041	11.041	0.000	96	47821	5.00	4.86	a
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	94	166578	5.00	4.86	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	147877	5.00	5.04	
120 tert-Butylbenzene	134	11.376	11.376	0.000	93	34649	5.00	4.77	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	171940	5.00	4.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	208462	5.00	4.92	
123 4-Isopropyltoluene	119	11.691	11.688	0.003	97	179516	5.00	4.95	
124 1,3-Dichlorobenzene	146	11.742	11.739	0.003	98	97876	5.00	4.90	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	96	101263	5.00	4.95	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	161499	5.00	4.92	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	100378	5.00	4.97	
129 1,2-Dibromo-3-Chloropropan	75	12.835	12.836	-0.001	85	15197	5.00	4.92	
130 1,2,4-Trichlorobenzene	180	13.511	13.508	0.003	93	68281	5.00	4.86	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	97	27327	5.00	4.89	
132 Naphthalene	128	13.768	13.765	0.003	97	208916	5.00	4.85	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	95	64000	5.00	4.88	
S 142 Total BTEX	1				0			25.0	
S 143 Xylenes, Total	1				0			9.95	
S 144 1,3-Dichloropropene, Total	1				0			9.75	
S 141 1,2-Dichloroethene, Total	1				0			10.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	5.00	Units: uL	
GAS CORP mix_00360	Amount Added:	5.00	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:44:58 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0952.D

Injection Date: 13-Sep-2019 17:22:14 Instrument ID: HP5977L

Lims ID: IC 3

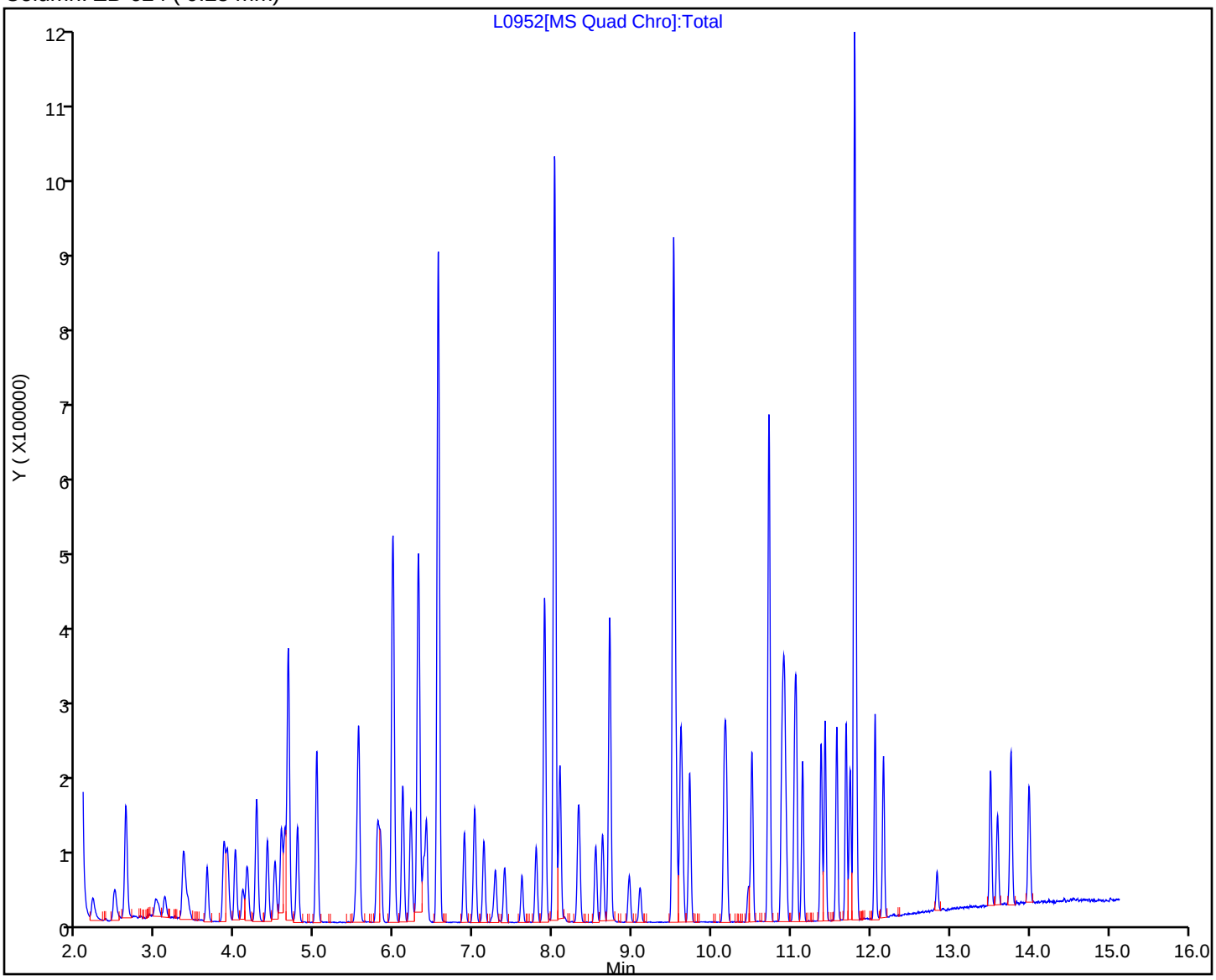
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 10

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

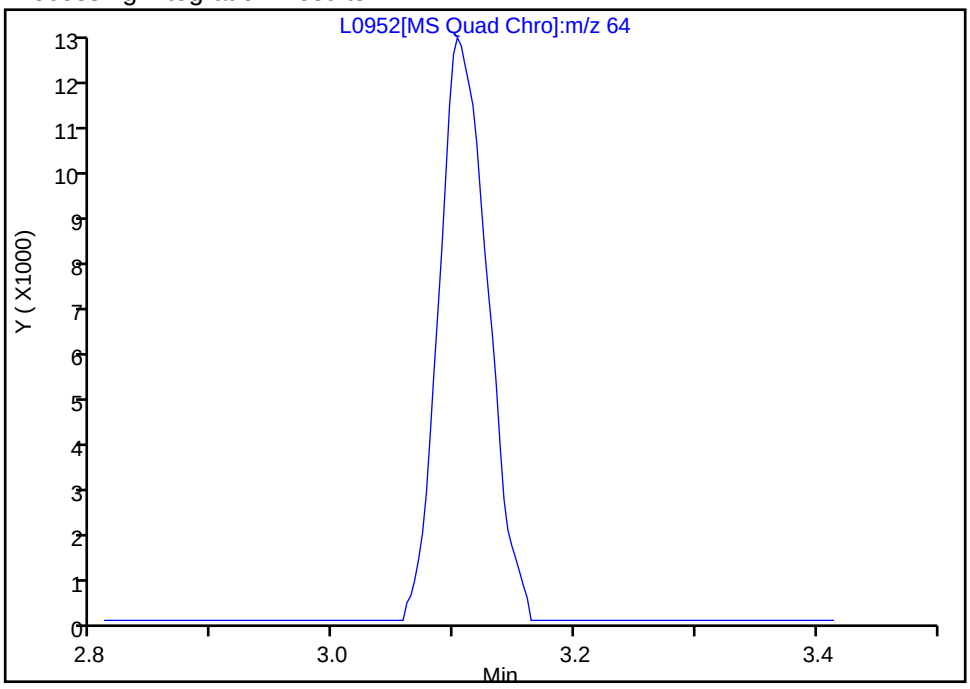
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0952.D
Injection Date: 13-Sep-2019 17:22:14 Instrument ID: HP5977L
Lims ID: IC 3
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

19 Chloroethane, CAS: 75-00-3

Signal: 1

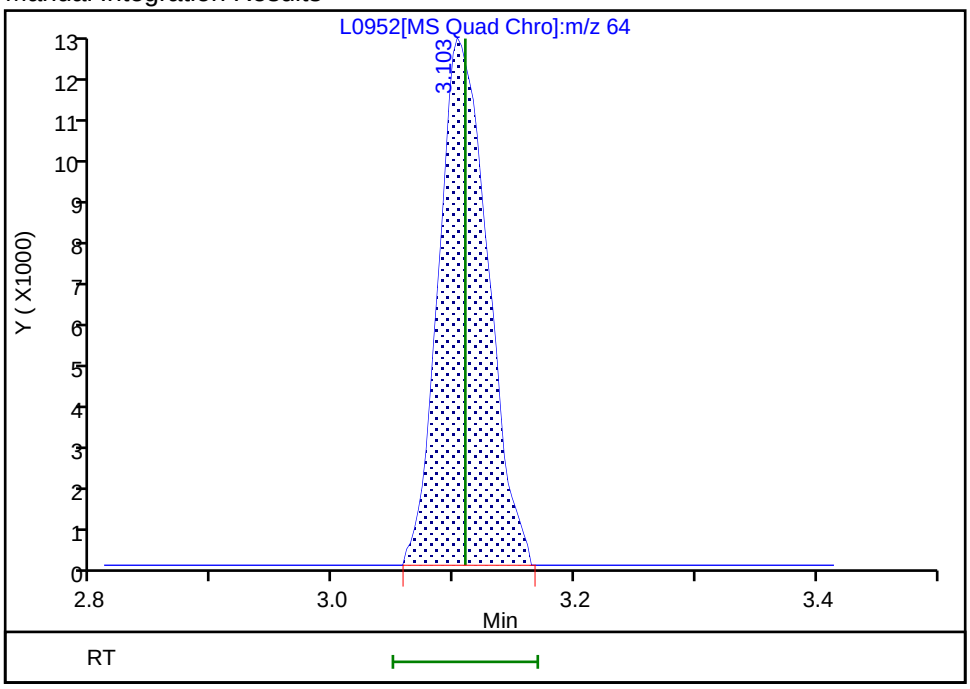
Not Detected
Expected RT: 3.11

Processing Integration Results



Manual Integration Results

RT: 3.10
Area: 36374
Amount: 5.566618
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:35:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

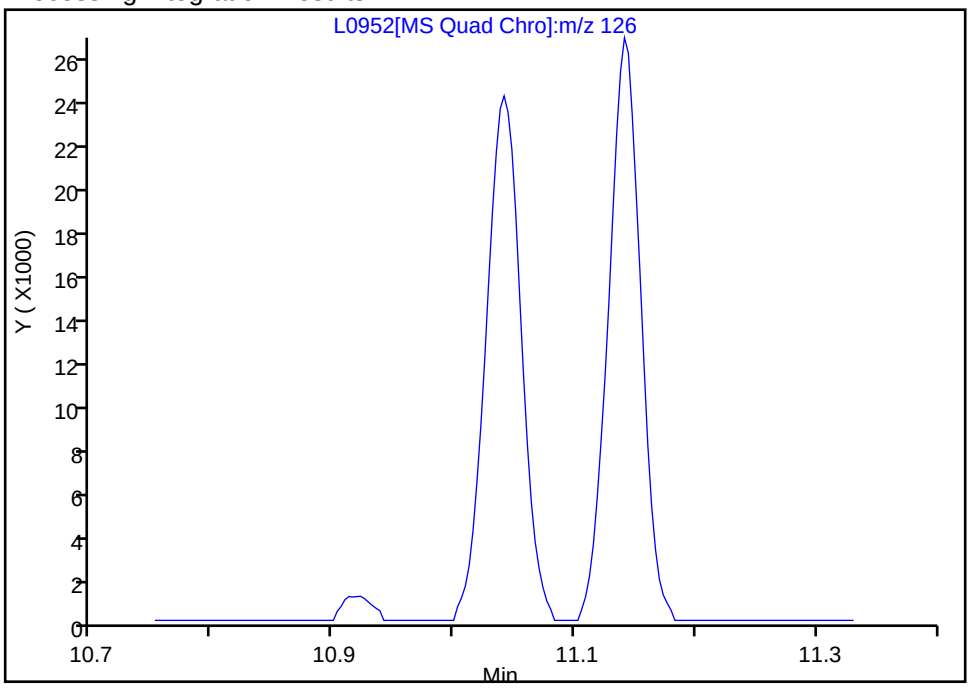
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0952.D
Injection Date: 13-Sep-2019 17:22:14 Instrument ID: HP5977L
Lims ID: IC 3
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

117 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

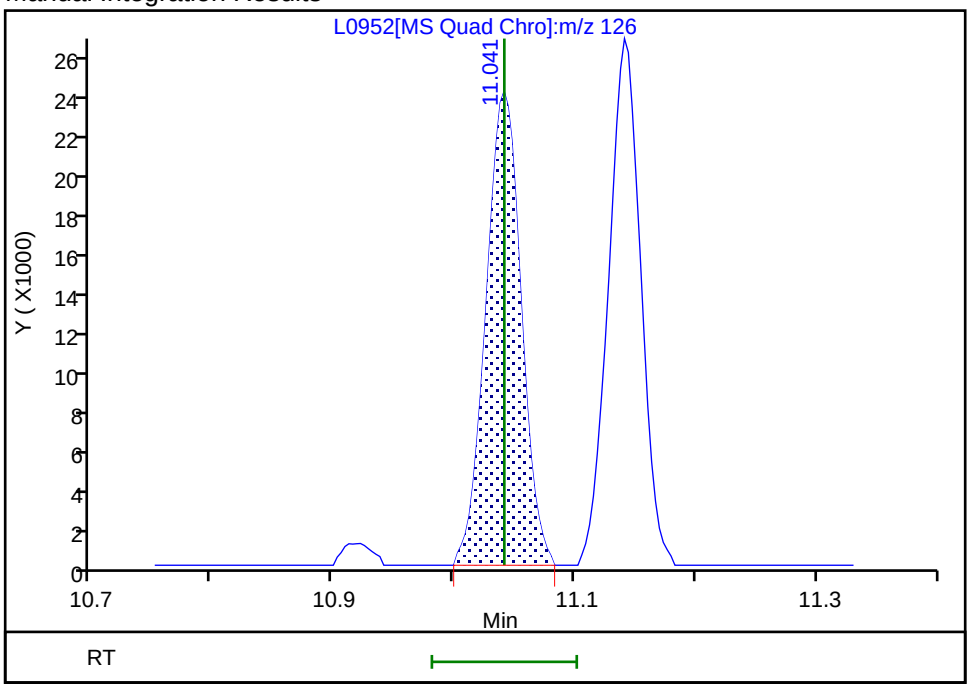
Not Detected
Expected RT: 11.04

Processing Integration Results



Manual Integration Results

RT: 11.04
Area: 47821
Amount: 4.858731
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:35:41
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0953.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 13-Sep-2019 17:46:12 ALS Bottle#: 0 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0084114-011
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:45:10 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:36:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	182112	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	88	679169	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	354811	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.981	0.000	95	240117	25.0	24.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.296	0.000	97	298958	25.0	25.0	
$ 6 Toluene-d8 (Surr)	98	8.016	8.019	-0.003	93	869120	25.0	25.2	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	98	245456	25.0	25.2	
10 Dichlorodifluoromethane	85	2.199	2.206	-0.007	99	97818	10.0	9.27	
13 Chloromethane	50	2.476	2.479	-0.003	99	141646	10.0	9.59	
14 Vinyl chloride	62	2.611	2.611	0.000	97	111877	10.0	10.1	
15 Butadiene	54	2.620	2.620	0.000	87	127326	10.0	9.40	
18 Bromomethane	94	2.990	2.993	-0.003	90	64481	10.0	9.91	
19 Chloroethane	64	3.112	3.109	0.003	99	63681	10.0	9.49	
20 Dichlorofluoromethane	67	3.344	3.344	0.000	97	153163	10.0	9.79	
21 Trichlorofluoromethane	101	3.370	3.366	0.004	98	132360	10.0	9.47	
26 Ethyl ether	59	3.640	3.643	-0.003	95	109034	10.0	10.0	
28 Acrolein	56	3.845	3.849	-0.004	100	136592	50.0	50.5	
29 1,1,2-Trichloro-1,2,2-trif	101	3.871	3.868	0.003	94	80880	10.0	9.95	
30 1,1-Dichloroethene	96	3.897	3.900	-0.003	95	83983	10.0	10.1	
31 Acetone	43	3.997	3.997	0.000	100	307091	50.0	50.8	
33 Iodomethane	142	4.090	4.090	0.000	99	152324	10.0	10.4	
35 Carbon disulfide	76	4.145	4.145	-0.001	100	286757	10.0	10.0	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	90	176413	10.0	9.95	
38 Methyl acetate	43	4.270	4.270	0.000	99	259789	20.0	20.2	
39 Methylene Chloride	84	4.399	4.399	0.000	99	111483	10.0	10.5	
40 2-Methyl-2-propanol	59	4.495	4.492	0.003	99	250336	100.0	99.9	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	297268	10.0	10.2	
42 trans-1,2-Dichloroethene	96	4.617	4.620	-0.003	96	102169	10.0	10.1	
44 Acrylonitrile	53	4.662	4.662	0.000	99	713587	100.0	104.1	
47 Hexane	57	4.778	4.778	0.000	91	145860	10.0	9.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	541541	20.0	20.6	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	95	194790	10.0	10.4	
56 2,2-Dichloropropane	77	5.524	5.521	0.003	94	97330	10.0	10.2	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	84	114000	10.0	10.7	
57 2-Butanone (MEK)	43	5.550	5.550	0.000	100	434237	50.0	50.8	
60 Chlorobromomethane	128	5.781	5.781	0.000	95	55798	10.0	10.6	
61 Tetrahydrofuran	42	5.797	5.794	0.003	91	110445	20.0	20.1	
62 Chloroform	83	5.826	5.826	0.000	94	180102	10.0	10.5	
64 1,1,1-Trichloroethane	97	5.968	5.968	0.000	98	140132	10.0	10.2	
65 Cyclohexane	56	5.987	5.987	0.000	93	183930	10.0	9.99	
67 1,1-Dichloropropene	75	6.103	6.103	0.000	95	124746	10.0	10.3	
66 Carbon tetrachloride	117	6.106	6.106	0.000	87	123047	10.0	9.94	
69 Isobutyl alcohol	43	6.206	6.206	0.000	94	248965	250.0	255.1	
70 Benzene	78	6.312	6.315	-0.003	97	375669	10.0	10.0	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	97	151315	10.0	9.81	
73 n-Heptane	43	6.402	6.402	0.000	94	129828	10.0	9.84	
75 Trichloroethene	95	6.878	6.881	-0.003	98	99460	10.0	10.4	
76 Methylcyclohexane	83	7.009	7.009	0.000	95	142729	10.0	9.71	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	108492	10.0	10.5	
81 1,4-Dioxane	88	7.238	7.234	0.004	97	28831	200.0	217.0	
82 Dibromomethane	93	7.273	7.273	0.000	97	65157	10.0	10.3	
83 Dichlorobromomethane	83	7.389	7.386	0.003	98	125246	10.0	10.3	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	92	72273	10.0	9.93	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	148894	10.0	10.5	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	96	801253	50.0	52.8	
88 Toluene	92	8.083	8.083	0.000	99	235427	10.0	10.2	
90 Ethyl methacrylate	69	8.312	8.312	0.000	92	123383	10.0	10.3	
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	97	139195	10.0	10.6	
93 1,1,2-Trichloroethane	83	8.533	8.534	-0.001	93	73425	10.0	10.4	
94 Tetrachloroethene	166	8.624	8.620	0.004	97	95336	10.0	10.1	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	94	151585	10.0	10.3	
96 2-Hexanone	43	8.714	8.710	0.004	95	564926	50.0	53.3	
98 Chlorodibromomethane	129	8.955	8.958	-0.003	91	94717	10.0	10.2	
101 Ethylene Dibromide	107	9.096	9.093	0.003	100	93575	10.0	10.3	
103 Chlorobenzene	112	9.550	9.546	0.004	96	260278	10.0	10.4	
104 Ethylbenzene	91	9.604	9.604	0.000	98	422392	10.0	10.4	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	0.000	95	94507	10.0	10.4	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.000	0	167539	10.0	10.5	
107 o-Xylene	106	10.157	10.157	0.000	97	164623	10.0	10.5	
109 Styrene	104	10.180	10.180	0.000	95	265377	10.0	10.7	
110 Bromoform	173	10.459	10.459	0.000	94	65003	10.0	10.4	
111 Isopropylbenzene	105	10.504	10.505	0.000	95	414967	10.0	10.4	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	140095	10.0	10.4	
113 Bromobenzene	156	10.887	10.887	0.000	96	107156	10.0	10.2	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	496707	10.0	10.3	
115 trans-1,4-Dichloro-2-buten	53	10.919	10.919	0.000	76	37507	10.0	9.17	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	83	46543	10.0	10.3	
117 2-Chlorotoluene	126	11.041	11.041	0.000	96	101507	10.0	10.1	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	95	362007	10.0	10.3	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	305190	10.0	10.2	
120 tert-Butylbenzene	134	11.373	11.376	-0.003	94	71219	10.0	9.18	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	371691	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	440985	10.0	10.2	
123 4-Isopropyltoluene	119	11.688	11.688	0.000	97	379903	10.0	10.2	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	97	208260	10.0	10.2	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	94	210995	10.0	10.1	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	342518	10.0	10.2	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	210176	10.0	10.2	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	83	30652	10.0	9.69	
130 1,2,4-Trichlorobenzene	180	13.508	13.508	0.000	95	143451	10.0	9.97	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	97	57701	10.0	10.1	
132 Naphthalene	128	13.768	13.765	0.003	97	451000	10.0	10.2	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	96	136129	10.0	10.1	
S 142 Total BTEX	1				0			51.5	
S 143 Xylenes, Total	1				0			21.0	
S 144 1,3-Dichloropropene, Total	1				0			21.1	
S 141 1,2-Dichloroethene, Total	1				0			20.8	

Reagents:

8260 CORP mix_00166	Amount Added:	5.00	Units: uL	
GAS CORP mix_00360	Amount Added:	5.00	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:45:11 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0953.D

Injection Date: 13-Sep-2019 17:46:12 Instrument ID: HP5977L

Lims ID: IC 4

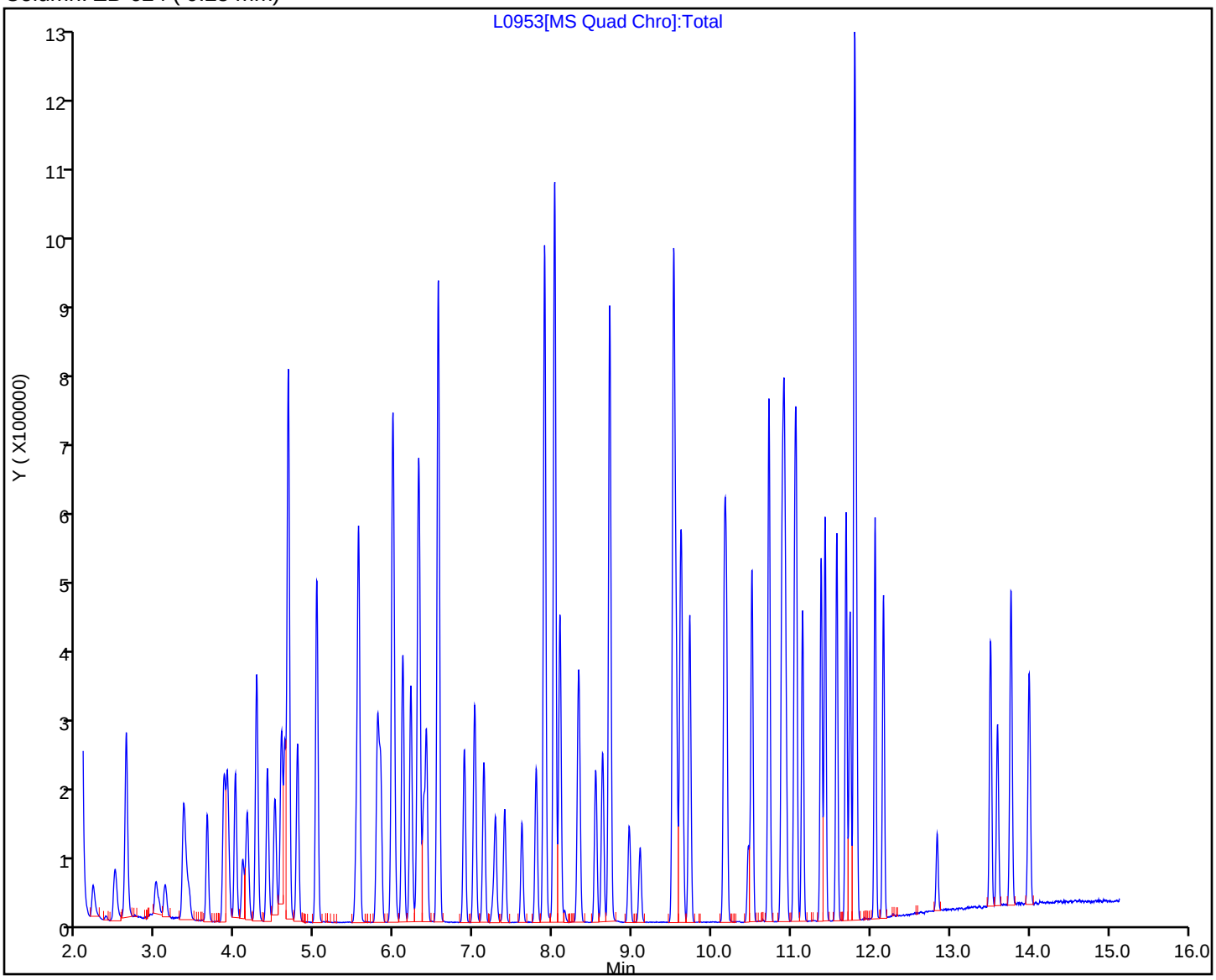
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 11

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0954.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 13-Sep-2019 18:10:11 ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0084114-012
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:45:26 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:22:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.550	6.550	0.000	98	178908	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	87	669120	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	95	345952	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.981	5.981	0.000	92	237754	25.0	25.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.296	0.000	98	285946	25.0	24.3	a
$ 6 Toluene-d8 (Surr)	98	8.019	8.019	0.000	93	831891	25.0	24.5	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	97	231687	25.0	24.1	
10 Dichlorodifluoromethane	85	2.206	2.206	0.000	99	256139	25.0	24.7	
13 Chloromethane	50	2.479	2.479	0.000	99	340157	25.0	23.4	
14 Vinyl chloride	62	2.611	2.611	0.000	98	272260	25.0	25.0	
15 Butadiene	54	2.620	2.620	0.000	89	316659	25.0	23.8	
18 Bromomethane	94	2.993	2.993	0.000	91	154915	25.0	24.2	
19 Chloroethane	64	3.109	3.109	0.000	99	155374	25.0	23.6	
20 Dichlorofluoromethane	67	3.344	3.344	0.000	97	378598	25.0	24.6	
21 Trichlorofluoromethane	101	3.366	3.366	0.000	98	334793	25.0	24.4	
26 Ethyl ether	59	3.643	3.643	0.000	94	261217	25.0	24.4	
28 Acrolein	56	3.849	3.849	0.000	100	339308	125.0	127.7	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	93	207148	25.0	25.9	
30 1,1-Dichloroethene	96	3.900	3.900	0.000	94	201449	25.0	24.7	
31 Acetone	43	3.997	3.997	0.000	100	725443	125.0	122.1	
33 Iodomethane	142	4.090	4.090	0.000	99	366582	25.0	25.5	
35 Carbon disulfide	76	4.145	4.145	0.000	100	706227	25.0	25.2	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	91	420539	25.0	24.1	
38 Methyl acetate	43	4.270	4.270	0.000	99	627767	50.0	49.8	
39 Methylene Chloride	84	4.399	4.399	0.000	99	254564	25.0	25.2	
40 2-Methyl-2-propanol	59	4.492	4.492	0.000	100	626323	250.0	254.5	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	724248	25.0	25.4	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	95	245098	25.0	24.6	
44 Acrylonitrile	53	4.662	4.662	0.000	99	1700952	250.0	252.6	
47 Hexane	57	4.778	4.778	0.000	90	376807	25.0	25.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	1328278	50.0	51.5	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	95	458445	25.0	24.9	
56 2,2-Dichloropropane	77	5.521	5.521	0.000	94	236827	25.0	25.2	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	87	262791	25.0	25.2	
57 2-Butanone (MEK)	43	5.550	5.550	0.000	100	1030861	125.0	122.7	
60 Chlorobromomethane	128	5.781	5.781	0.000	96	133292	25.0	25.8	
61 Tetrahydrofuran	42	5.794	5.794	0.000	91	269791	50.0	49.9	
62 Chloroform	83	5.826	5.826	0.000	93	413800	25.0	24.9	
64 1,1,1-Trichloroethane	97	5.968	5.968	0.000	98	342349	25.0	25.4	
65 Cyclohexane	56	5.987	5.987	0.000	93	469575	25.0	26.0	
67 1,1-Dichloropropene	75	6.103	6.103	0.000	94	304301	25.0	25.5	
66 Carbon tetrachloride	117	6.106	6.106	0.000	95	310179	25.0	25.5	
69 Isobutyl alcohol	43	6.206	6.206	0.000	95	624223	625.0	651.0	
70 Benzene	78	6.315	6.315	0.000	97	906515	25.0	24.6	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	96	365993	25.0	24.1	
73 n-Heptane	43	6.402	6.402	0.000	94	338562	25.0	26.1	
75 Trichloroethene	95	6.881	6.881	0.000	97	235679	25.0	25.1	
76 Methylcyclohexane	83	7.009	7.009	0.000	95	381297	25.0	26.4	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	252654	25.0	25.0	
81 1,4-Dioxane	88	7.234	7.234	0.000	98	66303	500.0	506.6	
82 Dibromomethane	93	7.273	7.273	0.000	97	157856	25.0	25.5	
83 Dichlorobromomethane	83	7.386	7.386	0.000	98	302568	25.0	25.3	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	92	181236	25.0	25.3	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	366481	25.0	26.3	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	96	1961448	125.0	131.2	
88 Toluene	92	8.083	8.083	0.000	99	567410	25.0	24.9	
90 Ethyl methacrylate	69	8.312	8.312	0.000	93	312154	25.0	26.5	
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	98	341444	25.0	26.4	
93 1,1,2-Trichloroethane	83	8.534	8.534	0.000	93	178764	25.0	25.6	
94 Tetrachloroethene	166	8.620	8.620	0.000	96	229338	25.0	24.7	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	95	359280	25.0	24.9	
96 2-Hexanone	43	8.710	8.710	0.000	95	1348539	125.0	129.2	
98 Chlorodibromomethane	129	8.958	8.958	0.000	90	235343	25.0	25.8	
101 Ethylene Dibromide	107	9.093	9.093	0.000	98	229002	25.0	25.6	
103 Chlorobenzene	112	9.546	9.546	0.000	96	615986	25.0	25.0	
104 Ethylbenzene	91	9.604	9.604	0.000	98	1021938	25.0	25.4	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	0.000	95	231714	25.0	26.0	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.000	0	409470	25.0	26.0	
107 o-Xylene	106	10.157	10.157	0.000	97	410008	25.0	26.5	
109 Styrene	104	10.180	10.180	0.000	96	655999	25.0	26.8	
110 Bromoform	173	10.459	10.459	0.000	95	165066	25.0	26.7	
111 Isopropylbenzene	105	10.505	10.505	0.000	96	1040066	25.0	26.7	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	328222	25.0	24.9	
113 Bromobenzene	156	10.887	10.887	0.000	96	254222	25.0	24.7	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	1209902	25.0	25.8	
115 trans-1,4-Dichloro-2-buten	53	10.919	10.919	0.000	71	99834	25.0	24.0	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	84	107490	25.0	24.4	
117 2-Chlorotoluene	126	11.041	11.041	0.000	96	251193	25.0	25.6	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	95	892284	25.0	26.1	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	740926	25.0	25.3	
120 tert-Butylbenzene	134	11.376	11.376	0.000	93	193108	25.0	24.8	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	904989	25.0	26.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	1098915	25.0	26.0	
123 4-Isopropyltoluene	119	11.688	11.688	0.000	97	949306	25.0	26.2	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	502487	25.0	25.2	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	95	505186	25.0	24.7	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	853184	25.0	26.0	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	505877	25.0	25.1	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	84	73444	25.0	23.8	
130 1,2,4-Trichlorobenzene	180	13.508	13.508	0.000	95	358235	25.0	25.5	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	97	146218	25.0	26.2	
132 Naphthalene	128	13.765	13.765	0.000	97	1130111	25.0	26.3	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	95	339408	25.0	25.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	12.50	Units: uL	
GAS CORP mix_00360	Amount Added:	12.50	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:45:27 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0954.D

Injection Date: 13-Sep-2019 18:10:11 Instrument ID: HP5977L

Lims ID: ICIS 5

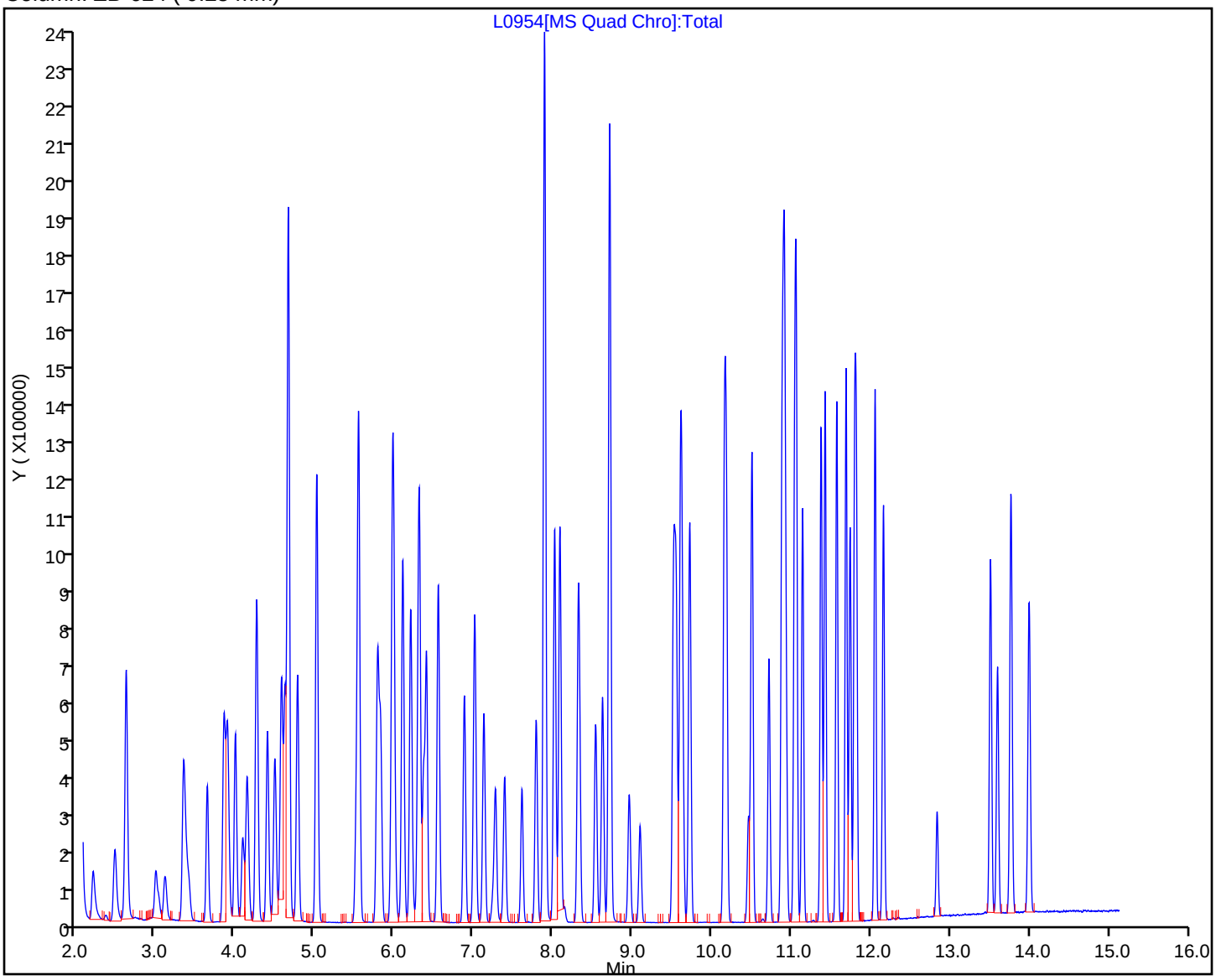
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 12

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

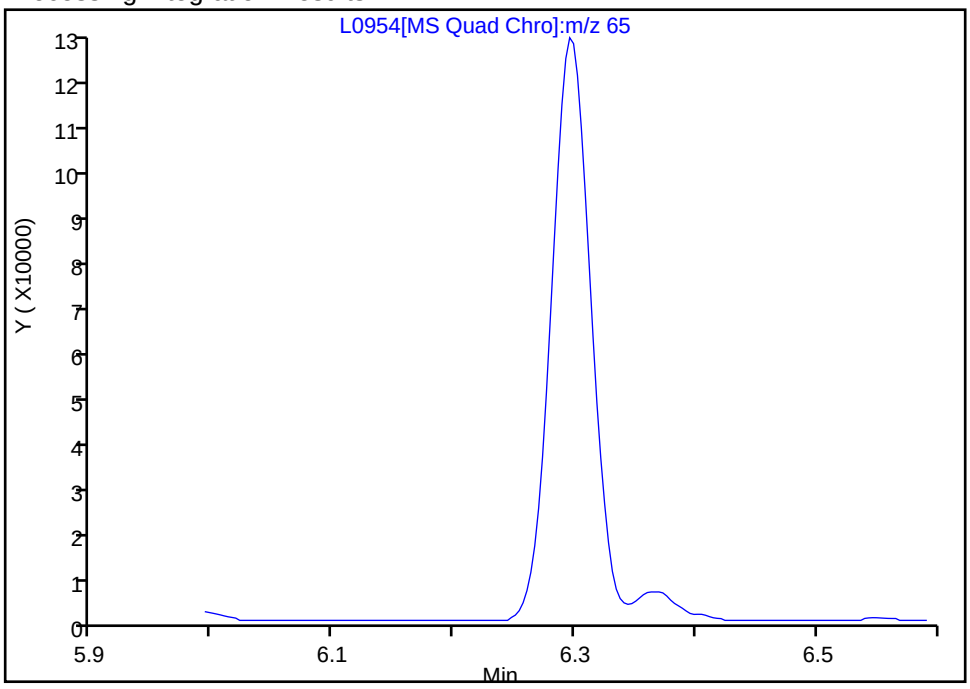
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0954.D
Injection Date: 13-Sep-2019 18:10:11 Instrument ID: HP5977L
Lims ID: ICIS 5
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

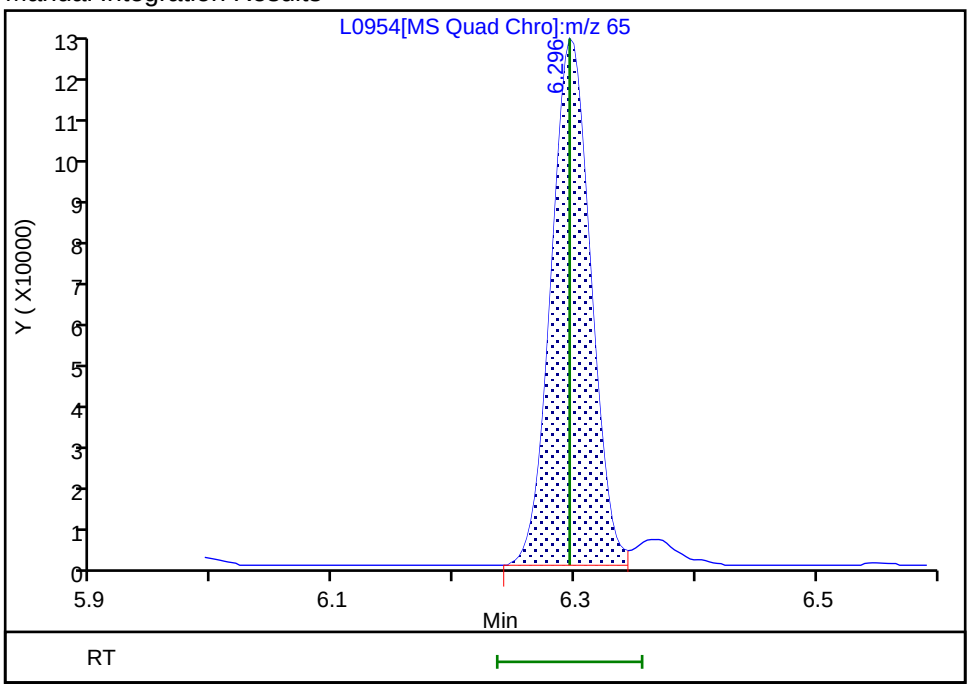
Processing Integration Results

Not Detected
Expected RT: 6.30



Manual Integration Results

RT: 6.30
Area: 285946
Amount: 24.316632
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:21:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0955.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 13-Sep-2019 18:34:11 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0084114-013
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:45:43 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:37:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.550	0.003	99	180854	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	88	683870	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	95	347634	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.981	-0.003	92	238954	25.0	24.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.296	0.000	88	296928	25.0	25.0	a
$ 6 Toluene-d8 (Surr)	98	8.019	8.019	0.000	93	885358	25.0	25.5	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.003	99	262522	25.0	26.7	
10 Dichlorodifluoromethane	85	2.202	2.206	-0.004	99	548130	50.0	52.3	
13 Chloromethane	50	2.479	2.479	0.000	99	683286	50.0	46.6	
14 Vinyl chloride	62	2.611	2.611	0.000	98	570254	50.0	51.8	
15 Butadiene	54	2.620	2.620	0.000	88	656782	50.0	48.8	
18 Bromomethane	94	2.997	2.993	0.004	91	311821	50.0	48.2	
19 Chloroethane	64	3.109	3.109	0.000	99	315458	50.0	47.3	
20 Dichlorofluoromethane	67	3.344	3.344	0.000	97	767310	50.0	49.4	
21 Trichlorofluoromethane	101	3.366	3.366	0.000	98	701875	50.0	50.6	
26 Ethyl ether	59	3.640	3.643	-0.003	95	514989	50.0	47.7	
28 Acrolein	56	3.845	3.849	-0.004	100	674435	250.0	251.1	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	94	417614	50.0	51.7	
30 1,1-Dichloroethene	96	3.900	3.900	0.000	94	404301	50.0	49.0	
31 Acetone	43	3.993	3.997	-0.004	100	1432635	250.0	238.5	
33 Iodomethane	142	4.090	4.090	0.000	99	726480	50.0	50.1	
35 Carbon disulfide	76	4.144	4.145	-0.001	100	1420019	50.0	50.0	
37 3-Chloro-1-propene	41	4.260	4.257	0.003	92	851716	50.0	48.4	
38 Methyl acetate	43	4.270	4.270	0.000	99	1224552	100.0	96.1	
39 Methylene Chloride	84	4.399	4.399	-0.001	99	497226	50.0	49.3	
40 2-Methyl-2-propanol	59	4.492	4.492	0.000	100	1245396	500.0	500.6	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	97	1448922	50.0	50.2	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	96	486739	50.0	48.4	
44 Acrylonitrile	53	4.662	4.662	0.000	99	3363049	500.0	494.0	
47 Hexane	57	4.778	4.778	0.000	90	766916	50.0	52.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	2731496	100.0	104.8	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	95	919940	50.0	49.4	
56 2,2-Dichloropropane	77	5.521	5.521	0.000	93	462369	50.0	48.7	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	86	533301	50.0	50.6	
57 2-Butanone (MEK)	43	5.550	5.550	0.000	100	2102209	250.0	247.4	
60 Chlorobromomethane	128	5.781	5.781	0.000	96	270666	50.0	51.8	
61 Tetrahydrofuran	42	5.797	5.794	0.003	91	537831	100.0	98.3	
62 Chloroform	83	5.826	5.826	0.000	93	818905	50.0	49.1	
64 1,1,1-Trichloroethane	97	5.968	5.968	0.000	97	685830	50.0	50.3	
65 Cyclohexane	56	5.987	5.987	0.000	93	948556	50.0	51.9	
67 1,1-Dichloropropene	75	6.106	6.103	0.003	92	618103	50.0	51.3	
66 Carbon tetrachloride	117	6.106	6.106	0.000	87	625470	50.0	50.9	
69 Isobutyl alcohol	43	6.206	6.206	0.000	98	1261103	1250.0	1301.1	
70 Benzene	78	6.315	6.315	0.000	98	1824458	50.0	49.1	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	96	733811	50.0	47.9	
73 n-Heptane	43	6.402	6.402	0.000	94	687948	50.0	52.5	
75 Trichloroethene	95	6.881	6.881	0.000	97	483020	50.0	50.9	
76 Methylcyclohexane	83	7.009	7.009	0.000	95	772897	50.0	52.9	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	522304	50.0	51.0	
81 1,4-Dioxane	88	7.238	7.234	0.004	98	135571	1000.0	1013.4	
82 Dibromomethane	93	7.273	7.273	0.000	97	318609	50.0	50.8	
83 Dichlorobromomethane	83	7.389	7.386	0.003	98	621424	50.0	51.3	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	92	396059	50.0	54.8	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	760263	50.0	54.0	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	96	3990498	250.0	261.1	
88 Toluene	92	8.083	8.083	0.000	98	1171795	50.0	50.2	
90 Ethyl methacrylate	69	8.312	8.312	0.000	91	677984	50.0	56.3	
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	98	725213	50.0	54.8	
93 1,1,2-Trichloroethane	83	8.533	8.534	-0.001	93	364798	50.0	51.1	
94 Tetrachloroethene	166	8.620	8.620	0.000	97	474648	50.0	50.1	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	94	749097	50.0	50.7	
96 2-Hexanone	43	8.714	8.710	0.004	94	2814378	250.0	263.8	
98 Chlorodibromomethane	129	8.958	8.958	0.000	91	496651	50.0	53.3	
101 Ethylene Dibromide	107	9.093	9.093	0.000	99	476284	50.0	52.1	
103 Chlorobenzene	112	9.546	9.546	0.000	97	1283475	50.0	50.9	
104 Ethylbenzene	91	9.604	9.604	0.000	98	2142371	50.0	52.2	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	0.000	95	479806	50.0	52.6	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.000	0	860786	50.0	53.6	
107 o-Xylene	106	10.154	10.157	-0.003	97	854907	50.0	54.0	
109 Styrene	104	10.180	10.180	0.000	95	1397223	50.0	55.8	
110 Bromoform	173	10.459	10.459	0.000	95	359437	50.0	56.9	
111 Isopropylbenzene	105	10.504	10.505	0.000	96	2157417	50.0	55.1	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	691345	50.0	52.2	
113 Bromobenzene	156	10.887	10.887	0.000	96	531676	50.0	51.5	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	2532772	50.0	53.7	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.919	-0.003	78	221695	50.0	52.3	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	84	226073	50.0	51.0	
117 2-Chlorotoluene	126	11.041	11.041	0.000	97	517208	50.0	52.4	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	96	1826959	50.0	53.2	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	1559076	50.0	53.0	
120 tert-Butylbenzene	134	11.376	11.376	0.000	94	399236	50.0	50.7	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	1869848	50.0	53.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	2284787	50.0	53.7	
123 4-Isopropyltoluene	119	11.691	11.688	0.003	97	1986770	50.0	54.6	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	1017160	50.0	50.8	
126 1,4-Dichlorobenzene	146	11.820	11.816	0.004	94	1047305	50.0	51.0	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	1768760	50.0	53.7	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	1038636	50.0	51.3	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	85	155960	50.0	50.3	
130 1,2,4-Trichlorobenzene	180	13.511	13.508	0.003	94	736149	50.0	52.2	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	98	302857	50.0	54.0	
132 Naphthalene	128	13.765	13.765	0.000	97	2311070	50.0	53.5	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	96	703563	50.0	53.5	
S 142 Total BTEX	1				0			259.1	
S 143 Xylenes, Total	1				0			107.6	
S 144 1,3-Dichloropropene, Total	1				0			108.8	
S 141 1,2-Dichloroethene, Total	1				0			98.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added: 25.00	Units: uL	
GAS CORP mix_00360	Amount Added: 25.00	Units: uL	
L_8260_IS_00007	Amount Added: 2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:45:44 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0955.D

Injection Date: 13-Sep-2019 18:34:11 Instrument ID: HP5977L

Lims ID: IC 6

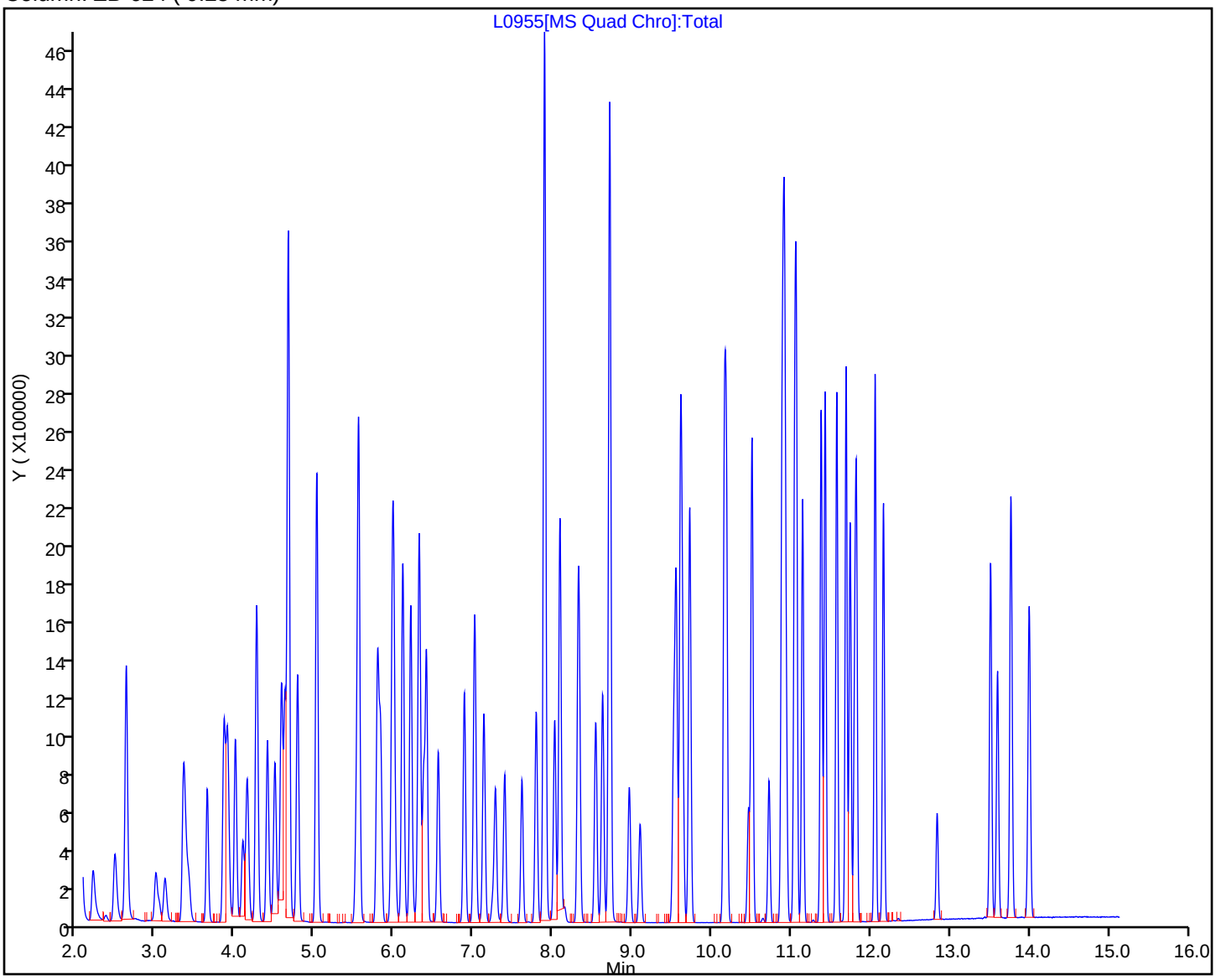
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 13

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

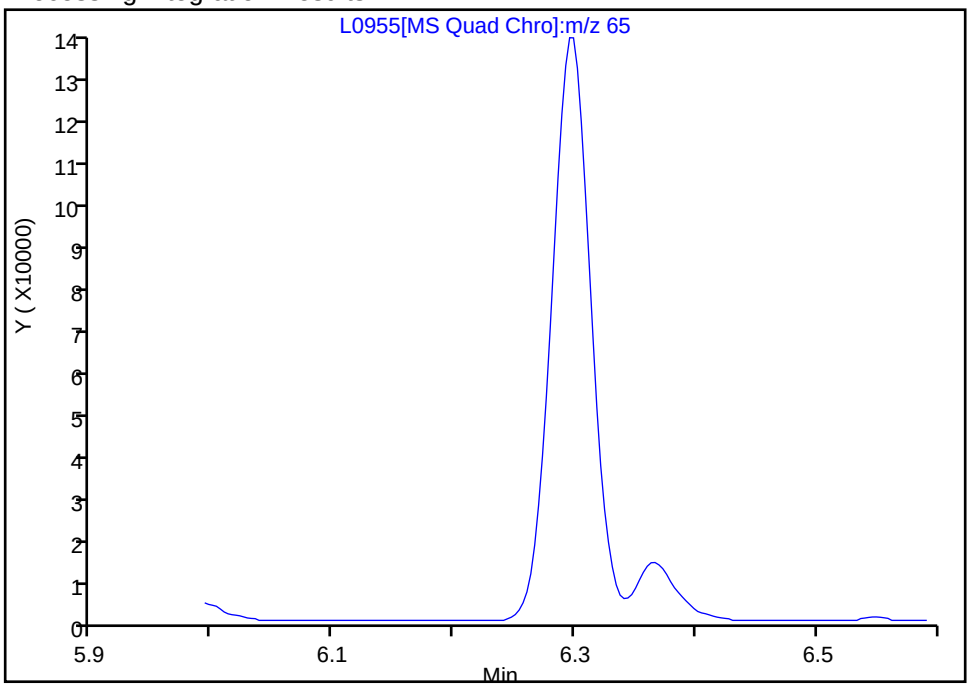
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0955.D
Injection Date: 13-Sep-2019 18:34:11 Instrument ID: HP5977L
Lims ID: IC 6
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

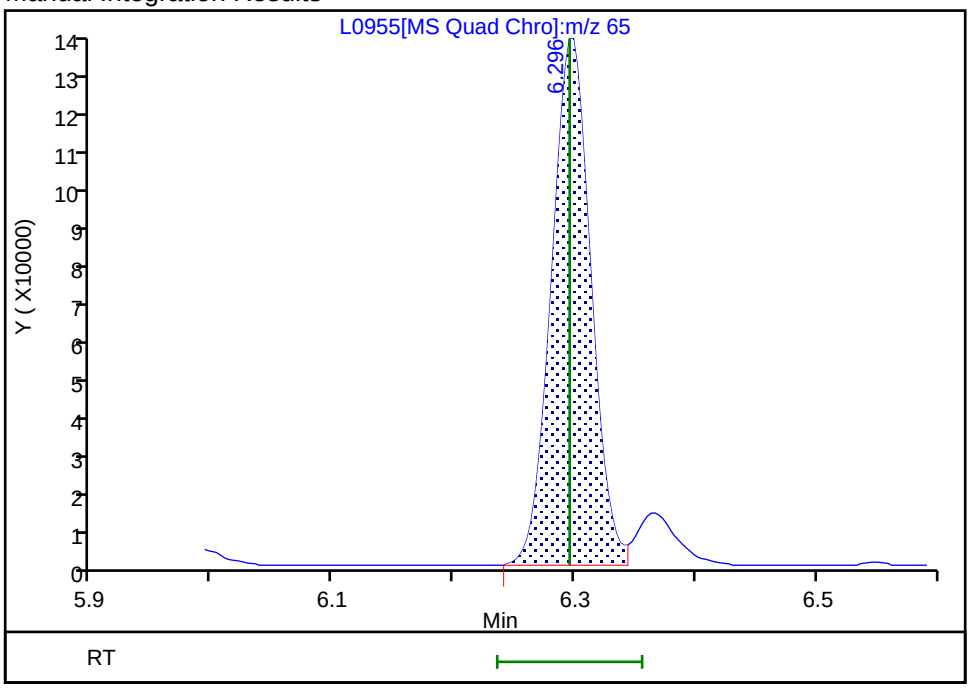
Processing Integration Results

Not Detected
Expected RT: 6.30



Manual Integration Results

RT: 6.30
Area: 296928
Amount: 24.978836
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:37:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0956.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 13-Sep-2019 18:58:08 ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0084114-014
Operator ID: BP/LH Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:45:59 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX1026

First Level Reviewer: HillL Date: 13-Sep-2019 20:38:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.550	6.550	0.000	99	173079	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.517	0.000	86	669291	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	95	339035	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.981	0.000	93	230263	25.0	25.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.296	0.000	99	280378	25.0	24.6	a
$ 6 Toluene-d8 (Surr)	98	8.019	8.019	0.000	93	838777	25.0	24.7	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	99	249724	25.0	26.0	
10 Dichlorodifluoromethane	85	2.202	2.206	-0.004	99	1050873	100.0	104.8	
13 Chloromethane	50	2.476	2.479	-0.003	99	1338877	100.0	95.3	
14 Vinyl chloride	62	2.611	2.611	0.000	98	1108106	100.0	105.2	
15 Butadiene	54	2.620	2.620	0.000	88	1245429	100.0	96.8	
18 Bromomethane	94	2.993	2.993	0.000	92	614070	100.0	99.3	
19 Chloroethane	64	3.109	3.109	0.000	99	611744	100.0	95.9	
20 Dichlorofluoromethane	67	3.341	3.344	-0.003	98	1499231	100.0	100.8	
21 Trichlorofluoromethane	101	3.366	3.366	0.000	98	1358081	100.0	102.3	
26 Ethyl ether	59	3.640	3.643	-0.003	95	1025429	100.0	99.2	
28 Acrolein	56	3.845	3.849	-0.004	100	1345017	500.0	523.2	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	93	769856	100.0	99.7	
30 1,1-Dichloroethene	96	3.900	3.900	0.000	95	764600	100.0	96.9	
31 Acetone	43	3.993	3.997	-0.004	100	2810794	500.0	488.9	
33 Iodomethane	142	4.090	4.090	0.000	99	1421109	100.0	102.3	
35 Carbon disulfide	76	4.144	4.145	-0.001	100	2702051	100.0	99.5	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	94	1618018	100.0	96.0	
38 Methyl acetate	43	4.270	4.270	0.000	99	2436923	200.0	199.8	
39 Methylene Chloride	84	4.399	4.399	-0.001	99	960964	100.0	100.1	
40 2-Methyl-2-propanol	59	4.492	4.492	0.000	100	2515969	1000.0	1056.8	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	97	2880907	100.0	104.3	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	95	929210	100.0	96.5	
44 Acrylonitrile	53	4.662	4.662	0.000	99	6569694	1000.0	1008.5	
47 Hexane	57	4.778	4.778	0.000	90	1445980	100.0	102.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	5451672	200.0	218.5	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	96	1767511	100.0	99.1	
56 2,2-Dichloropropane	77	5.521	5.521	0.000	90	841274	100.0	92.5	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	86	1030387	100.0	102.1	
57 2-Butanone (MEK)	43	5.546	5.550	-0.004	99	4207524	500.0	517.5	
60 Chlorobromomethane	128	5.781	5.781	0.000	96	532095	100.0	106.3	
61 Tetrahydrofuran	42	5.794	5.794	0.000	91	1088751	200.0	208.0	
62 Chloroform	83	5.826	5.826	0.000	93	1599308	100.0	100.5	
64 1,1,1-Trichloroethane	97	5.968	5.968	0.000	99	1322488	100.0	101.4	
65 Cyclohexane	56	5.987	5.987	0.000	92	1766746	100.0	101.0	
67 1,1-Dichloropropene	75	6.103	6.103	0.000	93	1177184	100.0	102.1	
66 Carbon tetrachloride	117	6.106	6.106	0.000	96	1185391	100.0	100.8	
69 Isobutyl alcohol	43	6.206	6.206	0.000	95	2553400	2500.0	2752.7	
70 Benzene	78	6.315	6.315	0.000	97	3549062	100.0	99.7	
72 1,2-Dichloroethane	62	6.366	6.366	0.000	96	1461477	100.0	99.7	
73 n-Heptane	43	6.402	6.402	0.000	94	1360353	100.0	108.4	
75 Trichloroethene	95	6.881	6.881	0.000	97	941785	100.0	103.8	
76 Methylcyclohexane	83	7.013	7.009	0.004	95	1462614	100.0	104.7	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	1028465	100.0	105.0	
81 1,4-Dioxane	88	7.238	7.234	0.004	97	273599	2000.0	2089.8	
82 Dibromomethane	93	7.270	7.273	-0.003	96	639246	100.0	106.5	
83 Dichlorobromomethane	83	7.386	7.386	0.000	98	1249680	100.0	107.9	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	92	817127	100.0	118.1	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	1531315	100.0	113.7	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	95	7828431	500.0	523.4	
88 Toluene	92	8.083	8.083	0.000	99	2270720	100.0	99.4	
90 Ethyl methacrylate	69	8.312	8.312	0.000	92	1393417	100.0	118.2	
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.000	98	1446151	100.0	111.7	
93 1,1,2-Trichloroethane	83	8.533	8.534	-0.001	93	725801	100.0	104.0	
94 Tetrachloroethene	166	8.623	8.620	0.003	97	916444	100.0	98.8	
95 1,3-Dichloropropane	76	8.707	8.707	0.000	98	1468353	100.0	101.6	
96 2-Hexanone	43	8.714	8.710	0.004	95	5545011	500.0	531.2	
98 Chlorodibromomethane	129	8.958	8.958	0.000	95	1008400	100.0	110.6	
101 Ethylene Dibromide	107	9.093	9.093	0.000	99	961452	100.0	107.5	
103 Chlorobenzene	112	9.550	9.546	0.004	98	2526571	100.0	102.4	
104 Ethylbenzene	91	9.604	9.604	0.000	98	4161917	100.0	103.6	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	0.000	96	941140	100.0	105.5	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.000	0	1668817	100.0	106.1	
107 o-Xylene	106	10.157	10.157	0.000	95	1669441	100.0	107.8	
109 Styrene	104	10.180	10.180	0.000	95	2813035	100.0	114.7	
110 Bromoform	173	10.459	10.459	0.000	96	740959	100.0	119.9	
111 Isopropylbenzene	105	10.501	10.505	-0.003	96	4231504	100.0	110.9	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	1357854	100.0	105.1	
113 Bromobenzene	156	10.887	10.887	0.000	96	1052483	100.0	104.4	
114 N-Propylbenzene	91	10.910	10.906	0.004	99	4894953	100.0	106.3	
115 trans-1,4-Dichloro-2-buten	53	10.919	10.919	0.000	80	466229	100.0	112.0	
116 1,2,3-Trichloropropane	110	10.935	10.932	0.003	84	446977	100.0	103.4	
117 2-Chlorotoluene	126	11.041	11.041	0.000	96	999265	100.0	103.7	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	95	3585936	100.0	107.0	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	3061414	100.0	106.7	
120 tert-Butylbenzene	134	11.376	11.376	0.000	93	773413	100.0	100.3	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	98	3686403	100.0	108.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	4464630	100.0	107.7	
123 4-Isopropyltoluene	119	11.691	11.688	0.003	97	3866628	100.0	109.0	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	2017828	100.0	103.2	
126 1,4-Dichlorobenzene	146	11.820	11.816	0.004	95	2070413	100.0	103.4	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	3468247	100.0	108.0	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	2053544	100.0	103.9	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	91	321738	100.0	106.4	
130 1,2,4-Trichlorobenzene	180	13.511	13.508	0.003	95	1471354	100.0	107.1	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	98	609649	100.0	111.5	
132 Naphthalene	128	13.768	13.765	0.003	97	4621680	100.0	109.7	
133 1,2,3-Trichlorobenzene	180	13.993	13.996	-0.003	96	1387308	100.0	108.2	
S 142 Total BTEX	1				0			516.7	
S 143 Xylenes, Total	1				0			213.9	
S 144 1,3-Dichloropropene, Total	1				0			225.4	
S 141 1,2-Dichloroethene, Total	1				0			198.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	50.00	Units: uL	
GAS CORP mix_00360	Amount Added:	50.00	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 09:46:01 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0956.D

Injection Date: 13-Sep-2019 18:58:08 Instrument ID: HP5977L

Lims ID: IC 7

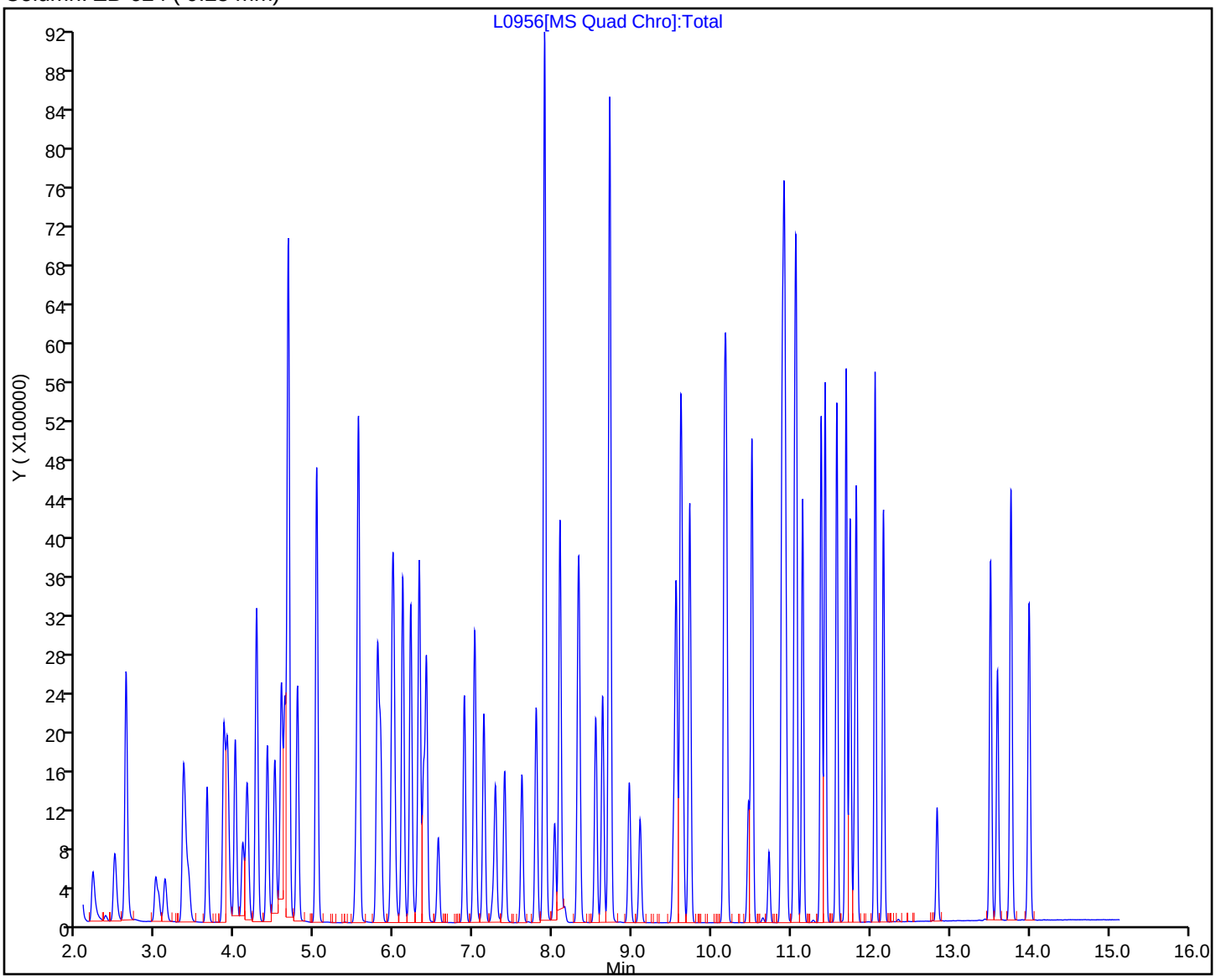
Client ID:

Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 14

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

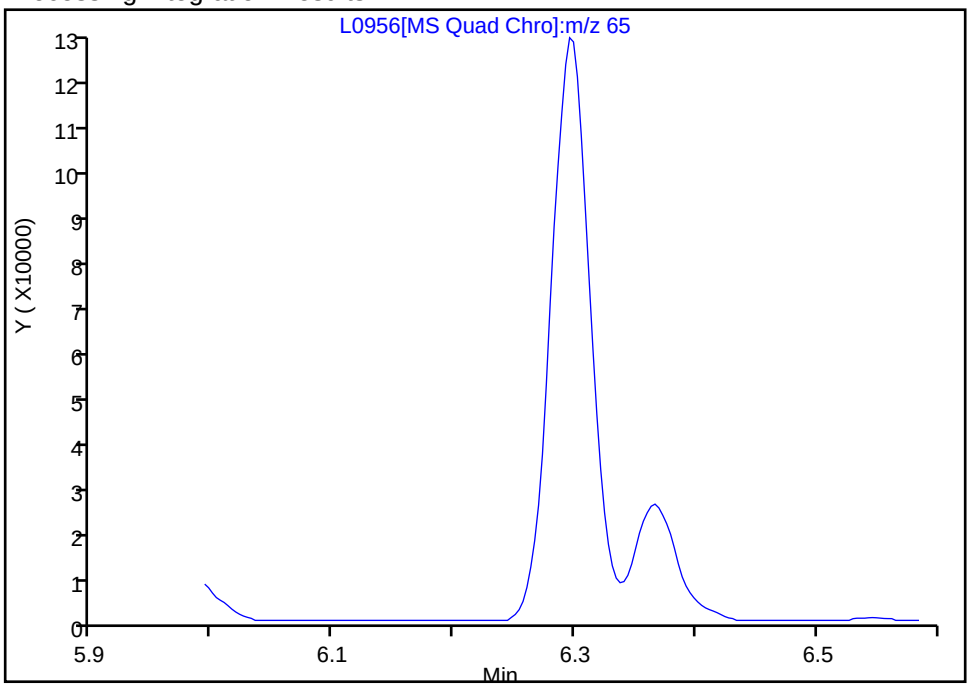
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0956.D
Injection Date: 13-Sep-2019 18:58:08 Instrument ID: HP5977L
Lims ID: IC 7
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

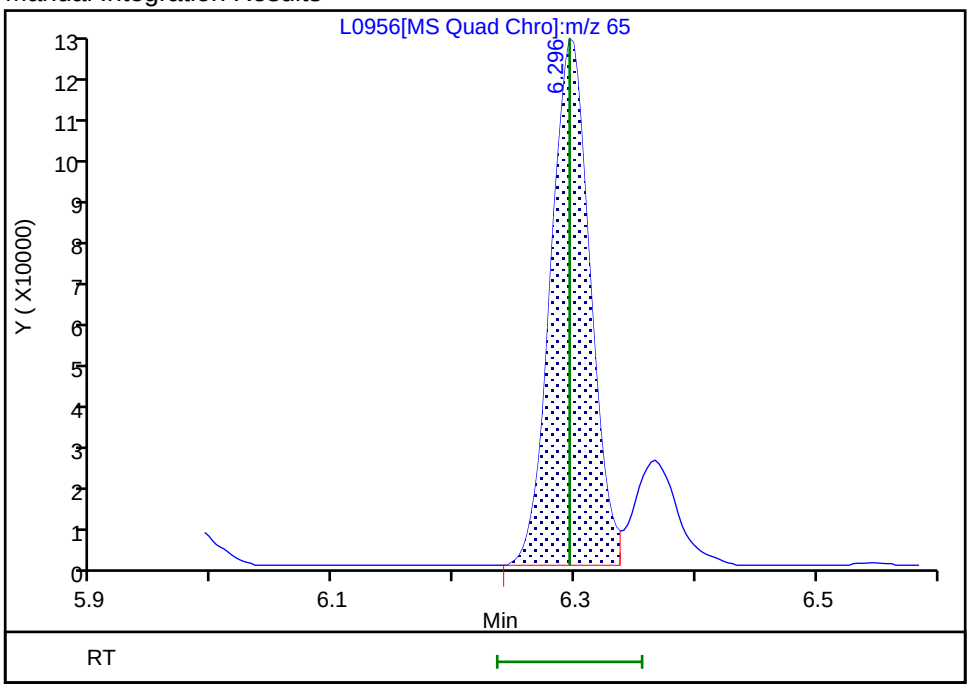
Processing Integration Results

Not Detected
Expected RT: 6.30



Manual Integration Results

RT: 6.30
Area: 280378
Amount: 24.646129
Amount Units: ug/L



Reviewer: HillL, 13-Sep-2019 20:38:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492066/3 Calibration Date: 09/14/2019 09:03

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S8948.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.766	1.202	0.1000	17.0	25.0	-31.9	50.0
Chloromethane	Ave	1.971	1.586	0.1000	20.1	25.0	-19.5	20.0
Butadiene	Ave	1.897	1.874		24.7	25.0	-1.2	20.0
Vinyl chloride	Ave	1.650	1.417	0.1000	21.5	25.0	-14.1	20.0
Bromomethane	Ave	1.167	1.028	0.1000	22.0	25.0	-11.9	50.0
Chloroethane	Ave	1.105	1.004	0.1000	22.7	25.0	-9.1	50.0
Dichlorofluoromethane	Ave	2.390	2.210		23.1	25.0	-7.5	20.0
Trichlorofluoromethane	Ave	2.275	2.189	0.1000	24.1	25.0	-3.8	20.0
Ethyl ether	Ave	1.340	1.476		27.5	25.0	10.1	20.0
Acrolein	Ave	0.2245	0.2444		136	125	8.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.255	1.476	0.1000	29.4	25.0	17.6	20.0
1,1-Dichloroethene	Ave	1.228	1.303	0.1000	26.5	25.0	6.1	20.0
Acetone	Ave	0.5189	0.6015	0.1000	145	125	15.9	50.0
Iodomethane	Ave	2.337	2.587		27.7	25.0	10.7	20.0
Carbon disulfide	Ave	4.017	4.208	0.1000	26.2	25.0	4.7	20.0
Allyl chloride	Ave	2.451	2.523		25.7	25.0	3.0	20.0
Methyl acetate	Ave	1.239	1.501	0.1000	60.6	50.0	21.1	50.0
Methylene Chloride	Lin1		1.477	0.1000	26.5	25.0	6.1	20.0
2-Methyl-2-propanol	Ave	0.1059	0.0845		199	250	-20.2	50.0
Methyl tert-butyl ether	Ave	4.030	4.032	0.1000	25.0	25.0	0.0	20.0
trans-1,2-Dichloroethene	Ave	1.397	1.436	0.1000	25.7	25.0	2.8	20.0
Acrylonitrile	Ave	0.6239	0.7307		293	250	17.1	20.0
Hexane	Ave	2.260	2.454		27.1	25.0	8.6	20.0
1,1-Dichloroethane	Ave	2.503	2.677	0.2000	26.7	25.0	6.9	20.0
Vinyl acetate	Ave	3.731	3.948		52.9	50.0	5.8	20.0
2,2-Dichloropropane	Ave	1.469	1.499		25.5	25.0	2.0	20.0
cis-1,2-Dichloroethene	Ave	1.539	1.557	0.1000	25.3	25.0	1.2	20.0
2-Butanone (MEK)	Ave	0.7507	0.8234	0.1000	137	125	9.7	20.0
Bromochloromethane	Ave	0.8090	0.8981		27.8	25.0	11.0	20.0
Tetrahydrofuran	Ave	0.5409	0.5847		54.1	50.0	8.1	20.0
Chloroform	Ave	2.503	2.568	0.2000	25.7	25.0	2.6	20.0
1,1,1-Trichloroethane	Ave	2.110	2.307	0.1000	27.3	25.0	9.3	20.0
Cyclohexane	Ave	2.628	2.861	0.1000	27.2	25.0	8.8	20.0
Carbon tetrachloride	Ave	1.889	2.114	0.1000	28.0	25.0	11.9	20.0
1,1-Dichloropropene	Ave	1.900	2.084		27.4	25.0	9.7	20.0
Benzene	Ave	5.604	5.846	0.5000	26.1	25.0	4.3	20.0
Isobutyl alcohol	Ave	0.0613	0.0538		548	625	-12.3	50.0
1,2-Dichloroethane	Ave	2.192	2.362	0.1000	26.9	25.0	7.8	20.0
n-Heptane	Ave	2.853	2.972		26.0	25.0	4.2	20.0
Trichloroethene	Ave	1.447	1.574	0.2000	27.2	25.0	8.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492066/3 Calibration Date: 09/14/2019 09:03

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S8948.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.492	2.783	0.1000	27.9	25.0	11.7	20.0
1,2-Dichloropropane	Ave	1.442	1.501	0.1000	26.0	25.0	4.1	20.0
Dibromomethane	Ave	0.9010	1.023	0.1000	28.4	25.0	13.6	20.0
1,4-Dioxane	Ave	0.0048	0.0039		412	500	-17.6	50.0
Bromodichloromethane	Ave	1.821	1.903	0.2000	26.1	25.0	4.5	20.0
2-Chloroethyl vinyl ether	Ave	1.042	1.080		25.9	25.0	3.6	20.0
cis-1,3-Dichloropropene	Ave	2.353	2.388	0.2000	25.4	25.0	1.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9375	1.002	0.1000	134	125	6.9	20.0
Toluene	Ave	1.815	1.794	0.4000	24.7	25.0	-1.2	20.0
trans-1,3-Dichloropropene	Ave	1.039	1.062	0.1000	25.6	25.0	2.3	20.0
Ethyl methacrylate	Ave	0.997	1.016		25.5	25.0	1.9	20.0
1,1,2-Trichloroethane	Ave	0.5424	0.5465	0.1000	25.2	25.0	0.8	20.0
Tetrachloroethene	Ave	0.8430	0.8761	0.2000	26.0	25.0	3.9	20.0
1,3-Dichloropropane	Ave	1.112	1.156		26.0	25.0	4.0	20.0
2-Hexanone	Ave	0.6810	0.7077	0.1000	130	125	3.9	20.0
Dibromochloromethane	Ave	0.7091	0.7234	0.1000	25.5	25.0	2.0	20.0
1,2-Dibromoethane	Ave	0.7138	0.7326		25.7	25.0	2.6	20.0
Chlorobenzene	Ave	2.093	2.107	0.5000	25.2	25.0	0.7	20.0
Ethylbenzene	Ave	3.379	3.479	0.1000	25.7	25.0	3.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7236	0.7732		26.7	25.0	6.8	20.0
m,p-Xylene	Ave	1.422	1.408	0.1000	24.8	25.0	-1.0	20.0
o-Xylene	Ave	1.370	1.359	0.3000	24.8	25.0	-0.8	20.0
Styrene	Ave	2.239	2.327	0.3000	26.0	25.0	3.9	20.0
Bromoform	Ave	0.4838	0.4695	0.1000	24.3	25.0	-3.0	50.0
Isopropylbenzene	Ave	3.162	3.247	0.1000	25.7	25.0	2.7	20.0
Bromobenzene	Ave	0.8418	0.9216		27.4	25.0	9.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7980	0.8309	0.3000	26.0	25.0	4.1	20.0
N-Propylbenzene	Ave	3.604	3.799		26.4	25.0	5.4	20.0
1,2,3-Trichloropropane	Ave	0.2869	0.3137		27.3	25.0	9.3	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.1667		15.4	25.0	-38.2	50.0
2-Chlorotoluene	Ave	0.7741	0.7980		25.8	25.0	3.1	20.0
1,3,5-Trimethylbenzene	Ave	2.636	2.713		25.7	25.0	2.9	20.0
4-Chlorotoluene	Ave	0.8346	0.8565		25.7	25.0	2.6	20.0
tert-Butylbenzene	Ave	0.6436	0.6671		25.9	25.0	3.6	20.0
1,2,4-Trimethylbenzene	Ave	2.719	2.749		25.3	25.0	1.1	20.0
sec-Butylbenzene	Ave	3.321	3.449		26.0	25.0	3.9	20.0
1,3-Dichlorobenzene	Ave	1.662	1.717	0.6000	25.8	25.0	3.4	20.0
4-Isopropyltoluene	Ave	3.068	3.117		25.4	25.0	1.6	20.0
1,4-Dichlorobenzene	Ave	1.701	1.760	0.5000	25.9	25.0	3.4	20.0
n-Butylbenzene	Ave	2.550	2.627		25.8	25.0	3.0	20.0
1,2-Dichlorobenzene	Ave	1.584	1.654	0.4000	26.1	25.0	4.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492066/3 Calibration Date: 09/14/2019 09:03

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S8948.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1612	0.1636	0.0500	25.4	25.0	1.5	50.0
1,2,4-Trichlorobenzene	Ave	1.142	1.007	0.2000	22.0	25.0	-11.8	20.0
Hexachlorobutadiene	Ave	0.4956	0.4447		22.4	25.0	-10.3	20.0
Naphthalene	Ave	2.984	2.661		22.3	25.0	-10.8	20.0
1,2,3-Trichlorobenzene	Ave	1.033	0.8689		21.0	25.0	-15.9	20.0
Dibromofluoromethane (Surr)	Ave	1.268	1.283		25.3	25.0	1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7981	0.7813		24.5	25.0	-2.1	20.0
Toluene-d8 (Surr)	Ave	2.476	2.387		24.1	25.0	-3.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8963	0.9127		25.5	25.0	1.8	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8948.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Sep-2019 09:03:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0084133-003
Operator ID: OI Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 09:25:28 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 14-Sep-2019 09:25:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	121159	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	255166	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	278498	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	55	155447	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	54	94656	25.0	24.5	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	77	609201	25.0	24.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	91	232883	25.0	25.5	
10 Dichlorodifluoromethane	85	1.270	1.270	0.000	96	145577	25.0	17.0	
12 Chloromethane	50	1.446	1.446	0.000	93	192199	25.0	20.1	
13 Vinyl chloride	62	1.543	1.543	0.000	53	171736	25.0	21.5	
151 Butadiene	54	1.543	1.543	0.000	92	227019	25.0	24.7	
14 Bromomethane	94	1.835	1.835	0.000	92	124548	25.0	22.0	
15 Chloroethane	64	1.939	1.939	0.000	98	121655	25.0	22.7	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	96	267743	25.0	23.1	
17 Trichlorofluoromethane	101	2.164	2.164	0.000	85	265208	25.0	24.1	
18 Ethyl ether	59	2.438	2.438	0.000	94	178828	25.0	27.5	
20 Acrolein	56	2.626	2.626	0.000	93	148026	125.0	136.1	
21 1,1,2-Trichloro-1,2,2-trif	101	2.657	2.657	0.000	71	178815	25.0	29.4	
22 1,1-Dichloroethene	96	2.657	2.657	0.000	97	157843	25.0	26.5	
23 Acetone	43	2.784	2.784	0.000	97	364386	125.0	144.9	
25 Iodomethane	142	2.821	2.821	0.000	98	313394	25.0	27.7	
26 Carbon disulfide	76	2.857	2.857	0.000	99	509820	25.0	26.2	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	86	305713	25.0	25.7	
27 Methyl acetate	43	3.089	3.089	0.000	96	363834	50.0	60.6	
30 Methylene Chloride	84	3.186	3.186	0.000	98	178928	25.0	26.5	
31 2-Methyl-2-propanol	59	3.362	3.362	0.000	91	102390	250.0	199.4	
32 Methyl tert-butyl ether	73	3.393	3.393	0.000	93	488524	25.0	25.0	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	93	173979	25.0	25.7	
33 Acrylonitrile	53	3.478	3.478	0.000	96	885296	250.0	292.8	
35 Hexane	57	3.600	3.600	0.000	91	297362	25.0	27.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	84	324332	25.0	26.7	
37 Vinyl acetate	43	3.892	3.892	0.000	97	956719	50.0	52.9	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	92	181583	25.0	25.5	
45 cis-1,2-Dichloroethene	96	4.397	4.397	0.000	81	188691	25.0	25.3	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	93	498828	125.0	137.1	
48 Chlorobromomethane	128	4.634	4.634	0.000	97	108809	25.0	27.8	
49 Tetrahydrofuran	42	4.646	4.646	0.000	89	141684	50.0	54.1	
50 Chloroform	83	4.713	4.713	0.000	95	311118	25.0	25.7	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	90	279493	25.0	27.3	
52 Cyclohexane	56	4.822	4.822	0.000	93	346578	25.0	27.2	
55 Carbon tetrachloride	117	4.956	4.956	0.000	88	256126	25.0	28.0	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	90	252508	25.0	27.4	
57 Benzene	78	5.175	5.175	0.000	97	708235	25.0	26.1	
53 Isobutyl alcohol	43	5.206	5.206	0.000	90	162922	625.0	548.1	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	286222	25.0	26.9	
59 n-Heptane	43	5.346	5.346	0.000	93	360087	25.0	26.0	
62 Trichloroethene	95	5.784	5.784	0.000	93	190675	25.0	27.2	
64 Methylcyclohexane	83	5.899	5.899	0.000	94	337171	25.0	27.9	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	89	181857	25.0	26.0	
67 Dibromomethane	93	6.173	6.173	0.000	83	123982	25.0	28.4	
66 1,4-Dioxane	88	6.179	6.179	0.000	16	20027	500.0	412.1	
68 Dichlorobromomethane	83	6.325	6.325	0.000	97	230576	25.0	26.1	
69 2-Chloroethyl vinyl ether	63	6.605	6.605	0.000	94	130842	25.0	25.9	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	87	289287	25.0	25.4	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	99	1278747	125.0	133.6	
74 Toluene	92	7.025	7.025	0.000	87	457656	25.0	24.7	
77 trans-1,3-Dichloropropene	75	7.311	7.311	0.000	98	271038	25.0	25.6	
75 Ethyl methacrylate	69	7.353	7.353	0.000	86	259245	25.0	25.5	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	95	139438	25.0	25.2	
81 Tetrachloroethene	166	7.554	7.554	0.000	85	223545	25.0	26.0	
82 1,3-Dichloropropane	76	7.663	7.663	0.000	95	295078	25.0	26.0	
80 2-Hexanone	43	7.730	7.730	0.000	94	902904	125.0	129.9	
83 Chlorodibromomethane	129	7.895	7.895	0.000	89	184579	25.0	25.5	
84 Ethylene Dibromide	107	7.998	7.998	0.000	99	186933	25.0	25.7	
87 Chlorobenzene	112	8.473	8.473	0.000	94	537566	25.0	25.2	
88 Ethylbenzene	91	8.564	8.564	0.000	98	887825	25.0	25.7	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	47	197293	25.0	26.7	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	97	359268	25.0	24.8	
91 o-Xylene	106	9.111	9.111	0.000	96	346773	25.0	24.8	
92 Styrene	104	9.142	9.142	0.000	94	593771	25.0	26.0	
95 Bromoform	173	9.397	9.397	0.000	95	119808	25.0	24.3	
94 Isopropylbenzene	105	9.495	9.495	0.000	95	904271	25.0	25.7	
101 Bromobenzene	156	9.841	9.841	0.000	91	256671	25.0	27.4	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	90	231404	25.0	26.0	
99 N-Propylbenzene	91	9.920	9.920	0.000	97	1057874	25.0	26.4	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	78	87367	25.0	27.3	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	76	46424	25.0	15.4	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	222237	25.0	25.8	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	85	755482	25.0	25.7	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	238542	25.0	25.7	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	185775	25.0	25.9	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	76	765647	25.0	25.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	960450	25.0	26.0	
111 1,3-Dichlorobenzene	146	10.766	10.766	0.000	71	478306	25.0	25.8	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	868000	25.0	25.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	490017	25.0	25.9	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	731660	25.0	25.8	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	93	460525	25.0	26.1	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	78	45571	25.0	25.4	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	94	280558	25.0	22.0	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	96	123838	25.0	22.4	
121 Naphthalene	128	12.822	12.822	0.000	97	740986	25.0	22.3	
122 1,2,3-Trichlorobenzene	180	13.023	13.023	0.000	94	241987	25.0	21.0	

Reagents:

GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
8260 CORP mix_00164	Amount Added: 12.50	Units: uL	
S_8260_IS_00325	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00326	Amount Added: 1.00	Units: uL	Run Reagent

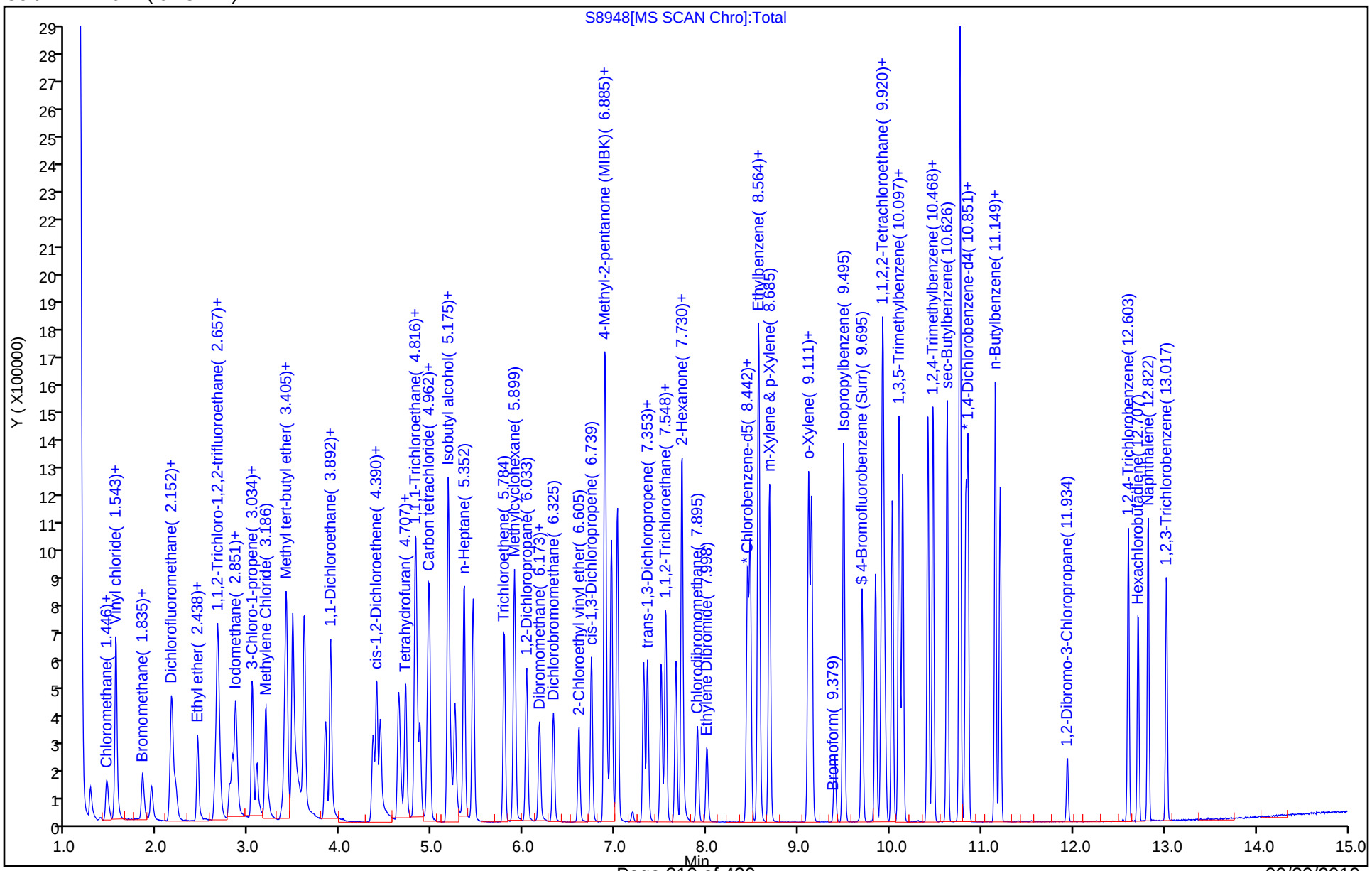
Report Date: 14-Sep-2019 09:25:29 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8948.D

Injection Date:	14-Sep-2019 09:03:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492085/3 Calibration Date: 09/14/2019 11:40

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L0974.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.448	1.454	0.1000	25.1	25.0	0.4	50.0
Chloromethane	Ave	2.029	1.860	0.1000	22.9	25.0	-8.3	20.0
Vinyl chloride	Ave	1.521	1.550	0.1000	25.5	25.0	1.9	20.0
Butadiene	Ave	1.859	1.663		22.4	25.0	-10.5	20.0
Bromomethane	Ave	0.8934	0.8347	0.1000	23.4	25.0	-6.6	50.0
Chloroethane	Ave	0.9214	0.8473	0.1000	23.0	25.0	-8.0	50.0
Dichlorofluoromethane	Ave	2.149	2.045		23.8	25.0	-4.8	20.0
Trichlorofluoromethane	Ave	1.918	1.836	0.1000	23.9	25.0	-4.3	20.0
Ethyl ether	Ave	1.494	1.324		22.2	25.0	-11.4	20.0
Acrolein	Ave	0.3713	0.3659		123	125	-1.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.116	1.071	0.1000	24.0	25.0	-4.0	20.0
1,1-Dichloroethene	Ave	1.140	1.076	0.1000	23.6	25.0	-5.7	20.0
Acetone	Ave	0.8304	0.7335	0.1000	110	125	-11.7	50.0
Iodomethane	Ave	2.006	1.909		23.8	25.0	-4.8	20.0
Carbon disulfide	Ave	3.922	3.751	0.1000	23.9	25.0	-4.4	20.0
Allyl chloride	Ave	2.435	2.205		22.6	25.0	-9.5	20.0
Methyl acetate	Ave	1.762	1.618	0.1000	45.9	50.0	-8.2	50.0
Methylene Chloride	Lin1		1.304	0.1000	23.0	25.0	-7.9	20.0
2-Methyl-2-propanol	Ave	0.3439	0.3258		237	250	-5.3	50.0
Methyl tert-butyl ether	Ave	3.991	3.795	0.1000	23.8	25.0	-4.9	20.0
trans-1,2-Dichloroethene	Ave	1.392	1.295	0.1000	23.3	25.0	-6.9	20.0
Acrylonitrile	Ave	0.9410	0.8981		239	250	-4.6	20.0
Hexane	Ave	2.035	2.012		24.7	25.0	-1.1	20.0
Vinyl acetate	Ave	3.603	3.534		49.0	50.0	-1.9	20.0
1,1-Dichloroethane	Ave	2.575	2.412	0.2000	23.4	25.0	-6.3	20.0
2,2-Dichloropropane	Ave	1.313	1.252		23.8	25.0	-4.7	20.0
2-Butanone (MEK)	Ave	1.174	1.094	0.1000	116	125	-6.8	20.0
cis-1,2-Dichloroethene	Ave	1.457	1.407	0.1000	24.1	25.0	-3.5	20.0
Bromochloromethane	Ave	0.7229	0.6936		24.0	25.0	-4.0	20.0
Tetrahydrofuran	Ave	0.7560	0.7099		47.0	50.0	-6.1	20.0
Chloroform	Lin1		2.135	0.2000	23.0	25.0	-8.1	20.0
1,1,1-Trichloroethane	Ave	1.884	1.805	0.1000	24.0	25.0	-4.2	20.0
Cyclohexane	Ave	2.528	2.453	0.1000	24.3	25.0	-2.9	20.0
1,1-Dichloropropene	Ave	1.666	1.632		24.5	25.0	-2.0	20.0
Carbon tetrachloride	Ave	1.699	1.645	0.1000	24.2	25.0	-3.2	20.0
Isobutyl alcohol	Ave	0.1340	0.1321		616	625	-1.4	50.0
Benzene	Ave	5.141	4.780	0.5000	23.2	25.0	-7.0	20.0
1,2-Dichloroethane	Ave	2.118	1.886	0.1000	22.3	25.0	-11.0	20.0
n-Heptane	Ave	1.812	1.811		25.0	25.0	-0.0	20.0
Trichloroethene	Ave	1.311	1.238	0.2000	23.6	25.0	-5.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492085/3 Calibration Date: 09/14/2019 11:40

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L0974.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.018	1.994	0.1000	24.7	25.0	-1.2	20.0
1,2-Dichloropropane	Ave	1.414	1.341	0.1000	23.7	25.0	-5.2	20.0
1,4-Dioxane	Ave	0.0049	0.0048		486	500	-2.7	50.0
Dibromomethane	Ave	0.8667	0.8163	0.1000	23.5	25.0	-5.8	20.0
Bromodichloromethane	Ave	1.673	1.603	0.2000	24.0	25.0	-4.2	20.0
2-Chloroethyl vinyl ether	Ave	0.999	0.9930		24.8	25.0	-0.6	20.0
cis-1,3-Dichloropropene	Ave	1.946	1.960	0.2000	25.2	25.0	0.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5587	0.5644	0.1000	126	125	1.0	20.0
Toluene	Ave	0.8530	0.8249	0.4000	24.2	25.0	-3.3	20.0
Ethyl methacrylate	Ave	0.4403	0.4549		25.8	25.0	3.3	20.0
trans-1,3-Dichloropropene	Ave	0.4836	0.5061	0.1000	26.2	25.0	4.7	20.0
1,1,2-Trichloroethane	Ave	0.2608	0.2546	0.1000	24.4	25.0	-2.4	20.0
Tetrachloroethene	Ave	0.3466	0.3457	0.2000	24.9	25.0	-0.2	20.0
1,3-Dichloropropane	Ave	0.5397	0.5174		24.0	25.0	-4.1	20.0
2-Hexanone	Ave	0.3899	0.3833	0.1000	123	125	-1.7	20.0
Dibromochloromethane	Ave	0.3407	0.3434	0.1000	25.2	25.0	0.8	20.0
1,2-Dibromoethane	Ave	0.3342	0.3296		24.7	25.0	-1.4	20.0
Chlorobenzene	Ave	0.9217	0.8978	0.5000	24.4	25.0	-2.6	20.0
Ethylbenzene	Ave	1.501	1.489	0.1000	24.8	25.0	-0.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3333	0.3290		24.7	25.0	-1.3	20.0
m,p-Xylene	Ave	0.5874	0.6020	0.1000	25.6	25.0	2.5	20.0
o-Xylene	Ave	0.5785	0.5965	0.3000	25.8	25.0	3.1	20.0
Styrene	Ave	0.9160	0.9633	0.3000	26.3	25.0	5.2	20.0
Bromoform	Ave	0.2309	0.2476	0.1000	26.8	25.0	7.2	50.0
Isopropylbenzene	Ave	2.813	3.033	0.1000	27.0	25.0	7.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9524	0.9322	0.3000	24.5	25.0	-2.1	20.0
Bromobenzene	Ave	0.7431	0.7434		25.0	25.0	0.0	20.0
N-Propylbenzene	Ave	3.394	3.554		26.2	25.0	4.7	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.3498		28.9	25.0	15.8	50.0
1,2,3-Trichloropropane	Ave	0.3188	0.3126		24.5	25.0	-2.0	20.0
2-Chlorotoluene	Ave	0.7103	0.7325		25.8	25.0	3.1	20.0
1,3,5-Trimethylbenzene	Ave	2.472	2.573		26.0	25.0	4.1	20.0
4-Chlorotoluene	Ave	2.117	2.165		25.6	25.0	2.3	20.0
tert-Butylbenzene	Lin1		0.5542		24.7	25.0	-1.3	20.0
1,2,4-Trimethylbenzene	Ave	2.515	2.606		25.9	25.0	3.6	20.0
sec-Butylbenzene	Ave	3.058	3.223		26.3	25.0	5.4	20.0
4-Isopropyltoluene	Ave	2.615	2.814		26.9	25.0	7.6	20.0
1,3-Dichlorobenzene	Ave	1.441	1.422	0.6000	24.7	25.0	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.477	1.450	0.5000	24.5	25.0	-1.8	20.0
n-Butylbenzene	Ave	2.369	2.467		26.0	25.0	4.1	20.0
1,2-Dichlorobenzene	Ave	1.457	1.438	0.4000	24.7	25.0	-1.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492085/3 Calibration Date: 09/14/2019 11:40

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L0974.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2230	0.2102	0.0500	23.6	25.0	-5.7	50.0
1,2,4-Trichlorobenzene	Ave	1.013	1.027	0.2000	25.3	25.0	1.3	20.0
Hexachlorobutadiene	Ave	0.4033	0.4358		27.0	25.0	8.1	20.0
Naphthalene	Ave	3.107	3.174		25.5	25.0	2.2	20.0
1,2,3-Trichlorobenzene	Ave	0.9458	0.9679		25.6	25.0	2.3	20.0
Dibromofluoromethane (Surr)	Ave	1.324	1.333		25.2	25.0	0.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.643	1.609		24.5	25.0	-2.1	20.0
Toluene-d8 (Surr)	Ave	1.270	1.313		25.8	25.0	3.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.3590	0.3733		26.0	25.0	4.0	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0974.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Sep-2019 11:40:12 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0084141-003
Operator ID: OI Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 12:23:06 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0340

First Level Reviewer: izquierdoo Date: 14-Sep-2019 12:23:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.550	6.550	0.000	99	183768	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.514	9.514	0.000	86	671709	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.794	11.794	0.000	96	337706	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.977	0.000	92	244872	25.0	25.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.296	0.000	98	295631	25.0	24.5	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	881843	25.0	25.8	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	98	250763	25.0	26.0	
10 Dichlorodifluoromethane	85	2.202	2.202	0.000	99	267256	25.0	25.1	
13 Chloromethane	50	2.476	2.476	0.000	99	341775	25.0	22.9	
14 Vinyl chloride	62	2.614	2.614	0.000	97	284879	25.0	25.5	
15 Butadiene	54	2.624	2.624	0.000	88	305553	25.0	22.4	
18 Bromomethane	94	2.997	2.997	0.000	91	153395	25.0	23.4	
19 Chloroethane	64	3.109	3.109	0.000	99	155699	25.0	23.0	
20 Dichlorofluoromethane	67	3.341	3.341	0.000	97	375878	25.0	23.8	
21 Trichlorofluoromethane	101	3.366	3.366	0.000	98	337343	25.0	23.9	
26 Ethyl ether	59	3.640	3.640	0.000	95	243243	25.0	22.2	
28 Acrolein	56	3.849	3.849	0.000	100	336191	125.0	123.2	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	92	196892	25.0	24.0	
30 1,1-Dichloroethene	96	3.900	3.900	0.000	95	197675	25.0	23.6	
31 Acetone	43	3.993	3.993	0.000	100	673928	125.0	110.4	
33 Iodomethane	142	4.090	4.090	0.000	99	350894	25.0	23.8	
35 Carbon disulfide	76	4.144	4.144	0.000	99	689336	25.0	23.9	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	91	405119	25.0	22.6	
38 Methyl acetate	43	4.270	4.270	0.000	99	594779	50.0	45.9	
39 Methylene Chloride	84	4.398	4.398	0.000	99	239684	25.0	23.0	
40 2-Methyl-2-propanol	59	4.492	4.492	0.000	100	598777	250.0	236.9	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	697473	25.0	23.8	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	96	238039	25.0	23.3	
44 Acrylonitrile	53	4.662	4.662	0.000	99	1650409	250.0	238.6	
47 Hexane	57	4.778	4.778	0.000	90	369722	25.0	24.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	1298845	50.0	49.0	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	96	443266	25.0	23.4	
56 2,2-Dichloropropane	77	5.521	5.521	0.000	92	230036	25.0	23.8	
57 2-Butanone (MEK)	43	5.546	5.546	0.000	99	1005408	125.0	116.5	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	59	258523	25.0	24.1	
60 Chlorobromomethane	128	5.781	5.781	0.000	97	127467	25.0	24.0	
61 Tetrahydrofuran	42	5.794	5.794	0.000	91	260908	50.0	47.0	
62 Chloroform	83	5.826	5.826	0.000	93	392378	25.0	23.0	
64 1,1,1-Trichloroethane	97	5.968	5.968	0.000	98	331674	25.0	24.0	
65 Cyclohexane	56	5.987	5.987	0.000	92	450871	25.0	24.3	
67 1,1-Dichloropropene	75	6.103	6.103	0.000	93	299896	25.0	24.5	
66 Carbon tetrachloride	117	6.106	6.106	0.000	95	302264	25.0	24.2	
69 Isobutyl alcohol	43	6.202	6.202	0.000	96	606919	625.0	616.2	
70 Benzene	78	6.312	6.312	0.000	97	878448	25.0	23.2	
72 1,2-Dichloroethane	62	6.363	6.363	0.000	96	346568	25.0	22.3	
73 n-Heptane	43	6.402	6.402	0.000	93	332761	25.0	25.0	
75 Trichloroethene	95	6.877	6.877	0.000	97	227504	25.0	23.6	
76 Methylcyclohexane	83	7.009	7.009	0.000	95	366397	25.0	24.7	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	246510	25.0	23.7	
81 1,4-Dioxane	88	7.238	7.238	0.000	98	63901	500.0	486.3	
82 Dibromomethane	93	7.270	7.270	0.000	97	150002	25.0	23.5	
83 Dichlorobromomethane	83	7.386	7.386	0.000	98	294604	25.0	24.0	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	92	182486	25.0	24.8	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	360259	25.0	25.2	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.890	0.000	96	1895473	125.0	126.3	
88 Toluene	92	8.083	8.083	0.000	99	554075	25.0	24.2	
90 Ethyl methacrylate	69	8.312	8.312	0.000	90	305572	25.0	25.8	
91 trans-1,3-Dichloropropene	75	8.324	8.324	0.000	98	339948	25.0	26.2	
93 1,1,2-Trichloroethane	83	8.533	8.533	0.000	93	170986	25.0	24.4	
94 Tetrachloroethene	166	8.620	8.620	0.000	98	232215	25.0	24.9	
95 1,3-Dichloropropane	76	8.704	8.704	0.000	93	347552	25.0	24.0	
96 2-Hexanone	43	8.710	8.710	0.000	94	1287159	125.0	122.9	
98 Chlorodibromomethane	129	8.958	8.958	0.000	90	230666	25.0	25.2	
101 Ethylene Dibromide	107	9.090	9.090	0.000	99	221397	25.0	24.7	
103 Chlorobenzene	112	9.546	9.546	0.000	95	603079	25.0	24.4	
104 Ethylbenzene	91	9.604	9.604	0.000	98	1000179	25.0	24.8	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.627	0.000	95	220982	25.0	24.7	
106 m-Xylene & p-Xylene	106	9.717	9.717	0.000	0	404338	25.0	25.6	
107 o-Xylene	106	10.154	10.154	0.000	97	400676	25.0	25.8	
109 Styrene	104	10.180	10.180	0.000	96	647023	25.0	26.3	
110 Bromoform	173	10.459	10.459	0.000	96	166289	25.0	26.8	
111 Isopropylbenzene	105	10.501	10.501	0.000	96	1024215	25.0	27.0	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	314795	25.0	24.5	
113 Bromobenzene	156	10.884	10.884	0.000	95	251042	25.0	25.0	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	1200079	25.0	26.2	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.916	0.000	79	118114	25.0	28.9	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	85	105549	25.0	24.5	
117 2-Chlorotoluene	126	11.038	11.038	0.000	96	247353	25.0	25.8	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	94	868777	25.0	26.0	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	731123	25.0	25.6	
120 tert-Butylbenzene	134	11.373	11.373	0.000	93	187152	25.0	24.7	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	879938	25.0	25.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	1088317	25.0	26.3	
123 4-Isopropyltoluene	119	11.688	11.688	0.000	97	950268	25.0	26.9	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	480233	25.0	24.7	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	95	489786	25.0	24.5	
127 n-Butylbenzene	91	12.054	12.054	0.000	97	833115	25.0	26.0	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	485654	25.0	24.7	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.000	87	70995	25.0	23.6	
130 1,2,4-Trichlorobenzene	180	13.508	13.508	0.000	95	346769	25.0	25.3	
131 Hexachlorobutadiene	225	13.598	13.598	0.000	98	147185	25.0	27.0	
132 Naphthalene	128	13.765	13.765	0.000	97	1071775	25.0	25.5	
133 1,2,3-Trichlorobenzene	180	13.993	13.993	0.000	96	326874	25.0	25.6	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
L_8260_IS_00007	Amount Added: 2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 12:23:08 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0974.D

Injection Date: 14-Sep-2019 11:40:12 Instrument ID: HP5977L

Lims ID: CCVIS

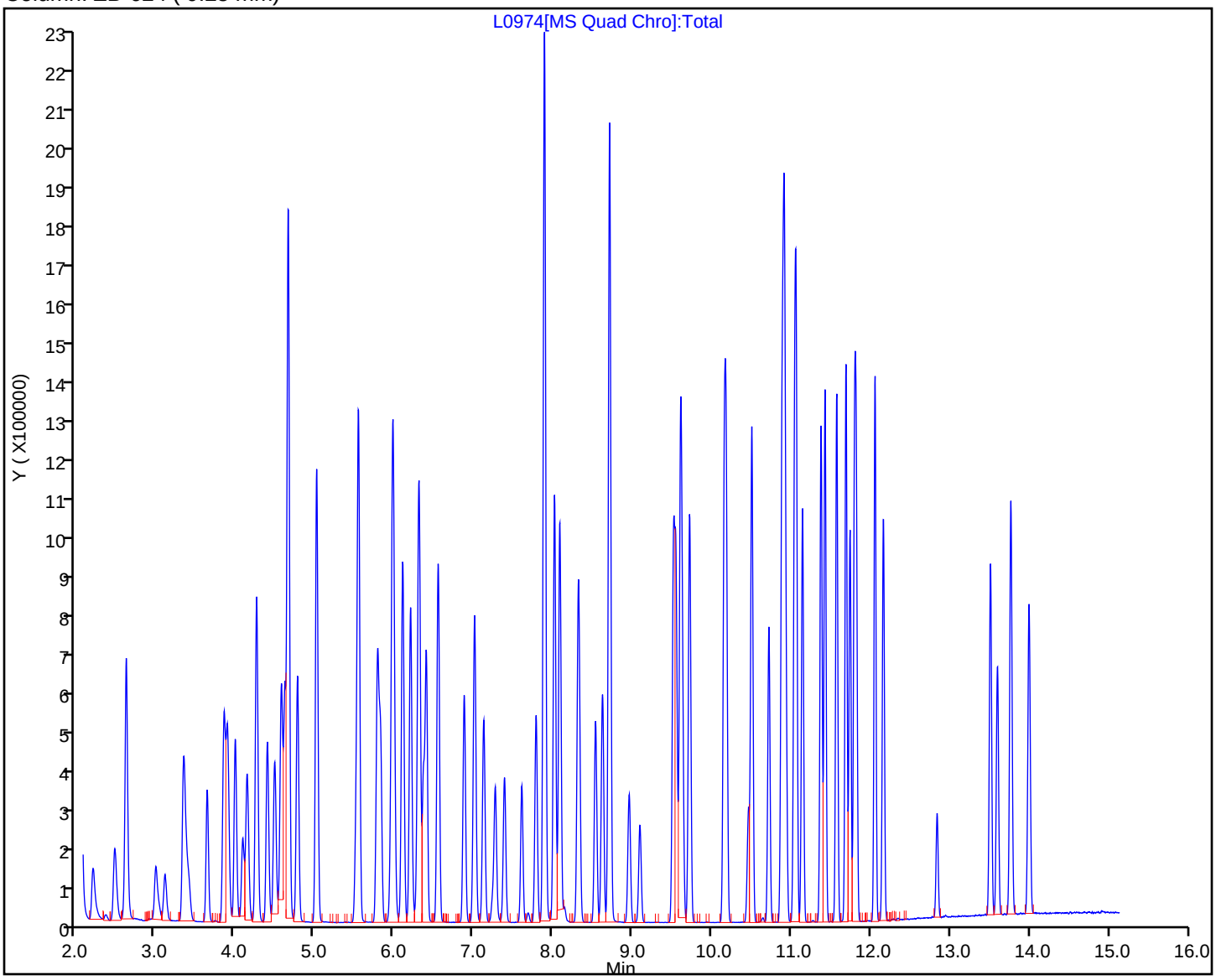
Client ID:

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 3

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492149/3 Calibration Date: 09/15/2019 11:21

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L1031.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.448	1.534	0.1000	26.5	25.0	5.9	50.0
Chloromethane	Ave	2.029	2.069	0.1000	25.5	25.0	2.0	20.0
Vinyl chloride	Ave	1.521	1.609	0.1000	26.4	25.0	5.8	20.0
Butadiene	Ave	1.859	1.872		25.2	25.0	0.7	20.0
Bromomethane	Ave	0.8934	0.8516	0.1000	23.8	25.0	-4.7	50.0
Chloroethane	Ave	0.9214	0.8738	0.1000	23.7	25.0	-5.2	50.0
Dichlorofluoromethane	Ave	2.149	2.203		25.6	25.0	2.5	20.0
Trichlorofluoromethane	Ave	1.918	2.021	0.1000	26.3	25.0	5.4	20.0
Ethyl ether	Ave	1.494	1.515		25.4	25.0	1.4	20.0
Acrolein	Ave	0.3713	0.4054		136	125	9.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.116	1.253	0.1000	28.1	25.0	12.3	20.0
1,1-Dichloroethene	Ave	1.140	1.201	0.1000	26.3	25.0	5.3	20.0
Acetone	Ave	0.8304	0.8203	0.1000	123	125	-1.2	50.0
Iodomethane	Ave	2.006	2.190		27.3	25.0	9.2	20.0
Carbon disulfide	Ave	3.922	4.258	0.1000	27.1	25.0	8.6	20.0
Allyl chloride	Ave	2.435	2.609		26.8	25.0	7.1	20.0
Methyl acetate	Ave	1.762	1.807	0.1000	51.3	50.0	2.6	50.0
Methylene Chloride	Lin1		1.466	0.1000	26.0	25.0	3.9	20.0
2-Methyl-2-propanol	Ave	0.3439	0.3521		256	250	2.4	50.0
Methyl tert-butyl ether	Ave	3.991	4.196	0.1000	26.3	25.0	5.1	20.0
trans-1,2-Dichloroethene	Ave	1.392	1.476	0.1000	26.5	25.0	6.1	20.0
Acrylonitrile	Ave	0.9410	1.011		269	250	7.4	20.0
Hexane	Ave	2.035	2.279		28.0	25.0	12.0	20.0
Vinyl acetate	Ave	3.603	4.033		56.0	50.0	11.9	20.0
1,1-Dichloroethane	Ave	2.575	2.758	0.2000	26.8	25.0	7.1	20.0
2,2-Dichloropropane	Ave	1.313	1.469		28.0	25.0	11.9	20.0
2-Butanone (MEK)	Ave	1.174	1.192	0.1000	127	125	1.5	20.0
cis-1,2-Dichloroethene	Ave	1.457	1.603	0.1000	27.5	25.0	10.0	20.0
Bromochloromethane	Ave	0.7229	0.7986		27.6	25.0	10.5	20.0
Tetrahydrofuran	Ave	0.7560	0.7953		52.6	50.0	5.2	20.0
Chloroform	Lin1		2.399	0.2000	25.9	25.0	3.4	20.0
1,1,1-Trichloroethane	Ave	1.884	2.030	0.1000	26.9	25.0	7.7	20.0
Cyclohexane	Ave	2.528	2.850	0.1000	28.2	25.0	12.8	20.0
1,1-Dichloropropene	Ave	1.666	1.825		27.4	25.0	9.6	20.0
Carbon tetrachloride	Ave	1.699	1.845	0.1000	27.1	25.0	8.6	20.0
Isobutyl alcohol	Ave	0.1340	0.1424		664	625	6.2	50.0
Benzene	Ave	5.141	5.454	0.5000	26.5	25.0	6.1	20.0
1,2-Dichloroethane	Ave	2.118	2.136	0.1000	25.2	25.0	0.8	20.0
n-Heptane	Ave	1.812	1.979		27.3	25.0	9.2	20.0
Trichloroethene	Ave	1.311	1.431	0.2000	27.3	25.0	9.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492149/3 Calibration Date: 09/15/2019 11:21

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L1031.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.018	2.232	0.1000	27.7	25.0	10.6	20.0
1,2-Dichloropropane	Ave	1.414	1.503	0.1000	26.6	25.0	6.3	20.0
1,4-Dioxane	Ave	0.0049	0.0050		508	500	1.5	50.0
Dibromomethane	Ave	0.8667	0.9143	0.1000	26.4	25.0	5.5	20.0
Bromodichloromethane	Ave	1.673	1.767	0.2000	26.4	25.0	5.6	20.0
2-Chloroethyl vinyl ether	Ave	0.999	0.9425		23.6	25.0	-5.7	20.0
cis-1,3-Dichloropropene	Ave	1.946	2.109	0.2000	27.1	25.0	8.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5587	0.6047	0.1000	135	125	8.2	20.0
Toluene	Ave	0.8530	0.9049	0.4000	26.5	25.0	6.1	20.0
Ethyl methacrylate	Ave	0.4403	0.4629		26.3	25.0	5.1	20.0
trans-1,3-Dichloropropene	Ave	0.4836	0.5168	0.1000	26.7	25.0	6.9	20.0
1,1,2-Trichloroethane	Ave	0.2608	0.2681	0.1000	25.7	25.0	2.8	20.0
Tetrachloroethene	Ave	0.3466	0.3716	0.2000	26.8	25.0	7.2	20.0
1,3-Dichloropropane	Ave	0.5397	0.5386		25.0	25.0	-0.2	20.0
2-Hexanone	Ave	0.3899	0.4044	0.1000	130	125	3.7	20.0
Dibromochloromethane	Ave	0.3407	0.3644	0.1000	26.7	25.0	7.0	20.0
1,2-Dibromoethane	Ave	0.3342	0.3464		25.9	25.0	3.7	20.0
Chlorobenzene	Ave	0.9217	0.9621	0.5000	26.1	25.0	4.4	20.0
Ethylbenzene	Ave	1.501	1.618	0.1000	27.0	25.0	7.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3333	0.3701		27.8	25.0	11.0	20.0
m,p-Xylene	Ave	0.5874	0.6533	0.1000	27.8	25.0	11.2	20.0
o-Xylene	Ave	0.5785	0.6577	0.3000	28.4	25.0	13.7	20.0
Styrene	Ave	0.9160	1.055	0.3000	28.8	25.0	15.2	20.0
Bromoform	Ave	0.2309	0.2581	0.1000	27.9	25.0	11.8	50.0
Isopropylbenzene	Ave	2.813	2.973	0.1000	26.4	25.0	5.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9524	0.9317	0.3000	24.5	25.0	-2.2	20.0
Bromobenzene	Ave	0.7431	0.7254		24.4	25.0	-2.4	20.0
N-Propylbenzene	Ave	3.394	3.509		25.8	25.0	3.4	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2950		24.5	25.0	-2.0	50.0
1,2,3-Trichloropropane	Ave	0.3188	0.3091		24.2	25.0	-3.1	20.0
2-Chlorotoluene	Ave	0.7103	0.7315		25.7	25.0	3.0	20.0
1,3,5-Trimethylbenzene	Ave	2.472	2.549		25.8	25.0	3.2	20.0
4-Chlorotoluene	Ave	2.117	2.145		25.3	25.0	1.4	20.0
tert-Butylbenzene	Lin1		0.5655		25.2	25.0	0.7	20.0
1,2,4-Trimethylbenzene	Ave	2.515	2.649		26.3	25.0	5.3	20.0
sec-Butylbenzene	Ave	3.058	3.221		26.3	25.0	5.3	20.0
4-Isopropyltoluene	Ave	2.615	2.774		26.5	25.0	6.1	20.0
1,3-Dichlorobenzene	Ave	1.441	1.465	0.6000	25.4	25.0	1.7	20.0
1,4-Dichlorobenzene	Ave	1.477	1.473	0.5000	24.9	25.0	-0.3	20.0
n-Butylbenzene	Ave	2.369	2.494		26.3	25.0	5.3	20.0
1,2-Dichlorobenzene	Ave	1.457	1.473	0.4000	25.3	25.0	1.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492149/3 Calibration Date: 09/15/2019 11:21

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L1031.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2230	0.2031	0.0500	22.8	25.0	-8.9	50.0
1,2,4-Trichlorobenzene	Ave	1.013	1.045	0.2000	25.8	25.0	3.1	20.0
Hexachlorobutadiene	Ave	0.4033	0.4406		27.3	25.0	9.2	20.0
Naphthalene	Ave	3.107	3.173		25.5	25.0	2.1	20.0
1,2,3-Trichlorobenzene	Ave	0.9458	0.9686		25.6	25.0	2.4	20.0
Dibromofluoromethane (Surr)	Ave	1.324	1.408		26.6	25.0	6.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.643	1.715		26.1	25.0	4.4	20.0
Toluene-d8 (Surr)	Ave	1.270	1.351		26.6	25.0	6.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.3590	0.3992		27.8	25.0	11.2	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1031.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 15-Sep-2019 11:21:44 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0084156-003
Operator ID: OI Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 12:21:27 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0319

First Level Reviewer: izquierdoo Date: 15-Sep-2019 12:21:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.549	0.000	99	155718	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.514	9.514	0.000	87	571836	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	95	318502	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.977	0.000	94	219293	25.0	26.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.295	0.000	97	267096	25.0	26.1	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	772446	25.0	26.6	
$ 7 4-Bromofluorobenzene (Surr	174	10.716	10.716	0.000	98	228292	25.0	27.8	
10 Dichlorodifluoromethane	85	2.199	2.199	0.000	99	238797	25.0	26.5	
13 Chloromethane	50	2.472	2.472	0.000	99	322170	25.0	25.5	
14 Vinyl chloride	62	2.607	2.607	0.000	98	250594	25.0	26.4	
15 Butadiene	54	2.617	2.617	0.000	88	291446	25.0	25.2	
18 Bromomethane	94	2.990	2.990	0.000	92	132614	25.0	23.8	
19 Chloroethane	64	3.102	3.102	0.000	98	136063	25.0	23.7	
20 Dichlorofluoromethane	67	3.337	3.337	0.000	97	343066	25.0	25.6	
21 Trichlorofluoromethane	101	3.360	3.360	0.000	98	314765	25.0	26.3	
26 Ethyl ether	59	3.639	3.639	0.000	95	235903	25.0	25.4	
28 Acrolein	56	3.845	3.845	0.000	99	315675	125.0	136.5	
29 1,1,2-Trichloro-1,2,2-trif	101	3.865	3.865	0.000	93	195178	25.0	28.1	
30 1,1-Dichloroethene	96	3.897	3.897	0.000	95	186981	25.0	26.3	
31 Acetone	43	3.993	3.993	0.000	100	638657	125.0	123.5	
33 Iodomethane	142	4.086	4.086	0.000	99	341029	25.0	27.3	
35 Carbon disulfide	76	4.141	4.141	0.000	100	662978	25.0	27.1	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	92	406232	25.0	26.8	
38 Methyl acetate	43	4.266	4.266	0.000	99	562794	50.0	51.3	
39 Methylene Chloride	84	4.395	4.395	0.000	99	228258	25.0	26.0	
40 2-Methyl-2-propanol	59	4.488	4.488	0.000	100	548254	250.0	256.0	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	653406	25.0	26.3	
42 trans-1,2-Dichloroethene	96	4.617	4.617	0.000	95	229829	25.0	26.5	
44 Acrylonitrile	53	4.659	4.659	0.000	99	1573894	250.0	268.5	
47 Hexane	57	4.778	4.778	0.000	90	354916	25.0	28.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.019	5.019	0.000	97	1256155	50.0	56.0	
50 1,1-Dichloroethane	63	5.022	5.022	0.000	95	429402	25.0	26.8	
56 2,2-Dichloropropane	77	5.520	5.520	0.000	93	228822	25.0	28.0	
57 2-Butanone (MEK)	43	5.546	5.546	0.000	99	928318	125.0	126.9	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	86	249679	25.0	27.5	
60 Chlorobromomethane	128	5.778	5.778	0.000	95	124357	25.0	27.6	
61 Tetrahydrofuran	42	5.794	5.794	0.000	91	247677	50.0	52.6	
62 Chloroform	83	5.823	5.823	0.000	93	373495	25.0	25.9	
64 1,1,1-Trichloroethane	97	5.967	5.967	0.000	98	316035	25.0	26.9	
65 Cyclohexane	56	5.987	5.987	0.000	93	443796	25.0	28.2	
66 Carbon tetrachloride	117	6.102	6.102	0.000	93	287229	25.0	27.1	
67 1,1-Dichloropropene	75	6.102	6.102	0.000	92	284260	25.0	27.4	
69 Isobutyl alcohol	43	6.202	6.202	0.000	96	554143	625.0	664.0	
70 Benzene	78	6.311	6.311	0.000	97	849343	25.0	26.5	
72 1,2-Dichloroethane	62	6.363	6.363	0.000	96	332632	25.0	25.2	
73 n-Heptane	43	6.398	6.398	0.000	94	308141	25.0	27.3	
75 Trichloroethene	95	6.877	6.877	0.000	94	222823	25.0	27.3	
76 Methylcyclohexane	83	7.009	7.009	0.000	94	347621	25.0	27.7	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	95	234070	25.0	26.6	
81 1,4-Dioxane	88	7.237	7.237	0.000	97	56786	500.0	507.7	M
82 Dibromomethane	93	7.270	7.270	0.000	96	142375	25.0	26.4	
83 Dichlorobromomethane	83	7.385	7.385	0.000	98	275158	25.0	26.4	
84 2-Chloroethyl vinyl ether	63	7.601	7.601	0.000	92	146761	25.0	23.6	
85 cis-1,3-Dichloropropene	75	7.781	7.781	0.000	94	328449	25.0	27.1	
87 4-Methyl-2-pentanone (MIBK	43	7.887	7.887	0.000	96	1729040	125.0	135.3	
88 Toluene	92	8.083	8.083	0.000	99	517436	25.0	26.5	
90 Ethyl methacrylate	69	8.308	8.308	0.000	91	264710	25.0	26.3	
91 trans-1,3-Dichloropropene	75	8.327	8.327	0.000	97	295515	25.0	26.7	
93 1,1,2-Trichloroethane	83	8.533	8.533	0.000	93	153306	25.0	25.7	
94 Tetrachloroethene	166	8.620	8.620	0.000	97	212507	25.0	26.8	
95 1,3-Dichloropropane	76	8.704	8.704	0.000	94	308009	25.0	25.0	
96 2-Hexanone	43	8.710	8.710	0.000	96	1156156	125.0	129.6	
98 Chlorodibromomethane	129	8.954	8.954	0.000	90	208349	25.0	26.7	
101 Ethylene Dibromide	107	9.093	9.093	0.000	98	198089	25.0	25.9	
103 Chlorobenzene	112	9.546	9.546	0.000	95	550151	25.0	26.1	
104 Ethylbenzene	91	9.604	9.604	0.000	98	925214	25.0	27.0	
105 1,1,1,2-Tetrachloroethane	131	9.623	9.623	0.000	96	211618	25.0	27.8	
106 m-Xylene & p-Xylene	106	9.716	9.716	0.000	0	373576	25.0	27.8	
107 o-Xylene	106	10.154	10.154	0.000	97	376119	25.0	28.4	
109 Styrene	104	10.179	10.179	0.000	96	603404	25.0	28.8	
110 Bromoform	173	10.456	10.456	0.000	95	147570	25.0	27.9	
111 Isopropylbenzene	105	10.501	10.501	0.000	95	946807	25.0	26.4	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	96	296745	25.0	24.5	
113 Bromobenzene	156	10.887	10.887	0.000	94	231030	25.0	24.4	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	1117625	25.0	25.8	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.916	0.000	73	93967	25.0	24.5	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	85	98434	25.0	24.2	
117 2-Chlorotoluene	126	11.041	11.041	0.000	96	232997	25.0	25.7	
118 1,3,5-Trimethylbenzene	105	11.060	11.060	0.000	95	812017	25.0	25.8	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	683278	25.0	25.3	
120 tert-Butylbenzene	134	11.372	11.372	0.000	93	180120	25.0	25.2	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	843853	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	1025887	25.0	26.3	
123 4-Isopropyltoluene	119	11.687	11.687	0.000	97	883569	25.0	26.5	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	466750	25.0	25.4	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	94	469151	25.0	24.9	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	794457	25.0	26.3	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	98	469238	25.0	25.3	
129 1,2-Dibromo-3-Chloropropan	75	12.835	12.835	0.000	93	64683	25.0	22.8	
130 1,2,4-Trichlorobenzene	180	13.507	13.507	0.000	95	332816	25.0	25.8	
131 Hexachlorobutadiene	225	13.597	13.597	0.000	97	140315	25.0	27.3	
132 Naphthalene	128	13.765	13.765	0.000	97	1010605	25.0	25.5	
133 1,2,3-Trichlorobenzene	180	13.993	13.993	0.000	95	308488	25.0	25.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
L_8260_IS_00007	Amount Added: 2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 15-Sep-2019 12:21:28 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1031.D

Injection Date: 15-Sep-2019 11:21:44 Instrument ID: HP5977L

Lims ID: CCVIS

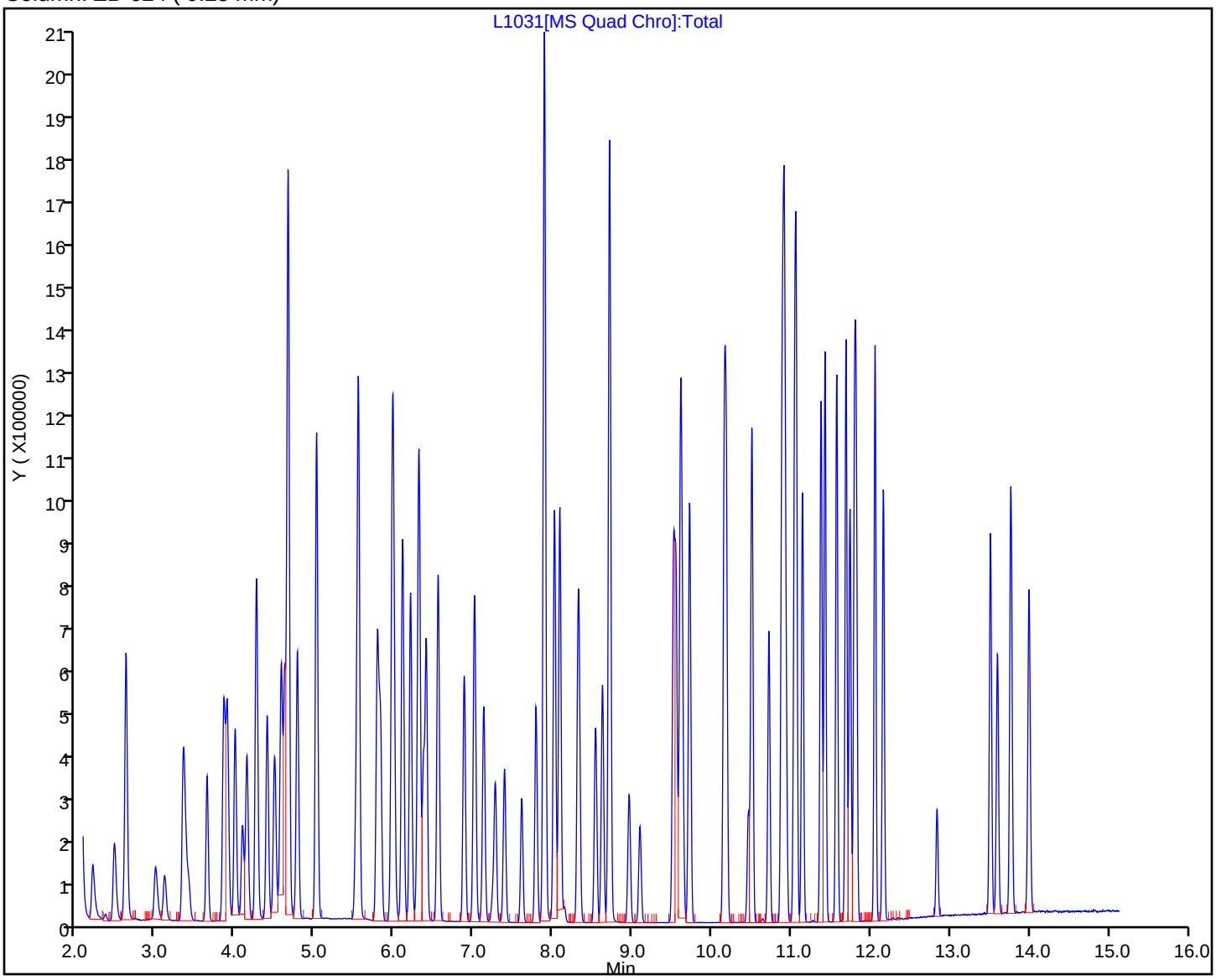
Client ID:

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 3

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Eurofins TestAmerica, Buffalo

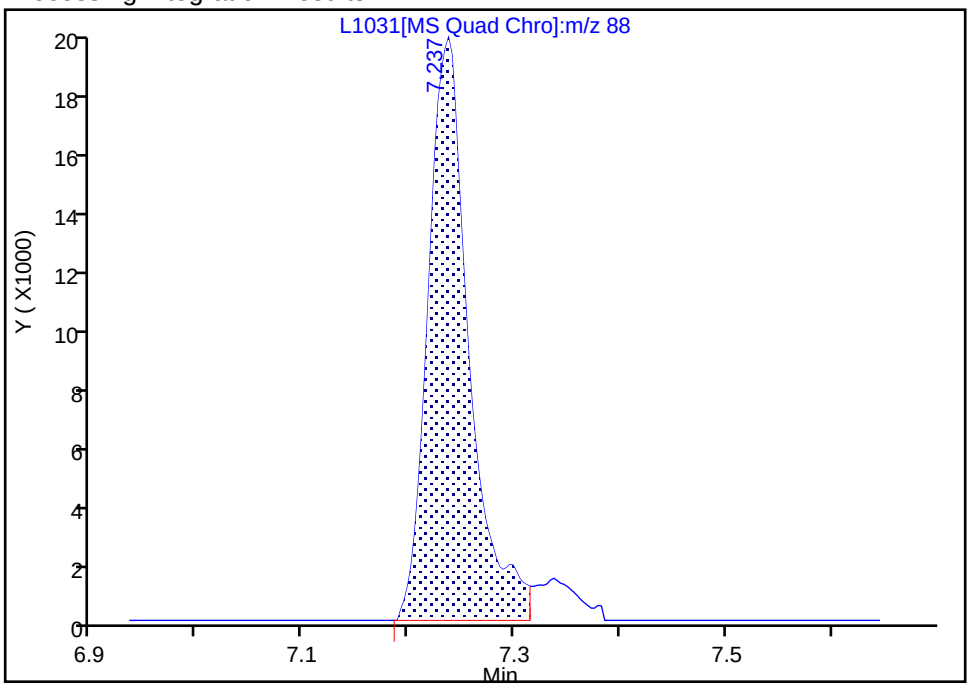
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1031.D
Injection Date: 15-Sep-2019 11:21:44 Instrument ID: HP5977L
Lims ID: CCVIS
Client ID:
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

81 1,4-Dioxane, CAS: 123-91-1

Signal: 1

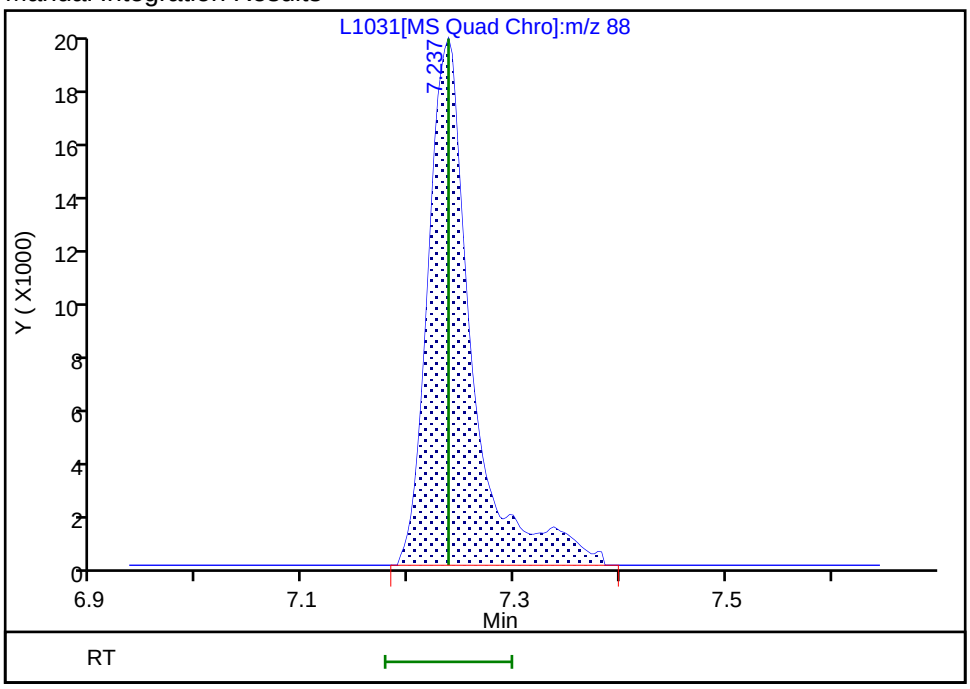
Processing Integration Results

RT: 7.24
Area: 52900
Amount: 472.9108
Amount Units: ug/L



Manual Integration Results

RT: 7.24
Area: 56786
Amount: 507.6505
Amount Units: ug/L



Reviewer: izquierdoo, 15-Sep-2019 12:21:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492226/3 Calibration Date: 09/16/2019 09:38

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L1086.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.448	1.603	0.1000	27.7	25.0	10.7	50.0
Chloromethane	Ave	2.029	1.965	0.1000	24.2	25.0	-3.1	20.0
Vinyl chloride	Ave	1.521	1.486	0.1000	24.4	25.0	-2.3	20.0
Butadiene	Ave	1.859	1.767		23.8	25.0	-4.9	20.0
Bromomethane	Ave	0.8934	0.6898	0.1000	19.3	25.0	-22.8	50.0
Chloroethane	Ave	0.9214	0.8127	0.1000	22.1	25.0	-11.8	50.0
Dichlorofluoromethane	Ave	2.149	2.162		25.2	25.0	0.6	20.0
Trichlorofluoromethane	Ave	1.918	2.079	0.1000	27.1	25.0	8.4	20.0
Ethyl ether	Ave	1.494	1.534		25.7	25.0	2.7	20.0
Acrolein	Ave	0.3713	0.4147		140	125	11.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.116	1.152	0.1000	25.8	25.0	3.2	20.0
1,1-Dichloroethene	Ave	1.140	1.115	0.1000	24.4	25.0	-2.2	20.0
Acetone	Ave	0.8304	0.8149	0.1000	123	125	-1.9	50.0
Iodomethane	Ave	2.006	2.109		26.3	25.0	5.1	20.0
Carbon disulfide	Ave	3.922	3.930	0.1000	25.0	25.0	0.2	20.0
Allyl chloride	Ave	2.435	2.566		26.3	25.0	5.4	20.0
Methyl acetate	Ave	1.762	1.912	0.1000	54.2	50.0	8.5	50.0
Methylene Chloride	Lin1		1.423	0.1000	25.2	25.0	0.8	20.0
2-Methyl-2-propanol	Ave	0.3439	0.3682		268	250	7.1	50.0
Methyl tert-butyl ether	Ave	3.991	4.281	0.1000	26.8	25.0	7.3	20.0
trans-1,2-Dichloroethene	Ave	1.392	1.410	0.1000	25.3	25.0	1.3	20.0
Acrylonitrile	Ave	0.9410	1.067		283	250	13.4	20.0
Hexane	Ave	2.035	2.265		27.8	25.0	11.3	20.0
Vinyl acetate	Ave	3.603	4.493		62.3	50.0	24.7*	20.0
1,1-Dichloroethane	Ave	2.575	2.756	0.2000	26.8	25.0	7.0	20.0
2,2-Dichloropropane	Ave	1.313	1.471		28.0	25.0	12.0	20.0
2-Butanone (MEK)	Ave	1.174	1.321	0.1000	141	125	12.5	20.0
cis-1,2-Dichloroethene	Ave	1.457	1.582	0.1000	27.1	25.0	8.6	20.0
Bromochloromethane	Ave	0.7229	0.8101		28.0	25.0	12.1	20.0
Tetrahydrofuran	Ave	0.7560	0.8587		56.8	50.0	13.6	20.0
Chloroform	Lin1		2.442	0.2000	26.3	25.0	5.3	20.0
1,1,1-Trichloroethane	Ave	1.884	2.011	0.1000	26.7	25.0	6.8	20.0
Cyclohexane	Ave	2.528	2.793	0.1000	27.6	25.0	10.5	20.0
1,1-Dichloropropene	Ave	1.666	1.763		26.5	25.0	5.8	20.0
Carbon tetrachloride	Ave	1.699	1.831	0.1000	26.9	25.0	7.8	20.0
Isobutyl alcohol	Ave	0.1340	0.1540		718	625	14.9	50.0
Benzene	Ave	5.141	5.367	0.5000	26.1	25.0	4.4	20.0
1,2-Dichloroethane	Ave	2.118	2.298	0.1000	27.1	25.0	8.5	20.0
n-Heptane	Ave	1.812	2.157		29.8	25.0	19.1	20.0
Trichloroethene	Ave	1.311	1.413	0.2000	27.0	25.0	7.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492226/3 Calibration Date: 09/16/2019 09:38

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L1086.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.018	2.166	0.1000	26.8	25.0	7.3	20.0
1,2-Dichloropropane	Ave	1.414	1.555	0.1000	27.5	25.0	9.9	20.0
1,4-Dioxane	Ave	0.0049	0.0052		527	500	5.4	50.0
Dibromomethane	Ave	0.8667	0.9770	0.1000	28.2	25.0	12.7	20.0
Bromodichloromethane	Ave	1.673	1.880	0.2000	28.1	25.0	12.4	20.0
2-Chloroethyl vinyl ether	Ave	0.999	1.131		28.3	25.0	13.1	20.0
cis-1,3-Dichloropropene	Ave	1.946	2.276	0.2000	29.2	25.0	17.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5587	0.6347	0.1000	142	125	13.6	20.0
Toluene	Ave	0.8530	0.8964	0.4000	26.3	25.0	5.1	20.0
Ethyl methacrylate	Ave	0.4403	0.4949		28.1	25.0	12.4	20.0
trans-1,3-Dichloropropene	Ave	0.4836	0.5632	0.1000	29.1	25.0	16.5	20.0
1,1,2-Trichloroethane	Ave	0.2608	0.2743	0.1000	26.3	25.0	5.2	20.0
Tetrachloroethene	Ave	0.3466	0.3620	0.2000	26.1	25.0	4.5	20.0
1,3-Dichloropropane	Ave	0.5397	0.5696		26.4	25.0	5.5	20.0
2-Hexanone	Ave	0.3899	0.4516	0.1000	145	125	15.8	20.0
Dibromochloromethane	Ave	0.3407	0.3780	0.1000	27.7	25.0	11.0	20.0
1,2-Dibromoethane	Ave	0.3342	0.3763		28.2	25.0	12.6	20.0
Chlorobenzene	Ave	0.9217	0.995	0.5000	27.0	25.0	7.9	20.0
Ethylbenzene	Ave	1.501	1.613	0.1000	26.9	25.0	7.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3333	0.3656		27.4	25.0	9.7	20.0
m,p-Xylene	Ave	0.5874	0.6577	0.1000	28.0	25.0	12.0	20.0
o-Xylene	Ave	0.5785	0.6488	0.3000	28.0	25.0	12.2	20.0
Styrene	Ave	0.9160	1.089	0.3000	29.7	25.0	18.9	20.0
Bromoform	Ave	0.2309	0.2779	0.1000	30.1	25.0	20.4	50.0
Isopropylbenzene	Ave	2.813	2.981	0.1000	26.5	25.0	6.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9524	0.9783	0.3000	25.7	25.0	2.7	20.0
Bromobenzene	Ave	0.7431	0.7891		26.5	25.0	6.2	20.0
N-Propylbenzene	Ave	3.394	3.508		25.8	25.0	3.3	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.3601		29.8	25.0	19.1	50.0
1,2,3-Trichloropropane	Ave	0.3188	0.3301		25.9	25.0	3.5	20.0
2-Chlorotoluene	Ave	0.7103	0.7413		26.1	25.0	4.4	20.0
1,3,5-Trimethylbenzene	Ave	2.472	2.602		26.3	25.0	5.3	20.0
4-Chlorotoluene	Ave	2.117	2.232		26.4	25.0	5.5	20.0
tert-Butylbenzene	Lin1		0.5572		24.8	25.0	-0.8	20.0
1,2,4-Trimethylbenzene	Ave	2.515	2.715		27.0	25.0	7.9	20.0
sec-Butylbenzene	Ave	3.058	3.244		26.5	25.0	6.1	20.0
4-Isopropyltoluene	Ave	2.615	2.857		27.3	25.0	9.3	20.0
1,3-Dichlorobenzene	Ave	1.441	1.541	0.6000	26.7	25.0	6.9	20.0
1,4-Dichlorobenzene	Ave	1.477	1.576	0.5000	26.7	25.0	6.7	20.0
n-Butylbenzene	Ave	2.369	2.491		26.3	25.0	5.2	20.0
1,2-Dichlorobenzene	Ave	1.457	1.547	0.4000	26.5	25.0	6.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Lab Sample ID: CCVIS 480-492226/3 Calibration Date: 09/16/2019 09:38

Instrument ID: HP5977L Calib Start Date: 09/13/2019 16:10

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 09/13/2019 18:58

Lab File ID: L1086.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2230	0.2190	0.0500	24.6	25.0	-1.8	50.0
1,2,4-Trichlorobenzene	Ave	1.013	1.089	0.2000	26.9	25.0	7.5	20.0
Hexachlorobutadiene	Ave	0.4033	0.4556		28.2	25.0	13.0	20.0
Naphthalene	Ave	3.107	3.259		26.2	25.0	4.9	20.0
1,2,3-Trichlorobenzene	Ave	0.9458	1.014		26.8	25.0	7.2	20.0
Dibromofluoromethane (Surr)	Ave	1.324	1.402		26.5	25.0	5.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.643	1.766		26.9	25.0	7.5	20.0
Toluene-d8 (Surr)	Ave	1.270	1.318		26.0	25.0	3.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.3590	0.4066		28.3	25.0	13.3	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1086.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Sep-2019 09:38:02 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0084170-003
Operator ID: BP Instrument ID: HP5977L
Sublist: chrom-L-8260*sub1

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Sep-2019 10:12:11 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: phillipsb Date: 16-Sep-2019 10:12:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.549	0.000	99	127942	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.514	9.514	0.000	86	505342	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	276200	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.977	0.000	91	179420	25.0	26.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.295	0.000	98	225965	25.0	26.9	a
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	666236	25.0	26.0	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.000	99	205493	25.0	28.3	
10 Dichlorodifluoromethane	85	2.199	2.199	0.000	99	205073	25.0	27.7	
13 Chloromethane	50	2.472	2.472	0.000	99	251403	25.0	24.2	
14 Vinyl chloride	62	2.607	2.607	0.000	98	190154	25.0	24.4	
15 Butadiene	54	2.617	2.617	0.000	89	226033	25.0	23.8	
18 Bromomethane	94	2.987	2.987	0.000	92	88258	25.0	19.3	
19 Chloroethane	64	3.099	3.099	0.000	97	103983	25.0	22.1	
20 Dichlorofluoromethane	67	3.337	3.337	0.000	97	276642	25.0	25.2	
21 Trichlorofluoromethane	101	3.357	3.357	0.000	98	266050	25.0	27.1	
26 Ethyl ether	59	3.636	3.636	0.000	96	196231	25.0	25.7	
28 Acrolein	56	3.845	3.845	0.000	100	265255	125.0	139.6	
29 1,1,2-Trichloro-1,2,2-trif	101	3.861	3.861	0.000	93	147353	25.0	25.8	
30 1,1-Dichloroethene	96	3.897	3.897	0.000	94	142664	25.0	24.4	
31 Acetone	43	3.990	3.990	0.000	100	521282	125.0	122.7	
33 Iodomethane	142	4.080	4.080	0.000	100	269811	25.0	26.3	
35 Carbon disulfide	76	4.138	4.138	0.000	100	502810	25.0	25.0	
37 3-Chloro-1-propene	41	4.254	4.254	0.000	91	328345	25.0	26.3	
38 Methyl acetate	43	4.267	4.267	0.000	99	489128	50.0	54.2	
39 Methylene Chloride	84	4.395	4.395	0.000	97	182083	25.0	25.2	
40 2-Methyl-2-propanol	59	4.488	4.488	0.000	99	471027	250.0	267.6	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	97	547748	25.0	26.8	
42 trans-1,2-Dichloroethene	96	4.617	4.617	0.000	95	180345	25.0	25.3	
44 Acrylonitrile	53	4.659	4.659	0.000	100	1364972	250.0	283.4	
47 Hexane	57	4.775	4.775	0.000	90	289725	25.0	27.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
49 Vinyl acetate	43	5.016	5.016	0.000	97	1149703	50.0	62.3	
50 1,1-Dichloroethane	63	5.019	5.019	0.000	96	352614	25.0	26.8	
56 2,2-Dichloropropane	77	5.520	5.520	0.000	93	188234	25.0	28.0	
57 2-Butanone (MEK)	43	5.543	5.543	0.000	99	845228	125.0	140.6	
58 cis-1,2-Dichloroethene	96	5.543	5.543	0.000	87	202406	25.0	27.1	
60 Chlorobromomethane	128	5.781	5.781	0.000	95	103639	25.0	28.0	
61 Tetrahydrofuran	42	5.794	5.794	0.000	92	219717	50.0	56.8	
62 Chloroform	83	5.823	5.823	0.000	93	312378	25.0	26.3	
64 1,1,1-Trichloroethane	97	5.964	5.964	0.000	98	257329	25.0	26.7	
65 Cyclohexane	56	5.987	5.987	0.000	93	357400	25.0	27.6	
66 Carbon tetrachloride	117	6.102	6.102	0.000	94	234311	25.0	26.9	
67 1,1-Dichloropropene	75	6.102	6.102	0.000	91	225525	25.0	26.5	
69 Isobutyl alcohol	43	6.202	6.202	0.000	95	492611	625.0	718.4	
70 Benzene	78	6.311	6.311	0.000	97	686651	25.0	26.1	
72 1,2-Dichloroethane	62	6.363	6.363	0.000	96	293954	25.0	27.1	
73 n-Heptane	43	6.398	6.398	0.000	95	276022	25.0	29.8	
75 Trichloroethene	95	6.877	6.877	0.000	96	180840	25.0	27.0	
76 Methylcyclohexane	83	7.006	7.006	0.000	96	277185	25.0	26.8	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	95	198942	25.0	27.5	
81 1,4-Dioxane	88	7.234	7.234	0.000	97	52110	500.0	527.1	
82 Dibromomethane	93	7.266	7.266	0.000	95	125003	25.0	28.2	
83 Dichlorobromomethane	83	7.385	7.385	0.000	98	240547	25.0	28.1	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	91	144638	25.0	28.3	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	291207	25.0	29.2	
87 4-Methyl-2-pentanone (MIBK	43	7.887	7.887	0.000	96	1603784	125.0	142.0	
88 Toluene	92	8.083	8.083	0.000	99	453008	25.0	26.3	
90 Ethyl methacrylate	69	8.308	8.308	0.000	94	250088	25.0	28.1	
91 trans-1,3-Dichloropropene	75	8.324	8.324	0.000	97	284610	25.0	29.1	
93 1,1,2-Trichloroethane	83	8.530	8.530	0.000	92	138621	25.0	26.3	
94 Tetrachloroethene	166	8.620	8.620	0.000	97	182938	25.0	26.1	
95 1,3-Dichloropropane	76	8.704	8.704	0.000	94	287822	25.0	26.4	
96 2-Hexanone	43	8.710	8.710	0.000	94	1140955	125.0	144.8	
98 Chlorodibromomethane	129	8.958	8.958	0.000	91	191021	25.0	27.7	
101 Ethylene Dibromide	107	9.093	9.093	0.000	99	190169	25.0	28.2	
103 Chlorobenzene	112	9.546	9.546	0.000	95	502817	25.0	27.0	
104 Ethylbenzene	91	9.604	9.604	0.000	98	815334	25.0	26.9	
105 1,1,1,2-Tetrachloroethane	131	9.623	9.623	0.000	95	184750	25.0	27.4	
106 m-Xylene & p-Xylene	106	9.717	9.717	0.000	0	332363	25.0	28.0	
107 o-Xylene	106	10.154	10.154	0.000	96	327870	25.0	28.0	
109 Styrene	104	10.180	10.180	0.000	95	550387	25.0	29.7	
110 Bromoform	173	10.459	10.459	0.000	96	140448	25.0	30.1	
111 Isopropylbenzene	105	10.501	10.501	0.000	96	823413	25.0	26.5	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	270196	25.0	25.7	
113 Bromobenzene	156	10.887	10.887	0.000	94	217956	25.0	26.5	
114 N-Propylbenzene	91	10.906	10.906	0.000	98	968796	25.0	25.8	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.916	0.000	80	99458	25.0	29.8	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	85	91171	25.0	25.9	
117 2-Chlorotoluene	126	11.041	11.041	0.000	97	204733	25.0	26.1	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	95	718606	25.0	26.3	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	616551	25.0	26.4	
120 tert-Butylbenzene	134	11.376	11.376	0.000	94	153904	25.0	24.8	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	749987	25.0	27.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	895891	25.0	26.5	
123 4-Isopropyltoluene	119	11.688	11.688	0.000	97	789042	25.0	27.3	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	99	425502	25.0	26.7	
126 1,4-Dichlorobenzene	146	11.819	11.819	0.000	95	435352	25.0	26.7	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	688022	25.0	26.3	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	98	427417	25.0	26.5	
129 1,2-Dibromo-3-Chloropropan	75	12.835	12.835	0.000	86	60494	25.0	24.6	
130 1,2,4-Trichlorobenzene	180	13.507	13.507	0.000	94	300868	25.0	26.9	
131 Hexachlorobutadiene	225	13.597	13.597	0.000	97	125837	25.0	28.2	
132 Naphthalene	128	13.765	13.765	0.000	97	900186	25.0	26.2	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	96	280153	25.0	26.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	12.50	Units: uL	
GAS CORP mix_00360	Amount Added:	12.50	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 16-Sep-2019 10:12:12 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1086.D

Injection Date: 16-Sep-2019 09:38:02 Instrument ID: HP5977L

Lims ID: CCVIS

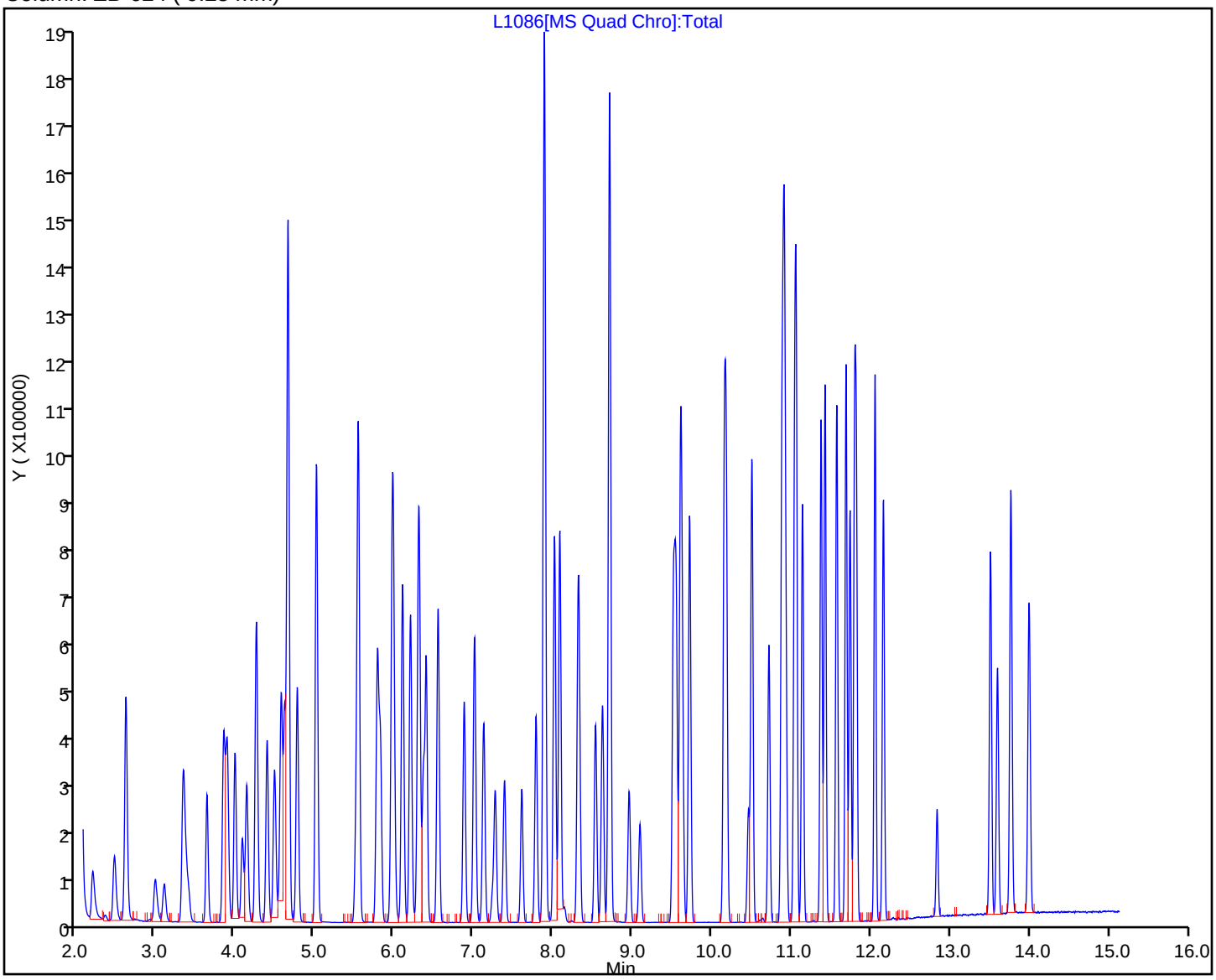
Client ID:

Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 3

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

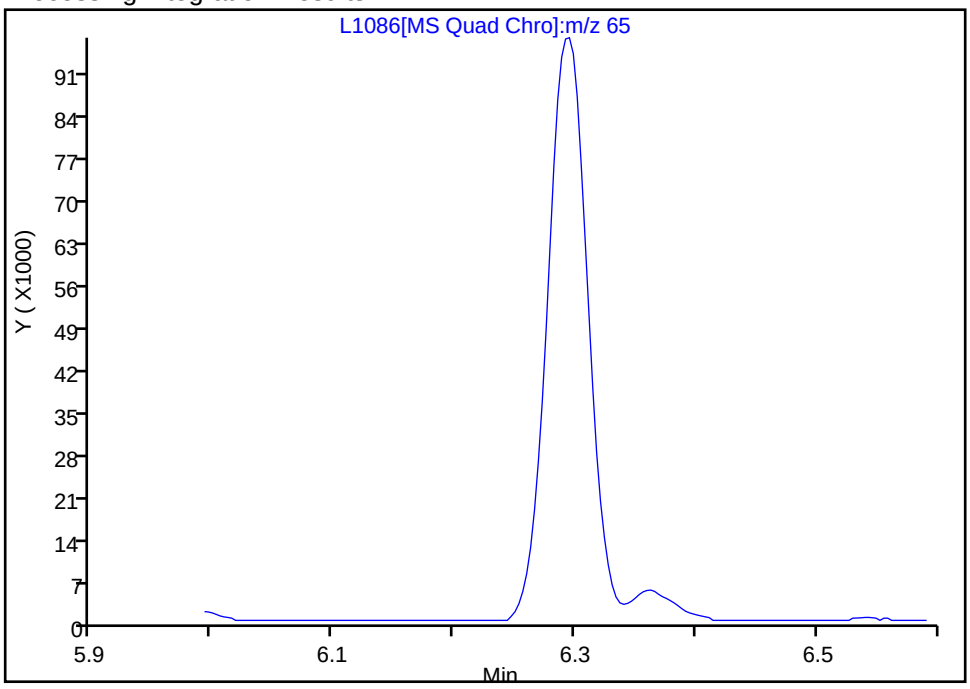
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1086.D
Injection Date: 16-Sep-2019 09:38:02 Instrument ID: HP5977L
Lims ID: CCVIS
Client ID:
Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

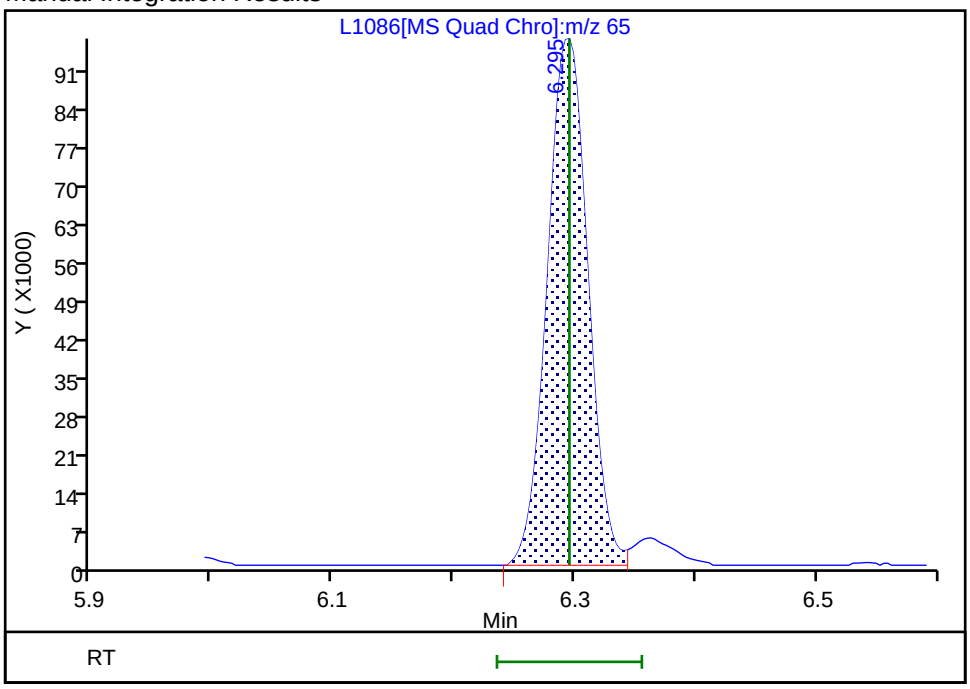
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.30
Area: 225965
Amount: 26.870590
Amount Units: ug/L



Reviewer: phillipsb, 16-Sep-2019 10:09:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8766.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	10-Sep-2019 13:48:30	ALS Bottle#:	2	Worklist Smp#:	5
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084010-005				
Operator ID:	kn	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	11-Sep-2019 11:14:16	Calib Date:	10-Sep-2019 21:32:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0328				
First Level Reviewer: nowakk		Date:	10-Sep-2019 13:57:37		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.765	3.765	0.000	0	230875	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

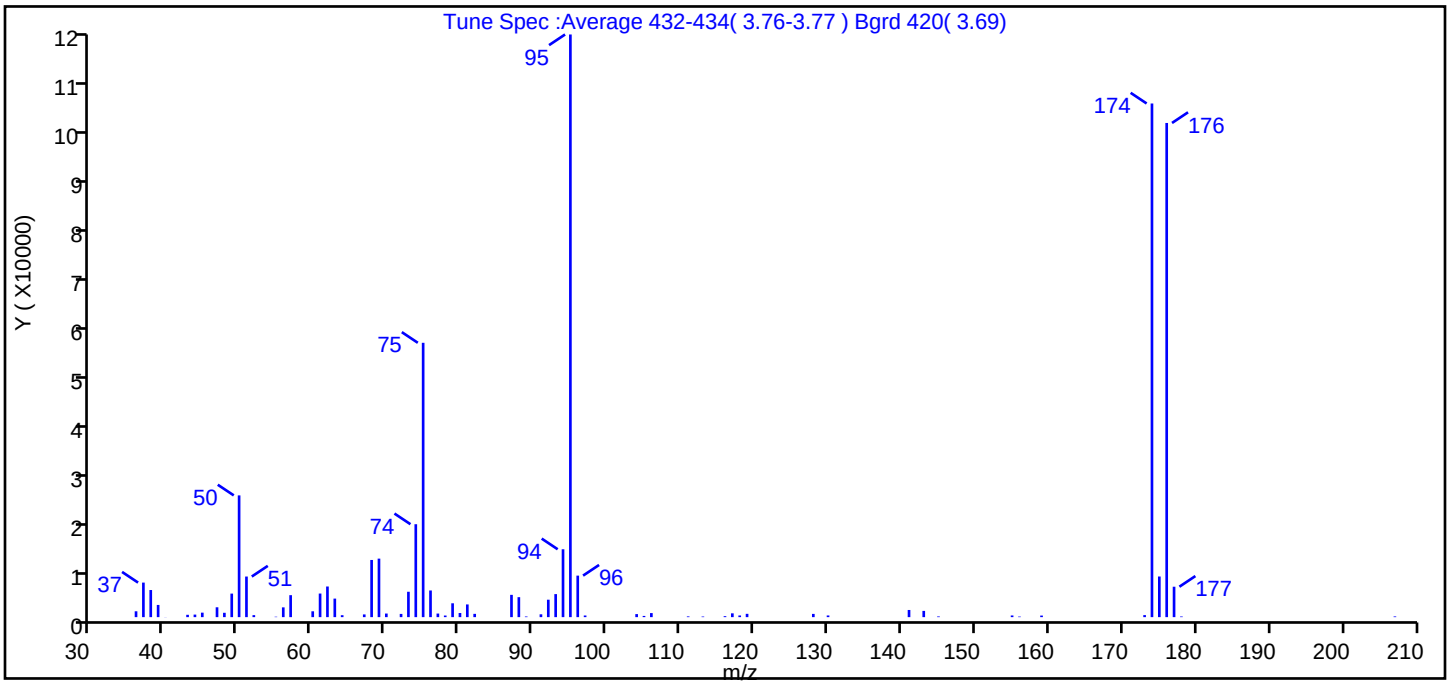
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8766.D
Injection Date: 10-Sep-2019 13:48:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: kn ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.9
75	30 to 60% of m/z 95	47.1
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	88.2
175	5 to 9% of m/z 174	7.0 (7.9)
176	Greater than 95% but less than 101% of m/z 174	84.8 (96.2)
177	5 to 9% of m/z 176	5.2 (6.2)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8766.D\S-8260.rslt\spectra.d
Injection Date: 10-Sep-2019 13:48:30
Spectrum: Tune Spec :Average 432-434(3.76-3.77) Bgrd 420(3.69)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1186	61.00	4768	82.00	665	118.00	336
37.00	6981	62.00	6192	87.00	4504	119.00	670
38.00	5479	63.00	3746	88.00	4035	128.00	656
39.00	2465	64.00	393	89.00	132	130.00	338
40.00	22	67.00	551	91.00	574	141.00	1448
43.00	473	68.00	11552	92.00	3524	143.00	1262
44.00	516	69.00	11823	93.00	4655	145.00	141
45.00	907	70.00	728	94.00	13714	155.00	338
47.00	1993	72.00	653	95.00	117728	156.00	116
48.00	880	73.00	5128	96.00	8389	159.00	319
49.00	4757	74.00	18776	97.00	332	173.00	412
50.00	24600	75.00	55432	104.00	617	174.00	103784
51.00	8204	76.00	5388	105.00	245	175.00	8212
52.00	405	77.00	726	106.00	820	176.00	99848
55.00	86	78.00	325	111.00	148	177.00	6146
56.00	1976	79.00	2799	113.00	123	178.00	131
57.00	4440	80.00	834	116.00	196	207.00	143
60.00	1183	81.00	2568	117.00	769		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8947.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	14-Sep-2019 08:39:30	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084133-002				
Operator ID:	OI	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	14-Sep-2019 08:47:51	Calib Date:	10-Sep-2019 21:32:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0317				
First Level Reviewer: nowakk		Date:	14-Sep-2019 08:47:51		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.820	3.820	0.000	0	1025439	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

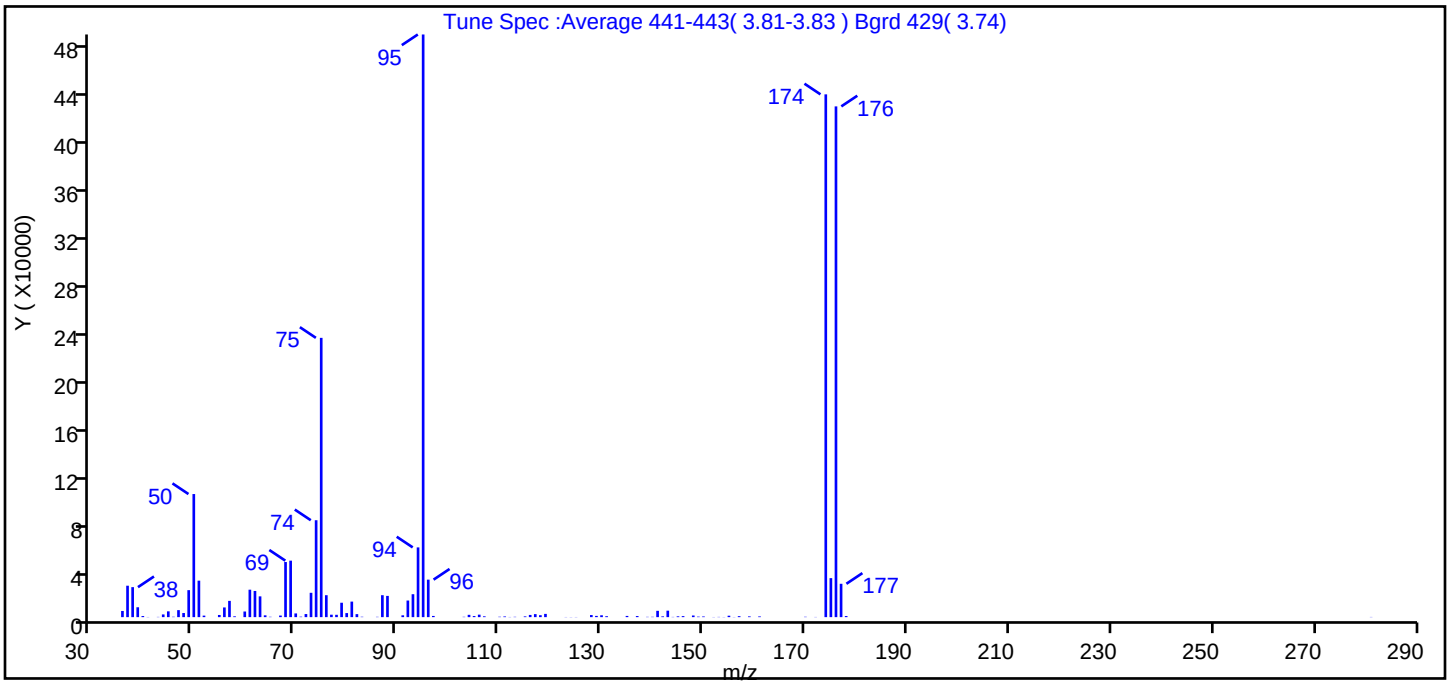
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8947.D
Injection Date: 14-Sep-2019 08:39:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: OI ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.1
75	30 to 60% of m/z 95	47.9
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	89.7
175	5 to 9% of m/z 174	6.7 (7.5)
176	Greater than 95% but less than 101% of m/z 174	87.7 (97.7)
177	5 to 9% of m/z 176	5.7 (6.5)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8947.D\S-8260.rslt\spectra.d
Injection Date: 14-Sep-2019 08:39:30
Spectrum: Tune Spec :Average 441-443(3.81-3.83) Bgrd 429(3.74)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5153	67.00	1316	97.00	1000	141.00	5273
37.00	26240	68.00	46016	103.00	275	142.00	639
38.00	25040	69.00	47152	104.00	1937	143.00	5401
39.00	8246	70.00	3095	105.00	911	144.00	187
40.00	908	71.00	390	106.00	2070	145.00	670
41.00	135	72.00	2579	107.00	684	146.00	847
43.00	200	73.00	20320	110.00	334	148.00	1369
44.00	2264	74.00	80904	111.00	571	149.00	424
45.00	4840	75.00	233152	112.00	145	150.00	552
46.00	323	76.00	18320	113.00	276	152.00	129
47.00	5849	77.00	2044	115.00	625	153.00	196
48.00	3446	78.00	1962	116.00	1838	154.00	124
49.00	22528	79.00	12024	117.00	2527	155.00	1184
50.00	102760	80.00	3379	118.00	1614	156.00	126
51.00	30456	81.00	12974	119.00	2715	157.00	809
52.00	1268	82.00	2514	123.00	133	159.00	629
55.00	1811	83.00	328	124.00	117	161.00	595
56.00	8096	86.00	263	125.00	130	170.00	302
57.00	13583	87.00	18320	128.00	1735	172.00	157
58.00	679	88.00	17736	129.00	1035	174.00	436416
60.00	4707	91.00	1526	130.00	1557	175.00	32568
61.00	22912	92.00	13871	131.00	775	176.00	426368
62.00	21864	93.00	19144	135.00	1014	177.00	27848
63.00	17352	94.00	58224	137.00	913	178.00	915
64.00	1514	95.00	486400	139.00	248	281.00	161
65.00	295	96.00	31304	140.00	283		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0947.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	13-Sep-2019 15:11:36	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084114-005				
Operator ID:	BP/LH	Instrument ID:	HP5977L		
Method:	\\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	18-Sep-2019 14:06:43	Calib Date:	13-Sep-2019 23:23:34		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D				
Column 1 :	ZB-624 (0.25 mm)		Det: MS Quad		
Process Host:	CTX0324				
First Level Reviewer: farrellr		Date:	18-Sep-2019 14:06:43		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 8 BFB	95	6.270	6.270	0.000	0	84669	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

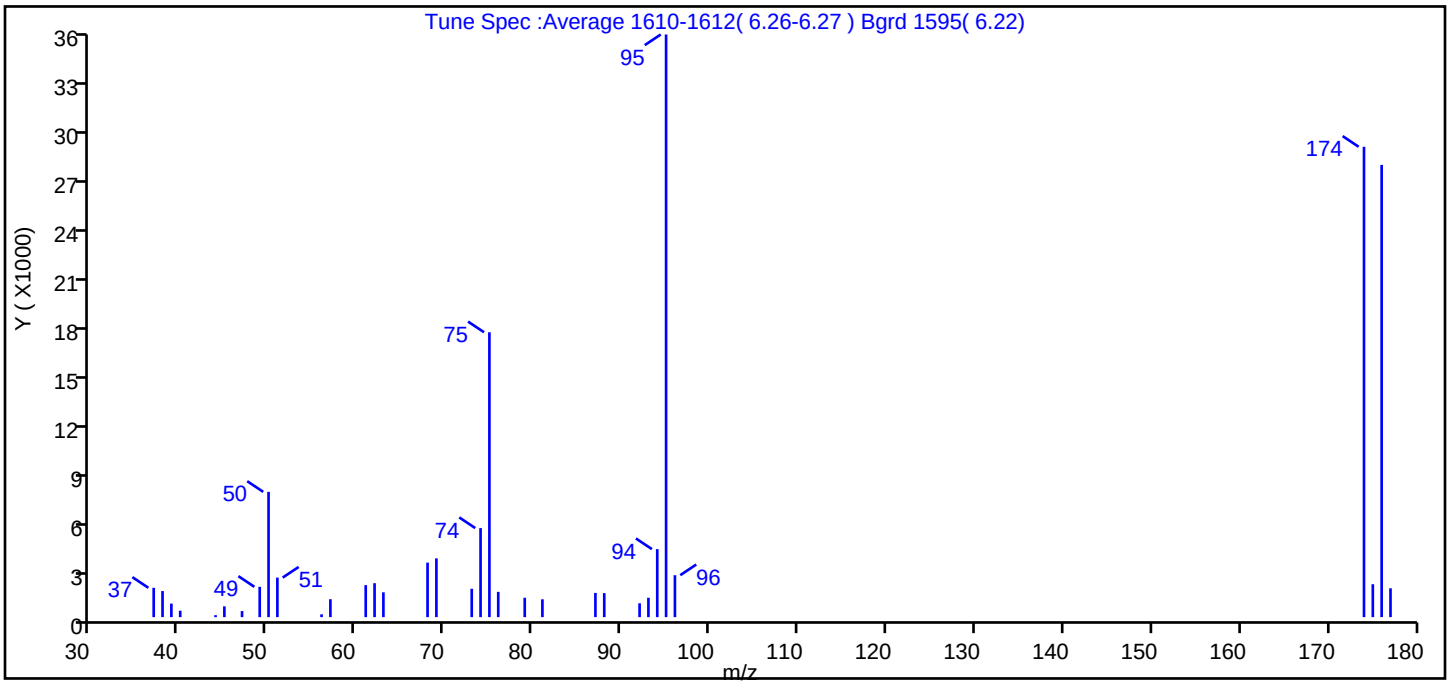
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0947.D
Injection Date: 13-Sep-2019 15:11:36 Instrument ID: HP5977L
Lims ID: BFB
Client ID:
Operator ID: BP/LH ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.5
75	30 to 60% of m/z 95	48.9
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.7
175	5 to 9% of m/z 174	5.7 (7.0)
176	Greater than 95% but less than 101% of m/z 174	77.6 (96.1)
177	5 to 9% of m/z 176	5.0 (6.4)

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0947.D\L-8260.rslt\spectra.d
Injection Date: 13-Sep-2019 15:11:36
Spectrum: Tune Spec :Average 1610-1612(6.26-6.27) Bgrd 1595(6.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 34

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1799	51.00	2426	74.00	5463	94.00	4172
38.00	1599	56.00	173	75.00	17472	95.00	35736
39.00	831	57.00	1100	76.00	1552	96.00	2573
40.00	395	61.00	1964	79.00	1189	174.00	28848
44.00	121	62.00	2082	81.00	1094	175.00	2020
45.00	662	63.00	1522	87.00	1486	176.00	27736
47.00	372	68.00	3345	88.00	1473	177.00	1769
49.00	1860	69.00	3606	92.00	849		
50.00	7684	73.00	1740	93.00	1189		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0973.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	14-Sep-2019 11:10:55	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084141-002				
Operator ID:	OI	Instrument ID:	HP5977L		
Method:	\\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	16-Sep-2019 16:15:13	Calib Date:	13-Sep-2019 23:23:34		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D				
Column 1 :	ZB-624 (0.25 mm)		Det: MS Quad		
Process Host:	CTX0303				
First Level Reviewer: chumongkolratn		Date:	16-Sep-2019 16:15:13		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 8 BFB	95	6.264	6.264	0.000	0	386913	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

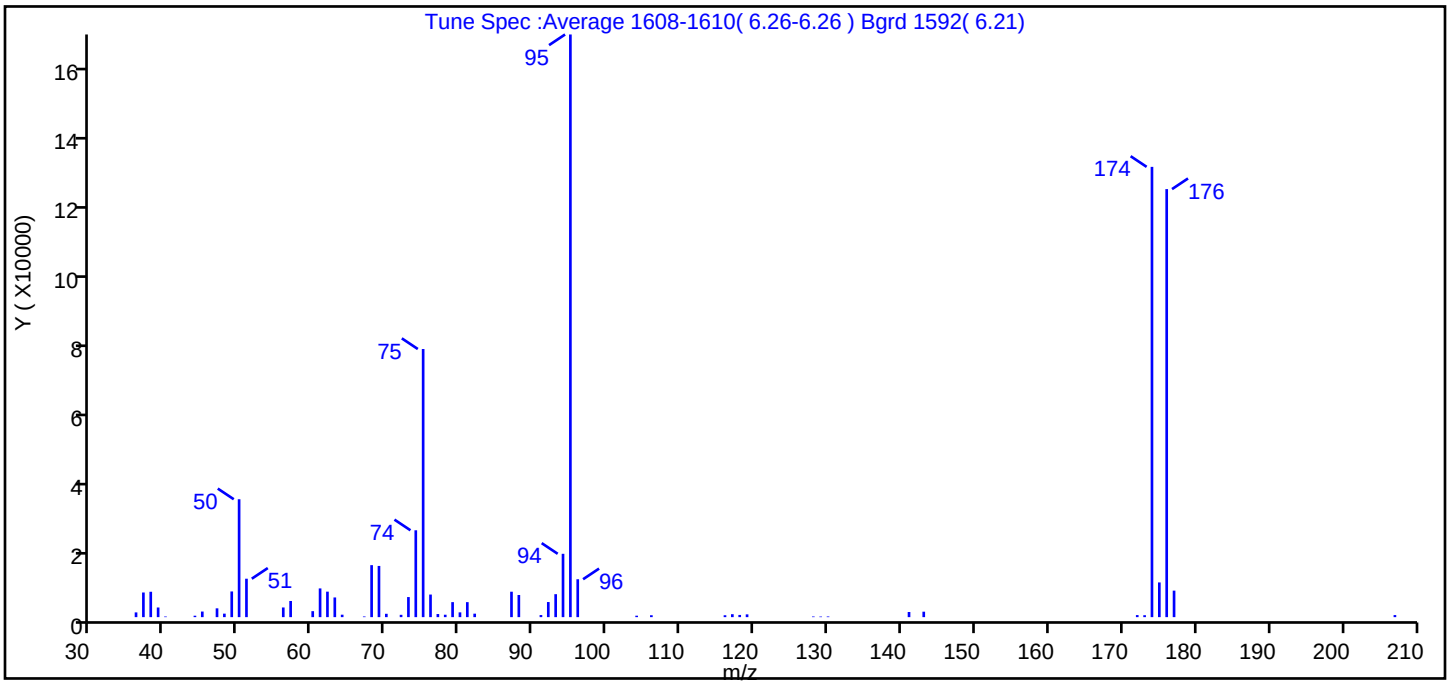
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0973.D
Injection Date: 14-Sep-2019 11:10:55 Instrument ID: HP5977L
Lims ID: BFB
Client ID:
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.2
75	30 to 60% of m/z 95	46.0
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	77.3
175	5 to 9% of m/z 174	6.0 (7.7)
176	Greater than 95% but less than 101% of m/z 174	73.5 (95.1)
177	5 to 9% of m/z 176	4.6 (6.2)

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0973.D\L-8260.rslt\spectra.d
Injection Date: 14-Sep-2019 11:10:55
Spectrum: Tune Spec :Average 1608-1610(6.26-6.26) Bgrd 1592(6.21)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 60

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1366	61.00	8256	79.00	4314	117.00	847
37.00	7086	62.00	7326	80.00	1375	118.00	635
38.00	7297	63.00	5659	81.00	4311	119.00	800
39.00	2775	64.00	706	82.00	999	128.00	185
40.00	180	67.00	192	87.00	7311	129.00	168
44.00	412	68.00	14945	88.00	6363	130.00	192
45.00	1610	69.00	14717	91.00	603	141.00	1478
47.00	2533	70.00	965	92.00	4342	143.00	1568
48.00	1006	72.00	669	93.00	6601	172.00	592
49.00	7384	73.00	5772	94.00	18208	173.00	556
50.00	33888	74.00	24968	95.00	167488	174.00	129432
51.00	11045	75.00	77072	96.00	10894	175.00	9978
56.00	2782	76.00	6495	104.00	417	176.00	123040
57.00	4643	77.00	892	106.00	546	177.00	7622
60.00	1721	78.00	695	116.00	545	207.00	595

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1030.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 15-Sep-2019 10:52:41 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0084156-002
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Sep-2019 10:32:02 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: izquierdoo Date: 15-Sep-2019 11:06:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 8 BFB	95	6.264	6.264	0.000	0	306067	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

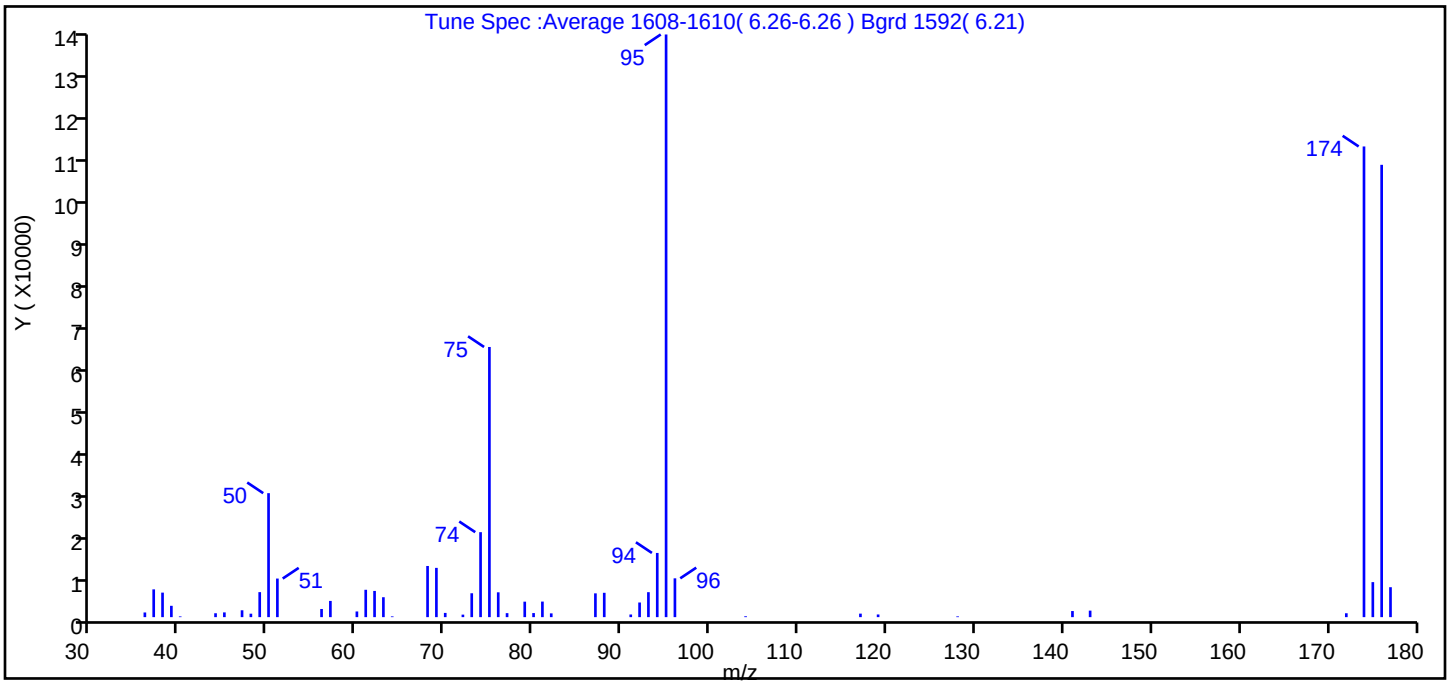
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1030.D
Injection Date: 15-Sep-2019 10:52:41 Instrument ID: HP5977L
Lims ID: BFB
Client ID:
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.3
75	30 to 60% of m/z 95	46.4
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.8
175	5 to 9% of m/z 174	6.0 (7.4)
176	Greater than 95% but less than 101% of m/z 174	77.6 (96.1)
177	5 to 9% of m/z 176	5.1 (6.6)

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1030.D\L-8260.rslt\spectra.d
Injection Date: 15-Sep-2019 10:52:41
Spectrum: Tune Spec :Average 1608-1610(6.26-6.26) Bgrd 1592(6.21)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 51

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1045	57.00	3626	76.00	5553	96.00	8679
37.00	6211	60.00	1271	77.00	894	104.00	194
38.00	5484	61.00	6116	79.00	3461	117.00	786
39.00	2534	62.00	5859	80.00	911	119.00	597
40.00	158	63.00	4455	81.00	3480	128.00	167
44.00	870	64.00	168	82.00	845	141.00	1364
45.00	1062	68.00	11439	87.00	5319	143.00	1456
47.00	1536	69.00	11017	88.00	5443	172.00	870
48.00	773	70.00	945	91.00	593	174.00	105240
49.00	5591	72.00	564	92.00	3274	175.00	7829
50.00	27720	73.00	5341	93.00	5583	176.00	101136
51.00	8628	74.00	19000	94.00	14354	177.00	6695
56.00	1823	75.00	60408	95.00	130280		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1085.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Sep-2019 09:12:28	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084170-002				
Operator ID:	BP	Instrument ID:	HP5977L		
Method:	\\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	18-Sep-2019 09:47:59	Calib Date:	13-Sep-2019 23:23:34		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D				
Column 1 :	ZB-624 (0.25 mm)		Det: MS Quad		
Process Host:	CTX0322				
First Level Reviewer: boonsiemj		Date:	18-Sep-2019 09:47:59		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 8 BFB	95	6.270	6.270	0.000	0	38166	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

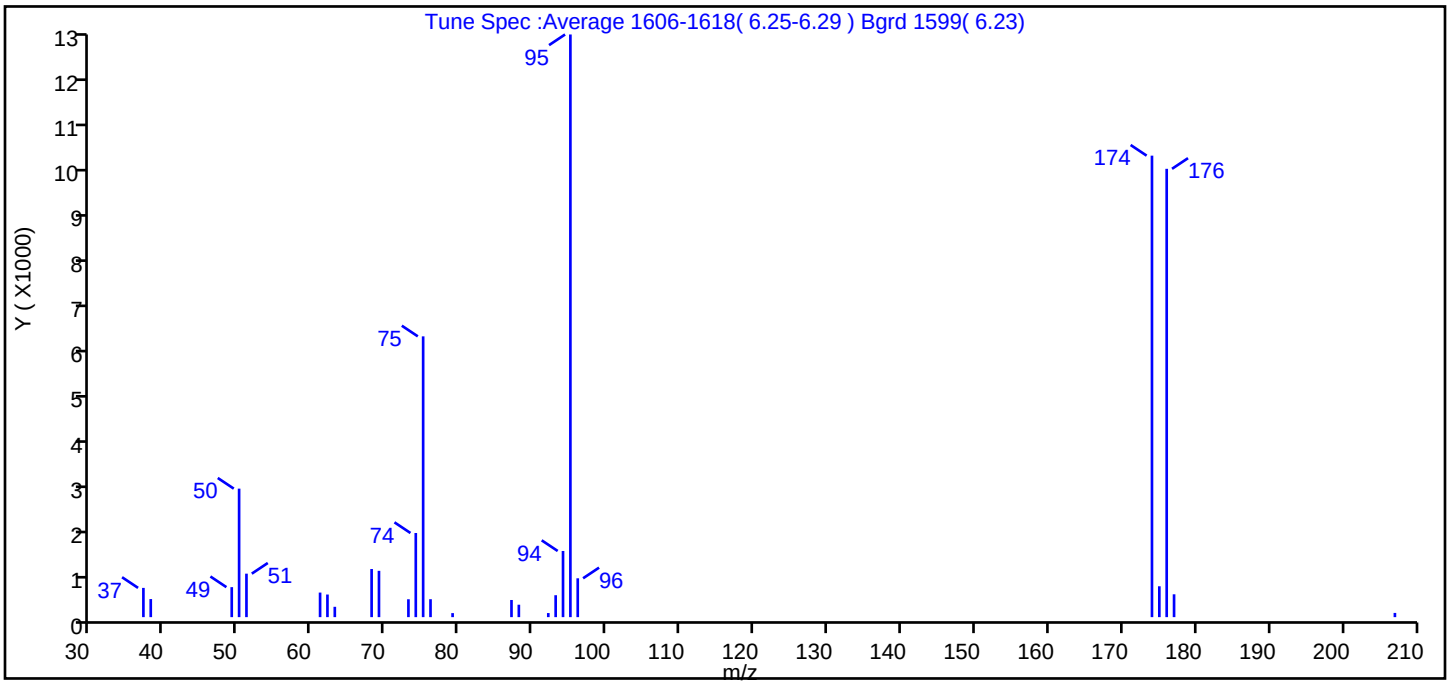
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1085.D
Injection Date: 16-Sep-2019 09:12:28 Instrument ID: HP5977L
Lims ID: BFB
Client ID:
Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.1
75	30 to 60% of m/z 95	48.2
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	79.2
175	5 to 9% of m/z 174	5.3 (6.7)
176	Greater than 95% but less than 101% of m/z 174	76.9 (97.1)
177	5 to 9% of m/z 176	3.9 (5.1)

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1085.D\L-8260.rslt\spectra.d
Injection Date: 16-Sep-2019 09:12:28
Spectrum: Tune Spec :Average 1606-1618(6.25-6.29) Bgrd 1599(6.23)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 27

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	631	63.00	223	79.00	87	96.00	838
38.00	390	68.00	1038	87.00	370	174.00	9955
49.00	647	69.00	999	88.00	268	175.00	666
50.00	2772	73.00	386	92.00	88	176.00	9671
51.00	938	74.00	1815	93.00	473	177.00	493
61.00	530	75.00	6057	94.00	1427	207.00	91
62.00	488	76.00	387	95.00	12569		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492066/7

Matrix: Water Lab File ID: S8952.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 10:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492066/7

Matrix: Water Lab File ID: S8952.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 10:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	108		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8952.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Sep-2019 10:36:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084133-007
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 11:00:27 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 14-Sep-2019 11:05:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	121360	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	249505	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	289725	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.871	4.865	0.006	59	156256	25.0	25.4	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	97882	25.0	25.3	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	615990	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	240758	25.0	26.9	
10 Dichlorodifluoromethane	85		1.270					ND	
11 Chlorodifluoromethane	51		1.288					ND	
12 Chloromethane	50		1.446					ND	
151 Butadiene	54		1.543					ND	
13 Vinyl chloride	62		1.543					ND	
14 Bromomethane	94		1.835					ND	
15 Chloroethane	64		1.939					ND	
16 Dichlorofluoromethane	67		2.152					ND	
17 Trichlorofluoromethane	101		2.164					ND	
18 Ethyl ether	59		2.438					ND	
148 Ethanol	45		2.468					ND	
19 Propene oxide	58		2.529					ND	
20 Acrolein	56		2.626					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.657					ND	
22 1,1-Dichloroethene	96		2.657					ND	
23 Acetone	43		2.784					ND	
25 Iodomethane	142		2.821					ND	
26 Carbon disulfide	76		2.857					ND	
24 Isopropyl alcohol	45		2.973					ND	
28 3-Chloro-1-propene	41		3.034					ND	
27 Methyl acetate	43		3.089					ND	
29 Acetonitrile	40		3.107					ND	
30 Methylene Chloride	84		3.186					ND	
31 2-Methyl-2-propanol	59		3.362					ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		3.393					ND	
34 trans-1,2-Dichloroethene	96		3.411					ND	
33 Acrylonitrile	53		3.478					ND	
35 Hexane	57		3.600					ND	
139 Halothane	117		3.822					ND	
39 1,1-Dichloroethane	63		3.837					ND	
36 Isopropyl ether	45		3.843					ND	
37 Vinyl acetate	43		3.892					ND	
40 2-Chloro-1,3-butadiene	53		3.892					ND	
38 1,1-Dimethoxyethane	75		3.922					ND	
41 Tert-butyl ethyl ether	59		4.184					ND	
44 2,2-Dichloropropane	77		4.354					ND	
45 cis-1,2-Dichloroethene	96		4.397					ND	
43 2-Butanone (MEK)	43		4.433					ND	
42 Ethyl acetate	43		4.457					ND	
46 Propionitrile	54		4.543					ND	
48 Chlorobromomethane	128		4.634					ND	
49 Tetrahydrofuran	42		4.646					ND	
47 Methacrylonitrile	41		4.646					ND	
50 Chloroform	83	4.713	4.713	0.000	1	1709		0.1407	
51 1,1,1-Trichloroethane	97		4.816					ND	
52 Cyclohexane	56		4.822					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.871					ND	
55 Carbon tetrachloride	117		4.956					ND	
54 1,1-Dichloropropene	75		4.968					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.153					ND	
152 Isooctane	57		5.163					ND	
57 Benzene	78		5.175					ND	
53 Isobutyl alcohol	43		5.206					ND	U
58 1,2-Dichloroethane	62		5.248					ND	
56 Tert-amyl methyl ether	73		5.248					ND	
147 t-Amyl alcohol	59		5.260					ND	
59 n-Heptane	43		5.346					ND	
1 1,4-Difluorobenzene	114		5.559					ND	
62 Trichloroethene	95		5.784					ND	
60 n-Butanol	56		5.826					ND	
64 Methylcyclohexane	83		5.899					ND	
142 Ethyl acrylate	55		5.911					ND	
65 1,2-Dichloropropane	63		6.033					ND	
63 Methyl methacrylate	41		6.130					ND	
67 Dibromomethane	93		6.173					ND	
66 1,4-Dioxane	88		6.179					ND	
68 Dichlorobromomethane	83		6.325					ND	
70 2-Nitropropane	43		6.581					ND	
69 2-Chloroethyl vinyl ether	63		6.605					ND	
71 Epichlorohydrin	57		6.696					ND	
72 cis-1,3-Dichloropropene	75		6.739					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885					ND	
74 Toluene	92		7.025					ND	
76 2-Methylthiophene	97		7.159					ND	
77 trans-1,3-Dichloropropene	75		7.311					ND	
78 3-Methylthiophene	97		7.323					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
75 Ethyl methacrylate	69		7.353					ND	
79 1,1,2-Trichloroethane	83		7.499					ND	
81 Tetrachloroethene	166		7.554					ND	
82 1,3-Dichloropropane	76		7.663					ND	
80 2-Hexanone	43		7.730					ND	
155 n-Butyl acetate	43		7.834					ND	
83 Chlorodibromomethane	129		7.895					ND	
84 Ethylene Dibromide	107		7.998					ND	
146 1-Chlorohexane	55		8.418					ND	U
85 3-Chlorobenzotrifluoride	180		8.442					ND	
87 Chlorobenzene	112		8.473					ND	
86 4-Chlorobenzotrifluoride	180		8.503					ND	
88 Ethylbenzene	91		8.564					ND	
89 1,1,1,2-Tetrachloroethane	131		8.570					ND	
90 m-Xylene & p-Xylene	106		8.685					ND	
91 o-Xylene	106		9.111					ND	
92 Styrene	104		9.142					ND	
95 Bromoform	173		9.397					ND	
93 2-Chlorobenzotrifluoride	180		9.422					ND	
94 Isopropylbenzene	105		9.495					ND	
96 Cyclohexanone	55		9.683					ND	
101 Bromobenzene	156		9.841					ND	
97 1,1,2,2-Tetrachloroethane	83		9.902					ND	
99 N-Propylbenzene	91		9.920					ND	
100 1,2,3-Trichloropropane	110		9.939					ND	
98 trans-1,4-Dichloro-2-buten	53		9.951					ND	
103 2-Chlorotoluene	126		10.024					ND	
104 3-Chlorotoluene	126		10.091					ND	
102 1,3,5-Trimethylbenzene	105		10.097					ND	
105 4-Chlorotoluene	126		10.139					ND	
106 tert-Butylbenzene	134		10.413					ND	
107 1,2,4-Trimethylbenzene	105		10.468					ND	
108 Pentachloroethane	167		10.480					ND	
109 sec-Butylbenzene	105		10.626					ND	
111 1,3-Dichlorobenzene	146		10.766					ND	
110 4-Isopropyltoluene	119		10.766					ND	
114 Dicyclopentadiene	66		10.827					ND	
113 1,4-Dichlorobenzene	146		10.851					ND	
112 1,2,3-Trimethylbenzene	105		10.876					ND	
150 Benzyl chloride	126		11.003					ND	
115 n-Butylbenzene	91		11.149					ND	
116 1,2-Dichlorobenzene	146		11.204					ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934					ND	
118 1,3,5-Trichlorobenzene	180		12.062					ND	
119 1,2,4-Trichlorobenzene	180		12.603					ND	
120 Hexachlorobutadiene	225		12.707					ND	
121 Naphthalene	128		12.822					ND	
122 1,2,3-Trichlorobenzene	180		13.023					ND	
149 2-Methylnaphthalene	142		13.729					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
144 1-Bromopropane TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
137 Methyl acrylate	1		0.000					ND	
134 Pentachloroethane TIC	1		0.000					ND	
S 124 Xylenes, Total	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 123 Total BTEX	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00326	Amount Added:	1.00	Units: uL	Run Reagent

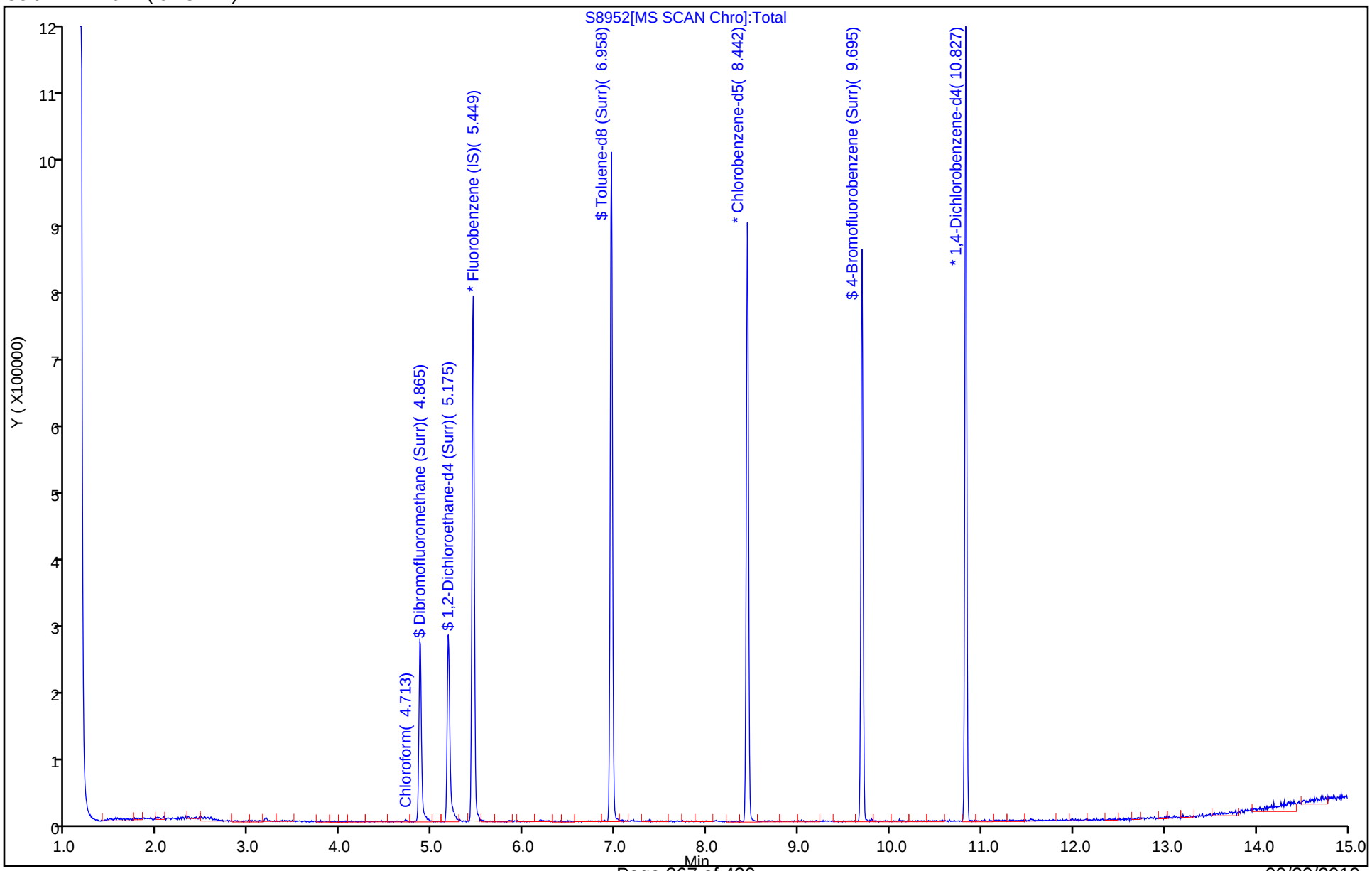
Report Date: 14-Sep-2019 11:05:39 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8952.D

Injection Date:	14-Sep-2019 10:36:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492085/7

Matrix: Water Lab File ID: L0978.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492085/7

Matrix: Water Lab File ID: L0978.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 13:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0978.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Sep-2019 13:17:23 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084141-007
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 13:45:25 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0340

First Level Reviewer: izquierdoo Date: 14-Sep-2019 13:45:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.550	6.550	0.000	99	175475	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	661270	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.794	0.003	96	338957	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.977	0.003	93	231600	25.0	24.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.299	6.296	0.003	99	286490	25.0	24.8	
$ 6 Toluene-d8 (Surr)	98	8.016	8.018	0.000	93	837384	25.0	24.9	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.720	0.000	99	249264	25.0	26.3	
10 Dichlorodifluoromethane	85		2.202					ND	
9 Chlorodifluoromethane	51		2.238					ND	
13 Chloromethane	50		2.476					ND	
14 Vinyl chloride	62		2.614					ND	
15 Butadiene	54		2.624					ND	
18 Bromomethane	94		2.997					ND	
19 Chloroethane	64		3.109					ND	
20 Dichlorofluoromethane	67		3.341					ND	
21 Trichlorofluoromethane	101		3.366					ND	
11 Ethanol	45		3.633					ND	
26 Ethyl ether	59		3.640					ND	
12 Propene oxide	58		3.752					ND	
28 Acrolein	56		3.849					ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.868					ND	
30 1,1-Dichloroethene	96		3.900					ND	
31 Acetone	43		3.993					ND	
33 Iodomethane	142		4.090					ND	
16 Isopropyl alcohol	45		4.128					ND	
35 Carbon disulfide	76		4.144					ND	
37 3-Chloro-1-propene	41		4.257					ND	
38 Methyl acetate	43		4.270					ND	
17 Acetonitrile	40		4.308					ND	
39 Methylene Chloride	84		4.398					ND	
40 2-Methyl-2-propanol	59		4.492					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
41 Methyl tert-butyl ether	73		4.575					ND	
42 trans-1,2-Dichloroethene	96		4.620					ND	
44 Acrylonitrile	53		4.662					ND	
47 Hexane	57		4.778					ND	
22 Isopropyl ether	45		4.968					ND	
23 Halothane	117		4.987					ND	
49 Vinyl acetate	43		5.019					ND	
50 1,1-Dichloroethane	63		5.022					ND	
25 1,1-Dimethoxyethane	75		5.058					ND	
24 2-Chloro-1,3-butadiene	53		5.074					ND	
27 Tert-butyl ethyl ether	59		5.292					ND	
56 2,2-Dichloropropane	77		5.521					ND	
32 Ethyl acetate	43		5.540					ND	
58 cis-1,2-Dichloroethene	96		5.546					ND	
57 2-Butanone (MEK)	43		5.546					ND	
34 Propionitrile	54		5.662					ND	
36 Methacrylonitrile	41		5.768					ND	
60 Chlorobromomethane	128		5.781					ND	
61 Tetrahydrofuran	42		5.794					ND	
62 Chloroform	83		5.826					ND	Ua
64 1,1,1-Trichloroethane	97		5.968					ND	
65 Cyclohexane	56		5.987					ND	
67 1,1-Dichloropropene	75		6.103					ND	
66 Carbon tetrachloride	117		6.106					ND	
69 Isobutyl alcohol	43		6.202					ND	
43 Isooctane	57		6.260					ND	
45 t-Amyl alcohol	59		6.279					ND	U
70 Benzene	78		6.312					ND	
46 Tert-amyl methyl ether	73		6.324					ND	
72 1,2-Dichloroethane	62		6.363					ND	
73 n-Heptane	43		6.402					ND	
48 1,4-Difluorobenzene	114		6.623					ND	
51 2,4,4-Trimethyl-1-pentene	55		6.739					ND	
52 n-Butanol	56		6.794					ND	
75 Trichloroethene	95		6.877					ND	
53 Ethyl acrylate	55		6.926					ND	
54 2,4,4-Trimethyl-2-pentene	97		6.939					ND	
76 Methylcyclohexane	83		7.009					ND	
77 1,2-Dichloropropane	63		7.125					ND	
55 Methyl methacrylate	41		7.135					ND	
81 1,4-Dioxane	88		7.238					ND	
82 Dibromomethane	93		7.270					ND	
83 Dichlorobromomethane	83		7.386					ND	
84 2-Chloroethyl vinyl ether	63		7.604					ND	
59 2-Nitropropane	43		7.623					ND	
63 Epichlorohydrin	57		7.736					ND	
85 cis-1,3-Dichloropropene	75		7.784					ND	
87 4-Methyl-2-pentanone (MIBK	43		7.890					ND	
88 Toluene	92		8.083					ND	
68 2-Methylthiophene	97		8.228					ND	
90 Ethyl methacrylate	69		8.312					ND	
91 trans-1,3-Dichloropropene	75		8.324					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
71 3-Methylthiophene	97		8.392					ND	
93 1,1,2-Trichloroethane	83		8.533					ND	
94 Tetrachloroethene	166		8.620					ND	
95 1,3-Dichloropropane	76		8.704					ND	
96 2-Hexanone	43		8.710					ND	
74 n-Butyl acetate	43		8.778					ND	
98 Chlorodibromomethane	129		8.958					ND	
101 Ethylene Dibromide	107		9.090					ND	
78 1-Chlorohexane	55		9.427					ND	
79 3-Chlorobenzotrifluoride	180		9.430					ND	
80 4-Chlorobenzotrifluoride	180		9.488					ND	
103 Chlorobenzene	112		9.546					ND	
104 Ethylbenzene	91		9.604					ND	
105 1,1,1,2-Tetrachloroethane	131		9.627					ND	
106 m-Xylene & p-Xylene	106		9.717					ND	
107 o-Xylene	106		10.154					ND	
109 Styrene	104		10.180					ND	
86 2-Chlorobenzotrifluoride	180		10.421					ND	
110 Bromoform	173		10.459					ND	
111 Isopropylbenzene	105		10.501					ND	
89 Cyclohexanone	55		10.717					ND	U
112 1,1,2,2-Tetrachloroethane	83		10.877					ND	
113 Bromobenzene	156		10.884					ND	
114 N-Propylbenzene	91		10.906					ND	
115 trans-1,4-Dichloro-2-buten	53		10.916					ND	
116 1,2,3-Trichloropropane	110		10.932					ND	
117 2-Chlorotoluene	126		11.038					ND	
118 1,3,5-Trimethylbenzene	105		11.061					ND	
92 3-Chlorotoluene	126		11.096					ND	
119 4-Chlorotoluene	91		11.141					ND	
120 tert-Butylbenzene	134		11.373					ND	
121 1,2,4-Trimethylbenzene	105		11.424					ND	
97 Pentachloroethane	167		11.459					ND	
122 sec-Butylbenzene	105		11.572					ND	
123 4-Isopropyltoluene	119		11.688					ND	
124 1,3-Dichlorobenzene	146		11.739					ND	
99 Dicyclopentadiene	66		11.810					ND	
126 1,4-Dichlorobenzene	146		11.816					ND	
100 1,2,3-Trimethylbenzene	105		11.823					ND	
102 Benzyl chloride	126		11.945					ND	
127 n-Butylbenzene	91	12.051	12.058	-0.003	92	3034		0.0945	
128 1,2-Dichlorobenzene	146		12.160					ND	
129 1,2-Dibromo-3-Chloropropan	75		12.836					ND	
108 1,3,5-Trichlorobenzene	180		12.948					ND	
130 1,2,4-Trichlorobenzene	180		13.508					ND	
131 Hexachlorobutadiene	225		13.598					ND	U
132 Naphthalene	128		13.765					ND	
133 1,2,3-Trichlorobenzene	180		13.993					ND	U
125 2-Methylnaphthalene	142		14.929					ND	
134 Ethylene oxide TIC	1		0.000					ND	
135 Propene oxide TIC	1		0.000					ND	
137 cis-1,4-Dichloro-2-butene	88		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
139 Hexachloroethane	117		0.000					ND	
140 Methyl acrylate	1		0.000					ND	
136 1-Bromopropane TIC	1		0.000					ND	
138 Nitrobenzene	77		0.000					ND	
S 144 1,3-Dichloropropene, Total	1		30.000					ND	
S 141 1,2-Dichloroethene, Total	1		30.000					ND	
S 142 Total BTEX	1		30.000					ND	
S 143 Xylenes, Total	1		30.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 13:45:26 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0978.D

Injection Date: 14-Sep-2019 13:17:23 Instrument ID: HP5977L

Lims ID: MB

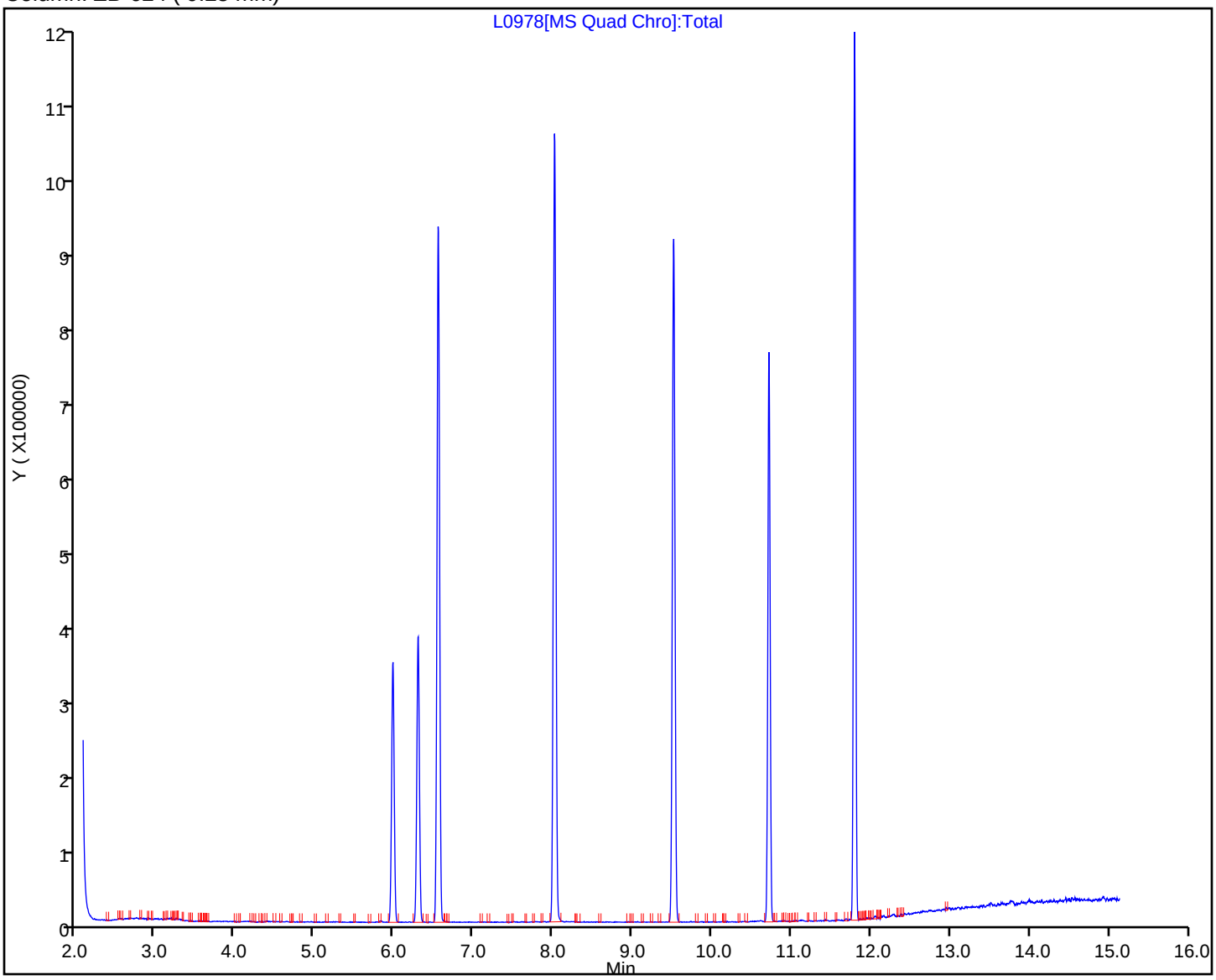
Client ID:

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



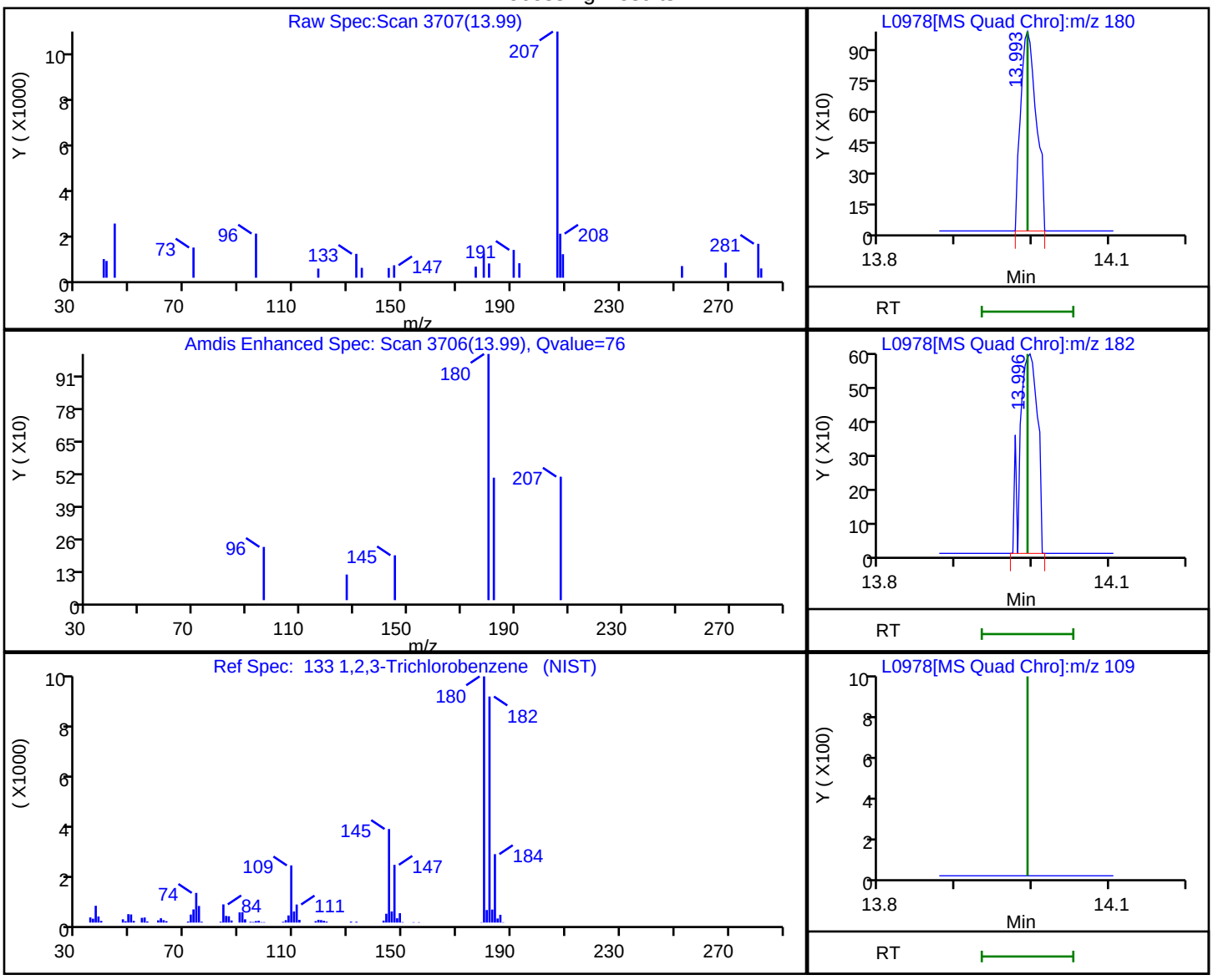
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0978.D
Injection Date: 14-Sep-2019 13:17:23 Instrument ID: HP5977L
Lims ID: MB
Client ID:
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

133 1,2,3-Trichlorobenzene, CAS: 87-61-6

Processing Results



RT	Mass	Response	Amount
13.99	180.00	1403	0.109404
14.00	182.00	923	
13.99	109.00	0	

Reviewer: izquierdoo, 14-Sep-2019 13:43:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

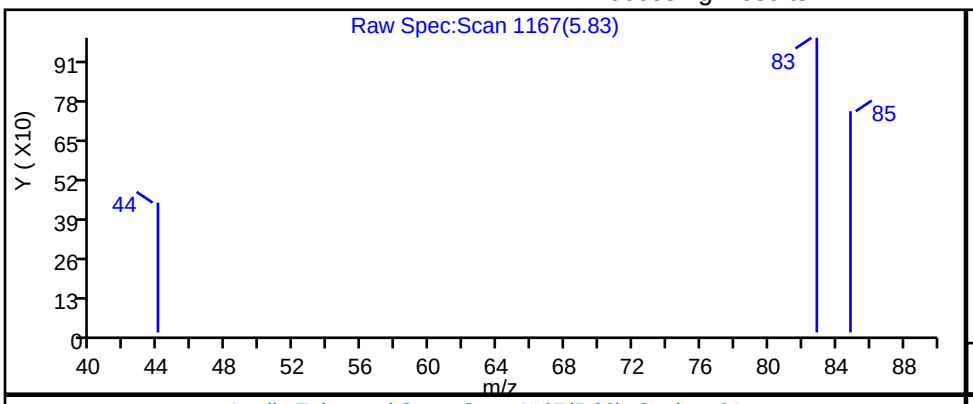
User Disabled Compound Report

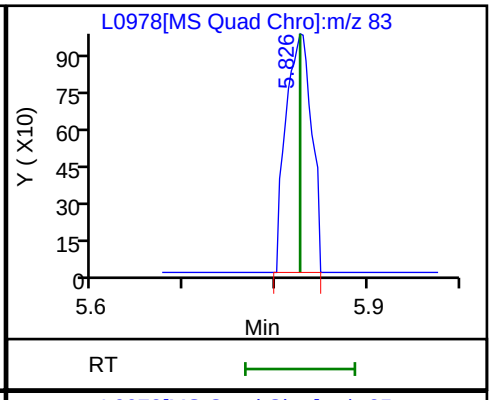
Eurofins TestAmerica, Buffalo

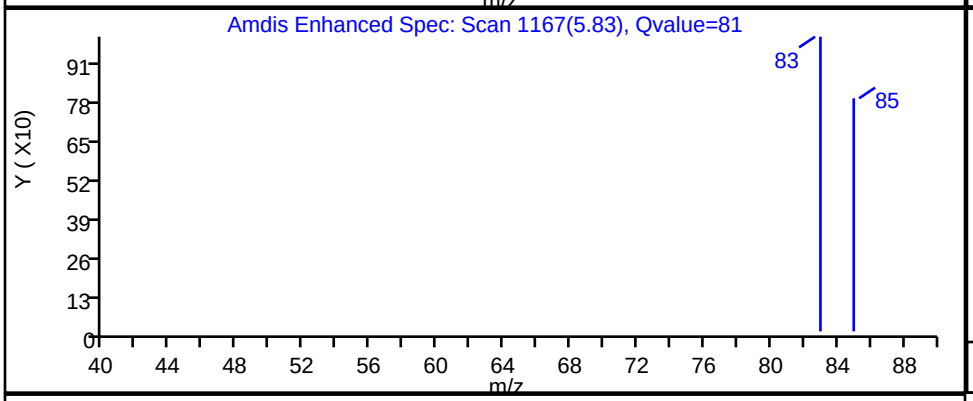
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0978.D
Injection Date: 14-Sep-2019 13:17:23 Instrument ID: HP5977L
Lims ID: MB
Client ID:
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

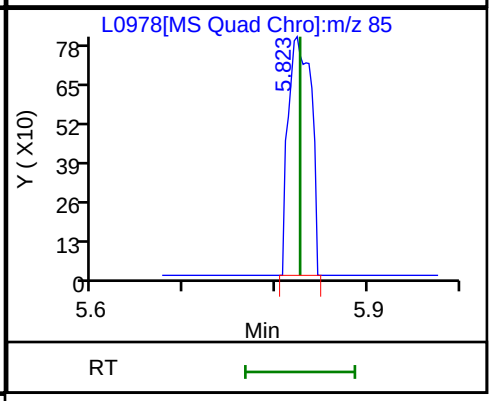
62 Chloroform, CAS: 67-66-3

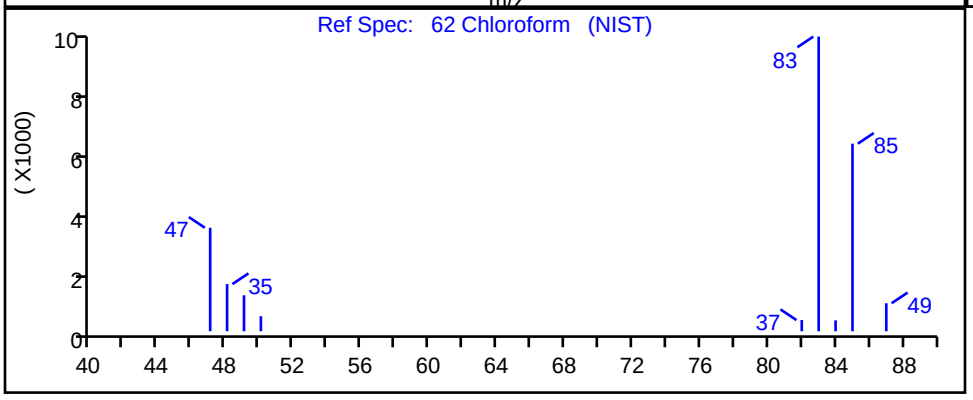
Processing Results











RT	Mass	Response	Amount
5.83	83.00	1908	-0.211274
5.82	85.00	1384	

Reviewer: izquierdoo, 14-Sep-2019 13:45:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492149/7

Matrix: Water Lab File ID: L1035.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 12:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492149/7

Matrix: Water Lab File ID: L1035.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 12:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	113		73-120
1868-53-7	Dibromofluoromethane (Surr)	110		75-123
2037-26-5	Toluene-d8 (Surr)	106		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1035.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Sep-2019 12:57:33 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084156-007
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 13:19:23 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0319

First Level Reviewer: izquierdoo Date: 15-Sep-2019 13:19:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.549	0.004	99	143553	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	90	517303	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	297060	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.980	0.000	94	208508	25.0	27.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.295	0.001	97	246929	25.0	26.2	
$ 6 Toluene-d8 (Surr)	98	8.019	8.018	0.003	93	697430	25.0	26.5	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.720	0.004	99	209126	25.0	28.2	
10 Dichlorodifluoromethane	85		2.199					ND	
9 Chlorodifluoromethane	51		2.238					ND	
13 Chloromethane	50		2.472					ND	
14 Vinyl chloride	62		2.607					ND	
15 Butadiene	54		2.617					ND	
18 Bromomethane	94		2.990					ND	
19 Chloroethane	64		3.102					ND	
20 Dichlorofluoromethane	67		3.337					ND	
21 Trichlorofluoromethane	101		3.360					ND	
11 Ethanol	45		3.633					ND	
26 Ethyl ether	59		3.639					ND	
12 Propene oxide	58		3.752					ND	
28 Acrolein	56		3.845					ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.865					ND	
30 1,1-Dichloroethene	96		3.897					ND	
31 Acetone	43		3.993					ND	
33 Iodomethane	142		4.086					ND	
16 Isopropyl alcohol	45		4.128					ND	
35 Carbon disulfide	76		4.141					ND	
37 3-Chloro-1-propene	41		4.257					ND	
38 Methyl acetate	43		4.266					ND	
17 Acetonitrile	40		4.308					ND	
39 Methylene Chloride	84		4.395					ND	
40 2-Methyl-2-propanol	59		4.488					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
41 Methyl tert-butyl ether	73		4.575					ND	
42 trans-1,2-Dichloroethene	96		4.617					ND	
44 Acrylonitrile	53		4.659					ND	
47 Hexane	57		4.778					ND	
22 Isopropyl ether	45		4.968					ND	
23 Halothane	117		4.987					ND	
49 Vinyl acetate	43		5.019					ND	
50 1,1-Dichloroethane	63		5.022					ND	
25 1,1-Dimethoxyethane	75		5.058					ND	
24 2-Chloro-1,3-butadiene	53		5.074					ND	
27 Tert-butyl ethyl ether	59		5.292					ND	
56 2,2-Dichloropropane	77		5.520					ND	
32 Ethyl acetate	43		5.540					ND	
58 cis-1,2-Dichloroethene	96		5.546					ND	
57 2-Butanone (MEK)	43		5.546					ND	
34 Propionitrile	54		5.662					ND	
36 Methacrylonitrile	41		5.768					ND	
60 Chlorobromomethane	128		5.778					ND	
61 Tetrahydrofuran	42		5.794					ND	
62 Chloroform	83		5.823					ND	Ua
64 1,1,1-Trichloroethane	97		5.967					ND	
65 Cyclohexane	56		5.987					ND	
67 1,1-Dichloropropene	75		6.102					ND	
66 Carbon tetrachloride	117		6.102					ND	
69 Isobutyl alcohol	43		6.202					ND	
43 Isooctane	57		6.260					ND	
45 t-Amyl alcohol	59		6.279					ND	U
70 Benzene	78		6.311					ND	
46 Tert-amyl methyl ether	73		6.324					ND	
72 1,2-Dichloroethane	62		6.363					ND	
73 n-Heptane	43		6.398					ND	
48 1,4-Difluorobenzene	114		6.623					ND	
51 2,4,4-Trimethyl-1-pentene	55		6.739					ND	
52 n-Butanol	56		6.794					ND	
75 Trichloroethene	95		6.877					ND	
53 Ethyl acrylate	55		6.926					ND	
54 2,4,4-Trimethyl-2-pentene	97		6.939					ND	
76 Methylcyclohexane	83		7.009					ND	
77 1,2-Dichloropropane	63		7.125					ND	
55 Methyl methacrylate	41		7.135					ND	
81 1,4-Dioxane	88		7.237					ND	
82 Dibromomethane	93		7.270					ND	
83 Dichlorobromomethane	83		7.385					ND	
84 2-Chloroethyl vinyl ether	63		7.601					ND	
59 2-Nitropropane	43		7.623					ND	
63 Epichlorohydrin	57		7.736					ND	
85 cis-1,3-Dichloropropene	75		7.781					ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887					ND	
88 Toluene	92		8.083					ND	
68 2-Methylthiophene	97		8.228					ND	
90 Ethyl methacrylate	69		8.308					ND	
91 trans-1,3-Dichloropropene	75		8.327					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
71 3-Methylthiophene	97		8.392					ND	
93 1,1,2-Trichloroethane	83		8.533					ND	
94 Tetrachloroethene	166		8.620					ND	
95 1,3-Dichloropropane	76		8.704					ND	
96 2-Hexanone	43		8.710					ND	
74 n-Butyl acetate	43		8.778					ND	
98 Chlorodibromomethane	129		8.954					ND	
101 Ethylene Dibromide	107		9.093					ND	
78 1-Chlorohexane	55		9.427					ND	
79 3-Chlorobenzotrifluoride	180		9.430					ND	
80 4-Chlorobenzotrifluoride	180		9.488					ND	
103 Chlorobenzene	112		9.546					ND	
104 Ethylbenzene	91		9.604					ND	
105 1,1,1,2-Tetrachloroethane	131		9.623					ND	
106 m-Xylene & p-Xylene	106		9.716					ND	
107 o-Xylene	106		10.154					ND	
109 Styrene	104		10.179					ND	
86 2-Chlorobenzotrifluoride	180		10.421					ND	
110 Bromoform	173		10.456					ND	
111 Isopropylbenzene	105		10.501					ND	
89 Cyclohexanone	55		10.717					ND	U
112 1,1,2,2-Tetrachloroethane	83		10.877					ND	
113 Bromobenzene	156		10.887					ND	
114 N-Propylbenzene	91		10.906					ND	
115 trans-1,4-Dichloro-2-buten	53		10.916					ND	
116 1,2,3-Trichloropropane	110		10.932					ND	
117 2-Chlorotoluene	126		11.041					ND	
118 1,3,5-Trimethylbenzene	105		11.060					ND	
92 3-Chlorotoluene	126		11.096					ND	
119 4-Chlorotoluene	91		11.141					ND	
120 tert-Butylbenzene	134		11.372					ND	
121 1,2,4-Trimethylbenzene	105		11.424					ND	
97 Pentachloroethane	167		11.459					ND	
122 sec-Butylbenzene	105		11.572					ND	
123 4-Isopropyltoluene	119		11.687					ND	
124 1,3-Dichlorobenzene	146		11.739					ND	
99 Dicyclopentadiene	66		11.810					ND	
126 1,4-Dichlorobenzene	146		11.816					ND	
100 1,2,3-Trimethylbenzene	105		11.823					ND	
102 Benzyl chloride	126		11.945					ND	
127 n-Butylbenzene	91		12.054					ND	Ua
128 1,2-Dichlorobenzene	146		12.160					ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835					ND	
108 1,3,5-Trichlorobenzene	180		12.948					ND	
130 1,2,4-Trichlorobenzene	180		13.507					ND	
131 Hexachlorobutadiene	225		13.597					ND	
132 Naphthalene	128		13.765					ND	
133 1,2,3-Trichlorobenzene	180		13.993					ND	
125 2-Methylnaphthalene	142		14.929					ND	U
134 Ethylene oxide TIC	1		0.000					ND	
135 Propene oxide TIC	1		0.000					ND	
137 cis-1,4-Dichloro-2-butene	88		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
139 Hexachloroethane	117		0.000					ND	
140 Methyl acrylate	1		0.000					ND	
136 1-Bromopropane TIC	1		0.000					ND	
138 Nitrobenzene	77		0.000					ND	
S 144 1,3-Dichloropropene, Total	1		30.000					ND	
S 141 1,2-Dichloroethene, Total	1		30.000					ND	
S 142 Total BTEX	1		30.000					ND	
S 143 Xylenes, Total	1		30.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 15-Sep-2019 13:19:24 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1035.D

Injection Date: 15-Sep-2019 12:57:33 Instrument ID: HP5977L

Lims ID: MB

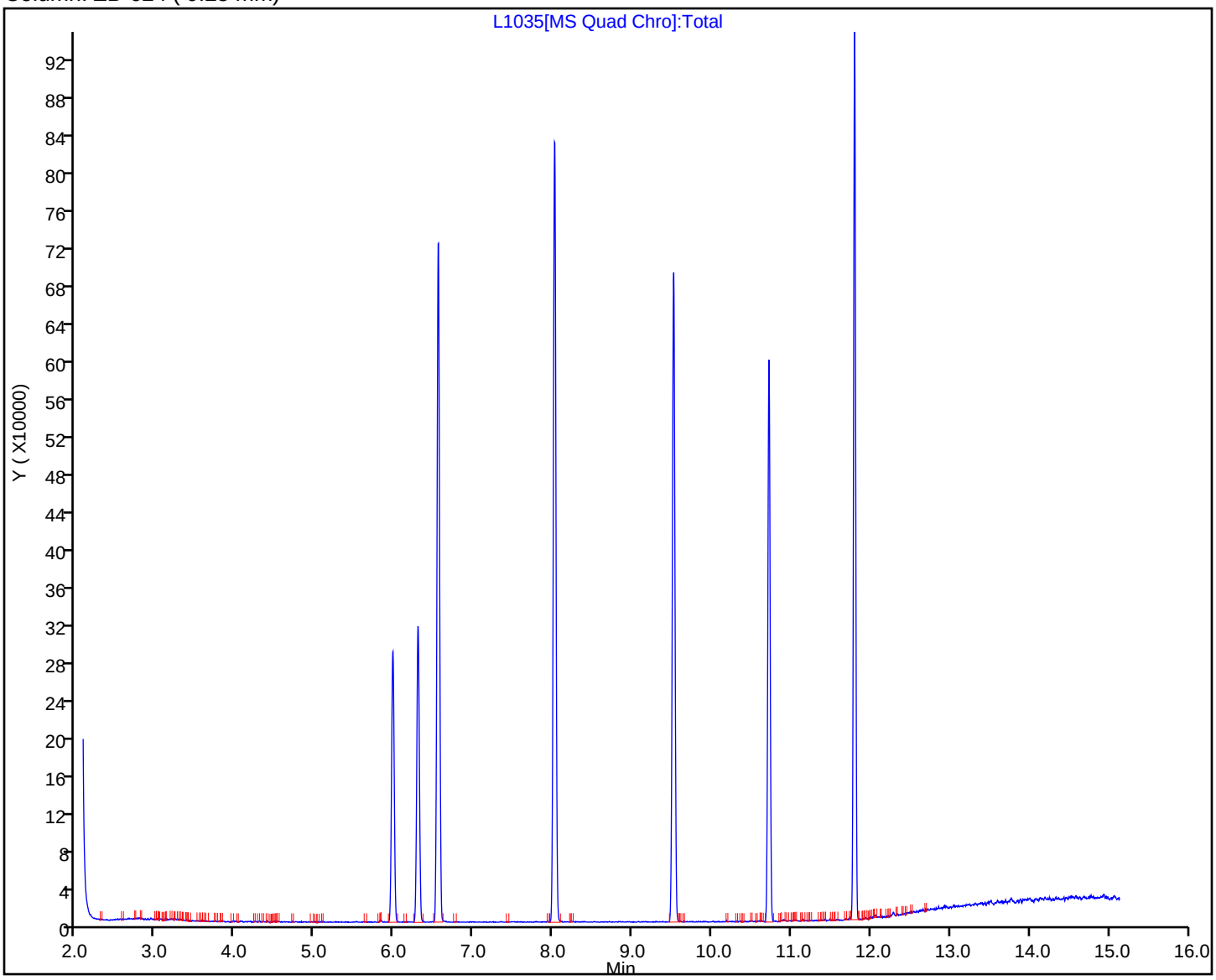
Client ID:

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



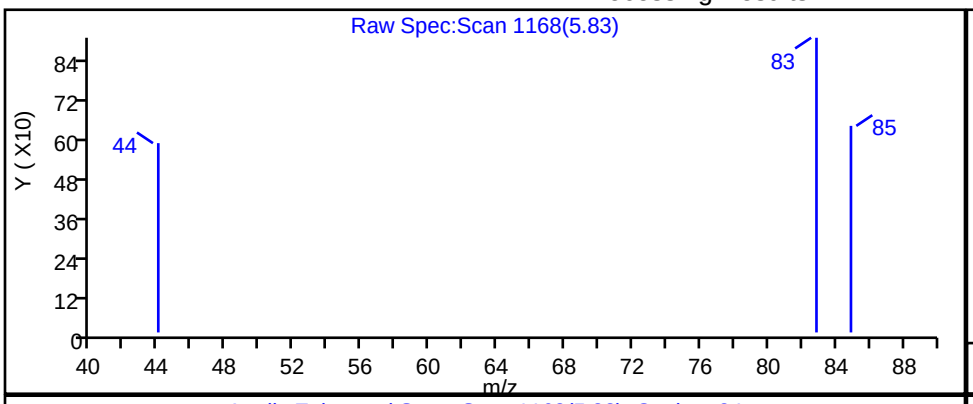
User Disabled Compound Report

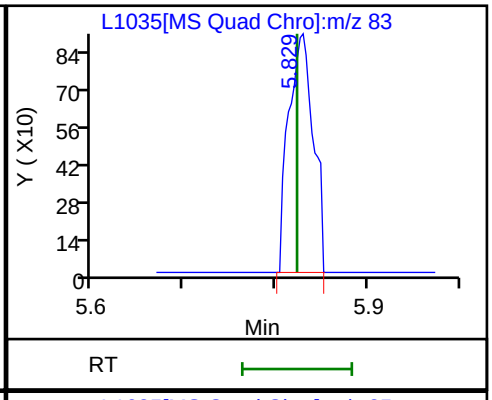
Eurofins TestAmerica, Buffalo

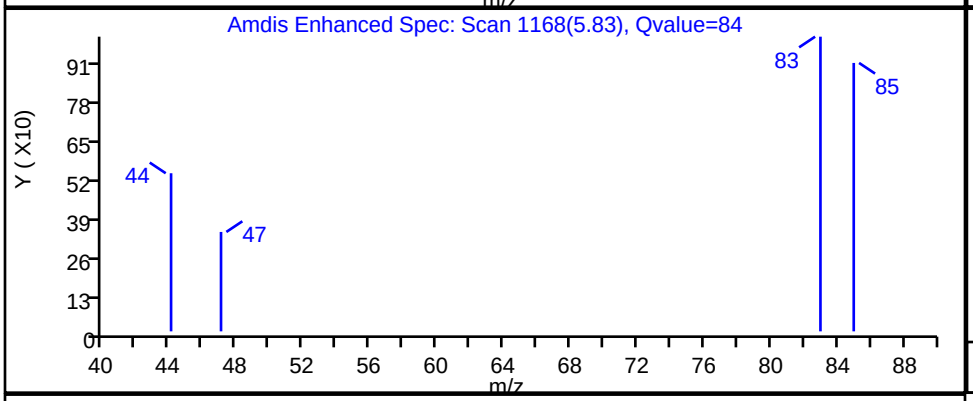
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1035.D
Injection Date: 15-Sep-2019 12:57:33 Instrument ID: HP5977L
Lims ID: MB
Client ID:
Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

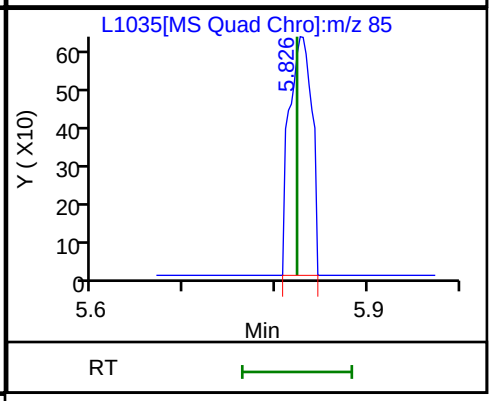
62 Chloroform, CAS: 67-66-3

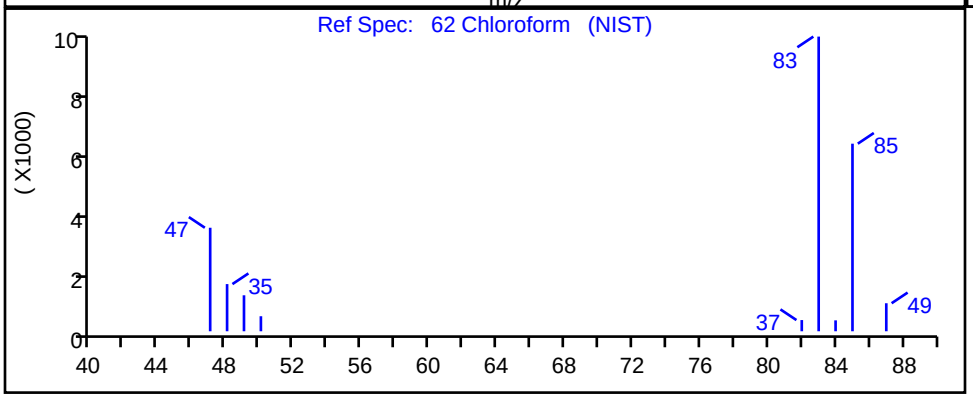
Processing Results











RT	Mass	Response	Amount
5.83	83.00	1692	-0.201304
5.83	85.00	1078	

Reviewer: izquierdoo, 15-Sep-2019 13:18:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492226/7

Matrix: Water Lab File ID: L1090.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-492226/7

Matrix: Water Lab File ID: L1090.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 11:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1090.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Sep-2019 11:40:08 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084170-007
Operator ID: BP Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Sep-2019 12:13:07 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: phillipsb Date: 16-Sep-2019 12:13:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.550	6.549	0.001	99	125061	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	473234	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	96	258719	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.977	0.000	93	177715	25.0	26.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.295	0.001	98	221622	25.0	27.0	
$ 6 Toluene-d8 (Surr)	98	8.016	8.018	0.000	94	607428	25.0	25.3	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.720	0.001	98	179199	25.0	26.4	
10 Dichlorodifluoromethane	85		2.199					ND	
9 Chlorodifluoromethane	51		2.238					ND	
13 Chloromethane	50		2.472					ND	
14 Vinyl chloride	62		2.607					ND	
15 Butadiene	54		2.617					ND	
18 Bromomethane	94		2.987					ND	
19 Chloroethane	64		3.099					ND	
20 Dichlorofluoromethane	67		3.337					ND	
21 Trichlorofluoromethane	101		3.357					ND	
11 Ethanol	45		3.633					ND	
26 Ethyl ether	59		3.636					ND	
12 Propene oxide	58		3.752					ND	
28 Acrolein	56		3.845					ND	
29 1,1,2-Trichloro-1,2,2-trif	101		3.861					ND	
30 1,1-Dichloroethene	96		3.897					ND	
31 Acetone	43		3.990					ND	
33 Iodomethane	142		4.080					ND	
16 Isopropyl alcohol	45		4.128					ND	
35 Carbon disulfide	76		4.138					ND	
37 3-Chloro-1-propene	41		4.254					ND	
38 Methyl acetate	43		4.267					ND	
17 Acetonitrile	40		4.308					ND	
39 Methylene Chloride	84		4.395					ND	
40 2-Methyl-2-propanol	59		4.488					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
41 Methyl tert-butyl ether	73		4.575					ND	
42 trans-1,2-Dichloroethene	96		4.617					ND	
44 Acrylonitrile	53		4.659					ND	
47 Hexane	57		4.775					ND	
22 Isopropyl ether	45		4.968					ND	
23 Halothane	117		4.987					ND	
49 Vinyl acetate	43		5.016					ND	
50 1,1-Dichloroethane	63		5.019					ND	
25 1,1-Dimethoxyethane	75		5.058					ND	
24 2-Chloro-1,3-butadiene	53		5.074					ND	
27 Tert-butyl ethyl ether	59		5.292					ND	
56 2,2-Dichloropropane	77		5.520					ND	
32 Ethyl acetate	43		5.540					ND	
58 cis-1,2-Dichloroethene	96		5.543					ND	
57 2-Butanone (MEK)	43		5.543					ND	
34 Propionitrile	54		5.662					ND	
36 Methacrylonitrile	41		5.768					ND	
60 Chlorobromomethane	128		5.781					ND	
61 Tetrahydrofuran	42		5.794					ND	
62 Chloroform	83		5.823					ND	
64 1,1,1-Trichloroethane	97		5.964					ND	
65 Cyclohexane	56		5.987					ND	
67 1,1-Dichloropropene	75		6.102					ND	
66 Carbon tetrachloride	117		6.102					ND	
69 Isobutyl alcohol	43		6.202					ND	
43 Isooctane	57		6.260					ND	
45 t-Amyl alcohol	59		6.279					ND	U
70 Benzene	78		6.311					ND	
46 Tert-amyl methyl ether	73		6.324					ND	
72 1,2-Dichloroethane	62		6.363					ND	
73 n-Heptane	43		6.398					ND	
48 1,4-Difluorobenzene	114		6.623					ND	
51 2,4,4-Trimethyl-1-pentene	55		6.739					ND	
52 n-Butanol	56		6.794					ND	
75 Trichloroethene	95		6.877					ND	
53 Ethyl acrylate	55		6.926					ND	
54 2,4,4-Trimethyl-2-pentene	97		6.939					ND	
76 Methylcyclohexane	83		7.006					ND	
77 1,2-Dichloropropane	63		7.125					ND	
55 Methyl methacrylate	41		7.135					ND	
81 1,4-Dioxane	88		7.234					ND	
82 Dibromomethane	93		7.266					ND	
83 Dichlorobromomethane	83		7.385					ND	
84 2-Chloroethyl vinyl ether	63		7.604					ND	
59 2-Nitropropane	43		7.623					ND	
63 Epichlorohydrin	57		7.736					ND	
85 cis-1,3-Dichloropropene	75		7.784					ND	
87 4-Methyl-2-pentanone (MIBK	43		7.887					ND	
88 Toluene	92		8.083					ND	
68 2-Methylthiophene	97		8.228					ND	
90 Ethyl methacrylate	69		8.308					ND	
91 trans-1,3-Dichloropropene	75		8.324					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
71 3-Methylthiophene	97		8.392					ND	
93 1,1,2-Trichloroethane	83		8.530					ND	
94 Tetrachloroethene	166		8.620					ND	
95 1,3-Dichloropropane	76		8.704					ND	
96 2-Hexanone	43		8.710					ND	
74 n-Butyl acetate	43		8.778					ND	
98 Chlorodibromomethane	129		8.958					ND	
101 Ethylene Dibromide	107		9.093					ND	
78 1-Chlorohexane	55		9.427					ND	
79 3-Chlorobenzotrifluoride	180		9.430					ND	
80 4-Chlorobenzotrifluoride	180		9.488					ND	
103 Chlorobenzene	112		9.546					ND	
104 Ethylbenzene	91		9.604					ND	
105 1,1,1,2-Tetrachloroethane	131		9.623					ND	
106 m-Xylene & p-Xylene	106		9.717					ND	
107 o-Xylene	106		10.154					ND	
109 Styrene	104		10.180					ND	
86 2-Chlorobenzotrifluoride	180		10.421					ND	
110 Bromoform	173		10.459					ND	
111 Isopropylbenzene	105		10.501					ND	
89 Cyclohexanone	55		10.717					ND	U
112 1,1,2,2-Tetrachloroethane	83		10.877					ND	
113 Bromobenzene	156		10.887					ND	
114 N-Propylbenzene	91		10.906					ND	
115 trans-1,4-Dichloro-2-buten	53		10.916					ND	
116 1,2,3-Trichloropropane	110		10.932					ND	
117 2-Chlorotoluene	126		11.041					ND	
118 1,3,5-Trimethylbenzene	105		11.061					ND	
92 3-Chlorotoluene	126		11.096					ND	
119 4-Chlorotoluene	91		11.141					ND	
120 tert-Butylbenzene	134		11.376					ND	
121 1,2,4-Trimethylbenzene	105		11.424					ND	
97 Pentachloroethane	167		11.459					ND	
122 sec-Butylbenzene	105		11.572					ND	
123 4-Isopropyltoluene	119		11.688					ND	
124 1,3-Dichlorobenzene	146		11.739					ND	
99 Dicyclopentadiene	66		11.810					ND	
126 1,4-Dichlorobenzene	146		11.819					ND	
100 1,2,3-Trimethylbenzene	105		11.823					ND	
102 Benzyl chloride	126		11.945					ND	
127 n-Butylbenzene	91	12.051	12.054	-0.003	90	2547		0.1039	
128 1,2-Dichlorobenzene	146		12.160					ND	
129 1,2-Dibromo-3-Chloropropan	75		12.835					ND	
108 1,3,5-Trichlorobenzene	180		12.948					ND	
130 1,2,4-Trichlorobenzene	180		13.507					ND	
131 Hexachlorobutadiene	225		13.597					ND	
132 Naphthalene	128		13.765					ND	
133 1,2,3-Trichlorobenzene	180		13.996					ND	
125 2-Methylnaphthalene	142		14.929					ND	
135 Propene oxide TIC	1		0.000					ND	
137 cis-1,4-Dichloro-2-butene	88		0.000					ND	
134 Ethylene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
139 Hexachloroethane	117		0.000					ND	
138 Nitrobenzene	77		0.000					ND	
140 Methyl acrylate	1		0.000					ND	
136 1-Bromopropane TIC	1		0.000					ND	
S 144 1,3-Dichloropropene, Total	1		30.000					ND	
S 141 1,2-Dichloroethene, Total	1		30.000					ND	
S 142 Total BTEX	1		30.000					ND	
S 143 Xylenes, Total	1		30.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 16-Sep-2019 12:13:08 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1090.D

Injection Date: 16-Sep-2019 11:40:08 Instrument ID: HP5977L

Lims ID: MB

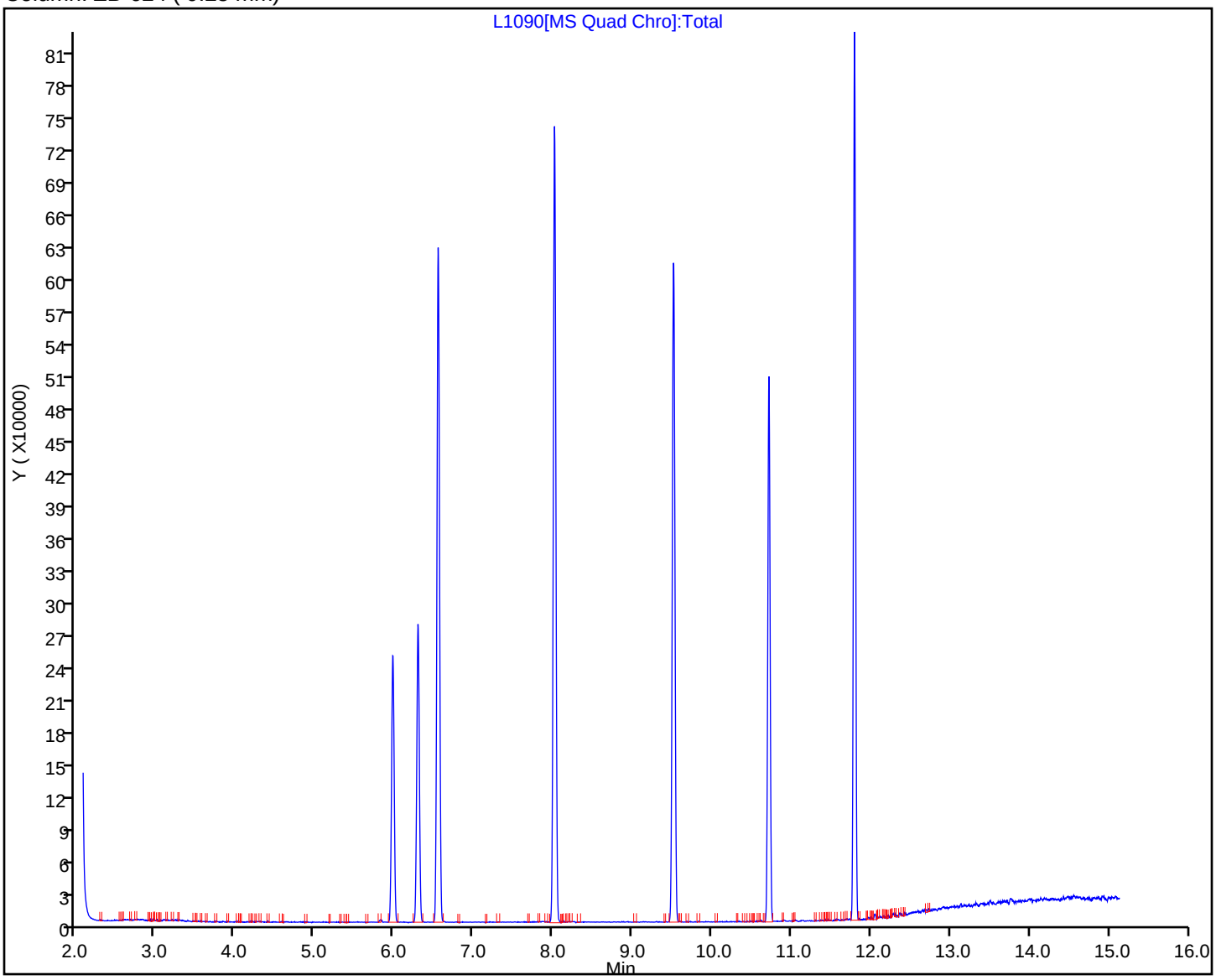
Client ID:

Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492066/5

Matrix: Water Lab File ID: S8950.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 09:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	26.9		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	25.9		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	30.2		1.0	0.31
79-00-5	1,1,2-Trichloroethane	26.2		1.0	0.23
75-34-3	1,1-Dichloroethane	26.9		1.0	0.38
75-35-4	1,1-Dichloroethene	26.7		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	21.9		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	23.0		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	24.7		1.0	0.39
106-93-4	1,2-Dibromoethane	27.2		1.0	0.73
95-50-1	1,2-Dichlorobenzene	26.4		1.0	0.79
107-06-2	1,2-Dichloroethane	26.0		1.0	0.21
78-87-5	1,2-Dichloropropane	26.0		1.0	0.72
541-73-1	1,3-Dichlorobenzene	26.1		1.0	0.78
106-46-7	1,4-Dichlorobenzene	26.3		1.0	0.84
123-91-1	1,4-Dioxane	443		40	9.3
78-93-3	2-Butanone (MEK)	148		10	1.3
591-78-6	2-Hexanone	136		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	142		5.0	2.1
67-64-1	Acetone	125		10	3.0
71-43-2	Benzene	25.7		1.0	0.41
74-97-5	Bromochloromethane	26.4		1.0	0.87
75-27-4	Bromodichloromethane	25.6		1.0	0.39
75-25-2	Bromoform	24.7		1.0	0.26
74-83-9	Bromomethane	21.6		1.0	0.69
75-15-0	Carbon disulfide	26.7		1.0	0.19
56-23-5	Carbon tetrachloride	27.8		1.0	0.27
108-90-7	Chlorobenzene	27.5		1.0	0.75
75-00-3	Chloroethane	22.4		1.0	0.32
67-66-3	Chloroform	25.2		1.0	0.34
74-87-3	Chloromethane	20.6		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	25.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.1		1.0	0.36
110-82-7	Cyclohexane	28.1		1.0	0.18
124-48-1	Dibromochloromethane	26.6		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492066/5

Matrix: Water Lab File ID: S8950.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 09:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492066 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	17.3		1.0	0.68
100-41-4	Ethylbenzene	27.4		1.0	0.74
98-82-8	Isopropylbenzene	26.2		1.0	0.79
79-20-9	Methyl acetate	53.4		2.5	1.3
1634-04-4	Methyl tert-butyl ether	26.3		1.0	0.16
108-87-2	Methylcyclohexane	28.3		1.0	0.16
75-09-2	Methylene Chloride	25.9		1.0	0.44
100-42-5	Styrene	27.6		1.0	0.73
127-18-4	Tetrachloroethene	28.4		1.0	0.36
108-88-3	Toluene	26.7		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	26.2		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	27.3		1.0	0.37
79-01-6	Trichloroethene	27.1		1.0	0.46
75-69-4	Trichlorofluoromethane	24.1		1.0	0.88
75-01-4	Vinyl chloride	21.7		1.0	0.90
1330-20-7	Xylenes, Total	53.4		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	109		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8950.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Sep-2019 09:50:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084133-005
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 10:13:05 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: nowakk Date: 14-Sep-2019 10:13:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	126455	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	246439	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	52	287017	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.871	4.865	0.006	55	160307	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	53	101750	25.0	25.2	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	83	618764	25.0	25.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	241838	25.0	27.4	
10 Dichlorodifluoromethane	85	1.270	1.270	0.000	96	154893	25.0	17.3	
12 Chloromethane	50	1.440	1.446	-0.006	93	205024	25.0	20.6	
13 Vinyl chloride	62	1.537	1.543	-0.006	62	181289	25.0	21.7	
151 Butadiene	54	1.543	1.543	0.000	93	242739	25.0	25.3	
14 Bromomethane	94	1.835	1.835	0.000	92	127697	25.0	21.6	
15 Chloroethane	64	1.933	1.939	-0.006	97	125244	25.0	22.4	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	96	276409	25.0	22.9	
17 Trichlorofluoromethane	101	2.158	2.164	-0.006	78	277444	25.0	24.1	
18 Ethyl ether	59	2.438	2.438	0.000	94	181645	25.0	26.8	
20 Acrolein	56	2.626	2.626	0.000	91	151576	125.0	133.5	
21 1,1,2-Trichloro-1,2,2-trif	101	2.657	2.657	0.000	73	191459	25.0	30.2	
22 1,1-Dichloroethene	96	2.657	2.657	0.000	96	165984	25.0	26.7	
23 Acetone	43	2.790	2.784	0.006	93	328555	125.0	125.2	
25 Iodomethane	142	2.821	2.821	0.000	98	327575	25.0	27.7	
26 Carbon disulfide	76	2.851	2.857	-0.006	100	542333	25.0	26.7	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	86	315826	25.0	25.5	
27 Methyl acetate	43	3.089	3.089	0.000	98	334701	50.0	53.4	
30 Methylene Chloride	84	3.186	3.186	0.000	96	182716	25.0	25.9	
31 2-Methyl-2-propanol	59	3.362	3.362	0.000	90	128455	250.0	239.7	M
32 Methyl tert-butyl ether	73	3.393	3.393	0.000	92	535951	25.0	26.3	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	94	185076	25.0	26.2	
33 Acrylonitrile	53	3.478	3.478	0.000	98	856177	250.0	271.3	M
35 Hexane	57	3.600	3.600	0.000	91	320277	25.0	28.0	
39 1,1-Dichloroethane	63	3.837	3.837	0.000	96	340858	25.0	26.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.892	3.892	0.000	97	938166	50.0	49.7	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	92	186457	25.0	25.1	
45 cis-1,2-Dichloroethene	96	4.396	4.397	-0.001	83	199026	25.0	25.6	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	93	563192	125.0	148.3	
48 Chlorobromomethane	128	4.634	4.634	0.000	96	108227	25.0	26.4	
49 Tetrahydrofuran	42	4.652	4.652	0.006	87	143036	50.0	52.3	M
50 Chloroform	83	4.713	4.713	0.000	95	319486	25.0	25.2	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	85	286962	25.0	26.9	
52 Cyclohexane	56	4.816	4.822	-0.006	93	373969	25.0	28.1	
55 Carbon tetrachloride	117	4.950	4.956	-0.006	90	265298	25.0	27.8	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	91	262140	25.0	27.3	
57 Benzene	78	5.175	5.175	0.000	97	728875	25.0	25.7	
53 Isobutyl alcohol	43	5.200	5.206	-0.006	86	166218	625.0	535.8	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	80	288698	25.0	26.0	
59 n-Heptane	43	5.352	5.346	0.006	94	352821	25.0	24.4	
62 Trichloroethene	95	5.790	5.784	0.006	91	198370	25.0	27.1	
64 Methylcyclohexane	83	5.899	5.899	0.000	93	356144	25.0	28.3	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	90	189523	25.0	26.0	
67 Dibromomethane	93	6.173	6.173	0.000	86	123430	25.0	27.1	
66 1,4-Dioxane	88	6.173	6.179	-0.006	25	20780	500.0	442.8	
68 Dichlorobromomethane	83	6.325	6.325	0.000	97	235375	25.0	25.6	
69 2-Chloroethyl vinyl ether	63	6.605	6.605	0.000	95	132500	25.0	25.1	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	87	298845	25.0	25.1	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	1307706	125.0	141.5	
74 Toluene	92	7.025	7.025	0.000	94	477096	25.0	26.7	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.000	98	279113	25.0	27.3	
75 Ethyl methacrylate	69	7.353	7.353	0.000	85	265644	25.0	27.0	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	96	140128	25.0	26.2	
81 Tetrachloroethene	166	7.554	7.554	0.000	86	235669	25.0	28.4	
82 1,3-Dichloropropane	76	7.663	7.663	0.000	95	294657	25.0	26.9	
80 2-Hexanone	43	7.730	7.730	0.000	95	912197	125.0	135.9	
83 Chlorodibromomethane	129	7.901	7.894	0.006	86	185931	25.0	26.6	
84 Ethylene Dibromide	107	7.998	7.998	0.000	96	191549	25.0	27.2	
87 Chlorobenzene	112	8.472	8.472	0.000	94	568278	25.0	27.5	
88 Ethylbenzene	91	8.564	8.564	0.000	98	912234	25.0	27.4	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	48	205424	25.0	28.8	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	374656	25.0	26.7	
91 o-Xylene	106	9.111	9.111	0.000	97	360029	25.0	26.7	
92 Styrene	104	9.142	9.142	0.000	94	610092	25.0	27.6	
95 Bromoform	173	9.397	9.397	0.000	94	117879	25.0	24.7	
94 Isopropylbenzene	105	9.495	9.494	0.000	96	950895	25.0	26.2	
101 Bromobenzene	156	9.841	9.841	0.000	92	262404	25.0	27.2	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	90	237435	25.0	25.9	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	1105748	25.0	26.7	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	84	90025	25.0	27.3	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	73	41834	25.0	13.6	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	237881	25.0	26.8	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	81	795815	25.0	26.3	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	250044	25.0	26.1	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	191257	25.0	25.9	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	77	819533	25.0	26.2	
109 sec-Butylbenzene	105	10.626	10.626	0.000	93	1020185	25.0	26.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.766	10.766	0.000	72	497477	25.0	26.1	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	929885	25.0	26.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	96	514510	25.0	26.3	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	783357	25.0	26.8	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	479325	25.0	26.4	
117 1,2-Dibromo-3-Chloropropan	75	11.940	11.934	0.006	81	45730	25.0	24.7	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	95	301344	25.0	23.0	
120 Hexachlorobutadiene	225	12.713	12.707	0.006	95	137997	25.0	24.3	
121 Naphthalene	128	12.816	12.822	-0.006	97	810776	25.0	23.7	
122 1,2,3-Trichlorobenzene	180	13.017	13.023	-0.006	96	259764	25.0	21.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	12.50	Units: uL	
8260 CORP mix_00164	Amount Added:	12.50	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00326	Amount Added:	1.00	Units: uL	Run Reagent

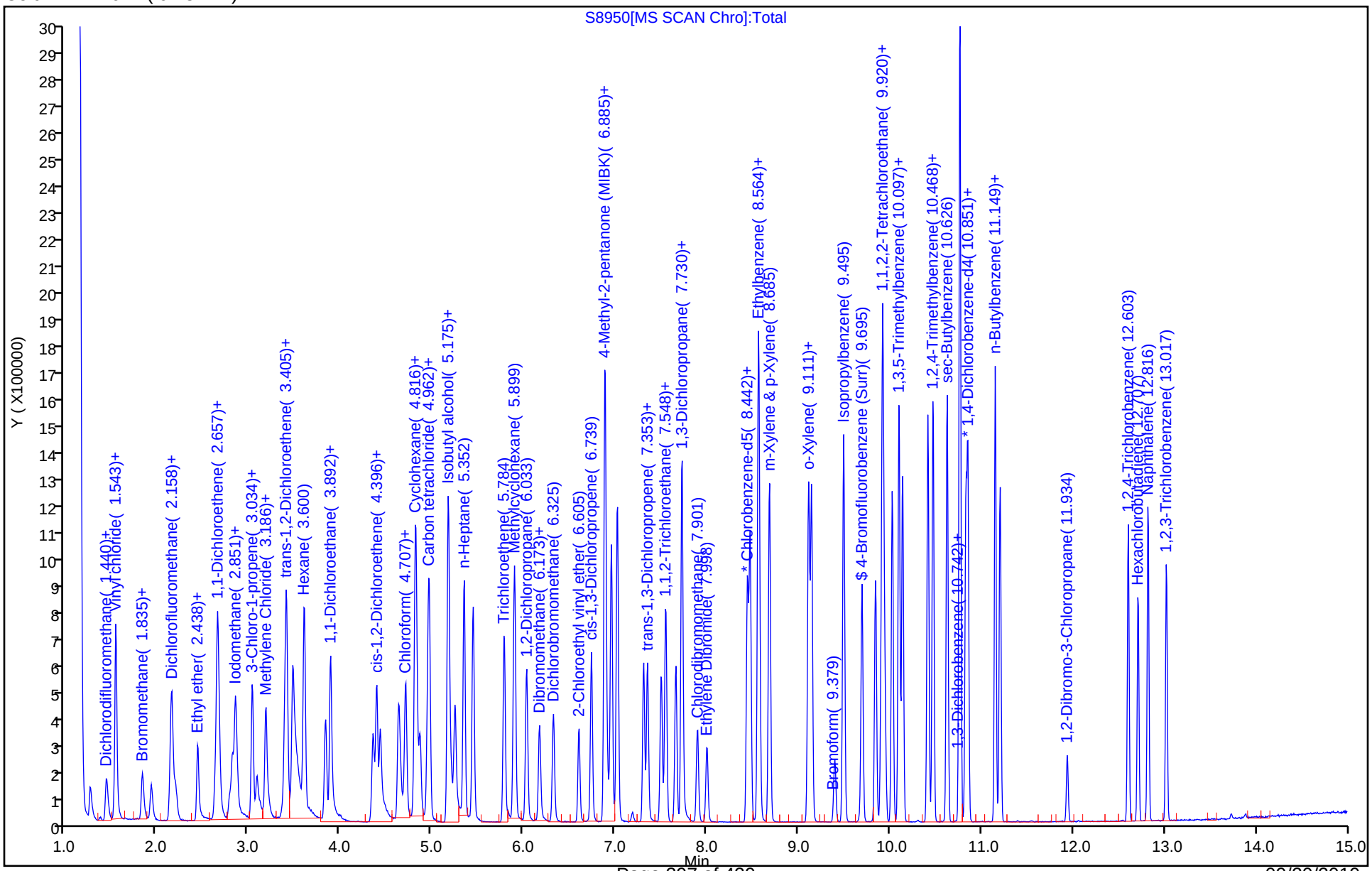
Report Date: 14-Sep-2019 10:13:18 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190914-84133.b\S8950.D

Injection Date:	14-Sep-2019 09:50:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492085/5

Matrix: Water Lab File ID: L0976.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 12:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	22.7		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	22.7		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22.4		1.0	0.31
79-00-5	1,1,2-Trichloroethane	23.7		1.0	0.23
75-34-3	1,1-Dichloroethane	22.0		1.0	0.38
75-35-4	1,1-Dichloroethene	21.6		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	22.4		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	22.3		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.2		1.0	0.39
106-93-4	1,2-Dibromoethane	24.6		1.0	0.73
95-50-1	1,2-Dichlorobenzene	22.0		1.0	0.79
107-06-2	1,2-Dichloroethane	22.5		1.0	0.21
78-87-5	1,2-Dichloropropane	24.0		1.0	0.72
541-73-1	1,3-Dichlorobenzene	22.4		1.0	0.78
106-46-7	1,4-Dichlorobenzene	22.4		1.0	0.84
123-91-1	1,4-Dioxane	507		40	9.3
78-93-3	2-Butanone (MEK)	121		10	1.3
591-78-6	2-Hexanone	129		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	122		5.0	2.1
67-64-1	Acetone	108		10	3.0
71-43-2	Benzene	22.6		1.0	0.41
74-97-5	Bromochloromethane	23.7		1.0	0.87
75-27-4	Bromodichloromethane	23.9		1.0	0.39
75-25-2	Bromoform	26.6		1.0	0.26
74-83-9	Bromomethane	20.7		1.0	0.69
75-15-0	Carbon disulfide	21.7		1.0	0.19
56-23-5	Carbon tetrachloride	22.7		1.0	0.27
108-90-7	Chlorobenzene	23.1		1.0	0.75
75-00-3	Chloroethane	20.7		1.0	0.32
67-66-3	Chloroform	22.0		1.0	0.34
74-87-3	Chloromethane	20.8		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	22.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.7		1.0	0.36
110-82-7	Cyclohexane	22.3		1.0	0.18
124-48-1	Dibromochloromethane	24.1		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492085/5

Matrix: Water Lab File ID: L0976.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/14/2019 12:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492085 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	22.6		1.0	0.68
100-41-4	Ethylbenzene	23.2		1.0	0.74
98-82-8	Isopropylbenzene	23.1		1.0	0.79
79-20-9	Methyl acetate	45.8		2.5	1.3
1634-04-4	Methyl tert-butyl ether	22.9		1.0	0.16
108-87-2	Methylcyclohexane	23.1		1.0	0.16
75-09-2	Methylene Chloride	21.5		1.0	0.44
100-42-5	Styrene	25.1		1.0	0.73
127-18-4	Tetrachloroethene	23.2		1.0	0.36
108-88-3	Toluene	22.3		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	21.7		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.4		1.0	0.37
79-01-6	Trichloroethene	23.4		1.0	0.46
75-69-4	Trichlorofluoromethane	22.1		1.0	0.88
75-01-4	Vinyl chloride	22.6		1.0	0.90
1330-20-7	Xylenes, Total	47.9		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	97		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0976.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Sep-2019 12:29:02 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084141-005
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 14-Sep-2019 10:50:55 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0340

First Level Reviewer: izquierdoo Date: 14-Sep-2019 12:55:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.550	-0.001	99	176309	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.517	9.514	0.003	87	699134	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.794	0.003	95	372008	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.980	5.977	0.003	93	226749	25.0	24.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.298	6.296	0.002	98	287584	25.0	24.8	
$ 6 Toluene-d8 (Surr)	98	8.019	8.018	0.003	93	869865	25.0	24.5	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.720	0.003	98	262323	25.0	26.1	
10 Dichlorodifluoromethane	85	2.202	2.202	0.000	98	231288	25.0	22.6	
13 Chloromethane	50	2.479	2.476	0.003	99	297026	25.0	20.8	
14 Vinyl chloride	62	2.610	2.614	-0.004	97	242618	25.0	22.6	
15 Butadiene	54	2.620	2.623	-0.004	88	256023	25.0	19.5	
18 Bromomethane	94	2.996	2.997	-0.001	92	130279	25.0	20.7	
19 Chloroethane	64	3.109	3.109	0.000	99	134590	25.0	20.7	
20 Dichlorofluoromethane	67	3.344	3.341	0.003	97	331477	25.0	21.9	
21 Trichlorofluoromethane	101	3.366	3.366	0.000	98	299579	25.0	22.1	
26 Ethyl ether	59	3.639	3.640	-0.001	96	228420	25.0	21.7	
28 Acrolein	56	3.845	3.849	-0.004	100	308557	125.0	117.8	
29 1,1,2-Trichloro-1,2,2-trif	101	3.868	3.868	0.000	93	176644	25.0	22.4	
30 1,1-Dichloroethene	96	3.903	3.900	0.003	95	173705	25.0	21.6	
31 Acetone	43	3.993	3.993	0.000	100	630179	125.0	107.6	
33 Iodomethane	142	4.099	4.090	0.009	99	313402	25.0	22.2	
35 Carbon disulfide	76	4.147	4.144	0.003	100	599099	25.0	21.7	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	92	362339	25.0	21.1	
38 Methyl acetate	43	4.270	4.270	0.000	99	568675	50.0	45.8	
39 Methylene Chloride	84	4.398	4.398	0.000	99	214920	25.0	21.5	
40 2-Methyl-2-propanol	59	4.491	4.492	-0.001	100	591139	250.0	243.7	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	98	644051	25.0	22.9	
42 trans-1,2-Dichloroethene	96	4.620	4.620	0.000	96	212990	25.0	21.7	
44 Acrylonitrile	53	4.662	4.662	0.000	100	1559046	250.0	234.9	
47 Hexane	57	4.778	4.778	0.000	89	333920	25.0	23.3	
49 Vinyl acetate	43	5.019	5.019	0.000	97	1250978	50.0	49.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
50 1,1-Dichloroethane	63	5.022	5.022	0.000	96	399523	25.0	22.0	
56 2,2-Dichloropropane	77	5.524	5.521	0.003	93	195132	25.0	21.1	
57 2-Butanone (MEK)	43	5.549	5.546	0.003	99	1005386	125.0	121.4	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	83	232634	25.0	22.6	
60 Chlorobromomethane	128	5.784	5.781	0.003	97	120586	25.0	23.7	
61 Tetrahydrofuran	42	5.794	5.794	0.000	92	258800	50.0	48.5	
62 Chloroform	83	5.826	5.826	0.000	95	360747	25.0	22.0	
64 1,1,1-Trichloroethane	97	5.967	5.968	-0.001	99	301082	25.0	22.7	
65 Cyclohexane	56	5.987	5.987	0.000	92	397925	25.0	22.3	
67 1,1-Dichloropropene	75	6.102	6.103	-0.001	92	272465	25.0	23.2	
66 Carbon tetrachloride	117	6.106	6.106	0.000	86	272393	25.0	22.7	
69 Isobutyl alcohol	43	6.205	6.202	0.003	95	612580	625.0	648.3	
70 Benzene	78	6.311	6.312	-0.001	97	818028	25.0	22.6	
72 1,2-Dichloroethane	62	6.366	6.363	0.003	97	335413	25.0	22.5	
73 n-Heptane	43	6.401	6.402	-0.001	93	307506	25.0	24.1	
75 Trichloroethene	95	6.880	6.877	0.003	97	216317	25.0	23.4	
76 Methylcyclohexane	83	7.009	7.009	0.000	94	328671	25.0	23.1	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	97	238915	25.0	24.0	
81 1,4-Dioxane	88	7.237	7.240	-0.001	97	69358	500.0	507.1	
82 Dibromomethane	93	7.270	7.270	0.000	96	144953	25.0	23.7	
83 Dichlorobromomethane	83	7.388	7.386	0.002	98	281764	25.0	23.9	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	93	193897	25.0	27.5	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	94	352324	25.0	25.7	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.893	0.000	96	1898595	125.0	121.5	
88 Toluene	92	8.083	8.086	0.000	98	531698	25.0	22.3	
90 Ethyl methacrylate	69	8.311	8.314	-0.001	92	318107	25.0	25.8	
91 trans-1,3-Dichloropropene	75	8.327	8.327	0.003	98	343914	25.0	25.4	
93 1,1,2-Trichloroethane	83	8.533	8.536	0.000	94	172507	25.0	23.7	
94 Tetrachloroethene	166	8.620	8.623	0.000	98	225281	25.0	23.2	
95 1,3-Dichloropropane	76	8.707	8.707	0.003	94	353010	25.0	23.4	
96 2-Hexanone	43	8.713	8.713	0.003	94	1406716	125.0	129.0	
98 Chlorodibromomethane	129	8.958	8.961	0.000	91	229356	25.0	24.1	
101 Ethylene Dibromide	107	9.093	9.092	0.003	98	229857	25.0	24.6	
103 Chlorobenzene	112	9.546	9.549	0.000	96	594285	25.0	23.1	
104 Ethylbenzene	91	9.604	9.607	0.000	98	973993	25.0	23.2	
105 1,1,1,2-Tetrachloroethane	131	9.623	9.630	-0.004	96	213669	25.0	22.9	
106 m-Xylene & p-Xylene	106	9.720	9.720	0.003	0	398538	25.0	24.3	
107 o-Xylene	106	10.157	10.157	0.003	96	382001	25.0	23.6	
109 Styrene	104	10.179	10.183	-0.001	96	642651	25.0	25.1	
110 Bromoform	173	10.459	10.463	0.000	97	171997	25.0	26.6	
111 Isopropylbenzene	105	10.504	10.504	0.003	96	969095	25.0	23.1	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.880	0.000	95	321138	25.0	22.7	
113 Bromobenzene	156	10.887	10.887	0.003	96	250550	25.0	22.7	
114 N-Propylbenzene	91	10.906	10.909	0.000	99	1163369	25.0	23.0	
115 trans-1,4-Dichloro-2-buten	53	10.919	10.919	0.003	80	130317	25.0	29.0	
116 1,2,3-Trichloropropane	110	10.932	10.935	0.000	83	109512	25.0	23.1	
117 2-Chlorotoluene	126	11.041	11.041	0.003	96	231947	25.0	21.9	
118 1,3,5-Trimethylbenzene	105	11.060	11.063	-0.001	94	834513	25.0	22.7	
119 4-Chlorotoluene	91	11.141	11.144	0.000	98	729382	25.0	23.2	
120 tert-Butylbenzene	134	11.376	11.375	0.003	93	178422	25.0	21.4	
121 1,2,4-Trimethylbenzene	105	11.424	11.427	0.000	96	851562	25.0	22.8	
122 sec-Butylbenzene	105	11.572	11.575	0.000	94	1041276	25.0	22.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
123 4-Isopropyltoluene	119	11.687	11.691	-0.001	97	904657	25.0	23.3	
124 1,3-Dichlorobenzene	146	11.739	11.742	0.000	98	480009	25.0	22.4	
126 1,4-Dichlorobenzene	146	11.819	11.819	0.003	95	491620	25.0	22.4	
127 n-Butylbenzene	91	12.054	12.057	0.000	98	805913	25.0	22.9	
128 1,2-Dichlorobenzene	146	12.160	12.163	0.000	97	476181	25.0	22.0	
129 1,2-Dibromo-3-Chloropropan	75	12.835	12.839	-0.001	86	73643	25.0	22.2	
130 1,2,4-Trichlorobenzene	180	13.511	13.511	0.003	94	336605	25.0	22.3	
131 Hexachlorobutadiene	225	13.597	13.601	-0.001	97	141627	25.0	23.6	
132 Naphthalene	128	13.768	13.768	0.003	97	1040341	25.0	22.5	
133 1,2,3-Trichlorobenzene	180	13.996	13.997	0.003	96	315415	25.0	22.4	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
L_8260_IS_00007	Amount Added: 2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 14-Sep-2019 12:55:45 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190914-84141.b\L0976.D

Injection Date: 14-Sep-2019 12:29:02 Instrument ID: HP5977L

Lims ID: LCS

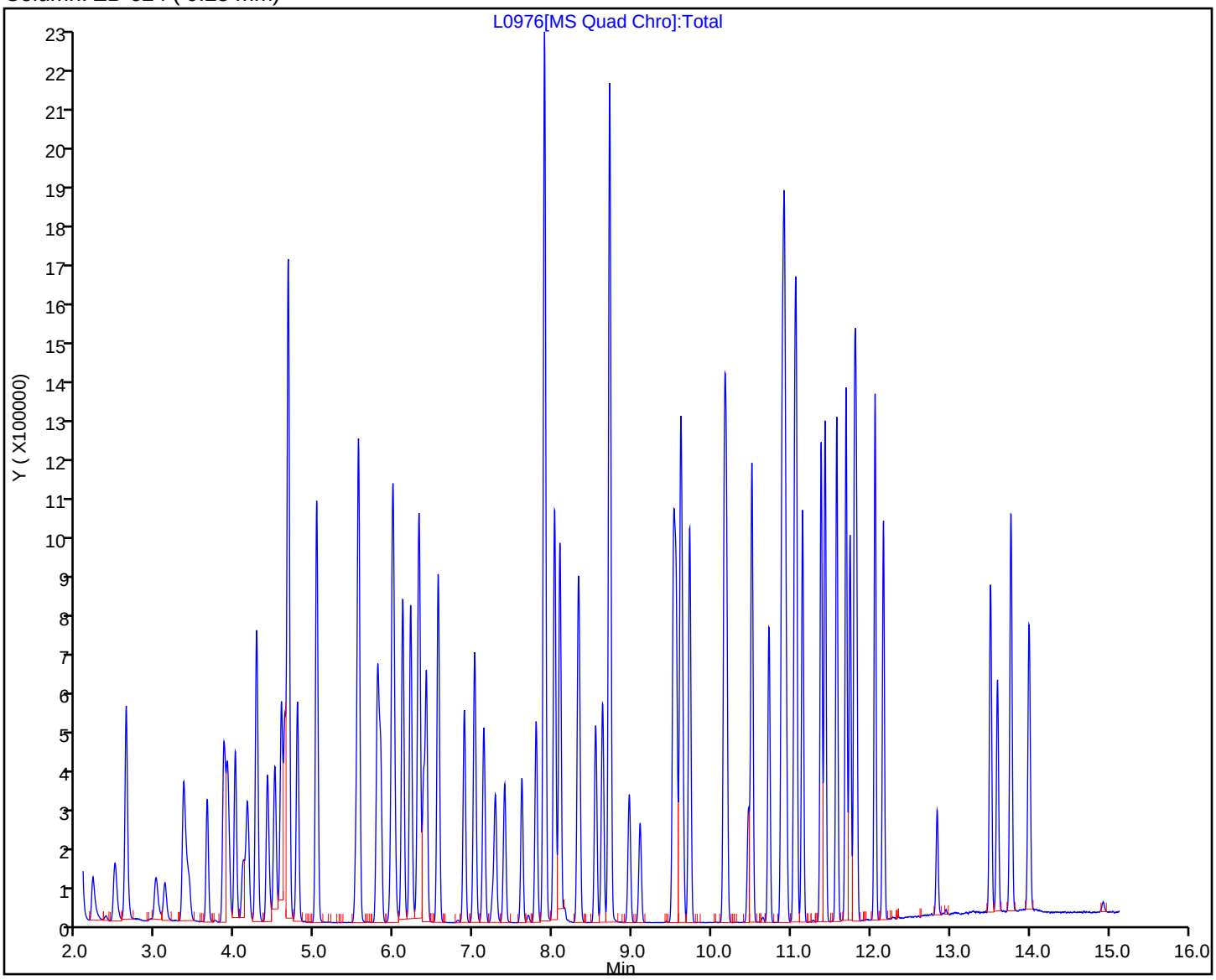
Client ID:

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492149/5

Matrix: Water Lab File ID: L1033.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 12:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	26.5		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.6		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.0		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.8		1.0	0.23
75-34-3	1,1-Dichloroethane	26.1		1.0	0.38
75-35-4	1,1-Dichloroethene	25.1		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	26.9		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	26.4		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	24.0		1.0	0.39
106-93-4	1,2-Dibromoethane	25.6		1.0	0.73
95-50-1	1,2-Dichlorobenzene	24.9		1.0	0.79
107-06-2	1,2-Dichloroethane	25.1		1.0	0.21
78-87-5	1,2-Dichloropropane	26.0		1.0	0.72
541-73-1	1,3-Dichlorobenzene	24.8		1.0	0.78
106-46-7	1,4-Dichlorobenzene	24.2		1.0	0.84
123-91-1	1,4-Dioxane	540		40	9.3
78-93-3	2-Butanone (MEK)	131		10	1.3
591-78-6	2-Hexanone	128		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	137		5.0	2.1
67-64-1	Acetone	129		10	3.0
71-43-2	Benzene	25.3		1.0	0.41
74-97-5	Bromochloromethane	27.8		1.0	0.87
75-27-4	Bromodichloromethane	26.1		1.0	0.39
75-25-2	Bromoform	27.5		1.0	0.26
74-83-9	Bromomethane	22.8		1.0	0.69
75-15-0	Carbon disulfide	25.5		1.0	0.19
56-23-5	Carbon tetrachloride	26.0		1.0	0.27
108-90-7	Chlorobenzene	25.2		1.0	0.75
75-00-3	Chloroethane	22.6		1.0	0.32
67-66-3	Chloroform	25.4		1.0	0.34
74-87-3	Chloromethane	24.3		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	26.8		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.4		1.0	0.36
110-82-7	Cyclohexane	26.6		1.0	0.18
124-48-1	Dibromochloromethane	26.2		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492149/5

Matrix: Water Lab File ID: L1033.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/15/2019 12:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492149 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	26.2		1.0	0.68
100-41-4	Ethylbenzene	25.5		1.0	0.74
98-82-8	Isopropylbenzene	25.5		1.0	0.79
79-20-9	Methyl acetate	53.2		2.5	1.3
1634-04-4	Methyl tert-butyl ether	26.7		1.0	0.16
108-87-2	Methylcyclohexane	26.4		1.0	0.16
75-09-2	Methylene Chloride	25.5		1.0	0.44
100-42-5	Styrene	27.2		1.0	0.73
127-18-4	Tetrachloroethene	25.7		1.0	0.36
108-88-3	Toluene	25.3		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	25.6		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.7		1.0	0.37
79-01-6	Trichloroethene	26.3		1.0	0.46
75-69-4	Trichlorofluoromethane	24.7		1.0	0.88
75-01-4	Vinyl chloride	24.5		1.0	0.90
1330-20-7	Xylenes, Total	54.5		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	108		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1033.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Sep-2019 12:09:40 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084156-005
Operator ID: OI Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Sep-2019 12:31:15 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0319

First Level Reviewer: izquierdoo Date: 15-Sep-2019 12:31:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.553	6.549	0.004	99	144189	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.514	9.514	0.000	86	535258	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	95	296744	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.980	0.000	93	205037	25.0	26.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.296	6.295	0.001	98	250483	25.0	26.4	
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	705977	25.0	26.0	
$ 7 4-Bromofluorobenzene (Surr	174	10.717	10.717	0.001	99	208014	25.0	27.1	
10 Dichlorodifluoromethane	85	2.199	2.199	0.000	99	218560	25.0	26.2	
13 Chloromethane	50	2.472	2.472	0.000	99	284314	25.0	24.3	
14 Vinyl chloride	62	2.608	2.607	0.001	98	214733	25.0	24.5	
15 Butadiene	54	2.617	2.618	0.000	89	250612	25.0	23.4	
18 Bromomethane	94	2.990	2.990	0.000	91	117626	25.0	22.8	
19 Chloroethane	64	3.103	3.102	0.001	98	119919	25.0	22.6	
20 Dichlorofluoromethane	67	3.337	3.337	0.000	97	299376	25.0	24.2	
21 Trichlorofluoromethane	101	3.360	3.360	0.000	96	273396	25.0	24.7	
26 Ethyl ether	59	3.640	3.639	0.001	95	218846	25.0	25.4	
28 Acrolein	56	3.845	3.845	0.000	99	302649	125.0	141.3	
29 1,1,2-Trichloro-1,2,2-trif	101	3.865	3.865	0.000	93	167368	25.0	26.0	
30 1,1-Dichloroethene	96	3.897	3.897	0.000	95	165224	25.0	25.1	
31 Acetone	43	3.993	3.993	0.000	100	616697	125.0	128.8	
33 Iodomethane	142	4.087	4.086	0.001	98	307408	25.0	26.6	
35 Carbon disulfide	76	4.141	4.141	0.000	100	577379	25.0	25.5	
37 3-Chloro-1-propene	41	4.257	4.257	0.000	92	365272	25.0	26.0	
38 Methyl acetate	43	4.267	4.266	0.001	99	540844	50.0	53.2	
39 Methylene Chloride	84	4.398	4.395	0.003	99	207982	25.0	25.5	
40 2-Methyl-2-propanol	59	4.492	4.488	0.004	100	539497	250.0	272.0	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	97	615718	25.0	26.7	
42 trans-1,2-Dichloroethene	96	4.617	4.617	0.000	95	205239	25.0	25.6	
44 Acrylonitrile	53	4.659	4.659	0.000	99	1510834	250.0	278.4	
47 Hexane	57	4.778	4.778	0.000	90	309235	25.0	26.3	
49 Vinyl acetate	43	5.019	5.019	0.000	97	1176218	50.0	56.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
50 1,1-Dichloroethane	63	5.022	5.022	0.000	96	387625	25.0	26.1	
56 2,2-Dichloropropane	77	5.521	5.520	0.001	94	214641	25.0	28.3	
57 2-Butanone (MEK)	43	5.546	5.546	0.000	99	888338	125.0	131.1	
58 cis-1,2-Dichloroethene	96	5.546	5.546	0.000	88	225394	25.0	26.8	
60 Chlorobromomethane	128	5.781	5.778	0.003	96	115967	25.0	27.8	
61 Tetrahydrofuran	42	5.797	5.794	0.003	93	235978	50.0	54.1	
62 Chloroform	83	5.826	5.823	0.003	93	340358	25.0	25.4	
64 1,1,1-Trichloroethane	97	5.968	5.967	0.001	99	287656	25.0	26.5	
65 Cyclohexane	56	5.987	5.987	0.000	93	388014	25.0	26.6	
66 Carbon tetrachloride	117	6.106	6.102	0.004	89	254480	25.0	26.0	
67 1,1-Dichloropropene	75	6.103	6.102	0.001	93	252903	25.0	26.3	
69 Isobutyl alcohol	43	6.202	6.202	0.000	96	539246	625.0	697.8	
70 Benzene	78	6.312	6.311	0.001	97	750127	25.0	25.3	
72 1,2-Dichloroethane	62	6.366	6.363	0.003	96	306156	25.0	25.1	
73 n-Heptane	43	6.402	6.398	0.004	94	268072	25.0	25.7	
75 Trichloroethene	95	6.881	6.877	0.004	97	198898	25.0	26.3	
76 Methylcyclohexane	83	7.013	7.009	0.004	94	307081	25.0	26.4	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	96	211958	25.0	26.0	
81 1,4-Dioxane	88	7.234	7.238	-0.003	97	56495	500.0	539.6	
82 Dibromomethane	93	7.270	7.270	0.000	94	131336	25.0	26.3	
83 Dichlorobromomethane	83	7.386	7.385	0.001	99	251480	25.0	26.1	
84 2-Chloroethyl vinyl ether	63	7.604	7.601	0.003	92	136602	25.0	23.7	
85 cis-1,3-Dichloropropene	75	7.784	7.781	0.003	94	296741	25.0	26.4	
87 4-Methyl-2-pentanone (MIBK	43	7.890	7.887	0.003	96	1639043	125.0	137.0	
88 Toluene	92	8.083	8.083	0.000	99	461587	25.0	25.3	
90 Ethyl methacrylate	69	8.312	8.308	0.004	91	244840	25.0	26.0	
91 trans-1,3-Dichloropropene	75	8.328	8.328	0.001	98	265773	25.0	25.7	
93 1,1,2-Trichloroethane	83	8.533	8.533	0.000	92	138267	25.0	24.8	
94 Tetrachloroethene	166	8.620	8.620	0.000	98	190570	25.0	25.7	
95 1,3-Dichloropropane	76	8.707	8.704	0.003	95	276786	25.0	24.0	
96 2-Hexanone	43	8.710	8.710	0.000	93	1071345	125.0	128.3	
98 Chlorodibromomethane	129	8.958	8.955	0.004	91	191448	25.0	26.2	
101 Ethylene Dibromide	107	9.093	9.093	0.000	97	182957	25.0	25.6	
103 Chlorobenzene	112	9.549	9.546	0.003	96	496535	25.0	25.2	
104 Ethylbenzene	91	9.604	9.604	0.000	98	819053	25.0	25.5	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.623	0.004	95	193511	25.0	27.1	
106 m-Xylene & p-Xylene	106	9.720	9.717	0.004	0	335056	25.0	26.6	
107 o-Xylene	106	10.157	10.154	0.003	96	345117	25.0	27.9	
109 Styrene	104	10.180	10.180	0.001	95	533418	25.0	27.2	
110 Bromoform	173	10.459	10.456	0.003	95	135915	25.0	27.5	
111 Isopropylbenzene	105	10.501	10.501	0.000	96	852606	25.0	25.5	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	96	277996	25.0	24.6	
113 Bromobenzene	156	10.887	10.887	0.000	96	210051	25.0	23.8	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	997326	25.0	24.8	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.916	0.000	78	84758	25.0	23.7	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	82	91783	25.0	24.3	
117 2-Chlorotoluene	126	11.041	11.041	0.000	96	210732	25.0	25.0	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.001	94	740555	25.0	25.2	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	612386	25.0	24.4	
120 tert-Butylbenzene	134	11.376	11.373	0.004	93	159791	25.0	24.0	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	760374	25.0	25.5	
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	924704	25.0	25.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
123 4-Isopropyltoluene	119	11.688	11.688	0.001	97	801801	25.0	25.8	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	423982	25.0	24.8	
126 1,4-Dichlorobenzene	146	11.816	11.816	0.000	94	424384	25.0	24.2	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	724620	25.0	25.8	
128 1,2-Dichlorobenzene	146	12.157	12.160	-0.003	97	430535	25.0	24.9	
129 1,2-Dibromo-3-Chloropropan	75	12.836	12.836	0.001	87	63444	25.0	24.0	
130 1,2,4-Trichlorobenzene	180	13.511	13.508	0.004	95	317668	25.0	26.4	
131 Hexachlorobutadiene	225	13.598	13.598	0.001	98	131240	25.0	27.4	
132 Naphthalene	128	13.765	13.765	0.000	97	990094	25.0	26.8	
133 1,2,3-Trichlorobenzene	180	13.993	13.993	0.000	96	302034	25.0	26.9	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
L_8260_IS_00007	Amount Added: 2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added: 2.00	Units: uL	Run Reagent

Report Date: 15-Sep-2019 12:31:16 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190915-84156.b\L1033.D

Injection Date: 15-Sep-2019 12:09:40 Instrument ID: HP5977L

Lims ID: LCS

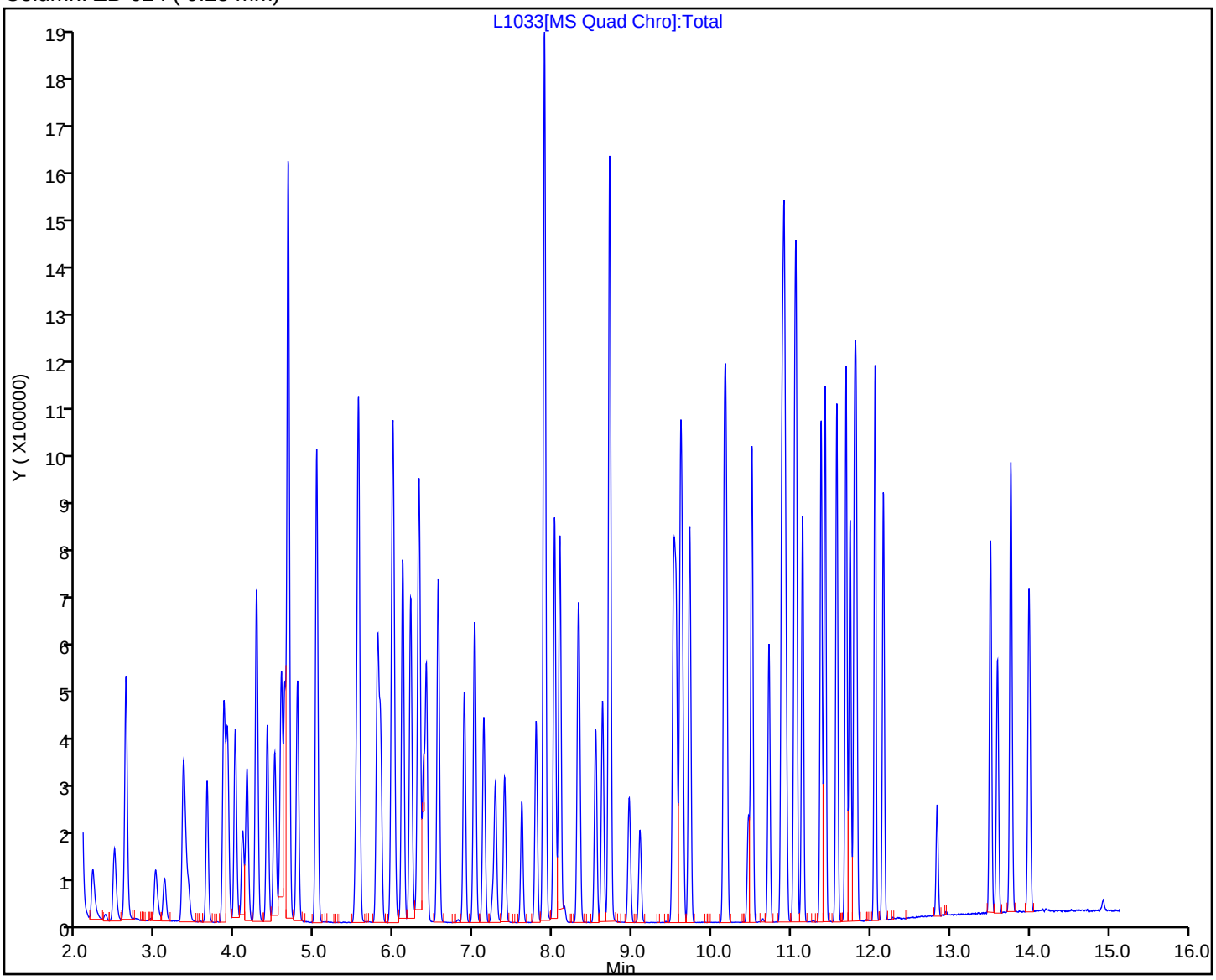
Client ID:

Operator ID: OI ALS Bottle#: 0 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492226/5

Matrix: Water Lab File ID: L1088.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 10:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	25.0		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	23.6		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	23.2		1.0	0.31
79-00-5	1,1,2-Trichloroethane	25.0		1.0	0.23
75-34-3	1,1-Dichloroethane	24.0		1.0	0.38
75-35-4	1,1-Dichloroethene	22.3		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	24.6		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	24.0		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.3		1.0	0.39
106-93-4	1,2-Dibromoethane	25.4		1.0	0.73
95-50-1	1,2-Dichlorobenzene	24.5		1.0	0.79
107-06-2	1,2-Dichloroethane	24.5		1.0	0.21
78-87-5	1,2-Dichloropropane	25.2		1.0	0.72
541-73-1	1,3-Dichlorobenzene	24.9		1.0	0.78
106-46-7	1,4-Dichlorobenzene	24.5		1.0	0.84
123-91-1	1,4-Dioxane	501		40	9.3
78-93-3	2-Butanone (MEK)	128		10	1.3
591-78-6	2-Hexanone	139		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	132		5.0	2.1
67-64-1	Acetone	114		10	3.0
71-43-2	Benzene	23.8		1.0	0.41
74-97-5	Bromochloromethane	25.1		1.0	0.87
75-27-4	Bromodichloromethane	25.9		1.0	0.39
75-25-2	Bromoform	28.0		1.0	0.26
74-83-9	Bromomethane	19.4		1.0	0.69
75-15-0	Carbon disulfide	22.1		1.0	0.19
56-23-5	Carbon tetrachloride	24.1		1.0	0.27
108-90-7	Chlorobenzene	24.9		1.0	0.75
75-00-3	Chloroethane	19.6		1.0	0.32
67-66-3	Chloroform	23.8		1.0	0.34
74-87-3	Chloromethane	21.6		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	24.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.8		1.0	0.36
110-82-7	Cyclohexane	24.8		1.0	0.18
124-48-1	Dibromochloromethane	26.2		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-492226/5

Matrix: Water Lab File ID: L1088.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/16/2019 10:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 492226 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	23.4		1.0	0.68
100-41-4	Ethylbenzene	24.8		1.0	0.74
98-82-8	Isopropylbenzene	24.4		1.0	0.79
79-20-9	Methyl acetate	49.4		2.5	1.3
1634-04-4	Methyl tert-butyl ether	24.5		1.0	0.16
108-87-2	Methylcyclohexane	24.5		1.0	0.16
75-09-2	Methylene Chloride	22.5		1.0	0.44
100-42-5	Styrene	27.4		1.0	0.73
127-18-4	Tetrachloroethene	24.6		1.0	0.36
108-88-3	Toluene	24.0		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	22.7		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	27.0		1.0	0.37
79-01-6	Trichloroethene	24.7		1.0	0.46
75-69-4	Trichlorofluoromethane	22.9		1.0	0.88
75-01-4	Vinyl chloride	21.3		1.0	0.90
1330-20-7	Xylenes, Total	51.6		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	115		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1088.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Sep-2019 10:42:47 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084170-005
Operator ID: BP Instrument ID: HP5977L

Method: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Sep-2019 11:04:00 Calib Date: 13-Sep-2019 23:23:34
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5977L\20190913-84114.b\L0967.D

Column 1 : ZB-624 (0.25 mm) Det: MS Quad
Process Host: CTX0318

First Level Reviewer: phillipsb Date: 16-Sep-2019 11:15:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 1 Fluorobenzene (IS)	70	6.549	6.549	0.000	99	136427	25.0	25.0	
* 2 Chlorobenzene-d5	117	9.514	9.514	0.000	87	529955	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	11.797	11.797	0.000	95	287615	25.0	25.0	
$ 4 Dibromofluoromethane (Surr	113	5.977	5.977	0.000	91	185595	25.0	25.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	6.295	6.295	0.000	98	238099	25.0	26.6	a
$ 6 Toluene-d8 (Surr)	98	8.016	8.016	0.000	93	701584	25.0	26.1	
$ 7 4-Bromofluorobenzene (Surr	174	10.720	10.717	0.004	98	219149	25.0	28.8	
10 Dichlorodifluoromethane	85	2.202	2.199	0.003	99	184776	25.0	23.4	
13 Chloromethane	50	2.479	2.472	0.007	99	239560	25.0	21.6	
14 Vinyl chloride	62	2.611	2.607	0.004	97	176489	25.0	21.3	
15 Butadiene	54	2.623	2.617	0.006	88	205724	25.0	20.3	
18 Bromomethane	94	2.990	2.987	0.003	92	94589	25.0	19.4	
19 Chloroethane	64	3.103	3.099	0.004	98	98515	25.0	19.6	
20 Dichlorofluoromethane	67	3.344	3.337	0.007	97	252801	25.0	21.6	
21 Trichlorofluoromethane	101	3.369	3.357	0.012	97	240174	25.0	22.9	
26 Ethyl ether	59	3.640	3.636	0.004	96	189250	25.0	23.2	
28 Acrolein	56	3.845	3.845	0.000	100	255705	125.0	126.2	
29 1,1,2-Trichloro-1,2,2-trif	101	3.871	3.861	0.010	93	141488	25.0	23.2	
30 1,1-Dichloroethene	96	3.900	3.897	0.003	96	139034	25.0	22.3	
31 Acetone	43	3.993	3.990	0.003	100	514446	125.0	113.5	
33 Iodomethane	142	4.090	4.080	0.010	99	262066	25.0	23.9	
35 Carbon disulfide	76	4.148	4.138	0.010	100	473896	25.0	22.1	
37 3-Chloro-1-propene	41	4.257	4.254	0.003	90	312468	25.0	23.5	
38 Methyl acetate	43	4.267	4.267	0.000	99	475086	50.0	49.4	
39 Methylene Chloride	84	4.398	4.395	0.003	98	173634	25.0	22.5	
40 2-Methyl-2-propanol	59	4.488	4.488	0.000	100	458419	250.0	244.3	
41 Methyl tert-butyl ether	73	4.575	4.575	0.000	97	533299	25.0	24.5	
42 trans-1,2-Dichloroethene	96	4.617	4.617	0.000	95	172540	25.0	22.7	
44 Acrylonitrile	53	4.659	4.659	0.000	99	1303422	250.0	253.8	
47 Hexane	57	4.778	4.775	0.003	90	281873	25.0	25.4	
49 Vinyl acetate	43	5.019	5.016	0.003	97	1085313	50.0	55.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
50 1,1-Dichloroethane	63	5.022	5.019	0.003	95	337733	25.0	24.0	
56 2,2-Dichloropropane	77	5.524	5.520	0.004	92	172512	25.0	24.1	
57 2-Butanone (MEK)	43	5.546	5.543	0.003	99	819052	125.0	127.8	
58 cis-1,2-Dichloroethene	96	5.546	5.543	0.003	58	195228	25.0	24.6	
60 Chlorobromomethane	128	5.781	5.781	0.000	95	99008	25.0	25.1	
61 Tetrahydrofuran	42	5.794	5.794	0.000	91	208371	50.0	50.5	
62 Chloroform	83	5.823	5.823	0.000	93	301319	25.0	23.8	
64 1,1,1-Trichloroethane	97	5.967	5.964	0.003	98	256535	25.0	25.0	
65 Cyclohexane	56	5.987	5.987	0.000	93	342209	25.0	24.8	
66 Carbon tetrachloride	117	6.102	6.102	0.000	87	223805	25.0	24.1	
67 1,1-Dichloropropene	75	6.102	6.102	0.000	91	219380	25.0	24.1	
69 Isobutyl alcohol	43	6.202	6.202	0.000	96	484017	625.0	662.0	
70 Benzene	78	6.311	6.311	0.000	97	667588	25.0	23.8	
72 1,2-Dichloroethane	62	6.366	6.363	0.003	97	283164	25.0	24.5	
73 n-Heptane	43	6.402	6.398	0.004	94	260787	25.0	26.4	
75 Trichloroethene	95	6.877	6.877	0.000	97	176701	25.0	24.7	
76 Methylcyclohexane	83	7.009	7.006	0.003	96	270139	25.0	24.5	
77 1,2-Dichloropropane	63	7.125	7.125	0.000	95	194741	25.0	25.2	
81 1,4-Dioxane	88	7.231	7.234	-0.003	96	51916	500.0	500.8	
82 Dibromomethane	93	7.270	7.266	0.004	96	120208	25.0	25.4	
83 Dichlorobromomethane	83	7.385	7.385	0.000	98	236373	25.0	25.9	
84 2-Chloroethyl vinyl ether	63	7.604	7.604	0.000	92	144549	25.0	26.5	
85 cis-1,3-Dichloropropene	75	7.784	7.784	0.000	93	284882	25.0	26.8	
87 4-Methyl-2-pentanone (MIBK	43	7.887	7.887	0.000	96	1564053	125.0	132.1	
88 Toluene	92	8.083	8.083	0.000	98	434865	25.0	24.0	
90 Ethyl methacrylate	69	8.311	8.308	0.003	93	248081	25.0	26.6	
91 trans-1,3-Dichloropropene	75	8.328	8.324	0.004	97	277045	25.0	27.0	
93 1,1,2-Trichloroethane	83	8.537	8.530	0.006	93	138255	25.0	25.0	
94 Tetrachloroethene	166	8.623	8.620	0.003	98	180591	25.0	24.6	
95 1,3-Dichloropropane	76	8.704	8.704	0.000	95	279856	25.0	24.5	
96 2-Hexanone	43	8.710	8.710	0.000	98	1147858	125.0	138.9	
98 Chlorodibromomethane	129	8.958	8.958	0.000	90	189204	25.0	26.2	
101 Ethylene Dibromide	107	9.093	9.093	0.000	100	179614	25.0	25.4	
103 Chlorobenzene	112	9.546	9.546	0.000	95	486591	25.0	24.9	
104 Ethylbenzene	91	9.604	9.604	0.000	98	789139	25.0	24.8	
105 1,1,1,2-Tetrachloroethane	131	9.627	9.623	0.003	95	179196	25.0	25.4	
106 m-Xylene & p-Xylene	106	9.717	9.717	0.000	0	321571	25.0	25.8	
107 o-Xylene	106	10.157	10.154	0.003	96	316727	25.0	25.8	
109 Styrene	104	10.180	10.180	0.000	95	531392	25.0	27.4	
110 Bromoform	173	10.459	10.459	0.000	96	136888	25.0	28.0	
111 Isopropylbenzene	105	10.501	10.501	0.000	97	791262	25.0	24.4	
112 1,1,2,2-Tetrachloroethane	83	10.877	10.877	0.000	95	258067	25.0	23.6	
113 Bromobenzene	156	10.887	10.887	0.000	94	207831	25.0	24.3	
114 N-Propylbenzene	91	10.906	10.906	0.000	99	939514	25.0	24.1	
115 trans-1,4-Dichloro-2-buten	53	10.916	10.916	0.000	79	96059	25.0	27.7	
116 1,2,3-Trichloropropane	110	10.932	10.932	0.000	84	89479	25.0	24.4	
117 2-Chlorotoluene	126	11.041	11.041	0.000	97	196448	25.0	24.0	
118 1,3,5-Trimethylbenzene	105	11.061	11.061	0.000	94	694747	25.0	24.4	
119 4-Chlorotoluene	91	11.141	11.141	0.000	98	604583	25.0	24.8	
120 tert-Butylbenzene	134	11.376	11.376	0.000	93	147104	25.0	22.8	
121 1,2,4-Trimethylbenzene	105	11.424	11.424	0.000	97	717657	25.0	24.8	
122 sec-Butylbenzene	105	11.572	11.572	0.000	94	857112	25.0	24.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
123 4-Isopropyltoluene	119	11.688	11.688	0.000	97	755198	25.0	25.1	
124 1,3-Dichlorobenzene	146	11.739	11.739	0.000	98	412328	25.0	24.9	
126 1,4-Dichlorobenzene	146	11.816	11.819	-0.003	95	415934	25.0	24.5	
127 n-Butylbenzene	91	12.054	12.054	0.000	98	662415	25.0	24.3	
128 1,2-Dichlorobenzene	146	12.160	12.160	0.000	97	410824	25.0	24.5	
129 1,2-Dibromo-3-Chloropropan	75	12.835	12.835	0.000	86	57126	25.0	22.3	
130 1,2,4-Trichlorobenzene	180	13.507	13.507	0.000	94	280279	25.0	24.0	
131 Hexachlorobutadiene	225	13.597	13.597	0.000	98	118241	25.0	25.5	
132 Naphthalene	128	13.765	13.765	0.000	97	842795	25.0	23.6	
133 1,2,3-Trichlorobenzene	180	13.996	13.996	0.000	96	267801	25.0	24.6	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	12.50	Units: uL	
GAS CORP mix_00360	Amount Added:	12.50	Units: uL	
L_8260_IS_00007	Amount Added:	2.00	Units: uL	Run Reagent
L_8260_SURR_00007	Amount Added:	2.00	Units: uL	Run Reagent

Report Date: 16-Sep-2019 11:15:10 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1088.D

Injection Date: 16-Sep-2019 10:42:47 Instrument ID: HP5977L

Lims ID: LCS

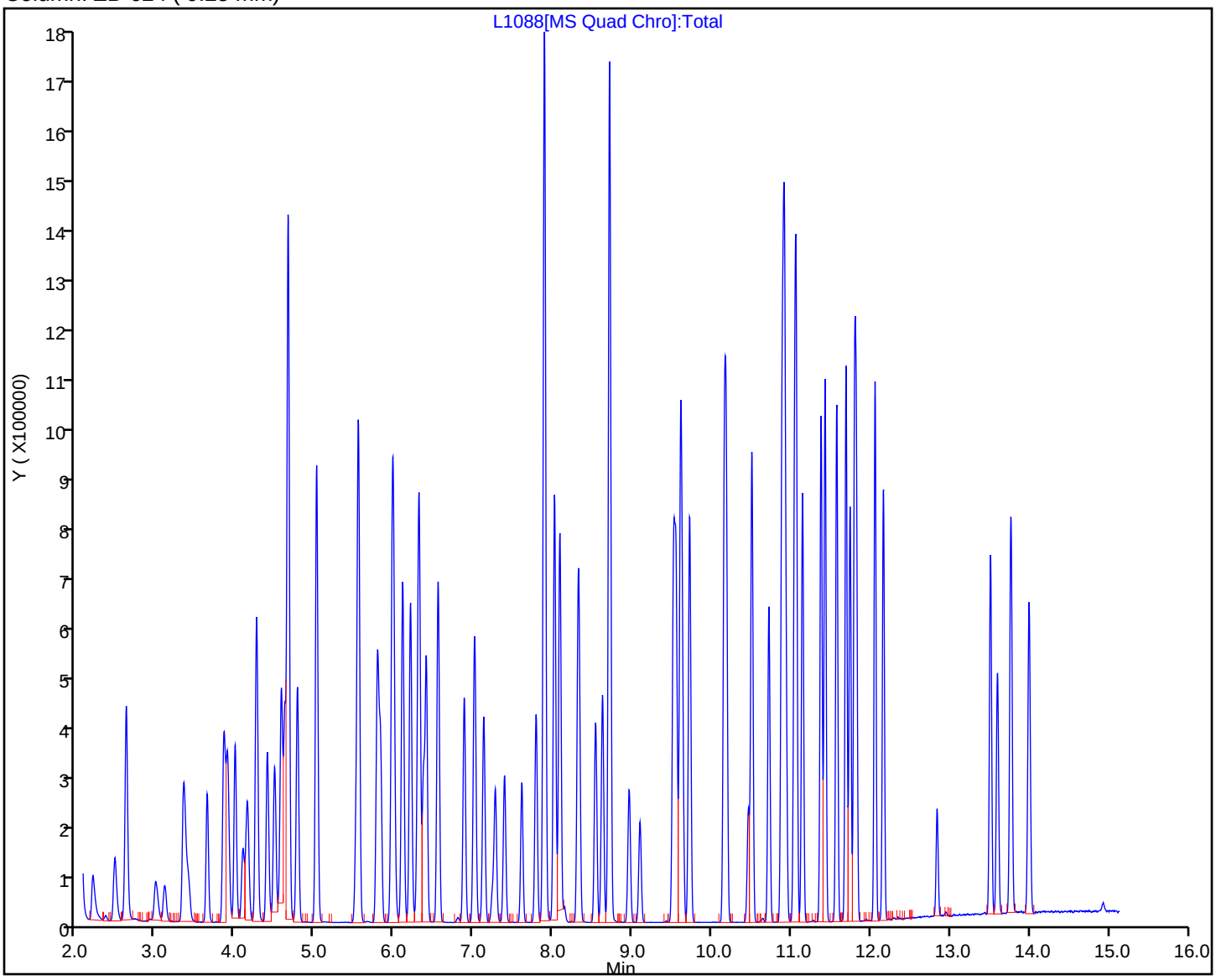
Client ID:

Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: L-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

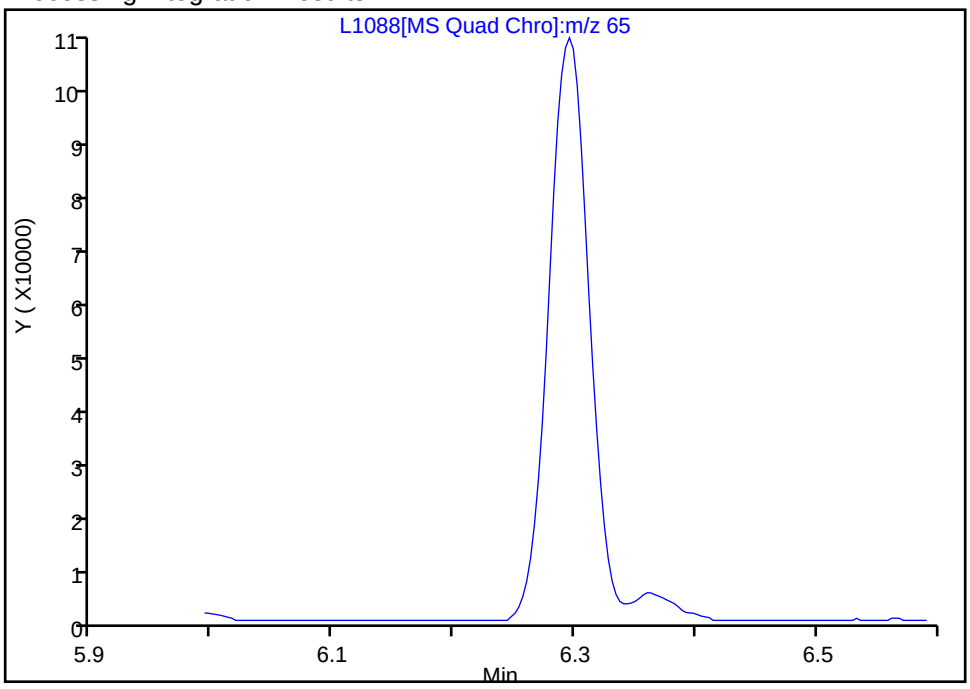
Data File: \\ChromNA\Buffalo\ChromData\HP5977L\20190916-84170.b\L1088.D
Injection Date: 16-Sep-2019 10:42:47 Instrument ID: HP5977L
Lims ID: LCS
Client ID:
Operator ID: BP ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: L-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS Quad

$ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

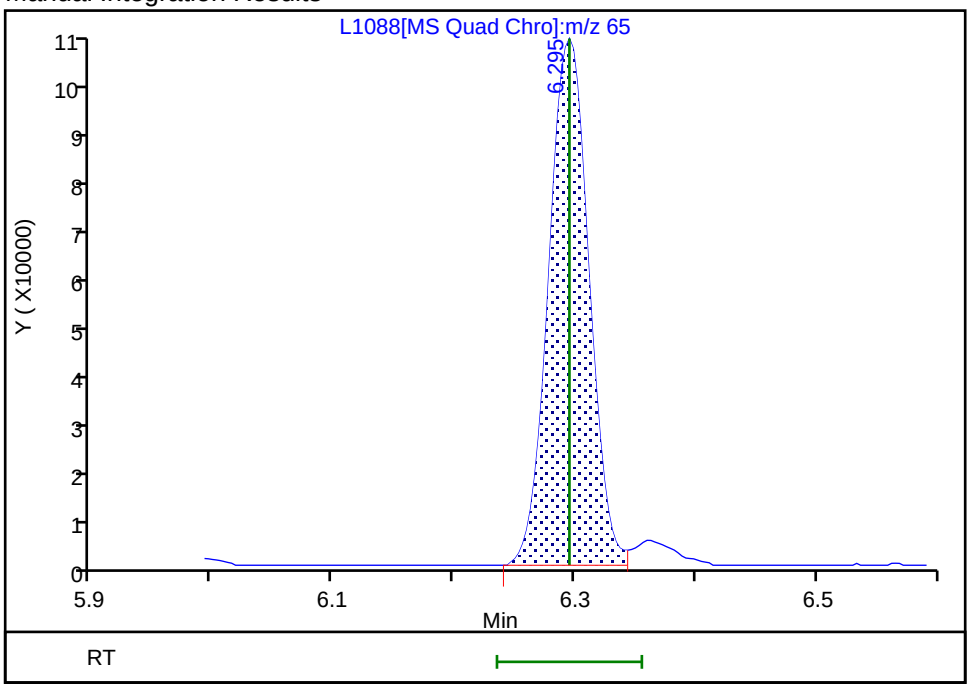
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.30
Area: 238099
Amount: 26.552560
Amount Units: ug/L



Reviewer: phillipsb, 16-Sep-2019 11:03:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Instrument ID: HP5973S Start Date: 09/10/2019 13:48

Analysis Batch Number: 491176 End Date: 09/10/2019 23:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-491176/5		09/10/2019 13:48	1	S8766.D	ZB-624 (20) 0.18(mm)
IC 480-491176/7		09/10/2019 14:39	1	S8768.D	ZB-624 (20) 0.18(mm)
IC 480-491176/8		09/10/2019 15:02	1	S8769.D	ZB-624 (20) 0.18(mm)
IC 480-491176/9		09/10/2019 15:25	1	S8770.D	ZB-624 (20) 0.18(mm)
IC 480-491176/10		09/10/2019 15:48	1	S8771.D	ZB-624 (20) 0.18(mm)
IC 480-491176/11		09/10/2019 16:11	1	S8772.D	ZB-624 (20) 0.18(mm)
ICIS 480-491176/12		09/10/2019 16:34	1	S8773.D	ZB-624 (20) 0.18(mm)
IC 480-491176/13		09/10/2019 16:57	1	S8774.D	ZB-624 (20) 0.18(mm)
IC 480-491176/14		09/10/2019 17:20	1	S8775.D	ZB-624 (20) 0.18(mm)
MDLV 480-491176/16		09/10/2019 18:06	1		ZB-624 (20) 0.18(mm)
MDLV 480-491176/17		09/10/2019 18:29	1		ZB-624 (20) 0.18(mm)
IC 480-491176/19		09/10/2019 19:15	1		ZB-624 (20) 0.18(mm)
IC 480-491176/20		09/10/2019 19:38	1		ZB-624 (20) 0.18(mm)
IC 480-491176/21		09/10/2019 20:01	1		ZB-624 (20) 0.18(mm)
IC 480-491176/22		09/10/2019 20:24	1		ZB-624 (20) 0.18(mm)
IC 480-491176/23		09/10/2019 20:47	1		ZB-624 (20) 0.18(mm)
IC 480-491176/24		09/10/2019 21:09	1		ZB-624 (20) 0.18(mm)
IC 480-491176/25		09/10/2019 21:32	1		ZB-624 (20) 0.18(mm)
MDLV 480-491176/27		09/10/2019 22:18	1		ZB-624 (20) 0.18(mm)
ICV 480-491176/28		09/10/2019 22:41	1		ZB-624 (20) 0.18(mm)
ICV 480-491176/29		09/10/2019 23:04	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Instrument ID: HP5973S Start Date: 09/14/2019 08:39

Analysis Batch Number: 492066 End Date: 09/14/2019 19:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-492066/2		09/14/2019 08:39	1	S8947.D	ZB-624 (20) 0.18(mm)
CCVIS 480-492066/3		09/14/2019 09:03	1	S8948.D	ZB-624 (20) 0.18(mm)
CCV 480-492066/4		09/14/2019 09:27	1		ZB-624 (20) 0.18(mm)
LCS 480-492066/5		09/14/2019 09:50	1	S8950.D	ZB-624 (20) 0.18(mm)
MB 480-492066/7		09/14/2019 10:36	1	S8952.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 11:13	2		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 11:36	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 11:59	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 12:22	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 12:47	1		ZB-624 (20) 0.18(mm)
480-158822-3		09/14/2019 13:10	5	S8959.D	ZB-624 (20) 0.18(mm)
480-158822-4		09/14/2019 13:33	5	S8960.D	ZB-624 (20) 0.18(mm)
480-158822-5		09/14/2019 13:56	5	S8961.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 14:19	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 14:42	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 15:05	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 15:28	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 15:52	20		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 16:15	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 16:38	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 17:01	4		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 17:24	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 17:47	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 18:10	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 18:33	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 18:56	20		ZB-624 (20) 0.18(mm)
ZZZZZ		09/14/2019 19:19	20		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Instrument ID: HP5977L Start Date: 09/13/2019 15:11

Analysis Batch Number: 491936 End Date: 09/14/2019 01:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-491936/5		09/13/2019 15:11	1	L0947.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/7		09/13/2019 16:10	1	L0949.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/8		09/13/2019 16:34	1	L0950.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/9		09/13/2019 16:58	1	L0951.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/10		09/13/2019 17:22	1	L0952.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/11		09/13/2019 17:46	1	L0953.D	ZB-624 (30) VOA 0.25(mm)
ICIS 480-491936/12		09/13/2019 18:10	1	L0954.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/13		09/13/2019 18:34	1	L0955.D	ZB-624 (30) VOA 0.25(mm)
IC 480-491936/14		09/13/2019 18:58	1	L0956.D	ZB-624 (30) VOA 0.25(mm)
MDLV 480-491936/16		09/13/2019 19:46	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/19		09/13/2019 20:57	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/20		09/13/2019 21:22	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/21		09/13/2019 21:46	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/22		09/13/2019 22:11	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/23		09/13/2019 22:35	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/24		09/13/2019 22:59	1		ZB-624 (30) VOA 0.25(mm)
IC 480-491936/25		09/13/2019 23:23	1		ZB-624 (30) VOA 0.25(mm)
MDLV 480-491936/27		09/14/2019 00:11	1		ZB-624 (30) VOA 0.25(mm)
ICV 480-491936/28		09/14/2019 00:35	1		ZB-624 (30) VOA 0.25(mm)
ICV 480-491936/29		09/14/2019 01:00	1		ZB-624 (30) VOA 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Instrument ID: HP5977L Start Date: 09/14/2019 11:10

Analysis Batch Number: 492085 End Date: 09/14/2019 22:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-492085/2		09/14/2019 11:10	1	L0973.D	ZB-624 (30) VOA 0.25(mm)
CCVIS 480-492085/3		09/14/2019 11:40	1	L0974.D	ZB-624 (30) VOA 0.25(mm)
CCV 480-492085/4		09/14/2019 12:04	1		ZB-624 (30) VOA 0.25(mm)
LCS 480-492085/5		09/14/2019 12:29	1	L0976.D	ZB-624 (30) VOA 0.25(mm)
RL 480-492085/6		09/14/2019 12:53	1		ZB-624 (30) VOA 0.25(mm)
MB 480-492085/7		09/14/2019 13:17	1	L0978.D	ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 13:59	4		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 14:23	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 14:47	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 15:12	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 15:36	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 16:01	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 16:25	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 16:50	2		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 17:14	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 17:38	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 18:03	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 18:27	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 18:52	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 19:16	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 19:40	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 20:04	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 20:28	5		ZB-624 (30) VOA 0.25(mm)
480-158822-1		09/14/2019 20:52	10	L0996.D	ZB-624 (30) VOA 0.25(mm)
480-158822-2		09/14/2019 21:16	10	L0997.D	ZB-624 (30) VOA 0.25(mm)
480-158822-11		09/14/2019 21:41	1	L0998.D	ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 22:05	5		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/14/2019 22:30	5		ZB-624 (30) VOA 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Instrument ID: HP5977L Start Date: 09/15/2019 10:52

Analysis Batch Number: 492149 End Date: 09/15/2019 21:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-492149/2		09/15/2019 10:52	1	L1030.D	ZB-624 (30) VOA 0.25(mm)
CCVIS 480-492149/3		09/15/2019 11:21	1	L1031.D	ZB-624 (30) VOA 0.25(mm)
CCV 480-492149/4		09/15/2019 11:45	1		ZB-624 (30) VOA 0.25(mm)
LCS 480-492149/5		09/15/2019 12:09	1	L1033.D	ZB-624 (30) VOA 0.25(mm)
MB 480-492149/7		09/15/2019 12:57	1	L1035.D	ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 13:33	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 13:57	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 14:21	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 14:45	2		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 15:09	200		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 15:33	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 15:58	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 16:22	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 16:47	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 17:11	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 17:35	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 17:59	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 18:23	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 18:47	10		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 19:11	1		ZB-624 (30) VOA 0.25(mm)
480-158822-6		09/15/2019 19:36	5	L1051.D	ZB-624 (30) VOA 0.25(mm)
480-158822-7		09/15/2019 20:00	5	L1052.D	ZB-624 (30) VOA 0.25(mm)
480-158822-8		09/15/2019 20:24	5	L1053.D	ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 20:48	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 21:13	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/15/2019 21:37	1		ZB-624 (30) VOA 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Instrument ID: HP5977L Start Date: 09/16/2019 09:12

Analysis Batch Number: 492226 End Date: 09/16/2019 20:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-492226/2		09/16/2019 09:12	1	L1085.D	ZB-624 (30) VOA 0.25(mm)
CCVIS 480-492226/3		09/16/2019 09:38	1	L1086.D	ZB-624 (30) VOA 0.25(mm)
CCV 480-492226/4		09/16/2019 10:10	1		ZB-624 (30) VOA 0.25(mm)
LCS 480-492226/5		09/16/2019 10:42	1	L1088.D	ZB-624 (30) VOA 0.25(mm)
MB 480-492226/7		09/16/2019 11:40	1	L1090.D	ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 12:18	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 12:42	10		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 13:07	2		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 13:31	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 13:56	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 14:20	4		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 14:44	2		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 15:09	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 15:33	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 15:57	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 16:21	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 16:46	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 17:10	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 17:34	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 17:58	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 18:23	1		ZB-624 (30) VOA 0.25(mm)
480-158822-9		09/16/2019 18:47	5	L1107.D	ZB-624 (30) VOA 0.25(mm)
480-158822-10		09/16/2019 19:12	5	L1108.D	ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 19:36	1		ZB-624 (30) VOA 0.25(mm)
ZZZZZ		09/16/2019 20:00	1		ZB-624 (30) VOA 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Batch Number: 492066 Batch Start Date: 09/14/19 08:39 Batch Analyst: Moffat, Alyssa M

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00164	BFB_WRK 00092	GAS CORP mix 00360
BFB 480-492066/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-492066/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-492066/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-492066/7		8260C		5 mL	5 mL				
480-158822-B-3	356023-GW-MW-5R-93-3	8260C	T	5 mL	5 mL	<2 SU			
480-158822-B-4	356023-GW-MW-5R-93-4	8260C	T	5 mL	5 mL	<2 SU			
480-158822-B-5	356023-GW-MW-5R-93-5	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	S_8260_IS 00325	S_8260_Surr 00326	AnalysisComment			
BFB 480-492066/2		8260C							
CCVIS 480-492066/3		8260C		1 uL	1 uL				
LCS 480-492066/5		8260C		1 uL	1 uL				
MB 480-492066/7		8260C		1 uL	1 uL				
480-158822-B-3	356023-GW-MW-5R-93-3	8260C	T	1 uL	1 uL	Targets			
480-158822-B-4	356023-GW-MW-5R-93-4	8260C	T	1 uL	1 uL	Targets			
480-158822-B-5	356023-GW-MW-5R-93-5	8260C	T	1 uL	1 uL	Targets			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Batch Number: 492085 Batch Start Date: 09/14/19 11:10 Batch Analyst: Moffat, Alyssa M

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00360
BFB 480-492085/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-492085/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-492085/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-492085/7		8260C		5 mL	5 mL				
480-158822-C-1	356023-GW-MW-5R-93-1	8260C	T	5 mL	5 mL	<2 SU			
480-158822-C-2	356023-GW-MW-5R-93-2	8260C	T	5 mL	5 mL	<2 SU			
480-158822-C-11	TRIP BLANK 2	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	L_8260_IS 00007	L_8260_SURR 00007	AnalysisComment			
BFB 480-492085/2		8260C							
CCVIS 480-492085/3		8260C		2 uL	2 uL				
LCS 480-492085/5		8260C		2 uL	2 uL				
MB 480-492085/7		8260C		2 uL	2 uL				
480-158822-C-1	356023-GW-MW-5R-93-1	8260C	T	2 uL	2 uL	Targets			
480-158822-C-2	356023-GW-MW-5R-93-2	8260C	T	2 uL	2 uL	Targets			
480-158822-C-11	TRIP BLANK 2	8260C	T	2 uL	2 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Batch Number: 492149 Batch Start Date: 09/15/19 10:52 Batch Analyst: Phillips, Brett T

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00360
BFB 480-492149/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-492149/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-492149/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-492149/7		8260C		5 mL	5 mL				
480-158822-B-6	356023-GW-MW-5R-93-6	8260C	T	5 mL	5 mL	<2 SU			
480-158822-B-7	356023-GW-MW-5R-93-7	8260C	T	5 mL	5 mL	<2 SU			
480-158822-B-8	356023-GW-MW-5R-93-8	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	L_8260_IS 00007	L_8260_SURR 00007	AnalysisComment			
BFB 480-492149/2		8260C							
CCVIS 480-492149/3		8260C		2 uL	2 uL				
LCS 480-492149/5		8260C		2 uL	2 uL				
MB 480-492149/7		8260C		2 uL	2 uL				
480-158822-B-6	356023-GW-MW-5R-93-6	8260C	T	2 uL	2 uL	Targets			
480-158822-B-7	356023-GW-MW-5R-93-7	8260C	T	2 uL	2 uL	Targets			
480-158822-B-8	356023-GW-MW-5R-93-8	8260C	T	2 uL	2 uL	Targets			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-158822-1

SDG No.:

Batch Number: 492226 Batch Start Date: 09/16/19 09:12 Batch Analyst: Phillips, Brett T

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00360
BFB 480-492226/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-492226/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-492226/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-492226/7		8260C		5 mL	5 mL				
480-158822-C-9	356023-GW-MW-5R-93-9	8260C	T	5 mL	5 mL	<2 SU			
480-158822-C-10	356023-GW-MW-5R-93-10	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	L_8260_IS 00007	L_8260_SURR 00007	AnalysisComment			
BFB 480-492226/2		8260C							
CCVIS 480-492226/3		8260C		2 uL	2 uL				
LCS 480-492226/5		8260C		2 uL	2 uL				
MB 480-492226/7		8260C		2 uL	2 uL				
480-158822-C-9	356023-GW-MW-5R-93-9	8260C	T	2 uL	2 uL	Targets			
480-158822-C-10	356023-GW-MW-5R-93-10	8260C	T	2 uL	2 uL	Targets			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Albany #224

Chain of Custody Record 315410

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Jamie Welch	Site Contact: Julie Riccardi	Date: 9/6/19	COC No: 1
Company Name: Wood E+I S	Tel/Fax: 207 828 3200	Lab Contact: Judy Stone	Carrier: FedEx	1 of 1 COCs
Address: 511 Congress St Suite 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Portland ME 04101	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 207 828 3200	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: Mohawk Rd Industrial Plant				Job / SDG No.:
Site: NYSDEC Site # 356023				
PO # 3611191234.02				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260 C TCL OLM 04.2	Sample Specific Notes:
36 356023-GW-MW-5R-93-1	9/3/19	1310	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-2	9/3/19	1630	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-3	9/4/19	0730	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-4	9/4/19	1205	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-5	9/4/19	1635	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-6	9/5/19	0725	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-7	9/5/19	1200	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-8	9/5/19	1640	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-9	9/6/19	0732	G	AQ	3	N	N	X	
356023-GW-MW-5R-93-10	9/6/19	1215	G	AQ	3	N	N	X	
Trip Blank 2	9/3/19	1200	QC	TB	3	N	N	X	

480-158822 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Lab Standard Protocol
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Category B deliverable, EQuIS EZ EDD

#1 2.7

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Wood E+I S	9/6/19 1420	Karl Zady	ETA	9/6/19 1420
Relinquished by: Karl Zady	Company: ETA 9/6/19	Date/Time: 1700	Received by:	Company: TAS	Date/Time: 9/7/19 0930
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-158822-1

Login Number: 158822 **List Source: Eurofins TestAmerica, Buffalo**
List Number: 1
Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	WOOD E+IS
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

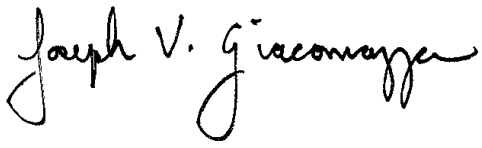
Job Number: 480-159208-1

Job Description: Mohonk Rd. #356023 Groundwaters

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, NY 12233-7014

Attention: Charles Gregory



Approved for release.
Joe V Giacomazza
Project Management Assistant II
9/28/2019 10:57 AM

Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
09/28/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

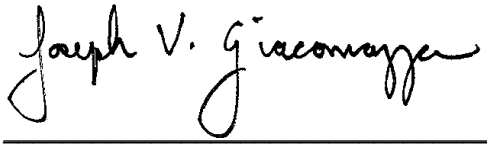
The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Job Number: 480-159208-1

Job Description: Mohonk Rd. #356023 Groundwaters

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Joe V Giacomazza
Project Management Assistant II
9/28/2019 10:57 AM

Designee for
Judy L Stone

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Job Narrative
480-159208-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-493096 recovered above the upper control limit for 2-Butanone (MEK). The samples associated with this CCV were non-detect above the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The following samples are impacted: TRIP BLANK 3 (480-159208-1), 356023-GW-MW-7R-98-1 (480-159208-2) and 356023-GW-MW-7R-98-2 (480-159208-3).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-7R-98-1 (480-159208-2), 356023-GW-MW-7R-98-2 (480-159208-3), 356023-GW-MW-7R-98-3 (480-159208-4), 356023-GW-MW-7R-98-4 (480-159208-5) and 356023-GW-MW-7R-98-5 (480-159208-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-493246 recovered above the upper control limit for 2-Butanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 356023-GW-MW-7R-98-1 (480-159208-2), 356023-GW-MW-7R-98-2 (480-159208-3), 356023-GW-MW-7R-98-3 (480-159208-4), 356023-GW-MW-7R-98-4 (480-159208-5) and 356023-GW-MW-7R-98-5 (480-159208-6).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-7R-98-6 (480-159208-7), 356023-GW-MW-7R-98-7 (480-159208-8), 356023-GW-MW-7R-98-8 (480-159208-9), (480-159208-C-9 MS) and (480-159208-C-9 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-GW-MW-7R-98-9 (480-159208-10), 356023-GW-MW-7R-98-10 (480-159208-11) and 356023-GW-MW-7R-98-11 (480-159208-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-493682 recovered outside acceptance criteria, low biased, for Vinyl chloride and Chloromethane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analyte, the data have been reported. The following samples are impacted: 356023-GW-MW-7R-98-9 (480-159208-10), 356023-GW-MW-7R-98-10 (480-159208-11) and 356023-GW-MW-7R-98-11 (480-159208-12).

Method(s) 8260C: The initial calibration curve analyzed in analytical batch 480-491176 and associated with analytical batches 480-493096 and 480-493246 was outside method criteria for the analyte 1,2,3-Trichlorobenzene. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for this analyte is considered an estimated concentration.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: New York State D.E.C.
Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-159208-1	TRIP BLANK 3	Water	09/09/19 12:00	09/14/19 09:00	
480-159208-2	356023-GW-MW-7R-98-1	Water	09/09/19 16:40	09/14/19 09:00	
480-159208-3	356023-GW-MW-7R-98-2	Water	09/09/19 18:05	09/14/19 09:00	
480-159208-4	356023-GW-MW-7R-98-3	Water	09/10/19 07:45	09/14/19 09:00	
480-159208-5	356023-GW-MW-7R-98-4	Water	09/10/19 12:45	09/14/19 09:00	
480-159208-6	356023-GW-MW-7R-98-5	Water	09/10/19 16:50	09/14/19 09:00	
480-159208-7	356023-GW-MW-7R-98-6	Water	09/11/19 07:50	09/14/19 09:00	
480-159208-8	356023-GW-MW-7R-98-7	Water	09/11/19 12:15	09/14/19 09:00	
480-159208-9	356023-GW-MW-7R-98-8	Water	09/11/19 16:55	09/14/19 09:00	
480-159208-10	356023-GW-MW-7R-98-9	Water	09/12/19 07:55	09/14/19 09:00	
480-159208-11	356023-GW-MW-7R-98-10	Water	09/12/19 12:30	09/14/19 09:00	
480-159208-12	356023-GW-MW-7R-98-11	Water	09/12/19 16:15	09/14/19 09:00	

Detection Summary

Client: New York State D.E.C.
Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: TRIP BLANK 3
Lab Sample ID: 480-159208-1

No Detections.

Client Sample ID: 356023-GW-MW-7R-98-1
Lab Sample ID: 480-159208-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	330	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	130	E	1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	34		1.0	0.29	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.31	J	1.0	0.21	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	5.5	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	3.0	J	10	3.0	ug/L	1		8260C	Total/NA
Chloroethane	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	2.6		1.0	0.46	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - DL	330		8.0	6.6	ug/L	8		8260C	Total/NA
1,1-Dichloroethane - DL	130		8.0	3.0	ug/L	8		8260C	Total/NA
1,1-Dichloroethene - DL	34		8.0	2.3	ug/L	8		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-2
Lab Sample ID: 480-159208-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	340	E	1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	140	E	1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	36		1.0	0.29	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.35	J	1.0	0.21	ug/L	1		8260C	Total/NA
Chloroethane	1.3		1.0	0.32	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	5.3		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	3.2		1.0	0.46	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane - DL	330		8.0	6.6	ug/L	8		8260C	Total/NA
1,1-Dichloroethane - DL	140		8.0	3.0	ug/L	8		8260C	Total/NA
1,1-Dichloroethene - DL	33		8.0	2.3	ug/L	8		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-3
Lab Sample ID: 480-159208-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	350		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	140		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	38		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	6.5	J	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-4
Lab Sample ID: 480-159208-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	340		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	140		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	39		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	5.8	J	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-5
Lab Sample ID: 480-159208-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	310		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	130		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	34		10	2.9	ug/L	10		8260C	Total/NA
Methylene Chloride	4.4	J	10	4.4	ug/L	10		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 356023-GW-MW-7R-98-5 (Continued) — Lab Sample ID: 480-159208-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6.1	J	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-6 — Lab Sample ID: 480-159208-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	290		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	110		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	31		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	5.8	J	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-7 — Lab Sample ID: 480-159208-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	310		10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	120		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	31		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	5.2	J	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-8 — Lab Sample ID: 480-159208-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	300	F1	10	8.2	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	120		10	3.8	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	32		10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	5.5	J	10	4.6	ug/L	10		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-9 — Lab Sample ID: 480-159208-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	300		8.0	6.6	ug/L	8		8260C	Total/NA
1,1-Dichloroethane	110		8.0	3.0	ug/L	8		8260C	Total/NA
1,1-Dichloroethene	32		8.0	2.3	ug/L	8		8260C	Total/NA
Trichloroethene	5.3	J	8.0	3.7	ug/L	8		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-10 — Lab Sample ID: 480-159208-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	260		8.0	6.6	ug/L	8		8260C	Total/NA
1,1-Dichloroethane	100		8.0	3.0	ug/L	8		8260C	Total/NA
1,1-Dichloroethene	28		8.0	2.3	ug/L	8		8260C	Total/NA
Trichloroethene	4.7	J	8.0	3.7	ug/L	8		8260C	Total/NA

Client Sample ID: 356023-GW-MW-7R-98-11 — Lab Sample ID: 480-159208-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	280		8.0	6.6	ug/L	8		8260C	Total/NA
1,1-Dichloroethane	110		8.0	3.0	ug/L	8		8260C	Total/NA
1,1-Dichloroethene	30		8.0	2.3	ug/L	8		8260C	Total/NA
Trichloroethene	5.1	J	8.0	3.7	ug/L	8		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: New York State D.E.C.
Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Client Sample ID: TRIP BLANK 3
Lab Sample ID: 480-159208-1

Date Collected: 09/09/19 12:00
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/19 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/20/19 16:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/20/19 16:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/19 16:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/19 16:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/19 16:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 16:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 16:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/20/19 16:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/20/19 16:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/19 16:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/19 16:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/19 16:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/19 16:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/19 16:58	1
1,4-Dioxane	ND		40	9.3	ug/L			09/20/19 16:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/20/19 16:58	1
2-Hexanone	ND		5.0	1.2	ug/L			09/20/19 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/20/19 16:58	1
Acetone	ND		10	3.0	ug/L			09/20/19 16:58	1
Benzene	ND		1.0	0.41	ug/L			09/20/19 16:58	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/20/19 16:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/20/19 16:58	1
Bromoform	ND		1.0	0.26	ug/L			09/20/19 16:58	1
Bromomethane	ND		1.0	0.69	ug/L			09/20/19 16:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/20/19 16:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/19 16:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/19 16:58	1
Chloroethane	ND		1.0	0.32	ug/L			09/20/19 16:58	1
Chloroform	ND		1.0	0.34	ug/L			09/20/19 16:58	1
Chloromethane	ND		1.0	0.35	ug/L			09/20/19 16:58	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/19 16:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/20/19 16:58	1
Cyclohexane	ND		1.0	0.18	ug/L			09/20/19 16:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/20/19 16:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/19 16:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/19 16:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/19 16:58	1
Methyl acetate	ND		2.5	1.3	ug/L			09/20/19 16:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/19 16:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/20/19 16:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/19 16:58	1
Styrene	ND		1.0	0.73	ug/L			09/20/19 16:58	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/19 16:58	1
Toluene	ND		1.0	0.51	ug/L			09/20/19 16:58	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/19 16:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/20/19 16:58	1
Trichloroethene	ND		1.0	0.46	ug/L			09/20/19 16:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/19 16:58	1

Client Sample ID: TRIP BLANK 3 — Lab Sample ID: 480-159208-1

Date Collected: 09/09/19 12:00 — **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/19 16:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/20/19 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/20/19 16:58*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/20/19 16:58*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/20/19 16:58*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*09/20/19 16:58*	*1*

Client Sample ID: 356023-GW-MW-7R-98-1 — Lab Sample ID: 480-159208-2

Date Collected: 09/09/19 16:40 — **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**330**	**E**	1.0	0.82	ug/L			09/20/19 17:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/20/19 17:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/20/19 17:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/19 17:21	1
1,1-Dichloroethane	**130**	**E**	1.0	0.38	ug/L			09/20/19 17:21	1
1,1-Dichloroethene	**34**		1.0	0.29	ug/L			09/20/19 17:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 17:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 17:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/20/19 17:21	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/20/19 17:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/19 17:21	1
1,2-Dichloroethane	**0.31**	**J**	1.0	0.21	ug/L			09/20/19 17:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/19 17:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/19 17:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/19 17:21	1
1,4-Dioxane	ND		40	9.3	ug/L			09/20/19 17:21	1
2-Butanone (MEK)	**5.5**	**J**	10	1.3	ug/L			09/20/19 17:21	1
2-Hexanone	ND		5.0	1.2	ug/L			09/20/19 17:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/20/19 17:21	1
Acetone	**3.0**	**J**	10	3.0	ug/L			09/20/19 17:21	1
Benzene	ND		1.0	0.41	ug/L			09/20/19 17:21	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/20/19 17:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/20/19 17:21	1
Bromoform	ND		1.0	0.26	ug/L			09/20/19 17:21	1
Bromomethane	ND		1.0	0.69	ug/L			09/20/19 17:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/20/19 17:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/19 17:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/19 17:21	1
Chloroethane	**1.2**		1.0	0.32	ug/L			09/20/19 17:21	1
Chloroform	ND		1.0	0.34	ug/L			09/20/19 17:21	1
Chloromethane	ND		1.0	0.35	ug/L			09/20/19 17:21	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.81	ug/L			09/20/19 17:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/20/19 17:21	1
Cyclohexane	ND		1.0	0.18	ug/L			09/20/19 17:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/20/19 17:21	1

Client Sample ID: 356023-GW-MW-7R-98-1 Lab Sample ID: 480-159208-2

Date Collected: 09/09/19 16:40 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/19 17:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/19 17:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/19 17:21	1
Methyl acetate	ND		2.5	1.3	ug/L			09/20/19 17:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/19 17:21	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/20/19 17:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/19 17:21	1
Styrene	ND		1.0	0.73	ug/L			09/20/19 17:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/19 17:21	1
Toluene	ND		1.0	0.51	ug/L			09/20/19 17:21	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/19 17:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/20/19 17:21	1
Trichloroethene	**2.6**		1.0	0.46	ug/L			09/20/19 17:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/19 17:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/19 17:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/20/19 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/20/19 17:21*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/20/19 17:21*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/20/19 17:21*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/20/19 17:21*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**330**		8.0	6.6	ug/L			09/21/19 12:29	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			09/21/19 12:29	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			09/21/19 12:29	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			09/21/19 12:29	8
1,1-Dichloroethane	**130**		8.0	3.0	ug/L			09/21/19 12:29	8
1,1-Dichloroethene	**34**		8.0	2.3	ug/L			09/21/19 12:29	8
1,2,3-Trichlorobenzene	ND		8.0	3.3	ug/L			09/21/19 12:29	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			09/21/19 12:29	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			09/21/19 12:29	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			09/21/19 12:29	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			09/21/19 12:29	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			09/21/19 12:29	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			09/21/19 12:29	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			09/21/19 12:29	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			09/21/19 12:29	8
1,4-Dioxane	ND		320	75	ug/L			09/21/19 12:29	8
2-Butanone (MEK)	ND		80	11	ug/L			09/21/19 12:29	8
2-Hexanone	ND		40	9.9	ug/L			09/21/19 12:29	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			09/21/19 12:29	8
Acetone	ND		80	24	ug/L			09/21/19 12:29	8
Benzene	ND		8.0	3.3	ug/L			09/21/19 12:29	8
Bromochloromethane	ND		8.0	7.0	ug/L			09/21/19 12:29	8
Bromodichloromethane	ND		8.0	3.1	ug/L			09/21/19 12:29	8
Bromoform	ND		8.0	2.1	ug/L			09/21/19 12:29	8
Bromomethane	ND		8.0	5.5	ug/L			09/21/19 12:29	8

Client Sample ID: 356023-GW-MW-7R-98-1 Lab Sample ID: 480-159208-2

Date Collected: 09/09/19 16:40 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		8.0	1.5	ug/L			09/21/19 12:29	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			09/21/19 12:29	8
Chlorobenzene	ND		8.0	6.0	ug/L			09/21/19 12:29	8
Chloroethane	ND		8.0	2.6	ug/L			09/21/19 12:29	8
Chloroform	ND		8.0	2.7	ug/L			09/21/19 12:29	8
Chloromethane	ND		8.0	2.8	ug/L			09/21/19 12:29	8
cis-1,2-Dichloroethene	ND		8.0	6.5	ug/L			09/21/19 12:29	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			09/21/19 12:29	8
Cyclohexane	ND		8.0	1.4	ug/L			09/21/19 12:29	8
Dibromochloromethane	ND		8.0	2.6	ug/L			09/21/19 12:29	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			09/21/19 12:29	8
Ethylbenzene	ND		8.0	5.9	ug/L			09/21/19 12:29	8
Isopropylbenzene	ND		8.0	6.3	ug/L			09/21/19 12:29	8
Methyl acetate	ND		20	10	ug/L			09/21/19 12:29	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			09/21/19 12:29	8
Methylcyclohexane	ND		8.0	1.3	ug/L			09/21/19 12:29	8
Methylene Chloride	ND		8.0	3.5	ug/L			09/21/19 12:29	8
Styrene	ND		8.0	5.8	ug/L			09/21/19 12:29	8
Tetrachloroethene	ND		8.0	2.9	ug/L			09/21/19 12:29	8
Toluene	ND		8.0	4.1	ug/L			09/21/19 12:29	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			09/21/19 12:29	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			09/21/19 12:29	8
Trichloroethene	ND		8.0	3.7	ug/L			09/21/19 12:29	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			09/21/19 12:29	8
Vinyl chloride	ND		8.0	7.2	ug/L			09/21/19 12:29	8
Xylenes, Total	ND		16	5.3	ug/L			09/21/19 12:29	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*09/21/19 12:29*	*8*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*09/21/19 12:29*	*8*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*09/21/19 12:29*	*8*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/21/19 12:29*	*8*

Client Sample ID: 356023-GW-MW-7R-98-2 Lab Sample ID: 480-159208-3

Date Collected: 09/09/19 18:05 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**340**	**E**	1.0	0.82	ug/L			09/20/19 17:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/20/19 17:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/20/19 17:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/19 17:44	1
1,1-Dichloroethane	**140**	**E**	1.0	0.38	ug/L			09/20/19 17:44	1
1,1-Dichloroethene	**36**		1.0	0.29	ug/L			09/20/19 17:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 17:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 17:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/20/19 17:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/20/19 17:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/19 17:44	1

Client Sample ID: 356023-GW-MW-7R-98-2 Lab Sample ID: 480-159208-3

Date Collected: 09/09/19 18:05 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	**0.35**	**J**	1.0	0.21	ug/L			09/20/19 17:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/19 17:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/19 17:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/19 17:44	1
1,4-Dioxane	ND		40	9.3	ug/L			09/20/19 17:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/20/19 17:44	1
2-Hexanone	ND		5.0	1.2	ug/L			09/20/19 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/20/19 17:44	1
Acetone	ND		10	3.0	ug/L			09/20/19 17:44	1
Benzene	ND		1.0	0.41	ug/L			09/20/19 17:44	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/20/19 17:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/20/19 17:44	1
Bromoform	ND		1.0	0.26	ug/L			09/20/19 17:44	1
Bromomethane	ND		1.0	0.69	ug/L			09/20/19 17:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/20/19 17:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/19 17:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/19 17:44	1
Chloroethane	**1.3**		1.0	0.32	ug/L			09/20/19 17:44	1
Chloroform	ND		1.0	0.34	ug/L			09/20/19 17:44	1
Chloromethane	ND		1.0	0.35	ug/L			09/20/19 17:44	1
cis-1,2-Dichloroethene	**5.3**		1.0	0.81	ug/L			09/20/19 17:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/20/19 17:44	1
Cyclohexane	ND		1.0	0.18	ug/L			09/20/19 17:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/20/19 17:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/19 17:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/19 17:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/19 17:44	1
Methyl acetate	ND		2.5	1.3	ug/L			09/20/19 17:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/19 17:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/20/19 17:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/19 17:44	1
Styrene	ND		1.0	0.73	ug/L			09/20/19 17:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/19 17:44	1
Toluene	ND		1.0	0.51	ug/L			09/20/19 17:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/19 17:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/20/19 17:44	1
Trichloroethene	**3.2**		1.0	0.46	ug/L			09/20/19 17:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/19 17:44	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/19 17:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/20/19 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/20/19 17:44*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*09/20/19 17:44*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/20/19 17:44*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/20/19 17:44*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**330**		8.0	6.6	ug/L			09/21/19 12:52	8

Client Sample ID: 356023-GW-MW-7R-98-2
Lab Sample ID: 480-159208-3

Date Collected: 09/09/19 18:05
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			09/21/19 12:52	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			09/21/19 12:52	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			09/21/19 12:52	8
1,1-Dichloroethane	**140**		8.0	3.0	ug/L			09/21/19 12:52	8
1,1-Dichloroethene	**33**		8.0	2.3	ug/L			09/21/19 12:52	8
1,2,3-Trichlorobenzene	ND		8.0	3.3	ug/L			09/21/19 12:52	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			09/21/19 12:52	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			09/21/19 12:52	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			09/21/19 12:52	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			09/21/19 12:52	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			09/21/19 12:52	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			09/21/19 12:52	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			09/21/19 12:52	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			09/21/19 12:52	8
1,4-Dioxane	ND		320	75	ug/L			09/21/19 12:52	8
2-Butanone (MEK)	ND		80	11	ug/L			09/21/19 12:52	8
2-Hexanone	ND		40	9.9	ug/L			09/21/19 12:52	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			09/21/19 12:52	8
Acetone	ND		80	24	ug/L			09/21/19 12:52	8
Benzene	ND		8.0	3.3	ug/L			09/21/19 12:52	8
Bromochloromethane	ND		8.0	7.0	ug/L			09/21/19 12:52	8
Bromodichloromethane	ND		8.0	3.1	ug/L			09/21/19 12:52	8
Bromoform	ND		8.0	2.1	ug/L			09/21/19 12:52	8
Bromomethane	ND		8.0	5.5	ug/L			09/21/19 12:52	8
Carbon disulfide	ND		8.0	1.5	ug/L			09/21/19 12:52	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			09/21/19 12:52	8
Chlorobenzene	ND		8.0	6.0	ug/L			09/21/19 12:52	8
Chloroethane	ND		8.0	2.6	ug/L			09/21/19 12:52	8
Chloroform	ND		8.0	2.7	ug/L			09/21/19 12:52	8
Chloromethane	ND		8.0	2.8	ug/L			09/21/19 12:52	8
cis-1,2-Dichloroethene	ND		8.0	6.5	ug/L			09/21/19 12:52	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			09/21/19 12:52	8
Cyclohexane	ND		8.0	1.4	ug/L			09/21/19 12:52	8
Dibromochloromethane	ND		8.0	2.6	ug/L			09/21/19 12:52	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			09/21/19 12:52	8
Ethylbenzene	ND		8.0	5.9	ug/L			09/21/19 12:52	8
Isopropylbenzene	ND		8.0	6.3	ug/L			09/21/19 12:52	8
Methyl acetate	ND		20	10	ug/L			09/21/19 12:52	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			09/21/19 12:52	8
Methylcyclohexane	ND		8.0	1.3	ug/L			09/21/19 12:52	8
Methylene Chloride	ND		8.0	3.5	ug/L			09/21/19 12:52	8
Styrene	ND		8.0	5.8	ug/L			09/21/19 12:52	8
Tetrachloroethene	ND		8.0	2.9	ug/L			09/21/19 12:52	8
Toluene	ND		8.0	4.1	ug/L			09/21/19 12:52	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			09/21/19 12:52	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			09/21/19 12:52	8
Trichloroethene	ND		8.0	3.7	ug/L			09/21/19 12:52	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			09/21/19 12:52	8
Vinyl chloride	ND		8.0	7.2	ug/L			09/21/19 12:52	8

Client Sample ID: 356023-GW-MW-7R-98-2 Lab Sample ID: 480-159208-3

Date Collected: 09/09/19 18:05 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		16	5.3	ug/L			09/21/19 12:52	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/21/19 12:52*	*8*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/21/19 12:52*	*8*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/21/19 12:52*	*8*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/21/19 12:52*	*8*

Client Sample ID: 356023-GW-MW-7R-98-3 Lab Sample ID: 480-159208-4

Date Collected: 09/10/19 07:45 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**350**		10	8.2	ug/L			09/21/19 13:15	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/21/19 13:15	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/21/19 13:15	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/21/19 13:15	10
1,1-Dichloroethane	**140**		10	3.8	ug/L			09/21/19 13:15	10
1,1-Dichloroethene	**38**		10	2.9	ug/L			09/21/19 13:15	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/21/19 13:15	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/21/19 13:15	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/21/19 13:15	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/21/19 13:15	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/21/19 13:15	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/21/19 13:15	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/21/19 13:15	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/21/19 13:15	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/21/19 13:15	10
1,4-Dioxane	ND		400	93	ug/L			09/21/19 13:15	10
2-Butanone (MEK)	ND		100	13	ug/L			09/21/19 13:15	10
2-Hexanone	ND		50	12	ug/L			09/21/19 13:15	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/21/19 13:15	10
Acetone	ND		100	30	ug/L			09/21/19 13:15	10
Benzene	ND		10	4.1	ug/L			09/21/19 13:15	10
Bromochloromethane	ND		10	8.7	ug/L			09/21/19 13:15	10
Bromodichloromethane	ND		10	3.9	ug/L			09/21/19 13:15	10
Bromoform	ND		10	2.6	ug/L			09/21/19 13:15	10
Bromomethane	ND		10	6.9	ug/L			09/21/19 13:15	10
Carbon disulfide	ND		10	1.9	ug/L			09/21/19 13:15	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/21/19 13:15	10
Chlorobenzene	ND		10	7.5	ug/L			09/21/19 13:15	10
Chloroethane	ND		10	3.2	ug/L			09/21/19 13:15	10
Chloroform	ND		10	3.4	ug/L			09/21/19 13:15	10
Chloromethane	ND		10	3.5	ug/L			09/21/19 13:15	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/21/19 13:15	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/21/19 13:15	10
Cyclohexane	ND		10	1.8	ug/L			09/21/19 13:15	10
Dibromochloromethane	ND		10	3.2	ug/L			09/21/19 13:15	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/21/19 13:15	10

Client Sample ID: 356023-GW-MW-7R-98-3
Lab Sample ID: 480-159208-4

Date Collected: 09/10/19 07:45
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		10	7.4	ug/L			09/21/19 13:15	10
Isopropylbenzene	ND		10	7.9	ug/L			09/21/19 13:15	10
Methyl acetate	ND		25	13	ug/L			09/21/19 13:15	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/21/19 13:15	10
Methylcyclohexane	ND		10	1.6	ug/L			09/21/19 13:15	10
Methylene Chloride	ND		10	4.4	ug/L			09/21/19 13:15	10
Styrene	ND		10	7.3	ug/L			09/21/19 13:15	10
Tetrachloroethene	ND		10	3.6	ug/L			09/21/19 13:15	10
Toluene	ND		10	5.1	ug/L			09/21/19 13:15	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/21/19 13:15	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/21/19 13:15	10
Trichloroethene	**6.5**	**J**	10	4.6	ug/L			09/21/19 13:15	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/21/19 13:15	10
Vinyl chloride	ND		10	9.0	ug/L			09/21/19 13:15	10
Xylenes, Total	ND		20	6.6	ug/L			09/21/19 13:15	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/21/19 13:15*	*10*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*09/21/19 13:15*	*10*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*09/21/19 13:15*	*10*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/21/19 13:15*	*10*

Client Sample ID: 356023-GW-MW-7R-98-4
Lab Sample ID: 480-159208-5

Date Collected: 09/10/19 12:45
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**340**		10	8.2	ug/L			09/21/19 13:38	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/21/19 13:38	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/21/19 13:38	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/21/19 13:38	10
1,1-Dichloroethane	**140**		10	3.8	ug/L			09/21/19 13:38	10
1,1-Dichloroethene	**39**		10	2.9	ug/L			09/21/19 13:38	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/21/19 13:38	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/21/19 13:38	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/21/19 13:38	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/21/19 13:38	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/21/19 13:38	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/21/19 13:38	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/21/19 13:38	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/21/19 13:38	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/21/19 13:38	10
1,4-Dioxane	ND		400	93	ug/L			09/21/19 13:38	10
2-Butanone (MEK)	ND		100	13	ug/L			09/21/19 13:38	10
2-Hexanone	ND		50	12	ug/L			09/21/19 13:38	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/21/19 13:38	10
Acetone	ND		100	30	ug/L			09/21/19 13:38	10
Benzene	ND		10	4.1	ug/L			09/21/19 13:38	10
Bromochloromethane	ND		10	8.7	ug/L			09/21/19 13:38	10

Client Sample ID: 356023-GW-MW-7R-98-4
Lab Sample ID: 480-159208-5

Date Collected: 09/10/19 12:45
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		10	3.9	ug/L			09/21/19 13:38	10
Bromoform	ND		10	2.6	ug/L			09/21/19 13:38	10
Bromomethane	ND		10	6.9	ug/L			09/21/19 13:38	10
Carbon disulfide	ND		10	1.9	ug/L			09/21/19 13:38	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/21/19 13:38	10
Chlorobenzene	ND		10	7.5	ug/L			09/21/19 13:38	10
Chloroethane	ND		10	3.2	ug/L			09/21/19 13:38	10
Chloroform	ND		10	3.4	ug/L			09/21/19 13:38	10
Chloromethane	ND		10	3.5	ug/L			09/21/19 13:38	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/21/19 13:38	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/21/19 13:38	10
Cyclohexane	ND		10	1.8	ug/L			09/21/19 13:38	10
Dibromochloromethane	ND		10	3.2	ug/L			09/21/19 13:38	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/21/19 13:38	10
Ethylbenzene	ND		10	7.4	ug/L			09/21/19 13:38	10
Isopropylbenzene	ND		10	7.9	ug/L			09/21/19 13:38	10
Methyl acetate	ND		25	13	ug/L			09/21/19 13:38	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/21/19 13:38	10
Methylcyclohexane	ND		10	1.6	ug/L			09/21/19 13:38	10
Methylene Chloride	ND		10	4.4	ug/L			09/21/19 13:38	10
Styrene	ND		10	7.3	ug/L			09/21/19 13:38	10
Tetrachloroethene	ND		10	3.6	ug/L			09/21/19 13:38	10
Toluene	ND		10	5.1	ug/L			09/21/19 13:38	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/21/19 13:38	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/21/19 13:38	10
Trichloroethene	**5.8**	**J**	10	4.6	ug/L			09/21/19 13:38	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/21/19 13:38	10
Vinyl chloride	ND		10	9.0	ug/L			09/21/19 13:38	10
Xylenes, Total	ND		20	6.6	ug/L			09/21/19 13:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/21/19 13:38*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/21/19 13:38*	*10*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*09/21/19 13:38*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/21/19 13:38*	*10*

Client Sample ID: 356023-GW-MW-7R-98-5
Lab Sample ID: 480-159208-6

Date Collected: 09/10/19 16:50
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**310**		10	8.2	ug/L			09/21/19 14:02	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/21/19 14:02	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/21/19 14:02	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/21/19 14:02	10
1,1-Dichloroethane	**130**		10	3.8	ug/L			09/21/19 14:02	10
1,1-Dichloroethene	**34**		10	2.9	ug/L			09/21/19 14:02	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/21/19 14:02	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/21/19 14:02	10

Client Sample ID: 356023-GW-MW-7R-98-5
Lab Sample ID: 480-159208-6

Date Collected: 09/10/19 16:50
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/21/19 14:02	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/21/19 14:02	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/21/19 14:02	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/21/19 14:02	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/21/19 14:02	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/21/19 14:02	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/21/19 14:02	10
1,4-Dioxane	ND		400	93	ug/L			09/21/19 14:02	10
2-Butanone (MEK)	ND		100	13	ug/L			09/21/19 14:02	10
2-Hexanone	ND		50	12	ug/L			09/21/19 14:02	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/21/19 14:02	10
Acetone	ND		100	30	ug/L			09/21/19 14:02	10
Benzene	ND		10	4.1	ug/L			09/21/19 14:02	10
Bromochloromethane	ND		10	8.7	ug/L			09/21/19 14:02	10
Bromodichloromethane	ND		10	3.9	ug/L			09/21/19 14:02	10
Bromoform	ND		10	2.6	ug/L			09/21/19 14:02	10
Bromomethane	ND		10	6.9	ug/L			09/21/19 14:02	10
Carbon disulfide	ND		10	1.9	ug/L			09/21/19 14:02	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/21/19 14:02	10
Chlorobenzene	ND		10	7.5	ug/L			09/21/19 14:02	10
Chloroethane	ND		10	3.2	ug/L			09/21/19 14:02	10
Chloroform	ND		10	3.4	ug/L			09/21/19 14:02	10
Chloromethane	ND		10	3.5	ug/L			09/21/19 14:02	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/21/19 14:02	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/21/19 14:02	10
Cyclohexane	ND		10	1.8	ug/L			09/21/19 14:02	10
Dibromochloromethane	ND		10	3.2	ug/L			09/21/19 14:02	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/21/19 14:02	10
Ethylbenzene	ND		10	7.4	ug/L			09/21/19 14:02	10
Isopropylbenzene	ND		10	7.9	ug/L			09/21/19 14:02	10
Methyl acetate	ND		25	13	ug/L			09/21/19 14:02	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/21/19 14:02	10
Methylcyclohexane	ND		10	1.6	ug/L			09/21/19 14:02	10
Methylene Chloride	**4.4**	**J**	10	4.4	ug/L			09/21/19 14:02	10
Styrene	ND		10	7.3	ug/L			09/21/19 14:02	10
Tetrachloroethene	ND		10	3.6	ug/L			09/21/19 14:02	10
Toluene	ND		10	5.1	ug/L			09/21/19 14:02	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/21/19 14:02	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/21/19 14:02	10
Trichloroethene	**6.1**	**J**	10	4.6	ug/L			09/21/19 14:02	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/21/19 14:02	10
Vinyl chloride	ND		10	9.0	ug/L			09/21/19 14:02	10
Xylenes, Total	ND		20	6.6	ug/L			09/21/19 14:02	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/21/19 14:02*	*10*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/21/19 14:02*	*10*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*09/21/19 14:02*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/21/19 14:02*	*10*

Client Sample ID: 356023-GW-MW-7R-98-6
Lab Sample ID: 480-159208-7

Date Collected: 09/11/19 07:50
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**290**		10	8.2	ug/L			09/22/19 20:19	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/22/19 20:19	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/22/19 20:19	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/22/19 20:19	10
1,1-Dichloroethane	**110**		10	3.8	ug/L			09/22/19 20:19	10
1,1-Dichloroethene	**31**		10	2.9	ug/L			09/22/19 20:19	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/22/19 20:19	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/22/19 20:19	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/22/19 20:19	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/22/19 20:19	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/22/19 20:19	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/22/19 20:19	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/22/19 20:19	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/22/19 20:19	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/22/19 20:19	10
1,4-Dioxane	ND		400	93	ug/L			09/22/19 20:19	10
2-Butanone (MEK)	ND		100	13	ug/L			09/22/19 20:19	10
2-Hexanone	ND		50	12	ug/L			09/22/19 20:19	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/22/19 20:19	10
Acetone	ND		100	30	ug/L			09/22/19 20:19	10
Benzene	ND		10	4.1	ug/L			09/22/19 20:19	10
Bromochloromethane	ND		10	8.7	ug/L			09/22/19 20:19	10
Bromodichloromethane	ND		10	3.9	ug/L			09/22/19 20:19	10
Bromoform	ND		10	2.6	ug/L			09/22/19 20:19	10
Bromomethane	ND		10	6.9	ug/L			09/22/19 20:19	10
Carbon disulfide	ND		10	1.9	ug/L			09/22/19 20:19	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/22/19 20:19	10
Chlorobenzene	ND		10	7.5	ug/L			09/22/19 20:19	10
Chloroethane	ND		10	3.2	ug/L			09/22/19 20:19	10
Chloroform	ND		10	3.4	ug/L			09/22/19 20:19	10
Chloromethane	ND		10	3.5	ug/L			09/22/19 20:19	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/22/19 20:19	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/22/19 20:19	10
Cyclohexane	ND		10	1.8	ug/L			09/22/19 20:19	10
Dibromochloromethane	ND		10	3.2	ug/L			09/22/19 20:19	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/22/19 20:19	10
Ethylbenzene	ND		10	7.4	ug/L			09/22/19 20:19	10
Isopropylbenzene	ND		10	7.9	ug/L			09/22/19 20:19	10
Methyl acetate	ND		25	13	ug/L			09/22/19 20:19	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/22/19 20:19	10
Methylcyclohexane	ND		10	1.6	ug/L			09/22/19 20:19	10
Methylene Chloride	ND		10	4.4	ug/L			09/22/19 20:19	10
Styrene	ND		10	7.3	ug/L			09/22/19 20:19	10
Tetrachloroethene	ND		10	3.6	ug/L			09/22/19 20:19	10
Toluene	ND		10	5.1	ug/L			09/22/19 20:19	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/22/19 20:19	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/22/19 20:19	10
Trichloroethene	**5.8**	**J**	10	4.6	ug/L			09/22/19 20:19	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/22/19 20:19	10

Client Sample ID: 356023-GW-MW-7R-98-6 Lab Sample ID: 480-159208-7

Date Collected: 09/11/19 07:50 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		10	9.0	ug/L			09/22/19 20:19	10
Xylenes, Total	ND		20	6.6	ug/L			09/22/19 20:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*09/22/19 20:19*	*10*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/22/19 20:19*	*10*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*09/22/19 20:19*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/22/19 20:19*	*10*

Client Sample ID: 356023-GW-MW-7R-98-7 Lab Sample ID: 480-159208-8

Date Collected: 09/11/19 12:15 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**310**		10	8.2	ug/L			09/22/19 20:43	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/22/19 20:43	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/22/19 20:43	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/22/19 20:43	10
1,1-Dichloroethane	**120**		10	3.8	ug/L			09/22/19 20:43	10
1,1-Dichloroethene	**31**		10	2.9	ug/L			09/22/19 20:43	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/22/19 20:43	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/22/19 20:43	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/22/19 20:43	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/22/19 20:43	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/22/19 20:43	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/22/19 20:43	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/22/19 20:43	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/22/19 20:43	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/22/19 20:43	10
1,4-Dioxane	ND		400	93	ug/L			09/22/19 20:43	10
2-Butanone (MEK)	ND		100	13	ug/L			09/22/19 20:43	10
2-Hexanone	ND		50	12	ug/L			09/22/19 20:43	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/22/19 20:43	10
Acetone	ND		100	30	ug/L			09/22/19 20:43	10
Benzene	ND		10	4.1	ug/L			09/22/19 20:43	10
Bromochloromethane	ND		10	8.7	ug/L			09/22/19 20:43	10
Bromodichloromethane	ND		10	3.9	ug/L			09/22/19 20:43	10
Bromoform	ND		10	2.6	ug/L			09/22/19 20:43	10
Bromomethane	ND		10	6.9	ug/L			09/22/19 20:43	10
Carbon disulfide	ND		10	1.9	ug/L			09/22/19 20:43	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/22/19 20:43	10
Chlorobenzene	ND		10	7.5	ug/L			09/22/19 20:43	10
Chloroethane	ND		10	3.2	ug/L			09/22/19 20:43	10
Chloroform	ND		10	3.4	ug/L			09/22/19 20:43	10
Chloromethane	ND		10	3.5	ug/L			09/22/19 20:43	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/22/19 20:43	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/22/19 20:43	10
Cyclohexane	ND		10	1.8	ug/L			09/22/19 20:43	10
Dibromochloromethane	ND		10	3.2	ug/L			09/22/19 20:43	10

Client Sample ID: 356023-GW-MW-7R-98-7
Lab Sample ID: 480-159208-8

Date Collected: 09/11/19 12:15
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/22/19 20:43	10
Ethylbenzene	ND		10	7.4	ug/L			09/22/19 20:43	10
Isopropylbenzene	ND		10	7.9	ug/L			09/22/19 20:43	10
Methyl acetate	ND		25	13	ug/L			09/22/19 20:43	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/22/19 20:43	10
Methylcyclohexane	ND		10	1.6	ug/L			09/22/19 20:43	10
Methylene Chloride	ND		10	4.4	ug/L			09/22/19 20:43	10
Styrene	ND		10	7.3	ug/L			09/22/19 20:43	10
Tetrachloroethene	ND		10	3.6	ug/L			09/22/19 20:43	10
Toluene	ND		10	5.1	ug/L			09/22/19 20:43	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/22/19 20:43	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/22/19 20:43	10
Trichloroethene	**5.2**	**J**	10	4.6	ug/L			09/22/19 20:43	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/22/19 20:43	10
Vinyl chloride	ND		10	9.0	ug/L			09/22/19 20:43	10
Xylenes, Total	ND		20	6.6	ug/L			09/22/19 20:43	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*77 - 120*		*09/22/19 20:43*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/22/19 20:43*	*10*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*09/22/19 20:43*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/22/19 20:43*	*10*

Client Sample ID: 356023-GW-MW-7R-98-8
Lab Sample ID: 480-159208-9

Date Collected: 09/11/19 16:55
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**300**	**F1**	10	8.2	ug/L			09/22/19 21:07	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			09/22/19 21:07	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			09/22/19 21:07	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			09/22/19 21:07	10
1,1-Dichloroethane	**120**		10	3.8	ug/L			09/22/19 21:07	10
1,1-Dichloroethene	**32**		10	2.9	ug/L			09/22/19 21:07	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			09/22/19 21:07	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			09/22/19 21:07	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			09/22/19 21:07	10
1,2-Dibromoethane	ND		10	7.3	ug/L			09/22/19 21:07	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			09/22/19 21:07	10
1,2-Dichloroethane	ND		10	2.1	ug/L			09/22/19 21:07	10
1,2-Dichloropropane	ND		10	7.2	ug/L			09/22/19 21:07	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			09/22/19 21:07	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			09/22/19 21:07	10
1,4-Dioxane	ND		400	93	ug/L			09/22/19 21:07	10
2-Butanone (MEK)	ND		100	13	ug/L			09/22/19 21:07	10
2-Hexanone	ND		50	12	ug/L			09/22/19 21:07	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			09/22/19 21:07	10
Acetone	ND		100	30	ug/L			09/22/19 21:07	10
Benzene	ND		10	4.1	ug/L			09/22/19 21:07	10

Client Sample ID: 356023-GW-MW-7R-98-8 Lab Sample ID: 480-159208-9

Date Collected: 09/11/19 16:55 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		10	8.7	ug/L			09/22/19 21:07	10
Bromodichloromethane	ND		10	3.9	ug/L			09/22/19 21:07	10
Bromoform	ND		10	2.6	ug/L			09/22/19 21:07	10
Bromomethane	ND		10	6.9	ug/L			09/22/19 21:07	10
Carbon disulfide	ND		10	1.9	ug/L			09/22/19 21:07	10
Carbon tetrachloride	ND		10	2.7	ug/L			09/22/19 21:07	10
Chlorobenzene	ND		10	7.5	ug/L			09/22/19 21:07	10
Chloroethane	ND		10	3.2	ug/L			09/22/19 21:07	10
Chloroform	ND		10	3.4	ug/L			09/22/19 21:07	10
Chloromethane	ND		10	3.5	ug/L			09/22/19 21:07	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			09/22/19 21:07	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			09/22/19 21:07	10
Cyclohexane	ND		10	1.8	ug/L			09/22/19 21:07	10
Dibromochloromethane	ND		10	3.2	ug/L			09/22/19 21:07	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			09/22/19 21:07	10
Ethylbenzene	ND		10	7.4	ug/L			09/22/19 21:07	10
Isopropylbenzene	ND		10	7.9	ug/L			09/22/19 21:07	10
Methyl acetate	ND		25	13	ug/L			09/22/19 21:07	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			09/22/19 21:07	10
Methylcyclohexane	ND		10	1.6	ug/L			09/22/19 21:07	10
Methylene Chloride	ND		10	4.4	ug/L			09/22/19 21:07	10
Styrene	ND		10	7.3	ug/L			09/22/19 21:07	10
Tetrachloroethene	ND		10	3.6	ug/L			09/22/19 21:07	10
Toluene	ND		10	5.1	ug/L			09/22/19 21:07	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			09/22/19 21:07	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			09/22/19 21:07	10
Trichloroethene	**5.5**	**J**	10	4.6	ug/L			09/22/19 21:07	10
Trichlorofluoromethane	ND		10	8.8	ug/L			09/22/19 21:07	10
Vinyl chloride	ND		10	9.0	ug/L			09/22/19 21:07	10
Xylenes, Total	ND		20	6.6	ug/L			09/22/19 21:07	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/22/19 21:07*	*10*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/22/19 21:07*	*10*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*09/22/19 21:07*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/22/19 21:07*	*10*

Client Sample ID: 356023-GW-MW-7R-98-9 Lab Sample ID: 480-159208-10

Date Collected: 09/12/19 07:55 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**300**		8.0	6.6	ug/L			09/24/19 15:14	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			09/24/19 15:14	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			09/24/19 15:14	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			09/24/19 15:14	8
1,1-Dichloroethane	**110**		8.0	3.0	ug/L			09/24/19 15:14	8
1,1-Dichloroethene	**32**		8.0	2.3	ug/L			09/24/19 15:14	8
1,2,3-Trichlorobenzene	ND		8.0	3.3	ug/L			09/24/19 15:14	8

Client Sample ID: 356023-GW-MW-7R-98-9
Lab Sample ID: 480-159208-10

Date Collected: 09/12/19 07:55
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			09/24/19 15:14	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			09/24/19 15:14	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			09/24/19 15:14	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			09/24/19 15:14	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			09/24/19 15:14	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			09/24/19 15:14	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			09/24/19 15:14	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			09/24/19 15:14	8
1,4-Dioxane	ND		320	75	ug/L			09/24/19 15:14	8
2-Butanone (MEK)	ND		80	11	ug/L			09/24/19 15:14	8
2-Hexanone	ND		40	9.9	ug/L			09/24/19 15:14	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			09/24/19 15:14	8
Acetone	ND		80	24	ug/L			09/24/19 15:14	8
Benzene	ND		8.0	3.3	ug/L			09/24/19 15:14	8
Bromochloromethane	ND		8.0	7.0	ug/L			09/24/19 15:14	8
Bromodichloromethane	ND		8.0	3.1	ug/L			09/24/19 15:14	8
Bromoform	ND		8.0	2.1	ug/L			09/24/19 15:14	8
Bromomethane	ND		8.0	5.5	ug/L			09/24/19 15:14	8
Carbon disulfide	ND		8.0	1.5	ug/L			09/24/19 15:14	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			09/24/19 15:14	8
Chlorobenzene	ND		8.0	6.0	ug/L			09/24/19 15:14	8
Chloroethane	ND		8.0	2.6	ug/L			09/24/19 15:14	8
Chloroform	ND		8.0	2.7	ug/L			09/24/19 15:14	8
Chloromethane	ND		8.0	2.8	ug/L			09/24/19 15:14	8
cis-1,2-Dichloroethene	ND		8.0	6.5	ug/L			09/24/19 15:14	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			09/24/19 15:14	8
Cyclohexane	ND		8.0	1.4	ug/L			09/24/19 15:14	8
Dibromochloromethane	ND		8.0	2.6	ug/L			09/24/19 15:14	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			09/24/19 15:14	8
Ethylbenzene	ND		8.0	5.9	ug/L			09/24/19 15:14	8
Isopropylbenzene	ND		8.0	6.3	ug/L			09/24/19 15:14	8
Methyl acetate	ND		20	10	ug/L			09/24/19 15:14	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			09/24/19 15:14	8
Methylcyclohexane	ND		8.0	1.3	ug/L			09/24/19 15:14	8
Methylene Chloride	ND		8.0	3.5	ug/L			09/24/19 15:14	8
Styrene	ND		8.0	5.8	ug/L			09/24/19 15:14	8
Tetrachloroethene	ND		8.0	2.9	ug/L			09/24/19 15:14	8
Toluene	ND		8.0	4.1	ug/L			09/24/19 15:14	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			09/24/19 15:14	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			09/24/19 15:14	8
Trichloroethene	**5.3**	**J**	8.0	3.7	ug/L			09/24/19 15:14	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			09/24/19 15:14	8
Vinyl chloride	ND		8.0	7.2	ug/L			09/24/19 15:14	8
Xylenes, Total	ND		16	5.3	ug/L			09/24/19 15:14	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*09/24/19 15:14*	*8*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*09/24/19 15:14*	*8*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*09/24/19 15:14*	*8*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/24/19 15:14*	*8*

Client Sample ID: 356023-GW-MW-7R-98-10
Lab Sample ID: 480-159208-11

Date Collected: 09/12/19 12:30
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**260**		8.0	6.6	ug/L			09/24/19 15:39	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			09/24/19 15:39	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			09/24/19 15:39	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			09/24/19 15:39	8
1,1-Dichloroethane	**100**		8.0	3.0	ug/L			09/24/19 15:39	8
1,1-Dichloroethene	**28**		8.0	2.3	ug/L			09/24/19 15:39	8
1,2,3-Trichlorobenzene	ND		8.0	3.3	ug/L			09/24/19 15:39	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			09/24/19 15:39	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			09/24/19 15:39	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			09/24/19 15:39	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			09/24/19 15:39	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			09/24/19 15:39	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			09/24/19 15:39	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			09/24/19 15:39	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			09/24/19 15:39	8
1,4-Dioxane	ND		320	75	ug/L			09/24/19 15:39	8
2-Butanone (MEK)	ND		80	11	ug/L			09/24/19 15:39	8
2-Hexanone	ND		40	9.9	ug/L			09/24/19 15:39	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			09/24/19 15:39	8
Acetone	ND		80	24	ug/L			09/24/19 15:39	8
Benzene	ND		8.0	3.3	ug/L			09/24/19 15:39	8
Bromochloromethane	ND		8.0	7.0	ug/L			09/24/19 15:39	8
Bromodichloromethane	ND		8.0	3.1	ug/L			09/24/19 15:39	8
Bromoform	ND		8.0	2.1	ug/L			09/24/19 15:39	8
Bromomethane	ND		8.0	5.5	ug/L			09/24/19 15:39	8
Carbon disulfide	ND		8.0	1.5	ug/L			09/24/19 15:39	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			09/24/19 15:39	8
Chlorobenzene	ND		8.0	6.0	ug/L			09/24/19 15:39	8
Chloroethane	ND		8.0	2.6	ug/L			09/24/19 15:39	8
Chloroform	ND		8.0	2.7	ug/L			09/24/19 15:39	8
Chloromethane	ND		8.0	2.8	ug/L			09/24/19 15:39	8
cis-1,2-Dichloroethene	ND		8.0	6.5	ug/L			09/24/19 15:39	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			09/24/19 15:39	8
Cyclohexane	ND		8.0	1.4	ug/L			09/24/19 15:39	8
Dibromochloromethane	ND		8.0	2.6	ug/L			09/24/19 15:39	8
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			09/24/19 15:39	8
Ethylbenzene	ND		8.0	5.9	ug/L			09/24/19 15:39	8
Isopropylbenzene	ND		8.0	6.3	ug/L			09/24/19 15:39	8
Methyl acetate	ND		20	10	ug/L			09/24/19 15:39	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			09/24/19 15:39	8
Methylcyclohexane	ND		8.0	1.3	ug/L			09/24/19 15:39	8
Methylene Chloride	ND		8.0	3.5	ug/L			09/24/19 15:39	8
Styrene	ND		8.0	5.8	ug/L			09/24/19 15:39	8
Tetrachloroethene	ND		8.0	2.9	ug/L			09/24/19 15:39	8
Toluene	ND		8.0	4.1	ug/L			09/24/19 15:39	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			09/24/19 15:39	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			09/24/19 15:39	8
Trichloroethene	**4.7**	**J**	8.0	3.7	ug/L			09/24/19 15:39	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			09/24/19 15:39	8

Client Sample ID: 356023-GW-MW-7R-98-10 Lab Sample ID: 480-159208-11

Date Collected: 09/12/19 12:30 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		8.0	7.2	ug/L			09/24/19 15:39	8
Xylenes, Total	ND		16	5.3	ug/L			09/24/19 15:39	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*09/24/19 15:39*	*8*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*09/24/19 15:39*	*8*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/24/19 15:39*	*8*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/24/19 15:39*	*8*

Client Sample ID: 356023-GW-MW-7R-98-11 Lab Sample ID: 480-159208-12

Date Collected: 09/12/19 16:15 **Matrix: Water**
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**280**		8.0	6.6	ug/L			09/24/19 16:03	8
1,1,2,2-Tetrachloroethane	ND		8.0	1.7	ug/L			09/24/19 16:03	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5	ug/L			09/24/19 16:03	8
1,1,2-Trichloroethane	ND		8.0	1.8	ug/L			09/24/19 16:03	8
1,1-Dichloroethane	**110**		8.0	3.0	ug/L			09/24/19 16:03	8
1,1-Dichloroethene	**30**		8.0	2.3	ug/L			09/24/19 16:03	8
1,2,3-Trichlorobenzene	ND		8.0	3.3	ug/L			09/24/19 16:03	8
1,2,4-Trichlorobenzene	ND		8.0	3.3	ug/L			09/24/19 16:03	8
1,2-Dibromo-3-Chloropropane	ND		8.0	3.1	ug/L			09/24/19 16:03	8
1,2-Dibromoethane	ND		8.0	5.8	ug/L			09/24/19 16:03	8
1,2-Dichlorobenzene	ND		8.0	6.3	ug/L			09/24/19 16:03	8
1,2-Dichloroethane	ND		8.0	1.7	ug/L			09/24/19 16:03	8
1,2-Dichloropropane	ND		8.0	5.8	ug/L			09/24/19 16:03	8
1,3-Dichlorobenzene	ND		8.0	6.2	ug/L			09/24/19 16:03	8
1,4-Dichlorobenzene	ND		8.0	6.7	ug/L			09/24/19 16:03	8
1,4-Dioxane	ND		320	75	ug/L			09/24/19 16:03	8
2-Butanone (MEK)	ND		80	11	ug/L			09/24/19 16:03	8
2-Hexanone	ND		40	9.9	ug/L			09/24/19 16:03	8
4-Methyl-2-pentanone (MIBK)	ND		40	17	ug/L			09/24/19 16:03	8
Acetone	ND		80	24	ug/L			09/24/19 16:03	8
Benzene	ND		8.0	3.3	ug/L			09/24/19 16:03	8
Bromochloromethane	ND		8.0	7.0	ug/L			09/24/19 16:03	8
Bromodichloromethane	ND		8.0	3.1	ug/L			09/24/19 16:03	8
Bromoform	ND		8.0	2.1	ug/L			09/24/19 16:03	8
Bromomethane	ND		8.0	5.5	ug/L			09/24/19 16:03	8
Carbon disulfide	ND		8.0	1.5	ug/L			09/24/19 16:03	8
Carbon tetrachloride	ND		8.0	2.2	ug/L			09/24/19 16:03	8
Chlorobenzene	ND		8.0	6.0	ug/L			09/24/19 16:03	8
Chloroethane	ND		8.0	2.6	ug/L			09/24/19 16:03	8
Chloroform	ND		8.0	2.7	ug/L			09/24/19 16:03	8
Chloromethane	ND		8.0	2.8	ug/L			09/24/19 16:03	8
cis-1,2-Dichloroethene	ND		8.0	6.5	ug/L			09/24/19 16:03	8
cis-1,3-Dichloropropene	ND		8.0	2.9	ug/L			09/24/19 16:03	8
Cyclohexane	ND		8.0	1.4	ug/L			09/24/19 16:03	8
Dibromochloromethane	ND		8.0	2.6	ug/L			09/24/19 16:03	8

Client Sample ID: 356023-GW-MW-7R-98-11
Lab Sample ID: 480-159208-12

Date Collected: 09/12/19 16:15
Matrix: Water
Date Received: 09/14/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		8.0	5.4	ug/L			09/24/19 16:03	8
Ethylbenzene	ND		8.0	5.9	ug/L			09/24/19 16:03	8
Isopropylbenzene	ND		8.0	6.3	ug/L			09/24/19 16:03	8
Methyl acetate	ND		20	10	ug/L			09/24/19 16:03	8
Methyl tert-butyl ether	ND		8.0	1.3	ug/L			09/24/19 16:03	8
Methylcyclohexane	ND		8.0	1.3	ug/L			09/24/19 16:03	8
Methylene Chloride	ND		8.0	3.5	ug/L			09/24/19 16:03	8
Styrene	ND		8.0	5.8	ug/L			09/24/19 16:03	8
Tetrachloroethene	ND		8.0	2.9	ug/L			09/24/19 16:03	8
Toluene	ND		8.0	4.1	ug/L			09/24/19 16:03	8
trans-1,2-Dichloroethene	ND		8.0	7.2	ug/L			09/24/19 16:03	8
trans-1,3-Dichloropropene	ND		8.0	3.0	ug/L			09/24/19 16:03	8
Trichloroethene	**5.1**	**J**	8.0	3.7	ug/L			09/24/19 16:03	8
Trichlorofluoromethane	ND		8.0	7.0	ug/L			09/24/19 16:03	8
Vinyl chloride	ND		8.0	7.2	ug/L			09/24/19 16:03	8
Xylenes, Total	ND		16	5.3	ug/L			09/24/19 16:03	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*09/24/19 16:03*	*8*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/24/19 16:03*	*8*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*09/24/19 16:03*	*8*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/24/19 16:03*	*8*

Surrogate Summary

Client: New York State D.E.C.
Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-159208-1	TRIP BLANK 3	106	103	108	105
480-159208-2	356023-GW-MW-7R-98-1	105	102	107	101
480-159208-2 - DL	356023-GW-MW-7R-98-1	102	104	102	103
480-159208-3	356023-GW-MW-7R-98-2	105	100	104	101
480-159208-3 - DL	356023-GW-MW-7R-98-2	104	102	104	102
480-159208-4	356023-GW-MW-7R-98-3	108	104	110	102
480-159208-5	356023-GW-MW-7R-98-4	103	101	107	100
480-159208-6	356023-GW-MW-7R-98-5	105	103	106	100
480-159208-7	356023-GW-MW-7R-98-6	106	97	109	99
480-159208-8	356023-GW-MW-7R-98-7	112	101	112	100
480-159208-9	356023-GW-MW-7R-98-8	108	101	110	100
480-159208-9 MS	356023-GW-MW-7R-98-8	103	102	103	98
480-159208-9 MSD	356023-GW-MW-7R-98-8	103	101	105	99
480-159208-10	356023-GW-MW-7R-98-9	103	95	105	92
480-159208-11	356023-GW-MW-7R-98-10	102	100	104	94
480-159208-12	356023-GW-MW-7R-98-11	108	97	108	95
LCS 480-493096/5	Lab Control Sample	105	100	105	104
LCS 480-493246/5	Lab Control Sample	103	100	104	103
LCS 480-493390/5	Lab Control Sample	105	107	107	101
LCS 480-493682/5	Lab Control Sample	103	105	104	101
MB 480-493096/7	Method Blank	104	106	104	104
MB 480-493246/7	Method Blank	105	102	104	101
MB 480-493390/7	Method Blank	104	100	105	98
MB 480-493682/7	Method Blank	100	97	98	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-493096/7
Matrix: Water
Analysis Batch: 493096

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/20/19 10:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/20/19 10:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/20/19 10:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/20/19 10:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/20/19 10:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/20/19 10:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 10:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/20/19 10:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/20/19 10:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/20/19 10:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/20/19 10:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/20/19 10:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/20/19 10:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/20/19 10:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/20/19 10:57	1
1,4-Dioxane	ND		40	9.3	ug/L			09/20/19 10:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/20/19 10:57	1
2-Hexanone	ND		5.0	1.2	ug/L			09/20/19 10:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/20/19 10:57	1
Acetone	ND		10	3.0	ug/L			09/20/19 10:57	1
Benzene	ND		1.0	0.41	ug/L			09/20/19 10:57	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/20/19 10:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/20/19 10:57	1
Bromoform	ND		1.0	0.26	ug/L			09/20/19 10:57	1
Bromomethane	ND		1.0	0.69	ug/L			09/20/19 10:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/20/19 10:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/20/19 10:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/20/19 10:57	1
Chloroethane	ND		1.0	0.32	ug/L			09/20/19 10:57	1
Chloroform	ND		1.0	0.34	ug/L			09/20/19 10:57	1
Chloromethane	ND		1.0	0.35	ug/L			09/20/19 10:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/20/19 10:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/20/19 10:57	1
Cyclohexane	ND		1.0	0.18	ug/L			09/20/19 10:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/20/19 10:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/20/19 10:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/20/19 10:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/20/19 10:57	1
Methyl acetate	ND		2.5	1.3	ug/L			09/20/19 10:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/20/19 10:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/20/19 10:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/20/19 10:57	1
Styrene	ND		1.0	0.73	ug/L			09/20/19 10:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/20/19 10:57	1
Toluene	ND		1.0	0.51	ug/L			09/20/19 10:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/20/19 10:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/20/19 10:57	1
Trichloroethene	ND		1.0	0.46	ug/L			09/20/19 10:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-493096/7
Matrix: Water
Analysis Batch: 493096

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/20/19 10:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/20/19 10:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/20/19 10:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/20/19 10:57*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*09/20/19 10:57*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/20/19 10:57*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*09/20/19 10:57*	*1*

Lab Sample ID: LCS 480-493096/5
Matrix: Water
Analysis Batch: 493096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.9		ug/L		112	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	31.4		ug/L		125	61 - 148
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	27.5		ug/L		110	77 - 120
1,1-Dichloroethene	25.0	26.5		ug/L		106	66 - 127
1,2,3-Trichlorobenzene	25.0	20.3		ug/L		81	75 - 123
1,2,4-Trichlorobenzene	25.0	20.9		ug/L		84	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	20.5		ug/L		82	56 - 134
1,2-Dibromoethane	25.0	25.3		ug/L		101	77 - 120
1,2-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	26.3		ug/L		105	75 - 120
1,2-Dichloropropane	25.0	26.4		ug/L		106	76 - 120
1,3-Dichlorobenzene	25.0	26.3		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	25.9		ug/L		103	80 - 120
1,4-Dioxane	500	748		ug/L		150	50 - 150
2-Butanone (MEK)	125	153		ug/L		122	57 - 140
2-Hexanone	125	128		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	71 - 125
Acetone	125	147		ug/L		117	56 - 142
Benzene	25.0	26.6		ug/L		106	71 - 124
Bromochloromethane	25.0	27.1		ug/L		108	72 - 130
Bromodichloromethane	25.0	25.9		ug/L		104	80 - 122
Bromoform	25.0	24.8		ug/L		99	61 - 132
Bromomethane	25.0	23.5		ug/L		94	55 - 144
Carbon disulfide	25.0	27.4		ug/L		110	59 - 134
Carbon tetrachloride	25.0	29.1		ug/L		116	72 - 134
Chlorobenzene	25.0	26.3		ug/L		105	80 - 120
Chloroethane	25.0	24.9		ug/L		100	69 - 136
Chloroform	25.0	25.6		ug/L		103	73 - 127
Chloromethane	25.0	23.8		ug/L		95	68 - 124
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	74 - 124
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-493096/5
Matrix: Water
Analysis Batch: 493096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	25.0	29.6		ug/L		118	59 - 135
Dibromochloromethane	25.0	26.1		ug/L		104	75 - 125
Dichlorodifluoromethane	25.0	21.8		ug/L		87	59 - 135
Ethylbenzene	25.0	26.6		ug/L		107	77 - 123
Isopropylbenzene	25.0	27.6		ug/L		110	77 - 122
Methyl acetate	50.0	57.6		ug/L		115	74 - 133
Methyl tert-butyl ether	25.0	25.6		ug/L		103	77 - 120
Methylcyclohexane	25.0	29.0		ug/L		116	68 - 134
Methylene Chloride	25.0	26.0		ug/L		104	75 - 124
Styrene	25.0	25.7		ug/L		103	80 - 120
Tetrachloroethene	25.0	27.7		ug/L		111	74 - 122
Toluene	25.0	26.5		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	27.0		ug/L		108	73 - 127
trans-1,3-Dichloropropene	25.0	26.9		ug/L		108	80 - 120
Trichloroethene	25.0	27.6		ug/L		111	74 - 123
Trichlorofluoromethane	25.0	26.5		ug/L		106	62 - 150
Vinyl chloride	25.0	25.6		ug/L		102	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 480-493246/7
Matrix: Water
Analysis Batch: 493246

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/21/19 11:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/21/19 11:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/21/19 11:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/21/19 11:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/21/19 11:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/21/19 11:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/21/19 11:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/21/19 11:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/21/19 11:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/21/19 11:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/21/19 11:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/21/19 11:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/21/19 11:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/21/19 11:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/21/19 11:11	1
1,4-Dioxane	ND		40	9.3	ug/L			09/21/19 11:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/21/19 11:11	1
2-Hexanone	ND		5.0	1.2	ug/L			09/21/19 11:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/21/19 11:11	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-493246/7
Matrix: Water
Analysis Batch: 493246

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			09/21/19 11:11	1
Benzene	ND		1.0	0.41	ug/L			09/21/19 11:11	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/21/19 11:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/21/19 11:11	1
Bromoform	ND		1.0	0.26	ug/L			09/21/19 11:11	1
Bromomethane	ND		1.0	0.69	ug/L			09/21/19 11:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/21/19 11:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/21/19 11:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/21/19 11:11	1
Chloroethane	ND		1.0	0.32	ug/L			09/21/19 11:11	1
Chloroform	ND		1.0	0.34	ug/L			09/21/19 11:11	1
Chloromethane	ND		1.0	0.35	ug/L			09/21/19 11:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/21/19 11:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/21/19 11:11	1
Cyclohexane	ND		1.0	0.18	ug/L			09/21/19 11:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/21/19 11:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/21/19 11:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/21/19 11:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/21/19 11:11	1
Methyl acetate	ND		2.5	1.3	ug/L			09/21/19 11:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/21/19 11:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/21/19 11:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/21/19 11:11	1
Styrene	ND		1.0	0.73	ug/L			09/21/19 11:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/21/19 11:11	1
Toluene	ND		1.0	0.51	ug/L			09/21/19 11:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/21/19 11:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/21/19 11:11	1
Trichloroethene	ND		1.0	0.46	ug/L			09/21/19 11:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/21/19 11:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/21/19 11:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/21/19 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*09/21/19 11:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/21/19 11:11*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*09/21/19 11:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/21/19 11:11*	*1*

Lab Sample ID: LCS 480-493246/5
Matrix: Water
Analysis Batch: 493246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	73 - 126
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.3		ug/L		101	61 - 148
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	76 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-493246/5
Matrix: Water
Analysis Batch: 493246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	24.6		ug/L		99	66 - 127
1,2,3-Trichlorobenzene	25.0	21.8		ug/L		87	75 - 123
1,2,4-Trichlorobenzene	25.0	22.1		ug/L		89	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.0		ug/L		88	56 - 134
1,2-Dibromoethane	25.0	26.1		ug/L		104	77 - 120
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.9		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	25.9		ug/L		103	76 - 120
1,3-Dichlorobenzene	25.0	25.9		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.4		ug/L		101	80 - 120
1,4-Dioxane	500	689		ug/L		138	50 - 150
2-Butanone (MEK)	125	162		ug/L		129	57 - 140
2-Hexanone	125	139		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	141		ug/L		113	71 - 125
Acetone	125	150		ug/L		120	56 - 142
Benzene	25.0	25.1		ug/L		101	71 - 124
Bromochloromethane	25.0	26.7		ug/L		107	72 - 130
Bromodichloromethane	25.0	25.2		ug/L		101	80 - 122
Bromoform	25.0	24.0		ug/L		96	61 - 132
Bromomethane	25.0	23.1		ug/L		92	55 - 144
Carbon disulfide	25.0	24.9		ug/L		100	59 - 134
Carbon tetrachloride	25.0	26.4		ug/L		106	72 - 134
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120
Chloroethane	25.0	23.1		ug/L		92	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	23.5		ug/L		94	68 - 124
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	24.4		ug/L		98	74 - 124
Cyclohexane	25.0	24.6		ug/L		98	59 - 135
Dibromochloromethane	25.0	25.3		ug/L		101	75 - 125
Dichlorodifluoromethane	25.0	18.6		ug/L		75	59 - 135
Ethylbenzene	25.0	25.4		ug/L		101	77 - 123
Isopropylbenzene	25.0	26.0		ug/L		104	77 - 122
Methyl acetate	50.0	62.7		ug/L		125	74 - 133
Methyl tert-butyl ether	25.0	25.5		ug/L		102	77 - 120
Methylcyclohexane	25.0	24.1		ug/L		96	68 - 134
Methylene Chloride	25.0	26.0		ug/L		104	75 - 124
Styrene	25.0	25.6		ug/L		102	80 - 120
Tetrachloroethene	25.0	25.9		ug/L		104	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.2		ug/L		101	73 - 127
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	80 - 120
Trichloroethene	25.0	26.0		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	23.2		ug/L		93	62 - 150
Vinyl chloride	25.0	23.2		ug/L		93	65 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-493246/5
Matrix: Water
Analysis Batch: 493246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 480-493390/7
Matrix: Water
Analysis Batch: 493390

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/22/19 12:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/22/19 12:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/22/19 12:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/22/19 12:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/22/19 12:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/22/19 12:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/22/19 12:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/22/19 12:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/22/19 12:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/22/19 12:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/22/19 12:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/22/19 12:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/22/19 12:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/22/19 12:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/22/19 12:55	1
1,4-Dioxane	ND		40	9.3	ug/L			09/22/19 12:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/22/19 12:55	1
2-Hexanone	ND		5.0	1.2	ug/L			09/22/19 12:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/22/19 12:55	1
Acetone	ND		10	3.0	ug/L			09/22/19 12:55	1
Benzene	ND		1.0	0.41	ug/L			09/22/19 12:55	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/22/19 12:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/22/19 12:55	1
Bromoform	ND		1.0	0.26	ug/L			09/22/19 12:55	1
Bromomethane	ND		1.0	0.69	ug/L			09/22/19 12:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/22/19 12:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/22/19 12:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/22/19 12:55	1
Chloroethane	ND		1.0	0.32	ug/L			09/22/19 12:55	1
Chloroform	ND		1.0	0.34	ug/L			09/22/19 12:55	1
Chloromethane	ND		1.0	0.35	ug/L			09/22/19 12:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/22/19 12:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/22/19 12:55	1
Cyclohexane	ND		1.0	0.18	ug/L			09/22/19 12:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/22/19 12:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/22/19 12:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/22/19 12:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/22/19 12:55	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-493390/7
Matrix: Water
Analysis Batch: 493390

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		2.5	1.3	ug/L			09/22/19 12:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/22/19 12:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/22/19 12:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/22/19 12:55	1
Styrene	ND		1.0	0.73	ug/L			09/22/19 12:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/22/19 12:55	1
Toluene	ND		1.0	0.51	ug/L			09/22/19 12:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/22/19 12:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/22/19 12:55	1
Trichloroethene	ND		1.0	0.46	ug/L			09/22/19 12:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/22/19 12:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/22/19 12:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/22/19 12:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*09/22/19 12:55*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*09/22/19 12:55*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*09/22/19 12:55*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/22/19 12:55*	*1*

Lab Sample ID: LCS 480-493390/5
Matrix: Water
Analysis Batch: 493390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.4		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.9		ug/L		107	61 - 148
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	26.3		ug/L		105	66 - 127
1,2,3-Trichlorobenzene	25.0	24.8		ug/L		99	75 - 123
1,2,4-Trichlorobenzene	25.0	23.4		ug/L		94	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.9		ug/L		96	56 - 134
1,2-Dibromoethane	25.0	25.8		ug/L		103	77 - 120
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 124
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		102	76 - 120
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	80 - 120
1,4-Dioxane	500	491		ug/L		98	50 - 150
2-Butanone (MEK)	125	136		ug/L		109	57 - 140
2-Hexanone	125	135		ug/L		108	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	71 - 125
Acetone	125	132		ug/L		106	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromochloromethane	25.0	27.0		ug/L		108	72 - 130
Bromodichloromethane	25.0	27.6		ug/L		111	80 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-493390/5
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 493390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	25.0	27.0		ug/L		108	61 - 132
Bromomethane	25.0	22.4		ug/L		90	55 - 144
Carbon disulfide	25.0	27.0		ug/L		108	59 - 134
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 134
Chlorobenzene	25.0	24.7		ug/L		99	80 - 120
Chloroethane	25.0	21.7		ug/L		87	69 - 136
Chloroform	25.0	24.9		ug/L		100	73 - 127
Chloromethane	25.0	22.0		ug/L		88	68 - 124
cis-1,2-Dichloroethene	25.0	25.6		ug/L		103	74 - 124
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	74 - 124
Cyclohexane	25.0	26.8		ug/L		107	59 - 135
Dibromochloromethane	25.0	26.6		ug/L		107	75 - 125
Dichlorodifluoromethane	25.0	21.9		ug/L		87	59 - 135
Ethylbenzene	25.0	24.8		ug/L		99	77 - 123
Isopropylbenzene	25.0	25.4		ug/L		102	77 - 122
Methyl acetate	50.0	49.3		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	26.4		ug/L		106	77 - 120
Methylcyclohexane	25.0	27.2		ug/L		109	68 - 134
Methylene Chloride	25.0	26.0		ug/L		104	75 - 124
Styrene	25.0	26.4		ug/L		106	80 - 120
Tetrachloroethene	25.0	26.9		ug/L		107	74 - 122
Toluene	25.0	25.0		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	26.5		ug/L		106	80 - 120
Trichloroethene	25.0	26.1		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	23.4		ug/L		94	62 - 150
Vinyl chloride	25.0	23.3		ug/L		93	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 480-159208-9 MS
Client Sample ID: 356023-GW-MW-7R-98-8
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 493390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	300	F1	250	490		ug/L		77	73 - 126
1,1,2,2-Tetrachloroethane	ND		250	241		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	258		ug/L		103	61 - 148
1,1,2-Trichloroethane	ND		250	235		ug/L		94	76 - 122
1,1-Dichloroethane	120		250	341		ug/L		90	77 - 120
1,1-Dichloroethene	32		250	278		ug/L		98	66 - 127
1,2,3-Trichlorobenzene	ND		250	232		ug/L		93	75 - 123
1,2,4-Trichlorobenzene	ND		250	226		ug/L		90	79 - 122
1,2-Dibromo-3-Chloropropane	ND		250	233		ug/L		93	56 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-159208-9 MS
Client Sample ID: 356023-GW-MW-7R-98-8
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 493390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane	ND		250	246		ug/L		98	77 - 120
1,2-Dichlorobenzene	ND		250	240		ug/L		96	80 - 124
1,2-Dichloroethane	ND		250	243		ug/L		97	75 - 120
1,2-Dichloropropane	ND		250	248		ug/L		99	76 - 120
1,3-Dichlorobenzene	ND		250	239		ug/L		96	77 - 120
1,4-Dichlorobenzene	ND		250	232		ug/L		93	78 - 124
1,4-Dioxane	ND		5000	4590		ug/L		92	50 - 150
2-Butanone (MEK)	ND		1250	1220		ug/L		98	57 - 140
2-Hexanone	ND		1250	1210		ug/L		97	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		1250	1190		ug/L		95	71 - 125
Acetone	ND		1250	1230		ug/L		98	56 - 142
Benzene	ND		250	248		ug/L		99	71 - 124
Bromochloromethane	ND		250	254		ug/L		101	72 - 130
Bromodichloromethane	ND		250	260		ug/L		104	80 - 122
Bromoform	ND		250	250		ug/L		100	61 - 132
Bromomethane	ND		250	233		ug/L		93	55 - 144
Carbon disulfide	ND		250	252		ug/L		101	59 - 134
Carbon tetrachloride	ND		250	255		ug/L		102	72 - 134
Chlorobenzene	ND		250	235		ug/L		94	80 - 120
Chloroethane	ND		250	240		ug/L		96	69 - 136
Chloroform	ND		250	239		ug/L		95	73 - 127
Chloromethane	ND		250	215		ug/L		86	68 - 124
cis-1,2-Dichloroethene	ND		250	256		ug/L		103	74 - 124
cis-1,3-Dichloropropene	ND		250	247		ug/L		99	74 - 124
Cyclohexane	ND		250	247		ug/L		99	59 - 135
Dibromochloromethane	ND		250	254		ug/L		102	75 - 125
Dichlorodifluoromethane	ND		250	211		ug/L		84	59 - 135
Ethylbenzene	ND		250	235		ug/L		94	77 - 123
Isopropylbenzene	ND		250	243		ug/L		97	77 - 122
Methyl acetate	ND		500	448		ug/L		90	74 - 133
Methyl tert-butyl ether	ND		250	242		ug/L		97	77 - 120
Methylcyclohexane	ND		250	251		ug/L		100	68 - 134
Methylene Chloride	ND		250	252		ug/L		101	75 - 124
Styrene	ND		250	253		ug/L		101	80 - 120
Tetrachloroethene	ND		250	256		ug/L		102	74 - 122
Toluene	ND		250	239		ug/L		96	80 - 122
trans-1,2-Dichloroethene	ND		250	256		ug/L		102	73 - 127
trans-1,3-Dichloropropene	ND		250	249		ug/L		100	80 - 120
Trichloroethene	5.5	J	250	252		ug/L		99	74 - 123
Trichlorofluoromethane	ND		250	235		ug/L		94	62 - 150
Vinyl chloride	ND		250	236		ug/L		94	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-159208-9 MSD
Client Sample ID: 356023-GW-MW-7R-98-8
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 493390

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	300	F1	250	467	F1	ug/L		67	73 - 126	5	15
1,1,2,2-Tetrachloroethane	ND		250	242		ug/L		97	76 - 120	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	250		ug/L		100	61 - 148	3	20
1,1,2-Trichloroethane	ND		250	232		ug/L		93	76 - 122	2	15
1,1-Dichloroethane	120		250	329		ug/L		85	77 - 120	4	20
1,1-Dichloroethene	32		250	266		ug/L		94	66 - 127	4	16
1,2,3-Trichlorobenzene	ND		250	230		ug/L		92	75 - 123	1	20
1,2,4-Trichlorobenzene	ND		250	221		ug/L		88	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		250	224		ug/L		90	56 - 134	4	15
1,2-Dibromoethane	ND		250	239		ug/L		96	77 - 120	3	15
1,2-Dichlorobenzene	ND		250	235		ug/L		94	80 - 124	2	20
1,2-Dichloroethane	ND		250	240		ug/L		96	75 - 120	2	20
1,2-Dichloropropane	ND		250	242		ug/L		97	76 - 120	3	20
1,3-Dichlorobenzene	ND		250	226		ug/L		90	77 - 120	6	20
1,4-Dichlorobenzene	ND		250	227		ug/L		91	78 - 124	2	20
1,4-Dioxane	ND		5000	4720		ug/L		94	50 - 150	3	20
2-Butanone (MEK)	ND		1250	1220		ug/L		98	57 - 140	0	20
2-Hexanone	ND		1250	1230		ug/L		98	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND		1250	1200		ug/L		96	71 - 125	1	35
Acetone	ND		1250	1190		ug/L		95	56 - 142	3	15
Benzene	ND		250	247		ug/L		99	71 - 124	0	13
Bromochloromethane	ND		250	258		ug/L		103	72 - 130	2	15
Bromodichloromethane	ND		250	255		ug/L		102	80 - 122	2	15
Bromoform	ND		250	244		ug/L		97	61 - 132	3	15
Bromomethane	ND		250	220		ug/L		88	55 - 144	6	15
Carbon disulfide	ND		250	244		ug/L		97	59 - 134	3	15
Carbon tetrachloride	ND		250	250		ug/L		100	72 - 134	2	15
Chlorobenzene	ND		250	234		ug/L		94	80 - 120	0	25
Chloroethane	ND		250	227		ug/L		91	69 - 136	5	15
Chloroform	ND		250	231		ug/L		92	73 - 127	3	20
Chloromethane	ND		250	214		ug/L		86	68 - 124	0	15
cis-1,2-Dichloroethene	ND		250	247		ug/L		99	74 - 124	4	15
cis-1,3-Dichloropropene	ND		250	247		ug/L		99	74 - 124	0	15
Cyclohexane	ND		250	241		ug/L		96	59 - 135	2	20
Dibromochloromethane	ND		250	251		ug/L		100	75 - 125	1	15
Dichlorodifluoromethane	ND		250	207		ug/L		83	59 - 135	2	20
Ethylbenzene	ND		250	231		ug/L		92	77 - 123	2	15
Isopropylbenzene	ND		250	233		ug/L		93	77 - 122	4	20
Methyl acetate	ND		500	457		ug/L		91	74 - 133	2	20
Methyl tert-butyl ether	ND		250	245		ug/L		98	77 - 120	1	37
Methylcyclohexane	ND		250	243		ug/L		97	68 - 134	3	20
Methylene Chloride	ND		250	247		ug/L		99	75 - 124	2	15
Styrene	ND		250	249		ug/L		100	80 - 120	2	20
Tetrachloroethene	ND		250	246		ug/L		98	74 - 122	4	20
Toluene	ND		250	238		ug/L		95	80 - 122	1	15
trans-1,2-Dichloroethene	ND		250	245		ug/L		98	73 - 127	4	20
trans-1,3-Dichloropropene	ND		250	244		ug/L		98	80 - 120	2	15
Trichloroethene	5.5	J	250	243		ug/L		95	74 - 123	4	16

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-159208-9 MSD
Client Sample ID: 356023-GW-MW-7R-98-8
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 493390

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane	ND		250	225		ug/L		90	62 - 150	4	20
Vinyl chloride	ND		250	223		ug/L		89	65 - 133	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 480-493682/7
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 493682

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/24/19 11:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/24/19 11:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/24/19 11:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/24/19 11:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/24/19 11:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/24/19 11:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			09/24/19 11:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/24/19 11:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/24/19 11:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/24/19 11:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/24/19 11:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/24/19 11:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/24/19 11:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/24/19 11:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/24/19 11:29	1
1,4-Dioxane	ND		40	9.3	ug/L			09/24/19 11:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/24/19 11:29	1
2-Hexanone	ND		5.0	1.2	ug/L			09/24/19 11:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/24/19 11:29	1
Acetone	ND		10	3.0	ug/L			09/24/19 11:29	1
Benzene	ND		1.0	0.41	ug/L			09/24/19 11:29	1
Bromochloromethane	ND		1.0	0.87	ug/L			09/24/19 11:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/24/19 11:29	1
Bromoform	ND		1.0	0.26	ug/L			09/24/19 11:29	1
Bromomethane	ND		1.0	0.69	ug/L			09/24/19 11:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/24/19 11:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/24/19 11:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/24/19 11:29	1
Chloroethane	ND		1.0	0.32	ug/L			09/24/19 11:29	1
Chloroform	ND		1.0	0.34	ug/L			09/24/19 11:29	1
Chloromethane	ND		1.0	0.35	ug/L			09/24/19 11:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/24/19 11:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/24/19 11:29	1
Cyclohexane	ND		1.0	0.18	ug/L			09/24/19 11:29	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-493682/7
Matrix: Water
Analysis Batch: 493682

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.32	ug/L			09/24/19 11:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/24/19 11:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/24/19 11:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/24/19 11:29	1
Methyl acetate	ND		2.5	1.3	ug/L			09/24/19 11:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/24/19 11:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/24/19 11:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/24/19 11:29	1
Styrene	ND		1.0	0.73	ug/L			09/24/19 11:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/24/19 11:29	1
Toluene	ND		1.0	0.51	ug/L			09/24/19 11:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/24/19 11:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/24/19 11:29	1
Trichloroethene	ND		1.0	0.46	ug/L			09/24/19 11:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/24/19 11:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/24/19 11:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/24/19 11:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*09/24/19 11:29*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/24/19 11:29*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*09/24/19 11:29*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*09/24/19 11:29*	*1*

Lab Sample ID: LCS 480-493682/5
Matrix: Water
Analysis Batch: 493682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	29.5		ug/L		118	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.9		ug/L		104	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.7		ug/L		119	61 - 148
1,1,2-Trichloroethane	25.0	26.5		ug/L		106	76 - 122
1,1-Dichloroethane	25.0	27.1		ug/L		108	77 - 120
1,1-Dichloroethene	25.0	28.2		ug/L		113	66 - 127
1,2,3-Trichlorobenzene	25.0	26.3		ug/L		105	75 - 123
1,2,4-Trichlorobenzene	25.0	25.9		ug/L		104	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	56 - 134
1,2-Dibromoethane	25.0	26.8		ug/L		107	77 - 120
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	26.7		ug/L		107	75 - 120
1,2-Dichloropropane	25.0	27.2		ug/L		109	76 - 120
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 120
1,4-Dioxane	500	469		ug/L		94	50 - 150
2-Butanone (MEK)	125	138		ug/L		110	57 - 140
2-Hexanone	125	136		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	71 - 125

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-493682/5
Matrix: Water
Analysis Batch: 493682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	125	142		ug/L		113	56 - 142
Benzene	25.0	27.2		ug/L		109	71 - 124
Bromochloromethane	25.0	28.6		ug/L		114	72 - 130
Bromodichloromethane	25.0	28.7		ug/L		115	80 - 122
Bromoform	25.0	28.7		ug/L		115	61 - 132
Bromomethane	25.0	19.0		ug/L		76	55 - 144
Carbon disulfide	25.0	29.6		ug/L		118	59 - 134
Carbon tetrachloride	25.0	28.5		ug/L		114	72 - 134
Chlorobenzene	25.0	26.0		ug/L		104	80 - 120
Chloroethane	25.0	18.1		ug/L		73	69 - 136
Chloroform	25.0	25.9		ug/L		104	73 - 127
Chloromethane	25.0	17.7		ug/L		71	68 - 124
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	74 - 124
cis-1,3-Dichloropropene	25.0	28.9		ug/L		116	74 - 124
Cyclohexane	25.0	28.7		ug/L		115	59 - 135
Dibromochloromethane	25.0	28.2		ug/L		113	75 - 125
Dichlorodifluoromethane	25.0	17.5		ug/L		70	59 - 135
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
Isopropylbenzene	25.0	27.2		ug/L		109	77 - 122
Methyl acetate	50.0	49.8		ug/L		100	74 - 133
Methyl tert-butyl ether	25.0	27.7		ug/L		111	77 - 120
Methylcyclohexane	25.0	29.2		ug/L		117	68 - 134
Methylene Chloride	25.0	28.0		ug/L		112	75 - 124
Styrene	25.0	27.5		ug/L		110	80 - 120
Tetrachloroethene	25.0	28.9		ug/L		116	74 - 122
Toluene	25.0	26.6		ug/L		106	80 - 122
trans-1,2-Dichloroethene	25.0	27.8		ug/L		111	73 - 127
trans-1,3-Dichloropropene	25.0	28.3		ug/L		113	80 - 120
Trichloroethene	25.0	27.7		ug/L		111	74 - 123
Trichlorofluoromethane	25.0	20.0		ug/L		80	62 - 150
Vinyl chloride	25.0	19.6		ug/L		78	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

QC Association Summary

Client: New York State D.E.C.
Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

GC/MS VOA

Analysis Batch: 493096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159208-1	TRIP BLANK 3	Total/NA	Water	8260C	
480-159208-2	356023-GW-MW-7R-98-1	Total/NA	Water	8260C	
480-159208-3	356023-GW-MW-7R-98-2	Total/NA	Water	8260C	
MB 480-493096/7	Method Blank	Total/NA	Water	8260C	
LCS 480-493096/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 493246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159208-2 - DL	356023-GW-MW-7R-98-1	Total/NA	Water	8260C	
480-159208-3 - DL	356023-GW-MW-7R-98-2	Total/NA	Water	8260C	
480-159208-4	356023-GW-MW-7R-98-3	Total/NA	Water	8260C	
480-159208-5	356023-GW-MW-7R-98-4	Total/NA	Water	8260C	
480-159208-6	356023-GW-MW-7R-98-5	Total/NA	Water	8260C	
MB 480-493246/7	Method Blank	Total/NA	Water	8260C	
LCS 480-493246/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 493390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159208-7	356023-GW-MW-7R-98-6	Total/NA	Water	8260C	
480-159208-8	356023-GW-MW-7R-98-7	Total/NA	Water	8260C	
480-159208-9	356023-GW-MW-7R-98-8	Total/NA	Water	8260C	
MB 480-493390/7	Method Blank	Total/NA	Water	8260C	
LCS 480-493390/5	Lab Control Sample	Total/NA	Water	8260C	
480-159208-9 MS	356023-GW-MW-7R-98-8	Total/NA	Water	8260C	
480-159208-9 MSD	356023-GW-MW-7R-98-8	Total/NA	Water	8260C	

Analysis Batch: 493682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-159208-10	356023-GW-MW-7R-98-9	Total/NA	Water	8260C	
480-159208-11	356023-GW-MW-7R-98-10	Total/NA	Water	8260C	
480-159208-12	356023-GW-MW-7R-98-11	Total/NA	Water	8260C	
MB 480-493682/7	Method Blank	Total/NA	Water	8260C	
LCS 480-493682/5	Lab Control Sample	Total/NA	Water	8260C	

Client Sample ID: TRIP BLANK 3 — Lab Sample ID: 480-159208-1

Date Collected: 09/09/19 12:00 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	493096	09/20/19 16:58	KMN	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-1 — Lab Sample ID: 480-159208-2

Date Collected: 09/09/19 16:40 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	493096	09/20/19 17:21	KMN	TAL BUF
Total/NA	Analysis	8260C	DL	8	493246	09/21/19 12:29	OMI	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-2 — Lab Sample ID: 480-159208-3

Date Collected: 09/09/19 18:05 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	493096	09/20/19 17:44	KMN	TAL BUF
Total/NA	Analysis	8260C	DL	8	493246	09/21/19 12:52	OMI	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-3 — Lab Sample ID: 480-159208-4

Date Collected: 09/10/19 07:45 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	493246	09/21/19 13:15	OMI	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-4 — Lab Sample ID: 480-159208-5

Date Collected: 09/10/19 12:45 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	493246	09/21/19 13:38	OMI	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-5 — Lab Sample ID: 480-159208-6

Date Collected: 09/10/19 16:50 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	493246	09/21/19 14:02	OMI	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-6 — Lab Sample ID: 480-159208-7

Date Collected: 09/11/19 07:50 **Matrix: Water**
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	493390	09/22/19 20:19	RJF	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Client Sample ID: 356023-GW-MW-7R-98-7
Lab Sample ID: 480-159208-8
Date Collected: 09/11/19 12:15
Matrix: Water
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	493390	09/22/19 20:43	RJF	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-8
Lab Sample ID: 480-159208-9
Date Collected: 09/11/19 16:55
Matrix: Water
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	493390	09/22/19 21:07	RJF	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-9
Lab Sample ID: 480-159208-10
Date Collected: 09/12/19 07:55
Matrix: Water
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	493682	09/24/19 15:14	RJF	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-10
Lab Sample ID: 480-159208-11
Date Collected: 09/12/19 12:30
Matrix: Water
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	493682	09/24/19 15:39	RJF	TAL BUF

Client Sample ID: 356023-GW-MW-7R-98-11
Lab Sample ID: 480-159208-12
Date Collected: 09/12/19 16:15
Matrix: Water
Date Received: 09/14/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	493682	09/24/19 16:03	RJF	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 480-159208-1
Project/Site: Mohonk Rd. #356023 Groundwaters

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (20) ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK 3	480-159208-1	108	106	105	103
356023-GW-MW-7R-98-1	480-159208-2	107	105	101	102
356023-GW-MW-7R-98-1 DL	480-159208-2 DL	102	102	103	104
356023-GW-MW-7R-98-2	480-159208-3	104	105	101	100
356023-GW-MW-7R-98-2 DL	480-159208-3 DL	104	104	102	102
356023-GW-MW-7R-98-3	480-159208-4	110	108	102	104
356023-GW-MW-7R-98-4	480-159208-5	107	103	100	101
356023-GW-MW-7R-98-5	480-159208-6	106	105	100	103
356023-GW-MW-7R-98-6	480-159208-7	109	106	99	97
356023-GW-MW-7R-98-7	480-159208-8	112	112	100	101
356023-GW-MW-7R-98-8	480-159208-9	110	108	100	101
356023-GW-MW-7R-98-9	480-159208-10	105	103	92	95
356023-GW-MW-7R-98-10	480-159208-11	104	102	94	100
356023-GW-MW-7R-98-11	480-159208-12	108	108	95	97
	MB 480-493096/7	104	104	104	106
	MB 480-493246/7	104	105	101	102
	MB 480-493390/7	105	104	98	100
	MB 480-493682/7	98	100	95	97
	LCS 480-493096/5	105	105	104	100
	LCS 480-493246/5	104	103	103	100
	LCS 480-493390/5	107	105	101	107
	LCS 480-493682/5	104	103	101	105
356023-GW-MW-7R-98-8 MS	480-159208-9 MS	103	103	98	102
356023-GW-MW-7R-98-8 MSD	480-159208-9 MSD	105	103	99	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S9288.D

Lab ID: LCS 480-493096/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	27.9	112	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.9	100	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	31.4	125	61-148	
1,1,2-Trichloroethane	25.0	24.7	99	76-122	
1,1-Dichloroethane	25.0	27.5	110	77-120	
1,1-Dichloroethene	25.0	26.5	106	66-127	
1,2,3-Trichlorobenzene	25.0	20.3	81	75-123	
1,2,4-Trichlorobenzene	25.0	20.9	84	79-122	
1,2-Dibromo-3-Chloropropane	25.0	20.5	82	56-134	
1,2-Dibromoethane	25.0	25.3	101	77-120	
1,2-Dichlorobenzene	25.0	25.8	103	80-124	
1,2-Dichloroethane	25.0	26.3	105	75-120	
1,2-Dichloropropane	25.0	26.4	106	76-120	
1,3-Dichlorobenzene	25.0	26.3	105	77-120	
1,4-Dichlorobenzene	25.0	25.9	103	80-120	
1,4-Dioxane	500	748	150	50-150	
2-Butanone (MEK)	125	153	122	57-140	
2-Hexanone	125	128	102	65-127	
4-Methyl-2-pentanone (MIBK)	125	128	102	71-125	
Acetone	125	147	117	56-142	
Benzene	25.0	26.6	106	71-124	
Bromochloromethane	25.0	27.1	108	72-130	
Bromodichloromethane	25.0	25.9	104	80-122	
Bromoform	25.0	24.8	99	61-132	
Bromomethane	25.0	23.5	94	55-144	
Carbon disulfide	25.0	27.4	110	59-134	
Carbon tetrachloride	25.0	29.1	116	72-134	
Chlorobenzene	25.0	26.3	105	80-120	
Chloroethane	25.0	24.9	100	69-136	
Chloroform	25.0	25.6	103	73-127	
Chloromethane	25.0	23.8	95	68-124	
cis-1,2-Dichloroethene	25.0	25.7	103	74-124	
cis-1,3-Dichloropropene	25.0	25.2	101	74-124	
Cyclohexane	25.0	29.6	118	59-135	
Dibromochloromethane	25.0	26.1	104	75-125	
Dichlorodifluoromethane	25.0	21.8	87	59-135	
Ethylbenzene	25.0	26.6	107	77-123	
Isopropylbenzene	25.0	27.6	110	77-122	
Methyl acetate	50.0	57.6	115	74-133	
Methyl tert-butyl ether	25.0	25.6	103	77-120	
Methylcyclohexane	25.0	29.0	116	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S9288.D

Lab ID: LCS 480-493096/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	26.0	104	75-124	
Styrene	25.0	25.7	103	80-120	
Tetrachloroethene	25.0	27.7	111	74-122	
Toluene	25.0	26.5	106	80-122	
trans-1,2-Dichloroethene	25.0	27.0	108	73-127	
trans-1,3-Dichloropropene	25.0	26.9	108	80-120	
Trichloroethene	25.0	27.6	111	74-123	
Trichlorofluoromethane	25.0	26.5	106	62-150	
Vinyl chloride	25.0	25.6	102	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S9343.D

Lab ID: LCS 480-493246/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.5	102	73-126	
1,1,2,2-Tetrachloroethane	25.0	26.2	105	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.3	101	61-148	
1,1,2-Trichloroethane	25.0	25.6	102	76-122	
1,1-Dichloroethane	25.0	26.3	105	77-120	
1,1-Dichloroethene	25.0	24.6	99	66-127	
1,2,3-Trichlorobenzene	25.0	21.8	87	75-123	
1,2,4-Trichlorobenzene	25.0	22.1	89	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.0	88	56-134	
1,2-Dibromoethane	25.0	26.1	104	77-120	
1,2-Dichlorobenzene	25.0	25.3	101	80-124	
1,2-Dichloroethane	25.0	25.9	103	75-120	
1,2-Dichloropropane	25.0	25.9	103	76-120	
1,3-Dichlorobenzene	25.0	25.9	103	77-120	
1,4-Dichlorobenzene	25.0	25.4	101	80-120	
1,4-Dioxane	500	689	138	50-150	
2-Butanone (MEK)	125	162	129	57-140	
2-Hexanone	125	139	111	65-127	
4-Methyl-2-pentanone (MIBK)	125	141	113	71-125	
Acetone	125	150	120	56-142	
Benzene	25.0	25.1	101	71-124	
Bromochloromethane	25.0	26.7	107	72-130	
Bromodichloromethane	25.0	25.2	101	80-122	
Bromoform	25.0	24.0	96	61-132	
Bromomethane	25.0	23.1	92	55-144	
Carbon disulfide	25.0	24.9	100	59-134	
Carbon tetrachloride	25.0	26.4	106	72-134	
Chlorobenzene	25.0	25.3	101	80-120	
Chloroethane	25.0	23.1	92	69-136	
Chloroform	25.0	24.7	99	73-127	
Chloromethane	25.0	23.5	94	68-124	
cis-1,2-Dichloroethene	25.0	25.6	102	74-124	
cis-1,3-Dichloropropene	25.0	24.4	98	74-124	
Cyclohexane	25.0	24.6	98	59-135	
Dibromochloromethane	25.0	25.3	101	75-125	
Dichlorodifluoromethane	25.0	18.6	75	59-135	
Ethylbenzene	25.0	25.4	101	77-123	
Isopropylbenzene	25.0	26.0	104	77-122	
Methyl acetate	50.0	62.7	125	74-133	
Methyl tert-butyl ether	25.0	25.5	102	77-120	
Methylcyclohexane	25.0	24.1	96	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S9343.D

Lab ID: LCS 480-493246/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	26.0	104	75-124	
Styrene	25.0	25.6	102	80-120	
Tetrachloroethene	25.0	25.9	104	74-122	
Toluene	25.0	25.5	102	80-122	
trans-1,2-Dichloroethene	25.0	25.2	101	73-127	
trans-1,3-Dichloropropene	25.0	25.9	104	80-120	
Trichloroethene	25.0	26.0	104	74-123	
Trichlorofluoromethane	25.0	23.2	93	62-150	
Vinyl chloride	25.0	23.2	93	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5389.D

Lab ID: LCS 480-493390/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	27.4	109	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.3	101	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.9	107	61-148	
1,1,2-Trichloroethane	25.0	24.7	99	76-122	
1,1-Dichloroethane	25.0	26.3	105	77-120	
1,1-Dichloroethene	25.0	26.3	105	66-127	
1,2,3-Trichlorobenzene	25.0	24.8	99	75-123	
1,2,4-Trichlorobenzene	25.0	23.4	94	79-122	
1,2-Dibromo-3-Chloropropane	25.0	23.9	96	56-134	
1,2-Dibromoethane	25.0	25.8	103	77-120	
1,2-Dichlorobenzene	25.0	24.8	99	80-124	
1,2-Dichloroethane	25.0	25.8	103	75-120	
1,2-Dichloropropane	25.0	25.4	102	76-120	
1,3-Dichlorobenzene	25.0	24.5	98	77-120	
1,4-Dichlorobenzene	25.0	23.9	96	80-120	
1,4-Dioxane	500	491	98	50-150	
2-Butanone (MEK)	125	136	109	57-140	
2-Hexanone	125	135	108	65-127	
4-Methyl-2-pentanone (MIBK)	125	132	106	71-125	
Acetone	125	132	106	56-142	
Benzene	25.0	25.8	103	71-124	
Bromochloromethane	25.0	27.0	108	72-130	
Bromodichloromethane	25.0	27.6	111	80-122	
Bromoform	25.0	27.0	108	61-132	
Bromomethane	25.0	22.4	90	55-144	
Carbon disulfide	25.0	27.0	108	59-134	
Carbon tetrachloride	25.0	27.5	110	72-134	
Chlorobenzene	25.0	24.7	99	80-120	
Chloroethane	25.0	21.7	87	69-136	
Chloroform	25.0	24.9	100	73-127	
Chloromethane	25.0	22.0	88	68-124	
cis-1,2-Dichloroethene	25.0	25.6	103	74-124	
cis-1,3-Dichloropropene	25.0	27.1	108	74-124	
Cyclohexane	25.0	26.8	107	59-135	
Dibromochloromethane	25.0	26.6	107	75-125	
Dichlorodifluoromethane	25.0	21.9	87	59-135	
Ethylbenzene	25.0	24.8	99	77-123	
Isopropylbenzene	25.0	25.4	102	77-122	
Methyl acetate	50.0	49.3	99	74-133	
Methyl tert-butyl ether	25.0	26.4	106	77-120	
Methylcyclohexane	25.0	27.2	109	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5389.D

Lab ID: LCS 480-493390/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	26.0	104	75-124	
Styrene	25.0	26.4	106	80-120	
Tetrachloroethene	25.0	26.9	107	74-122	
Toluene	25.0	25.0	100	80-122	
trans-1,2-Dichloroethene	25.0	26.3	105	73-127	
trans-1,3-Dichloropropene	25.0	26.5	106	80-120	
Trichloroethene	25.0	26.1	104	74-123	
Trichlorofluoromethane	25.0	23.4	94	62-150	
Vinyl chloride	25.0	23.3	93	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5479.D

Lab ID: LCS 480-493682/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	29.5	118	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.7	119	61-148	
1,1,2-Trichloroethane	25.0	26.5	106	76-122	
1,1-Dichloroethane	25.0	27.1	108	77-120	
1,1-Dichloroethene	25.0	28.2	113	66-127	
1,2,3-Trichlorobenzene	25.0	26.3	105	75-123	
1,2,4-Trichlorobenzene	25.0	25.9	104	79-122	
1,2-Dibromo-3-Chloropropane	25.0	24.4	98	56-134	
1,2-Dibromoethane	25.0	26.8	107	77-120	
1,2-Dichlorobenzene	25.0	26.4	106	80-124	
1,2-Dichloroethane	25.0	26.7	107	75-120	
1,2-Dichloropropane	25.0	27.2	109	76-120	
1,3-Dichlorobenzene	25.0	25.4	102	77-120	
1,4-Dichlorobenzene	25.0	25.6	102	80-120	
1,4-Dioxane	500	469	94	50-150	
2-Butanone (MEK)	125	138	110	57-140	
2-Hexanone	125	136	109	65-127	
4-Methyl-2-pentanone (MIBK)	125	132	105	71-125	
Acetone	125	142	113	56-142	
Benzene	25.0	27.2	109	71-124	
Bromochloromethane	25.0	28.6	114	72-130	
Bromodichloromethane	25.0	28.7	115	80-122	
Bromoform	25.0	28.7	115	61-132	
Bromomethane	25.0	19.0	76	55-144	
Carbon disulfide	25.0	29.6	118	59-134	
Carbon tetrachloride	25.0	28.5	114	72-134	
Chlorobenzene	25.0	26.0	104	80-120	
Chloroethane	25.0	18.1	73	69-136	
Chloroform	25.0	25.9	104	73-127	
Chloromethane	25.0	17.7	71	68-124	
cis-1,2-Dichloroethene	25.0	27.8	111	74-124	
cis-1,3-Dichloropropene	25.0	28.9	116	74-124	
Cyclohexane	25.0	28.7	115	59-135	
Dibromochloromethane	25.0	28.2	113	75-125	
Dichlorodifluoromethane	25.0	17.5	70	59-135	
Ethylbenzene	25.0	26.6	106	77-123	
Isopropylbenzene	25.0	27.2	109	77-122	
Methyl acetate	50.0	49.8	100	74-133	
Methyl tert-butyl ether	25.0	27.7	111	77-120	
Methylcyclohexane	25.0	29.2	117	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5479.D

Lab ID: LCS 480-493682/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	28.0	112	75-124	
Styrene	25.0	27.5	110	80-120	
Tetrachloroethene	25.0	28.9	116	74-122	
Toluene	25.0	26.6	106	80-122	
trans-1,2-Dichloroethene	25.0	27.8	111	73-127	
trans-1,3-Dichloropropene	25.0	28.3	113	80-120	
Trichloroethene	25.0	27.7	111	74-123	
Trichlorofluoromethane	25.0	20.0	80	62-150	
Vinyl chloride	25.0	19.6	78	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5412.D

Lab ID: 480-159208-9 MS Client ID: 356023-GW-MW-7R-98-8 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	250	300	490	77	73-126	
1,1,2,2-Tetrachloroethane	250	ND	241	96	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	250	ND	258	103	61-148	
1,1,2-Trichloroethane	250	ND	235	94	76-122	
1,1-Dichloroethane	250	120	341	90	77-120	
1,1-Dichloroethene	250	32	278	98	66-127	
1,2,3-Trichlorobenzene	250	ND	232	93	75-123	
1,2,4-Trichlorobenzene	250	ND	226	90	79-122	
1,2-Dibromo-3-Chloropropane	250	ND	233	93	56-134	
1,2-Dibromoethane	250	ND	246	98	77-120	
1,2-Dichlorobenzene	250	ND	240	96	80-124	
1,2-Dichloroethane	250	ND	243	97	75-120	
1,2-Dichloropropane	250	ND	248	99	76-120	
1,3-Dichlorobenzene	250	ND	239	96	77-120	
1,4-Dichlorobenzene	250	ND	232	93	78-124	
1,4-Dioxane	5000	ND	4590	92	50-150	
2-Butanone (MEK)	1250	ND	1220	98	57-140	
2-Hexanone	1250	ND	1210	97	65-127	
4-Methyl-2-pentanone (MIBK)	1250	ND	1190	95	71-125	
Acetone	1250	ND	1230	98	56-142	
Benzene	250	ND	248	99	71-124	
Bromochloromethane	250	ND	254	101	72-130	
Bromodichloromethane	250	ND	260	104	80-122	
Bromoform	250	ND	250	100	61-132	
Bromomethane	250	ND	233	93	55-144	
Carbon disulfide	250	ND	252	101	59-134	
Carbon tetrachloride	250	ND	255	102	72-134	
Chlorobenzene	250	ND	235	94	80-120	
Chloroethane	250	ND	240	96	69-136	
Chloroform	250	ND	239	95	73-127	
Chloromethane	250	ND	215	86	68-124	
cis-1,2-Dichloroethene	250	ND	256	103	74-124	
cis-1,3-Dichloropropene	250	ND	247	99	74-124	
Cyclohexane	250	ND	247	99	59-135	
Dibromochloromethane	250	ND	254	102	75-125	
Dichlorodifluoromethane	250	ND	211	84	59-135	
Ethylbenzene	250	ND	235	94	77-123	
Isopropylbenzene	250	ND	243	97	77-122	
Methyl acetate	500	ND	448	90	74-133	
Methyl tert-butyl ether	250	ND	242	97	77-120	
Methylcyclohexane	250	ND	251	100	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5412.D

Lab ID: 480-159208-9 MS Client ID: 356023-GW-MW-7R-98-8 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	250	ND	252	101	75-124	
Styrene	250	ND	253	101	80-120	
Tetrachloroethene	250	ND	256	102	74-122	
Toluene	250	ND	239	96	80-122	
trans-1,2-Dichloroethene	250	ND	256	102	73-127	
trans-1,3-Dichloropropene	250	ND	249	100	80-120	
Trichloroethene	250	5.5 J	252	99	74-123	
Trichlorofluoromethane	250	ND	235	94	62-150	
Vinyl chloride	250	ND	236	94	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5413.D

Lab ID: 480-159208-9 MSD Client ID: 356023-GW-MW-7R-98-8 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	250	467	67	5	15	73-126	F1
1,1,2,2-Tetrachloroethane	250	242	97	0	15	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	250	250	100	3	20	61-148	
1,1,2-Trichloroethane	250	232	93	2	15	76-122	
1,1-Dichloroethane	250	329	85	4	20	77-120	
1,1-Dichloroethene	250	266	94	4	16	66-127	
1,2,3-Trichlorobenzene	250	230	92	1	20	75-123	
1,2,4-Trichlorobenzene	250	221	88	2	20	79-122	
1,2-Dibromo-3-Chloropropane	250	224	90	4	15	56-134	
1,2-Dibromoethane	250	239	96	3	15	77-120	
1,2-Dichlorobenzene	250	235	94	2	20	80-124	
1,2-Dichloroethane	250	240	96	2	20	75-120	
1,2-Dichloropropane	250	242	97	3	20	76-120	
1,3-Dichlorobenzene	250	226	90	6	20	77-120	
1,4-Dichlorobenzene	250	227	91	2	20	78-124	
1,4-Dioxane	5000	4720	94	3	20	50-150	
2-Butanone (MEK)	1250	1220	98	0	20	57-140	
2-Hexanone	1250	1230	98	1	15	65-127	
4-Methyl-2-pentanone (MIBK)	1250	1200	96	1	35	71-125	
Acetone	1250	1190	95	3	15	56-142	
Benzene	250	247	99	0	13	71-124	
Bromochloromethane	250	258	103	2	15	72-130	
Bromodichloromethane	250	255	102	2	15	80-122	
Bromoform	250	244	97	3	15	61-132	
Bromomethane	250	220	88	6	15	55-144	
Carbon disulfide	250	244	97	3	15	59-134	
Carbon tetrachloride	250	250	100	2	15	72-134	
Chlorobenzene	250	234	94	0	25	80-120	
Chloroethane	250	227	91	5	15	69-136	
Chloroform	250	231	92	3	20	73-127	
Chloromethane	250	214	86	0	15	68-124	
cis-1,2-Dichloroethene	250	247	99	4	15	74-124	
cis-1,3-Dichloropropene	250	247	99	0	15	74-124	
Cyclohexane	250	241	96	2	20	59-135	
Dibromochloromethane	250	251	100	1	15	75-125	
Dichlorodifluoromethane	250	207	83	2	20	59-135	
Ethylbenzene	250	231	92	2	15	77-123	
Isopropylbenzene	250	233	93	4	20	77-122	
Methyl acetate	500	457	91	2	20	74-133	
Methyl tert-butyl ether	250	245	98	1	37	77-120	
Methylcyclohexane	250	243	97	3	20	68-134	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Matrix: Water Level: Low Lab File ID: T5413.D

Lab ID: 480-159208-9 MSD Client ID: 356023-GW-MW-7R-98-8 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	250	247	99	2	15	75-124	
Styrene	250	249	100	2	20	80-120	
Tetrachloroethene	250	246	98	4	20	74-122	
Toluene	250	238	95	1	15	80-122	
trans-1,2-Dichloroethene	250	245	98	4	20	73-127	
trans-1,3-Dichloropropene	250	244	98	2	15	80-120	
Trichloroethene	250	243	95	4	16	74-123	
Trichlorofluoromethane	250	225	90	4	20	62-150	
Vinyl chloride	250	223	89	5	15	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: S9290.D Lab Sample ID: MB 480-493096/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973S Date Analyzed: 09/20/2019 10:57

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-493096/5	S9288.D	09/20/2019 10:11
TRIP BLANK 3	480-159208-1	S9305.D	09/20/2019 16:58
356023-GW-MW-7R-98-1	480-159208-2	S9306.D	09/20/2019 17:21
356023-GW-MW-7R-98-2	480-159208-3	S9307.D	09/20/2019 17:44

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: S9345.D Lab Sample ID: MB 480-493246/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973S Date Analyzed: 09/21/2019 11:11

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-493246/5	S9343.D	09/21/2019 10:25
356023-GW-MW-7R-98-1 DL	480-159208-2 DL	S9348.D	09/21/2019 12:29
356023-GW-MW-7R-98-2 DL	480-159208-3 DL	S9349.D	09/21/2019 12:52
356023-GW-MW-7R-98-3	480-159208-4	S9350.D	09/21/2019 13:15
356023-GW-MW-7R-98-4	480-159208-5	S9351.D	09/21/2019 13:38
356023-GW-MW-7R-98-5	480-159208-6	S9352.D	09/21/2019 14:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: T5391.D Lab Sample ID: MB 480-493390/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5975T Date Analyzed: 09/22/2019 12:55

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-493390/5	T5389.D	09/22/2019 12:07
356023-GW-MW-7R-98-6	480-159208-7	T5409.D	09/22/2019 20:19
356023-GW-MW-7R-98-7	480-159208-8	T5410.D	09/22/2019 20:43
356023-GW-MW-7R-98-8	480-159208-9	T5411.D	09/22/2019 21:07
356023-GW-MW-7R-98-8 MS	480-159208-9 MS	T5412.D	09/22/2019 21:31
356023-GW-MW-7R-98-8 MSD	480-159208-9 MSD	T5413.D	09/22/2019 21:55

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: T5481.D Lab Sample ID: MB 480-493682/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5975T Date Analyzed: 09/24/2019 11:29

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-493682/5	T5479.D	09/24/2019 10:40
356023-GW-MW-7R-98-9	480-159208-10	T5490.D	09/24/2019 15:14
356023-GW-MW-7R-98-10	480-159208-11	T5491.D	09/24/2019 15:39
356023-GW-MW-7R-98-11	480-159208-12	T5492.D	09/24/2019 16:03

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: S8766.D BFB Injection Date: 09/10/2019

Instrument ID: HP5973S BFB Injection Time: 13:48

Analysis Batch No.: 491176

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.9	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	88.2	
175	5.0 - 9.0 % of mass 174	7.0	(7.9) 1
176	95.0 - 101.0 % of mass 174	84.8	(96.2) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.2) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-491176/7	S8768.D	09/10/2019	14:39
	IC 480-491176/8	S8769.D	09/10/2019	15:02
	IC 480-491176/9	S8770.D	09/10/2019	15:25
	IC 480-491176/10	S8771.D	09/10/2019	15:48
	IC 480-491176/11	S8772.D	09/10/2019	16:11
	ICIS 480-491176/12	S8773.D	09/10/2019	16:34
	IC 480-491176/13	S8774.D	09/10/2019	16:57
	IC 480-491176/14	S8775.D	09/10/2019	17:20

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: S9285.D BFB Injection Date: 09/20/2019

Instrument ID: HP5973S BFB Injection Time: 08:57

Analysis Batch No.: 493096

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.6	
75	30.0 - 60.0 % of mass 95	48.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	94.3	
175	5.0 - 9.0 % of mass 174	7.2	(7.6) 1
176	95.0 - 101.0 % of mass 174	90.4	(95.9) 1
177	5.0 - 9.0 % of mass 176	5.8	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-493096/3	S9286.D	09/20/2019	09:25
	LCS 480-493096/5	S9288.D	09/20/2019	10:11
	MB 480-493096/7	S9290.D	09/20/2019	10:57
TRIP BLANK 3	480-159208-1	S9305.D	09/20/2019	16:58
356023-GW-MW-7R-98-1	480-159208-2	S9306.D	09/20/2019	17:21
356023-GW-MW-7R-98-2	480-159208-3	S9307.D	09/20/2019	17:44

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: S9340.D BFB Injection Date: 09/21/2019

Instrument ID: HP5973S BFB Injection Time: 09:12

Analysis Batch No.: 493246

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.3	
75	30.0 - 60.0 % of mass 95	47.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	94.5	
175	5.0 - 9.0 % of mass 174	7.1	(7.5) 1
176	95.0 - 101.0 % of mass 174	92.8	(98.2) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-493246/3	S9341.D	09/21/2019	09:38
	LCS 480-493246/5	S9343.D	09/21/2019	10:25
	MB 480-493246/7	S9345.D	09/21/2019	11:11
356023-GW-MW-7R-98-1 DL	480-159208-2 DL	S9348.D	09/21/2019	12:29
356023-GW-MW-7R-98-2 DL	480-159208-3 DL	S9349.D	09/21/2019	12:52
356023-GW-MW-7R-98-3	480-159208-4	S9350.D	09/21/2019	13:15
356023-GW-MW-7R-98-4	480-159208-5	S9351.D	09/21/2019	13:38
356023-GW-MW-7R-98-5	480-159208-6	S9352.D	09/21/2019	14:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: T5175.D BFB Injection Date: 09/18/2019

Instrument ID: HP5975T BFB Injection Time: 15:25

Analysis Batch No.: 492722

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.3	
75	30.0 - 60.0 % of mass 95	53.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	50.0 - 120.00 % of mass 95	89.3	
175	5.0 - 9.0 % of mass 174	6.7	(7.5) 1
176	95.0 - 101.0 % of mass 174	85.5	(95.8) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-492722/5	T5177.D	09/18/2019	16:14
	IC 480-492722/6	T5178.D	09/18/2019	16:38
	IC 480-492722/7	T5179.D	09/18/2019	17:02
	IC 480-492722/8	T5180.D	09/18/2019	17:26
	IC 480-492722/9	T5181.D	09/18/2019	17:49
	ICIS 480-492722/10	T5182.D	09/18/2019	18:13
	IC 480-492722/11	T5183.D	09/18/2019	18:37
	IC 480-492722/12	T5184.D	09/18/2019	19:01

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: T5386.D BFB Injection Date: 09/22/2019

Instrument ID: HP5975T BFB Injection Time: 10:54

Analysis Batch No.: 493390

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.1	
75	30.0 - 60.0 % of mass 95	52.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	85.1	
175	5.0 - 9.0 % of mass 174	6.4	(7.6) 1
176	95.0 - 101.0 % of mass 174	84.5	(99.3) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-493390/3	T5387.D	09/22/2019	11:19
	LCS 480-493390/5	T5389.D	09/22/2019	12:07
	MB 480-493390/7	T5391.D	09/22/2019	12:55
356023-GW-MW-7R-98-6	480-159208-7	T5409.D	09/22/2019	20:19
356023-GW-MW-7R-98-7	480-159208-8	T5410.D	09/22/2019	20:43
356023-GW-MW-7R-98-8	480-159208-9	T5411.D	09/22/2019	21:07
356023-GW-MW-7R-98-8 MS	480-159208-9 MS	T5412.D	09/22/2019	21:31
356023-GW-MW-7R-98-8 MSD	480-159208-9 MSD	T5413.D	09/22/2019	21:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab File ID: T5475.D BFB Injection Date: 09/24/2019

Instrument ID: HP5975T BFB Injection Time: 08:50

Analysis Batch No.: 493682

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.2	
75	30.0 - 60.0 % of mass 95	51.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.8	(1.0) 1
174	50.0 - 120.00 % of mass 95	86.4	
175	5.0 - 9.0 % of mass 174	6.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	82.1	(95.1) 1
177	5.0 - 9.0 % of mass 176	5.9	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-493682/9	T5478.D	09/24/2019	10:04
	LCS 480-493682/5	T5479.D	09/24/2019	10:40
	MB 480-493682/7	T5481.D	09/24/2019	11:29
356023-GW-MW-7R-98-9	480-159208-10	T5490.D	09/24/2019	15:14
356023-GW-MW-7R-98-10	480-159208-11	T5491.D	09/24/2019	15:39
356023-GW-MW-7R-98-11	480-159208-12	T5492.D	09/24/2019	16:03

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Sample No.: ICIS 480-491176/12 Date Analyzed: 09/10/2019 16:34

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S8773.D Heated Purge: (Y/N) N

Calibration ID: 37555

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		143736	5.45	283614	8.44	325070	10.83
UPPER LIMIT		287472	5.95	567228	8.94	650140	11.33
LOWER LIMIT		71868	4.95	141807	7.94	162535	10.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-493096/3		119241	5.44	235101	8.44	262383	10.83
CCVIS 480-493246/3		112189	5.44	229696	8.44	243093	10.83

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Sample No.: CCVIS 480-493096/3 Date Analyzed: 09/20/2019 09:25

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S9286.D Heated Purge: (Y/N) N

Calibration ID: 37552

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		119241	5.44	235101	8.44	262383	10.83
UPPER LIMIT		238482	5.94	470202	8.94	524766	11.33
LOWER LIMIT		59621	4.94	117551	7.94	131192	10.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-493096/5		117695	5.44	239478	8.44	253198	10.83
MB 480-493096/7		117266	5.45	232118	8.44	277549	10.83
480-159208-1	TRIP BLANK 3	109689	5.44	222469	8.44	260409	10.83
480-159208-2	356023-GW-MW-7R-98-1	113448	5.44	232162	8.44	266011	10.83
480-159208-3	356023-GW-MW-7R-98-2	113459	5.44	229478	8.44	264574	10.83

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Sample No.: CCVIS 480-493246/3 Date Analyzed: 09/21/2019 09:38

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S9341.D Heated Purge: (Y/N) N

Calibration ID: 37552

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		112189	5.44	229696	8.44	243093	10.83
UPPER LIMIT		224378	5.94	459392	8.94	486186	11.33
LOWER LIMIT		56095	4.94	114848	7.94	121547	10.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-493246/5		115102	5.44	235636	8.44	250732	10.83
MB 480-493246/7		113255	5.44	234579	8.44	267875	10.83
480-159208-2 DL	356023-GW-MW-7R-98-1 DL	115250	5.45	229066	8.44	268922	10.83
480-159208-3 DL	356023-GW-MW-7R-98-2 DL	110962	5.44	230586	8.44	264416	10.83
480-159208-4	356023-GW-MW-7R-98-3	109079	5.44	230206	8.44	263046	10.83
480-159208-5	356023-GW-MW-7R-98-4	110048	5.44	230582	8.44	261415	10.83
480-159208-6	356023-GW-MW-7R-98-5	110120	5.44	229876	8.44	264169	10.83

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Sample No.: ICIS 480-492722/10 Date Analyzed: 09/18/2019 18:13

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): T5182.D Heated Purge: (Y/N) N

Calibration ID: 37706

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		211587	4.80	809497	7.09	437501	8.96
UPPER LIMIT		423174	5.30	1618994	7.59	875002	9.46
LOWER LIMIT		105794	4.30	404749	6.59	218751	8.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-493390/3		195540	4.80	763084	7.09	426504	8.96
CCVIS 480-493682/9		211759	4.80	814109	7.09	446770	8.96

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Sample No.: CCVIS 480-493390/3 Date Analyzed: 09/22/2019 11:19

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): T5387.D Heated Purge: (Y/N) N

Calibration ID: 37709

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		195540	4.80	763084	7.09	426504	8.96
UPPER LIMIT		391080	5.30	1526168	7.59	853008	9.46
LOWER LIMIT		97770	4.30	381542	6.59	213252	8.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-493390/5		199970	4.80	784995	7.09	436149	8.96
MB 480-493390/7		196195	4.80	751132	7.09	403348	8.96
480-159208-7	356023-GW-MW-7R-98-6	187655	4.80	729257	7.09	394240	8.96
480-159208-8	356023-GW-MW-7R-98-7	181246	4.80	721362	7.09	383301	8.96
480-159208-9	356023-GW-MW-7R-98-8	185331	4.80	715151	7.09	380831	8.96
480-159208-9 MS	356023-GW-MW-7R-98-8 MS	200231	4.80	782234	7.09	428049	8.96
480-159208-9 MSD	356023-GW-MW-7R-98-8 MSD	202663	4.80	790168	7.09	438127	8.96

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Sample No.: CCVIS 480-493682/9 Date Analyzed: 09/24/2019 10:04

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): T5478.D Heated Purge: (Y/N) N

Calibration ID: 37709

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		211759	4.80	814109	7.09	446770	8.96
UPPER LIMIT		423518	5.30	1628218	7.59	893540	9.46
LOWER LIMIT		105880	4.30	407055	6.59	223385	8.46
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-493682/5		197920	4.80	776093	7.09	427643	8.96
MB 480-493682/7		204914	4.80	795823	7.09	429275	8.96
480-159208-10	356023-GW-MW-7R-98-9	193070	4.80	785982	7.09	416931	8.96
480-159208-11	356023-GW-MW-7R-98-10	197469	4.80	767914	7.09	405561	8.96
480-159208-12	356023-GW-MW-7R-98-11	189630	4.80	770535	7.09	392531	8.96

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: TRIP BLANK 3 Lab Sample ID: 480-159208-1

Matrix: Water Lab File ID: S9305.D

Analysis Method: 8260C Date Collected: 09/09/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 16:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: TRIP BLANK 3 Lab Sample ID: 480-159208-1

Matrix: Water Lab File ID: S9305.D

Analysis Method: 8260C Date Collected: 09/09/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 16:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	105		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9305.D
Lims ID: 480-159208-A-1
Client ID: TRIP BLANK 3
Sample Type: Client
Inject. Date: 20-Sep-2019 16:58:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-159208-A-1
Misc. Info.: 480-0084301-023
Operator ID: kn Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Sep-2019 09:28:30 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0306

First Level Reviewer: izquierdoo Date: 21-Sep-2019 09:28:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	99	109689	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	222469	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	260409	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	64	149869	26.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	92400	26.4	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	576386	26.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	205610	25.8	
10 Dichlorodifluoromethane	85		1.264				ND	
12 Chloromethane	50		1.440				ND	
13 Vinyl chloride	62		1.537				ND	
14 Bromomethane	94		1.829				ND	
15 Chloroethane	64		1.921				ND	
17 Trichlorofluoromethane	101		2.146				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.644				ND	
22 1,1-Dichloroethene	96		2.651				ND	
23 Acetone	43		2.778				ND	
26 Carbon disulfide	76		2.845				ND	
27 Methyl acetate	43		3.076				ND	
30 Methylene Chloride	84		3.180				ND	Ua
32 Methyl tert-butyl ether	73		3.387				ND	
34 trans-1,2-Dichloroethene	96		3.405				ND	
39 1,1-Dichloroethane	63		3.831				ND	
45 cis-1,2-Dichloroethene	96		4.390				ND	
43 2-Butanone (MEK)	43		4.427				ND	
48 Chlorobromomethane	128		4.628				ND	
50 Chloroform	83	4.707	4.701	0.000	11	1320	0.1202	
51 1,1,1-Trichloroethane	97		4.816				ND	
52 Cyclohexane	56		4.816				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.169				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95		5.784				ND	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.548				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.558				ND	
90 m-Xylene & p-Xylene	106		8.679				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.908				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

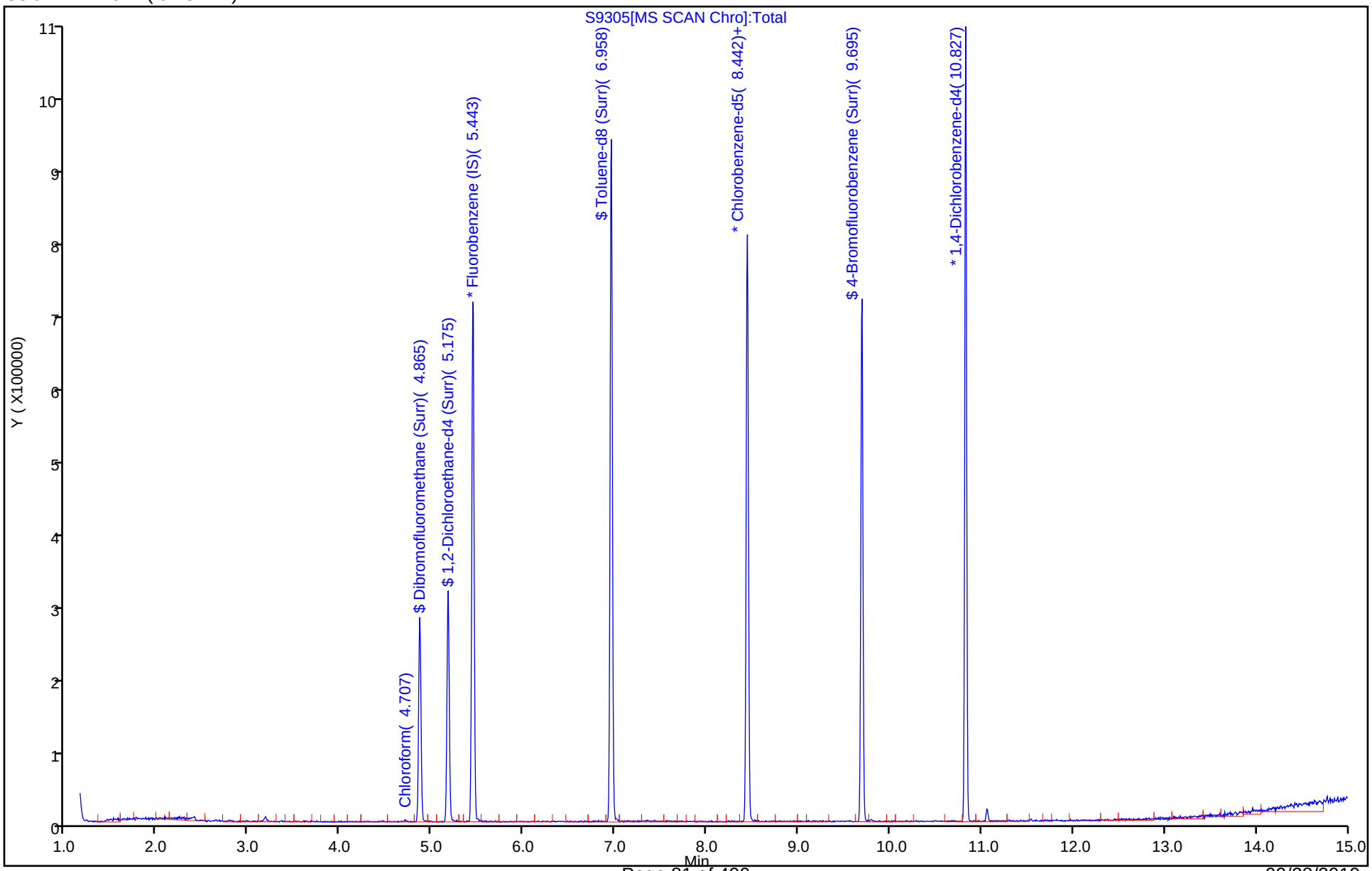
Report Date: 21-Sep-2019 09:28:31 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9305.D

Injection Date:	20-Sep-2019 16:58:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	480-159208-A-1	Lab Sample ID:	480-159208-1	Worklist Smp#:	23
Client ID:	TRIP BLANK 3				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-1 Lab Sample ID: 480-159208-2

Matrix: Water Lab File ID: S9306.D

Analysis Method: 8260C Date Collected: 09/09/2019 16:40

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 17:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	*1,1,1-Trichloroethane*	*330*	*E*	*1.0*	*0.82*
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	*1,1-Dichloroethane*	*130*	*E*	*1.0*	*0.38*
75-35-4	1,1-Dichloroethene	34		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	0.31	J	1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	5.5	J	10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	3.0	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	1.2		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	4.8		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-1 Lab Sample ID: 480-159208-2

Matrix: Water Lab File ID: S9306.D

Analysis Method: 8260C Date Collected: 09/09/2019 16:40

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 17:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	2.6		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D
Lims ID: 480-159208-B-2
Client ID: 356023-GW-MW-7R-98-1
Sample Type: Client
Inject. Date: 20-Sep-2019 17:21:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-159208-B-2
Misc. Info.: 480-0084301-024
Operator ID: kn Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Sep-2019 09:29:48 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0306

First Level Reviewer: izquierdoo Date: 21-Sep-2019 09:29:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	113448	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	232162	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	266011	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	54	153595	26.7	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	94727	26.2	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	83	580836	25.3	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	95	212056	25.5	
10 Dichlorodifluoromethane	85		1.264				ND	
12 Chloromethane	50		1.440				ND	
13 Vinyl chloride	62		1.537				ND	
14 Bromomethane	94		1.829				ND	
15 Chloroethane	64	1.927	1.921	0.006	35	5964	1.19	
17 Trichlorofluoromethane	101		2.146				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.644				ND	
22 1,1-Dichloroethene	96	2.657	2.651	0.006	96	187521	33.7	
23 Acetone	43	2.790	2.790	0.012	61	6967	2.96	Ma
26 Carbon disulfide	76		2.845				ND	
27 Methyl acetate	43		3.076				ND	
30 Methylene Chloride	84		3.180				ND	Ua
32 Methyl tert-butyl ether	73		3.387				ND	
34 trans-1,2-Dichloroethene	96		3.405				ND	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	98	1484627	130.7	E
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	78	33796	4.84	
43 2-Butanone (MEK)	43	4.439	4.439	0.012	87	18655	5.48	M
48 Chlorobromomethane	128		4.628				ND	
50 Chloroform	83		4.707				ND	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	98	3162315	330.3	E
52 Cyclohexane	56		4.816				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.169				ND	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	24	3090	0.3107	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.784	5.784	0.000	88	17051	2.60	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.548				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.558				ND	
90 m-Xylene & p-Xylene	106		8.679				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.908				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added: 1.00	Units: uL	Run Reagent

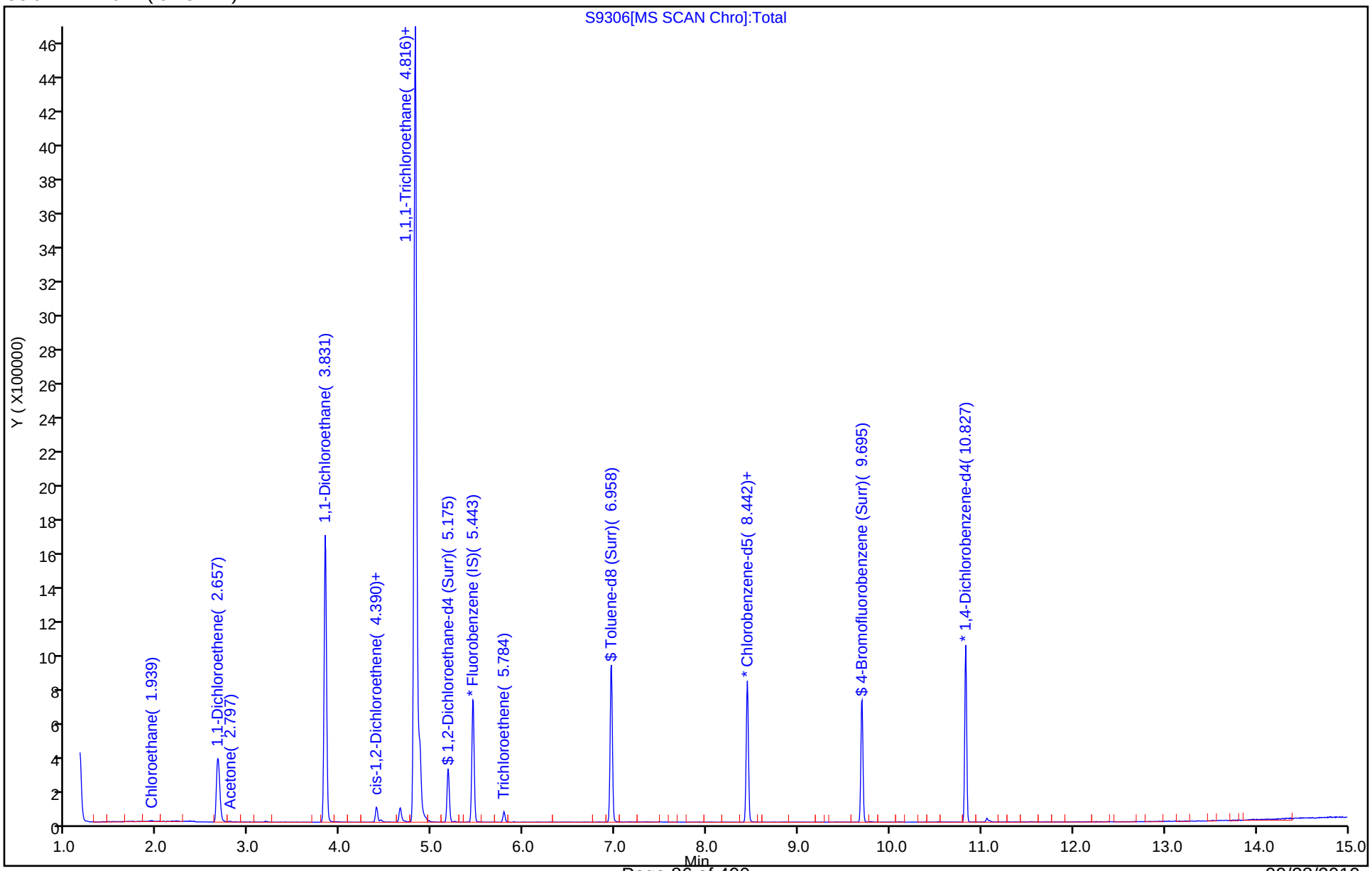
Report Date: 21-Sep-2019 09:29:48 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D

Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2	Worklist Smp#:	24
Client ID:	356023-GW-MW-7R-98-1				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
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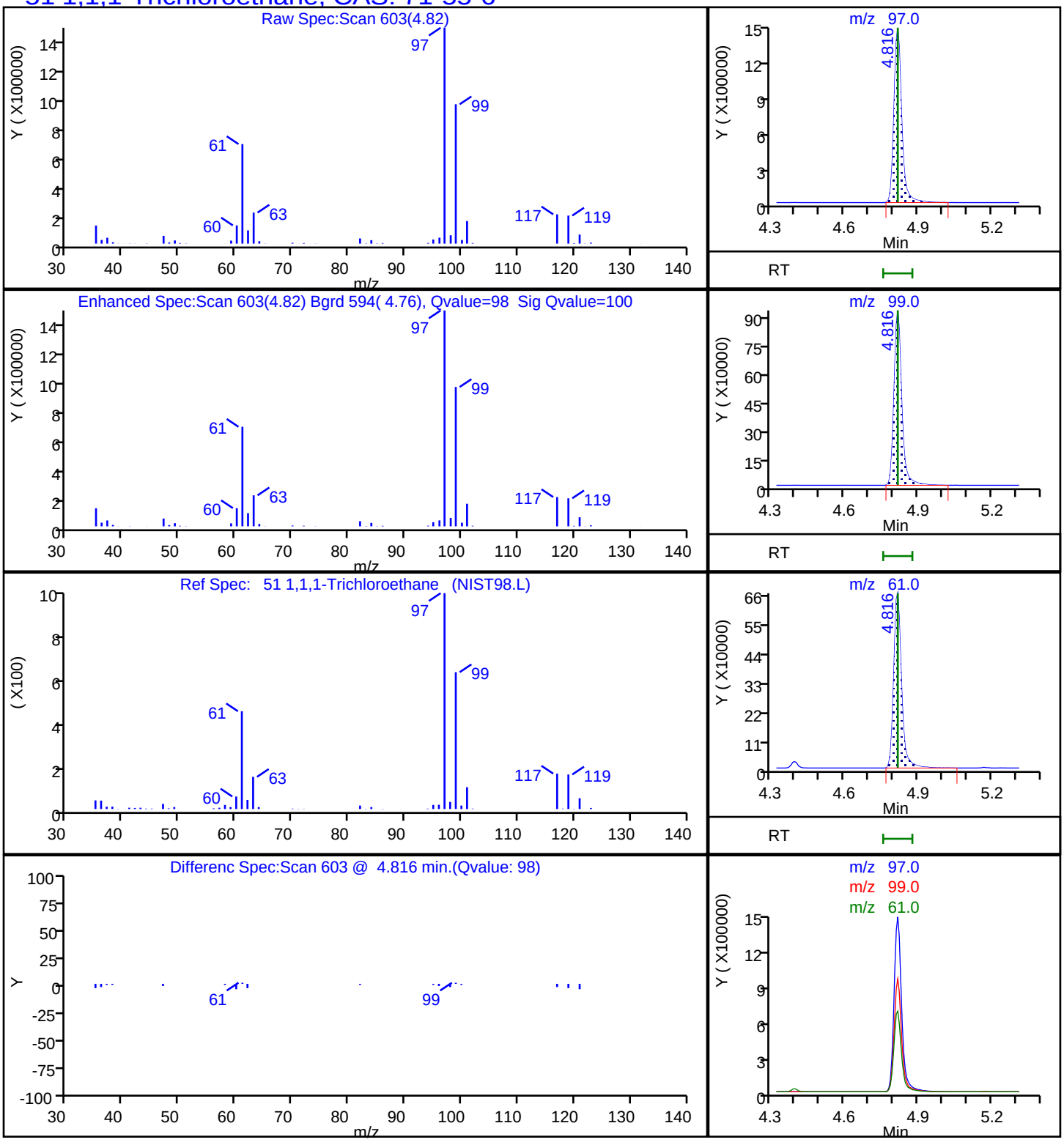
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

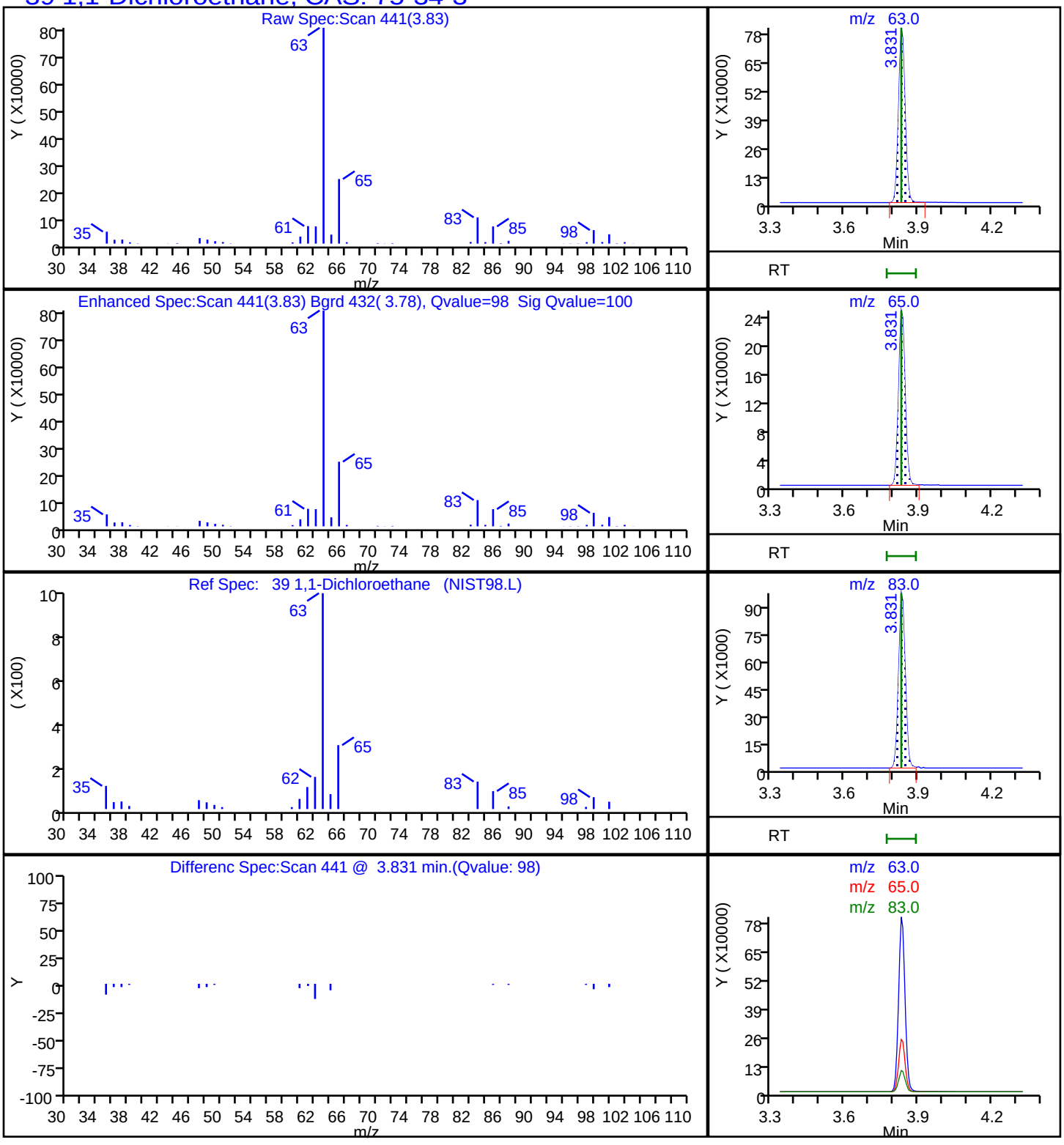
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

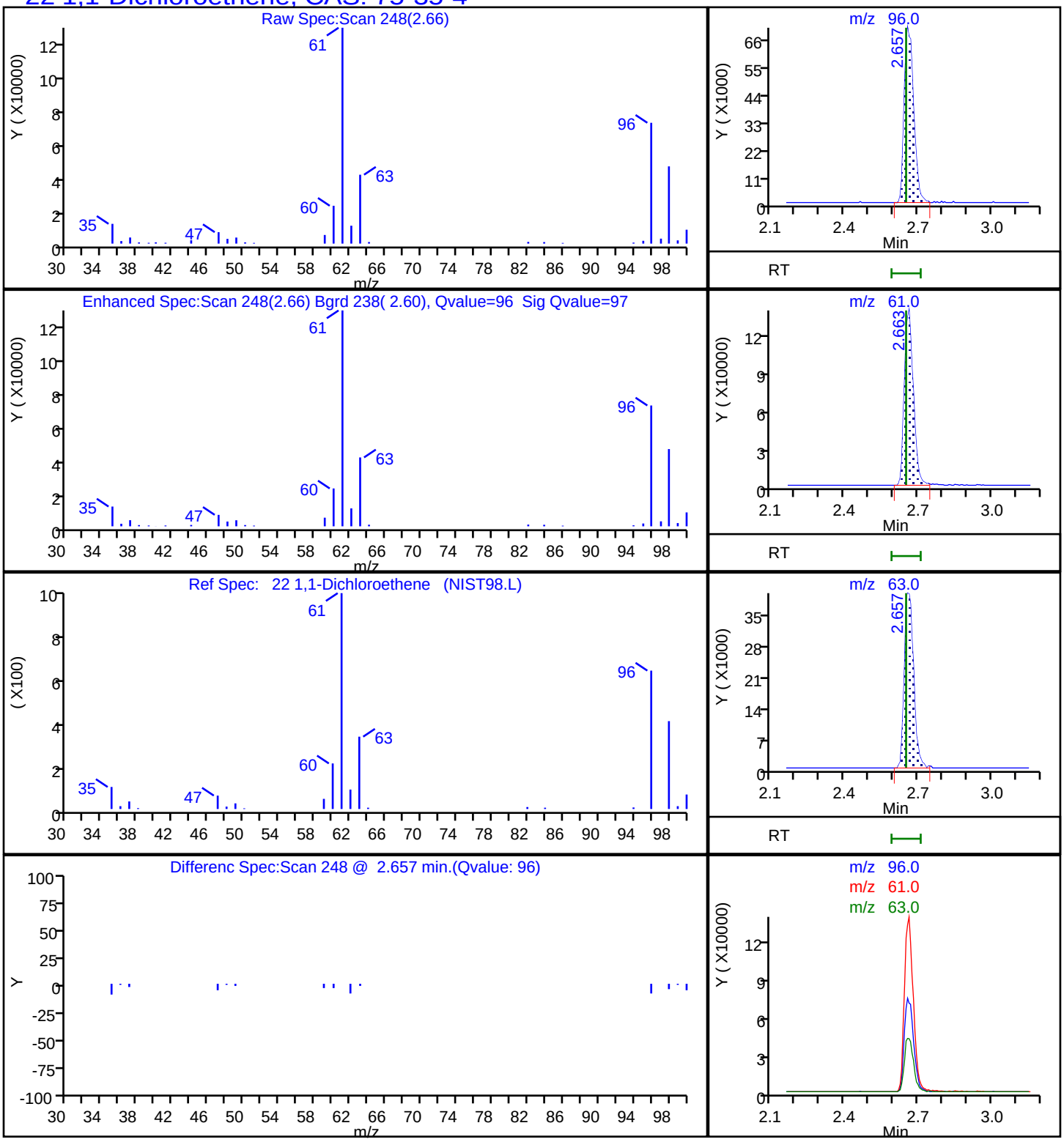
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

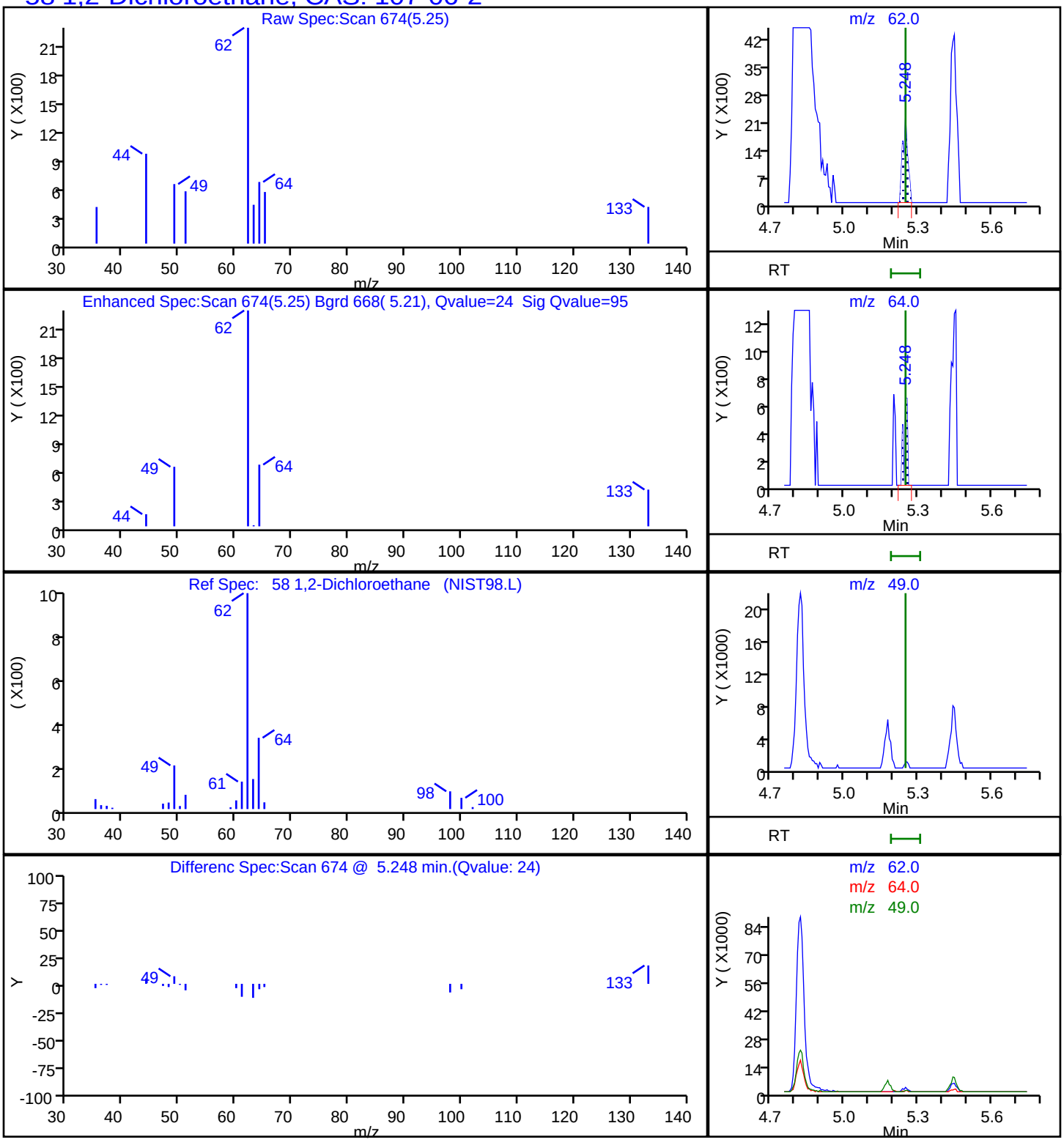
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

58 1,2-Dichloroethane, CAS: 107-06-2

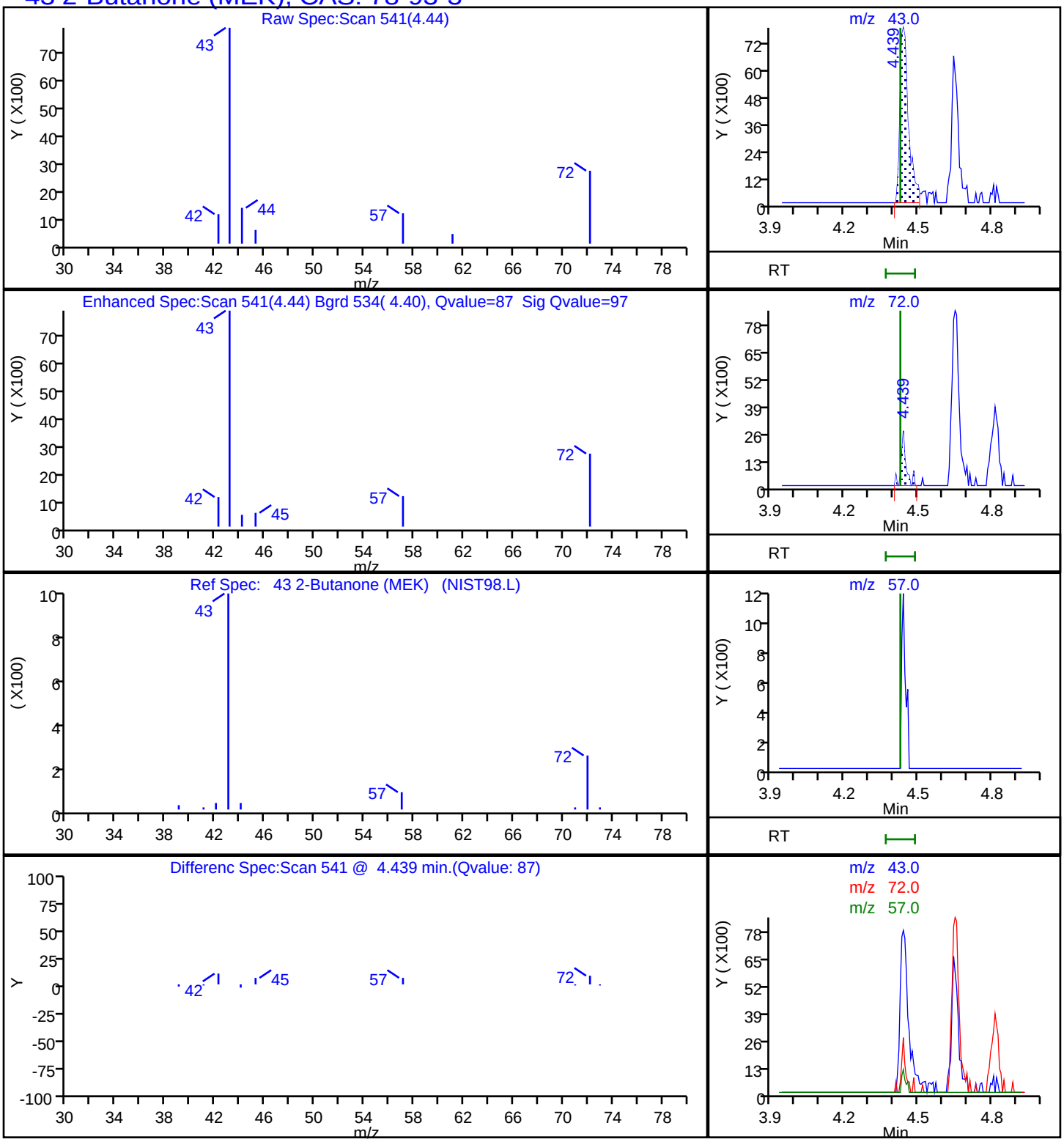


Report Date: 21-Sep-2019 09:29:48 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

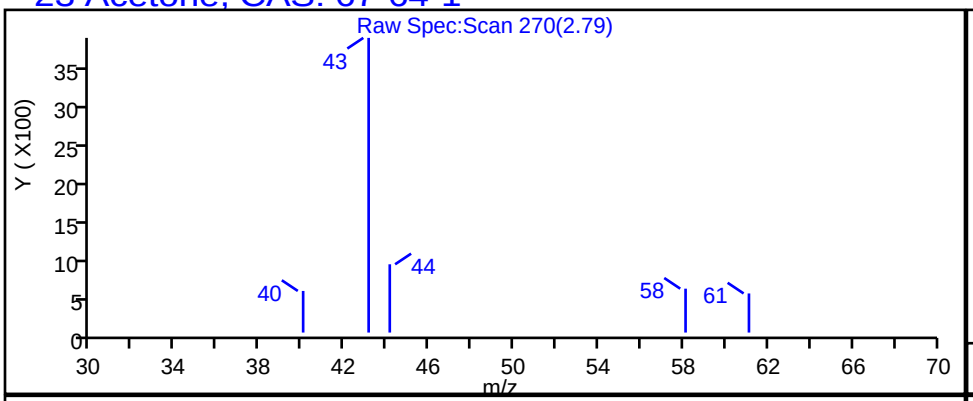
43 2-Butanone (MEK), CAS: 78-93-3

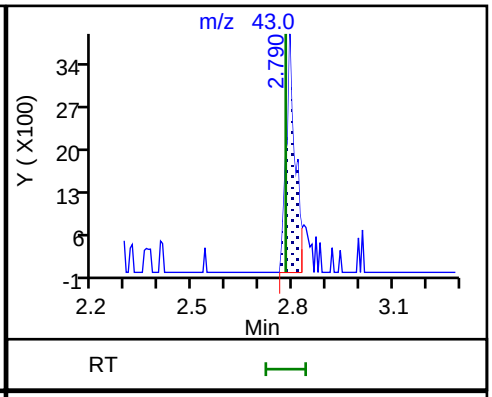


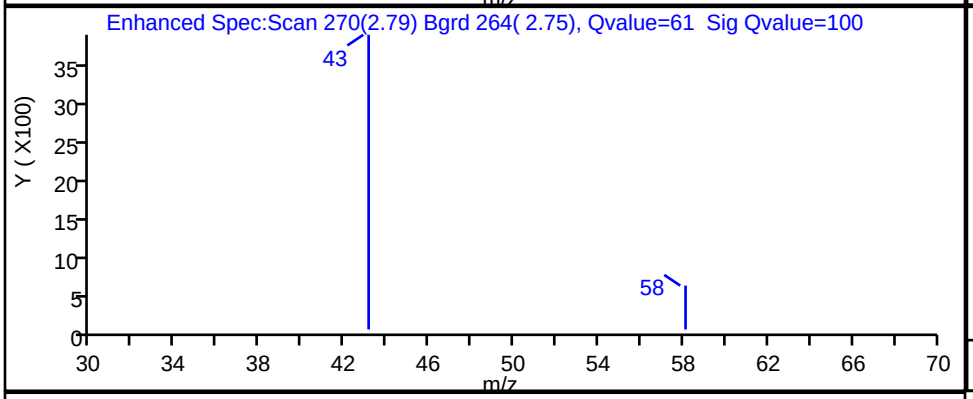
Eurofins TestAmerica, Buffalo

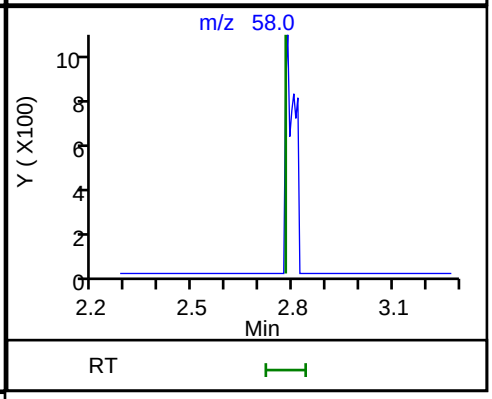
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D
Injection Date: 20-Sep-2019 17:21:30 Instrument ID: HP5973S
Lims ID: 480-159208-B-2 Lab Sample ID: 480-159208-2
Client ID: 356023-GW-MW-7R-98-1
Operator ID: kn ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

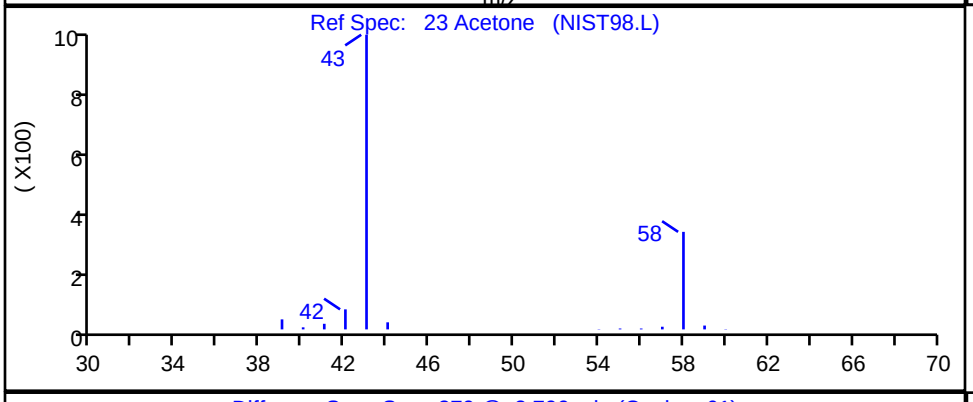
23 Acetone, CAS: 67-64-1

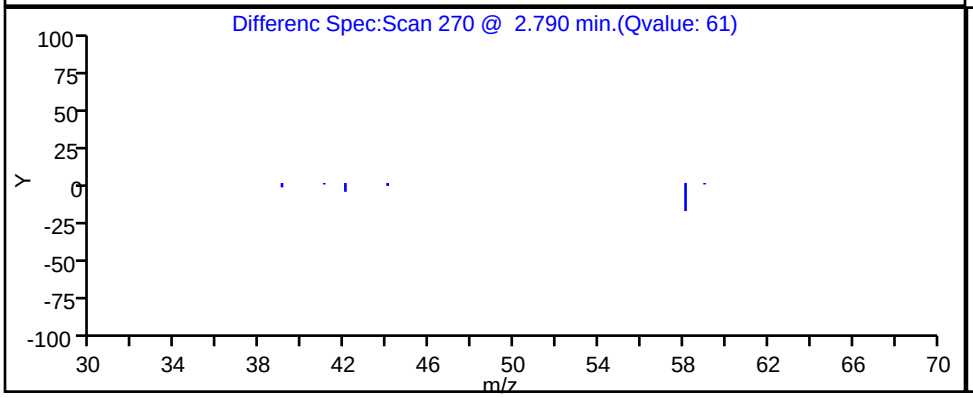


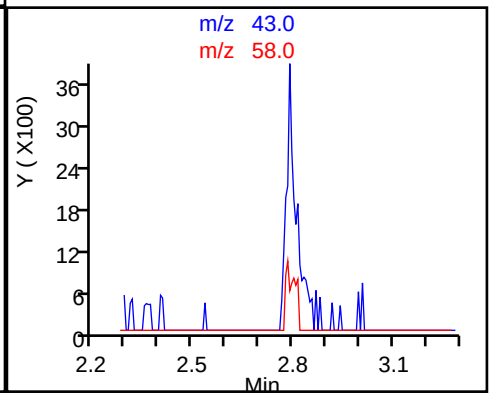












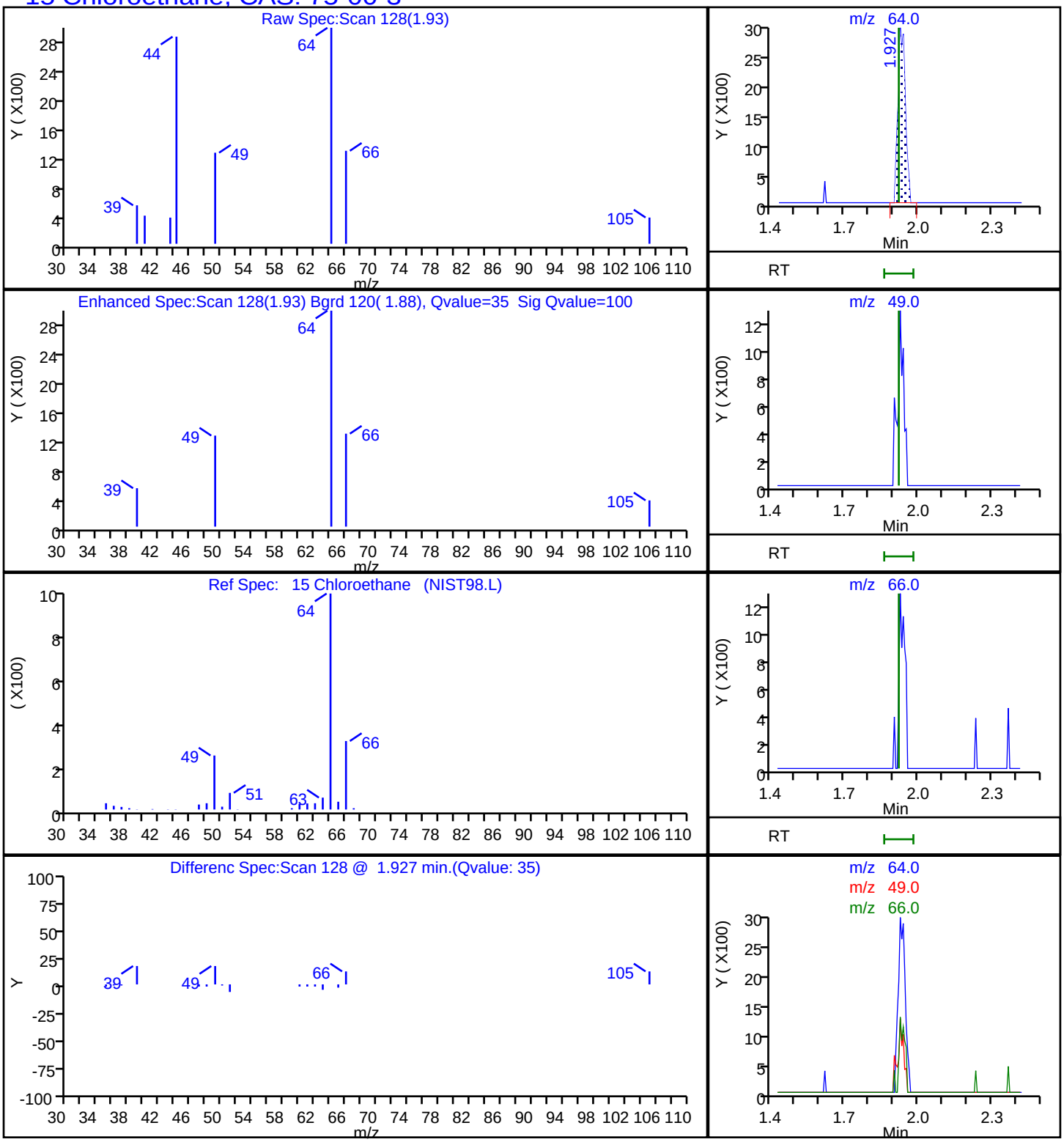
Report Date: 21-Sep-2019 09:29:48 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D

Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

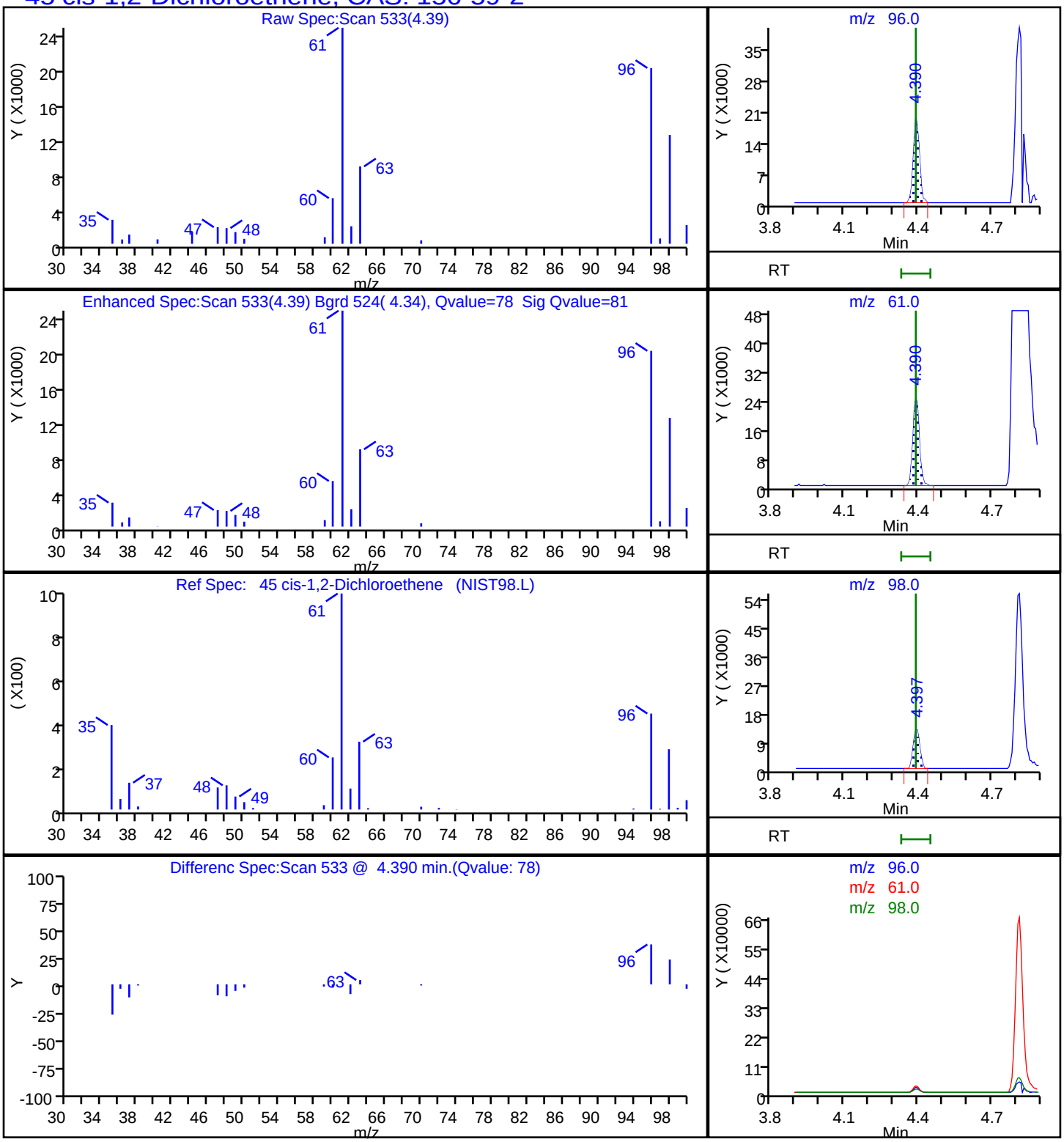
15 Chloroethane, CAS: 75-00-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

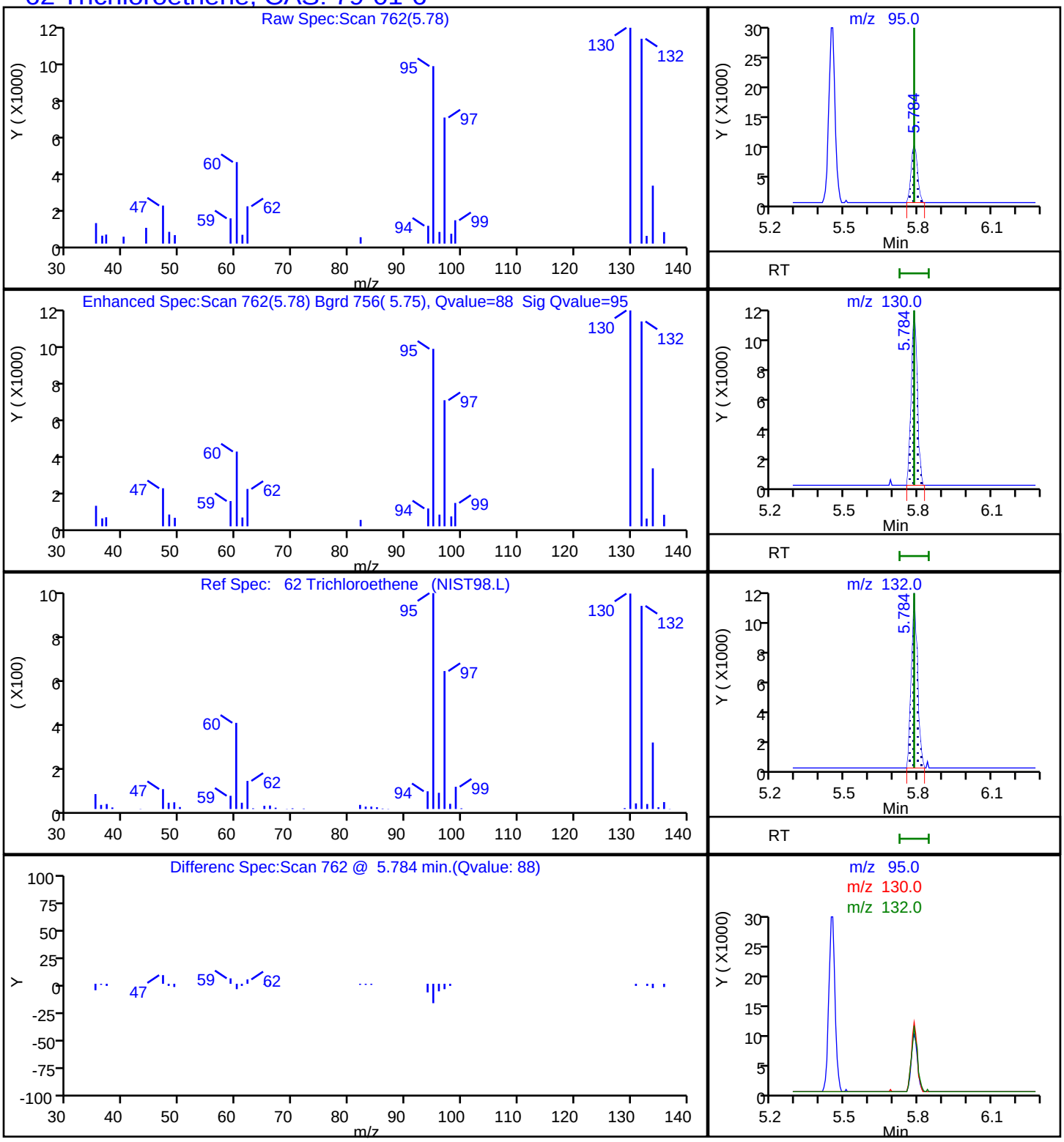
45 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

62 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

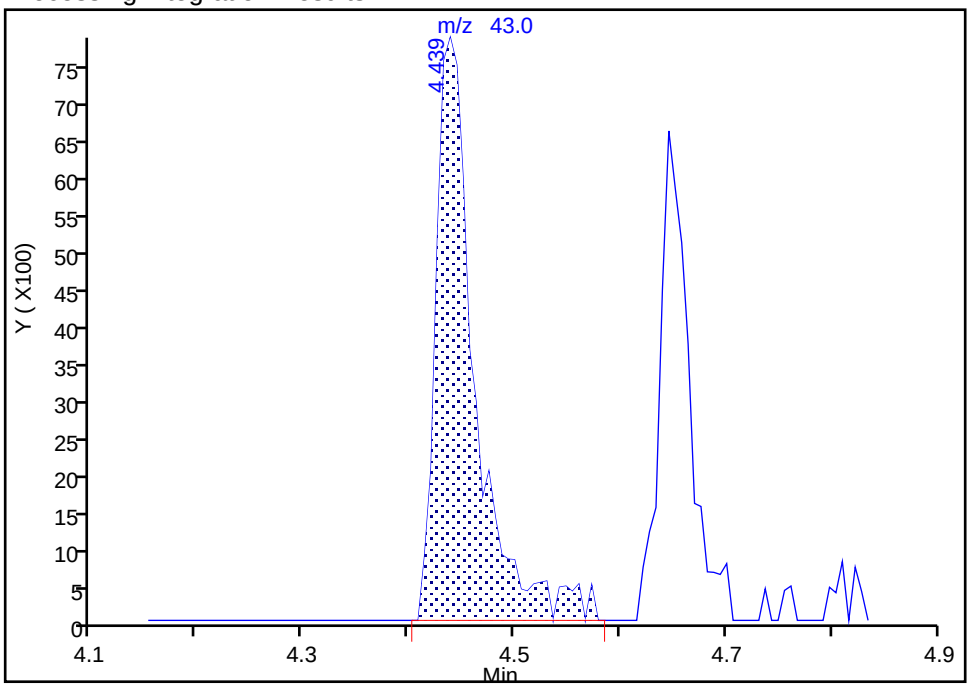
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

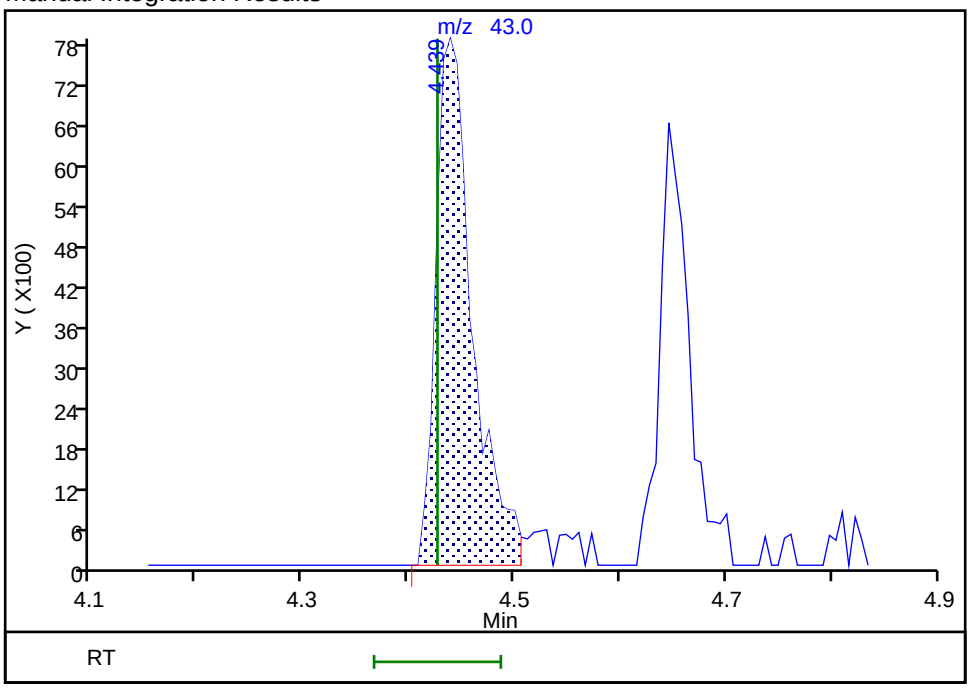
Processing Integration Results

RT: 4.44
Area: 20169
Amount: 5.920921
Amount Units: ug/L



Manual Integration Results

RT: 4.44
Area: 18655
Amount: 5.476463
Amount Units: ug/L



Reviewer: izquierdoo, 21-Sep-2019 09:29:06

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

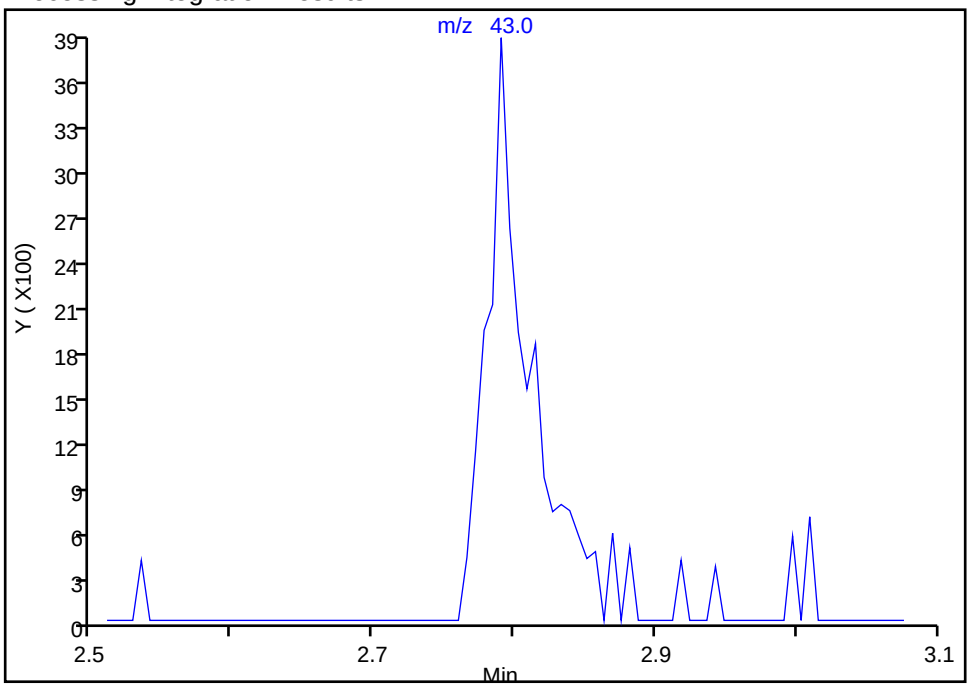
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9306.D				
Injection Date:	20-Sep-2019 17:21:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	kn	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

Signal: 1

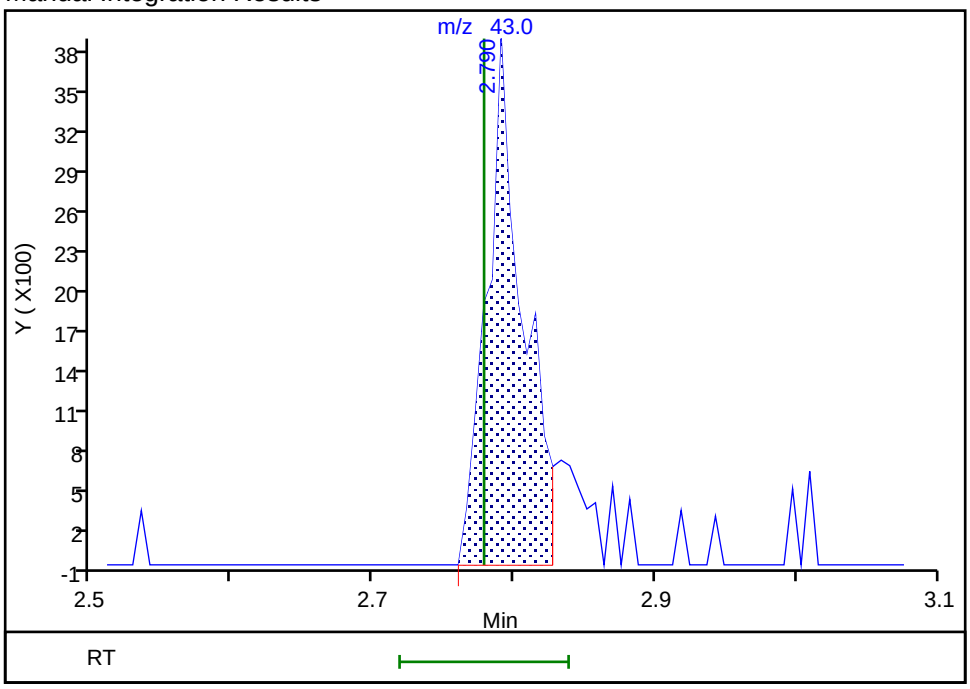
Not Detected
Expected RT: 2.78

Processing Integration Results



Manual Integration Results

RT: 2.79
Area: 6967
Amount: 2.958981
Amount Units: ug/L



Reviewer: izquierdoo, 21-Sep-2019 09:29:39
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-1 DL Lab Sample ID: 480-159208-2 DL

Matrix: Water Lab File ID: S9348.D

Analysis Method: 8260C Date Collected: 09/09/2019 16:40

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 12:29

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	330		8.0	6.6
79-34-5	*1,1,2,2-Tetrachloroethane*	*ND*		*8.0*	*1.7*
76-13-1	*1,1,2-Trichloro-1,2,2-trifluoroethane*	*ND*		*8.0*	*2.5*
79-00-5	*1,1,2-Trichloroethane*	*ND*		*8.0*	*1.8*
75-34-3	1,1-Dichloroethane	130		8.0	3.0
75-35-4	*1,1-Dichloroethene*	*34*		*8.0*	*2.3*
87-61-6	*1,2,3-Trichlorobenzene*	*ND*		*8.0*	*3.3*
120-82-1	*1,2,4-Trichlorobenzene*	*ND*		*8.0*	*3.3*
96-12-8	*1,2-Dibromo-3-Chloropropane*	*ND*		*8.0*	*3.1*
106-93-4	*1,2-Dibromoethane*	*ND*		*8.0*	*5.8*
95-50-1	*1,2-Dichlorobenzene*	*ND*		*8.0*	*6.3*
107-06-2	*1,2-Dichloroethane*	*ND*		*8.0*	*1.7*
78-87-5	*1,2-Dichloropropane*	*ND*		*8.0*	*5.8*
541-73-1	*1,3-Dichlorobenzene*	*ND*		*8.0*	*6.2*
106-46-7	*1,4-Dichlorobenzene*	*ND*		*8.0*	*6.7*
123-91-1	*1,4-Dioxane*	*ND*		*320*	*75*
78-93-3	*2-Butanone (MEK)*	*ND*		*80*	*11*
591-78-6	*2-Hexanone*	*ND*		*40*	*9.9*
108-10-1	*4-Methyl-2-pentanone (MIBK)*	*ND*		*40*	*17*
67-64-1	*Acetone*	*ND*		*80*	*24*
71-43-2	*Benzene*	*ND*		*8.0*	*3.3*
74-97-5	*Bromochloromethane*	*ND*		*8.0*	*7.0*
75-27-4	*Bromodichloromethane*	*ND*		*8.0*	*3.1*
75-25-2	*Bromoform*	*ND*		*8.0*	*2.1*
74-83-9	*Bromomethane*	*ND*		*8.0*	*5.5*
75-15-0	*Carbon disulfide*	*ND*		*8.0*	*1.5*
56-23-5	*Carbon tetrachloride*	*ND*		*8.0*	*2.2*
108-90-7	*Chlorobenzene*	*ND*		*8.0*	*6.0*
75-00-3	*Chloroethane*	*ND*		*8.0*	*2.6*
67-66-3	*Chloroform*	*ND*		*8.0*	*2.7*
74-87-3	*Chloromethane*	*ND*		*8.0*	*2.8*
156-59-2	*cis-1,2-Dichloroethene*	*ND*		*8.0*	*6.5*
10061-01-5	*cis-1,3-Dichloropropene*	*ND*		*8.0*	*2.9*
110-82-7	*Cyclohexane*	*ND*		*8.0*	*1.4*
124-48-1	*Dibromochloromethane*	*ND*		*8.0*	*2.6*

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-1 DL Lab Sample ID: 480-159208-2 DL

Matrix: Water Lab File ID: S9348.D

Analysis Method: 8260C Date Collected: 09/09/2019 16:40

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 12:29

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	*Dichlorodifluoromethane*	*ND*		*8.0*	*5.4*
100-41-4	*Ethylbenzene*	*ND*		*8.0*	*5.9*
98-82-8	*Isopropylbenzene*	*ND*		*8.0*	*6.3*
79-20-9	*Methyl acetate*	*ND*		*20*	*10*
1634-04-4	*Methyl tert-butyl ether*	*ND*		*8.0*	*1.3*
108-87-2	*Methylcyclohexane*	*ND*		*8.0*	*1.3*
75-09-2	*Methylene Chloride*	*ND*		*8.0*	*3.5*
100-42-5	*Styrene*	*ND*		*8.0*	*5.8*
127-18-4	*Tetrachloroethene*	*ND*		*8.0*	*2.9*
108-88-3	*Toluene*	*ND*		*8.0*	*4.1*
156-60-5	*trans-1,2-Dichloroethene*	*ND*		*8.0*	*7.2*
10061-02-6	*trans-1,3-Dichloropropene*	*ND*		*8.0*	*3.0*
79-01-6	*Trichloroethene*	*ND*		*8.0*	*3.7*
75-69-4	*Trichlorofluoromethane*	*ND*		*8.0*	*7.0*
75-01-4	*Vinyl chloride*	*ND*		*8.0*	*7.2*
1330-20-7	*Xylenes, Total*	*ND*		*16*	*5.3*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D
Lims ID: 480-159208-C-2
Client ID: 356023-GW-MW-7R-98-1
Sample Type: Client
Inject. Date: 21-Sep-2019 12:29:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 480-159208-C-2
Misc. Info.: 480-0084330-010
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 09:12:55 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: izquierdoo Date: 22-Sep-2019 09:12:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.443	0.006	98	115250	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	83	229066	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	268922	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	55	149045	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	93639	25.5	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	583374	25.7	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	214361	26.1	
10 Dichlorodifluoromethane	85		1.263				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.927				ND	
17 Trichlorofluoromethane	101		2.152				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.651				ND	
22 1,1-Dichloroethene	96	2.651	2.657	-0.006	80	24366	4.30	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.082				ND	
30 Methylene Chloride	84		3.180				ND	Ua
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	97	190008	16.5	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	13	4395	0.6196	M
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83	4.713	4.707	0.006	32	1542	0.1337	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	94	406669	41.8	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.784	5.784	0.000	31	2368	0.3549	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

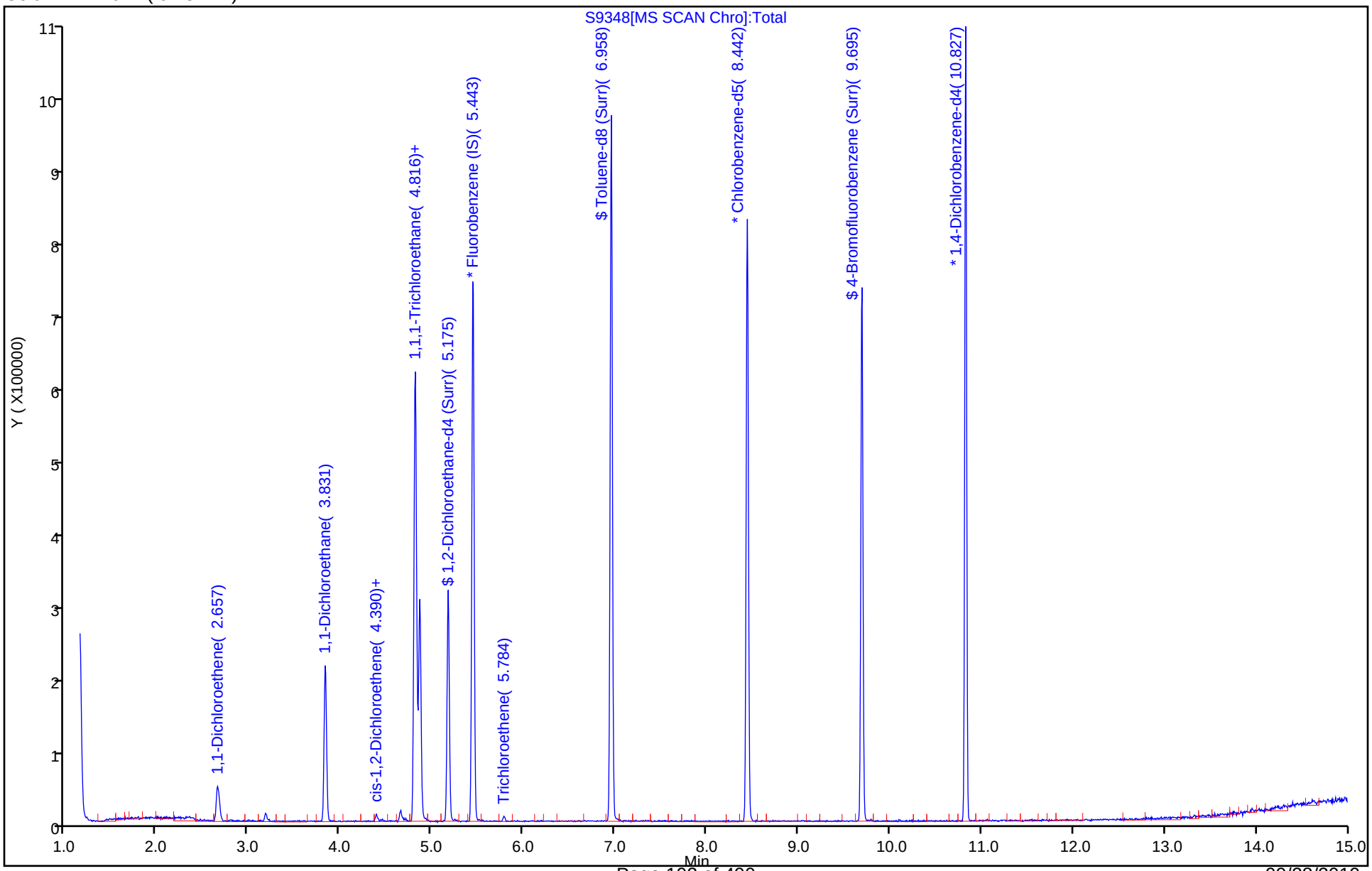
Report Date: 22-Sep-2019 09:12:56 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D

Injection Date:	21-Sep-2019 12:29:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-159208-C-2	Lab Sample ID:	480-159208-2	Worklist Smp#:	10
Client ID:	356023-GW-MW-7R-98-1				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	10
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

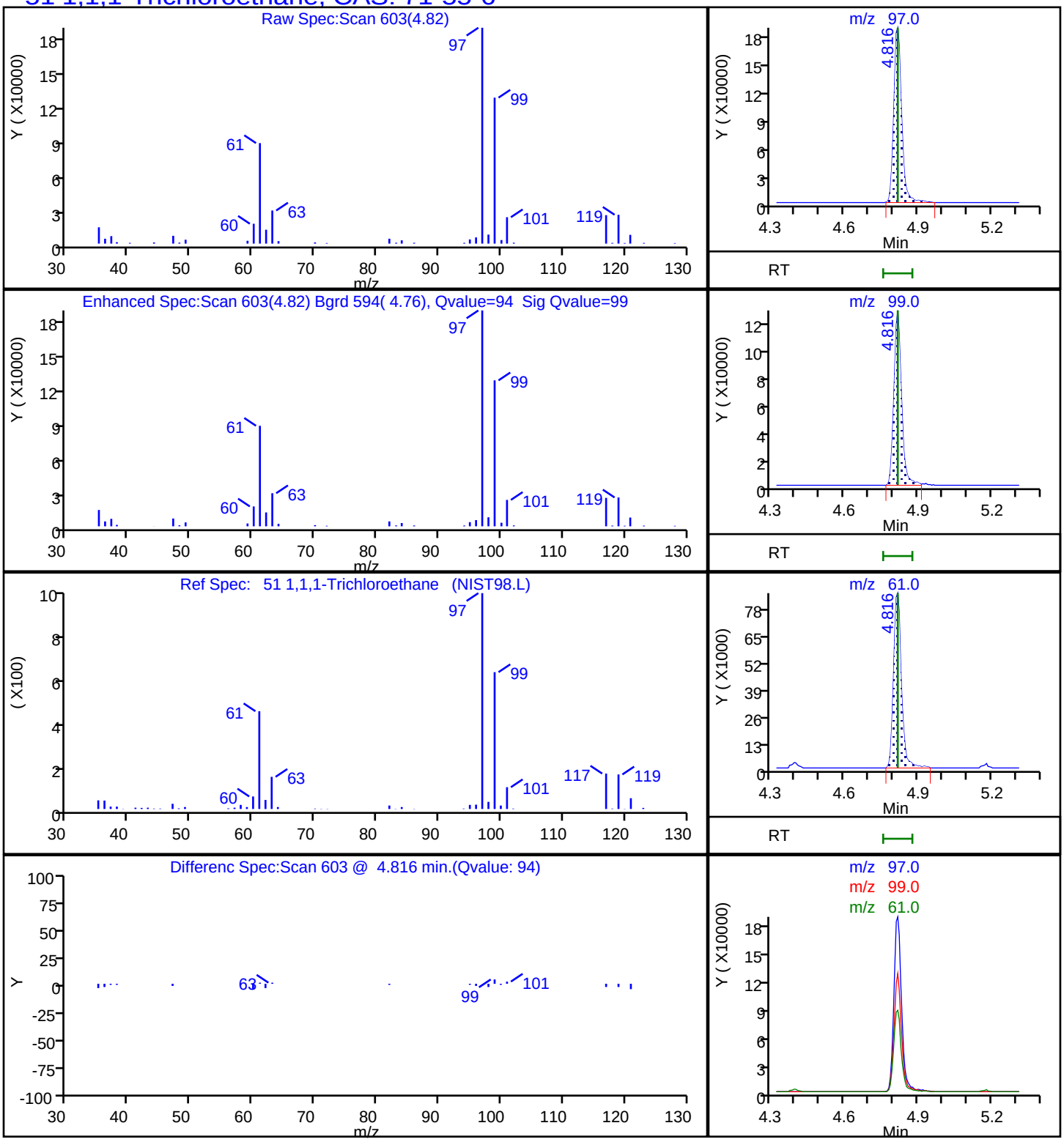
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D				
Injection Date:	21-Sep-2019 12:29:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	OI	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

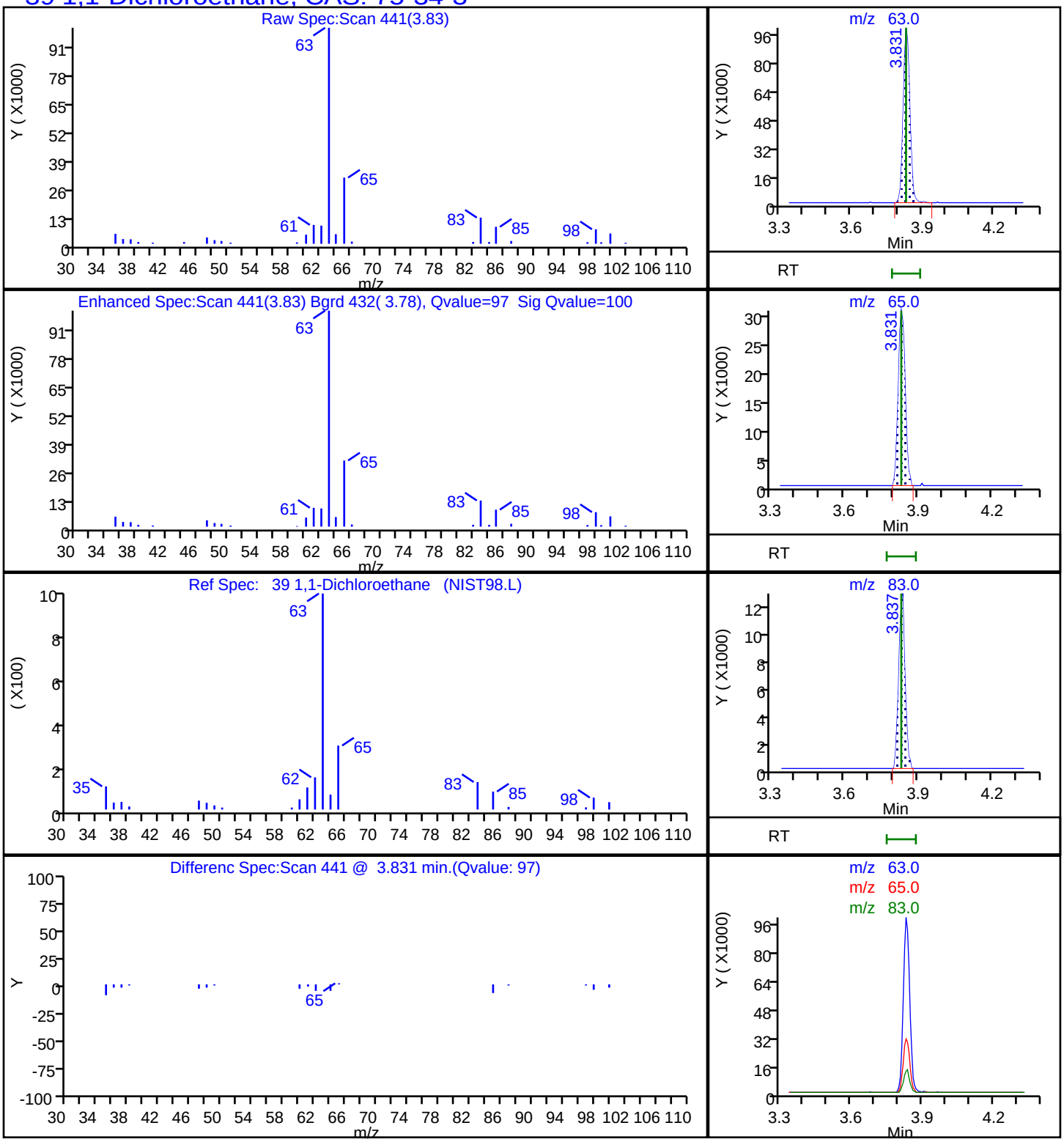
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D				
Injection Date:	21-Sep-2019 12:29:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	OI	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

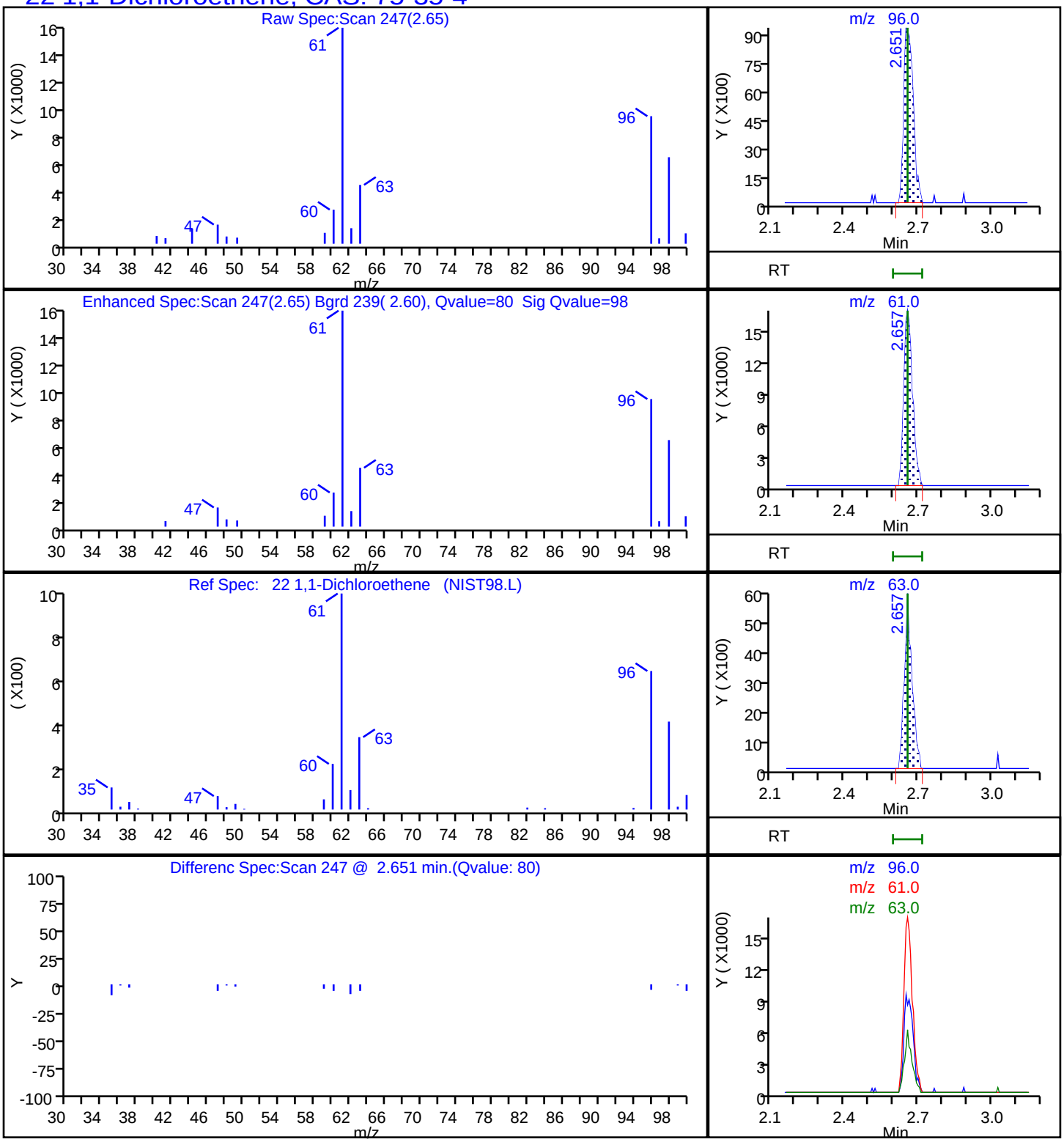
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D				
Injection Date:	21-Sep-2019 12:29:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	OI	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

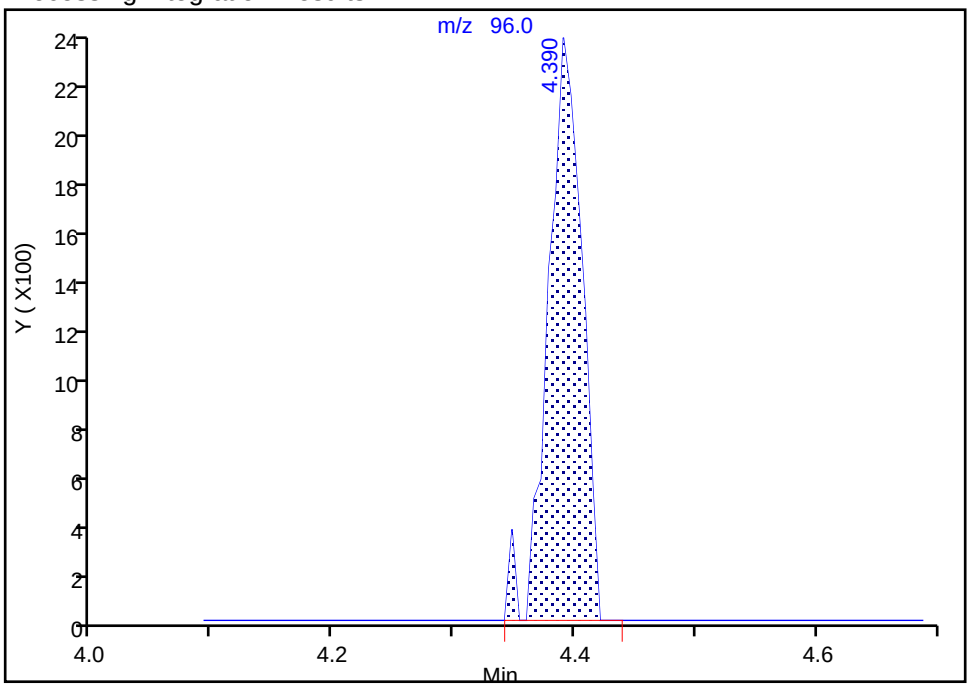
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D				
Injection Date:	21-Sep-2019 12:29:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	OI	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

45 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

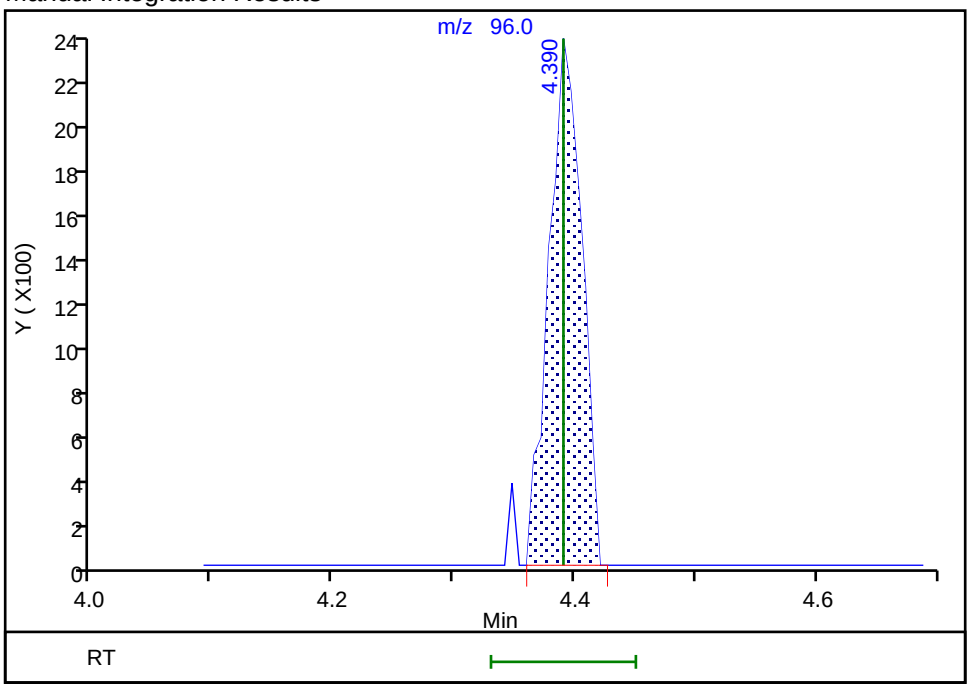
Processing Integration Results

RT: 4.39
Area: 4529
Amount: 0.638457
Amount Units: ug/L



Manual Integration Results

RT: 4.39
Area: 4395
Amount: 0.619567
Amount Units: ug/L



Reviewer: izquierdoo, 22-Sep-2019 09:12:34

Audit Action: Manually Integrated Audit Reason: Poor chromatography

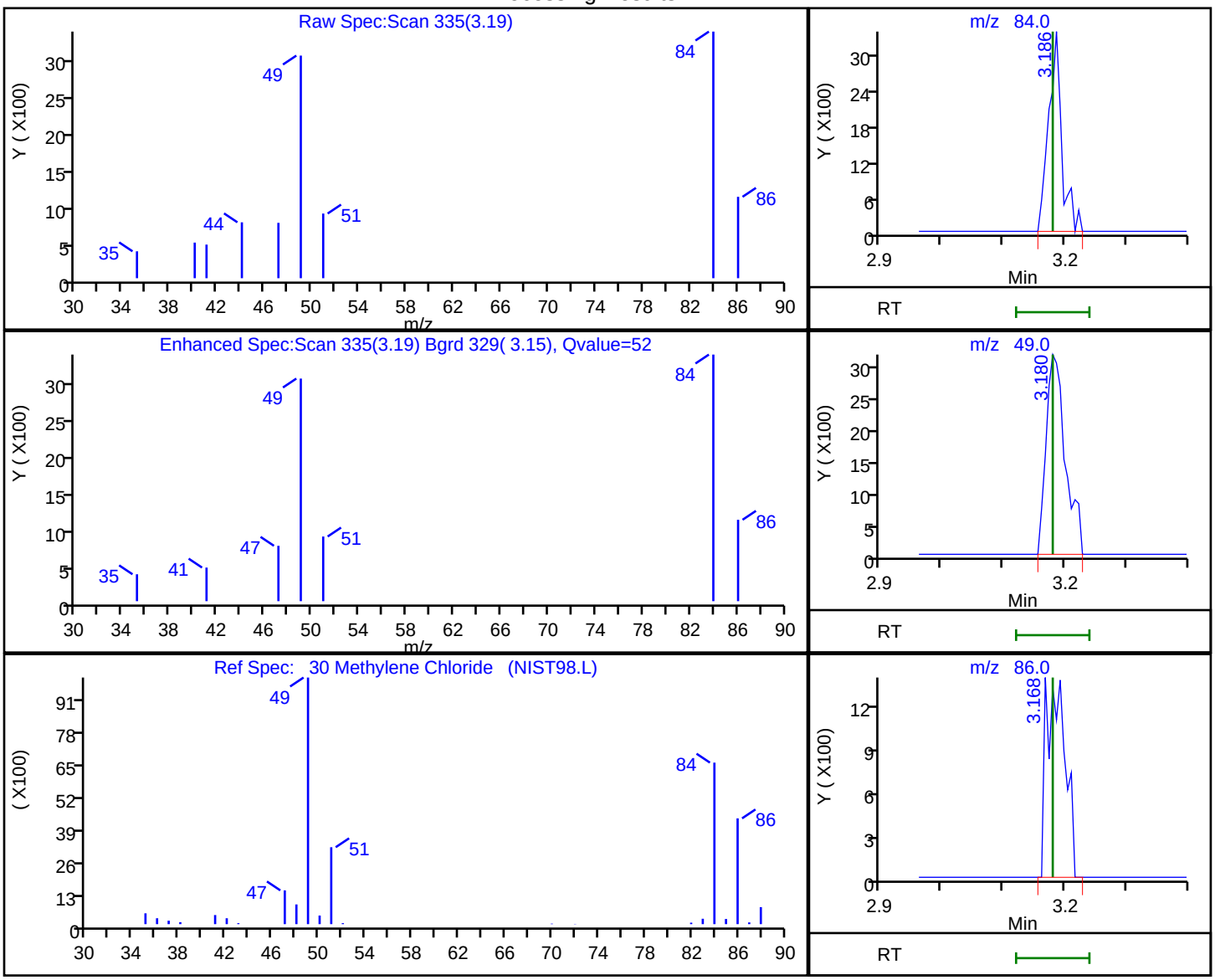
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9348.D				
Injection Date:	21-Sep-2019 12:29:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-2	Lab Sample ID:	480-159208-2		
Client ID:	356023-GW-MW-7R-98-1				
Operator ID:	OI	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
3.19	84.00	4960	-0.158994
3.18	49.00	6829	
3.17	86.00	2995	

Reviewer: izquierdoo, 22-Sep-2019 09:12:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-2 Lab Sample ID: 480-159208-3

Matrix: Water Lab File ID: S9307.D

Analysis Method: 8260C Date Collected: 09/09/2019 18:05

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 17:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	*1,1,1-Trichloroethane*	*340*	*E*	*1.0*	*0.82*
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	*1,1-Dichloroethane*	*140*	*E*	*1.0*	*0.38*
75-35-4	1,1-Dichloroethene	36		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	0.35	J	1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	1.3		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	5.3		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-2 Lab Sample ID: 480-159208-3

Matrix: Water Lab File ID: S9307.D

Analysis Method: 8260C Date Collected: 09/09/2019 18:05

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 17:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	3.2		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D
Lims ID: 480-159208-B-3
Client ID: 356023-GW-MW-7R-98-2
Sample Type: Client
Inject. Date: 20-Sep-2019 17:44:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-159208-B-3
Misc. Info.: 480-0084301-025
Operator ID: kn Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Sep-2019 09:30:27 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0306

First Level Reviewer: izquierdoo Date: 21-Sep-2019 09:30:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	99	113459	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	229478	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	264574	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	58	149513	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	94679	26.1	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	573940	25.3	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	205966	25.0	
10 Dichlorodifluoromethane	85		1.264				ND	
12 Chloromethane	50		1.440				ND	U
13 Vinyl chloride	62		1.537				ND	
14 Bromomethane	94		1.829				ND	
15 Chloroethane	64	1.927	1.921	0.006	57	6341	1.26	
17 Trichlorofluoromethane	101		2.146				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.644				ND	
22 1,1-Dichloroethene	96	2.657	2.651	0.006	97	198635	35.6	
23 Acetone	43		2.778				ND	
26 Carbon disulfide	76		2.845				ND	
27 Methyl acetate	43		3.076				ND	
30 Methylene Chloride	84		3.180				ND	Ua
32 Methyl tert-butyl ether	73		3.387				ND	
34 trans-1,2-Dichloroethene	96		3.405				ND	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	97	1563970	137.7	E
45 cis-1,2-Dichloroethene	96	4.391	4.390	0.000	83	37347	5.35	
43 2-Butanone (MEK)	43		4.427				ND	
48 Chlorobromomethane	128		4.628				ND	
50 Chloroform	83	4.701	4.701	-0.006	41	2807	0.2471	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	97	3213493	335.6	E
52 Cyclohexane	56		4.816				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.169				ND	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	31	3438	0.3456	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.784	5.784	0.000	85	21045	3.20	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.548				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.558				ND	
90 m-Xylene & p-Xylene	106		8.679				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.908				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added: 1.00	Units: uL	Run Reagent

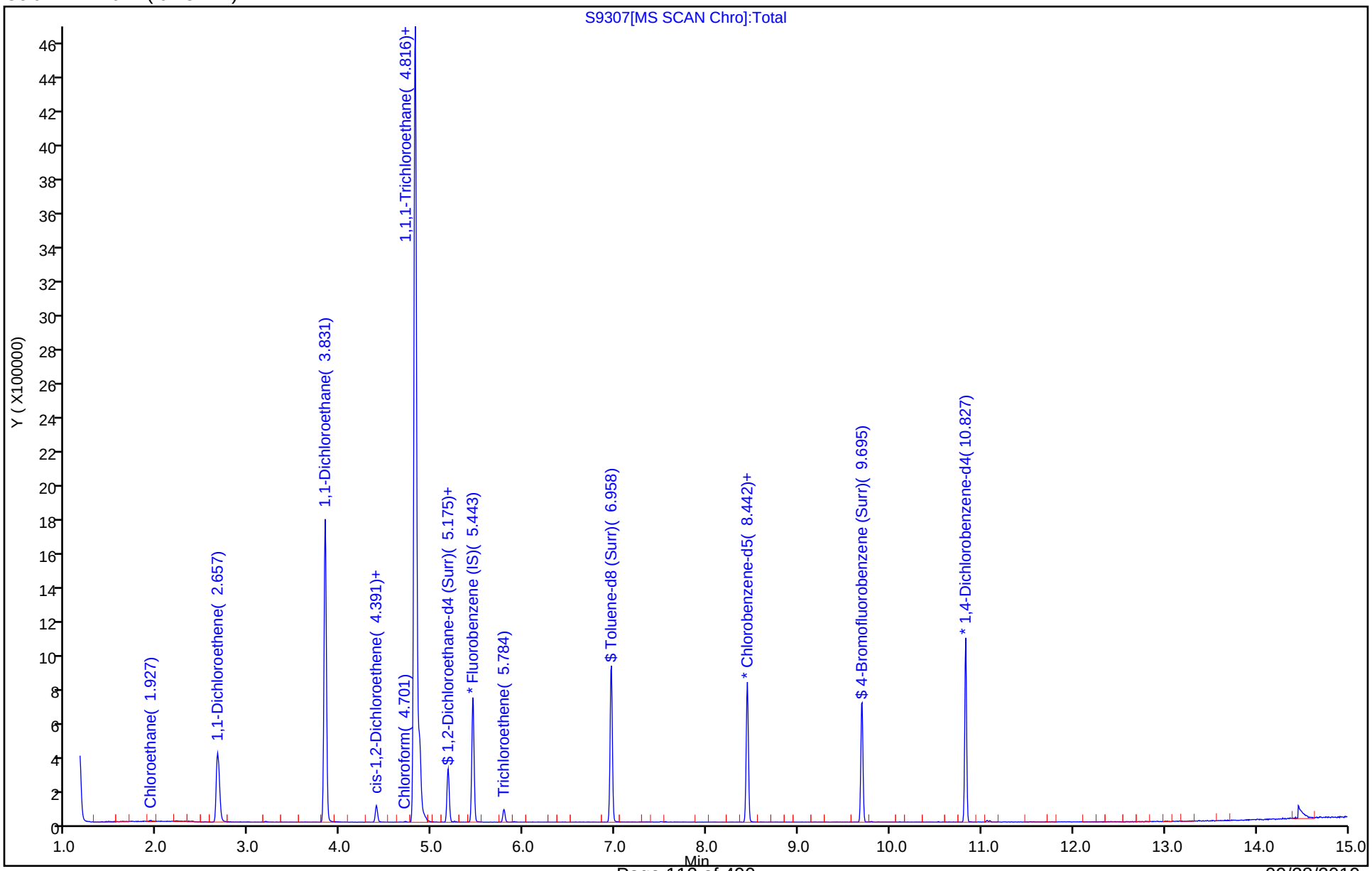
Report Date: 21-Sep-2019 09:30:27 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D

Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3	Worklist Smp#:	25
Client ID:	356023-GW-MW-7R-98-2				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

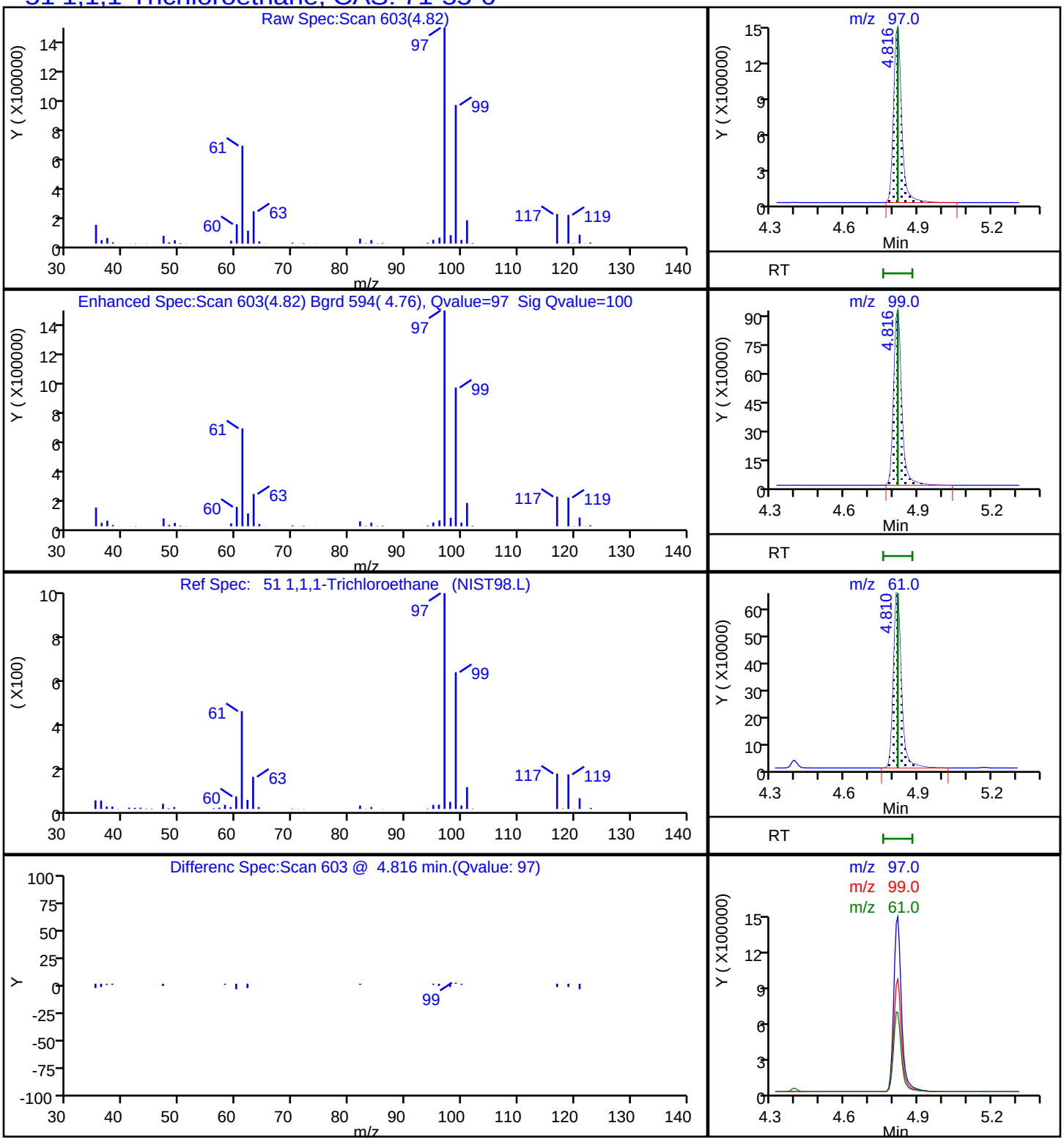
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D				
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6



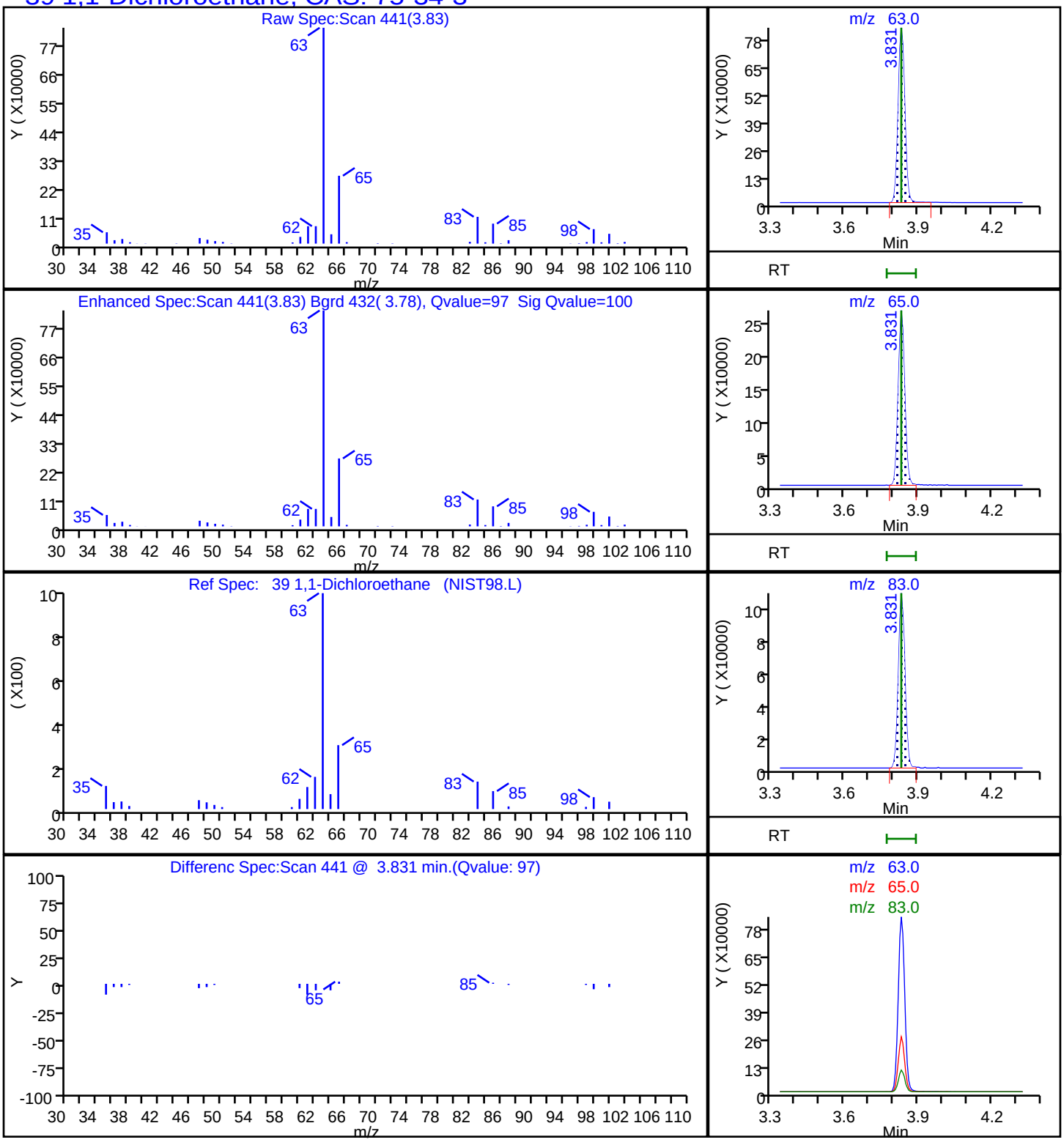
Report Date: 21-Sep-2019 09:30:27 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D

Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

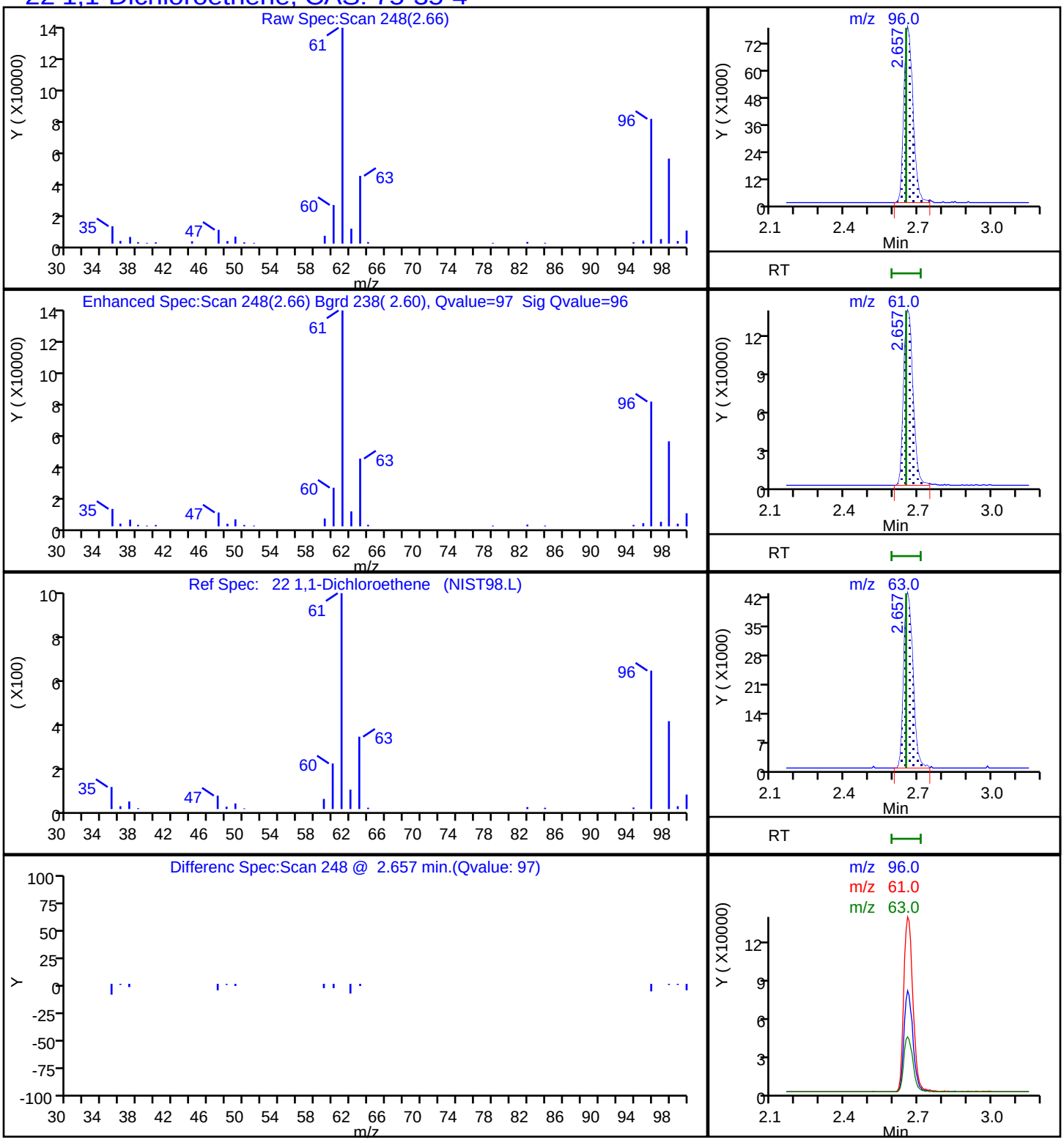
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D				
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

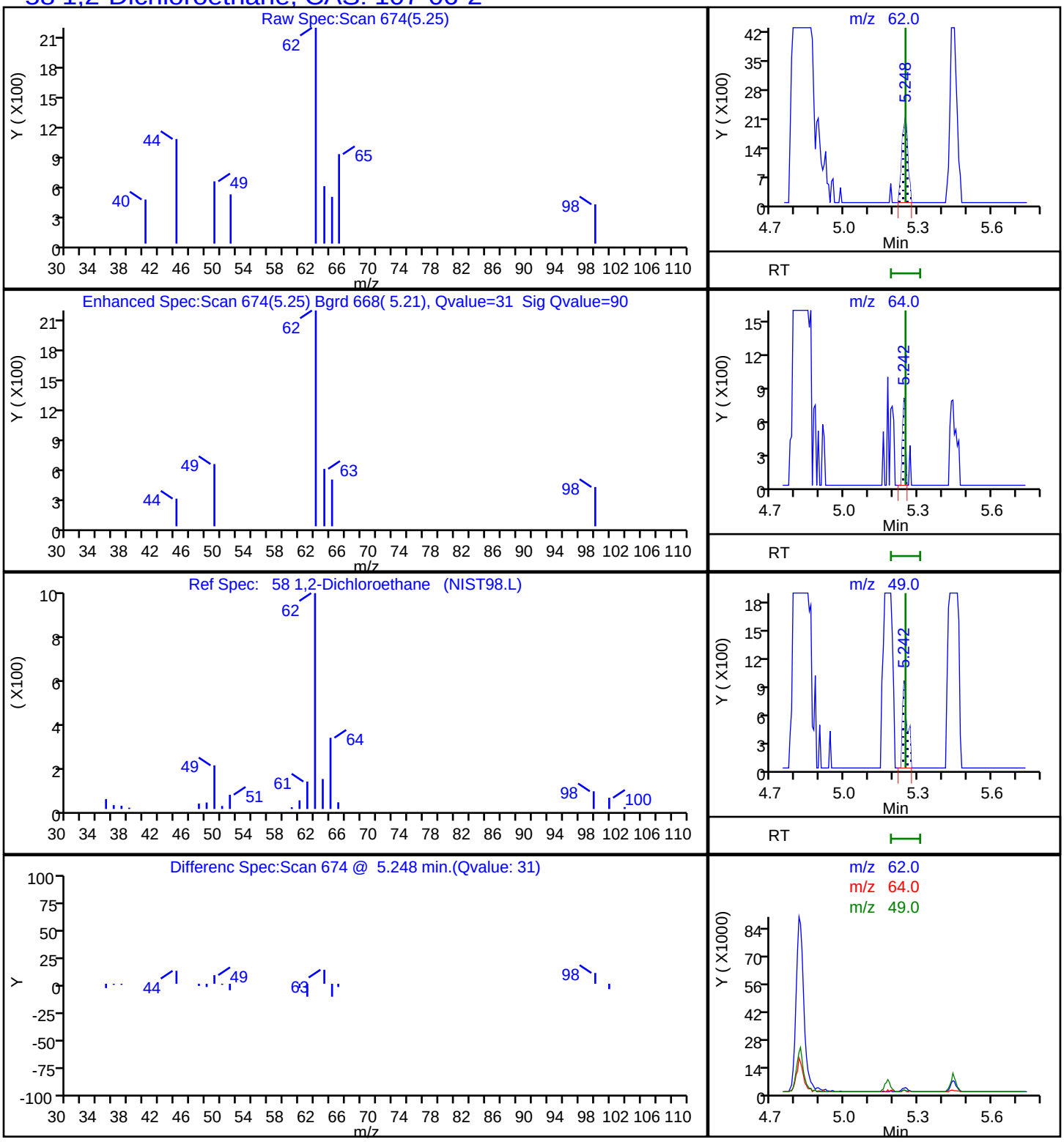
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D				
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

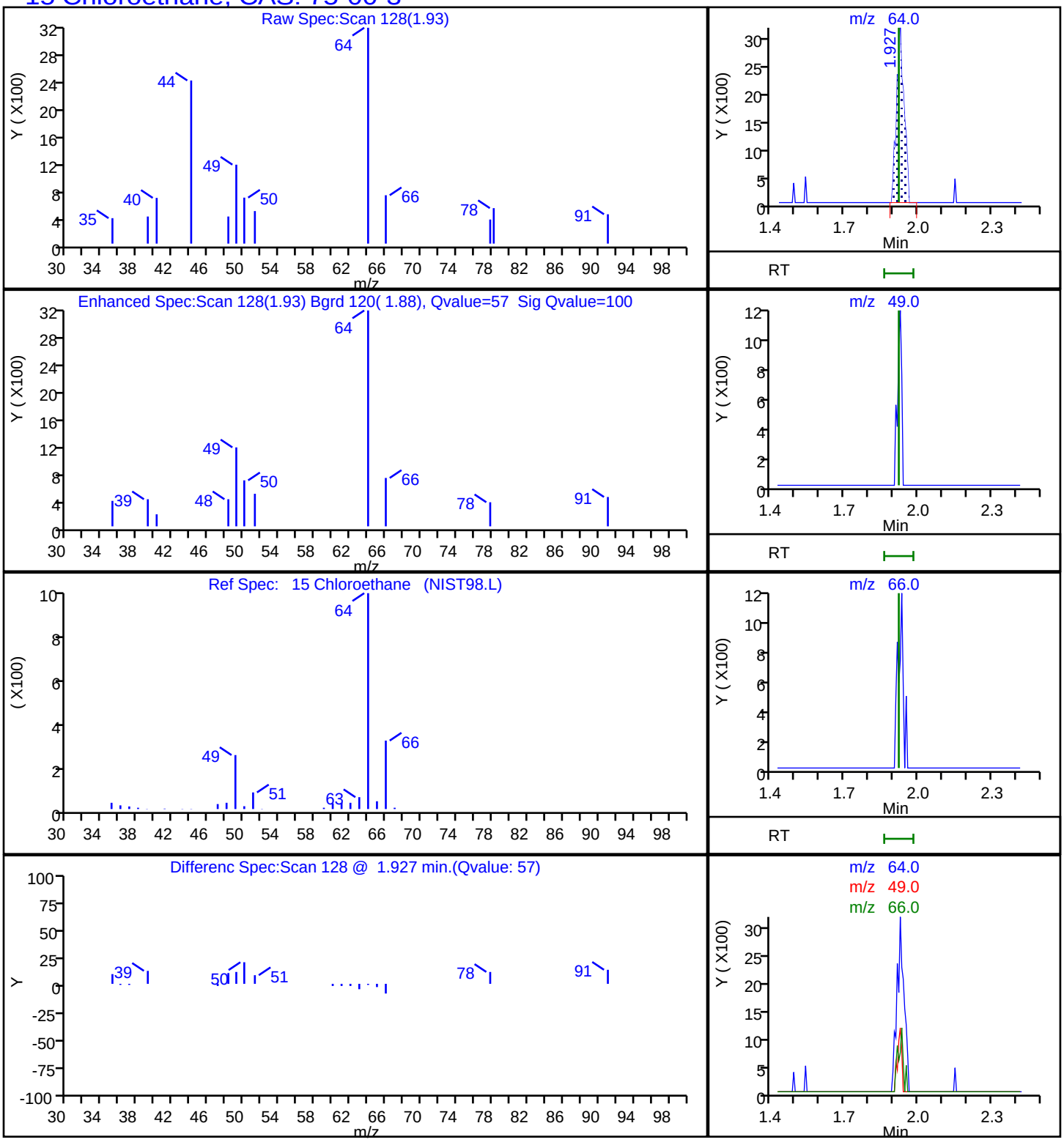
58 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D				
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

15 Chloroethane, CAS: 75-00-3

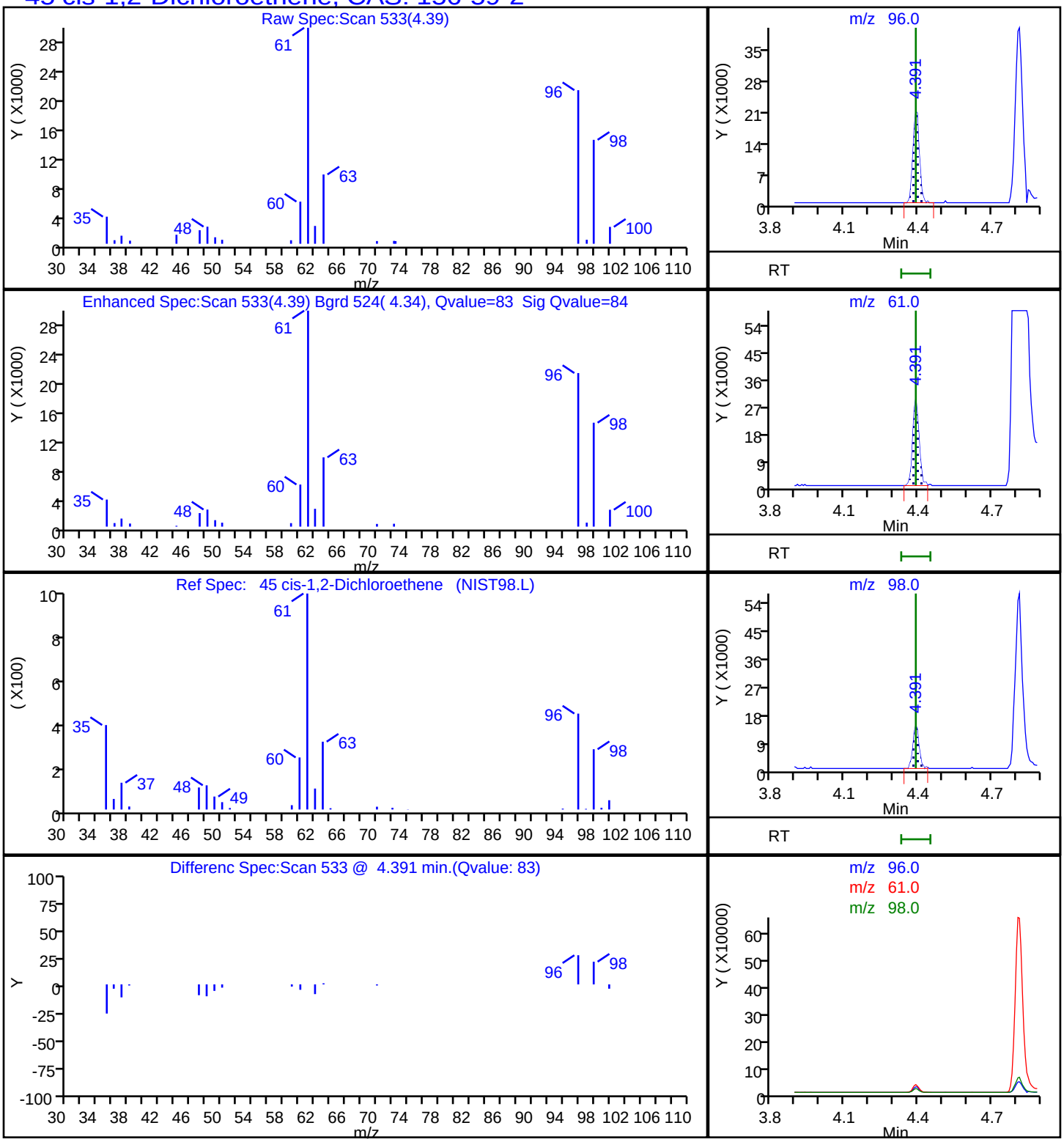


Report Date: 21-Sep-2019 09:30:27 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D				
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

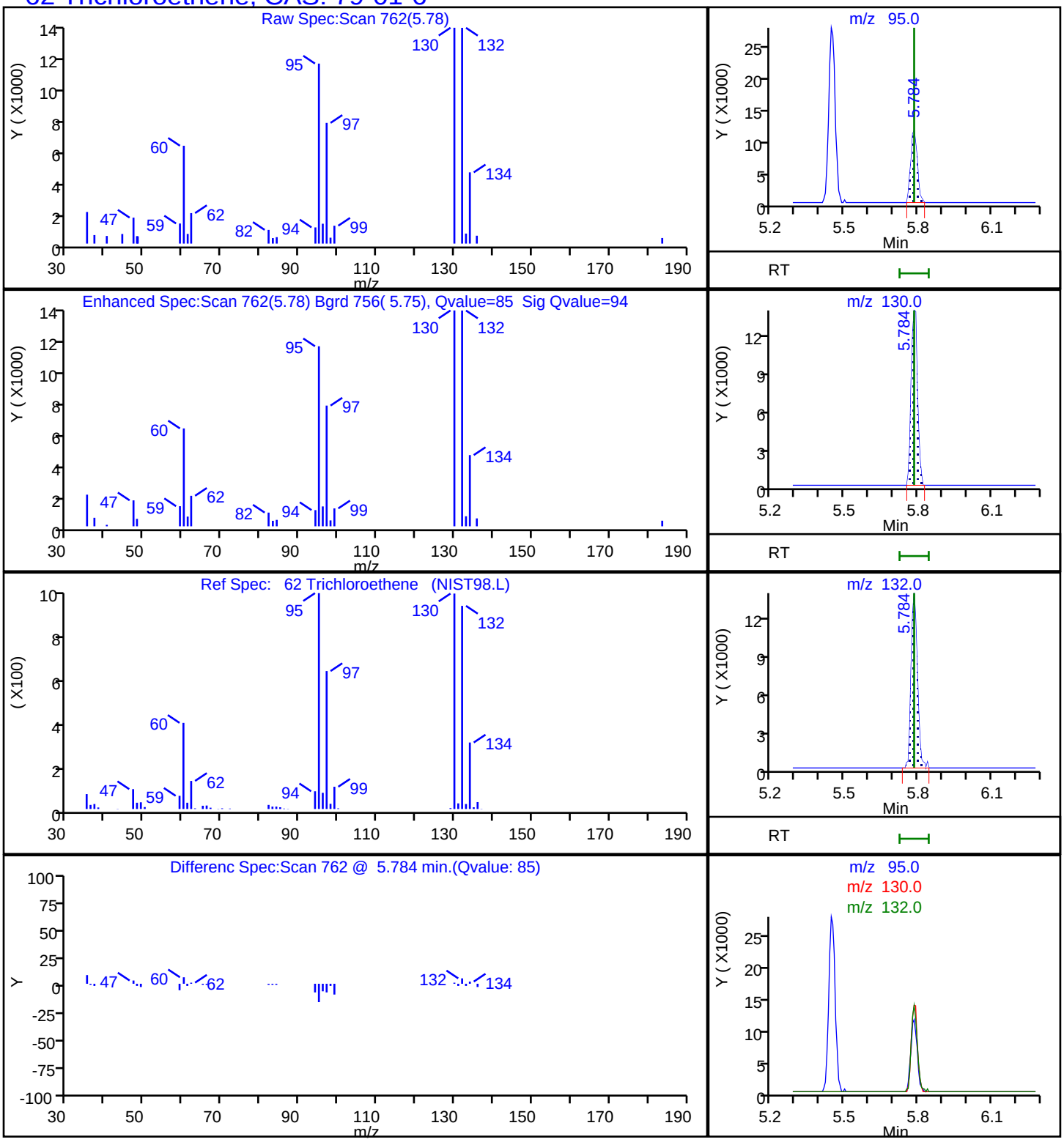
45 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D		
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3
Client ID:	356023-GW-MW-7R-98-2		
Operator ID:	kn	ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

62 Trichloroethene, CAS: 79-01-6



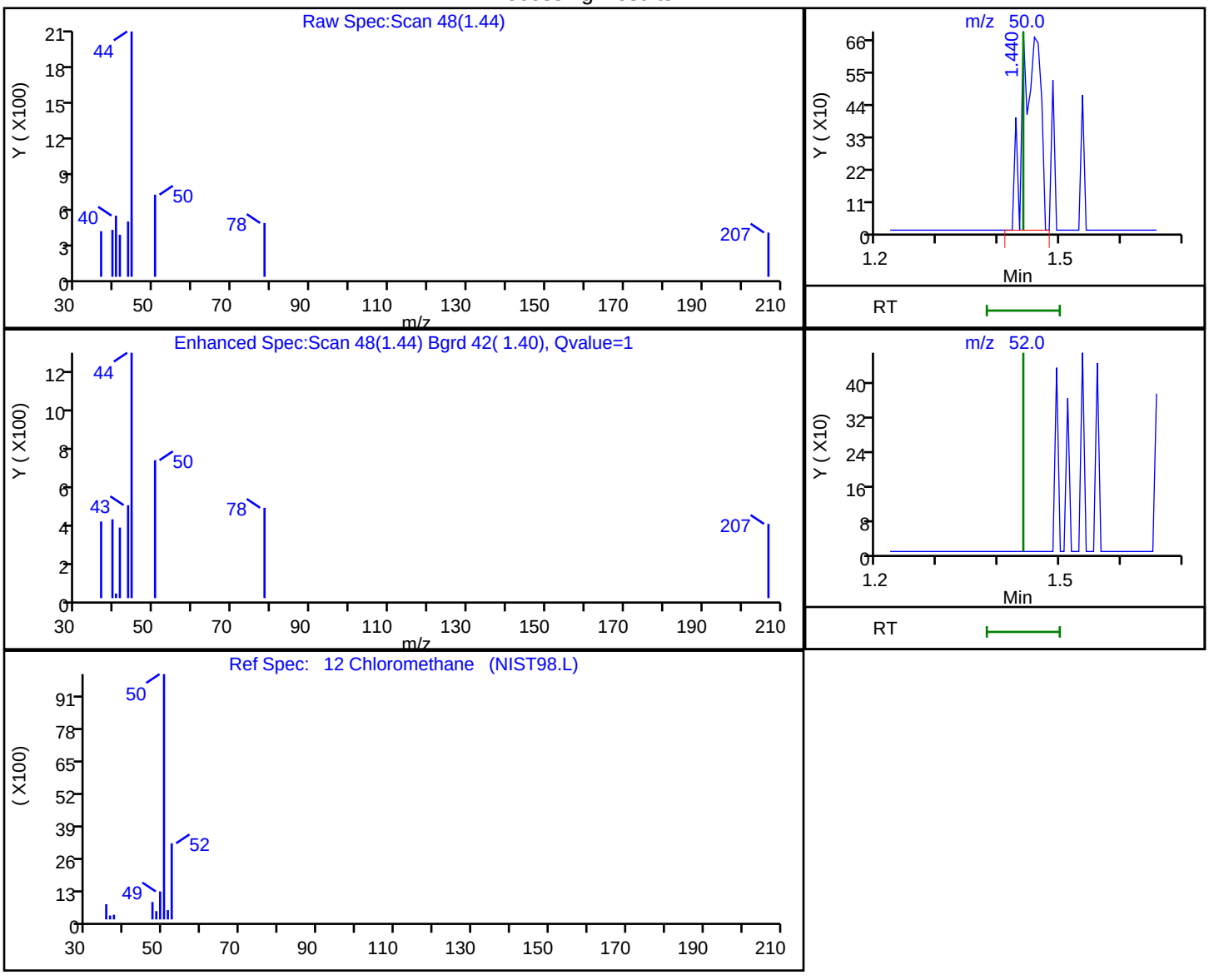
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9307.D				
Injection Date:	20-Sep-2019 17:44:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	kn	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.44	50.00	1355	0.151487
1.44	52.00	0	

Reviewer: izquierdoo, 21-Sep-2019 09:29:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-2 DL Lab Sample ID: 480-159208-3 DL

Matrix: Water Lab File ID: S9349.D

Analysis Method: 8260C Date Collected: 09/09/2019 18:05

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 12:52

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	330		8.0	6.6
79-34-5	*1,1,2,2-Tetrachloroethane*	*ND*		*8.0*	*1.7*
76-13-1	*1,1,2-Trichloro-1,2,2-trifluoroethane*	*ND*		*8.0*	*2.5*
79-00-5	*1,1,2-Trichloroethane*	*ND*		*8.0*	*1.8*
75-34-3	1,1-Dichloroethane	140		8.0	3.0
75-35-4	*1,1-Dichloroethene*	*33*		*8.0*	*2.3*
87-61-6	*1,2,3-Trichlorobenzene*	*ND*		*8.0*	*3.3*
120-82-1	*1,2,4-Trichlorobenzene*	*ND*		*8.0*	*3.3*
96-12-8	*1,2-Dibromo-3-Chloropropane*	*ND*		*8.0*	*3.1*
106-93-4	*1,2-Dibromoethane*	*ND*		*8.0*	*5.8*
95-50-1	*1,2-Dichlorobenzene*	*ND*		*8.0*	*6.3*
107-06-2	*1,2-Dichloroethane*	*ND*		*8.0*	*1.7*
78-87-5	*1,2-Dichloropropane*	*ND*		*8.0*	*5.8*
541-73-1	*1,3-Dichlorobenzene*	*ND*		*8.0*	*6.2*
106-46-7	*1,4-Dichlorobenzene*	*ND*		*8.0*	*6.7*
123-91-1	*1,4-Dioxane*	*ND*		*320*	*75*
78-93-3	*2-Butanone (MEK)*	*ND*		*80*	*11*
591-78-6	*2-Hexanone*	*ND*		*40*	*9.9*
108-10-1	*4-Methyl-2-pentanone (MIBK)*	*ND*		*40*	*17*
67-64-1	*Acetone*	*ND*		*80*	*24*
71-43-2	*Benzene*	*ND*		*8.0*	*3.3*
74-97-5	*Bromochloromethane*	*ND*		*8.0*	*7.0*
75-27-4	*Bromodichloromethane*	*ND*		*8.0*	*3.1*
75-25-2	*Bromoform*	*ND*		*8.0*	*2.1*
74-83-9	*Bromomethane*	*ND*		*8.0*	*5.5*
75-15-0	*Carbon disulfide*	*ND*		*8.0*	*1.5*
56-23-5	*Carbon tetrachloride*	*ND*		*8.0*	*2.2*
108-90-7	*Chlorobenzene*	*ND*		*8.0*	*6.0*
75-00-3	*Chloroethane*	*ND*		*8.0*	*2.6*
67-66-3	*Chloroform*	*ND*		*8.0*	*2.7*
74-87-3	*Chloromethane*	*ND*		*8.0*	*2.8*
156-59-2	*cis-1,2-Dichloroethene*	*ND*		*8.0*	*6.5*
10061-01-5	*cis-1,3-Dichloropropene*	*ND*		*8.0*	*2.9*
110-82-7	*Cyclohexane*	*ND*		*8.0*	*1.4*
124-48-1	*Dibromochloromethane*	*ND*		*8.0*	*2.6*

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-2 DL Lab Sample ID: 480-159208-3 DL

Matrix: Water Lab File ID: S9349.D

Analysis Method: 8260C Date Collected: 09/09/2019 18:05

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 12:52

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	*Dichlorodifluoromethane*	*ND*		*8.0*	*5.4*
100-41-4	*Ethylbenzene*	*ND*		*8.0*	*5.9*
98-82-8	*Isopropylbenzene*	*ND*		*8.0*	*6.3*
79-20-9	*Methyl acetate*	*ND*		*20*	*10*
1634-04-4	*Methyl tert-butyl ether*	*ND*		*8.0*	*1.3*
108-87-2	*Methylcyclohexane*	*ND*		*8.0*	*1.3*
75-09-2	*Methylene Chloride*	*ND*		*8.0*	*3.5*
100-42-5	*Styrene*	*ND*		*8.0*	*5.8*
127-18-4	*Tetrachloroethene*	*ND*		*8.0*	*2.9*
108-88-3	*Toluene*	*ND*		*8.0*	*4.1*
156-60-5	*trans-1,2-Dichloroethene*	*ND*		*8.0*	*7.2*
10061-02-6	*trans-1,3-Dichloropropene*	*ND*		*8.0*	*3.0*
79-01-6	*Trichloroethene*	*ND*		*8.0*	*3.7*
75-69-4	*Trichlorofluoromethane*	*ND*		*8.0*	*7.0*
75-01-4	*Vinyl chloride*	*ND*		*8.0*	*7.2*
1330-20-7	*Xylenes, Total*	*ND*		*16*	*5.3*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9349.D
Lims ID: 480-159208-C-3
Client ID: 356023-GW-MW-7R-98-2
Sample Type: Client
Inject. Date: 21-Sep-2019 12:52:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 480-159208-C-3
Misc. Info.: 480-0084330-011
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 09:13:50 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: izquierdoo Date: 22-Sep-2019 09:13:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	110962	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	230586	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	264416	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	146354	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.169	5.175	-0.006	98	91718	25.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	580774	25.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	95	210974	25.5	
10 Dichlorodifluoromethane	85		1.263				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.927				ND	
17 Trichlorofluoromethane	101		2.152				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.651				ND	
22 1,1-Dichloroethene	96	2.657	2.657	0.000	78	22471	4.12	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.082				ND	
30 Methylene Chloride	84		3.180				ND	Ua
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	97	190333	17.1	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	20	4456	0.6524	
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83		4.707				ND	Ua
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	96	387251	41.4	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.784	5.784	0.000	36	2573	0.4006	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

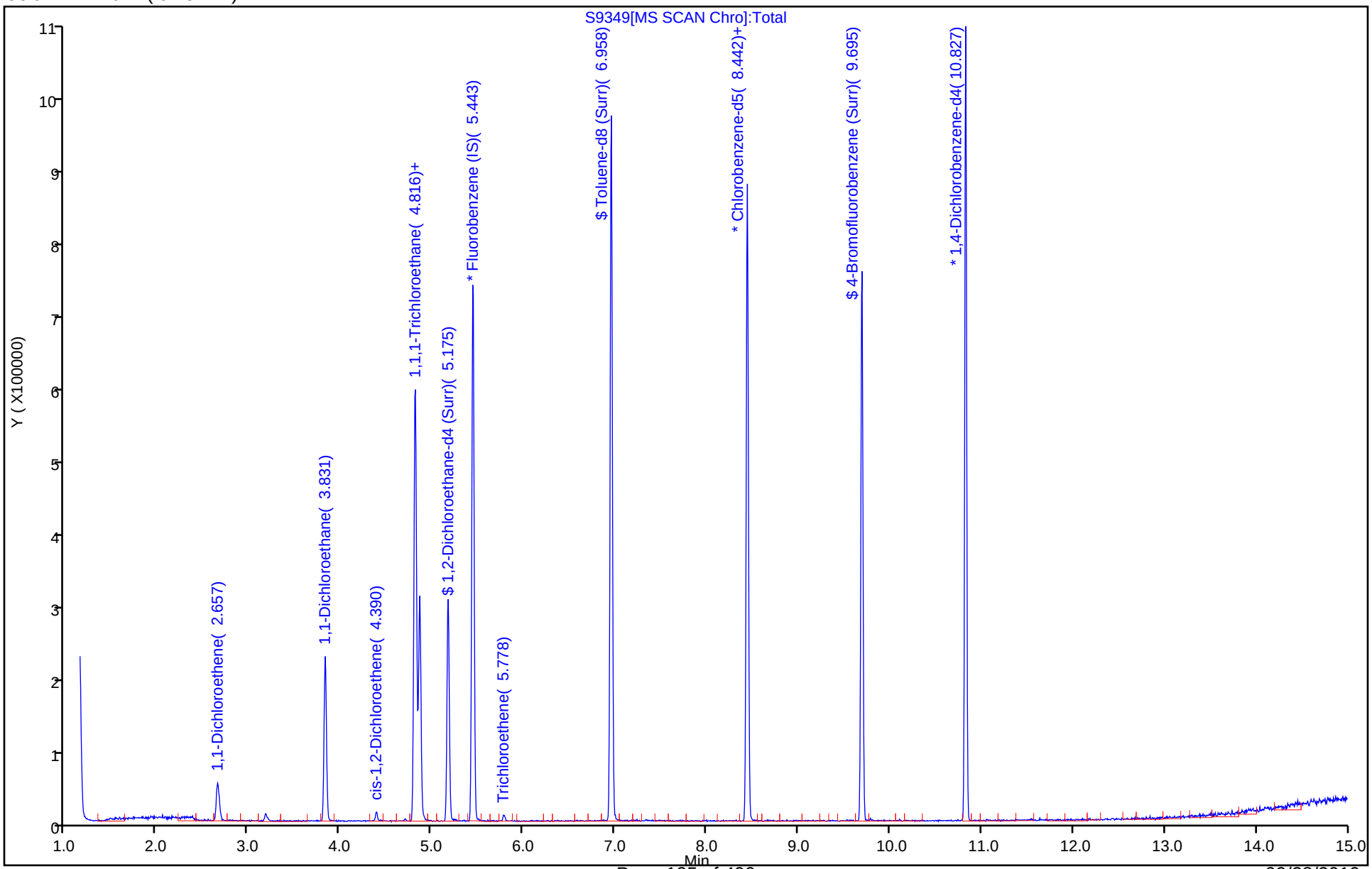
Report Date: 22-Sep-2019 09:13:50 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9349.D

Injection Date:	21-Sep-2019 12:52:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-159208-C-3	Lab Sample ID:	480-159208-3	Worklist Smp#:	11
Client ID:	356023-GW-MW-7R-98-2				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	11
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

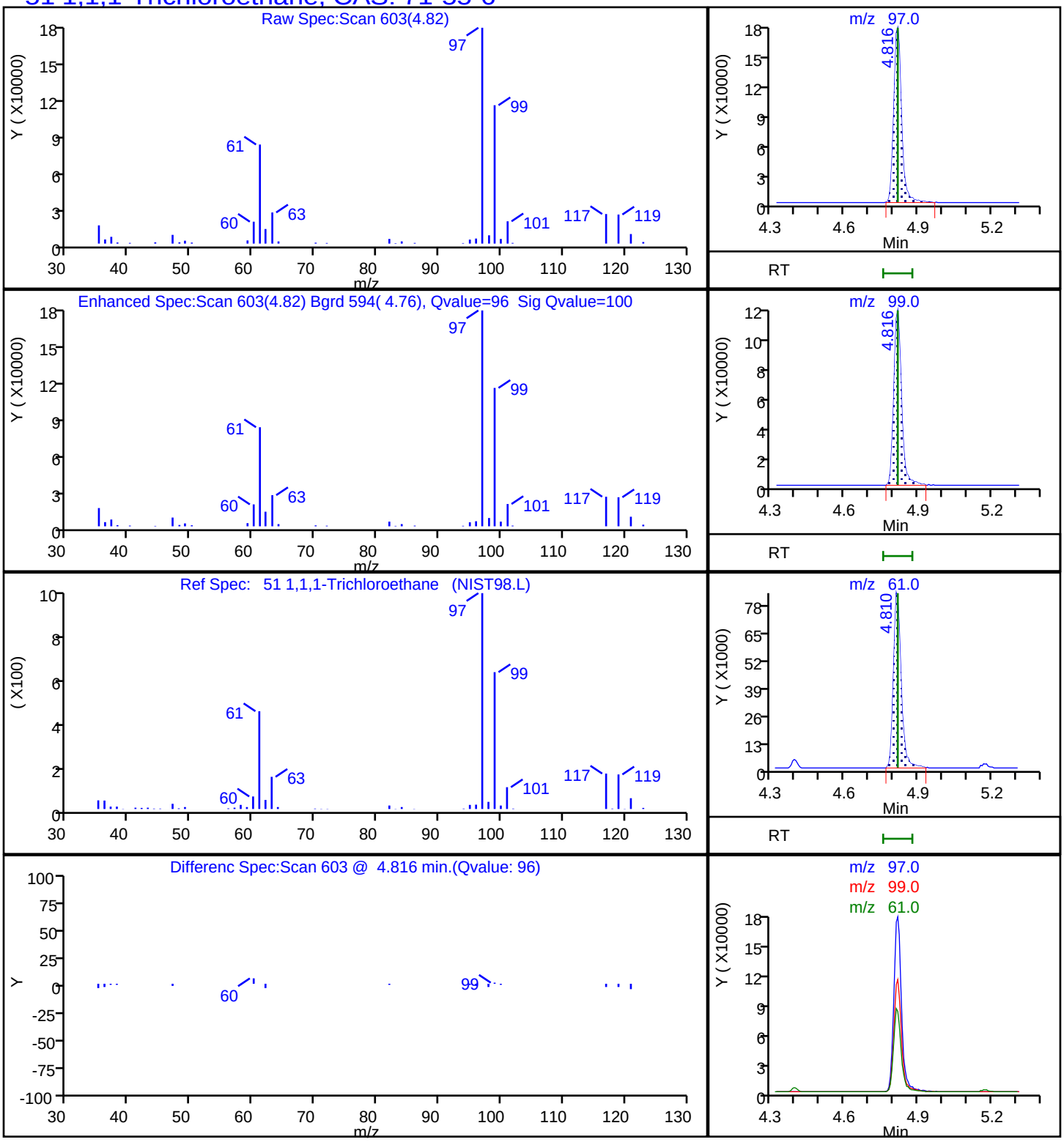
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9349.D				
Injection Date:	21-Sep-2019 12:52:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

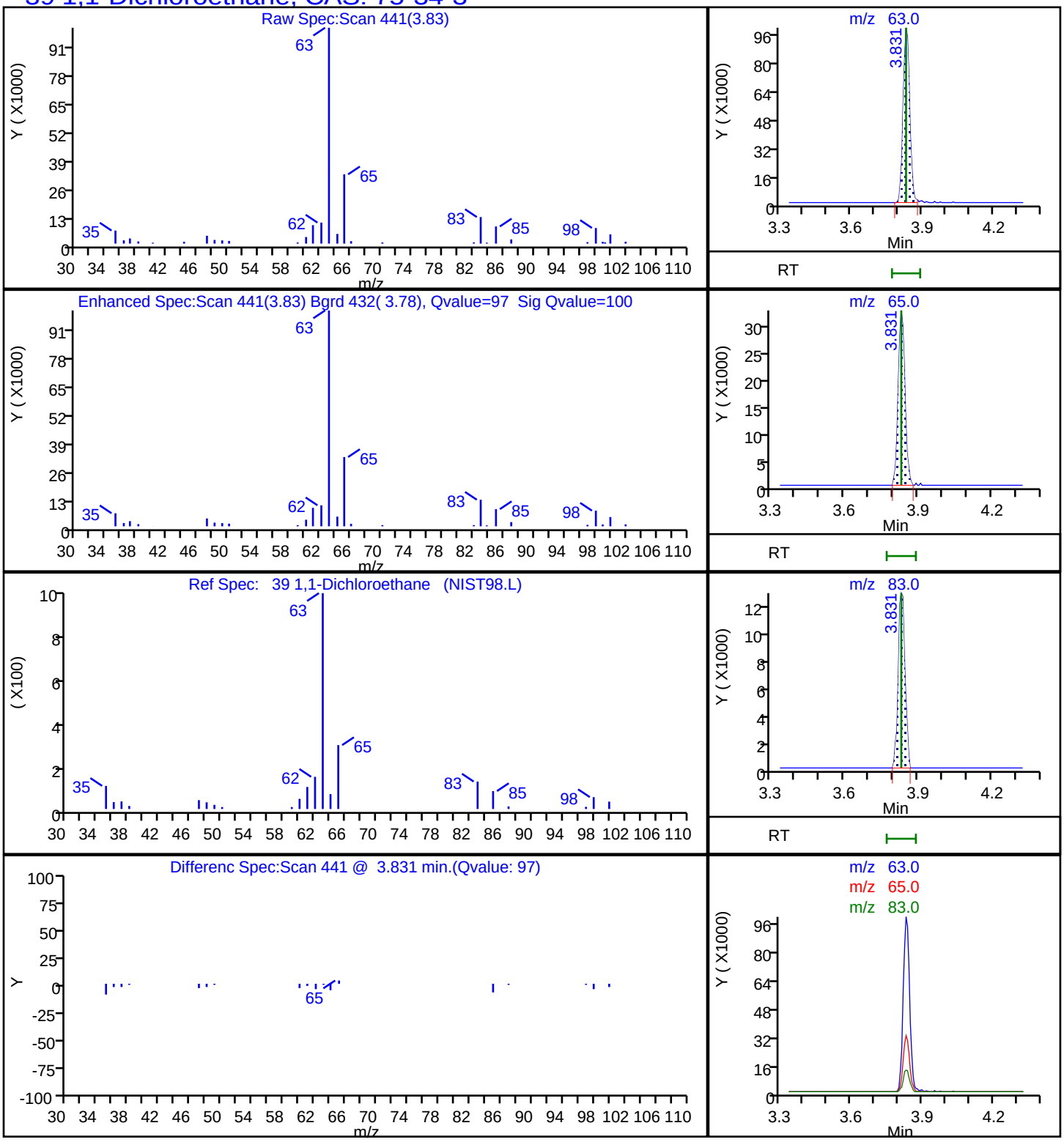
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9349.D				
Injection Date:	21-Sep-2019 12:52:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

39 1,1-Dichloroethane, CAS: 75-34-3



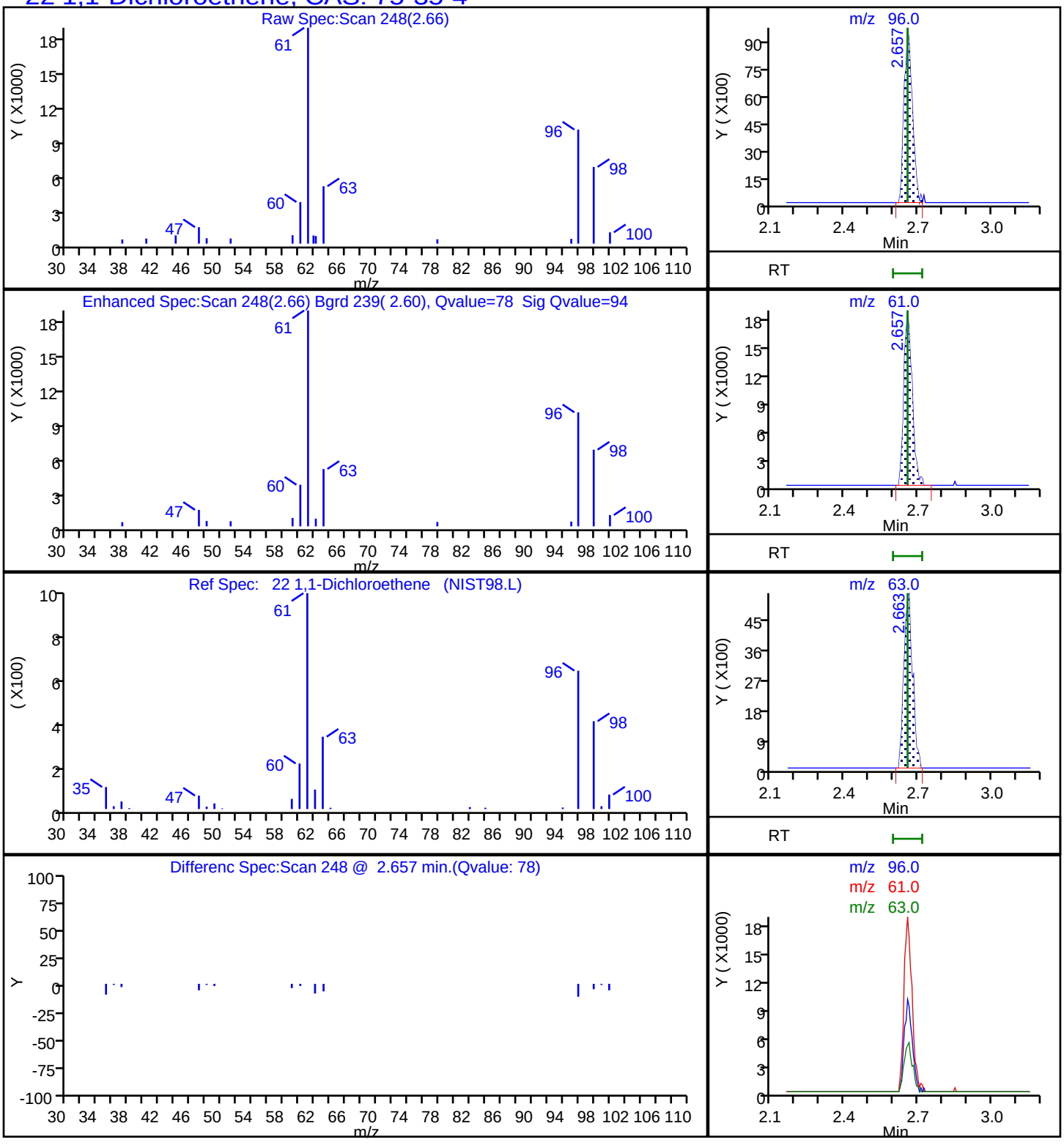
Report Date: 22-Sep-2019 09:13:50 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9349.D

Injection Date:	21-Sep-2019 12:52:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4



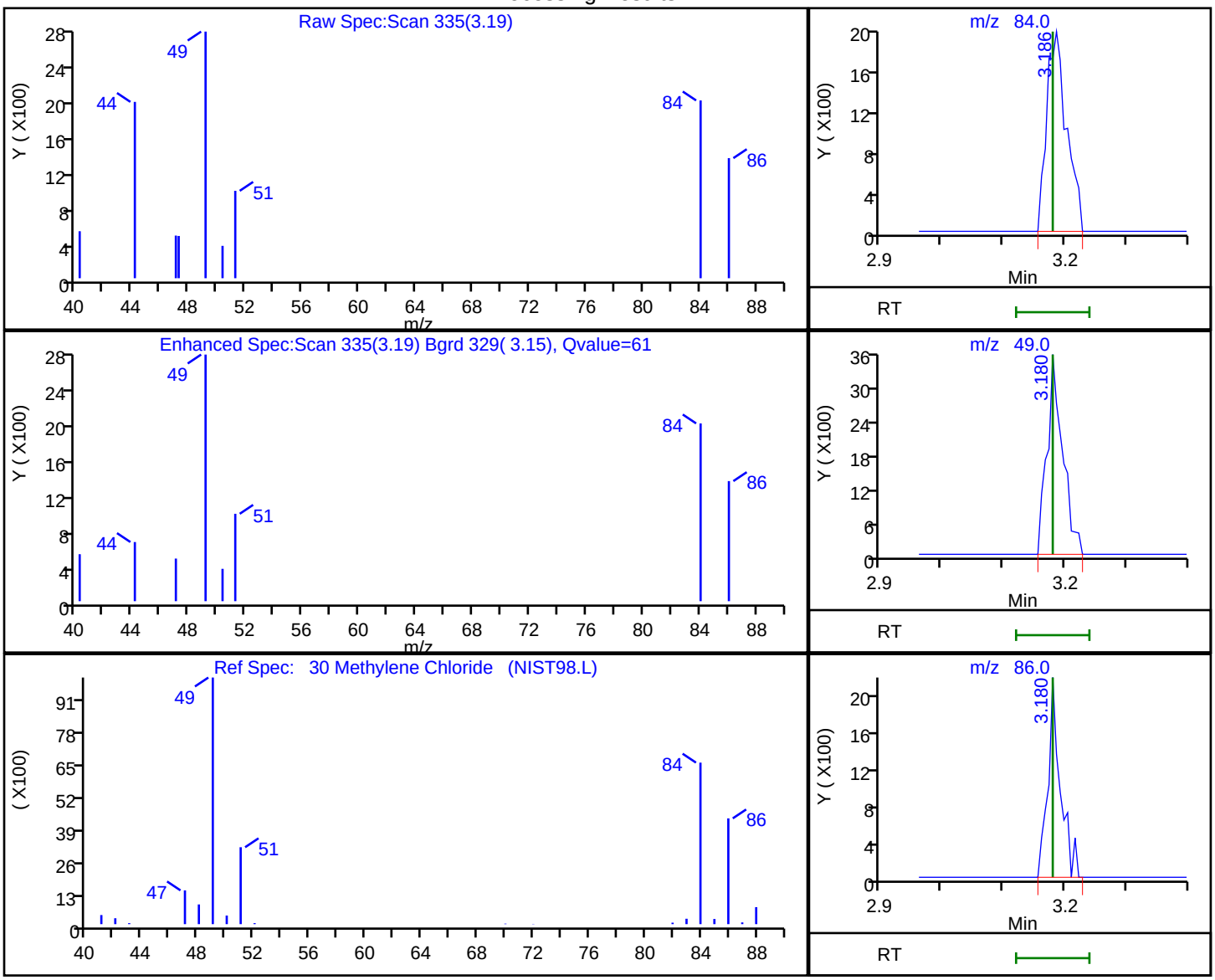
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9349.D				
Injection Date:	21-Sep-2019 12:52:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-C-3	Lab Sample ID:	480-159208-3		
Client ID:	356023-GW-MW-7R-98-2				
Operator ID:	OI	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
3.19	84.00	4407	-0.220790
3.18	49.00	6376	
3.18	86.00	3011	

Reviewer: izquierdoo, 22-Sep-2019 09:13:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-3 Lab Sample ID: 480-159208-4

Matrix: Water Lab File ID: S9350.D

Analysis Method: 8260C Date Collected: 09/10/2019 07:45

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 13:15

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	350		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	140		10	3.8
75-35-4	1,1-Dichloroethene	38		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-3 Lab Sample ID: 480-159208-4

Matrix: Water Lab File ID: S9350.D

Analysis Method: 8260C Date Collected: 09/10/2019 07:45

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 13:15

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	6.5	J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	110		75-123
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D
Lims ID: 480-159208-B-4
Client ID: 356023-GW-MW-7R-98-3
Sample Type: Client
Inject. Date: 21-Sep-2019 13:15:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-B-4
Misc. Info.: 480-0084330-012
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 09:17:05 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: izquierdoo Date: 22-Sep-2019 09:17:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	109079	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	230206	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	263046	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	55	152018	27.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	93595	26.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	94	580966	25.5	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	95	214868	26.0	
10 Dichlorodifluoromethane	85		1.263				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.927				ND	
17 Trichlorofluoromethane	101		2.152				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.651				ND	
22 1,1-Dichloroethene	96	2.657	2.657	-0.001	87	20128	3.76	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.082				ND	
30 Methylene Chloride	84	3.186	3.186	0.006	75	5848	0.0378	7a
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	95	150466	13.8	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	28	3599	0.5361	a
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83		4.707				ND	U
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	94	324246	35.2	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.783	5.784	-0.001	52	4074	0.6452	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added: 1.00	Units: uL	Run Reagent

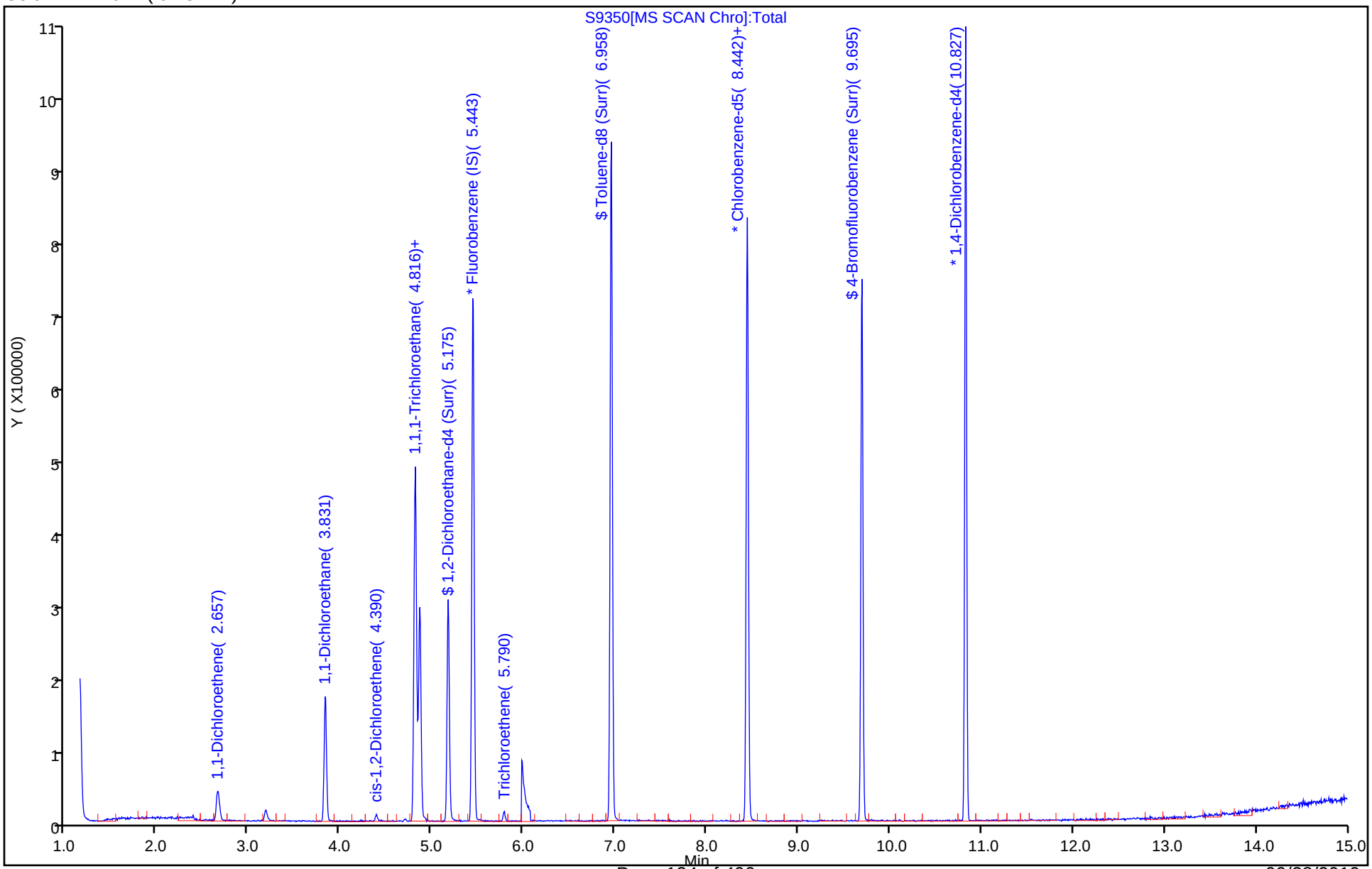
Report Date: 22-Sep-2019 09:17:06 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D

Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4	Worklist Smp#:	12
Client ID:	356023-GW-MW-7R-98-3				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	12
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

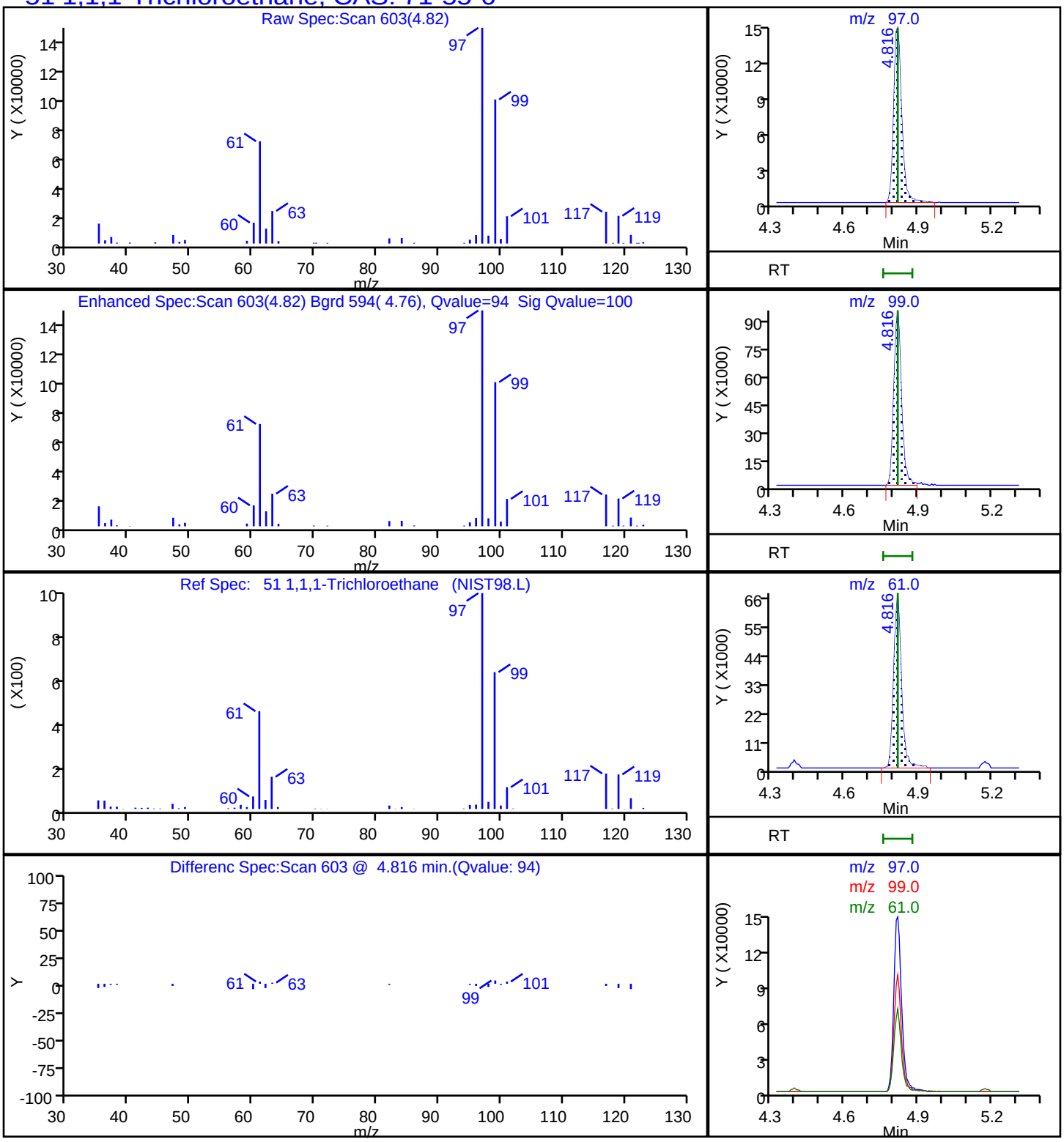
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D				
Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4		
Client ID:	356023-GW-MW-7R-98-3				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

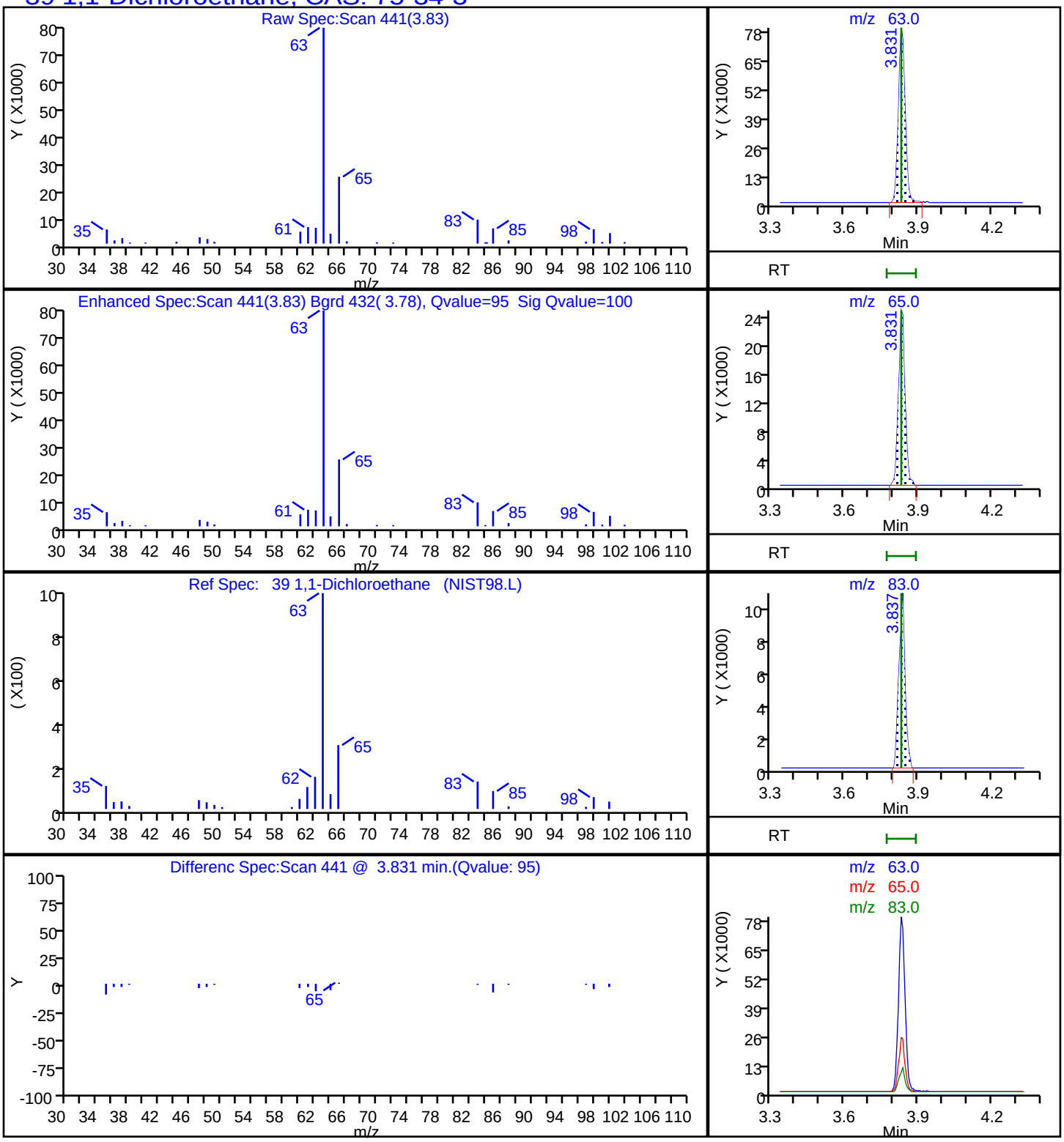


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D

Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4		
Client ID:	356023-GW-MW-7R-98-3				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

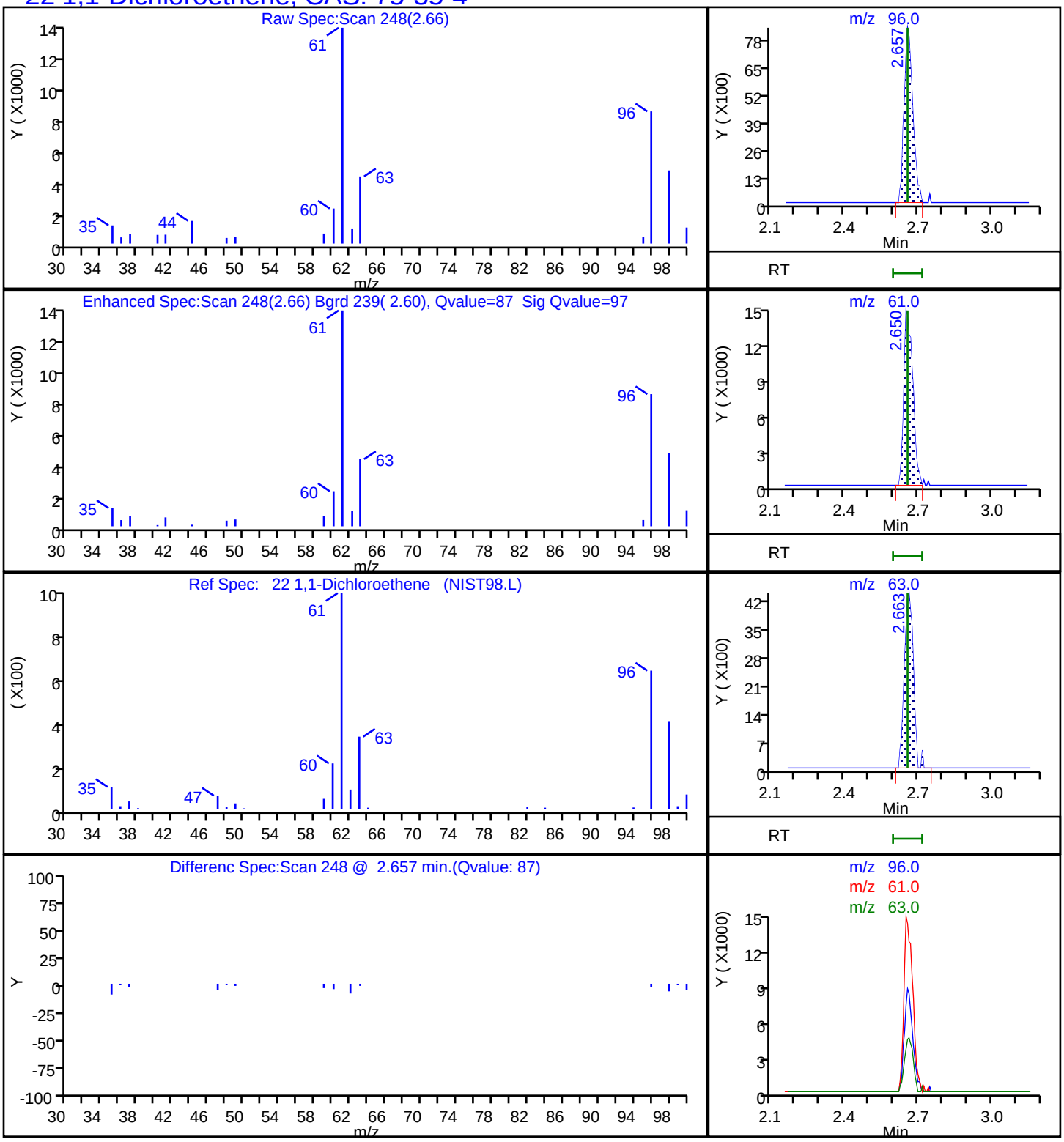
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D				
Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4		
Client ID:	356023-GW-MW-7R-98-3				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

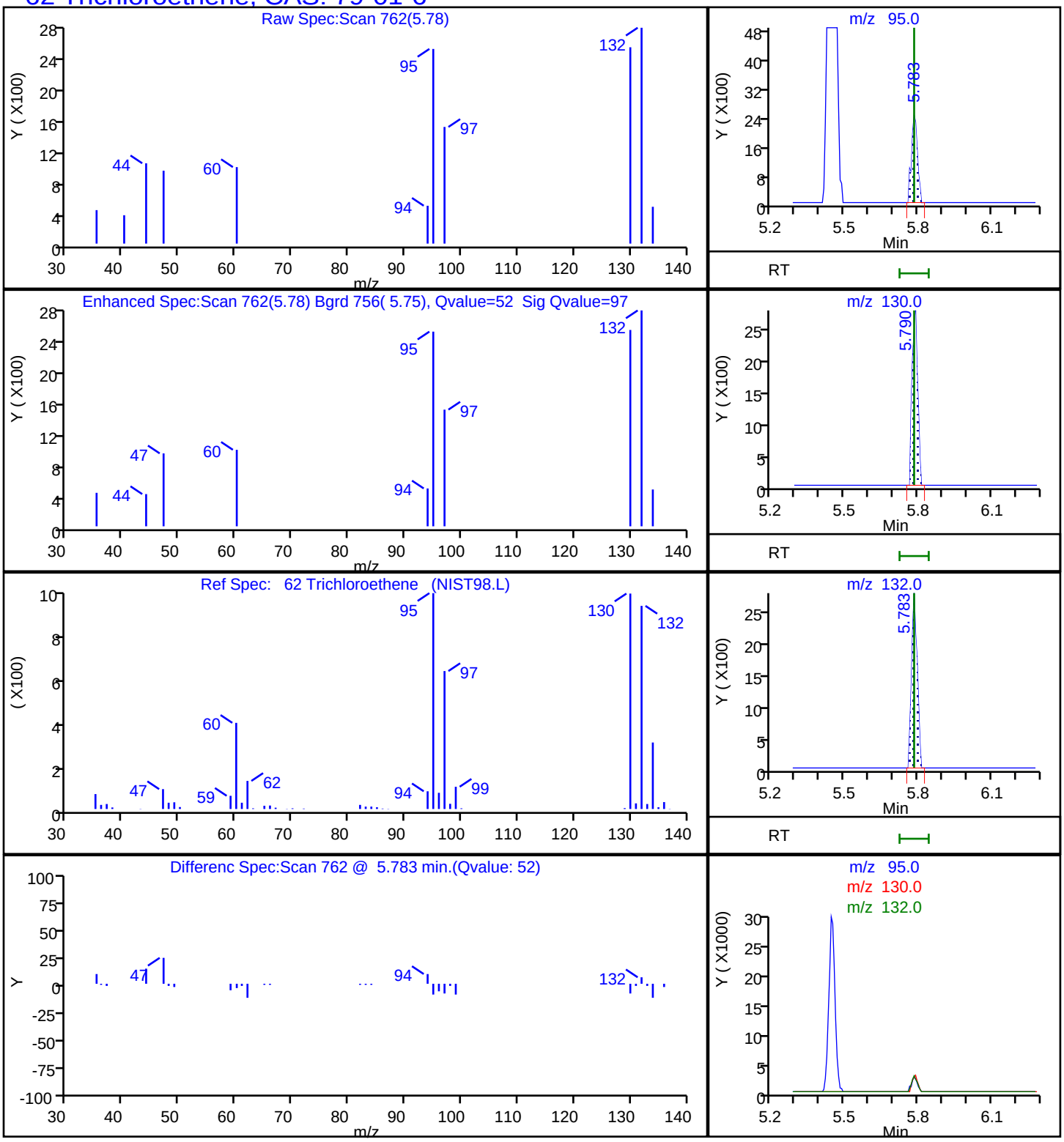
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D		
Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4
Client ID:	356023-GW-MW-7R-98-3		
Operator ID:	OI	ALS Bottle#:	12 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

62 Trichloroethene, CAS: 79-01-6



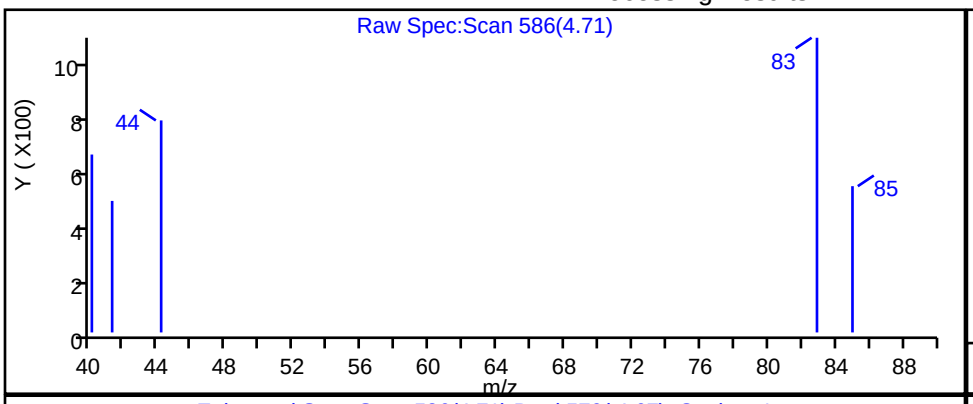
User Disabled Compound Report

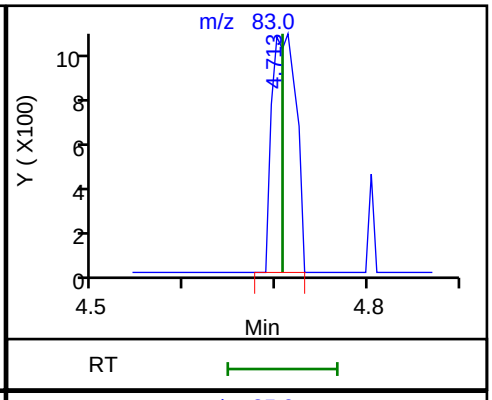
Eurofins TestAmerica, Buffalo

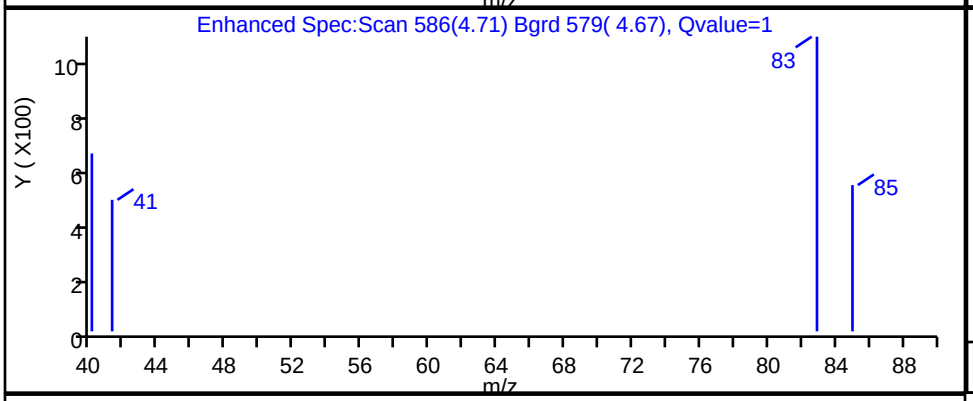
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D				
Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4		
Client ID:	356023-GW-MW-7R-98-3				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

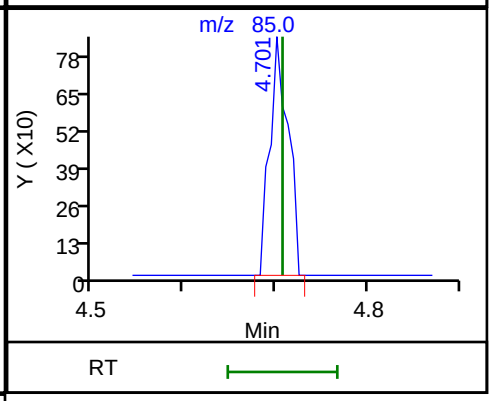
50 Chloroform, CAS: 67-66-3

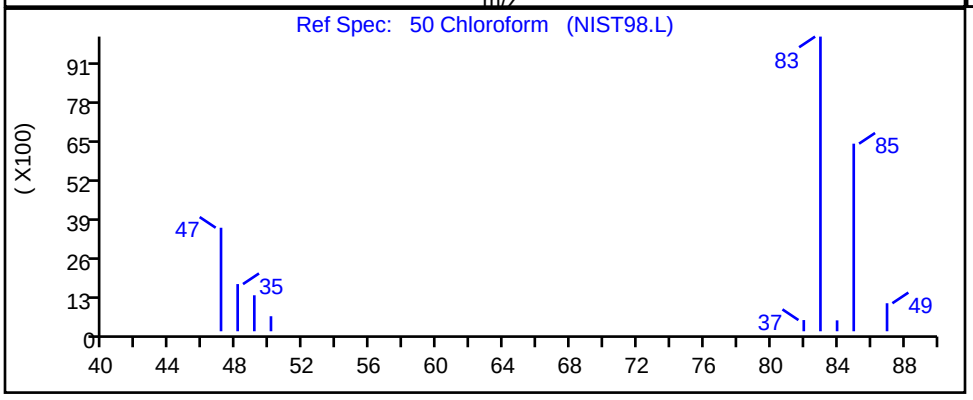
Processing Results











RT	Mass	Response	Amount
4.71	83.00	1988	0.182060
4.70	85.00	1185	

Reviewer: izquierdoo, 22-Sep-2019 09:16:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

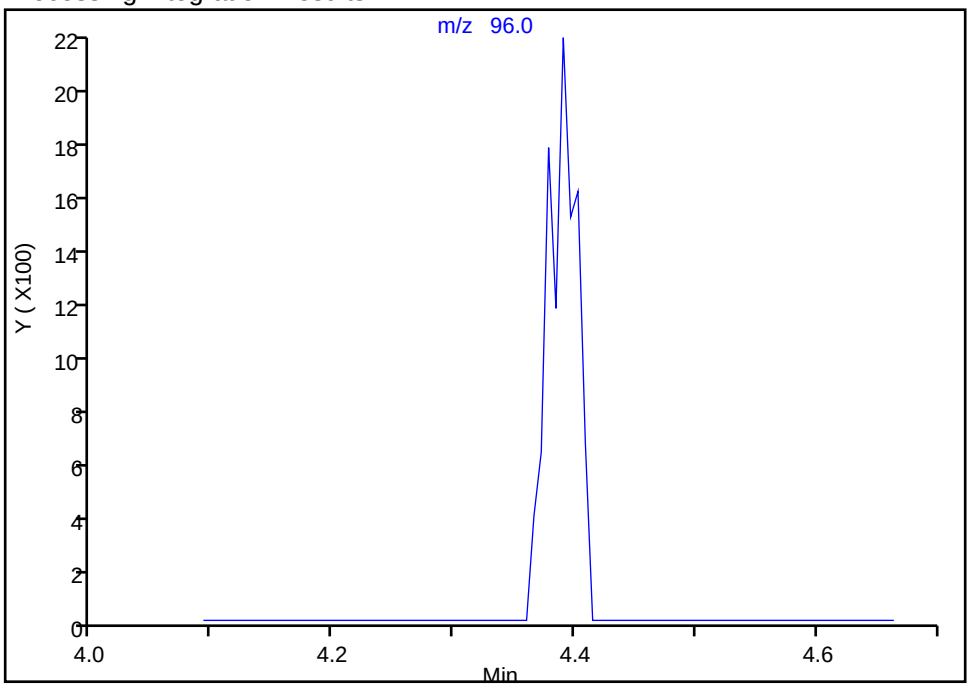
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D				
Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4		
Client ID:	356023-GW-MW-7R-98-3				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

45 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

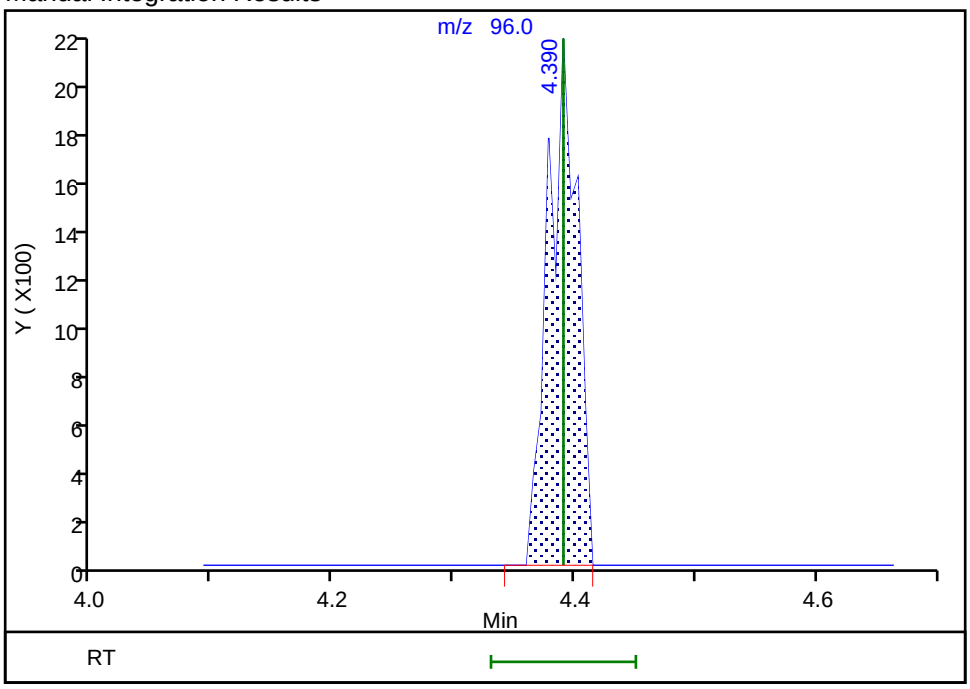
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.39
Area: 3599
Amount: 0.536057
Amount Units: ug/L



Reviewer: izquierdoo, 22-Sep-2019 09:16:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

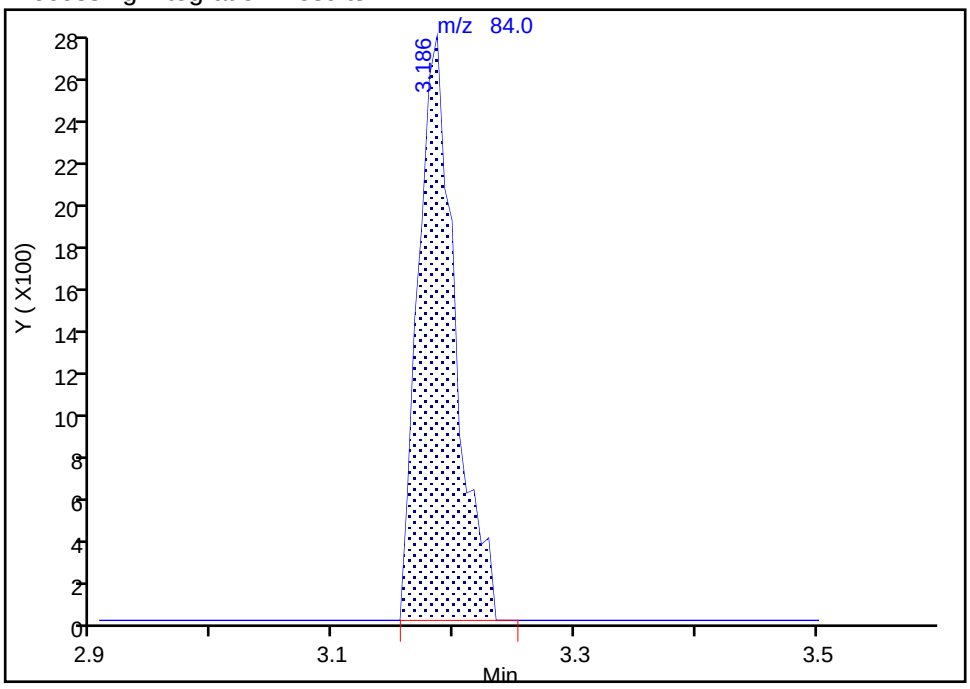
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9350.D				
Injection Date:	21-Sep-2019 13:15:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-4	Lab Sample ID:	480-159208-4		
Client ID:	356023-GW-MW-7R-98-3				
Operator ID:	OI	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2

Signal: 1

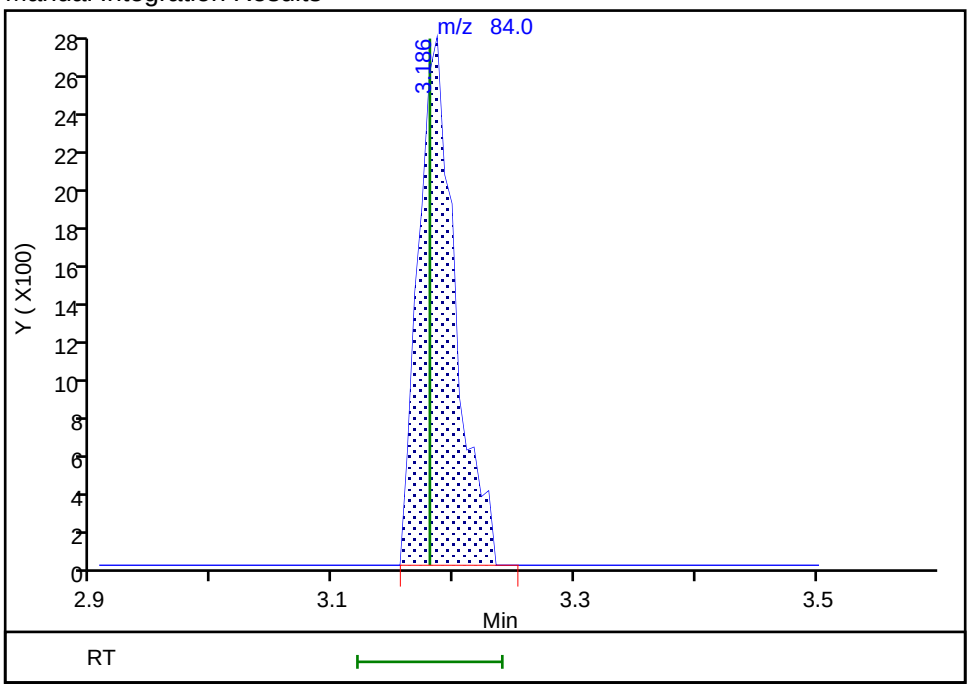
Processing Integration Results

RT: 3.19
Area: 5848
Amount: 0.037818
Amount Units: ug/L



Manual Integration Results

RT: 3.19
Area: 5848
Amount: 0.037818
Amount Units: ug/L



Reviewer: izquierdoo, 22-Sep-2019 09:16:27

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-4 Lab Sample ID: 480-159208-5

Matrix: Water Lab File ID: S9351.D

Analysis Method: 8260C Date Collected: 09/10/2019 12:45

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 13:38

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	340		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	140		10	3.8
75-35-4	1,1-Dichloroethene	39		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-4 Lab Sample ID: 480-159208-5

Matrix: Water Lab File ID: S9351.D

Analysis Method: 8260C Date Collected: 09/10/2019 12:45

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 13:38

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	5.8	J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D
Lims ID: 480-159208-B-5
Client ID: 356023-GW-MW-7R-98-4
Sample Type: Client
Inject. Date: 21-Sep-2019 13:38:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-B-5
Misc. Info.: 480-0084330-013
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 09:17:49 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: izquierdoo Date: 22-Sep-2019 09:17:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	99	110048	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	230582	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	261415	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	59	149507	26.8	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	96	90850	25.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	572553	25.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	209443	25.3	
10 Dichlorodifluoromethane	85		1.263				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.927				ND	
17 Trichlorofluoromethane	101		2.152				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.651				ND	
22 1,1-Dichloroethene	96	2.663	2.657	0.006	85	21041	3.89	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.082				ND	
30 Methylene Chloride	84	3.186	3.186	0.006	82	8039	0.3995	
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.837	3.831	0.006	97	151436	13.7	
45 cis-1,2-Dichloroethene	96	4.402	4.402	0.012	8	3259	0.4811	a
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83		4.707				ND	Ua
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	94	312733	33.7	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.790	5.784	0.006	42	3666	0.5755	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

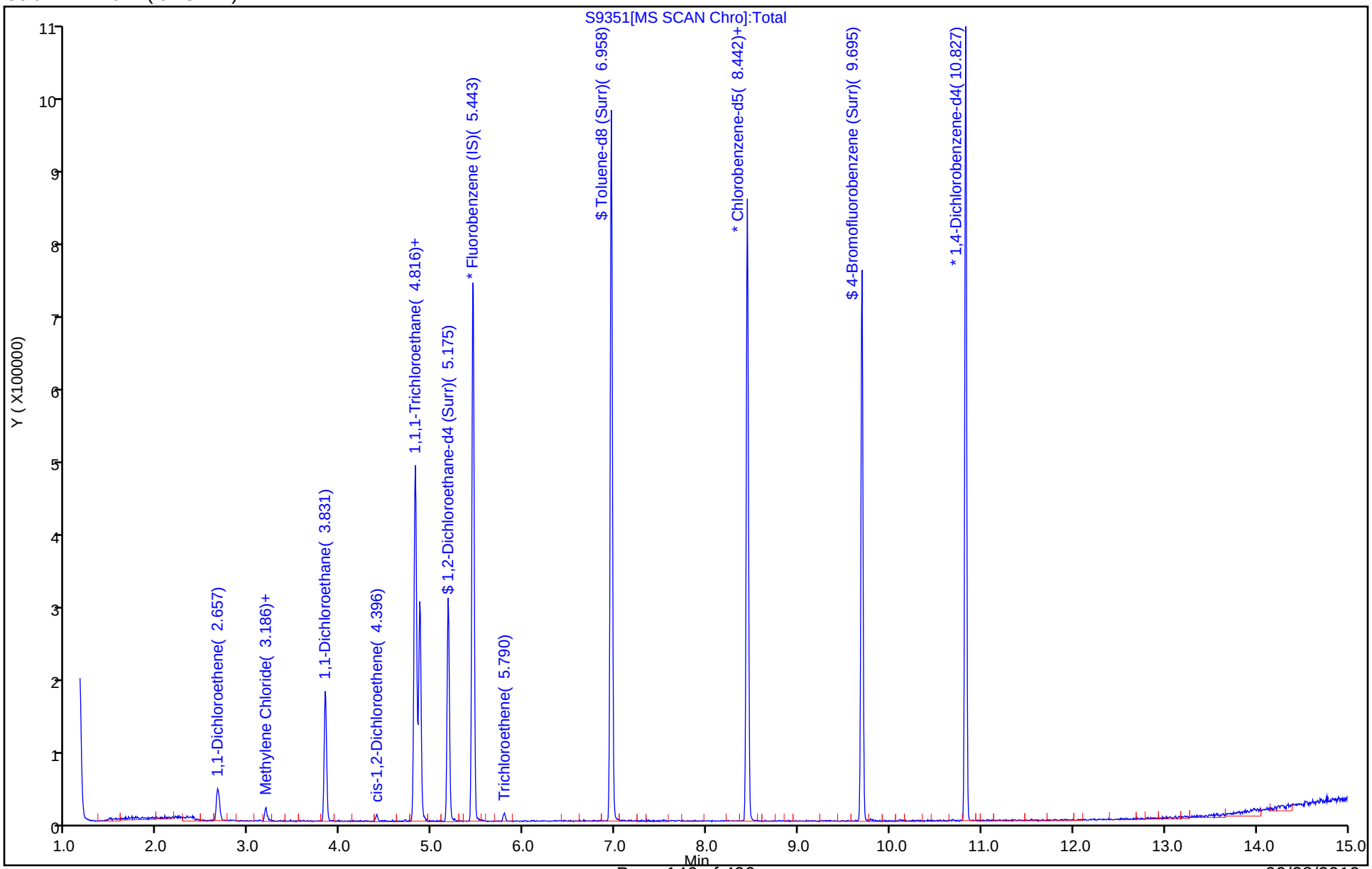
Report Date: 22-Sep-2019 09:17:49 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D

Injection Date:	21-Sep-2019 13:38:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-159208-B-5	Lab Sample ID:	480-159208-5	Worklist Smp#:	13
Client ID:	356023-GW-MW-7R-98-4				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	13
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

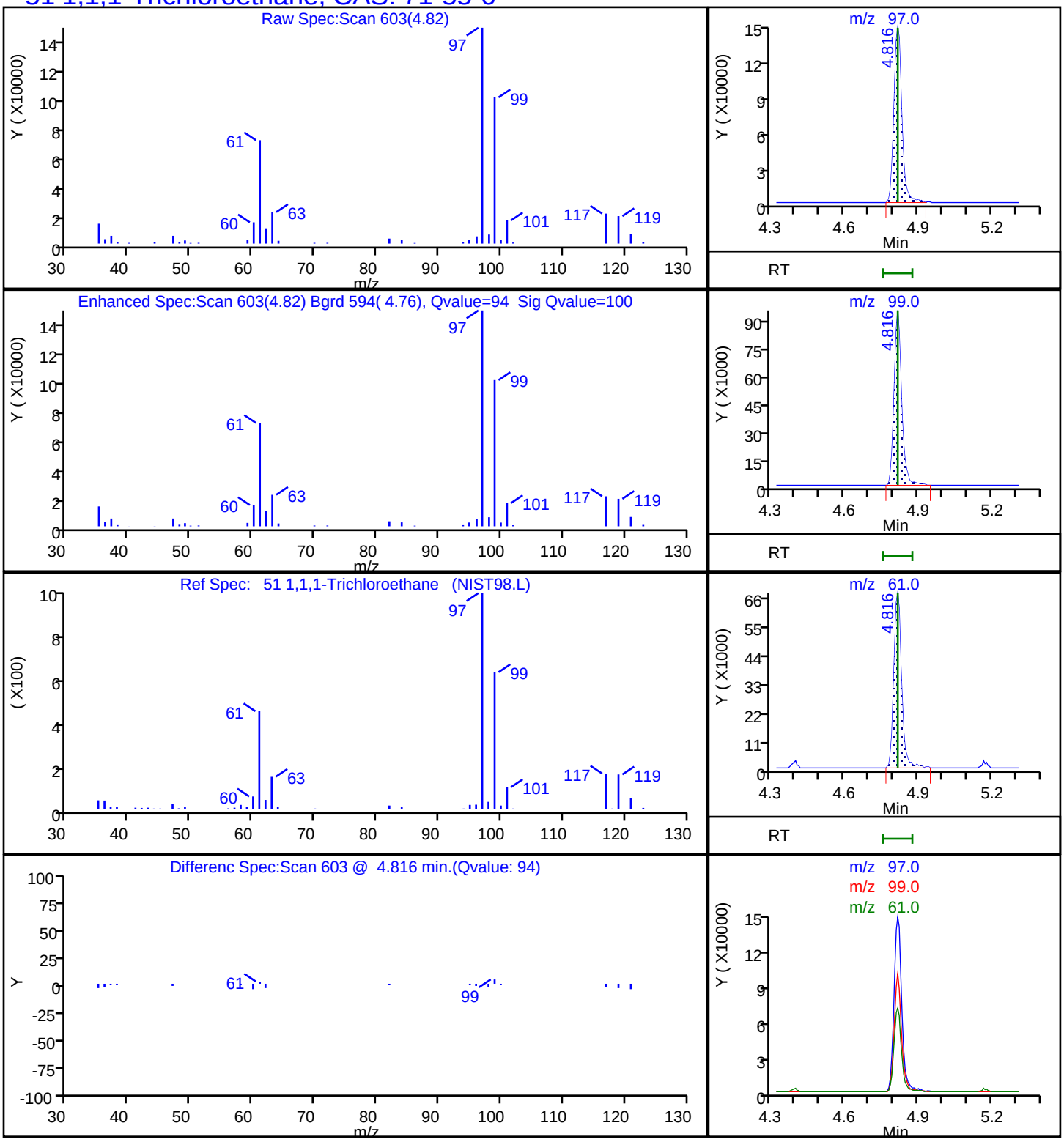
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D				
Injection Date:	21-Sep-2019 13:38:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-5	Lab Sample ID:	480-159208-5		
Client ID:	356023-GW-MW-7R-98-4				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

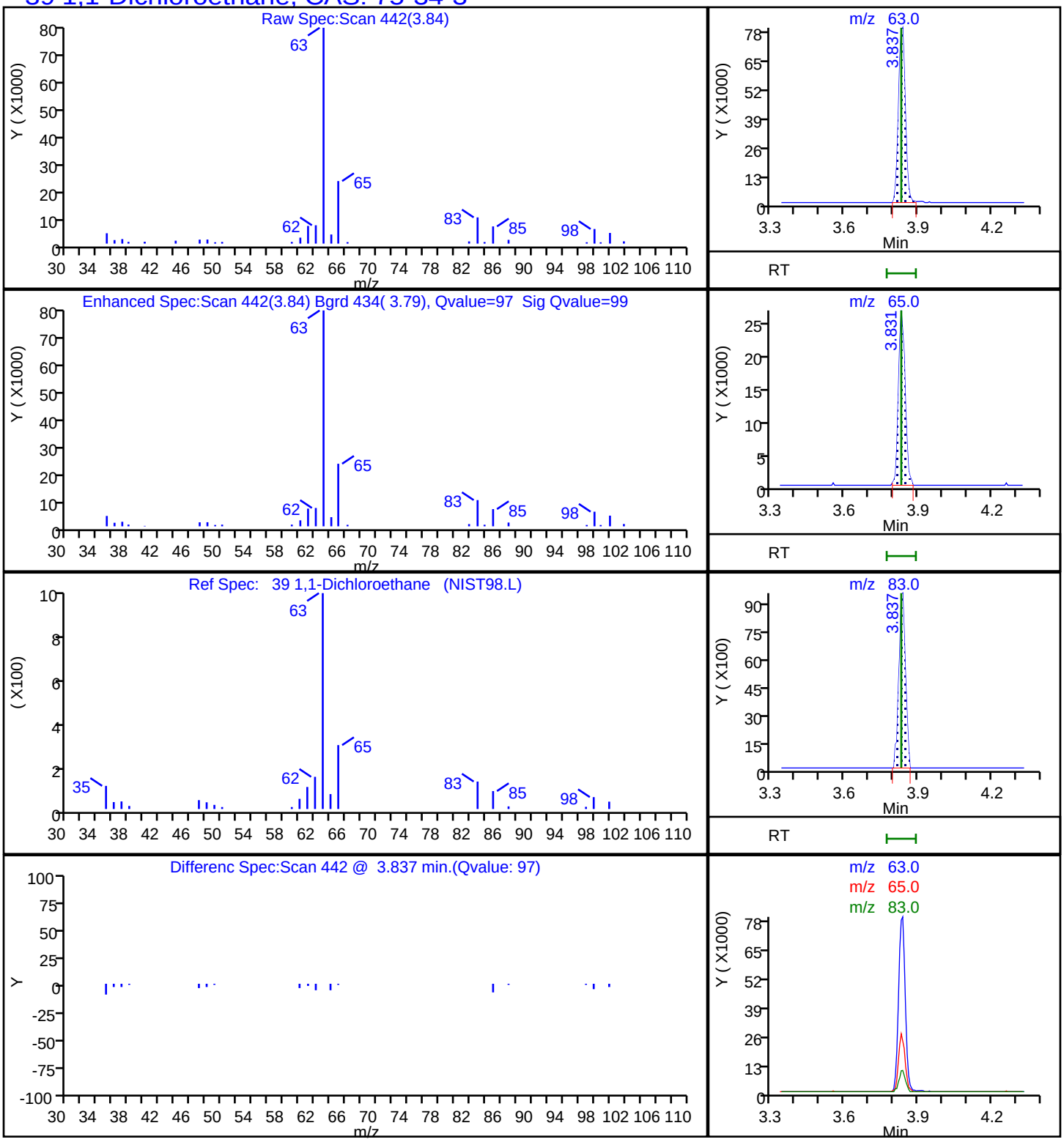
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D				
Injection Date:	21-Sep-2019 13:38:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-5	Lab Sample ID:	480-159208-5		
Client ID:	356023-GW-MW-7R-98-4				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

39 1,1-Dichloroethane, CAS: 75-34-3

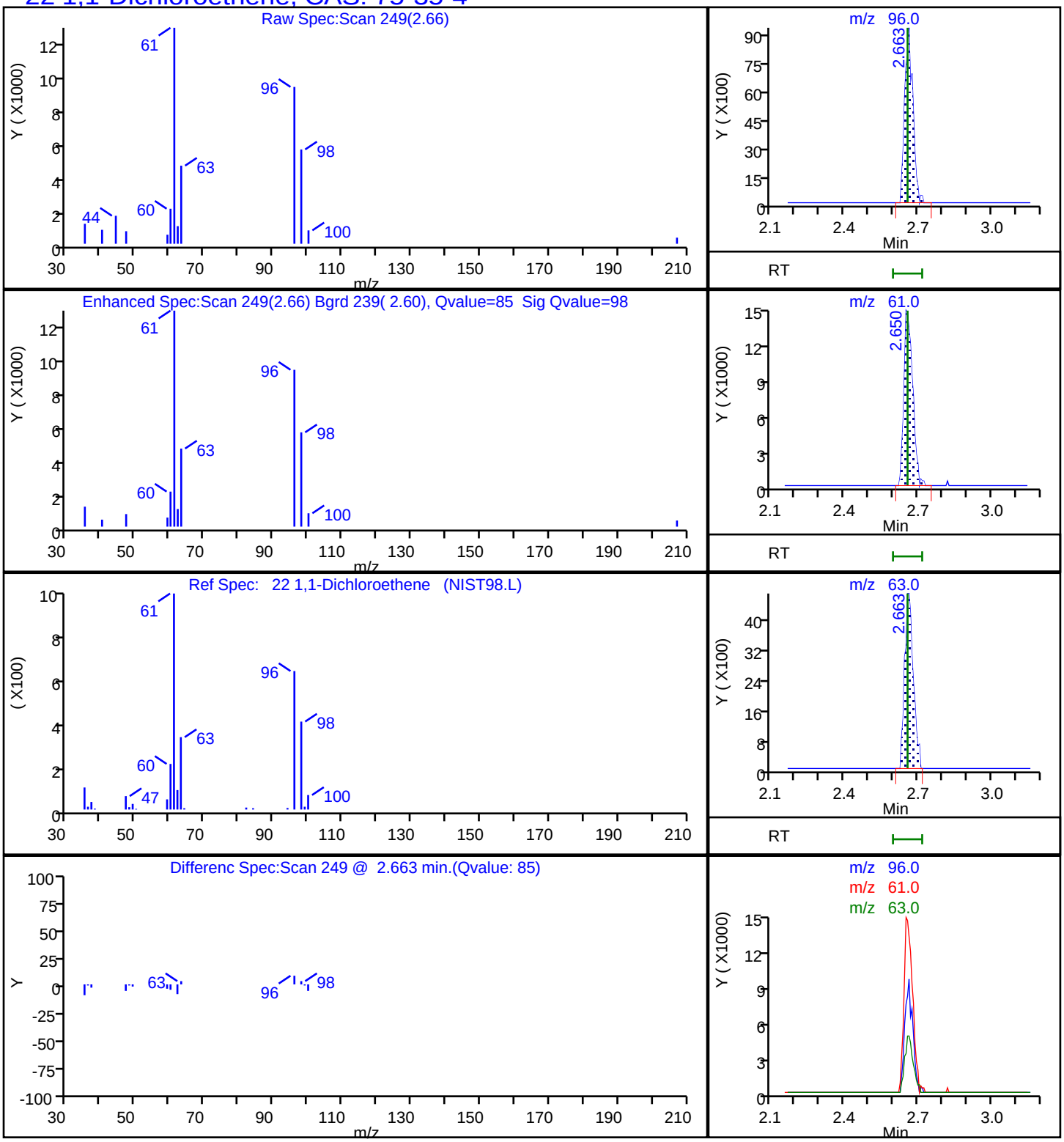


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D

Injection Date:	21-Sep-2019 13:38:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-5	Lab Sample ID:	480-159208-5		
Client ID:	356023-GW-MW-7R-98-4				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

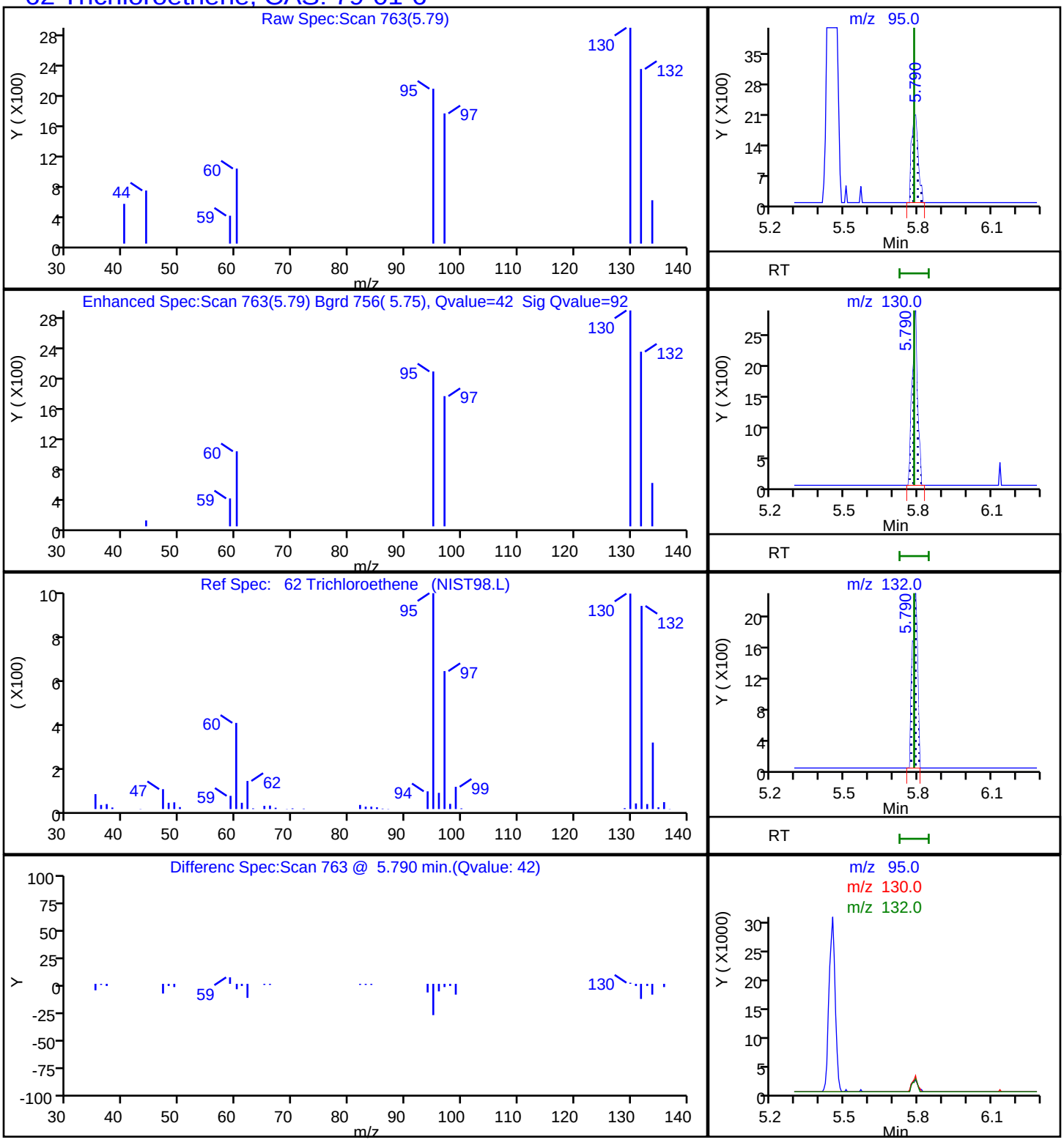
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D
Injection Date: 21-Sep-2019 13:38:30 Instrument ID: HP5973S
Lims ID: 480-159208-B-5 Lab Sample ID: 480-159208-5
Client ID: 356023-GW-MW-7R-98-4
Operator ID: OI ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

62 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

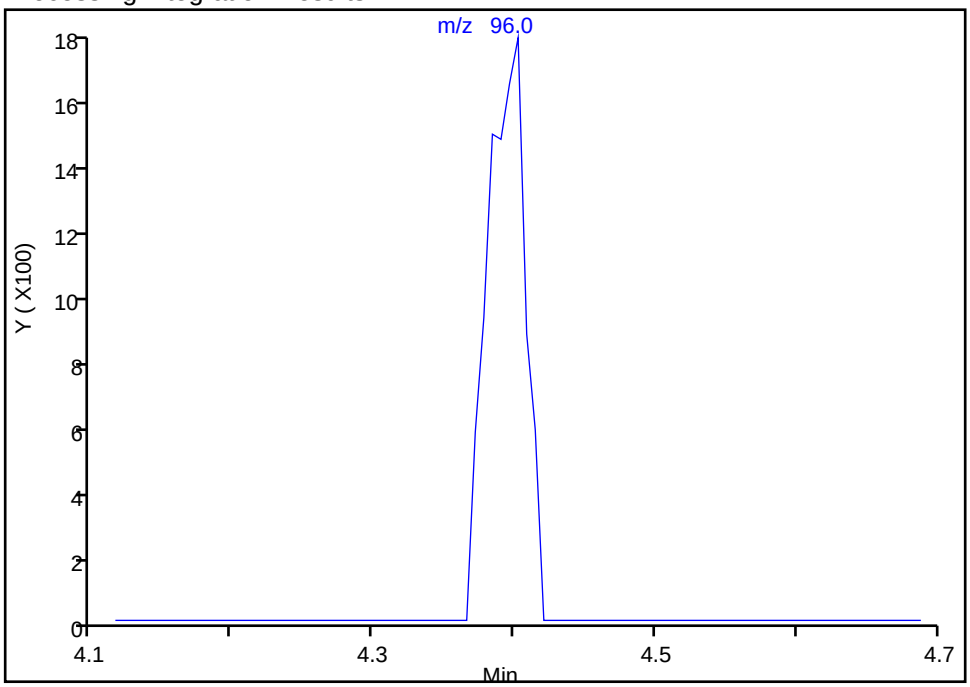
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9351.D				
Injection Date:	21-Sep-2019 13:38:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-5	Lab Sample ID:	480-159208-5		
Client ID:	356023-GW-MW-7R-98-4				
Operator ID:	OI	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

45 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

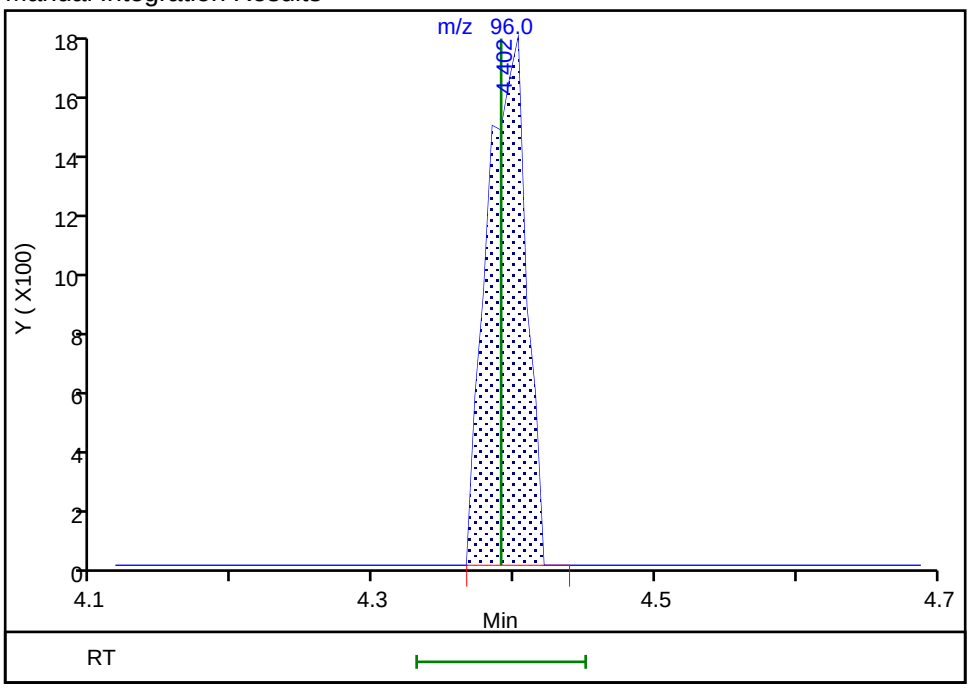
Not Detected
Expected RT: 4.39

Processing Integration Results



Manual Integration Results

RT: 4.40
Area: 3259
Amount: 0.481141
Amount Units: ug/L



Reviewer: izquierdoo, 22-Sep-2019 09:17:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-5 Lab Sample ID: 480-159208-6

Matrix: Water Lab File ID: S9352.D

Analysis Method: 8260C Date Collected: 09/10/2019 16:50

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 14:02

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	310		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	130		10	3.8
75-35-4	1,1-Dichloroethene	34		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-5 Lab Sample ID: 480-159208-6

Matrix: Water Lab File ID: S9352.D

Analysis Method: 8260C Date Collected: 09/10/2019 16:50

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 14:02

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	4.4	J	10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	6.1	J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	106		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D
Lims ID: 480-159208-B-6
Client ID: 356023-GW-MW-7R-98-5
Sample Type: Client
Inject. Date: 21-Sep-2019 14:02:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-B-6
Misc. Info.: 480-0084330-014
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 09:18:31 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: izquierdoo Date: 22-Sep-2019 09:18:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	110120	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	229876	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	264169	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	55	148647	26.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	92717	26.4	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	566713	24.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	95	212595	25.8	
10 Dichlorodifluoromethane	85		1.263				ND	
12 Chloromethane	50		1.446				ND	
13 Vinyl chloride	62		1.543				ND	
14 Bromomethane	94		1.835				ND	
15 Chloroethane	64		1.927				ND	
17 Trichlorofluoromethane	101		2.152				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.651				ND	
22 1,1-Dichloroethene	96	2.650	2.657	-0.007	81	18547	3.43	
23 Acetone	43		2.784				ND	
26 Carbon disulfide	76		2.857				ND	
27 Methyl acetate	43		3.082				ND	
30 Methylene Chloride	84	3.174	3.186	-0.006	60	8306	0.4438	
32 Methyl tert-butyl ether	73		3.393				ND	
34 trans-1,2-Dichloroethene	96		3.411				ND	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	96	138620	12.6	
45 cis-1,2-Dichloroethene	96	4.396	4.402	0.006	2	3467	0.5115	
43 2-Butanone (MEK)	43		4.433				ND	
48 Chlorobromomethane	128		4.634				ND	
50 Chloroform	83	4.713	4.713	0.006	1	1501	0.1362	M
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	94	290846	31.3	
52 Cyclohexane	56		4.822				ND	
55 Carbon tetrachloride	117		4.950				ND	
57 Benzene	78		5.175				ND	
58 1,2-Dichloroethane	62		5.248				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
62 Trichloroethene	95	5.784	5.784	0.000	60	3900	0.6118	
64 Methylcyclohexane	83		5.899				ND	
65 1,2-Dichloropropane	63		6.027				ND	
66 1,4-Dioxane	88		6.179				ND	
68 Dichlorobromomethane	83		6.319				ND	
72 cis-1,3-Dichloropropene	75		6.739				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885				ND	
74 Toluene	92		7.025				ND	
77 trans-1,3-Dichloropropene	75		7.311				ND	
79 1,1,2-Trichloroethane	83		7.499				ND	
81 Tetrachloroethene	166		7.554				ND	
80 2-Hexanone	43		7.724				ND	
83 Chlorodibromomethane	129		7.895				ND	
84 Ethylene Dibromide	107		7.998				ND	
87 Chlorobenzene	112		8.473				ND	
88 Ethylbenzene	91		8.564				ND	
90 m-Xylene & p-Xylene	106		8.685				ND	
91 o-Xylene	106		9.111				ND	
92 Styrene	104		9.142				ND	
95 Bromoform	173		9.397				ND	
94 Isopropylbenzene	105		9.495				ND	
97 1,1,2,2-Tetrachloroethane	83		9.902				ND	
111 1,3-Dichlorobenzene	146		10.760				ND	
113 1,4-Dichlorobenzene	146		10.851				ND	
116 1,2-Dichlorobenzene	146		11.204				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934				ND	
119 1,2,4-Trichlorobenzene	180		12.603				ND	
122 1,2,3-Trichlorobenzene	180		13.017				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

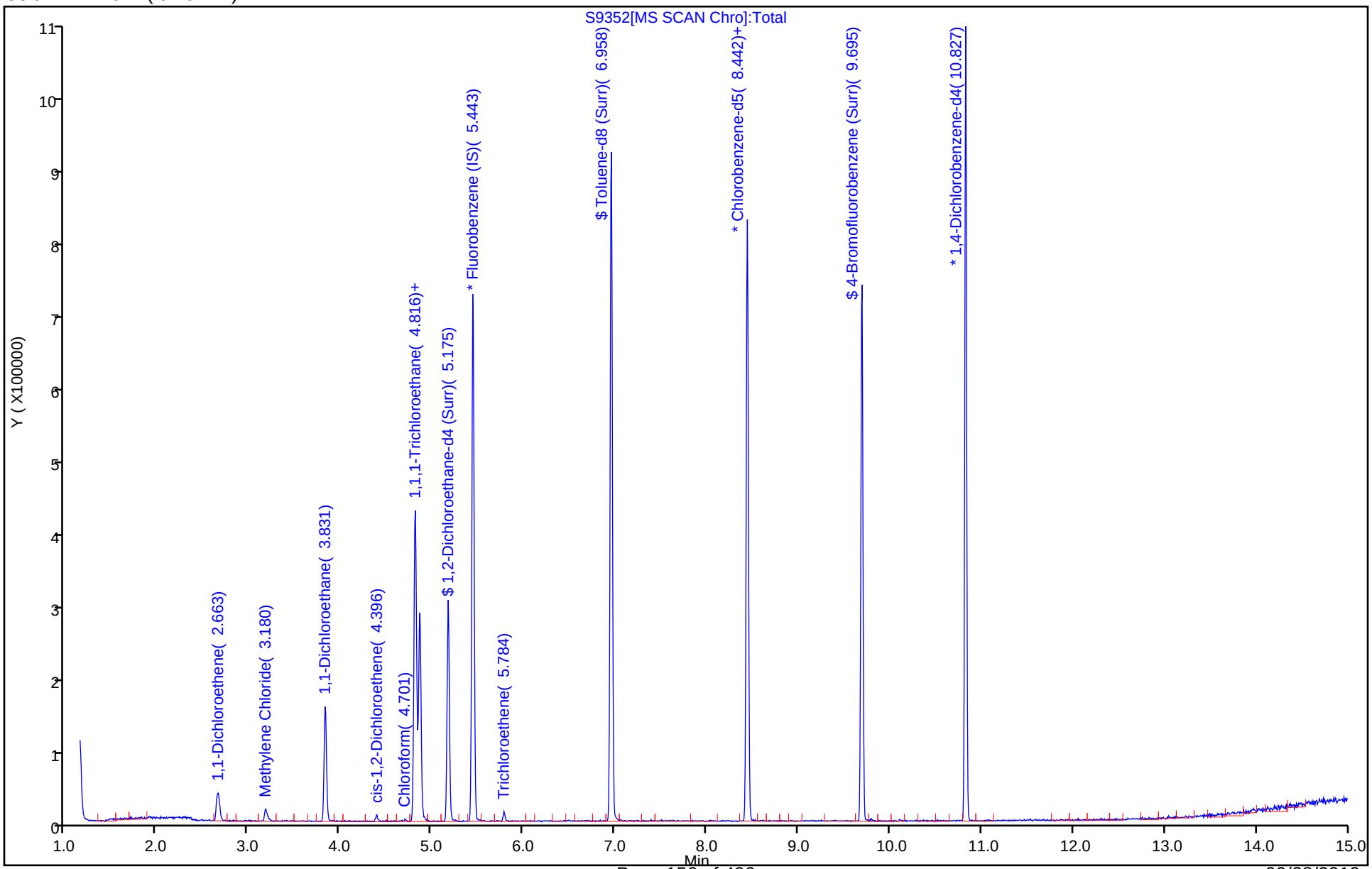
Report Date: 22-Sep-2019 09:18:32 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D

Injection Date:	21-Sep-2019 14:02:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	480-159208-B-6	Lab Sample ID:	480-159208-6	Worklist Smp#:	14
Client ID:	356023-GW-MW-7R-98-5				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	14
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

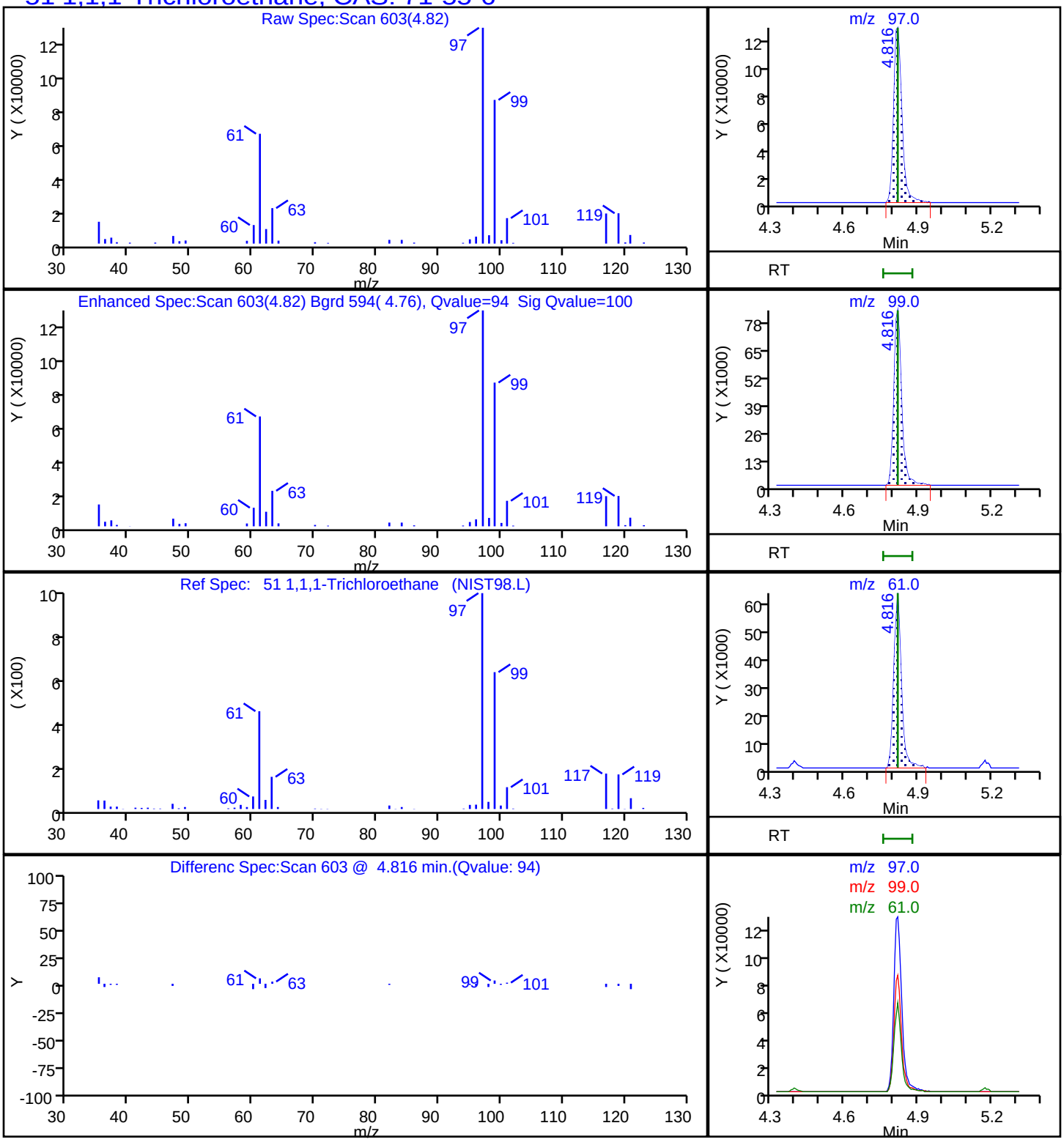
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D				
Injection Date:	21-Sep-2019 14:02:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-6	Lab Sample ID:	480-159208-6		
Client ID:	356023-GW-MW-7R-98-5				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

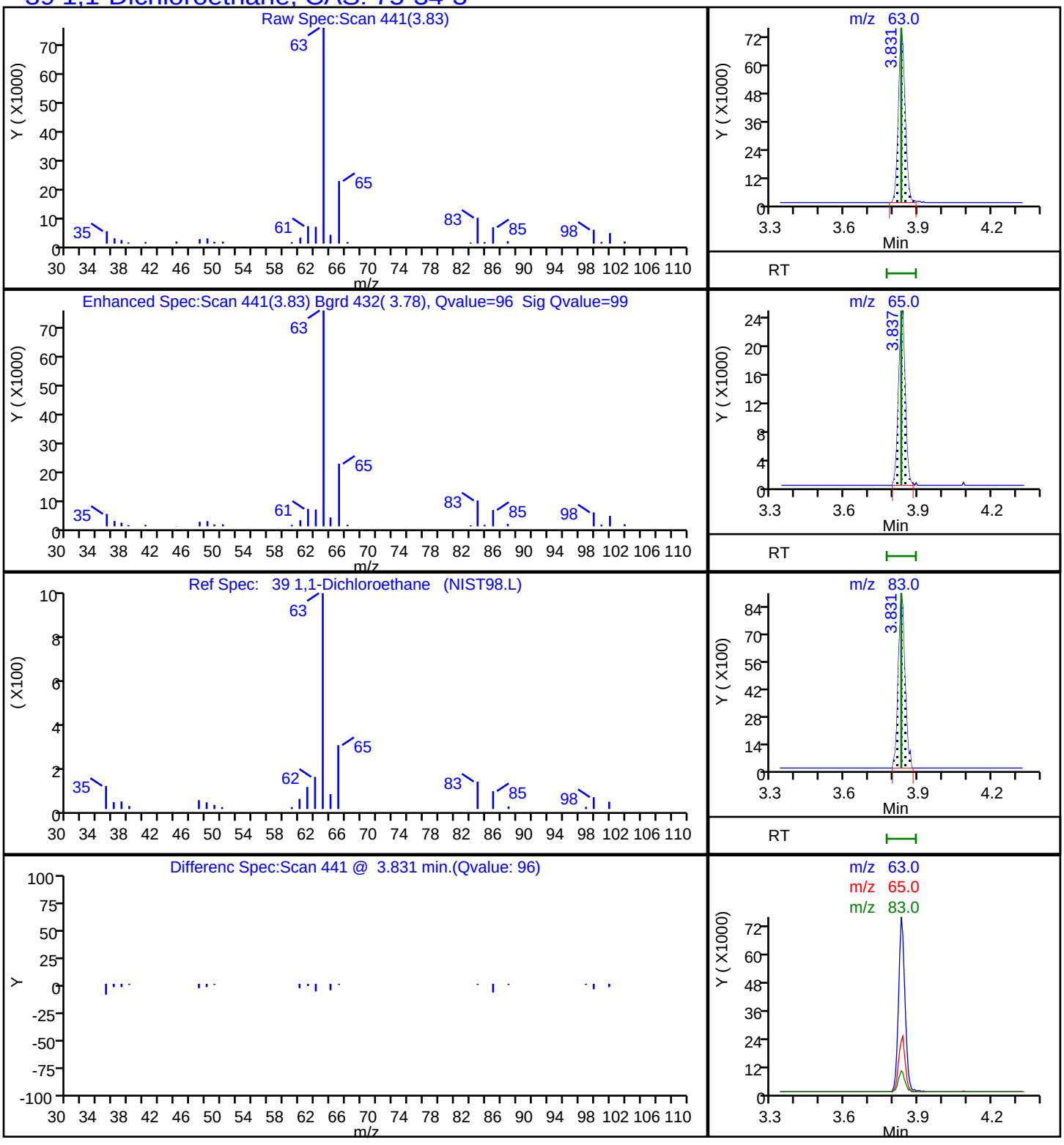
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D				
Injection Date:	21-Sep-2019 14:02:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-6	Lab Sample ID:	480-159208-6		
Client ID:	356023-GW-MW-7R-98-5				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

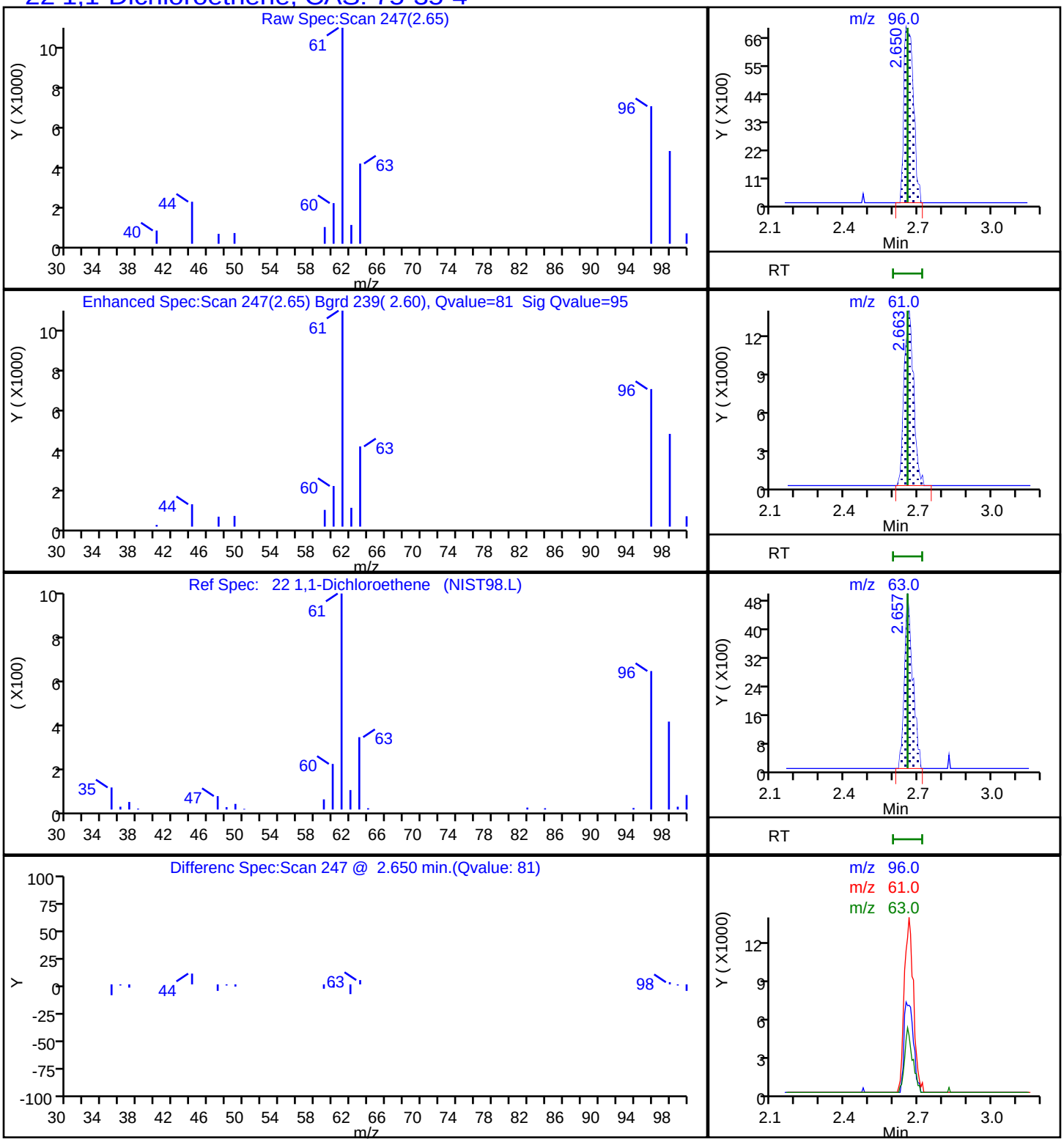
39 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D				
Injection Date:	21-Sep-2019 14:02:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-6	Lab Sample ID:	480-159208-6		
Client ID:	356023-GW-MW-7R-98-5				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D

Injection Date: 21-Sep-2019 14:02:30 Instrument ID: HP5973S

Lims ID: 480-159208-B-6 Lab Sample ID: 480-159208-6

Client ID: 356023-GW-MW-7R-98-5

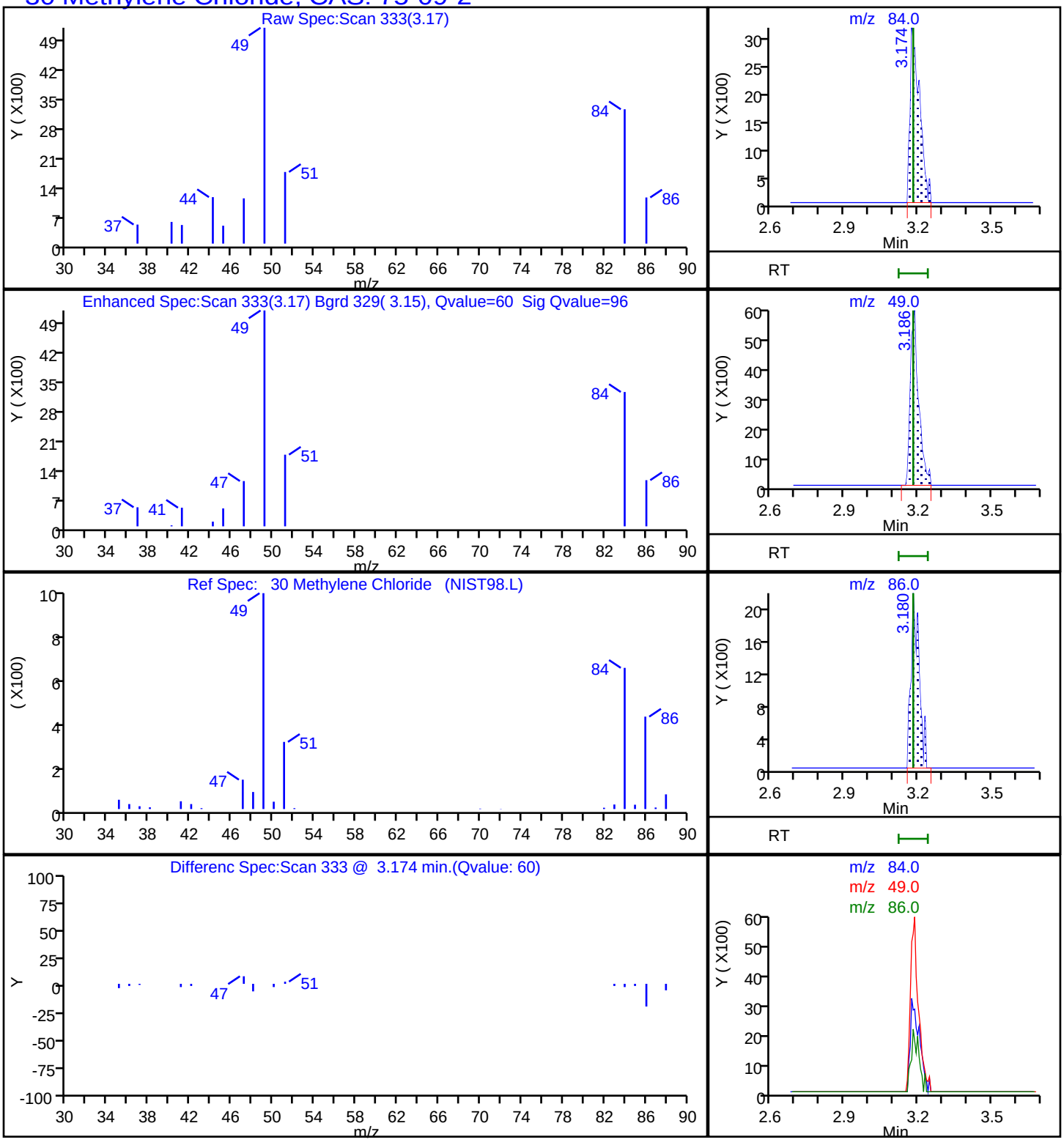
Operator ID: OI ALS Bottle#: 14 Worklist Smp#: 14

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: S-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm) Detector MS SCAN

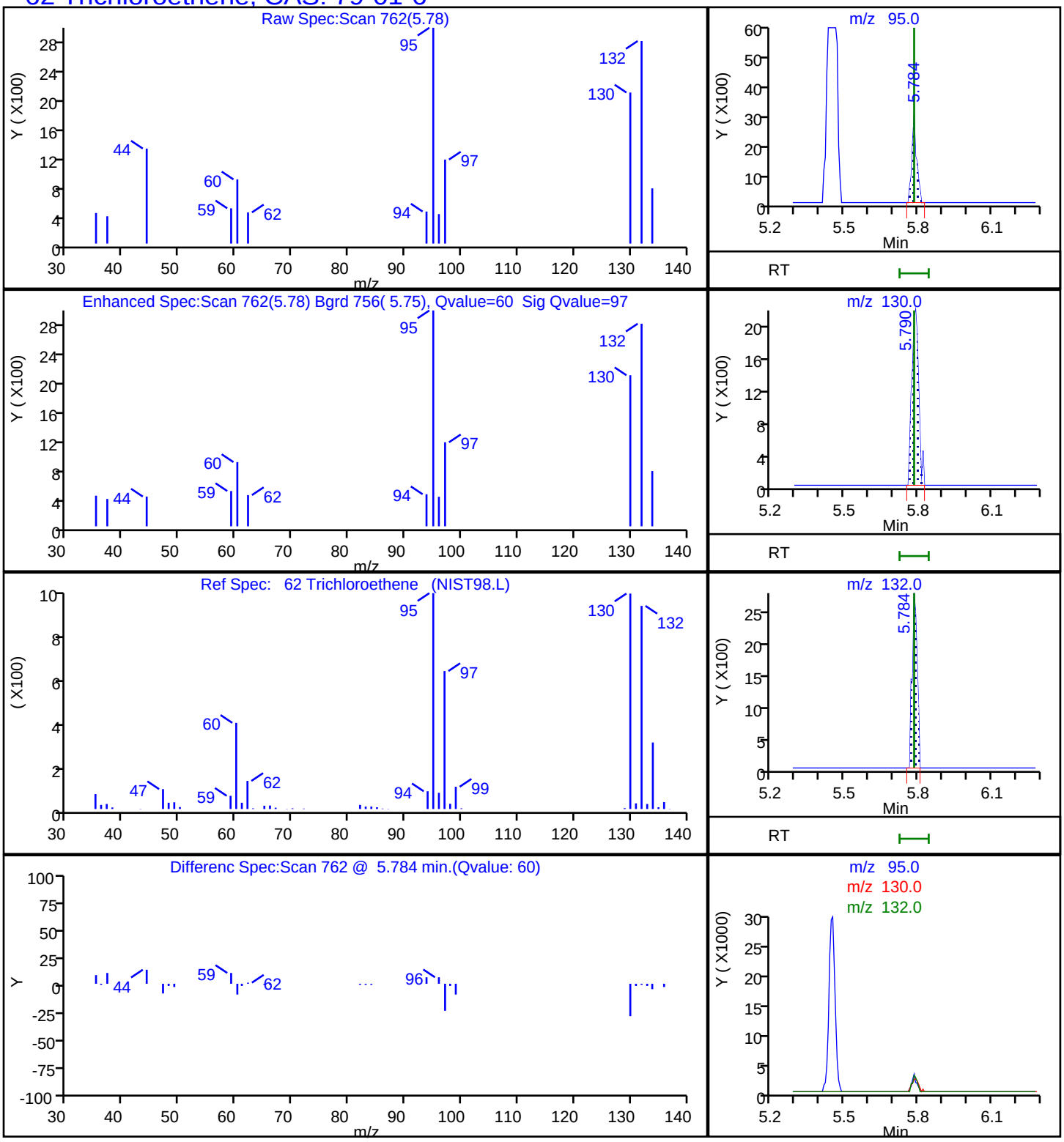
30 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D				
Injection Date:	21-Sep-2019 14:02:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-6	Lab Sample ID:	480-159208-6		
Client ID:	356023-GW-MW-7R-98-5				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

62 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

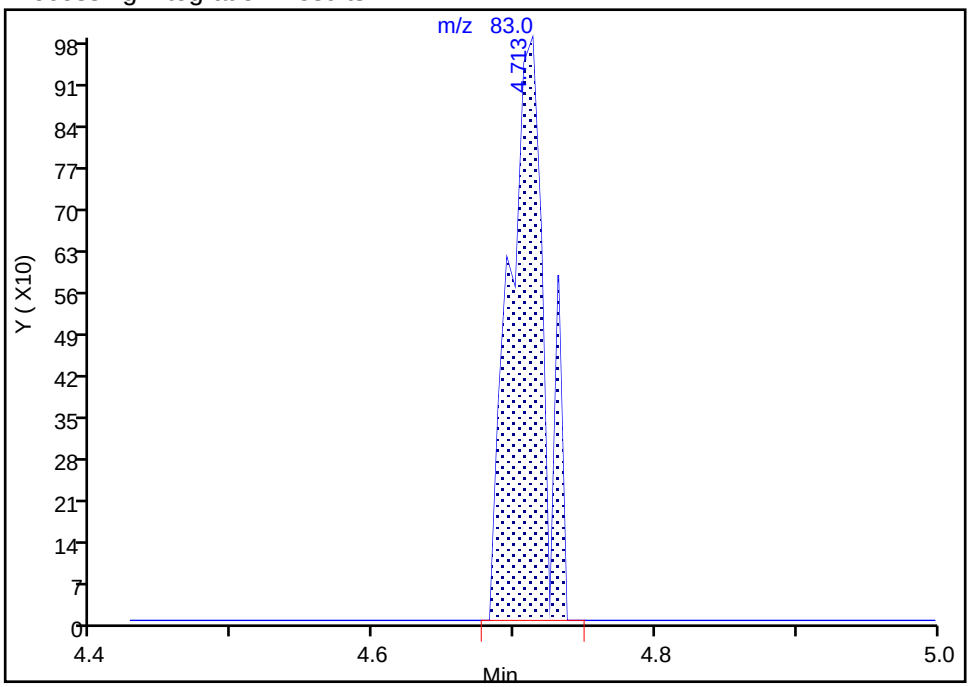
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9352.D				
Injection Date:	21-Sep-2019 14:02:30	Instrument ID:	HP5973S		
Lims ID:	480-159208-B-6	Lab Sample ID:	480-159208-6		
Client ID:	356023-GW-MW-7R-98-5				
Operator ID:	OI	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

50 Chloroform, CAS: 67-66-3

Signal: 1

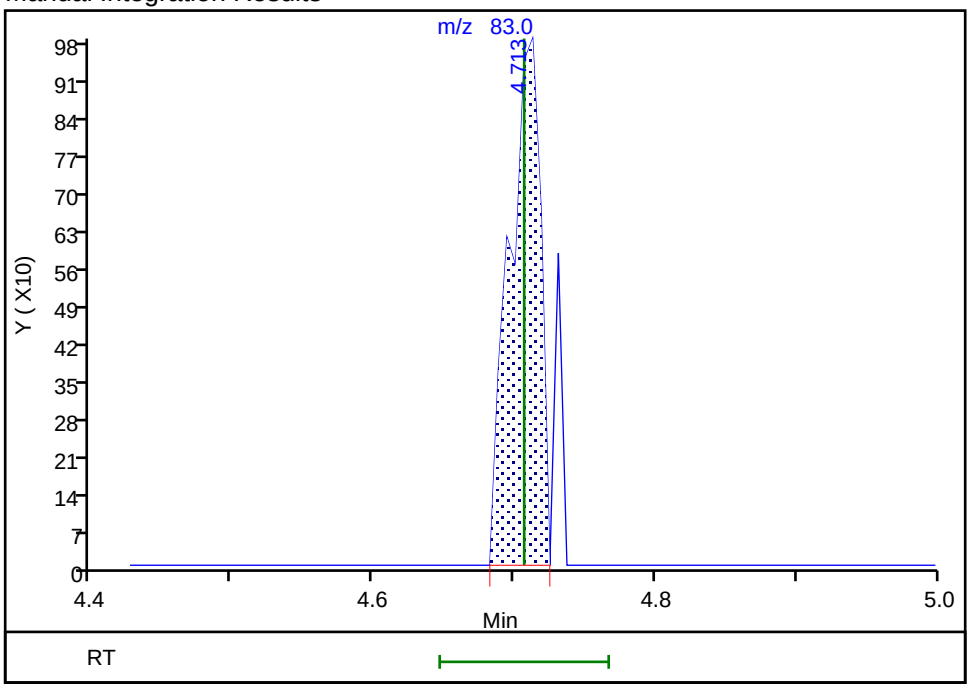
Processing Integration Results

RT: 4.71
Area: 1714
Amount: 0.155483
Amount Units: ug/L



Manual Integration Results

RT: 4.71
Area: 1501
Amount: 0.136161
Amount Units: ug/L



Reviewer: izquierdoo, 22-Sep-2019 09:18:12

Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-6 Lab Sample ID: 480-159208-7

Matrix: Water Lab File ID: T5409.D

Analysis Method: 8260C Date Collected: 09/11/2019 07:50

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 20:19

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	290		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	110		10	3.8
75-35-4	1,1-Dichloroethene	31		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-6 Lab Sample ID: 480-159208-7

Matrix: Water Lab File ID: T5409.D

Analysis Method: 8260C Date Collected: 09/11/2019 07:50

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 20:19

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	5.8	J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	109		75-123
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D
Lims ID: 480-159208-C-7
Client ID: 356023-GW-MW-7R-98-6
Sample Type: Client
Inject. Date: 22-Sep-2019 20:19:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-c-7
Misc. Info.: 480-0084351-026
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 23-Sep-2019 14:19:45 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: farrellr Date: 23-Sep-2019 14:19:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	187655	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	729257	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	394240	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	276396	27.2	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	344661	26.6	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	956908	24.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	292581	24.2	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.371				ND	U
14 Vinyl chloride	62		1.454				ND	
15 Bromomethane	94		1.713				ND	
16 Chloroethane	64		1.776				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	98	27604	3.11	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449				ND	
23 Acetone	43	2.553	2.563	-0.010	35	1723	0.4205	
25 Carbon disulfide	76		2.625				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84		2.916				ND	
33 Methyl tert-butyl ether	73		3.112				ND	
32 trans-1,2-Dichloroethene	96		3.112				ND	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	185350	11.0	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	79	5020	0.4588	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.211	4.201	0.010	90	3186	0.1646	
52 Cyclohexane	56		4.304				ND	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	456774	29.2	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	88	6040	0.5770	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.910				ND	
73 Toluene	92		6.024				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.905				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.962				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.019				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

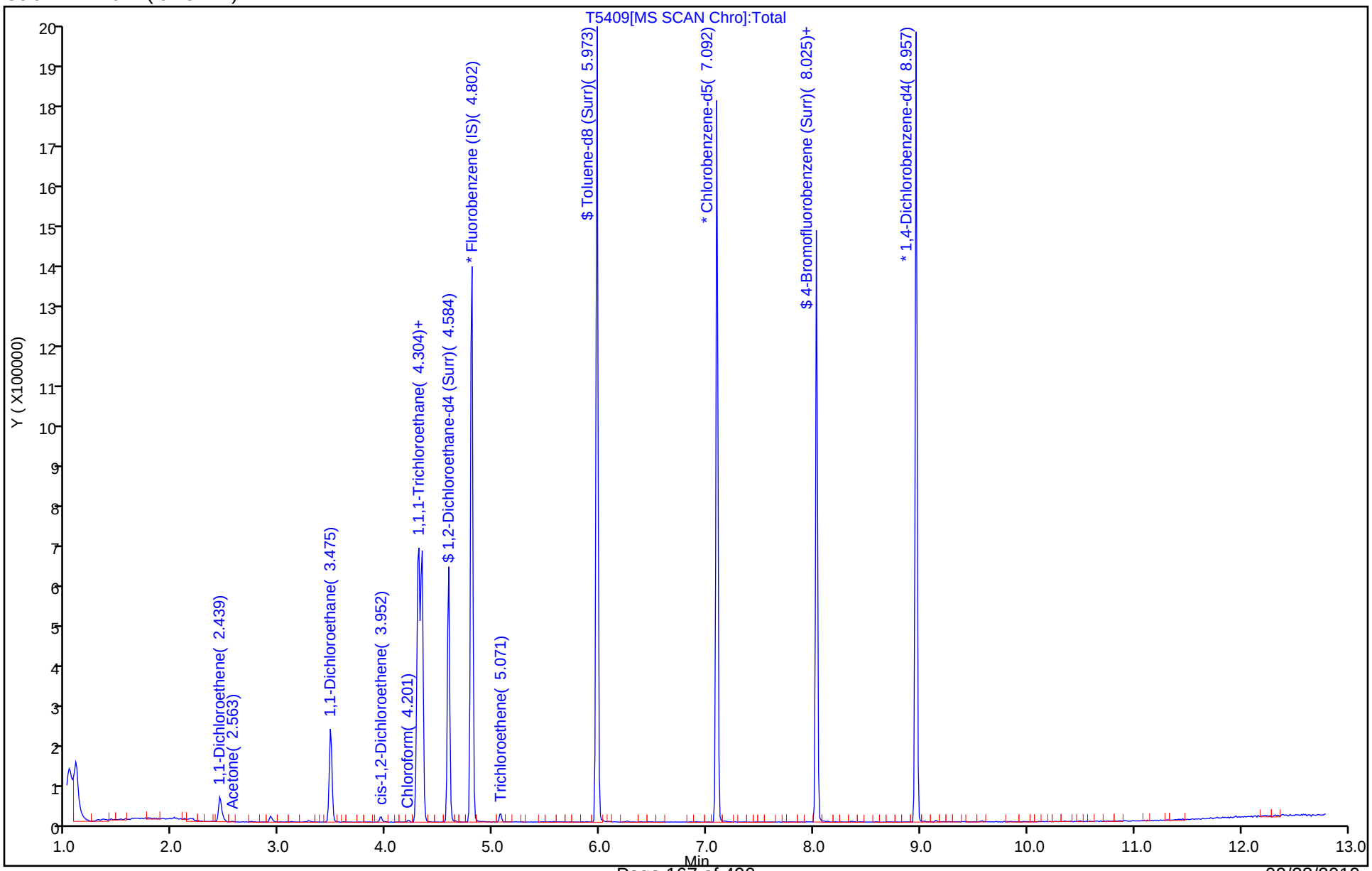
Report Date: 23-Sep-2019 14:19:46 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D

Injection Date:	22-Sep-2019 20:19:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	480-159208-C-7	Lab Sample ID:	480-159208-7	Worklist Smp#:	26
Client ID:	356023-GW-MW-7R-98-6				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	25
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

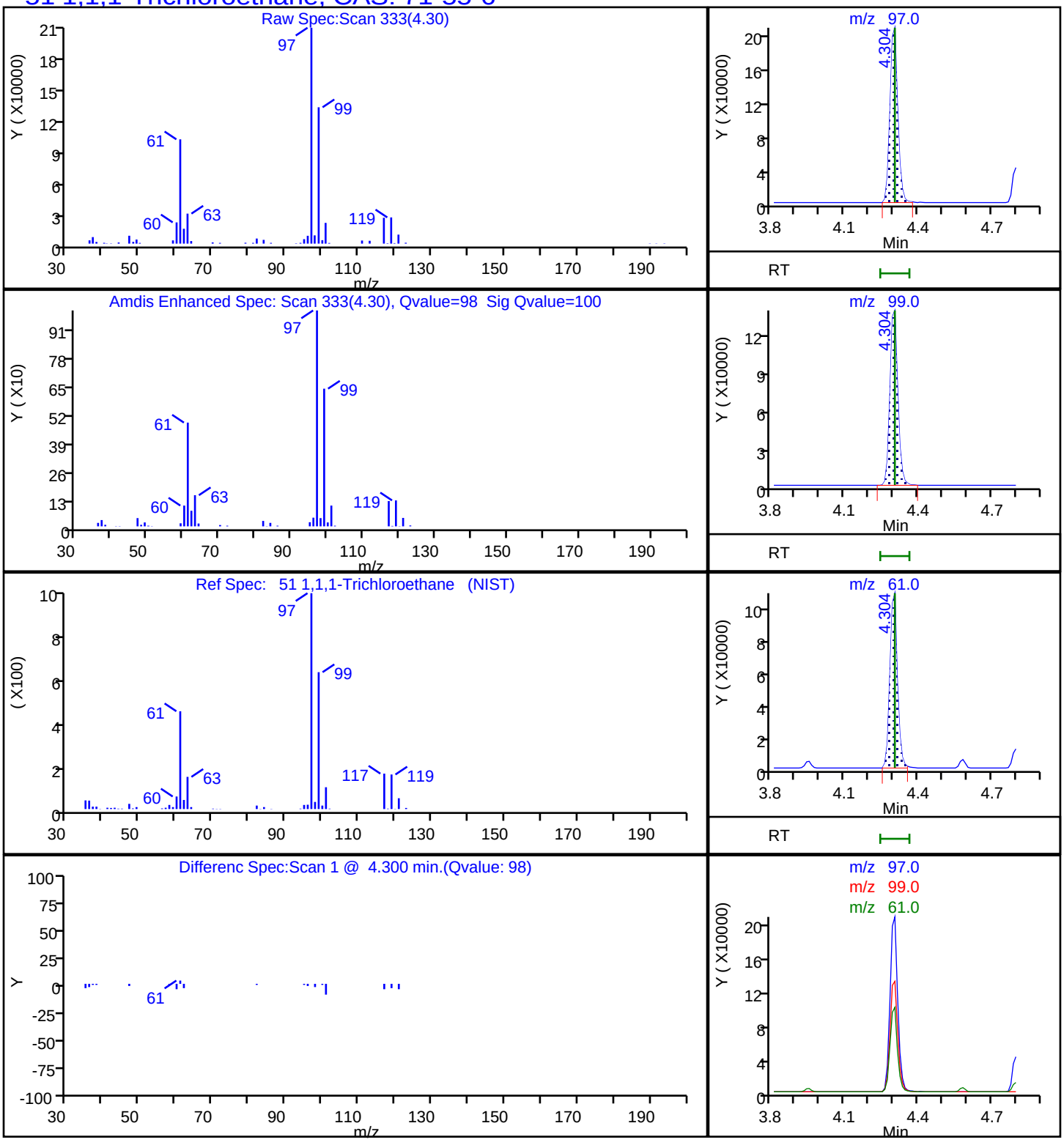
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D				
Injection Date:	22-Sep-2019 20:19:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-7	Lab Sample ID:	480-159208-7		
Client ID:	356023-GW-MW-7R-98-6				
Operator ID:	RF	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

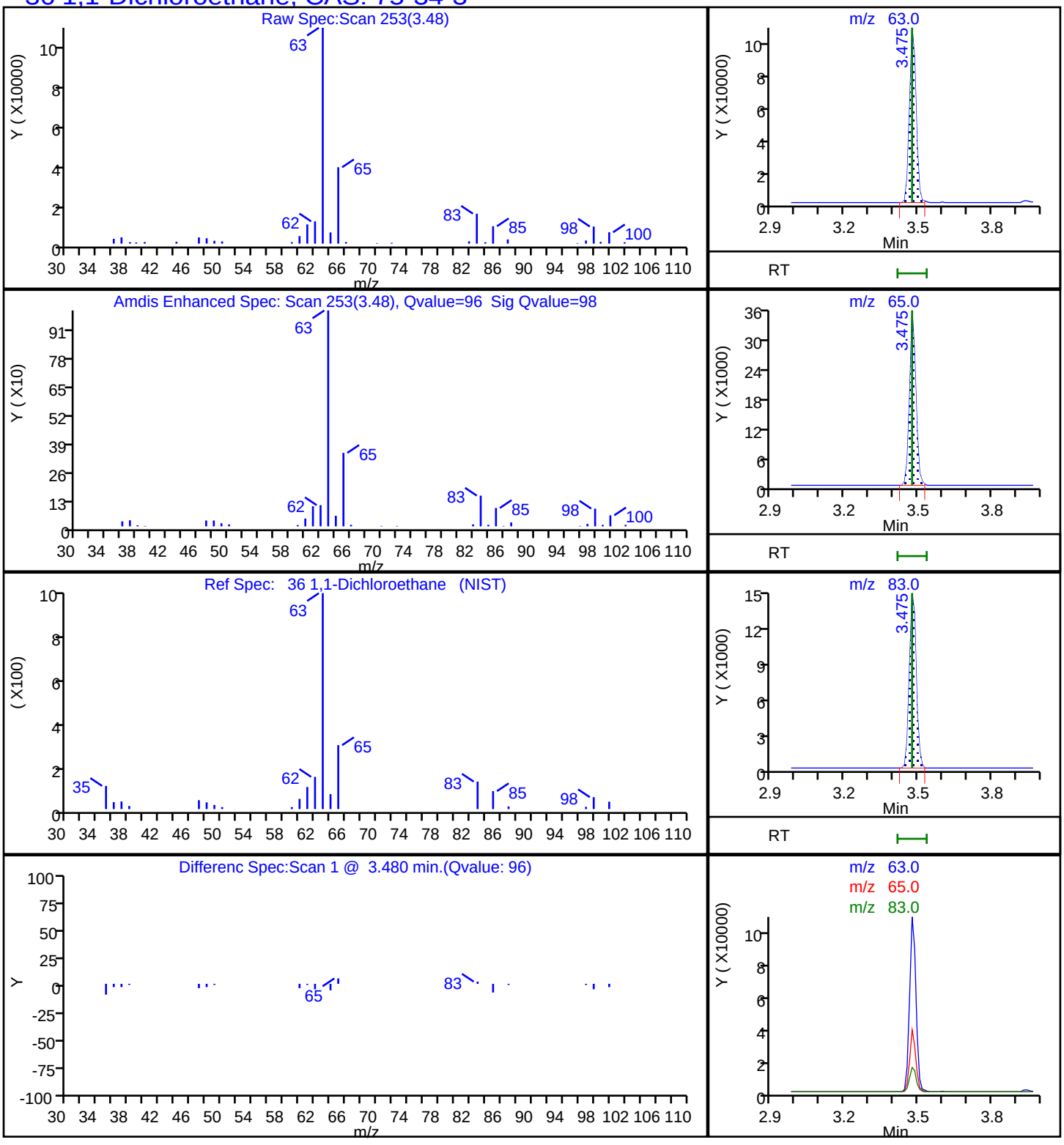


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D

Injection Date:	22-Sep-2019 20:19:30	Instrument ID:	HP5975T
Lims ID:	480-159208-C-7	Lab Sample ID:	480-159208-7
Client ID:	356023-GW-MW-7R-98-6		
Operator ID:	RF	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3

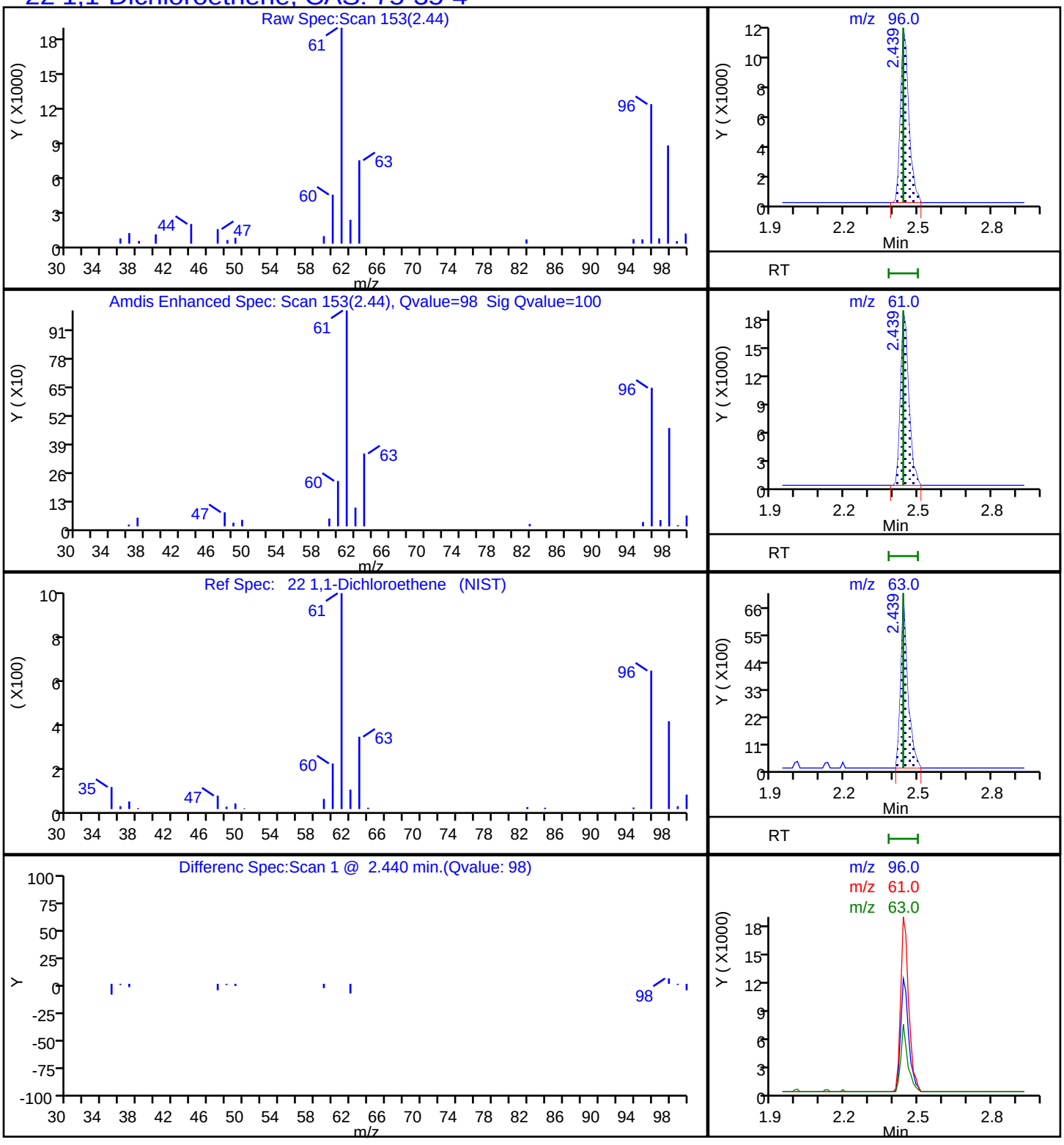


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D

Injection Date:	22-Sep-2019 20:19:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-7	Lab Sample ID:	480-159208-7		
Client ID:	356023-GW-MW-7R-98-6				
Operator ID:	RF	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

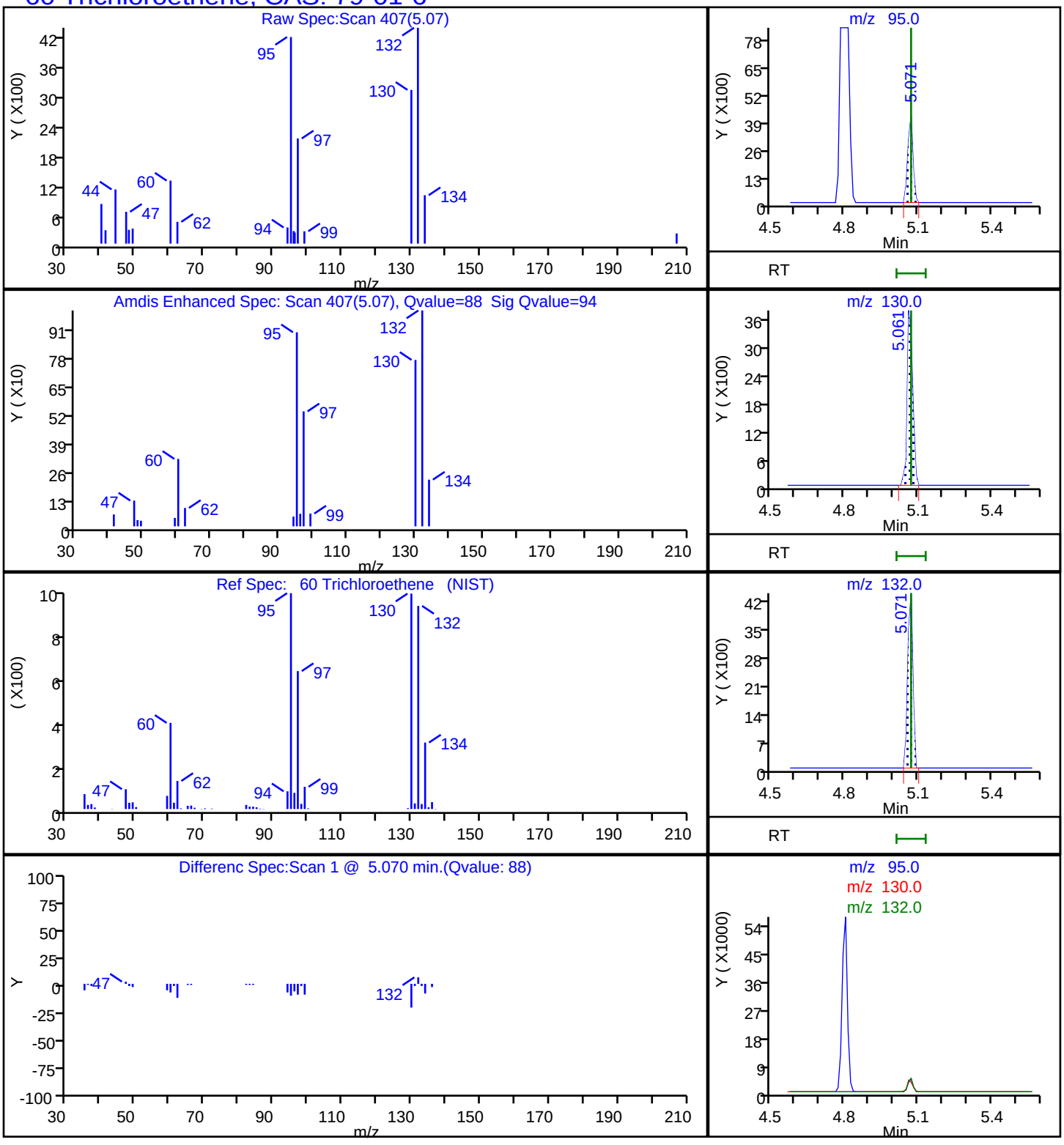
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D				
Injection Date:	22-Sep-2019 20:19:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-7	Lab Sample ID:	480-159208-7		
Client ID:	356023-GW-MW-7R-98-6				
Operator ID:	RF	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



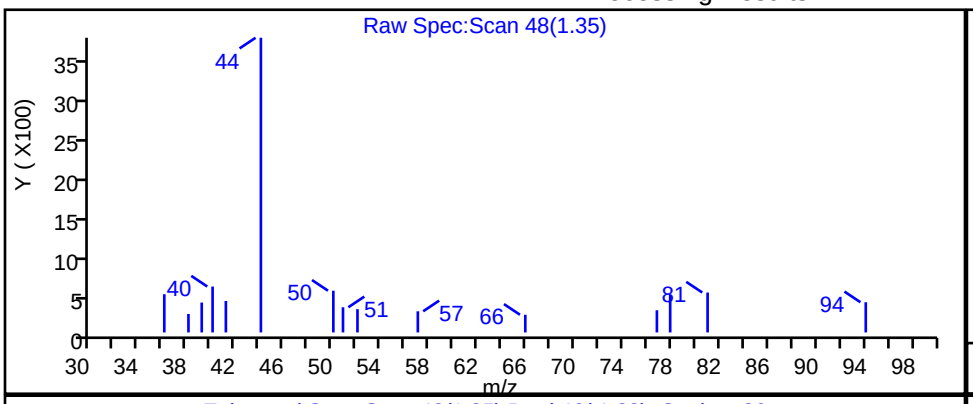
User Disabled Compound Report

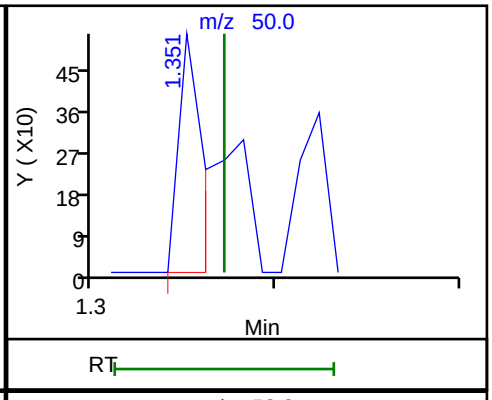
Eurofins TestAmerica, Buffalo

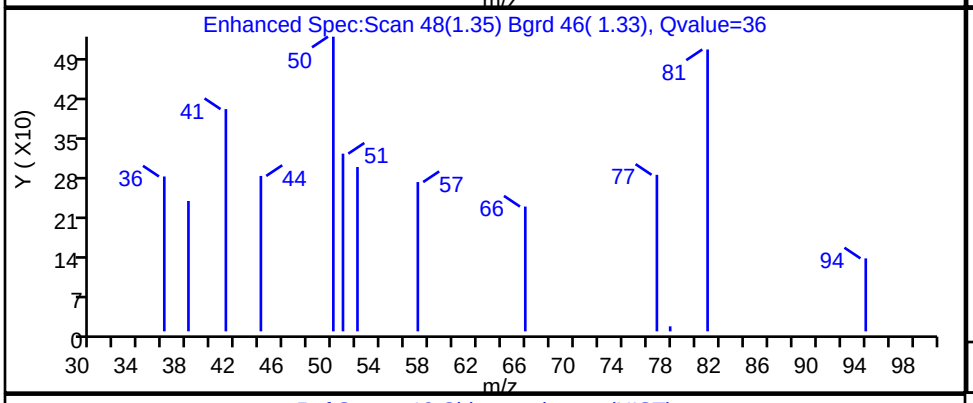
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5409.D				
Injection Date:	22-Sep-2019 20:19:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-7	Lab Sample ID:	480-159208-7		
Client ID:	356023-GW-MW-7R-98-6				
Operator ID:	RF	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

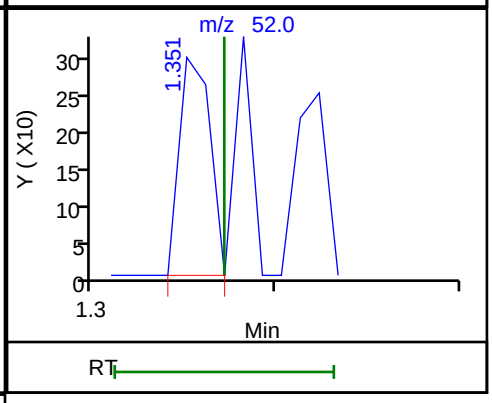
13 Chloromethane, CAS: 74-87-3

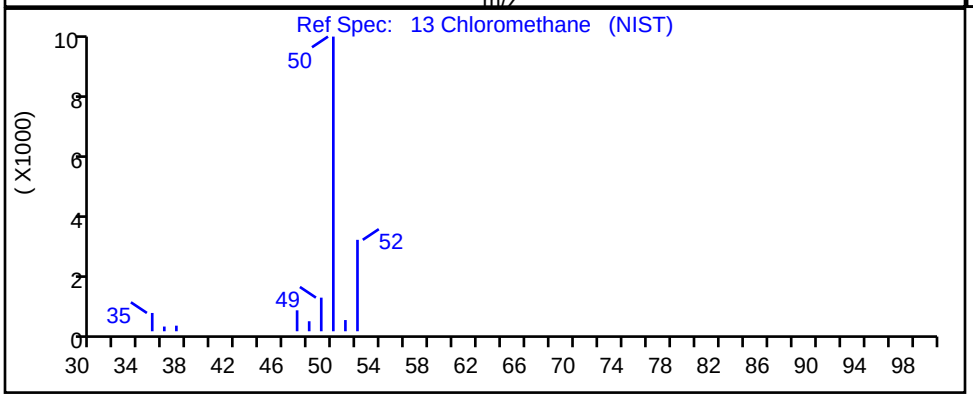
Processing Results











RT	Mass	Response	Amount
1.35	50.00	471	0.039054
1.35	52.00	344	

Reviewer: farrellr, 23-Sep-2019 14:19:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-7 Lab Sample ID: 480-159208-8

Matrix: Water Lab File ID: T5410.D

Analysis Method: 8260C Date Collected: 09/11/2019 12:15

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 20:43

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	310		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	120		10	3.8
75-35-4	1,1-Dichloroethene	31		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-7 Lab Sample ID: 480-159208-8

Matrix: Water Lab File ID: T5410.D

Analysis Method: 8260C Date Collected: 09/11/2019 12:15

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 20:43

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	5.2	J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	112		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D
Lims ID: 480-159208-C-8
Client ID: 356023-GW-MW-7R-98-7
Sample Type: Client
Inject. Date: 22-Sep-2019 20:43:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-c-8
Misc. Info.: 480-0084351-027
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 23-Sep-2019 14:20:29 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: farrellr Date: 23-Sep-2019 14:20:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	181246	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	721362	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	383301	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	92	273592	27.9	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	350484	28.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	953091	24.9	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	301383	25.2	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.371				ND	
14 Vinyl chloride	62		1.454				ND	
15 Bromomethane	94		1.713				ND	
16 Chloroethane	64		1.776				ND	U
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	98	26173	3.05	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449				ND	
23 Acetone	43		2.563				ND	U
25 Carbon disulfide	76		2.625				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84		2.916				ND	
33 Methyl tert-butyl ether	73		3.112				ND	
32 trans-1,2-Dichloroethene	96		3.112				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	189055	11.7	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	79	5462	0.5169	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83		4.201				ND	Ua
52 Cyclohexane	56		4.304				ND	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	461770	30.6	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	92	5237	0.5180	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.910				ND	
73 Toluene	92		6.024				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.905				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.962				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.019				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

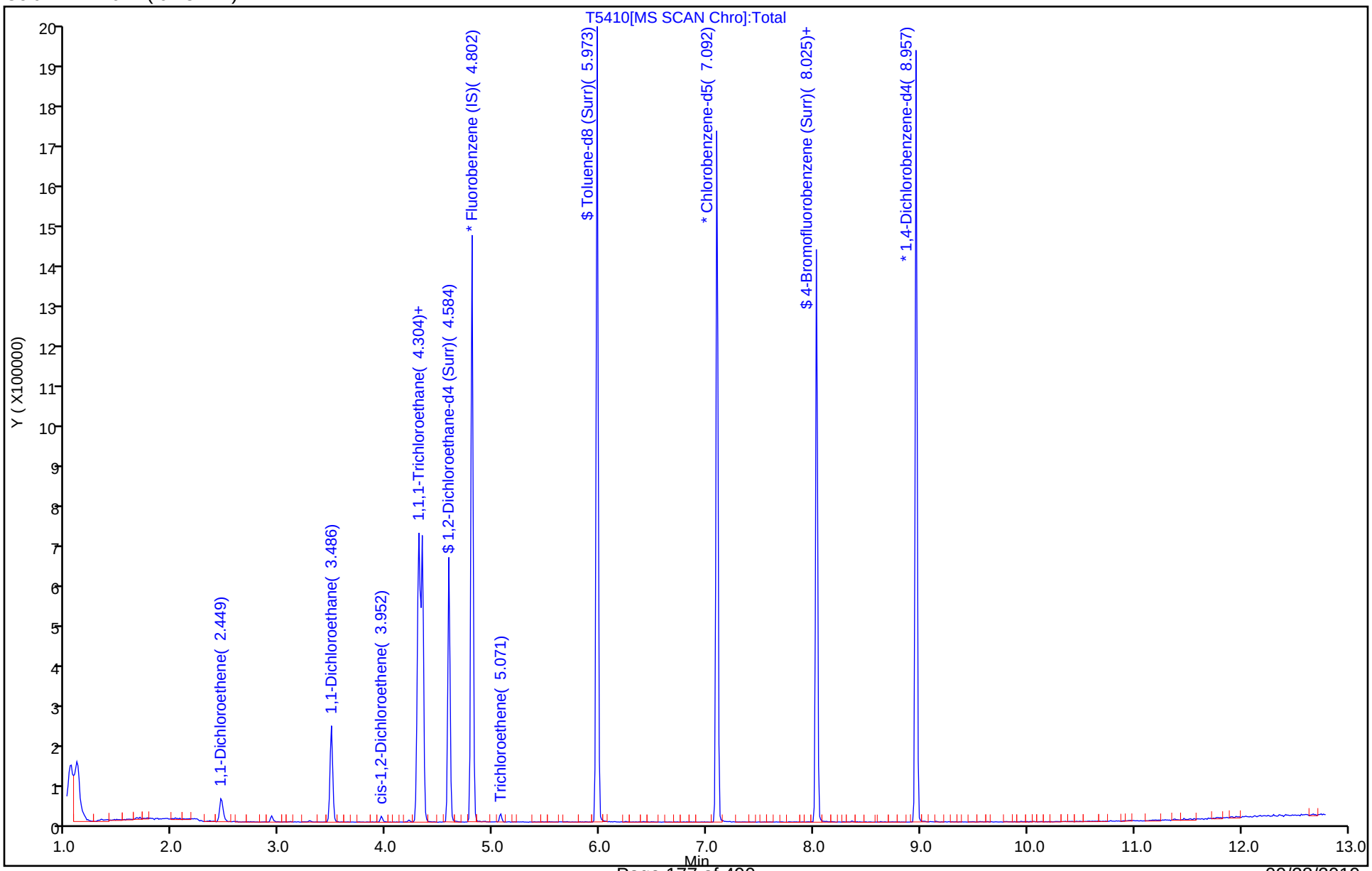
Report Date: 23-Sep-2019 14:20:29 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D

Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8	Worklist Smp#:	27
Client ID:	356023-GW-MW-7R-98-7				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	26
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

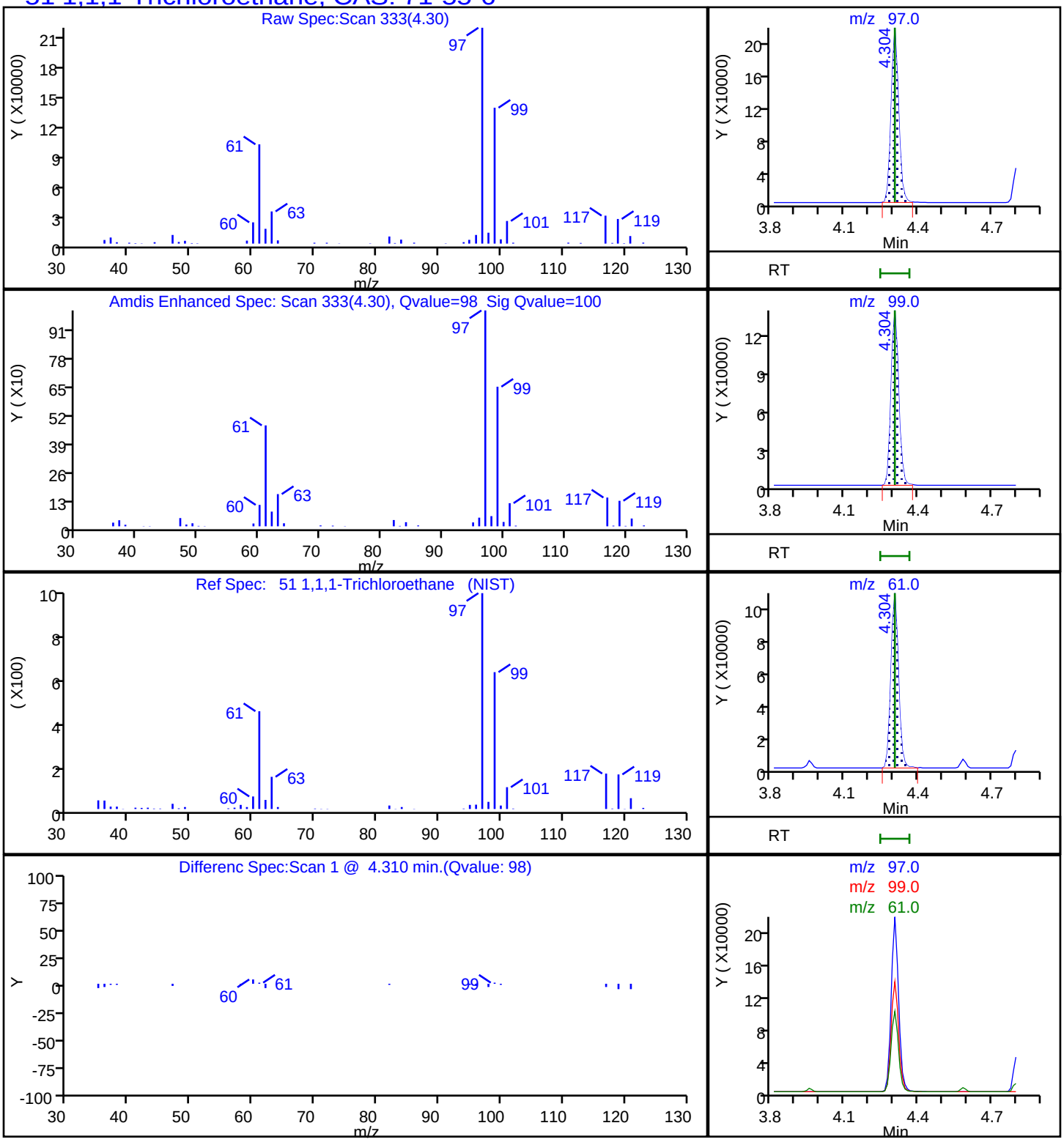
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D				
Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

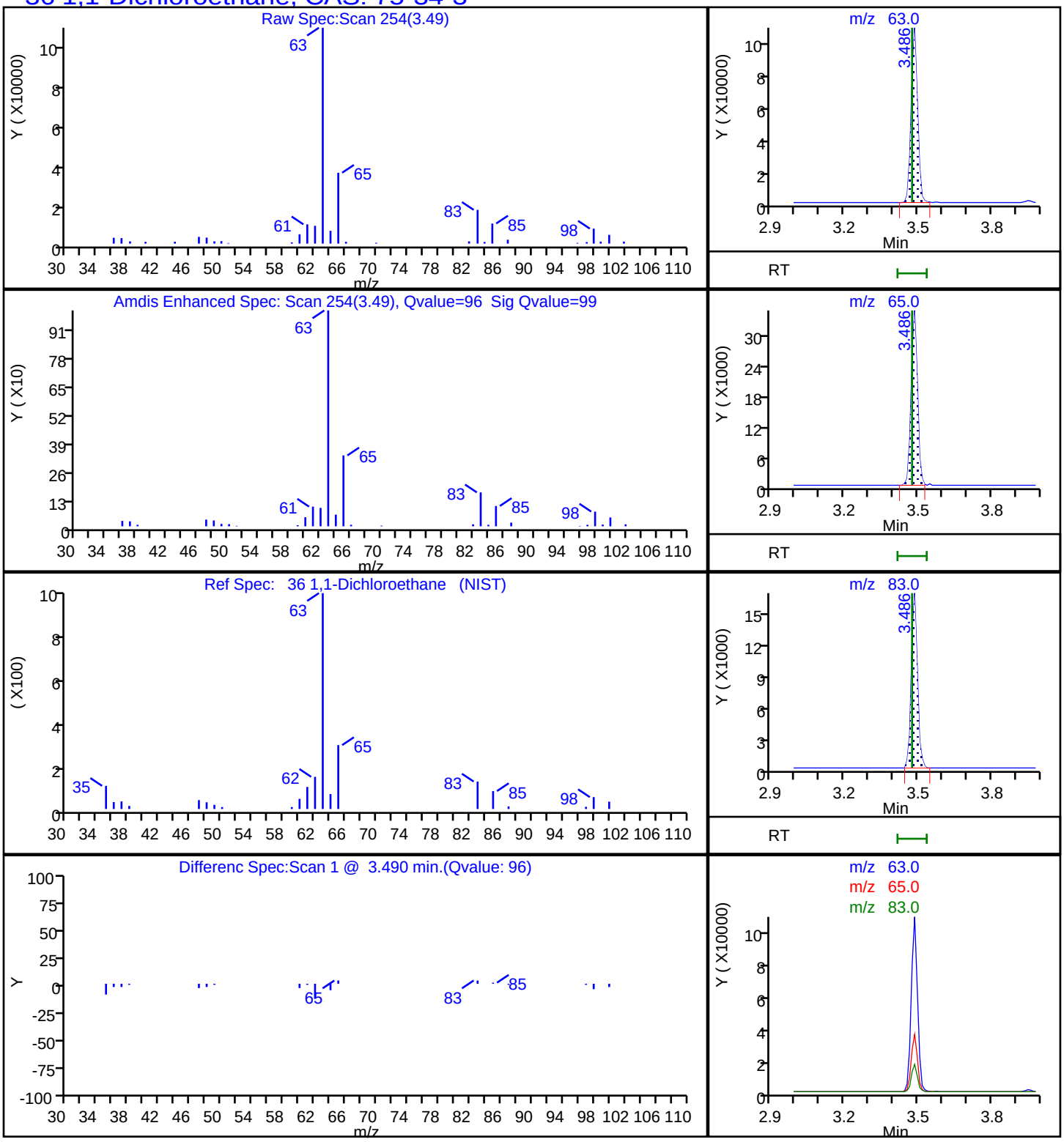
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D				
Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

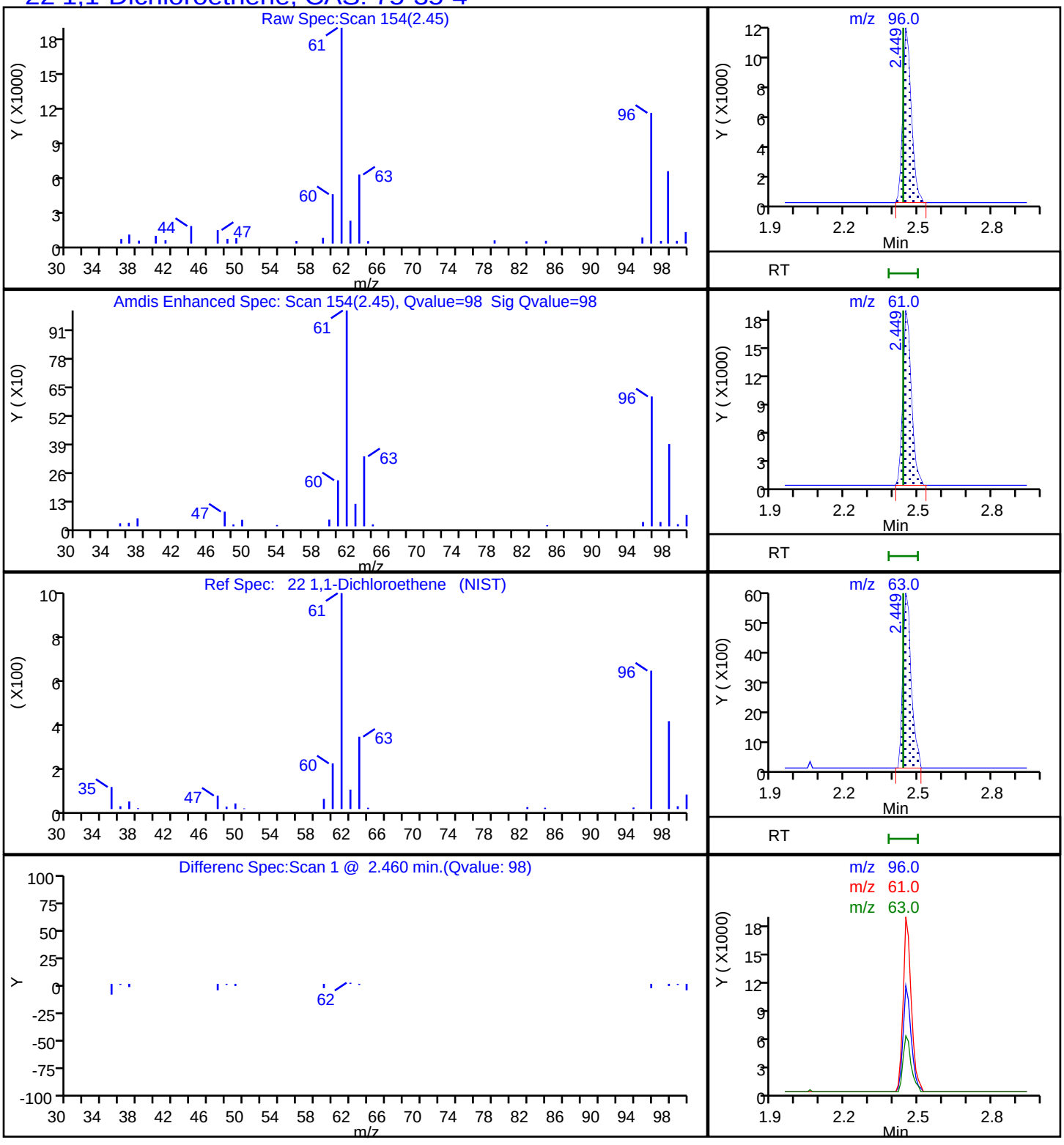


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D

Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

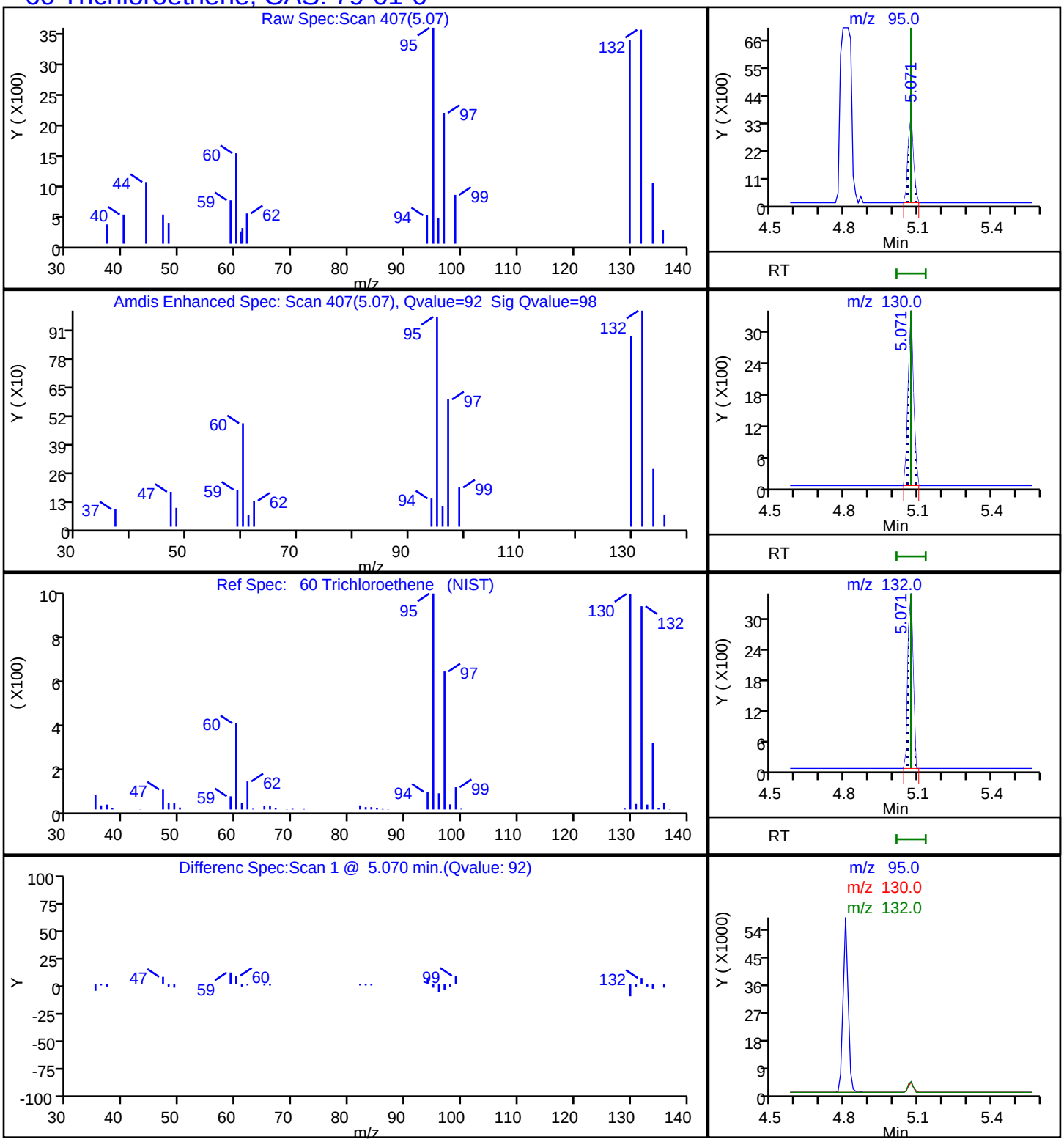
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D				
Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



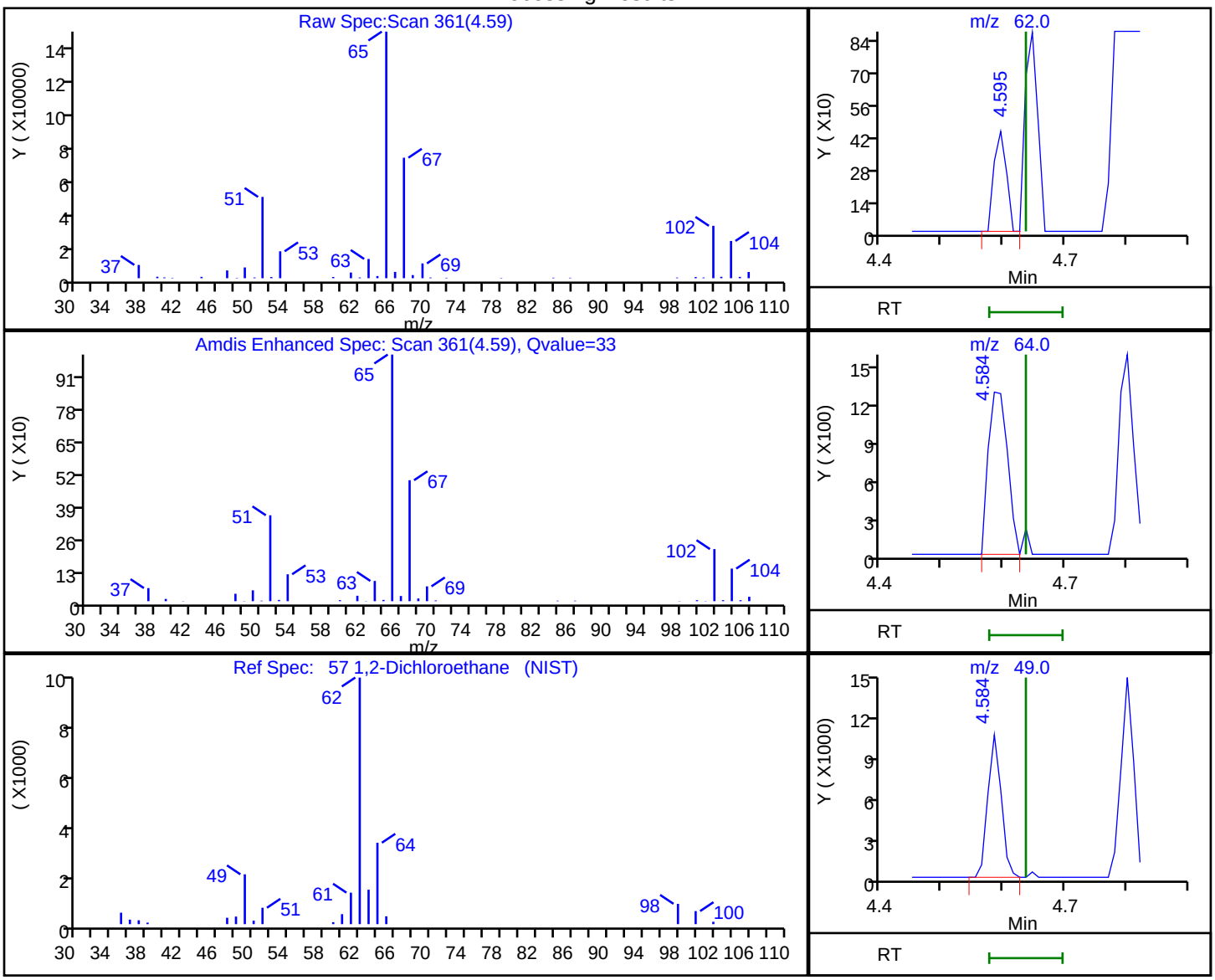
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D				
Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

57 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.59	62.00	618	0.040577
4.58	64.00	2760	
4.58	49.00	15725	

Reviewer: farrellr, 23-Sep-2019 14:20:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

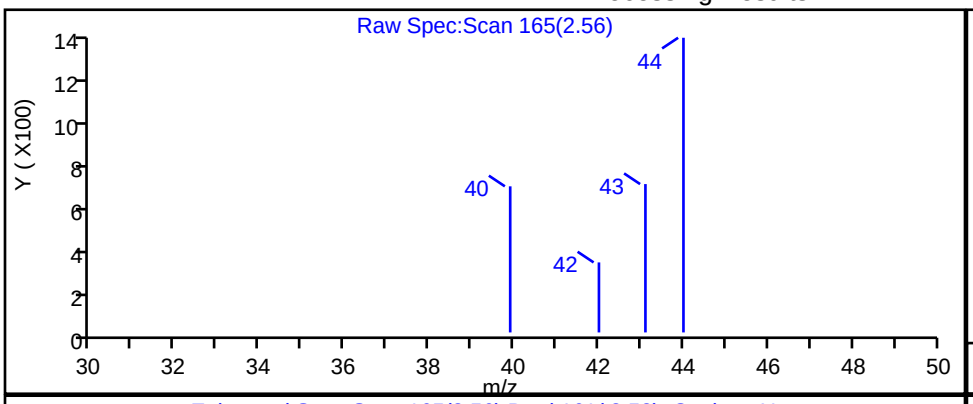
User Disabled Compound Report

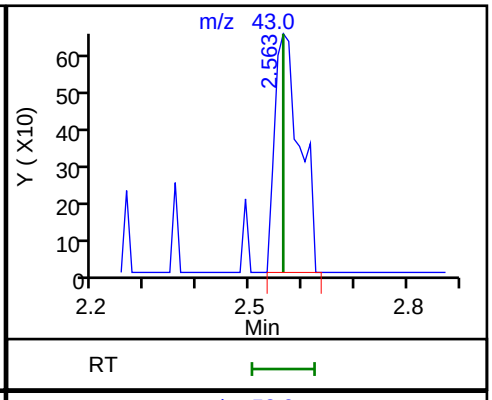
Eurofins TestAmerica, Buffalo

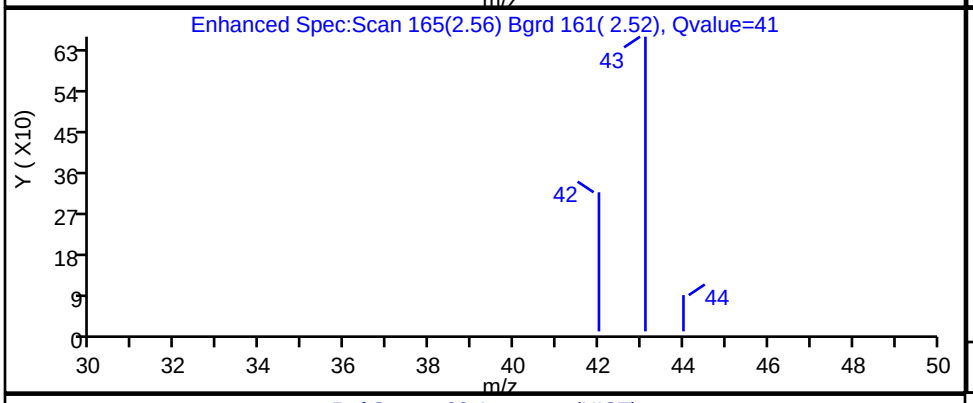
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D				
Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

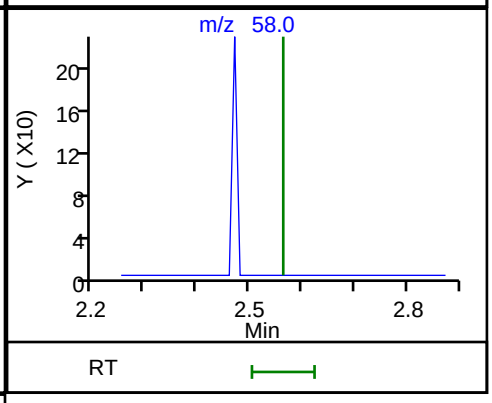
23 Acetone, CAS: 67-64-1

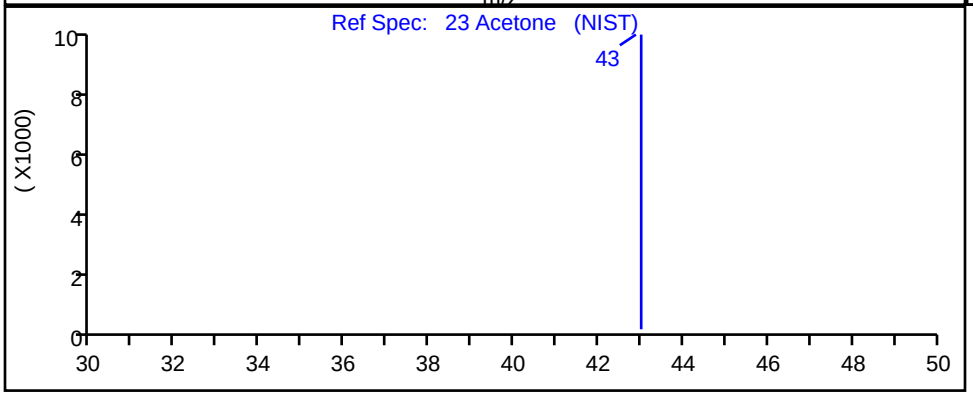
Processing Results











RT	Mass	Response	Amount
2.56	43.00	2211	0.558612
2.56	58.00	0	

Reviewer: farrellr, 23-Sep-2019 14:20:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

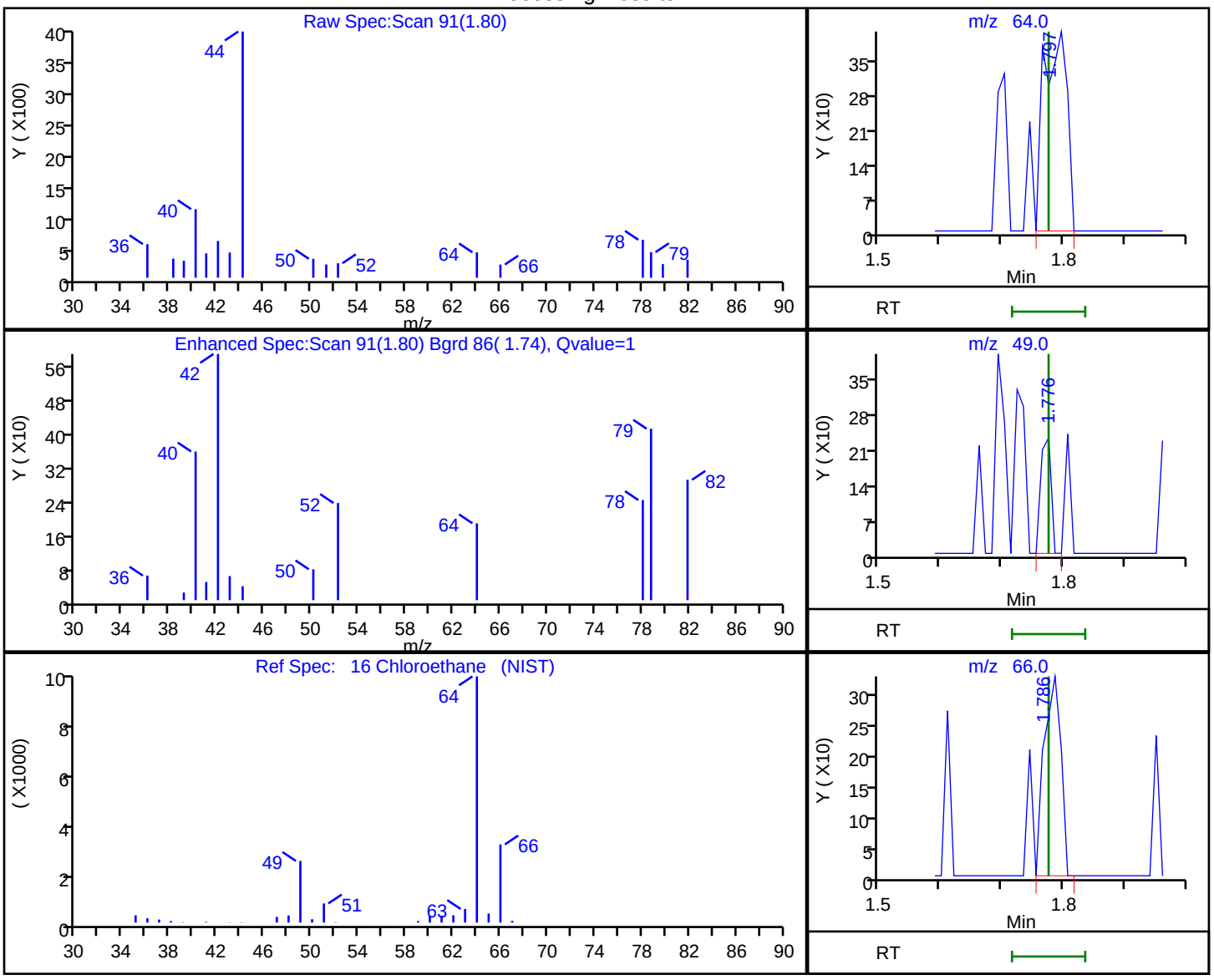
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5410.D				
Injection Date:	22-Sep-2019 20:43:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-8	Lab Sample ID:	480-159208-8		
Client ID:	356023-GW-MW-7R-98-7				
Operator ID:	RF	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
1.80	64.00	1052	0.125618
1.78	49.00	272	
1.79	66.00	629	

Reviewer: farrellr, 23-Sep-2019 14:19:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-8 Lab Sample ID: 480-159208-9

Matrix: Water Lab File ID: T5411.D

Analysis Method: 8260C Date Collected: 09/11/2019 16:55

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 21:07

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	300	F1	10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	120		10	3.8
75-35-4	1,1-Dichloroethene	32		10	2.9
87-61-6	1,2,3-Trichlorobenzene	ND		10	4.1
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
123-91-1	1,4-Dioxane	ND		400	93
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
74-97-5	Bromochloromethane	ND		10	8.7
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-8 Lab Sample ID: 480-159208-9

Matrix: Water Lab File ID: T5411.D

Analysis Method: 8260C Date Collected: 09/11/2019 16:55

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 21:07

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	ND		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	5.5	J	10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	110		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D
Lims ID: 480-159208-C-9
Client ID: 356023-GW-MW-7R-98-8
Sample Type: Client
Inject. Date: 22-Sep-2019 21:07:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-c-9
Misc. Info.: 480-0084351-028
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 23-Sep-2019 14:21:21 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: farrellr Date: 23-Sep-2019 14:21:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	185331	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	715151	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	380831	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	93	276089	27.5	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	347473	27.1	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	945582	24.9	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	300147	25.3	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.371				ND	
14 Vinyl chloride	62		1.454				ND	
15 Bromomethane	94		1.713				ND	
16 Chloroethane	64	1.776	1.776	0.000	43	1436	0.1677	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	98	27802	3.17	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449				ND	
23 Acetone	43	2.564	2.563	0.001	32	1589	0.3926	
25 Carbon disulfide	76		2.625				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84		2.916				ND	
33 Methyl tert-butyl ether	73		3.112				ND	
32 trans-1,2-Dichloroethene	96		3.112				ND	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	193533	11.7	
43 cis-1,2-Dichloroethene	96	3.942	3.952	-0.010	81	5502	0.5092	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.149				ND	
50 Chloroform	83	4.201	4.211	0.000	91	3089	0.1616	
52 Cyclohexane	56		4.304				ND	
51 1,1,1-Trichloroethane	97	4.294	4.304	-0.010	98	461037	29.8	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.061	5.071	-0.010	88	5639	0.5455	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.910				ND	
73 Toluene	92		6.024				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.905				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.962				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.019				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

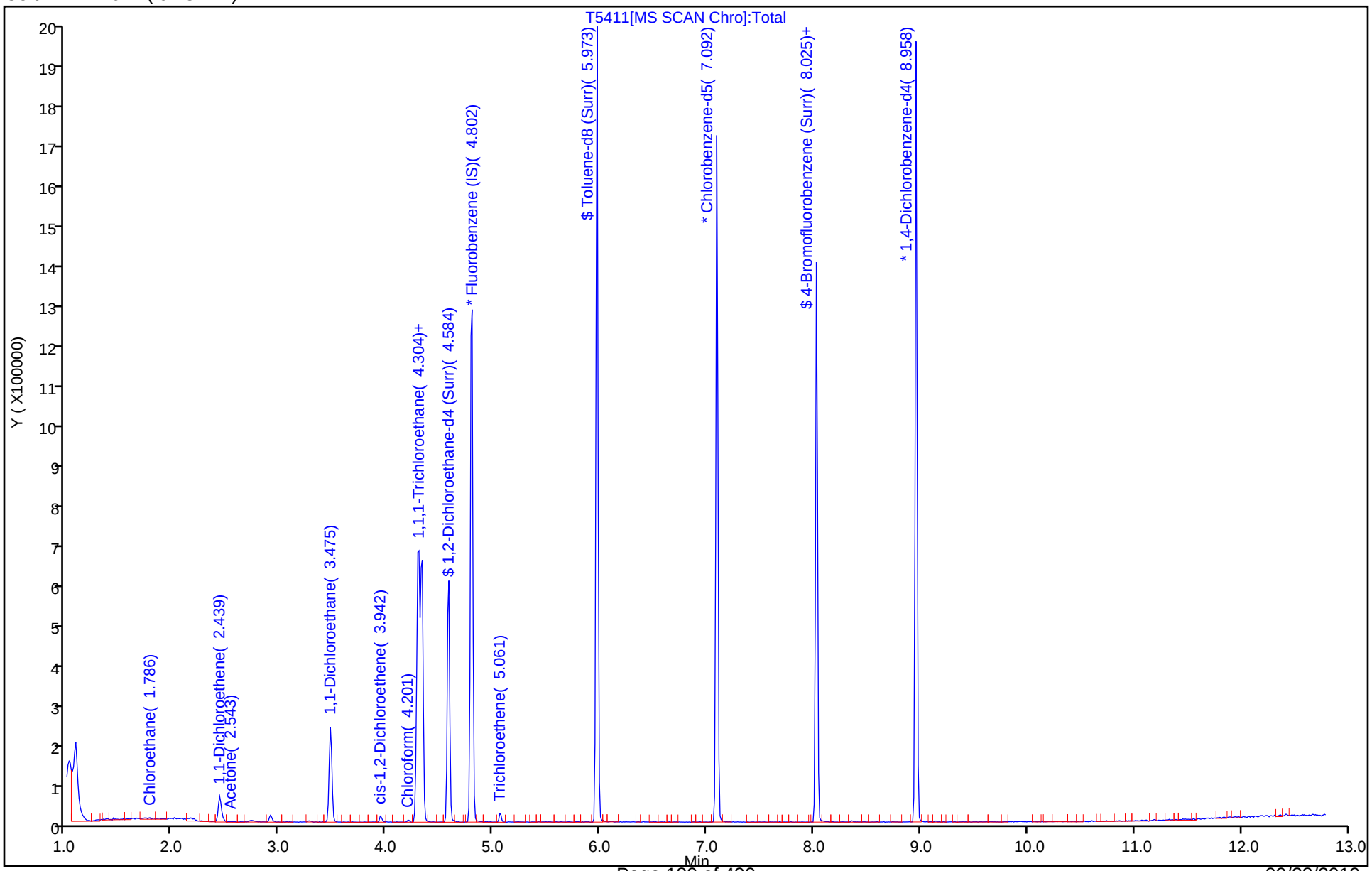
Report Date: 23-Sep-2019 14:21:21 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D

Injection Date:	22-Sep-2019 21:07:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	480-159208-C-9	Lab Sample ID:	480-159208-9	Worklist Smp#:	28
Client ID:	356023-GW-MW-7R-98-8				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	27
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

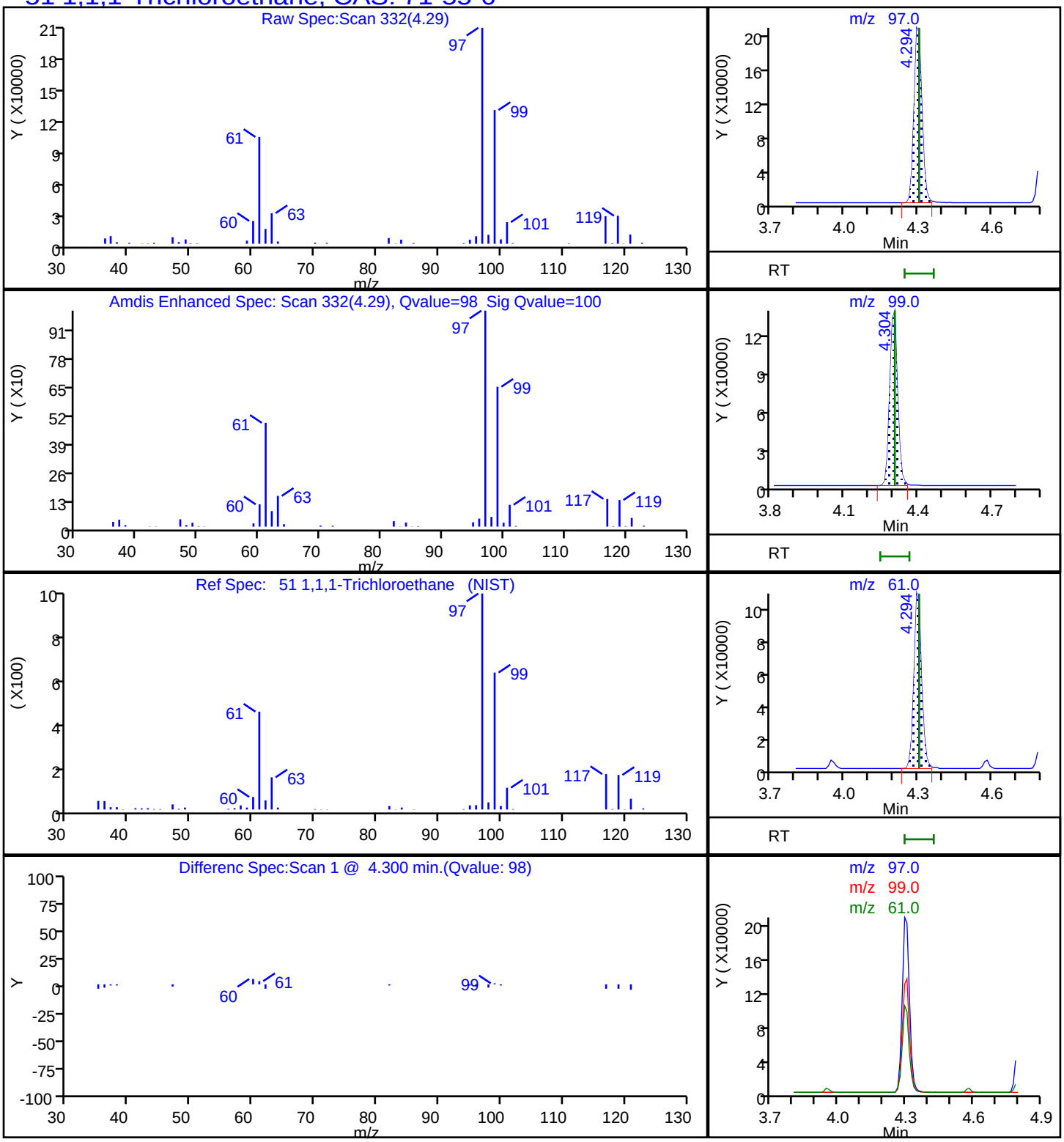
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D				
Injection Date:	22-Sep-2019 21:07:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-9	Lab Sample ID:	480-159208-9		
Client ID:	356023-GW-MW-7R-98-8				
Operator ID:	RF	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

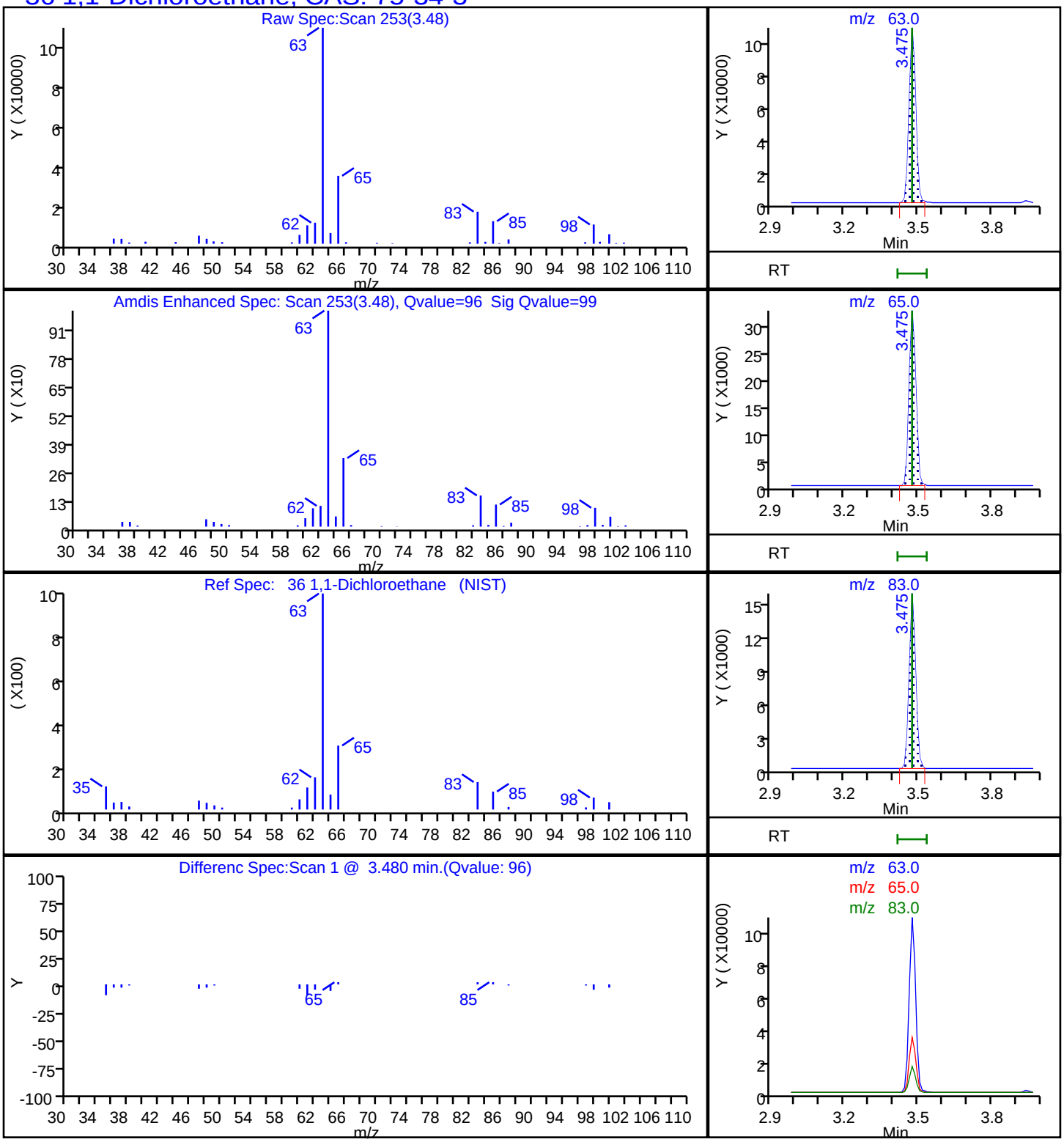
51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D				
Injection Date:	22-Sep-2019 21:07:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-9	Lab Sample ID:	480-159208-9		
Client ID:	356023-GW-MW-7R-98-8				
Operator ID:	RF	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

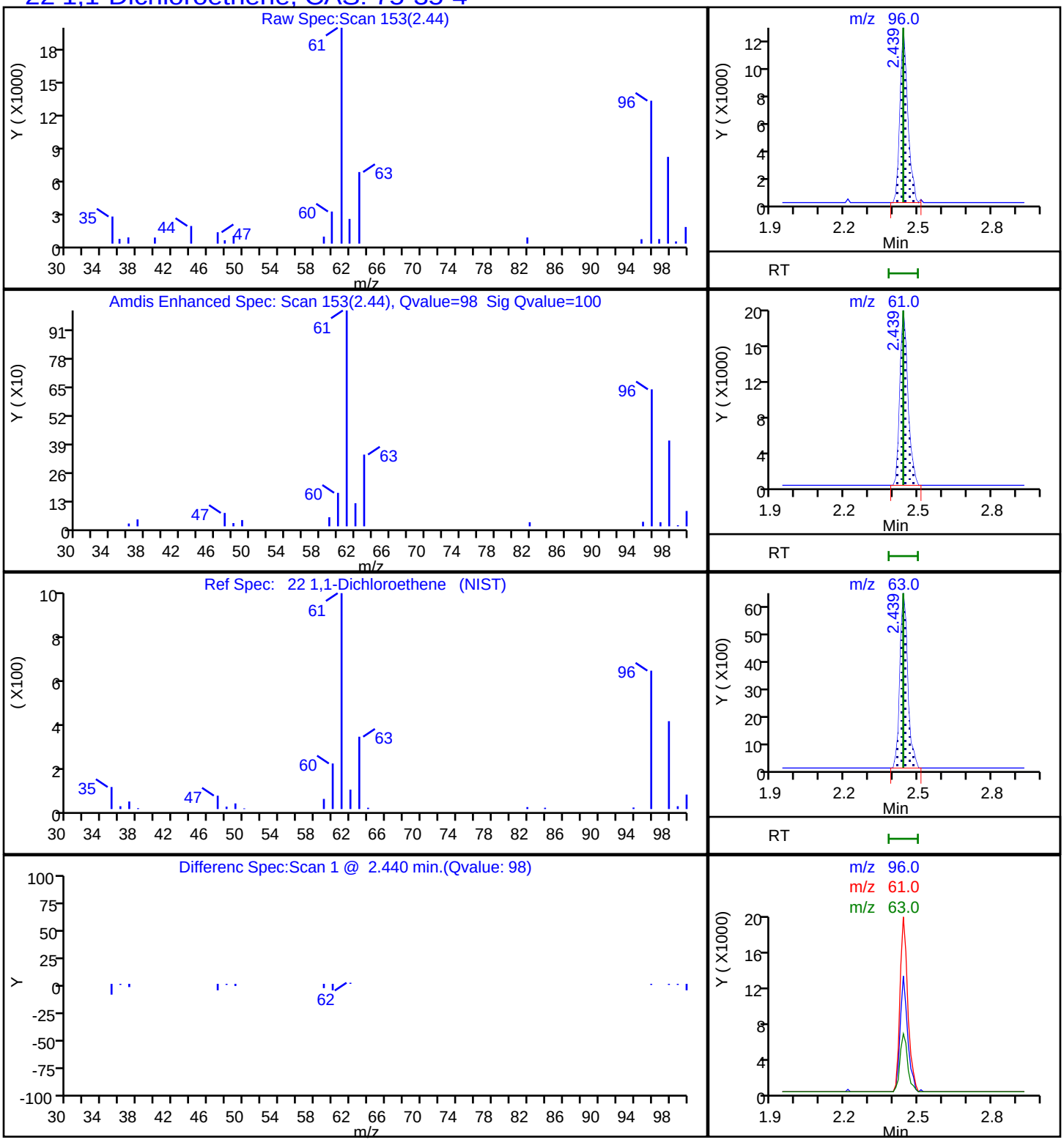
36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D				
Injection Date:	22-Sep-2019 21:07:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-9	Lab Sample ID:	480-159208-9		
Client ID:	356023-GW-MW-7R-98-8				
Operator ID:	RF	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

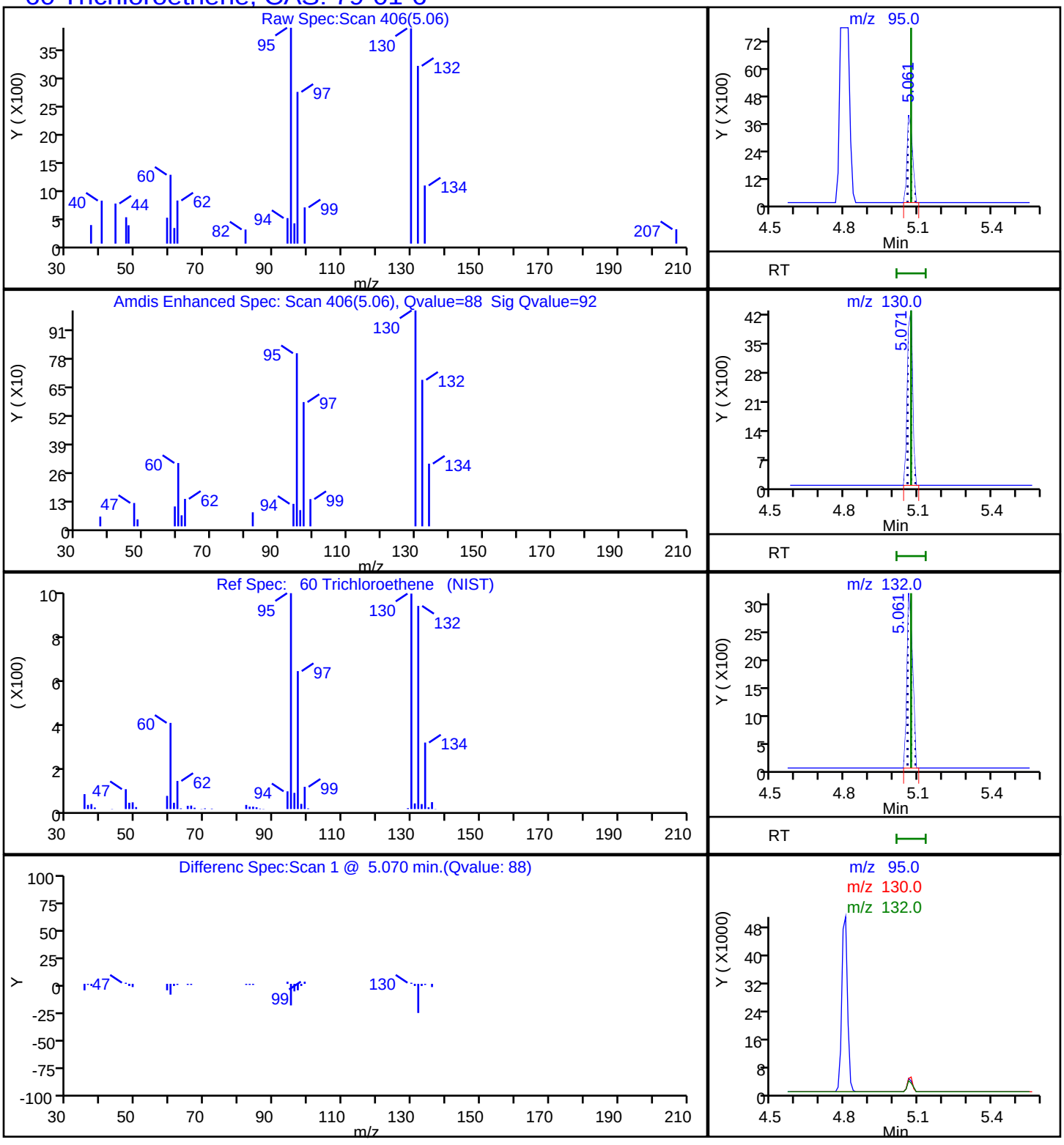
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D				
Injection Date:	22-Sep-2019 21:07:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-9	Lab Sample ID:	480-159208-9		
Client ID:	356023-GW-MW-7R-98-8				
Operator ID:	RF	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



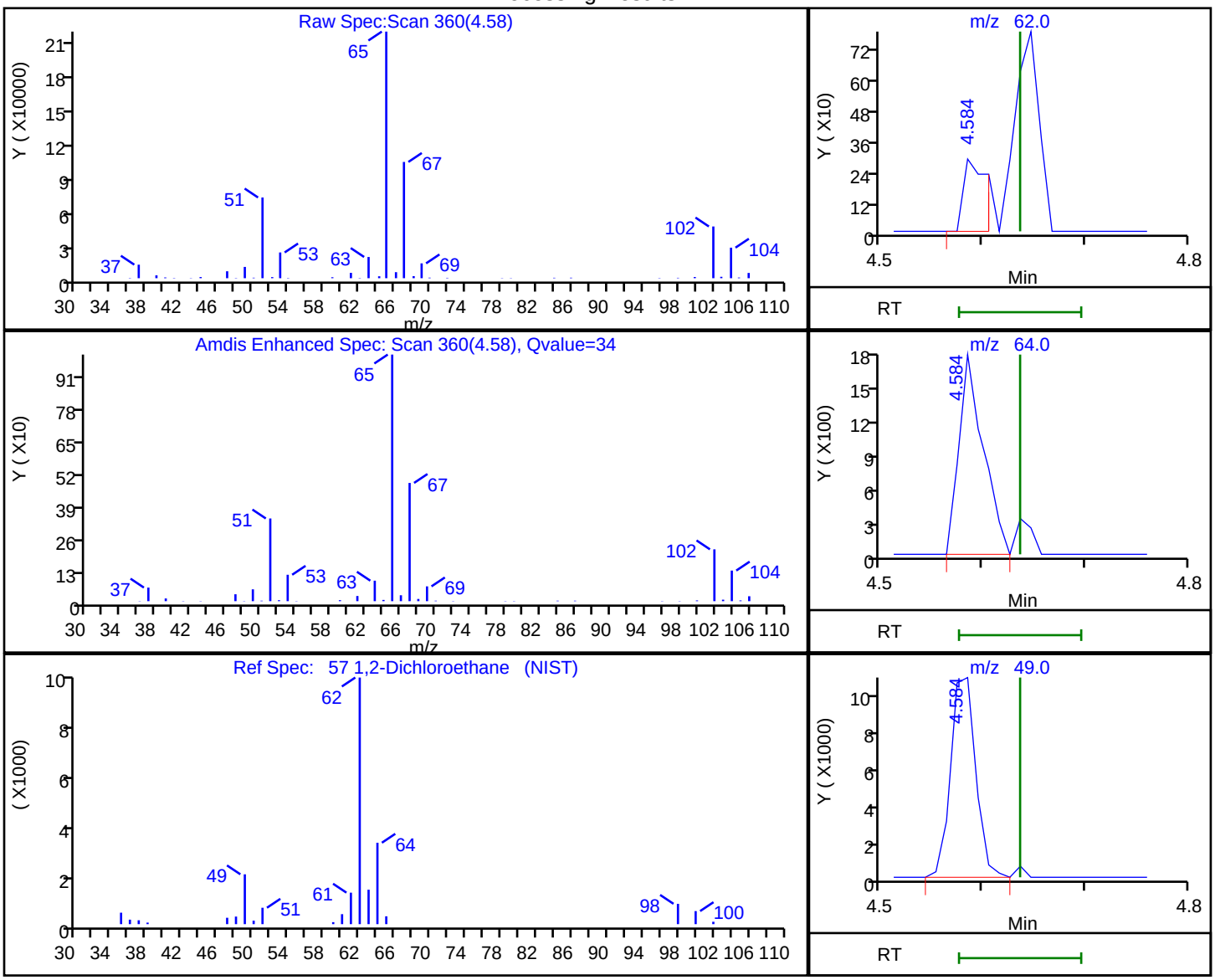
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5411.D				
Injection Date:	22-Sep-2019 21:07:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-C-9	Lab Sample ID:	480-159208-9		
Client ID:	356023-GW-MW-7R-98-8				
Operator ID:	RF	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

57 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.58	62.00	459	0.029473
4.58	64.00	2821	
4.58	49.00	17201	

Reviewer: farrellr, 23-Sep-2019 14:21:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-9 Lab Sample ID: 480-159208-10

Matrix: Water Lab File ID: T5490.D

Analysis Method: 8260C Date Collected: 09/12/2019 07:55

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 15:14

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	300		8.0	6.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		8.0	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5
79-00-5	1,1,2-Trichloroethane	ND		8.0	1.8
75-34-3	1,1-Dichloroethane	110		8.0	3.0
75-35-4	1,1-Dichloroethene	32		8.0	2.3
87-61-6	1,2,3-Trichlorobenzene	ND		8.0	3.3
120-82-1	1,2,4-Trichlorobenzene	ND		8.0	3.3
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	3.1
106-93-4	1,2-Dibromoethane	ND		8.0	5.8
95-50-1	1,2-Dichlorobenzene	ND		8.0	6.3
107-06-2	1,2-Dichloroethane	ND		8.0	1.7
78-87-5	1,2-Dichloropropane	ND		8.0	5.8
541-73-1	1,3-Dichlorobenzene	ND		8.0	6.2
106-46-7	1,4-Dichlorobenzene	ND		8.0	6.7
123-91-1	1,4-Dioxane	ND		320	75
78-93-3	2-Butanone (MEK)	ND		80	11
591-78-6	2-Hexanone	ND		40	9.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	17
67-64-1	Acetone	ND		80	24
71-43-2	Benzene	ND		8.0	3.3
74-97-5	Bromochloromethane	ND		8.0	7.0
75-27-4	Bromodichloromethane	ND		8.0	3.1
75-25-2	Bromoform	ND		8.0	2.1
74-83-9	Bromomethane	ND		8.0	5.5
75-15-0	Carbon disulfide	ND		8.0	1.5
56-23-5	Carbon tetrachloride	ND		8.0	2.2
108-90-7	Chlorobenzene	ND		8.0	6.0
75-00-3	Chloroethane	ND		8.0	2.6
67-66-3	Chloroform	ND		8.0	2.7
74-87-3	Chloromethane	ND		8.0	2.8
156-59-2	cis-1,2-Dichloroethene	ND		8.0	6.5
10061-01-5	cis-1,3-Dichloropropene	ND		8.0	2.9
110-82-7	Cyclohexane	ND		8.0	1.4
124-48-1	Dibromochloromethane	ND		8.0	2.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-9 Lab Sample ID: 480-159208-10

Matrix: Water Lab File ID: T5490.D

Analysis Method: 8260C Date Collected: 09/12/2019 07:55

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 15:14

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		8.0	5.4
100-41-4	Ethylbenzene	ND		8.0	5.9
98-82-8	Isopropylbenzene	ND		8.0	6.3
79-20-9	Methyl acetate	ND		20	10
1634-04-4	Methyl tert-butyl ether	ND		8.0	1.3
108-87-2	Methylcyclohexane	ND		8.0	1.3
75-09-2	Methylene Chloride	ND		8.0	3.5
100-42-5	Styrene	ND		8.0	5.8
127-18-4	Tetrachloroethene	ND		8.0	2.9
108-88-3	Toluene	ND		8.0	4.1
156-60-5	trans-1,2-Dichloroethene	ND		8.0	7.2
10061-02-6	trans-1,3-Dichloropropene	ND		8.0	3.0
79-01-6	Trichloroethene	5.3	J	8.0	3.7
75-69-4	Trichlorofluoromethane	ND		8.0	7.0
75-01-4	Vinyl chloride	ND		8.0	7.2
1330-20-7	Xylenes, Total	ND		16	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D
Lims ID: 480-159208-B-10
Client ID: 356023-GW-MW-7R-98-9
Sample Type: Client
Inject. Date: 24-Sep-2019 15:14:30 ALS Bottle#: 17 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 480-159208-b-10
Misc. Info.: 480-0084408-016
Operator ID: KN Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Sep-2019 10:45:47 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: farrellr Date: 25-Sep-2019 10:45:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	193070	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	785982	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	416931	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.001	93	275064	26.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	344764	25.8	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	960642	23.0	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	311371	23.9	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.454				ND	U
15 Bromomethane	94		1.714				ND	
16 Chloroethane	64		1.776				ND	U
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	98	36218	3.96	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449				ND	
23 Acetone	43	2.574	2.553	0.021	65	1645	0.3902	
25 Carbon disulfide	76		2.625				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84		2.916				ND	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	97	243643	14.1	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	78	6842	0.6078	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.138				ND	
50 Chloroform	83	4.211	4.211	0.010	87	3442	0.1728	
52 Cyclohexane	56		4.304				ND	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	607435	37.7	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.061	0.010	90	7167	0.6655	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.905				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.020				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

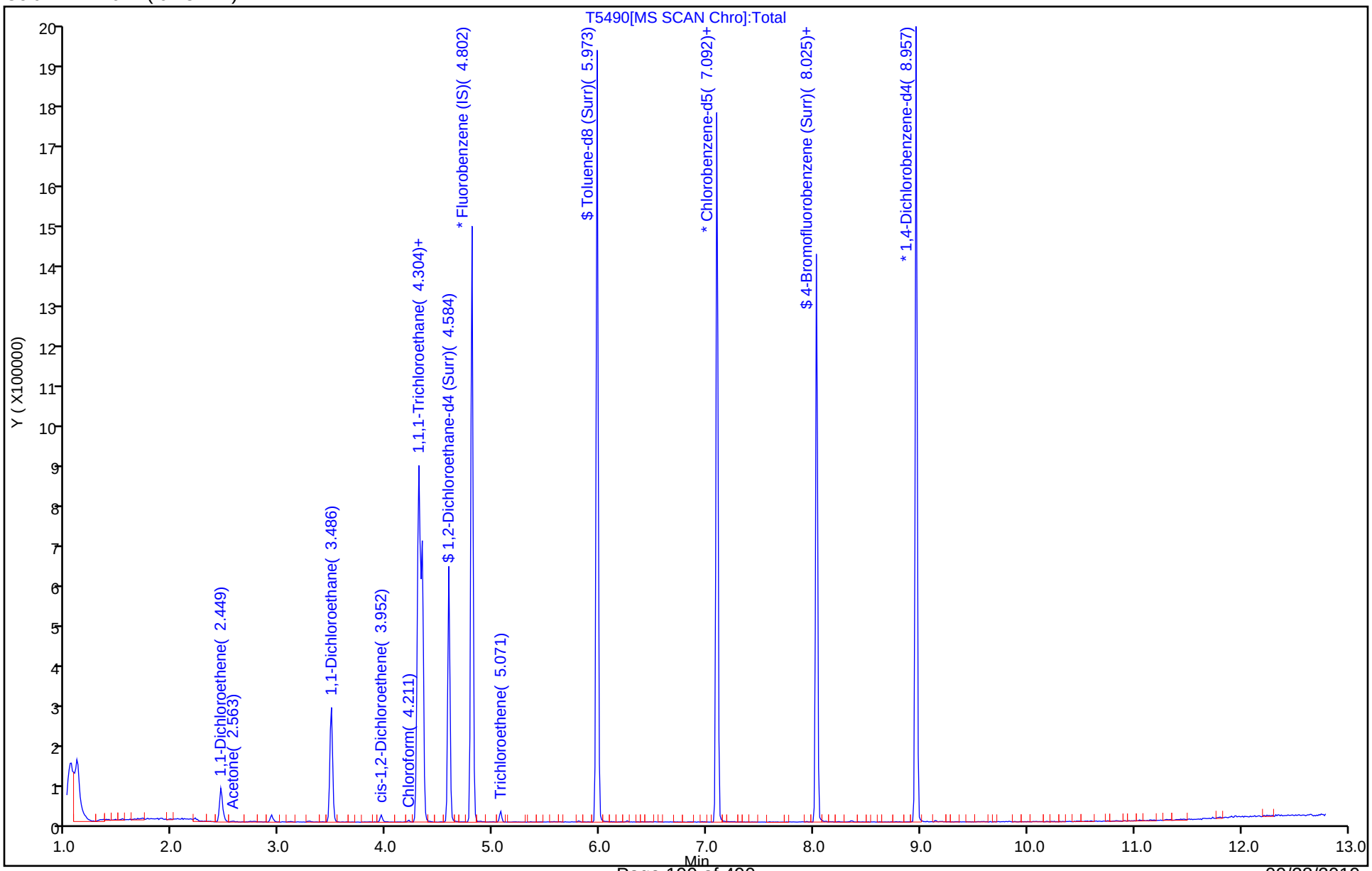
Report Date: 25-Sep-2019 10:45:47 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D

Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T	Operator ID:	KN
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10	Worklist Smp#:	16
Client ID:	356023-GW-MW-7R-98-9				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	17
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

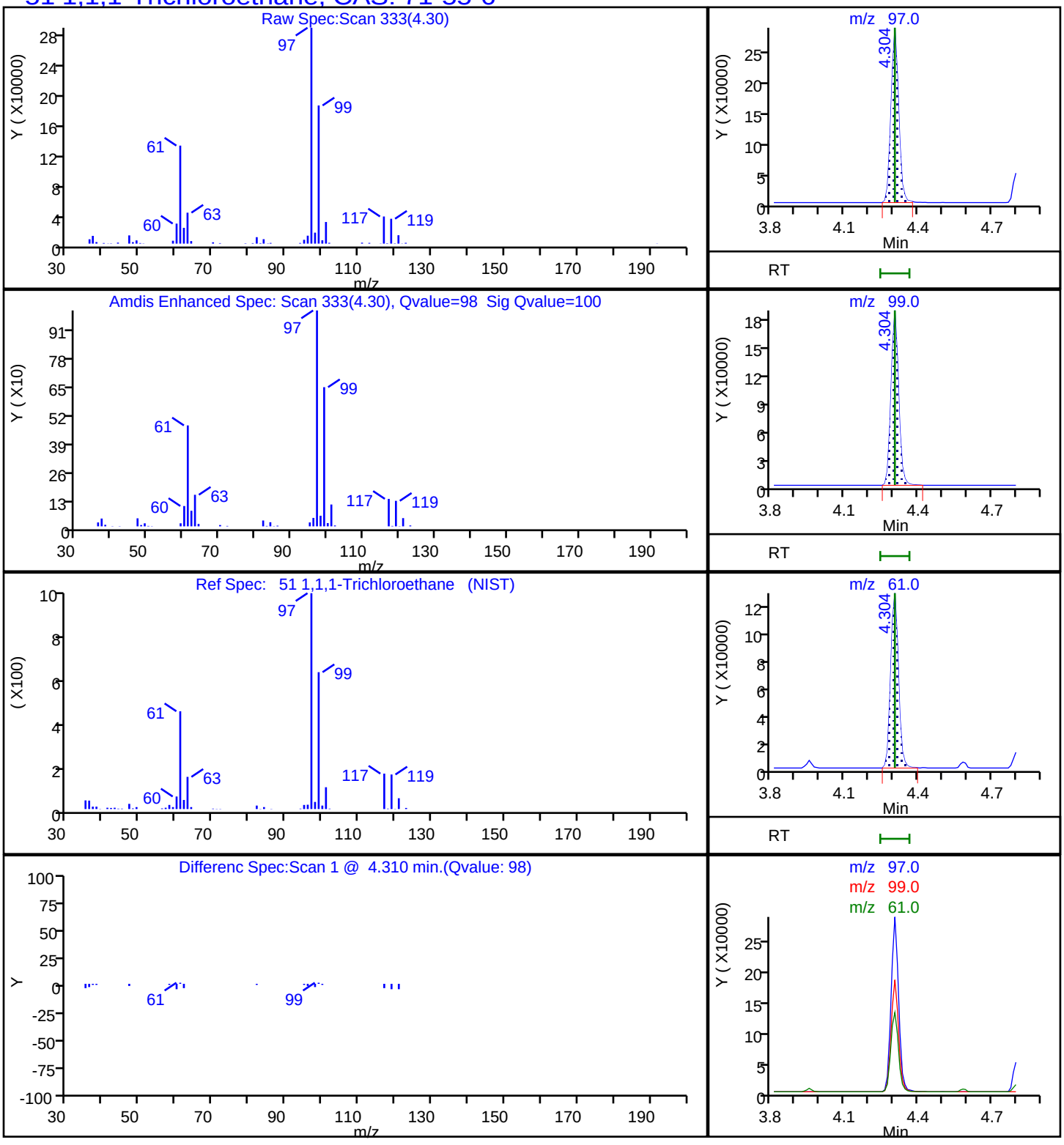


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D

Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10		
Client ID:	356023-GW-MW-7R-98-9				
Operator ID:	KN	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

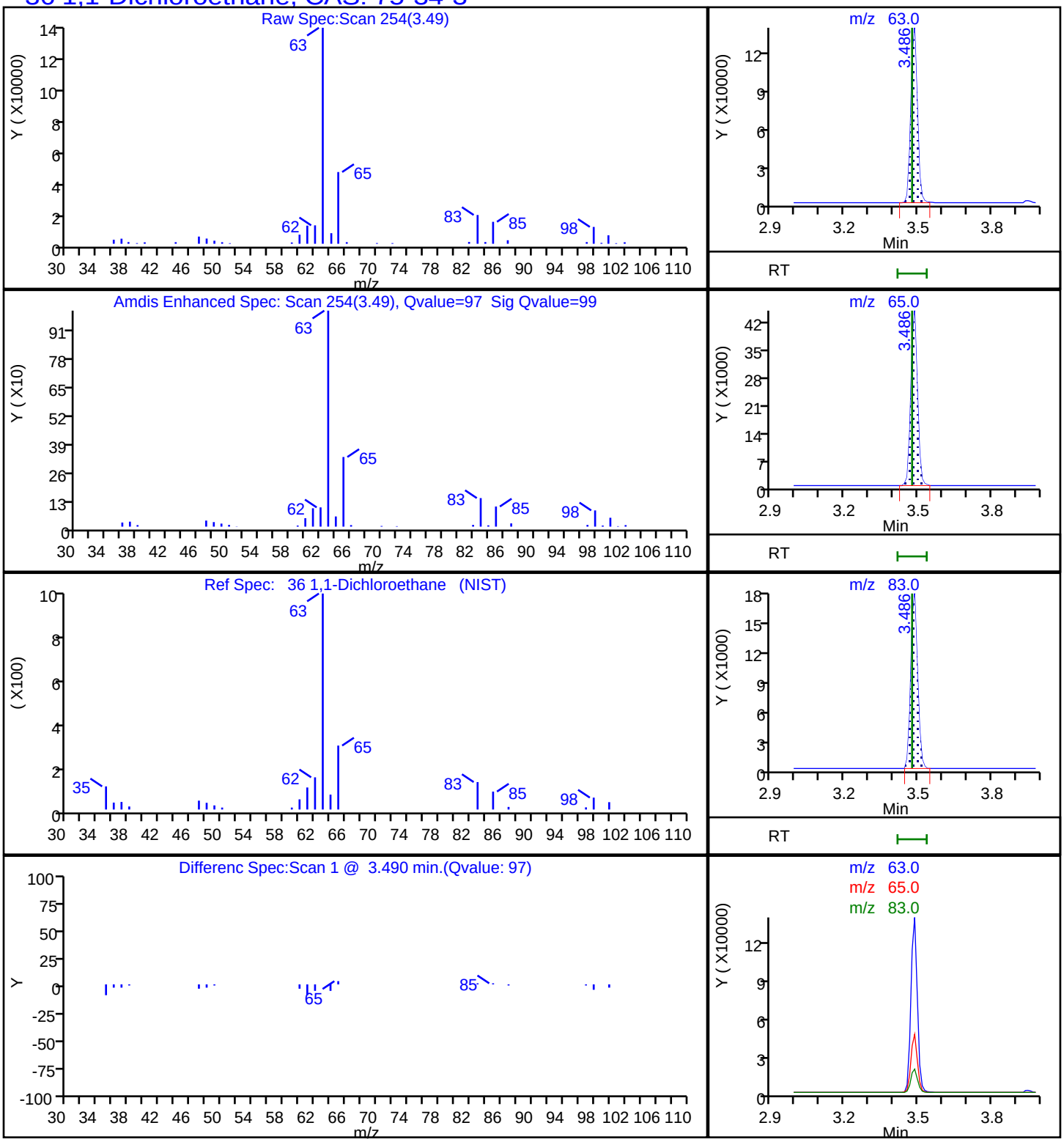


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D

Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10		
Client ID:	356023-GW-MW-7R-98-9				
Operator ID:	KN	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

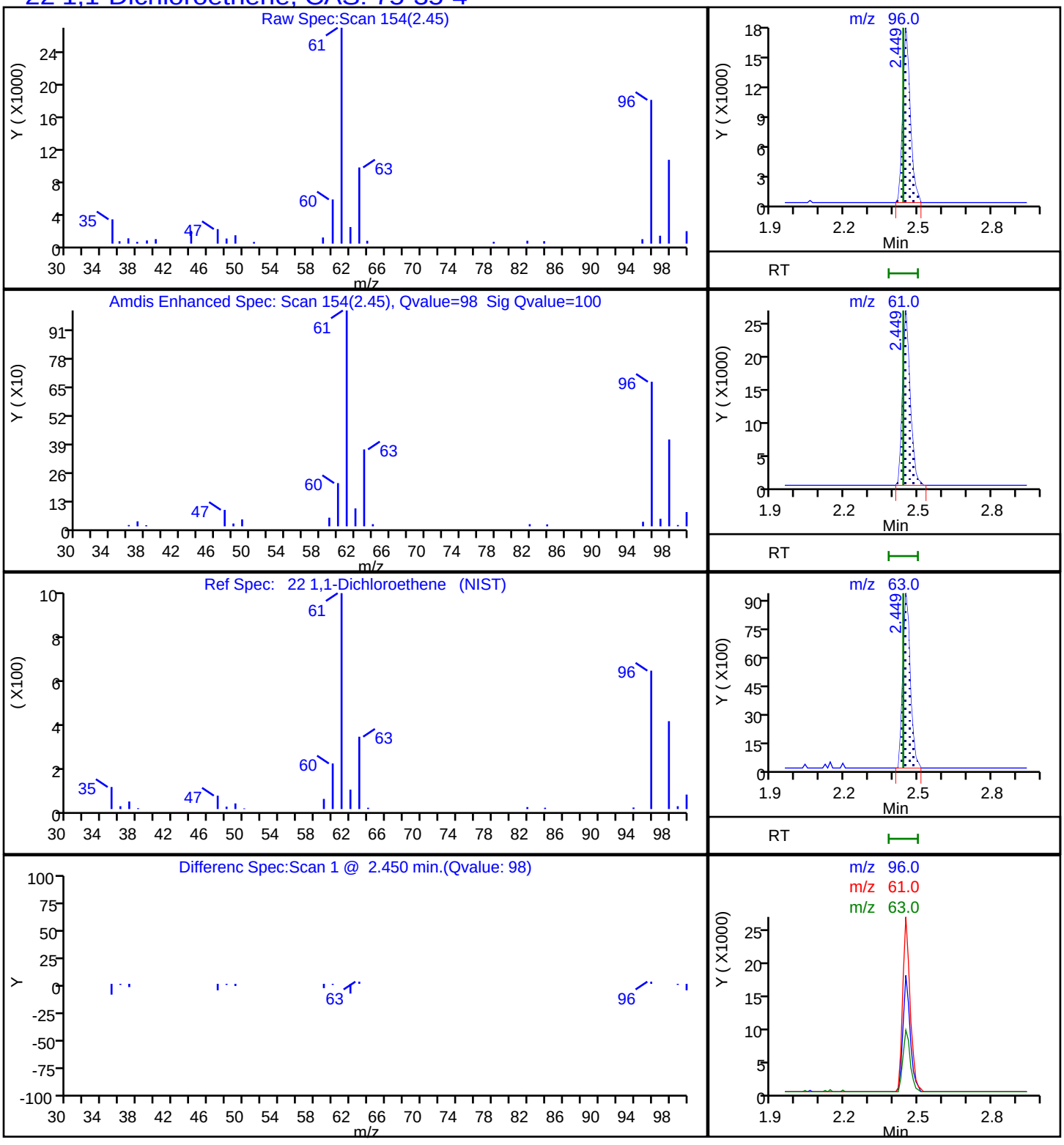


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D

Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10		
Client ID:	356023-GW-MW-7R-98-9				
Operator ID:	KN	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

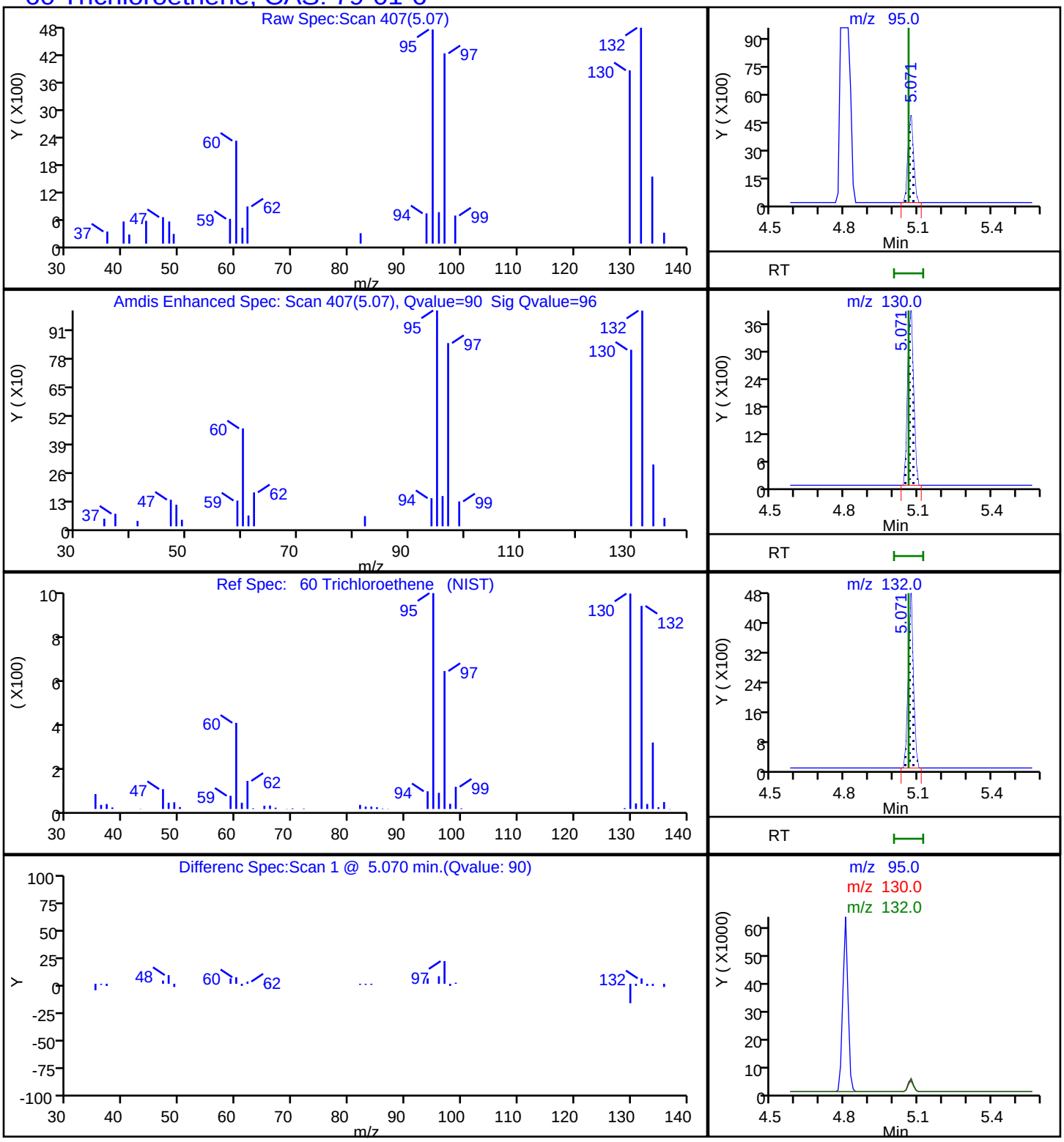
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D		
Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10
Client ID:	356023-GW-MW-7R-98-9		
Operator ID:	KN	ALS Bottle#:	17 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	8.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

60 Trichloroethene, CAS: 79-01-6



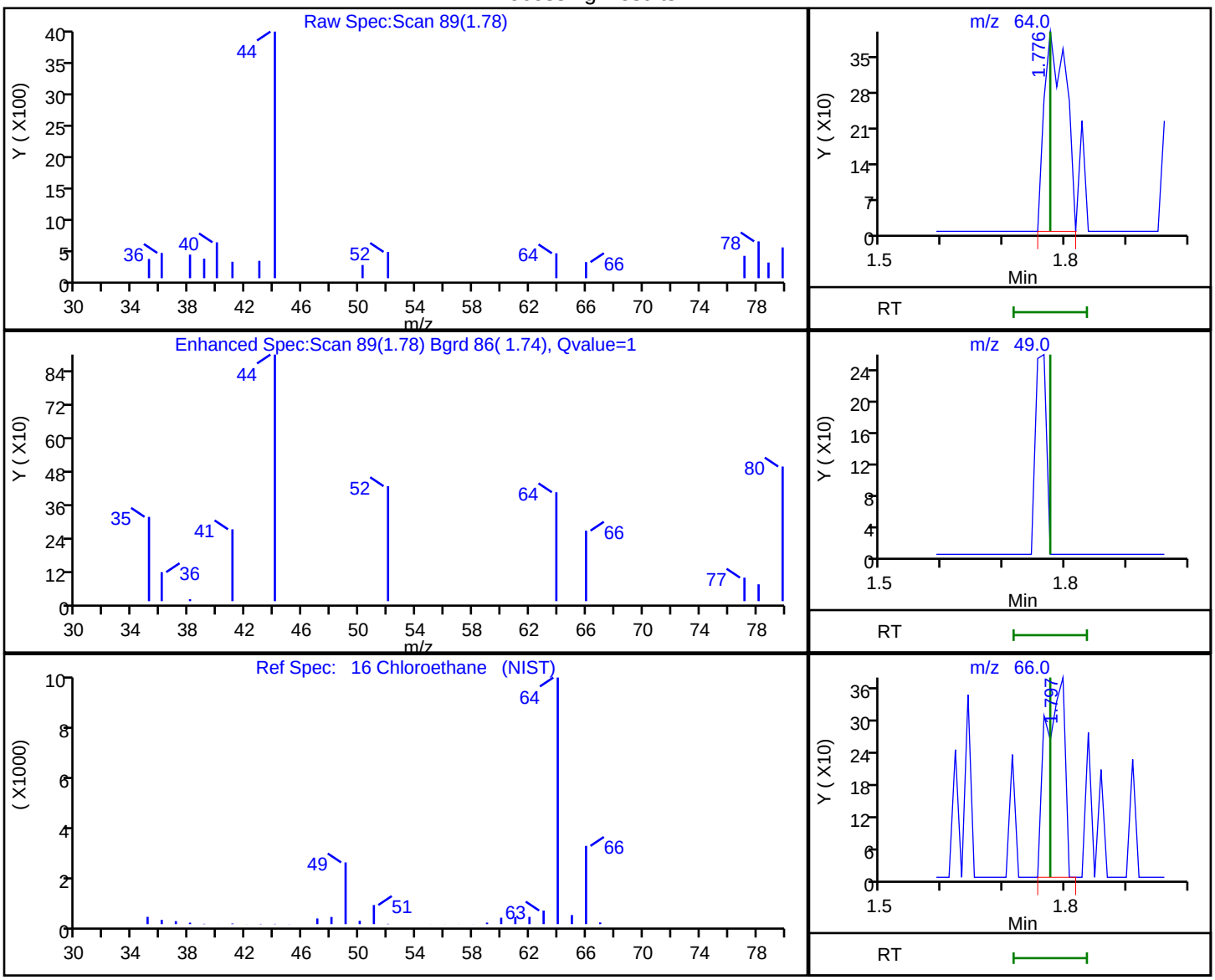
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D				
Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10		
Client ID:	356023-GW-MW-7R-98-9				
Operator ID:	KN	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
1.78	64.00	968	0.108509
1.80	66.00	779	
1.78	49.00	0	

Reviewer: farrellr, 25-Sep-2019 10:43:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

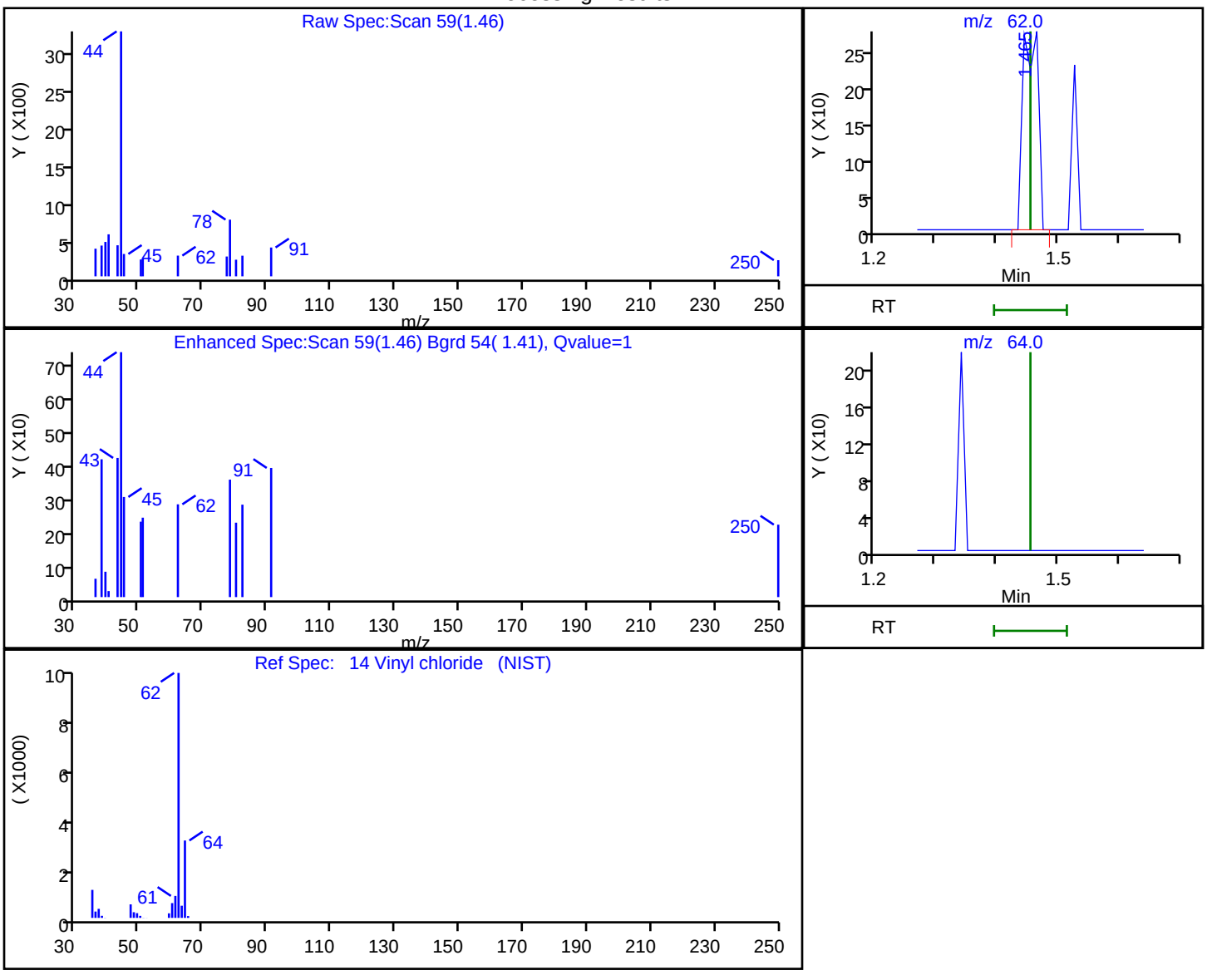
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5490.D				
Injection Date:	24-Sep-2019 15:14:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-10	Lab Sample ID:	480-159208-10		
Client ID:	356023-GW-MW-7R-98-9				
Operator ID:	KN	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.46	62.00	482	0.040009
1.45	64.00	0	

Reviewer: farrellr, 25-Sep-2019 10:42:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-10 Lab Sample ID: 480-159208-11

Matrix: Water Lab File ID: T5491.D

Analysis Method: 8260C Date Collected: 09/12/2019 12:30

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 15:39

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	260		8.0	6.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		8.0	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5
79-00-5	1,1,2-Trichloroethane	ND		8.0	1.8
75-34-3	1,1-Dichloroethane	100		8.0	3.0
75-35-4	1,1-Dichloroethene	28		8.0	2.3
87-61-6	1,2,3-Trichlorobenzene	ND		8.0	3.3
120-82-1	1,2,4-Trichlorobenzene	ND		8.0	3.3
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	3.1
106-93-4	1,2-Dibromoethane	ND		8.0	5.8
95-50-1	1,2-Dichlorobenzene	ND		8.0	6.3
107-06-2	1,2-Dichloroethane	ND		8.0	1.7
78-87-5	1,2-Dichloropropane	ND		8.0	5.8
541-73-1	1,3-Dichlorobenzene	ND		8.0	6.2
106-46-7	1,4-Dichlorobenzene	ND		8.0	6.7
123-91-1	1,4-Dioxane	ND		320	75
78-93-3	2-Butanone (MEK)	ND		80	11
591-78-6	2-Hexanone	ND		40	9.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	17
67-64-1	Acetone	ND		80	24
71-43-2	Benzene	ND		8.0	3.3
74-97-5	Bromochloromethane	ND		8.0	7.0
75-27-4	Bromodichloromethane	ND		8.0	3.1
75-25-2	Bromoform	ND		8.0	2.1
74-83-9	Bromomethane	ND		8.0	5.5
75-15-0	Carbon disulfide	ND		8.0	1.5
56-23-5	Carbon tetrachloride	ND		8.0	2.2
108-90-7	Chlorobenzene	ND		8.0	6.0
75-00-3	Chloroethane	ND		8.0	2.6
67-66-3	Chloroform	ND		8.0	2.7
74-87-3	Chloromethane	ND		8.0	2.8
156-59-2	cis-1,2-Dichloroethene	ND		8.0	6.5
10061-01-5	cis-1,3-Dichloropropene	ND		8.0	2.9
110-82-7	Cyclohexane	ND		8.0	1.4
124-48-1	Dibromochloromethane	ND		8.0	2.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-10 Lab Sample ID: 480-159208-11

Matrix: Water Lab File ID: T5491.D

Analysis Method: 8260C Date Collected: 09/12/2019 12:30

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 15:39

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		8.0	5.4
100-41-4	Ethylbenzene	ND		8.0	5.9
98-82-8	Isopropylbenzene	ND		8.0	6.3
79-20-9	Methyl acetate	ND		20	10
1634-04-4	Methyl tert-butyl ether	ND		8.0	1.3
108-87-2	Methylcyclohexane	ND		8.0	1.3
75-09-2	Methylene Chloride	ND		8.0	3.5
100-42-5	Styrene	ND		8.0	5.8
127-18-4	Tetrachloroethene	ND		8.0	2.9
108-88-3	Toluene	ND		8.0	4.1
156-60-5	trans-1,2-Dichloroethene	ND		8.0	7.2
10061-02-6	trans-1,3-Dichloropropene	ND		8.0	3.0
79-01-6	Trichloroethene	4.7	J	8.0	3.7
75-69-4	Trichlorofluoromethane	ND		8.0	7.0
75-01-4	Vinyl chloride	ND		8.0	7.2
1330-20-7	Xylenes, Total	ND		16	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D
Lims ID: 480-159208-B-11
Client ID: 356023-GW-MW-7R-98-10
Sample Type: Client
Inject. Date: 24-Sep-2019 15:39:30 ALS Bottle#: 18 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 480-159208-b-11
Misc. Info.: 480-0084408-017
Operator ID: KN Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Sep-2019 10:49:42 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: farrellr Date: 25-Sep-2019 10:49:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	197469	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	767914	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	405561	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.001	92	277515	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	348646	25.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	961441	23.6	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	320117	25.1	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	U
14 Vinyl chloride	62		1.454				ND	U
15 Bromomethane	94		1.714				ND	
16 Chloroethane	64		1.776				ND	
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	98	32595	3.49	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449				ND	
23 Acetone	43	2.563	2.553	0.010	62	1448	0.3358	
25 Carbon disulfide	76		2.625				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84		2.916				ND	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	221001	12.5	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	81	5978	0.5192	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.138				ND	
50 Chloroform	83	4.201	4.211	0.000	92	2828	0.1388	
52 Cyclohexane	56		4.304				ND	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	542271	32.9	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	Ua

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.061	5.061	0.000	91	6468	0.5872	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.905				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.020				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

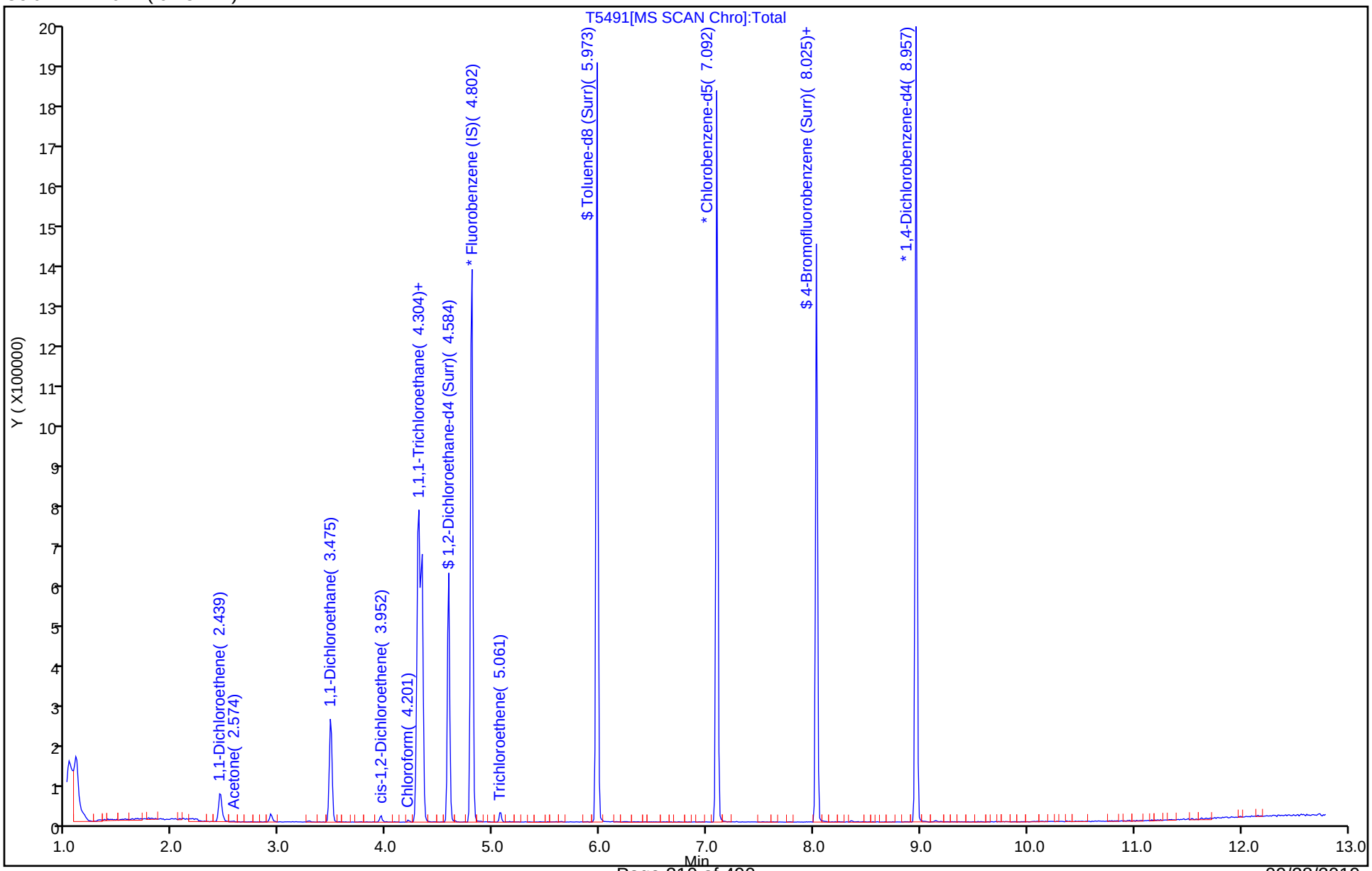
Report Date: 25-Sep-2019 10:49:43 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D

Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T	Operator ID:	KN
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11	Worklist Smp#:	17
Client ID:	356023-GW-MW-7R-98-10				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	18
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

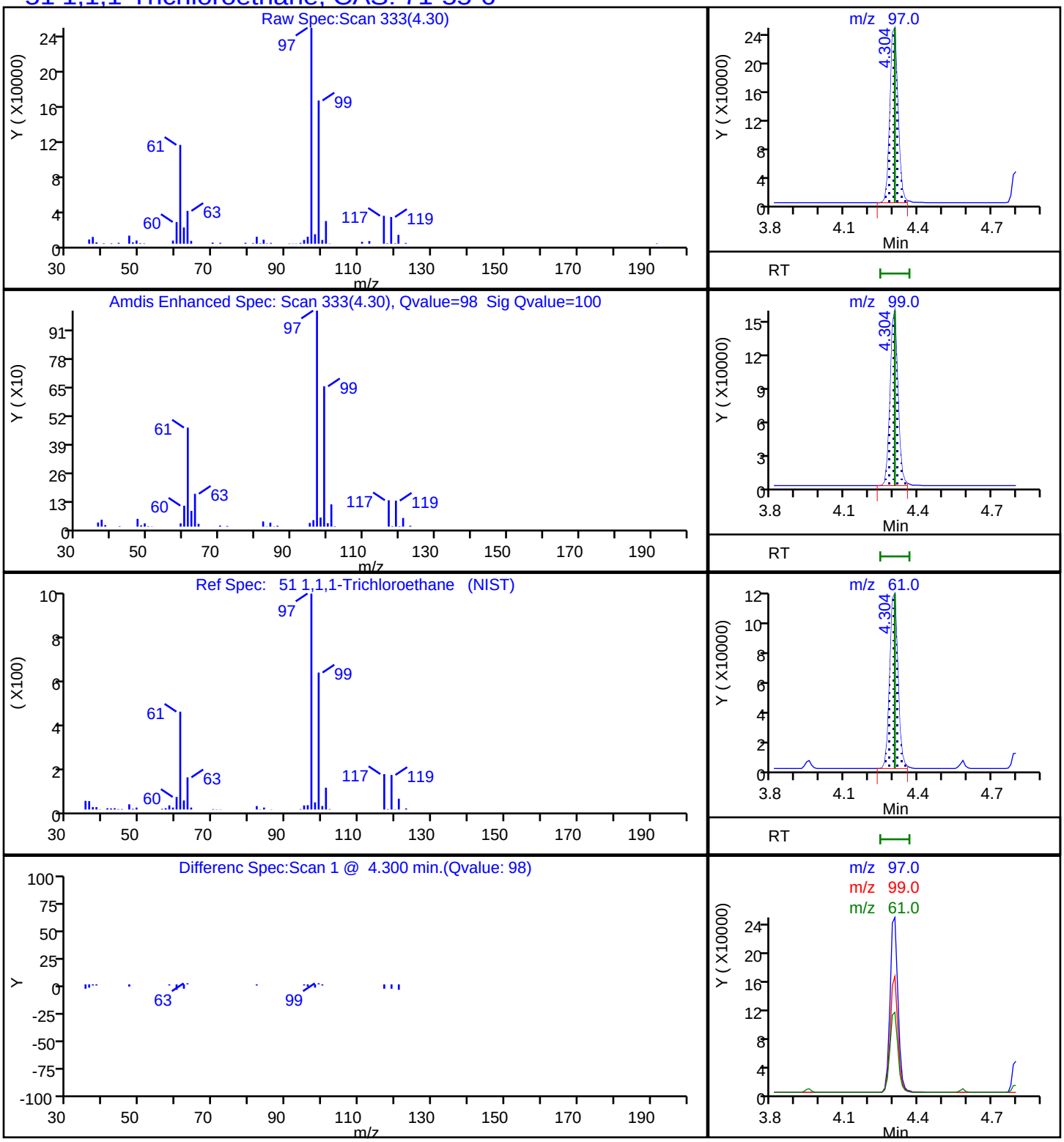


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D

Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

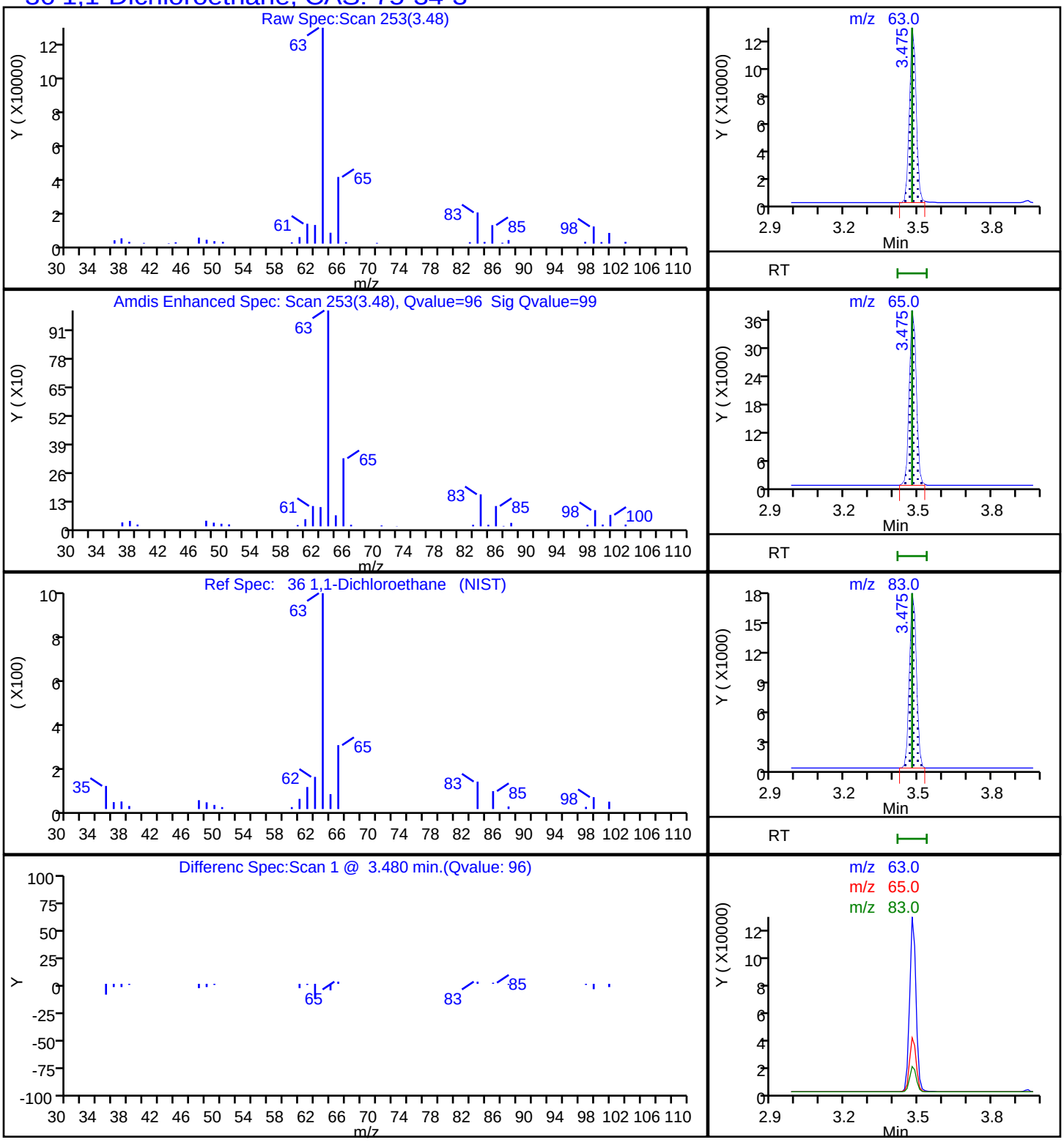


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D

Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

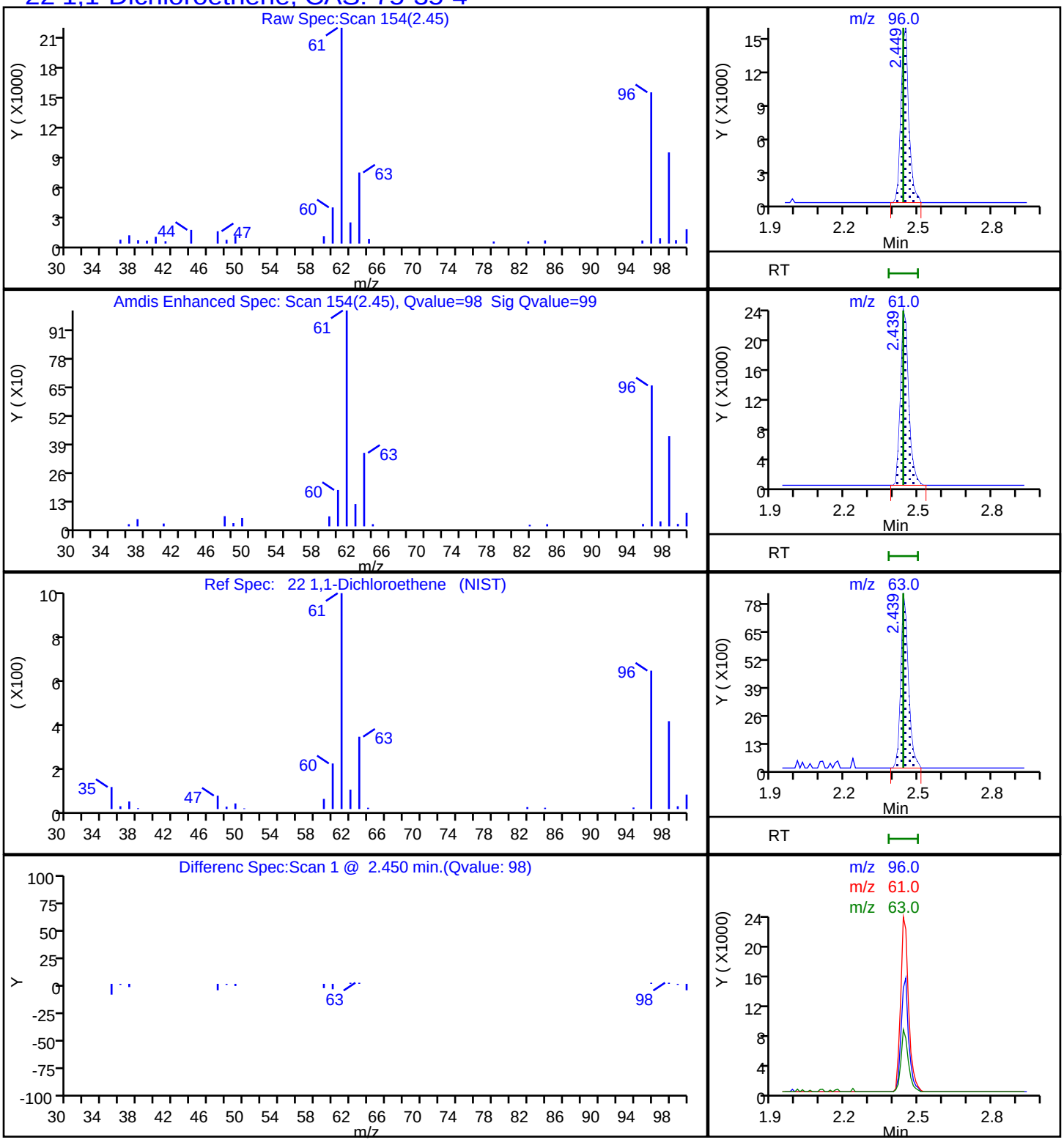


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D

Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

22 1,1-Dichloroethene, CAS: 75-35-4

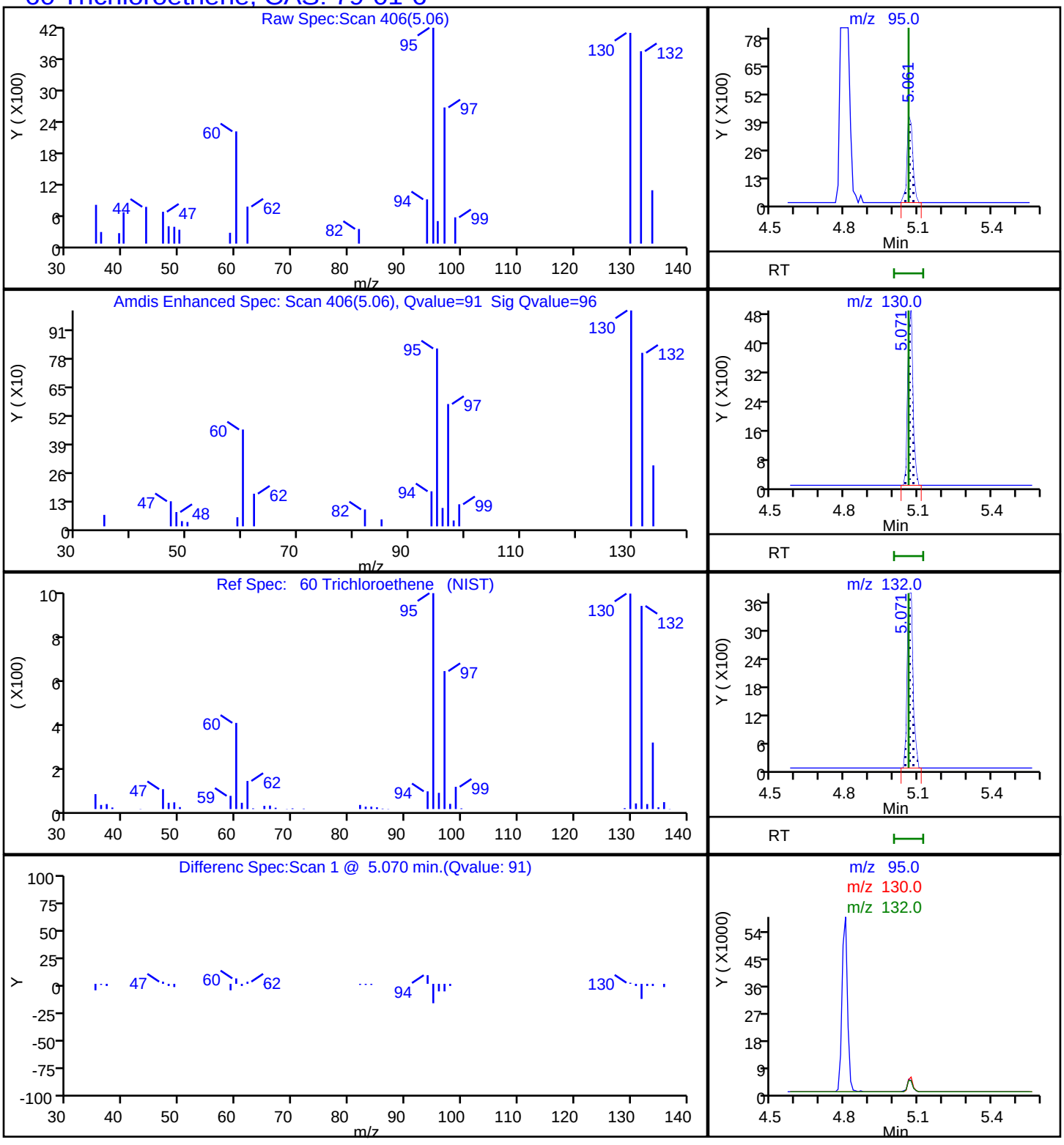


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D

Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



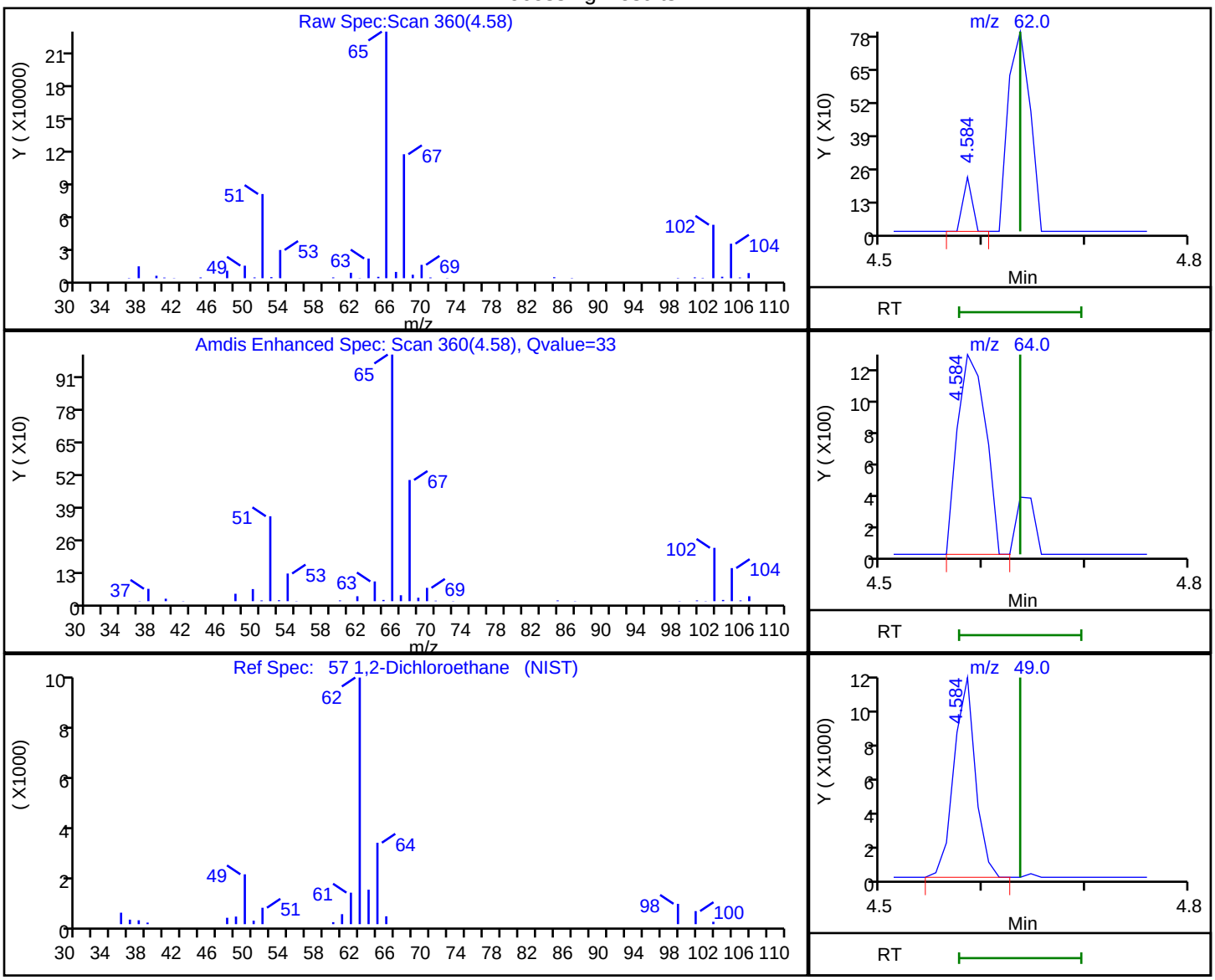
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D				
Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

57 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
4.58	62.00	134	0.008076
4.58	64.00	2433	
4.58	49.00	16936	

Reviewer: farrellr, 25-Sep-2019 10:48:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

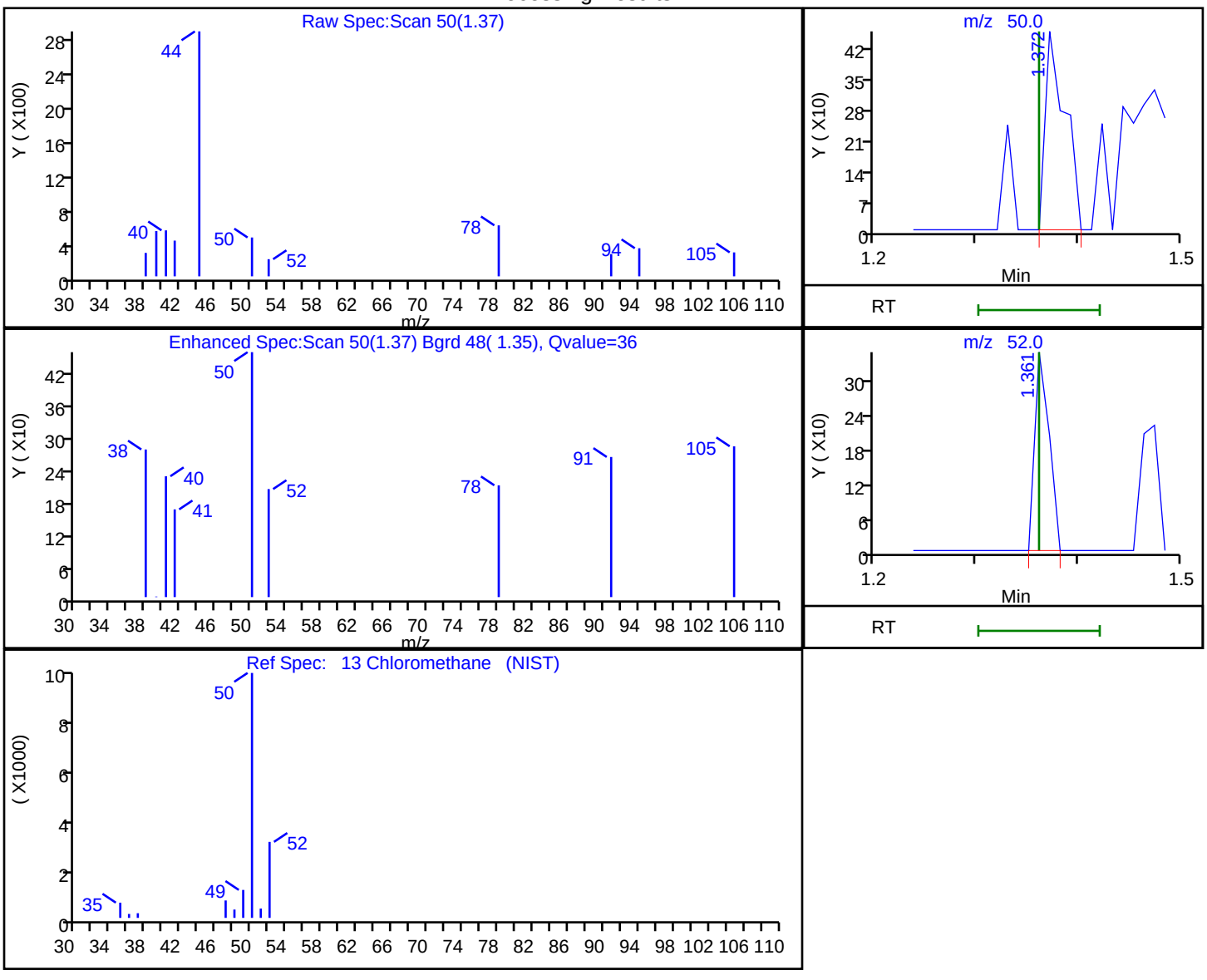
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D				
Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

13 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.37	50.00	621	0.048933
1.36	52.00	343	

Reviewer: farrellr, 25-Sep-2019 10:46:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

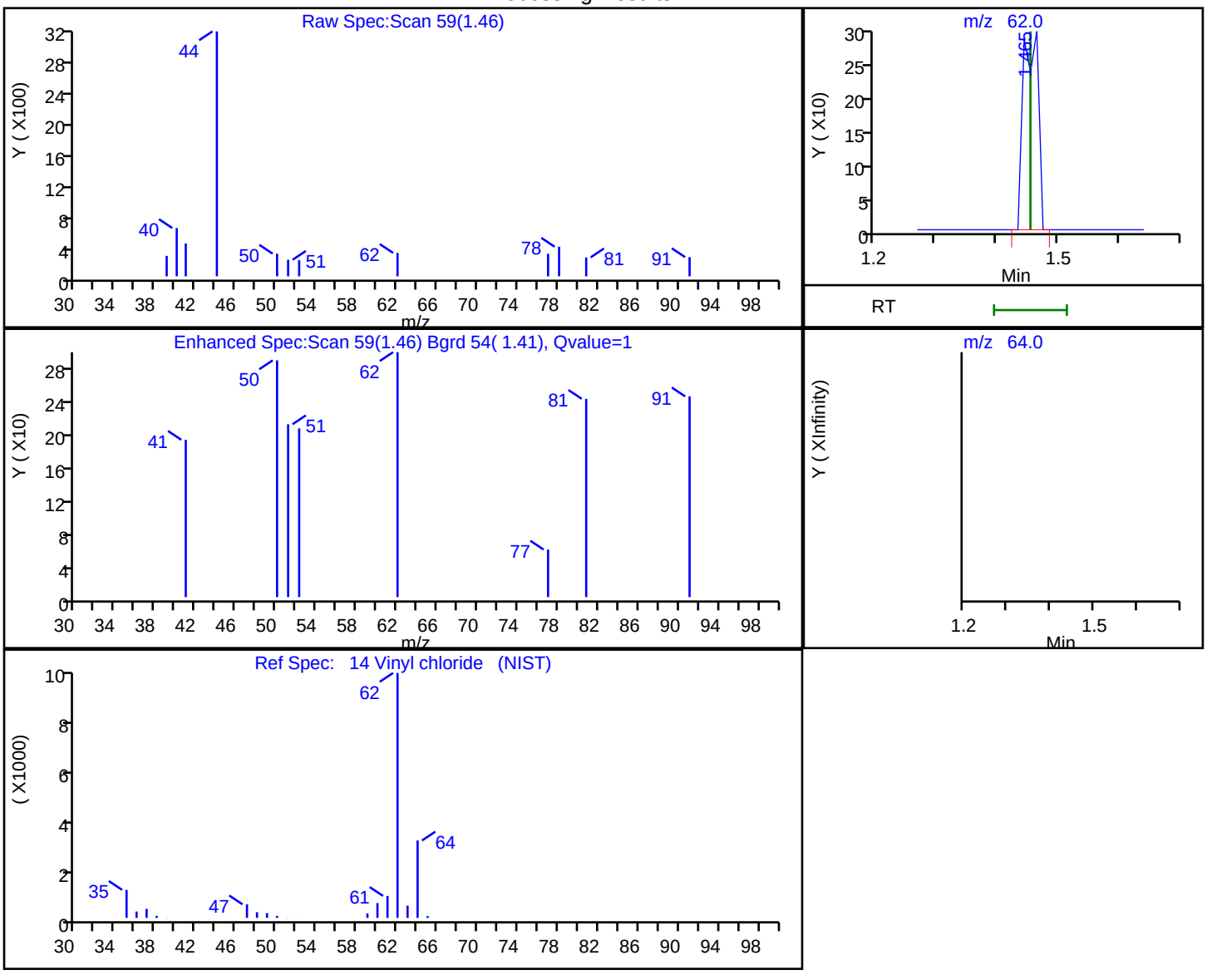
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5491.D				
Injection Date:	24-Sep-2019 15:39:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-11	Lab Sample ID:	480-159208-11		
Client ID:	356023-GW-MW-7R-98-10				
Operator ID:	KN	ALS Bottle#:	18	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.46	62.00	512	0.041553
1.45	64.00	0	

Reviewer: farrellr, 25-Sep-2019 10:46:49

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-11 Lab Sample ID: 480-159208-12

Matrix: Water Lab File ID: T5492.D

Analysis Method: 8260C Date Collected: 09/12/2019 16:15

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 16:03

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	280		8.0	6.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		8.0	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	2.5
79-00-5	1,1,2-Trichloroethane	ND		8.0	1.8
75-34-3	1,1-Dichloroethane	110		8.0	3.0
75-35-4	1,1-Dichloroethene	30		8.0	2.3
87-61-6	1,2,3-Trichlorobenzene	ND		8.0	3.3
120-82-1	1,2,4-Trichlorobenzene	ND		8.0	3.3
96-12-8	1,2-Dibromo-3-Chloropropane	ND		8.0	3.1
106-93-4	1,2-Dibromoethane	ND		8.0	5.8
95-50-1	1,2-Dichlorobenzene	ND		8.0	6.3
107-06-2	1,2-Dichloroethane	ND		8.0	1.7
78-87-5	1,2-Dichloropropane	ND		8.0	5.8
541-73-1	1,3-Dichlorobenzene	ND		8.0	6.2
106-46-7	1,4-Dichlorobenzene	ND		8.0	6.7
123-91-1	1,4-Dioxane	ND		320	75
78-93-3	2-Butanone (MEK)	ND		80	11
591-78-6	2-Hexanone	ND		40	9.9
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		40	17
67-64-1	Acetone	ND		80	24
71-43-2	Benzene	ND		8.0	3.3
74-97-5	Bromochloromethane	ND		8.0	7.0
75-27-4	Bromodichloromethane	ND		8.0	3.1
75-25-2	Bromoform	ND		8.0	2.1
74-83-9	Bromomethane	ND		8.0	5.5
75-15-0	Carbon disulfide	ND		8.0	1.5
56-23-5	Carbon tetrachloride	ND		8.0	2.2
108-90-7	Chlorobenzene	ND		8.0	6.0
75-00-3	Chloroethane	ND		8.0	2.6
67-66-3	Chloroform	ND		8.0	2.7
74-87-3	Chloromethane	ND		8.0	2.8
156-59-2	cis-1,2-Dichloroethene	ND		8.0	6.5
10061-01-5	cis-1,3-Dichloropropene	ND		8.0	2.9
110-82-7	Cyclohexane	ND		8.0	1.4
124-48-1	Dibromochloromethane	ND		8.0	2.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-11 Lab Sample ID: 480-159208-12

Matrix: Water Lab File ID: T5492.D

Analysis Method: 8260C Date Collected: 09/12/2019 16:15

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 16:03

Soil Aliquot Vol: Dilution Factor: 8

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		8.0	5.4
100-41-4	Ethylbenzene	ND		8.0	5.9
98-82-8	Isopropylbenzene	ND		8.0	6.3
79-20-9	Methyl acetate	ND		20	10
1634-04-4	Methyl tert-butyl ether	ND		8.0	1.3
108-87-2	Methylcyclohexane	ND		8.0	1.3
75-09-2	Methylene Chloride	ND		8.0	3.5
100-42-5	Styrene	ND		8.0	5.8
127-18-4	Tetrachloroethene	ND		8.0	2.9
108-88-3	Toluene	ND		8.0	4.1
156-60-5	trans-1,2-Dichloroethene	ND		8.0	7.2
10061-02-6	trans-1,3-Dichloropropene	ND		8.0	3.0
79-01-6	Trichloroethene	5.1	J	8.0	3.7
75-69-4	Trichlorofluoromethane	ND		8.0	7.0
75-01-4	Vinyl chloride	ND		8.0	7.2
1330-20-7	Xylenes, Total	ND		16	5.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D
Lims ID: 480-159208-B-12
Client ID: 356023-GW-MW-7R-98-11
Sample Type: Client
Inject. Date: 24-Sep-2019 16:03:30 ALS Bottle#: 19 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 8.0000
Sample Info: 480-159208-b-12
Misc. Info.: 480-0084408-018
Operator ID: KN Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Sep-2019 10:51:48 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: farrellr Date: 25-Sep-2019 10:51:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	189630	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	770535	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	97	392531	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	0.000	93	276791	27.0	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	353469	27.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	972081	23.8	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	311739	24.4	
11 Dichlorodifluoromethane	85		1.206				ND	
13 Chloromethane	50		1.361				ND	
14 Vinyl chloride	62		1.454				ND	
15 Bromomethane	94		1.714				ND	
16 Chloroethane	64		1.776				ND	U
17 Trichlorofluoromethane	101		2.004				ND	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	97	33503	3.73	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449				ND	
23 Acetone	43		2.553				ND	U
25 Carbon disulfide	76		2.625				ND	
28 Methyl acetate	43		2.822				ND	
30 Methylene Chloride	84		2.916				ND	
33 Methyl tert-butyl ether	73		3.102				ND	
32 trans-1,2-Dichloroethene	96		3.113				ND	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	230215	13.6	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	73	6929	0.6267	
44 2-Butanone (MEK)	43		3.973				ND	
47 Chlorobromomethane	128		4.138				ND	
50 Chloroform	83	4.201	4.211	0.000	90	2990	0.1528	
52 Cyclohexane	56		4.304				ND	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	562979	35.6	
53 Carbon tetrachloride	117		4.408				ND	
55 Benzene	78		4.584				ND	
57 1,2-Dichloroethane	62		4.636				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.061	0.010	93	6745	0.6377	
62 Methylcyclohexane	83		5.164				ND	
63 1,2-Dichloropropane	63		5.258				ND	
66 1,4-Dioxane	88		5.372				ND	
67 Dichlorobromomethane	83		5.486				ND	
71 cis-1,3-Dichloropropene	75		5.807				ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911				ND	
73 Toluene	92		6.025				ND	
75 trans-1,3-Dichloropropene	75		6.232				ND	
78 1,1,2-Trichloroethane	83		6.377				ND	
79 Tetrachloroethene	166		6.429				ND	
81 2-Hexanone	43		6.543				ND	
82 Chlorodibromomethane	129		6.688				ND	
83 Ethylene Dibromide	107		6.760				ND	
86 Chlorobenzene	112		7.113				ND	
88 Ethylbenzene	91		7.175				ND	
90 m-Xylene & p-Xylene	106		7.268				ND	
91 o-Xylene	106		7.589				ND	
92 Styrene	104		7.610				ND	
93 Bromoform	173		7.807				ND	
95 Isopropylbenzene	105		7.869				ND	
98 1,1,2,2-Tetrachloroethane	83		8.180				ND	
110 1,3-Dichlorobenzene	146		8.905				ND	
113 1,4-Dichlorobenzene	146		8.978				ND	
116 1,2-Dichlorobenzene	146		9.289				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963				ND	
119 1,2,4-Trichlorobenzene	180		10.605				ND	
122 1,2,3-Trichlorobenzene	180		11.020				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

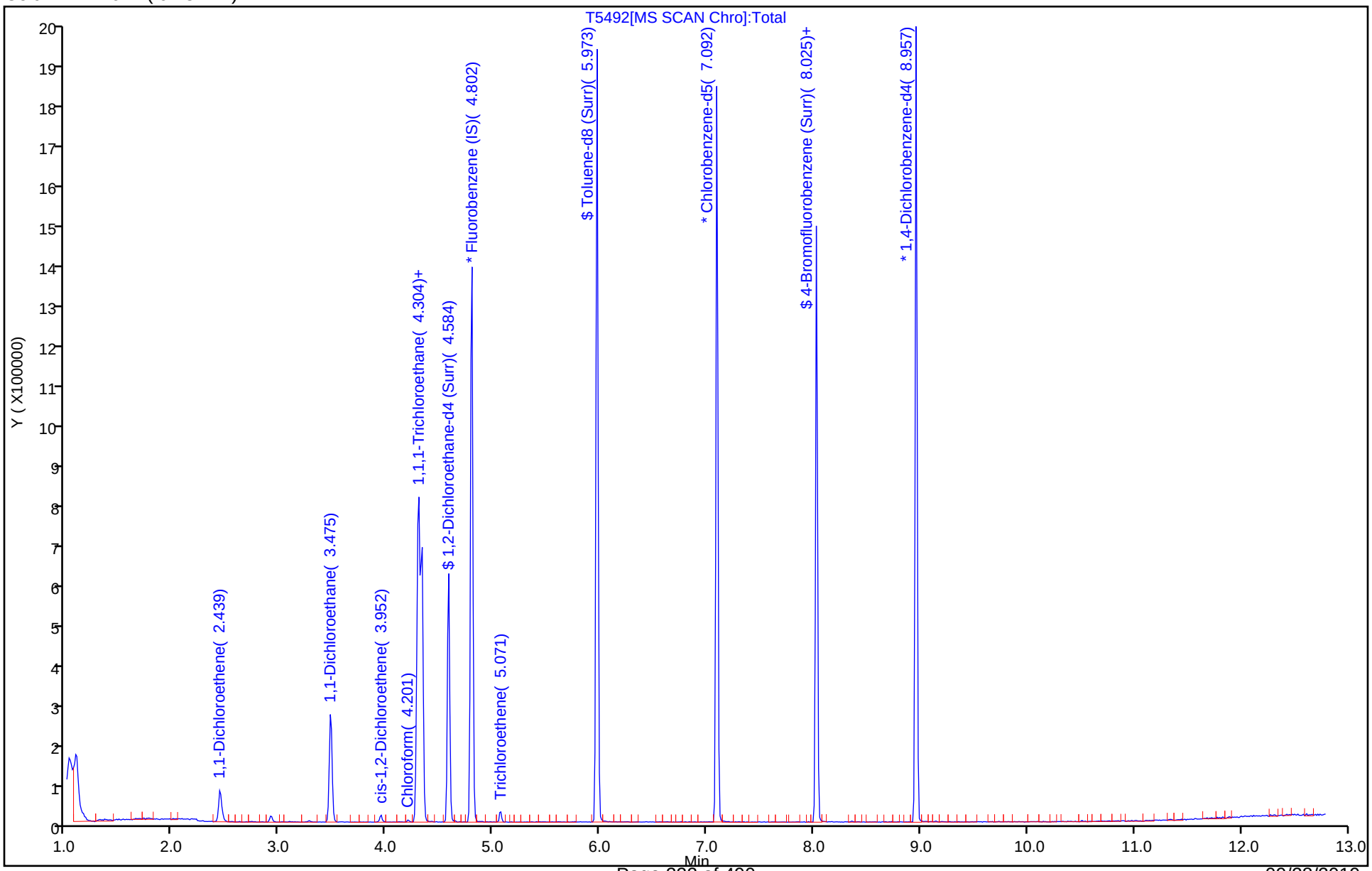
Report Date: 25-Sep-2019 10:51:48 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D

Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T	Operator ID:	KN
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12	Worklist Smp#:	18
Client ID:	356023-GW-MW-7R-98-11				
Purge Vol:	5.000 mL	Dil. Factor:	8.0000	ALS Bottle#:	19
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

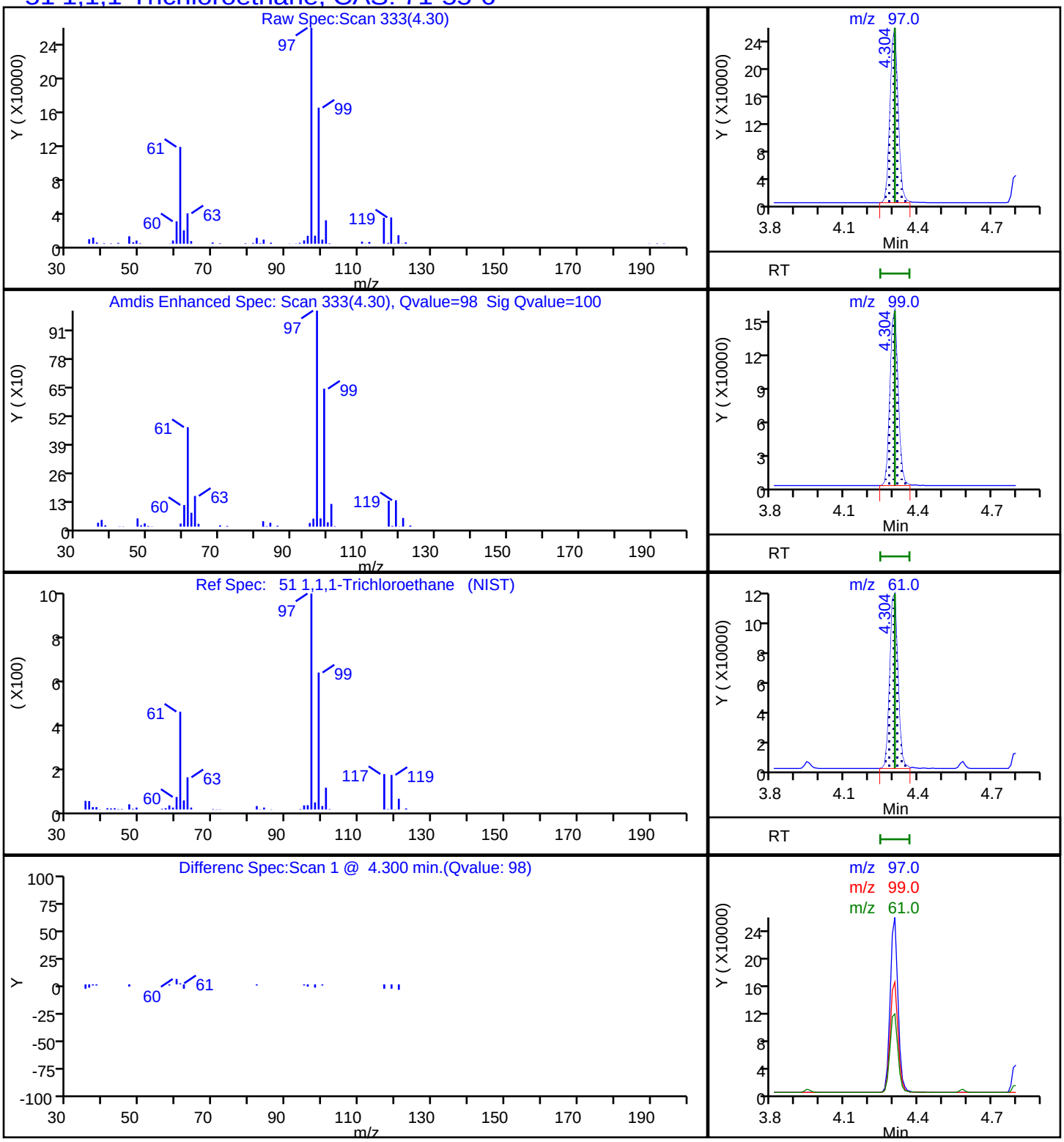


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D

Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12		
Client ID:	356023-GW-MW-7R-98-11				
Operator ID:	KN	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

51 1,1,1-Trichloroethane, CAS: 71-55-6

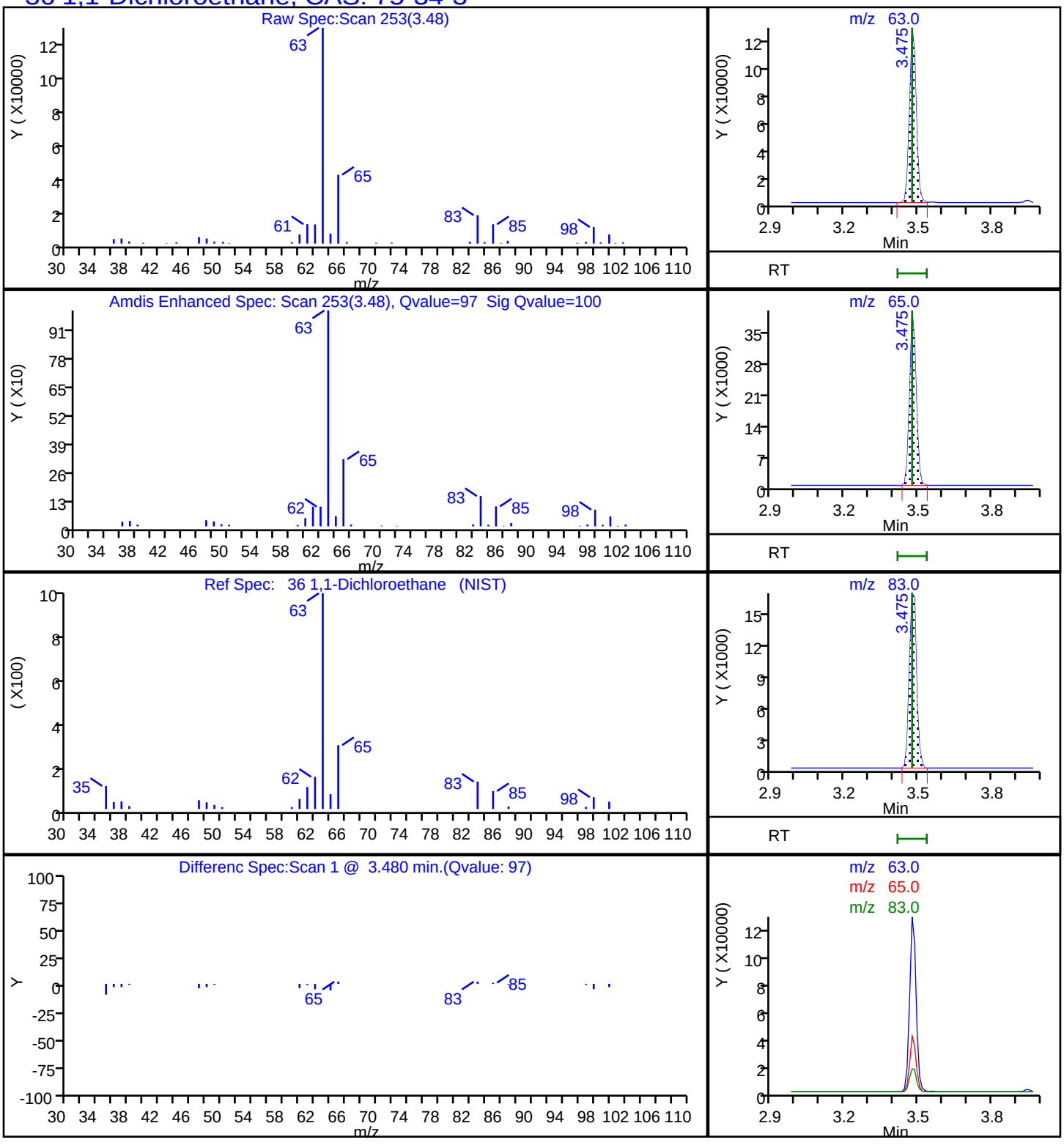


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D

Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12		
Client ID:	356023-GW-MW-7R-98-11				
Operator ID:	KN	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

36 1,1-Dichloroethane, CAS: 75-34-3

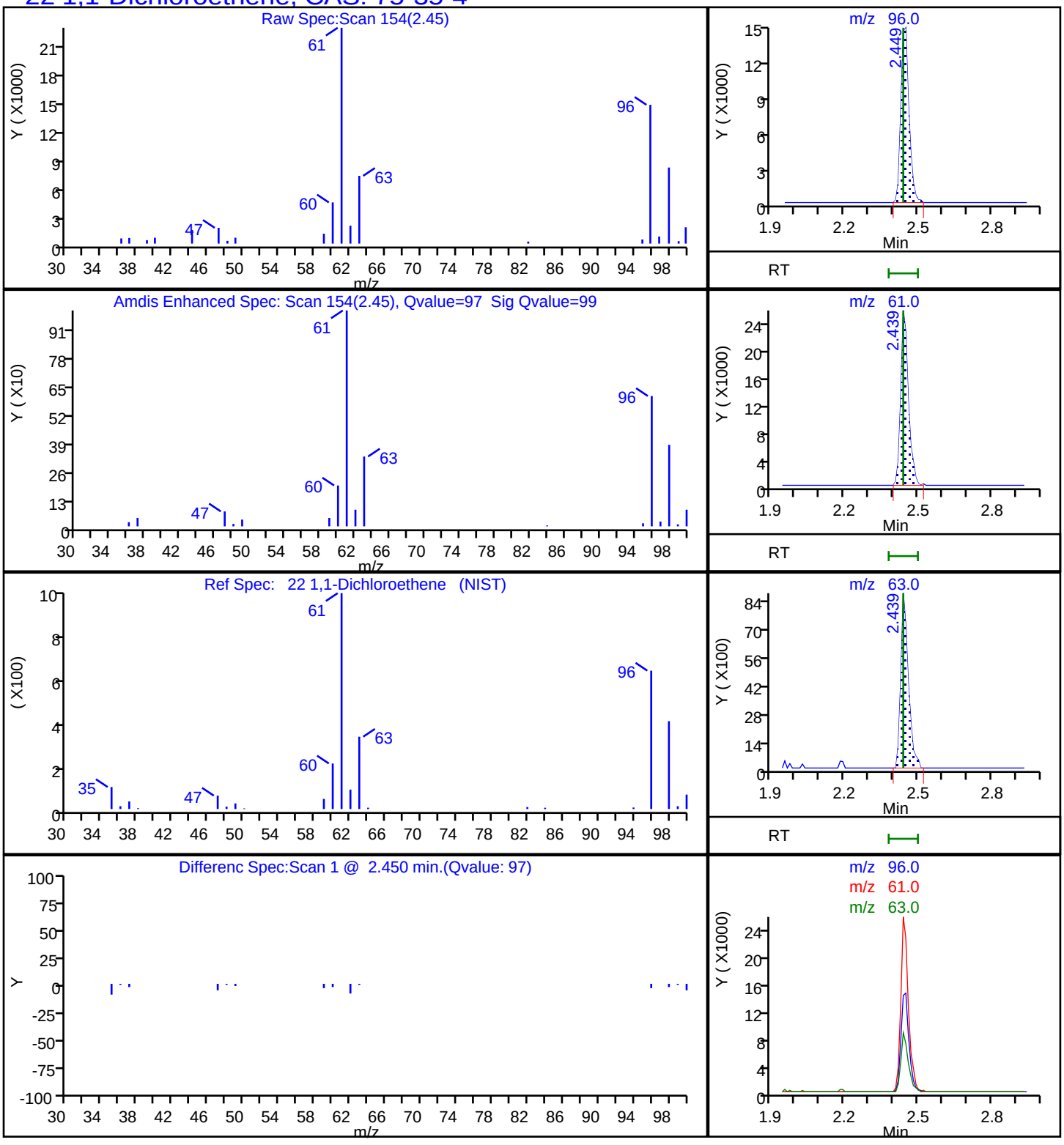


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D

Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12
Client ID:	356023-GW-MW-7R-98-11		
Operator ID:	KN	ALS Bottle#:	19 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	8.0000
Method:	T-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

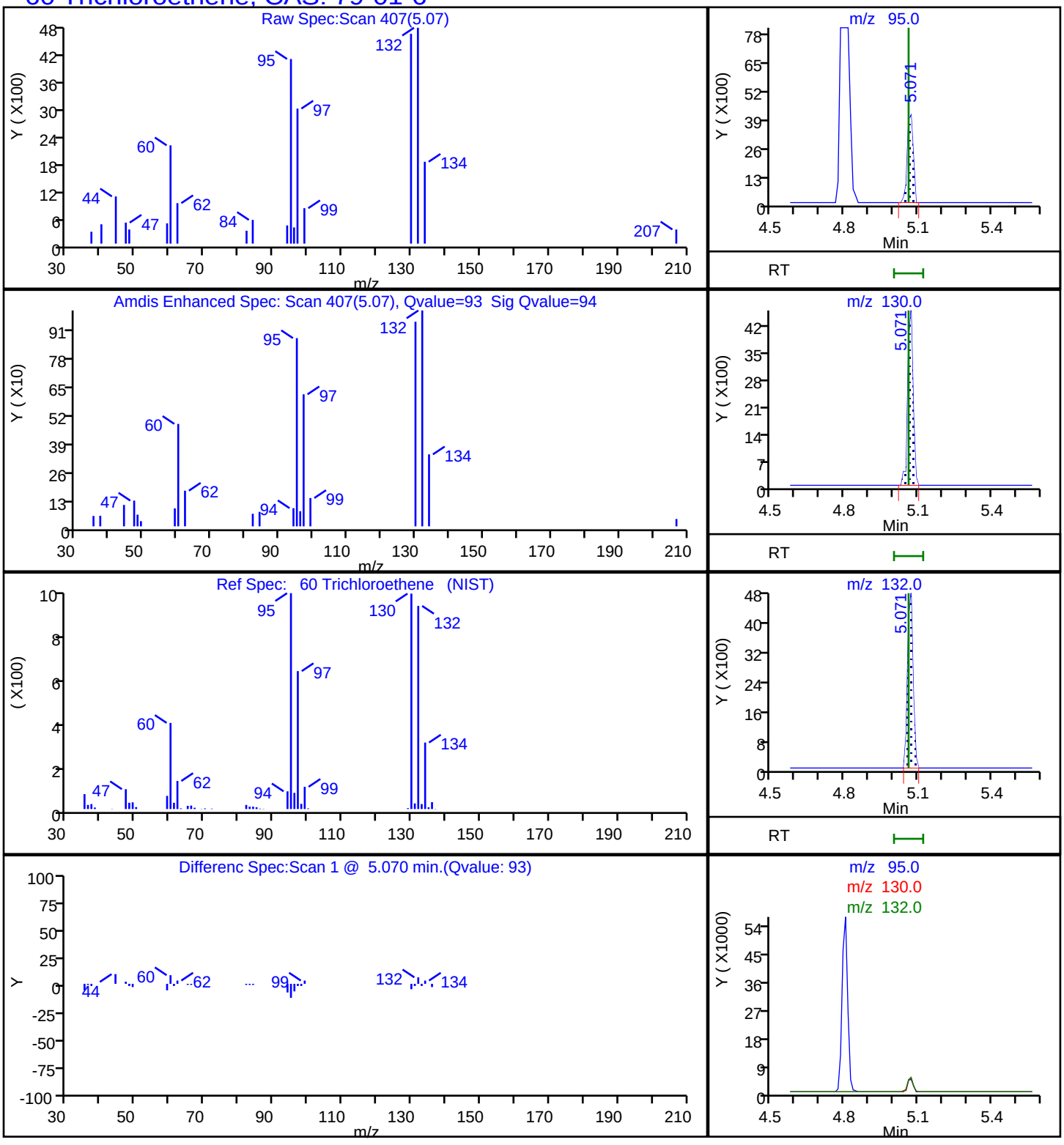
22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D				
Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12		
Client ID:	356023-GW-MW-7R-98-11				
Operator ID:	KN	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



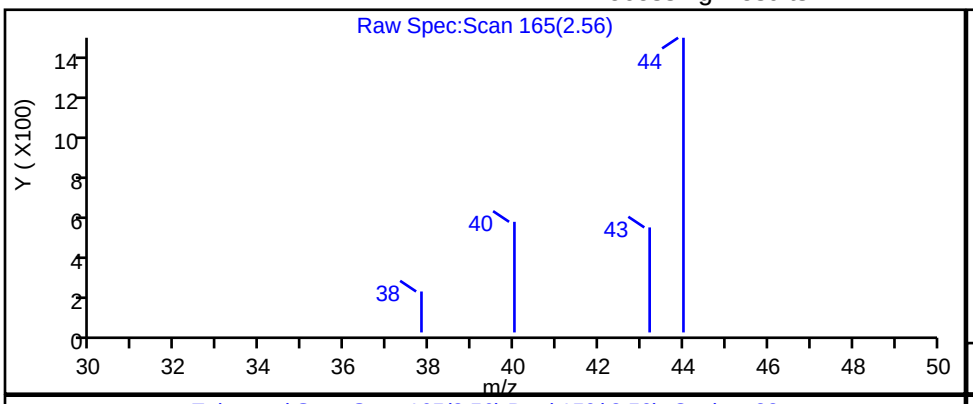
User Disabled Compound Report

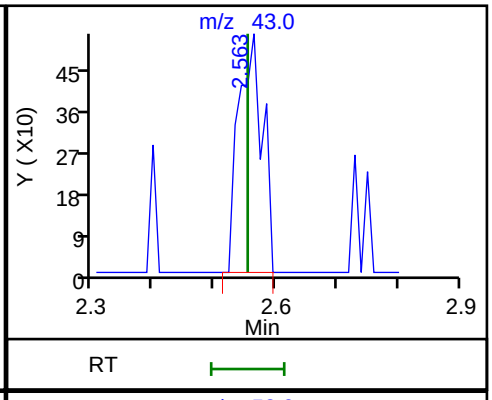
Eurofins TestAmerica, Buffalo

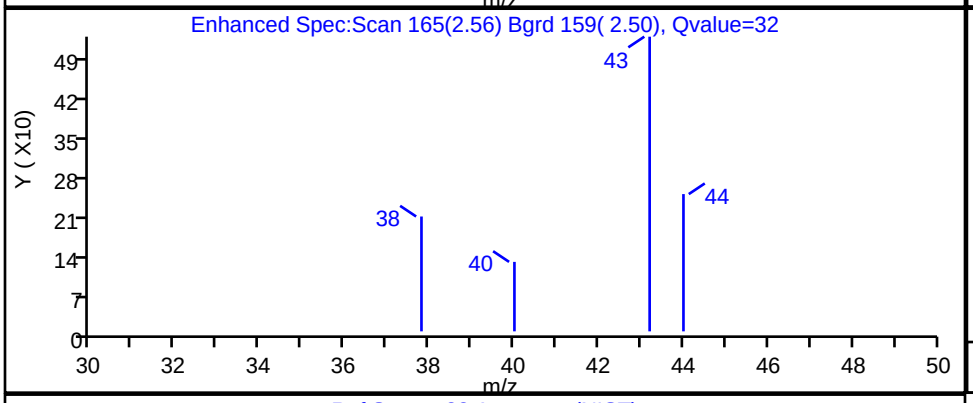
Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D				
Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12		
Client ID:	356023-GW-MW-7R-98-11				
Operator ID:	KN	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

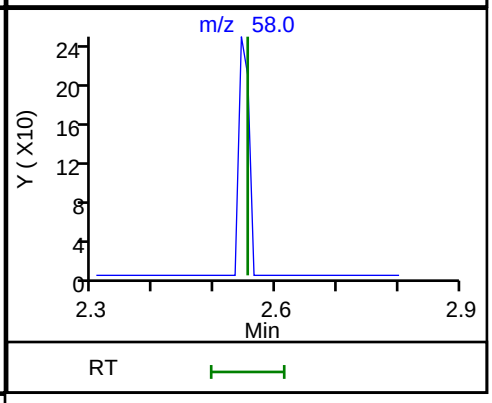
23 Acetone, CAS: 67-64-1

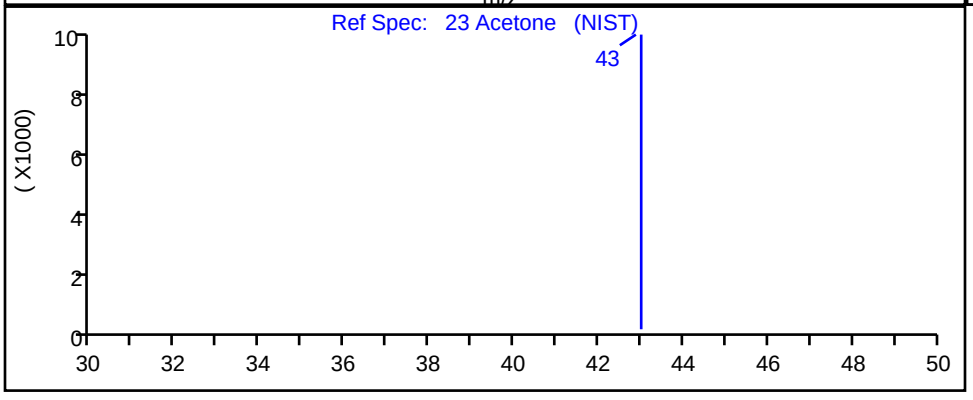
Processing Results











RT	Mass	Response	Amount
2.56	43.00	1428	0.344835
2.55	58.00	0	

Reviewer: farrellr, 25-Sep-2019 10:50:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

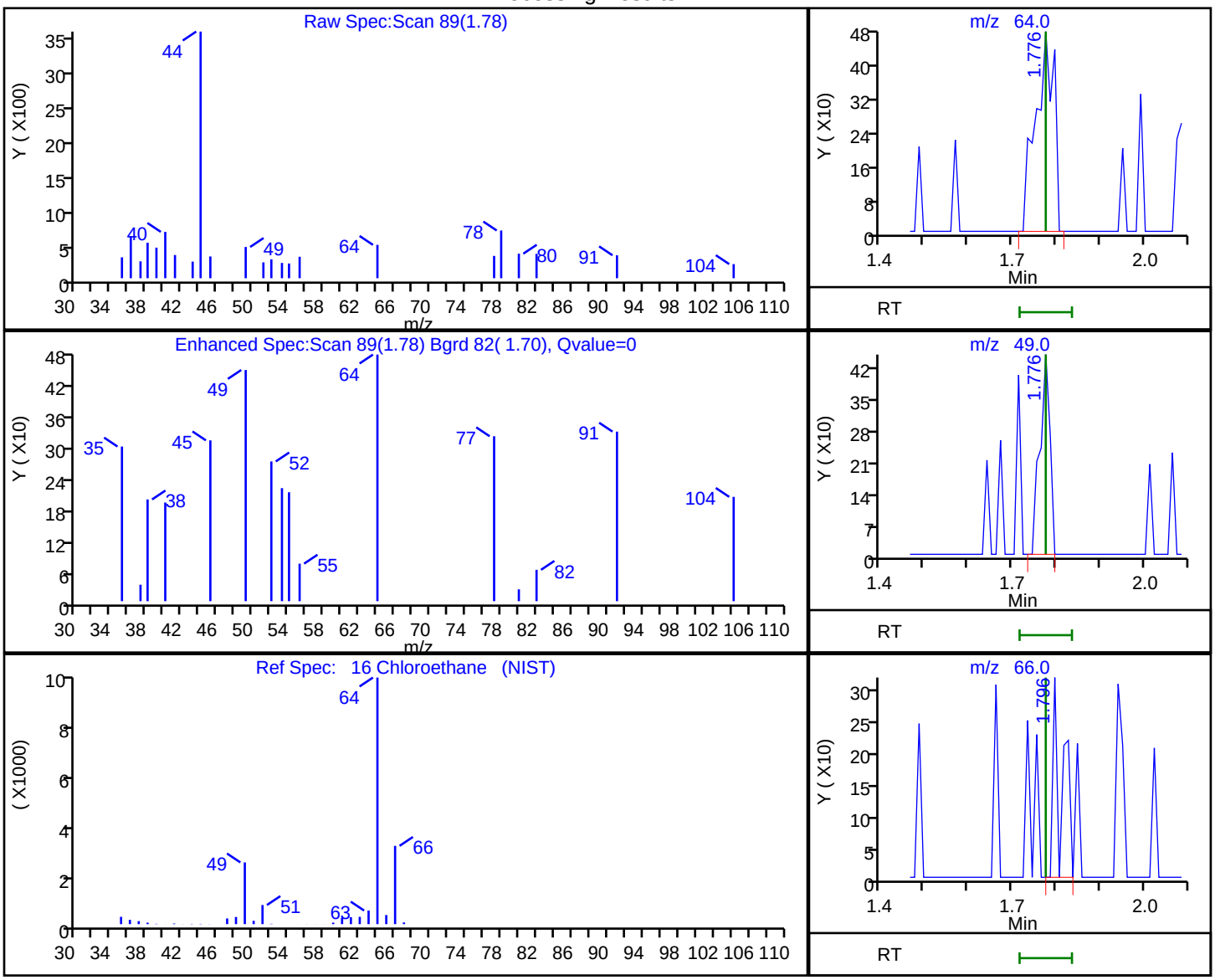
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5492.D				
Injection Date:	24-Sep-2019 16:03:30	Instrument ID:	HP5975T		
Lims ID:	480-159208-B-12	Lab Sample ID:	480-159208-12		
Client ID:	356023-GW-MW-7R-98-11				
Operator ID:	KN	ALS Bottle#:	19	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	8.0000		
Method:	T-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
1.78	64.00	1400	0.159781
1.78	49.00	726	
1.80	66.00	455	

Reviewer: farrellr, 25-Sep-2019 10:50:15

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-491176/7	S8768.D
Level 2	IC 480-491176/8	S8769.D
Level 3	IC 480-491176/9	S8770.D
Level 4	IC 480-491176/10	S8771.D
Level 5	IC 480-491176/11	S8772.D
Level 6	ICIS 480-491176/12	S8773.D
Level 7	IC 480-491176/13	S8774.D
Level 8	IC 480-491176/14	S8775.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.5947 1.6931	1.7035 1.9179	1.7705 1.7898	1.8106	1.8443	Ave		1.7656			0.1000	5.7		20.0			
Chloromethane	2.2895 1.7459	2.0763 2.0225	1.9929 1.7797	1.9852	1.8753	Ave		1.9709			0.1000	8.8		20.0			
Vinyl chloride	1.5351 1.4377	1.8385 1.7933	1.5670 1.6359	1.7450	1.6452	Ave		1.6497			0.1000	8.3		20.0			
Butadiene	2.0361 1.6789	1.9668 1.9797	1.9127 1.8025	1.9598	1.8407	Ave		1.8972				6.1		20.0			
Bromomethane	1.3902 1.0071	1.3045 1.1309	1.2679 1.0193	1.1024	1.1170	Ave		1.1674			0.1000	11.9		20.0			
Chloroethane	1.2376 0.9541	1.1784 1.0872	1.1914 1.0123	1.1103	1.0651	Ave		1.1046			0.1000	8.6		20.0			
Dichlorofluoromethane	2.9107 2.0350	2.7787 2.3323	2.3319 2.1115	2.3499	2.2707	Ave		2.3901				12.7		20.0			
Trichlorofluoromethane	2.3786 2.0328	2.2724 2.4936	2.1897 2.2491	2.3226	2.2634	Ave		2.2753			0.1000	5.9		20.0			
Ethyl ether	1.2675 1.3002	1.2815 1.3526	1.4739 1.3527	1.3614	1.3324	Ave		1.3403				4.8		20.0			
Acrolein	0.2247 0.2039	0.2475 0.2275	0.2539 0.2448	0.1948	0.1987	Ave		0.2245				10.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.1680 1.1938	1.0970 1.2626	1.4306 1.3476	1.3189	1.2227	Ave		1.2551			0.1000	8.6		20.0			
1,1-Dichloroethene	1.1045 1.1336	1.3289 1.1950	1.3631 1.2283	1.2988	1.1709	Ave		1.2279			0.1000	7.7		20.0			
Acetone	+++++ 0.4929	+++++ 0.5076	0.5619 0.4945	0.5350	0.5212	Ave		0.5189			0.1000	5.1		20.0			
Iodomethane	2.0884 2.2029	2.3582 2.3337	2.5905 2.3498	2.4384	2.3351	Ave		2.3371				6.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	3.8142 3.7399	4.2764 3.9318	4.3389 4.0332	4.1634	3.8408	Ave		4.0173			0.1000	5.6		20.0			
Allyl chloride	2.0673 2.2982	2.6897 2.3950	2.7262 2.4561	2.5277	2.4446	Ave		2.4506				8.6		20.0			
Methyl acetate	1.1284 1.1380	1.2924 1.3037	1.2513 1.2874	1.3485	1.1663	Ave		1.2395			0.1000	6.8		20.0			
Methylene Chloride	3.8884 1.3336	2.5729 1.3755	2.0695 1.3647	1.6629	1.4698	Lin1	1.2895	1.3434			0.1000				1.0000		0.9900
2-Methyl-2-propanol	+++++ 0.1015	0.0961 0.1330	0.1101 0.1037	0.1051	0.0921	Ave		0.1059				12.6		20.0			
Methyl tert-butyl ether	3.9872 3.8383	4.2899 3.9185	4.3281 3.8736	4.0525	3.9508	Ave		4.0299			0.1000	4.6		20.0			
trans-1,2-Dichloroethene	1.2900 1.3343	1.4117 1.3981	1.5090 1.3969	1.4697	1.3685	Ave		1.3973			0.1000	5.0		20.0			
Acrylonitrile	0.6566 0.6130	0.6568 0.6362	0.5744 0.6259	0.6213	0.6070	Ave		0.6239				4.4		20.0			
Hexane	2.1730 2.0791	2.1493 2.1769	2.5367 2.3314	2.4034	2.2314	Ave		2.2602				6.7		20.0			
1,1-Dichloroethane	2.1310 2.4349	2.5828 2.5358	2.6556 2.5226	2.6383	2.5254	Ave		2.5033			0.2000	6.6		20.0			
Vinyl acetate	3.5750 3.4608	4.1118 3.7148	3.8231 3.8233	3.6831	3.6585	Ave		3.7313				5.2		20.0			
2,2-Dichloropropane	1.3267 1.3640	1.4231 1.4944	1.5763 1.4284	1.6134	1.5248	Ave		1.4689				6.9		20.0			
cis-1,2-Dichloroethene	1.3018 1.4642	1.5755 1.5483	1.6863 1.5189	1.6672	1.5478	Ave		1.5388			0.1000	7.8		20.0			
2-Butanone (MEK)	0.7074 0.6944	0.8539 0.7432	0.8053 0.7494	0.7239	0.7276	Ave		0.7507			0.1000	7.1		20.0			
Bromochloromethane	0.7405 0.7744	0.7843 0.8190	0.8808 0.8118	0.8506	0.8110	Ave		0.8090				5.4		20.0			
Tetrahydrofuran	0.6273 0.5111	0.5226 0.4908	0.6286 0.5122	0.4902	0.5442	Ave		0.5409				10.4		20.0			
Chloroform	2.7003 2.2825	2.6126 2.3683	2.7735 2.3934	2.5059	2.3847	Ave		2.5027			0.2000	7.0		20.0			
1,1,1-Trichloroethane	1.9404 1.9716	2.1794 2.1346	2.2309 2.1741	2.2036	2.0431	Ave		2.1097			0.1000	5.2		20.0			
Cyclohexane	2.6129 2.4542	2.5173 2.5845	2.8360 2.7819	2.7597	2.4797	Ave		2.6283			0.1000	5.6		20.0			
Carbon tetrachloride	1.5722 1.7516	1.9234 1.9285	2.0306 2.0465	2.0204	1.8401	Ave		1.8892			0.1000	8.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	2.0225 1.7698	1.7970 1.8532	2.0555 1.9133	1.9585	1.8314	Ave		1.9002				5.5		20.0			
Benzene	5.5739 5.1505	5.9247 5.4919	6.0277 5.5918	5.6287	5.4406	Ave		5.6037			0.5000	4.9		20.0			
Isobutyl alcohol	+++++ 0.0541	0.0742 0.0570	0.0661 0.0572	0.0582	0.0625	Ave		0.0613				11.3		20.0			
1,2-Dichloroethane	2.4184 2.0080	2.2268 2.0936	2.2611 2.1349	2.2442	2.1471	Ave		2.1918			0.1000	5.7		20.0			
n-Heptane	3.1312 2.5219	3.0018 2.5926	3.0814 2.9290	2.8901	2.6795	Ave		2.8534				8.0		20.0			
Trichloroethene	1.3451 1.3145	1.5141 1.4254	1.5663 1.4813	1.5282	1.4032	Ave		1.4472			0.2000	6.2		20.0			
Methylcyclohexane	2.3300 2.3872	2.3437 2.5401	2.6273 2.6912	2.6051	2.4078	Ave		2.4916			0.1000	5.7		20.0			
1,2-Dichloropropane	1.3441 1.3641	1.4716 1.4450	1.5920 1.4434	1.4713	1.4075	Ave		1.4424			0.1000	5.3		20.0			
Dibromomethane	0.8352 0.8779	0.8358 0.9031	0.9335 0.9224	0.9590	0.9413	Ave		0.9010			0.1000	5.2		20.0			
1,4-Dioxane	+++++ 0.0048	+++++ 0.0046	0.0040 0.0053	0.0048	0.0051	Ave		0.0048				9.3		20.0			
Bromodichloromethane	1.6873 1.7413	1.9355 1.8335	1.9445 1.8817	1.7748	1.7697	Ave		1.8210			0.2000	5.1		20.0			
2-Chloroethyl vinyl ether	+++++ 0.9551	1.0513 1.0416	1.0463 1.0983	1.0789	1.0222	Ave		1.0419				4.4		20.0			
cis-1,3-Dichloropropene	2.4365 2.2095	2.3621 2.3559	2.3731 2.4382	2.3543	2.2951	Ave		2.3531			0.2000	3.2		20.0			
4-Methyl-2-pentanone (MIBK)	0.9105 0.9118	0.9226 0.8397	0.9996 0.9037	1.0356	0.9766	Ave		0.9375			0.1000	6.7		20.0			
Toluene	1.8172 1.7029	1.9132 1.6941	1.8470 1.8732	1.9620	1.7137	Ave		1.8154			0.4000	5.6		20.0			
trans-1,3-Dichloropropene	1.0006 0.9930	1.0532 1.0253	1.0484 1.1414	1.0811	0.9658	Ave		1.0386			0.1000	5.4		20.0			
Ethyl methacrylate	0.8675 0.9903	0.9837 0.9621	0.9880 1.0686	1.0949	1.0179	Ave		0.9966				6.9		20.0			
1,1,2-Trichloroethane	0.5324 0.4893	0.5768 0.4951	0.6240 0.5327	0.5660	0.5227	Ave		0.5424			0.1000	8.3		20.0			
Tetrachloroethene	0.8234 0.8035	0.8299 0.7852	0.9177 0.8768	0.9226	0.7853	Ave		0.8430			0.2000	6.6		20.0			
1,3-Dichloropropane	0.9718 1.0422	1.1948 1.0579	1.2068 1.1694	1.1866	1.0647	Ave		1.1118				7.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.6035 0.6584	0.7383 0.6082	0.7021 0.6747	0.7554	0.7074	Ave		0.6810			0.1000	8.2		20.0			
Dibromochloromethane	0.6652 0.7003	0.6765 0.7161	0.6862 0.8039	0.7430	0.6816	Ave		0.7091			0.1000	6.4		20.0			
1,2-Dibromoethane	0.7071 0.6879	0.6979 0.6622	0.7720 0.7451	0.7416	0.6970	Ave		0.7138				5.0		20.0			
Chlorobenzene	1.9996 2.0048	2.1550 1.9819	2.2524 2.1397	2.1827	2.0282	Ave		2.0930			0.5000	4.9		20.0			
Ethylbenzene	3.1607 3.2200	3.3947 3.1991	3.5914 3.5187	3.6814	3.2619	Ave		3.3785			0.1000	5.9		20.0			
1,1,1,2-Tetrachloroethane	0.6049 0.7193	0.6965 0.7175	0.7808 0.7576	0.7758	0.7367	Ave		0.7236				7.8		20.0			
m,p-Xylene	1.6424 1.3193	1.4374 1.3140	1.3783 1.4318	1.4918	1.3598	Ave		1.4219			0.1000	7.6		20.0			
o-Xylene	1.4355 1.2854	1.3624 1.2716	1.4802 1.3407	1.4480	1.3327	Ave		1.3696			0.3000	5.6		20.0			
Styrene	2.0671 2.2005	2.2721 2.1669	2.2851 2.3083	2.4445	2.1691	Ave		2.2392			0.3000	5.1		20.0			
Bromoform	0.4055 0.4804	0.4795 0.4963	0.4766 0.5596	0.4984	0.4744	Ave		0.4838			0.1000	8.7		20.0			
Isopropylbenzene	3.0302 2.9151	3.1166 3.1525	3.3243 3.6001	3.1601	3.0008	Ave		3.1625			0.1000	6.8		20.0			
Bromobenzene	0.7856 0.8189	0.8128 0.8587	0.8886 0.9578	0.8006	0.8112	Ave		0.8418				6.8		20.0			
1,1,2,2-Tetrachloroethane	0.7241 0.7529	0.8176 0.7756	0.8649 0.8667	0.8135	0.7686	Ave		0.7980			0.3000	6.5		20.0			
N-Propylbenzene	3.5079 3.3885	3.3790 3.5936	3.7791 4.0700	3.7104	3.4003	Ave		3.6036				6.7		20.0			
1,2,3-Trichloropropane	0.2661 0.2701	0.3185 0.2709	0.3010 0.3022	0.2896	0.2771	Ave		0.2869				6.6		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2578	0.1562 0.2900	0.2144 +++++	0.2251	0.2453	Lin1	-0.157	0.2801							0.9960		0.9900
2-Chlorotoluene	0.7072 0.7434	0.7574 0.7449	0.8330 0.8461	0.8156	0.7456	Ave		0.7741				6.5		20.0			
1,3,5-Trimethylbenzene	2.4835 2.4482	2.6091 2.5379	2.8474 2.8466	2.7344	2.5844	Ave		2.6364				5.9		20.0			
4-Chlorotoluene	0.8657 0.7625	0.8326 0.8185	0.8752 0.9056	0.8194	0.7975	Ave		0.8346				5.5		20.0			
tert-Butylbenzene	0.5900 0.5897	0.6475 0.5918	0.7429 0.6720	0.6913	0.6241	Ave		0.6436				8.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.7828 2.5423	2.6317 2.5792	2.8511 2.8793	2.8671	2.6220	Ave		2.7194				5.1		20.0			
sec-Butylbenzene	3.3090 3.1046	3.1549 3.1312	3.4639 3.6085	3.5092	3.2832	Ave		3.3206				5.7		20.0			
1,3-Dichlorobenzene	1.6799 1.5590	1.7574 1.6158	1.7014 1.6906	1.6800	1.6090	Ave		1.6616			0.6000	3.8		20.0			
4-Isopropyltoluene	2.6748 2.8701	3.0880 2.8644	3.4185 3.2346	3.2763	3.1152	Ave		3.0677				8.1		20.0			
1,4-Dichlorobenzene	1.6396 1.5979	1.7307 1.6551	1.8548 1.7553	1.7230	1.6551	Ave		1.7014			0.5000	4.8		20.0			
n-Butylbenzene	2.3538 2.3862	2.5582 2.3661	2.8123 2.6136	2.7523	2.5555	Ave		2.5497				6.8		20.0			
1,2-Dichlorobenzene	1.6310 1.4673	1.6814 1.4321	1.7209 1.5282	1.6527	1.5568	Ave		1.5838			0.4000	6.6		20.0			
1,2-Dibromo-3-Chloropropane	0.1770 0.1460	0.1544 0.1302	0.1732 0.1628	0.1738	0.1720	Ave		0.1612			0.0500	10.2		20.0			
1,2,4-Trichlorobenzene	1.2640 0.9206	1.3028 0.8164	1.3892 0.9662	1.3018	1.1772	Ave		1.1423			0.2000	18.6		20.0			
Hexachlorobutadiene	0.5316 0.4046	0.6099 0.3521	0.5577 0.3984	0.5840	0.5268	Ave		0.4956				19.5		20.0			
Naphthalene	3.1849 2.3592	3.4217 2.0519	3.5503 2.7606	3.4122	3.1289	Ave		2.9837				18.2		20.0			
1,2,3-Trichlorobenzene	1.1709 0.7856	1.2283 0.6679	1.2428 0.8667	1.2175	1.0867	Ave		1.0333				22.0	*	20.0			
Dibromofluoromethane (Surr)	1.2796 1.2659	1.2494 1.3079	1.2524 1.2226	1.2499	1.3165	Ave		1.2680				2.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.8025 0.7898	0.7782 0.8104	0.8131 0.7641	0.7947	0.8320	Ave		0.7981				2.7		20.0			
Toluene-d8 (Surr)	2.4941 2.5107	2.4133 2.4452	2.4353 2.5002	2.5514	2.4564	Ave		2.4758				1.9		20.0			
4-Bromofluorobenzene (Surr)	0.8781 0.9033	0.8843 0.8637	0.9004 0.8663	0.9481	0.9266	Ave		0.8963				3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-491176/7	S8768.D
Level 2	IC 480-491176/8	S8769.D
Level 3	IC 480-491176/9	S8770.D
Level 4	IC 480-491176/10	S8771.D
Level 5	IC 480-491176/11	S8772.D
Level 6	ICIS 480-491176/12	S8773.D
Level 7	IC 480-491176/13	S8774.D
Level 8	IC 480-491176/14	S8775.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	4600 243366	9704 536840	19971 1063651	51233	101350	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	6604 250948	11828 566101	22479 1057634	56172	103053	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	4428 206649	10473 501942	17675 972167	49377	90408	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	5873 241313	11204 554135	21575 1071192	55455	101155	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	4010 144751	7431 316533	14302 605761	31193	61384	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	3570 137144	6713 304310	13439 601597	31416	58529	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	8396 292501	15829 652814	26303 1254804	66492	124781	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	6861 292183	12945 697977	24699 1336570	65719	124379	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	3656 186889	7300 378602	16625 803869	38522	73222	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	3241 146574	7051 318340	14318 727387	27554	54603	2.50 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	3369 171590	6249 353407	16137 800828	37321	67189	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	3186 162932	7570 334485	15375 729934	36750	64347	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	+++++ 354222	+++++ 710382	31693 1469231	75694	143220	+++++ 125	+++++ 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	6024 316633	13434 653201	29220 1396414	68996	128320	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	11002 537556	24361 1100524	48942 2396847	117808	211062	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	5963 330341	15322 670379	30751 1459608	71524	134339	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	6510 327130	14725 729815	28228 1530111	76313	128183	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	11216 191682	14657 385016	23344 811028	47054	80769	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	+++++ 145899	5475 372217	12422 616280	29725	50608	+++++ 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	11501 551696	24438 1096809	48820 2301990	114669	217111	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	3721 191782	8042 391332	17021 830144	41586	75206	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	18940 881054	37418 1780740	64787 3719591	175798	333559	5.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	6268 298841	12244 609324	28613 1385509	68008	122623	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	6147 349976	14713 709767	29954 1499140	74652	138781	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	20624 994889	46847 2079569	86248 4544144	208432	402089	1.00 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	3827 196053	8107 418276	17780 848881	45654	83790	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	3755 210461	8975 433382	19021 902637	47176	85057	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	10203 499073	24322 1040111	45418 2226600	102424	199932	2.50 125	5.00 250	10.0 500	25.0	50.0
Bromochloromethane	FB	Ave	2136 111305	4468 229247	9935 482406	24068	44565	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	3619 146920	5954 274781	14180 608775	27743	59815	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	7789 328077	14883 662888	31284 1422353	70908	131049	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	5597 283391	12415 597476	25164 1291992	62354	112277	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	7537 352750	14340 723421	31989 1653234	78088	136269	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	4535 251773	10957 539798	22905 1216185	57170	101122	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	5834 254385	10237 518722	23185 1137021	55417	100644	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	16078 740315	33751 1537207	67991 3323060	159270	298979	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	+++++ 194434	10573 398796	18650 849535	41140	85904	+++++ 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	6976 288628	12685 586018	25505 1268690	63503	117991	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	9032 362492	17100 725690	34757 1740631	81778	147246	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	3880 188935	8625 398964	17667 880270	43243	77108	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	6721 343120	13351 710983	29635 1599325	73715	132317	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3877 196069	8383 404453	17957 857793	41631	77348	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2409 126189	4761 252785	10530 548164	27136	51729	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 27383	+++++ 53469	1863 122617	5260	11489	+++++ 500	+++++ 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	4867 250290	11026 513209	21933 1118227	50219	97248	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 137278	5989 291547	11802 652663	30529	56171	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	7028 317588	13456 659421	26768 1448982	66617	126121	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	27053 1292982	53693 2442732	116295 5257645	285978	549072	2.50 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	10799 482958	22270 985608	42979 2179638	108363	192706	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	5946 281620	12259 596524	24396 1328130	59708	108604	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	5155 280852	11450 559729	22990 1243394	60474	114462	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	3164 138784	6714 288022	14519 619776	31258	58774	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4893 227883	9660 456812	21354 1020167	50957	88303	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	5775 295596	13908 615455	28081 1360718	65537	119719	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	17931 933608	42967 1769206	81687 3925278	208617	397746	2.50 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3953 198603	7875 416629	15967 935407	41039	76643	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	4202 195089	8124 385235	17963 866939	40961	78378	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11883 568598	25084 1153068	52412 2489635	120550	228069	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	18783 913251	39515 1861207	83569 4094275	203327	366800	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3595 204016	8107 417419	18168 881488	42847	82841	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	9760 374180	16732 764482	32073 1665990	82395	152912	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	8531 364567	15858 739807	34444 1559958	79972	149859	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	12284 624088	26447 1260683	53172 2685871	135010	243909	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2410 136250	5582 288718	11089 651170	27529	53347	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	20442 947620	41896 1918970	88576 4074944	211948	396406	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5300 266190	10927 522674	23677 1084167	53697	107163	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4885 244740	10991 472111	23044 980962	54559	101538	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	23665 1101515	45424 2187444	100693 4606802	248859	449189	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1795 87804	4281 164886	8021 342065	19427	36604	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 83808	2100 176526	5712 +++++	15095	32405	+++++ 25.0	1.00 50.0	2.00 +++++	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	4771 241659	10181 453441	22195 957657	54704	98492	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	16754 795851	35074 1544843	75869 3222047	183400	341403	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	5840 247859	11192 498248	23320 1025022	54960	105351	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	3980 191702	8704 360211	19795 760630	46364	82441	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	18773 826431	35377 1569977	75969 3259070	192301	346365	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	22323 1009216	42411 1906010	92295 4084470	235363	433719	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	11333 506796	23624 983528	45333 1913584	112681	212557	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	18045 932987	41511 1743597	91085 3661267	219746	411530	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 491176

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/10/2019 14:39 Calibration End Date: 09/10/2019 17:20 Calibration ID: 37555

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	11061 519426	23266 1007466	49421 1986880	115560	218645	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	15879 775667	34389 1440287	74934 2958294	184597	337582	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	11003 476973	22603 871753	45853 1729773	110849	205659	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1194 47459	2076 79267	4614 184235	11657	22720	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8527 299246	17514 496929	37016 1093591	87316	155505	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	3586 131531	8199 214301	14859 450940	39171	69593	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	21486 766890	45997 1249020	94597 3124773	228858	413334	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7899 255390	16512 406569	33114 980986	81659	143557	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	184547 181961	177930 183038	176581 181640	176829	180864	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	115735 113518	110828 113411	114642 113521	112440	114296	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	741072 712070	702289 711295	708338 727283	704578	690557	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	260925 256179	257322 251250	261883 252001	261817	260491	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Lims ID: IC 0.5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Sep-2019 14:39:30 ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.5
Misc. Info.: 480-0084010-007
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:11:44 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:45:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.449	-0.006	98	144225	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	297135	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	337309	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	65	184547	25.0	25.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	115735	25.0	25.1	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	92	741072	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	91	260925	25.0	24.5	
10 Dichlorodifluoromethane	85	1.264	1.263	0.001	55	4600	0.5000	0.4516	
12 Chloromethane	50	1.440	1.440	0.000	32	6604	0.5000	0.5808	
13 Vinyl chloride	62	1.543	1.537	0.006	11	4428	0.5000	0.4653	
151 Butadiene	54	1.543	1.543	0.000	91	5873	0.5000	0.5366	
14 Bromomethane	94	1.835	1.835	0.000	71	4010	0.5000	0.5954	
15 Chloroethane	64	1.927	1.926	0.001	55	3570	0.5000	0.5602	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	11	6861	0.5000	0.5227	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	36	8396	0.5000	0.6089	
18 Ethyl ether	59	2.432	2.437	-0.005	70	3656	0.5000	0.4728	
20 Acrolein	56	2.638	2.626	0.012	1	3241	2.50	2.50	
21 1,1,2-Trichloro-1,2,2-trif	101	2.651	2.650	0.001	26	3369	0.5000	0.4653	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	56	3186	0.5000	0.4498	
23 Acetone	43		2.784				ND	ND	MU
25 Iodomethane	142	2.815	2.821	-0.006	75	6024	0.5000	0.4468	
26 Carbon disulfide	76	2.851	2.851	0.000	93	11002	0.5000	0.4747	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	57	5963	0.5000	0.4218	
27 Methyl acetate	43	3.089	3.082	0.007	78	6510	1.00	0.9104	a
30 Methylene Chloride	84	3.186	3.186	0.000	83	11216	0.5000	0.4873	
31 2-Methyl-2-propanol	59	3.368	3.356	0.012	12	519	5.00	0.8492	
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	74	11501	0.5000	0.4947	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	64	3721	0.5000	0.4616	
33 Acrylonitrile	53	3.478	3.478	0.000	81	18940	5.00	5.26	M
35 Hexane	57	3.600	3.606	-0.006	82	6268	0.5000	0.4807	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	6	6147	0.5000	0.4256	
37 Vinyl acetate	43	3.892	3.891	0.001	95	20624	1.00	0.9581	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	12	3827	0.5000	0.4516	
45 cis-1,2-Dichloroethene	96	4.391	4.390	0.001	39	3755	0.5000	0.4230	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	87	10203	2.50	2.36	
48 Chlorobromomethane	128	4.634	4.634	0.000	41	2136	0.5000	0.4576	
49 Tetrahydrofuran	42	4.670	4.652	0.018	34	3619	1.00	1.16	
50 Chloroform	83	4.707	4.707	0.000	76	7789	0.5000	0.5395	
51 1,1,1-Trichloroethane	97	4.822	4.816	0.006	32	5597	0.5000	0.4599	
52 Cyclohexane	56	4.829	4.816	0.013	55	7537	0.5000	0.4971	
55 Carbon tetrachloride	117	4.944	4.950	-0.006	51	4535	0.5000	0.4161	M
54 1,1-Dichloropropene	75	4.962	4.968	-0.006	46	5834	0.5000	0.5322	
57 Benzene	78	5.169	5.175	-0.006	25	16078	0.5000	0.4973	
53 Isobutyl alcohol	43	5.206	5.199	0.007	27	2942	12.5	8.31	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	34	6976	0.5000	0.5517	
59 n-Heptane	43	5.352	5.345	0.007	75	9032	0.5000	0.5487	
62 Trichloroethene	95	5.790	5.783	0.007	60	3880	0.5000	0.4647	
64 Methylcyclohexane	83	5.905	5.899	0.006	68	6721	0.5000	0.4676	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	44	3877	0.5000	0.4659	
67 Dibromomethane	93	6.167	6.167	0.000	51	2409	0.5000	0.4634	
66 1,4-Dioxane	88		6.173				ND	ND	
68 Dichlorobromomethane	83	6.319	6.325	-0.006	31	4867	0.5000	0.4633	
69 2-Chloroethyl vinyl ether	63		6.599				ND	ND	U
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	45	7028	0.5000	0.5177	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	82	27053	2.50	2.43	
74 Toluene	92	7.025	7.018	0.007	66	10799	0.5000	0.5005	
77 trans-1,3-Dichloropropene	75	7.305	7.310	-0.005	49	5946	0.5000	0.4817	
75 Ethyl methacrylate	69	7.359	7.347	0.012	18	5155	0.5000	0.4352	a
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	35	3164	0.5000	0.4908	
81 Tetrachloroethene	166	7.554	7.548	0.006	57	4893	0.5000	0.4883	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	51	5775	0.5000	0.4370	
80 2-Hexanone	43	7.730	7.724	0.006	63	17931	2.50	2.22	
83 Chlorodibromomethane	129	7.889	7.894	-0.005	1	3953	0.5000	0.4690	M
84 Ethylene Dibromide	107	8.004	7.998	0.006	53	4202	0.5000	0.4953	
87 Chlorobenzene	112	8.473	8.472	0.001	39	11883	0.5000	0.4777	
88 Ethylbenzene	91	8.558	8.564	-0.006	74	18783	0.5000	0.4678	
89 1,1,1,2-Tetrachloroethane	131	8.558	8.570	-0.012	1	3595	0.5000	0.4180	M
90 m-Xylene & p-Xylene	106	8.686	8.685	0.001	63	9760	0.5000	0.5775	
91 o-Xylene	106	9.111	9.111	0.000	65	8531	0.5000	0.5241	
92 Styrene	104	9.142	9.142	0.000	72	12284	0.5000	0.4616	M
95 Bromoform	173	9.397	9.397	0.000	22	2410	0.5000	0.4191	
94 Isopropylbenzene	105	9.495	9.494	0.001	65	20442	0.5000	0.4791	
101 Bromobenzene	156	9.847	9.841	0.006	55	5300	0.5000	0.4666	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	8	4885	0.5000	0.4537	
99 N-Propylbenzene	91	9.920	9.920	0.000	86	23665	0.5000	0.4867	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	16	1795	0.5000	0.4636	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	8	1182	0.5000	0.8730	M
103 2-Chlorotoluene	126	10.030	10.024	0.006	73	4771	0.5000	0.4568	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	74	16754	0.5000	0.4710	
105 4-Chlorotoluene	126	10.133	10.139	-0.006	58	5840	0.5000	0.5186	
106 tert-Butylbenzene	134	10.419	10.413	0.006	59	3980	0.5000	0.4583	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	9	18773	0.5000	0.5116	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	66	22323	0.5000	0.4983	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	62	11333	0.5000	0.5055	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	74	18045	0.5000	0.4360	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	1	11061	0.5000	0.4818	M
115 n-Butylbenzene	91	11.149	11.149	0.000	74	15879	0.5000	0.4616	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	58	11003	0.5000	0.5149	
117 1,2-Dibromo-3-Chloropropan	75	11.928	11.934	-0.006	1	1194	0.5000	0.5491	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	49	8527	0.5000	0.5533	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	32	3586	0.5000	0.5362	
121 Naphthalene	128	12.816	12.816	0.000	82	21486	0.5000	0.5337	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	51	7899	0.5000	0.5666	
S 125 1,2-Dichloroethene, Total	1				0			0.8846	
S 123 Total BTEX	1				0			2.57	
S 124 Xylenes, Total	1				0			1.10	
S 126 1,3-Dichloropropene, Total	1				0			1.00	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

GAS CORP mix_00360	Amount Added:	0.50	Units: uL	
SS 8260 CORP_00077	Amount Added:	0.50	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

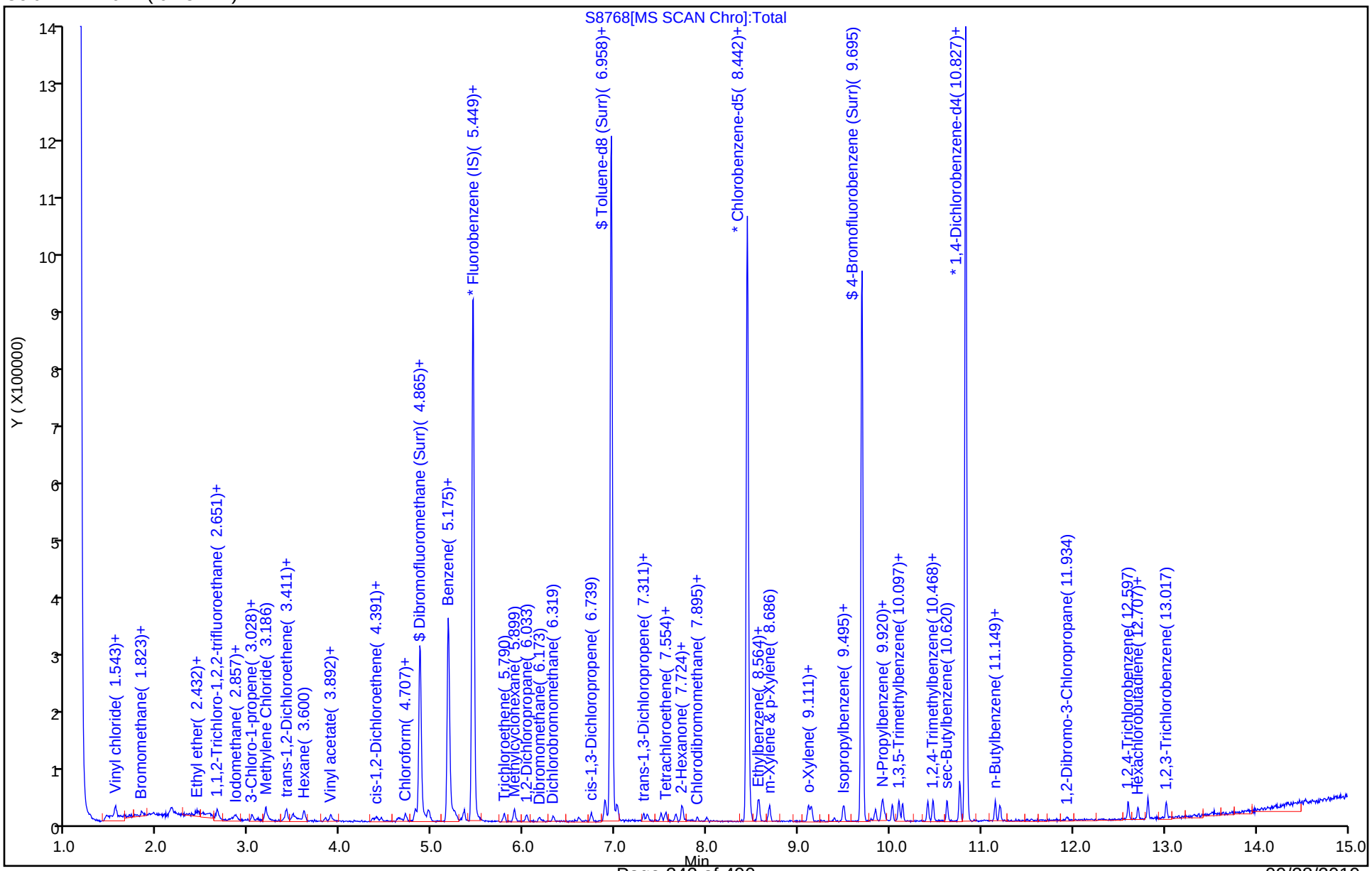
Report Date: 11-Sep-2019 11:11:46 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D

Injection Date:	10-Sep-2019 14:39:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 0.5			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

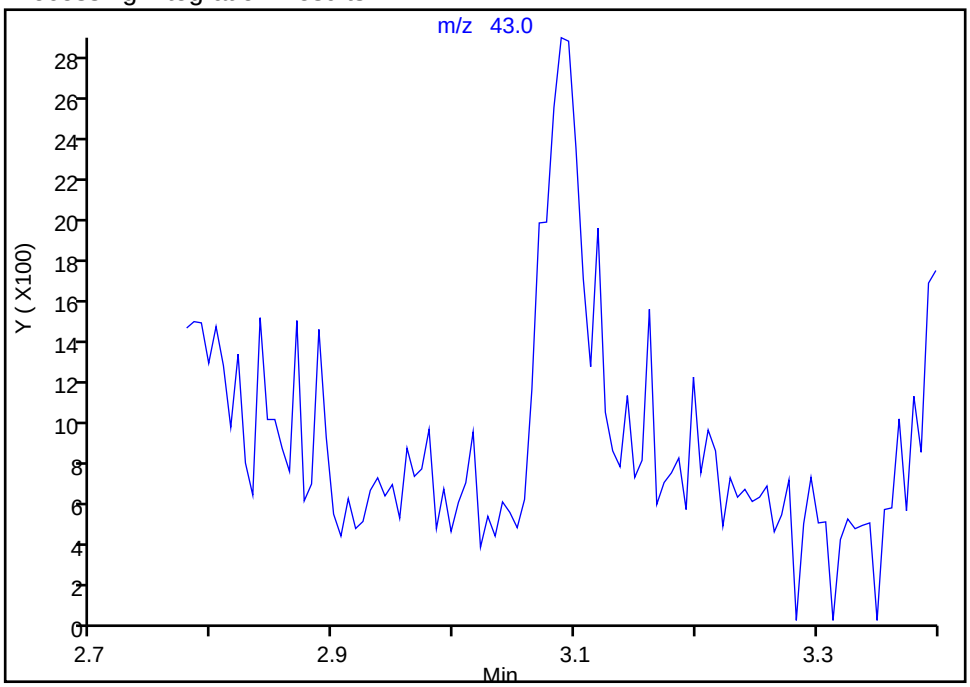
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

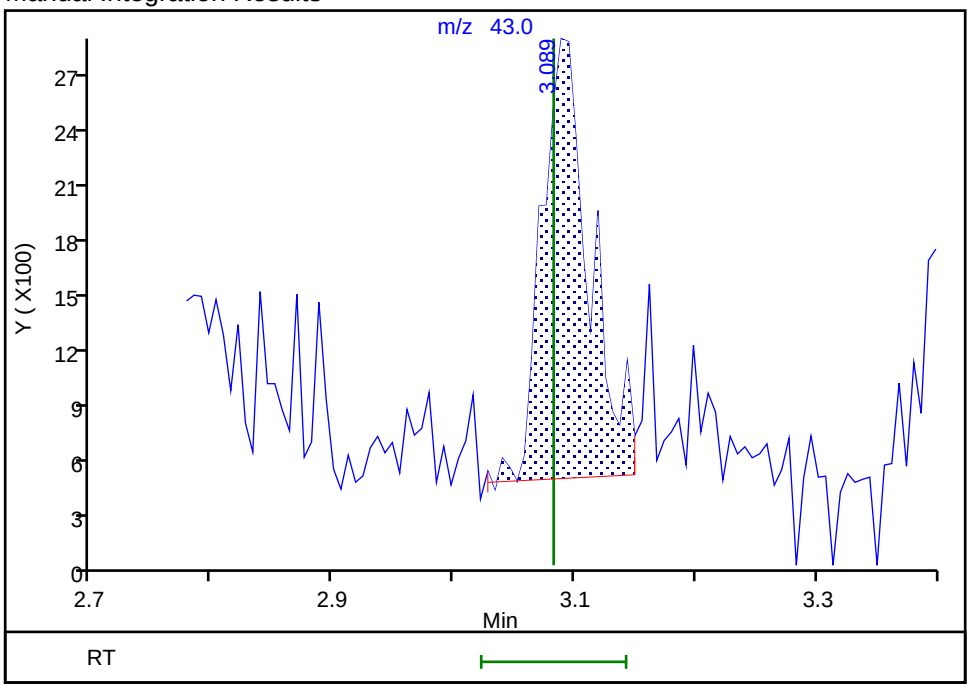
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 6510
Amount: 0.910409
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:41:14
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

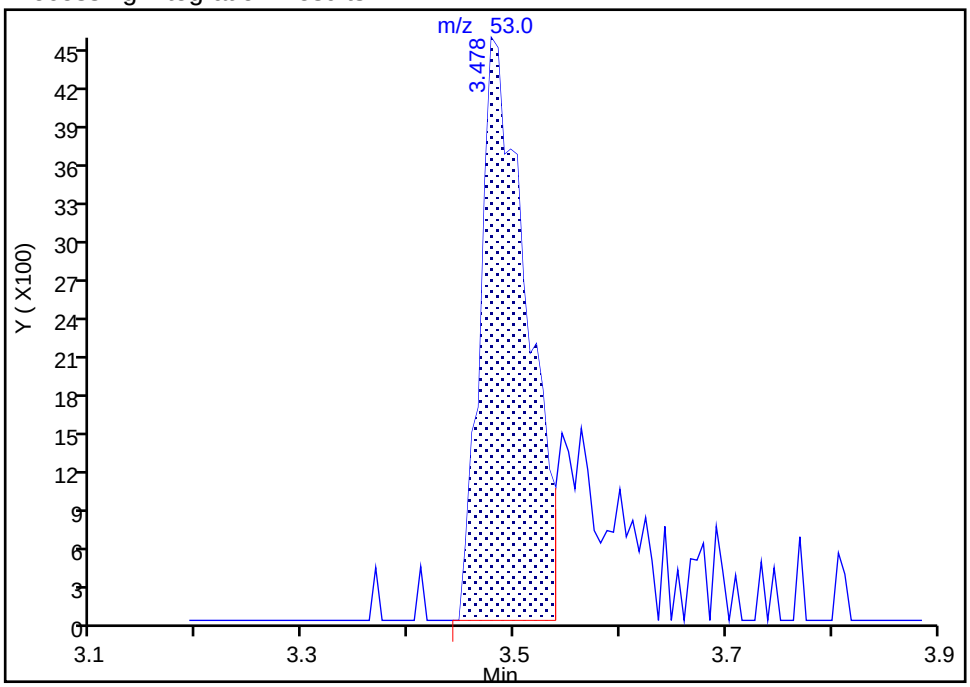
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

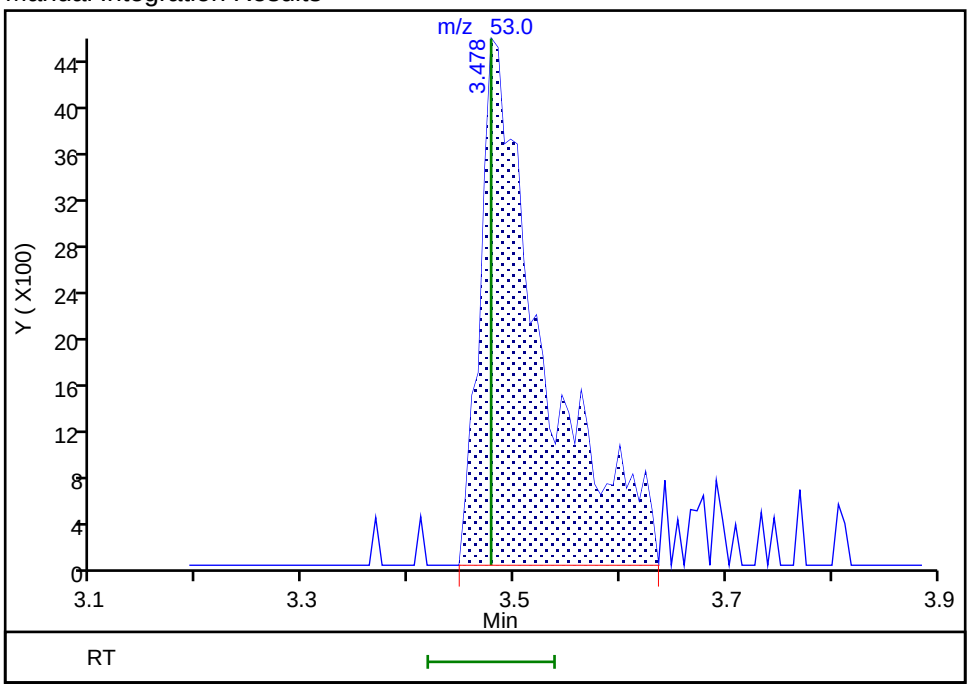
Processing Integration Results

RT: 3.48
Area: 13993
Amount: 4.080173
Amount Units: ug/L



Manual Integration Results

RT: 3.48
Area: 18940
Amount: 5.262205
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:42:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

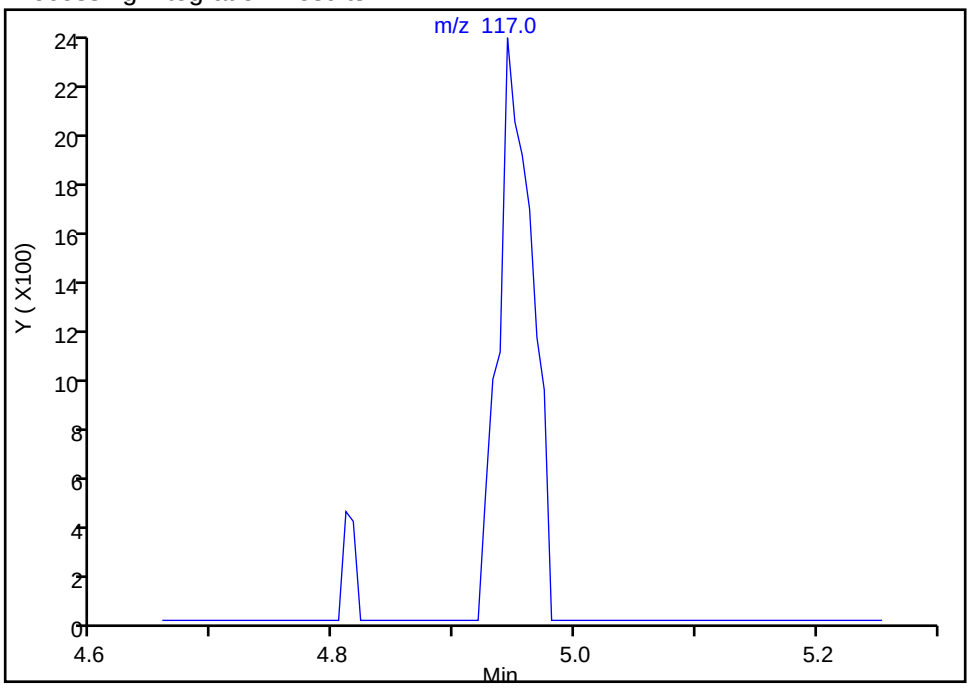
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

55 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

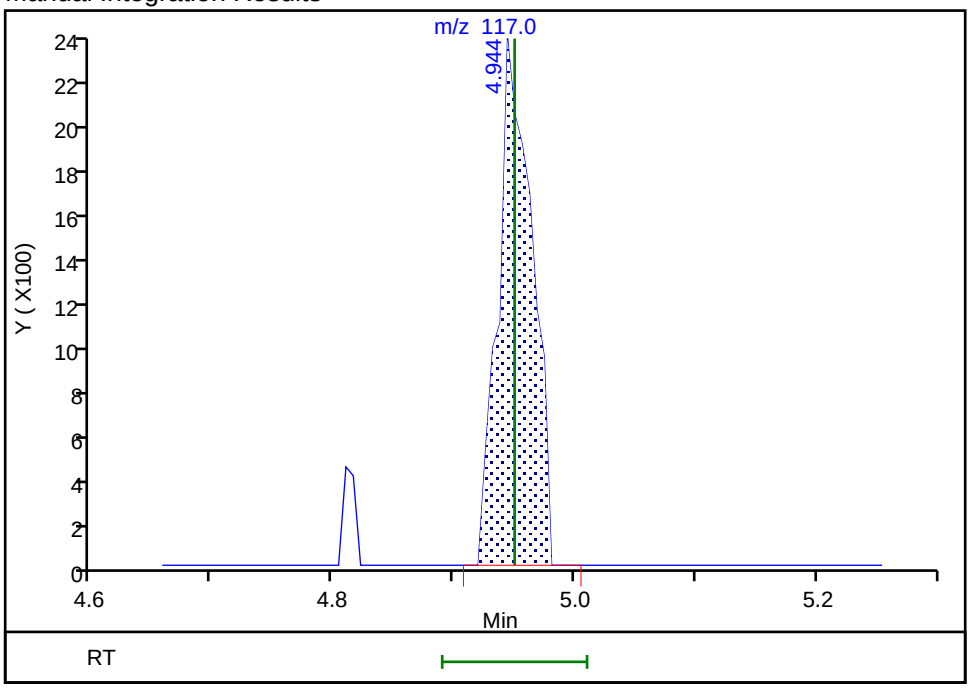
Not Detected
Expected RT: 4.95

Processing Integration Results



Manual Integration Results

RT: 4.94
Area: 4535
Amount: 0.416105
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:43:25
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

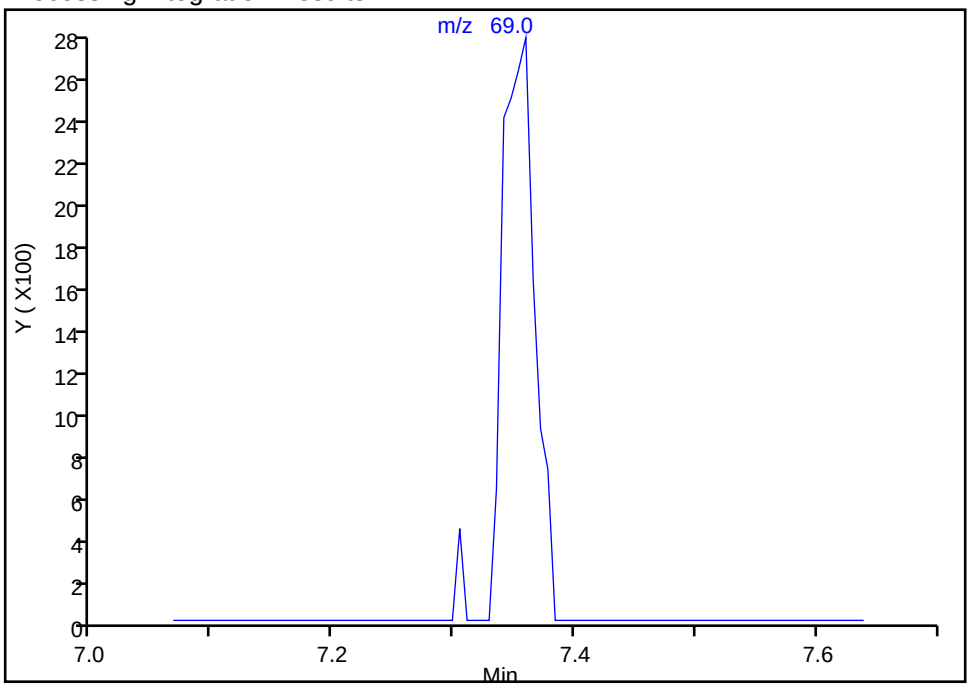
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

75 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

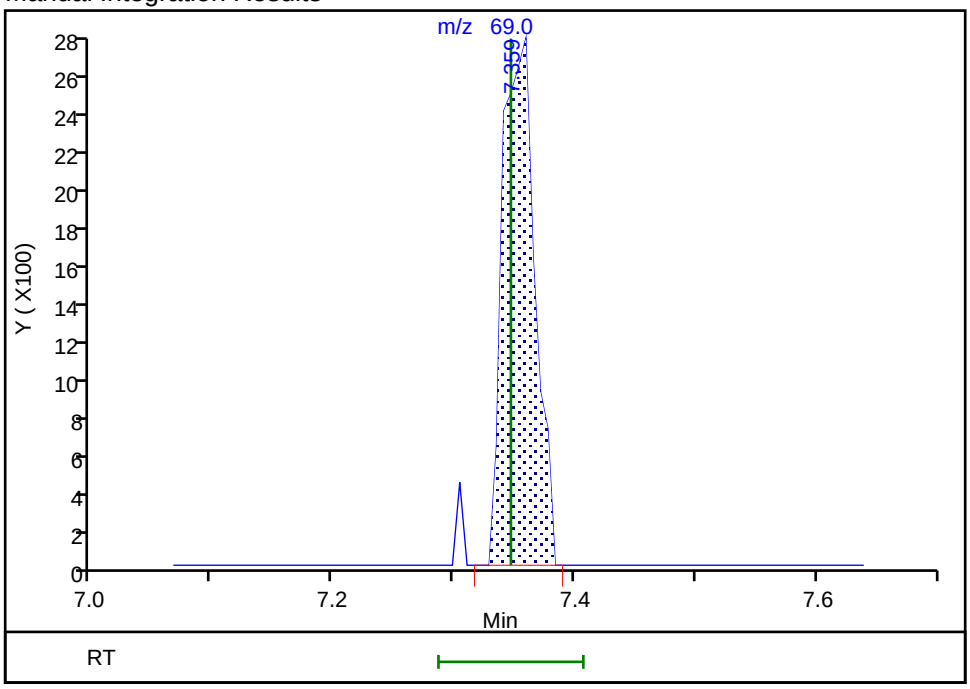
Not Detected
Expected RT: 7.35

Processing Integration Results



Manual Integration Results

RT: 7.36
Area: 5155
Amount: 0.435200
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:18
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

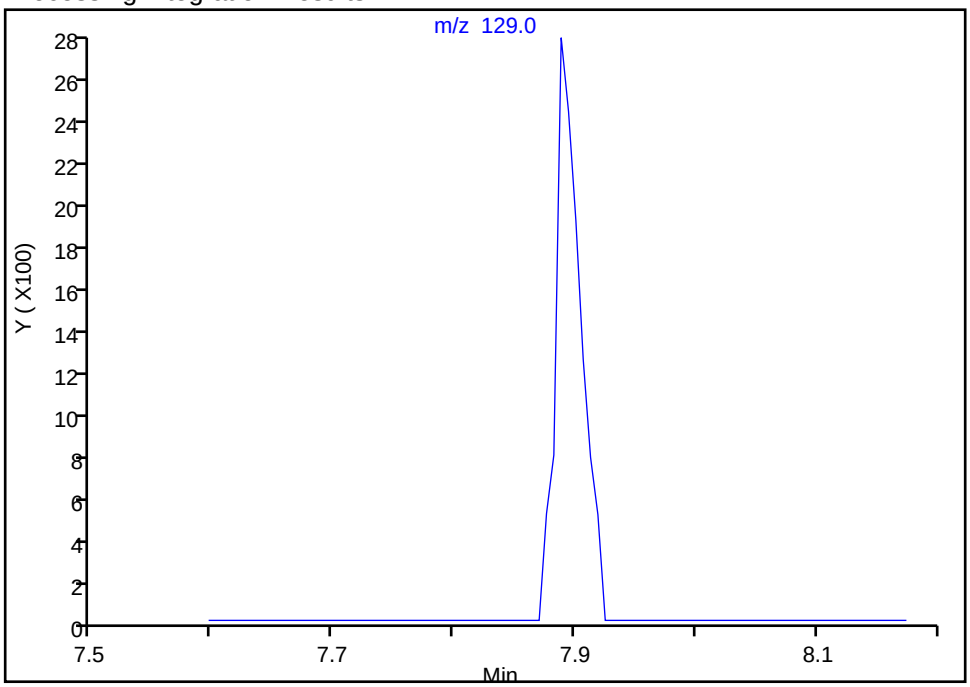
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

83 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

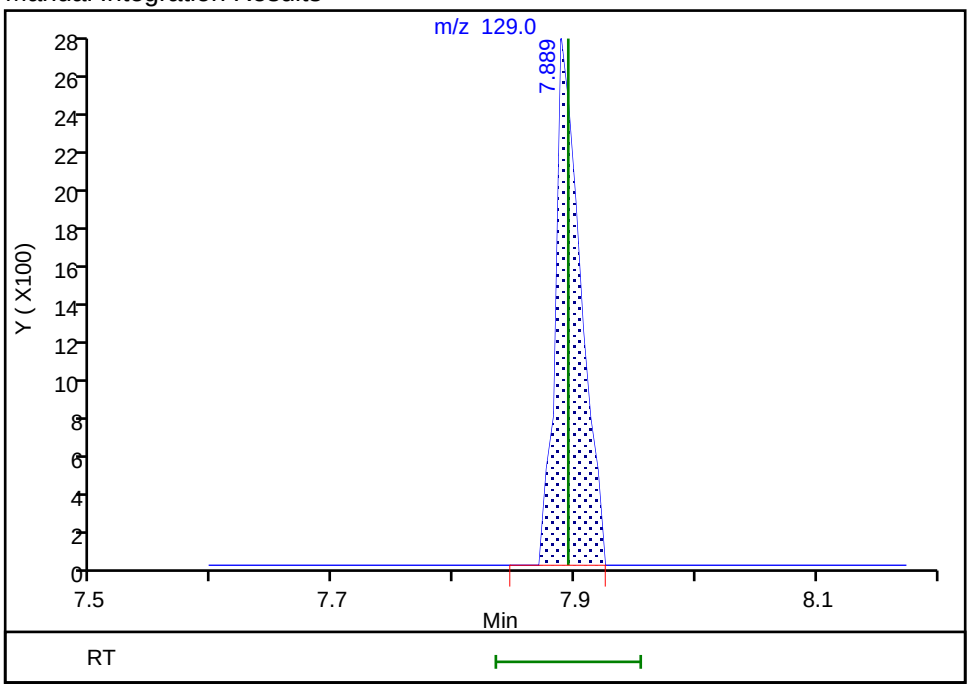
Not Detected
Expected RT: 7.89

Processing Integration Results



Manual Integration Results

RT: 7.89
Area: 3953
Amount: 0.469033
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:31
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

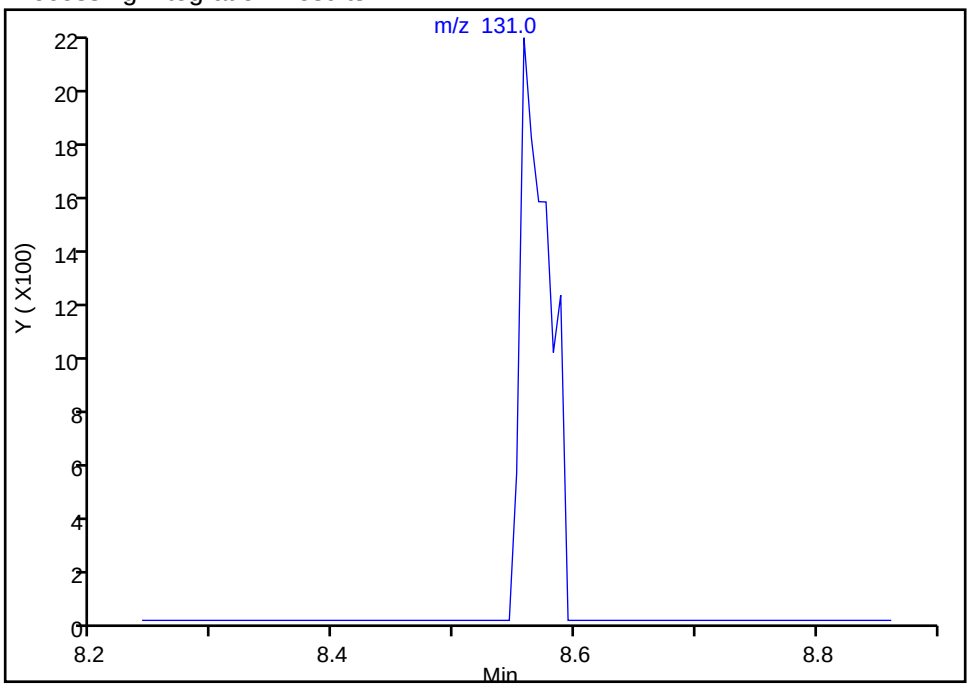
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Signal: 1

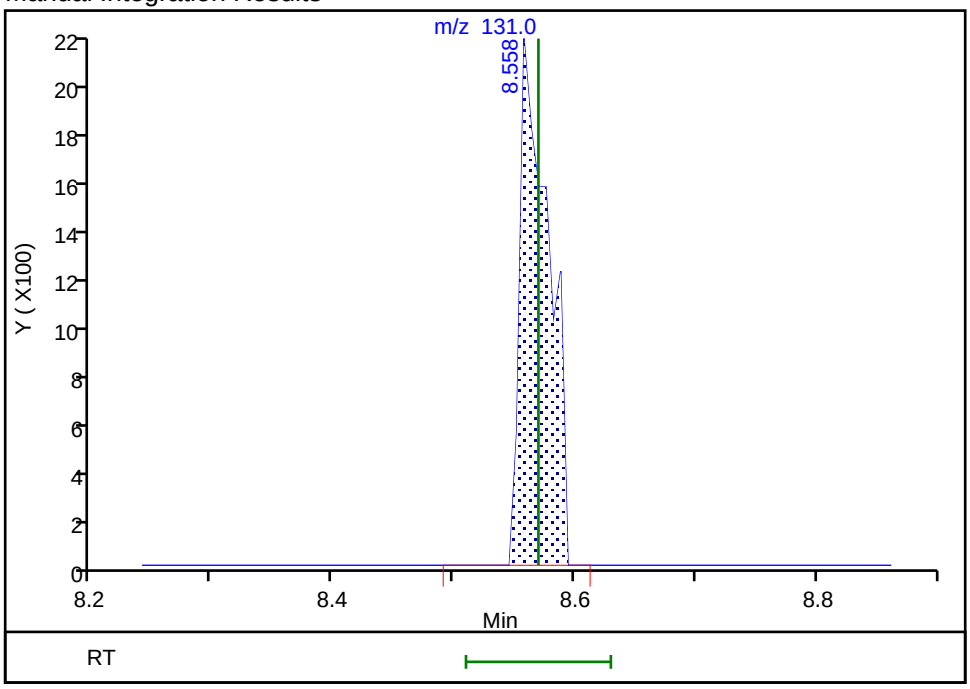
Not Detected
Expected RT: 8.57

Processing Integration Results



Manual Integration Results

RT: 8.56
Area: 3595
Amount: 0.417991
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

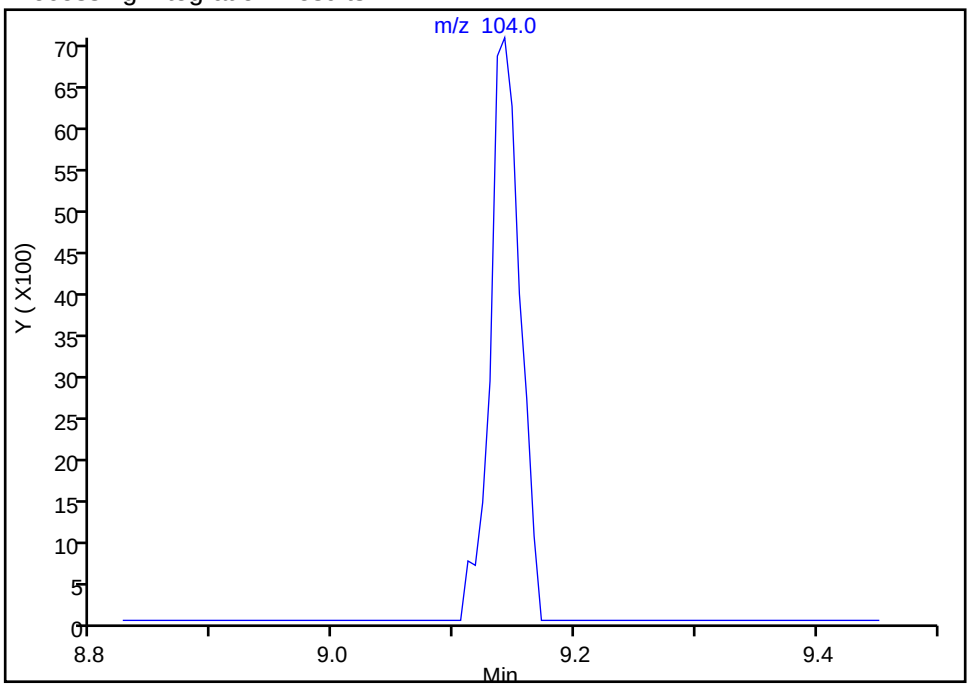
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

92 Styrene, CAS: 100-42-5

Signal: 1

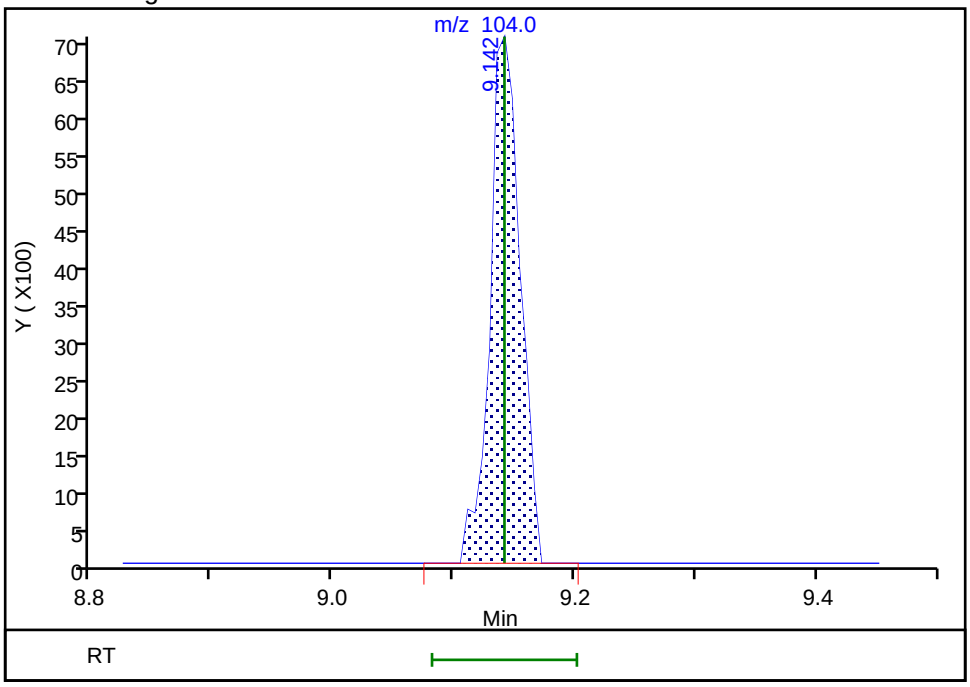
Not Detected
Expected RT: 9.14

Processing Integration Results



Manual Integration Results

RT: 9.14
Area: 12284
Amount: 0.461570
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

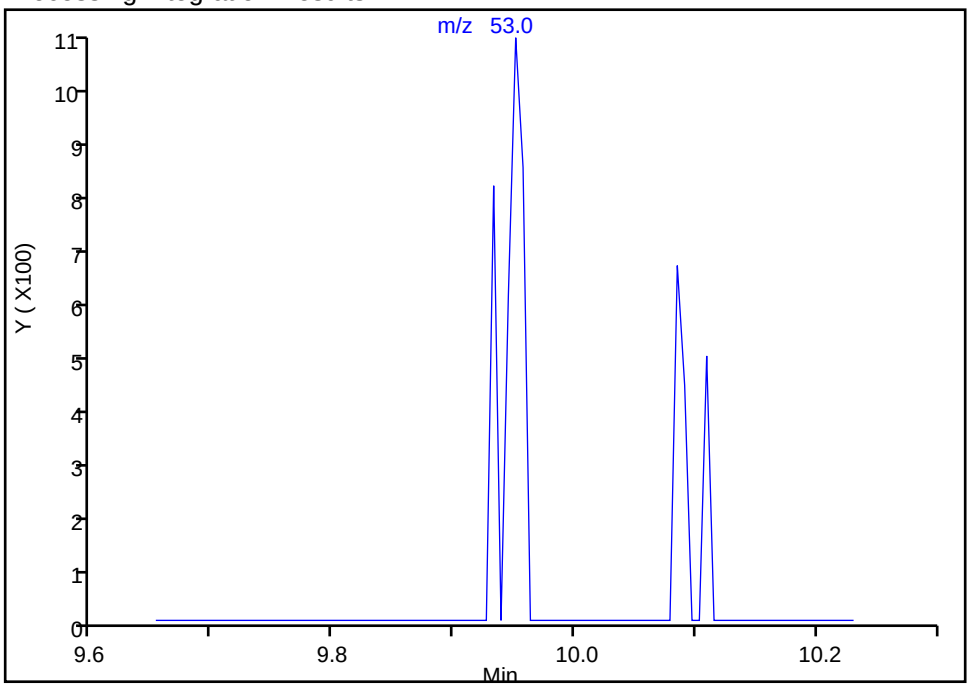
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

98 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

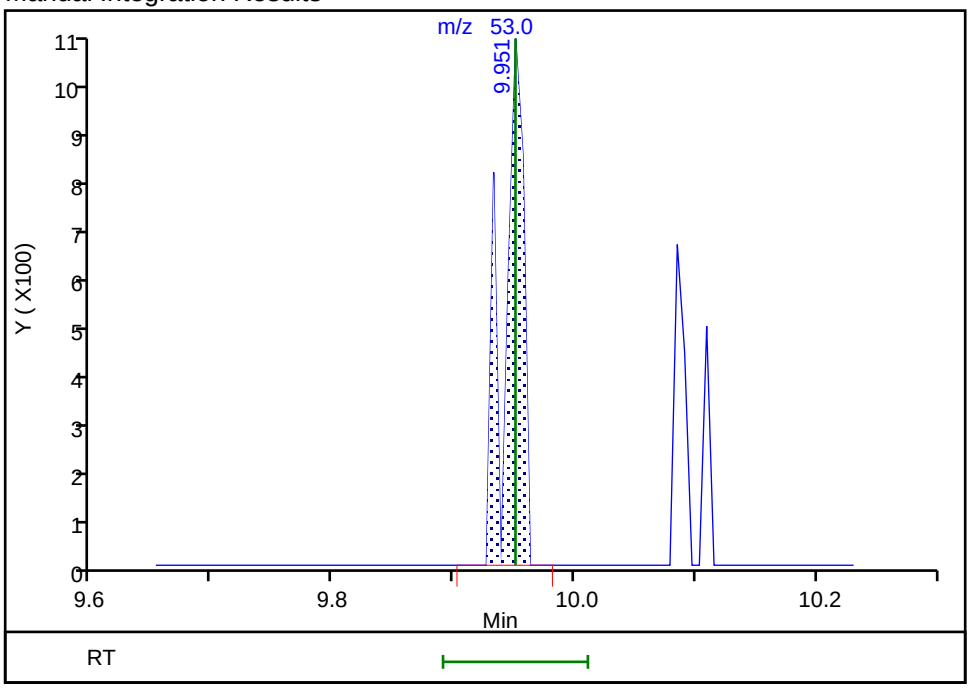
Not Detected
Expected RT: 9.95

Processing Integration Results



Manual Integration Results

RT: 9.95
Area: 1182
Amount: 0.873009
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:44:51
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

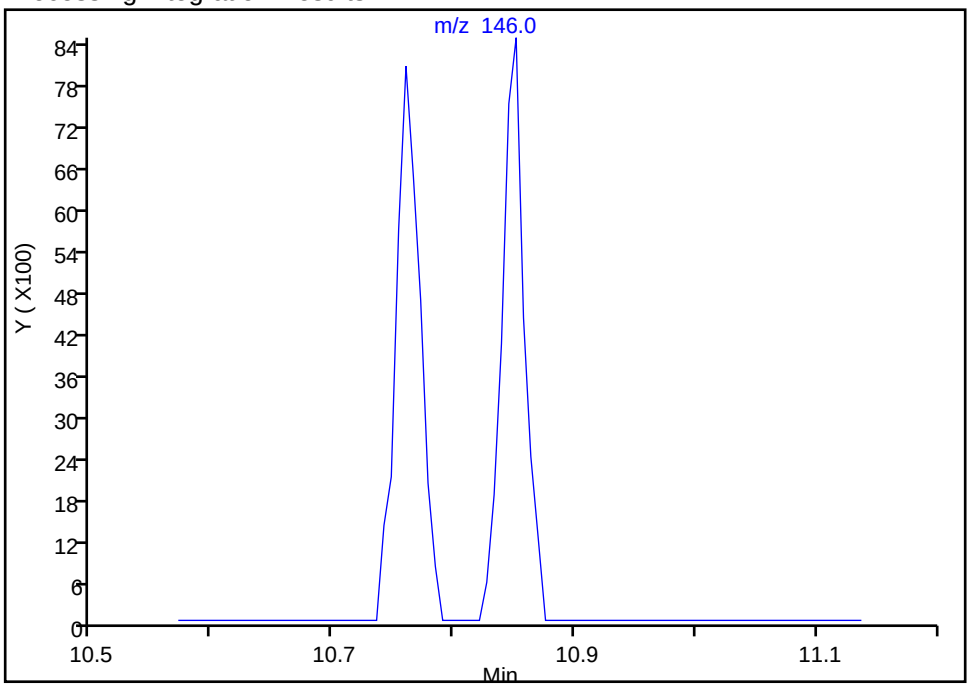
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

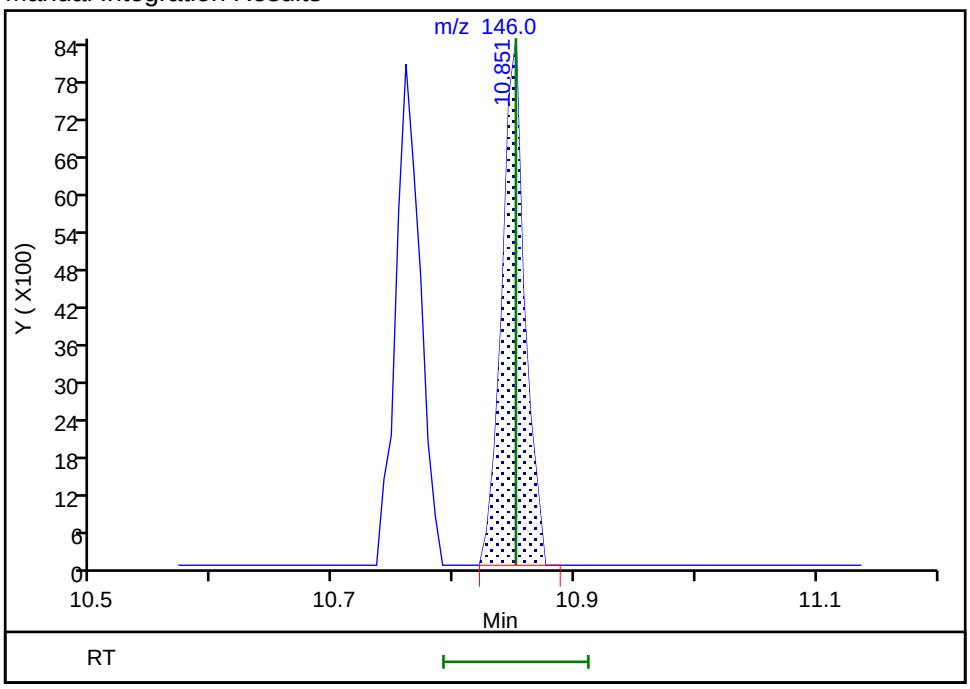
Not Detected
Expected RT: 10.85

Processing Integration Results



Manual Integration Results

RT: 10.85
Area: 11061
Amount: 0.481825
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:45:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

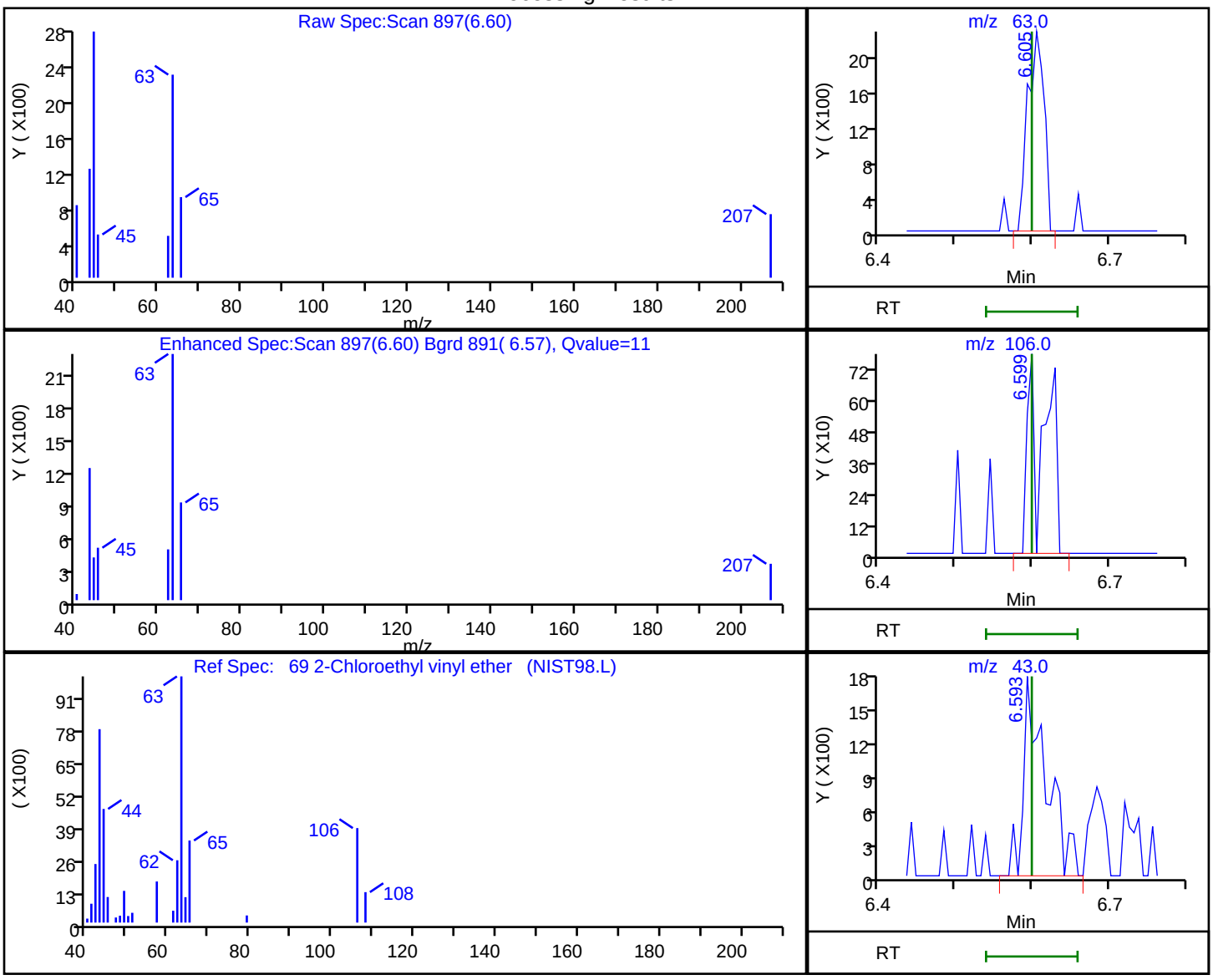
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8768.D
Injection Date: 10-Sep-2019 14:39:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: kn ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Processing Results



RT	Mass	Response	Amount
6.60	63.00	3337	0.547600
6.60	106.00	1321	
6.59	43.00	3676	
6.60	65.00	0	

Reviewer: nowakk, 11-Sep-2019 08:44:08
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Sep-2019 15:02:30 ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0084010-008
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:11:51 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:52:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	142416	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	291002	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	93	336071	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	177930	25.0	24.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	110828	25.0	24.4	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	702289	25.0	24.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	91	257322	25.0	24.7	
10 Dichlorodifluoromethane	85	1.270	1.263	0.007	44	9704	1.00	0.9648	
12 Chloromethane	50	1.446	1.440	0.006	67	11828	1.00	1.05	
13 Vinyl chloride	62	1.543	1.537	0.006	29	10473	1.00	1.11	
151 Butadiene	54	1.543	1.543	0.000	91	11204	1.00	1.04	
14 Bromomethane	94	1.835	1.835	0.000	80	7431	1.00	1.12	
15 Chloroethane	64	1.933	1.926	0.007	60	6713	1.00	1.07	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	51	12945	1.00	1.00	
16 Dichlorofluoromethane	67	2.158	2.152	0.006	78	15829	1.00	1.16	
18 Ethyl ether	59	2.432	2.437	-0.005	72	7300	1.00	0.9561	
20 Acrolein	56	2.626	2.626	0.000	41	7051	5.00	5.51	
21 1,1,2-Trichloro-1,2,2-trif	101	2.657	2.650	0.007	30	6249	1.00	0.8740	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	85	7570	1.00	1.08	
23 Acetone	43	2.797	2.784	0.013	91	23015	5.00	7.79	Ma
25 Iodomethane	142	2.827	2.821	0.006	80	13434	1.00	1.01	
26 Carbon disulfide	76	2.851	2.851	0.000	94	24361	1.00	1.06	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	74	15322	1.00	1.10	
27 Methyl acetate	43	3.083	3.082	0.000	87	14725	2.00	2.09	Ma
30 Methylene Chloride	84	3.180	3.186	-0.006	87	14657	1.00	0.9554	
31 2-Methyl-2-propanol	59	3.405	3.356	0.049	32	5475	10.0	9.07	M
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	82	24438	1.00	1.06	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	87	8042	1.00	1.01	
33 Acrylonitrile	53	3.484	3.478	0.006	96	37418	10.0	10.5	M
35 Hexane	57	3.600	3.606	-0.006	81	12244	1.00	0.9510	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	55	14713	1.00	1.03	
37 Vinyl acetate	43	3.892	3.891	0.001	95	46847	2.00	2.20	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	59	8107	1.00	0.9688	
45 cis-1,2-Dichloroethene	96	4.397	4.390	0.007	37	8975	1.00	1.02	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	83	24322	5.00	5.69	
48 Chlorobromomethane	128	4.634	4.634	0.000	69	4468	1.00	0.9694	
49 Tetrahydrofuran	42	4.658	4.652	0.006	62	5954	2.00	1.93	
50 Chloroform	83	4.713	4.707	0.006	73	14883	1.00	1.04	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	66	12415	1.00	1.03	
52 Cyclohexane	56	4.816	4.816	0.000	71	14340	1.00	0.9578	
55 Carbon tetrachloride	117	4.956	4.950	0.006	62	10957	1.00	1.02	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	72	10237	1.00	0.9457	
57 Benzene	78	5.169	5.175	-0.006	45	33751	1.00	1.06	
53 Isobutyl alcohol	43	5.206	5.199	0.007	45	10573	25.0	30.3	M
58 1,2-Dichloroethane	62	5.248	5.248	0.000	57	12685	1.00	1.02	
59 n-Heptane	43	5.352	5.345	0.007	80	17100	1.00	1.05	
62 Trichloroethene	95	5.784	5.783	0.001	63	8625	1.00	1.05	
64 Methylcyclohexane	83	5.899	5.899	0.000	76	13351	1.00	0.9406	
65 1,2-Dichloropropane	63	6.021	6.033	-0.012	65	8383	1.00	1.02	
67 Dibromomethane	93	6.167	6.167	0.000	71	4761	1.00	0.9276	
66 1,4-Dioxane	88	6.167	6.173	-0.006	1	499	20.0	9.00	M
68 Dichlorobromomethane	83	6.325	6.325	0.000	71	11026	1.00	1.06	
69 2-Chloroethyl vinyl ether	63	6.605	6.599	0.006	70	5989	1.00	1.01	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	57	13456	1.00	1.00	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	93	53693	5.00	4.92	
74 Toluene	92	7.025	7.018	0.007	84	22270	1.00	1.05	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.001	81	12259	1.00	1.01	
75 Ethyl methacrylate	69	7.347	7.347	0.000	51	11450	1.00	0.9870	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	70	6714	1.00	1.06	
81 Tetrachloroethene	166	7.554	7.548	0.006	82	9660	1.00	0.9844	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	69	13908	1.00	1.07	
80 2-Hexanone	43	7.730	7.724	0.006	85	42967	5.00	5.42	
83 Chlorodibromomethane	129	7.895	7.894	0.001	41	7875	1.00	0.9541	
84 Ethylene Dibromide	107	8.004	7.998	0.006	56	8124	1.00	0.9777	
87 Chlorobenzene	112	8.473	8.472	0.001	69	25084	1.00	1.03	
88 Ethylbenzene	91	8.558	8.564	-0.006	87	39515	1.00	1.00	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	23	8107	1.00	0.9625	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	90	16732	1.00	1.01	
91 o-Xylene	106	9.111	9.111	0.000	83	15858	1.00	0.99	
92 Styrene	104	9.142	9.142	0.000	85	26447	1.00	1.01	
95 Bromoform	173	9.397	9.397	0.000	49	5582	1.00	0.99	
94 Isopropylbenzene	105	9.495	9.494	0.001	78	41896	1.00	0.9855	
101 Bromobenzene	156	9.841	9.841	0.000	76	10927	1.00	0.9656	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	57	10991	1.00	1.02	
99 N-Propylbenzene	91	9.920	9.920	0.000	93	45424	1.00	0.9377	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	48	4281	1.00	1.11	
98 trans-1,4-Dichloro-2-buten	53	9.945	9.951	-0.006	18	2100	1.00	1.12	
103 2-Chlorotoluene	126	10.030	10.024	0.006	80	10181	1.00	0.9783	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	81	35074	1.00	0.9896	
105 4-Chlorotoluene	126	10.139	10.139	0.000	67	11192	1.00	1.00	
106 tert-Butylbenzene	134	10.413	10.413	0.000	83	8704	1.00	1.01	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	26	35377	1.00	0.9677	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	68	42411	1.00	0.9501	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	69	23624	1.00	1.06	
110 4-Isopropyltoluene	119	10.760	10.766	-0.006	91	41511	1.00	1.01	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	84	23266	1.00	1.02	
115 n-Butylbenzene	91	11.149	11.149	0.000	89	34389	1.00	1.00	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	87	22603	1.00	1.06	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	17	2076	1.00	0.9582	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	79	17514	1.00	1.14	
120 Hexachlorobutadiene	225	12.713	12.707	0.006	48	8199	1.00	1.23	
121 Naphthalene	128	12.816	12.816	0.000	92	45997	1.00	1.15	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	77	16512	1.00	1.19	
S 125 1,2-Dichloroethene, Total	1				0			2.03	
S 123 Total BTEX	1				0			5.12	
S 124 Xylenes, Total	1				0			2.01	
S 126 1,3-Dichloropropene, Total	1				0			2.02	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00360	Amount Added:	1.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	1.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

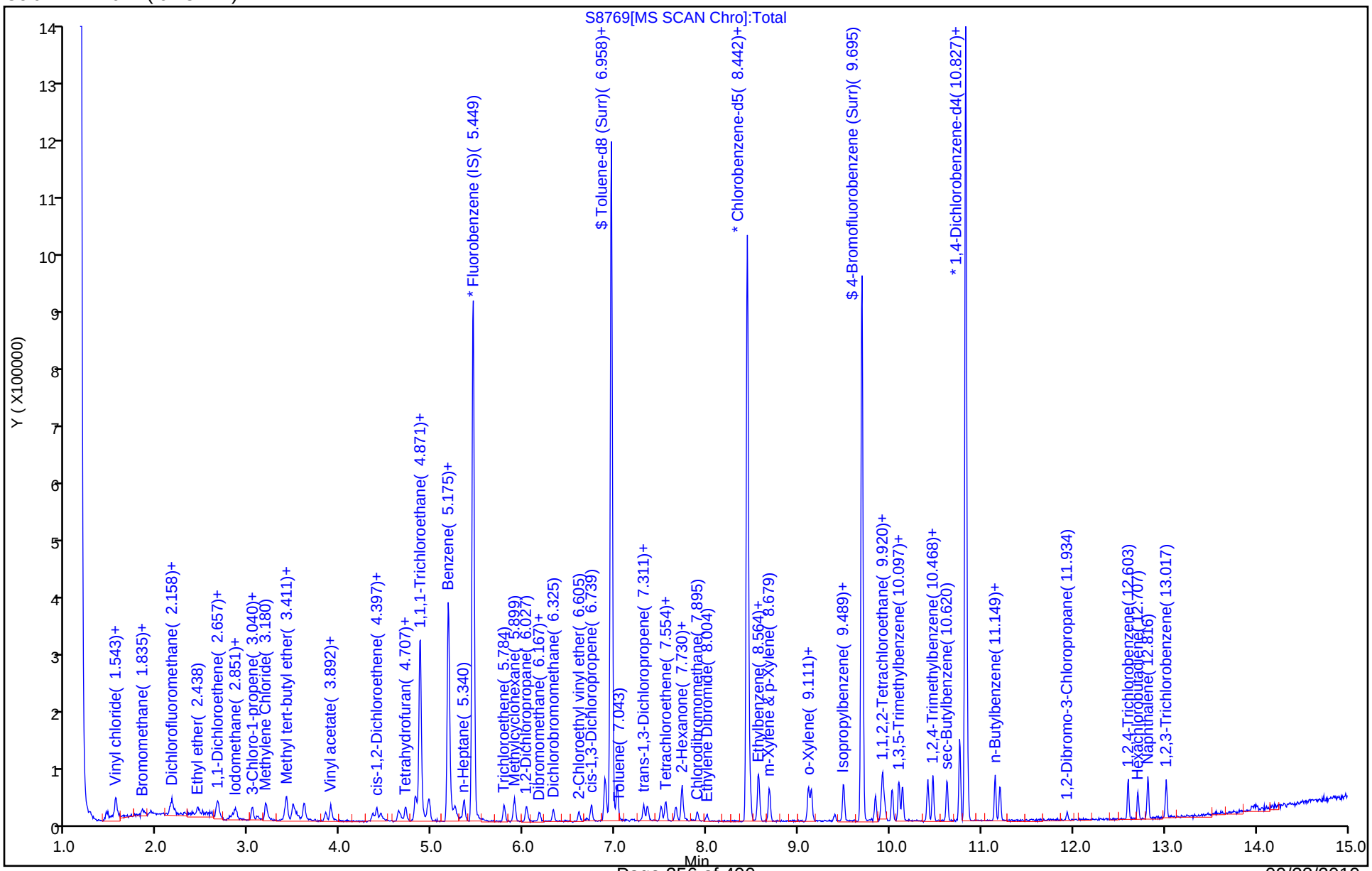
Report Date: 11-Sep-2019 11:11:53 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D

Injection Date:	10-Sep-2019 15:02:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

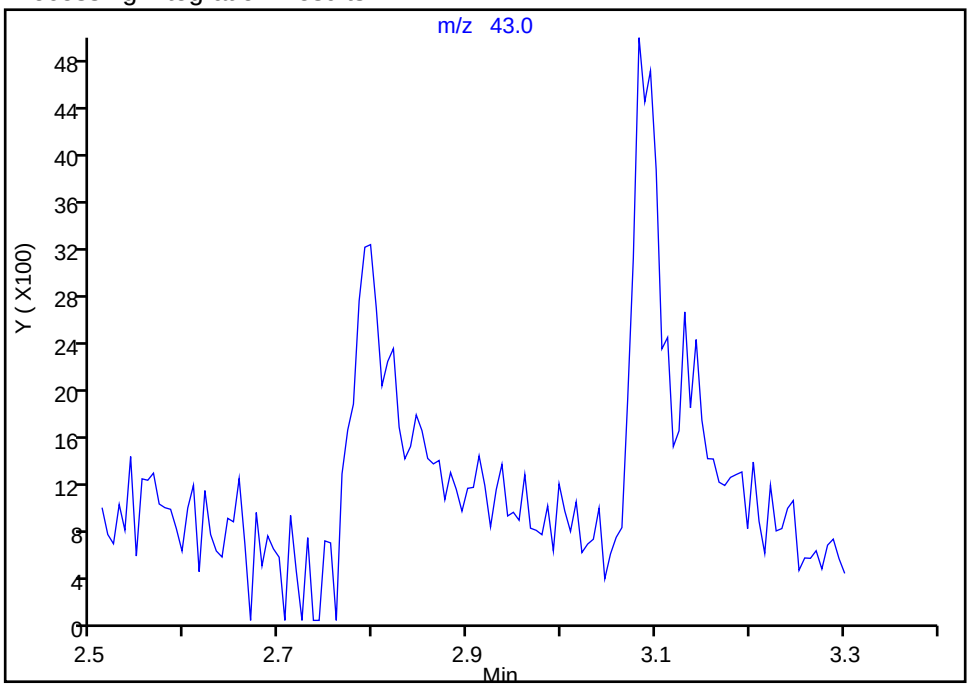
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

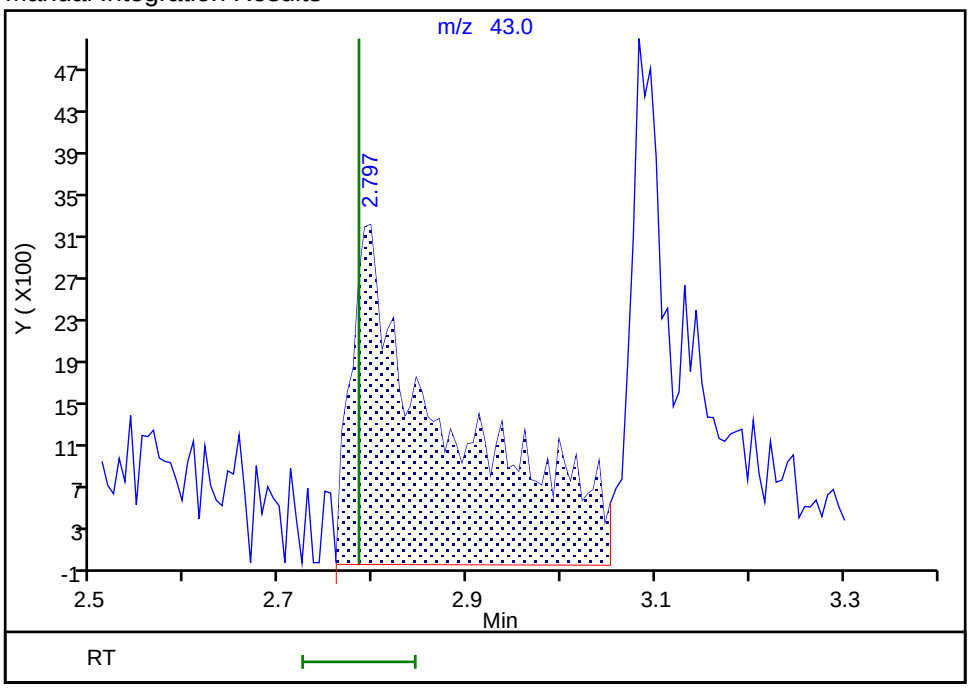
Not Detected
Expected RT: 2.78

Processing Integration Results



Manual Integration Results

RT: 2.80
Area: 23015
Amount: 7.786555
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:46:53
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

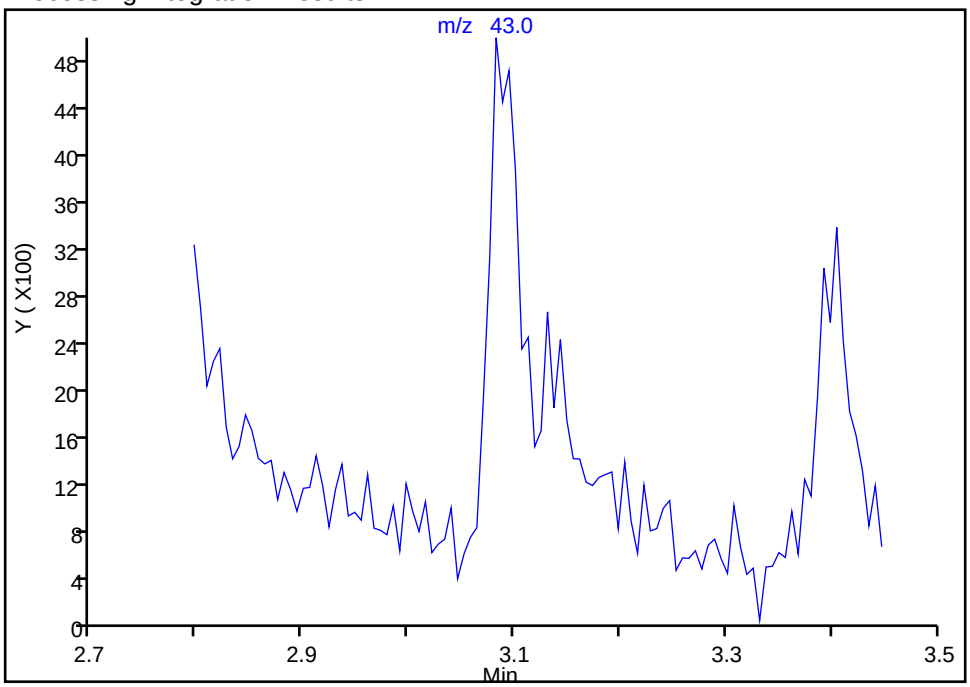
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

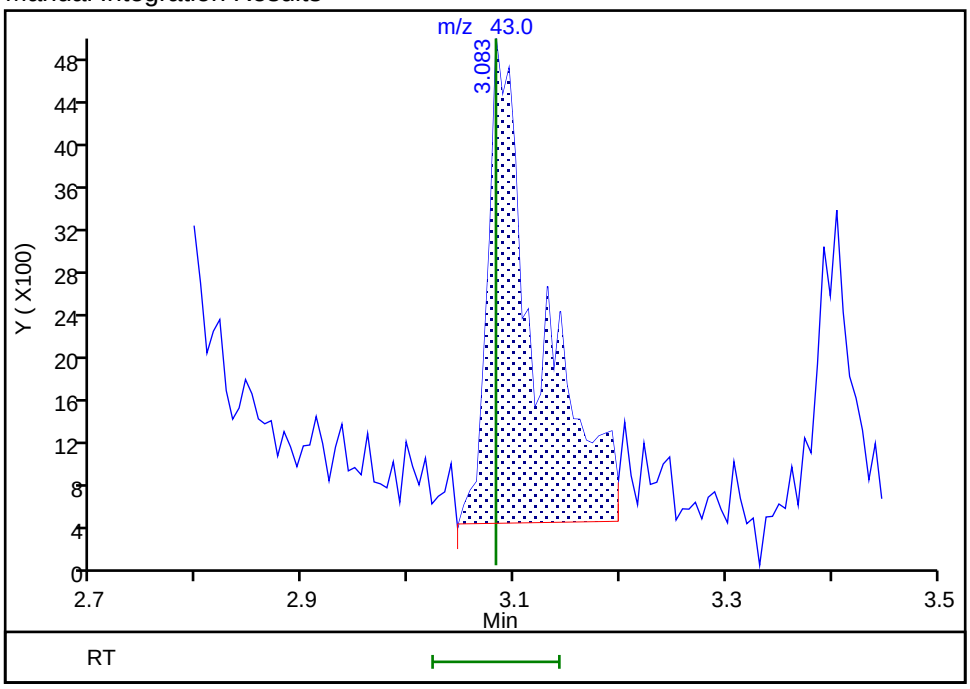
Not Detected
Expected RT: 3.08

Processing Integration Results



Manual Integration Results

RT: 3.08
Area: 14725
Amount: 2.085417
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:47:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

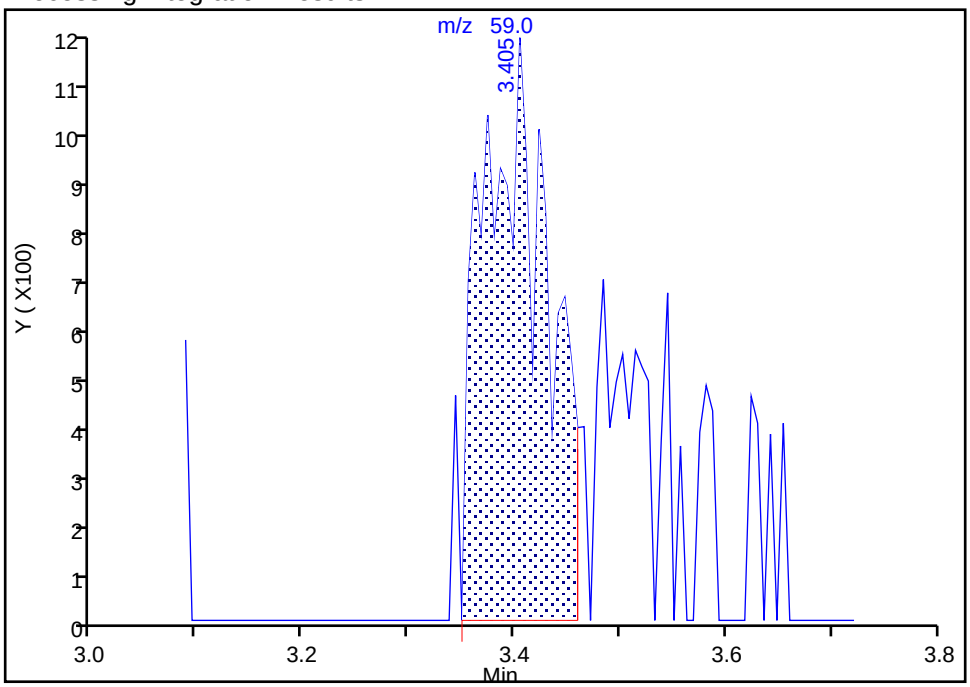
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

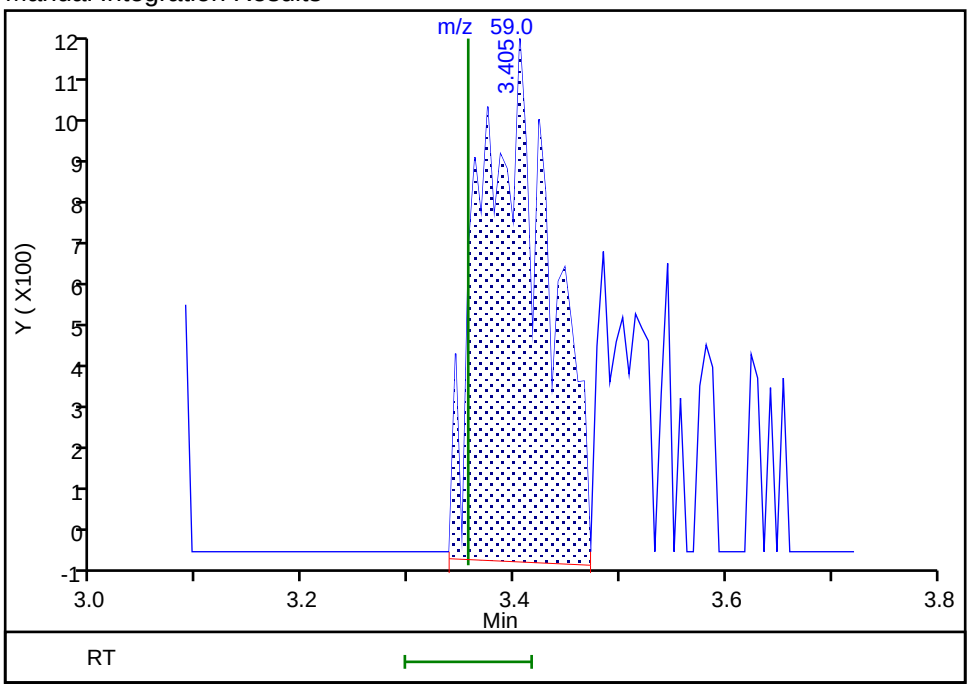
Processing Integration Results

RT: 3.40
Area: 4969
Amount: 8.291455
Amount Units: ug/L



Manual Integration Results

RT: 3.40
Area: 5475
Amount: 9.072205
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:48:00
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

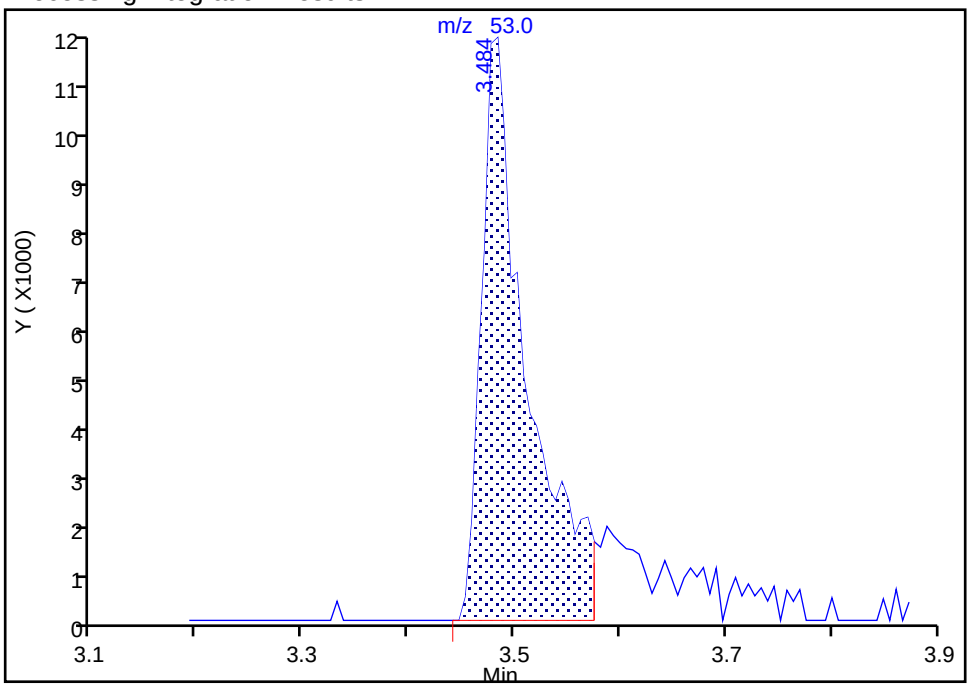
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

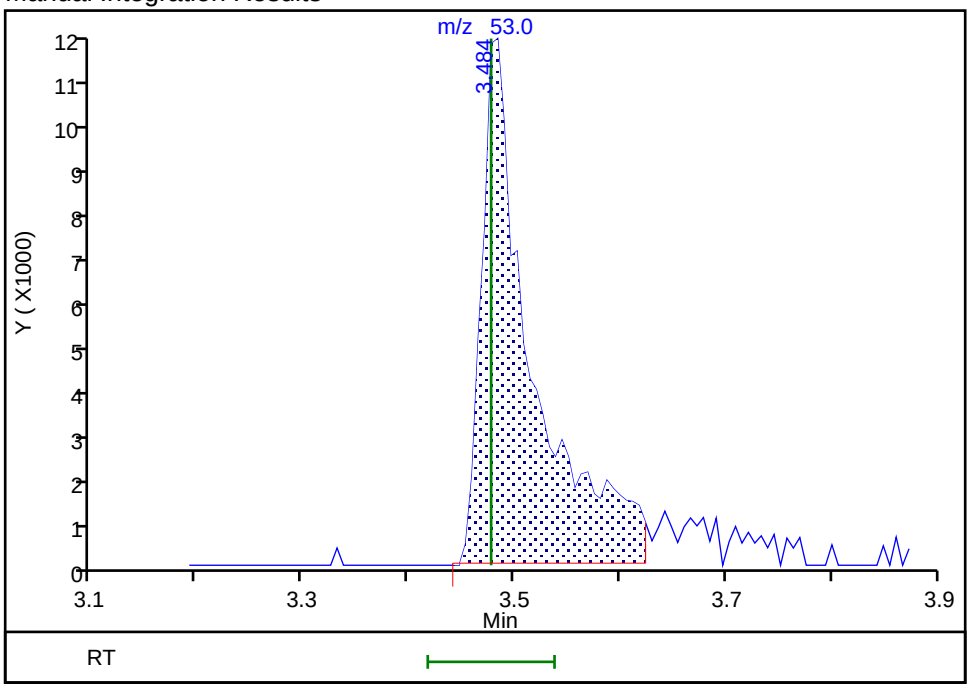
Processing Integration Results

RT: 3.48
Area: 33779
Amount: 9.627435
Amount Units: ug/L



Manual Integration Results

RT: 3.48
Area: 37418
Amount: 10.528104
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:48:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

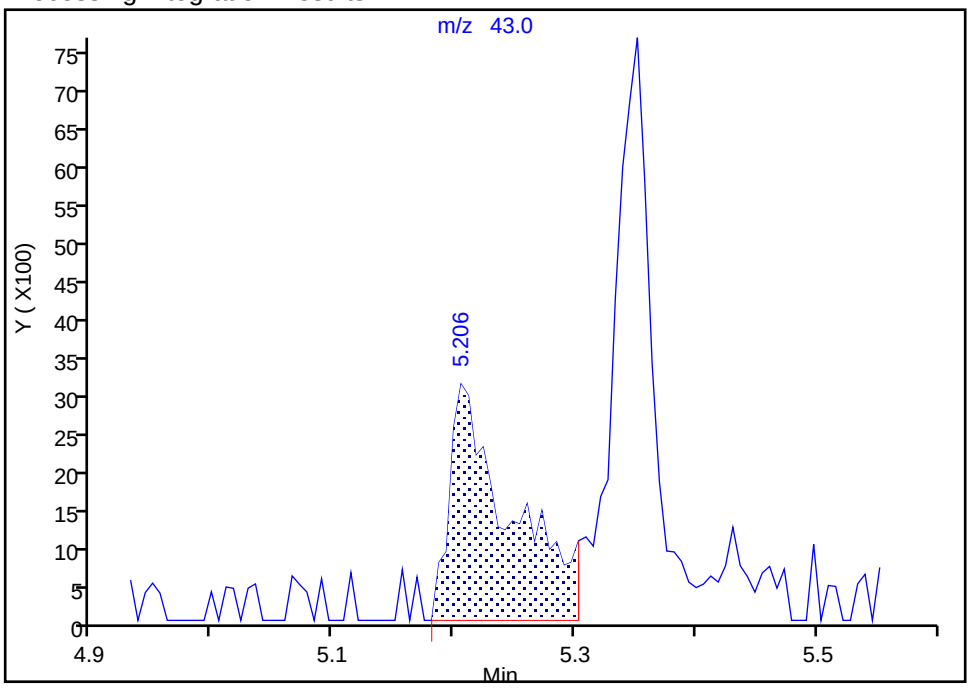
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

53 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

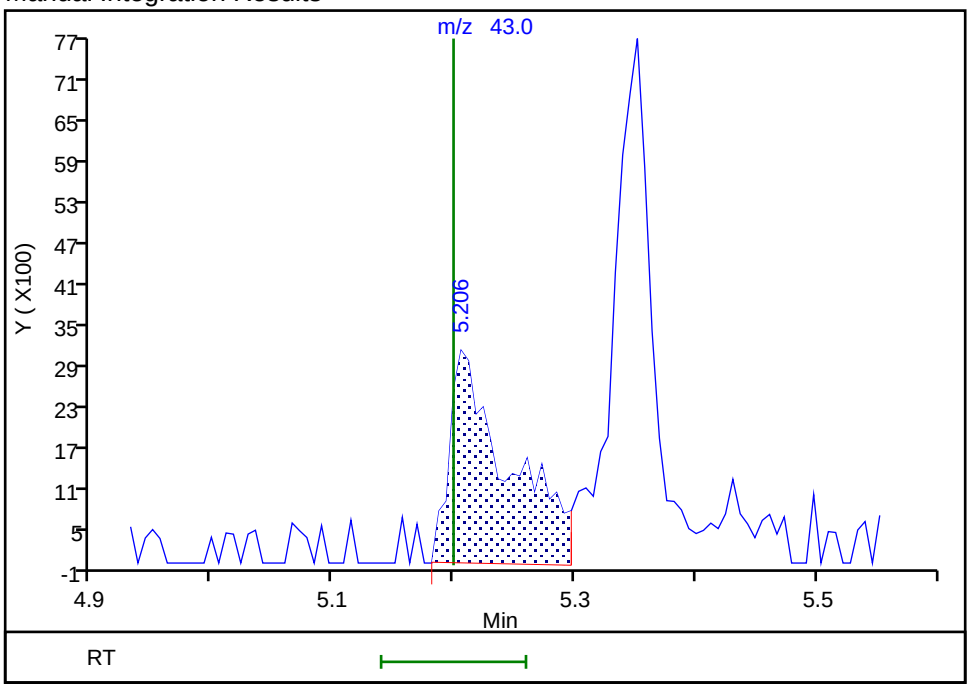
Processing Integration Results

RT: 5.21
Area: 10881
Amount: 32.353387
Amount Units: ug/L



Manual Integration Results

RT: 5.21
Area: 10573
Amount: 30.260328
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:49:18
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

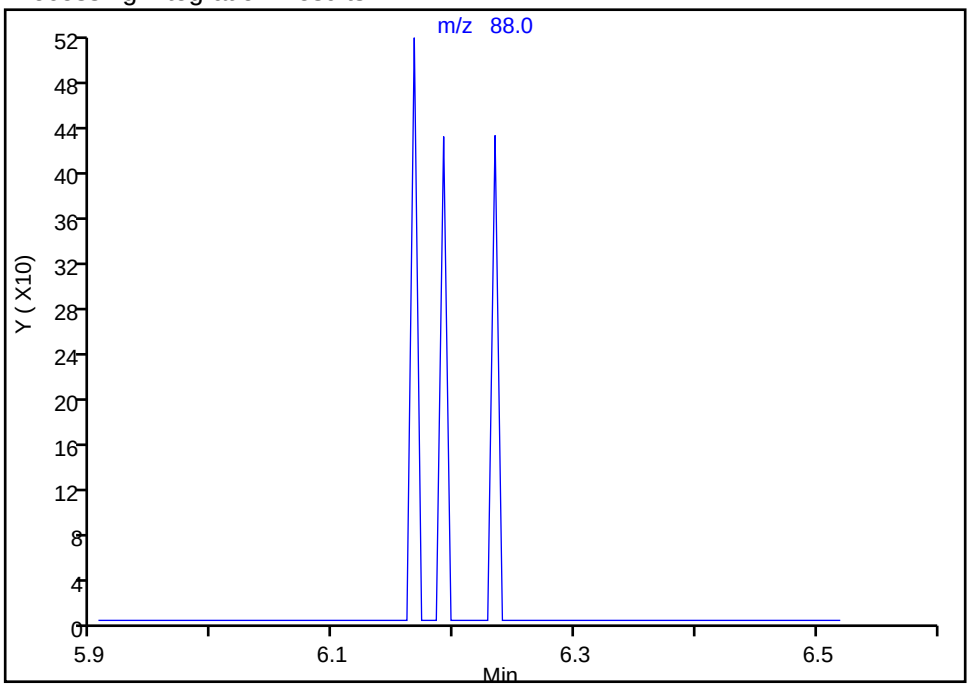
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8769.D
Injection Date: 10-Sep-2019 15:02:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

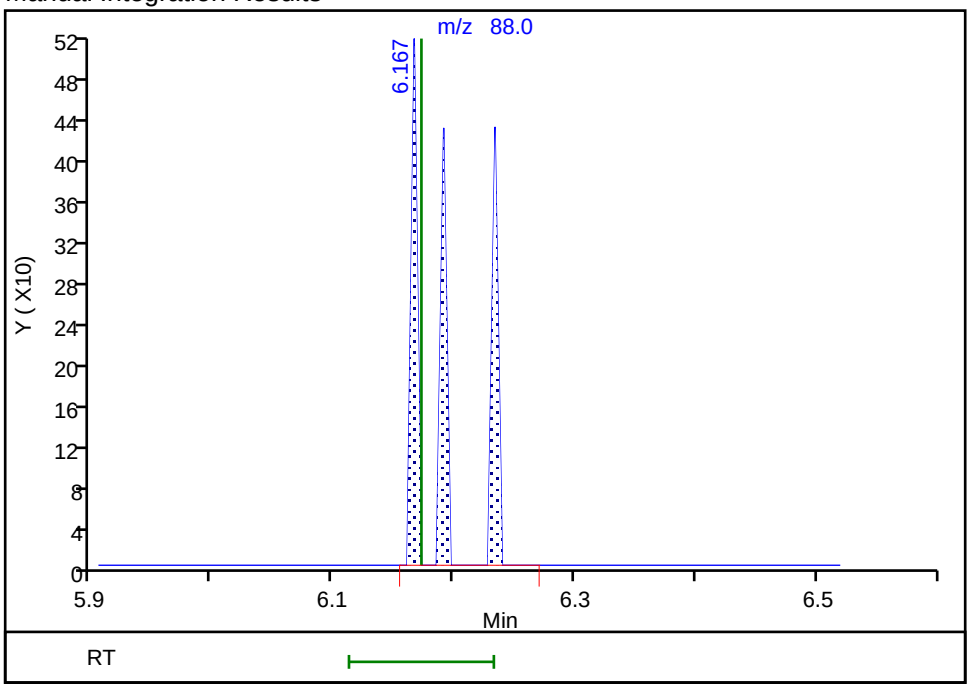
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.17
Area: 499
Amount: 9.004467
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:49:37
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Sep-2019 15:25:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0084010-009
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:11:57 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:58:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	140997	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	290866	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	93	333063	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	176581	25.0	24.7	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	114642	25.0	25.5	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	82	708338	25.0	24.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	261883	25.0	25.1	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	86	19971	2.00	2.01	
12 Chloromethane	50	1.440	1.440	0.000	88	22479	2.00	2.02	
13 Vinyl chloride	62	1.543	1.537	0.006	60	17675	2.00	1.90	
151 Butadiene	54	1.543	1.543	0.000	88	21575	2.00	2.02	
14 Bromomethane	94	1.841	1.835	0.006	74	14302	2.00	2.17	
15 Chloroethane	64	1.933	1.926	0.007	71	13439	2.00	2.16	
17 Trichlorofluoromethane	101	2.158	2.152	0.006	79	24699	2.00	1.92	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	89	26303	2.00	1.95	
18 Ethyl ether	59	2.444	2.437	0.007	88	16625	2.00	2.20	
20 Acrolein	56	2.632	2.626	0.006	74	14318	10.0	11.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.644	2.650	-0.006	72	16137	2.00	2.28	
22 1,1-Dichloroethene	96	2.650	2.656	-0.006	90	15375	2.00	2.22	
23 Acetone	43	2.784	2.784	0.000	87	31693	10.0	10.8	M
25 Iodomethane	142	2.821	2.821	0.000	89	29220	2.00	2.22	
26 Carbon disulfide	76	2.857	2.851	0.006	95	48942	2.00	2.16	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	82	30751	2.00	2.22	
27 Methyl acetate	43	3.082	3.082	0.000	95	28228	4.00	4.04	
30 Methylene Chloride	84	3.186	3.186	0.000	93	23344	2.00	2.12	
31 2-Methyl-2-propanol	59	3.362	3.356	0.006	59	12422	20.0	20.8	
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	83	48820	2.00	2.15	
34 trans-1,2-Dichloroethene	96	3.405	3.411	-0.006	86	17021	2.00	2.16	
33 Acrylonitrile	53	3.484	3.478	0.006	98	64787	20.0	18.4	
35 Hexane	57	3.606	3.606	0.000	89	28613	2.00	2.24	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	78	29954	2.00	2.12	
37 Vinyl acetate	43	3.892	3.891	0.001	96	86248	4.00	4.10	
44 2,2-Dichloropropane	77	4.360	4.354	0.006	79	17780	2.00	2.15	
45 cis-1,2-Dichloroethene	96	4.396	4.390	0.006	73	19021	2.00	2.19	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	90	45418	10.0	10.7	
48 Chlorobromomethane	128	4.634	4.634	0.000	77	9935	2.00	2.18	
49 Tetrahydrofuran	42	4.658	4.652	0.006	74	14180	4.00	4.65	
50 Chloroform	83	4.713	4.707	0.006	73	31284	2.00	2.22	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	78	25164	2.00	2.11	
52 Cyclohexane	56	4.822	4.816	0.006	87	31989	2.00	2.16	
55 Carbon tetrachloride	117	4.950	4.950	0.000	77	22905	2.00	2.15	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	81	23185	2.00	2.16	
57 Benzene	78	5.169	5.175	-0.006	58	67991	2.00	2.15	
53 Isobutyl alcohol	43	5.206	5.199	0.007	77	18650	50.0	53.9	
58 1,2-Dichloroethane	62	5.254	5.248	0.006	52	25505	2.00	2.06	
59 n-Heptane	43	5.345	5.345	0.000	87	34757	2.00	2.16	
62 Trichloroethene	95	5.784	5.783	0.001	88	17667	2.00	2.16	
64 Methylcyclohexane	83	5.899	5.899	0.000	88	29635	2.00	2.11	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	81	17957	2.00	2.21	
67 Dibromomethane	93	6.167	6.167	0.000	79	10530	2.00	2.07	
66 1,4-Dioxane	88	6.179	6.173	0.006	1	1863	40.0	33.6	M
68 Dichlorobromomethane	83	6.319	6.325	-0.006	89	21933	2.00	2.14	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	72	11802	2.00	2.01	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	73	26768	2.00	2.02	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	97	116295	10.0	10.7	
74 Toluene	92	7.018	7.018	0.000	91	42979	2.00	2.03	
77 trans-1,3-Dichloropropene	75	7.310	7.310	0.000	93	24396	2.00	2.02	
75 Ethyl methacrylate	69	7.353	7.347	0.006	65	22990	2.00	1.98	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	81	14519	2.00	2.30	
81 Tetrachloroethene	166	7.554	7.548	0.006	78	21354	2.00	2.18	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	84	28081	2.00	2.17	
80 2-Hexanone	43	7.730	7.724	0.006	81	81687	10.0	10.3	
83 Chlorodibromomethane	129	7.895	7.894	0.000	72	15967	2.00	1.94	
84 Ethylene Dibromide	107	8.004	7.998	0.006	70	17963	2.00	2.16	
87 Chlorobenzene	112	8.472	8.472	0.000	86	52412	2.00	2.15	
88 Ethylbenzene	91	8.564	8.564	0.000	97	83569	2.00	2.13	
89 1,1,1,2-Tetrachloroethane	131	8.576	8.570	0.006	50	18168	2.00	2.16	
90 m-Xylene & p-Xylene	106	8.679	8.685	-0.006	97	32073	2.00	1.94	
91 o-Xylene	106	9.111	9.111	0.000	95	34444	2.00	2.16	
92 Styrene	104	9.142	9.142	0.000	90	53172	2.00	2.04	
95 Bromoform	173	9.397	9.397	0.000	79	11089	2.00	1.97	
94 Isopropylbenzene	105	9.494	9.494	0.000	92	88576	2.00	2.10	
101 Bromobenzene	156	9.841	9.841	0.000	86	23677	2.00	2.11	
97 1,1,2,2-Tetrachloroethane	83	9.908	9.902	0.006	49	23044	2.00	2.17	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	100693	2.00	2.10	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.007	64	8021	2.00	2.10	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	57	5712	2.00	2.09	
103 2-Chlorotoluene	126	10.024	10.024	0.000	94	22195	2.00	2.15	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	79	75869	2.00	2.16	
105 4-Chlorotoluene	126	10.139	10.139	0.000	74	23320	2.00	2.10	
106 tert-Butylbenzene	134	10.413	10.413	0.000	87	19795	2.00	2.31	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	72	75969	2.00	2.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.620	10.626	-0.006	88	92295	2.00	2.09	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	70	45333	2.00	2.05	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	95	91085	2.00	2.23	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	90	49421	2.00	2.18	
115 n-Butylbenzene	91	11.149	11.149	0.000	90	74934	2.00	2.21	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	45853	2.00	2.17	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	44	4614	2.00	2.15	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	89	37016	2.00	2.43	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	81	14859	2.00	2.25	
121 Naphthalene	128	12.816	12.816	0.000	96	94597	2.00	2.38	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	89	33114	2.00	2.41	
S 125 1,2-Dichloroethene, Total	1				0			4.35	
S 123 Total BTEX	1				0			10.4	
S 124 Xylenes, Total	1				0			4.10	
S 126 1,3-Dichloropropene, Total	1				0			4.04	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	2.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	2.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

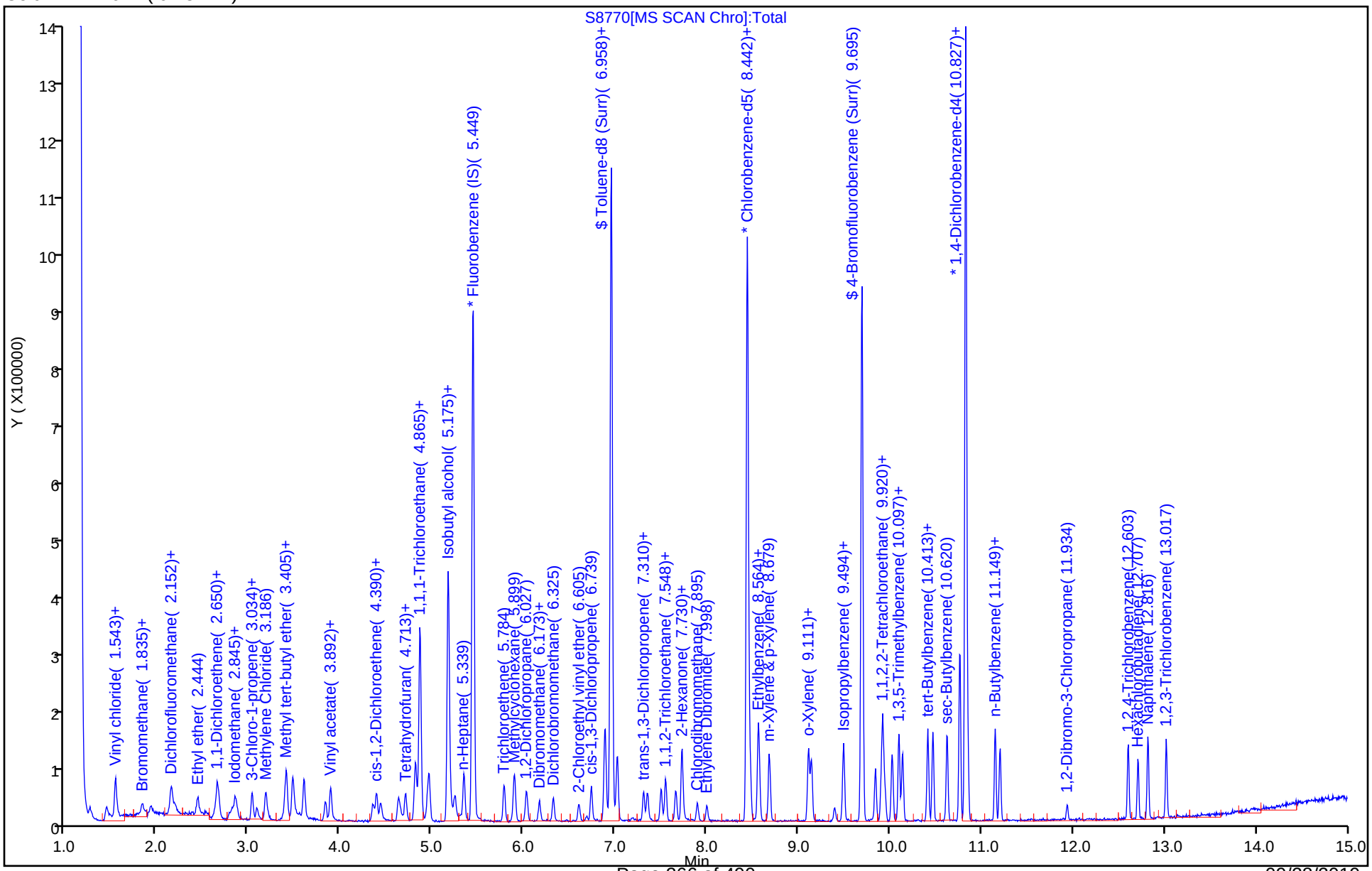
Report Date: 11-Sep-2019 11:11:58 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D

Injection Date:	10-Sep-2019 15:25:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 2			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

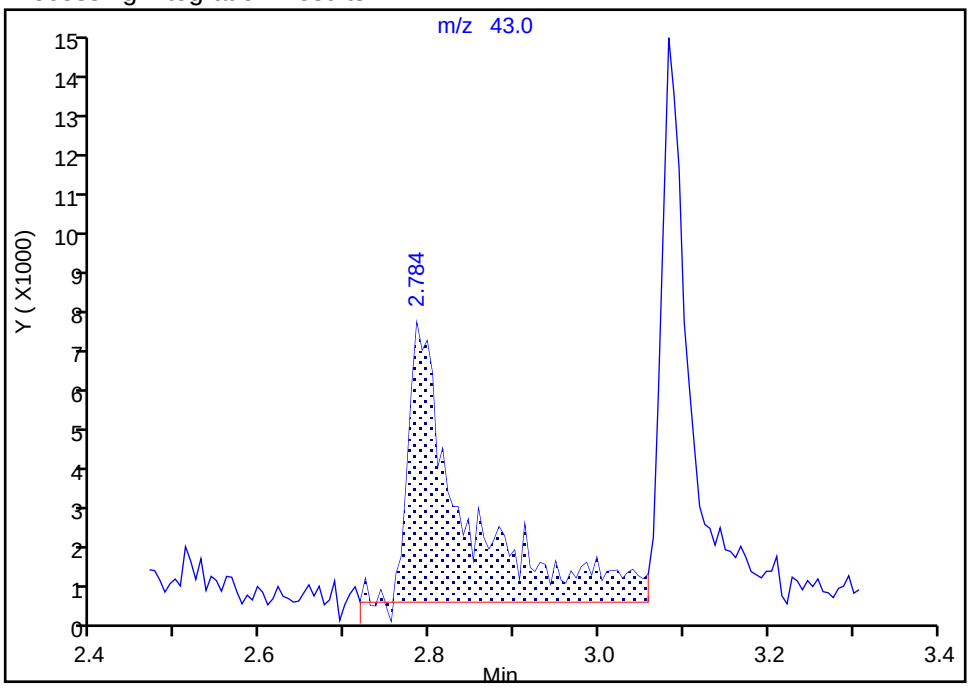
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D
Injection Date: 10-Sep-2019 15:25:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: kn ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

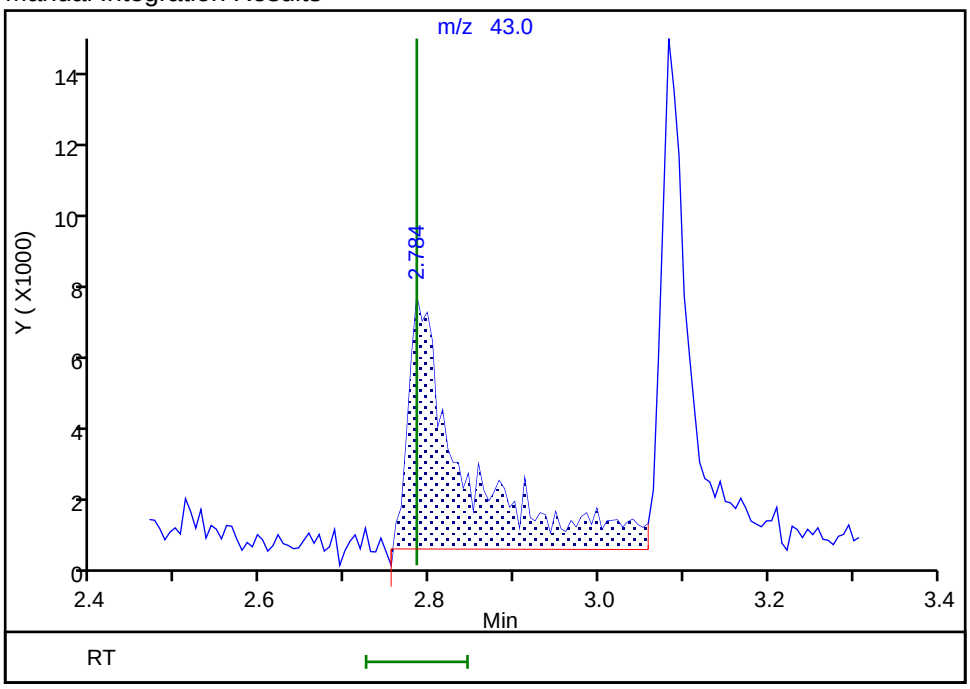
Processing Integration Results

RT: 2.78
Area: 31707
Amount: 9.292993
Amount Units: ug/L



Manual Integration Results

RT: 2.78
Area: 31693
Amount: 10.830453
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:57:32
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

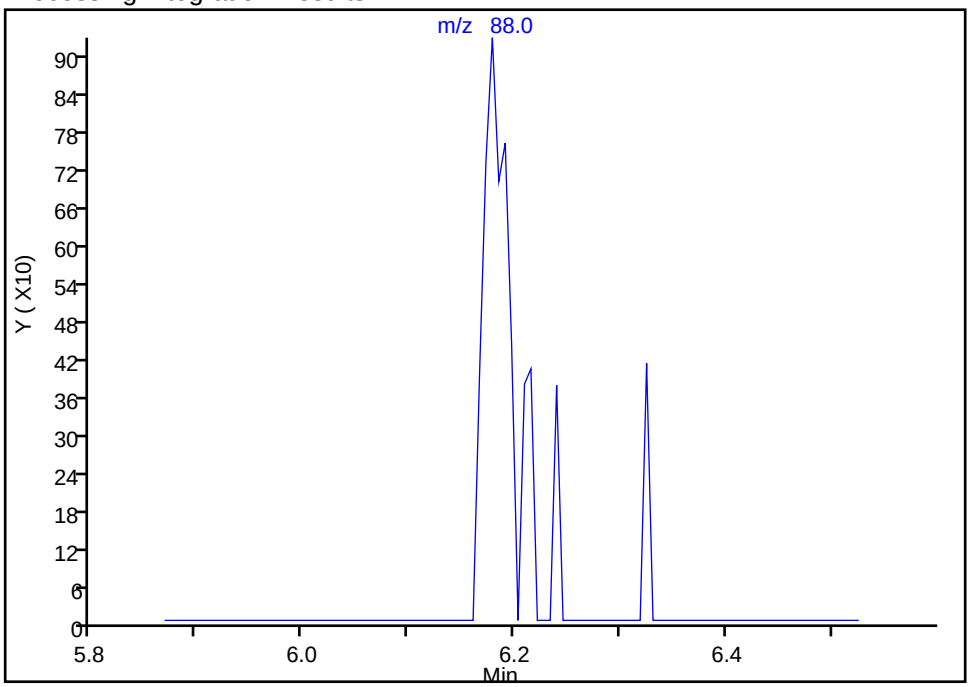
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8770.D
Injection Date: 10-Sep-2019 15:25:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: kn ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

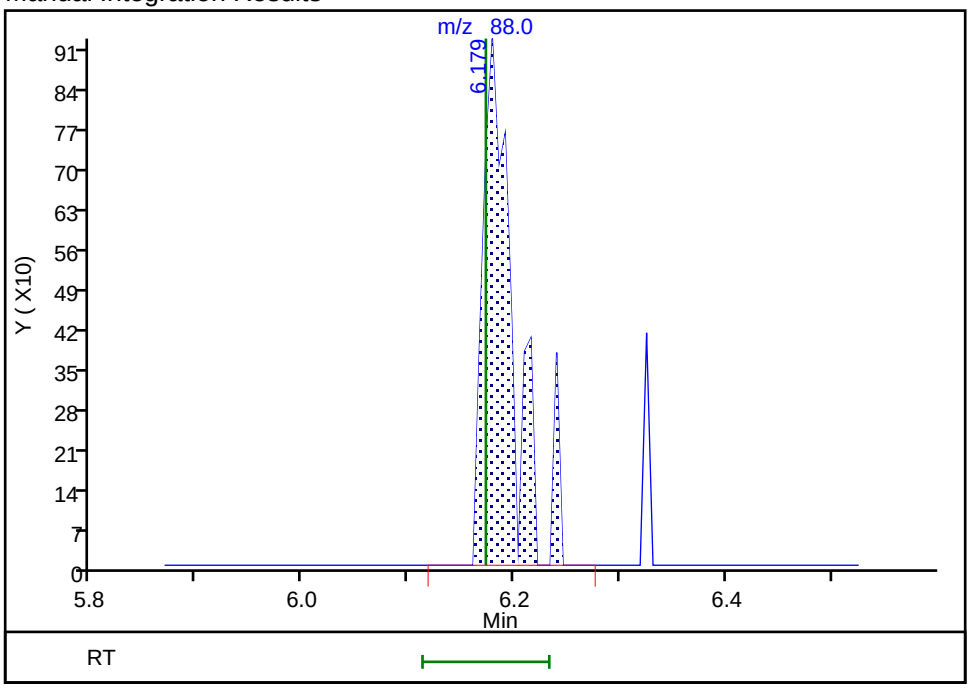
Not Detected
Expected RT: 6.17

Processing Integration Results



Manual Integration Results

RT: 6.18
Area: 1863
Amount: 33.633597
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 08:58:00
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Sep-2019 15:48:30 ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0084010-010
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:03 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:04:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	141480	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	276154	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	90	335355	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	63	176829	25.0	24.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	95	112440	25.0	24.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	704578	25.0	25.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	261817	25.0	26.4	
10 Dichlorodifluoromethane	85	1.269	1.263	0.006	93	51233	5.00	5.13	
12 Chloromethane	50	1.446	1.440	0.006	99	56172	5.00	5.04	
13 Vinyl chloride	62	1.549	1.537	0.012	56	49377	5.00	5.29	
151 Butadiene	54	1.543	1.543	0.000	95	55455	5.00	5.17	
14 Bromomethane	94	1.835	1.835	0.000	79	31193	5.00	4.72	
15 Chloroethane	64	1.933	1.926	0.007	93	31416	5.00	5.03	
17 Trichlorofluoromethane	101	2.158	2.152	0.006	79	65719	5.00	5.10	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	94	66492	5.00	4.92	
18 Ethyl ether	59	2.444	2.437	0.007	94	38522	5.00	5.08	
20 Acrolein	56	2.632	2.626	0.006	86	27554	25.0	21.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.656	2.650	0.006	61	37321	5.00	5.25	
22 1,1-Dichloroethene	96	2.656	2.656	0.000	95	36750	5.00	5.29	
23 Acetone	43	2.790	2.784	0.006	96	75694	25.0	25.8	M
25 Iodomethane	142	2.827	2.821	0.006	92	68996	5.00	5.22	
26 Carbon disulfide	76	2.851	2.851	0.000	97	117808	5.00	5.18	
28 3-Chloro-1-propene	41	3.040	3.034	0.006	86	71524	5.00	5.16	
27 Methyl acetate	43	3.082	3.082	0.000	93	76313	10.0	10.9	M
30 Methylene Chloride	84	3.180	3.186	-0.006	94	47054	5.00	5.23	
31 2-Methyl-2-propanol	59	3.368	3.356	0.012	71	29725	50.0	49.6	M
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	91	114669	5.00	5.03	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	94	41586	5.00	5.26	
33 Acrylonitrile	53	3.478	3.478	0.000	97	175798	50.0	49.8	
35 Hexane	57	3.599	3.606	-0.007	89	68008	5.00	5.32	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	81	74652	5.00	5.27	
37 Vinyl acetate	43	3.891	3.891	0.000	97	208432	10.0	9.87	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	90	45654	5.00	5.49	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	79	47176	5.00	5.42	
43 2-Butanone (MEK)	43	4.439	4.433	0.006	93	102424	25.0	24.1	
48 Chlorobromomethane	128	4.628	4.634	-0.006	92	24068	5.00	5.26	
49 Tetrahydrofuran	42	4.658	4.652	0.006	87	27743	10.0	9.06	
50 Chloroform	83	4.707	4.707	0.000	94	70908	5.00	5.01	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	89	62354	5.00	5.22	
52 Cyclohexane	56	4.822	4.816	0.006	90	78088	5.00	5.25	
55 Carbon tetrachloride	117	4.956	4.950	0.006	85	57170	5.00	5.35	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	89	55417	5.00	5.15	
57 Benzene	78	5.175	5.175	0.000	77	159270	5.00	5.02	
53 Isobutyl alcohol	43	5.205	5.199	0.006	91	41140	125.0	118.5	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	71	63503	5.00	5.12	
59 n-Heptane	43	5.345	5.345	0.000	94	81778	5.00	5.06	
62 Trichloroethene	95	5.783	5.783	0.000	91	43243	5.00	5.28	
64 Methylcyclohexane	83	5.899	5.899	0.000	90	73715	5.00	5.23	
65 1,2-Dichloropropane	63	6.027	6.033	-0.006	86	41631	5.00	5.10	
67 Dibromomethane	93	6.167	6.167	0.000	85	27136	5.00	5.32	
66 1,4-Dioxane	88	6.173	6.173	0.000	1	5260	100.0	100.0	
68 Dichlorobromomethane	83	6.319	6.325	-0.006	92	50219	5.00	4.87	
69 2-Chloroethyl vinyl ether	63	6.605	6.599	0.006	87	30529	5.00	5.18	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	82	66617	5.00	5.00	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	285978	25.0	27.6	
74 Toluene	92	7.024	7.018	0.006	73	108363	5.00	5.40	
77 trans-1,3-Dichloropropene	75	7.310	7.310	0.000	96	59708	5.00	5.20	
75 Ethyl methacrylate	69	7.353	7.347	0.006	88	60474	5.00	5.49	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	93	31258	5.00	5.22	
81 Tetrachloroethene	166	7.554	7.548	0.006	79	50957	5.00	5.47	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	93	65537	5.00	5.34	
80 2-Hexanone	43	7.730	7.724	0.006	95	208617	25.0	27.7	
83 Chlorodibromomethane	129	7.894	7.894	0.000	81	41039	5.00	5.24	
84 Ethylene Dibromide	107	7.998	7.998	0.000	90	40961	5.00	5.19	
87 Chlorobenzene	112	8.472	8.472	0.000	93	120550	5.00	5.21	
88 Ethylbenzene	91	8.564	8.564	0.000	98	203327	5.00	5.45	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	49	42847	5.00	5.36	
90 m-Xylene & p-Xylene	106	8.679	8.685	-0.006	95	82395	5.00	5.25	
91 o-Xylene	106	9.105	9.111	-0.006	95	79972	5.00	5.29	
92 Styrene	104	9.142	9.142	0.000	93	135010	5.00	5.46	
95 Bromoform	173	9.397	9.397	0.000	89	27529	5.00	5.15	
94 Isopropylbenzene	105	9.494	9.494	0.000	95	211948	5.00	5.00	
101 Bromobenzene	156	9.841	9.841	0.000	90	53697	5.00	4.76	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	93	54559	5.00	5.10	
99 N-Propylbenzene	91	9.920	9.920	0.000	97	248859	5.00	5.15	
100 1,2,3-Trichloropropane	110	9.939	9.939	-0.001	75	19427	5.00	5.05	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	63	15095	5.00	4.58	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	54704	5.00	5.27	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	83	183400	5.00	5.19	
105 4-Chlorotoluene	126	10.139	10.139	0.000	93	54960	5.00	4.91	
106 tert-Butylbenzene	134	10.413	10.413	0.000	88	46364	5.00	5.37	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	76	192301	5.00	5.27	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	92	235363	5.00	5.28	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	72	112681	5.00	5.06	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	219746	5.00	5.34	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	93	115560	5.00	5.06	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	184597	5.00	5.40	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	92	110849	5.00	5.22	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	65	11657	5.00	5.39	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	92	87316	5.00	5.70	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	90	39171	5.00	5.89	
121 Naphthalene	128	12.816	12.816	0.000	96	228858	5.00	5.72	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	95	81659	5.00	5.89	
S 125 1,2-Dichloroethene, Total	1				0			10.7	
S 123 Total BTEX	1				0			26.4	
S 124 Xylenes, Total	1				0			10.5	
S 126 1,3-Dichloropropene, Total	1				0			10.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	5.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	5.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

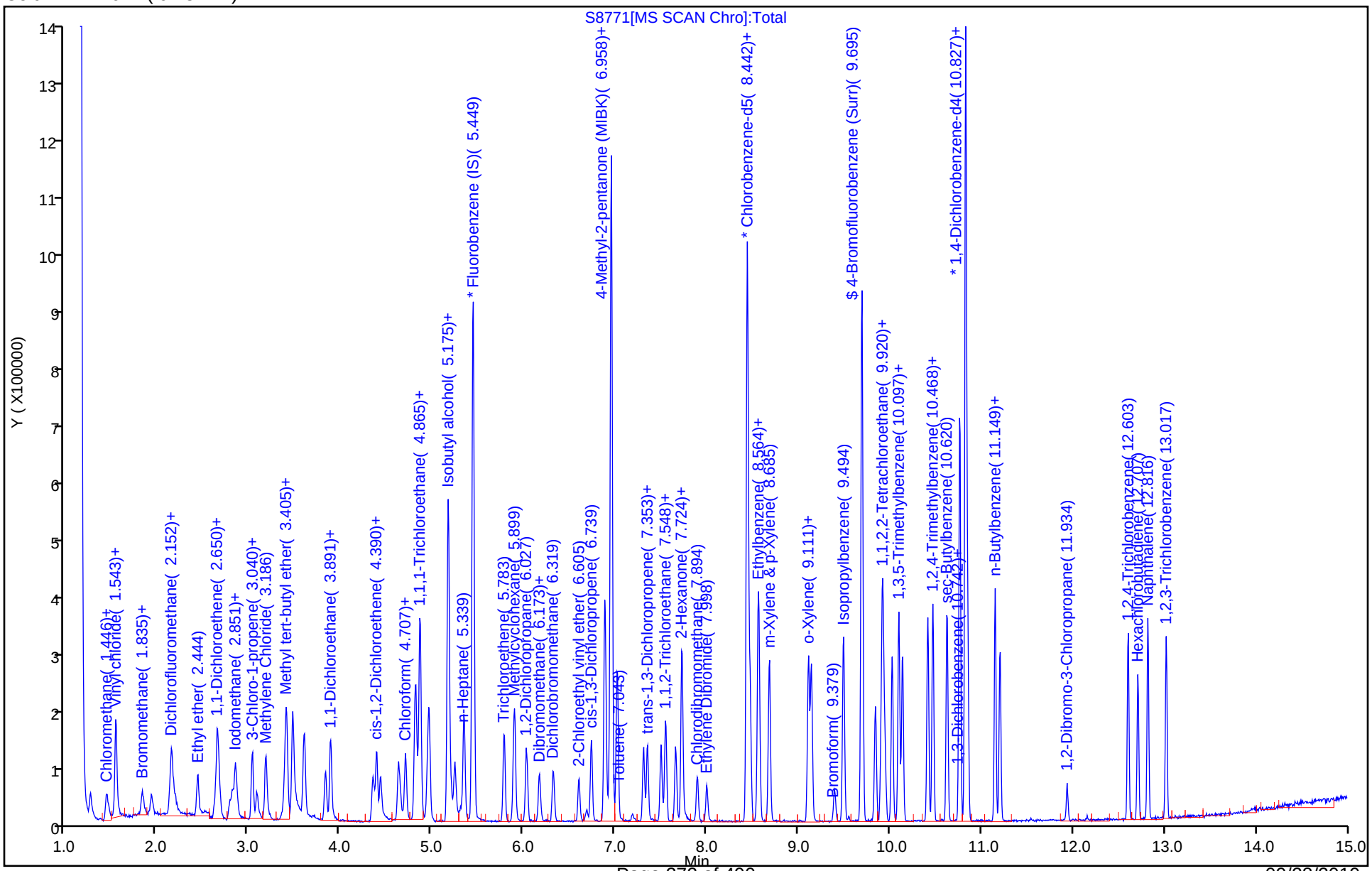
Report Date: 11-Sep-2019 11:12:04 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D

Injection Date:	10-Sep-2019 15:48:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 3			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

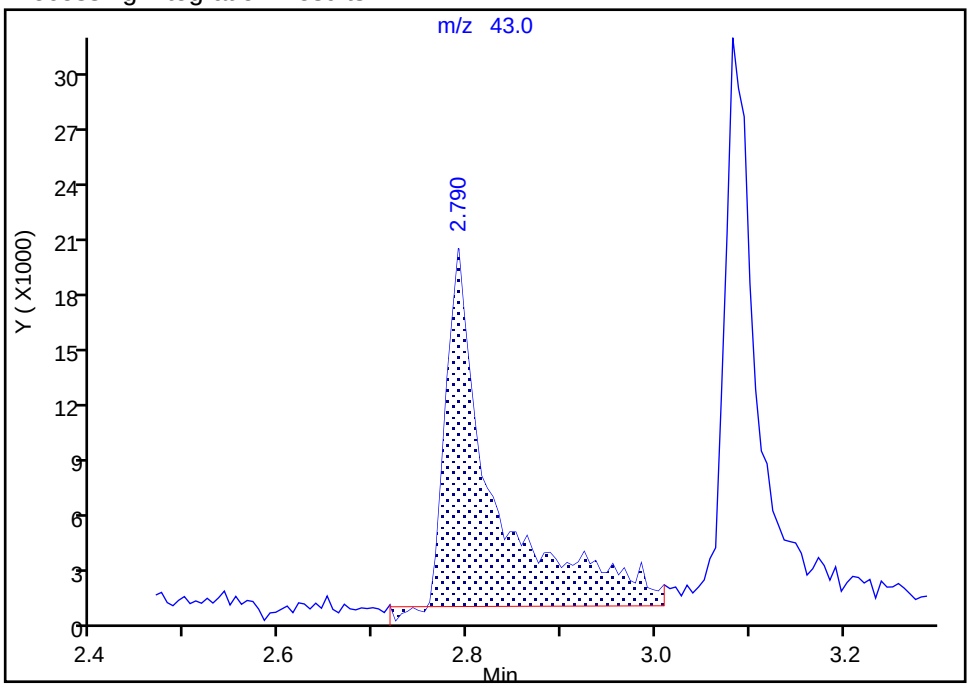
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Injection Date: 10-Sep-2019 15:48:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: kn ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

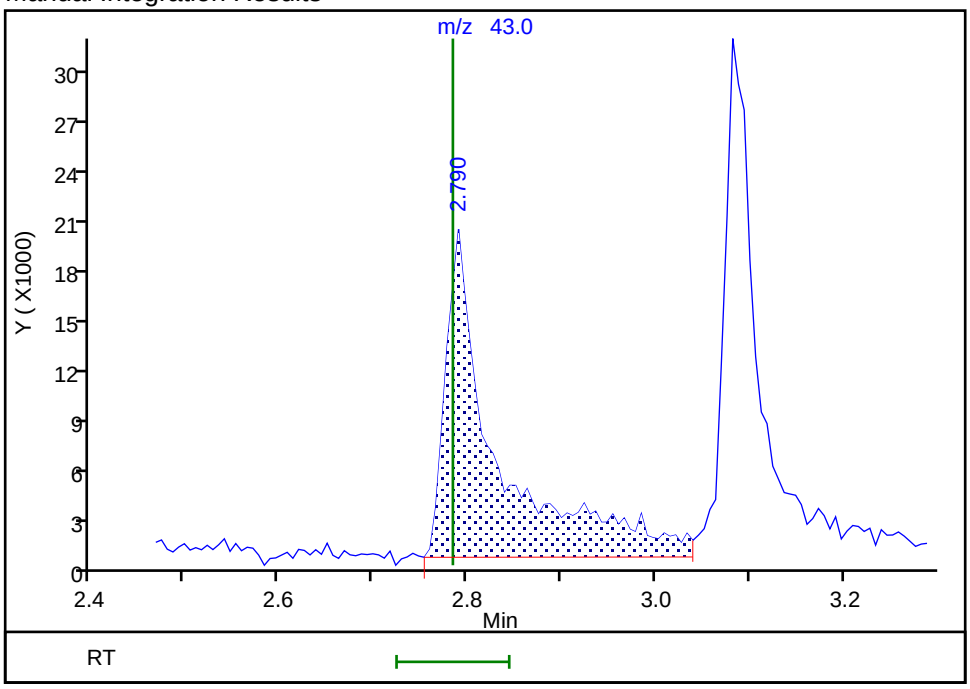
Processing Integration Results

RT: 2.79
Area: 68559
Amount: 22.500775
Amount Units: ug/L



Manual Integration Results

RT: 2.79
Area: 75694
Amount: 25.778613
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:00:50
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

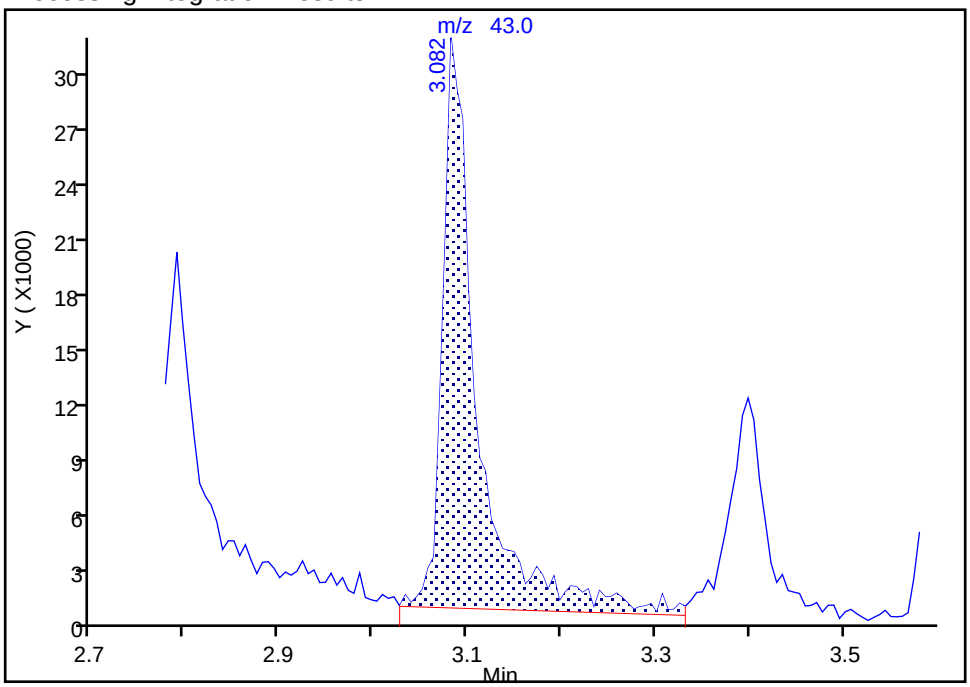
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Injection Date: 10-Sep-2019 15:48:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: kn ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

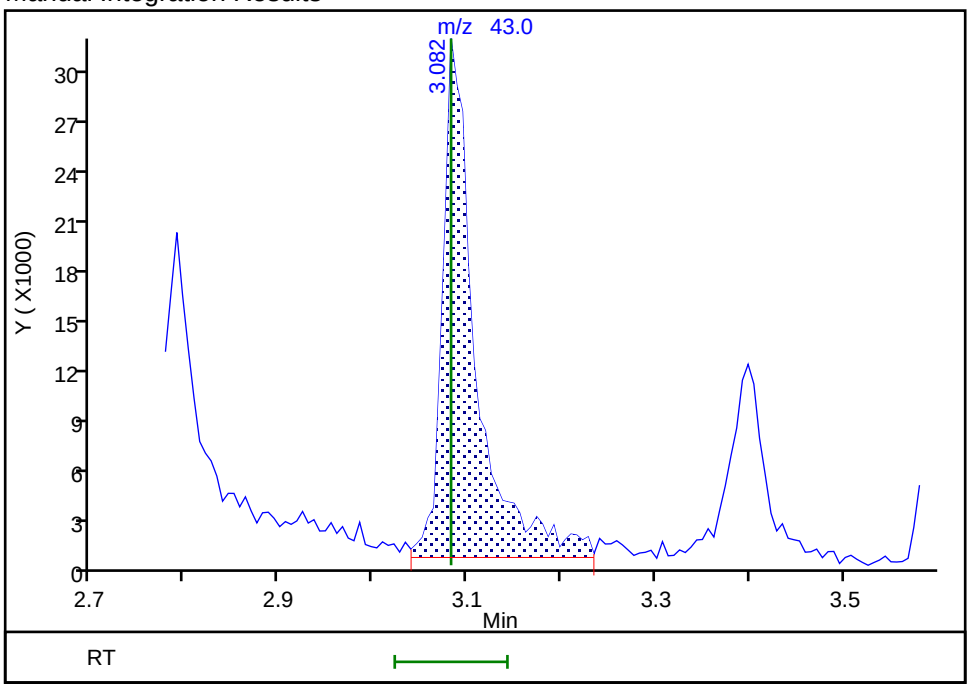
Processing Integration Results

RT: 3.08
Area: 78740
Amount: 11.176927
Amount Units: ug/L



Manual Integration Results

RT: 3.08
Area: 76313
Amount: 10.879270
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:01:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

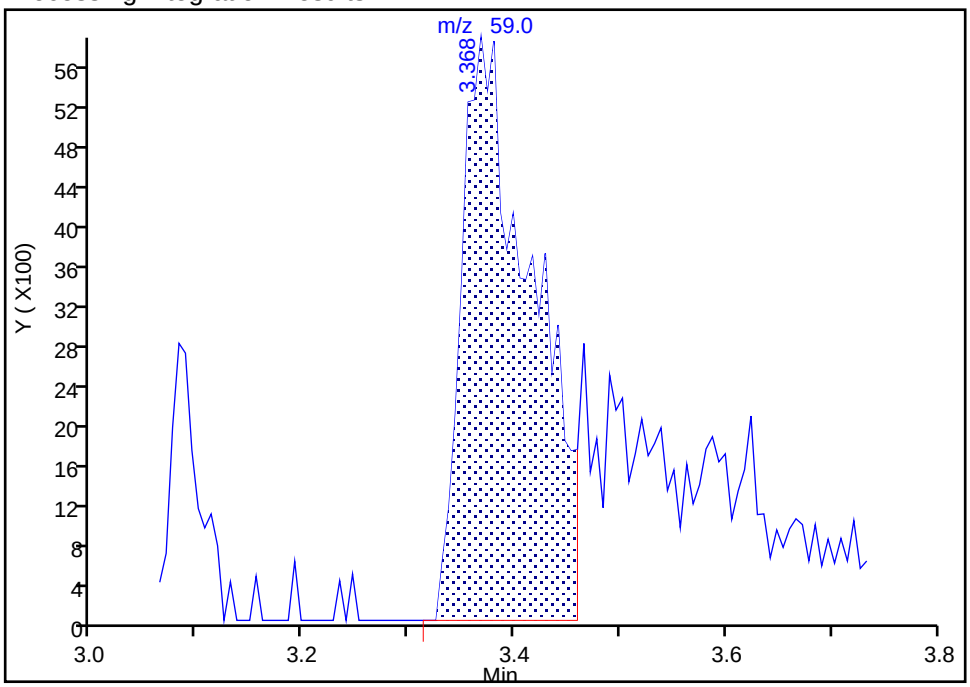
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8771.D
Injection Date: 10-Sep-2019 15:48:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: kn ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

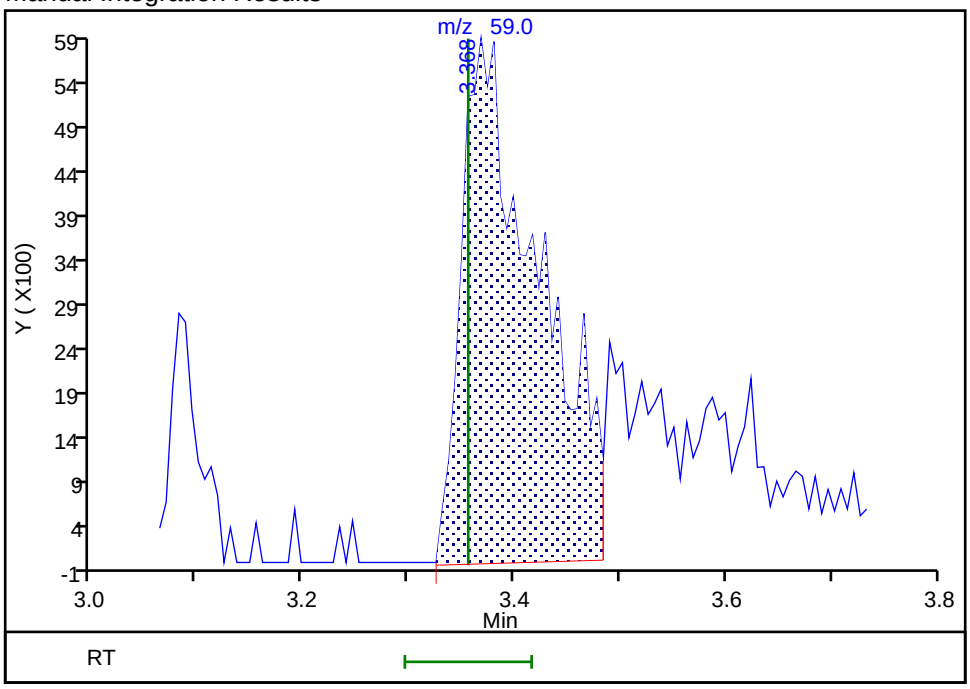
Processing Integration Results

RT: 3.37
Area: 27069
Amount: 44.836202
Amount Units: ug/L



Manual Integration Results

RT: 3.37
Area: 29725
Amount: 49.580889
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:01:40
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Sep-2019 16:11:30 ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0084010-011
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:08 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:09:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	99	137383	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	281122	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	81	330255	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	63	180864	25.0	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	85	114296	25.0	26.1	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	90	690557	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	260491	25.0	25.8	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	97	101350	10.0	10.4	
12 Chloromethane	50	1.440	1.440	0.000	99	103053	10.0	9.51	
13 Vinyl chloride	62	1.543	1.537	0.006	65	90408	10.0	9.97	
151 Butadiene	54	1.543	1.543	0.000	92	101155	10.0	9.70	
14 Bromomethane	94	1.829	1.835	-0.006	88	61384	10.0	9.57	
15 Chloroethane	64	1.927	1.926	0.001	97	58529	10.0	9.64	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	80	124379	10.0	9.95	
16 Dichlorofluoromethane	67	2.146	2.152	-0.006	95	124781	10.0	9.50	
18 Ethyl ether	59	2.438	2.437	0.001	93	73222	10.0	9.94	
20 Acrolein	56	2.626	2.626	0.000	94	54603	50.0	44.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.657	2.650	0.007	67	67189	10.0	9.74	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	98	64347	10.0	9.54	
23 Acetone	43	2.784	2.784	0.000	98	143220	50.0	50.2	M
25 Iodomethane	142	2.821	2.821	0.000	95	128320	10.0	10.0	
26 Carbon disulfide	76	2.851	2.851	0.000	99	211062	10.0	9.56	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	85	134339	10.0	9.98	
27 Methyl acetate	43	3.082	3.082	0.000	95	128183	20.0	18.8	
30 Methylene Chloride	84	3.180	3.186	-0.006	97	80769	10.0	9.98	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	89	50608	100.0	86.9	Ma
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	92	217111	10.0	9.80	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	93	75206	10.0	9.79	
33 Acrylonitrile	53	3.478	3.478	0.000	99	333559	100.0	97.3	
35 Hexane	57	3.600	3.606	-0.006	89	122623	10.0	9.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	96	138781	10.0	10.1	
37 Vinyl acetate	43	3.892	3.891	0.001	97	402089	20.0	19.6	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	91	83790	10.0	10.4	
45 cis-1,2-Dichloroethene	96	4.397	4.390	0.007	79	85057	10.0	10.1	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	199932	50.0	48.5	
48 Chlorobromomethane	128	4.634	4.634	0.000	92	44565	10.0	10.0	
49 Tetrahydrofuran	42	4.646	4.652	-0.006	89	59815	20.0	20.1	
50 Chloroform	83	4.707	4.707	0.000	84	131049	10.0	9.53	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	88	112277	10.0	9.68	
52 Cyclohexane	56	4.816	4.816	0.000	93	136269	10.0	9.43	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	101122	10.0	9.74	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	92	100644	10.0	9.64	
57 Benzene	78	5.175	5.175	0.000	93	298979	10.0	9.71	
53 Isobutyl alcohol	43	5.206	5.199	0.007	95	85904	250.0	254.9	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	78	117991	10.0	9.80	
59 n-Heptane	43	5.346	5.345	0.001	96	147246	10.0	9.39	
62 Trichloroethene	95	5.784	5.783	0.001	94	77108	10.0	9.70	
64 Methylcyclohexane	83	5.899	5.899	0.000	91	132317	10.0	9.66	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	89	77348	10.0	9.76	
67 Dibromomethane	93	6.167	6.167	0.000	86	51729	10.0	10.4	
66 1,4-Dioxane	88	6.179	6.173	0.006	4	11489	200.0	214.6	M
68 Dichlorobromomethane	83	6.325	6.325	0.000	96	97248	10.0	9.72	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	91	56171	10.0	9.81	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	83	126121	10.0	9.75	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	549072	50.0	52.1	
74 Toluene	92	7.019	7.018	0.001	82	192706	10.0	9.44	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.001	99	108604	10.0	9.30	
75 Ethyl methacrylate	69	7.347	7.347	0.000	87	114462	10.0	10.2	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	87	58774	10.0	9.64	
81 Tetrachloroethene	166	7.548	7.548	0.000	85	88303	10.0	9.31	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	96	119719	10.0	9.58	
80 2-Hexanone	43	7.724	7.724	0.000	96	397746	50.0	51.9	
83 Chlorodibromomethane	129	7.895	7.894	0.001	89	76643	10.0	9.61	
84 Ethylene Dibromide	107	7.998	7.998	0.000	97	78378	10.0	9.76	
87 Chlorobenzene	112	8.473	8.472	0.001	92	228069	10.0	9.69	
88 Ethylbenzene	91	8.558	8.564	-0.006	98	366800	10.0	9.65	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	82841	10.0	10.2	
90 m-Xylene & p-Xylene	106	8.679	8.685	-0.006	98	152912	10.0	9.56	
91 o-Xylene	106	9.111	9.111	0.000	96	149859	10.0	9.73	
92 Styrene	104	9.142	9.142	0.000	92	243909	10.0	9.69	
95 Bromoform	173	9.391	9.397	-0.006	93	53347	10.0	9.80	
94 Isopropylbenzene	105	9.495	9.494	0.001	95	396406	10.0	9.49	
101 Bromobenzene	156	9.841	9.841	0.000	92	107163	10.0	9.64	
97 1,1,2,2-Tetrachloroethane	83	9.908	9.902	0.006	58	101538	10.0	9.63	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	449189	10.0	9.44	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	56	36604	10.0	9.66	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	79	32405	10.0	9.32	
103 2-Chlorotoluene	126	10.024	10.024	0.000	97	98492	10.0	9.63	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	86	341403	10.0	9.80	
105 4-Chlorotoluene	126	10.133	10.139	-0.006	93	105351	10.0	9.56	
106 tert-Butylbenzene	134	10.413	10.413	0.000	91	82441	10.0	9.70	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	41	346365	10.0	9.64	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	92	433719	10.0	9.89	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	72	212557	10.0	9.68	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	97	411530	10.0	10.2	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	218645	10.0	9.73	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	337582	10.0	10.0	
116 1,2-Dichlorobenzene	146	11.198	11.204	-0.006	93	205659	10.0	9.83	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	69	22720	10.0	10.7	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	94	155505	10.0	10.3	
120 Hexachlorobutadiene	225	12.713	12.707	0.006	93	69593	10.0	10.6	
121 Naphthalene	128	12.816	12.816	0.000	97	413334	10.0	10.5	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	143557	10.0	10.5	
S 125 1,2-Dichloroethene, Total	1				0			19.9	
S 123 Total BTEX	1				0			48.1	
S 124 Xylenes, Total	1				0			19.3	
S 126 1,3-Dichloropropene, Total	1				0			19.1	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00360	Amount Added:	5.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	5.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

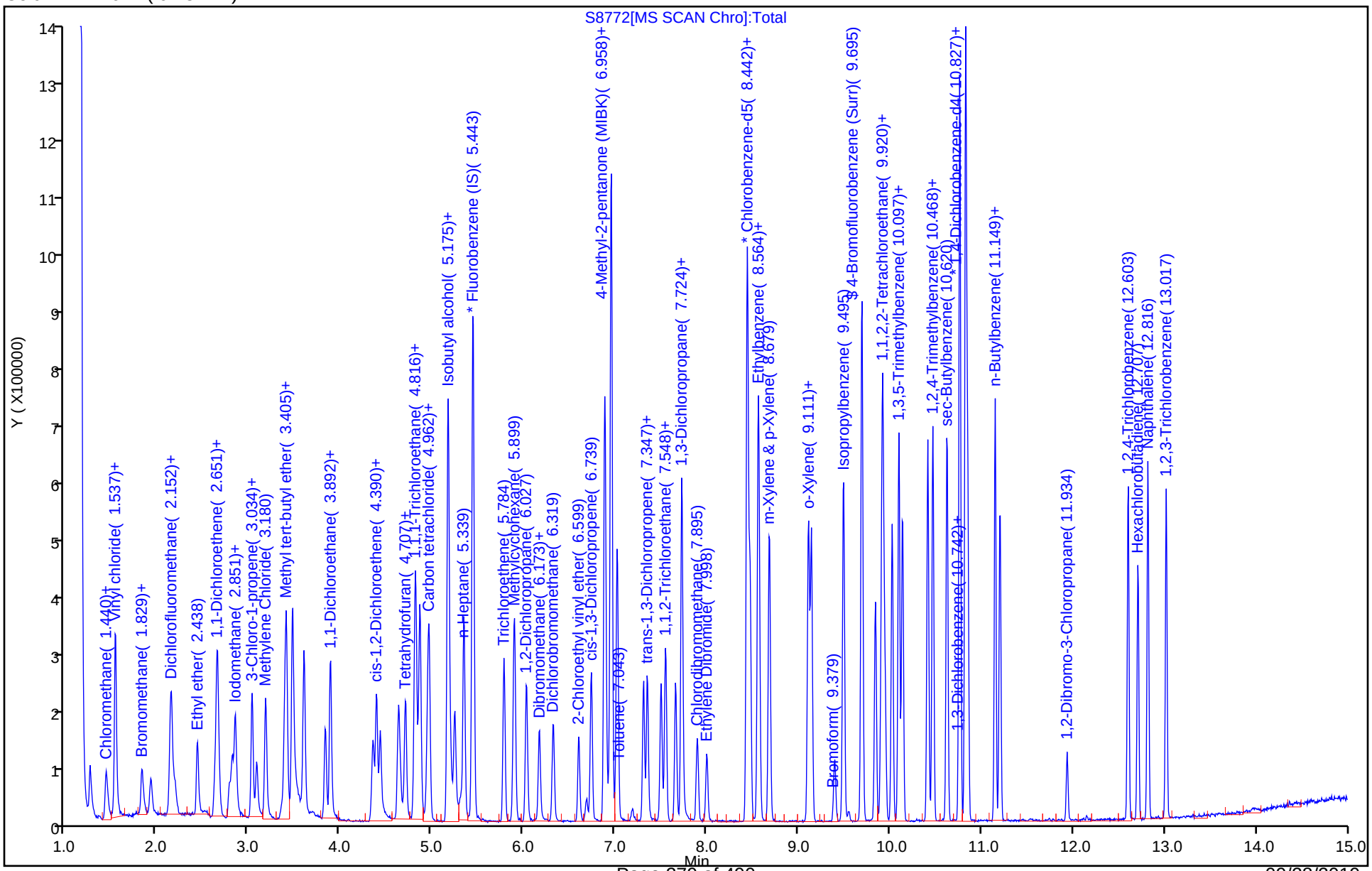
Report Date: 11-Sep-2019 11:12:10 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D

Injection Date:	10-Sep-2019 16:11:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 4			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

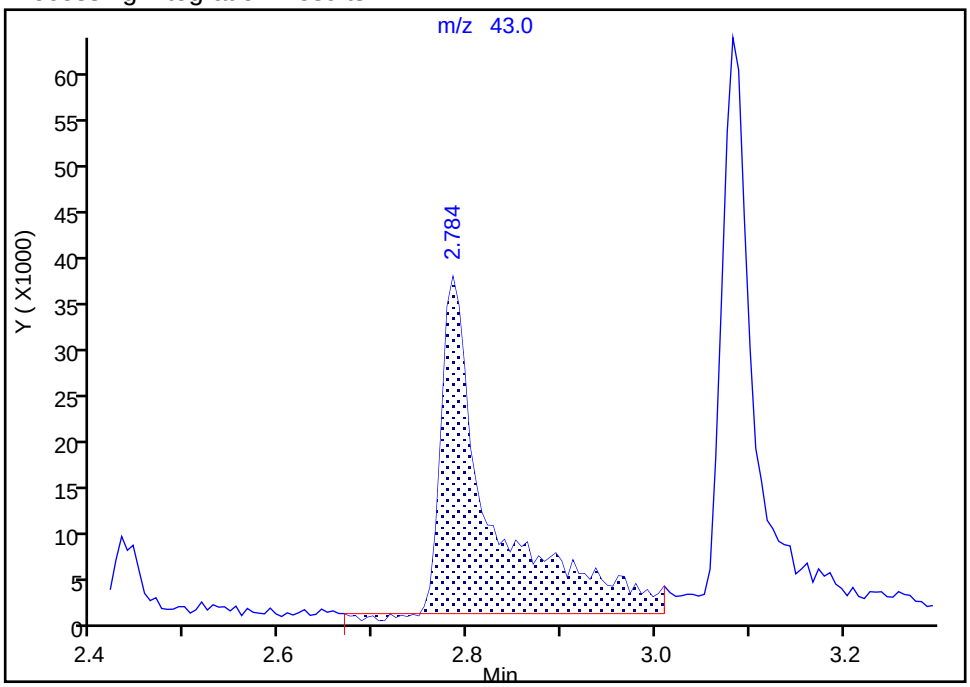
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Injection Date: 10-Sep-2019 16:11:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: kn ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

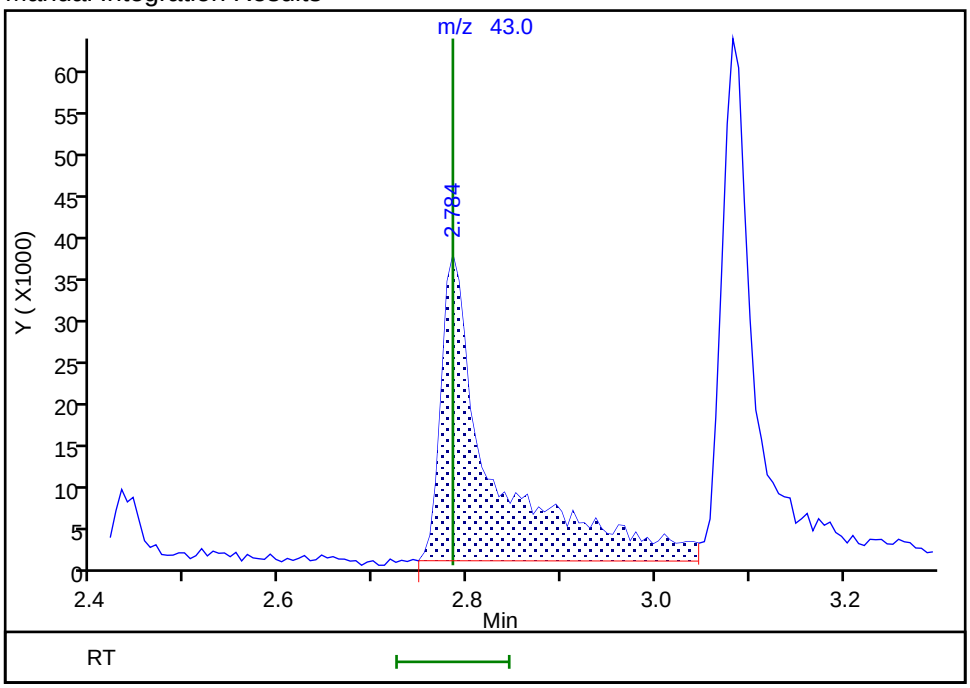
Processing Integration Results

RT: 2.78
Area: 133421
Amount: 46.947600
Amount Units: ug/L



Manual Integration Results

RT: 2.78
Area: 143220
Amount: 50.230074
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:05:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

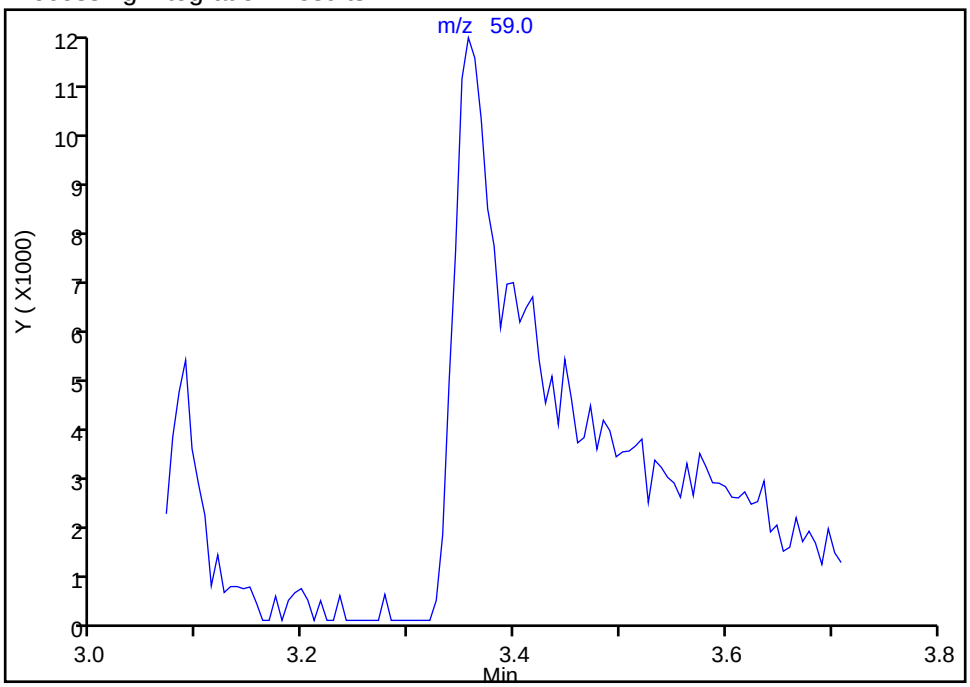
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Injection Date: 10-Sep-2019 16:11:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: kn ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

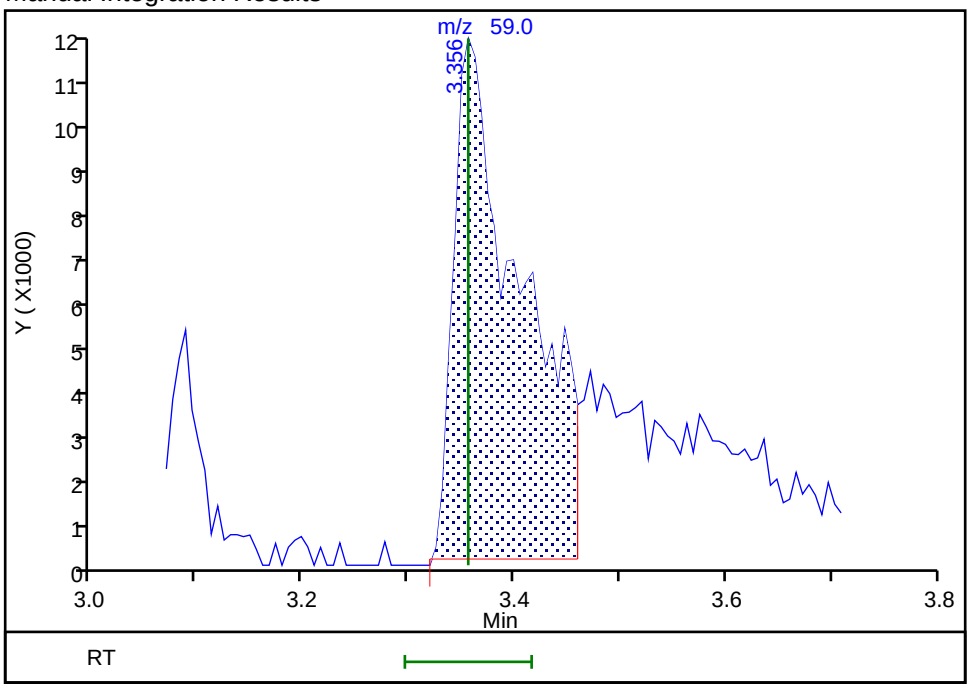
Not Detected
Expected RT: 3.36

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 50608
Amount: 86.930800
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:05:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

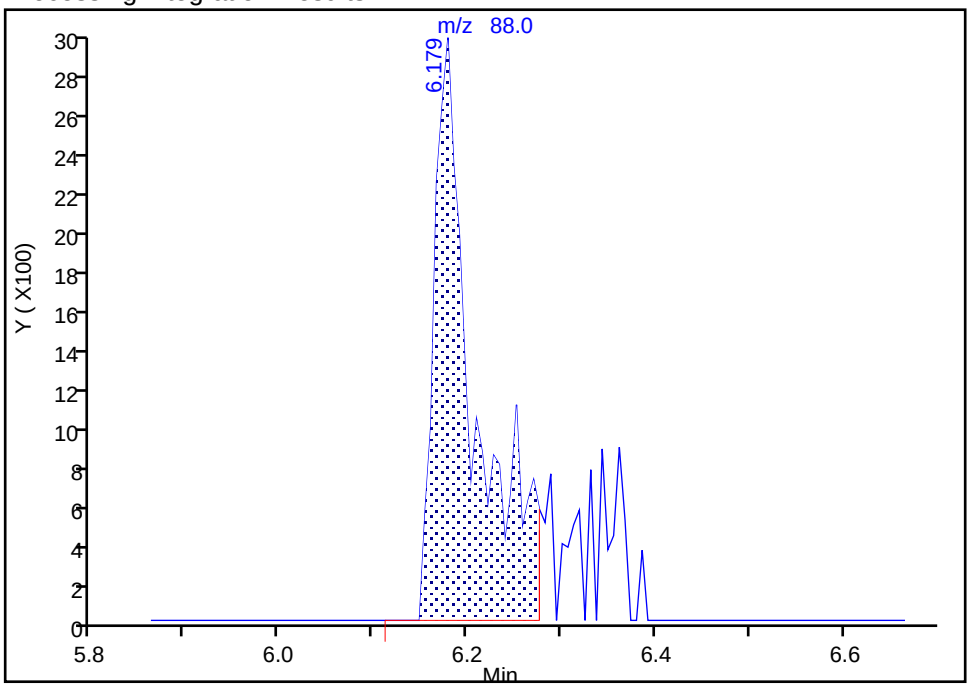
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8772.D
Injection Date: 10-Sep-2019 16:11:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: kn ALS Bottle#: 8 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

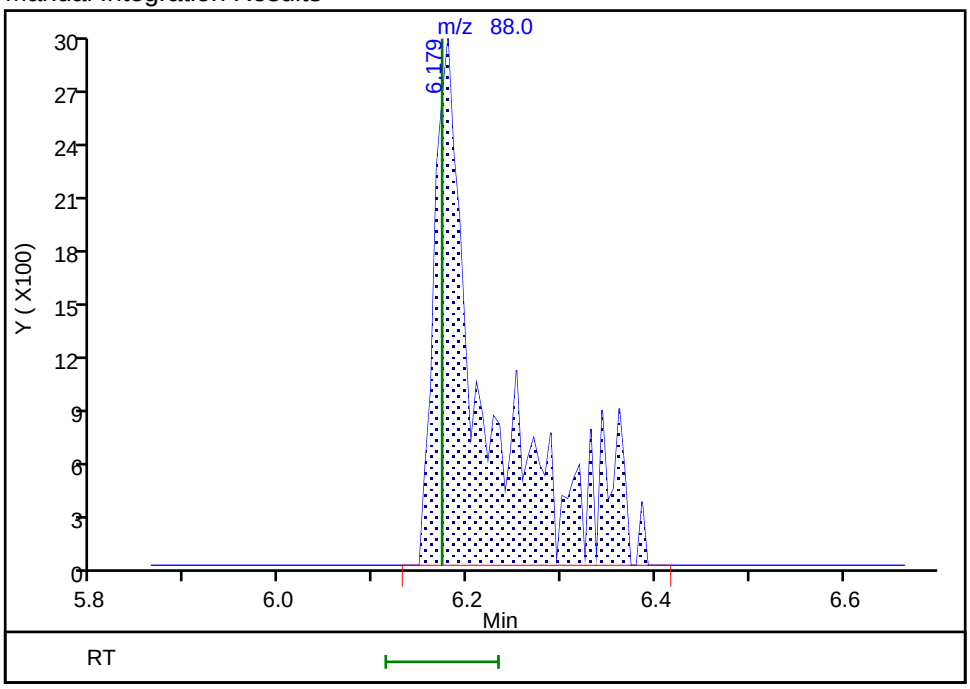
Processing Integration Results

RT: 6.18
Area: 8845
Amount: 195.7124
Amount Units: ug/L



Manual Integration Results

RT: 6.18
Area: 11489
Amount: 214.6055
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:06:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8773.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 10-Sep-2019 16:34:30 ALS Bottle#: 9 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0084010-012
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:14 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 08:37:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.449	0.000	98	143736	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	283614	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	54	325070	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	66	181961	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	57	113518	25.0	24.7	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	90	712070	25.0	25.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	256179	25.0	25.2	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	97	243366	25.0	24.0	
12 Chloromethane	50	1.440	1.440	0.000	99	250948	25.0	22.1	
13 Vinyl chloride	62	1.537	1.537	0.000	73	206649	25.0	21.8	
151 Butadiene	54	1.543	1.543	0.000	94	241313	25.0	22.1	
14 Bromomethane	94	1.835	1.835	0.000	90	144751	25.0	21.6	
15 Chloroethane	64	1.926	1.926	0.000	99	137144	25.0	21.6	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	78	292183	25.0	22.3	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	96	292501	25.0	21.3	
18 Ethyl ether	59	2.437	2.437	0.000	94	186889	25.0	24.3	
20 Acrolein	56	2.626	2.626	0.000	94	146574	125.0	113.6	
21 1,1,2-Trichloro-1,2,2-trif	101	2.650	2.650	0.000	67	171590	25.0	23.8	
22 1,1-Dichloroethene	96	2.656	2.656	0.000	96	162932	25.0	23.1	
23 Acetone	43	2.784	2.784	0.000	99	354222	125.0	118.7	
25 Iodomethane	142	2.821	2.821	0.000	98	316633	25.0	23.6	
26 Carbon disulfide	76	2.851	2.851	0.000	100	537556	25.0	23.3	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	86	330341	25.0	23.4	
27 Methyl acetate	43	3.082	3.082	0.000	96	327130	50.0	45.9	
30 Methylene Chloride	84	3.186	3.186	0.000	95	191682	25.0	23.9	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	96	145899	250.0	239.5	
32 Methyl tert-butyl ether	73	3.399	3.399	0.000	91	551696	25.0	23.8	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	94	191782	25.0	23.9	
33 Acrylonitrile	53	3.478	3.478	0.000	98	881054	250.0	245.6	
35 Hexane	57	3.606	3.606	0.000	91	298841	25.0	23.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	97	349976	25.0	24.3	
37 Vinyl acetate	43	3.891	3.891	0.000	97	994889	50.0	46.4	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	92	196053	25.0	23.2	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	210461	25.0	23.8	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	499073	125.0	115.6	
48 Chlorobromomethane	128	4.634	4.634	0.000	95	111305	25.0	23.9	
49 Tetrahydrofuran	42	4.652	4.652	0.000	87	146920	50.0	47.2	
50 Chloroform	83	4.707	4.707	0.000	84	328077	25.0	22.8	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	87	283391	25.0	23.4	
52 Cyclohexane	56	4.816	4.816	0.000	93	352750	25.0	23.3	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	251773	25.0	23.2	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	92	254385	25.0	23.3	
57 Benzene	78	5.175	5.175	0.000	97	740315	25.0	23.0	
53 Isobutyl alcohol	43	5.199	5.199	0.000	93	194434	625.0	551.4	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	78	288628	25.0	22.9	
59 n-Heptane	43	5.345	5.345	0.000	93	362492	25.0	22.1	
62 Trichloroethene	95	5.783	5.783	0.000	94	188935	25.0	22.7	
64 Methylcyclohexane	83	5.899	5.899	0.000	90	343120	25.0	24.0	
65 1,2-Dichloropropane	63	6.033	6.033	0.000	90	196069	25.0	23.6	
67 Dibromomethane	93	6.167	6.167	0.000	84	126189	25.0	24.4	
66 1,4-Dioxane	88	6.173	6.173	0.000	30	27383	500.0	507.0	
68 Dichlorobromomethane	83	6.325	6.325	0.000	98	250290	25.0	23.9	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	137278	25.0	22.9	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	85	317588	25.0	23.5	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	1292982	125.0	121.6	
74 Toluene	92	7.018	7.018	0.000	86	482958	25.0	23.5	
77 trans-1,3-Dichloropropene	75	7.310	7.310	0.000	97	281620	25.0	23.9	
75 Ethyl methacrylate	69	7.347	7.347	0.000	91	280852	25.0	24.8	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	93	138784	25.0	22.6	
81 Tetrachloroethene	166	7.548	7.548	0.000	86	227883	25.0	23.8	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	95	295596	25.0	23.4	
80 2-Hexanone	43	7.724	7.724	0.000	96	933608	125.0	120.8	
83 Chlorodibromomethane	129	7.894	7.894	0.000	90	198603	25.0	24.7	
84 Ethylene Dibromide	107	7.998	7.998	0.000	97	195089	25.0	24.1	
87 Chlorobenzene	112	8.472	8.472	0.000	94	568598	25.0	23.9	
88 Ethylbenzene	91	8.564	8.564	0.000	98	913251	25.0	23.8	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	204016	25.0	24.9	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	374180	25.0	23.2	
91 o-Xylene	106	9.111	9.111	0.000	97	364567	25.0	23.5	
92 Styrene	104	9.142	9.142	0.000	94	624088	25.0	24.6	
95 Bromoform	173	9.397	9.397	0.000	96	136250	25.0	24.8	
94 Isopropylbenzene	105	9.494	9.494	0.000	95	947620	25.0	23.0	
101 Bromobenzene	156	9.841	9.841	0.000	92	266190	25.0	24.3	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	90	244740	25.0	23.6	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	1101515	25.0	23.5	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	86	87804	25.0	23.5	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	84	83808	25.0	23.6	
103 2-Chlorotoluene	126	10.024	10.024	0.000	97	241659	25.0	24.0	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	86	795851	25.0	23.2	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	247859	25.0	22.8	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	191702	25.0	22.9	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	77	826431	25.0	23.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	1009216	25.0	23.4	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	74	506796	25.0	23.5	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	932987	25.0	23.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	519426	25.0	23.5	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	775667	25.0	23.4	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	476973	25.0	23.2	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	77	47459	25.0	22.6	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	95	299246	25.0	20.1	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	96	131531	25.0	20.4	
121 Naphthalene	128	12.816	12.816	0.000	97	766890	25.0	19.8	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	255390	25.0	19.0	

Reagents:

GAS CORP mix_00360	Amount Added: 12.50	Units: uL	
SS 8260 CORP_00077	Amount Added: 12.50	Units: uL	
S_8260_IS_00325	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added: 1.00	Units: uL	Run Reagent

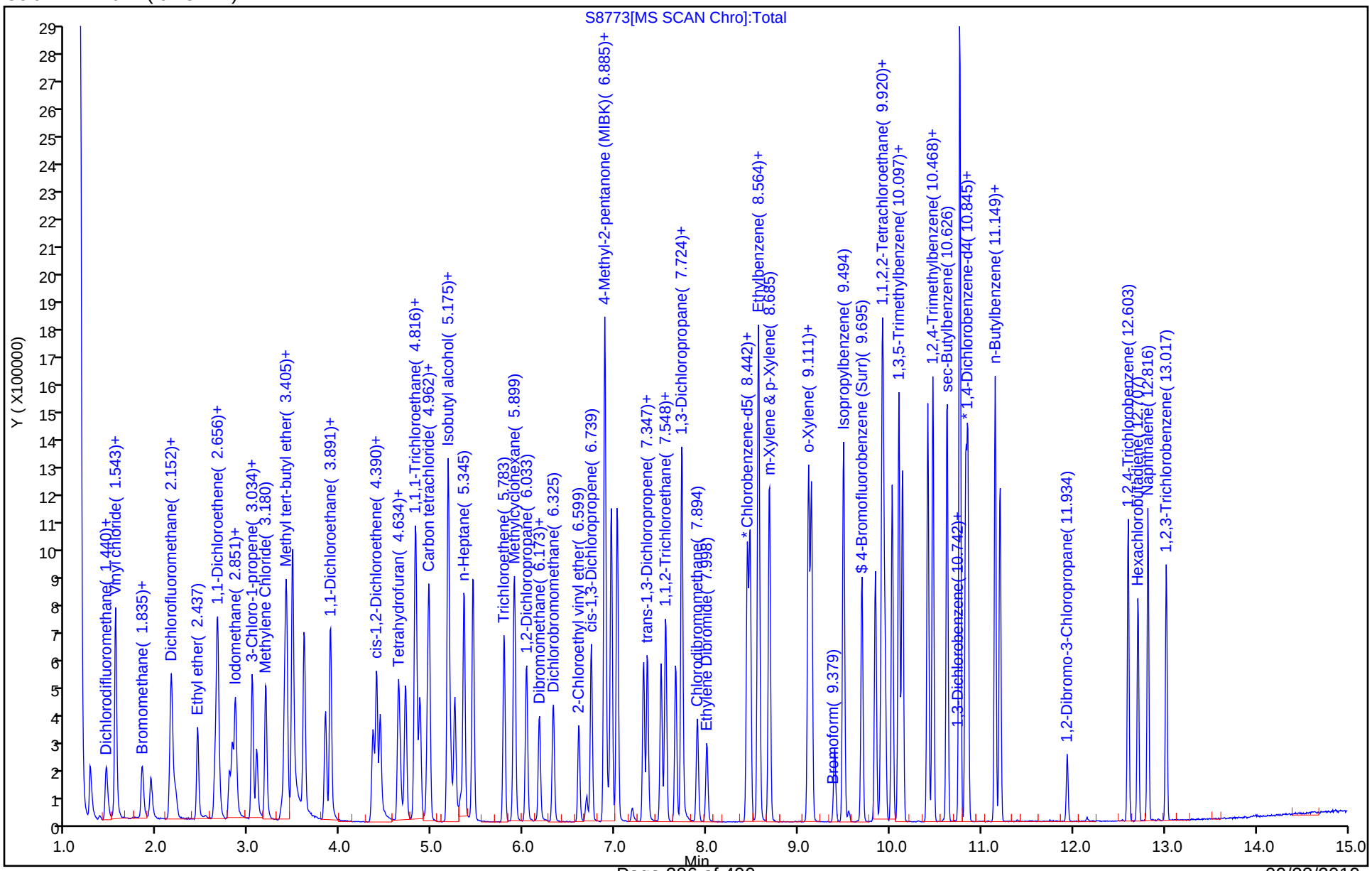
Report Date: 11-Sep-2019 11:12:16 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8773.D

Injection Date:	10-Sep-2019 16:34:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	ICIS 5			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8774.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Sep-2019 16:57:30 ALS Bottle#: 10 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0084010-013
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:19 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:12:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.449	-0.006	98	139952	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	81	290897	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	47	304353	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	64	183038	25.0	25.8	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	46	113411	25.0	25.4	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	82	711295	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	251250	25.0	24.1	
10 Dichlorodifluoromethane	85	1.264	1.263	0.001	98	536840	50.0	54.3	
12 Chloromethane	50	1.440	1.440	0.000	99	566101	50.0	51.3	
13 Vinyl chloride	62	1.537	1.537	0.000	68	501942	50.0	54.4	
151 Butadiene	54	1.537	1.543	-0.006	94	554135	50.0	52.2	
14 Bromomethane	94	1.829	1.835	-0.006	90	316533	50.0	48.4	
15 Chloroethane	64	1.927	1.926	0.001	99	304310	50.0	49.2	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	82	697977	50.0	54.8	
16 Dichlorofluoromethane	67	2.146	2.152	-0.006	96	652814	50.0	48.8	
18 Ethyl ether	59	2.438	2.437	0.001	93	378602	50.0	50.5	
20 Acrolein	56	2.620	2.626	-0.006	96	318340	250.0	253.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.651	2.650	0.001	66	353407	50.0	50.3	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	98	334485	50.0	48.7	
23 Acetone	43	2.784	2.784	0.000	98	710382	250.0	244.6	
25 Iodomethane	142	2.815	2.821	-0.006	98	653201	50.0	49.9	
26 Carbon disulfide	76	2.851	2.851	0.000	100	1100524	50.0	48.9	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	87	670379	50.0	48.9	
27 Methyl acetate	43	3.083	3.082	0.001	96	729815	100.0	105.2	
30 Methylene Chloride	84	3.180	3.186	-0.006	95	385016	50.0	50.2	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	97	372217	500.0	627.6	
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	92	1096809	50.0	48.6	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	95	391332	50.0	50.0	
33 Acrylonitrile	53	3.478	3.478	0.000	99	1780740	500.0	509.9	
35 Hexane	57	3.600	3.606	-0.006	91	609324	50.0	48.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.837	-0.006	97	709767	50.0	50.6	
37 Vinyl acetate	43	3.886	3.891	-0.005	97	2079569	100.0	99.6	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	92	418276	50.0	50.9	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	433382	50.0	50.3	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	1040111	250.0	247.5	
48 Chlorobromomethane	128	4.628	4.634	-0.006	96	229247	50.0	50.6	
49 Tetrahydrofuran	42	4.646	4.652	-0.006	88	274781	100.0	90.7	
50 Chloroform	83	4.707	4.707	0.000	94	662888	50.0	47.3	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	88	597476	50.0	50.6	
52 Cyclohexane	56	4.816	4.816	0.000	94	723421	50.0	49.2	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	539798	50.0	51.0	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	92	518722	50.0	48.8	
57 Benzene	78	5.175	5.175	0.000	98	1537207	50.0	49.0	
53 Isobutyl alcohol	43	5.200	5.199	0.001	91	398796	1250.0	1161.5	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	586018	50.0	47.8	
59 n-Heptane	43	5.346	5.345	0.001	94	725690	50.0	45.4	
62 Trichloroethene	95	5.784	5.783	0.001	96	398964	50.0	49.2	
64 Methylcyclohexane	83	5.899	5.899	0.000	93	710983	50.0	51.0	
65 1,2-Dichloropropane	63	6.027	6.033	-0.006	91	404453	50.0	50.1	
67 Dibromomethane	93	6.167	6.167	0.000	89	252785	50.0	50.1	
66 1,4-Dioxane	88	6.173	6.173	0.000	31	53469	1000.0	965.2	
68 Dichlorobromomethane	83	6.319	6.325	-0.006	96	513209	50.0	50.3	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	291547	50.0	50.0	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	87	659421	50.0	50.1	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	2442732	250.0	223.9	
74 Toluene	92	7.025	7.018	0.007	89	985608	50.0	46.7	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.001	97	596524	50.0	49.4	
75 Ethyl methacrylate	69	7.353	7.347	0.006	88	559729	50.0	48.3	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	92	288022	50.0	45.6	
81 Tetrachloroethene	166	7.548	7.548	0.000	90	456812	50.0	46.6	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	96	615455	50.0	47.6	
80 2-Hexanone	43	7.724	7.724	0.000	95	1769206	250.0	223.3	
83 Chlorodibromomethane	129	7.895	7.894	0.001	88	416629	50.0	50.5	
84 Ethylene Dibromide	107	7.998	7.998	0.000	100	385235	50.0	46.4	
87 Chlorobenzene	112	8.473	8.472	0.001	94	1153068	50.0	47.3	
88 Ethylbenzene	91	8.564	8.564	0.000	98	1861207	50.0	47.3	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	417419	50.0	49.6	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	764482	50.0	46.2	
91 o-Xylene	106	9.111	9.111	0.000	97	739807	50.0	46.4	
92 Styrene	104	9.142	9.142	0.000	93	1260683	50.0	48.4	
95 Bromoform	173	9.397	9.397	0.000	96	288718	50.0	51.3	
94 Isopropylbenzene	105	9.495	9.494	0.001	95	1918970	50.0	49.8	
101 Bromobenzene	156	9.841	9.841	0.000	92	522674	50.0	51.0	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	85	472111	50.0	48.6	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	2187444	50.0	49.9	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	60	164886	50.0	47.2	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	85	176526	50.0	52.3	
103 2-Chlorotoluene	126	10.024	10.024	0.000	94	453441	50.0	48.1	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	84	1544843	50.0	48.1	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	498248	50.0	49.0	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	360211	50.0	46.0	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	42	1569977	50.0	47.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	92	1906010	50.0	47.1	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	76	983528	50.0	48.6	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	95	1743597	50.0	46.7	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	1007466	50.0	48.6	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	1440287	50.0	46.4	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	93	871753	50.0	45.2	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	82	79267	50.0	40.4	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	92	496929	50.0	35.7	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	96	214301	50.0	35.5	
121 Naphthalene	128	12.816	12.816	0.000	97	1249020	50.0	34.4	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	406569	50.0	32.3	
S 125 1,2-Dichloroethene, Total	1				0			100.3	
S 123 Total BTEX	1				0			235.6	
S 124 Xylenes, Total	1				0			92.6	
S 126 1,3-Dichloropropene, Total	1				0			99.4	

Reagents:

GAS CORP mix_00360	Amount Added: 25.00	Units: uL	
SS 8260 CORP_00077	Amount Added: 25.00	Units: uL	
S_8260_IS_00325	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added: 1.00	Units: uL	Run Reagent

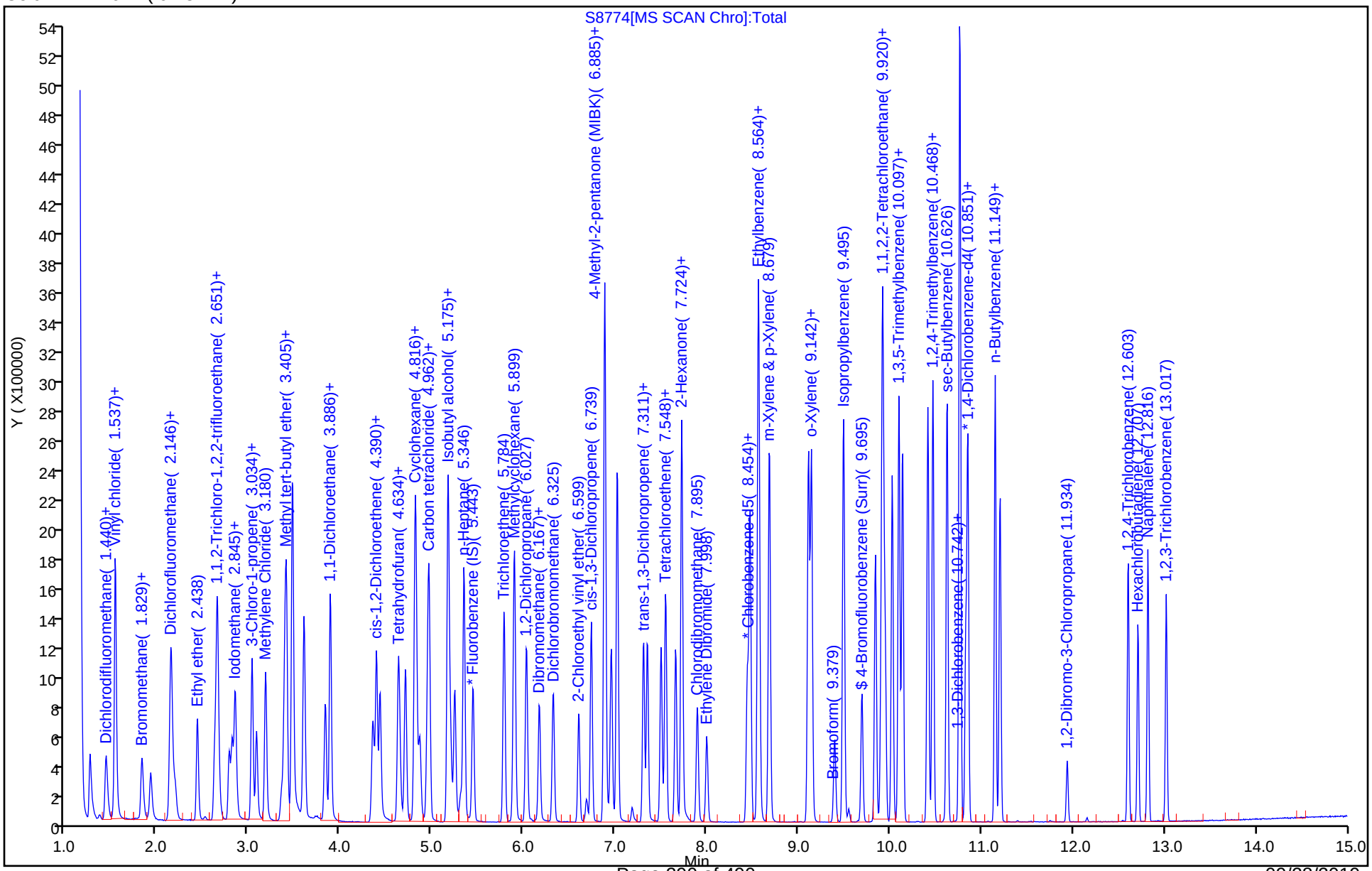
Report Date: 11-Sep-2019 11:12:21 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8774.D

Injection Date:	10-Sep-2019 16:57:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 6			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8775.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 10-Sep-2019 17:20:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0084010-014
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Sep-2019 11:12:25 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0328

First Level Reviewer: nowakk Date: 11-Sep-2019 09:19:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.449	-0.006	98	148568	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	290891	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	20	282975	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	64	181640	25.0	24.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	40	113521	25.0	23.9	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	56	727283	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	92	252001	25.0	24.2	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	99	1063651	100.0	101.4	
12 Chloromethane	50	1.440	1.440	0.000	100	1057634	100.0	90.3	
13 Vinyl chloride	62	1.537	1.537	0.000	69	972167	100.0	99.2	
151 Butadiene	54	1.543	1.543	0.000	91	1071192	100.0	95.0	
14 Bromomethane	94	1.829	1.835	-0.006	91	605761	100.0	87.3	
15 Chloroethane	64	1.927	1.926	0.001	99	601597	100.0	91.6	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	80	1336570	100.0	98.8	
16 Dichlorofluoromethane	67	2.146	2.152	-0.006	96	1254804	100.0	88.3	
18 Ethyl ether	59	2.438	2.437	0.001	93	803869	100.0	100.9	
20 Acrolein	56	2.626	2.626	0.000	92	727387	500.0	545.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.650	2.650	0.000	71	800828	100.0	107.4	
22 1,1-Dichloroethene	96	2.657	2.656	0.001	96	729934	100.0	100.0	
23 Acetone	43	2.784	2.784	0.000	97	1469231	500.0	476.5	
25 Iodomethane	142	2.821	2.821	0.000	98	1396414	100.0	100.5	
26 Carbon disulfide	76	2.851	2.851	0.000	100	2396847	100.0	100.4	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	87	1459608	100.0	100.2	
27 Methyl acetate	43	3.082	3.082	0.000	96	1530111	200.0	207.7	
30 Methylene Chloride	84	3.180	3.186	-0.006	97	811028	100.0	100.6	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	94	616280	1000.0	978.9	
32 Methyl tert-butyl ether	73	3.393	3.399	-0.006	92	2301990	100.0	96.1	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	95	830144	100.0	100.0	
33 Acrylonitrile	53	3.478	3.478	0.000	99	3719591	1000.0	1003.2	
35 Hexane	57	3.600	3.606	-0.006	93	1385509	100.0	103.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.837	3.837	0.000	97	1499140	100.0	100.8	
37 Vinyl acetate	43	3.885	3.891	-0.006	97	4544144	200.0	204.9	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	93	848881	100.0	97.2	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	902637	100.0	98.7	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	94	2226600	500.0	499.1	
48 Chlorobromomethane	128	4.634	4.634	0.000	95	482406	100.0	100.3	
49 Tetrahydrofuran	42	4.646	4.652	-0.006	90	608775	200.0	189.4	
50 Chloroform	83	4.707	4.707	0.000	94	1422353	100.0	95.6	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	90	1291992	100.0	103.1	
52 Cyclohexane	56	4.822	4.816	0.006	93	1653234	100.0	105.8	
55 Carbon tetrachloride	117	4.950	4.950	0.000	89	1216185	100.0	108.3	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	91	1137021	100.0	100.7	
57 Benzene	78	5.175	5.175	0.000	98	3323060	100.0	99.8	
53 Isobutyl alcohol	43	5.200	5.199	0.001	92	849535	2500.0	2330.7	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	1268690	100.0	97.4	
59 n-Heptane	43	5.346	5.345	0.001	95	1740631	100.0	102.6	
62 Trichloroethene	95	5.784	5.783	0.001	94	880270	100.0	102.4	
64 Methylcyclohexane	83	5.899	5.899	0.000	92	1599325	100.0	108.0	
65 1,2-Dichloropropane	63	6.027	6.033	-0.006	91	857793	100.0	100.1	
67 Dibromomethane	93	6.167	6.167	0.000	89	548164	100.0	102.4	
66 1,4-Dioxane	88	6.173	6.173	0.000	29	122617	2000.0	2213.5	M
68 Dichlorobromomethane	83	6.325	6.325	0.000	98	1118227	100.0	103.3	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	652663	100.0	105.4	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	86	1448982	100.0	103.6	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	5257645	500.0	482.0	
74 Toluene	92	7.025	7.018	0.007	97	2179638	100.0	103.2	
77 trans-1,3-Dichloropropene	75	7.311	7.310	0.000	97	1328130	100.0	109.9	
75 Ethyl methacrylate	69	7.353	7.347	0.006	90	1243394	100.0	107.2	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	93	619776	100.0	98.2	
81 Tetrachloroethene	166	7.548	7.548	0.000	89	1020167	100.0	104.0	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	96	1360718	100.0	105.2	
80 2-Hexanone	43	7.724	7.724	0.000	95	3925278	500.0	495.4	
83 Chlorodibromomethane	129	7.895	7.894	0.001	90	935407	100.0	113.4	
84 Ethylene Dibromide	107	7.998	7.998	0.000	99	866939	100.0	104.4	
87 Chlorobenzene	112	8.472	8.472	0.000	94	2489635	100.0	102.2	
88 Ethylbenzene	91	8.564	8.564	0.000	98	4094275	100.0	104.2	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	48	881488	100.0	104.7	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	99	1665990	100.0	100.7	
91 o-Xylene	106	9.111	9.111	0.000	97	1559958	100.0	97.9	
92 Styrene	104	9.142	9.142	0.000	94	2685871	100.0	103.1	
95 Bromoform	173	9.397	9.397	0.000	96	651170	100.0	115.7	
94 Isopropylbenzene	105	9.495	9.494	0.000	95	4074944	100.0	113.8	
101 Bromobenzene	156	9.841	9.841	0.000	92	1084167	100.0	113.8	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	90	980962	100.0	108.6	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	4606802	100.0	112.9	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	85	342065	100.0	105.3	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	84	386206	100.0	122.4	
103 2-Chlorotoluene	126	10.024	10.024	0.000	95	957657	100.0	109.3	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	81	3222047	100.0	108.0	
105 4-Chlorotoluene	126	10.139	10.139	0.000	95	1025022	100.0	108.5	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	760630	100.0	104.4	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	76	3259070	100.0	105.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	4084470	100.0	108.7	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	72	1913584	100.0	101.7	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	3661267	100.0	105.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	96	1986880	100.0	103.2	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	2958294	100.0	102.5	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	94	1729773	100.0	96.5	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	84	184235	100.0	101.0	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	94	1093591	100.0	84.6	
120 Hexachlorobutadiene	225	12.707	12.707	0.000	97	450940	100.0	80.4	
121 Naphthalene	128	12.816	12.816	0.000	97	3124773	100.0	92.5	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	95	980986	100.0	83.9	
S 125 1,2-Dichloroethene, Total	1				0			198.7	
S 123 Total BTEX	1				0			505.7	
S 124 Xylenes, Total	1				0			198.6	
S 126 1,3-Dichloropropene, Total	1				0			213.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00360	Amount Added:	50.00	Units: uL	
SS 8260 CORP_00077	Amount Added:	50.00	Units: uL	
S_8260_IS_00325	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00325	Amount Added:	1.00	Units: uL	Run Reagent

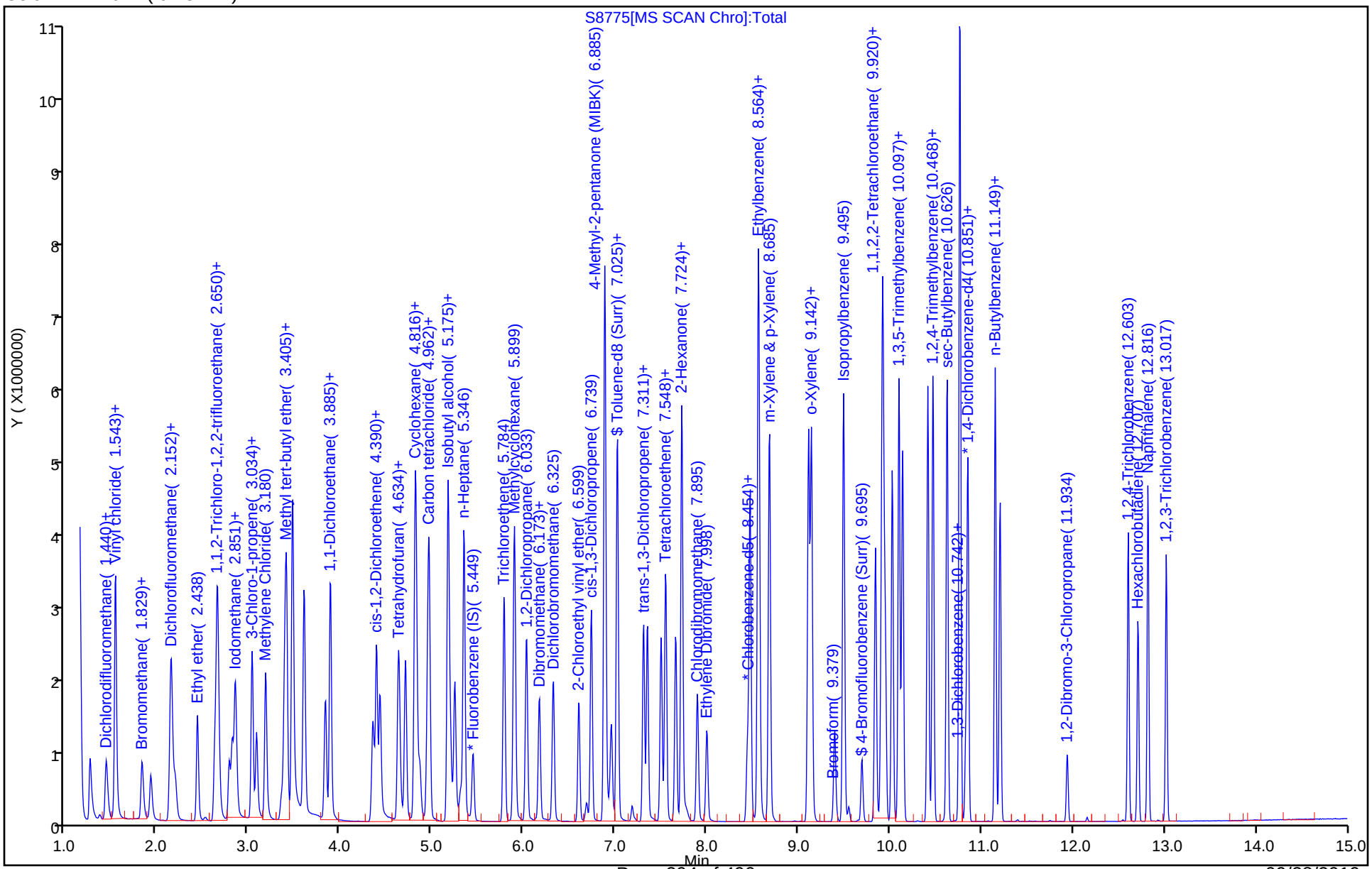
Report Date: 11-Sep-2019 11:12:27 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8775.D

Injection Date:	10-Sep-2019 17:20:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	IC 7			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

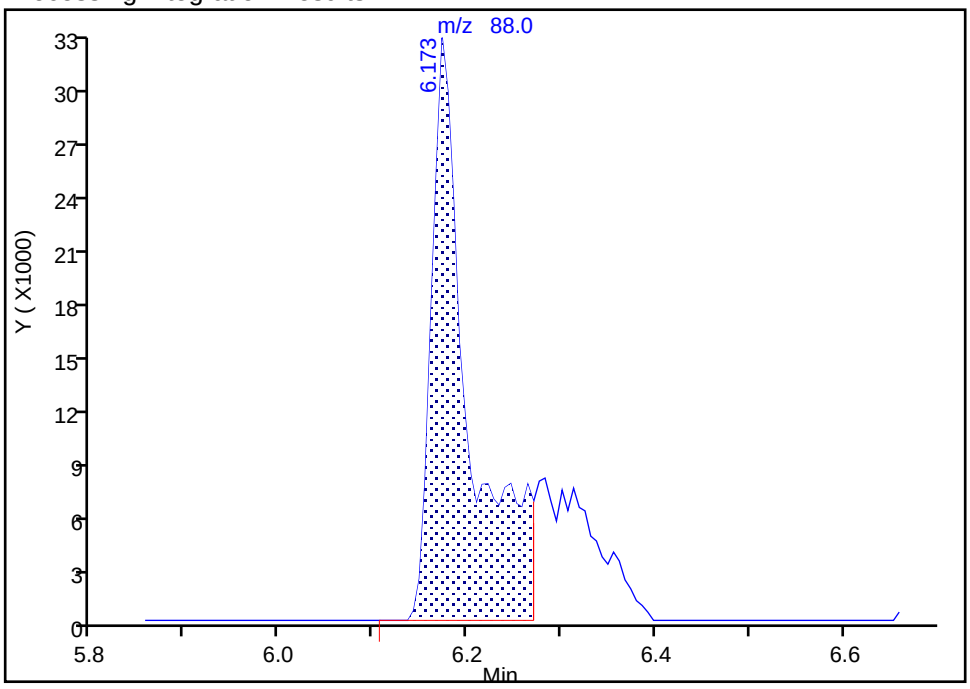
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8775.D
Injection Date: 10-Sep-2019 17:20:30 Instrument ID: HP5973S
Lims ID: IC 7
Client ID:
Operator ID: kn ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

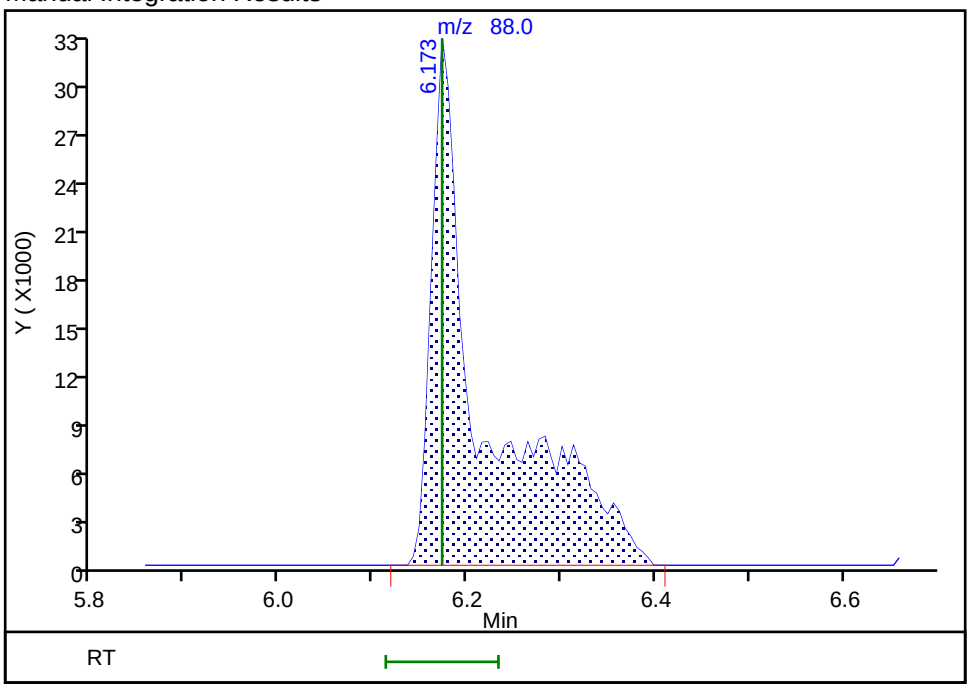
Processing Integration Results

RT: 6.17
Area: 90046
Amount: 1999.2363
Amount Units: ug/L



Manual Integration Results

RT: 6.17
Area: 122617
Amount: 2213.4710
Amount Units: ug/L



Reviewer: nowakk, 11-Sep-2019 09:12:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-492722/5	T5177.D
Level 2	IC 480-492722/6	T5178.D
Level 3	IC 480-492722/7	T5179.D
Level 4	IC 480-492722/8	T5180.D
Level 5	IC 480-492722/9	T5181.D
Level 6	ICIS 480-492722/10	T5182.D
Level 7	IC 480-492722/11	T5183.D
Level 8	IC 480-492722/12	T5184.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.6456 1.8871	1.8919 1.7136	1.6374 1.7803	1.8823	1.6263	Ave		1.7580			0.1000	6.7		20.0			
Chloromethane	1.7644 1.5837	1.8248 1.4892	1.5308 1.5056	1.6069	1.5482	Ave		1.6067			0.1000	7.7		20.0			
Butadiene	1.4586 1.4923	1.4712 1.3532	1.3915 1.3827	1.4837	1.3201	Ave		1.4191				4.6		20.0			
Vinyl chloride	1.6284 1.6079	1.6379 1.5012	1.5602 1.5307	1.5563	1.4569	Ave		1.5599			0.1000	4.1		20.0			
Bromomethane	1.4958 1.3122	1.6780 1.2238	1.2990 1.2042	1.3420	1.2853	Ave		1.3550			0.1000	11.6		20.0			
Chloroethane	1.2701 1.2028	1.2446 1.0888	1.1134 1.0466	1.1827	1.0921	Ave		1.1551			0.1000	7.0		20.0			
Dichlorofluoromethane	3.0134 2.5878	3.1834 2.4293	2.9961 2.4047	2.7162	2.5055	Ave		2.7295				10.9		20.0			
Trichlorofluoromethane	3.0815 2.6088	2.8177 2.4182	2.6235 2.4606	2.6478	2.3835	Ave		2.6302			0.1000	8.8		20.0			
Ethyl ether	1.2154 1.2073	1.3473 1.1369	1.3623 1.1021	1.2080	1.1836	Ave		1.2204				7.5		20.0			
Acrolein	0.3162 0.2802	0.3027 0.2678	0.2661 0.2651	0.2773	0.2665	Ave		0.2802				6.9		20.0			
1,1-Dichloroethene	1.0855 1.1676	1.2777 1.1287	1.2768 1.1836	1.2160	1.1325	Ave		1.1835			0.1000	5.9		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 1.3323	1.4155 1.2631	1.2965 1.3478	1.3377	1.2647	Ave		1.3225			0.1000	4.0		20.0			
Acetone	0.5883 0.5395	0.5731 0.5085	0.5721 0.5163	0.5326	0.5371	Ave		0.5459			0.1000	5.3		20.0			
Iodomethane	1.8005 2.1646	2.3164 2.1348	2.3926 2.1479	2.2013	2.0860	Ave		2.1555				8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	2.9624 4.0443	3.9768 3.9027	3.8021 4.0304	3.9073	3.7335	Ave		3.7949			0.1000	9.3		20.0			
Allyl chloride	1.7995 1.8118	1.8276 1.7283	1.6656 1.7903	1.7277	1.7059	Ave		1.7571				3.3		20.0			
Methyl acetate	1.2902 1.2274	1.2984 1.1867	1.2409 1.1666	1.1832	1.1917	Ave		1.2231			0.1000	4.1		20.0			
Methylene Chloride	+++++ 1.4808	2.5816 1.4075	2.1022 1.3814	1.5715	1.5094	Lin1	1.2688	1.3803			0.1000				1.0000		0.9900
2-Methyl-2-propanol	0.2392 0.2681	0.2489 0.2581	0.2357 0.2738	0.2535	0.2492	Ave		0.2533				5.2		20.0			
Methyl tert-butyl ether	3.2981 4.1312	3.9836 3.9323	4.0941 3.8726	3.8633	3.8123	Ave		3.8734			0.1000	6.7		20.0			
trans-1,2-Dichloroethene	1.0370 1.4111	1.4903 1.3352	1.3853 1.3432	1.3802	1.2976	Ave		1.3350			0.1000	10.0		20.0			
Acrylonitrile	0.5607 0.6561	0.5873 0.6174	0.6494 0.6118	0.6018	0.6169	Ave		0.6127				5.1		20.0			
Hexane	2.0736 1.8606	2.2096 1.7438	1.9524 1.8460	1.9415	1.7223	Ave		1.9187				8.5		20.0			
1,1-Dichloroethane	2.0177 2.3255	2.3960 2.1732	2.2990 2.1974	2.2818	2.2069	Ave		2.2372			0.2000	5.2		20.0			
Vinyl acetate	2.1923 2.8706	2.4519 2.8192	2.4925 2.8812	2.5617	2.6464	Ave		2.6145				9.2		20.0			
2,2-Dichloropropane	1.4314 1.8723	1.6889 1.8495	1.8942 1.9699	1.9004	1.7622	Ave		1.7961				9.5		20.0			
cis-1,2-Dichloroethene	1.1042 1.4924	1.5547 1.4736	1.6026 1.4670	1.5184	1.4482	Ave		1.4576			0.1000	10.4		20.0			
2-Butanone (MEK)	0.6914 0.8022	0.7339 0.7703	0.8021 0.7823	0.7338	0.7618	Ave		0.7597			0.1000	5.0		20.0			
Bromochloromethane	0.6303 0.8134	0.7599 0.7656	0.7679 0.7814	0.7892	0.7384	Ave		0.7557				7.3		20.0			
Tetrahydrofuran	0.5600 0.5215	0.5022 0.5043	0.5303 0.5119	0.5102	0.5302	Ave		0.5213				3.6		20.0			
Chloroform	+++++ 2.5607	2.9933 2.4469	2.6519 2.4469	2.5433	2.4100	Ave		2.5790			0.2000	7.8		20.0			
1,1,1-Trichloroethane	+++++ 2.1889	1.9493 2.1044	2.0341 2.1949	2.1105	2.0096	Ave		2.0845			0.1000	4.4		20.0			
Cyclohexane	+++++ 2.1819	2.0668 2.0484	2.1912 2.1668	2.1313	1.9600	Ave		2.1066			0.1000	4.0		20.0			
Carbon tetrachloride	+++++ 1.8183	1.9236 1.7849	1.7821 1.9248	1.7808	1.6850	Ave		1.8142			0.1000	4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	+++++ 1.7756	1.7704 1.7170	1.7203 1.7925	1.7957	1.6489	Ave		1.7458				3.1		20.0			
Benzene	4.3076 5.3964	5.6567 5.0699	5.4482 5.0934	5.0928	5.1686	Ave		5.1542			0.5000	7.8		20.0			
Isobutyl alcohol	+++++ 0.0965	0.0714 0.0921	0.0765 0.0979	0.0843	0.0859	Ave		0.0864				11.5		20.0			
1,2-Dichloroethane	2.2019 2.1295	2.1789 2.0403	2.1541 2.0138	2.0616	2.0260	Ave		2.1008			0.1000	3.5		20.0			
n-Heptane	+++++ 1.7842	1.8033 1.6785	1.8149 1.7558	1.7883	1.6849	Ave		1.7586				3.2		20.0			
Trichloroethene	1.2795 1.4342	1.4183 1.3619	1.4429 1.4158	1.4331	1.3703	Ave		1.3945			0.2000	4.0		20.0			
Methylcyclohexane	+++++ 2.2724	2.2772 2.1762	2.2144 2.3257	2.2619	2.1151	Ave		2.2347			0.1000	3.2		20.0			
1,2-Dichloropropane	1.0412 1.2676	1.1946 1.2515	1.3241 1.2288	1.2566	1.2543	Ave		1.2274			0.1000	6.8		20.0			
Dibromomethane	0.8729 0.9817	0.9441 0.9390	0.9467 0.9484	0.9358	0.9319	Ave		0.9375			0.1000	3.2		20.0			
1,4-Dioxane	+++++ 0.0070	0.0059 0.0067	0.0059 0.0068	0.0074	0.0067	Ave		0.0066				8.5		20.0			
Bromodichloromethane	1.1870 1.8162	1.5701 1.7819	1.6725 1.8328	1.6613	1.6711	Ave		1.6491			0.2000	12.6		20.0			
2-Chloroethyl vinyl ether	0.7042 0.9469	0.8819 0.9285	0.8478 0.9679	0.8626	0.8248	Ave		0.8706				9.6		20.0			
cis-1,3-Dichloropropene	1.4109 2.1372	1.8317 2.0585	1.7916 2.1366	1.8693	1.9167	Ave		1.8941			0.2000	12.5		20.0			
4-Methyl-2-pentanone (MIBK)	0.3477 0.4533	0.3935 0.4342	0.3868 0.4400	0.4236	0.4276	Ave		0.4133			0.1000	8.4		20.0			
Toluene	0.6904 0.8924	1.0095 0.8517	0.9342 0.8687	0.9041	0.8685	Ave		0.8774			0.4000	10.3		20.0			
trans-1,3-Dichloropropene	0.3496 0.5227	0.4586 0.5228	0.4380 0.5452	0.4865	0.4790	Ave		0.4753			0.1000	13.1		20.0			
Ethyl methacrylate	+++++ 0.4974	0.4177 0.4960	0.4099 0.5186	0.4207	0.4596	Ave		0.4600				9.7		20.0			
1,1,2-Trichloroethane	0.2603 0.2962	0.2808 0.2840	0.2999 0.2877	0.2831	0.2832	Ave		0.2844			0.1000	4.2		20.0			
Tetrachloroethene	0.2746 0.3943	0.4222 0.3713	0.4046 0.3901	0.4064	0.3743	Ave		0.3797			0.2000	12.0		20.0			
1,3-Dichloropropane	0.4847 0.5965	0.6158 0.5590	0.5758 0.5597	0.5772	0.5559	Ave		0.5656				6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	+++++ 0.3259	0.2380 0.3105	0.2634 0.3153	0.2913	0.3010	Ave		0.2922			0.1000	10.7		20.0			
Dibromochloromethane	0.2729 0.3553	0.3220 0.3575	0.3055 0.3831	0.3226	0.3281	Ave		0.3309			0.1000	10.3		20.0			
1,2-Dibromoethane	0.3529 0.3680	0.3483 0.3603	0.3465 0.3689	0.3519	0.3572	Ave		0.3567				2.4		20.0			
Chlorobenzene	+++++ 1.0024	1.0541 0.9610	1.0189 0.9738	1.0067	0.9788	Ave		0.9994			0.5000	3.2		20.0			
Ethylbenzene	+++++ 1.6927	1.6925 1.6458	1.7305 1.6779	1.6959	1.6035	Ave		1.6769			0.1000	2.4		20.0			
1,1,1,2-Tetrachloroethane	0.2576 0.3389	0.3130 0.3394	0.3200 0.3574	0.3141	0.3091	Ave		0.3187				9.3		20.0			
m,p-Xylene	+++++ 0.6570	0.6477 0.6394	0.6156 0.6518	0.6145	0.6113	Ave		0.6339			0.1000	3.1		20.0			
o-Xylene	+++++ 0.6405	0.5926 0.6201	0.6093 0.6511	0.6039	0.6111	Ave		0.6184			0.3000	3.3		20.0			
Styrene	+++++ 1.0807	0.9338 1.0530	0.9424 1.0886	0.9639	0.9797	Ave		1.0060			0.3000	6.6		20.0			
Bromoform	0.1982 0.2320	0.1912 0.2435	0.1809 0.2737	0.2071	0.2101	Ave		0.2171			0.1000	14.2		20.0			
Isopropylbenzene	+++++ 3.0870	2.9901 3.0099	2.9108 3.0799	2.9039	2.8947	Ave		2.9823			0.1000	2.7		20.0			
Bromobenzene	0.6648 0.8019	0.8569 0.7599	0.7460 0.7754	0.7817	0.7822	Ave		0.7711				7.0		20.0			
1,1,2,2-Tetrachloroethane	0.8096 0.9677	0.8382 0.9148	0.9169 0.9397	0.9628	0.9168	Ave		0.9083			0.3000	6.2		20.0			
N-Propylbenzene	+++++ 3.8024	3.6853 3.6466	3.6337 3.6786	3.6581	3.6089	Ave		3.6734				1.7		20.0			
1,2,3-Trichloropropane	0.2968 0.3318	0.3599 0.3084	0.3110 0.3123	0.3334	0.3203	Ave		0.3217				6.1		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2859	0.2360 0.2890	0.2287 0.3022	0.2541	0.2613	Ave		0.2653				10.5		20.0			
2-Chlorotoluene	+++++ 0.7355	0.7290 0.7141	0.7152 0.7119	0.7015	0.7232	Ave		0.7186				1.6		20.0			
1,3,5-Trimethylbenzene	+++++ 2.7032	2.3402 2.6247	2.3763 2.6516	2.5116	2.5434	Ave		2.5359				5.4		20.0			
4-Chlorotoluene	+++++ 2.6643	2.5903 2.2518	2.2908 2.2845	2.6004	2.3176	Ave		2.4285				7.4		20.0			
tert-Butylbenzene	+++++ 0.5554	0.4736 0.5329	0.5325 0.5593	0.5367	0.5202	Ave		0.5301				5.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	+++++ 2.7607	2.4207 2.6703	2.4553 2.7223	2.5510	2.6093	Ave		2.5985				5.0		20.0			
sec-Butylbenzene	+++++ 3.3966	3.2209 3.2649	2.9992 3.4175	3.2480	3.1918	Ave		3.2484				4.3		20.0			
4-Isopropyltoluene	+++++ 2.9279	2.4965 2.8445	2.5485 2.9714	2.7570	2.7394	Ave		2.7550				6.5		20.0			
1,3-Dichlorobenzene	+++++ 1.5842	1.5689 1.5141	1.6470 1.5181	1.5620	1.5402	Ave		1.5621			0.6000	2.9		20.0			
1,4-Dichlorobenzene	+++++ 1.6018	1.6619 1.5277	1.6442 1.5309	1.6490	1.5880	Ave		1.6005			0.5000	3.5		20.0			
n-Butylbenzene	+++++ 2.7332	2.4922 2.6447	2.4886 2.7376	2.6172	2.5476	Ave		2.6087				4.0		20.0			
1,2-Dichlorobenzene	+++++ 1.6018	1.5402 1.5169	1.4597 1.5219	1.5513	1.5527	Ave		1.5349			0.4000	2.8		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1902	0.1789 0.1887	0.1762 0.2091	0.1703	0.1745	Ave		0.1840			0.0500	7.2		20.0			
1,2,4-Trichlorobenzene	+++++ 1.1656	1.2345 1.1186	1.1307 1.1587	1.1353	1.1206	Ave		1.1520			0.2000	3.5		20.0			
Hexachlorobutadiene	0.3273 0.5524	0.4877 0.5321	0.5435 0.5616	0.5062	0.5029	Lin1	-0.090	0.5510							0.9990		0.9900
Naphthalene	+++++ 3.3545	2.7378 3.2806	2.8255 3.3272	2.9583	3.0479	Ave		3.0760				8.1		20.0			
1,2,3-Trichlorobenzene	+++++ 1.1413	1.1921 1.1060	1.1481 1.1295	1.0903	1.1248	Ave		1.1331				2.9		20.0			
Dibromofluoromethane (Surr)	1.3539 1.3702	1.3248 1.3667	1.3814 1.3273	1.3587	1.3382	Ave		1.3526				1.5		20.0			
1,2-Dichloroethane-d4 (Surr)	1.7108 1.7375	1.7170 1.7610	1.7519 1.7309	1.7196	1.6996	Ave		1.7285				1.2		20.0			
Toluene-d8 (Surr)	1.2967 1.3329	1.3676 1.3141	1.3029 1.2900	1.3648	1.3455	Ave		1.3268				2.3		20.0			
4-Bromofluorobenzene (Surr)	0.3992 0.4253	0.4126 0.4249	0.4033 0.4181	0.4226	0.4139	Ave		0.4150				2.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-492722/5	T5177.D
Level 2	IC 480-492722/6	T5178.D
Level 3	IC 480-492722/7	T5179.D
Level 4	IC 480-492722/8	T5180.D
Level 5	IC 480-492722/9	T5181.D
Level 6	ICIS 480-492722/10	T5182.D
Level 7	IC 480-492722/11	T5183.D
Level 8	IC 480-492722/12	T5184.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	5386 399293	15873 737525	27645 1580637	79960	138060	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	5775 335087	15310 640972	25845 1336741	68262	131429	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	4774 315741	12344 582425	23493 1227641	63027	112061	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	5330 340213	13742 646096	26342 1359018	66115	123680	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	4896 277642	14079 526737	21932 1069139	57009	109110	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	4157 254506	10442 468617	18798 929279	50244	92710	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	9863 547542	26709 1045572	50585 2135004	115387	212696	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	10086 551994	23641 1040797	44293 2184637	112481	202337	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	3978 255451	11304 489309	23000 978550	51318	100474	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	5175 296418	12699 576246	22465 1177037	58906	113098	2.00 125	5.00 250	10.0 500	25.0	50.0
1,1-Dichloroethene	FB	Ave	3553 247047	10720 485789	21557 1050870	51656	96135	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 281898	11876 543649	21889 1196631	56827	107359	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	9627 570749	24041 1094321	48298 2292140	113137	227982	2.00 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	5893 457994	19435 918810	40396 1907061	93515	177079	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	9696 855717	33366 1679704	64192 3578428	165984	316933	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	5890 383354	15334 743850	28121 1589565	73396	144813	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	8446 519413	21788 1021530	41903 2071539	100523	202323	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	+++++ 313316	21660 605779	35493 1226502	66761	128133	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	7828 567177	20881 1110918	39795 2431060	107669	211585	4.00 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	10795 874108	33423 1692460	69122 3438375	164115	323623	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	3394 298578	12504 574691	23388 1192599	58634	110156	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	18352 1388136	49277 2657077	109635 5432366	255645	523716	4.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	6787 393688	18539 750520	32964 1638968	82476	146203	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	6604 492050	20103 935352	38815 1951010	96932	187345	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	14351 1214753	41144 2426777	84163 5116186	217649	449303	0.800 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	4685 396158	14170 796018	31981 1749046	80731	149592	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	3614 315775	13044 634229	27057 1302490	64503	122937	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	11315 848667	30788 1657744	67715 3472975	155857	323344	2.00 125	5.00 250	10.0 500	25.0	50.0
Bromochloromethane	FB	Ave	2063 172097	6376 329512	12964 693775	33525	62680	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	3666 220705	8427 434117	17906 909061	43346	90011	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	+++++ 541818	25114 1053156	44774 2172472	108042	204583	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	+++++ 463152	16355 905714	34343 1948786	89657	170599	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	+++++ 461660	17341 881649	36995 1923817	90541	166384	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	+++++ 384733	16139 768207	30088 1708939	75650	143038	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	+++++ 375694	14854 738980	29044 1591522	76284	139975	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	14099 1141802	47461 2182074	91984 4522267	216349	438766	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	+++++ 510531	14972 991195	32304 2173864	89515	182205	+++++ 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	7207 450571	18281 878153	36369 1787965	87578	171986	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	+++++ 377512	15130 722437	30642 1558899	75967	143030	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	4188 303463	11900 586160	24361 1257067	60880	116323	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	+++++ 480813	19106 936650	37387 2064898	96087	179548	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3408 268218	10023 538644	22356 1091019	53380	106481	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2857 207705	7921 404131	15983 842047	39754	79108	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 113261	3648 219679	7597 460979	23074	42828	+++++ 500	20.0 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	3885 384280	13173 766940	28238 1627276	70572	141856	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	2305 200352	7399 399622	14313 859393	36646	70020	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	4618 452197	15368 885992	30248 1896981	79410	162712	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	21628 1834798	60784 3574915	124722 7410228	329358	680106	2.00 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	8590 722378	31192 1402451	60241 2926271	140609	276263	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	4350 423151	14170 860804	28248 1836414	75657	152355	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 402663	12905 816805	26430 1746996	65432	146200	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	3239 239795	8676 467714	19339 968994	44020	90088	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	3417 319173	13044 611364	26091 1313883	63207	119053	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	6031 482867	19027 920549	37133 1885421	89770	176816	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	+++++ 1319116	36764 2556684	84943 5310545	226511	478780	+++++ 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3395 287590	9948 588741	19698 1290280	50172	104367	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	4391 297865	10762 593367	22342 1242656	54727	113615	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	+++++ 811472	32569 1582361	65707 3280113	156565	311358	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	+++++ 1370209	52295 2710016	111592 5651724	263736	510059	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3205 274317	9672 558858	20635 1203910	48849	98313	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	+++++ 531842	20013 1052834	39696 2195604	95573	194447	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	+++++ 518479	18311 1021078	39291 2193210	93920	194384	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	+++++ 874802	28851 1733963	60771 3666729	149904	311629	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2466 187828	5908 400995	11667 921963	32208	66825	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	+++++ 1350584	48973 2710815	101809 5734230	245491	494054	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	4233 350836	14034 684385	26092 1443640	66085	133496	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5155 423384	13729 823926	32071 1749530	81397	156468	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	+++++ 1663565	60360 3284156	127094 6848892	309250	615952	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1890 145162	5895 277734	10879 581364	28186	54667	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 125095	3865 260309	7999 562608	21485	44591	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	+++++ 321791	11940 643091	25015 1325499	59300	123433	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 1182660	38329 2363810	83116 4936873	212324	434097	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	+++++ 1165635	42425 2028020	80124 4253325	219836	395547	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 242981	7756 479964	18625 1041380	45372	88782	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	+++++ 1207818	39648 2404888	85879 5068502	215655	445345	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	+++++ 1486033	52754 2940385	104903 6362876	274585	544760	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 1280953	40889 2561796	89137 5532308	233072	467547	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 693090	25696 1363625	57607 2826482	132053	262875	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1 Analy Batch No.: 492722

SDG No.:

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/18/2019 16:14 Calibration End Date: 09/18/2019 19:01 Calibration ID: 37706

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	+++++ 700769	27219 1375894	57510 2850206	139403	271035	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	+++++ 1195766	40819 2381865	87043 5097070	221252	434813	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 700787	25226 1366165	51056 2833521	131141	265010	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 83204	2930 169926	6162 389397	14396	29791	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 509936	20219 1007430	39547 2157287	95975	191252	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Lin1	2084 241683	7987 479208	19011 1045618	42791	85830	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	+++++ 1467605	44840 2954546	98825 6194752	250089	520190	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 499326	19524 996093	40155 2102944	92173	191967	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	276954 289915	277876 294116	291540 294606	288590	283998	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	349970 367634	360154 378972	369730 384205	365255	360692	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1008353 1078968	1056362 1081964	1050239 1086279	1061287	1070019	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	310454 344260	318698 349842	325057 352076	328623	329182	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Lims ID: IC 0.4
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Sep-2019 16:14:30 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 0.4
Misc. Info.: 480-0084255-005
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:18:35 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 19:00:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	204566	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	86	777610	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	97	397964	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	93	276954	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	349970	25.0	24.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1008353	25.0	24.4	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	310454	25.0	24.1	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	44	5386	0.4000	0.3744	
13 Chloromethane	50	1.361	1.361	0.000	97	5775	0.4000	0.4393	M
151 Butadiene	54	1.434	1.434	0.000	78	4774	0.4000	0.4111	
14 Vinyl chloride	62	1.444	1.455	-0.011	96	5330	0.4000	0.4176	
15 Bromomethane	94	1.693	1.703	-0.010	64	4896	0.4000	0.4416	M
16 Chloroethane	64	1.755	1.766	-0.011	28	4157	0.4000	0.4398	M
18 Dichlorofluoromethane	67	1.983	1.983	0.000	93	9863	0.4000	0.4416	M
17 Trichlorofluoromethane	101	1.994	1.994	0.000	61	10086	0.4000	0.4686	Ma
19 Ethyl ether	59	2.232	2.232	0.000	77	3978	0.4000	0.3984	
21 Acrolein	56	2.418	2.418	0.000	78	5175	2.00	2.26	
20 1,1,2-Trichloro-1,2,2-trif	101	2.418	2.439	-0.021	60	1945	0.4000	0.1797	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	92	3553	0.4000	0.3669	
23 Acetone	43	2.564	2.564	0.000	95	9627	2.00	2.16	M
24 Iodomethane	142	2.595	2.595	0.000	72	5893	0.4000	0.3341	
25 Carbon disulfide	76	2.615	2.626	-0.011	68	9696	0.4000	0.3122	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	81	5890	0.4000	0.4097	
28 Methyl acetate	43	2.833	2.823	0.010	87	8446	0.8000	0.8439	
30 Methylene Chloride	84	2.916	2.916	0.000	94	12773	0.4000	0.2117	
31 2-Methyl-2-propanol	59	3.102	3.082	0.020	56	7828	4.00	3.78	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	91	10795	0.4000	0.3406	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	94	3394	0.4000	0.3107	
34 Acrylonitrile	53	3.175	3.175	0.000	97	18352	4.00	3.66	
35 Hexane	57	3.279	3.279	0.000	92	6787	0.4000	0.4323	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.475	3.475	0.000	37	6604	0.4000	0.3608	
39 Vinyl acetate	43	3.517	3.517	0.000	100	14351	0.8000	0.6708	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	54	4685	0.4000	0.3188	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	79	3614	0.4000	0.3030	
44 2-Butanone (MEK)	43	3.983	3.973	0.010	98	11315	2.00	1.82	
47 Chlorobromomethane	128	4.149	4.149	0.000	88	2063	0.4000	0.3336	
48 Tetrahydrofuran	42	4.159	4.159	0.000	75	3666	0.8000	0.8594	
50 Chloroform	83	4.201	4.211	-0.010	95	10968	0.4000	0.5197	
52 Cyclohexane	56	4.294	4.305	-0.010	82	3607	0.4000	0.2092	a
51 1,1,1-Trichloroethane	97	4.305	4.305	0.000	95	4187	0.4000	0.2455	
53 Carbon tetrachloride	117	4.418	4.408	0.010	81	4219	0.4000	0.2842	
54 1,1-Dichloropropene	75	4.408	4.418	-0.010	86	3946	0.4000	0.2762	
55 Benzene	78	4.584	4.584	0.000	43	14099	0.4000	0.3343	
56 Isobutyl alcohol	43	4.605	4.595	0.010	61	5618	10.0	7.95	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	93	7207	0.4000	0.4193	a
59 n-Heptane	43	4.709	4.719	-0.010	81	4607	0.4000	0.3202	
60 Trichloroethene	95	5.061	5.061	0.000	84	4188	0.4000	0.3670	
62 Methylcyclohexane	83	5.154	5.165	-0.011	90	3436	0.4000	0.1879	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	92	3408	0.4000	0.3393	
66 1,4-Dioxane	88	5.372	5.372	0.000	0	628	8.00	3.04	M
65 Dibromomethane	93	5.372	5.372	0.000	89	2857	0.4000	0.3724	
67 Dichlorobromomethane	83	5.486	5.486	0.000	93	3885	0.4000	0.2879	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	88	2305	0.4000	0.3236	a
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	91	4618	0.4000	0.2980	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	21628	2.00	1.68	
73 Toluene	92	6.025	6.025	0.000	96	8590	0.4000	0.3147	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	93	4350	0.4000	0.2942	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	3991	0.4000	0.2789	a
78 1,1,2-Trichloroethane	83	6.387	6.377	0.010	90	3239	0.4000	0.3661	
79 Tetrachloroethene	166	6.419	6.429	-0.010	92	3417	0.4000	0.2893	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	87	6031	0.4000	0.3428	a
81 2-Hexanone	43	6.543	6.543	0.000	96	12942	2.00	1.42	
82 Chlorodibromomethane	129	6.688	6.678	0.010	83	3395	0.4000	0.3299	a
83 Ethylene Dibromide	107	6.771	6.761	0.010	97	4391	0.4000	0.3957	
86 Chlorobenzene	112	7.113	7.113	0.000	41	9701	0.4000	0.3121	
88 Ethylbenzene	91	7.185	7.175	0.010	97	14737	0.4000	0.2825	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	46	3205	0.4000	0.3233	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	5626	0.4000	0.2853	
91 o-Xylene	106	7.590	7.590	0.000	96	5348	0.4000	0.2780	
92 Styrene	104	7.610	7.610	0.000	94	8861	0.4000	0.2832	
93 Bromoform	173	7.807	7.807	0.000	85	2466	0.4000	0.3652	a
95 Isopropylbenzene	105	7.869	7.869	0.000	96	13420	0.4000	0.2827	
97 Bromobenzene	156	8.149	8.149	0.000	89	4233	0.4000	0.3449	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	94	5155	0.4000	0.3565	
99 N-Propylbenzene	91	8.201	8.201	0.000	98	16553	0.4000	0.2831	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	55	1890	0.4000	0.3690	
101 trans-1,4-Dichloro-2-buten	53	8.211	8.222	-0.011	41	1234	0.4000	0.2922	
105 2-Chlorotoluene	126	8.294	8.294	0.000	95	3578	0.4000	0.3128	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	10143	0.4000	0.2513	
102 4-Chlorotoluene	91	8.377	8.377	0.000	96	12906	0.4000	0.3338	
106 tert-Butylbenzene	134	8.605	8.605	0.000	91	2434	0.4000	0.2885	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	94	11579	0.4000	0.2799	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	12083	0.4000	0.2337	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	10980	0.4000	0.2504	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	95	7809	0.4000	0.3140	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	48	8544	0.4000	0.3354	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	11295	0.4000	0.2720	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	94	8360	0.4000	0.3421	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	70	1000	0.4000	0.3414	a
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	92	4984	0.4000	0.2718	Ma
120 Hexachlorobutadiene	225	10.709	10.709	0.000	85	2084	0.4000	0.4014	Ma
121 Naphthalene	128	10.812	10.823	-0.011	0	16148	0.4000	0.3298	M
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	91	5284	0.4000	0.2929	
S 124 1,2-Dichloroethene, Total	1				0			0.6137	
S 126 Xylenes, Total	1				0			0.5634	
S 123 1,3-Dichloropropene, Total	1				0			0.5922	
S 125 Total BTEX	1				0			1.49	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	0.40	Units: uL	
GAS CORP mix_00361	Amount Added:	0.40	Units: uL	
T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

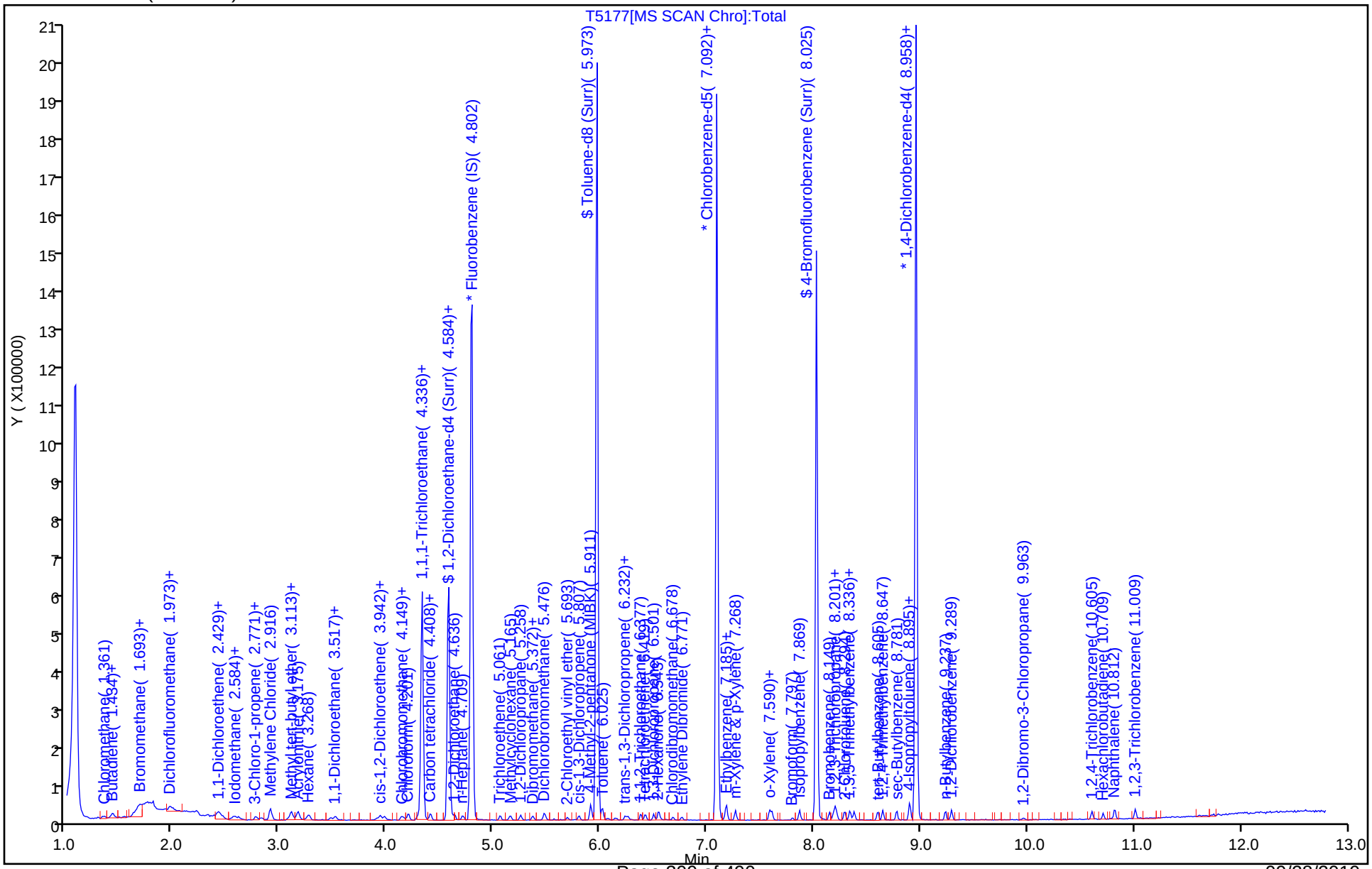
Report Date: 19-Sep-2019 09:18:39 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D

Injection Date:	18-Sep-2019 16:14:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC 0.4			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

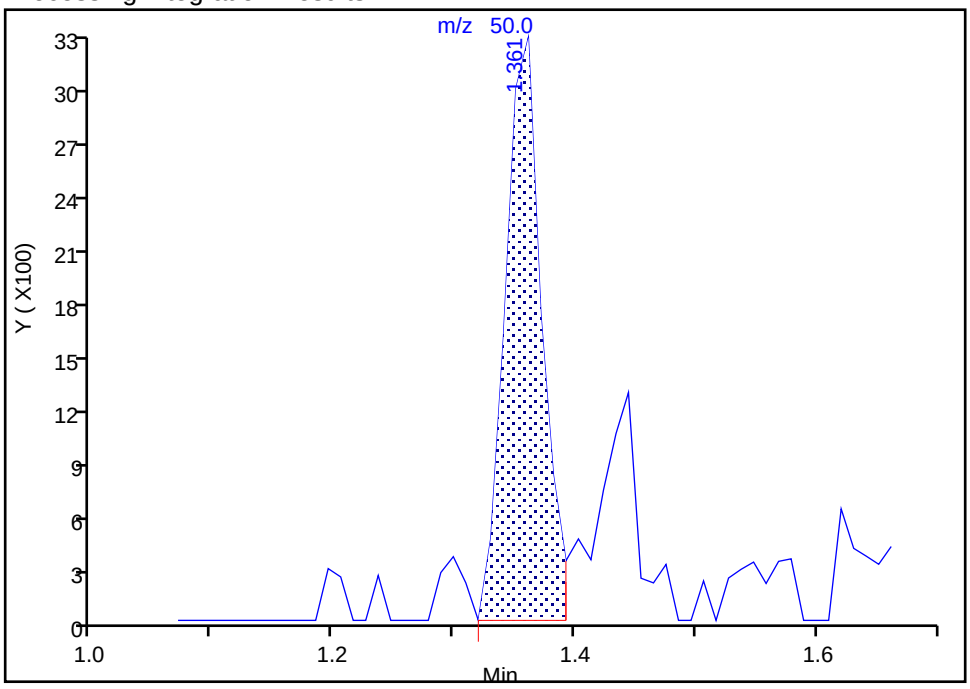
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

13 Chloromethane, CAS: 74-87-3

Signal: 1

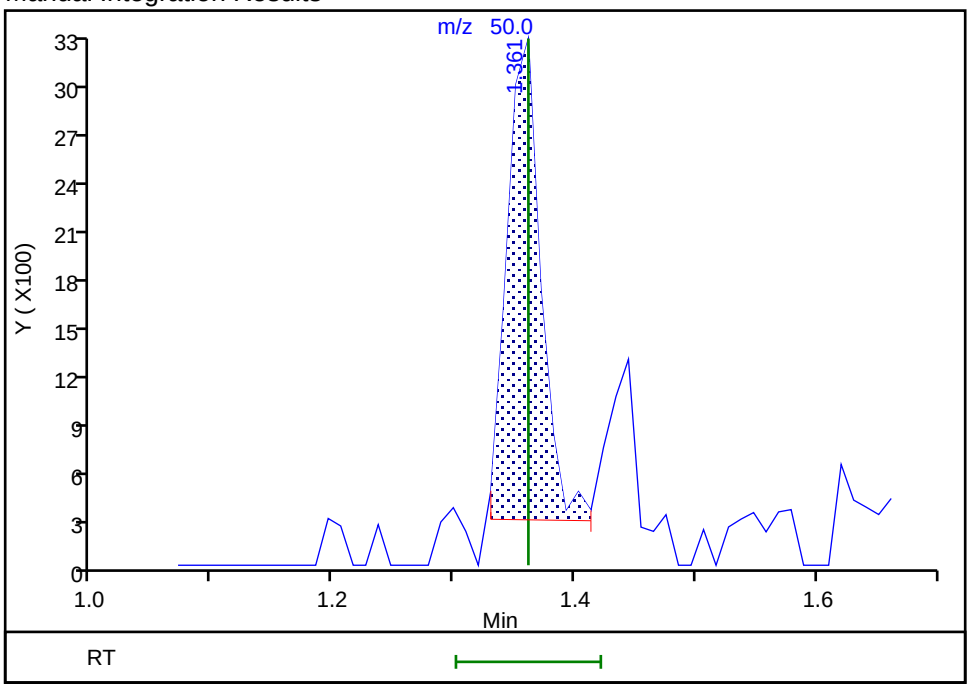
Processing Integration Results

RT: 1.36
Area: 6835
Amount: 0.492195
Amount Units: ug/L



Manual Integration Results

RT: 1.36
Area: 5775
Amount: 0.439263
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:53:51
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

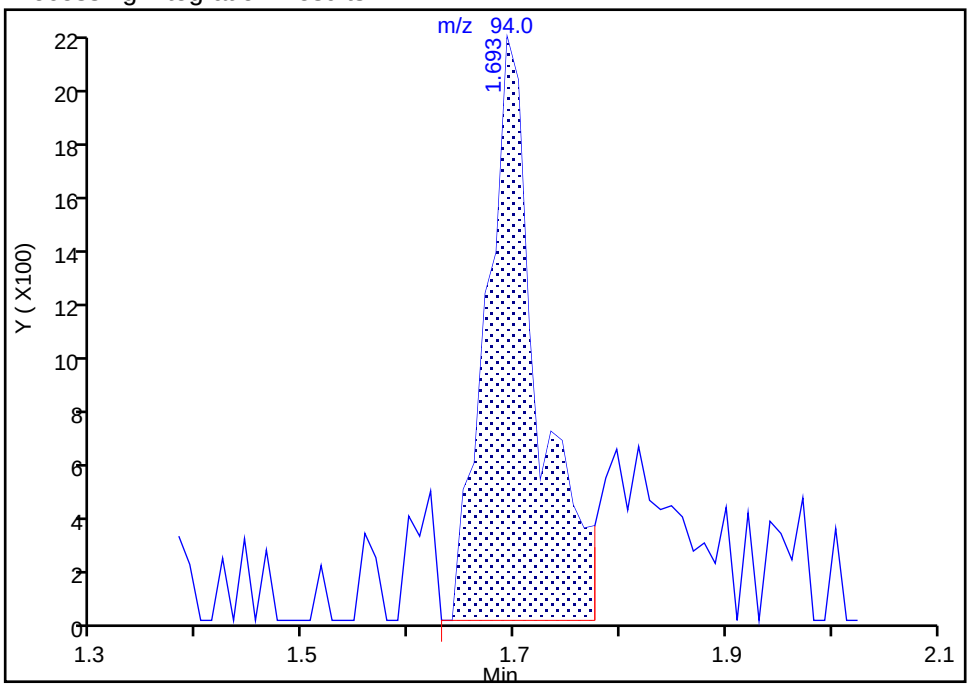
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

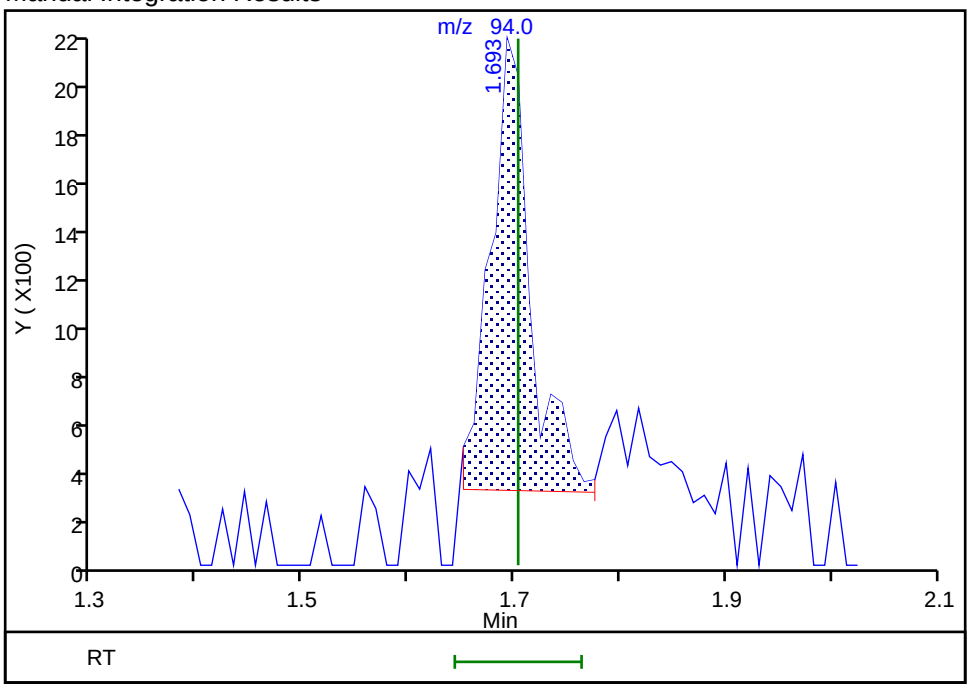
Processing Integration Results

RT: 1.69
Area: 7345
Amount: 0.433531
Amount Units: ug/L



Manual Integration Results

RT: 1.69
Area: 4896
Amount: 0.441563
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:54:13
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Buffalo

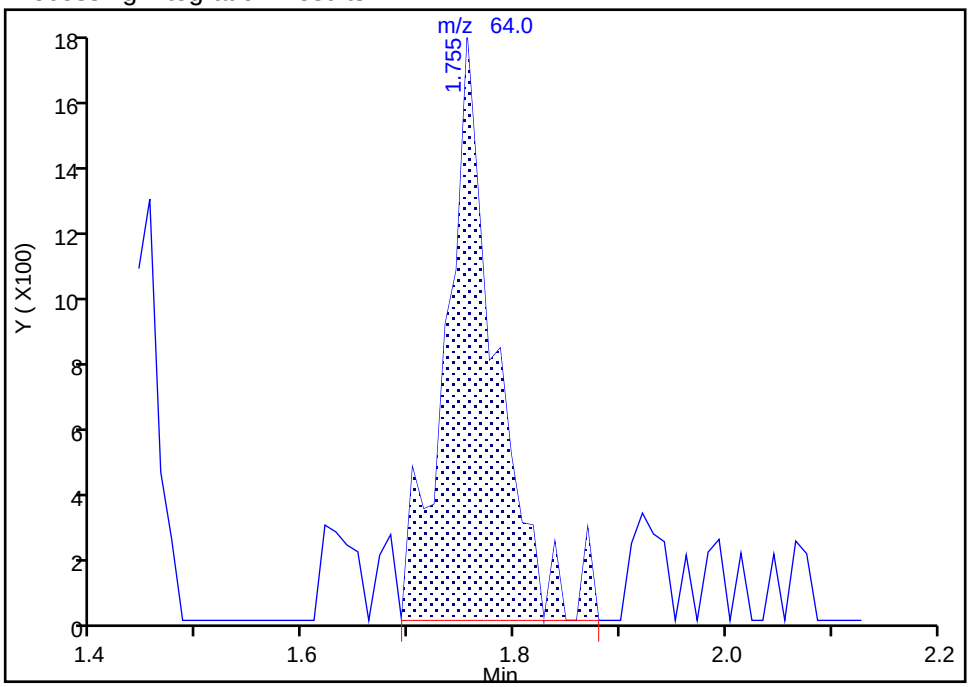
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

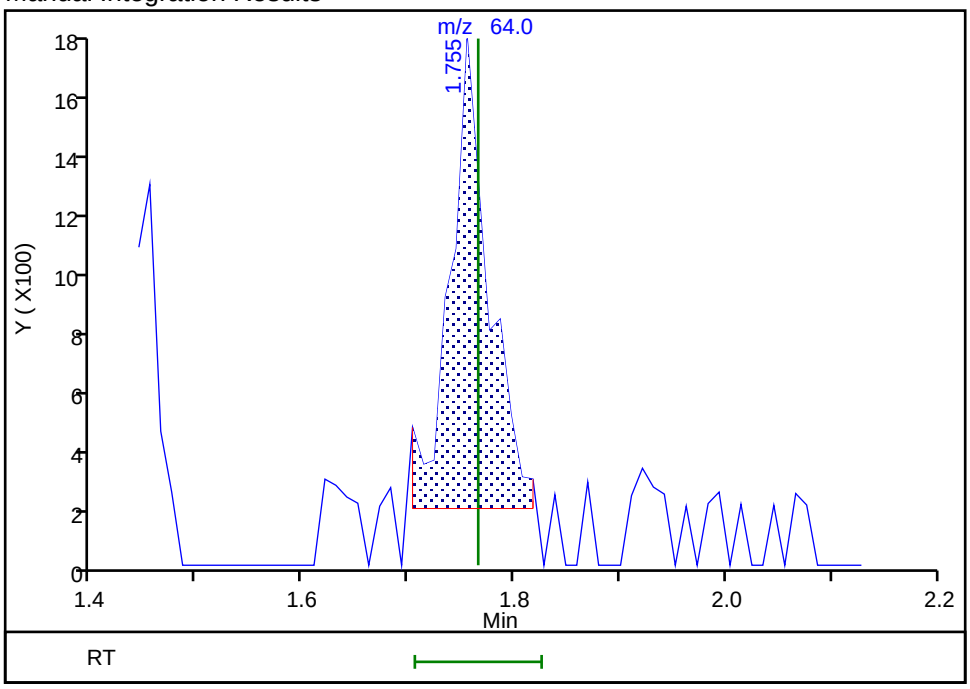
Processing Integration Results

RT: 1.76
Area: 5922
Amount: 0.568002
Amount Units: ug/L



Manual Integration Results

RT: 1.76
Area: 4157
Amount: 0.439795
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:55:33
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Buffalo

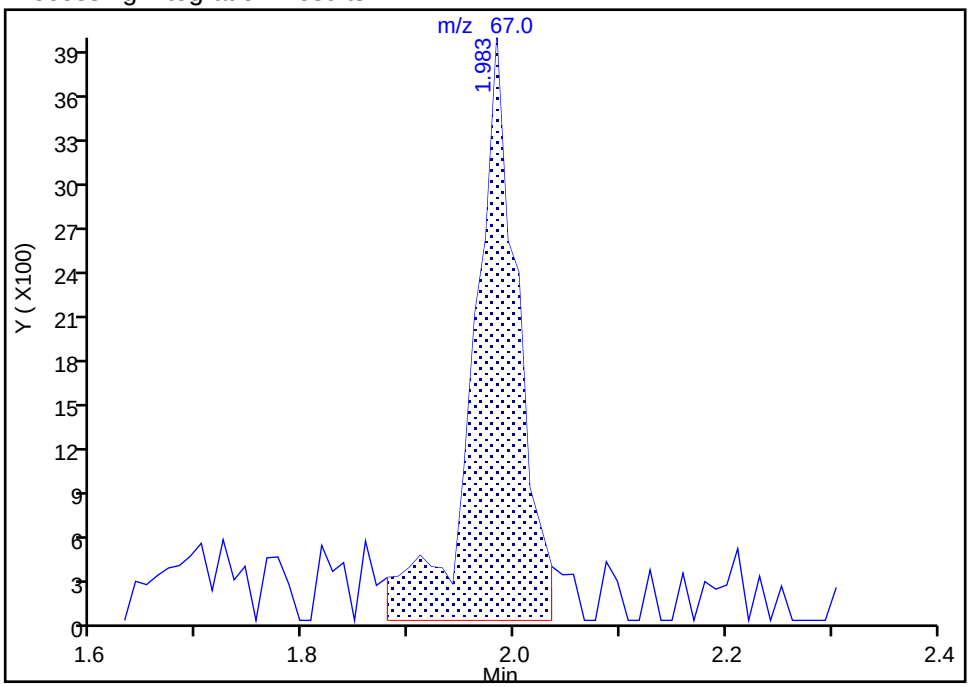
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

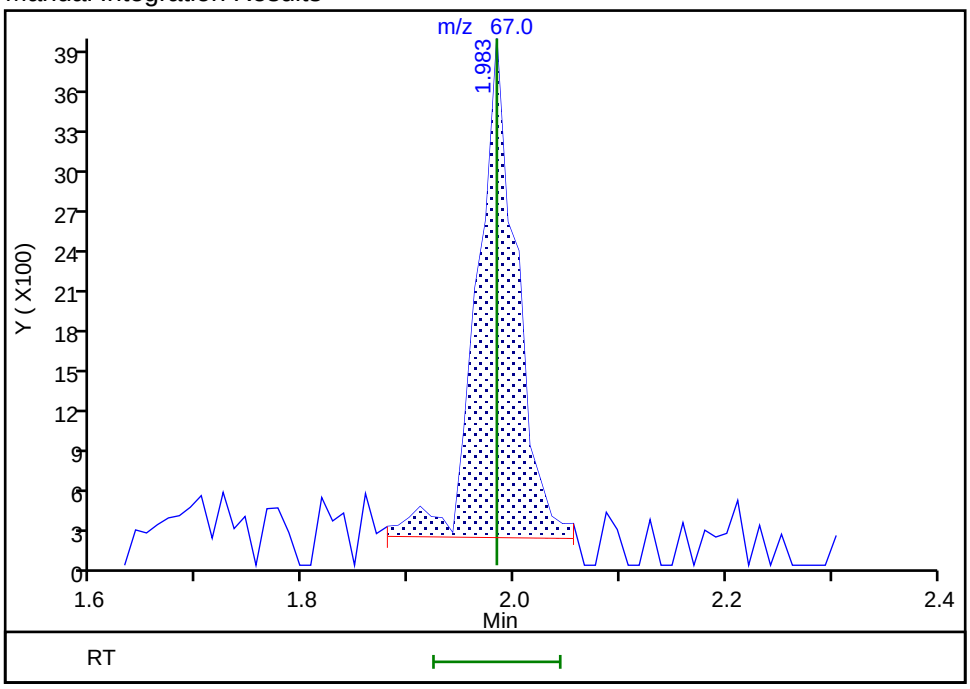
Processing Integration Results

RT: 1.98
Area: 11833
Amount: 0.492871
Amount Units: ug/L



Manual Integration Results

RT: 1.98
Area: 9863
Amount: 0.441596
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:55:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

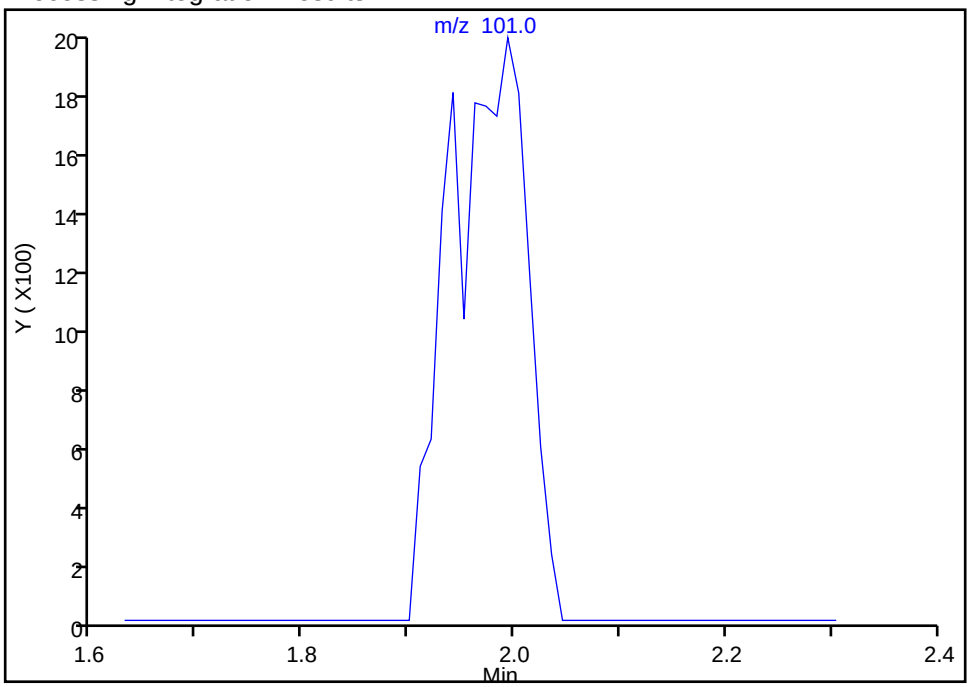
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

17 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

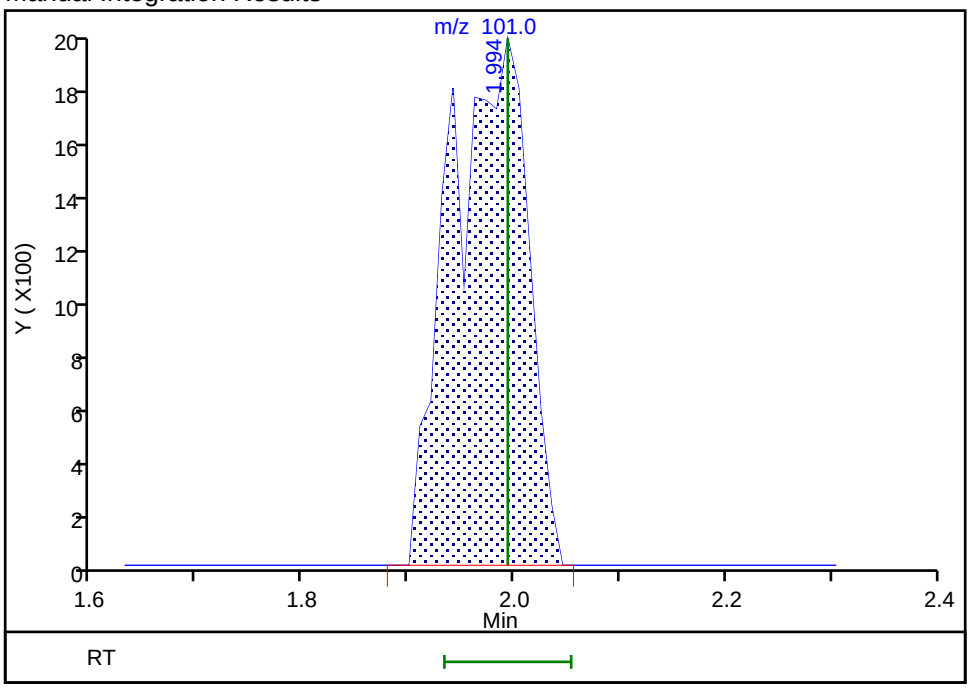
Not Detected
Expected RT: 1.99

Processing Integration Results



Manual Integration Results

RT: 1.99
Area: 10086
Amount: 0.468637
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:56:19
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

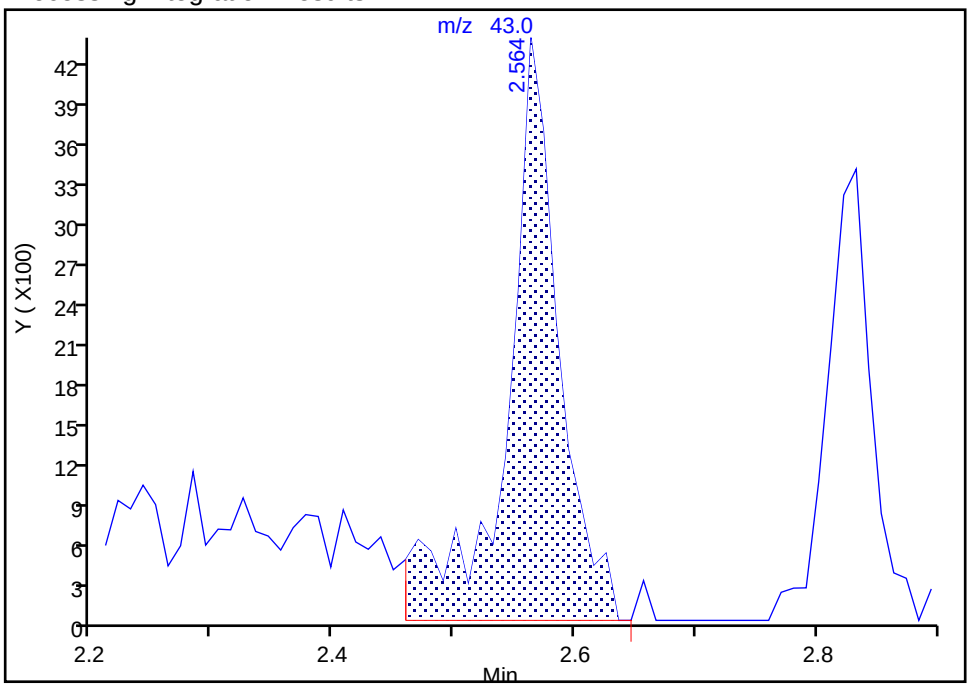
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

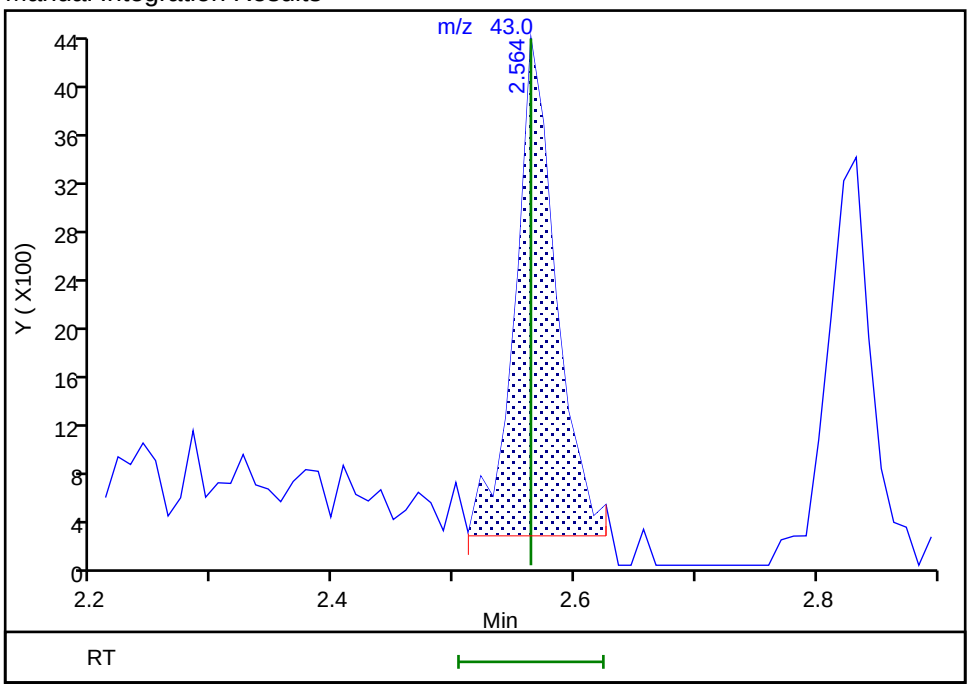
Processing Integration Results

RT: 2.56
Area: 12996
Amount: 2.685413
Amount Units: ug/L



Manual Integration Results

RT: 2.56
Area: 9627
Amount: 2.155000
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:56:54
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

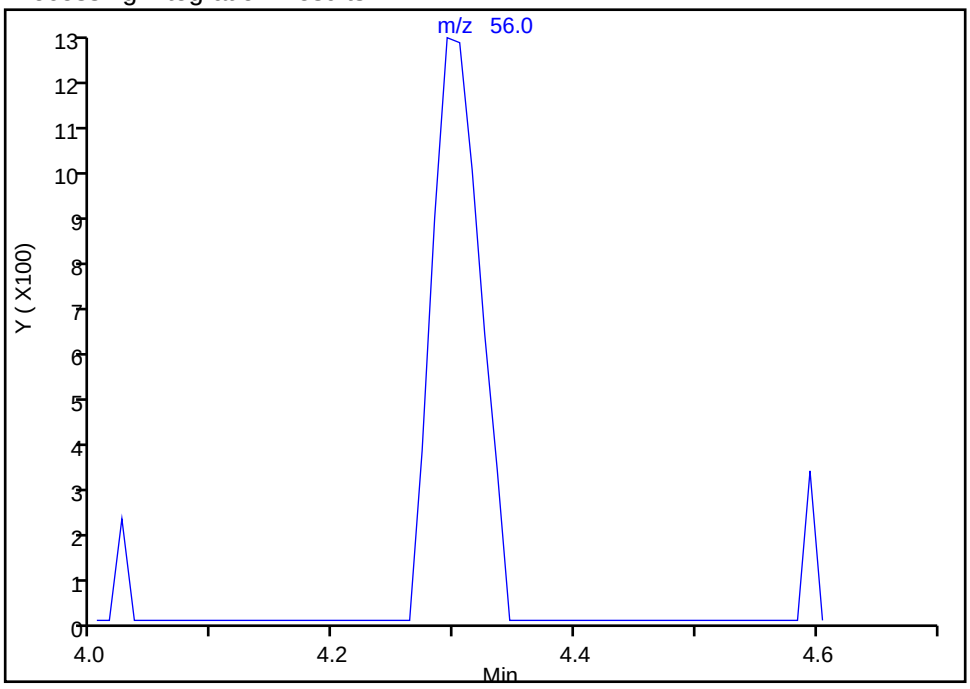
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

52 Cyclohexane, CAS: 110-82-7

Signal: 1

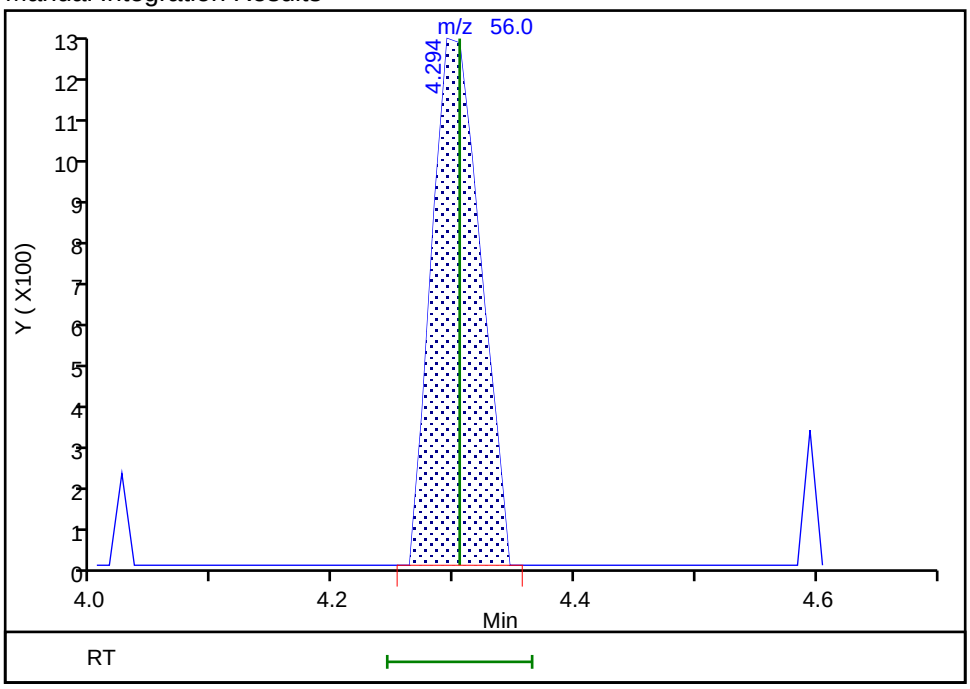
Not Detected
Expected RT: 4.30

Processing Integration Results



Manual Integration Results

RT: 4.29
Area: 3607
Amount: 0.209249
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:57:26
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins TestAmerica, Buffalo

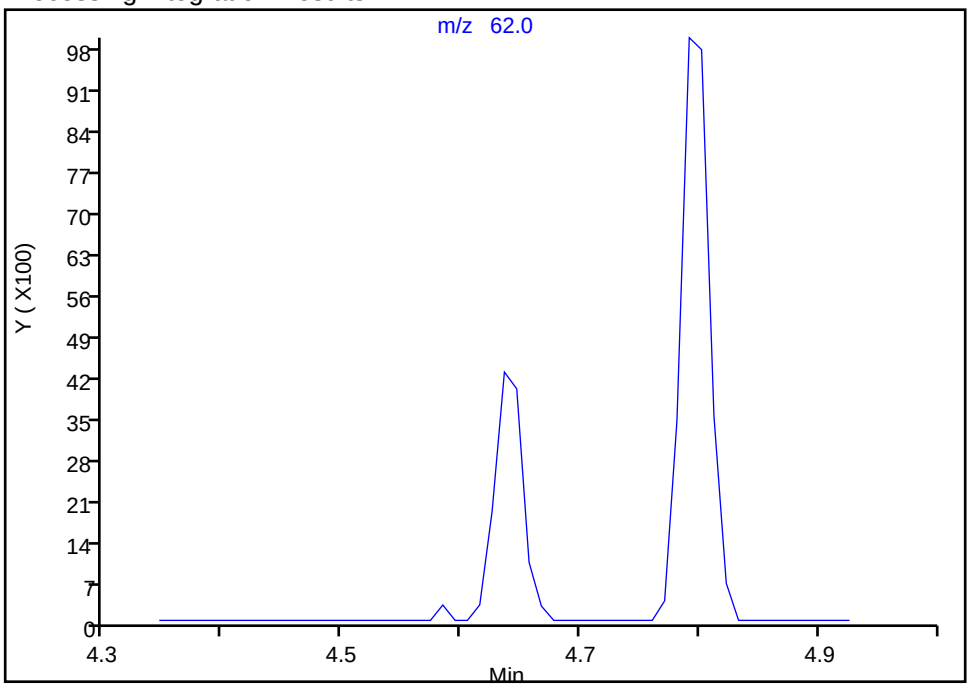
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

57 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

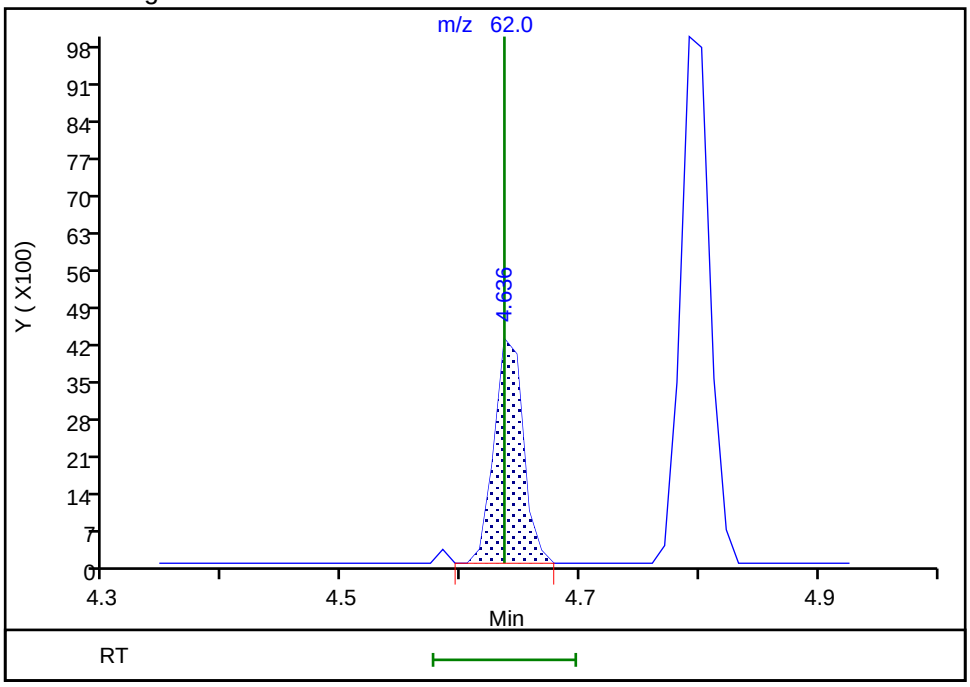
Not Detected
Expected RT: 4.64

Processing Integration Results



Manual Integration Results

RT: 4.64
Area: 7207
Amount: 0.419262
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:57:38
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins TestAmerica, Buffalo

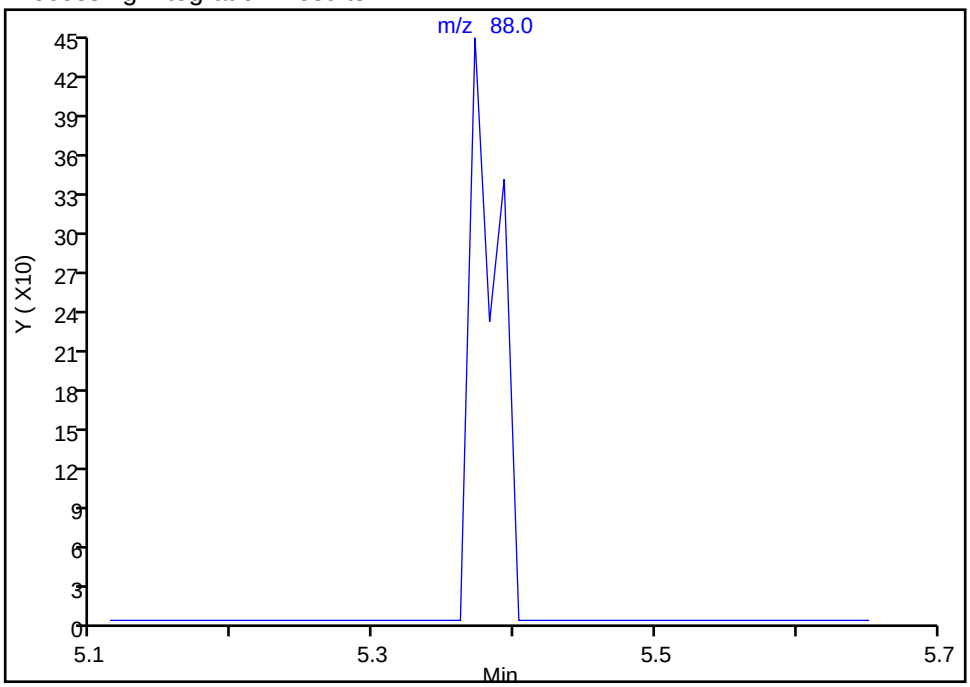
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

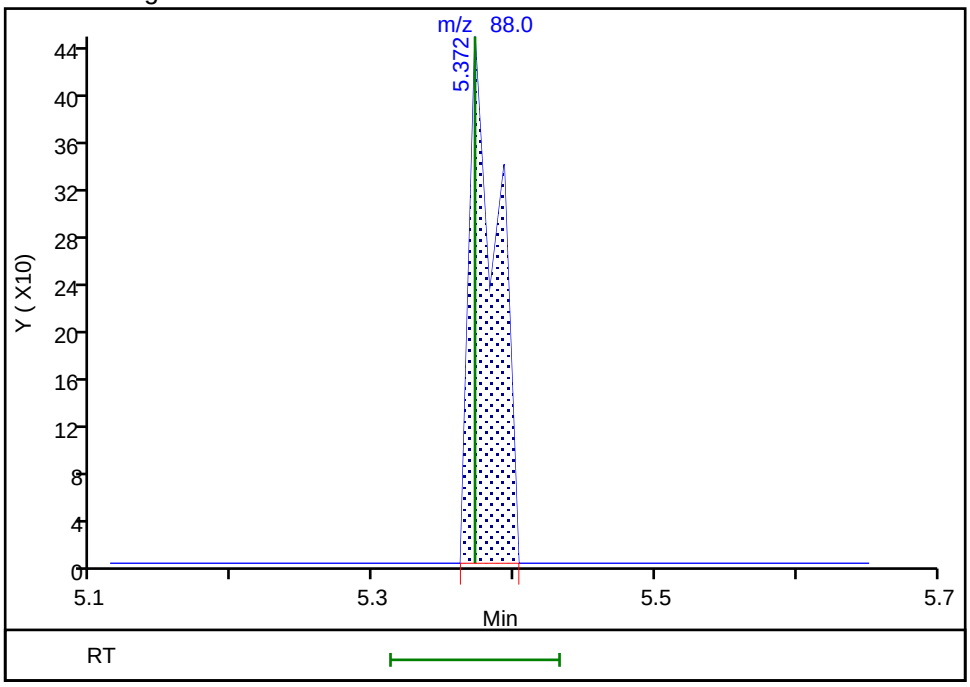
Not Detected
Expected RT: 5.37

Processing Integration Results



Manual Integration Results

RT: 5.37
Area: 628
Amount: 3.042441
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:57:58
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

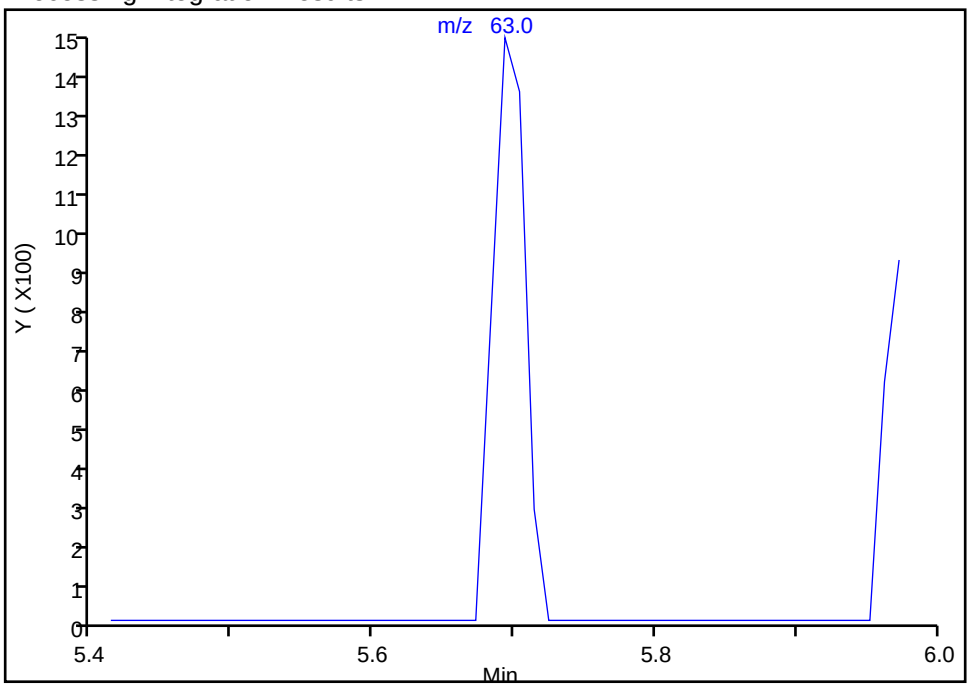
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

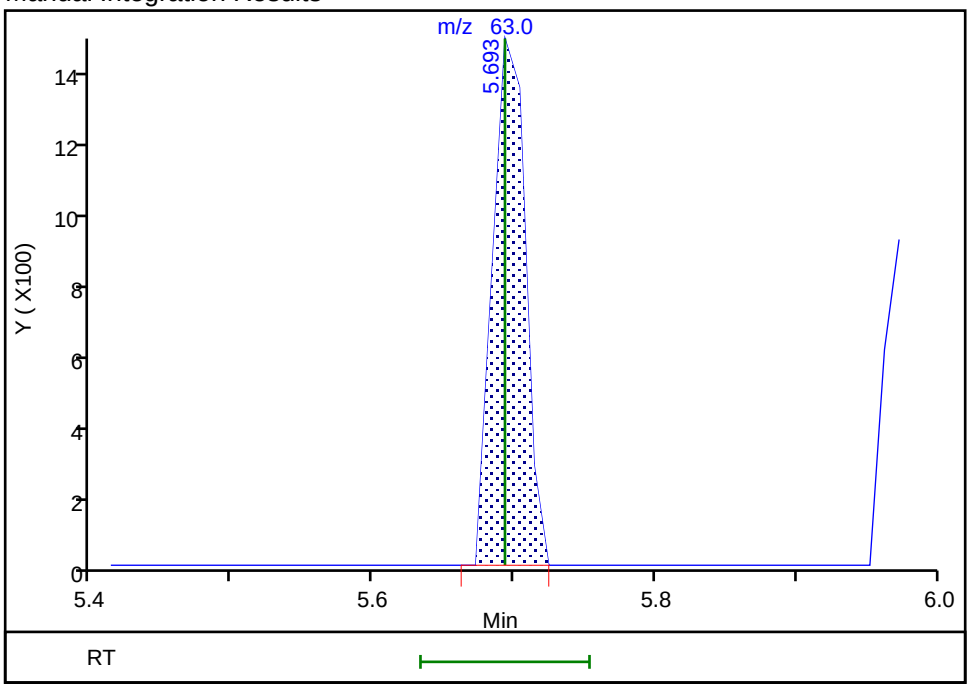
Not Detected
Expected RT: 5.69

Processing Integration Results



Manual Integration Results

RT: 5.69
Area: 2305
Amount: 0.323570
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:58:09
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

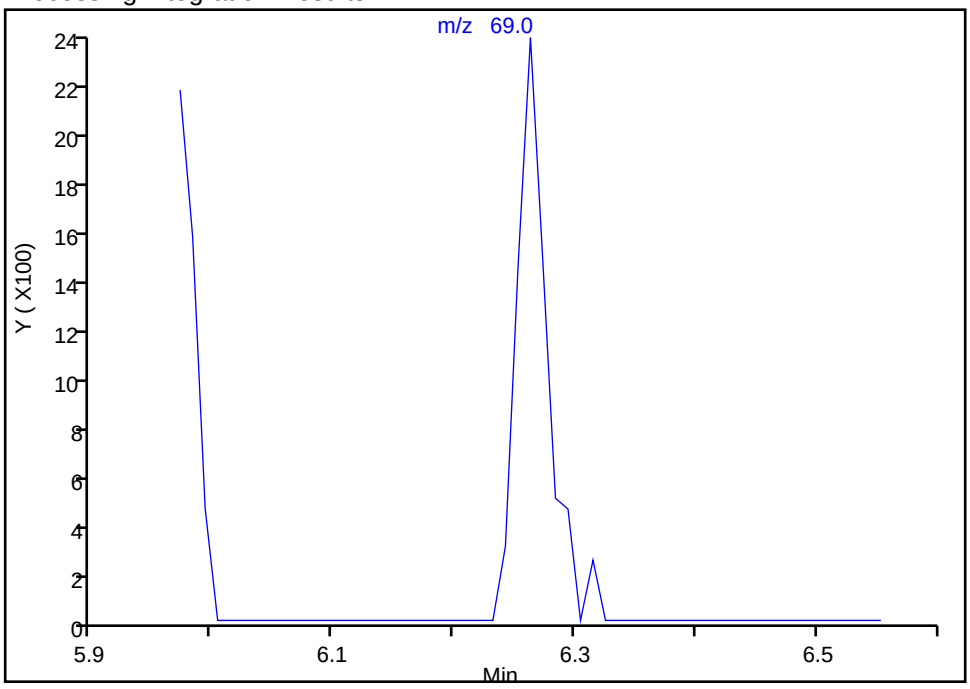
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

77 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

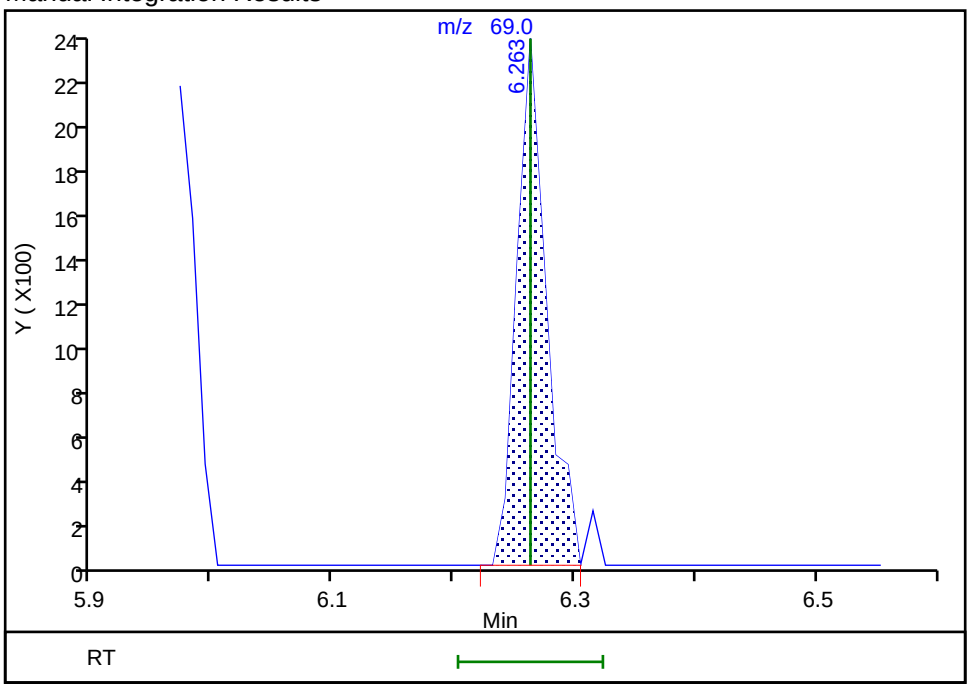
Not Detected
Expected RT: 6.26

Processing Integration Results



Manual Integration Results

RT: 6.26
Area: 3991
Amount: 0.278937
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:58:20
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

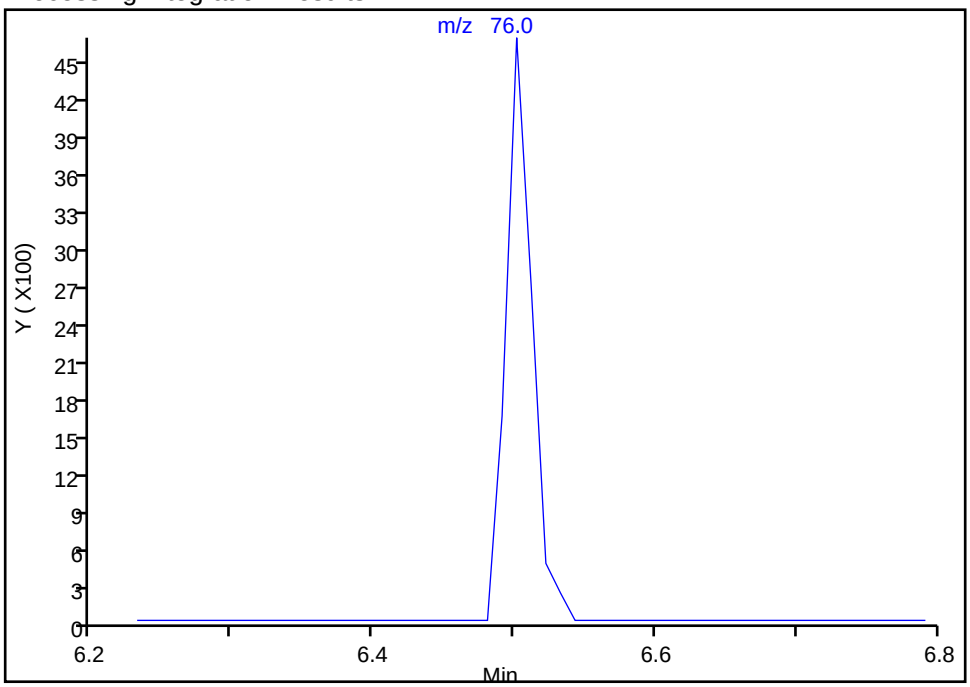
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

80 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

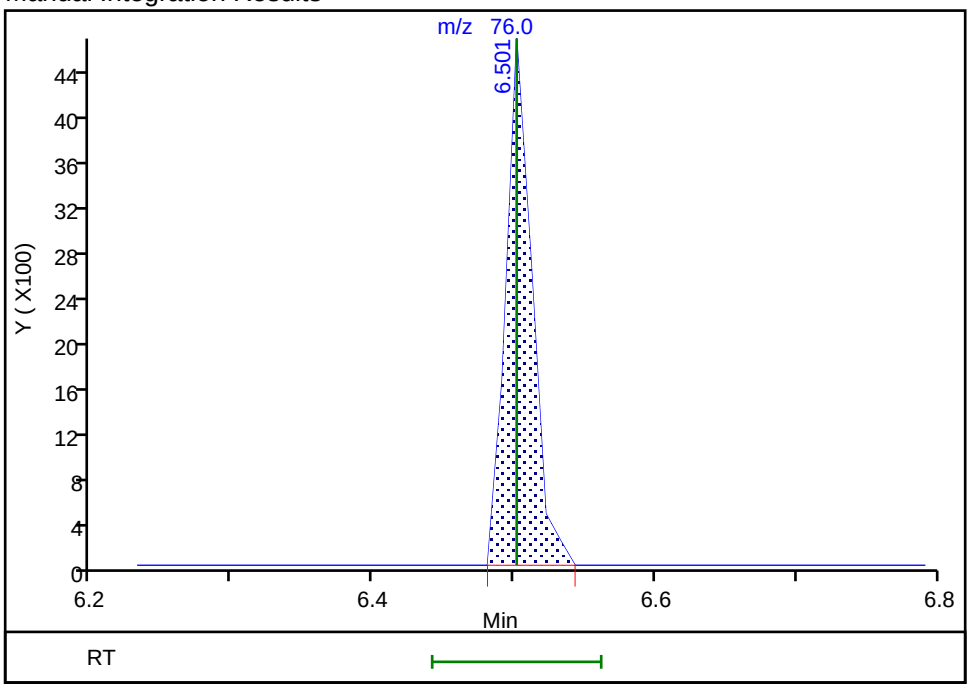
Not Detected
Expected RT: 6.50

Processing Integration Results



Manual Integration Results

RT: 6.50
Area: 6031
Amount: 0.342818
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:58:29
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

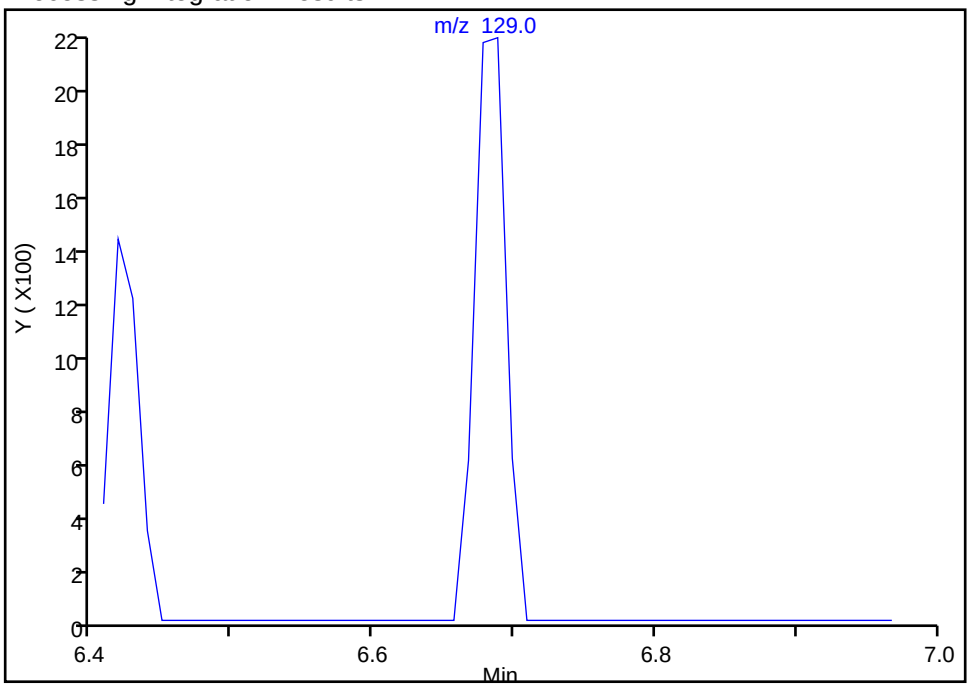
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

82 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

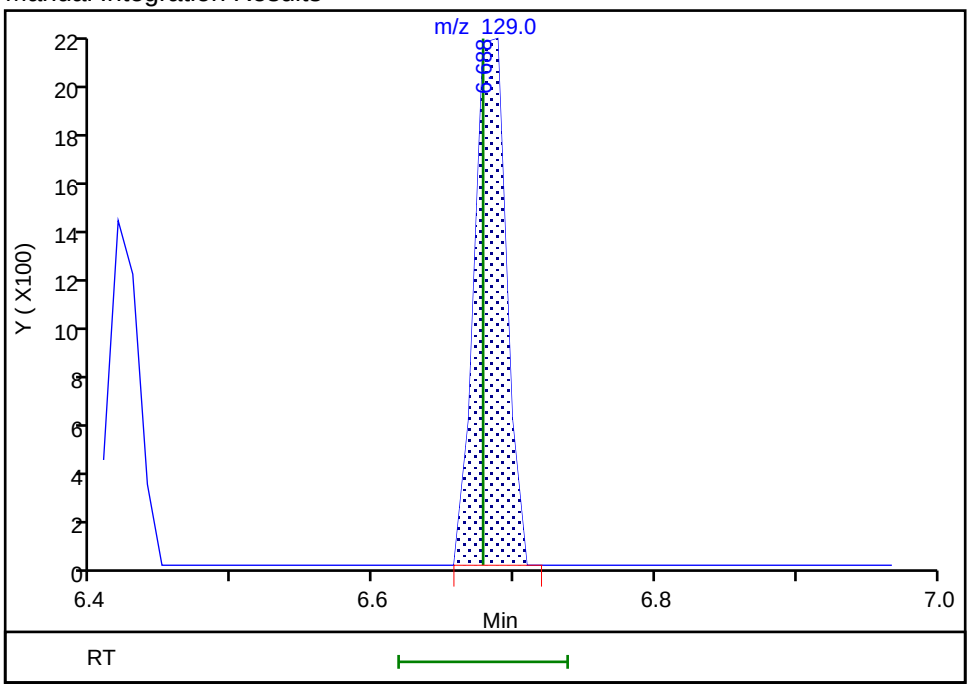
Not Detected
Expected RT: 6.68

Processing Integration Results



Manual Integration Results

RT: 6.69
Area: 3395
Amount: 0.329895
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:58:35
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

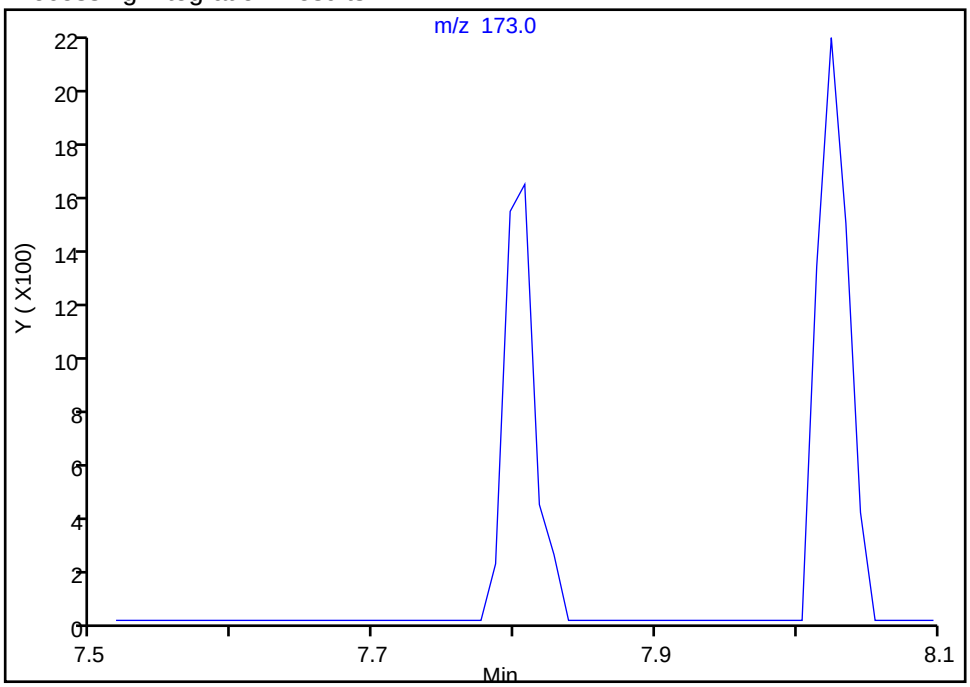
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

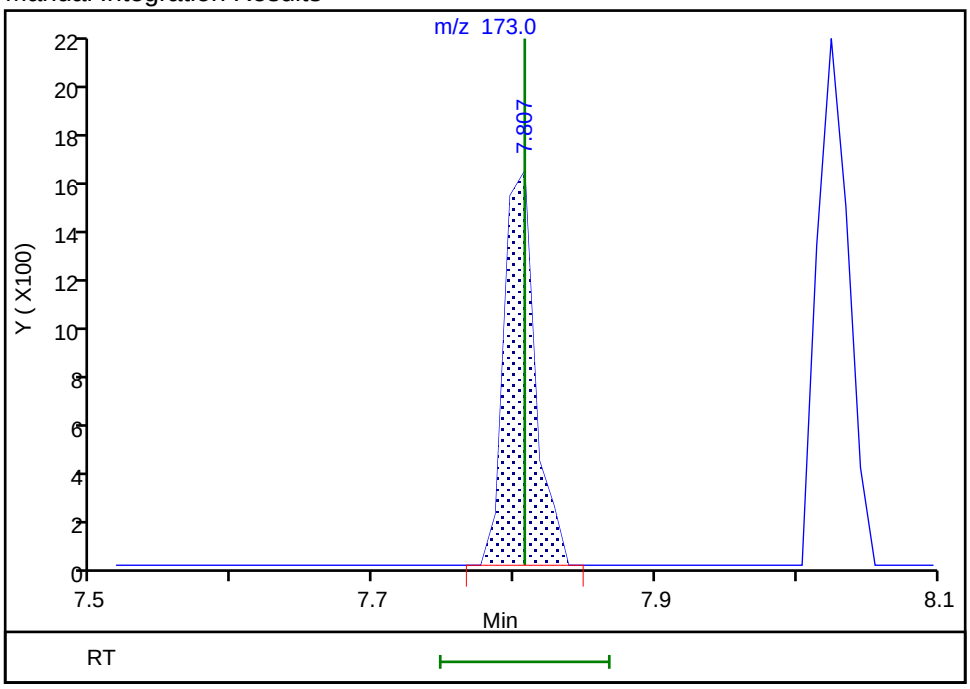
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.81
Area: 2466
Amount: 0.365189
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:58:47
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

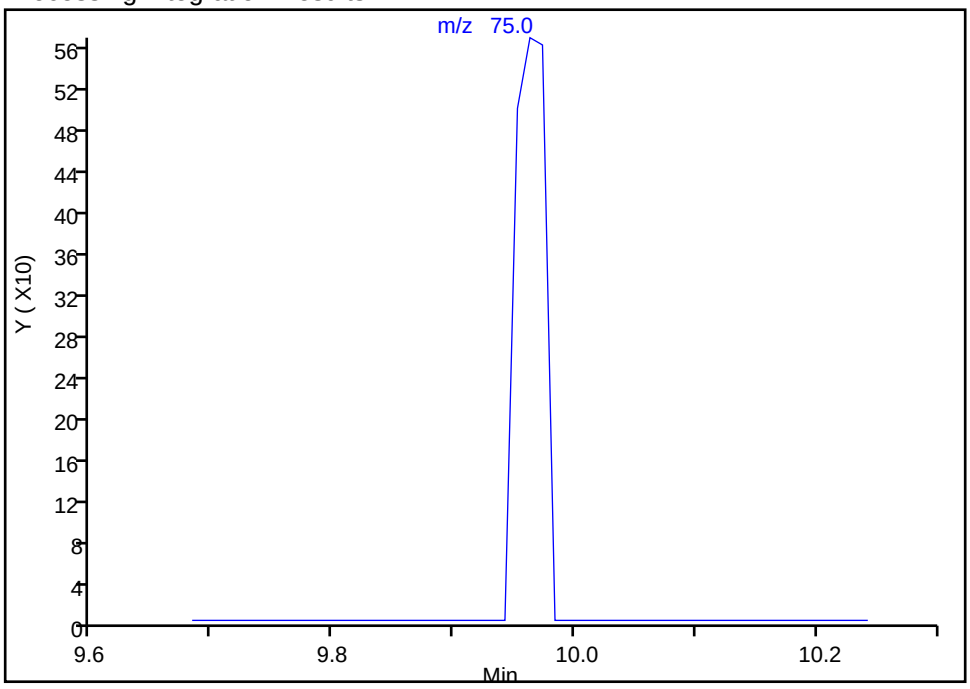
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

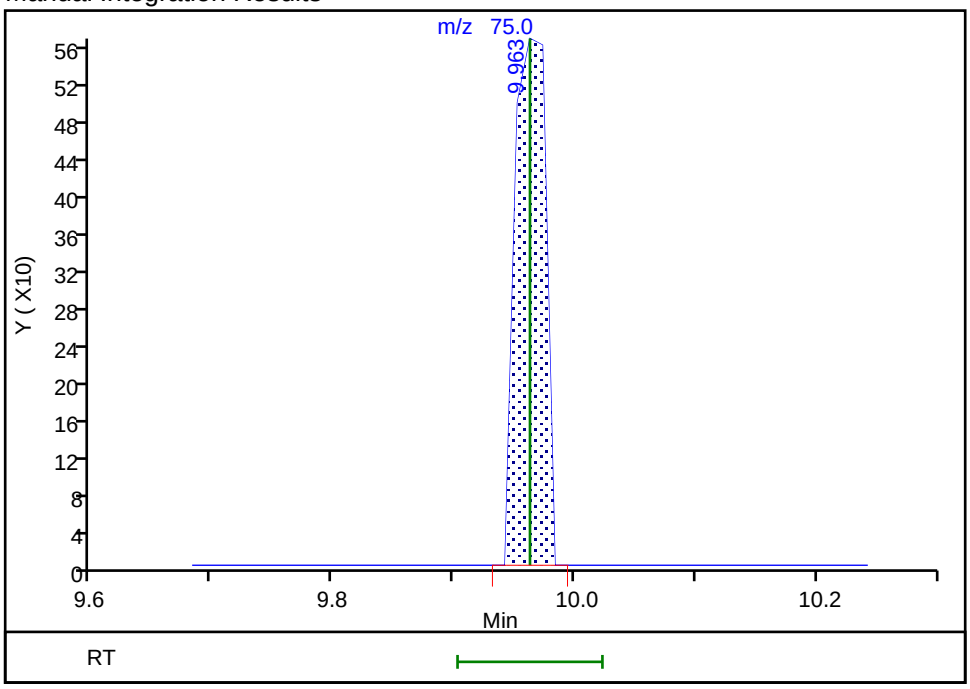
Not Detected
Expected RT: 9.96

Processing Integration Results



RT: 9.96
Area: 1000
Amount: 0.341435
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 18-Sep-2019 18:59:02
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

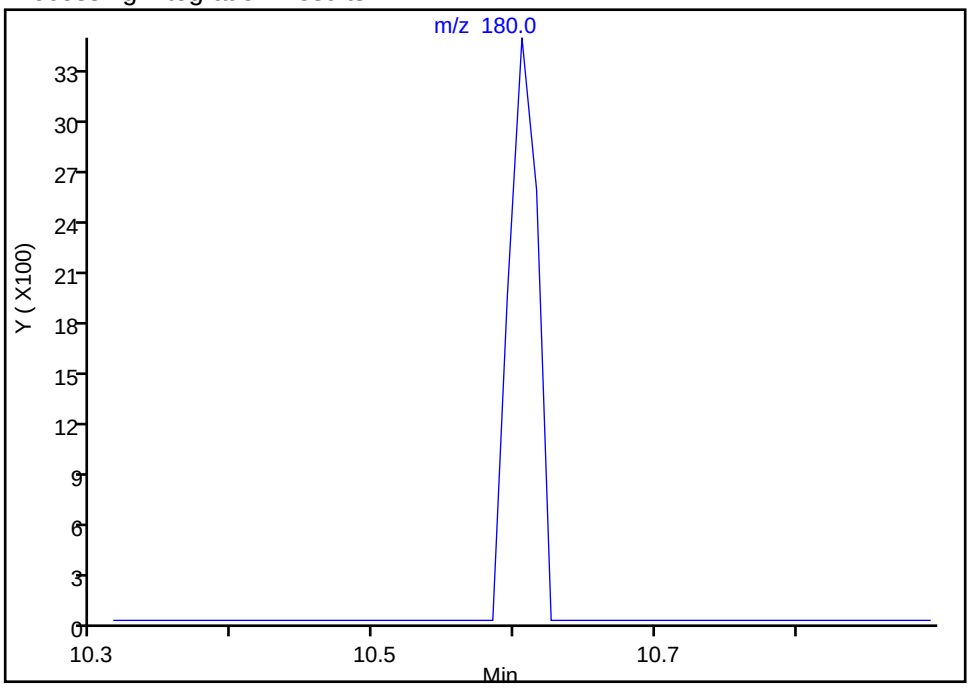
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

119 1,2,4-Trichlorobenzene, CAS: 120-82-1

Signal: 1

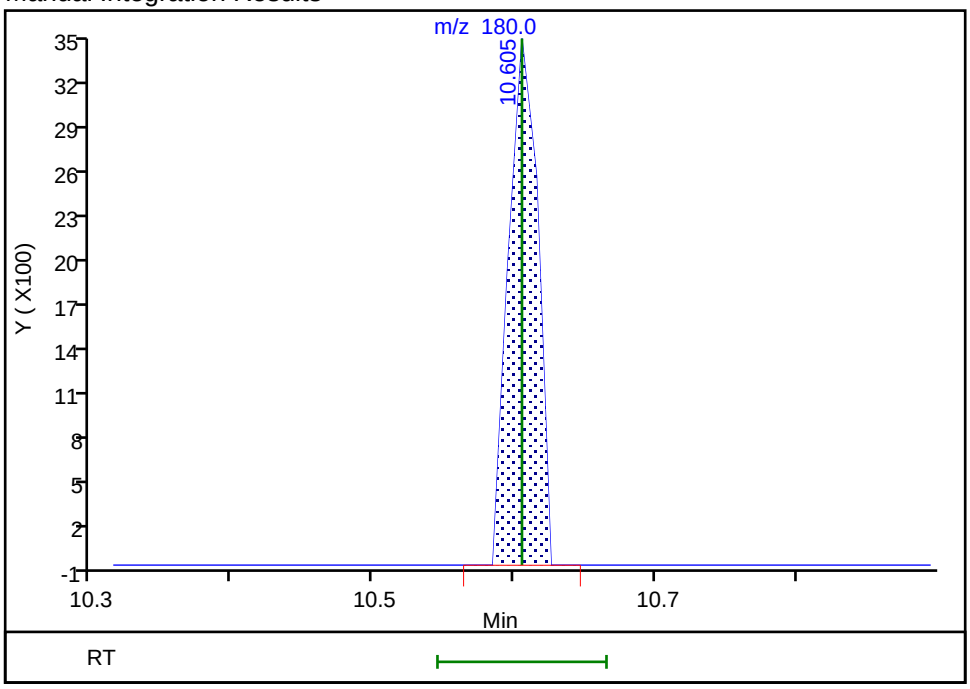
Not Detected
Expected RT: 10.61

Processing Integration Results



Manual Integration Results

RT: 10.61
Area: 4984
Amount: 0.271787
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:59:24
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

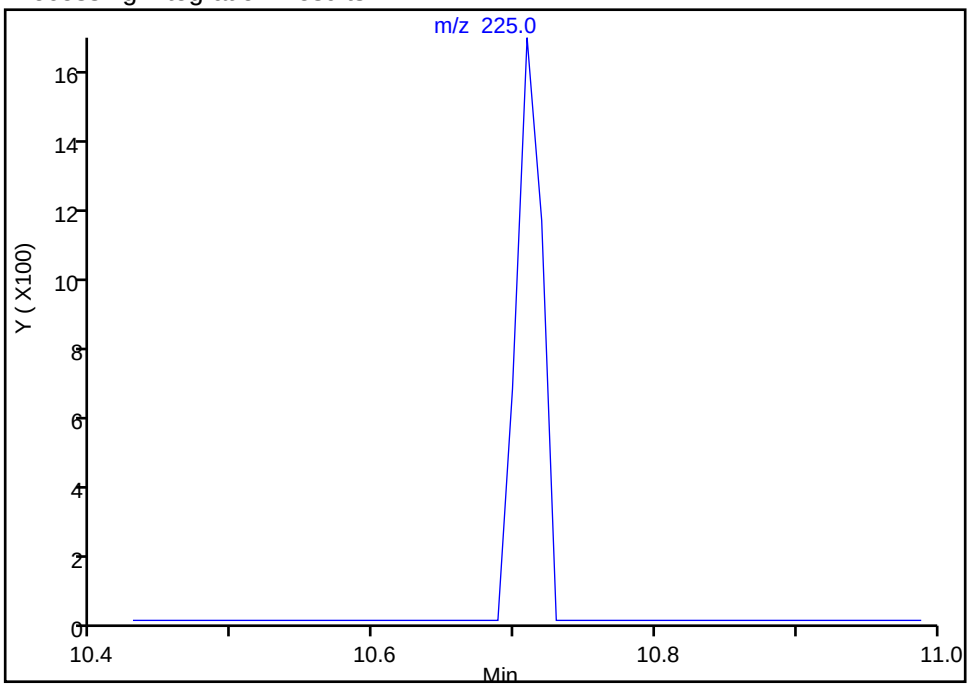
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

120 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

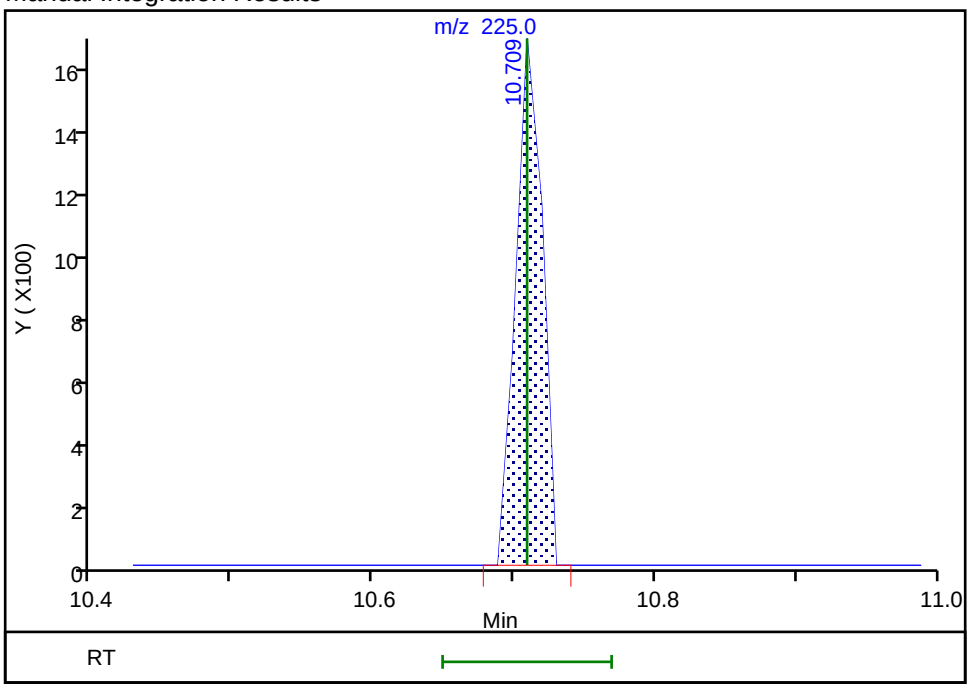
Not Detected
Expected RT: 10.71

Processing Integration Results



Manual Integration Results

RT: 10.71
Area: 2084
Amount: 0.401360
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:59:44
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

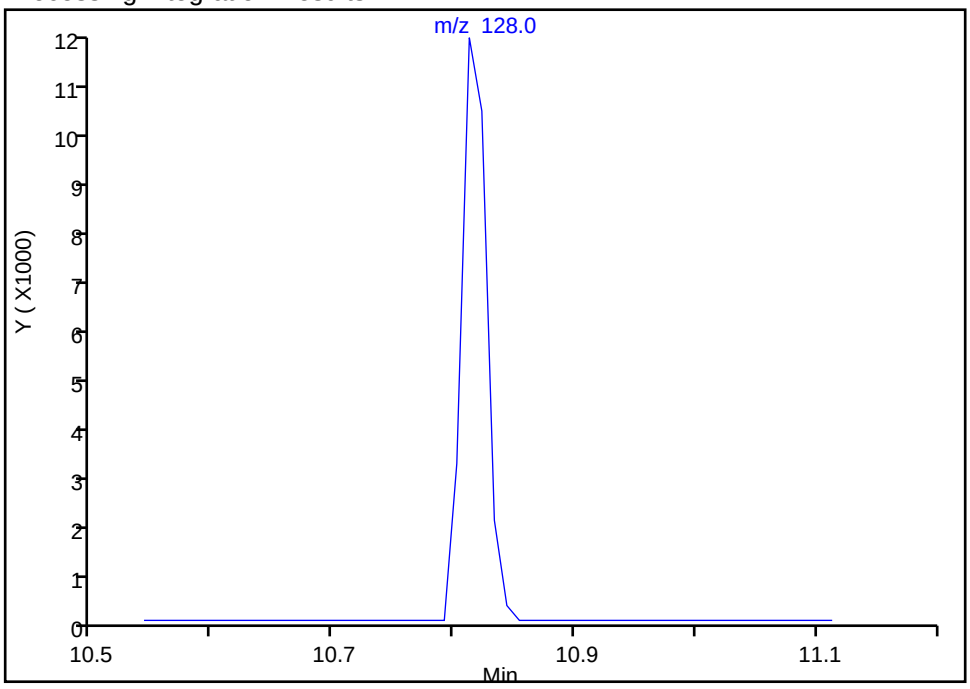
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5177.D
Injection Date: 18-Sep-2019 16:14:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: RF ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

121 Naphthalene, CAS: 91-20-3

Signal: 1

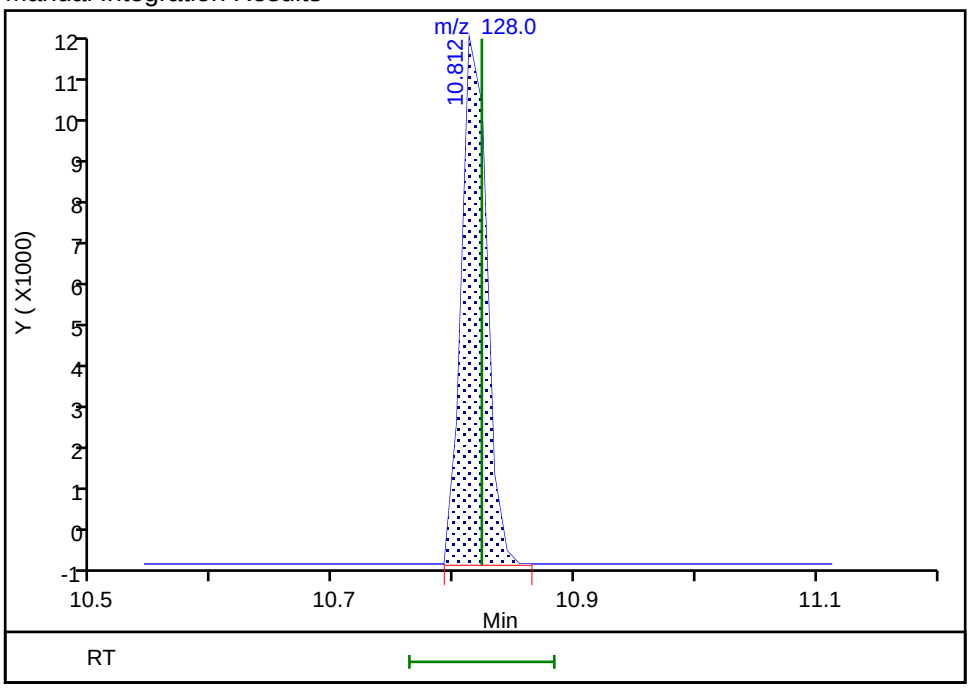
Not Detected
Expected RT: 10.82

Processing Integration Results



Manual Integration Results

RT: 10.81
Area: 16148
Amount: 0.329788
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 19:00:00
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5178.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Sep-2019 16:38:30 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic
Misc. Info.: 480-0084255-006
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:18:47 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 18:53:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	209754	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	772445	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	409460	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.336	-0.001	92	277876	25.0	24.5	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	360154	25.0	24.8	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1056362	25.0	25.8	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	318698	25.0	24.9	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	82	15873	1.00	1.08	
13 Chloromethane	50	1.361	1.361	0.000	97	15310	1.00	1.14	
151 Butadiene	54	1.434	1.434	0.000	86	12344	1.00	1.04	
14 Vinyl chloride	62	1.455	1.455	0.000	72	13742	1.00	1.05	
15 Bromomethane	94	1.703	1.703	0.000	89	14079	1.00	1.24	
16 Chloroethane	64	1.755	1.766	-0.011	73	10442	1.00	1.08	
18 Dichlorofluoromethane	67	1.983	1.983	0.000	95	26709	1.00	1.17	
17 Trichlorofluoromethane	101	1.983	1.994	-0.011	68	23641	1.00	1.07	
19 Ethyl ether	59	2.242	2.232	0.010	91	11304	1.00	1.10	
21 Acrolein	56	2.408	2.418	-0.010	86	12699	5.00	5.40	
20 1,1,2-Trichloro-1,2,2-trif	101	2.429	2.439	-0.010	68	11876	1.00	1.07	
22 1,1-Dichloroethene	96	2.429	2.439	-0.010	97	10720	1.00	1.08	
23 Acetone	43	2.563	2.564	-0.001	80	24041	5.00	5.25	
24 Iodomethane	142	2.584	2.595	-0.011	94	19435	1.00	1.07	
25 Carbon disulfide	76	2.615	2.626	-0.011	98	33366	1.00	1.05	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	84	15334	1.00	1.04	
28 Methyl acetate	43	2.822	2.823	-0.001	97	21788	2.00	2.12	
30 Methylene Chloride	84	2.916	2.916	0.000	90	21660	1.00	0.9511	
31 2-Methyl-2-propanol	59	3.092	3.082	0.010	80	20881	10.0	9.83	
33 Methyl tert-butyl ether	73	3.113	3.102	0.011	97	33423	1.00	1.03	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	95	12504	1.00	1.12	
34 Acrylonitrile	53	3.175	3.175	0.000	99	49277	10.0	9.59	
35 Hexane	57	3.268	3.279	-0.011	92	18539	1.00	1.15	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	20103	1.00	1.07	
39 Vinyl acetate	43	3.517	3.517	0.000	98	41144	2.00	1.88	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	82	14170	1.00	0.9403	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	80	13044	1.00	1.07	
44 2-Butanone (MEK)	43	3.983	3.973	0.010	97	30788	5.00	4.83	
47 Chlorobromomethane	128	4.139	4.149	-0.010	91	6376	1.00	1.01	
48 Tetrahydrofuran	42	4.159	4.159	0.000	79	8427	2.00	1.93	
50 Chloroform	83	4.201	4.211	-0.010	94	25114	1.00	1.16	
52 Cyclohexane	56	4.304	4.305	0.000	89	17341	1.00	0.9811	
51 1,1,1-Trichloroethane	97	4.294	4.305	-0.010	90	16355	1.00	0.9351	
53 Carbon tetrachloride	117	4.408	4.408	0.000	80	16139	1.00	1.06	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	90	14854	1.00	1.01	
55 Benzene	78	4.584	4.584	0.000	48	47461	1.00	1.10	
56 Isobutyl alcohol	43	4.605	4.595	0.010	92	14972	25.0	20.7	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	97	18281	1.00	1.04	
59 n-Heptane	43	4.719	4.719	0.000	88	15130	1.00	1.03	
60 Trichloroethene	95	5.061	5.061	0.000	96	11900	1.00	1.02	
62 Methylcyclohexane	83	5.165	5.165	0.000	89	19106	1.00	1.02	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	86	10023	1.00	0.9733	
66 1,4-Dioxane	88	5.382	5.372	0.010	0	3648	20.0	17.8	M
65 Dibromomethane	93	5.372	5.372	0.000	90	7921	1.00	1.01	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	13173	1.00	0.9521	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	7399	1.00	1.01	
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	92	15368	1.00	0.9671	a
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	97	60784	5.00	4.76	
73 Toluene	92	6.025	6.025	0.000	98	31192	1.00	1.15	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	89	14170	1.00	0.9649	
77 Ethyl methacrylate	69	6.263	6.263	0.000	85	12905	1.00	0.9080	a
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	90	8676	1.00	0.9873	
79 Tetrachloroethene	166	6.429	6.429	0.000	94	13044	1.00	1.11	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	92	19027	1.00	1.09	
81 2-Hexanone	43	6.543	6.543	0.000	95	36764	5.00	4.07	
82 Chlorodibromomethane	129	6.688	6.678	0.010	87	9948	1.00	0.9731	
83 Ethylene Dibromide	107	6.760	6.761	-0.001	97	10762	1.00	0.9763	
86 Chlorobenzene	112	7.113	7.113	0.000	96	32569	1.00	1.05	
88 Ethylbenzene	91	7.175	7.175	0.000	99	52295	1.00	1.01	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	91	9672	1.00	0.9823	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	20013	1.00	1.02	
91 o-Xylene	106	7.589	7.590	-0.001	96	18311	1.00	0.9584	
92 Styrene	104	7.610	7.610	0.000	93	28851	1.00	0.9282	
93 Bromoform	173	7.807	7.807	0.000	92	5908	1.00	0.8808	
95 Isopropylbenzene	105	7.869	7.869	0.000	95	48973	1.00	1.00	
97 Bromobenzene	156	8.149	8.149	0.000	93	14034	1.00	1.11	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	93	13729	1.00	0.9228	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	60360	1.00	1.00	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	5895	1.00	1.12	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	69	3865	1.00	0.8894	
105 2-Chlorotoluene	126	8.294	8.294	0.000	97	11940	1.00	1.01	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	95	38329	1.00	0.9228	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	42425	1.00	1.07	
106 tert-Butylbenzene	134	8.605	8.605	0.000	94	7756	1.00	0.8934	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	97	39648	1.00	0.9316	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	52754	1.00	0.99	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	40889	1.00	0.9062	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	25696	1.00	1.00	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	27219	1.00	1.04	
115 n-Butylbenzene	91	9.237	9.237	0.000	97	40819	1.00	0.9553	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	95	25226	1.00	1.00	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	70	2930	1.00	0.9723	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	93	20219	1.00	1.07	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	90	7987	1.00	1.05	
121 Naphthalene	128	10.823	10.823	0.000	98	44840	1.00	0.8901	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	93	19524	1.00	1.05	
S 124 1,2-Dichloroethene, Total	1				0			2.18	
S 126 Xylenes, Total	1				0			1.98	
S 123 1,3-Dichloropropene, Total	1				0			1.93	
S 125 Total BTEX	1				0			5.24	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	1.00	Units: uL	
GAS CORP mix_00361	Amount Added:	1.00	Units: uL	
T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

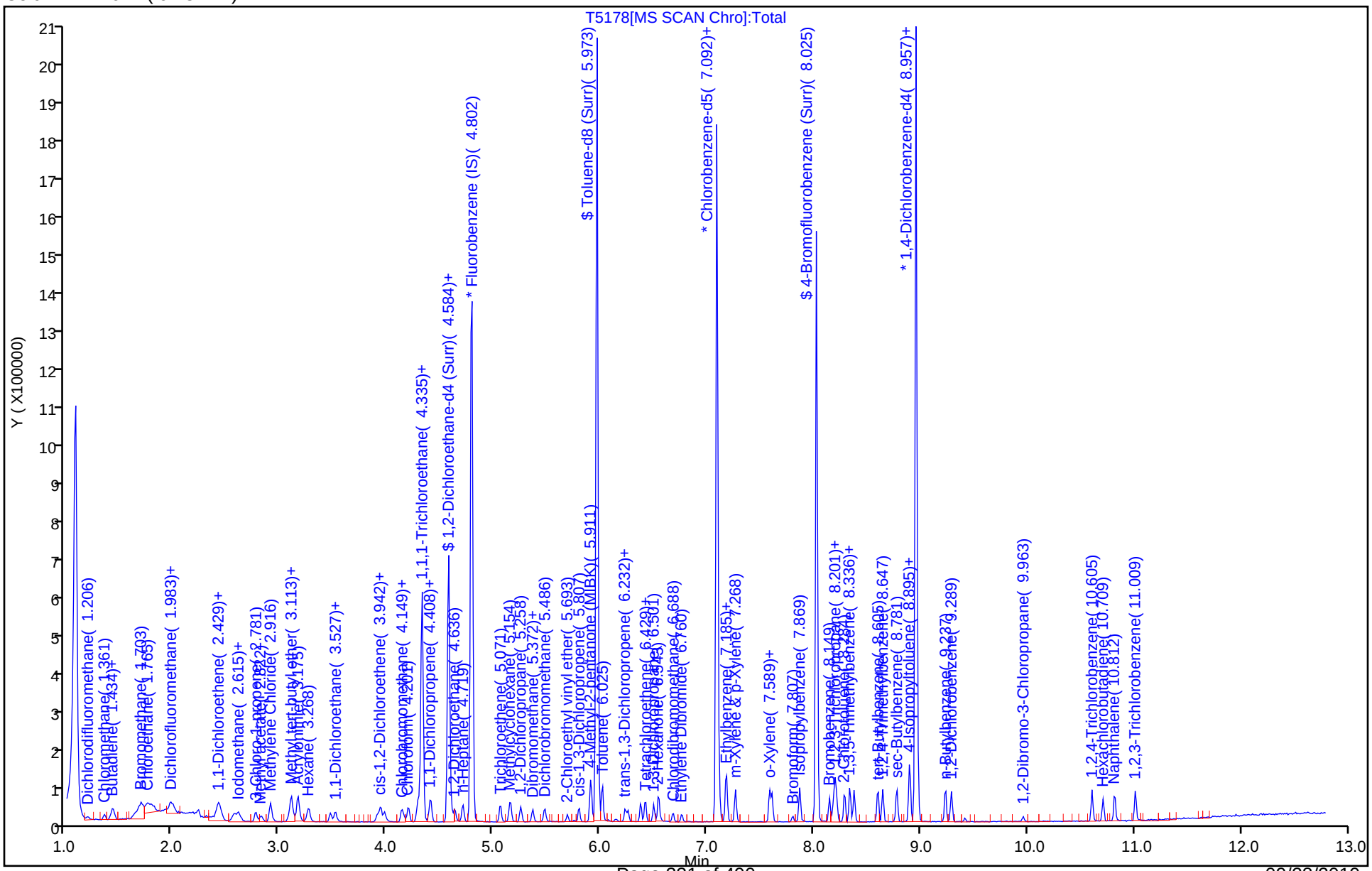
Report Date: 19-Sep-2019 09:18:49 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5178.D

Injection Date:	18-Sep-2019 16:38:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

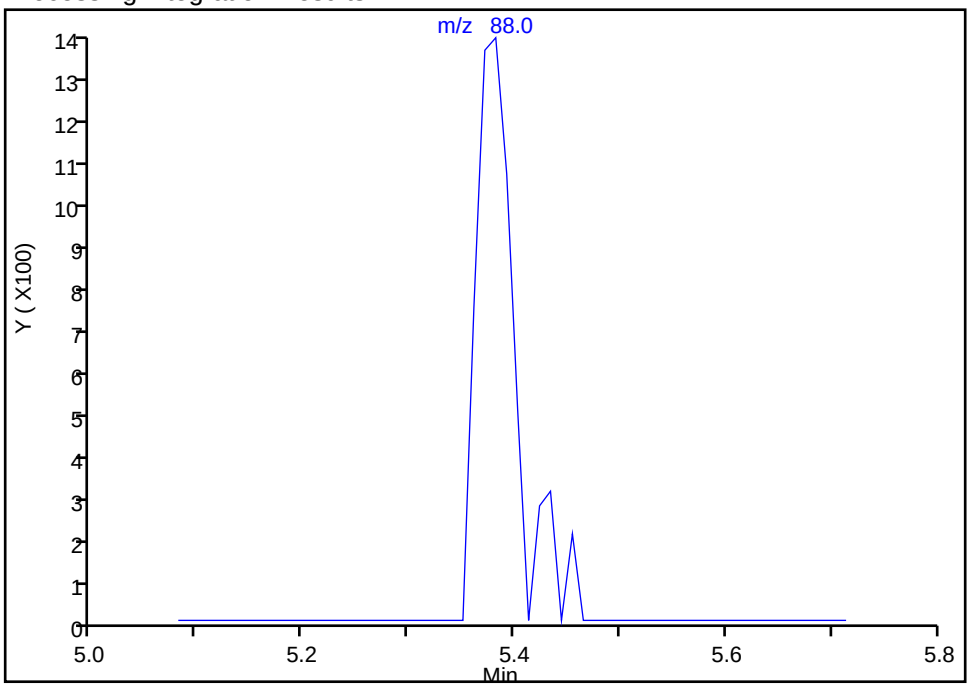
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5178.D
Injection Date: 18-Sep-2019 16:38:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

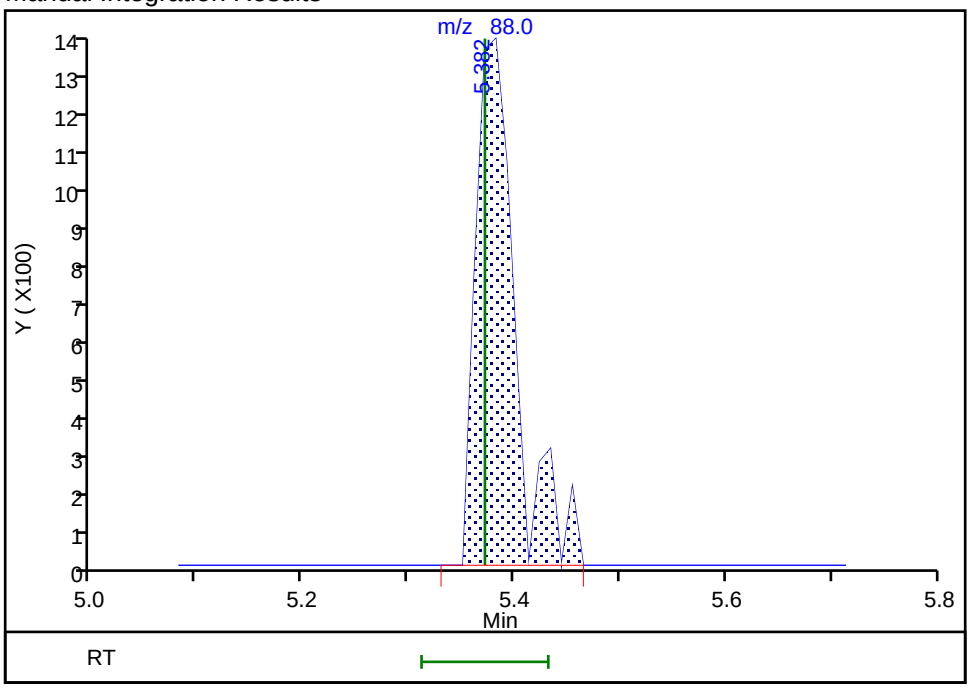
Not Detected
Expected RT: 5.37

Processing Integration Results



Manual Integration Results

RT: 5.38
Area: 3648
Amount: 17.791462
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:52:40
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

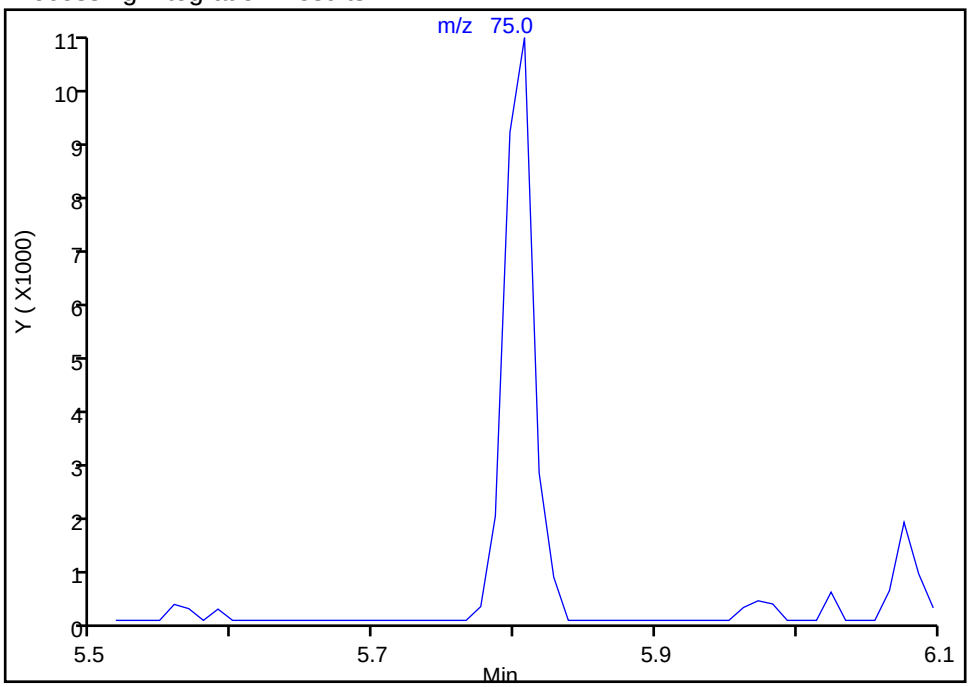
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5178.D
Injection Date: 18-Sep-2019 16:38:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

71 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

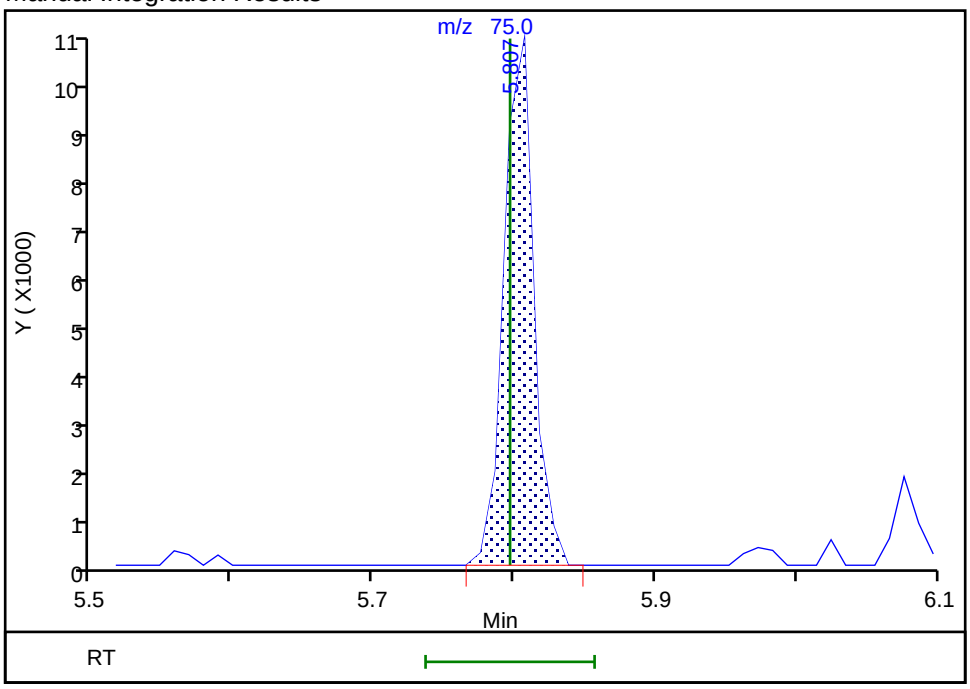
Not Detected
Expected RT: 5.80

Processing Integration Results



Manual Integration Results

RT: 5.81
Area: 15368
Amount: 0.967060
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:52:52
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

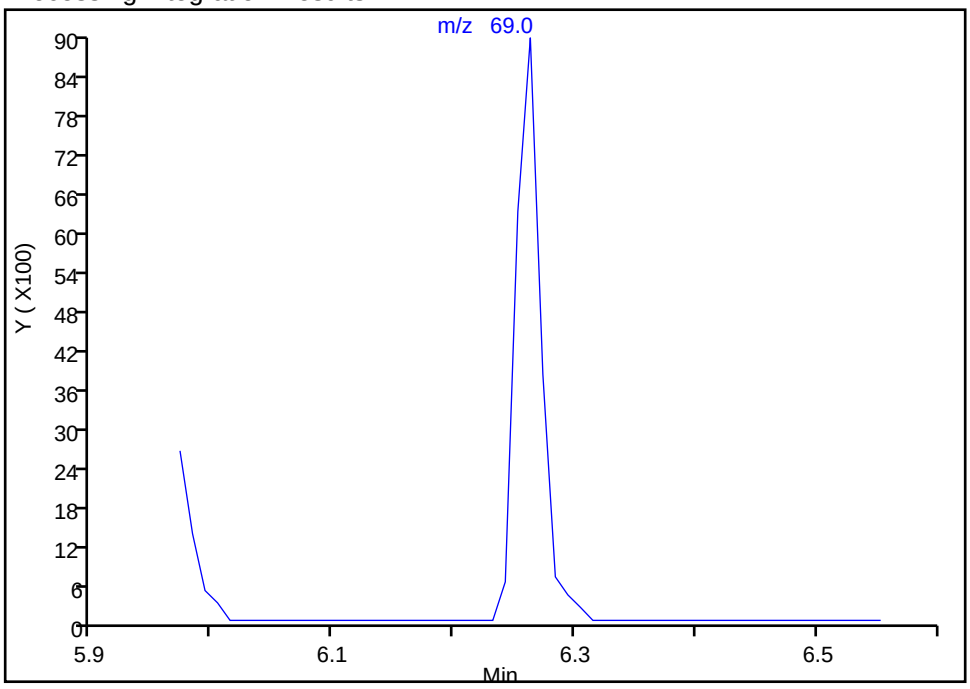
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5178.D
Injection Date: 18-Sep-2019 16:38:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

77 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

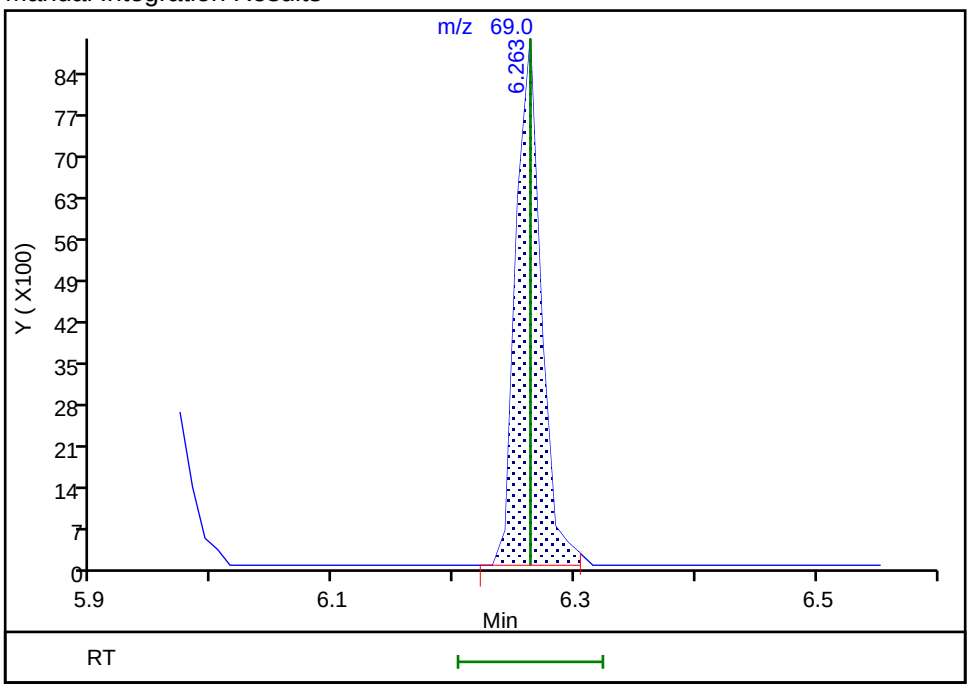
Not Detected
Expected RT: 6.26

Processing Integration Results



Manual Integration Results

RT: 6.26
Area: 12905
Amount: 0.907981
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:53:01
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5179.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Sep-2019 17:02:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 2
Misc. Info.: 480-0084255-007
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:18:55 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 18:52:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	211043	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	806086	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	97	437208	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.336	-0.001	92	291540	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	369730	25.0	25.3	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1050239	25.0	24.5	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	325057	25.0	24.3	
11 Dichlorodifluoromethane	85	1.216	1.206	0.010	98	27645	2.00	1.86	
13 Chloromethane	50	1.372	1.361	0.011	99	25845	2.00	1.91	
151 Butadiene	54	1.444	1.434	0.010	89	23493	2.00	1.96	
14 Vinyl chloride	62	1.454	1.455	-0.001	98	26342	2.00	2.00	
15 Bromomethane	94	1.703	1.703	0.000	95	21932	2.00	1.92	
16 Chloroethane	64	1.765	1.766	-0.001	96	18798	2.00	1.93	
18 Dichlorofluoromethane	67	1.993	1.983	0.010	96	50585	2.00	2.20	
17 Trichlorofluoromethane	101	1.993	1.994	-0.001	64	44293	2.00	1.99	
19 Ethyl ether	59	2.242	2.232	0.010	90	23000	2.00	2.23	
21 Acrolein	56	2.429	2.418	0.011	97	22465	10.0	9.50	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.439	0.000	62	21889	2.00	1.96	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	97	21557	2.00	2.16	
23 Acetone	43	2.574	2.564	0.010	99	48298	10.0	10.5	
24 Iodomethane	142	2.594	2.595	-0.001	98	40396	2.00	2.22	
25 Carbon disulfide	76	2.626	2.626	0.000	98	64192	2.00	2.00	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	84	28121	2.00	1.90	
28 Methyl acetate	43	2.833	2.823	0.010	97	41903	4.00	4.06	
30 Methylene Chloride	84	2.916	2.916	0.000	91	35493	2.00	2.13	
31 2-Methyl-2-propanol	59	3.113	3.082	0.031	55	39795	20.0	18.6	
33 Methyl tert-butyl ether	73	3.113	3.102	0.011	96	69122	2.00	2.11	
32 trans-1,2-Dichloroethene	96	3.123	3.113	0.010	96	23388	2.00	2.08	
34 Acrylonitrile	53	3.175	3.175	0.000	98	109635	20.0	21.2	
35 Hexane	57	3.278	3.279	-0.001	93	32964	2.00	2.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	38815	2.00	2.06	
39 Vinyl acetate	43	3.527	3.517	0.010	98	84163	4.00	3.81	
42 2,2-Dichloropropane	77	3.931	3.921	0.010	91	31981	2.00	2.11	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	81	27057	2.00	2.20	
44 2-Butanone (MEK)	43	3.983	3.973	0.010	99	67715	10.0	10.6	
47 Chlorobromomethane	128	4.149	4.149	0.000	95	12964	2.00	2.03	
48 Tetrahydrofuran	42	4.159	4.159	0.000	86	17906	4.00	4.07	
50 Chloroform	83	4.211	4.211	0.000	95	44774	2.00	2.06	
52 Cyclohexane	56	4.304	4.305	0.000	88	36995	2.00	2.08	
51 1,1,1-Trichloroethane	97	4.304	4.305	0.000	96	34343	2.00	1.95	
53 Carbon tetrachloride	117	4.408	4.408	0.000	93	30088	2.00	1.96	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	92	29044	2.00	1.97	
55 Benzene	78	4.584	4.584	0.000	53	91984	2.00	2.11	
56 Isobutyl alcohol	43	4.605	4.595	0.010	92	32304	50.0	44.3	
57 1,2-Dichloroethane	62	4.646	4.636	0.010	97	36369	2.00	2.05	
59 n-Heptane	43	4.719	4.719	0.000	81	30642	2.00	2.06	
60 Trichloroethene	95	5.071	5.061	0.010	93	24361	2.00	2.07	
62 Methylcyclohexane	83	5.164	5.165	-0.001	92	37387	2.00	1.98	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	22356	2.00	2.16	
66 1,4-Dioxane	88	5.372	5.372	0.000	39	7597	40.0	35.5	Ma
65 Dibromomethane	93	5.372	5.372	0.000	95	15983	2.00	2.02	
67 Dichlorobromomethane	83	5.486	5.486	0.000	97	28238	2.00	2.03	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	96	14313	2.00	1.95	
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	93	30248	2.00	1.89	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	124722	10.0	9.36	
73 Toluene	92	6.025	6.025	0.000	97	60241	2.00	2.13	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	97	28248	2.00	1.84	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	26430	2.00	1.78	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	19339	2.00	2.11	
79 Tetrachloroethene	166	6.429	6.429	0.000	95	26091	2.00	2.13	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	91	37133	2.00	2.04	
81 2-Hexanone	43	6.543	6.543	0.000	97	84943	10.0	9.02	
82 Chlorodibromomethane	129	6.688	6.678	0.010	88	19698	2.00	1.85	
83 Ethylene Dibromide	107	6.771	6.761	0.010	99	22342	2.00	1.94	
86 Chlorobenzene	112	7.113	7.113	0.000	94	65707	2.00	2.04	
88 Ethylbenzene	91	7.175	7.175	0.000	99	111592	2.00	2.06	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	88	20635	2.00	2.01	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	39696	2.00	1.94	
91 o-Xylene	106	7.589	7.590	-0.001	96	39291	2.00	1.97	
92 Styrene	104	7.610	7.610	0.000	95	60771	2.00	1.87	
93 Bromoform	173	7.807	7.807	0.000	91	11667	2.00	1.67	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	101809	2.00	1.95	
97 Bromobenzene	156	8.149	8.149	0.000	95	26092	2.00	1.93	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	93	32071	2.00	2.02	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	127094	2.00	1.98	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	10879	2.00	1.93	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	69	7999	2.00	1.72	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	25015	2.00	1.99	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	95	83116	2.00	1.87	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	80124	2.00	1.89	
106 tert-Butylbenzene	134	8.605	8.605	0.000	92	18625	2.00	2.01	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	97	85879	2.00	1.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	104903	2.00	1.85	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	89137	2.00	1.85	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	57607	2.00	2.11	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	57510	2.00	2.05	
115 n-Butylbenzene	91	9.237	9.237	0.000	97	87043	2.00	1.91	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	51056	2.00	1.90	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	71	6162	2.00	1.92	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	39547	2.00	1.96	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	96	19011	2.00	2.14	
121 Naphthalene	128	10.823	10.823	0.000	97	98825	2.00	1.84	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	94	40155	2.00	2.03	
S 124 1,2-Dichloroethene, Total	1				0			4.27	
S 126 Xylenes, Total	1				0			3.91	
S 123 1,3-Dichloropropene, Total	1				0			3.74	
S 125 Total BTEX	1				0			10.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00361	Amount Added:	2.00	Units: uL	
8260 CORP mix_00166	Amount Added:	2.00	Units: uL	
T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

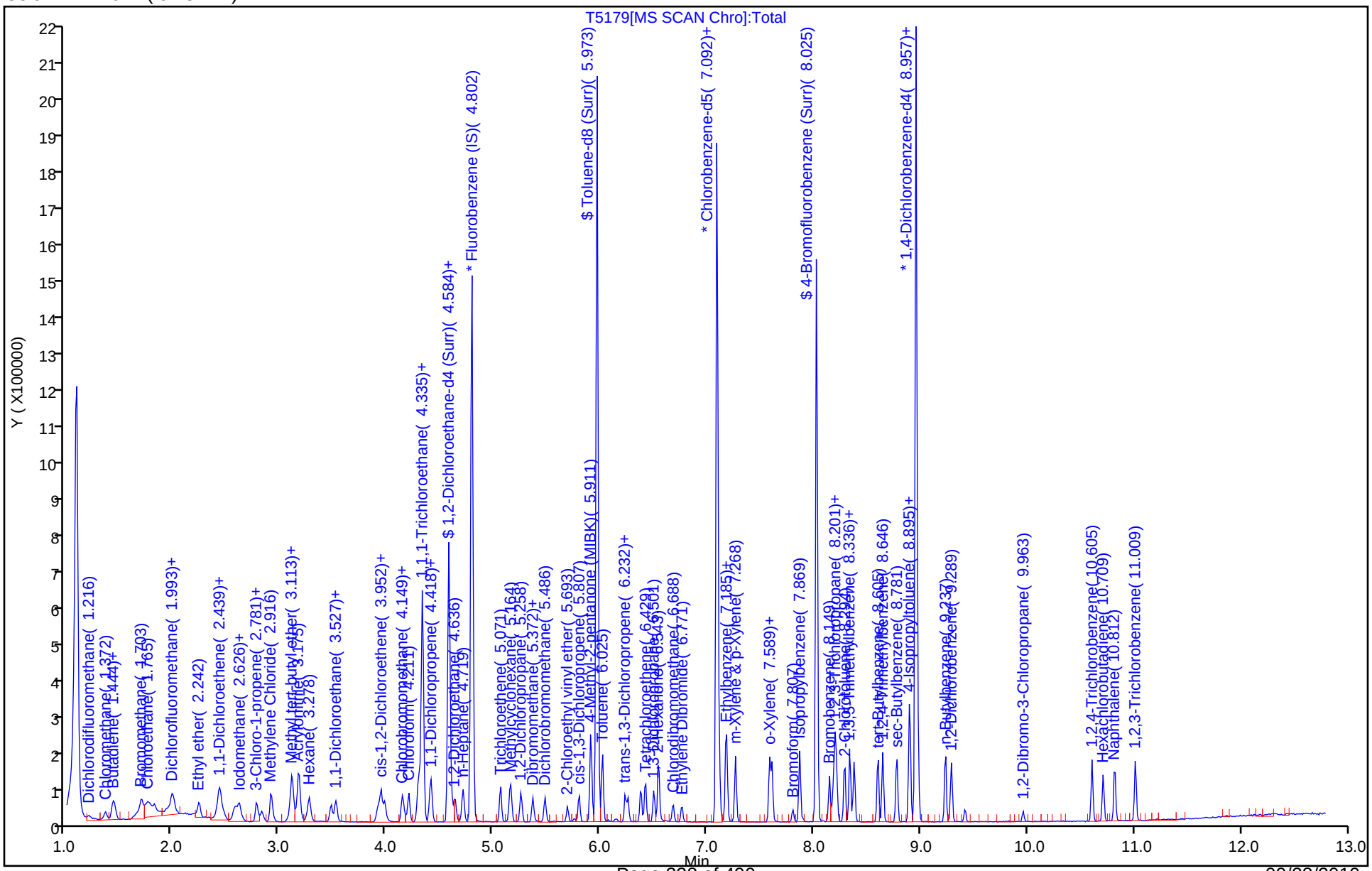
Report Date: 19-Sep-2019 09:18:58 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5179.D

Injection Date:	18-Sep-2019 17:02:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC 2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

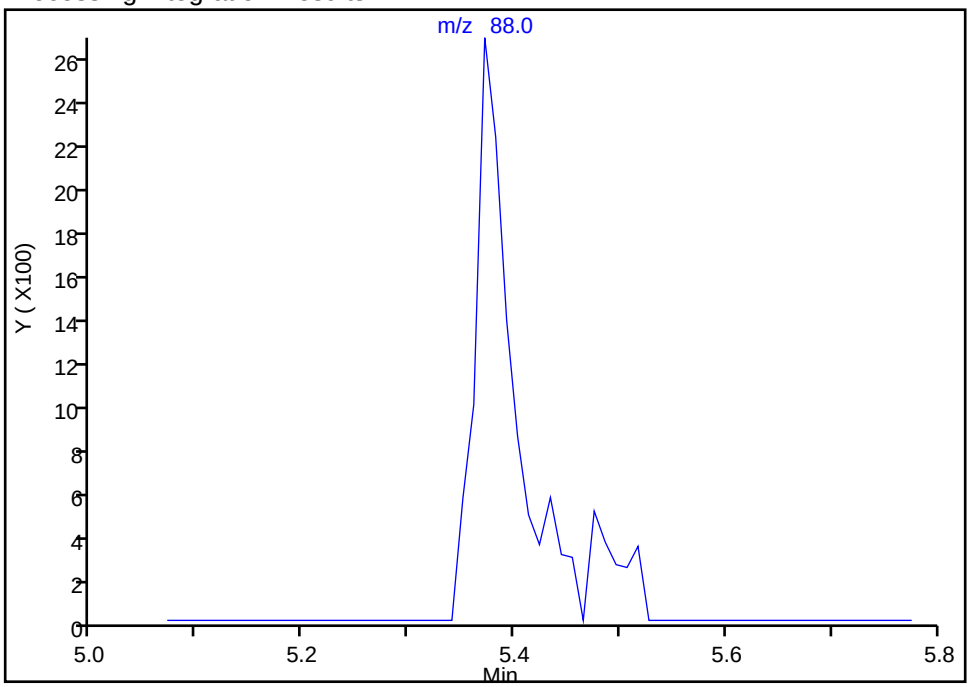
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5179.D
Injection Date: 18-Sep-2019 17:02:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: RF ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

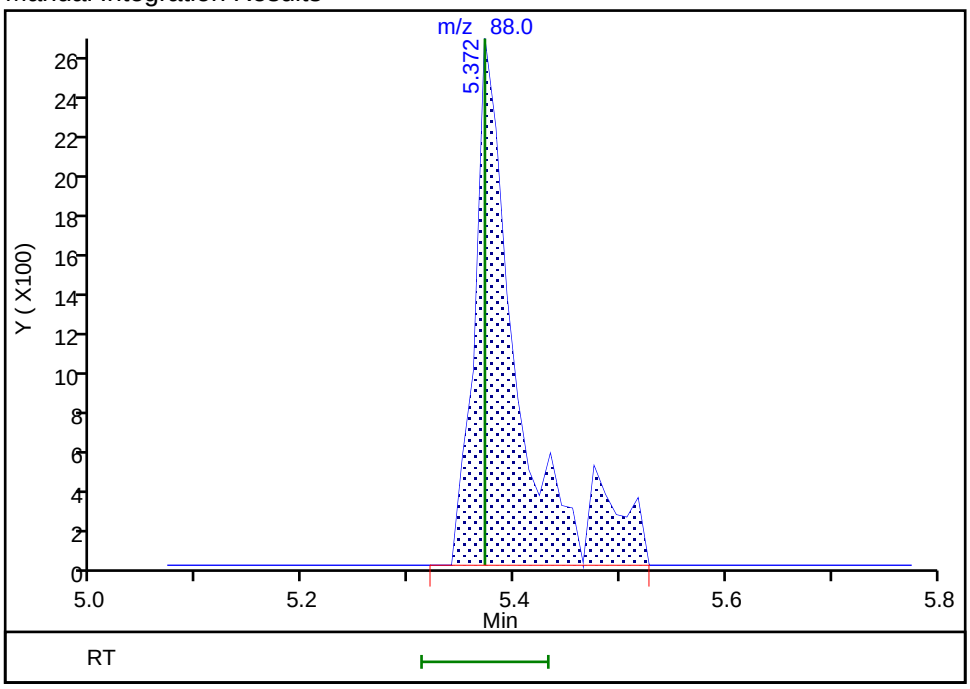
Not Detected
Expected RT: 5.37

Processing Integration Results



Manual Integration Results

RT: 5.37
Area: 7597
Amount: 35.504641
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:51:39
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5180.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Sep-2019 17:26:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 3
Misc. Info.: 480-0084255-008
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:19:02 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 18:50:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	212405	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	777589	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	97	422693	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	93	288590	25.0	25.1	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	365255	25.0	24.9	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1061287	25.0	25.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	328623	25.0	25.5	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	79960	5.00	5.35	
13 Chloromethane	50	1.361	1.361	0.000	98	68262	5.00	5.00	
151 Butadiene	54	1.434	1.434	0.000	90	63027	5.00	5.23	
14 Vinyl chloride	62	1.444	1.455	-0.011	98	66115	5.00	4.99	
15 Bromomethane	94	1.703	1.703	0.000	90	57009	5.00	4.95	
16 Chloroethane	64	1.766	1.766	0.000	98	50244	5.00	5.12	
18 Dichlorofluoromethane	67	1.983	1.983	0.000	96	115387	5.00	4.98	
17 Trichlorofluoromethane	101	1.994	1.994	0.000	67	112481	5.00	5.03	
19 Ethyl ether	59	2.232	2.232	0.000	88	51318	5.00	4.95	
21 Acrolein	56	2.408	2.418	-0.010	98	58906	25.0	24.7	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.439	0.000	61	56827	5.00	5.06	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	96	51656	5.00	5.14	
23 Acetone	43	2.564	2.564	0.000	99	113137	25.0	24.4	
24 Iodomethane	142	2.584	2.595	-0.011	98	93515	5.00	5.11	
25 Carbon disulfide	76	2.615	2.626	-0.011	99	165984	5.00	5.15	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	86	73396	5.00	4.92	
28 Methyl acetate	43	2.823	2.823	0.000	97	100523	10.0	9.67	
30 Methylene Chloride	84	2.916	2.916	0.000	96	66761	5.00	4.77	
31 2-Methyl-2-propanol	59	3.092	3.082	0.010	67	107669	50.0	50.0	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	98	164115	5.00	4.99	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	98	58634	5.00	5.17	
34 Acrylonitrile	53	3.175	3.175	0.000	97	255645	50.0	49.1	
35 Hexane	57	3.279	3.279	0.000	92	82476	5.00	5.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	96932	5.00	5.10	
39 Vinyl acetate	43	3.517	3.517	0.000	97	217649	10.0	9.80	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	91	80731	5.00	5.29	
43 cis-1,2-Dichloroethene	96	3.942	3.952	-0.010	82	64503	5.00	5.21	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	98	155857	25.0	24.1	
47 Chlorobromomethane	128	4.139	4.149	-0.010	94	33525	5.00	5.22	
48 Tetrahydrofuran	42	4.159	4.159	0.000	85	43346	10.0	9.79	
50 Chloroform	83	4.211	4.211	0.000	95	108042	5.00	4.93	
52 Cyclohexane	56	4.304	4.305	0.000	92	90541	5.00	5.06	
51 1,1,1-Trichloroethane	97	4.304	4.305	0.000	96	89657	5.00	5.06	
53 Carbon tetrachloride	117	4.408	4.408	0.000	95	75650	5.00	4.91	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	95	76284	5.00	5.14	
55 Benzene	78	4.584	4.584	0.000	70	216349	5.00	4.94	
56 Isobutyl alcohol	43	4.605	4.595	0.010	93	89515	125.0	122.0	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	97	87578	5.00	4.91	
59 n-Heptane	43	4.719	4.719	0.000	87	75967	5.00	5.08	
60 Trichloroethene	95	5.061	5.061	0.000	96	60880	5.00	5.14	
62 Methylcyclohexane	83	5.165	5.165	0.000	90	96087	5.00	5.06	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	89	53380	5.00	5.12	
66 1,4-Dioxane	88	5.372	5.372	0.000	46	23074	100.0	111.8	
65 Dibromomethane	93	5.372	5.372	0.000	95	39754	5.00	4.99	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	70572	5.00	5.04	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	36646	5.00	4.95	
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	93	79410	5.00	4.93	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	97	329358	25.0	25.6	
73 Toluene	92	6.025	6.025	0.000	97	140609	5.00	5.15	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	96	75657	5.00	5.12	
77 Ethyl methacrylate	69	6.263	6.263	0.000	90	65432	5.00	4.57	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	91	44020	5.00	4.98	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	63207	5.00	5.35	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	93	89770	5.00	5.10	
81 2-Hexanone	43	6.543	6.543	0.000	96	226511	25.0	24.9	
82 Chlorodibromomethane	129	6.688	6.678	0.010	88	50172	5.00	4.88	
83 Ethylene Dibromide	107	6.761	6.761	0.000	98	54727	5.00	4.93	
86 Chlorobenzene	112	7.113	7.113	0.000	95	156565	5.00	5.04	
88 Ethylbenzene	91	7.175	7.175	0.000	99	263736	5.00	5.06	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	89	48849	5.00	4.93	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	95573	5.00	4.85	
91 o-Xylene	106	7.590	7.590	0.000	98	93920	5.00	4.88	
92 Styrene	104	7.610	7.610	0.000	94	149904	5.00	4.79	
93 Bromoform	173	7.807	7.807	0.000	94	32208	5.00	4.77	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	245491	5.00	4.87	
97 Bromobenzene	156	8.149	8.149	0.000	94	66085	5.00	5.07	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	94	81397	5.00	5.30	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	309250	5.00	4.98	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	28186	5.00	5.18	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	76	21485	5.00	4.79	
105 2-Chlorotoluene	126	8.294	8.294	0.000	95	59300	5.00	4.88	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	212324	5.00	4.95	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	219836	5.00	5.35	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	45372	5.00	5.06	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	97	215655	5.00	4.91	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	274585	5.00	5.00	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	233072	5.00	5.00	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	132053	5.00	5.00	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	96	139403	5.00	5.15	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	221252	5.00	5.02	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	131141	5.00	5.05	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	77	14396	5.00	4.63	a
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	95975	5.00	4.93	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	95	42791	5.00	4.76	
121 Naphthalene	128	10.823	10.823	0.000	97	250089	5.00	4.81	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	93	92173	5.00	4.81	
S 124 1,2-Dichloroethene, Total	1				0			10.4	
S 126 Xylenes, Total	1				0			9.73	
S 123 1,3-Dichloropropene, Total	1				0			10.1	
S 125 Total BTEX	1				0			24.9	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8260 CORP mix_00166	Amount Added:	5.00	Units: uL	
GAS CORP mix_00361	Amount Added:	5.00	Units: uL	
T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

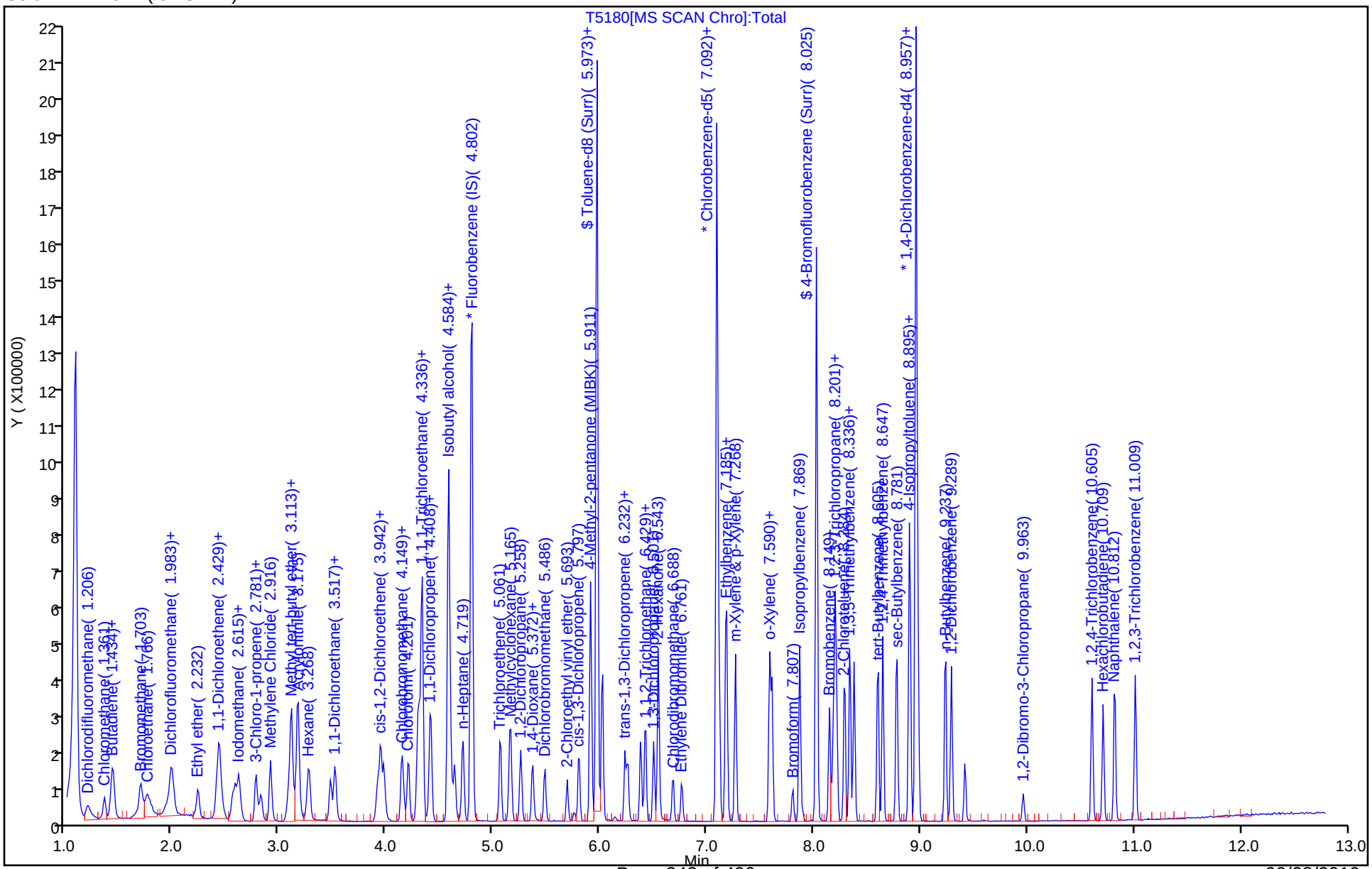
Report Date: 19-Sep-2019 09:19:05 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5180.D

Injection Date:	18-Sep-2019 17:26:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC 3			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

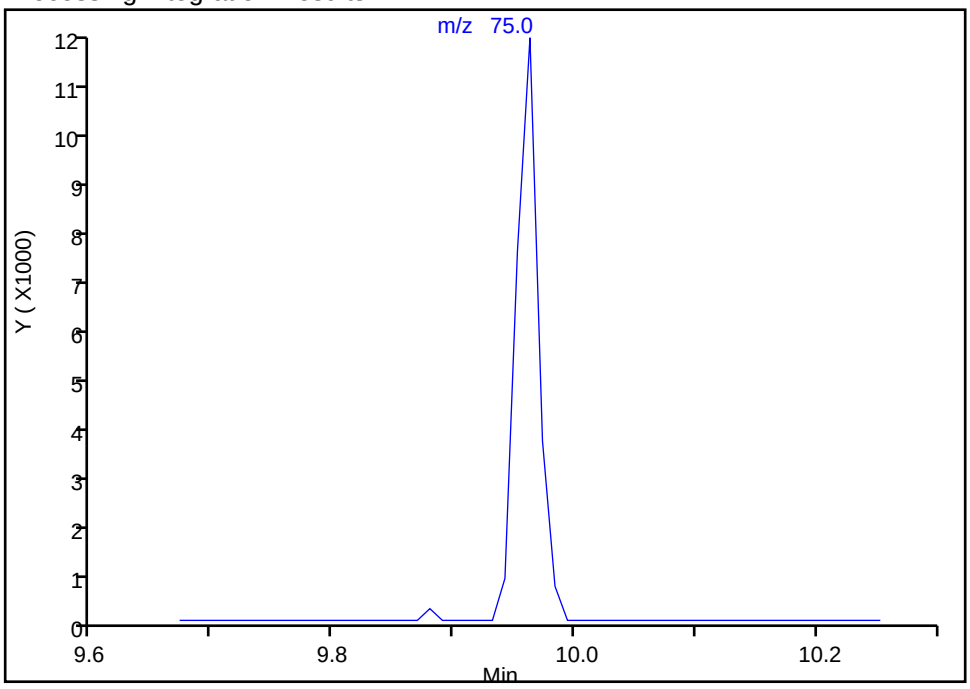
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5180.D
Injection Date: 18-Sep-2019 17:26:30 Instrument ID: HP5975T
Lims ID: IC 3
Client ID:
Operator ID: RF ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

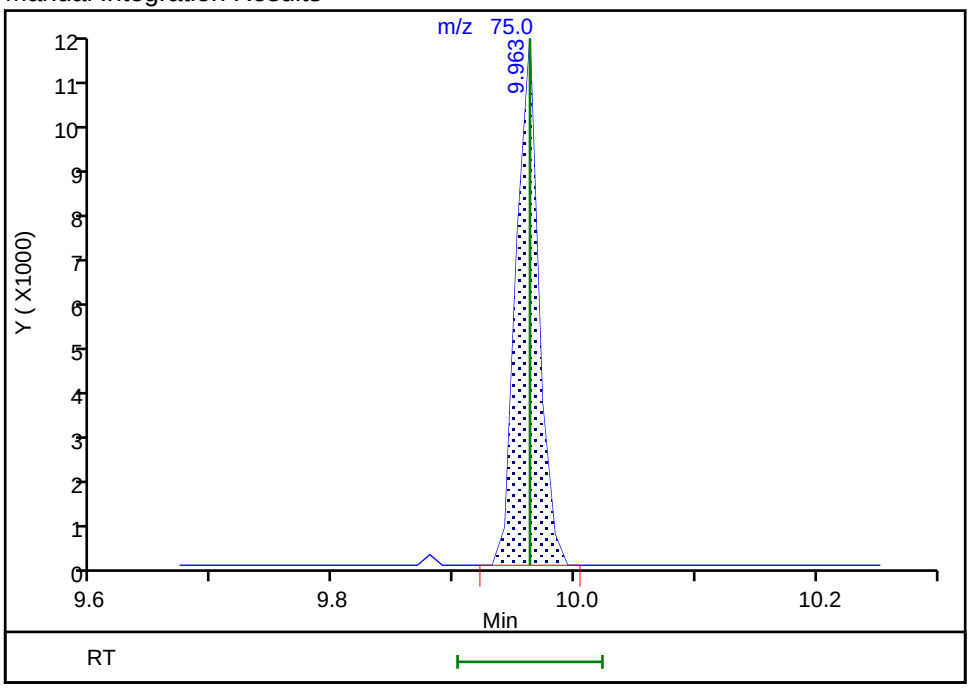
Not Detected
Expected RT: 9.96

Processing Integration Results



Manual Integration Results

RT: 9.96
Area: 14396
Amount: 4.627742
Amount Units: ug/L



Reviewer: HillL, 18-Sep-2019 18:50:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5181.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Sep-2019 17:49:30 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 4
Misc. Info.: 480-0084255-009
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:19:13 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 18:50:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	212225	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	795239	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	426684	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	92	283998	25.0	24.7	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	360692	25.0	24.6	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1070019	25.0	25.4	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	329182	25.0	24.9	
11 Dichlorodifluoromethane	85	1.216	1.206	0.010	98	138060	10.0	9.25	
13 Chloromethane	50	1.372	1.361	0.011	99	131429	10.0	9.64	
151 Butadiene	54	1.444	1.434	0.010	93	112061	10.0	9.30	
14 Vinyl chloride	62	1.455	1.455	0.000	98	123680	10.0	9.34	
15 Bromomethane	94	1.714	1.703	0.011	93	109110	10.0	9.49	
16 Chloroethane	64	1.776	1.766	0.010	100	92710	10.0	9.45	
18 Dichlorofluoromethane	67	1.994	1.983	0.011	96	212696	10.0	9.18	
17 Trichlorofluoromethane	101	2.004	1.994	0.010	65	202337	10.0	9.06	
19 Ethyl ether	59	2.242	2.232	0.010	91	100474	10.0	9.70	
21 Acrolein	56	2.418	2.418	0.000	99	113098	50.0	47.5	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.439	0.010	61	107359	10.0	9.56	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	98	96135	10.0	9.57	
23 Acetone	43	2.574	2.564	0.010	100	227982	50.0	49.2	
24 Iodomethane	142	2.595	2.595	0.000	97	177079	10.0	9.68	
25 Carbon disulfide	76	2.626	2.626	0.000	100	316933	10.0	9.84	
27 3-Chloro-1-propene	41	2.791	2.781	0.010	87	144813	10.0	9.71	
28 Methyl acetate	43	2.833	2.823	0.010	97	202323	20.0	19.5	
30 Methylene Chloride	84	2.926	2.916	0.010	91	128133	10.0	10.0	
31 2-Methyl-2-propanol	59	3.092	3.082	0.010	83	211585	100.0	98.4	
33 Methyl tert-butyl ether	73	3.113	3.102	0.011	99	323623	10.0	9.84	
32 trans-1,2-Dichloroethene	96	3.123	3.113	0.010	98	110156	10.0	9.72	
34 Acrylonitrile	53	3.175	3.175	0.000	99	523716	100.0	100.7	
35 Hexane	57	3.279	3.279	0.000	92	146203	10.0	8.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	187345	10.0	9.86	
39 Vinyl acetate	43	3.527	3.517	0.010	98	449303	20.0	20.2	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	89	149592	10.0	9.81	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	122937	10.0	9.94	
44 2-Butanone (MEK)	43	3.983	3.973	0.010	99	323344	50.0	50.1	
47 Chlorobromomethane	128	4.149	4.149	0.000	96	62680	10.0	9.77	
48 Tetrahydrofuran	42	4.159	4.159	0.000	86	90011	20.0	20.3	
50 Chloroform	83	4.211	4.211	0.000	94	204583	10.0	9.34	
52 Cyclohexane	56	4.304	4.305	0.000	87	166384	10.0	9.30	
51 1,1,1-Trichloroethane	97	4.304	4.305	0.000	97	170599	10.0	9.64	
53 Carbon tetrachloride	117	4.408	4.408	0.000	96	143038	10.0	9.29	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	93	139975	10.0	9.45	
55 Benzene	78	4.584	4.584	0.000	92	438766	10.0	10.0	
56 Isobutyl alcohol	43	4.605	4.595	0.010	91	182205	250.0	248.5	
57 1,2-Dichloroethane	62	4.646	4.636	0.010	98	171986	10.0	9.64	
59 n-Heptane	43	4.719	4.719	0.000	86	143030	10.0	9.58	
60 Trichloroethene	95	5.071	5.061	0.010	96	116323	10.0	9.83	
62 Methylcyclohexane	83	5.165	5.165	0.000	90	179548	10.0	9.46	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	106481	10.0	10.2	
66 1,4-Dioxane	88	5.372	5.372	0.000	46	42828	200.0	202.9	
65 Dibromomethane	93	5.372	5.372	0.000	97	79108	10.0	9.94	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	141856	10.0	10.1	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	70020	10.0	9.47	
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	93	162712	10.0	10.1	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	680106	50.0	51.7	
73 Toluene	92	6.025	6.025	0.000	98	276263	10.0	9.90	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	97	152355	10.0	10.1	
77 Ethyl methacrylate	69	6.263	6.263	0.000	87	146200	10.0	10.0	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	92	90088	10.0	9.96	
79 Tetrachloroethene	166	6.429	6.429	0.000	95	119053	10.0	9.86	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	92	176816	10.0	9.83	
81 2-Hexanone	43	6.543	6.543	0.000	97	478780	50.0	51.5	
82 Chlorodibromomethane	129	6.688	6.678	0.010	89	104367	10.0	9.92	
83 Ethylene Dibromide	107	6.771	6.761	0.010	97	113615	10.0	10.0	
86 Chlorobenzene	112	7.113	7.113	0.000	95	311358	10.0	9.79	
88 Ethylbenzene	91	7.175	7.175	0.000	99	510059	10.0	9.56	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	92	98313	10.0	9.70	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	194447	10.0	9.64	
91 o-Xylene	106	7.590	7.590	0.000	98	194384	10.0	9.88	
92 Styrene	104	7.610	7.610	0.000	95	311629	10.0	9.74	
93 Bromoform	173	7.807	7.807	0.000	95	66825	10.0	9.68	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	494054	10.0	9.71	
97 Bromobenzene	156	8.149	8.149	0.000	94	133496	10.0	10.1	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	156468	10.0	10.1	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	615952	10.0	9.82	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	54667	10.0	9.96	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	73	44591	10.0	9.85	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	123433	10.0	10.1	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	96	434097	10.0	10.0	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	395547	10.0	9.54	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	88782	10.0	9.81	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	97	445345	10.0	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	544760	10.0	9.83	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	467547	10.0	9.94	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	262875	10.0	9.86	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	94	271035	10.0	9.92	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	434813	10.0	9.77	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	265010	10.0	10.1	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	78	29791	10.0	9.49	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	191252	10.0	9.73	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	96	85830	10.0	9.29	
121 Naphthalene	128	10.823	10.823	0.000	97	520190	10.0	9.91	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	96	191967	10.0	9.93	
S 124 1,2-Dichloroethene, Total	1				0			19.7	
S 126 Xylenes, Total	1				0			19.5	
S 123 1,3-Dichloropropene, Total	1				0			20.2	
S 125 Total BTEX	1				0			49.0	

Reagents:

8260 CORP mix_00166	Amount Added:	5.00	Units: uL	
GAS CORP mix_00361	Amount Added:	5.00	Units: uL	
T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

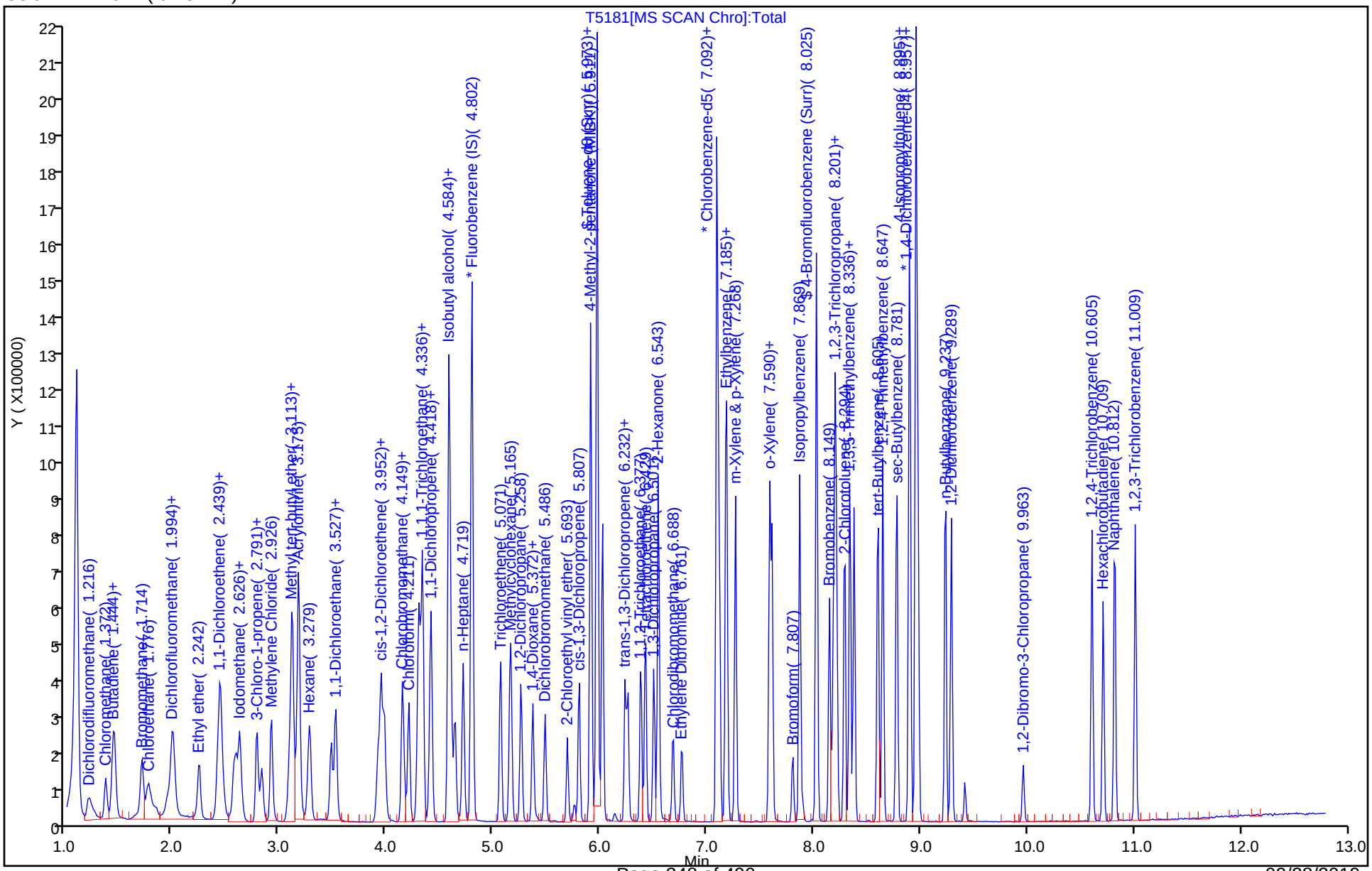
Report Date: 19-Sep-2019 09:19:16 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5181.D

Injection Date:	18-Sep-2019 17:49:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC 4			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5182.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 18-Sep-2019 18:13:30 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: icis 5
Misc. Info.: 480-0084255-010
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:19:21 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 18:49:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	211587	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	809497	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	437501	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.336	0.000	94	289915	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	367634	25.0	25.1	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1078968	25.0	25.1	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	344260	25.0	25.6	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	399293	25.0	26.8	
13 Chloromethane	50	1.361	1.361	0.000	98	335087	25.0	24.6	
151 Butadiene	54	1.434	1.434	0.000	91	315741	25.0	26.3	
14 Vinyl chloride	62	1.455	1.455	0.000	98	340213	25.0	25.8	
15 Bromomethane	94	1.703	1.703	0.000	91	277642	25.0	24.2	
16 Chloroethane	64	1.766	1.766	0.000	100	254506	25.0	26.0	
18 Dichlorofluoromethane	67	1.983	1.983	0.000	97	547542	25.0	23.7	
17 Trichlorofluoromethane	101	1.994	1.994	0.000	98	551994	25.0	24.8	
19 Ethyl ether	59	2.232	2.232	0.000	91	255451	25.0	24.7	
21 Acrolein	56	2.418	2.418	0.000	99	296418	125.0	125.0	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.439	0.000	61	281898	25.0	25.2	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	96	247047	25.0	24.7	
23 Acetone	43	2.564	2.564	0.000	99	570749	125.0	123.5	
24 Iodomethane	142	2.595	2.595	0.000	98	457994	25.0	25.1	
25 Carbon disulfide	76	2.626	2.626	0.000	100	855717	25.0	26.6	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	86	383354	25.0	25.8	
28 Methyl acetate	43	2.823	2.823	0.000	97	519413	50.0	50.2	
30 Methylene Chloride	84	2.916	2.916	0.000	92	313316	25.0	25.9	
31 2-Methyl-2-propanol	59	3.082	3.082	0.000	93	567177	250.0	264.6	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	99	874108	25.0	26.7	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	99	298578	25.0	26.4	
34 Acrylonitrile	53	3.175	3.175	0.000	98	1388136	250.0	267.7	
35 Hexane	57	3.279	3.279	0.000	92	393688	25.0	24.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	492050	25.0	26.0	
39 Vinyl acetate	43	3.517	3.517	0.000	98	1214753	50.0	54.9	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	93	396158	25.0	26.1	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	315775	25.0	25.6	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	848667	125.0	132.0	
47 Chlorobromomethane	128	4.149	4.149	0.000	93	172097	25.0	26.9	
48 Tetrahydrofuran	42	4.159	4.159	0.000	81	220705	50.0	50.0	
50 Chloroform	83	4.211	4.211	0.000	94	541818	25.0	24.8	
52 Cyclohexane	56	4.305	4.305	0.000	92	461660	25.0	25.9	
51 1,1,1-Trichloroethane	97	4.305	4.305	0.000	98	463152	25.0	26.3	
53 Carbon tetrachloride	117	4.408	4.408	0.000	98	384733	25.0	25.1	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	93	375694	25.0	25.4	
55 Benzene	78	4.584	4.584	0.000	96	1141802	25.0	26.2	
56 Isobutyl alcohol	43	4.595	4.595	0.000	92	510531	625.0	698.4	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	98	450571	25.0	25.3	
59 n-Heptane	43	4.719	4.719	0.000	87	377512	25.0	25.4	
60 Trichloroethene	95	5.061	5.061	0.000	97	303463	25.0	25.7	
62 Methylcyclohexane	83	5.165	5.165	0.000	90	480813	25.0	25.4	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	89	268218	25.0	25.8	
66 1,4-Dioxane	88	5.372	5.372	0.000	47	113261	500.0	527.1	
65 Dibromomethane	93	5.372	5.372	0.000	95	207705	25.0	26.2	
67 Dichlorobromomethane	83	5.486	5.486	0.000	99	384280	25.0	27.5	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	200352	25.0	27.2	
71 cis-1,3-Dichloropropene	75	5.797	5.797	0.000	93	452197	25.0	28.2	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	1834798	125.0	137.1	
73 Toluene	92	6.025	6.025	0.000	98	722378	25.0	25.4	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	95	423151	25.0	27.5	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	402663	25.0	27.0	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	92	239795	25.0	26.0	
79 Tetrachloroethene	166	6.429	6.429	0.000	97	319173	25.0	26.0	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	91	482867	25.0	26.4	
81 2-Hexanone	43	6.543	6.543	0.000	96	1319116	125.0	139.4	
82 Chlorodibromomethane	129	6.678	6.678	0.000	90	287590	25.0	26.8	
83 Ethylene Dibromide	107	6.761	6.761	0.000	99	297865	25.0	25.8	
86 Chlorobenzene	112	7.113	7.113	0.000	95	811472	25.0	25.1	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1370209	25.0	25.2	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	92	274317	25.0	26.6	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	531842	25.0	25.9	
91 o-Xylene	106	7.590	7.590	0.000	98	518479	25.0	25.9	
92 Styrene	104	7.610	7.610	0.000	95	874802	25.0	26.9	
93 Bromoform	173	7.807	7.807	0.000	96	187828	25.0	26.7	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1350584	25.0	25.9	
97 Bromobenzene	156	8.149	8.149	0.000	94	350836	25.0	26.0	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	97	423384	25.0	26.6	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1663565	25.0	25.9	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	145162	25.0	25.8	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	75	125095	25.0	26.9	
105 2-Chlorotoluene	126	8.294	8.294	0.000	95	321791	25.0	25.6	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	95	1182660	25.0	26.6	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	1165635	25.0	27.4	
106 tert-Butylbenzene	134	8.605	8.605	0.000	92	242981	25.0	26.2	
107 1,2,4-Trimethylbenzene	105	8.647	8.647	0.000	98	1207818	25.0	26.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	1486033	25.0	26.1	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1280953	25.0	26.6	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	693090	25.0	25.4	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	95	700769	25.0	25.0	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	1195766	25.0	26.2	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	700787	25.0	26.1	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	80	83204	25.0	25.8	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	509936	25.0	25.3	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	241683	25.0	25.2	
121 Naphthalene	128	10.823	10.823	0.000	97	1467605	25.0	27.3	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	94	499326	25.0	25.2	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

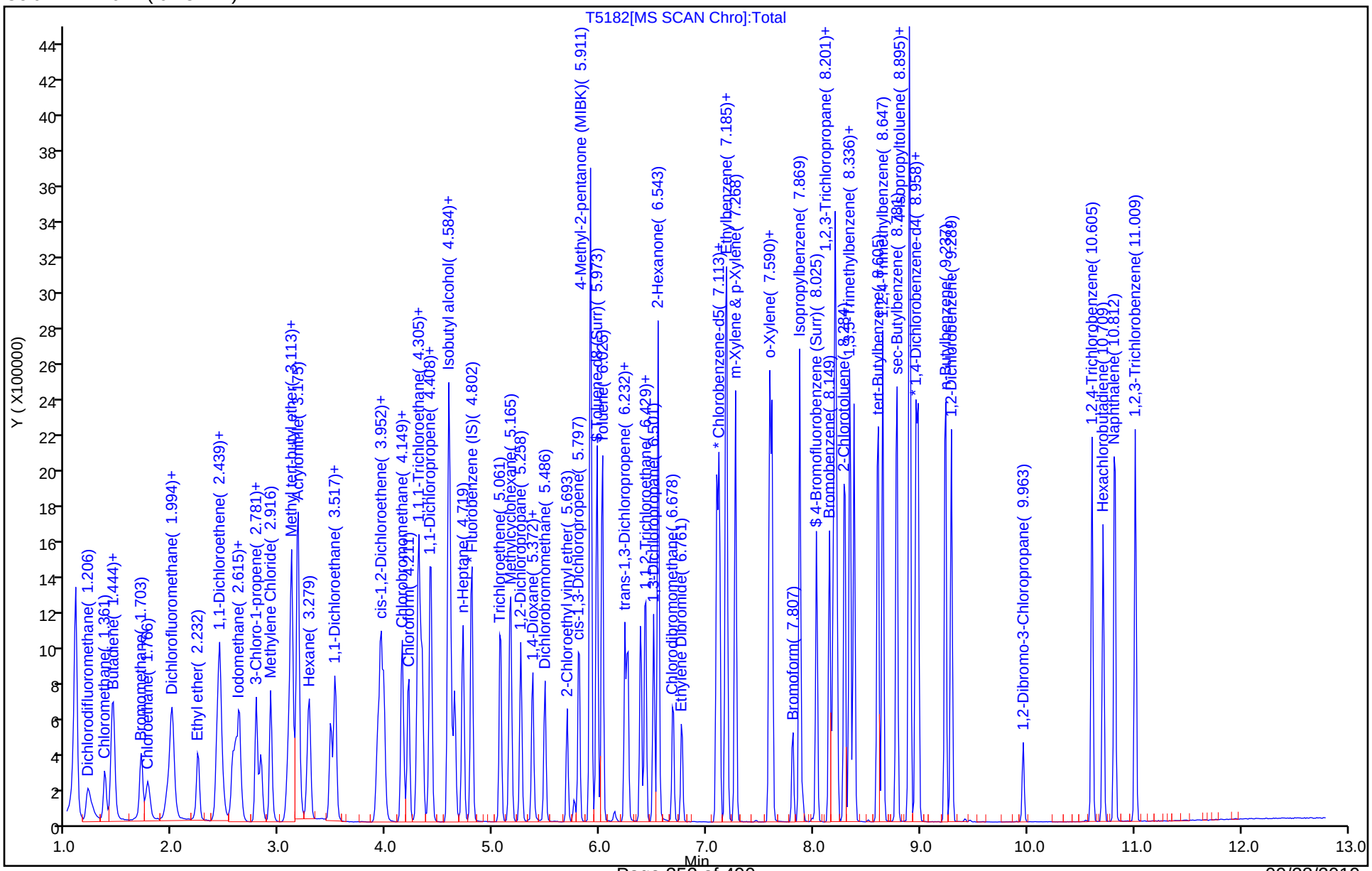
Report Date: 19-Sep-2019 09:19:24 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5182.D

Injection Date:	18-Sep-2019 18:13:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	ICIS 5			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5183.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Sep-2019 18:37:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 6
Misc. Info.: 480-0084255-011
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:19:29 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 20:13:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	215200	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	823328	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	450309	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.336	-0.001	94	294116	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	378972	25.0	25.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1081964	25.0	24.8	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	349842	25.0	25.6	
11 Dichlorodifluoromethane	85	1.216	1.206	0.010	99	737525	50.0	48.7	
13 Chloromethane	50	1.372	1.361	0.011	99	640972	50.0	46.3	
151 Butadiene	54	1.444	1.434	0.010	90	582425	50.0	47.7	
14 Vinyl chloride	62	1.454	1.455	-0.001	98	646096	50.0	48.1	
15 Bromomethane	94	1.714	1.703	0.011	92	526737	50.0	45.2	
16 Chloroethane	64	1.776	1.766	0.010	100	468617	50.0	47.1	
18 Dichlorofluoromethane	67	1.993	1.983	0.010	97	1045572	50.0	44.5	
17 Trichlorofluoromethane	101	2.004	1.994	0.010	97	1040797	50.0	46.0	
19 Ethyl ether	59	2.242	2.232	0.010	91	489309	50.0	46.6	
21 Acrolein	56	2.418	2.418	0.000	99	576246	250.0	238.9	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.439	0.010	94	543649	50.0	47.8	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	99	485789	50.0	47.7	
23 Acetone	43	2.563	2.564	-0.001	99	1094321	250.0	232.9	
24 Iodomethane	142	2.605	2.595	0.010	98	918810	50.0	49.5	
25 Carbon disulfide	76	2.626	2.626	0.000	100	1679704	50.0	51.4	
27 3-Chloro-1-propene	41	2.791	2.781	0.010	86	743850	50.0	49.2	
28 Methyl acetate	43	2.833	2.823	0.010	98	1021530	100.0	97.0	
30 Methylene Chloride	84	2.926	2.916	0.010	91	605779	50.0	50.1	
31 2-Methyl-2-propanol	59	3.092	3.082	0.010	98	1110918	500.0	509.5	
33 Methyl tert-butyl ether	73	3.113	3.102	0.011	99	1692460	50.0	50.8	
32 trans-1,2-Dichloroethene	96	3.123	3.113	0.010	98	574691	50.0	50.0	
34 Acrylonitrile	53	3.175	3.175	0.000	99	2657077	500.0	503.8	
35 Hexane	57	3.278	3.279	-0.001	93	750520	50.0	45.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	935352	50.0	48.6	
39 Vinyl acetate	43	3.527	3.517	0.010	98	2426777	100.0	107.8	
42 2,2-Dichloropropane	77	3.931	3.921	0.010	90	796018	50.0	51.5	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	80	634229	50.0	50.5	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	1657744	250.0	253.5	
47 Chlorobromomethane	128	4.149	4.149	0.000	93	329512	50.0	50.7	
48 Tetrahydrofuran	42	4.159	4.159	0.000	83	434117	100.0	96.7	
50 Chloroform	83	4.211	4.211	0.000	94	1053156	50.0	47.4	
52 Cyclohexane	56	4.304	4.305	0.000	91	881649	50.0	48.6	
51 1,1,1-Trichloroethane	97	4.304	4.305	0.000	98	905714	50.0	50.5	
53 Carbon tetrachloride	117	4.418	4.408	0.010	97	768207	50.0	49.2	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	95	738980	50.0	49.2	
55 Benzene	78	4.584	4.584	0.000	98	2182074	50.0	49.2	
56 Isobutyl alcohol	43	4.605	4.595	0.010	89	991195	1250.0	1333.1	
57 1,2-Dichloroethane	62	4.646	4.636	0.010	98	878153	50.0	48.6	
59 n-Heptane	43	4.719	4.719	0.000	87	722437	50.0	47.7	
60 Trichloroethene	95	5.071	5.061	0.010	97	586160	50.0	48.8	
62 Methylcyclohexane	83	5.164	5.165	-0.001	91	936650	50.0	48.7	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	91	538644	50.0	51.0	
66 1,4-Dioxane	88	5.372	5.372	0.000	46	219679	1000.0	1005.2	
65 Dibromomethane	93	5.372	5.372	0.000	94	404131	50.0	50.1	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	766940	50.0	54.0	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	399622	50.0	53.3	
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	93	885992	50.0	54.3	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	3574915	250.0	262.6	
73 Toluene	92	6.025	6.025	0.000	98	1402451	50.0	48.5	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	96	860804	50.0	55.0	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	816805	50.0	53.9	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	467714	50.0	49.9	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	611364	50.0	48.9	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	92	920549	50.0	49.4	
81 2-Hexanone	43	6.543	6.543	0.000	96	2556684	250.0	265.7	
82 Chlorodibromomethane	129	6.688	6.678	0.010	90	588741	50.0	54.0	
83 Ethylene Dibromide	107	6.771	6.761	0.010	98	593367	50.0	50.5	
86 Chlorobenzene	112	7.113	7.113	0.000	94	1582361	50.0	48.1	
88 Ethylbenzene	91	7.175	7.175	0.000	99	2710016	50.0	49.1	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	558858	50.0	53.2	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	1052834	50.0	50.4	
91 o-Xylene	106	7.589	7.590	-0.001	98	1021078	50.0	50.1	
92 Styrene	104	7.610	7.610	0.000	95	1733963	50.0	52.3	
93 Bromoform	173	7.807	7.807	0.000	96	400995	50.0	56.1	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	2710815	50.0	50.5	
97 Bromobenzene	156	8.149	8.149	0.000	95	684385	50.0	49.3	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	823926	50.0	50.4	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	3284156	50.0	49.6	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	88	277734	50.0	47.9	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	76	260309	50.0	54.5	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	643091	50.0	49.7	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	2363810	50.0	51.8	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	2028020	50.0	46.4	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	479964	50.0	50.3	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	98	2404888	50.0	51.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	2940385	50.0	50.3	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	2561796	50.0	51.6	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	1363625	50.0	48.5	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	1375894	50.0	47.7	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	2381865	50.0	50.7	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	1366165	50.0	49.4	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	81	169926	50.0	51.3	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	1007430	50.0	48.6	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	479208	50.0	48.4	
121 Naphthalene	128	10.823	10.823	0.000	97	2954546	50.0	53.3	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	95	996093	50.0	48.8	
S 124 1,2-Dichloroethene, Total	1				0			100.6	
S 126 Xylenes, Total	1				0			100.6	
S 123 1,3-Dichloropropene, Total	1				0			109.3	
S 125 Total BTEX	1				0			247.4	

Reagents:

8260 CORP mix_00166	Amount Added: 25.00	Units: uL	
GAS CORP mix_00361	Amount Added: 25.00	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

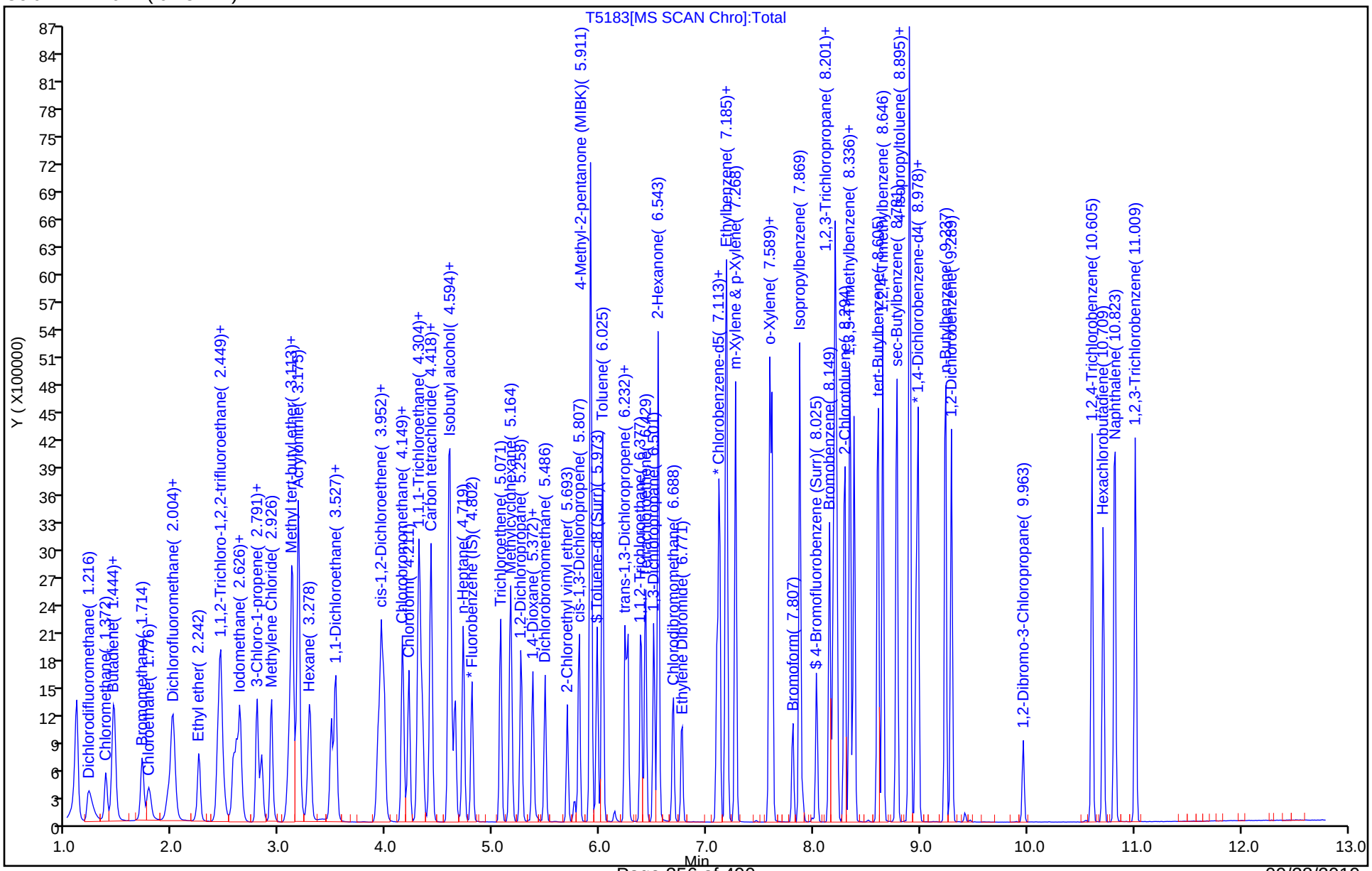
Report Date: 19-Sep-2019 09:19:31 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5183.D

Injection Date:	18-Sep-2019 18:37:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC 6			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5184.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Sep-2019 19:01:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ic 7
Misc. Info.: 480-0084255-012
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Sep-2019 09:19:35 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0315

First Level Reviewer: HillL Date: 18-Sep-2019 20:19:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	98	221966	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	842099	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	465461	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.336	-0.001	77	294606	25.0	24.5	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	384205	25.0	25.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1086279	25.0	24.3	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	352076	25.0	25.2	
11 Dichlorodifluoromethane	85	1.216	1.206	0.010	99	1580637	100.0	101.3	
13 Chloromethane	50	1.372	1.361	0.011	99	1336741	100.0	93.7	
151 Butadiene	54	1.444	1.434	0.010	91	1227641	100.0	97.4	
14 Vinyl chloride	62	1.454	1.455	-0.001	98	1359018	100.0	98.1	
15 Bromomethane	94	1.714	1.703	0.011	92	1069139	100.0	88.9	
16 Chloroethane	64	1.776	1.766	0.010	100	929279	100.0	90.6	
18 Dichlorofluoromethane	67	1.993	1.983	0.010	98	2135004	100.0	88.1	
17 Trichlorofluoromethane	101	2.004	1.994	0.010	99	2184637	100.0	93.6	
19 Ethyl ether	59	2.242	2.232	0.010	90	978550	100.0	90.3	
21 Acrolein	56	2.418	2.418	0.000	99	1177037	500.0	473.1	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.439	0.010	62	1196631	100.0	101.9	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	98	1050870	100.0	100.0	
23 Acetone	43	2.563	2.564	-0.001	99	2292140	500.0	472.9	
24 Iodomethane	142	2.594	2.595	-0.001	98	1907061	100.0	99.6	
25 Carbon disulfide	76	2.626	2.626	0.000	100	3578428	100.0	106.2	
27 3-Chloro-1-propene	41	2.791	2.781	0.010	87	1589565	100.0	101.9	
28 Methyl acetate	43	2.833	2.823	0.010	98	2071539	200.0	190.8	
30 Methylene Chloride	84	2.926	2.916	0.010	92	1226502	100.0	99.2	
31 2-Methyl-2-propanol	59	3.081	3.082	-0.001	98	2431060	1000.0	1081.0	
33 Methyl tert-butyl ether	73	3.113	3.102	0.011	99	3438375	100.0	100.0	
32 trans-1,2-Dichloroethene	96	3.123	3.113	0.010	98	1192599	100.0	100.6	
34 Acrylonitrile	53	3.175	3.175	0.000	98	5432366	1000.0	998.7	
35 Hexane	57	3.278	3.279	-0.001	92	1638968	100.0	96.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	1951010	100.0	98.2	
39 Vinyl acetate	43	3.527	3.517	0.010	98	5116186	200.0	220.4	
42 2,2-Dichloropropane	77	3.931	3.921	0.010	90	1749046	100.0	109.7	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	80	1302490	100.0	100.6	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	3472975	500.0	514.9	
47 Chlorobromomethane	128	4.149	4.149	0.000	93	693775	100.0	103.4	
48 Tetrahydrofuran	42	4.159	4.159	0.000	82	909061	200.0	196.4	
50 Chloroform	83	4.211	4.211	0.000	94	2172472	100.0	94.9	
52 Cyclohexane	56	4.304	4.305	0.000	93	1923817	100.0	102.9	
51 1,1,1-Trichloroethane	97	4.304	4.305	0.000	98	1948786	100.0	105.3	
53 Carbon tetrachloride	117	4.418	4.408	0.010	97	1708939	100.0	106.1	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	95	1591522	100.0	102.7	
55 Benzene	78	4.584	4.584	0.000	98	4522267	100.0	98.8	
56 Isobutyl alcohol	43	4.605	4.595	0.010	91	2173864	2500.0	2834.6	
57 1,2-Dichloroethane	62	4.646	4.636	0.010	98	1787965	100.0	95.9	
59 n-Heptane	43	4.719	4.719	0.000	87	1558899	100.0	99.8	
60 Trichloroethene	95	5.071	5.061	0.010	97	1257067	100.0	101.5	
62 Methylcyclohexane	83	5.164	5.165	-0.001	91	2064898	100.0	104.1	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	1091019	100.0	100.1	
66 1,4-Dioxane	88	5.372	5.372	0.000	46	460979	2000.0	2062.3	
65 Dibromomethane	93	5.372	5.372	0.000	95	842047	100.0	101.2	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	1627276	100.0	111.1	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	859393	100.0	111.2	
71 cis-1,3-Dichloropropene	75	5.807	5.797	0.010	94	1896981	100.0	112.8	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	95	7410228	500.0	532.2	
73 Toluene	92	6.025	6.025	0.000	98	2926271	100.0	99.0	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	95	1836414	100.0	114.7	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	1746996	100.0	112.7	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	968994	100.0	101.1	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	1313883	100.0	102.7	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	92	1885421	100.0	99.0	
81 2-Hexanone	43	6.543	6.543	0.000	96	5310545	500.0	539.5	
82 Chlorodibromomethane	129	6.688	6.678	0.010	89	1290280	100.0	115.8	
83 Ethylene Dibromide	107	6.760	6.761	-0.001	98	1242656	100.0	103.4	
86 Chlorobenzene	112	7.113	7.113	0.000	93	3280113	100.0	97.4	
88 Ethylbenzene	91	7.175	7.175	0.000	99	5651724	100.0	100.1	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	1203910	100.0	112.2	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	2195604	100.0	102.8	
91 o-Xylene	106	7.589	7.590	-0.001	98	2193210	100.0	105.3	
92 Styrene	104	7.610	7.610	0.000	95	3666729	100.0	108.2	
93 Bromoform	173	7.807	7.807	0.000	96	921963	100.0	126.1	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	5734230	100.0	103.3	
97 Bromobenzene	156	8.149	8.149	0.000	94	1443640	100.0	100.6	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	1749530	100.0	103.5	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	6848892	100.0	100.1	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	89	581364	100.0	97.1	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	83	562608	100.0	113.9	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	1325499	100.0	99.1	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	4936873	100.0	104.6	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	4253325	100.0	94.1	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	1041380	100.0	105.5	
107 1,2,4-Trimethylbenzene	105	8.646	8.647	-0.001	98	5068502	100.0	104.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	6362876	100.0	105.2	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	5532308	100.0	107.9	
110 1,3-Dichlorobenzene	146	8.906	8.906	0.000	97	2826482	100.0	97.2	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	2850206	100.0	95.6	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	5097070	100.0	104.9	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	2833521	100.0	99.2	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	82	389397	100.0	113.7	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	2157287	100.0	100.6	
120 Hexachlorobutadiene	225	10.709	10.709	0.000	97	1045618	100.0	102.1	
121 Naphthalene	128	10.823	10.823	0.000	97	6194752	100.0	108.2	
122 1,2,3-Trichlorobenzene	180	11.009	11.009	0.000	95	2102944	100.0	99.7	
S 124 1,2-Dichloroethene, Total	1				0			201.3	
S 126 Xylenes, Total	1				0			208.1	
S 123 1,3-Dichloropropene, Total	1				0			227.5	
S 125 Total BTEX	1				0			506.0	

Reagents:

8260 CORP mix_00166	Amount Added:	50.00	Units: uL	
GAS CORP mix_00361	Amount Added:	50.00	Units: uL	
T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

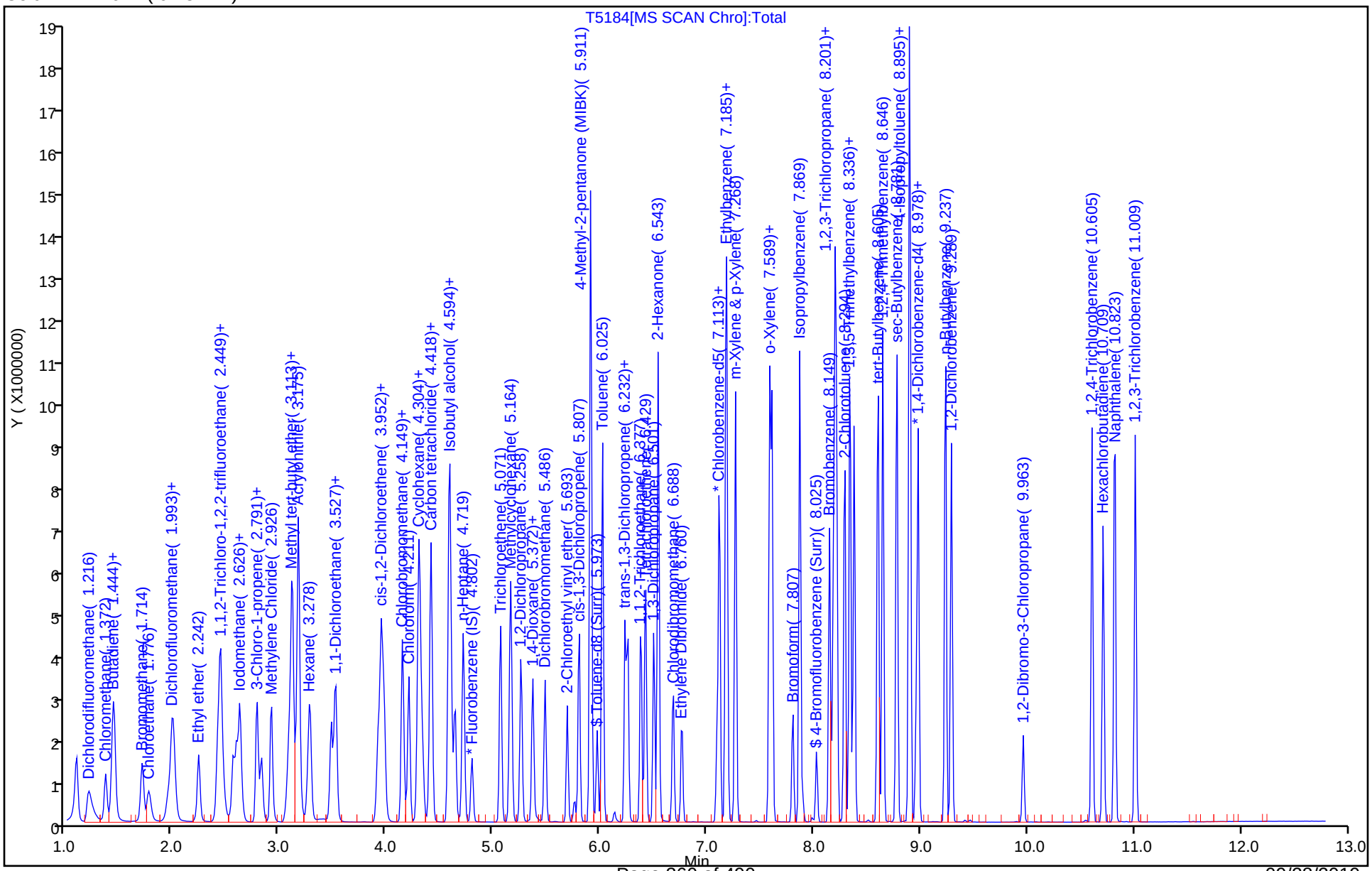
Report Date: 19-Sep-2019 09:19:37 Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5184.D

Injection Date:	18-Sep-2019 19:01:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	IC 7			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493096/3 Calibration Date: 09/20/2019 09:25

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S9286.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.766	1.512	0.1000	21.4	25.0	-14.4	50.0
Chloromethane	Ave	1.971	1.823	0.1000	23.1	25.0	-7.5	20.0
Butadiene	Ave	1.897	1.984		26.1	25.0	4.6	20.0
Vinyl chloride	Ave	1.650	1.543	0.1000	23.4	25.0	-6.5	20.0
Bromomethane	Ave	1.167	1.027	0.1000	22.0	25.0	-12.0	50.0
Chloroethane	Ave	1.105	1.018	0.1000	23.0	25.0	-7.9	50.0
Dichlorofluoromethane	Ave	2.390	2.254		23.6	25.0	-5.7	20.0
Trichlorofluoromethane	Ave	2.275	2.273	0.1000	25.0	25.0	-0.0	20.0
Ethyl ether	Ave	1.340	1.502		28.0	25.0	12.1	20.0
Acrolein	Ave	0.2245	0.2491		139	125	11.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.255	1.474	0.1000	29.4	25.0	17.4	20.0
1,1-Dichloroethene	Ave	1.228	1.254	0.1000	25.5	25.0	2.1	20.0
Acetone	Ave	0.5189	0.6457	0.1000	156	125	24.4	50.0
Iodomethane	Ave	2.337	2.482		26.6	25.0	6.2	20.0
Carbon disulfide	Ave	4.017	4.094	0.1000	25.5	25.0	1.9	20.0
Allyl chloride	Ave	2.451	2.489		25.4	25.0	1.6	20.0
Methyl acetate	Ave	1.239	1.410	0.1000	56.9	50.0	13.7	50.0
Methylene Chloride	Lin1		1.403	0.1000	25.2	25.0	0.6	20.0
2-Methyl-2-propanol	Ave	0.1059	0.1407		332	250	32.8	50.0
Methyl tert-butyl ether	Ave	4.030	4.039	0.1000	25.1	25.0	0.2	20.0
trans-1,2-Dichloroethene	Ave	1.397	1.425	0.1000	25.5	25.0	2.0	20.0
Acrylonitrile	Ave	0.6239	0.6952		279	250	11.4	20.0
Hexane	Ave	2.260	2.563		28.3	25.0	13.4	20.0
1,1-Dichloroethane	Ave	2.503	2.555	0.2000	25.5	25.0	2.1	20.0
Vinyl acetate	Ave	3.731	3.916		52.5	50.0	4.9	20.0
2,2-Dichloropropane	Ave	1.469	1.612		27.4	25.0	9.7	20.0
cis-1,2-Dichloroethene	Ave	1.539	1.528	0.1000	24.8	25.0	-0.7	20.0
2-Butanone (MEK)	Ave	0.7507	0.9095	0.1000	151	125	21.2*	20.0
Bromochloromethane	Ave	0.8090	0.8679		26.8	25.0	7.3	20.0
Tetrahydrofuran	Ave	0.5409	0.5984		55.3	50.0	10.6	20.0
Chloroform	Ave	2.503	2.422	0.2000	24.2	25.0	-3.2	20.0
1,1,1-Trichloroethane	Ave	2.110	2.184	0.1000	25.9	25.0	3.5	20.0
Cyclohexane	Ave	2.628	2.868	0.1000	27.3	25.0	9.1	20.0
Carbon tetrachloride	Ave	1.889	2.030	0.1000	26.9	25.0	7.4	20.0
1,1-Dichloropropene	Ave	1.900	1.997		26.3	25.0	5.1	20.0
Benzene	Ave	5.604	5.663	0.5000	25.3	25.0	1.1	20.0
Isobutyl alcohol	Ave	0.0613	0.0663		676	625	8.1	50.0
1,2-Dichloroethane	Ave	2.192	2.214	0.1000	25.3	25.0	1.0	20.0
n-Heptane	Ave	2.853	2.975		26.1	25.0	4.2	20.0
Trichloroethene	Ave	1.447	1.486	0.2000	25.7	25.0	2.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493096/3 Calibration Date: 09/20/2019 09:25

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S9286.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.492	2.691	0.1000	27.0	25.0	8.0	20.0
1,2-Dichloropropane	Ave	1.442	1.461	0.1000	25.3	25.0	1.3	20.0
Dibromomethane	Ave	0.9010	0.9302	0.1000	25.8	25.0	3.2	20.0
1,4-Dioxane	Ave	0.0048	0.0059		615	500	23.1	50.0
Bromodichloromethane	Ave	1.821	1.827	0.2000	25.1	25.0	0.3	20.0
2-Chloroethyl vinyl ether	Ave	1.042	0.9929		23.8	25.0	-4.7	20.0
cis-1,3-Dichloropropene	Ave	2.353	2.302	0.2000	24.5	25.0	-2.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9375	0.9856	0.1000	131	125	5.1	20.0
Toluene	Ave	1.815	1.879	0.4000	25.9	25.0	3.5	20.0
trans-1,3-Dichloropropene	Ave	1.039	1.108	0.1000	26.7	25.0	6.7	20.0
Ethyl methacrylate	Ave	0.997	1.027		25.8	25.0	3.1	20.0
1,1,2-Trichloroethane	Ave	0.5424	0.5361	0.1000	24.7	25.0	-1.1	20.0
Tetrachloroethene	Ave	0.8430	0.9228	0.2000	27.4	25.0	9.5	20.0
1,3-Dichloropropane	Ave	1.112	1.173		26.4	25.0	5.5	20.0
2-Hexanone	Ave	0.6810	0.7096	0.1000	130	125	4.2	20.0
Dibromochloromethane	Ave	0.7091	0.7566	0.1000	26.7	25.0	6.7	20.0
1,2-Dibromoethane	Ave	0.7138	0.7297		25.6	25.0	2.2	20.0
Chlorobenzene	Ave	2.093	2.160	0.5000	25.8	25.0	3.2	20.0
Ethylbenzene	Ave	3.379	3.499	0.1000	25.9	25.0	3.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7236	0.7829		27.0	25.0	8.2	20.0
m,p-Xylene	Ave	1.422	1.421	0.1000	25.0	25.0	-0.0	20.0
o-Xylene	Ave	1.370	1.368	0.3000	25.0	25.0	-0.1	20.0
Styrene	Ave	2.239	2.285	0.3000	25.5	25.0	2.0	20.0
Bromoform	Ave	0.4838	0.4925	0.1000	25.4	25.0	1.8	50.0
Isopropylbenzene	Ave	3.162	3.202	0.1000	25.3	25.0	1.3	20.0
Bromobenzene	Ave	0.8418	0.8941		26.6	25.0	6.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7980	0.7717	0.3000	24.2	25.0	-3.3	20.0
N-Propylbenzene	Ave	3.604	3.770		26.2	25.0	4.6	20.0
1,2,3-Trichloropropane	Ave	0.2869	0.2724		23.7	25.0	-5.1	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2043		18.8	25.0	-24.8	50.0
2-Chlorotoluene	Ave	0.7741	0.7764		25.1	25.0	0.3	20.0
1,3,5-Trimethylbenzene	Ave	2.636	2.633		25.0	25.0	-0.1	20.0
4-Chlorotoluene	Ave	0.8346	0.8338		25.0	25.0	-0.1	20.0
tert-Butylbenzene	Ave	0.6436	0.6288		24.4	25.0	-2.3	20.0
1,2,4-Trimethylbenzene	Ave	2.719	2.629		24.2	25.0	-3.3	20.0
sec-Butylbenzene	Ave	3.321	3.289		24.8	25.0	-0.9	20.0
1,3-Dichlorobenzene	Ave	1.662	1.668	0.6000	25.1	25.0	0.4	20.0
4-Isopropyltoluene	Ave	3.068	3.055		24.9	25.0	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.701	1.681	0.5000	24.7	25.0	-1.2	20.0
n-Butylbenzene	Ave	2.550	2.535		24.9	25.0	-0.6	20.0
1,2-Dichlorobenzene	Ave	1.584	1.602	0.4000	25.3	25.0	1.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493096/3 Calibration Date: 09/20/2019 09:25

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S9286.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1612	0.1276	0.0500	19.8	25.0	-20.9	50.0
1,2,4-Trichlorobenzene	Ave	1.142	0.9501	0.2000	20.8	25.0	-16.8	20.0
Hexachlorobutadiene	Ave	0.4956	0.3961		20.0	25.0	-20.1*	20.0
Naphthalene	Ave	2.984	2.262		19.0	25.0	-24.2*	20.0
1,2,3-Trichlorobenzene	Ave	1.033	0.8394		20.3	25.0	-18.8	20.0
Dibromofluoromethane (Surr)	Ave	1.268	1.314		25.9	25.0	3.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7981	0.8502		26.6	25.0	6.5	20.0
Toluene-d8 (Surr)	Ave	2.476	2.616		26.4	25.0	5.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8963	0.9270		25.9	25.0	3.4	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9286.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Sep-2019 09:25:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0084301-003
Operator ID: kn Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Sep-2019 09:48:18 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0334

First Level Reviewer: nowakk Date: 20-Sep-2019 09:48:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	119241	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	235101	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	48	262383	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	156705	25.0	25.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	58	101383	25.0	26.6	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	615045	25.0	26.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	93	217930	25.0	25.9	
10 Dichlorodifluoromethane	85	1.264	1.264	0.000	98	180252	25.0	21.4	
12 Chloromethane	50	1.440	1.440	0.000	100	217367	25.0	23.1	
13 Vinyl chloride	62	1.537	1.537	0.000	63	184006	25.0	23.4	
151 Butadiene	54	1.537	1.537	0.000	93	236615	25.0	26.1	
14 Bromomethane	94	1.829	1.829	0.000	91	122491	25.0	22.0	
15 Chloroethane	64	1.921	1.921	0.000	98	121353	25.0	23.0	
16 Dichlorofluoromethane	67	2.146	2.146	0.000	96	268745	25.0	23.6	
17 Trichlorofluoromethane	101	2.146	2.146	0.000	74	271076	25.0	25.0	
18 Ethyl ether	59	2.438	2.438	0.000	93	179144	25.0	28.0	
20 Acrolein	56	2.620	2.620	0.000	93	148501	125.0	138.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.644	2.644	0.000	75	175770	25.0	29.4	
22 1,1-Dichloroethene	96	2.651	2.651	0.000	96	149504	25.0	25.5	
23 Acetone	43	2.778	2.778	0.000	98	384958	125.0	155.6	
25 Iodomethane	142	2.815	2.815	0.000	99	295963	25.0	26.6	
26 Carbon disulfide	76	2.845	2.845	0.000	99	488115	25.0	25.5	
28 3-Chloro-1-propene	41	3.028	3.028	0.000	87	296752	25.0	25.4	
27 Methyl acetate	43	3.076	3.076	0.000	99	336224	50.0	56.9	
30 Methylene Chloride	84	3.180	3.180	0.000	98	167308	25.0	25.2	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	94	167736	250.0	332.0	
32 Methyl tert-butyl ether	73	3.387	3.387	0.000	92	481615	25.0	25.1	
34 trans-1,2-Dichloroethene	96	3.405	3.405	0.000	93	169976	25.0	25.5	
33 Acrylonitrile	53	3.472	3.472	0.000	98	828968	250.0	278.6	
35 Hexane	57	3.600	3.600	0.000	94	305586	25.0	28.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.831	0.000	97	304660	25.0	25.5	
37 Vinyl acetate	43	3.886	3.886	0.000	97	933812	50.0	52.5	
44 2,2-Dichloropropane	77	4.354	4.354	0.000	93	192224	25.0	27.4	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	80	182208	25.0	24.8	
43 2-Butanone (MEK)	43	4.427	4.427	0.000	93	542238	125.0	151.4	
48 Chlorobromomethane	128	4.628	4.628	0.000	97	103487	25.0	26.8	
49 Tetrahydrofuran	42	4.646	4.646	0.000	88	142715	50.0	55.3	
50 Chloroform	83	4.707	4.707	0.000	95	288747	25.0	24.2	
52 Cyclohexane	56	4.816	4.816	0.000	95	341925	25.0	27.3	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	85	260379	25.0	25.9	
55 Carbon tetrachloride	117	4.950	4.950	0.000	89	242006	25.0	26.9	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	90	238074	25.0	26.3	
57 Benzene	78	5.169	5.169	0.000	96	675220	25.0	25.3	
53 Isobutyl alcohol	43	5.200	5.200	0.000	91	197614	625.0	675.5	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	263993	25.0	25.3	
59 n-Heptane	43	5.346	5.346	0.000	95	354705	25.0	26.1	
62 Trichloroethene	95	5.784	5.784	0.000	92	177200	25.0	25.7	
64 Methylcyclohexane	83	5.899	5.899	0.000	95	320835	25.0	27.0	
65 1,2-Dichloropropane	63	6.027	6.027	0.000	90	174180	25.0	25.3	
67 Dibromomethane	93	6.167	6.167	0.000	86	110915	25.0	25.8	
66 1,4-Dioxane	88	6.179	6.179	0.000	31	27546	500.0	615.3	
68 Dichlorobromomethane	83	6.319	6.319	0.000	97	217893	25.0	25.1	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	94	118397	25.0	23.8	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	87	274524	25.0	24.5	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	1158516	125.0	131.4	
74 Toluene	92	7.025	7.025	0.000	94	441666	25.0	25.9	
77 trans-1,3-Dichloropropene	75	7.311	7.311	0.000	98	260587	25.0	26.7	
75 Ethyl methacrylate	69	7.353	7.353	0.000	73	241472	25.0	25.8	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	92	126045	25.0	24.7	
81 Tetrachloroethene	166	7.548	7.548	0.000	89	216946	25.0	27.4	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	97	275687	25.0	26.4	
80 2-Hexanone	43	7.724	7.724	0.000	96	834150	125.0	130.3	
83 Chlorodibromomethane	129	7.895	7.895	0.000	89	177872	25.0	26.7	
84 Ethylene Dibromide	107	7.998	7.998	0.000	99	171559	25.0	25.6	
87 Chlorobenzene	112	8.473	8.473	0.000	93	507743	25.0	25.8	
88 Ethylbenzene	91	8.558	8.558	0.000	98	822600	25.0	25.9	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	51	184056	25.0	27.0	
90 m-Xylene & p-Xylene	106	8.679	8.679	0.000	98	334128	25.0	25.0	
91 o-Xylene	106	9.111	9.111	0.000	97	321540	25.0	25.0	
92 Styrene	104	9.142	9.142	0.000	93	537155	25.0	25.5	
95 Bromoform	173	9.397	9.397	0.000	96	115783	25.0	25.4	
94 Isopropylbenzene	105	9.495	9.495	0.000	96	840250	25.0	25.3	
101 Bromobenzene	156	9.841	9.841	0.000	90	234585	25.0	26.6	
97 1,1,2,2-Tetrachloroethane	83	9.908	9.908	0.000	58	202491	25.0	24.2	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	989219	25.0	26.2	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	85	71472	25.0	23.7	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	76	53602	25.0	18.8	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	203700	25.0	25.1	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	86	690983	25.0	25.0	
105 4-Chlorotoluene	126	10.139	10.139	0.000	95	218762	25.0	25.0	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	164987	25.0	24.4	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	38	689685	25.0	24.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	863047	25.0	24.8	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	76	437609	25.0	25.1	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	801698	25.0	24.9	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	96	440998	25.0	24.7	
115 n-Butylbenzene	91	11.149	11.149	0.000	95	665154	25.0	24.9	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	93	420260	25.0	25.3	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	77	33466	25.0	19.8	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	94	249276	25.0	20.8	
120 Hexachlorobutadiene	225	12.713	12.713	0.000	94	103938	25.0	20.0	
121 Naphthalene	128	12.816	12.816	0.000	97	593501	25.0	19.0	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	220230	25.0	20.3	

Reagents:

GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
S_8260_IS_00326	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added: 1.00	Units: uL	Run Reagent

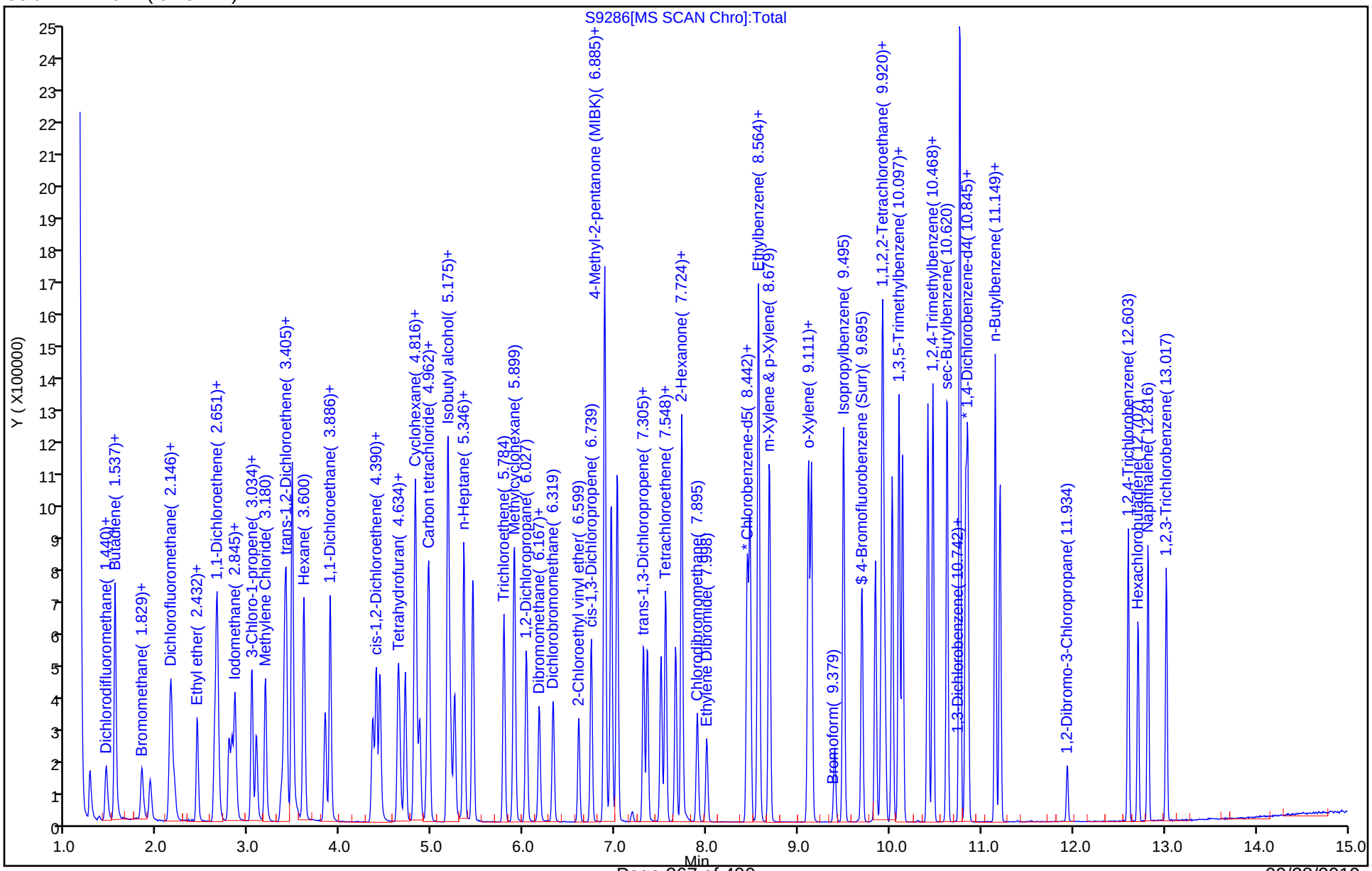
Report Date: 20-Sep-2019 09:48:19 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9286.D

Injection Date:	20-Sep-2019 09:25:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493246/3 Calibration Date: 09/21/2019 09:38

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S9341.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.766	1.407	0.1000	19.9	25.0	-20.3	50.0
Chloromethane	Ave	1.971	1.905	0.1000	24.2	25.0	-3.3	20.0
Butadiene	Ave	1.897	2.145		28.3	25.0	13.1	20.0
Vinyl chloride	Ave	1.650	1.626	0.1000	24.6	25.0	-1.5	20.0
Bromomethane	Ave	1.167	1.106	0.1000	23.7	25.0	-5.2	50.0
Chloroethane	Ave	1.105	1.064	0.1000	24.1	25.0	-3.7	50.0
Dichlorofluoromethane	Ave	2.390	2.349		24.6	25.0	-1.7	20.0
Trichlorofluoromethane	Ave	2.275	2.269	0.1000	24.9	25.0	-0.3	20.0
Ethyl ether	Ave	1.340	1.550		28.9	25.0	15.7	20.0
Acrolein	Ave	0.2245	0.2395		133	125	6.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.255	1.414	0.1000	28.2	25.0	12.6	20.0
1,1-Dichloroethene	Ave	1.228	1.299	0.1000	26.4	25.0	5.8	20.0
Acetone	Ave	0.5189	0.6004	0.1000	145	125	15.7	50.0
Iodomethane	Ave	2.337	2.609		27.9	25.0	11.6	20.0
Carbon disulfide	Ave	4.017	4.294	0.1000	26.7	25.0	6.9	20.0
Allyl chloride	Ave	2.451	2.596		26.5	25.0	5.9	20.0
Methyl acetate	Ave	1.239	1.520	0.1000	61.3	50.0	22.6	50.0
Methylene Chloride	Lin1		1.557	0.1000	28.0	25.0	12.1	20.0
2-Methyl-2-propanol	Ave	0.1059	0.1549		365	250	46.2	50.0
Methyl tert-butyl ether	Ave	4.030	4.177	0.1000	25.9	25.0	3.7	20.0
trans-1,2-Dichloroethene	Ave	1.397	1.515	0.1000	27.1	25.0	8.5	20.0
Acrylonitrile	Ave	0.6239	0.7120		285	250	14.1	20.0
Hexane	Ave	2.260	2.438		27.0	25.0	7.9	20.0
1,1-Dichloroethane	Ave	2.503	2.806	0.2000	28.0	25.0	12.1	20.0
Vinyl acetate	Ave	3.731	4.102		55.0	50.0	9.9	20.0
2,2-Dichloropropane	Ave	1.469	1.566		26.7	25.0	6.6	20.0
cis-1,2-Dichloroethene	Ave	1.539	1.639	0.1000	26.6	25.0	6.5	20.0
2-Butanone (MEK)	Ave	0.7507	0.9407	0.1000	157	125	25.3*	20.0
Bromochloromethane	Ave	0.8090	0.9342		28.9	25.0	15.5	20.0
Tetrahydrofuran	Ave	0.5409	0.6062		56.0	50.0	12.1	20.0
Chloroform	Ave	2.503	2.590	0.2000	25.9	25.0	3.5	20.0
1,1,1-Trichloroethane	Ave	2.110	2.299	0.1000	27.2	25.0	9.0	20.0
Cyclohexane	Ave	2.628	2.792	0.1000	26.6	25.0	6.2	20.0
Carbon tetrachloride	Ave	1.889	2.091	0.1000	27.7	25.0	10.7	20.0
1,1-Dichloropropene	Ave	1.900	2.051		27.0	25.0	7.9	20.0
Benzene	Ave	5.604	5.986	0.5000	26.7	25.0	6.8	20.0
Isobutyl alcohol	Ave	0.0613	0.0784		799	625	27.8	50.0
1,2-Dichloroethane	Ave	2.192	2.338	0.1000	26.7	25.0	6.7	20.0
n-Heptane	Ave	2.853	2.702		23.7	25.0	-5.3	20.0
Trichloroethene	Ave	1.447	1.576	0.2000	27.2	25.0	8.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493246/3 Calibration Date: 09/21/2019 09:38

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S9341.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.492	2.573	0.1000	25.8	25.0	3.3	20.0
1,2-Dichloropropane	Ave	1.442	1.574	0.1000	27.3	25.0	9.1	20.0
Dibromomethane	Ave	0.9010	0.9654	0.1000	26.8	25.0	7.1	20.0
1,4-Dioxane	Ave	0.0048	0.0060		627	500	25.3	50.0
Bromodichloromethane	Ave	1.821	1.898	0.2000	26.1	25.0	4.2	20.0
2-Chloroethyl vinyl ether	Ave	1.042	1.060		25.4	25.0	1.8	20.0
cis-1,3-Dichloropropene	Ave	2.353	2.364	0.2000	25.1	25.0	0.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9375	1.047	0.1000	140	125	11.7	20.0
Toluene	Ave	1.815	1.883	0.4000	25.9	25.0	3.7	20.0
trans-1,3-Dichloropropene	Ave	1.039	1.082	0.1000	26.0	25.0	4.1	20.0
Ethyl methacrylate	Ave	0.997	1.015		25.4	25.0	1.8	20.0
1,1,2-Trichloroethane	Ave	0.5424	0.5451	0.1000	25.1	25.0	0.5	20.0
Tetrachloroethene	Ave	0.8430	0.9226	0.2000	27.4	25.0	9.4	20.0
1,3-Dichloropropane	Ave	1.112	1.210		27.2	25.0	8.8	20.0
2-Hexanone	Ave	0.6810	0.7552	0.1000	139	125	10.9	20.0
Dibromochloromethane	Ave	0.7091	0.7352	0.1000	25.9	25.0	3.7	20.0
1,2-Dibromoethane	Ave	0.7138	0.7646		26.8	25.0	7.1	20.0
Chlorobenzene	Ave	2.093	2.202	0.5000	26.3	25.0	5.2	20.0
Ethylbenzene	Ave	3.379	3.575	0.1000	26.5	25.0	5.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7236	0.8213		28.4	25.0	13.5	20.0
m,p-Xylene	Ave	1.422	1.435	0.1000	25.2	25.0	0.9	20.0
o-Xylene	Ave	1.370	1.387	0.3000	25.3	25.0	1.3	20.0
Styrene	Ave	2.239	2.353	0.3000	26.3	25.0	5.1	20.0
Bromoform	Ave	0.4838	0.4843	0.1000	25.0	25.0	0.0	50.0
Isopropylbenzene	Ave	3.162	3.306	0.1000	26.1	25.0	4.5	20.0
Bromobenzene	Ave	0.8418	0.9844		29.2	25.0	16.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7980	0.8458	0.3000	26.5	25.0	6.0	20.0
N-Propylbenzene	Ave	3.604	3.910		27.1	25.0	8.5	20.0
1,2,3-Trichloropropane	Ave	0.2869	0.3110		27.1	25.0	8.4	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.1661		15.4	25.0	-38.4	50.0
2-Chlorotoluene	Ave	0.7741	0.8292		26.8	25.0	7.1	20.0
1,3,5-Trimethylbenzene	Ave	2.636	2.783		26.4	25.0	5.6	20.0
4-Chlorotoluene	Ave	0.8346	0.8973		26.9	25.0	7.5	20.0
tert-Butylbenzene	Ave	0.6436	0.6560		25.5	25.0	1.9	20.0
1,2,4-Trimethylbenzene	Ave	2.719	2.795		25.7	25.0	2.8	20.0
sec-Butylbenzene	Ave	3.321	3.431		25.8	25.0	3.3	20.0
1,3-Dichlorobenzene	Ave	1.662	1.746	0.6000	26.3	25.0	5.1	20.0
4-Isopropyltoluene	Ave	3.068	3.160		25.8	25.0	3.0	20.0
1,4-Dichlorobenzene	Ave	1.701	1.783	0.5000	26.2	25.0	4.8	20.0
n-Butylbenzene	Ave	2.550	2.597		25.5	25.0	1.9	20.0
1,2-Dichlorobenzene	Ave	1.584	1.664	0.4000	26.3	25.0	5.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493246/3 Calibration Date: 09/21/2019 09:38

Instrument ID: HP5973S Calib Start Date: 09/10/2019 14:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/10/2019 17:20

Lab File ID: S9341.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1612	0.1472	0.0500	22.8	25.0	-8.7	50.0
1,2,4-Trichlorobenzene	Ave	1.142	1.037	0.2000	22.7	25.0	-9.2	20.0
Hexachlorobutadiene	Ave	0.4956	0.4137		20.9	25.0	-16.5	20.0
Naphthalene	Ave	2.984	2.511		21.0	25.0	-15.8	20.0
1,2,3-Trichlorobenzene	Ave	1.033	0.9306		22.5	25.0	-9.9	20.0
Dibromofluoromethane (Surr)	Ave	1.268	1.334		26.3	25.0	5.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7981	0.8690		27.2	25.0	8.9	20.0
Toluene-d8 (Surr)	Ave	2.476	2.584		26.1	25.0	4.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8963	0.9176		25.6	25.0	2.4	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9341.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Sep-2019 09:38:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0084330-003
Operator ID: OI Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Sep-2019 09:58:22 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0306

First Level Reviewer: izquierdoo Date: 21-Sep-2019 09:58:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	99	112189	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	229696	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	53	243093	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	149667	25.0	26.3	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	56	97490	25.0	27.2	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	90	593464	25.0	26.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	94	210772	25.0	25.6	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	96	157902	25.0	19.9	
12 Chloromethane	50	1.446	1.446	0.000	99	213735	25.0	24.2	
151 Butadiene	54	1.543	1.543	0.000	94	240646	25.0	28.3	
13 Vinyl chloride	62	1.543	1.543	0.000	64	182392	25.0	24.6	
14 Bromomethane	94	1.835	1.835	0.000	90	124110	25.0	23.7	
15 Chloroethane	64	1.927	1.927	0.000	99	119382	25.0	24.1	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	96	263569	25.0	24.6	
17 Trichlorofluoromethane	101	2.152	2.152	0.000	72	254524	25.0	24.9	
18 Ethyl ether	59	2.438	2.438	0.000	96	173912	25.0	28.9	
20 Acrolein	56	2.626	2.626	0.000	97	134333	125.0	133.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.651	2.651	0.000	75	158603	25.0	28.2	
22 1,1-Dichloroethene	96	2.657	2.657	0.000	95	145681	25.0	26.4	
23 Acetone	43	2.784	2.784	0.000	98	336805	125.0	144.7	
25 Iodomethane	142	2.821	2.821	0.000	98	292696	25.0	27.9	
26 Carbon disulfide	76	2.857	2.857	0.000	99	481709	25.0	26.7	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	85	291224	25.0	26.5	
27 Methyl acetate	43	3.082	3.082	0.000	96	341061	50.0	61.3	
30 Methylene Chloride	84	3.180	3.180	0.000	99	174707	25.0	28.0	
31 2-Methyl-2-propanol	59	3.362	3.362	0.000	92	173743	250.0	365.5	
32 Methyl tert-butyl ether	73	3.393	3.393	0.000	94	468643	25.0	25.9	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	95	170005	25.0	27.1	
33 Acrylonitrile	53	3.472	3.472	0.000	97	798803	250.0	285.3	
35 Hexane	57	3.600	3.600	0.000	95	273515	25.0	27.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.831	3.831	0.000	98	314802	25.0	28.0	
37 Vinyl acetate	43	3.886	3.886	0.000	97	920487	50.0	55.0	
44 2,2-Dichloropropane	77	4.348	4.348	0.000	92	175731	25.0	26.7	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	81	183877	25.0	26.6	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	93	527665	125.0	156.6	
48 Chlorobromomethane	128	4.634	4.634	0.000	93	104810	25.0	28.9	
49 Tetrahydrofuran	42	4.646	4.646	0.000	92	136025	50.0	56.0	
50 Chloroform	83	4.707	4.707	0.000	95	290612	25.0	25.9	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	95	257974	25.0	27.2	
52 Cyclohexane	56	4.822	4.822	0.000	94	313182	25.0	26.6	
55 Carbon tetrachloride	117	4.950	4.950	0.000	89	234635	25.0	27.7	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	90	230120	25.0	27.0	
57 Benzene	78	5.175	5.175	0.000	97	671599	25.0	26.7	
53 Isobutyl alcohol	43	5.200	5.200	0.000	92	219802	625.0	798.6	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	262303	25.0	26.7	
59 n-Heptane	43	5.346	5.346	0.000	95	303164	25.0	23.7	
62 Trichloroethene	95	5.784	5.784	0.000	95	176846	25.0	27.2	
64 Methylcyclohexane	83	5.899	5.899	0.000	94	288702	25.0	25.8	
65 1,2-Dichloropropane	63	6.027	6.027	0.000	89	176609	25.0	27.3	
67 Dibromomethane	93	6.167	6.167	0.000	86	108303	25.0	26.8	
66 1,4-Dioxane	88	6.179	6.179	0.000	31	27405	500.0	626.5	
68 Dichlorobromomethane	83	6.319	6.319	0.000	97	212894	25.0	26.1	
69 2-Chloroethyl vinyl ether	63	6.605	6.605	0.000	93	118973	25.0	25.4	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	88	265265	25.0	25.1	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	99	1202172	125.0	139.6	
74 Toluene	92	7.025	7.025	0.000	93	432616	25.0	25.9	
77 trans-1,3-Dichloropropene	75	7.311	7.311	0.000	98	248439	25.0	26.0	
75 Ethyl methacrylate	69	7.353	7.353	0.000	87	233031	25.0	25.4	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	95	125215	25.0	25.1	
81 Tetrachloroethene	166	7.554	7.554	0.000	85	211913	25.0	27.4	
82 1,3-Dichloropropane	76	7.663	7.663	0.000	96	277880	25.0	27.2	
80 2-Hexanone	43	7.724	7.724	0.000	96	867282	125.0	138.6	
83 Chlorodibromomethane	129	7.895	7.895	0.000	88	168868	25.0	25.9	
84 Ethylene Dibromide	107	7.998	7.998	0.000	98	175633	25.0	26.8	
87 Chlorobenzene	112	8.473	8.473	0.000	93	505748	25.0	26.3	
88 Ethylbenzene	91	8.564	8.564	0.000	98	821115	25.0	26.5	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	188657	25.0	28.4	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	329593	25.0	25.2	
91 o-Xylene	106	9.111	9.111	0.000	97	318558	25.0	25.3	
92 Styrene	104	9.142	9.142	0.000	93	540397	25.0	26.3	
95 Bromoform	173	9.397	9.397	0.000	97	111243	25.0	25.0	
94 Isopropylbenzene	105	9.495	9.495	0.000	95	803582	25.0	26.1	
101 Bromobenzene	156	9.841	9.841	0.000	90	239298	25.0	29.2	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	89	205617	25.0	26.5	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	950522	25.0	27.1	
100 1,2,3-Trichloropropane	110	9.939	9.939	0.000	86	75605	25.0	27.1	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	78	40387	25.0	15.4	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	201568	25.0	26.8	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	87	676639	25.0	26.4	
105 4-Chlorotoluene	126	10.139	10.139	0.000	95	218125	25.0	26.9	
106 tert-Butylbenzene	134	10.413	10.413	0.000	91	159465	25.0	25.5	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	77	679401	25.0	25.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	834107	25.0	25.8	
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	76	424349	25.0	26.3	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	768185	25.0	25.8	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	433377	25.0	26.2	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	631385	25.0	25.5	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	93	404558	25.0	26.3	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	76	35789	25.0	22.8	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	92	252168	25.0	22.7	
120 Hexachlorobutadiene	225	12.713	12.713	0.000	94	100576	25.0	20.9	
121 Naphthalene	128	12.816	12.816	0.000	97	610421	25.0	21.0	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	97	226213	25.0	22.5	

Reagents:

GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
S_8260_IS_00326	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added: 1.00	Units: uL	Run Reagent

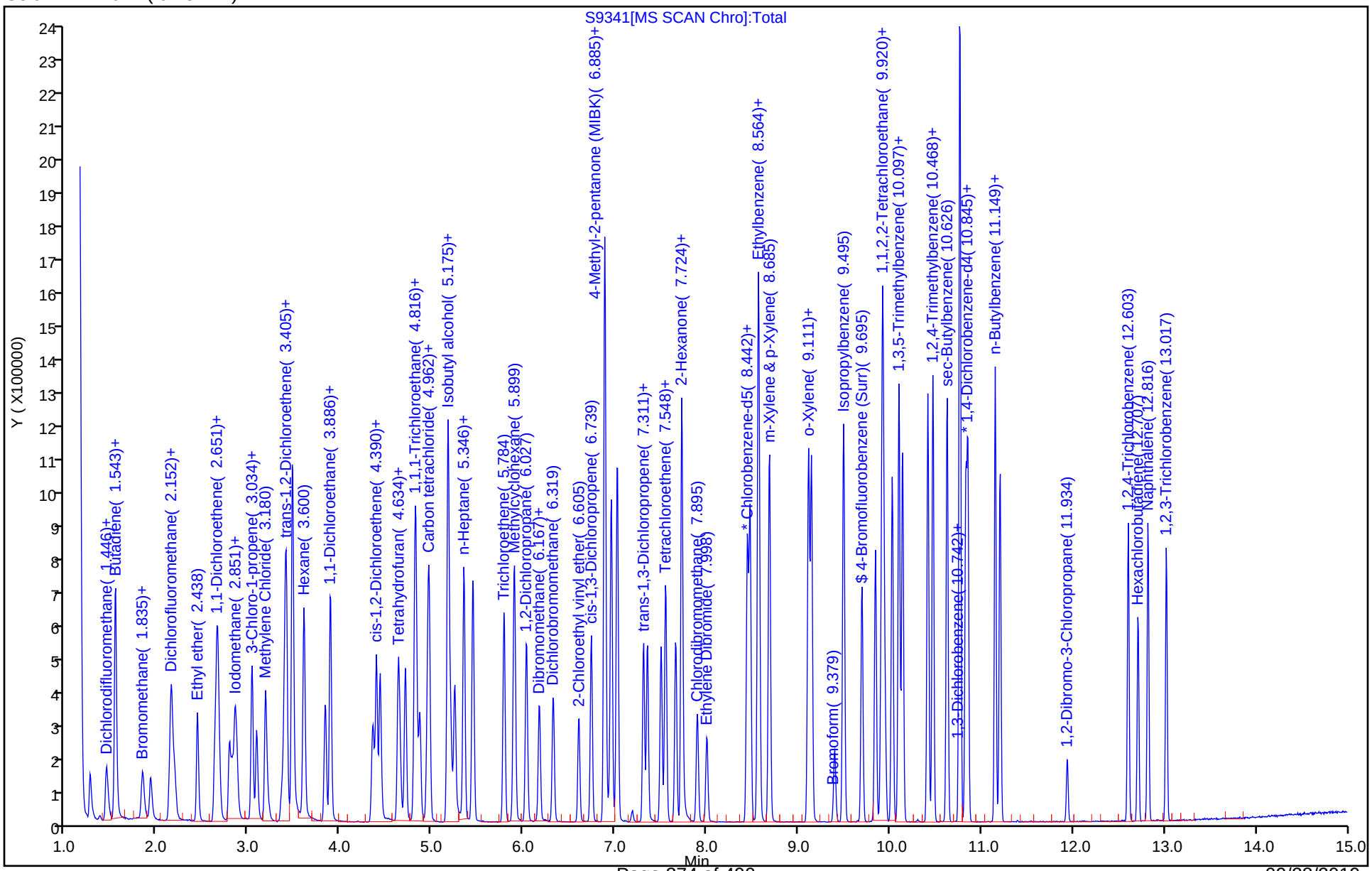
Report Date: 21-Sep-2019 09:58:23 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9341.D

Injection Date:	21-Sep-2019 09:38:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493390/3 Calibration Date: 09/22/2019 11:19

Instrument ID: HP5975T Calib Start Date: 09/18/2019 16:14

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/18/2019 19:01

Lab File ID: T5387.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.758	1.701	0.1000	24.2	25.0	-3.3	50.0
Chloromethane	Ave	1.607	1.514	0.1000	23.6	25.0	-5.8	20.0
Butadiene	Ave	1.419	1.479		26.1	25.0	4.2	20.0
Vinyl chloride	Ave	1.560	1.578	0.1000	25.3	25.0	1.2	20.0
Bromomethane	Ave	1.355	1.268	0.1000	23.4	25.0	-6.4	50.0
Chloroethane	Ave	1.155	1.088	0.1000	23.5	25.0	-5.9	50.0
Dichlorofluoromethane	Ave	2.730	2.519		23.1	25.0	-7.7	20.0
Trichlorofluoromethane	Ave	2.630	2.586	0.1000	24.6	25.0	-1.7	20.0
Ethyl ether	Ave	1.220	1.139		23.3	25.0	-6.7	20.0
Acrolein	Ave	0.2802	0.2619		117	125	-6.6	50.0
1,1-Dichloroethene	Ave	1.184	1.263	0.1000	26.7	25.0	6.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.323	1.443	0.1000	27.3	25.0	9.1	20.0
Acetone	Ave	0.5459	0.5919	0.1000	136	125	8.4	50.0
Iodomethane	Ave	2.156	2.295		26.6	25.0	6.5	20.0
Carbon disulfide	Ave	3.795	4.187	0.1000	27.6	25.0	10.3	20.0
Allyl chloride	Ave	1.757	1.763		25.1	25.0	0.3	20.0
Methyl acetate	Ave	1.223	1.193	0.1000	48.8	50.0	-2.4	50.0
Methylene Chloride	Lin1		1.513	0.1000	26.5	25.0	5.9	20.0
2-Methyl-2-propanol	Ave	0.2533	0.2414		238	250	-4.7	50.0
Methyl tert-butyl ether	Ave	3.873	4.023	0.1000	26.0	25.0	3.8	20.0
trans-1,2-Dichloroethene	Ave	1.335	1.427	0.1000	26.7	25.0	6.9	20.0
Acrylonitrile	Ave	0.6127	0.6273		256	250	2.4	20.0
Hexane	Ave	1.919	1.912		24.9	25.0	-0.3	20.0
1,1-Dichloroethane	Ave	2.237	2.323	0.2000	26.0	25.0	3.8	20.0
Vinyl acetate	Ave	2.614	2.774		53.1	50.0	6.1	20.0
2,2-Dichloropropane	Ave	1.796	1.984		27.6	25.0	10.5	20.0
cis-1,2-Dichloroethene	Ave	1.458	1.581	0.1000	27.1	25.0	8.5	20.0
2-Butanone (MEK)	Ave	0.7597	0.8116	0.1000	134	125	6.8	20.0
Bromochloromethane	Ave	0.7557	0.8192		27.1	25.0	8.4	20.0
Tetrahydrofuran	Ave	0.5213	0.4983		47.8	50.0	-4.4	20.0
Chloroform	Ave	2.579	2.603	0.2000	25.2	25.0	0.9	20.0
1,1,1-Trichloroethane	Ave	2.085	2.293	0.1000	27.5	25.0	10.0	20.0
Cyclohexane	Ave	2.107	2.201	0.1000	26.1	25.0	4.5	20.0
Carbon tetrachloride	Ave	1.814	1.985	0.1000	27.4	25.0	9.4	20.0
1,1-Dichloropropene	Ave	1.746	1.898		27.2	25.0	8.7	20.0
Benzene	Ave	5.154	5.406	0.5000	26.2	25.0	4.9	20.0
Isobutyl alcohol	Ave	0.0864	0.0869		629	625	0.6	50.0
1,2-Dichloroethane	Ave	2.101	2.153	0.1000	25.6	25.0	2.5	20.0
n-Heptane	Ave	1.759	1.865		26.5	25.0	6.1	20.0
Trichloroethene	Ave	1.395	1.463	0.2000	26.2	25.0	4.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493390/3 Calibration Date: 09/22/2019 11:19

Instrument ID: HP5975T Calib Start Date: 09/18/2019 16:14

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/18/2019 19:01

Lab File ID: T5387.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.235	2.396	0.1000	26.8	25.0	7.2	20.0
1,2-Dichloropropane	Ave	1.227	1.290	0.1000	26.3	25.0	5.1	20.0
1,4-Dioxane	Ave	0.0066	0.0062		469	500	-6.2	50.0
Dibromomethane	Ave	0.9375	0.9708	0.1000	25.9	25.0	3.6	20.0
Bromodichloromethane	Ave	1.649	1.818	0.2000	27.6	25.0	10.3	20.0
2-Chloroethyl vinyl ether	Ave	0.8706	0.9219		26.5	25.0	5.9	20.0
cis-1,3-Dichloropropene	Ave	1.894	2.068	0.2000	27.3	25.0	9.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4133	0.4236	0.1000	128	125	2.5	20.0
Toluene	Ave	0.8774	0.8898	0.4000	25.4	25.0	1.4	20.0
trans-1,3-Dichloropropene	Ave	0.4753	0.5142	0.1000	27.0	25.0	8.2	20.0
Ethyl methacrylate	Ave	0.4600	0.4745		25.8	25.0	3.1	20.0
1,1,2-Trichloroethane	Ave	0.2844	0.2878	0.1000	25.3	25.0	1.2	20.0
Tetrachloroethene	Ave	0.3797	0.4133	0.2000	27.2	25.0	8.9	20.0
1,3-Dichloropropane	Ave	0.5656	0.5664		25.0	25.0	0.1	20.0
2-Hexanone	Ave	0.2922	0.3086	0.1000	132	125	5.6	20.0
Dibromochloromethane	Ave	0.3309	0.3506	0.1000	26.5	25.0	6.0	20.0
1,2-Dibromoethane	Ave	0.3567	0.3716		26.0	25.0	4.2	20.0
Chlorobenzene	Ave	0.999	0.9922	0.5000	24.8	25.0	-0.7	20.0
Ethylbenzene	Ave	1.677	1.690	0.1000	25.2	25.0	0.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3187	0.3412		26.8	25.0	7.1	20.0
m,p-Xylene	Ave	0.6339	0.6529	0.1000	25.7	25.0	3.0	20.0
o-Xylene	Ave	0.6184	0.6355	0.3000	25.7	25.0	2.8	20.0
Styrene	Ave	1.006	1.064	0.3000	26.4	25.0	5.8	20.0
Bromoform	Ave	0.2171	0.2361	0.1000	27.2	25.0	8.8	50.0
Isopropylbenzene	Ave	2.982	3.012	0.1000	25.2	25.0	1.0	20.0
Bromobenzene	Ave	0.7711	0.7605		24.7	25.0	-1.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9083	0.9011	0.3000	24.8	25.0	-0.8	20.0
N-Propylbenzene	Ave	3.673	3.688		25.1	25.0	0.4	20.0
1,2,3-Trichloropropane	Ave	0.3217	0.3149		24.5	25.0	-2.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2653	0.2552		24.0	25.0	-3.8	50.0
2-Chlorotoluene	Ave	0.7186	0.7181		25.0	25.0	-0.0	20.0
1,3,5-Trimethylbenzene	Ave	2.536	2.601		25.6	25.0	2.6	20.0
4-Chlorotoluene	Ave	2.429	2.260		23.3	25.0	-7.0	20.0
tert-Butylbenzene	Ave	0.5301	0.5376		25.4	25.0	1.4	20.0
1,2,4-Trimethylbenzene	Ave	2.599	2.630		25.3	25.0	1.2	20.0
sec-Butylbenzene	Ave	3.248	3.325		25.6	25.0	2.4	20.0
4-Isopropyltoluene	Ave	2.755	2.859		25.9	25.0	3.8	20.0
1,3-Dichlorobenzene	Ave	1.562	1.538	0.6000	24.6	25.0	-1.6	20.0
1,4-Dichlorobenzene	Ave	1.600	1.537	0.5000	24.0	25.0	-3.9	20.0
n-Butylbenzene	Ave	2.609	2.620		25.1	25.0	0.4	20.0
1,2-Dichlorobenzene	Ave	1.535	1.528	0.4000	24.9	25.0	-0.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493390/3 Calibration Date: 09/22/2019 11:19

Instrument ID: HP5975T Calib Start Date: 09/18/2019 16:14

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/18/2019 19:01

Lab File ID: T5387.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1840	0.1737	0.0500	23.6	25.0	-5.6	50.0
1,2,4-Trichlorobenzene	Ave	1.152	1.103	0.2000	23.9	25.0	-4.3	20.0
Hexachlorobutadiene	Lin1		0.5614		25.6	25.0	2.5	20.0
Naphthalene	Ave	3.076	3.062		24.9	25.0	-0.4	20.0
1,2,3-Trichlorobenzene	Ave	1.133	1.097		24.2	25.0	-3.2	20.0
Dibromofluoromethane (Surr)	Ave	1.353	1.460		27.0	25.0	7.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.729	1.833		26.5	25.0	6.1	20.0
Toluene-d8 (Surr)	Ave	1.327	1.374		25.9	25.0	3.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4150	0.4377		26.4	25.0	5.5	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5387.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 22-Sep-2019 11:19:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvis
Misc. Info.: 480-0084351-003
Operator ID: RF Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 11:36:16 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0334

First Level Reviewer: farrellr Date: 22-Sep-2019 11:36:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	195540	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	763084	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	95	426504	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	0.000	93	285404	25.0	27.0	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	358496	25.0	26.5	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1048846	25.0	25.9	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	333983	25.0	26.4	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	332571	25.0	24.2	
13 Chloromethane	50	1.371	1.371	0.000	98	295974	25.0	23.6	
151 Butadiene	54	1.434	1.434	0.000	91	289259	25.0	26.1	
14 Vinyl chloride	62	1.454	1.454	0.000	98	308657	25.0	25.3	
15 Bromomethane	94	1.713	1.713	0.000	92	247887	25.0	23.4	
16 Chloroethane	64	1.776	1.776	0.000	100	212658	25.0	23.5	
18 Dichlorofluoromethane	67	1.993	1.993	0.000	97	492550	25.0	23.1	
17 Trichlorofluoromethane	101	2.004	2.004	0.000	98	505641	25.0	24.6	
19 Ethyl ether	59	2.232	2.232	0.000	90	222642	25.0	23.3	
21 Acrolein	56	2.408	2.408	0.000	99	256007	125.0	116.8	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	97	247031	25.0	26.7	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.449	0.000	93	282221	25.0	27.3	
23 Acetone	43	2.563	2.563	0.000	99	578689	125.0	135.5	
24 Iodomethane	142	2.594	2.594	0.000	98	448702	25.0	26.6	
25 Carbon disulfide	76	2.625	2.625	0.000	100	818777	25.0	27.6	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	84	344720	25.0	25.1	
28 Methyl acetate	43	2.822	2.822	0.000	97	466635	50.0	48.8	
30 Methylene Chloride	84	2.916	2.916	0.000	92	295870	25.0	26.5	
31 2-Methyl-2-propanol	59	3.081	3.081	0.000	97	472074	250.0	238.3	
33 Methyl tert-butyl ether	73	3.112	3.112	0.000	99	786563	25.0	26.0	
32 trans-1,2-Dichloroethene	96	3.112	3.112	0.000	99	279040	25.0	26.7	
34 Acrylonitrile	53	3.164	3.164	0.000	98	1226606	250.0	256.0	
35 Hexane	57	3.278	3.278	0.000	93	373910	25.0	24.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	454145	25.0	26.0	
39 Vinyl acetate	43	3.517	3.517	0.000	98	1085010	50.0	53.1	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	92	387914	25.0	27.6	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	82	309171	25.0	27.1	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	793477	125.0	133.5	
47 Chlorobromomethane	128	4.149	4.149	0.000	91	160191	25.0	27.1	
48 Tetrahydrofuran	42	4.159	4.159	0.000	82	194859	50.0	47.8	
50 Chloroform	83	4.201	4.201	0.000	94	508974	25.0	25.2	
52 Cyclohexane	56	4.304	4.304	0.000	92	430360	25.0	26.1	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	448342	25.0	27.5	
53 Carbon tetrachloride	117	4.408	4.408	0.000	96	388233	25.0	27.4	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	95	371183	25.0	27.2	
55 Benzene	78	4.584	4.584	0.000	96	1057164	25.0	26.2	
56 Isobutyl alcohol	43	4.594	4.594	0.000	89	424935	625.0	629.0	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	98	420921	25.0	25.6	
59 n-Heptane	43	4.719	4.719	0.000	87	364764	25.0	26.5	
60 Trichloroethene	95	5.071	5.071	0.000	96	286164	25.0	26.2	
62 Methylcyclohexane	83	5.164	5.164	0.000	91	468534	25.0	26.8	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	252315	25.0	26.3	
66 1,4-Dioxane	88	5.372	5.372	0.000	48	94992	500.0	469.0	
65 Dibromomethane	93	5.372	5.372	0.000	93	189838	25.0	25.9	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	355545	25.0	27.6	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	180268	25.0	26.5	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	94	404443	25.0	27.3	
72 4-Methyl-2-pentanone (MIBK	43	5.910	5.910	0.000	95	1616089	125.0	128.1	
73 Toluene	92	6.024	6.024	0.000	98	678977	25.0	25.4	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	96	392337	25.0	27.0	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	362067	25.0	25.8	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	219587	25.0	25.3	
79 Tetrachloroethene	166	6.429	6.429	0.000	97	315414	25.0	27.2	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	92	432219	25.0	25.0	
81 2-Hexanone	43	6.543	6.543	0.000	96	1177257	125.0	132.0	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	267510	25.0	26.5	
83 Ethylene Dibromide	107	6.760	6.760	0.000	96	283560	25.0	26.0	
86 Chlorobenzene	112	7.113	7.113	0.000	94	757106	25.0	24.8	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1289239	25.0	25.2	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	92	260382	25.0	26.8	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	498232	25.0	25.7	
91 o-Xylene	106	7.589	7.589	0.000	98	484941	25.0	25.7	
92 Styrene	104	7.610	7.610	0.000	95	811998	25.0	26.4	
93 Bromoform	173	7.807	7.807	0.000	96	180189	25.0	27.2	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1284573	25.0	25.2	
97 Bromobenzene	156	8.149	8.149	0.000	94	324356	25.0	24.7	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	384323	25.0	24.8	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1573081	25.0	25.1	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	90	134294	25.0	24.5	
101 trans-1,4-Dichloro-2-buten	53	8.221	8.221	0.000	74	108823	25.0	24.0	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	306257	25.0	25.0	
104 1,3,5-Trimethylbenzene	105	8.335	8.335	0.000	94	1109271	25.0	25.6	
102 4-Chlorotoluene	91	8.377	8.377	0.000	98	963733	25.0	23.3	
106 tert-Butylbenzene	134	8.605	8.605	0.000	92	229286	25.0	25.4	
107 1,2,4-Trimethylbenzene	105	8.646	8.646	0.000	97	1121631	25.0	25.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	1418261	25.0	25.6	
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1219546	25.0	25.9	
110 1,3-Dichlorobenzene	146	8.905	8.905	0.000	97	655865	25.0	24.6	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	94	655680	25.0	24.0	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	1117448	25.0	25.1	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	651588	25.0	24.9	
117 1,2-Dibromo-3-Chloropropan	75	9.962	9.962	0.000	81	74100	25.0	23.6	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	470277	25.0	23.9	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	97	239426	25.0	25.6	
121 Naphthalene	128	10.823	10.823	0.000	97	1306108	25.0	24.9	
122 1,2,3-Trichlorobenzene	180	11.019	11.019	0.000	95	468003	25.0	24.2	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

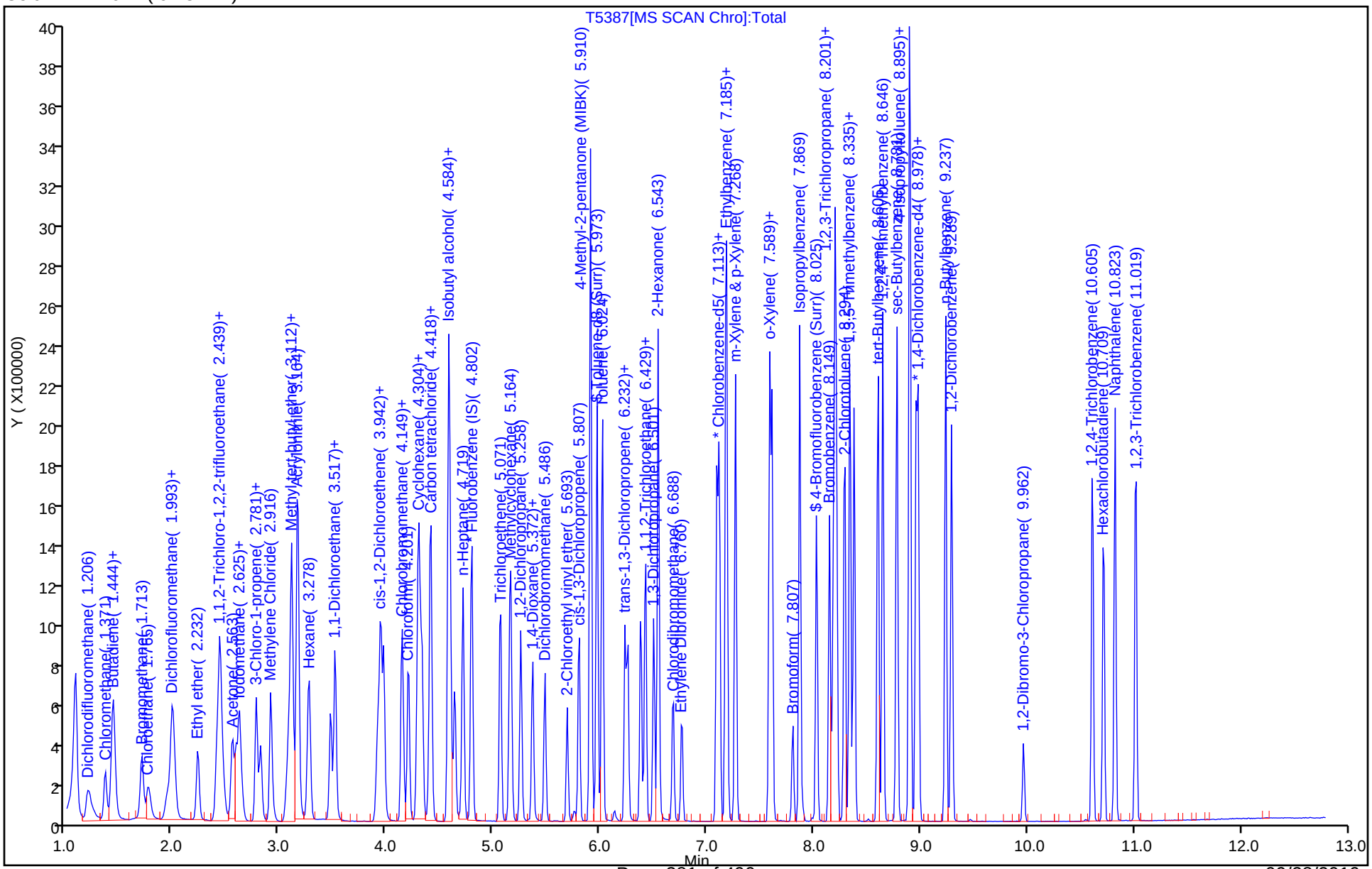
Report Date: 22-Sep-2019 11:36:18 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5387.D

Injection Date:	22-Sep-2019 11:19:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493682/9 Calibration Date: 09/24/2019 10:04

Instrument ID: HP5975T Calib Start Date: 09/18/2019 16:14

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/18/2019 19:01

Lab File ID: T5478.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.758	1.224	0.1000	17.4	25.0	-30.4	50.0
Chloromethane	Ave	1.607	1.161	0.1000	18.1	25.0	-27.7*	20.0
Butadiene	Ave	1.419	1.076		19.0	25.0	-24.2*	20.0
Vinyl chloride	Ave	1.560	1.235	0.1000	19.8	25.0	-20.9*	20.0
Bromomethane	Ave	1.355	1.036	0.1000	19.1	25.0	-23.6	50.0
Chloroethane	Ave	1.155	0.8465	0.1000	18.3	25.0	-26.7	50.0
Dichlorofluoromethane	Ave	2.730	2.114		19.4	25.0	-22.6*	20.0
Trichlorofluoromethane	Ave	2.630	2.145	0.1000	20.4	25.0	-18.4	20.0
Ethyl ether	Ave	1.220	1.172		24.0	25.0	-3.9	20.0
Acrolein	Ave	0.2802	0.2437		109	125	-13.0	50.0
1,1-Dichloroethene	Ave	1.184	1.360	0.1000	28.7	25.0	14.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.323	1.559	0.1000	29.5	25.0	17.9	20.0
Acetone	Ave	0.5459	0.5721	0.1000	131	125	4.8	50.0
Iodomethane	Ave	2.156	2.384		27.7	25.0	10.6	20.0
Carbon disulfide	Ave	3.795	4.457	0.1000	29.4	25.0	17.5	20.0
Allyl chloride	Ave	1.757	1.850		26.3	25.0	5.3	20.0
Methyl acetate	Ave	1.223	1.139	0.1000	46.6	50.0	-6.9	50.0
Methylene Chloride	Lin1		1.521	0.1000	26.6	25.0	6.5	20.0
2-Methyl-2-propanol	Ave	0.2533	0.2307		228	250	-8.9	50.0
Methyl tert-butyl ether	Ave	3.873	4.005	0.1000	25.9	25.0	3.4	20.0
trans-1,2-Dichloroethene	Ave	1.335	1.472	0.1000	27.6	25.0	10.3	20.0
Acrylonitrile	Ave	0.6127	0.5947		243	250	-2.9	20.0
Hexane	Ave	1.919	2.145		27.9	25.0	11.8	20.0
1,1-Dichloroethane	Ave	2.237	2.375	0.2000	26.5	25.0	6.2	20.0
Vinyl acetate	Ave	2.614	2.840		54.3	50.0	8.6	20.0
2,2-Dichloropropane	Ave	1.796	2.100		29.2	25.0	16.9	20.0
cis-1,2-Dichloroethene	Ave	1.458	1.590	0.1000	27.3	25.0	9.1	20.0
2-Butanone (MEK)	Ave	0.7597	0.7841	0.1000	129	125	3.2	20.0
Bromochloromethane	Ave	0.7557	0.8175		27.0	25.0	8.2	20.0
Tetrahydrofuran	Ave	0.5213	0.4759		45.6	50.0	-8.7	20.0
Chloroform	Ave	2.579	2.619	0.2000	25.4	25.0	1.5	20.0
1,1,1-Trichloroethane	Ave	2.085	2.374	0.1000	28.5	25.0	13.9	20.0
Cyclohexane	Ave	2.107	2.392	0.1000	28.4	25.0	13.5	20.0
Carbon tetrachloride	Ave	1.814	2.044	0.1000	28.2	25.0	12.7	20.0
1,1-Dichloropropene	Ave	1.746	1.995		28.6	25.0	14.3	20.0
Benzene	Ave	5.154	5.489	0.5000	26.6	25.0	6.5	20.0
Isobutyl alcohol	Ave	0.0864	0.0792		573	625	-8.3	50.0
1,2-Dichloroethane	Ave	2.101	2.122	0.1000	25.3	25.0	1.0	20.0
n-Heptane	Ave	1.759	2.049		29.1	25.0	16.5	20.0
Trichloroethene	Ave	1.395	1.525	0.2000	27.3	25.0	9.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493682/9 Calibration Date: 09/24/2019 10:04

Instrument ID: HP5975T Calib Start Date: 09/18/2019 16:14

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/18/2019 19:01

Lab File ID: T5478.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.235	2.656	0.1000	29.7	25.0	18.8	20.0
1,2-Dichloropropane	Ave	1.227	1.292	0.1000	26.3	25.0	5.3	20.0
1,4-Dioxane	Ave	0.0066	0.0059		443	500	-11.4	50.0
Dibromomethane	Ave	0.9375	0.9743	0.1000	26.0	25.0	3.9	20.0
Bromodichloromethane	Ave	1.649	1.866	0.2000	28.3	25.0	13.2	20.0
2-Chloroethyl vinyl ether	Ave	0.8706	0.9286		26.7	25.0	6.7	20.0
cis-1,3-Dichloropropene	Ave	1.894	2.091	0.2000	27.6	25.0	10.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4133	0.4181	0.1000	126	125	1.2	20.0
Toluene	Ave	0.8774	0.9364	0.4000	26.7	25.0	6.7	20.0
trans-1,3-Dichloropropene	Ave	0.4753	0.5258	0.1000	27.7	25.0	10.6	20.0
Ethyl methacrylate	Ave	0.4600	0.4841		26.3	25.0	5.2	20.0
1,1,2-Trichloroethane	Ave	0.2844	0.2880	0.1000	25.3	25.0	1.3	20.0
Tetrachloroethene	Ave	0.3797	0.4385	0.2000	28.9	25.0	15.5	20.0
1,3-Dichloropropane	Ave	0.5656	0.5797		25.6	25.0	2.5	20.0
2-Hexanone	Ave	0.2922	0.3045	0.1000	130	125	4.2	20.0
Dibromochloromethane	Ave	0.3309	0.3633	0.1000	27.4	25.0	9.8	20.0
1,2-Dibromoethane	Ave	0.3567	0.3717		26.0	25.0	4.2	20.0
Chlorobenzene	Ave	0.999	1.026	0.5000	25.7	25.0	2.7	20.0
Ethylbenzene	Ave	1.677	1.770	0.1000	26.4	25.0	5.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3187	0.3536		27.7	25.0	10.9	20.0
m,p-Xylene	Ave	0.6339	0.6772	0.1000	26.7	25.0	6.8	20.0
o-Xylene	Ave	0.6184	0.6673	0.3000	27.0	25.0	7.9	20.0
Styrene	Ave	1.006	1.117	0.3000	27.8	25.0	11.0	20.0
Bromoform	Ave	0.2171	0.2432	0.1000	28.0	25.0	12.0	50.0
Isopropylbenzene	Ave	2.982	3.277	0.1000	27.5	25.0	9.9	20.0
Bromobenzene	Ave	0.7711	0.8148		26.4	25.0	5.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9083	0.9175	0.3000	25.3	25.0	1.0	20.0
N-Propylbenzene	Ave	3.673	3.919		26.7	25.0	6.7	20.0
1,2,3-Trichloropropane	Ave	0.3217	0.3084		24.0	25.0	-4.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2653	0.2625		24.7	25.0	-1.1	50.0
2-Chlorotoluene	Ave	0.7186	0.7579		26.4	25.0	5.5	20.0
1,3,5-Trimethylbenzene	Ave	2.536	2.802		27.6	25.0	10.5	20.0
4-Chlorotoluene	Ave	2.429	2.755		28.4	25.0	13.5	20.0
tert-Butylbenzene	Ave	0.5301	0.5897		27.8	25.0	11.2	20.0
1,2,4-Trimethylbenzene	Ave	2.599	2.875		27.7	25.0	10.6	20.0
sec-Butylbenzene	Ave	3.248	3.616		27.8	25.0	11.3	20.0
4-Isopropyltoluene	Ave	2.755	3.096		28.1	25.0	12.4	20.0
1,3-Dichlorobenzene	Ave	1.562	1.602	0.6000	25.6	25.0	2.6	20.0
1,4-Dichlorobenzene	Ave	1.600	1.631	0.5000	25.5	25.0	1.9	20.0
n-Butylbenzene	Ave	2.609	2.889		27.7	25.0	10.7	20.0
1,2-Dichlorobenzene	Ave	1.535	1.575	0.4000	25.6	25.0	2.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Lab Sample ID: CCVIS 480-493682/9 Calibration Date: 09/24/2019 10:04

Instrument ID: HP5975T Calib Start Date: 09/18/2019 16:14

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 09/18/2019 19:01

Lab File ID: T5478.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1840	0.1727	0.0500	23.5	25.0	-6.2	50.0
1,2,4-Trichlorobenzene	Ave	1.152	1.176	0.2000	25.5	25.0	2.1	20.0
Hexachlorobutadiene	Lin1		0.6121		27.9	25.0	11.7	20.0
Naphthalene	Ave	3.076	3.221		26.2	25.0	4.7	20.0
1,2,3-Trichlorobenzene	Ave	1.133	1.177		26.0	25.0	3.9	20.0
Dibromofluoromethane (Surr)	Ave	1.353	1.330		24.6	25.0	-1.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.729	1.669		24.1	25.0	-3.4	20.0
Toluene-d8 (Surr)	Ave	1.327	1.285		24.2	25.0	-3.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4150	0.4186		25.2	25.0	0.9	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5478.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Sep-2019 10:04:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Operator ID: KN Instrument ID: HP5975T
Sublist: chrom-T-8260*sub48

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Sep-2019 09:15:28 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: nowakk Date: 24-Sep-2019 10:24:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	211759	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	86	814109	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	95	446770	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	0.000	92	281608	25.0	24.6	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	353436	25.0	24.1	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1046031	25.0	24.2	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	340770	25.0	25.2	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	259098	25.0	17.4	
13 Chloromethane	50	1.361	1.361	0.000	99	245930	25.0	18.1	
151 Butadiene	54	1.434	1.434	0.000	92	227864	25.0	19.0	
14 Vinyl chloride	62	1.454	1.454	0.000	98	261423	25.0	19.8	
15 Bromomethane	94	1.714	1.714	0.000	92	219299	25.0	19.1	
16 Chloroethane	64	1.776	1.776	0.000	99	179255	25.0	18.3	
18 Dichlorofluoromethane	67	1.993	1.993	0.000	97	447614	25.0	19.4	
17 Trichlorofluoromethane	101	2.004	2.004	0.000	97	454276	25.0	20.4	
19 Ethyl ether	59	2.232	2.232	0.000	90	248263	25.0	24.0	
21 Acrolein	56	2.408	2.408	0.000	99	258045	125.0	108.7	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	98	287887	25.0	28.7	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.449	0.000	96	330103	25.0	29.5	
23 Acetone	43	2.553	2.553	0.000	99	605726	125.0	131.0	
24 Iodomethane	142	2.594	2.594	0.000	97	504927	25.0	27.7	
25 Carbon disulfide	76	2.625	2.625	0.000	100	943853	25.0	29.4	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	85	391854	25.0	26.3	
28 Methyl acetate	43	2.822	2.822	0.000	97	482456	50.0	46.6	
30 Methylene Chloride	84	2.916	2.916	0.000	91	322000	25.0	26.6	
31 2-Methyl-2-propanol	59	3.071	3.071	0.000	97	488468	250.0	227.7	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	99	848137	25.0	25.9	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	98	311677	25.0	27.6	
34 Acrylonitrile	53	3.164	3.164	0.000	98	1259229	250.0	242.6	
35 Hexane	57	3.278	3.278	0.000	92	454170	25.0	27.9	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	502883	25.0	26.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Vinyl acetate	43	3.517	3.517	0.000	98	1202675	50.0	54.3	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	92	444770	25.0	29.2	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	83	336797	25.0	27.3	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	100	830222	125.0	129.0	
47 Chlorobromomethane	128	4.138	4.138	0.000	92	173118	25.0	27.0	
48 Tetrahydrofuran	42	4.149	4.149	0.000	83	201565	50.0	45.6	
50 Chloroform	83	4.201	4.201	0.000	95	554527	25.0	25.4	
52 Cyclohexane	56	4.304	4.304	0.000	91	506450	25.0	28.4	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	502732	25.0	28.5	
53 Carbon tetrachloride	117	4.408	4.408	0.000	96	432909	25.0	28.2	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	96	422445	25.0	28.6	
55 Benzene	78	4.584	4.584	0.000	97	1162382	25.0	26.6	
56 Isobutyl alcohol	43	4.594	4.594	0.000	94	419188	625.0	573.0	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	98	449382	25.0	25.3	
59 n-Heptane	43	4.719	4.719	0.000	87	433942	25.0	29.1	
60 Trichloroethene	95	5.061	5.061	0.000	97	322941	25.0	27.3	
62 Methylcyclohexane	83	5.164	5.164	0.000	90	562341	25.0	29.7	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	89	273575	25.0	26.3	
66 1,4-Dioxane	88	5.372	5.372	0.000	47	95719	500.0	442.9	
65 Dibromomethane	93	5.372	5.372	0.000	95	206318	25.0	26.0	
67 Dichlorobromomethane	83	5.486	5.486	0.000	99	395185	25.0	28.3	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	93	196629	25.0	26.7	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	93	442753	25.0	27.6	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	1701814	125.0	126.4	
73 Toluene	92	6.025	6.025	0.000	98	762364	25.0	26.7	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	95	428087	25.0	27.7	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	394095	25.0	26.3	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	92	234438	25.0	25.3	
79 Tetrachloroethene	166	6.429	6.429	0.000	97	357003	25.0	28.9	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	91	471934	25.0	25.6	
81 2-Hexanone	43	6.543	6.543	0.000	96	1239310	125.0	130.2	
82 Chlorodibromomethane	129	6.688	6.688	0.000	89	295728	25.0	27.4	
83 Ethylene Dibromide	107	6.760	6.760	0.000	98	302613	25.0	26.0	
86 Chlorobenzene	112	7.113	7.113	0.000	94	835554	25.0	25.7	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1440616	25.0	26.4	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	93	287839	25.0	27.7	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	551325	25.0	26.7	
91 o-Xylene	106	7.589	7.589	0.000	98	543254	25.0	27.0	
92 Styrene	104	7.610	7.610	0.000	95	909084	25.0	27.8	
93 Bromoform	173	7.807	7.807	0.000	95	197975	25.0	28.0	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1464196	25.0	27.5	
97 Bromobenzene	156	8.149	8.149	0.000	94	364038	25.0	26.4	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	409905	25.0	25.3	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1751097	25.0	26.7	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	90	137780	25.0	24.0	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	74	117273	25.0	24.7	
105 2-Chlorotoluene	126	8.294	8.294	0.000	95	338598	25.0	26.4	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	1251629	25.0	27.6	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	1231011	25.0	28.4	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	263440	25.0	27.8	
107 1,2,4-Trimethylbenzene	105	8.646	8.646	0.000	97	1284401	25.0	27.7	
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	1615495	25.0	27.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 4-Isopropyltoluene	119	8.895	8.895	0.000	96	1383018	25.0	28.1	
110 1,3-Dichlorobenzene	146	8.905	8.905	0.000	98	715888	25.0	25.6	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	728731	25.0	25.5	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	1290745	25.0	27.7	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	703553	25.0	25.6	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.963	0.000	81	77138	25.0	23.5	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	525468	25.0	25.5	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	98	273448	25.0	27.9	
121 Naphthalene	128	10.823	10.823	0.000	97	1439023	25.0	26.2	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	95	526045	25.0	26.0	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00362	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

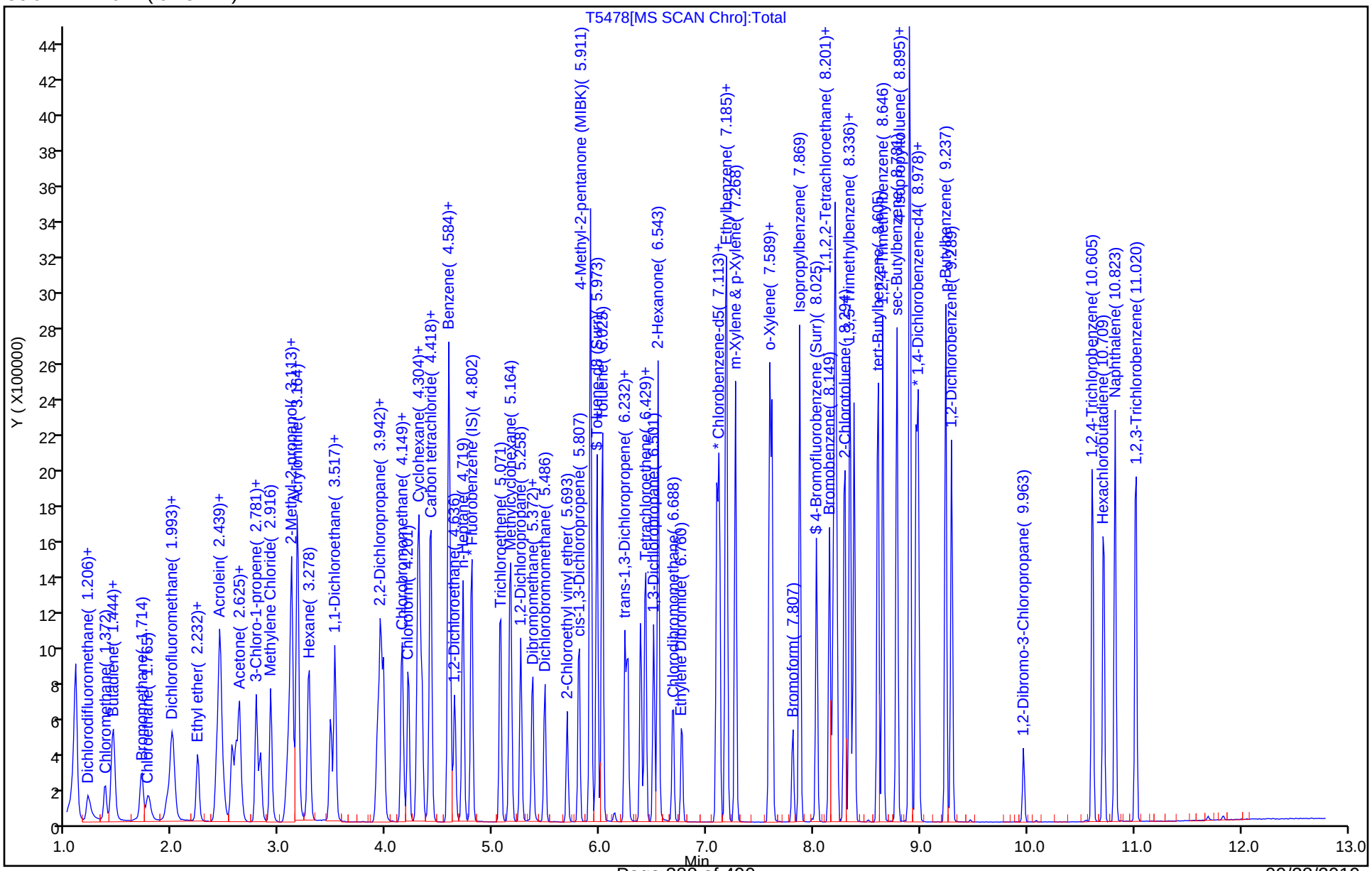
Report Date: 25-Sep-2019 09:15:30 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5478.D

Injection Date:	24-Sep-2019 10:04:30	Instrument ID:	HP5975T	Operator ID:	KN
Lims ID:	CCVIS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8766.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	10-Sep-2019 13:48:30	ALS Bottle#:	2	Worklist Smp#:	5
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084010-005				
Operator ID:	kn	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	11-Sep-2019 11:14:16	Calib Date:	10-Sep-2019 21:32:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0328				
First Level Reviewer: nowakk		Date:	10-Sep-2019 13:57:37		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.765	3.765	0.000	0	230875	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

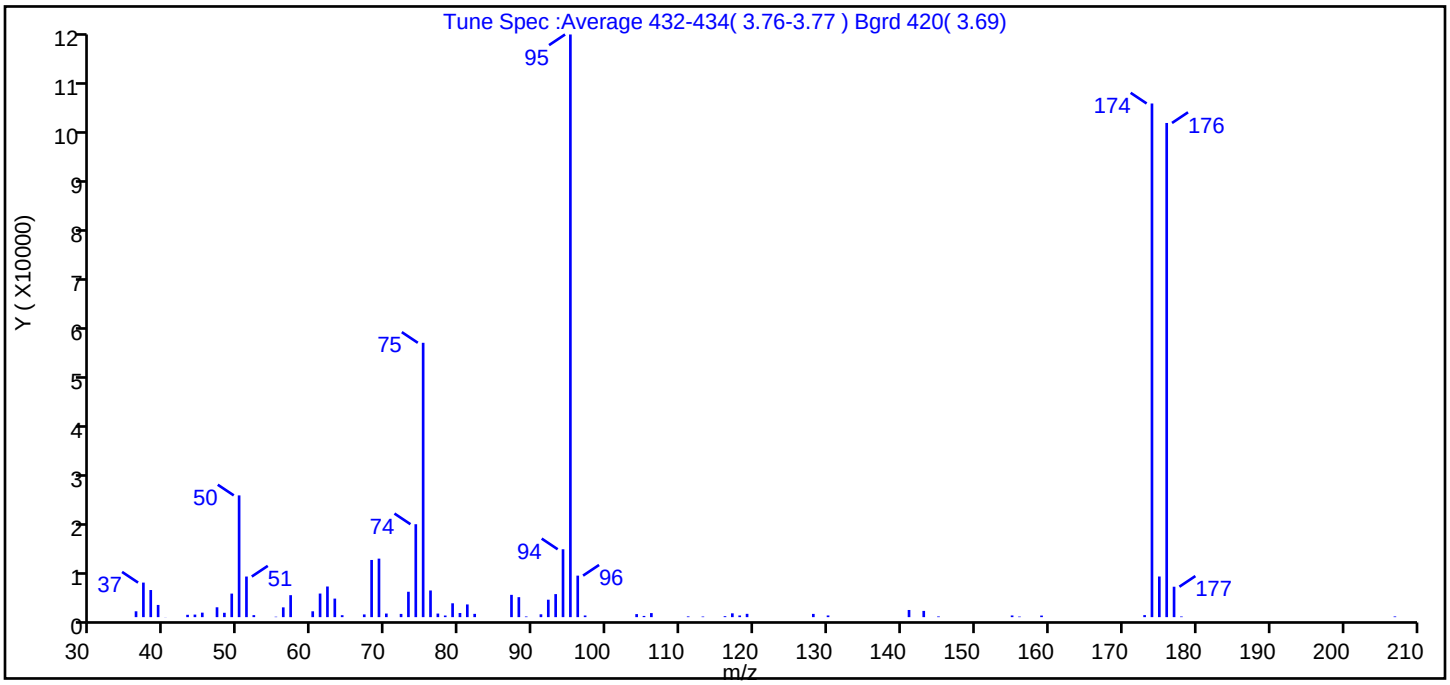
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8766.D
Injection Date: 10-Sep-2019 13:48:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: kn ALS Bottle#: 2 Worklist Smp#: 5
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.9
75	30 to 60% of m/z 95	47.1
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	88.2
175	5 to 9% of m/z 174	7.0 (7.9)
176	Greater than 95% but less than 101% of m/z 174	84.8 (96.2)
177	5 to 9% of m/z 176	5.2 (6.2)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8766.D\S-8260.rslt\spectra.d
Injection Date: 10-Sep-2019 13:48:30
Spectrum: Tune Spec :Average 432-434(3.76-3.77) Bgrd 420(3.69)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1186	61.00	4768	82.00	665	118.00	336
37.00	6981	62.00	6192	87.00	4504	119.00	670
38.00	5479	63.00	3746	88.00	4035	128.00	656
39.00	2465	64.00	393	89.00	132	130.00	338
40.00	22	67.00	551	91.00	574	141.00	1448
43.00	473	68.00	11552	92.00	3524	143.00	1262
44.00	516	69.00	11823	93.00	4655	145.00	141
45.00	907	70.00	728	94.00	13714	155.00	338
47.00	1993	72.00	653	95.00	117728	156.00	116
48.00	880	73.00	5128	96.00	8389	159.00	319
49.00	4757	74.00	18776	97.00	332	173.00	412
50.00	24600	75.00	55432	104.00	617	174.00	103784
51.00	8204	76.00	5388	105.00	245	175.00	8212
52.00	405	77.00	726	106.00	820	176.00	99848
55.00	86	78.00	325	111.00	148	177.00	6146
56.00	1976	79.00	2799	113.00	123	178.00	131
57.00	4440	80.00	834	116.00	196	207.00	143
60.00	1183	81.00	2568	117.00	769		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9285.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Sep-2019 08:57:30	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084301-002				
Operator ID:	kn	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	20-Sep-2019 09:10:13	Calib Date:	10-Sep-2019 21:32:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0334				
First Level Reviewer: nowakk		Date:	20-Sep-2019 09:10:13		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.765	3.765	0.000	0	201912	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

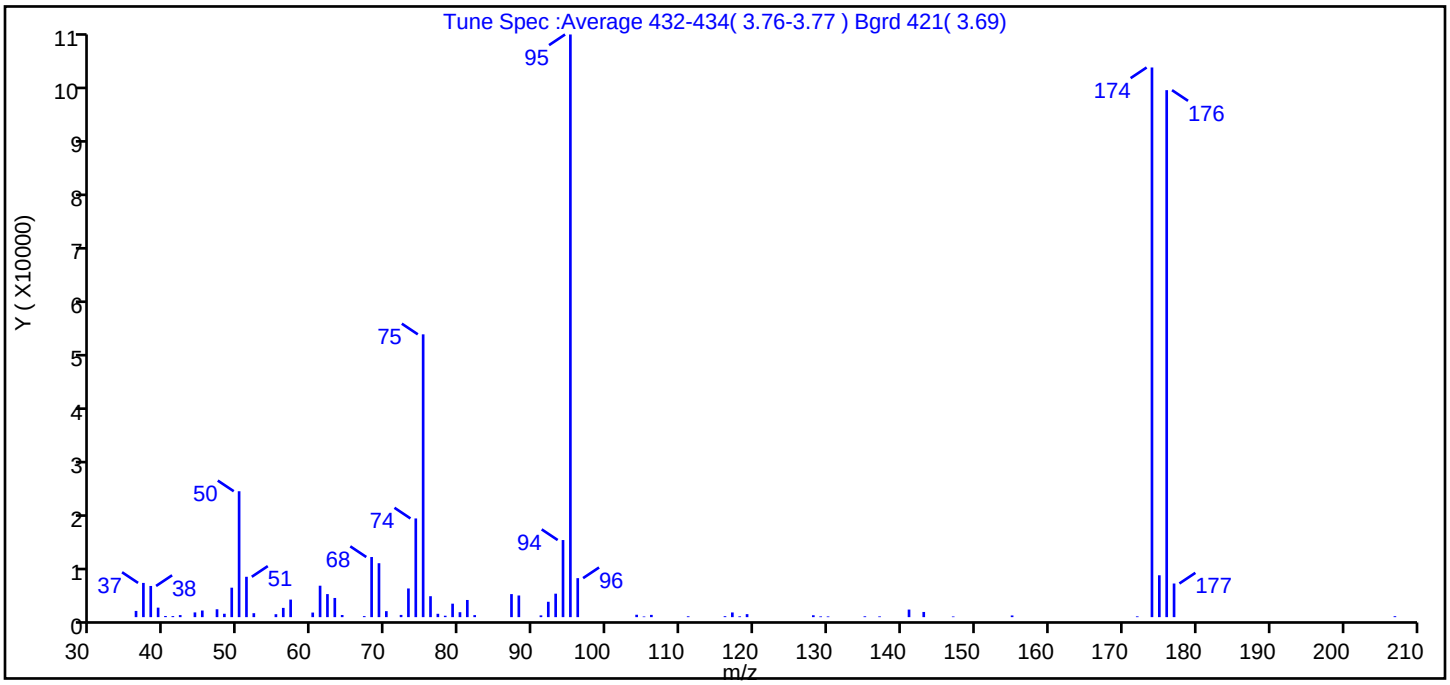
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9285.D
Injection Date: 20-Sep-2019 08:57:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: kn ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.6
75	30 to 60% of m/z 95	48.5
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	94.3
175	5 to 9% of m/z 174	7.2 (7.6)
176	Greater than 95% but less than 101% of m/z 174	90.4 (95.9)
177	5 to 9% of m/z 176	5.8 (6.4)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9285.D\S-8260.rslt\spectra.d
Injection Date: 20-Sep-2019 08:57:30
Spectrum: Tune Spec :Average 432-434(3.76-3.77) Bgrd 421(3.69)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1124	60.00	829	81.00	3100	128.00	342
37.00	6182	61.00	5677	82.00	365	129.00	136
38.00	5632	62.00	4161	87.00	4163	130.00	130
39.00	1716	63.00	3464	88.00	3912	135.00	155
40.00	209	64.00	385	91.00	319	137.00	136
41.00	187	67.00	185	92.00	2775	141.00	1366
42.00	373	68.00	10857	93.00	4238	143.00	937
44.00	856	69.00	9739	94.00	13923	147.00	120
45.00	1198	70.00	1083	95.00	105224	155.00	304
47.00	1424	72.00	400	96.00	7044	172.00	142
48.00	613	73.00	5180	104.00	434	174.00	99264
49.00	5320	74.00	17824	105.00	118	175.00	7561
50.00	22736	75.00	51072	106.00	409	176.00	95168
51.00	7289	76.00	3782	111.00	153	177.00	6074
52.00	712	77.00	608	116.00	174	207.00	171
55.00	531	78.00	255	117.00	847		
56.00	1672	79.00	2433	118.00	142		
57.00	3171	80.00	893	119.00	542		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9340.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	21-Sep-2019 09:12:30	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0084330-002				
Operator ID:	OI	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	21-Sep-2019 09:23:18	Calib Date:	10-Sep-2019 21:32:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0306				
First Level Reviewer: izquierdoo		Date:	21-Sep-2019 09:23:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.820	3.820	0.000	0	1040677	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

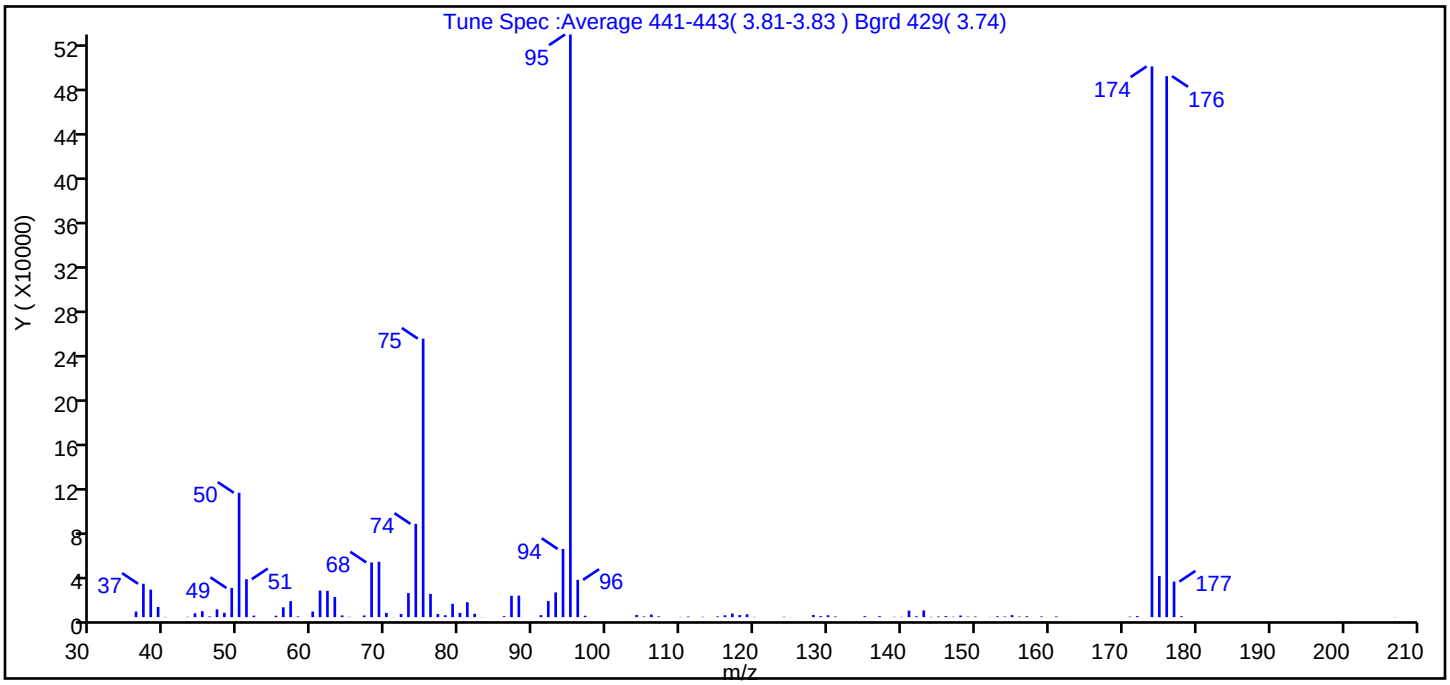
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9340.D
Injection Date: 21-Sep-2019 09:12:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: OI ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.3
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	94.5
175	5 to 9% of m/z 174	7.1 (7.5)
176	Greater than 95% but less than 101% of m/z 174	92.8 (98.2)
177	5 to 9% of m/z 176	6.1 (6.6)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9340.D\S-8260.rslt\spectra.d
Injection Date: 21-Sep-2019 09:12:30
Spectrum: Tune Spec :Average 441-443(3.81-3.83) Bgrd 429(3.74)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5001	68.00	48888	104.00	1954	144.00	260
37.00	29832	69.00	49528	105.00	618	145.00	583
38.00	24624	70.00	3765	106.00	2262	146.00	936
39.00	9075	71.00	129	107.00	672	147.00	350
40.00	234	72.00	2800	110.00	241	148.00	1451
43.00	305	73.00	21544	111.00	556	149.00	462
44.00	3450	74.00	83344	113.00	331	150.00	563
45.00	5337	75.00	248832	115.00	685	152.00	211
46.00	640	76.00	20792	116.00	1670	153.00	765
47.00	6938	77.00	2773	117.00	3215	154.00	550
48.00	3851	78.00	1719	118.00	1870	155.00	1817
49.00	26048	79.00	11918	119.00	2543	156.00	507
50.00	111120	80.00	3781	120.00	244	157.00	809
51.00	33896	81.00	13267	124.00	347	159.00	599
52.00	1374	82.00	2969	125.00	135	161.00	657
55.00	1258	83.00	131	128.00	1915	171.00	439
56.00	8786	86.00	843	129.00	911	172.00	925
57.00	14264	87.00	19056	130.00	1671	174.00	492032
58.00	648	88.00	19232	131.00	634	175.00	36808
60.00	5032	91.00	1794	135.00	883	176.00	483328
61.00	23728	92.00	14383	137.00	889	177.00	31776
62.00	23552	93.00	22120	139.00	280	178.00	808
63.00	17952	94.00	60912	140.00	304	207.00	126
64.00	1564	95.00	520576	141.00	5874		
65.00	315	96.00	33320	142.00	794		
67.00	1509	97.00	1245	143.00	6042		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5175.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 18-Sep-2019 15:25:30 ALS Bottle#: 1 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: bfb
Misc. Info.: 480-0084255-003
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 18-Sep-2019 15:35:59 Calib Date: 07-Aug-2019 23:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190807-83215.b\T3694.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: farrellr Date: 18-Sep-2019 15:35:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 5 BFB	95	5.474	5.474	0.000	90	380381	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

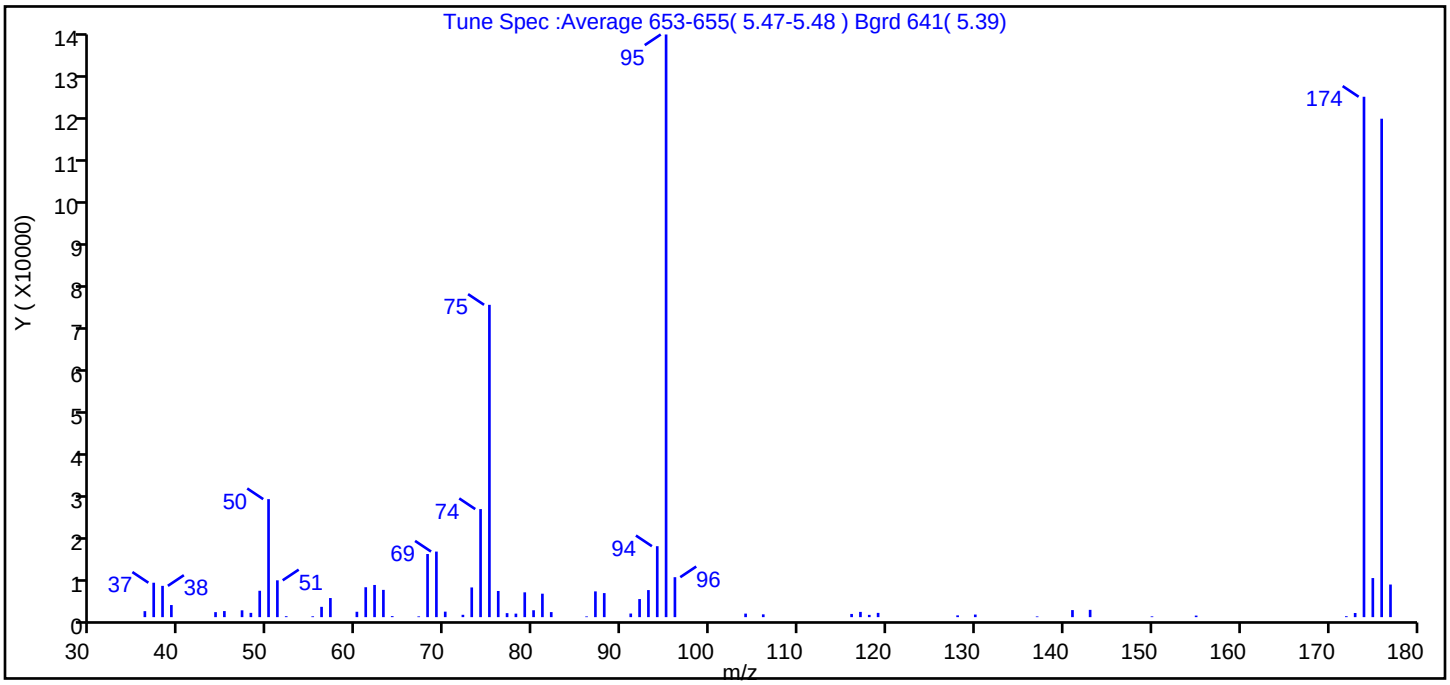
MV_BFB_STK_00073 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5175.D
Injection Date: 18-Sep-2019 15:25:30 Instrument ID: HP5975T
Lims ID: BFB
Client ID:
Operator ID: RF ALS Bottle#: 1 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.3
75	30 to 60% of m/z 95	53.6
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	89.3
175	5 to 9% of m/z 174	6.7 (7.5)
176	Greater than 95% but less than 101% of m/z 174	85.5 (95.8)
177	5 to 9% of m/z 176	5.6 (6.5)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5175.D\T-8260.rslt\spectra.d
Injection Date: 18-Sep-2019 15:25:30
Spectrum: Tune Spec :Average 653-655(5.47-5.48) Bgrd 641(5.39)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1395	61.00	6967	80.00	1605	118.00	530
37.00	8015	62.00	7492	81.00	5462	119.00	991
38.00	7285	63.00	6350	82.00	1176	128.00	413
39.00	2819	64.00	238	86.00	171	130.00	604
44.00	1167	67.00	175	87.00	5998	137.00	166
45.00	1414	68.00	14698	88.00	5599	141.00	1643
47.00	1589	69.00	15269	91.00	842	143.00	1697
48.00	997	70.00	1280	92.00	4210	150.00	178
49.00	6142	72.00	548	93.00	6300	155.00	363
50.00	27480	73.00	6915	94.00	16520	172.00	218
51.00	8576	74.00	25160	95.00	135680	173.00	965
52.00	217	75.00	72728	96.00	9304	174.00	121176
55.00	194	76.00	6092	104.00	823	175.00	9100
56.00	2397	77.00	934	106.00	651	176.00	116064
57.00	4449	78.00	819	116.00	745	177.00	7595
60.00	1256	79.00	5778	117.00	1222		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5386.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	22-Sep-2019 10:54:30	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	bfb				
Misc. Info.:	480-0084351-002				
Operator ID:	RF	Instrument ID:	HP5975T		
Method:	\\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	22-Sep-2019 13:46:47	Calib Date:	18-Sep-2019 23:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0334				
First Level Reviewer: farrellr		Date:	22-Sep-2019 11:02:06		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 5 BFB	95	5.474	5.474	0.000	83	53890	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

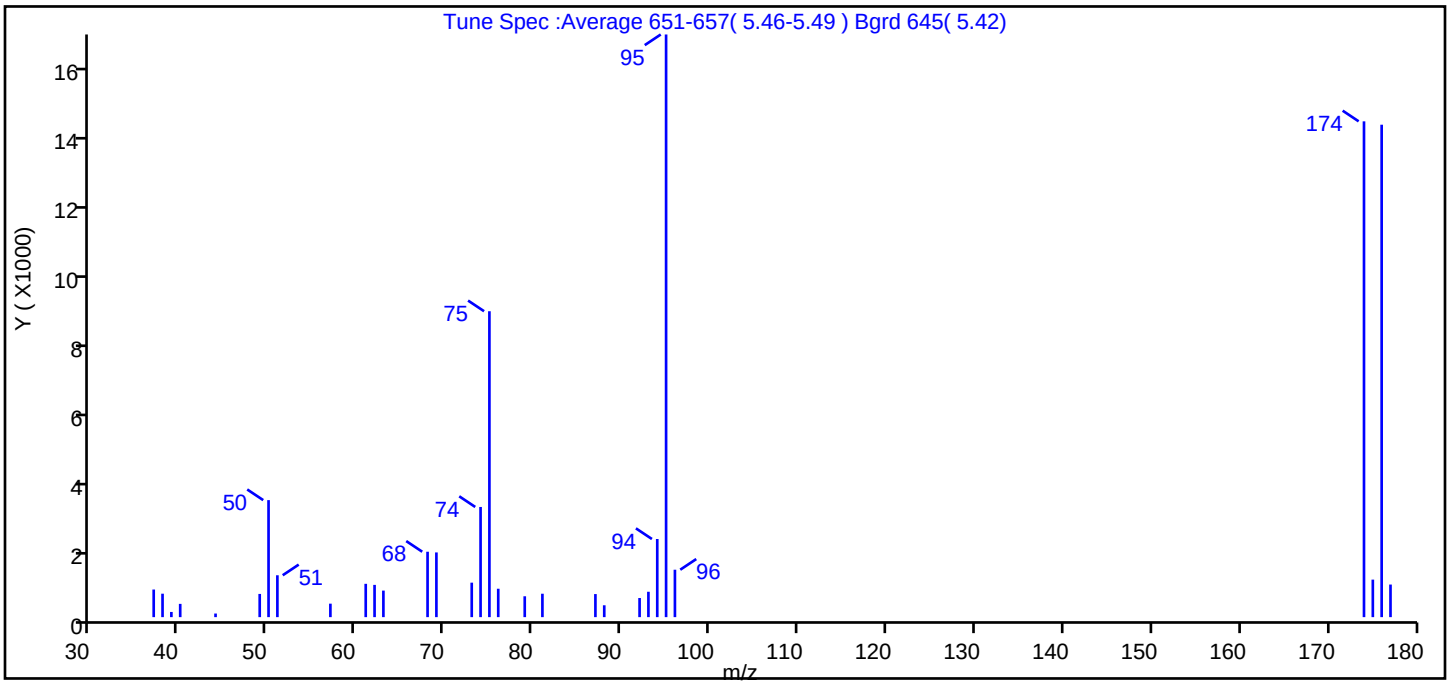
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5386.D
Injection Date: 22-Sep-2019 10:54:30 Instrument ID: HP5975T
Lims ID: BFB
Client ID:
Operator ID: RF ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.1
75	30 to 60% of m/z 95	52.5
96	5 to 9% of m/z 95	8.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	85.1
175	5 to 9% of m/z 174	6.4 (7.6)
176	Greater than 95% but less than 101% of m/z 174	84.5 (99.3)
177	5 to 9% of m/z 176	5.6 (6.6)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5386.D\T-8260.rslt\spectra.d
Injection Date: 22-Sep-2019 10:54:30
Spectrum: Tune Spec :Average 651-657(5.46-5.49) Bgrd 645(5.42)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 31

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	803	57.00	392	75.00	8896	94.00	2272
38.00	682	61.00	969	76.00	826	95.00	16944
39.00	151	62.00	938	79.00	607	96.00	1379
40.00	386	63.00	772	81.00	681	174.00	14418
44.00	105	68.00	1902	87.00	671	175.00	1091
49.00	675	69.00	1882	88.00	345	176.00	14320
50.00	3403	73.00	1003	92.00	556	177.00	948
51.00	1218	74.00	3204	93.00	738		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5475.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 24-Sep-2019 08:50:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: bfb
Misc. Info.: 480-0084408-002
Operator ID: KN Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 24-Sep-2019 09:00:32 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: nowakk Date: 24-Sep-2019 09:00:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 5 BFB	95	5.468	5.468	0.000	88	323415	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

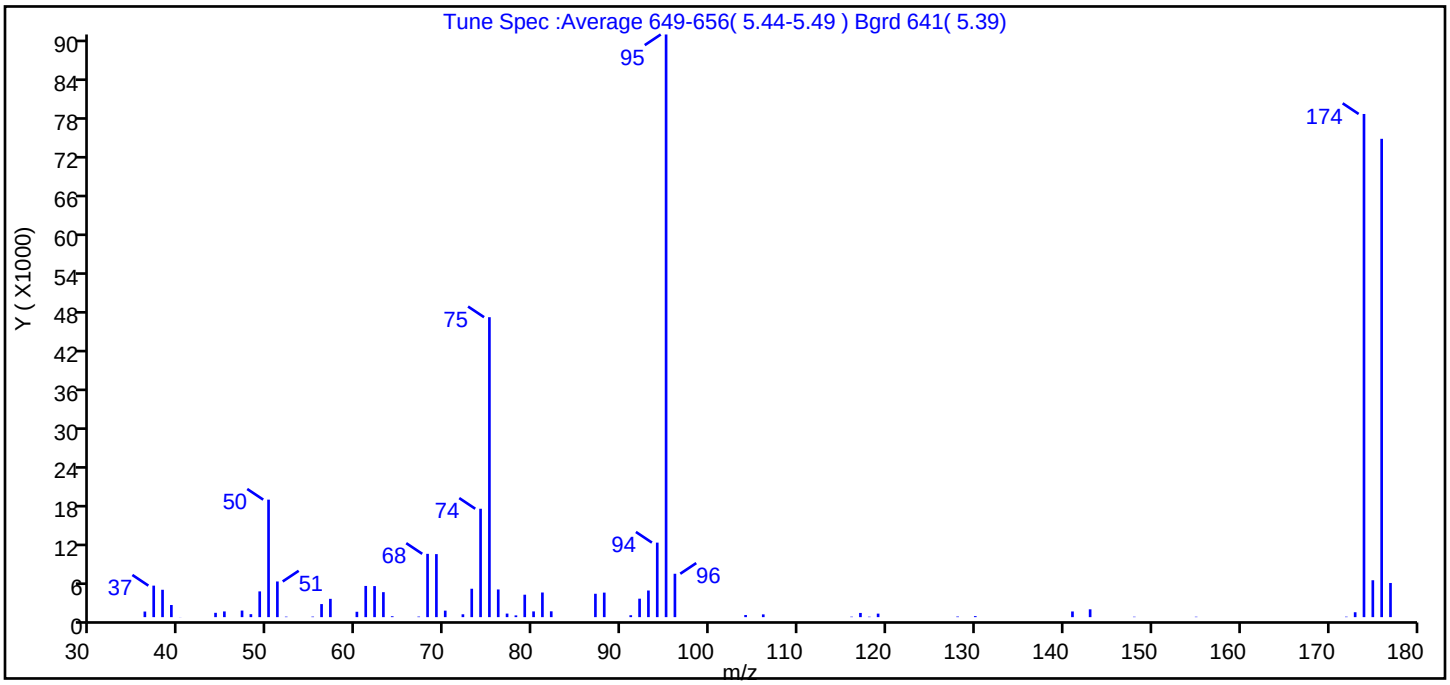
BFB_WRK_00092 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5475.D
Injection Date: 24-Sep-2019 08:50:30 Instrument ID: HP5975T
Lims ID: BFB
Client ID:
Operator ID: KN ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.2
75	30 to 60% of m/z 95	51.5
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.8 (1.0)
174	50 to 120% of m/z 95	86.4
175	5 to 9% of m/z 174	6.3 (7.3)
176	Greater than 95% but less than 101% of m/z 174	82.1 (95.1)
177	5 to 9% of m/z 176	5.9 (7.1)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5475.D\T-8260.rslt\spectra.d
Injection Date: 24-Sep-2019 08:50:30
Spectrum: Tune Spec :Average 649-656(5.44-5.49) Bgrd 641(5.39)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	872	60.00	838	79.00	3491	118.00	69
37.00	4903	61.00	4855	80.00	893	119.00	548
38.00	4260	62.00	4835	81.00	3834	128.00	93
39.00	1888	63.00	3886	82.00	907	130.00	158
40.00	16	64.00	139	87.00	3637	141.00	885
44.00	673	67.00	87	88.00	3816	143.00	1217
45.00	889	68.00	9848	91.00	297	148.00	63
47.00	1024	69.00	9807	92.00	2873	155.00	63
48.00	462	70.00	1012	93.00	4144	172.00	72
49.00	4007	72.00	446	94.00	11595	173.00	762
50.00	18280	73.00	4419	95.00	90648	174.00	78280
51.00	5550	74.00	16864	96.00	6750	175.00	5740
52.00	77	75.00	46664	104.00	328	176.00	74416
55.00	83	76.00	4307	106.00	430	177.00	5315
56.00	2033	77.00	555	116.00	72		
57.00	2848	78.00	273	117.00	653		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493096/7

Matrix: Water Lab File ID: S9290.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 10:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493096/7

Matrix: Water Lab File ID: S9290.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 10:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9290.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Sep-2019 10:57:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084301-007
Operator ID: kn Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Sep-2019 11:17:26 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0334

First Level Reviewer: nowakk Date: 20-Sep-2019 11:17:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.449	5.443	0.006	98	117266	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	232118	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	94	277549	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.870	0.000	58	155338	25.0	26.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	98	97729	25.0	26.1	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	94	597675	25.0	26.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	94	220145	25.0	26.5	
10 Dichlorodifluoromethane	85		1.264					ND	
11 Chlorodifluoromethane	51		1.288					ND	
12 Chloromethane	50		1.440					ND	
13 Vinyl chloride	62		1.537					ND	
151 Butadiene	54		1.537					ND	
14 Bromomethane	94		1.829					ND	
15 Chloroethane	64		1.921					ND	
16 Dichlorofluoromethane	67		2.146					ND	
17 Trichlorofluoromethane	101		2.146					ND	
18 Ethyl ether	59		2.438					ND	
148 Ethanol	45		2.462					ND	
19 Propene oxide	58		2.529					ND	
20 Acrolein	56		2.620					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.644					ND	
22 1,1-Dichloroethene	96		2.651					ND	
23 Acetone	43		2.778					ND	
25 Iodomethane	142		2.815					ND	
26 Carbon disulfide	76		2.845					ND	
24 Isopropyl alcohol	45		2.973					ND	
28 3-Chloro-1-propene	41		3.028					ND	
27 Methyl acetate	43		3.076					ND	
29 Acetonitrile	40		3.101					ND	U
30 Methylene Chloride	84		3.180					ND	
31 2-Methyl-2-propanol	59		3.356					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		3.387					ND	
34 trans-1,2-Dichloroethene	96		3.405					ND	
33 Acrylonitrile	53		3.472					ND	
35 Hexane	57		3.600					ND	
139 Halothane	117		3.822					ND	
39 1,1-Dichloroethane	63		3.831					ND	
36 Isopropyl ether	45		3.843					ND	
37 Vinyl acetate	43		3.886					ND	
40 2-Chloro-1,3-butadiene	53		3.886					ND	
38 1,1-Dimethoxyethane	75		3.916					ND	
41 Tert-butyl ethyl ether	59		4.184					ND	
44 2,2-Dichloropropane	77		4.354					ND	
45 cis-1,2-Dichloroethene	96		4.390					ND	
43 2-Butanone (MEK)	43		4.427					ND	
42 Ethyl acetate	43		4.457					ND	
46 Propionitrile	54		4.543					ND	
48 Chlorobromomethane	128		4.628					ND	
49 Tetrahydrofuran	42		4.646					ND	
47 Methacrylonitrile	41		4.646					ND	
50 Chloroform	83	4.713	4.707	0.006	18	1582		0.1348	
51 1,1,1-Trichloroethane	97		4.816					ND	
52 Cyclohexane	56		4.816					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.871					ND	
55 Carbon tetrachloride	117		4.950					ND	
54 1,1-Dichloropropene	75		4.968					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.153					ND	
152 Isooctane	57		5.163					ND	
57 Benzene	78		5.169					ND	
53 Isobutyl alcohol	43		5.200					ND	
58 1,2-Dichloroethane	62		5.248					ND	
56 Tert-amyl methyl ether	73		5.248					ND	
147 t-Amyl alcohol	59		5.254					ND	
59 n-Heptane	43		5.346					ND	
1 1,4-Difluorobenzene	114		5.559					ND	
62 Trichloroethene	95		5.784					ND	
60 n-Butanol	56		5.820					ND	
64 Methylcyclohexane	83		5.899					ND	
142 Ethyl acrylate	55		5.911					ND	
65 1,2-Dichloropropane	63		6.027					ND	
63 Methyl methacrylate	41		6.130					ND	
67 Dibromomethane	93		6.167					ND	
66 1,4-Dioxane	88		6.179					ND	
68 Dichlorobromomethane	83		6.319					ND	
70 2-Nitropropane	43		6.581					ND	
69 2-Chloroethyl vinyl ether	63		6.599					ND	
71 Epichlorohydrin	57		6.696					ND	
72 cis-1,3-Dichloropropene	75		6.739					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885					ND	
74 Toluene	92		7.025					ND	
76 2-Methylthiophene	97		7.159					ND	
77 trans-1,3-Dichloropropene	75		7.311					ND	
78 3-Methylthiophene	97		7.323					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
75 Ethyl methacrylate	69		7.353					ND	
79 1,1,2-Trichloroethane	83		7.499					ND	
81 Tetrachloroethene	166		7.548					ND	
82 1,3-Dichloropropane	76		7.657					ND	
80 2-Hexanone	43		7.724					ND	
155 n-Butyl acetate	43		7.834					ND	
83 Chlorodibromomethane	129		7.895					ND	
84 Ethylene Dibromide	107		7.998					ND	
146 1-Chlorohexane	55		8.418					ND	U
85 3-Chlorobenzotrifluoride	180		8.442					ND	
87 Chlorobenzene	112		8.473					ND	
86 4-Chlorobenzotrifluoride	180		8.503					ND	
88 Ethylbenzene	91		8.558					ND	
89 1,1,1,2-Tetrachloroethane	131		8.570					ND	
90 m-Xylene & p-Xylene	106		8.679					ND	
91 o-Xylene	106		9.111					ND	
92 Styrene	104		9.142					ND	
95 Bromoform	173		9.397					ND	
93 2-Chlorobenzotrifluoride	180		9.422					ND	
94 Isopropylbenzene	105		9.495					ND	
96 Cyclohexanone	55		9.671					ND	
101 Bromobenzene	156		9.841					ND	
97 1,1,2,2-Tetrachloroethane	83		9.908					ND	
99 N-Propylbenzene	91		9.920					ND	
100 1,2,3-Trichloropropane	110		9.939					ND	
98 trans-1,4-Dichloro-2-buten	53		9.951					ND	
103 2-Chlorotoluene	126		10.024					ND	
104 3-Chlorotoluene	126		10.091					ND	
102 1,3,5-Trimethylbenzene	105		10.097					ND	
105 4-Chlorotoluene	126		10.139					ND	
106 tert-Butylbenzene	134		10.413					ND	
107 1,2,4-Trimethylbenzene	105		10.468					ND	
108 Pentachloroethane	167		10.474					ND	
109 sec-Butylbenzene	105		10.626					ND	
111 1,3-Dichlorobenzene	146		10.760					ND	
110 4-Isopropyltoluene	119		10.766					ND	
114 Dicyclopentadiene	66		10.827					ND	
113 1,4-Dichlorobenzene	146		10.851					ND	
112 1,2,3-Trimethylbenzene	105		10.876					ND	
150 Benzyl chloride	126		10.997					ND	
115 n-Butylbenzene	91		11.149					ND	
116 1,2-Dichlorobenzene	146		11.204					ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934					ND	
118 1,3,5-Trichlorobenzene	180		12.062					ND	
119 1,2,4-Trichlorobenzene	180		12.603					ND	
120 Hexachlorobutadiene	225		12.713					ND	
121 Naphthalene	128		12.816					ND	
122 1,2,3-Trichlorobenzene	180		13.017					ND	
149 2-Methylnaphthalene	142		13.729					ND	U
137 Methyl acrylate	1		0.000					ND	
134 Pentachloroethane TIC	1		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
135 Hexachloroethane	117		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
S 124 Xylenes, Total	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 123 Total BTEX	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

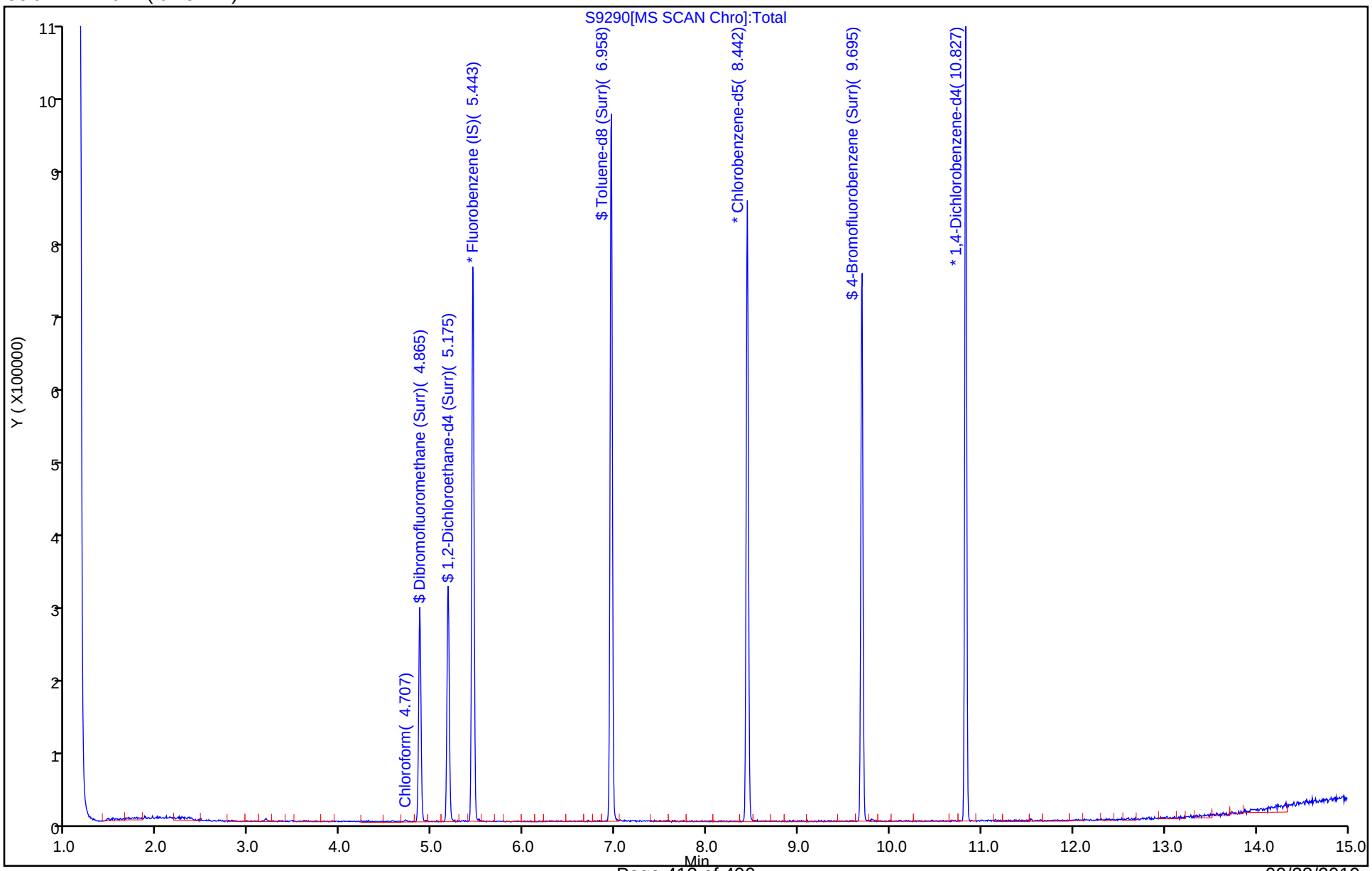
Report Date: 20-Sep-2019 11:17:38 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9290.D

Injection Date:	20-Sep-2019 10:57:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493246/7

Matrix: Water Lab File ID: S9345.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 11:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493246/7

Matrix: Water Lab File ID: S9345.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 11:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9345.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-Sep-2019 11:11:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084330-007
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Sep-2019 11:28:35 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0306

First Level Reviewer: izquierdoo Date: 21-Sep-2019 11:28:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	113255	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	86	234579	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	95	267875	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	56	149458	25.0	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	97	94689	25.0	26.2	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	93	588803	25.0	25.3	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	95	215390	25.0	25.6	
10 Dichlorodifluoromethane	85		1.263					ND	
11 Chlorodifluoromethane	51		1.288					ND	
12 Chloromethane	50		1.446					ND	
13 Vinyl chloride	62		1.543					ND	
151 Butadiene	54		1.543					ND	
14 Bromomethane	94		1.835					ND	
15 Chloroethane	64		1.927					ND	
16 Dichlorofluoromethane	67		2.152					ND	
17 Trichlorofluoromethane	101		2.152					ND	
18 Ethyl ether	59		2.438					ND	
148 Ethanol	45		2.456					ND	
19 Propene oxide	58		2.529					ND	
20 Acrolein	56		2.626					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.651					ND	
22 1,1-Dichloroethene	96		2.657					ND	
23 Acetone	43		2.784					ND	
25 Iodomethane	142		2.821					ND	
26 Carbon disulfide	76		2.857					ND	
24 Isopropyl alcohol	45		2.979					ND	
28 3-Chloro-1-propene	41		3.034					ND	
27 Methyl acetate	43		3.082					ND	
29 Acetonitrile	40		3.107					ND	U
30 Methylene Chloride	84		3.180					ND	
31 2-Methyl-2-propanol	59		3.362					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		3.393					ND	
34 trans-1,2-Dichloroethene	96		3.411					ND	
33 Acrylonitrile	53		3.472					ND	
35 Hexane	57		3.600					ND	
139 Halothane	117		3.822					ND	
39 1,1-Dichloroethane	63		3.831					ND	
36 Isopropyl ether	45		3.843					ND	
37 Vinyl acetate	43		3.886					ND	
40 2-Chloro-1,3-butadiene	53		3.891					ND	
38 1,1-Dimethoxyethane	75		3.922					ND	
41 Tert-butyl ethyl ether	59		4.183					ND	
44 2,2-Dichloropropane	77		4.348					ND	
45 cis-1,2-Dichloroethene	96		4.390					ND	
43 2-Butanone (MEK)	43		4.433					ND	
42 Ethyl acetate	43		4.463					ND	
46 Propionitrile	54		4.542					ND	
48 Chlorobromomethane	128		4.634					ND	
47 Methacrylonitrile	41		4.646					ND	
49 Tetrahydrofuran	42		4.646					ND	
50 Chloroform	83		4.707					ND	U
51 1,1,1-Trichloroethane	97		4.816					ND	
52 Cyclohexane	56		4.822					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.871					ND	
55 Carbon tetrachloride	117		4.950					ND	
54 1,1-Dichloropropene	75		4.968					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.153					ND	
152 Isooctane	57		5.163					ND	
57 Benzene	78		5.175					ND	
53 Isobutyl alcohol	43		5.200					ND	
56 Tert-amyl methyl ether	73		5.248					ND	
58 1,2-Dichloroethane	62		5.248					ND	
147 t-Amyl alcohol	59		5.260					ND	
59 n-Heptane	43		5.346					ND	
1 1,4-Difluorobenzene	114		5.558					ND	
62 Trichloroethene	95		5.784					ND	
60 n-Butanol	56		5.826					ND	
64 Methylcyclohexane	83		5.899					ND	
142 Ethyl acrylate	55		5.911					ND	
65 1,2-Dichloropropane	63		6.027					ND	
63 Methyl methacrylate	41		6.130					ND	
67 Dibromomethane	93		6.167					ND	
66 1,4-Dioxane	88		6.179					ND	
68 Dichlorobromomethane	83		6.319					ND	
70 2-Nitropropane	43		6.580					ND	
69 2-Chloroethyl vinyl ether	63		6.605					ND	
71 Epichlorohydrin	57		6.696					ND	
72 cis-1,3-Dichloropropene	75		6.739					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.885					ND	
74 Toluene	92		7.025					ND	
76 2-Methylthiophene	97		7.158					ND	
77 trans-1,3-Dichloropropene	75		7.311					ND	
78 3-Methylthiophene	97		7.323					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
75 Ethyl methacrylate	69		7.353					ND	
79 1,1,2-Trichloroethane	83		7.499					ND	
81 Tetrachloroethene	166		7.554					ND	
82 1,3-Dichloropropane	76		7.663					ND	
80 2-Hexanone	43		7.724					ND	
155 n-Butyl acetate	43		7.834					ND	
83 Chlorodibromomethane	129		7.895					ND	
84 Ethylene Dibromide	107		7.998					ND	
146 1-Chlorohexane	55		8.418					ND	U
85 3-Chlorobenzotrifluoride	180		8.442					ND	
87 Chlorobenzene	112		8.473					ND	
86 4-Chlorobenzotrifluoride	180		8.503					ND	
88 Ethylbenzene	91		8.564					ND	
89 1,1,1,2-Tetrachloroethane	131		8.570					ND	
90 m-Xylene & p-Xylene	106		8.685					ND	
91 o-Xylene	106		9.111					ND	
92 Styrene	104		9.142					ND	
95 Bromoform	173		9.397					ND	
93 2-Chlorobenzotrifluoride	180		9.421					ND	
94 Isopropylbenzene	105		9.495					ND	
96 Cyclohexanone	55		9.677					ND	
101 Bromobenzene	156		9.841					ND	
97 1,1,2,2-Tetrachloroethane	83		9.902					ND	
99 N-Propylbenzene	91		9.920					ND	
100 1,2,3-Trichloropropane	110		9.939					ND	
98 trans-1,4-Dichloro-2-buten	53		9.951					ND	
103 2-Chlorotoluene	126		10.024					ND	
104 3-Chlorotoluene	126		10.091					ND	
102 1,3,5-Trimethylbenzene	105		10.097					ND	
105 4-Chlorotoluene	126		10.139					ND	
106 tert-Butylbenzene	134		10.413					ND	
107 1,2,4-Trimethylbenzene	105		10.468					ND	
108 Pentachloroethane	167		10.474					ND	
109 sec-Butylbenzene	105		10.626					ND	
111 1,3-Dichlorobenzene	146		10.760					ND	
110 4-Isopropyltoluene	119		10.766					ND	
114 Dicyclopentadiene	66		10.827					ND	
113 1,4-Dichlorobenzene	146		10.851					ND	
112 1,2,3-Trimethylbenzene	105		10.875					ND	
150 Benzyl chloride	126		10.997					ND	
115 n-Butylbenzene	91		11.149					ND	
116 1,2-Dichlorobenzene	146		11.204					ND	
117 1,2-Dibromo-3-Chloropropan	75		11.934					ND	
118 1,3,5-Trichlorobenzene	180		12.062					ND	
119 1,2,4-Trichlorobenzene	180		12.603					ND	
120 Hexachlorobutadiene	225		12.713					ND	
121 Naphthalene	128		12.816					ND	
122 1,2,3-Trichlorobenzene	180		13.017					ND	
149 2-Methylnaphthalene	142		13.729					ND	U
137 Methyl acrylate	1		0.000					ND	
134 Pentachloroethane TIC	1		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
135 Hexachloroethane	117		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
S 124 Xylenes, Total	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 123 Total BTEX	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

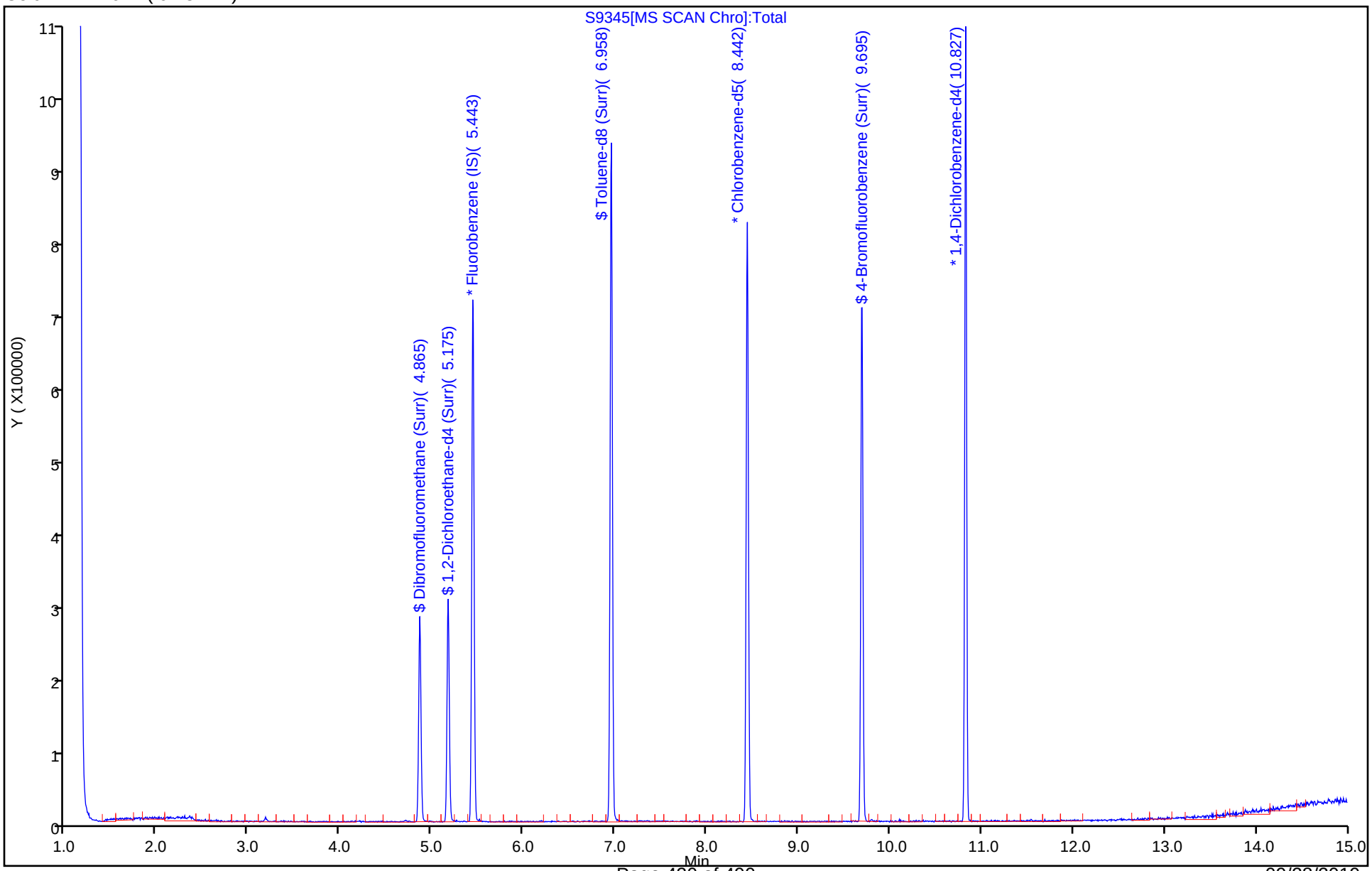
Report Date: 21-Sep-2019 11:28:36 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9345.D

Injection Date:	21-Sep-2019 11:11:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



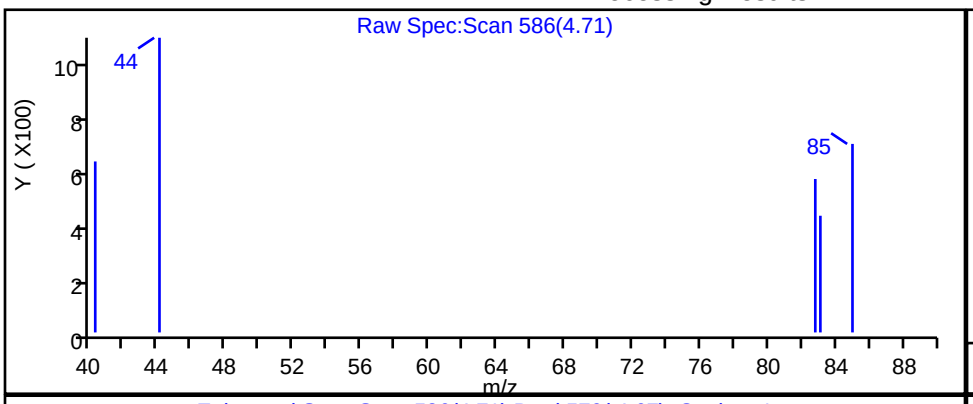
User Disabled Compound Report

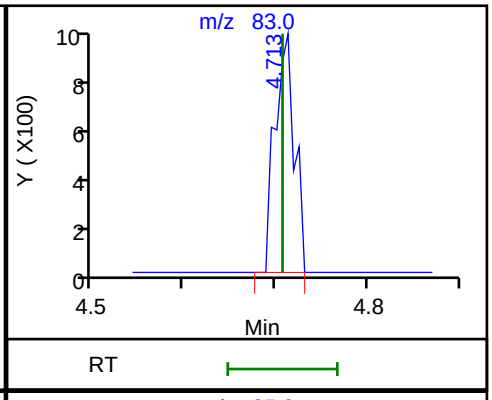
Eurofins TestAmerica, Buffalo

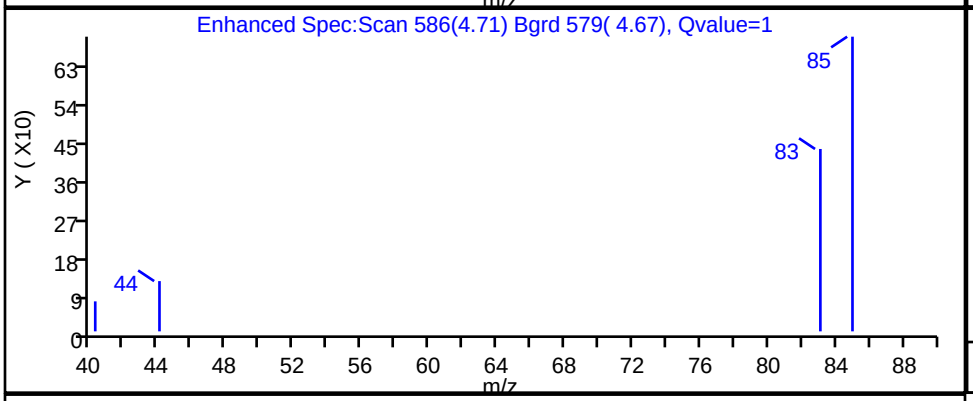
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9345.D
Injection Date: 21-Sep-2019 11:11:30 Instrument ID: HP5973S
Lims ID: MB
Client ID:
Operator ID: OI ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

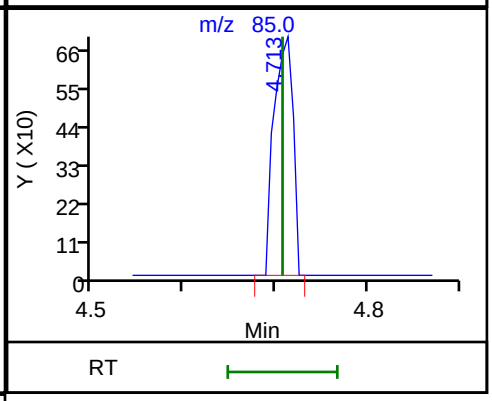
50 Chloroform, CAS: 67-66-3

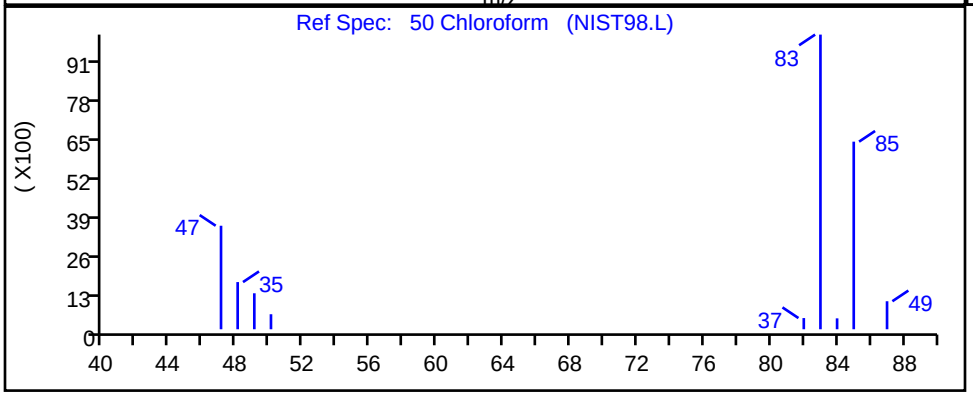
Processing Results











RT	Mass	Response	Amount
4.71	83.00	1475	0.130099
4.71	85.00	1011	

Reviewer: izquierdoo, 21-Sep-2019 11:28:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493390/7

Matrix: Water Lab File ID: T5391.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493390/7

Matrix: Water Lab File ID: T5391.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 12:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5391.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Sep-2019 12:55:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 480-0084351-007
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 14:06:36 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0334

First Level Reviewer: farrellr Date: 22-Sep-2019 14:06:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	196195	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	751132	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	403348	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	93	279676	25.0	26.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	352879	25.0	26.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	979907	25.0	24.6	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	312482	25.0	25.1	
11 Dichlorodifluoromethane	85		1.206					ND	
12 Chlorodifluoromethane	51		1.227					ND	
13 Chloromethane	50		1.371					ND	
151 Butadiene	54		1.434					ND	
14 Vinyl chloride	62		1.454					ND	U
15 Bromomethane	94		1.713					ND	
16 Chloroethane	64		1.776					ND	
18 Dichlorofluoromethane	67		1.993					ND	
17 Trichlorofluoromethane	101		2.004					ND	
19 Ethyl ether	59		2.232					ND	
148 Ethanol	45		2.273					ND	
84 Propene oxide	58		2.335					ND	
21 Acrolein	56		2.408					ND	
22 1,1-Dichloroethene	96		2.439					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449					ND	
23 Acetone	43		2.563					ND	U
24 Iodomethane	142		2.594					ND	
25 Carbon disulfide	76		2.625					ND	
26 Isopropyl alcohol	45		2.740					ND	
27 3-Chloro-1-propene	41		2.781					ND	
28 Methyl acetate	43		2.822					ND	
29 Acetonitrile	40		2.854					ND	
30 Methylene Chloride	84		2.916					ND	
31 2-Methyl-2-propanol	59		3.081					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
33 Methyl tert-butyl ether	73		3.112					ND	
32 trans-1,2-Dichloroethene	96		3.112					ND	
34 Acrylonitrile	53		3.164					ND	
35 Hexane	57	3.268	3.278	-0.010	87	1994		0.1324	
36 1,1-Dichloroethane	63		3.475					ND	
37 Isopropyl ether	45		3.486					ND	
39 Vinyl acetate	43		3.517					ND	
139 Halothane	117		3.527					ND	
38 2-Chloro-1,3-butadiene	53		3.527					ND	
40 1,1-Dimethoxyethane	75		3.548					ND	
41 Tert-butyl ethyl ether	59		3.776					ND	
42 2,2-Dichloropropane	77		3.921					ND	
43 cis-1,2-Dichloroethene	96		3.952					ND	
44 2-Butanone (MEK)	43		3.973					ND	
45 Ethyl acetate	43		3.994					ND	
46 Propionitrile	54		4.066					ND	
47 Chlorobromomethane	128		4.149					ND	
49 Methacrylonitrile	41		4.149					ND	
48 Tetrahydrofuran	42		4.159					ND	
50 Chloroform	83	4.201	4.201	0.000	92	4587		0.2266	
52 Cyclohexane	56		4.304					ND	
51 1,1,1-Trichloroethane	97		4.304					ND	
53 Carbon tetrachloride	117		4.408					ND	
54 1,1-Dichloropropene	75		4.418					ND	
152 Isooctane	57		4.574					ND	
55 Benzene	78		4.584					ND	
56 Isobutyl alcohol	43		4.594					ND	
57 1,2-Dichloroethane	62		4.636					ND	
147 t-Amyl alcohol	59		4.646					ND	
58 Tert-amyl methyl ether	73		4.646					ND	
59 n-Heptane	43		4.719					ND	
1 1,4-Difluorobenzene	114		4.885					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.978					ND	
60 Trichloroethene	95		5.071					ND	
61 n-Butanol	56		5.082					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.154					ND	
142 Ethyl acrylate	55		5.154					ND	
62 Methylcyclohexane	83		5.164					ND	
63 1,2-Dichloropropane	63		5.258					ND	
64 Methyl methacrylate	41		5.330					ND	
66 1,4-Dioxane	88		5.372					ND	
65 Dibromomethane	93		5.372					ND	
67 Dichlorobromomethane	83		5.486					ND	
68 2-Nitropropane	43		5.683					ND	
69 2-Chloroethyl vinyl ether	63		5.693					ND	
70 Epichlorohydrin	57		5.766					ND	
71 cis-1,3-Dichloropropene	75		5.807					ND	
72 4-Methyl-2-pentanone (MIBK	43		5.910					ND	
73 Toluene	92		6.024					ND	
74 2-Methylthiophene	97		6.128					ND	
75 trans-1,3-Dichloropropene	75		6.232					ND	
76 3-Methylthiophene	97		6.253					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
77 Ethyl methacrylate	69		6.263					ND	
78 1,1,2-Trichloroethane	83		6.377					ND	
79 Tetrachloroethene	166		6.429					ND	
80 1,3-Dichloropropane	76		6.501					ND	
81 2-Hexanone	43		6.543					ND	
155 n-Butyl acetate	43		6.615					ND	
82 Chlorodibromomethane	129		6.688					ND	
83 Ethylene Dibromide	107		6.760					ND	
146 1-Chlorohexane	55		7.071					ND	U
85 3-Chlorobenzotrifluoride	180		7.082					ND	
86 Chlorobenzene	112		7.113					ND	
87 4-Chlorobenzotrifluoride	180		7.123					ND	
88 Ethylbenzene	91		7.175					ND	
89 1,1,1,2-Tetrachloroethane	131		7.185					ND	
90 m-Xylene & p-Xylene	106		7.268					ND	
91 o-Xylene	106		7.589					ND	
92 Styrene	104		7.610					ND	
93 Bromoform	173		7.807					ND	
94 2-Chlorobenzotrifluoride	180		7.818					ND	
95 Isopropylbenzene	105		7.869					ND	
96 Cyclohexanone	55		8.014					ND	U
97 Bromobenzene	156		8.149					ND	
98 1,1,2,2-Tetrachloroethane	83		8.180					ND	
99 N-Propylbenzene	91		8.201					ND	
100 1,2,3-Trichloropropane	110		8.211					ND	
101 trans-1,4-Dichloro-2-buten	53		8.221					ND	
105 2-Chlorotoluene	126		8.294					ND	
104 1,3,5-Trimethylbenzene	105		8.335					ND	
103 3-Chlorotoluene	126		8.346					ND	
102 4-Chlorotoluene	91		8.377					ND	
106 tert-Butylbenzene	134		8.605					ND	
107 1,2,4-Trimethylbenzene	105		8.646					ND	
108 Pentachloroethane	167		8.657					ND	
109 sec-Butylbenzene	105		8.781					ND	
111 4-Isopropyltoluene	119		8.895					ND	
110 1,3-Dichlorobenzene	146		8.905					ND	
112 Dicyclopentadiene	66		8.958					ND	
113 1,4-Dichlorobenzene	146		8.978					ND	
114 1,2,3-Trimethylbenzene	105		8.999					ND	
150 Benzyl chloride	126		9.113					ND	
115 n-Butylbenzene	91		9.237					ND	
116 1,2-Dichlorobenzene	146		9.289					ND	
117 1,2-Dibromo-3-Chloropropan	75		9.962					ND	
118 1,3,5-Trichlorobenzene	180		10.087					ND	
119 1,2,4-Trichlorobenzene	180		10.605					ND	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	1	706		0.2432	
121 Naphthalene	128		10.823					ND	
122 1,2,3-Trichlorobenzene	180		11.019					ND	
149 2-Methylnaphthalene	142		11.693					ND	
136 Nitrobenzene	77		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
137 Methyl acrylate	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
S 123 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 Total BTEX	1		30.000					ND	
S 124 1,2-Dichloroethene, Total	1		30.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

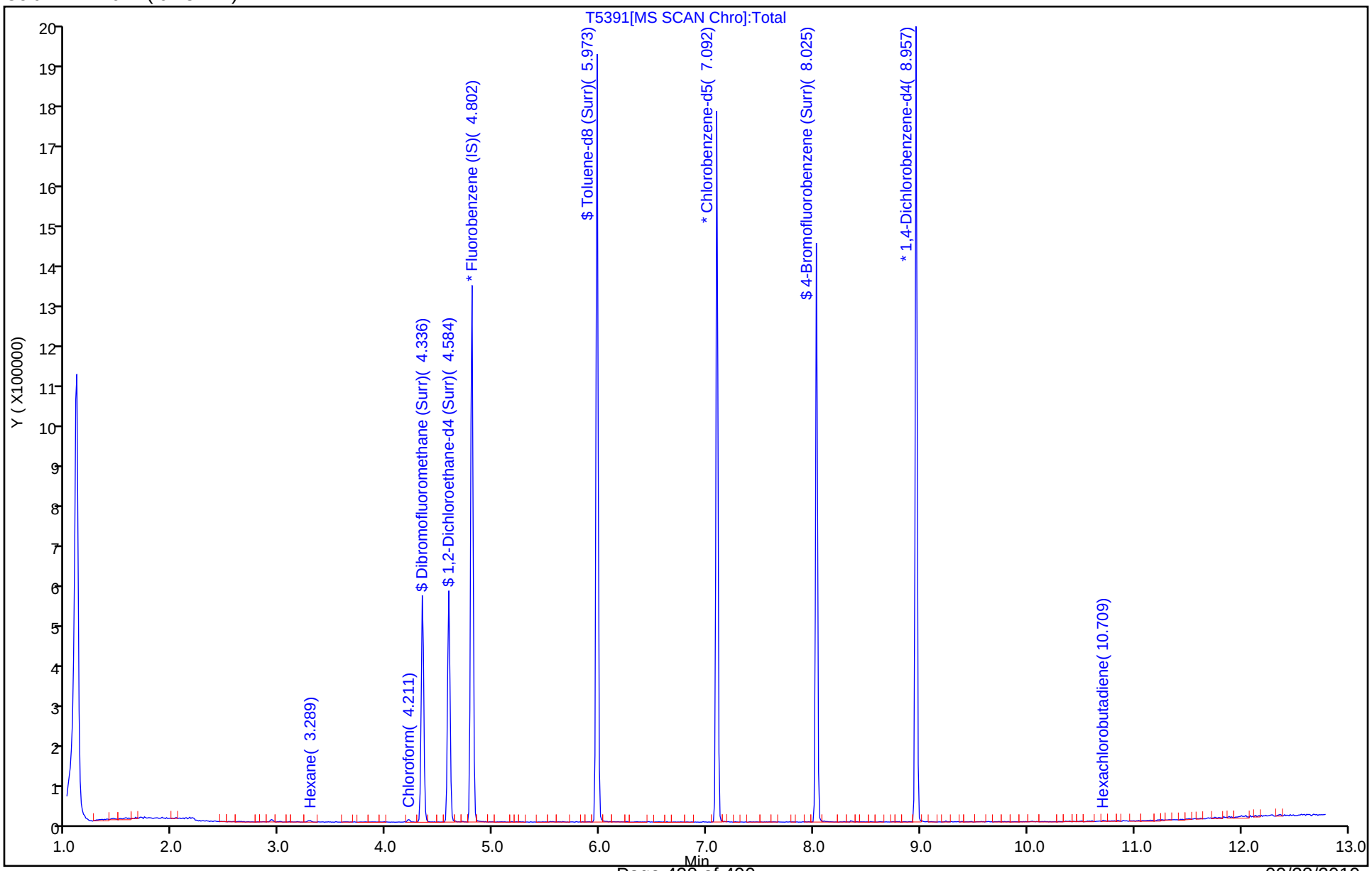
Report Date: 22-Sep-2019 14:06:37 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5391.D

Injection Date:	22-Sep-2019 12:55:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



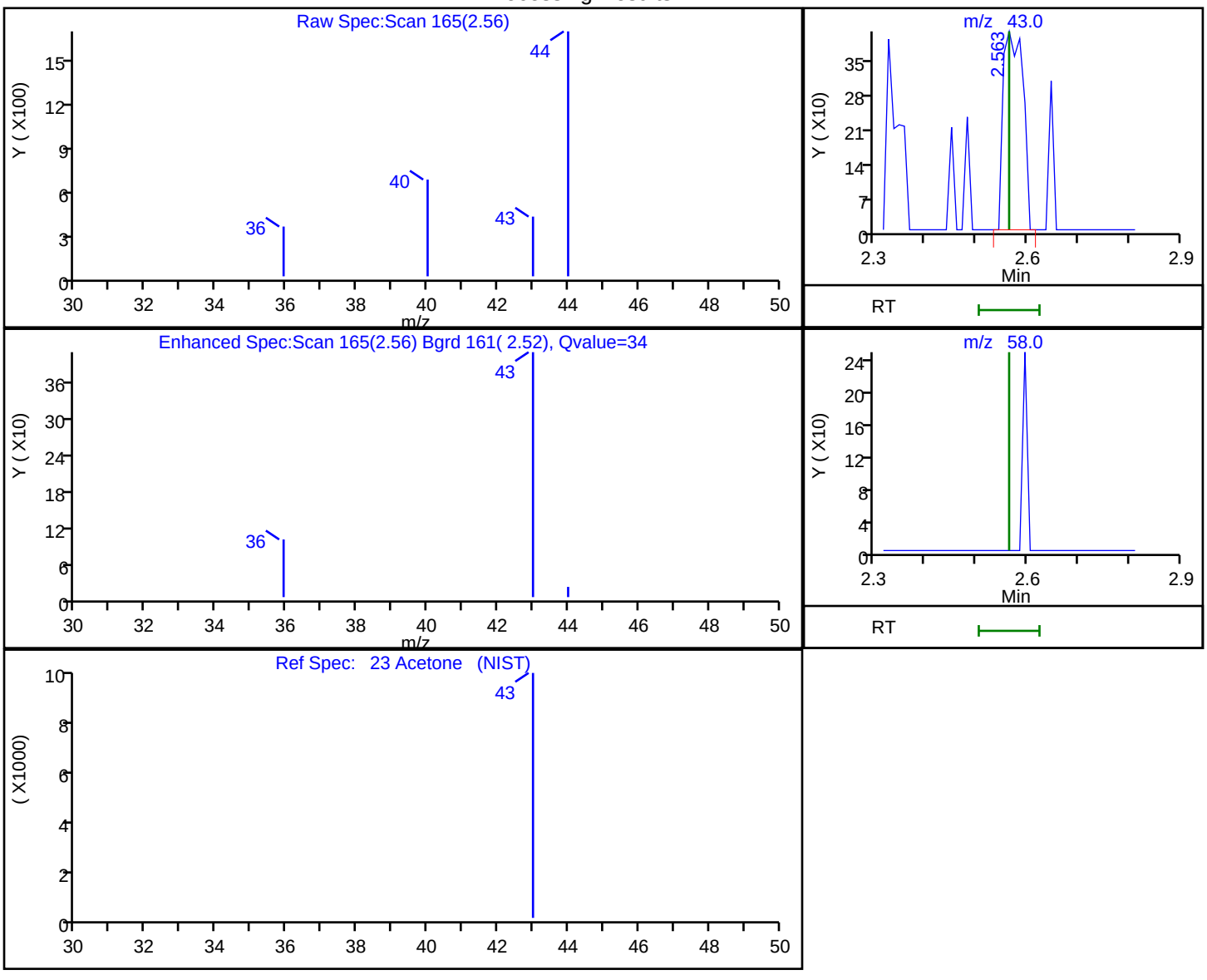
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5391.D
Injection Date: 22-Sep-2019 12:55:30 Instrument ID: HP5975T
Lims ID: MB
Client ID:
Operator ID: RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.56	43.00	1108	0.258608
2.56	58.00	0	

Reviewer: farrellr, 22-Sep-2019 14:05:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

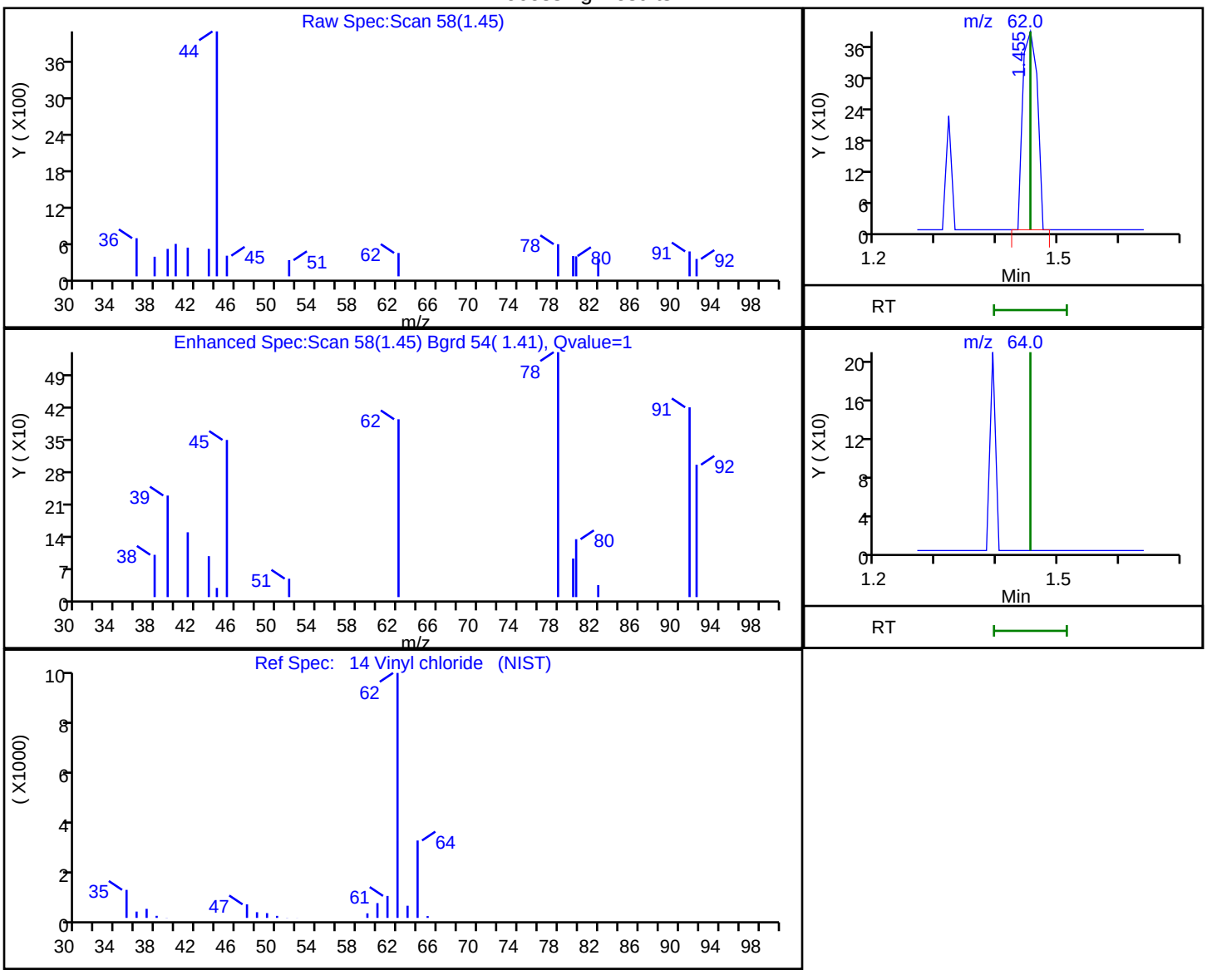
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5391.D
Injection Date: 22-Sep-2019 12:55:30 Instrument ID: HP5975T
Lims ID: MB
Client ID:
Operator ID: RF ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.45	62.00	644	0.052605
1.45	64.00	0	

Reviewer: farrellr, 22-Sep-2019 14:04:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493682/7

Matrix: Water Lab File ID: T5481.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-493682/7

Matrix: Water Lab File ID: T5481.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 11:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120
1868-53-7	Dibromofluoromethane (Surr)	98		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5481.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 24-Sep-2019 11:29:30 ALS Bottle#: 8 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0084408-007
Operator ID: KN Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 24-Sep-2019 11:45:35 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: nowakk Date: 24-Sep-2019 11:45:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	204914	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	795823	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	97	429275	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	0.000	93	272351	25.0	24.6	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	353939	25.0	25.0	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1002656	25.0	23.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	319809	25.0	24.2	
11 Dichlorodifluoromethane	85		1.206					ND	
12 Chlorodifluoromethane	51		1.227					ND	
13 Chloromethane	50		1.361					ND	
151 Butadiene	54		1.434					ND	
14 Vinyl chloride	62		1.454					ND	U
15 Bromomethane	94		1.714					ND	
16 Chloroethane	64		1.776					ND	
18 Dichlorofluoromethane	67		1.993					ND	
17 Trichlorofluoromethane	101		2.004					ND	
19 Ethyl ether	59		2.232					ND	
148 Ethanol	45		2.273					ND	
84 Propene oxide	58		2.335					ND	
21 Acrolein	56		2.408					ND	
22 1,1-Dichloroethene	96		2.439					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.449					ND	
23 Acetone	43		2.553					ND	
24 Iodomethane	142		2.594					ND	
25 Carbon disulfide	76		2.625					ND	U
26 Isopropyl alcohol	45		2.740					ND	
27 3-Chloro-1-propene	41		2.781					ND	
28 Methyl acetate	43		2.822					ND	
29 Acetonitrile	40		2.854					ND	
30 Methylene Chloride	84		2.916					ND	
31 2-Methyl-2-propanol	59		3.071					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
33 Methyl tert-butyl ether	73		3.102					ND	
32 trans-1,2-Dichloroethene	96		3.113					ND	
34 Acrylonitrile	53		3.164					ND	
35 Hexane	57		3.278					ND	U
36 1,1-Dichloroethane	63		3.475					ND	
37 Isopropyl ether	45		3.486					ND	
39 Vinyl acetate	43		3.517					ND	
139 Halothane	117		3.527					ND	
38 2-Chloro-1,3-butadiene	53		3.527					ND	
40 1,1-Dimethoxyethane	75		3.548					ND	
41 Tert-butyl ethyl ether	59		3.776					ND	
42 2,2-Dichloropropane	77		3.921					ND	
43 cis-1,2-Dichloroethene	96		3.952					ND	
44 2-Butanone (MEK)	43		3.973					ND	
45 Ethyl acetate	43		3.994					ND	
46 Propionitrile	54		4.066					ND	
47 Chlorobromomethane	128		4.138					ND	
48 Tetrahydrofuran	42		4.149					ND	
49 Methacrylonitrile	41		4.149					ND	
50 Chloroform	83	4.211	4.201	0.010	93	3436		0.1625	
52 Cyclohexane	56		4.304					ND	
51 1,1,1-Trichloroethane	97		4.304					ND	
53 Carbon tetrachloride	117		4.408					ND	
54 1,1-Dichloropropene	75		4.418					ND	
152 Isooctane	57		4.574					ND	
55 Benzene	78		4.584					ND	
56 Isobutyl alcohol	43		4.594					ND	
57 1,2-Dichloroethane	62		4.636					ND	
147 t-Amyl alcohol	59		4.646					ND	
58 Tert-amyl methyl ether	73		4.646					ND	
59 n-Heptane	43		4.719					ND	
1 1,4-Difluorobenzene	114		4.885					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.978					ND	
60 Trichloroethene	95		5.061					ND	
61 n-Butanol	56		5.082					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.154					ND	
142 Ethyl acrylate	55		5.154					ND	
62 Methylcyclohexane	83		5.164					ND	
63 1,2-Dichloropropane	63		5.258					ND	
64 Methyl methacrylate	41		5.330					ND	
66 1,4-Dioxane	88		5.372					ND	
65 Dibromomethane	93		5.372					ND	
67 Dichlorobromomethane	83		5.486					ND	
68 2-Nitropropane	43		5.683					ND	
69 2-Chloroethyl vinyl ether	63		5.693					ND	
70 Epichlorohydrin	57		5.766					ND	
71 cis-1,3-Dichloropropene	75		5.807					ND	
72 4-Methyl-2-pentanone (MIBK	43		5.911					ND	
73 Toluene	92		6.025					ND	
74 2-Methylthiophene	97		6.128					ND	
75 trans-1,3-Dichloropropene	75		6.232					ND	
76 3-Methylthiophene	97		6.253					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
77 Ethyl methacrylate	69		6.263					ND	
78 1,1,2-Trichloroethane	83		6.377					ND	
79 Tetrachloroethene	166		6.429					ND	
80 1,3-Dichloropropane	76		6.501					ND	
81 2-Hexanone	43		6.543					ND	
155 n-Butyl acetate	43		6.615					ND	
82 Chlorodibromomethane	129		6.688					ND	
83 Ethylene Dibromide	107		6.760					ND	
146 1-Chlorohexane	55		7.071					ND	
85 3-Chlorobenzotrifluoride	180		7.082					ND	
86 Chlorobenzene	112		7.113					ND	
87 4-Chlorobenzotrifluoride	180		7.123					ND	
88 Ethylbenzene	91		7.175					ND	
89 1,1,1,2-Tetrachloroethane	131		7.185					ND	
90 m-Xylene & p-Xylene	106		7.268					ND	
91 o-Xylene	106		7.589					ND	
92 Styrene	104		7.610					ND	
93 Bromoform	173		7.807					ND	
94 2-Chlorobenzotrifluoride	180		7.818					ND	
95 Isopropylbenzene	105		7.869					ND	
96 Cyclohexanone	55		8.014					ND	U
97 Bromobenzene	156		8.149					ND	
98 1,1,2,2-Tetrachloroethane	83		8.180					ND	
99 N-Propylbenzene	91		8.201					ND	
100 1,2,3-Trichloropropane	110		8.211					ND	
101 trans-1,4-Dichloro-2-buten	53		8.222					ND	
105 2-Chlorotoluene	126		8.294					ND	
104 1,3,5-Trimethylbenzene	105		8.336					ND	
103 3-Chlorotoluene	126		8.336					ND	
102 4-Chlorotoluene	91		8.377					ND	
106 tert-Butylbenzene	134		8.605					ND	
107 1,2,4-Trimethylbenzene	105		8.646					ND	
108 Pentachloroethane	167		8.657					ND	
109 sec-Butylbenzene	105		8.781					ND	
111 4-Isopropyltoluene	119		8.895					ND	
110 1,3-Dichlorobenzene	146		8.905					ND	
112 Dicyclopentadiene	66		8.957					ND	
113 1,4-Dichlorobenzene	146		8.978					ND	
114 1,2,3-Trimethylbenzene	105		8.999					ND	
150 Benzyl chloride	126		9.113					ND	
115 n-Butylbenzene	91		9.237					ND	
116 1,2-Dichlorobenzene	146		9.289					ND	
117 1,2-Dibromo-3-Chloropropan	75		9.963					ND	
118 1,3,5-Trichlorobenzene	180		10.087					ND	
119 1,2,4-Trichlorobenzene	180		10.605					ND	
120 Hexachlorobutadiene	225		10.719					ND	
121 Naphthalene	128		10.823					ND	
122 1,2,3-Trichlorobenzene	180		11.020					ND	
149 2-Methylnaphthalene	142		11.693					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
137 Methyl acrylate	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
S 124 1,2-Dichloroethene, Total	1		30.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
S 123 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 Total BTEX	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00197	Amount Added:	1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added:	1.00	Units: uL	Run Reagent

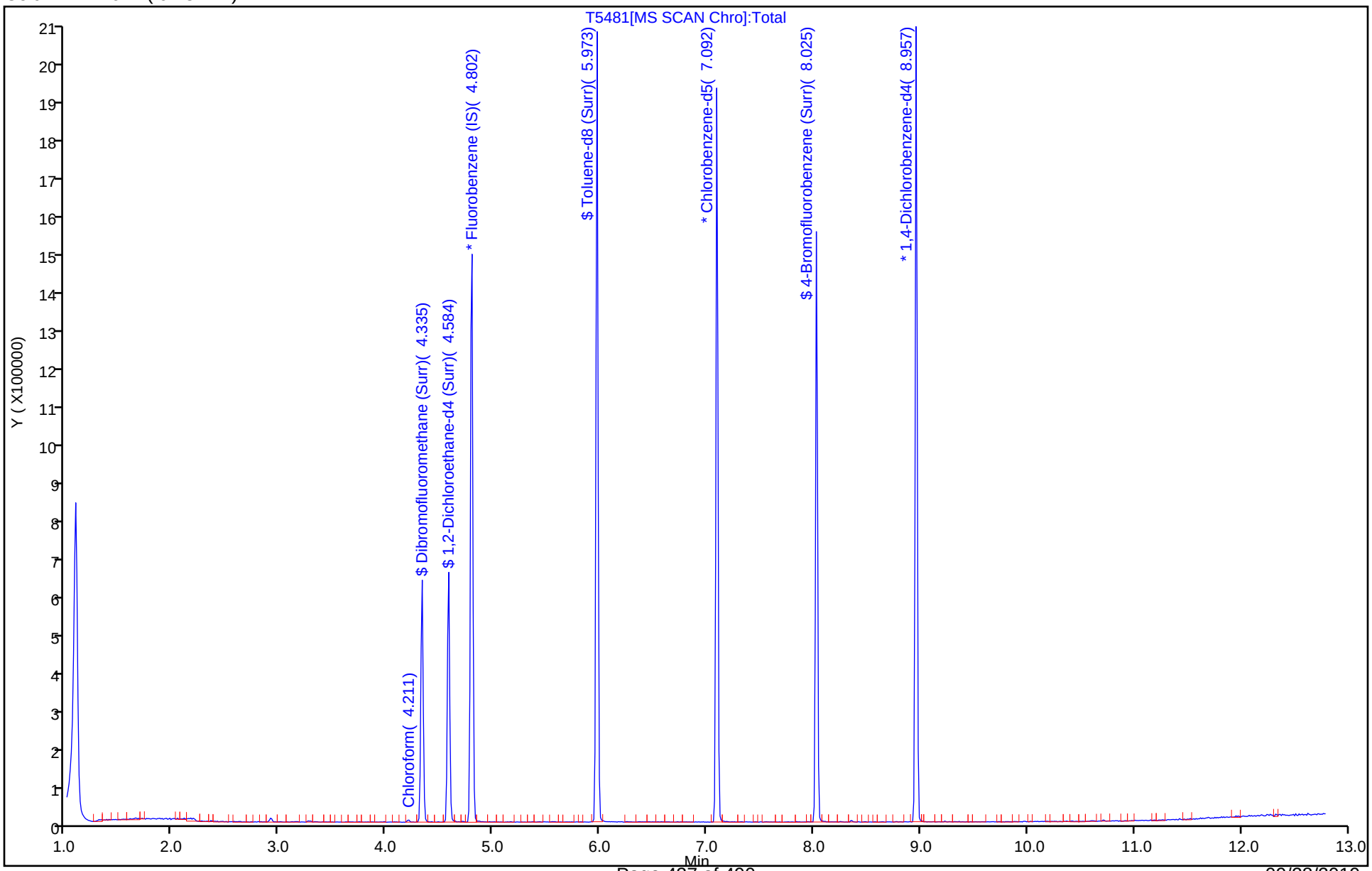
Report Date: 24-Sep-2019 11:45:36 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5481.D

Injection Date:	24-Sep-2019 11:29:30	Instrument ID:	HP5975T	Operator ID:	KN
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



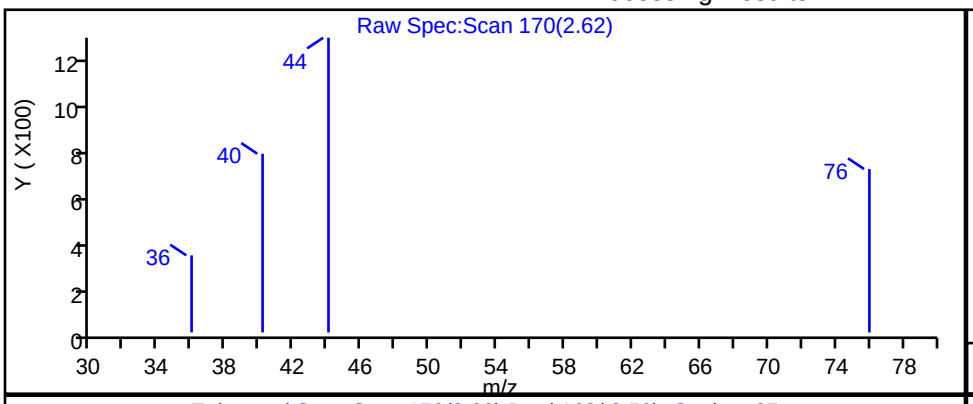
User Disabled Compound Report

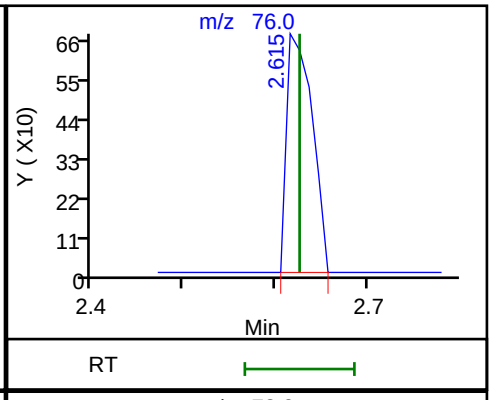
Eurofins TestAmerica, Buffalo

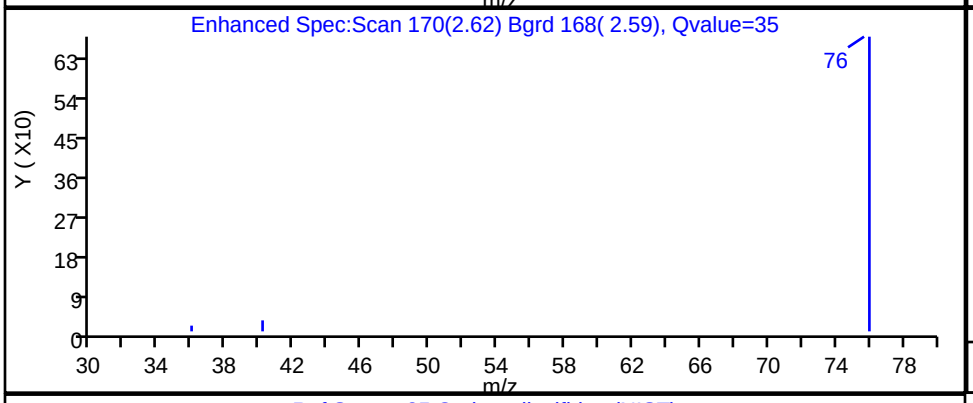
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5481.D
Injection Date: 24-Sep-2019 11:29:30 Instrument ID: HP5975T
Lims ID: MB
Client ID:
Operator ID: KN ALS Bottle#: 8 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

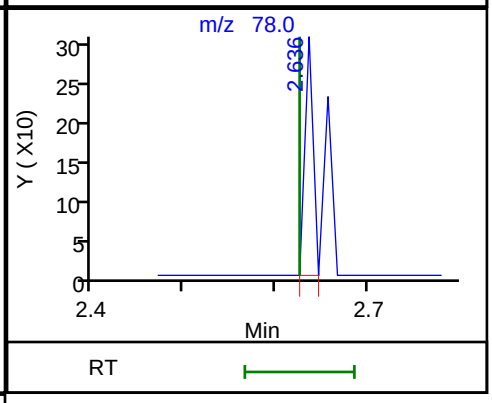
25 Carbon disulfide, CAS: 75-15-0

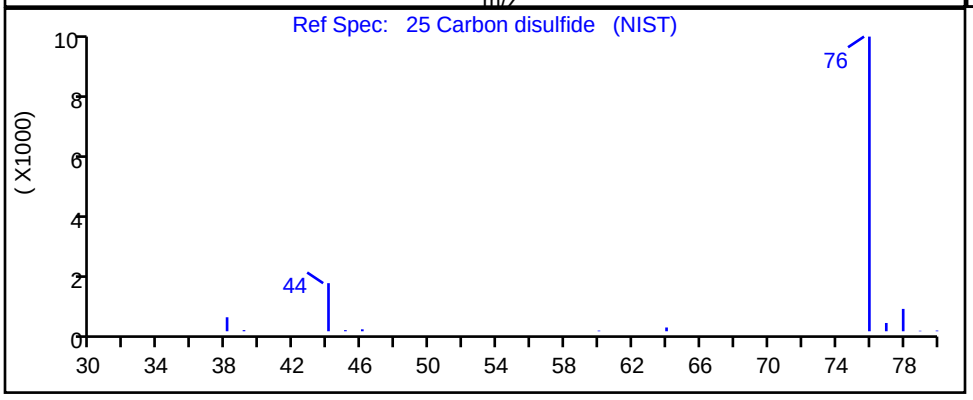
Processing Results











RT	Mass	Response	Amount
2.62	76.00	1303	0.041890
2.64	78.00	191	

Reviewer: nowakk, 24-Sep-2019 11:44:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

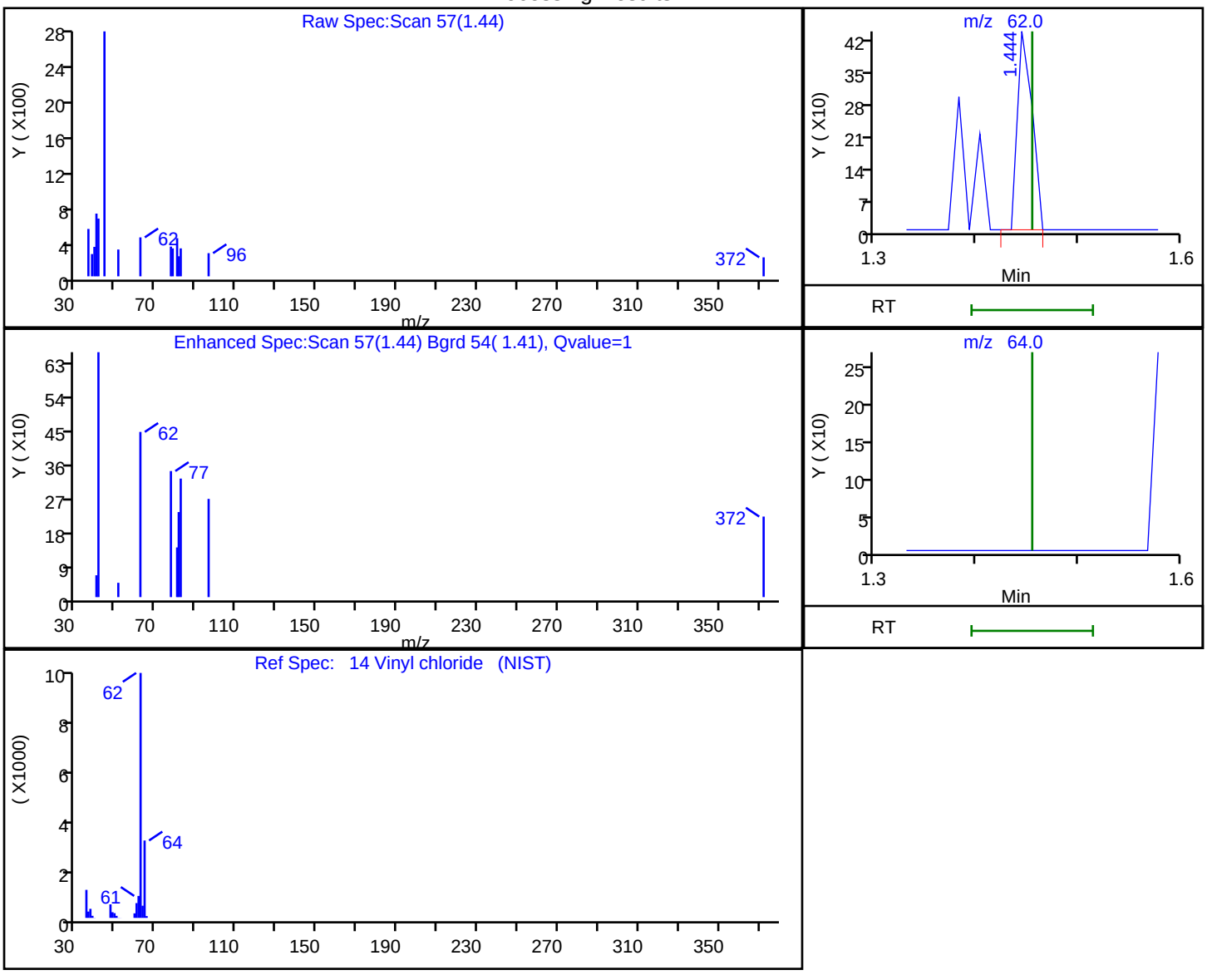
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5481.D
Injection Date: 24-Sep-2019 11:29:30 Instrument ID: HP5975T
Lims ID: MB
Client ID:
Operator ID: KN ALS Bottle#: 8 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.44	62.00	441	0.034490
1.45	64.00	0	

Reviewer: nowakk, 24-Sep-2019 11:44:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493096/5

Matrix: Water Lab File ID: S9288.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 10:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	27.9		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.9		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	31.4		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.7		1.0	0.23
75-34-3	1,1-Dichloroethane	27.5		1.0	0.38
75-35-4	1,1-Dichloroethene	26.5		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	20.3		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	20.9		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	20.5		1.0	0.39
106-93-4	1,2-Dibromoethane	25.3		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.8		1.0	0.79
107-06-2	1,2-Dichloroethane	26.3		1.0	0.21
78-87-5	1,2-Dichloropropane	26.4		1.0	0.72
541-73-1	1,3-Dichlorobenzene	26.3		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.9		1.0	0.84
123-91-1	1,4-Dioxane	748		40	9.3
78-93-3	2-Butanone (MEK)	153		10	1.3
591-78-6	2-Hexanone	128		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	128		5.0	2.1
67-64-1	Acetone	147		10	3.0
71-43-2	Benzene	26.6		1.0	0.41
74-97-5	Bromochloromethane	27.1		1.0	0.87
75-27-4	Bromodichloromethane	25.9		1.0	0.39
75-25-2	Bromoform	24.8		1.0	0.26
74-83-9	Bromomethane	23.5		1.0	0.69
75-15-0	Carbon disulfide	27.4		1.0	0.19
56-23-5	Carbon tetrachloride	29.1		1.0	0.27
108-90-7	Chlorobenzene	26.3		1.0	0.75
75-00-3	Chloroethane	24.9		1.0	0.32
67-66-3	Chloroform	25.6		1.0	0.34
74-87-3	Chloromethane	23.8		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	25.7		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.2		1.0	0.36
110-82-7	Cyclohexane	29.6		1.0	0.18
124-48-1	Dibromochloromethane	26.1		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493096/5

Matrix: Water Lab File ID: S9288.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/20/2019 10:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493096 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	21.8		1.0	0.68
100-41-4	Ethylbenzene	26.6		1.0	0.74
98-82-8	Isopropylbenzene	27.6		1.0	0.79
79-20-9	Methyl acetate	57.6		2.5	1.3
1634-04-4	Methyl tert-butyl ether	25.6		1.0	0.16
108-87-2	Methylcyclohexane	29.0		1.0	0.16
75-09-2	Methylene Chloride	26.0		1.0	0.44
100-42-5	Styrene	25.7		1.0	0.73
127-18-4	Tetrachloroethene	27.7		1.0	0.36
108-88-3	Toluene	26.5		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	27.0		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	26.9		1.0	0.37
79-01-6	Trichloroethene	27.6		1.0	0.46
75-69-4	Trichlorofluoromethane	26.5		1.0	0.88
75-01-4	Vinyl chloride	25.6		1.0	0.90
1330-20-7	Xylenes, Total	51.7		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9288.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Sep-2019 10:11:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084301-005
Operator ID: kn Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 20-Sep-2019 10:35:57 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0334

First Level Reviewer: nowakk Date: 20-Sep-2019 10:42:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	117695	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	85	239478	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	54	253198	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	58	156415	25.0	26.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	56	98682	25.0	26.3	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	616412	25.0	26.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	94	213853	25.0	24.9	
10 Dichlorodifluoromethane	85	1.264	1.264	0.000	98	180995	25.0	21.8	
12 Chloromethane	50	1.440	1.440	0.000	99	221032	25.0	23.8	
13 Vinyl chloride	62	1.537	1.537	0.000	54	198656	25.0	25.6	
151 Butadiene	54	1.537	1.537	0.000	94	249847	25.0	28.0	
14 Bromomethane	94	1.835	1.829	0.006	92	129014	25.0	23.5	
15 Chloroethane	64	1.927	1.921	0.006	98	129663	25.0	24.9	
16 Dichlorofluoromethane	67	2.146	2.146	0.000	96	276145	25.0	24.5	
17 Trichlorofluoromethane	101	2.146	2.146	0.000	75	283499	25.0	26.5	
18 Ethyl ether	59	2.438	2.438	0.000	93	173191	25.0	27.4	
20 Acrolein	56	2.626	2.620	0.006	97	146222	125.0	138.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.651	2.644	0.007	71	185328	25.0	31.4	
22 1,1-Dichloroethene	96	2.651	2.651	0.000	95	153403	25.0	26.5	
23 Acetone	43	2.784	2.778	0.006	98	357948	125.0	146.5	
25 Iodomethane	142	2.815	2.815	0.000	98	299822	25.0	27.2	
26 Carbon disulfide	76	2.845	2.845	0.000	99	517886	25.0	27.4	
28 3-Chloro-1-propene	41	3.028	3.028	0.000	87	315283	25.0	27.3	
27 Methyl acetate	43	3.083	3.076	0.007	96	336238	50.0	57.6	
30 Methylene Chloride	84	3.180	3.180	0.000	96	170399	25.0	26.0	
31 2-Methyl-2-propanol	59	3.356	3.356	0.000	94	193826	250.0	388.6	
32 Methyl tert-butyl ether	73	3.393	3.387	0.006	94	486417	25.0	25.6	
34 trans-1,2-Dichloroethene	96	3.405	3.405	0.000	93	177762	25.0	27.0	
33 Acrylonitrile	53	3.472	3.472	0.000	98	828701	250.0	282.1	
35 Hexane	57	3.600	3.600	0.000	94	319577	25.0	30.0	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	97	324157	25.0	27.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.886	3.886	0.000	97	915971	50.0	52.1	
44 2,2-Dichloropropane	77	4.348	4.354	-0.006	90	199613	25.0	28.9	
45 cis-1,2-Dichloroethene	96	4.391	4.390	0.000	80	185849	25.0	25.7	
43 2-Butanone (MEK)	43	4.427	4.427	0.000	94	540354	125.0	152.9	
48 Chlorobromomethane	128	4.628	4.628	0.000	95	103072	25.0	27.1	
49 Tetrahydrofuran	42	4.646	4.646	0.000	90	140707	50.0	55.3	
50 Chloroform	83	4.707	4.707	0.000	94	301932	25.0	25.6	
51 1,1,1-Trichloroethane	97	4.810	4.816	-0.006	89	276933	25.0	27.9	
52 Cyclohexane	56	4.816	4.816	0.000	94	366291	25.0	29.6	
55 Carbon tetrachloride	117	4.950	4.950	0.000	88	258646	25.0	29.1	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	90	249233	25.0	27.9	
57 Benzene	78	5.175	5.169	0.006	97	702242	25.0	26.6	
53 Isobutyl alcohol	43	5.200	5.200	0.000	93	228266	625.0	790.5	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	80	271025	25.0	26.3	
59 n-Heptane	43	5.346	5.346	0.000	96	388495	25.0	28.9	
62 Trichloroethene	95	5.784	5.784	0.000	92	188372	25.0	27.6	
64 Methylcyclohexane	83	5.899	5.899	0.000	95	340094	25.0	29.0	
65 1,2-Dichloropropane	63	6.027	6.027	0.000	89	179108	25.0	26.4	
67 Dibromomethane	93	6.167	6.167	0.000	88	110722	25.0	26.1	
66 1,4-Dioxane	88	6.173	6.173	-0.006	33	34093	500.0	747.6	M
68 Dichlorobromomethane	83	6.325	6.319	0.006	98	222001	25.0	25.9	
69 2-Chloroethyl vinyl ether	63	6.599	6.599	0.000	93	123850	25.0	25.2	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	87	279702	25.0	25.2	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	98	1146848	125.0	127.7	
74 Toluene	92	7.019	7.025	-0.006	95	461189	25.0	26.5	
77 trans-1,3-Dichloropropene	75	7.305	7.311	-0.006	98	267592	25.0	26.9	
75 Ethyl methacrylate	69	7.347	7.353	-0.006	86	240597	25.0	25.2	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	94	128332	25.0	24.7	
81 Tetrachloroethene	166	7.548	7.548	0.000	87	223601	25.0	27.7	
82 1,3-Dichloropropane	76	7.657	7.657	0.000	98	278394	25.0	26.1	
80 2-Hexanone	43	7.724	7.724	0.000	96	832061	125.0	127.6	
83 Chlorodibromomethane	129	7.895	7.895	0.000	90	177115	25.0	26.1	
84 Ethylene Dibromide	107	7.998	7.998	0.000	99	172709	25.0	25.3	
87 Chlorobenzene	112	8.473	8.473	0.000	94	528166	25.0	26.3	
88 Ethylbenzene	91	8.564	8.558	0.006	98	861729	25.0	26.6	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	51	191649	25.0	27.6	
90 m-Xylene & p-Xylene	106	8.679	8.679	0.000	97	349083	25.0	25.6	
91 o-Xylene	106	9.111	9.111	0.000	97	342189	25.0	26.1	
92 Styrene	104	9.142	9.142	0.000	93	552067	25.0	25.7	
95 Bromoform	173	9.397	9.397	0.000	95	114733	25.0	24.8	
94 Isopropylbenzene	105	9.495	9.495	0.000	95	883830	25.0	27.6	
101 Bromobenzene	156	9.841	9.841	0.000	93	239735	25.0	28.1	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.908	-0.006	86	201404	25.0	24.9	
99 N-Propylbenzene	91	9.920	9.920	0.000	98	1023482	25.0	28.0	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.006	60	72911	25.0	25.1	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	77	46842	25.0	17.1	
103 2-Chlorotoluene	126	10.024	10.024	0.000	96	212686	25.0	27.1	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	85	714461	25.0	26.8	
105 4-Chlorotoluene	126	10.139	10.139	0.000	95	227571	25.0	26.9	
106 tert-Butylbenzene	134	10.413	10.413	0.000	85	168821	25.0	25.9	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	76	712516	25.0	25.9	
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	909093	25.0	27.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	74	441876	25.0	26.3	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	97	819264	25.0	26.4	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	96	445681	25.0	25.9	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	679789	25.0	26.3	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	93	413459	25.0	25.8	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	78	33511	25.0	20.5	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	93	241812	25.0	20.9	
120 Hexachlorobutadiene	225	12.707	12.713	-0.006	96	106309	25.0	21.2	
121 Naphthalene	128	12.816	12.816	0.000	97	583807	25.0	19.3	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	95	212850	25.0	20.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00361	Amount Added:	12.50	Units: uL	
8260 CORP mix_00166	Amount Added:	12.50	Units: uL	
S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

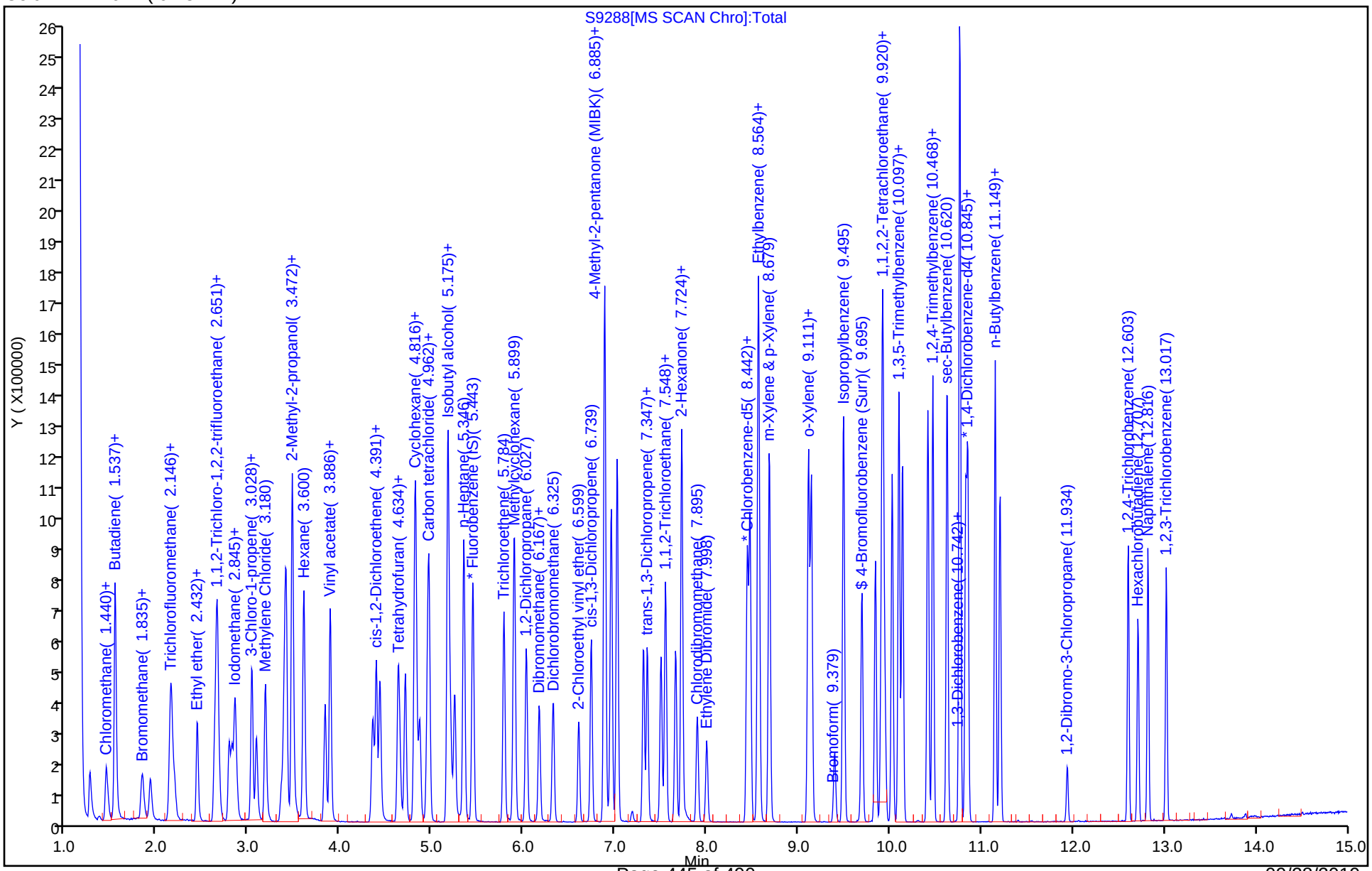
Report Date: 20-Sep-2019 10:42:21 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9288.D

Injection Date:	20-Sep-2019 10:11:30	Instrument ID:	HP5973S	Operator ID:	kn
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

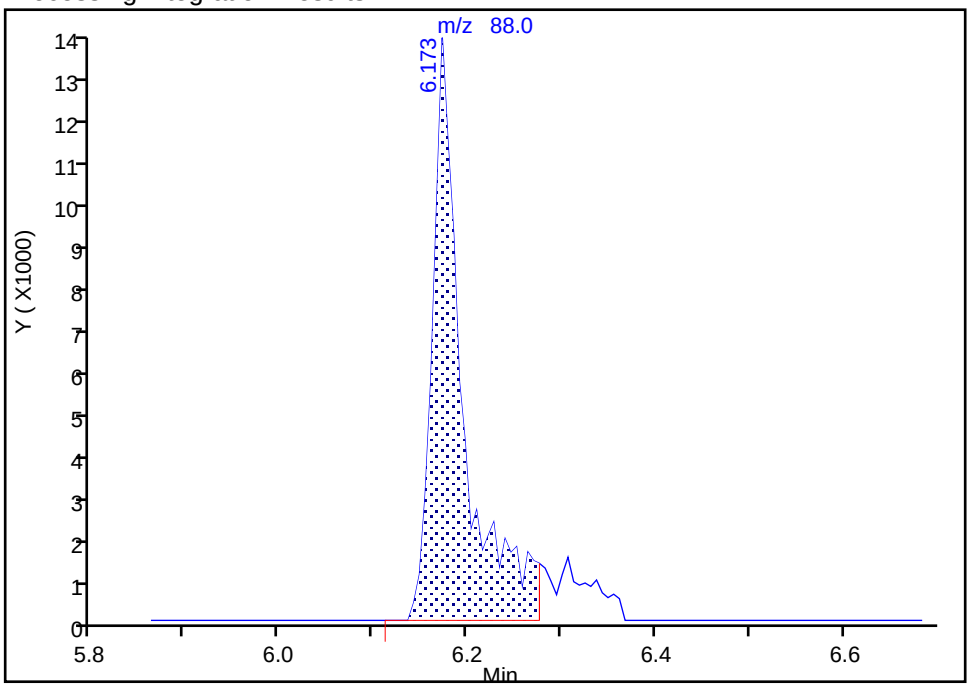
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84301.b\S9288.D
Injection Date: 20-Sep-2019 10:11:30 Instrument ID: HP5973S
Lims ID: LCS
Client ID:
Operator ID: kn ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

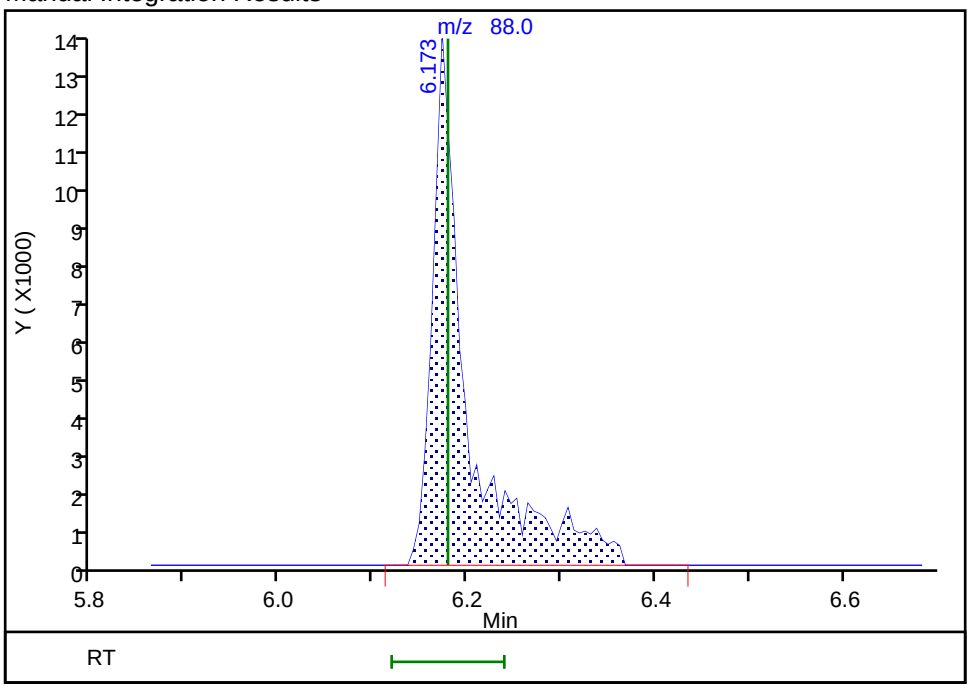
Processing Integration Results

RT: 6.17
Area: 29904
Amount: 655.7180
Amount Units: ug/L



Manual Integration Results

RT: 6.17
Area: 34093
Amount: 747.5720
Amount Units: ug/L



Reviewer: nowakk, 20-Sep-2019 10:35:46
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493246/5

Matrix: Water Lab File ID: S9343.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 10:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	25.5		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	26.2		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	25.3		1.0	0.31
79-00-5	1,1,2-Trichloroethane	25.6		1.0	0.23
75-34-3	1,1-Dichloroethane	26.3		1.0	0.38
75-35-4	1,1-Dichloroethene	24.6		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	21.8		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	22.1		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.0		1.0	0.39
106-93-4	1,2-Dibromoethane	26.1		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.3		1.0	0.79
107-06-2	1,2-Dichloroethane	25.9		1.0	0.21
78-87-5	1,2-Dichloropropane	25.9		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.9		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.4		1.0	0.84
123-91-1	1,4-Dioxane	689		40	9.3
78-93-3	2-Butanone (MEK)	162		10	1.3
591-78-6	2-Hexanone	139		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	141		5.0	2.1
67-64-1	Acetone	150		10	3.0
71-43-2	Benzene	25.1		1.0	0.41
74-97-5	Bromochloromethane	26.7		1.0	0.87
75-27-4	Bromodichloromethane	25.2		1.0	0.39
75-25-2	Bromoform	24.0		1.0	0.26
74-83-9	Bromomethane	23.1		1.0	0.69
75-15-0	Carbon disulfide	24.9		1.0	0.19
56-23-5	Carbon tetrachloride	26.4		1.0	0.27
108-90-7	Chlorobenzene	25.3		1.0	0.75
75-00-3	Chloroethane	23.1		1.0	0.32
67-66-3	Chloroform	24.7		1.0	0.34
74-87-3	Chloromethane	23.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	25.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	24.4		1.0	0.36
110-82-7	Cyclohexane	24.6		1.0	0.18
124-48-1	Dibromochloromethane	25.3		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493246/5

Matrix: Water Lab File ID: S9343.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/21/2019 10:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493246 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	18.6		1.0	0.68
100-41-4	Ethylbenzene	25.4		1.0	0.74
98-82-8	Isopropylbenzene	26.0		1.0	0.79
79-20-9	Methyl acetate	62.7		2.5	1.3
1634-04-4	Methyl tert-butyl ether	25.5		1.0	0.16
108-87-2	Methylcyclohexane	24.1		1.0	0.16
75-09-2	Methylene Chloride	26.0		1.0	0.44
100-42-5	Styrene	25.6		1.0	0.73
127-18-4	Tetrachloroethene	25.9		1.0	0.36
108-88-3	Toluene	25.5		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	25.2		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.9		1.0	0.37
79-01-6	Trichloroethene	26.0		1.0	0.46
75-69-4	Trichlorofluoromethane	23.2		1.0	0.88
75-01-4	Vinyl chloride	23.2		1.0	0.90
1330-20-7	Xylenes, Total	48.8		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	103		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9343.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-Sep-2019 10:25:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084330-005
Operator ID: OI Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 21-Sep-2019 10:46:09 Calib Date: 10-Sep-2019 21:32:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190910-84010.b\S8786.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0306

First Level Reviewer: izquierdoo Date: 21-Sep-2019 10:46:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.443	5.443	0.000	98	115102	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.442	8.442	0.000	84	235636	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.827	10.827	0.000	56	250732	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.865	4.865	0.000	57	151143	25.0	25.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.175	5.175	0.000	57	94386	25.0	25.7	
$ 5 Toluene-d8 (Surr)	98	6.958	6.958	0.000	91	601915	25.0	25.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.695	9.695	0.000	94	210366	25.0	24.9	
10 Dichlorodifluoromethane	85	1.263	1.263	0.000	97	151512	25.0	18.6	
12 Chloromethane	50	1.446	1.446	0.000	99	212807	25.0	23.5	
13 Vinyl chloride	62	1.543	1.543	0.000	49	176264	25.0	23.2	
151 Butadiene	54	1.537	1.543	-0.006	93	235237	25.0	26.9	
14 Bromomethane	94	1.835	1.835	0.000	91	124056	25.0	23.1	
15 Chloroethane	64	1.927	1.927	0.000	96	117475	25.0	23.1	
16 Dichlorofluoromethane	67	2.152	2.152	0.000	96	256196	25.0	23.3	
17 Trichlorofluoromethane	101	2.158	2.152	0.006	79	242675	25.0	23.2	
18 Ethyl ether	59	2.438	2.438	0.000	95	177706	25.0	28.8	
20 Acrolein	56	2.626	2.626	0.000	97	145936	125.0	141.2	
21 1,1,2-Trichloro-1,2,2-trif	101	2.650	2.651	-0.001	77	146395	25.0	25.3	
22 1,1-Dichloroethene	96	2.663	2.657	0.006	98	139325	25.0	24.6	
23 Acetone	43	2.784	2.784	0.000	98	357835	125.0	149.8	
25 Iodomethane	142	2.833	2.821	0.012	96	286133	25.0	26.6	
26 Carbon disulfide	76	2.857	2.857	0.000	99	460092	25.0	24.9	
28 3-Chloro-1-propene	41	3.034	3.034	0.000	86	278990	25.0	24.7	
27 Methyl acetate	43	3.082	3.082	0.000	96	357588	50.0	62.7	
30 Methylene Chloride	84	3.186	3.180	0.006	96	166479	25.0	26.0	
31 2-Methyl-2-propanol	59	3.356	3.362	-0.006	96	187553	250.0	384.5	
32 Methyl tert-butyl ether	73	3.393	3.393	0.000	93	473024	25.0	25.5	
34 trans-1,2-Dichloroethene	96	3.411	3.411	0.000	94	162368	25.0	25.2	
33 Acrylonitrile	53	3.472	3.472	0.000	98	835705	250.0	290.9	
35 Hexane	57	3.600	3.600	0.000	95	262076	25.0	25.2	
39 1,1-Dichloroethane	63	3.831	3.831	0.000	97	302765	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.885	3.886	-0.001	97	926374	50.0	53.9	
44 2,2-Dichloropropane	77	4.354	4.348	0.006	93	165694	25.0	24.5	
45 cis-1,2-Dichloroethene	96	4.390	4.390	0.000	80	181052	25.0	25.6	
43 2-Butanone (MEK)	43	4.433	4.433	0.000	93	558428	125.0	161.6	
48 Chlorobromomethane	128	4.628	4.634	-0.006	93	99272	25.0	26.7	
49 Tetrahydrofuran	42	4.646	4.646	0.000	90	146538	50.0	58.8	
50 Chloroform	83	4.707	4.707	0.000	95	284470	25.0	24.7	
51 1,1,1-Trichloroethane	97	4.816	4.816	0.000	90	247517	25.0	25.5	
52 Cyclohexane	56	4.816	4.822	-0.006	93	297220	25.0	24.6	
55 Carbon tetrachloride	117	4.950	4.950	0.000	90	229659	25.0	26.4	
54 1,1-Dichloropropene	75	4.968	4.968	0.000	91	225927	25.0	25.8	
57 Benzene	78	5.175	5.175	0.000	96	648794	25.0	25.1	
53 Isobutyl alcohol	43	5.199	5.200	-0.001	93	223038	625.0	789.8	
58 1,2-Dichloroethane	62	5.248	5.248	0.000	79	260887	25.0	25.9	
59 n-Heptane	43	5.346	5.346	0.000	95	310456	25.0	23.6	
62 Trichloroethene	95	5.784	5.784	0.000	94	173253	25.0	26.0	
64 Methylcyclohexane	83	5.899	5.899	0.000	94	276631	25.0	24.1	
65 1,2-Dichloropropane	63	6.027	6.027	0.000	88	171750	25.0	25.9	
67 Dibromomethane	93	6.167	6.167	0.000	88	110545	25.0	26.6	
66 1,4-Dioxane	88	6.173	6.173	-0.006	32	30901	500.0	688.6	M
68 Dichlorobromomethane	83	6.325	6.319	0.006	98	211683	25.0	25.2	
69 2-Chloroethyl vinyl ether	63	6.599	6.605	-0.006	94	121605	25.0	25.3	
72 cis-1,3-Dichloropropene	75	6.739	6.739	0.000	88	264333	25.0	24.4	
73 4-Methyl-2-pentanone (MIBK	43	6.885	6.885	0.000	99	1245845	125.0	141.0	
74 Toluene	92	7.018	7.025	-0.007	95	435813	25.0	25.5	
77 trans-1,3-Dichloropropene	75	7.310	7.311	-0.001	98	253750	25.0	25.9	
75 Ethyl methacrylate	69	7.353	7.353	0.000	86	248708	25.0	26.5	
79 1,1,2-Trichloroethane	83	7.499	7.499	0.000	94	130808	25.0	25.6	
81 Tetrachloroethene	166	7.548	7.554	-0.006	85	206113	25.0	25.9	
82 1,3-Dichloropropane	76	7.657	7.663	-0.006	97	270089	25.0	25.8	
80 2-Hexanone	43	7.724	7.724	0.000	96	892803	125.0	139.1	
83 Chlorodibromomethane	129	7.895	7.895	0.000	87	169224	25.0	25.3	
84 Ethylene Dibromide	107	7.998	7.998	0.000	96	175697	25.0	26.1	
87 Chlorobenzene	112	8.472	8.473	0.000	93	498218	25.0	25.3	
88 Ethylbenzene	91	8.564	8.564	0.000	98	807508	25.0	25.4	
89 1,1,1,2-Tetrachloroethane	131	8.570	8.570	0.000	50	180951	25.0	26.5	
90 m-Xylene & p-Xylene	106	8.685	8.685	0.000	98	326751	25.0	24.4	
91 o-Xylene	106	9.111	9.111	0.000	97	314742	25.0	24.4	
92 Styrene	104	9.142	9.142	0.000	94	540511	25.0	25.6	
95 Bromoform	173	9.397	9.397	0.000	95	109371	25.0	24.0	
94 Isopropylbenzene	105	9.494	9.495	-0.001	96	823274	25.0	26.0	
101 Bromobenzene	156	9.841	9.841	0.000	91	234724	25.0	27.8	
97 1,1,2,2-Tetrachloroethane	83	9.902	9.902	0.000	89	209345	25.0	26.2	
99 N-Propylbenzene	91	9.920	9.920	0.000	97	932172	25.0	25.8	
100 1,2,3-Trichloropropane	110	9.933	9.939	-0.007	61	74890	25.0	26.0	
98 trans-1,4-Dichloro-2-buten	53	9.951	9.951	0.000	76	41557	25.0	15.4	
103 2-Chlorotoluene	126	10.024	10.024	0.000	97	208100	25.0	26.8	
102 1,3,5-Trimethylbenzene	105	10.097	10.097	0.000	85	670343	25.0	25.4	
105 4-Chlorotoluene	126	10.139	10.139	0.000	94	215692	25.0	25.8	
106 tert-Butylbenzene	134	10.413	10.413	0.000	90	159214	25.0	24.7	
107 1,2,4-Trimethylbenzene	105	10.468	10.468	0.000	38	681683	25.0	25.0	
109 sec-Butylbenzene	105	10.626	10.626	0.000	94	816331	25.0	24.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.760	10.760	0.000	76	430982	25.0	25.9	
110 4-Isopropyltoluene	119	10.766	10.766	0.000	96	747613	25.0	24.3	
113 1,4-Dichlorobenzene	146	10.851	10.851	0.000	95	432870	25.0	25.4	
115 n-Butylbenzene	91	11.149	11.149	0.000	94	617049	25.0	24.1	
116 1,2-Dichlorobenzene	146	11.204	11.204	0.000	92	402121	25.0	25.3	
117 1,2-Dibromo-3-Chloropropan	75	11.934	11.934	0.000	75	35556	25.0	22.0	
119 1,2,4-Trichlorobenzene	180	12.603	12.603	0.000	93	253651	25.0	22.1	
120 Hexachlorobutadiene	225	12.707	12.713	-0.006	96	102420	25.0	20.6	
121 Naphthalene	128	12.816	12.816	0.000	97	639312	25.0	21.4	
122 1,2,3-Trichlorobenzene	180	13.017	13.017	0.000	96	226172	25.0	21.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

GAS CORP mix_00361	Amount Added:	12.50	Units: uL	
8260 CORP mix_00166	Amount Added:	12.50	Units: uL	
S_8260_IS_00326	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00329	Amount Added:	1.00	Units: uL	Run Reagent

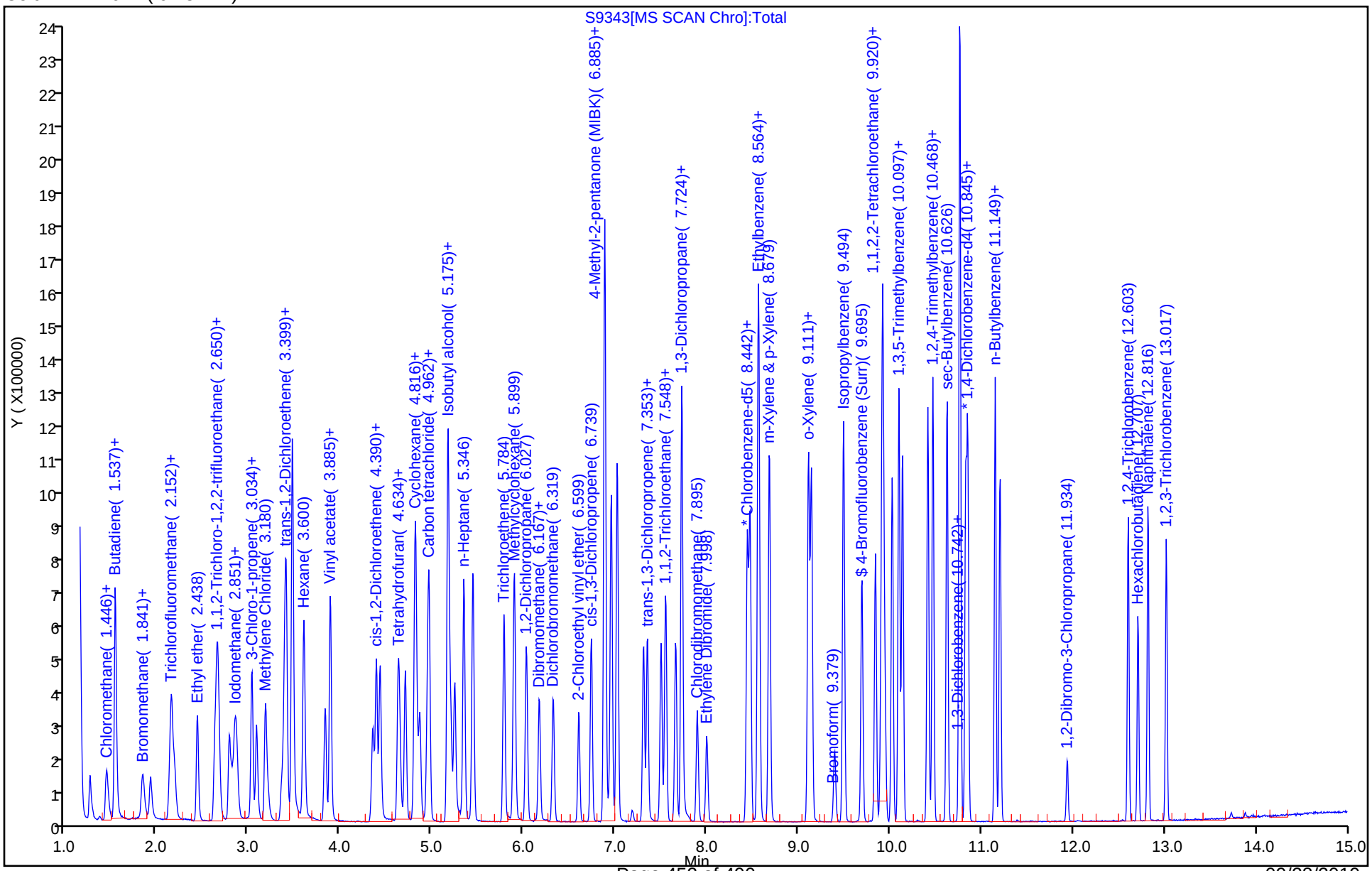
Report Date: 21-Sep-2019 10:46:10 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9343.D

Injection Date:	21-Sep-2019 10:25:30	Instrument ID:	HP5973S	Operator ID:	OI
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

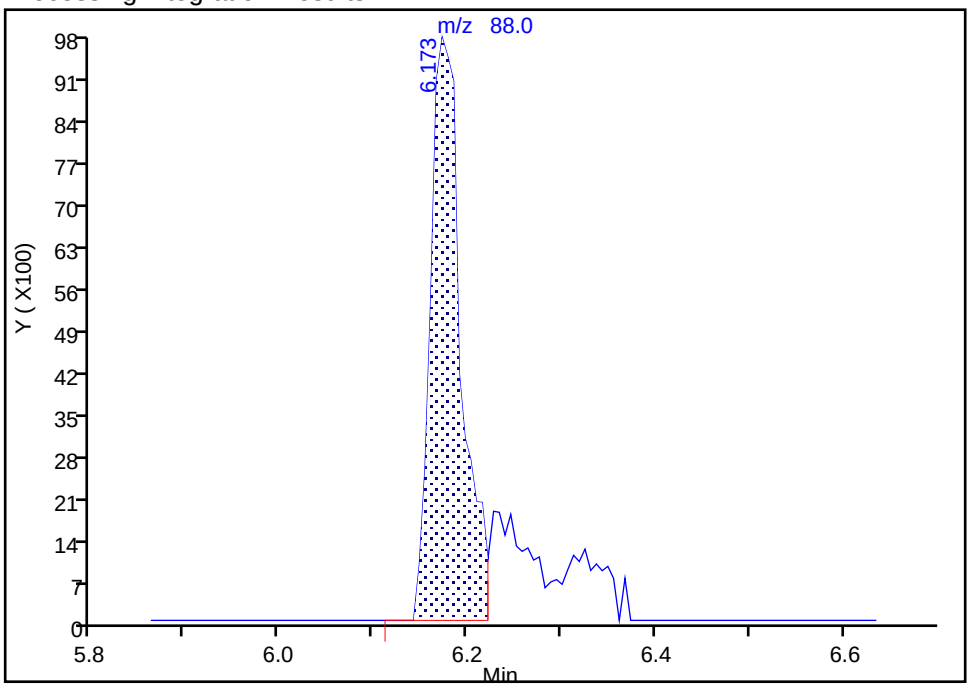
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190920-84330.b\S9343.D
Injection Date: 21-Sep-2019 10:25:30 Instrument ID: HP5973S
Lims ID: LCS
Client ID:
Operator ID: OI ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

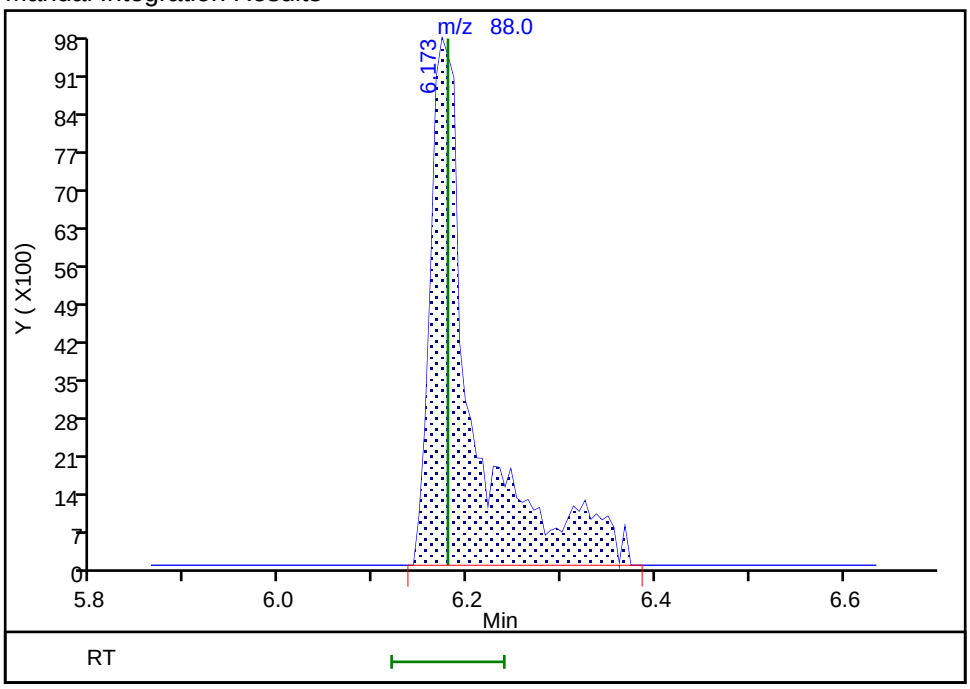
Processing Integration Results

RT: 6.17
Area: 22162
Amount: 493.8792
Amount Units: ug/L



Manual Integration Results

RT: 6.17
Area: 30901
Amount: 688.6274
Amount Units: ug/L



Reviewer: izquierdoo, 21-Sep-2019 10:45:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493390/5

Matrix: Water Lab File ID: T5389.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 12:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	27.4		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	25.3		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.9		1.0	0.31
79-00-5	1,1,2-Trichloroethane	24.7		1.0	0.23
75-34-3	1,1-Dichloroethane	26.3		1.0	0.38
75-35-4	1,1-Dichloroethene	26.3		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	24.8		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	23.4		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	23.9		1.0	0.39
106-93-4	1,2-Dibromoethane	25.8		1.0	0.73
95-50-1	1,2-Dichlorobenzene	24.8		1.0	0.79
107-06-2	1,2-Dichloroethane	25.8		1.0	0.21
78-87-5	1,2-Dichloropropane	25.4		1.0	0.72
541-73-1	1,3-Dichlorobenzene	24.5		1.0	0.78
106-46-7	1,4-Dichlorobenzene	23.9		1.0	0.84
123-91-1	1,4-Dioxane	491		40	9.3
78-93-3	2-Butanone (MEK)	136		10	1.3
591-78-6	2-Hexanone	135		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	132		5.0	2.1
67-64-1	Acetone	132		10	3.0
71-43-2	Benzene	25.8		1.0	0.41
74-97-5	Bromochloromethane	27.0		1.0	0.87
75-27-4	Bromodichloromethane	27.6		1.0	0.39
75-25-2	Bromoform	27.0		1.0	0.26
74-83-9	Bromomethane	22.4		1.0	0.69
75-15-0	Carbon disulfide	27.0		1.0	0.19
56-23-5	Carbon tetrachloride	27.5		1.0	0.27
108-90-7	Chlorobenzene	24.7		1.0	0.75
75-00-3	Chloroethane	21.7		1.0	0.32
67-66-3	Chloroform	24.9		1.0	0.34
74-87-3	Chloromethane	22.0		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	25.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	27.1		1.0	0.36
110-82-7	Cyclohexane	26.8		1.0	0.18
124-48-1	Dibromochloromethane	26.6		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493390/5

Matrix: Water Lab File ID: T5389.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 12:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	21.9		1.0	0.68
100-41-4	Ethylbenzene	24.8		1.0	0.74
98-82-8	Isopropylbenzene	25.4		1.0	0.79
79-20-9	Methyl acetate	49.3		2.5	1.3
1634-04-4	Methyl tert-butyl ether	26.4		1.0	0.16
108-87-2	Methylcyclohexane	27.2		1.0	0.16
75-09-2	Methylene Chloride	26.0		1.0	0.44
100-42-5	Styrene	26.4		1.0	0.73
127-18-4	Tetrachloroethene	26.9		1.0	0.36
108-88-3	Toluene	25.0		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	26.3		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	26.5		1.0	0.37
79-01-6	Trichloroethene	26.1		1.0	0.46
75-69-4	Trichlorofluoromethane	23.4		1.0	0.88
75-01-4	Vinyl chloride	23.3		1.0	0.90
1330-20-7	Xylenes, Total	51.0		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5389.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 22-Sep-2019 12:07:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 480-0084351-005
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Sep-2019 10:45:49 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0334

First Level Reviewer: farrellr Date: 22-Sep-2019 13:10:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	199970	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	784995	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	96	436149	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	288904	25.0	26.7	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	362339	25.0	26.2	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1056789	25.0	25.4	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	348147	25.0	26.7	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	307485	25.0	21.9	
13 Chloromethane	50	1.372	1.371	0.001	99	282951	25.0	22.0	
151 Butadiene	54	1.444	1.434	0.010	90	257592	25.0	22.7	
14 Vinyl chloride	62	1.465	1.454	0.011	99	291125	25.0	23.3	
15 Bromomethane	94	1.714	1.713	0.001	93	243076	25.0	22.4	
16 Chloroethane	64	1.776	1.776	0.000	99	200918	25.0	21.7	
18 Dichlorofluoromethane	67	2.004	1.993	0.011	98	476301	25.0	21.8	
17 Trichlorofluoromethane	101	2.014	2.004	0.010	98	492184	25.0	23.4	
19 Ethyl ether	59	2.242	2.232	0.010	91	231795	25.0	23.7	
21 Acrolein	56	2.418	2.408	0.010	99	270796	125.0	120.8	
22 1,1-Dichloroethene	96	2.449	2.439	0.010	99	249211	25.0	26.3	
20 1,1,2-Trichloro-1,2,2-trif	101	2.449	2.449	0.000	92	284121	25.0	26.9	
23 Acetone	43	2.563	2.563	0.000	99	578225	125.0	132.4	
24 Iodomethane	142	2.605	2.594	0.011	98	450666	25.0	26.1	
25 Carbon disulfide	76	2.636	2.625	0.011	100	820653	25.0	27.0	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	84	347750	25.0	24.7	
28 Methyl acetate	43	2.822	2.822	0.000	97	482347	50.0	49.3	
30 Methylene Chloride	84	2.926	2.916	0.010	92	297162	25.0	26.0	
31 2-Methyl-2-propanol	59	3.081	3.081	0.000	87	516431	250.0	254.9	
33 Methyl tert-butyl ether	73	3.113	3.112	0.001	98	818895	25.0	26.4	
32 trans-1,2-Dichloroethene	96	3.113	3.112	0.001	99	281329	25.0	26.3	
34 Acrylonitrile	53	3.175	3.164	0.011	98	1281996	250.0	261.6	
35 Hexane	57	3.278	3.278	0.000	92	391626	25.0	25.5	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	97	470514	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Vinyl acetate	43	3.517	3.517	0.000	98	1137555	50.0	54.4	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	91	397640	25.0	27.7	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	82	298994	25.0	25.6	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	828899	125.0	136.4	
47 Chlorobromomethane	128	4.149	4.149	0.000	92	163055	25.0	27.0	
48 Tetrahydrofuran	42	4.159	4.159	0.000	83	210569	50.0	50.5	
50 Chloroform	83	4.211	4.201	0.010	94	514539	25.0	24.9	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	456369	25.0	27.4	
52 Cyclohexane	56	4.304	4.304	0.000	92	452132	25.0	26.8	
53 Carbon tetrachloride	117	4.408	4.408	0.000	96	399229	25.0	27.5	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	93	376515	25.0	27.0	
55 Benzene	78	4.584	4.584	0.000	96	1063336	25.0	25.8	
56 Isobutyl alcohol	43	4.594	4.594	0.000	90	451837	625.0	654.0	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	98	433464	25.0	25.8	
59 n-Heptane	43	4.719	4.719	0.000	86	376699	25.0	26.8	
60 Trichloroethene	95	5.071	5.071	0.000	97	291352	25.0	26.1	
62 Methylcyclohexane	83	5.164	5.164	0.000	90	485842	25.0	27.2	
63 1,2-Dichloropropane	63	5.258	5.257	0.000	89	249647	25.0	25.4	
66 1,4-Dioxane	88	5.372	5.372	0.000	49	102375	500.0	491.3	
65 Dibromomethane	93	5.372	5.371	0.000	95	199185	25.0	26.6	
67 Dichlorobromomethane	83	5.486	5.485	0.000	98	364722	25.0	27.6	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	95	185604	25.0	26.7	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	93	409820	25.0	27.1	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.910	0.001	96	1718321	125.0	132.4	
73 Toluene	92	6.025	6.024	0.001	98	688841	25.0	25.0	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	96	395822	25.0	26.5	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	372652	25.0	25.8	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	93	220298	25.0	24.7	
79 Tetrachloroethene	166	6.429	6.429	0.000	96	320295	25.0	26.9	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	91	451713	25.0	25.4	
81 2-Hexanone	43	6.543	6.543	0.000	96	1234594	125.0	134.6	
82 Chlorodibromomethane	129	6.688	6.688	0.000	89	276702	25.0	26.6	
83 Ethylene Dibromide	107	6.771	6.760	0.011	97	288853	25.0	25.8	
86 Chlorobenzene	112	7.113	7.112	0.000	94	773539	25.0	24.7	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1305193	25.0	24.8	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	92	262282	25.0	26.2	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	512285	25.0	25.7	
91 o-Xylene	106	7.589	7.589	0.000	98	491638	25.0	25.3	
92 Styrene	104	7.610	7.610	0.000	94	833338	25.0	26.4	
93 Bromoform	173	7.807	7.807	0.000	95	184319	25.0	27.0	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1322365	25.0	25.4	
97 Bromobenzene	156	8.149	8.149	0.000	94	333875	25.0	24.8	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	400715	25.0	25.3	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1603384	25.0	25.0	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	88	137099	25.0	24.4	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.221	0.001	79	112762	25.0	24.4	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	311473	25.0	24.8	
104 1,3,5-Trimethylbenzene	105	8.336	8.335	0.001	94	1146774	25.0	25.9	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	1103508	25.0	26.0	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	235811	25.0	25.5	
107 1,2,4-Trimethylbenzene	105	8.646	8.646	0.000	98	1160112	25.0	25.6	
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	1463888	25.0	25.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1246596	25.0	25.9	
110 1,3-Dichlorobenzene	146	8.905	8.905	0.000	98	666942	25.0	24.5	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	668659	25.0	23.9	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	1178705	25.0	25.9	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	96	663329	25.0	24.8	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.962	0.000	84	76804	25.0	23.9	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	471022	25.0	23.4	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	98	247011	25.0	25.9	
121 Naphthalene	128	10.823	10.822	0.000	97	1361867	25.0	25.4	
122 1,2,3-Trichlorobenzene	180	11.020	11.019	0.001	95	489704	25.0	24.8	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

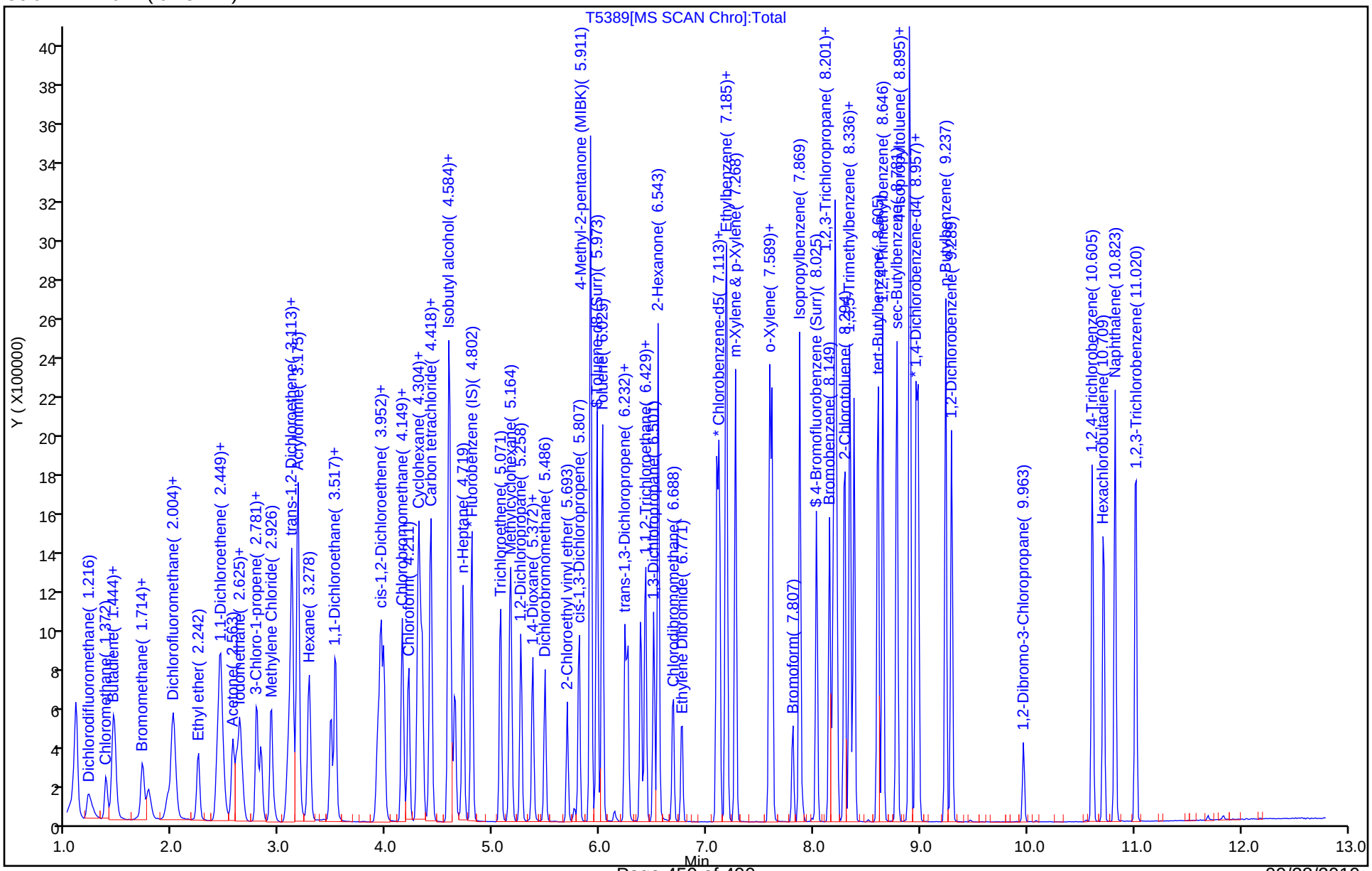
Report Date: 22-Sep-2019 13:10:38 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5389.D

Injection Date:	22-Sep-2019 12:07:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493682/5

Matrix: Water Lab File ID: T5479.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 10:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	29.5		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	25.9		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	29.7		1.0	0.31
79-00-5	1,1,2-Trichloroethane	26.5		1.0	0.23
75-34-3	1,1-Dichloroethane	27.1		1.0	0.38
75-35-4	1,1-Dichloroethene	28.2		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	26.3		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	25.9		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	24.4		1.0	0.39
106-93-4	1,2-Dibromoethane	26.8		1.0	0.73
95-50-1	1,2-Dichlorobenzene	26.4		1.0	0.79
107-06-2	1,2-Dichloroethane	26.7		1.0	0.21
78-87-5	1,2-Dichloropropane	27.2		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.4		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.6		1.0	0.84
123-91-1	1,4-Dioxane	469		40	9.3
78-93-3	2-Butanone (MEK)	138		10	1.3
591-78-6	2-Hexanone	136		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	132		5.0	2.1
67-64-1	Acetone	142		10	3.0
71-43-2	Benzene	27.2		1.0	0.41
74-97-5	Bromochloromethane	28.6		1.0	0.87
75-27-4	Bromodichloromethane	28.7		1.0	0.39
75-25-2	Bromoform	28.7		1.0	0.26
74-83-9	Bromomethane	19.0		1.0	0.69
75-15-0	Carbon disulfide	29.6		1.0	0.19
56-23-5	Carbon tetrachloride	28.5		1.0	0.27
108-90-7	Chlorobenzene	26.0		1.0	0.75
75-00-3	Chloroethane	18.1		1.0	0.32
67-66-3	Chloroform	25.9		1.0	0.34
74-87-3	Chloromethane	17.7		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	27.8		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	28.9		1.0	0.36
110-82-7	Cyclohexane	28.7		1.0	0.18
124-48-1	Dibromochloromethane	28.2		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-493682/5

Matrix: Water Lab File ID: T5479.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/24/2019 10:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493682 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	17.5		1.0	0.68
100-41-4	Ethylbenzene	26.6		1.0	0.74
98-82-8	Isopropylbenzene	27.2		1.0	0.79
79-20-9	Methyl acetate	49.8		2.5	1.3
1634-04-4	Methyl tert-butyl ether	27.7		1.0	0.16
108-87-2	Methylcyclohexane	29.2		1.0	0.16
75-09-2	Methylene Chloride	28.0		1.0	0.44
100-42-5	Styrene	27.5		1.0	0.73
127-18-4	Tetrachloroethene	28.9		1.0	0.36
108-88-3	Toluene	26.6		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	27.8		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	28.3		1.0	0.37
79-01-6	Trichloroethene	27.7		1.0	0.46
75-69-4	Trichlorofluoromethane	20.0		1.0	0.88
75-01-4	Vinyl chloride	19.6		1.0	0.90
1330-20-7	Xylenes, Total	54.0		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5479.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 24-Sep-2019 10:40:30 ALS Bottle#: 6 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0084408-005
Operator ID: KN Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 24-Sep-2019 10:57:52 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0323

First Level Reviewer: nowakk Date: 24-Sep-2019 11:05:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	197920	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	88	776093	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.957	0.000	96	427643	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	0.000	92	278865	25.0	26.0	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	351449	25.0	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1036827	25.0	25.2	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	338586	25.0	26.3	
11 Dichlorodifluoromethane	85	1.206	1.206	0.000	99	243335	25.0	17.5	
13 Chloromethane	50	1.361	1.361	0.000	99	225534	25.0	17.7	
151 Butadiene	54	1.434	1.434	0.000	91	215306	25.0	19.2	
14 Vinyl chloride	62	1.454	1.454	0.000	98	241752	25.0	19.6	
15 Bromomethane	94	1.714	1.714	0.000	92	203829	25.0	19.0	
16 Chloroethane	64	1.776	1.776	0.000	100	165837	25.0	18.1	
18 Dichlorofluoromethane	67	1.993	1.993	0.000	98	421875	25.0	19.5	
17 Trichlorofluoromethane	101	2.004	2.004	0.000	99	417349	25.0	20.0	
19 Ethyl ether	59	2.232	2.232	0.000	88	237820	25.0	24.6	
21 Acrolein	56	2.408	2.408	0.000	99	257983	125.0	116.3	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	97	264466	25.0	28.2	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.449	-0.010	94	310459	25.0	29.7	
23 Acetone	43	2.553	2.553	0.000	99	612502	125.0	141.7	
24 Iodomethane	142	2.594	2.594	0.000	98	481697	25.0	28.2	
25 Carbon disulfide	76	2.625	2.625	0.000	100	889780	25.0	29.6	
27 3-Chloro-1-propene	41	2.781	2.781	0.000	86	377782	25.0	27.2	
28 Methyl acetate	43	2.822	2.822	0.000	97	482617	50.0	49.8	
30 Methylene Chloride	84	2.916	2.916	0.000	92	316404	25.0	28.0	
31 2-Methyl-2-propanol	59	3.081	3.071	0.010	98	492236	250.0	245.5	
33 Methyl tert-butyl ether	73	3.102	3.102	0.000	99	850799	25.0	27.7	
32 trans-1,2-Dichloroethene	96	3.113	3.113	0.000	98	293694	25.0	27.8	
34 Acrylonitrile	53	3.164	3.164	0.000	98	1252670	250.0	258.3	
35 Hexane	57	3.278	3.278	0.000	92	426636	25.0	28.1	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	479717	25.0	27.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Vinyl acetate	43	3.517	3.517	0.000	98	1192412	50.0	57.6	
42 2,2-Dichloropropane	77	3.921	3.921	0.000	92	423265	25.0	29.8	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	82	320921	25.0	27.8	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	830661	125.0	138.1	
47 Chlorobromomethane	128	4.138	4.138	0.000	91	171178	25.0	28.6	
48 Tetrahydrofuran	42	4.149	4.149	0.000	83	200479	50.0	48.6	
50 Chloroform	83	4.201	4.201	0.000	94	529808	25.0	25.9	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	486423	25.0	29.5	
52 Cyclohexane	56	4.304	4.304	0.000	90	479417	25.0	28.7	
53 Carbon tetrachloride	117	4.408	4.408	0.000	96	409679	25.0	28.5	
54 1,1-Dichloropropene	75	4.418	4.418	0.000	95	395214	25.0	28.6	
55 Benzene	78	4.584	4.584	0.000	96	1108730	25.0	27.2	
56 Isobutyl alcohol	43	4.594	4.594	0.000	93	425846	625.0	622.8	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	98	444258	25.0	26.7	
59 n-Heptane	43	4.719	4.719	0.000	88	411135	25.0	29.5	
60 Trichloroethene	95	5.061	5.061	0.000	97	305809	25.0	27.7	
62 Methylcyclohexane	83	5.164	5.164	0.000	91	516569	25.0	29.2	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	263937	25.0	27.2	
66 1,4-Dioxane	88	5.372	5.372	0.000	48	96535	500.0	468.6	
65 Dibromomethane	93	5.372	5.372	0.000	94	198989	25.0	26.8	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	374441	25.0	28.7	
69 2-Chloroethyl vinyl ether	63	5.693	5.693	0.000	94	192127	25.0	27.9	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	93	433038	25.0	28.9	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.911	0.000	96	1690393	125.0	131.7	
73 Toluene	92	6.025	6.025	0.000	98	724608	25.0	26.6	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	96	417154	25.0	28.3	
77 Ethyl methacrylate	69	6.263	6.263	0.000	88	377877	25.0	26.5	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	92	234008	25.0	26.5	
79 Tetrachloroethene	166	6.429	6.429	0.000	97	340491	25.0	28.9	
80 1,3-Dichloropropane	76	6.501	6.501	0.000	91	463551	25.0	26.4	
81 2-Hexanone	43	6.543	6.543	0.000	96	1236753	125.0	136.3	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	289468	25.0	28.2	
83 Ethylene Dibromide	107	6.760	6.760	0.000	98	296296	25.0	26.8	
86 Chlorobenzene	112	7.113	7.113	0.000	96	807285	25.0	26.0	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1382276	25.0	26.6	
89 1,1,1,2-Tetrachloroethane	131	7.185	7.185	0.000	92	283300	25.0	28.6	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	533056	25.0	27.1	
91 o-Xylene	106	7.589	7.589	0.000	98	516778	25.0	26.9	
92 Styrene	104	7.610	7.610	0.000	95	860060	25.0	27.5	
93 Bromoform	173	7.807	7.807	0.000	96	193101	25.0	28.7	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1388766	25.0	27.2	
97 Bromobenzene	156	8.149	8.149	0.000	93	355869	25.0	27.0	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	402774	25.0	25.9	
99 N-Propylbenzene	91	8.201	8.201	0.000	99	1681293	25.0	26.8	
100 1,2,3-Trichloropropane	110	8.211	8.211	0.000	90	137871	25.0	25.1	
101 trans-1,4-Dichloro-2-buten	53	8.222	8.222	0.000	76	118225	25.0	26.0	
105 2-Chlorotoluene	126	8.294	8.294	0.000	96	321715	25.0	26.2	
104 1,3,5-Trimethylbenzene	105	8.336	8.336	0.000	94	1201020	25.0	27.7	
102 4-Chlorotoluene	91	8.377	8.377	0.000	99	1049420	25.0	25.3	
106 tert-Butylbenzene	134	8.605	8.605	0.000	93	249591	25.0	27.5	
107 1,2,4-Trimethylbenzene	105	8.646	8.646	0.000	98	1232991	25.0	27.7	
109 sec-Butylbenzene	105	8.781	8.781	0.000	95	1545667	25.0	27.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 4-Isopropyltoluene	119	8.895	8.895	0.000	97	1321718	25.0	28.0	
110 1,3-Dichlorobenzene	146	8.905	8.905	0.000	97	679189	25.0	25.4	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	699804	25.0	25.6	
115 n-Butylbenzene	91	9.237	9.237	0.000	98	1245053	25.0	27.9	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	693958	25.0	26.4	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.962	-0.001	82	76728	25.0	24.4	
119 1,2,4-Trichlorobenzene	180	10.615	10.605	0.010	94	510017	25.0	25.9	
120 Hexachlorobutadiene	225	10.719	10.719	0.000	97	268103	25.0	28.6	
121 Naphthalene	128	10.823	10.823	0.000	97	1423083	25.0	27.0	
122 1,2,3-Trichlorobenzene	180	11.020	11.020	0.000	95	510115	25.0	26.3	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00362	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

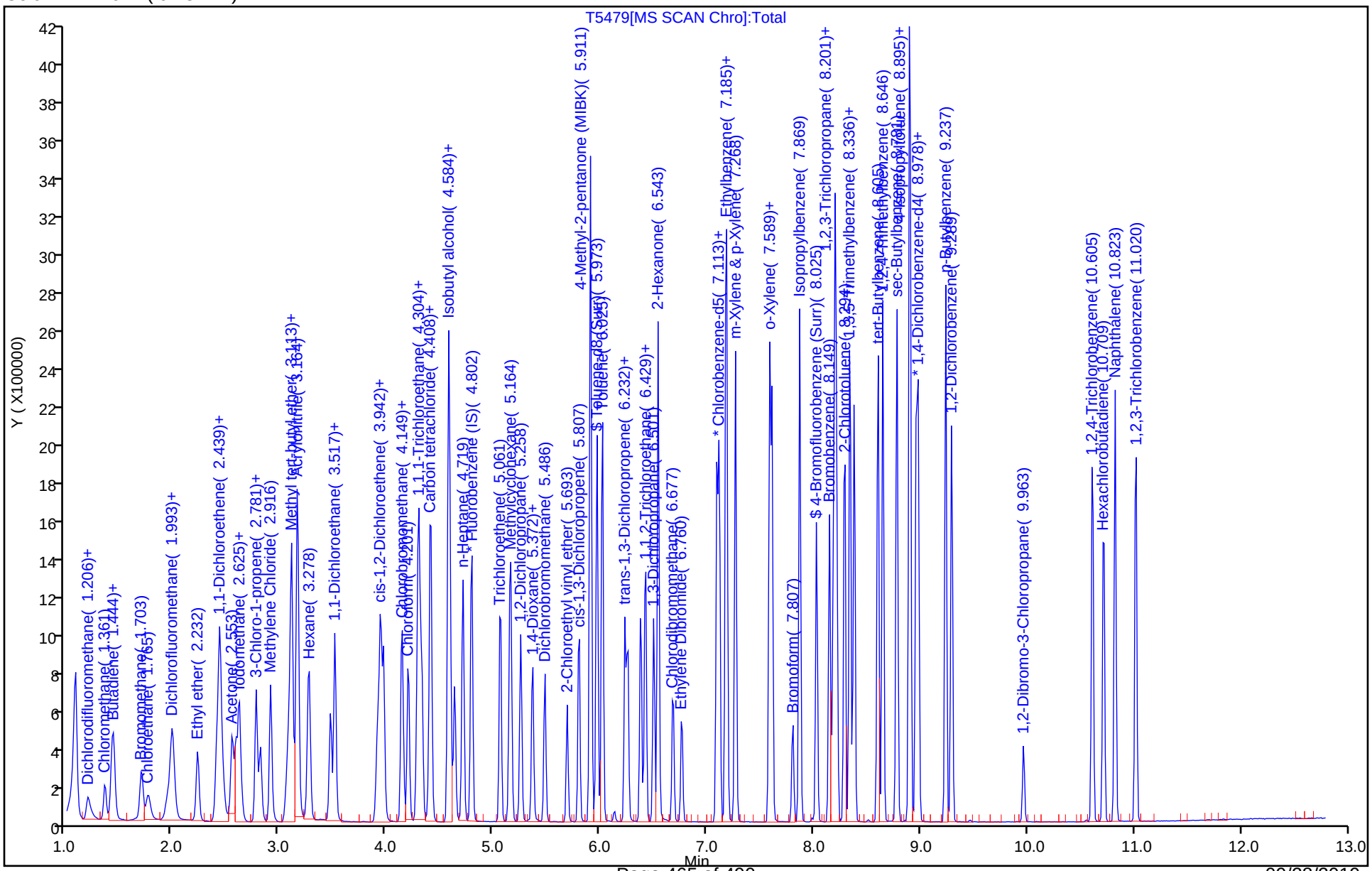
Report Date: 24-Sep-2019 11:05:35 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190924-84408.b\T5479.D

Injection Date:	24-Sep-2019 10:40:30	Instrument ID:	HP5975T	Operator ID:	KN
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-8 MS Lab Sample ID: 480-159208-9 MS

Matrix: Water Lab File ID: T5412.D

Analysis Method: 8260C Date Collected: 09/11/2019 16:55

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 21:31

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	490		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	241		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	258		10	3.1
79-00-5	1,1,2-Trichloroethane	235		10	2.3
75-34-3	1,1-Dichloroethane	341		10	3.8
75-35-4	1,1-Dichloroethene	278		10	2.9
87-61-6	1,2,3-Trichlorobenzene	232		10	4.1
120-82-1	1,2,4-Trichlorobenzene	226		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	233		10	3.9
106-93-4	1,2-Dibromoethane	246		10	7.3
95-50-1	1,2-Dichlorobenzene	240		10	7.9
107-06-2	1,2-Dichloroethane	243		10	2.1
78-87-5	1,2-Dichloropropane	248		10	7.2
541-73-1	1,3-Dichlorobenzene	239		10	7.8
106-46-7	1,4-Dichlorobenzene	232		10	8.4
123-91-1	1,4-Dioxane	4590		400	93
78-93-3	2-Butanone (MEK)	1220		100	13
591-78-6	2-Hexanone	1210		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	1190		50	21
67-64-1	Acetone	1230		100	30
71-43-2	Benzene	248		10	4.1
74-97-5	Bromochloromethane	254		10	8.7
75-27-4	Bromodichloromethane	260		10	3.9
75-25-2	Bromoform	250		10	2.6
74-83-9	Bromomethane	233		10	6.9
75-15-0	Carbon disulfide	252		10	1.9
56-23-5	Carbon tetrachloride	255		10	2.7
108-90-7	Chlorobenzene	235		10	7.5
75-00-3	Chloroethane	240		10	3.2
67-66-3	Chloroform	239		10	3.4
74-87-3	Chloromethane	215		10	3.5
156-59-2	cis-1,2-Dichloroethene	256		10	8.1
10061-01-5	cis-1,3-Dichloropropene	247		10	3.6
110-82-7	Cyclohexane	247		10	1.8
124-48-1	Dibromochloromethane	254		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-8 MS Lab Sample ID: 480-159208-9 MS

Matrix: Water Lab File ID: T5412.D

Analysis Method: 8260C Date Collected: 09/11/2019 16:55

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 21:31

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	211		10	6.8
100-41-4	Ethylbenzene	235		10	7.4
98-82-8	Isopropylbenzene	243		10	7.9
79-20-9	Methyl acetate	448		25	13
1634-04-4	Methyl tert-butyl ether	242		10	1.6
108-87-2	Methylcyclohexane	251		10	1.6
75-09-2	Methylene Chloride	252		10	4.4
100-42-5	Styrene	253		10	7.3
127-18-4	Tetrachloroethene	256		10	3.6
108-88-3	Toluene	239		10	5.1
156-60-5	trans-1,2-Dichloroethene	256		10	9.0
10061-02-6	trans-1,3-Dichloropropene	249		10	3.7
79-01-6	Trichloroethene	252		10	4.6
75-69-4	Trichlorofluoromethane	235		10	8.8
75-01-4	Vinyl chloride	236		10	9.0
1330-20-7	Xylenes, Total	485		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5412.D
Lims ID: 480-159208-C-9 MS
Client ID:
Sample Type: MS
Inject. Date: 22-Sep-2019 21:31:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-c-9 ms
Misc. Info.: 480-0084351-029
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 23-Sep-2019 14:21:21 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: farrellr Date: 23-Sep-2019 14:21:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	200231	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	86	782234	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.958	8.958	0.000	96	428049	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.336	4.335	0.000	93	279572	25.0	25.8	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	355427	25.0	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1015618	25.0	24.5	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	330755	25.0	25.5	
11 Dichlorodifluoromethane	85	1.216	1.206	0.010	99	297299	25.0	21.1	
13 Chloromethane	50	1.372	1.371	0.001	99	276238	25.0	21.5	
14 Vinyl chloride	62	1.465	1.454	0.011	98	294611	25.0	23.6	
15 Bromomethane	94	1.714	1.713	0.001	92	252752	25.0	23.3	
16 Chloroethane	64	1.776	1.776	0.000	100	221847	25.0	24.0	
17 Trichlorofluoromethane	101	2.014	2.004	0.010	98	494460	25.0	23.5	
22 1,1-Dichloroethene	96	2.450	2.439	0.011	98	263129	25.0	27.8	
20 1,1,2-Trichloro-1,2,2-trif	101	2.450	2.449	0.001	61	273031	25.0	25.8	
23 Acetone	43	2.564	2.563	0.001	98	538025	125.0	123.0	
25 Carbon disulfide	76	2.626	2.625	0.001	100	765043	25.0	25.2	
28 Methyl acetate	43	2.833	2.822	0.011	97	438964	50.0	44.8	
30 Methylene Chloride	84	2.926	2.916	0.010	92	288856	25.0	25.2	
33 Methyl tert-butyl ether	73	3.113	3.112	0.001	99	751531	25.0	24.2	
32 trans-1,2-Dichloroethene	96	3.123	3.112	0.011	99	273636	25.0	25.6	
36 1,1-Dichloroethane	63	3.486	3.475	0.011	96	610876	25.0	34.1	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	80	299271	25.0	25.6	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	742111	125.0	122.0	
47 Chlorobromomethane	128	4.149	4.149	0.000	92	153491	25.0	25.4	
50 Chloroform	83	4.211	4.211	0.010	95	492823	25.0	23.9	
52 Cyclohexane	56	4.305	4.304	0.001	91	416100	25.0	24.7	
51 1,1,1-Trichloroethane	97	4.305	4.304	0.001	98	818243	25.0	49.0	
53 Carbon tetrachloride	117	4.408	4.408	0.000	80	370159	25.0	25.5	
55 Benzene	78	4.584	4.584	0.000	97	1022420	25.0	24.8	
57 1,2-Dichloroethane	62	4.646	4.636	0.010	98	409355	25.0	24.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	97	281823	25.0	25.2	
62 Methylcyclohexane	83	5.165	5.164	0.001	90	448440	25.0	25.1	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	244103	25.0	24.8	
66 1,4-Dioxane	88	5.372	5.371	0.000	47	95346	500.0	459.2	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	343073	25.0	26.0	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	93	375111	25.0	24.7	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.910	0.001	96	1537526	125.0	118.9	
73 Toluene	92	6.025	6.024	0.001	98	657145	25.0	23.9	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	95	370044	25.0	24.9	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	91	209546	25.0	23.5	
79 Tetrachloroethene	166	6.429	6.428	0.000	96	303889	25.0	25.6	
81 2-Hexanone	43	6.543	6.542	0.000	95	1108698	125.0	121.3	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	263323	25.0	25.4	
83 Ethylene Dibromide	107	6.761	6.760	0.001	98	274371	25.0	24.6	
86 Chlorobenzene	112	7.113	7.112	0.000	95	734720	25.0	23.5	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1235359	25.0	23.5	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	487764		24.6	
91 o-Xylene	106	7.590	7.589	0.001	97	462693		23.9	
92 Styrene	104	7.610	7.610	0.000	95	795367	25.0	25.3	
93 Bromoform	173	7.807	7.807	0.000	96	169718	25.0	25.0	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1238656	25.0	24.3	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	97	375137	25.0	24.1	
110 1,3-Dichlorobenzene	146	8.906	8.905	0.001	97	638918	25.0	23.9	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	636937	25.0	23.2	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	631415	25.0	24.0	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.962	0.001	79	73383	25.0	23.3	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	445596	25.0	22.6	
122 1,2,3-Trichlorobenzene	180	11.020	11.019	0.001	94	450254	25.0	23.2	
S 126 Xylenes, Total	1				0			48.5	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

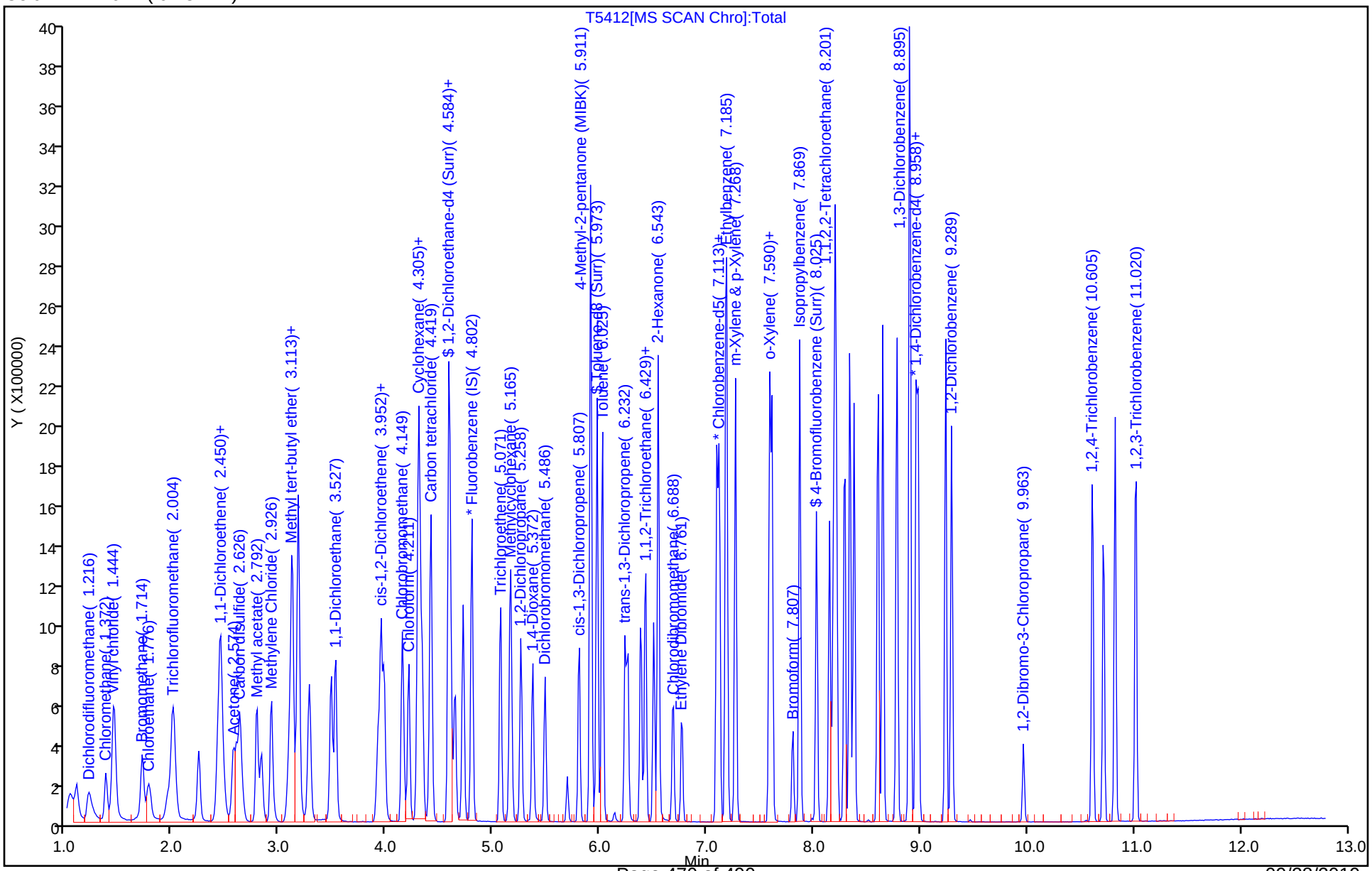
Report Date: 23-Sep-2019 14:21:47 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5412.D

Injection Date:	22-Sep-2019 21:31:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	480-159208-C-9 MS			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	28
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-8 MSD Lab Sample ID: 480-159208-9 MSD

Matrix: Water Lab File ID: T5413.D

Analysis Method: 8260C Date Collected: 09/11/2019 16:55

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 21:55

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	467		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	242		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250		10	3.1
79-00-5	1,1,2-Trichloroethane	232		10	2.3
75-34-3	1,1-Dichloroethane	329		10	3.8
75-35-4	1,1-Dichloroethene	266		10	2.9
87-61-6	1,2,3-Trichlorobenzene	230		10	4.1
120-82-1	1,2,4-Trichlorobenzene	221		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	224		10	3.9
106-93-4	1,2-Dibromoethane	239		10	7.3
95-50-1	1,2-Dichlorobenzene	235		10	7.9
107-06-2	1,2-Dichloroethane	240		10	2.1
78-87-5	1,2-Dichloropropane	242		10	7.2
541-73-1	1,3-Dichlorobenzene	226		10	7.8
106-46-7	1,4-Dichlorobenzene	227		10	8.4
123-91-1	1,4-Dioxane	4720		400	93
78-93-3	2-Butanone (MEK)	1220		100	13
591-78-6	2-Hexanone	1230		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	1200		50	21
67-64-1	Acetone	1190		100	30
71-43-2	Benzene	247		10	4.1
74-97-5	Bromochloromethane	258		10	8.7
75-27-4	Bromodichloromethane	255		10	3.9
75-25-2	Bromoform	244		10	2.6
74-83-9	Bromomethane	220		10	6.9
75-15-0	Carbon disulfide	244		10	1.9
56-23-5	Carbon tetrachloride	250		10	2.7
108-90-7	Chlorobenzene	234		10	7.5
75-00-3	Chloroethane	227		10	3.2
67-66-3	Chloroform	231		10	3.4
74-87-3	Chloromethane	214		10	3.5
156-59-2	cis-1,2-Dichloroethene	247		10	8.1
10061-01-5	cis-1,3-Dichloropropene	247		10	3.6
110-82-7	Cyclohexane	241		10	1.8
124-48-1	Dibromochloromethane	251		10	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Client Sample ID: 356023-GW-MW-7R-98-8 MSD Lab Sample ID: 480-159208-9 MSD

Matrix: Water Lab File ID: T5413.D

Analysis Method: 8260C Date Collected: 09/11/2019 16:55

Sample wt/vol: 5(mL) Date Analyzed: 09/22/2019 21:55

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 493390 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	207		10	6.8
100-41-4	Ethylbenzene	231		10	7.4
98-82-8	Isopropylbenzene	233		10	7.9
79-20-9	Methyl acetate	457		25	13
1634-04-4	Methyl tert-butyl ether	245		10	1.6
108-87-2	Methylcyclohexane	243		10	1.6
75-09-2	Methylene Chloride	247		10	4.4
100-42-5	Styrene	249		10	7.3
127-18-4	Tetrachloroethene	246		10	3.6
108-88-3	Toluene	238		10	5.1
156-60-5	trans-1,2-Dichloroethene	245		10	9.0
10061-02-6	trans-1,3-Dichloropropene	244		10	3.7
79-01-6	Trichloroethene	243		10	4.6
75-69-4	Trichlorofluoromethane	225		10	8.8
75-01-4	Vinyl chloride	223		10	9.0
1330-20-7	Xylenes, Total	484		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	101		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5413.D
Lims ID: 480-159208-C-9 MSD
Client ID:
Sample Type: MSD
Inject. Date: 22-Sep-2019 21:55:30 ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-159208-c-9 msd
Misc. Info.: 480-0084351-030
Operator ID: RF Instrument ID: HP5975T

Method: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 23-Sep-2019 14:21:21 Calib Date: 18-Sep-2019 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190918-84255.b\T5195.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: farrellr Date: 23-Sep-2019 14:22:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.802	4.802	0.000	99	202663	25.0	25.0	
* 2 Chlorobenzene-d5	117	7.092	7.092	0.000	87	790168	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.957	8.958	-0.001	95	438127	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.335	4.335	-0.001	93	288536	25.0	26.3	
$ 4 1,2-Dichloroethane-d4 (Sur	65	4.584	4.584	0.000	0	360037	25.0	25.7	
$ 6 Toluene-d8 (Surr)	98	5.973	5.973	0.000	94	1037364	25.0	24.7	
$ 7 4-Bromofluorobenzene (Surr	174	8.025	8.025	0.000	0	332312	25.0	25.3	
11 Dichlorodifluoromethane	85	1.216	1.206	0.010	99	294851	25.0	20.7	
13 Chloromethane	50	1.372	1.371	0.001	99	279272	25.0	21.4	
14 Vinyl chloride	62	1.454	1.454	0.000	98	282522	25.0	22.3	
15 Bromomethane	94	1.714	1.713	0.001	92	241712	25.0	22.0	
16 Chloroethane	64	1.765	1.776	-0.011	100	212961	25.0	22.7	
17 Trichlorofluoromethane	101	2.004	2.004	0.000	97	479988	25.0	22.5	
22 1,1-Dichloroethene	96	2.439	2.439	0.000	97	255638	25.0	26.6	
20 1,1,2-Trichloro-1,2,2-trif	101	2.439	2.449	-0.010	63	267510	25.0	25.0	
23 Acetone	43	2.563	2.563	0.000	99	527998	125.0	119.3	
25 Carbon disulfide	76	2.625	2.625	0.000	100	749307	25.0	24.4	
28 Methyl acetate	43	2.822	2.822	0.000	97	453227	50.0	45.7	
30 Methylene Chloride	84	2.916	2.916	0.000	92	286990	25.0	24.7	
33 Methyl tert-butyl ether	73	3.113	3.112	0.001	99	769114	25.0	24.5	
32 trans-1,2-Dichloroethene	96	3.113	3.112	0.001	98	265152	25.0	24.5	
36 1,1-Dichloroethane	63	3.475	3.475	0.000	96	596057	25.0	32.9	
43 cis-1,2-Dichloroethene	96	3.952	3.952	0.000	82	292213	25.0	24.7	
44 2-Butanone (MEK)	43	3.973	3.973	0.000	99	751283	125.0	122.0	
47 Chlorobromomethane	128	4.149	4.149	0.000	92	157792	25.0	25.8	
50 Chloroform	83	4.211	4.211	0.010	94	482794	25.0	23.1	
52 Cyclohexane	56	4.304	4.304	0.000	90	411600	25.0	24.1	
51 1,1,1-Trichloroethane	97	4.304	4.304	0.000	98	788350	25.0	46.7	
53 Carbon tetrachloride	117	4.408	4.408	0.000	97	367165	25.0	25.0	
55 Benzene	78	4.584	4.584	0.000	96	1030868	25.0	24.7	
57 1,2-Dichloroethane	62	4.636	4.636	0.000	98	407960	25.0	24.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
60 Trichloroethene	95	5.071	5.071	0.000	97	275059	25.0	24.3	
62 Methylcyclohexane	83	5.164	5.164	0.000	90	439533	25.0	24.3	
63 1,2-Dichloropropane	63	5.258	5.258	0.000	90	240714	25.0	24.2	
66 1,4-Dioxane	88	5.372	5.371	0.000	49	99065	500.0	472.3	
67 Dichlorobromomethane	83	5.486	5.486	0.000	98	341098	25.0	25.5	
71 cis-1,3-Dichloropropene	75	5.807	5.807	0.000	94	378960	25.0	24.7	
72 4-Methyl-2-pentanone (MIBK	43	5.911	5.910	0.001	95	1564230	125.0	119.7	
73 Toluene	92	6.025	6.024	0.001	98	658852	25.0	23.8	
75 trans-1,3-Dichloropropene	75	6.232	6.232	0.000	96	366804	25.0	24.4	
78 1,1,2-Trichloroethane	83	6.377	6.377	0.000	92	208253	25.0	23.2	
79 Tetrachloroethene	166	6.429	6.428	0.000	96	295482	25.0	24.6	
81 2-Hexanone	43	6.543	6.542	0.000	96	1135588	125.0	123.0	
82 Chlorodibromomethane	129	6.688	6.688	0.000	90	262226	25.0	25.1	
83 Ethylene Dibromide	107	6.771	6.760	0.011	99	269299	25.0	23.9	
86 Chlorobenzene	112	7.113	7.112	0.000	94	740630	25.0	23.4	
88 Ethylbenzene	91	7.175	7.175	0.000	99	1224186	25.0	23.1	
90 m-Xylene & p-Xylene	106	7.268	7.268	0.000	0	485578		24.2	
91 o-Xylene	106	7.589	7.589	0.000	97	472819		24.2	
92 Styrene	104	7.610	7.610	0.000	95	791082	25.0	24.9	
93 Bromoform	173	7.807	7.807	0.000	97	167149	25.0	24.4	
95 Isopropylbenzene	105	7.869	7.869	0.000	96	1217829	25.0	23.3	
98 1,1,2,2-Tetrachloroethane	83	8.180	8.180	0.000	96	384548	25.0	24.2	
110 1,3-Dichlorobenzene	146	8.905	8.905	0.000	97	618269	25.0	22.6	
113 1,4-Dichlorobenzene	146	8.978	8.978	0.000	93	636787	25.0	22.7	
116 1,2-Dichlorobenzene	146	9.289	9.289	0.000	97	632094	25.0	23.5	
117 1,2-Dibromo-3-Chloropropan	75	9.963	9.962	0.000	80	72219	25.0	22.4	
119 1,2,4-Trichlorobenzene	180	10.605	10.605	0.000	94	445799	25.0	22.1	
122 1,2,3-Trichlorobenzene	180	11.020	11.019	0.001	94	457164	25.0	23.0	
S 126 Xylenes, Total	1				0			48.4	

Reagents:

8260 CORP mix_00166	Amount Added: 12.50	Units: uL	
GAS CORP mix_00361	Amount Added: 12.50	Units: uL	
T_8260_Surr_00197	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00228	Amount Added: 1.00	Units: uL	Run Reagent

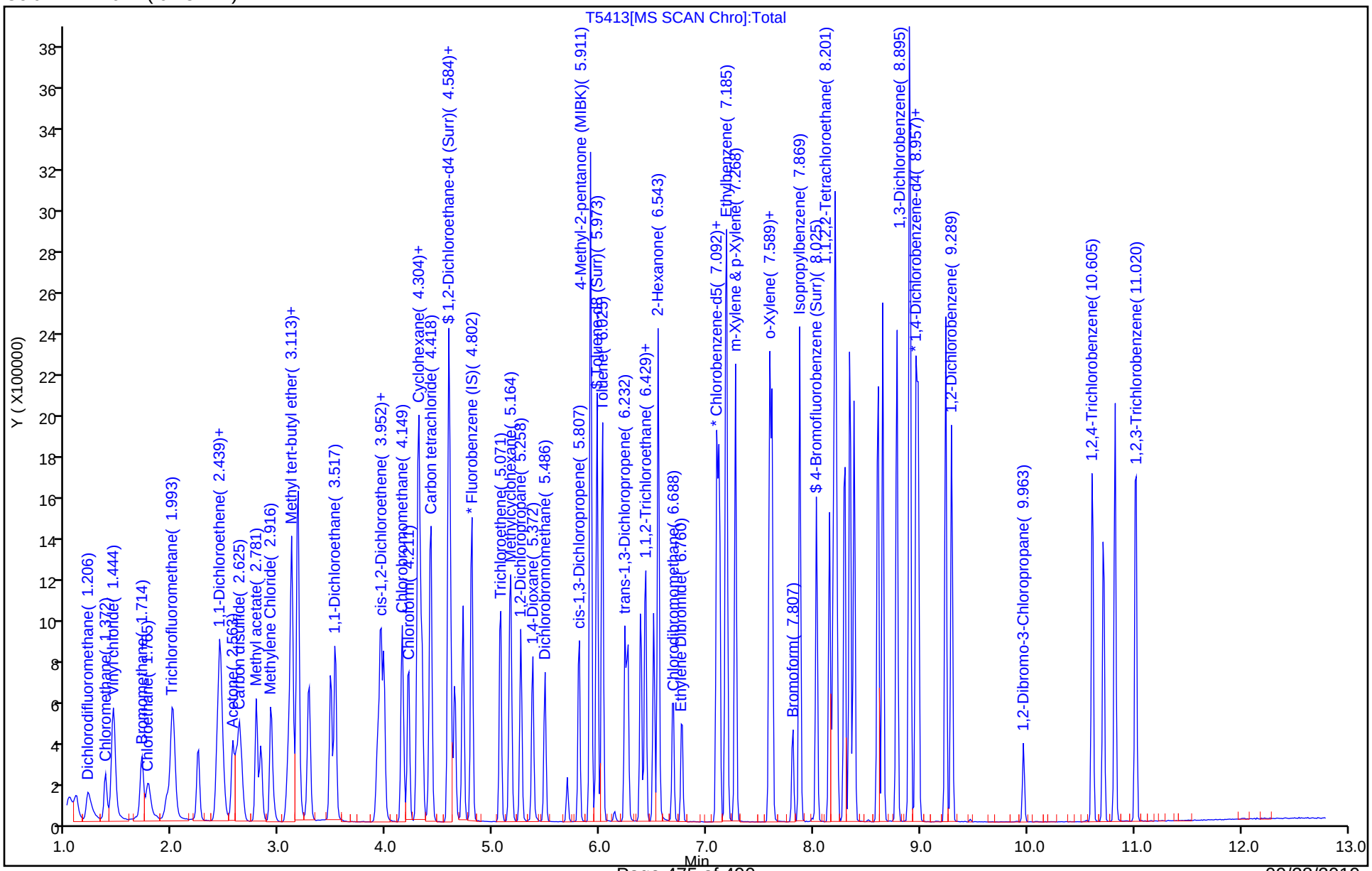
Report Date: 23-Sep-2019 14:22:19 Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190922-84351.b\T5413.D

Injection Date:	22-Sep-2019 21:55:30	Instrument ID:	HP5975T	Operator ID:	RF
Lims ID:	480-159208-C-9 MSD			Worklist Smp#:	30
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	29
Method:	T-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Instrument ID: HP5973S Start Date: 09/10/2019 13:48

Analysis Batch Number: 491176 End Date: 09/10/2019 23:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-491176/5		09/10/2019 13:48	1	S8766.D	ZB-624 (20) 0.18(mm)
IC 480-491176/7		09/10/2019 14:39	1	S8768.D	ZB-624 (20) 0.18(mm)
IC 480-491176/8		09/10/2019 15:02	1	S8769.D	ZB-624 (20) 0.18(mm)
IC 480-491176/9		09/10/2019 15:25	1	S8770.D	ZB-624 (20) 0.18(mm)
IC 480-491176/10		09/10/2019 15:48	1	S8771.D	ZB-624 (20) 0.18(mm)
IC 480-491176/11		09/10/2019 16:11	1	S8772.D	ZB-624 (20) 0.18(mm)
ICIS 480-491176/12		09/10/2019 16:34	1	S8773.D	ZB-624 (20) 0.18(mm)
IC 480-491176/13		09/10/2019 16:57	1	S8774.D	ZB-624 (20) 0.18(mm)
IC 480-491176/14		09/10/2019 17:20	1	S8775.D	ZB-624 (20) 0.18(mm)
MDLV 480-491176/16		09/10/2019 18:06	1		ZB-624 (20) 0.18(mm)
MDLV 480-491176/17		09/10/2019 18:29	1		ZB-624 (20) 0.18(mm)
IC 480-491176/19		09/10/2019 19:15	1		ZB-624 (20) 0.18(mm)
IC 480-491176/20		09/10/2019 19:38	1		ZB-624 (20) 0.18(mm)
IC 480-491176/21		09/10/2019 20:01	1		ZB-624 (20) 0.18(mm)
IC 480-491176/22		09/10/2019 20:24	1		ZB-624 (20) 0.18(mm)
IC 480-491176/23		09/10/2019 20:47	1		ZB-624 (20) 0.18(mm)
IC 480-491176/24		09/10/2019 21:09	1		ZB-624 (20) 0.18(mm)
IC 480-491176/25		09/10/2019 21:32	1		ZB-624 (20) 0.18(mm)
MDLV 480-491176/27		09/10/2019 22:18	1		ZB-624 (20) 0.18(mm)
ICV 480-491176/28		09/10/2019 22:41	1		ZB-624 (20) 0.18(mm)
ICV 480-491176/29		09/10/2019 23:04	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Instrument ID: HP5973S Start Date: 09/20/2019 08:57

Analysis Batch Number: 493096 End Date: 09/20/2019 18:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-493096/2		09/20/2019 08:57	1	S9285.D	ZB-624 (20) 0.18(mm)
CCVIS 480-493096/3		09/20/2019 09:25	1	S9286.D	ZB-624 (20) 0.18(mm)
CCV 480-493096/4		09/20/2019 09:48	1		ZB-624 (20) 0.18(mm)
LCS 480-493096/5		09/20/2019 10:11	1	S9288.D	ZB-624 (20) 0.18(mm)
RL 480-493096/6		09/20/2019 10:34	1		ZB-624 (20) 0.18(mm)
MB 480-493096/7		09/20/2019 10:57	1	S9290.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 11:33	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 11:56	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 12:19	8		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 12:42	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 13:05	50		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 13:28	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 13:51	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 14:14	2		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 14:37	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 15:00	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 15:23	2		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 15:49	2		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 16:12	8		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 16:35	1		ZB-624 (20) 0.18(mm)
480-159208-1		09/20/2019 16:58	1	S9305.D	ZB-624 (20) 0.18(mm)
480-159208-2		09/20/2019 17:21	1	S9306.D	ZB-624 (20) 0.18(mm)
480-159208-3		09/20/2019 17:44	1	S9307.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 18:07	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 18:30	8		ZB-624 (20) 0.18(mm)
ZZZZZ		09/20/2019 18:53	8		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Instrument ID: HP5973S Start Date: 09/21/2019 09:12

Analysis Batch Number: 493246 End Date: 09/21/2019 19:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-493246/2		09/21/2019 09:12	1	S9340.D	ZB-624 (20) 0.18(mm)
CCVIS 480-493246/3		09/21/2019 09:38	1	S9341.D	ZB-624 (20) 0.18(mm)
CCV 480-493246/4		09/21/2019 10:01	1		ZB-624 (20) 0.18(mm)
LCS 480-493246/5		09/21/2019 10:25	1	S9343.D	ZB-624 (20) 0.18(mm)
RL 480-493246/6		09/21/2019 10:48	1		ZB-624 (20) 0.18(mm)
MB 480-493246/7		09/21/2019 11:11	1	S9345.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 11:43	4		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 12:06	10		ZB-624 (20) 0.18(mm)
480-159208-2 DL		09/21/2019 12:29	8	S9348.D	ZB-624 (20) 0.18(mm)
480-159208-3 DL		09/21/2019 12:52	8	S9349.D	ZB-624 (20) 0.18(mm)
480-159208-4		09/21/2019 13:15	10	S9350.D	ZB-624 (20) 0.18(mm)
480-159208-5		09/21/2019 13:38	10	S9351.D	ZB-624 (20) 0.18(mm)
480-159208-6		09/21/2019 14:02	10	S9352.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 14:25	10		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 14:48	10		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 15:11	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 15:34	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 15:57	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 16:20	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 16:43	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 17:06	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 17:29	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 17:52	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 18:15	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 18:38	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 19:01	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 19:24	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/21/2019 19:48	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Instrument ID: HP5975T Start Date: 09/18/2019 15:25

Analysis Batch Number: 492722 End Date: 09/19/2019 00:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-492722/3		09/18/2019 15:25	1	T5175.D	ZB-624 (20) 0.18(mm)
IC 480-492722/5		09/18/2019 16:14	1	T5177.D	ZB-624 (20) 0.18(mm)
IC 480-492722/6		09/18/2019 16:38	1	T5178.D	ZB-624 (20) 0.18(mm)
IC 480-492722/7		09/18/2019 17:02	1	T5179.D	ZB-624 (20) 0.18(mm)
IC 480-492722/8		09/18/2019 17:26	1	T5180.D	ZB-624 (20) 0.18(mm)
IC 480-492722/9		09/18/2019 17:49	1	T5181.D	ZB-624 (20) 0.18(mm)
ICIS 480-492722/10		09/18/2019 18:13	1	T5182.D	ZB-624 (20) 0.18(mm)
IC 480-492722/11		09/18/2019 18:37	1	T5183.D	ZB-624 (20) 0.18(mm)
IC 480-492722/12		09/18/2019 19:01	1	T5184.D	ZB-624 (20) 0.18(mm)
MDLV 480-492722/15		09/18/2019 20:12	1		ZB-624 (20) 0.18(mm)
IC 480-492722/17		09/18/2019 20:59	1		ZB-624 (20) 0.18(mm)
IC 480-492722/18		09/18/2019 21:23	1		ZB-624 (20) 0.18(mm)
IC 480-492722/19		09/18/2019 21:47	1		ZB-624 (20) 0.18(mm)
IC 480-492722/20		09/18/2019 22:10	1		ZB-624 (20) 0.18(mm)
IC 480-492722/21		09/18/2019 22:34	1		ZB-624 (20) 0.18(mm)
IC 480-492722/22		09/18/2019 22:58	1		ZB-624 (20) 0.18(mm)
IC 480-492722/23		09/18/2019 23:22	1		ZB-624 (20) 0.18(mm)
MDLV 480-492722/25		09/19/2019 00:09	1		ZB-624 (20) 0.18(mm)
ICV 480-492722/26		09/19/2019 00:33	1		ZB-624 (20) 0.18(mm)
ICV 480-492722/27		09/19/2019 00:57	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Instrument ID: HP5975T Start Date: 09/22/2019 10:54

Analysis Batch Number: 493390 End Date: 09/22/2019 21:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-493390/2		09/22/2019 10:54	1	T5386.D	ZB-624 (20) 0.18(mm)
CCVIS 480-493390/3		09/22/2019 11:19	1	T5387.D	ZB-624 (20) 0.18(mm)
CCV 480-493390/4		09/22/2019 11:43	1		ZB-624 (20) 0.18(mm)
LCS 480-493390/5		09/22/2019 12:07	1	T5389.D	ZB-624 (20) 0.18(mm)
MB 480-493390/7		09/22/2019 12:55	1	T5391.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 13:31	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 13:55	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 14:20	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 14:44	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 15:08	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 15:32	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 15:56	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 16:19	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 16:44	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 17:08	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 17:32	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 17:56	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 18:20	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 18:43	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 19:07	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 19:31	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/22/2019 19:55	1		ZB-624 (20) 0.18(mm)
480-159208-7		09/22/2019 20:19	10	T5409.D	ZB-624 (20) 0.18(mm)
480-159208-8		09/22/2019 20:43	10	T5410.D	ZB-624 (20) 0.18(mm)
480-159208-9		09/22/2019 21:07	10	T5411.D	ZB-624 (20) 0.18(mm)
480-159208-9 MS		09/22/2019 21:31	10	T5412.D	ZB-624 (20) 0.18(mm)
480-159208-9 MSD		09/22/2019 21:55	10	T5413.D	ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Instrument ID: HP5975T Start Date: 09/24/2019 08:50

Analysis Batch Number: 493682 End Date: 09/24/2019 20:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-493682/2		09/24/2019 08:50	1	T5475.D	ZB-624 (20) 0.18(mm)
CCV 480-493682/4		09/24/2019 09:39	1		ZB-624 (20) 0.18(mm)
CCVIS 480-493682/9		09/24/2019 10:04	1	T5478.D	ZB-624 (20) 0.18(mm)
LCS 480-493682/5		09/24/2019 10:40	1	T5479.D	ZB-624 (20) 0.18(mm)
RL 480-493682/6		09/24/2019 11:04	1		ZB-624 (20) 0.18(mm)
MB 480-493682/7		09/24/2019 11:29	1	T5481.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 12:01	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 12:26	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 12:50	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 13:14	4		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 13:38	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 14:02	200		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 14:26	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 14:50	1		ZB-624 (20) 0.18(mm)
480-159208-10		09/24/2019 15:14	8	T5490.D	ZB-624 (20) 0.18(mm)
480-159208-11		09/24/2019 15:39	8	T5491.D	ZB-624 (20) 0.18(mm)
480-159208-12		09/24/2019 16:03	8	T5492.D	ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 16:27	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 16:51	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 17:15	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 17:40	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 18:04	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 18:28	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 18:52	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 19:16	1		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 19:40	5		ZB-624 (20) 0.18(mm)
ZZZZZ		09/24/2019 20:04	5		ZB-624 (20) 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Batch Number: 493096 Batch Start Date: 09/20/19 08:57 Batch Analyst: Nowak, Kate-Lynn M

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00361
BFB 480-493096/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-493096/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-493096/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-493096/7		8260C		5 mL	5 mL				
480-159208-A-1	TRIP BLANK 3	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-2	356023-GW-MW-7R-98-1	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-3	356023-GW-MW-7R-98-2	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	S_8260_IS 00326	S_8260_Surr 00329	AnalysisComment			
BFB 480-493096/2		8260C							
CCVIS 480-493096/3		8260C		1 uL	1 uL				
LCS 480-493096/5		8260C		1 uL	1 uL				
MB 480-493096/7		8260C		1 uL	1 uL				
480-159208-A-1	TRIP BLANK 3	8260C	T	1 uL	1 uL				
480-159208-B-2	356023-GW-MW-7R-98-1	8260C	T	1 uL	1 uL	RA @ 8x (DL)			
480-159208-B-3	356023-GW-MW-7R-98-2	8260C	T	1 uL	1 uL	RA @ 8x (DL)			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Batch Number: 493246 Batch Start Date: 09/21/19 09:12 Batch Analyst: Izquierdo, Olivia M

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00361
BFB 480-493246/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-493246/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-493246/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-493246/7		8260C		5 mL	5 mL				
480-159208-C-2	356023-GW-MW-7R-98-1	8260C	T	5 mL	5 mL	<2 SU			
480-159208-C-3	356023-GW-MW-7R-98-2	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-4	356023-GW-MW-7R-98-3	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-5	356023-GW-MW-7R-98-4	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-6	356023-GW-MW-7R-98-5	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	S_8260_IS 00326	S_8260_Surr 00329				
BFB 480-493246/2		8260C							
CCVIS 480-493246/3		8260C		1 uL	1 uL				
LCS 480-493246/5		8260C		1 uL	1 uL				
MB 480-493246/7		8260C		1 uL	1 uL				
480-159208-C-2	356023-GW-MW-7R-98-1	8260C	T	1 uL	1 uL				
480-159208-C-3	356023-GW-MW-7R-98-2	8260C	T	1 uL	1 uL				
480-159208-B-4	356023-GW-MW-7R-98-3	8260C	T	1 uL	1 uL				
480-159208-B-5	356023-GW-MW-7R-98-4	8260C	T	1 uL	1 uL				
480-159208-B-6	356023-GW-MW-7R-98-5	8260C	T	1 uL	1 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Batch Number: 493246 Batch Start Date: 09/21/19 09:12 Batch Analyst: Izquierdo, Olivia M

Batch Method: 8260C Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Batch Number: 493390 Batch Start Date: 09/22/19 10:54 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00361
BFB 480-493390/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-493390/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-493390/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-493390/7		8260C		5 mL	5 mL				
480-159208-C-7	356023-GW-MW-7R-98-6	8260C	T	5 mL	5 mL	<2 SU			
480-159208-C-8	356023-GW-MW-7R-98-7	8260C	T	5 mL	5 mL	<2 SU			
480-159208-C-9	356023-GW-MW-7R-98-8	8260C	T	5 mL	5 mL	<2 SU			
480-159208-C-9 MS	356023-GW-MW-7R-98-8	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL
480-159208-C-9 MSD	356023-GW-MW-7R-98-8	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00228	T_8260_Surr 00197				
BFB 480-493390/2		8260C							
CCVIS 480-493390/3		8260C		1 uL	1 uL				
LCS 480-493390/5		8260C		1 uL	1 uL				
MB 480-493390/7		8260C		1 uL	1 uL				
480-159208-C-7	356023-GW-MW-7R-98-6	8260C	T	1 uL	1 uL				
480-159208-C-8	356023-GW-MW-7R-98-7	8260C	T	1 uL	1 uL				
480-159208-C-9	356023-GW-MW-7R-98-8	8260C	T	1 uL	1 uL				
480-159208-C-9 MS	356023-GW-MW-7R-98-8	8260C	T	1 uL	1 uL				
480-159208-C-9 MSD	356023-GW-MW-7R-98-8	8260C	T	1 uL	1 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Batch Number: 493390 Batch Start Date: 09/22/19 10:54 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-159208-1

SDG No.:

Batch Number: 493682 Batch Start Date: 09/24/19 08:50 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00166	BFB_WRK 00092	GAS CORP mix 00362
BFB 480-493682/2		8260C		1 uL	1 uL			1 uL	
LCS 480-493682/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-493682/7		8260C		5 mL	5 mL				
CCVIS 480-493682/9		8260C		5 mL	5 mL		12.5 uL		12.5 uL
480-159208-B-10	356023-GW-MW-7R-98-9	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-11	356023-GW-MW-7R-98-10	8260C	T	5 mL	5 mL	<2 SU			
480-159208-B-12	356023-GW-MW-7R-98-11	8260C	T	5 mL	5 mL	<2 SU			

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00228	T_8260_Surr 00197				
BFB 480-493682/2		8260C							
LCS 480-493682/5		8260C		1 uL	1 uL				
MB 480-493682/7		8260C		1 uL	1 uL				
CCVIS 480-493682/9		8260C		1 uL	1 uL				
480-159208-B-10	356023-GW-MW-7R-98-9	8260C	T	1 uL	1 uL				
480-159208-B-11	356023-GW-MW-7R-98-10	8260C	T	1 uL	1 uL				
480-159208-B-12	356023-GW-MW-7R-98-11	8260C	T	1 uL	1 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Albany #224

Chain of Custody Record 315412

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: JAMIE WELCH	Site Contact: JULIE RICARDI	Date: 9/13/19	COC No:
Company Name: WOOD E+I SOLUTIONS	Tel/Fax: (207) 828-3200	Lab Contact: JUDY STONE	Carrier:	1 of 1 COCs
Address: 511 CONGRESS STREET, STE 200	Analysis Turnaround Time			Sampler: T. GERHARD
City/State/Zip: PORTLAND/ME/04101	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (207) 828-3200	TAT if different from Below			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: MOHONK RD. IND. PLANT	☐ 1 week			
Site: NYSDEC SITE # 356023	☐ 2 days			Job / SDG No.:
PO# 3611191234.02	☐ 1 day			

480-159208 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C TCL OLM04.2	Sample Specific Notes:
TRIP BLANK 3	9/9/19	1200	QC	TB	3	N	N	X	
356023-GW-MW-7R-98-1	9/9/19	1640	G	GW	3	N	N	X	
356023-GW-MW-7R-98-2	9/9/19	1805	G	GW	3	N	N	X	
356023-GW-MW-7R-98-3	9/10/19	0745	G	GW	3	N	N	X	
356023-GW-MW-7R-98-4	9/10/19	1245	G	GW	3	N	N	X	
356023-GW-MW-7R-98-5	9/10/19	1650	G	GW	3	N	N	X	
356023-GW-MW-7R-98-6	9/11/19	0750	G	GW	3	N	N	X	
356023-GW-MW-7R-98-7	9/11/19	1215	G	GW	3	N	N	X	
356023-GW-MW-7R-98-8	9/11/19	1655	G	GW	3	N	N	X	
356023-GW-MW-7R-98-9	9/12/19	0755	G	GW	3	N	N	X	
356023-GW-MW-7R-98-10	9/12/19	1230	G	GW	3	N	N	X	
356023-GW-MW-7R-98-11	9/12/19	1615	G	GW	3	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
LAB STANDARD PROTOCOL

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
CATEGORY B DELIVERABLE, EQuIS EZEDD

#1 3.3

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	WOOD E+IS	9/13/19 1040	Karl Zach	ETA	9/13/19 1040
Relinquished by: Karl Zach	Company: ETA 9/13/19	Date/Time: 1700	Received by:	Company: TAL	Date/Time: 9/14/19 0900
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

09/28/2019

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-159208-1

Login Number: 159208 **List Source: Eurofins TestAmerica, Buffalo**
List Number: 1
Creator: Manhardt, Kara M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	WOOD E+ I S
Samples received within 48 hours of sampling.	False	9/9-9/12/19
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-160366-1
Client Project/Site: Mohonk Rd. #356023 - Monthly

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, New York 12233-7014

Attn: Charles Gregory

Judy Stone

Authorized for release by:
10/25/2019 10:33:29 AM

Judy Stone, Senior Project Manager
(484)685-0868
judy.stone@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-160366-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-160366-1

Receipt
The samples were received on 10/5/2019 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 200.7 Rev 4.4: The method blank for preparation batch 480-496571 contained Total Iron above the reporting limit (RL). None of the samples 7R (480-160366-1), ERT-1 (480-160366-2), COMBINED INFLUENT (480-160366-4) and EFFLUENT (480-160366-5) associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples have been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: 7R (480-160366-1), ERT-1 (480-160366-2), 5R (480-160366-3), COMBINED INFLUENT (480-160366-4) and EFFLUENT (480-160366-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: 7R
Lab Sample ID: 480-160366-1
Date Collected: 10/03/19 10:40
Matrix: Water
Date Received: 10/05/19 08:00

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**86**		5.0	0.39	ug/L			10/10/19 12:45	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/10/19 12:45	1
1,1-Dichloroethane	**37**		5.0	0.59	ug/L			10/10/19 12:45	1
1,1-Dichloroethylene	**12**		5.0	0.85	ug/L			10/10/19 12:45	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/10/19 12:45	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/10/19 12:45	1
1,4-Dioxane	ND		200	15	ug/L			10/10/19 12:45	1
Acetone	ND		25	2.0	ug/L			10/10/19 12:45	1
Benzene	ND		5.0	0.60	ug/L			10/10/19 12:45	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/10/19 12:45	1
Chloroform	ND		5.0	0.54	ug/L			10/10/19 12:45	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/10/19 12:45	1
Toluene	ND		5.0	0.45	ug/L			10/10/19 12:45	1
Trichloroethylene	**0.75**	**J**	5.0	0.60	ug/L			10/10/19 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*68 - 130*		*10/10/19 12:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*76 - 123*		*10/10/19 12:45*	*1*
Toluene-d8 (Surr)	*85*		*77 - 120*		*10/10/19 12:45*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*10/10/19 12:45*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND	F1 F2	0.050	0.019	mg/L		10/08/19 10:14	10/09/19 01:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**354**		10.0	4.0	mg/L			10/09/19 09:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			10/09/19 16:06	1
pH	**7.2**	**HF**	0.1	0.1	SU			10/24/19 13:43	1
Temperature	**20.1**	**HF**	0.001	0.001	Degrees C			10/24/19 13:43	1

Client Sample ID: ERT-1
Lab Sample ID: 480-160366-2
Date Collected: 10/03/19 10:30
Matrix: Water
Date Received: 10/05/19 08:00

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**41**		5.0	0.39	ug/L			10/10/19 13:09	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/10/19 13:09	1
1,1-Dichloroethane	**7.0**		5.0	0.59	ug/L			10/10/19 13:09	1
1,1-Dichloroethylene	**14**		5.0	0.85	ug/L			10/10/19 13:09	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/10/19 13:09	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/10/19 13:09	1
1,4-Dioxane	ND		200	15	ug/L			10/10/19 13:09	1
Acetone	ND		25	2.0	ug/L			10/10/19 13:09	1
Benzene	ND		5.0	0.60	ug/L			10/10/19 13:09	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/10/19 13:09	1
Chloroform	ND		5.0	0.54	ug/L			10/10/19 13:09	1

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Client Sample ID: ERT-1
Lab Sample ID: 480-160366-2
Date Collected: 10/03/19 10:30
Matrix: Water
Date Received: 10/05/19 08:00

Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	0.81	ug/L			10/10/19 13:09	1
Toluene	ND		5.0	0.45	ug/L			10/10/19 13:09	1
Trichloroethylene	**4.4**	**J**	5.0	0.60	ug/L			10/10/19 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*68 - 130*		*10/10/19 13:09*	*1*
4-Bromofluorobenzene (Surr)	*94*		*76 - 123*		*10/10/19 13:09*	*1*
Toluene-d8 (Surr)	*84*		*77 - 120*		*10/10/19 13:09*	*1*
Dibromofluoromethane (Surr)	*84*		*75 - 123*		*10/10/19 13:09*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		10/08/19 10:14	10/09/19 01:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**351**		10.0	4.0	mg/L			10/09/19 09:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			10/09/19 16:06	1
pH	**7.2**	**HF**	0.1	0.1	SU			10/24/19 13:40	1
Temperature	**20.2**	**HF**	0.001	0.001	Degrees C			10/24/19 13:40	1

Client Sample ID: 5R
Lab Sample ID: 480-160366-3
Date Collected: 10/03/19 10:20
Matrix: Water
Date Received: 10/05/19 08:00

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**93**		5.0	0.39	ug/L			10/10/19 13:33	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/10/19 13:33	1
1,1-Dichloroethane	**7.1**		5.0	0.59	ug/L			10/10/19 13:33	1
1,1-Dichloroethylene	**27**		5.0	0.85	ug/L			10/10/19 13:33	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/10/19 13:33	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/10/19 13:33	1
1,4-Dioxane	ND		200	15	ug/L			10/10/19 13:33	1
Acetone	ND		25	2.0	ug/L			10/10/19 13:33	1
Benzene	ND		5.0	0.60	ug/L			10/10/19 13:33	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/10/19 13:33	1
Chloroform	ND		5.0	0.54	ug/L			10/10/19 13:33	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/10/19 13:33	1
Toluene	ND		5.0	0.45	ug/L			10/10/19 13:33	1
Trichloroethylene	**7.3**		5.0	0.60	ug/L			10/10/19 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*68 - 130*		*10/10/19 13:33*	*1*
4-Bromofluorobenzene (Surr)	*92*		*76 - 123*		*10/10/19 13:33*	*1*
Toluene-d8 (Surr)	*82*		*77 - 120*		*10/10/19 13:33*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*10/10/19 13:33*	*1*

Client Sample ID: 5R
Lab Sample ID: 480-160366-3
Date Collected: 10/03/19 10:20
Matrix: Water
Date Received: 10/05/19 08:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.024**	**J**	0.050	0.019	mg/L		10/15/19 12:12	10/15/19 21:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**391**		10.0	4.0	mg/L			10/09/19 09:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			10/09/19 16:06	1
pH	**7.2**	**HF**	0.1	0.1	SU			10/24/19 13:38	1
Temperature	**20.3**	**HF**	0.001	0.001	Degrees C			10/24/19 13:38	1

Client Sample ID: COMBINED INFLUENT
Lab Sample ID: 480-160366-4
Date Collected: 10/03/19 10:10
Matrix: Water
Date Received: 10/05/19 08:00

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**77**		5.0	0.39	ug/L			10/10/19 13:56	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/10/19 13:56	1
1,1-Dichloroethane	**17**		5.0	0.59	ug/L			10/10/19 13:56	1
1,1-Dichloroethylene	**16**		5.0	0.85	ug/L			10/10/19 13:56	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/10/19 13:56	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/10/19 13:56	1
1,4-Dioxane	ND		200	15	ug/L			10/10/19 13:56	1
Acetone	ND		25	2.0	ug/L			10/10/19 13:56	1
Benzene	ND		5.0	0.60	ug/L			10/10/19 13:56	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/10/19 13:56	1
Chloroform	ND		5.0	0.54	ug/L			10/10/19 13:56	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/10/19 13:56	1
Toluene	ND		5.0	0.45	ug/L			10/10/19 13:56	1
Trichloroethylene	**4.5**	**J**	5.0	0.60	ug/L			10/10/19 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*68 - 130*		*10/10/19 13:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*76 - 123*		*10/10/19 13:56*	*1*
Toluene-d8 (Surr)	*83*		*77 - 120*		*10/10/19 13:56*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*10/10/19 13:56*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		10/08/19 10:14	10/09/19 01:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**345**		10.0	4.0	mg/L			10/09/19 09:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**22.0**		4.0	4.0	mg/L			10/10/19 11:00	1
pH	**7.2**	**HF**	0.1	0.1	SU			10/24/19 13:35	1
Temperature	**20.4**	**HF**	0.001	0.001	Degrees C			10/24/19 13:35	1

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Client Sample ID: EFFLUENT
Lab Sample ID: 480-160366-5
Date Collected: 10/03/19 10:00
Matrix: Water
Date Received: 10/05/19 08:00

Method: 624.1 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.39	ug/L			10/10/19 14:20	1
1,1,2-Trichloroethane	ND		5.0	0.48	ug/L			10/10/19 14:20	1
1,1-Dichloroethane	ND		5.0	0.59	ug/L			10/10/19 14:20	1
1,1-Dichloroethylene	ND		5.0	0.85	ug/L			10/10/19 14:20	1
1,2-Dichloroethane	ND		5.0	0.60	ug/L			10/10/19 14:20	1
1,2-Dichloroethene, Total	ND		10	3.2	ug/L			10/10/19 14:20	1
1,4-Dioxane	ND		200	15	ug/L			10/10/19 14:20	1
Acetone	ND		25	2.0	ug/L			10/10/19 14:20	1
Benzene	ND		5.0	0.60	ug/L			10/10/19 14:20	1
Carbon tetrachloride	ND		5.0	0.51	ug/L			10/10/19 14:20	1
Chloroform	ND		5.0	0.54	ug/L			10/10/19 14:20	1
Methylene Chloride	ND		5.0	0.81	ug/L			10/10/19 14:20	1
Toluene	ND		5.0	0.45	ug/L			10/10/19 14:20	1
Trichloroethylene	ND		5.0	0.60	ug/L			10/10/19 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*68 - 130*		*10/10/19 14:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*76 - 123*		*10/10/19 14:20*	*1*
Toluene-d8 (Surr)	*82*		*77 - 120*		*10/10/19 14:20*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*10/10/19 14:20*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		10/08/19 10:14	10/09/19 01:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**357**		10.0	4.0	mg/L			10/09/19 09:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**40.4**		4.0	4.0	mg/L			10/10/19 11:00	1
pH	**8.2**	**HF**	0.1	0.1	SU			10/24/19 13:33	1
Temperature	**20.4**	**HF**	0.001	0.001	Degrees C			10/24/19 13:33	1

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Client Sample ID: 7R
Lab Sample ID: 480-160366-1
Date Collected: 10/03/19 10:40
Matrix: Water
Date Received: 10/05/19 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	497142	10/10/19 12:45	S1V	TAL BUF
Total/NA	Prep	200.7			496571	10/08/19 10:14	NSW	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	496808	10/09/19 01:07	AMH	TAL BUF
Total/NA	Analysis	SM 2540C		1	496889	10/09/19 09:50	CSS	TAL BUF
Total/NA	Analysis	SM 2540D		1	497049	10/09/19 16:06	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	500055	10/24/19 13:43	KEB	TAL BUF

Client Sample ID: ERT-1
Lab Sample ID: 480-160366-2
Date Collected: 10/03/19 10:30
Matrix: Water
Date Received: 10/05/19 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	497142	10/10/19 13:09	S1V	TAL BUF
Total/NA	Prep	200.7			496571	10/08/19 10:14	NSW	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	496808	10/09/19 01:26	AMH	TAL BUF
Total/NA	Analysis	SM 2540C		1	496889	10/09/19 09:50	CSS	TAL BUF
Total/NA	Analysis	SM 2540D		1	497049	10/09/19 16:06	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	500055	10/24/19 13:40	KEB	TAL BUF

Client Sample ID: 5R
Lab Sample ID: 480-160366-3
Date Collected: 10/03/19 10:20
Matrix: Water
Date Received: 10/05/19 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	497142	10/10/19 13:33	S1V	TAL BUF
Total/NA	Prep	200.7			498115	10/15/19 12:12	ADM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	498301	10/15/19 21:29	LMH	TAL BUF
Total/NA	Analysis	SM 2540C		1	496889	10/09/19 09:50	CSS	TAL BUF
Total/NA	Analysis	SM 2540D		1	497049	10/09/19 16:06	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	500055	10/24/19 13:38	KEB	TAL BUF

Client Sample ID: COMBINED INFLUENT
Lab Sample ID: 480-160366-4
Date Collected: 10/03/19 10:10
Matrix: Water
Date Received: 10/05/19 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	497142	10/10/19 13:56	S1V	TAL BUF
Total/NA	Prep	200.7			496571	10/08/19 10:14	NSW	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	496808	10/09/19 01:34	AMH	TAL BUF
Total/NA	Analysis	SM 2540C		1	496889	10/09/19 09:50	CSS	TAL BUF
Total/NA	Analysis	SM 2540D		1	497191	10/10/19 11:00	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	500055	10/24/19 13:35	KEB	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Client Sample ID: EFFLUENT
Lab Sample ID: 480-160366-5
Date Collected: 10/03/19 10:00
Matrix: Water
Date Received: 10/05/19 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	497142	10/10/19 14:20	S1V	TAL BUF
Total/NA	Prep	200.7			496571	10/08/19 10:14	NSW	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	496808	10/09/19 01:37	AMH	TAL BUF
Total/NA	Analysis	SM 2540C		1	496889	10/09/19 09:50	CSS	TAL BUF
Total/NA	Analysis	SM 2540D		1	497191	10/10/19 11:00	CSS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	500055	10/24/19 13:33	KEB	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Laboratory: Eurofins TestAmerica, Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
624.1		Water	1,2-Dichloroethene, Total
624.1		Water	1,4-Dioxane
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Method Summary

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
200.7	Preparation, Total Metals	EPA	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State D.E.C.
Job ID: 480-160366-1
Project/Site: Mohonk Rd. #356023 - Monthly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-160366-1	7R	Water	10/03/19 10:40	10/05/19 08:00	
480-160366-2	ERT-1	Water	10/03/19 10:30	10/05/19 08:00	
480-160366-3	5R	Water	10/03/19 10:20	10/05/19 08:00	
480-160366-4	COMBINED INFLUENT	Water	10/03/19 10:10	10/05/19 08:00	
480-160366-5	EFFLUENT	Water	10/03/19 10:00	10/05/19 08:00	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-160366-1

Login Number: 160366

List Source: Eurofins TestAmerica, Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AZTECH
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Albany #224

Chain of Custody Record

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Client Information	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-123830-15807.1
Client Contact: Andrew Talbot	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1

Company: Aztech Technologies Inc

Address: 5 McCrea Hill Road
City: Ballston Spa
State, Zip: NY, 12020
Phone:
Email: atalbot@aztechenv.com
Project Name: Mohonk Rd. #356023
Site:

Due Date Requested:
TAT Requested (days):
PO #: CallOut 136396
WO #:
Project #: 48005267
SSOW#:

480-160366 Chain of Custody

H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify); Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	2540D - Total Suspended Solids	2540C_Calcd - Total Dissolved Solids	SM4500_H+ - pH	624.1_PREC - (MOD) Priority Pollutant List - VOA - 62	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	N	A		
7R	10/3/14	1040	G	Water			X	X	X	X	X		
ERT-1	10/3/14	1030	G	Water			X	X	X	X	X		
5R	10/3/14	1020	G	Water			X	X	X	X	X		
Combined Influent	10/3/14	1010	G	Water			X	X	X	X	X		
Effluent	10/3/14	1000	G	Water			X	X	X	X	X		

KKZ 10/4/19

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/3/14 1500	Aztech	[signature]	10/4/19 0650	Eurofins
2	[signature]	10/4/19 1700	Eurofins	[signature]	10/5/19 0800	TAB
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.2.5

Ver: 01/16/2019

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ANALYTICAL REPORT

Job Number: 140-16177-1

Job Description: Mohonk Road Industrial Plant #356023

Contract Number: C100700

For:
New York State D.E.C.
625 Broadway
Division of Environmental Remediation
Albany, NY 12233-7014

Attention: Charles Gregory

Approved for release.
Diana L Lange
Project Management Assistant II
8/9/2019 8:43 AM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
08/09/2019

The test results in this report meet all 2003 NELAC and 2003 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Definitions/Glossary

Client: New York State D.E.C. Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
140-16177-1

Comments
No additional comments.

Receipt
The samples were received on 7/27/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
Method(s) TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-32044, the results are within limits for TO-15, which is required for this project.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-32044 exhibited % difference of > 30% for the following analyte(s) 1,3,5-Trimethylbenzene; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-32044: 1,3,5-Trimethylbenzene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) TO 15 LL, TO-15: Although the BFB is flagged as outside control limits for TO-14 on batch 140-32181, the results are within limits for TO-15, which is required for this project.

Method(s) TO 15 LL, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: New York State D.E.C.
Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Client Sample ID: 356023-SV-T1A
Lab Sample ID: 140-16177-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3600		160		ppb v/v	101.05		TO 15 LL	Total/NA
1,1-Dichloroethene	760		81		ppb v/v	101.05		TO 15 LL	Total/NA
2-Butanone	9500		650		ppb v/v	101.05		TO 15 LL	Total/NA
Trichloroethene	140		73		ppb v/v	101.05		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	20000		880		ug/m3	101.05		TO 15 LL	Total/NA
1,1-Dichloroethene	3000		320		ug/m3	101.05		TO 15 LL	Total/NA
2-Butanone	28000		1900		ug/m3	101.05		TO 15 LL	Total/NA
Trichloroethene	760		390		ug/m3	101.05		TO 15 LL	Total/NA

Client Sample ID: 356023-SV-T1B
Lab Sample ID: 140-16177-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	27000		270		ppb v/v	340.06		TO 15 LL	Total/NA
1,1-Dichloroethene	5200		140		ppb v/v	340.06		TO 15 LL	Total/NA
2-Butanone	1900		1100		ppb v/v	340.06		TO 15 LL	Total/NA
Trichloroethene	890		120		ppb v/v	340.06		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	150000		1500		ug/m3	340.06		TO 15 LL	Total/NA
1,1-Dichloroethene	21000		540		ug/m3	340.06		TO 15 LL	Total/NA
2-Butanone	5700		3200		ug/m3	340.06		TO 15 LL	Total/NA
Trichloroethene	4800		660		ug/m3	340.06		TO 15 LL	Total/NA

Client Sample ID: 356023-SV-21
Lab Sample ID: 140-16177-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	35000		330		ppb v/v	334.03		TO 15 LL	Total/NA
1,1-Dichloroethane	370		330		ppb v/v	334.03		TO 15 LL	Total/NA
1,1-Dichloroethene	5900		170		ppb v/v	334.03		TO 15 LL	Total/NA
Trichloroethene	990		150		ppb v/v	334.03		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	190000		1800		ug/m3	334.03		TO 15 LL	Total/NA
1,1-Dichloroethane	1500		1400		ug/m3	334.03		TO 15 LL	Total/NA
1,1-Dichloroethene	23000		660		ug/m3	334.03		TO 15 LL	Total/NA
Trichloroethene	5300		810		ug/m3	334.03		TO 15 LL	Total/NA

Client Sample ID: 356023-SV-22
Lab Sample ID: 140-16177-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3100		30		ppb v/v	37.98		TO 15 LL	Total/NA
1,1-Dichloroethene	430		15		ppb v/v	37.98		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	120		76		ppb v/v	37.98		TO 15 LL	Total/NA
2-Butanone	820		120		ppb v/v	37.98		TO 15 LL	Total/NA
Hexane	180		76		ppb v/v	37.98		TO 15 LL	Total/NA
Trichloroethene	240		14		ppb v/v	37.98		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	17000		170		ug/m3	37.98		TO 15 LL	Total/NA
1,1-Dichloroethene	1700		60		ug/m3	37.98		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	540		350		ug/m3	37.98		TO 15 LL	Total/NA
2-Butanone	2400		360		ug/m3	37.98		TO 15 LL	Total/NA
Hexane	630		270		ug/m3	37.98		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 356023-SV-22 (Continued)
Lab Sample ID: 140-16177-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1300		73		ug/m3	37.98		TO 15 LL	Total/NA

Client Sample ID: 356023-SV-23
Lab Sample ID: 140-16177-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3600		29		ppb v/v	42.93		TO 15 LL	Total/NA
1,1-Dichloroethene	890		14		ppb v/v	42.93		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	81		72		ppb v/v	42.93		TO 15 LL	Total/NA
2-Butanone	6200	E	110		ppb v/v	42.93		TO 15 LL	Total/NA
Trichloroethene	54		13		ppb v/v	42.93		TO 15 LL	Total/NA
2-Butanone - DL	5600	D	230		ppb v/v	42.93		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	20000		160		ug/m3	42.93		TO 15 LL	Total/NA
1,1-Dichloroethene	3500		57		ug/m3	42.93		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	380		330		ug/m3	42.93		TO 15 LL	Total/NA
2-Butanone	18000	E	340		ug/m3	42.93		TO 15 LL	Total/NA
Trichloroethene	290		69		ug/m3	42.93		TO 15 LL	Total/NA
2-Butanone - DL	16000	D	680		ug/m3	42.93		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 356023-SV-T1A
Lab Sample ID: 140-16177-1

Date Collected: 07/24/19 08:53
Matrix: Air
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**3600**		160		ppb v/v			07/30/19 23:47	101.05
1,1,2,2-Tetrachloroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,1,2-Trichloroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,1,2-Trichlorotrifluoroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,1-Dichloroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,1-Dichloroethene	**760**		81		ppb v/v			07/30/19 23:47	101.05
1,2,4-Trichlorobenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
1,2,4-Trimethylbenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
1,2-Dibromoethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,2-Dichlorobenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
1,2-Dichloroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,2-Dichloropropane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,2-Dichlorotetrafluoroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
1,3,5-Trimethylbenzene	ND	*	160		ppb v/v			07/30/19 23:47	101.05
1,3-Dichlorobenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
1,4-Dichlorobenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
1,4-Dioxane	ND		400		ppb v/v			07/30/19 23:47	101.05
2,2,4-Trimethylpentane	ND		400		ppb v/v			07/30/19 23:47	101.05
2-Butanone	**9500**		650		ppb v/v			07/30/19 23:47	101.05
4-Methyl-2-pentanone (MIBK)	ND		400		ppb v/v			07/30/19 23:47	101.05
Benzene	ND		160		ppb v/v			07/30/19 23:47	101.05
Benzyl chloride	ND		320		ppb v/v			07/30/19 23:47	101.05
Bromodichloromethane	ND		160		ppb v/v			07/30/19 23:47	101.05
Bromoform	ND		160		ppb v/v			07/30/19 23:47	101.05
Bromomethane	ND		160		ppb v/v			07/30/19 23:47	101.05
Carbon tetrachloride	ND		65		ppb v/v			07/30/19 23:47	101.05
Chlorobenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
Chloroethane	ND		160		ppb v/v			07/30/19 23:47	101.05
Chloroform	ND		160		ppb v/v			07/30/19 23:47	101.05
Chloromethane	ND		400		ppb v/v			07/30/19 23:47	101.05
cis-1,2-Dichloroethene	ND		81		ppb v/v			07/30/19 23:47	101.05
cis-1,3-Dichloropropene	ND		160		ppb v/v			07/30/19 23:47	101.05
Cyclohexane	ND		400		ppb v/v			07/30/19 23:47	101.05
Dibromochloromethane	ND		160		ppb v/v			07/30/19 23:47	101.05
Dichlorodifluoromethane	ND		160		ppb v/v			07/30/19 23:47	101.05
Ethanol	ND		4000		ppb v/v			07/30/19 23:47	101.05
Ethylbenzene	ND		160		ppb v/v			07/30/19 23:47	101.05
Hexachlorobutadiene	ND		160		ppb v/v			07/30/19 23:47	101.05
Hexane	ND		400		ppb v/v			07/30/19 23:47	101.05
Methyl tert-butyl ether	ND		320		ppb v/v			07/30/19 23:47	101.05
Methylene Chloride	ND		400		ppb v/v			07/30/19 23:47	101.05
m-Xylene & p-Xylene	ND		160		ppb v/v			07/30/19 23:47	101.05
o-Xylene	ND		160		ppb v/v			07/30/19 23:47	101.05
Styrene	ND		160		ppb v/v			07/30/19 23:47	101.05
t-Butyl alcohol	ND		650		ppb v/v			07/30/19 23:47	101.05
Tetrachloroethene	ND		160		ppb v/v			07/30/19 23:47	101.05
Toluene	ND		240		ppb v/v			07/30/19 23:47	101.05
trans-1,2-Dichloroethene	ND		160		ppb v/v			07/30/19 23:47	101.05

Client Sample ID: 356023-SV-T1A
Lab Sample ID: 140-16177-1

Date Collected: 07/24/19 08:53
Matrix: Air
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		160		ppb v/v			07/30/19 23:47	101.05
Trichloroethene	**140**		73		ppb v/v			07/30/19 23:47	101.05
Trichlorofluoromethane	ND		160		ppb v/v			07/30/19 23:47	101.05
Vinyl chloride	ND		81		ppb v/v			07/30/19 23:47	101.05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**20000**		880		ug/m3			07/30/19 23:47	101.05
1,1,2,2-Tetrachloroethane	ND		1100		ug/m3			07/30/19 23:47	101.05
1,1,2-Trichloroethane	ND		880		ug/m3			07/30/19 23:47	101.05
1,1,2-Trichlorotrifluoroethane	ND		1200		ug/m3			07/30/19 23:47	101.05
1,1-Dichloroethane	ND		650		ug/m3			07/30/19 23:47	101.05
1,1-Dichloroethene	**3000**		320		ug/m3			07/30/19 23:47	101.05
1,2,4-Trichlorobenzene	ND		1200		ug/m3			07/30/19 23:47	101.05
1,2,4-Trimethylbenzene	ND		790		ug/m3			07/30/19 23:47	101.05
1,2-Dibromoethane	ND		1200		ug/m3			07/30/19 23:47	101.05
1,2-Dichlorobenzene	ND		970		ug/m3			07/30/19 23:47	101.05
1,2-Dichloroethane	ND		650		ug/m3			07/30/19 23:47	101.05
1,2-Dichloropropane	ND		750		ug/m3			07/30/19 23:47	101.05
1,2-Dichlorotetrafluoroethane	ND		1100		ug/m3			07/30/19 23:47	101.05
1,3,5-Trimethylbenzene	ND	*	790		ug/m3			07/30/19 23:47	101.05
1,3-Dichlorobenzene	ND		970		ug/m3			07/30/19 23:47	101.05
1,4-Dichlorobenzene	ND		970		ug/m3			07/30/19 23:47	101.05
1,4-Dioxane	ND		1500		ug/m3			07/30/19 23:47	101.05
2,2,4-Trimethylpentane	ND		1900		ug/m3			07/30/19 23:47	101.05
2-Butanone	**28000**		1900		ug/m3			07/30/19 23:47	101.05
4-Methyl-2-pentanone (MIBK)	ND		1700		ug/m3			07/30/19 23:47	101.05
Benzene	ND		520		ug/m3			07/30/19 23:47	101.05
Benzyl chloride	ND		1700		ug/m3			07/30/19 23:47	101.05
Bromodichloromethane	ND		1100		ug/m3			07/30/19 23:47	101.05
Bromoform	ND		1700		ug/m3			07/30/19 23:47	101.05
Bromomethane	ND		630		ug/m3			07/30/19 23:47	101.05
Carbon tetrachloride	ND		410		ug/m3			07/30/19 23:47	101.05
Chlorobenzene	ND		740		ug/m3			07/30/19 23:47	101.05
Chloroethane	ND		430		ug/m3			07/30/19 23:47	101.05
Chloroform	ND		790		ug/m3			07/30/19 23:47	101.05
Chloromethane	ND		830		ug/m3			07/30/19 23:47	101.05
cis-1,2-Dichloroethene	ND		320		ug/m3			07/30/19 23:47	101.05
cis-1,3-Dichloropropene	ND		730		ug/m3			07/30/19 23:47	101.05
Cyclohexane	ND		1400		ug/m3			07/30/19 23:47	101.05
Dibromochloromethane	ND		1400		ug/m3			07/30/19 23:47	101.05
Dichlorodifluoromethane	ND		800		ug/m3			07/30/19 23:47	101.05
Ethanol	ND		7600		ug/m3			07/30/19 23:47	101.05
Ethylbenzene	ND		700		ug/m3			07/30/19 23:47	101.05
Hexachlorobutadiene	ND		1700		ug/m3			07/30/19 23:47	101.05
Hexane	ND		1400		ug/m3			07/30/19 23:47	101.05
Methyl tert-butyl ether	ND		1200		ug/m3			07/30/19 23:47	101.05
Methylene Chloride	ND		1400		ug/m3			07/30/19 23:47	101.05
m-Xylene & p-Xylene	ND		700		ug/m3			07/30/19 23:47	101.05
o-Xylene	ND		700		ug/m3			07/30/19 23:47	101.05

Client Sample ID: 356023-SV-T1A — Lab Sample ID: 140-16177-1

Date Collected: 07/24/19 08:53 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		690		ug/m3			07/30/19 23:47	101.05
t-Butyl alcohol	ND		2000		ug/m3			07/30/19 23:47	101.05
Tetrachloroethene	ND		1100		ug/m3			07/30/19 23:47	101.05
Toluene	ND		910		ug/m3			07/30/19 23:47	101.05
trans-1,2-Dichloroethene	ND		640		ug/m3			07/30/19 23:47	101.05
trans-1,3-Dichloropropene	ND		730		ug/m3			07/30/19 23:47	101.05
Trichloroethene	**760**		390		ug/m3			07/30/19 23:47	101.05
Trichlorofluoromethane	ND		910		ug/m3			07/30/19 23:47	101.05
Vinyl chloride	ND		210		ug/m3			07/30/19 23:47	101.05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*60 - 140*		*07/30/19 23:47*	*101.05*

Client Sample ID: 356023-SV-T1B — Lab Sample ID: 140-16177-2

Date Collected: 07/24/19 17:44 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**27000**		270		ppb v/v			08/01/19 02:33	340.06
1,1,2,2-Tetrachloroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,1,2-Trichloroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,1,2-Trichlorotrifluoroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,1-Dichloroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,1-Dichloroethene	**5200**		140		ppb v/v			08/01/19 02:33	340.06
1,2,4-Trichlorobenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
1,2,4-Trimethylbenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
1,2-Dibromoethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,2-Dichlorobenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
1,2-Dichloroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,2-Dichloropropane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,2-Dichlorotetrafluoroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
1,3,5-Trimethylbenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
1,3-Dichlorobenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
1,4-Dichlorobenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
1,4-Dioxane	ND		680		ppb v/v			08/01/19 02:33	340.06
2,2,4-Trimethylpentane	ND		680		ppb v/v			08/01/19 02:33	340.06
2-Butanone	**1900**		1100		ppb v/v			08/01/19 02:33	340.06
4-Methyl-2-pentanone (MIBK)	ND		680		ppb v/v			08/01/19 02:33	340.06
Benzene	ND		270		ppb v/v			08/01/19 02:33	340.06
Benzyl chloride	ND		540		ppb v/v			08/01/19 02:33	340.06
Bromodichloromethane	ND		270		ppb v/v			08/01/19 02:33	340.06
Bromoform	ND		270		ppb v/v			08/01/19 02:33	340.06
Bromomethane	ND		270		ppb v/v			08/01/19 02:33	340.06
Carbon tetrachloride	ND		110		ppb v/v			08/01/19 02:33	340.06
Chlorobenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
Chloroethane	ND		270		ppb v/v			08/01/19 02:33	340.06
Chloroform	ND		270		ppb v/v			08/01/19 02:33	340.06

Client Sample ID: 356023-SV-T1B
Lab Sample ID: 140-16177-2

Date Collected: 07/24/19 17:44
Matrix: Air
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		680		ppb v/v			08/01/19 02:33	340.06
cis-1,2-Dichloroethene	ND		140		ppb v/v			08/01/19 02:33	340.06
cis-1,3-Dichloropropene	ND		270		ppb v/v			08/01/19 02:33	340.06
Cyclohexane	ND		680		ppb v/v			08/01/19 02:33	340.06
Dibromochloromethane	ND		270		ppb v/v			08/01/19 02:33	340.06
Dichlorodifluoromethane	ND		270		ppb v/v			08/01/19 02:33	340.06
Ethanol	ND		6800		ppb v/v			08/01/19 02:33	340.06
Ethylbenzene	ND		270		ppb v/v			08/01/19 02:33	340.06
Hexachlorobutadiene	ND		270		ppb v/v			08/01/19 02:33	340.06
Hexane	ND		680		ppb v/v			08/01/19 02:33	340.06
Methyl tert-butyl ether	ND		540		ppb v/v			08/01/19 02:33	340.06
Methylene Chloride	ND		680		ppb v/v			08/01/19 02:33	340.06
m-Xylene & p-Xylene	ND		270		ppb v/v			08/01/19 02:33	340.06
o-Xylene	ND		270		ppb v/v			08/01/19 02:33	340.06
Styrene	ND		270		ppb v/v			08/01/19 02:33	340.06
t-Butyl alcohol	ND		1100		ppb v/v			08/01/19 02:33	340.06
Tetrachloroethene	ND		270		ppb v/v			08/01/19 02:33	340.06
Toluene	ND		410		ppb v/v			08/01/19 02:33	340.06
trans-1,2-Dichloroethene	ND		270		ppb v/v			08/01/19 02:33	340.06
trans-1,3-Dichloropropene	ND		270		ppb v/v			08/01/19 02:33	340.06
Trichloroethene	**890**		120		ppb v/v			08/01/19 02:33	340.06
Trichlorofluoromethane	ND		270		ppb v/v			08/01/19 02:33	340.06
Vinyl chloride	ND		140		ppb v/v			08/01/19 02:33	340.06

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**150000**		1500		ug/m3			08/01/19 02:33	340.06
1,1,2,2-Tetrachloroethane	ND		1900		ug/m3			08/01/19 02:33	340.06
1,1,2-Trichloroethane	ND		1500		ug/m3			08/01/19 02:33	340.06
1,1,2-Trichlorotrifluoroethane	ND		2100		ug/m3			08/01/19 02:33	340.06
1,1-Dichloroethane	ND		1100		ug/m3			08/01/19 02:33	340.06
1,1-Dichloroethene	**21000**		540		ug/m3			08/01/19 02:33	340.06
1,2,4-Trichlorobenzene	ND		2000		ug/m3			08/01/19 02:33	340.06
1,2,4-Trimethylbenzene	ND		1300		ug/m3			08/01/19 02:33	340.06
1,2-Dibromoethane	ND		2100		ug/m3			08/01/19 02:33	340.06
1,2-Dichlorobenzene	ND		1600		ug/m3			08/01/19 02:33	340.06
1,2-Dichloroethane	ND		1100		ug/m3			08/01/19 02:33	340.06
1,2-Dichloropropane	ND		1300		ug/m3			08/01/19 02:33	340.06
1,2-Dichlorotetrafluoroethane	ND		1900		ug/m3			08/01/19 02:33	340.06
1,3,5-Trimethylbenzene	ND		1300		ug/m3			08/01/19 02:33	340.06
1,3-Dichlorobenzene	ND		1600		ug/m3			08/01/19 02:33	340.06
1,4-Dichlorobenzene	ND		1600		ug/m3			08/01/19 02:33	340.06
1,4-Dioxane	ND		2500		ug/m3			08/01/19 02:33	340.06
2,2,4-Trimethylpentane	ND		3200		ug/m3			08/01/19 02:33	340.06
2-Butanone	**5700**		3200		ug/m3			08/01/19 02:33	340.06
4-Methyl-2-pentanone (MIBK)	ND		2800		ug/m3			08/01/19 02:33	340.06
Benzene	ND		870		ug/m3			08/01/19 02:33	340.06
Benzyl chloride	ND		2800		ug/m3			08/01/19 02:33	340.06
Bromodichloromethane	ND		1800		ug/m3			08/01/19 02:33	340.06
Bromoform	ND		2800		ug/m3			08/01/19 02:33	340.06

Client Sample ID: 356023-SV-T1B — Lab Sample ID: 140-16177-2

Date Collected: 07/24/19 17:44 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1100		ug/m3			08/01/19 02:33	340.06
Carbon tetrachloride	ND		680		ug/m3			08/01/19 02:33	340.06
Chlorobenzene	ND		1300		ug/m3			08/01/19 02:33	340.06
Chloroethane	ND		720		ug/m3			08/01/19 02:33	340.06
Chloroform	ND		1300		ug/m3			08/01/19 02:33	340.06
Chloromethane	ND		1400		ug/m3			08/01/19 02:33	340.06
cis-1,2-Dichloroethene	ND		540		ug/m3			08/01/19 02:33	340.06
cis-1,3-Dichloropropene	ND		1200		ug/m3			08/01/19 02:33	340.06
Cyclohexane	ND		2300		ug/m3			08/01/19 02:33	340.06
Dibromochloromethane	ND		2300		ug/m3			08/01/19 02:33	340.06
Dichlorodifluoromethane	ND		1300		ug/m3			08/01/19 02:33	340.06
Ethanol	ND		13000		ug/m3			08/01/19 02:33	340.06
Ethylbenzene	ND		1200		ug/m3			08/01/19 02:33	340.06
Hexachlorobutadiene	ND		2900		ug/m3			08/01/19 02:33	340.06
Hexane	ND		2400		ug/m3			08/01/19 02:33	340.06
Methyl tert-butyl ether	ND		2000		ug/m3			08/01/19 02:33	340.06
Methylene Chloride	ND		2400		ug/m3			08/01/19 02:33	340.06
m-Xylene & p-Xylene	ND		1200		ug/m3			08/01/19 02:33	340.06
o-Xylene	ND		1200		ug/m3			08/01/19 02:33	340.06
Styrene	ND		1200		ug/m3			08/01/19 02:33	340.06
t-Butyl alcohol	ND		3300		ug/m3			08/01/19 02:33	340.06
Tetrachloroethene	ND		1800		ug/m3			08/01/19 02:33	340.06
Toluene	ND		1500		ug/m3			08/01/19 02:33	340.06
trans-1,2-Dichloroethene	ND		1100		ug/m3			08/01/19 02:33	340.06
trans-1,3-Dichloropropene	ND		1200		ug/m3			08/01/19 02:33	340.06
Trichloroethene	**4800**		660		ug/m3			08/01/19 02:33	340.06
Trichlorofluoromethane	ND		1500		ug/m3			08/01/19 02:33	340.06
Vinyl chloride	ND		350		ug/m3			08/01/19 02:33	340.06

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*08/01/19 02:33*	*340.06*

Client Sample ID: 356023-SV-21 — Lab Sample ID: 140-16177-3

Date Collected: 07/26/19 10:38 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**35000**		330		ppb v/v			08/01/19 03:20	334.03
1,1,2,2-Tetrachloroethane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,1,2-Trichloroethane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,1,2-Trichlorotrifluoroethane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,1-Dichloroethane	**370**		330		ppb v/v			08/01/19 03:20	334.03
1,1-Dichloroethene	**5900**		170		ppb v/v			08/01/19 03:20	334.03
1,2,4-Trichlorobenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
1,2,4-Trimethylbenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
1,2-Dibromoethane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,2-Dichlorobenzene	ND		330		ppb v/v			08/01/19 03:20	334.03

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Date Collected: 07/26/19 10:38 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,2-Dichloropropane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,2-Dichlorotetrafluoroethane	ND		330		ppb v/v			08/01/19 03:20	334.03
1,3,5-Trimethylbenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
1,3-Dichlorobenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
1,4-Dichlorobenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
1,4-Dioxane	ND		840		ppb v/v			08/01/19 03:20	334.03
2,2,4-Trimethylpentane	ND		840		ppb v/v			08/01/19 03:20	334.03
2-Butanone	ND		1300		ppb v/v			08/01/19 03:20	334.03
4-Methyl-2-pentanone (MIBK)	ND		840		ppb v/v			08/01/19 03:20	334.03
Benzene	ND		330		ppb v/v			08/01/19 03:20	334.03
Benzyl chloride	ND		670		ppb v/v			08/01/19 03:20	334.03
Bromodichloromethane	ND		330		ppb v/v			08/01/19 03:20	334.03
Bromoform	ND		330		ppb v/v			08/01/19 03:20	334.03
Bromomethane	ND		330		ppb v/v			08/01/19 03:20	334.03
Carbon tetrachloride	ND		130		ppb v/v			08/01/19 03:20	334.03
Chlorobenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
Chloroethane	ND		330		ppb v/v			08/01/19 03:20	334.03
Chloroform	ND		330		ppb v/v			08/01/19 03:20	334.03
Chloromethane	ND		840		ppb v/v			08/01/19 03:20	334.03
cis-1,2-Dichloroethene	ND		170		ppb v/v			08/01/19 03:20	334.03
cis-1,3-Dichloropropene	ND		330		ppb v/v			08/01/19 03:20	334.03
Cyclohexane	ND		840		ppb v/v			08/01/19 03:20	334.03
Dibromochloromethane	ND		330		ppb v/v			08/01/19 03:20	334.03
Dichlorodifluoromethane	ND		330		ppb v/v			08/01/19 03:20	334.03
Ethanol	ND		8400		ppb v/v			08/01/19 03:20	334.03
Ethylbenzene	ND		330		ppb v/v			08/01/19 03:20	334.03
Hexachlorobutadiene	ND		330		ppb v/v			08/01/19 03:20	334.03
Hexane	ND		840		ppb v/v			08/01/19 03:20	334.03
Methyl tert-butyl ether	ND		670		ppb v/v			08/01/19 03:20	334.03
Methylene Chloride	ND		840		ppb v/v			08/01/19 03:20	334.03
m-Xylene & p-Xylene	ND		330		ppb v/v			08/01/19 03:20	334.03
o-Xylene	ND		330		ppb v/v			08/01/19 03:20	334.03
Styrene	ND		330		ppb v/v			08/01/19 03:20	334.03
t-Butyl alcohol	ND		1300		ppb v/v			08/01/19 03:20	334.03
Tetrachloroethene	ND		330		ppb v/v			08/01/19 03:20	334.03
Toluene	ND		500		ppb v/v			08/01/19 03:20	334.03
trans-1,2-Dichloroethene	ND		330		ppb v/v			08/01/19 03:20	334.03
trans-1,3-Dichloropropene	ND		330		ppb v/v			08/01/19 03:20	334.03
Trichloroethene	**990**		150		ppb v/v			08/01/19 03:20	334.03
Trichlorofluoromethane	ND		330		ppb v/v			08/01/19 03:20	334.03
Vinyl chloride	ND		170		ppb v/v			08/01/19 03:20	334.03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**190000**		1800		ug/m3			08/01/19 03:20	334.03
1,1,2,2-Tetrachloroethane	ND		2300		ug/m3			08/01/19 03:20	334.03
1,1,2-Trichloroethane	ND		1800		ug/m3			08/01/19 03:20	334.03
1,1,2-Trichlorotrifluoroethane	ND		2600		ug/m3			08/01/19 03:20	334.03
1,1-Dichloroethane	**1500**		1400		ug/m3			08/01/19 03:20	334.03

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Date Collected: 07/26/19 10:38 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	**23000**		660		ug/m3			08/01/19 03:20	334.03
1,2,4-Trichlorobenzene	ND		2500		ug/m3			08/01/19 03:20	334.03
1,2,4-Trimethylbenzene	ND		1600		ug/m3			08/01/19 03:20	334.03
1,2-Dibromoethane	ND		2600		ug/m3			08/01/19 03:20	334.03
1,2-Dichlorobenzene	ND		2000		ug/m3			08/01/19 03:20	334.03
1,2-Dichloroethane	ND		1400		ug/m3			08/01/19 03:20	334.03
1,2-Dichloropropane	ND		1500		ug/m3			08/01/19 03:20	334.03
1,2-Dichlorotetrafluoroethane	ND		2300		ug/m3			08/01/19 03:20	334.03
1,3,5-Trimethylbenzene	ND		1600		ug/m3			08/01/19 03:20	334.03
1,3-Dichlorobenzene	ND		2000		ug/m3			08/01/19 03:20	334.03
1,4-Dichlorobenzene	ND		2000		ug/m3			08/01/19 03:20	334.03
1,4-Dioxane	ND		3000		ug/m3			08/01/19 03:20	334.03
2,2,4-Trimethylpentane	ND		3900		ug/m3			08/01/19 03:20	334.03
2-Butanone	ND		3900		ug/m3			08/01/19 03:20	334.03
4-Methyl-2-pentanone (MIBK)	ND		3400		ug/m3			08/01/19 03:20	334.03
Benzene	ND		1100		ug/m3			08/01/19 03:20	334.03
Benzyl chloride	ND		3500		ug/m3			08/01/19 03:20	334.03
Bromodichloromethane	ND		2200		ug/m3			08/01/19 03:20	334.03
Bromoform	ND		3500		ug/m3			08/01/19 03:20	334.03
Bromomethane	ND		1300		ug/m3			08/01/19 03:20	334.03
Carbon tetrachloride	ND		840		ug/m3			08/01/19 03:20	334.03
Chlorobenzene	ND		1500		ug/m3			08/01/19 03:20	334.03
Chloroethane	ND		880		ug/m3			08/01/19 03:20	334.03
Chloroform	ND		1600		ug/m3			08/01/19 03:20	334.03
Chloromethane	ND		1700		ug/m3			08/01/19 03:20	334.03
cis-1,2-Dichloroethene	ND		660		ug/m3			08/01/19 03:20	334.03
cis-1,3-Dichloropropene	ND		1500		ug/m3			08/01/19 03:20	334.03
Cyclohexane	ND		2900		ug/m3			08/01/19 03:20	334.03
Dibromochloromethane	ND		2800		ug/m3			08/01/19 03:20	334.03
Dichlorodifluoromethane	ND		1700		ug/m3			08/01/19 03:20	334.03
Ethanol	ND		16000		ug/m3			08/01/19 03:20	334.03
Ethylbenzene	ND		1500		ug/m3			08/01/19 03:20	334.03
Hexachlorobutadiene	ND		3600		ug/m3			08/01/19 03:20	334.03
Hexane	ND		2900		ug/m3			08/01/19 03:20	334.03
Methyl tert-butyl ether	ND		2400		ug/m3			08/01/19 03:20	334.03
Methylene Chloride	ND		2900		ug/m3			08/01/19 03:20	334.03
m-Xylene & p-Xylene	ND		1500		ug/m3			08/01/19 03:20	334.03
o-Xylene	ND		1500		ug/m3			08/01/19 03:20	334.03
Styrene	ND		1400		ug/m3			08/01/19 03:20	334.03
t-Butyl alcohol	ND		4100		ug/m3			08/01/19 03:20	334.03
Tetrachloroethene	ND		2300		ug/m3			08/01/19 03:20	334.03
Toluene	ND		1900		ug/m3			08/01/19 03:20	334.03
trans-1,2-Dichloroethene	ND		1300		ug/m3			08/01/19 03:20	334.03
trans-1,3-Dichloropropene	ND		1500		ug/m3			08/01/19 03:20	334.03
Trichloroethene	**5300**		810		ug/m3			08/01/19 03:20	334.03
Trichlorofluoromethane	ND		1900		ug/m3			08/01/19 03:20	334.03
Vinyl chloride	ND		430		ug/m3			08/01/19 03:20	334.03

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Date Collected: 07/26/19 10:38 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		08/01/19 03:20	334.03

Client Sample ID: 356023-SV-22 Lab Sample ID: 140-16177-4

Date Collected: 07/26/19 11:56 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**3100**		30		ppb v/v			08/01/19 04:07	37.98
1,1,2,2-Tetrachloroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,1,2-Trichloroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,1,2-Trichlorotrifluoroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,1-Dichloroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,1-Dichloroethene	**430**		15		ppb v/v			08/01/19 04:07	37.98
1,2,4-Trichlorobenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
1,2,4-Trimethylbenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
1,2-Dibromoethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,2-Dichlorobenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
1,2-Dichloroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,2-Dichloropropane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,2-Dichlorotetrafluoroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
1,3,5-Trimethylbenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
1,3-Dichlorobenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
1,4-Dichlorobenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
1,4-Dioxane	ND		76		ppb v/v			08/01/19 04:07	37.98
2,2,4-Trimethylpentane	**120**		76		ppb v/v			08/01/19 04:07	37.98
2-Butanone	**820**		120		ppb v/v			08/01/19 04:07	37.98
4-Methyl-2-pentanone (MIBK)	ND		76		ppb v/v			08/01/19 04:07	37.98
Benzene	ND		30		ppb v/v			08/01/19 04:07	37.98
Benzyl chloride	ND		61		ppb v/v			08/01/19 04:07	37.98
Bromodichloromethane	ND		30		ppb v/v			08/01/19 04:07	37.98
Bromoform	ND		30		ppb v/v			08/01/19 04:07	37.98
Bromomethane	ND		30		ppb v/v			08/01/19 04:07	37.98
Carbon tetrachloride	ND		12		ppb v/v			08/01/19 04:07	37.98
Chlorobenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
Chloroethane	ND		30		ppb v/v			08/01/19 04:07	37.98
Chloroform	ND		30		ppb v/v			08/01/19 04:07	37.98
Chloromethane	ND		76		ppb v/v			08/01/19 04:07	37.98
cis-1,2-Dichloroethene	ND		15		ppb v/v			08/01/19 04:07	37.98
cis-1,3-Dichloropropene	ND		30		ppb v/v			08/01/19 04:07	37.98
Cyclohexane	ND		76		ppb v/v			08/01/19 04:07	37.98
Dibromochloromethane	ND		30		ppb v/v			08/01/19 04:07	37.98
Dichlorodifluoromethane	ND		30		ppb v/v			08/01/19 04:07	37.98
Ethanol	ND		760		ppb v/v			08/01/19 04:07	37.98
Ethylbenzene	ND		30		ppb v/v			08/01/19 04:07	37.98
Hexachlorobutadiene	ND		30		ppb v/v			08/01/19 04:07	37.98
Hexane	**180**		76		ppb v/v			08/01/19 04:07	37.98
Methyl tert-butyl ether	ND		61		ppb v/v			08/01/19 04:07	37.98

Client Sample ID: 356023-SV-22
Lab Sample ID: 140-16177-4

Date Collected: 07/26/19 11:56
Matrix: Air
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		76		ppb v/v			08/01/19 04:07	37.98
m-Xylene & p-Xylene	ND		30		ppb v/v			08/01/19 04:07	37.98
o-Xylene	ND		30		ppb v/v			08/01/19 04:07	37.98
Styrene	ND		30		ppb v/v			08/01/19 04:07	37.98
t-Butyl alcohol	ND		120		ppb v/v			08/01/19 04:07	37.98
Tetrachloroethene	ND		30		ppb v/v			08/01/19 04:07	37.98
Toluene	ND		46		ppb v/v			08/01/19 04:07	37.98
trans-1,2-Dichloroethene	ND		30		ppb v/v			08/01/19 04:07	37.98
trans-1,3-Dichloropropene	ND		30		ppb v/v			08/01/19 04:07	37.98
Trichloroethene	**240**		14		ppb v/v			08/01/19 04:07	37.98
Trichlorofluoromethane	ND		30		ppb v/v			08/01/19 04:07	37.98
Vinyl chloride	ND		15		ppb v/v			08/01/19 04:07	37.98

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**17000**		170		ug/m3			08/01/19 04:07	37.98
1,1,2,2-Tetrachloroethane	ND		210		ug/m3			08/01/19 04:07	37.98
1,1,2-Trichloroethane	ND		170		ug/m3			08/01/19 04:07	37.98
1,1,2-Trichlorotrifluoroethane	ND		230		ug/m3			08/01/19 04:07	37.98
1,1-Dichloroethane	ND		120		ug/m3			08/01/19 04:07	37.98
1,1-Dichloroethene	**1700**		60		ug/m3			08/01/19 04:07	37.98
1,2,4-Trichlorobenzene	ND		230		ug/m3			08/01/19 04:07	37.98
1,2,4-Trimethylbenzene	ND		150		ug/m3			08/01/19 04:07	37.98
1,2-Dibromoethane	ND		230		ug/m3			08/01/19 04:07	37.98
1,2-Dichlorobenzene	ND		180		ug/m3			08/01/19 04:07	37.98
1,2-Dichloroethane	ND		120		ug/m3			08/01/19 04:07	37.98
1,2-Dichloropropane	ND		140		ug/m3			08/01/19 04:07	37.98
1,2-Dichlorotetrafluoroethane	ND		210		ug/m3			08/01/19 04:07	37.98
1,3,5-Trimethylbenzene	ND		150		ug/m3			08/01/19 04:07	37.98
1,3-Dichlorobenzene	ND		180		ug/m3			08/01/19 04:07	37.98
1,4-Dichlorobenzene	ND		180		ug/m3			08/01/19 04:07	37.98
1,4-Dioxane	ND		270		ug/m3			08/01/19 04:07	37.98
2,2,4-Trimethylpentane	**540**		350		ug/m3			08/01/19 04:07	37.98
2-Butanone	**2400**		360		ug/m3			08/01/19 04:07	37.98
4-Methyl-2-pentanone (MIBK)	ND		310		ug/m3			08/01/19 04:07	37.98
Benzene	ND		97		ug/m3			08/01/19 04:07	37.98
Benzyl chloride	ND		310		ug/m3			08/01/19 04:07	37.98
Bromodichloromethane	ND		200		ug/m3			08/01/19 04:07	37.98
Bromoform	ND		310		ug/m3			08/01/19 04:07	37.98
Bromomethane	ND		120		ug/m3			08/01/19 04:07	37.98
Carbon tetrachloride	ND		76		ug/m3			08/01/19 04:07	37.98
Chlorobenzene	ND		140		ug/m3			08/01/19 04:07	37.98
Chloroethane	ND		80		ug/m3			08/01/19 04:07	37.98
Chloroform	ND		150		ug/m3			08/01/19 04:07	37.98
Chloromethane	ND		160		ug/m3			08/01/19 04:07	37.98
cis-1,2-Dichloroethene	ND		60		ug/m3			08/01/19 04:07	37.98
cis-1,3-Dichloropropene	ND		140		ug/m3			08/01/19 04:07	37.98
Cyclohexane	ND		260		ug/m3			08/01/19 04:07	37.98
Dibromochloromethane	ND		260		ug/m3			08/01/19 04:07	37.98
Dichlorodifluoromethane	ND		150		ug/m3			08/01/19 04:07	37.98

Client Sample ID: 356023-SV-22 Lab Sample ID: 140-16177-4

Date Collected: 07/26/19 11:56 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	ND		1400		ug/m3			08/01/19 04:07	37.98
Ethylbenzene	ND		130		ug/m3			08/01/19 04:07	37.98
Hexachlorobutadiene	ND		320		ug/m3			08/01/19 04:07	37.98
Hexane	**630**		270		ug/m3			08/01/19 04:07	37.98
Methyl tert-butyl ether	ND		220		ug/m3			08/01/19 04:07	37.98
Methylene Chloride	ND		260		ug/m3			08/01/19 04:07	37.98
m-Xylene & p-Xylene	ND		130		ug/m3			08/01/19 04:07	37.98
o-Xylene	ND		130		ug/m3			08/01/19 04:07	37.98
Styrene	ND		130		ug/m3			08/01/19 04:07	37.98
t-Butyl alcohol	ND		370		ug/m3			08/01/19 04:07	37.98
Tetrachloroethene	ND		210		ug/m3			08/01/19 04:07	37.98
Toluene	ND		170		ug/m3			08/01/19 04:07	37.98
trans-1,2-Dichloroethene	ND		120		ug/m3			08/01/19 04:07	37.98
trans-1,3-Dichloropropene	ND		140		ug/m3			08/01/19 04:07	37.98
Trichloroethene	**1300**		73		ug/m3			08/01/19 04:07	37.98
Trichlorofluoromethane	ND		170		ug/m3			08/01/19 04:07	37.98
Vinyl chloride	ND		39		ug/m3			08/01/19 04:07	37.98

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*08/01/19 04:07*	*37.98*

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Date Collected: 07/26/19 13:43 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**3600**		29		ppb v/v			08/01/19 04:55	42.93
1,1,2,2-Tetrachloroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,1,2-Trichloroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,1,2-Trichlorotrifluoroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,1-Dichloroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,1-Dichloroethene	**890**		14		ppb v/v			08/01/19 04:55	42.93
1,2,4-Trichlorobenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
1,2,4-Trimethylbenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
1,2-Dibromoethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,2-Dichlorobenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
1,2-Dichloroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,2-Dichloropropane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,2-Dichlorotetrafluoroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
1,3,5-Trimethylbenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
1,3-Dichlorobenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
1,4-Dichlorobenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
1,4-Dioxane	ND		72		ppb v/v			08/01/19 04:55	42.93
2,2,4-Trimethylpentane	**81**		72		ppb v/v			08/01/19 04:55	42.93
2-Butanone	**6200**	**E**	110		ppb v/v			08/01/19 04:55	42.93
4-Methyl-2-pentanone (MIBK)	ND		72		ppb v/v			08/01/19 04:55	42.93
Benzene	ND		29		ppb v/v			08/01/19 04:55	42.93

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Date Collected: 07/26/19 13:43 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	ND		57		ppb v/v			08/01/19 04:55	42.93
Bromodichloromethane	ND		29		ppb v/v			08/01/19 04:55	42.93
Bromoform	ND		29		ppb v/v			08/01/19 04:55	42.93
Bromomethane	ND		29		ppb v/v			08/01/19 04:55	42.93
Carbon tetrachloride	ND		11		ppb v/v			08/01/19 04:55	42.93
Chlorobenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
Chloroethane	ND		29		ppb v/v			08/01/19 04:55	42.93
Chloroform	ND		29		ppb v/v			08/01/19 04:55	42.93
Chloromethane	ND		72		ppb v/v			08/01/19 04:55	42.93
cis-1,2-Dichloroethene	ND		14		ppb v/v			08/01/19 04:55	42.93
cis-1,3-Dichloropropene	ND		29		ppb v/v			08/01/19 04:55	42.93
Cyclohexane	ND		72		ppb v/v			08/01/19 04:55	42.93
Dibromochloromethane	ND		29		ppb v/v			08/01/19 04:55	42.93
Dichlorodifluoromethane	ND		29		ppb v/v			08/01/19 04:55	42.93
Ethanol	ND		720		ppb v/v			08/01/19 04:55	42.93
Ethylbenzene	ND		29		ppb v/v			08/01/19 04:55	42.93
Hexachlorobutadiene	ND		29		ppb v/v			08/01/19 04:55	42.93
Hexane	ND		72		ppb v/v			08/01/19 04:55	42.93
Methyl tert-butyl ether	ND		57		ppb v/v			08/01/19 04:55	42.93
Methylene Chloride	ND		72		ppb v/v			08/01/19 04:55	42.93
m-Xylene & p-Xylene	ND		29		ppb v/v			08/01/19 04:55	42.93
o-Xylene	ND		29		ppb v/v			08/01/19 04:55	42.93
Styrene	ND		29		ppb v/v			08/01/19 04:55	42.93
t-Butyl alcohol	ND		110		ppb v/v			08/01/19 04:55	42.93
Tetrachloroethene	ND		29		ppb v/v			08/01/19 04:55	42.93
Toluene	ND		43		ppb v/v			08/01/19 04:55	42.93
trans-1,2-Dichloroethene	ND		29		ppb v/v			08/01/19 04:55	42.93
trans-1,3-Dichloropropene	ND		29		ppb v/v			08/01/19 04:55	42.93
Trichloroethene	**54**		13		ppb v/v			08/01/19 04:55	42.93
Trichlorofluoromethane	ND		29		ppb v/v			08/01/19 04:55	42.93
Vinyl chloride	ND		14		ppb v/v			08/01/19 04:55	42.93

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**20000**		160		ug/m3			08/01/19 04:55	42.93
1,1,2,2-Tetrachloroethane	ND		200		ug/m3			08/01/19 04:55	42.93
1,1,2-Trichloroethane	ND		160		ug/m3			08/01/19 04:55	42.93
1,1,2-Trichlorotrifluoroethane	ND		220		ug/m3			08/01/19 04:55	42.93
1,1-Dichloroethane	ND		120		ug/m3			08/01/19 04:55	42.93
1,1-Dichloroethene	**3500**		57		ug/m3			08/01/19 04:55	42.93
1,2,4-Trichlorobenzene	ND		210		ug/m3			08/01/19 04:55	42.93
1,2,4-Trimethylbenzene	ND		140		ug/m3			08/01/19 04:55	42.93
1,2-Dibromoethane	ND		220		ug/m3			08/01/19 04:55	42.93
1,2-Dichlorobenzene	ND		170		ug/m3			08/01/19 04:55	42.93
1,2-Dichloroethane	ND		120		ug/m3			08/01/19 04:55	42.93
1,2-Dichloropropane	ND		130		ug/m3			08/01/19 04:55	42.93
1,2-Dichlorotetrafluoroethane	ND		200		ug/m3			08/01/19 04:55	42.93
1,3,5-Trimethylbenzene	ND		140		ug/m3			08/01/19 04:55	42.93
1,3-Dichlorobenzene	ND		170		ug/m3			08/01/19 04:55	42.93
1,4-Dichlorobenzene	ND		170		ug/m3			08/01/19 04:55	42.93

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Date Collected: 07/26/19 13:43 **Matrix: Air**
Date Received: 07/27/19 10:00
Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		260		ug/m3			08/01/19 04:55	42.93
2,2,4-Trimethylpentane	**380**		330		ug/m3			08/01/19 04:55	42.93
2-Butanone	**18000**	**E**	340		ug/m3			08/01/19 04:55	42.93
4-Methyl-2-pentanone (MIBK)	ND		290		ug/m3			08/01/19 04:55	42.93
Benzene	ND		91		ug/m3			08/01/19 04:55	42.93
Benzyl chloride	ND		300		ug/m3			08/01/19 04:55	42.93
Bromodichloromethane	ND		190		ug/m3			08/01/19 04:55	42.93
Bromoform	ND		300		ug/m3			08/01/19 04:55	42.93
Bromomethane	ND		110		ug/m3			08/01/19 04:55	42.93
Carbon tetrachloride	ND		72		ug/m3			08/01/19 04:55	42.93
Chlorobenzene	ND		130		ug/m3			08/01/19 04:55	42.93
Chloroethane	ND		76		ug/m3			08/01/19 04:55	42.93
Chloroform	ND		140		ug/m3			08/01/19 04:55	42.93
Chloromethane	ND		150		ug/m3			08/01/19 04:55	42.93
cis-1,2-Dichloroethene	ND		57		ug/m3			08/01/19 04:55	42.93
cis-1,3-Dichloropropene	ND		130		ug/m3			08/01/19 04:55	42.93
Cyclohexane	ND		250		ug/m3			08/01/19 04:55	42.93
Dibromochloromethane	ND		240		ug/m3			08/01/19 04:55	42.93
Dichlorodifluoromethane	ND		140		ug/m3			08/01/19 04:55	42.93
Ethanol	ND		1300		ug/m3			08/01/19 04:55	42.93
Ethylbenzene	ND		120		ug/m3			08/01/19 04:55	42.93
Hexachlorobutadiene	ND		310		ug/m3			08/01/19 04:55	42.93
Hexane	ND		250		ug/m3			08/01/19 04:55	42.93
Methyl tert-butyl ether	ND		210		ug/m3			08/01/19 04:55	42.93
Methylene Chloride	ND		250		ug/m3			08/01/19 04:55	42.93
m-Xylene & p-Xylene	ND		120		ug/m3			08/01/19 04:55	42.93
o-Xylene	ND		120		ug/m3			08/01/19 04:55	42.93
Styrene	ND		120		ug/m3			08/01/19 04:55	42.93
t-Butyl alcohol	ND		350		ug/m3			08/01/19 04:55	42.93
Tetrachloroethene	ND		190		ug/m3			08/01/19 04:55	42.93
Toluene	ND		160		ug/m3			08/01/19 04:55	42.93
trans-1,2-Dichloroethene	ND		110		ug/m3			08/01/19 04:55	42.93
trans-1,3-Dichloropropene	ND		130		ug/m3			08/01/19 04:55	42.93
Trichloroethene	**290**		69		ug/m3			08/01/19 04:55	42.93
Trichlorofluoromethane	ND		160		ug/m3			08/01/19 04:55	42.93
Vinyl chloride	ND		37		ug/m3			08/01/19 04:55	42.93

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*60 - 140*		*08/01/19 04:55*	*42.93*

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	**5600**	**D**	230		ppb v/v			08/01/19 08:16	42.93

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	**16000**	**D**	680		ug/m3			08/01/19 08:16	42.93

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*08/01/19 08:16*	*42.93*

Default Detection Limits

Client: New York State D.E.C. Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2,2-Tetrachloroethane	0.080	0.014	ppb v/v
1,1,2,2-Tetrachloroethane	0.55	0.096	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1,2-Trichlorotrifluoroethane	0.080	0.0080	ppb v/v
1,1,2-Trichlorotrifluoroethane	0.61	0.061	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.040	0.0080	ppb v/v
1,1-Dichloroethene	0.16	0.032	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dibromoethane	0.080	0.0070	ppb v/v
1,2-Dibromoethane	0.61	0.054	ug/m3
1,2-Dichlorobenzene	0.080	0.031	ppb v/v
1,2-Dichlorobenzene	0.48	0.19	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,2-Dichloropropane	0.080	0.010	ppb v/v
1,2-Dichloropropane	0.37	0.046	ug/m3
1,2-Dichlorotetrafluoroethane	0.080	0.012	ppb v/v
1,2-Dichlorotetrafluoroethane	0.56	0.084	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
1,3-Dichlorobenzene	0.080	0.016	ppb v/v
1,3-Dichlorobenzene	0.48	0.096	ug/m3
1,4-Dichlorobenzene	0.080	0.016	ppb v/v
1,4-Dichlorobenzene	0.48	0.096	ug/m3
1,4-Dioxane	0.20	0.030	ppb v/v
1,4-Dioxane	0.72	0.11	ug/m3
2,2,4-Trimethylpentane	0.20	0.0080	ppb v/v
2,2,4-Trimethylpentane	0.93	0.037	ug/m3
2-Butanone	0.32	0.073	ppb v/v
2-Butanone	0.94	0.22	ug/m3
4-Methyl-2-pentanone (MIBK)	0.20	0.054	ppb v/v
4-Methyl-2-pentanone (MIBK)	0.82	0.22	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Benzyl chloride	0.16	0.038	ppb v/v
Benzyl chloride	0.83	0.20	ug/m3
Bromodichloromethane	0.080	0.018	ppb v/v
Bromodichloromethane	0.54	0.12	ug/m3
Bromoform	0.080	0.0090	ppb v/v
Bromoform	0.83	0.093	ug/m3
Bromomethane	0.080	0.022	ppb v/v
Bromomethane	0.31	0.085	ug/m3
Carbon tetrachloride	0.032	0.0070	ppb v/v
Carbon tetrachloride	0.20	0.044	ug/m3
Chlorobenzene	0.080	0.0060	ppb v/v

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Conti

Analyte	RL	MDL	Units
Chlorobenzene	0.37	0.028	ug/m3
Chloroethane	0.080	0.029	ppb v/v
Chloroethane	0.21	0.077	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
Chloromethane	0.20	0.066	ppb v/v
Chloromethane	0.41	0.14	ug/m3
cis-1,2-Dichloroethene	0.040	0.010	ppb v/v
cis-1,2-Dichloroethene	0.16	0.040	ug/m3
cis-1,3-Dichloropropene	0.080	0.016	ppb v/v
cis-1,3-Dichloropropene	0.36	0.073	ug/m3
Cyclohexane	0.20	0.023	ppb v/v
Cyclohexane	0.69	0.079	ug/m3
Dibromochloromethane	0.080	0.0070	ppb v/v
Dibromochloromethane	0.68	0.060	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethanol	2.0	0.87	ppb v/v
Ethanol	3.8	1.6	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Hexachlorobutadiene	0.080	0.032	ppb v/v
Hexachlorobutadiene	0.85	0.34	ug/m3
Hexane	0.20	0.013	ppb v/v
Hexane	0.70	0.046	ug/m3
Methyl tert-butyl ether	0.16	0.052	ppb v/v
Methyl tert-butyl ether	0.58	0.19	ug/m3
Methylene Chloride	0.20	0.16	ppb v/v
Methylene Chloride	0.69	0.56	ug/m3
m-Xylene & p-Xylene	0.080	0.029	ppb v/v
m-Xylene & p-Xylene	0.35	0.13	ug/m3
o-Xylene	0.080	0.015	ppb v/v
o-Xylene	0.35	0.065	ug/m3
Styrene	0.080	0.024	ppb v/v
Styrene	0.34	0.10	ug/m3
t-Butyl alcohol	0.32	0.088	ppb v/v
t-Butyl alcohol	0.97	0.27	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
trans-1,3-Dichloropropene	0.080	0.0090	ppb v/v
trans-1,3-Dichloropropene	0.36	0.041	ug/m3
Trichloroethene	0.036	0.0060	ppb v/v
Trichloroethene	0.19	0.032	ug/m3
Trichlorofluoromethane	0.080	0.011	ppb v/v
Trichlorofluoromethane	0.45	0.062	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3

Surrogate Summary

Client: New York State D.E.C.
Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (60-140)								
140-16177-1	356023-SV-T1A	102								
140-16177-2	356023-SV-T1B	99								
140-16177-3	356023-SV-21	102								
140-16177-4	356023-SV-22	101								
140-16177-5	356023-SV-23	101								
140-16177-5 - DL	356023-SV-23	100								
LCS 140-32044/1002	Lab Control Sample	104								
LCS 140-32181/1002	Lab Control Sample	105								
MB 140-32044/4	Method Blank	100								
MB 140-32181/8	Method Blank	103								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-32044/4 **Client Sample ID: Method Blank**
Matrix: Air **Prep Type: Total/NA**
Analysis Batch: 32044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,1-Dichloroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,1-Dichloroethene	ND		0.040		ppb v/v			07/30/19 11:18	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
1,2-Dibromoethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
1,2-Dichloroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,2-Dichloropropane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
1,4-Dioxane	ND		0.20		ppb v/v			07/30/19 11:18	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			07/30/19 11:18	1
2-Butanone	ND		0.32		ppb v/v			07/30/19 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			07/30/19 11:18	1
Benzene	ND		0.080		ppb v/v			07/30/19 11:18	1
Benzyl chloride	ND		0.16		ppb v/v			07/30/19 11:18	1
Bromodichloromethane	ND		0.080		ppb v/v			07/30/19 11:18	1
Bromoform	ND		0.080		ppb v/v			07/30/19 11:18	1
Bromomethane	ND		0.080		ppb v/v			07/30/19 11:18	1
Carbon tetrachloride	ND		0.032		ppb v/v			07/30/19 11:18	1
Chlorobenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
Chloroethane	ND		0.080		ppb v/v			07/30/19 11:18	1
Chloroform	ND		0.080		ppb v/v			07/30/19 11:18	1
Chloromethane	ND		0.20		ppb v/v			07/30/19 11:18	1
cis-1,2-Dichloroethene	ND		0.040		ppb v/v			07/30/19 11:18	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			07/30/19 11:18	1
Cyclohexane	ND		0.20		ppb v/v			07/30/19 11:18	1
Dibromochloromethane	ND		0.080		ppb v/v			07/30/19 11:18	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			07/30/19 11:18	1
Ethanol	ND		2.0		ppb v/v			07/30/19 11:18	1
Ethylbenzene	ND		0.080		ppb v/v			07/30/19 11:18	1
Hexachlorobutadiene	ND		0.080		ppb v/v			07/30/19 11:18	1
Hexane	ND		0.20		ppb v/v			07/30/19 11:18	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			07/30/19 11:18	1
Methylene Chloride	ND		0.20		ppb v/v			07/30/19 11:18	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			07/30/19 11:18	1
o-Xylene	ND		0.080		ppb v/v			07/30/19 11:18	1
Styrene	ND		0.080		ppb v/v			07/30/19 11:18	1
t-Butyl alcohol	ND		0.32		ppb v/v			07/30/19 11:18	1
Tetrachloroethene	ND		0.080		ppb v/v			07/30/19 11:18	1
Toluene	ND		0.12		ppb v/v			07/30/19 11:18	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			07/30/19 11:18	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-32044/4 **Client Sample ID: Method Blank**
Matrix: Air **Prep Type: Total/NA**
Analysis Batch: 32044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			07/30/19 11:18	1
Trichloroethene	ND		0.036		ppb v/v			07/30/19 11:18	1
Trichlorofluoromethane	ND		0.080		ppb v/v			07/30/19 11:18	1
Vinyl chloride	ND		0.040		ppb v/v			07/30/19 11:18	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			07/30/19 11:18	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			07/30/19 11:18	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			07/30/19 11:18	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			07/30/19 11:18	1
1,1-Dichloroethane	ND		0.32		ug/m3			07/30/19 11:18	1
1,1-Dichloroethene	ND		0.16		ug/m3			07/30/19 11:18	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			07/30/19 11:18	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			07/30/19 11:18	1
1,2-Dibromoethane	ND		0.61		ug/m3			07/30/19 11:18	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			07/30/19 11:18	1
1,2-Dichloroethane	ND		0.32		ug/m3			07/30/19 11:18	1
1,2-Dichloropropane	ND		0.37		ug/m3			07/30/19 11:18	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			07/30/19 11:18	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			07/30/19 11:18	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			07/30/19 11:18	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			07/30/19 11:18	1
1,4-Dioxane	ND		0.72		ug/m3			07/30/19 11:18	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			07/30/19 11:18	1
2-Butanone	ND		0.94		ug/m3			07/30/19 11:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			07/30/19 11:18	1
Benzene	ND		0.26		ug/m3			07/30/19 11:18	1
Benzyl chloride	ND		0.83		ug/m3			07/30/19 11:18	1
Bromodichloromethane	ND		0.54		ug/m3			07/30/19 11:18	1
Bromoform	ND		0.83		ug/m3			07/30/19 11:18	1
Bromomethane	ND		0.31		ug/m3			07/30/19 11:18	1
Carbon tetrachloride	ND		0.20		ug/m3			07/30/19 11:18	1
Chlorobenzene	ND		0.37		ug/m3			07/30/19 11:18	1
Chloroethane	ND		0.21		ug/m3			07/30/19 11:18	1
Chloroform	ND		0.39		ug/m3			07/30/19 11:18	1
Chloromethane	ND		0.41		ug/m3			07/30/19 11:18	1
cis-1,2-Dichloroethene	ND		0.16		ug/m3			07/30/19 11:18	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			07/30/19 11:18	1
Cyclohexane	ND		0.69		ug/m3			07/30/19 11:18	1
Dibromochloromethane	ND		0.68		ug/m3			07/30/19 11:18	1
Dichlorodifluoromethane	ND		0.40		ug/m3			07/30/19 11:18	1
Ethanol	ND		3.8		ug/m3			07/30/19 11:18	1
Ethylbenzene	ND		0.35		ug/m3			07/30/19 11:18	1
Hexachlorobutadiene	ND		0.85		ug/m3			07/30/19 11:18	1
Hexane	ND		0.70		ug/m3			07/30/19 11:18	1
Methyl tert-butyl ether	ND		0.58		ug/m3			07/30/19 11:18	1
Methylene Chloride	ND		0.69		ug/m3			07/30/19 11:18	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-32044/4
Matrix: Air
Analysis Batch: 32044

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.35		ug/m3			07/30/19 11:18	1
o-Xylene	ND		0.35		ug/m3			07/30/19 11:18	1
Styrene	ND		0.34		ug/m3			07/30/19 11:18	1
t-Butyl alcohol	ND		0.97		ug/m3			07/30/19 11:18	1
Tetrachloroethene	ND		0.54		ug/m3			07/30/19 11:18	1
Toluene	ND		0.45		ug/m3			07/30/19 11:18	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			07/30/19 11:18	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			07/30/19 11:18	1
Trichloroethene	ND		0.19		ug/m3			07/30/19 11:18	1
Trichlorofluoromethane	ND		0.45		ug/m3			07/30/19 11:18	1
Vinyl chloride	ND		0.10		ug/m3			07/30/19 11:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 140*		*07/30/19 11:18*	*1*

Lab Sample ID: LCS 140-32044/1002
Matrix: Air
Analysis Batch: 32044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.00	0.976		ppb v/v		98	70 - 130
1,1,2,2-Tetrachloroethane	1.00	1.08		ppb v/v		108	70 - 130
1,1,2-Trichloroethane	1.00	1.06		ppb v/v		106	70 - 130
1,1,2-Trichlorotrifluoroethane	1.00	0.957		ppb v/v		96	70 - 130
1,1-Dichloroethane	1.00	0.952		ppb v/v		95	70 - 130
1,1-Dichloroethene	1.00	0.913		ppb v/v		91	70 - 130
1,2,4-Trichlorobenzene	1.00	0.979		ppb v/v		98	60 - 140
1,2,4-Trimethylbenzene	1.00	1.17		ppb v/v		117	70 - 130
1,2-Dibromoethane	1.00	1.08		ppb v/v		108	70 - 130
1,2-Dichlorobenzene	1.00	1.04		ppb v/v		104	70 - 130
1,2-Dichloroethane	1.00	1.05		ppb v/v		105	70 - 130
1,2-Dichloropropane	1.00	0.953		ppb v/v		95	70 - 130
1,2-Dichlorotetrafluoroethane	1.00	1.17		ppb v/v		117	60 - 140
1,3,5-Trimethylbenzene	1.00	1.35	*	ppb v/v		135	70 - 130
1,3-Dichlorobenzene	1.00	1.04		ppb v/v		104	70 - 130
1,4-Dichlorobenzene	1.00	1.05		ppb v/v		105	70 - 130
1,4-Dioxane	1.00	1.02		ppb v/v		102	60 - 140
2,2,4-Trimethylpentane	1.00	0.994		ppb v/v		99	70 - 130
2-Butanone	1.00	0.817		ppb v/v		82	60 - 140
4-Methyl-2-pentanone (MIBK)	1.00	1.01		ppb v/v		101	60 - 140
Benzene	1.00	0.982		ppb v/v		98	70 - 130
Benzyl chloride	1.00	1.15		ppb v/v		115	70 - 130
Bromodichloromethane	1.00	1.09		ppb v/v		109	70 - 130
Bromoform	1.00	1.21		ppb v/v		121	60 - 140
Bromomethane	1.00	0.993		ppb v/v		99	70 - 130
Carbon tetrachloride	1.00	1.27		ppb v/v		127	70 - 130
Chlorobenzene	1.00	1.06		ppb v/v		106	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-32044/1002 **Client Sample ID: Lab Control Sample**
Matrix: Air **Prep Type: Total/NA**
Analysis Batch: 32044

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	1.00	1.02		ppb v/v		102	70 - 130
Chloroform	1.00	1.00		ppb v/v		100	70 - 130
Chloromethane	1.00	0.895		ppb v/v		90	60 - 140
cis-1,2-Dichloroethene	1.00	0.935		ppb v/v		94	70 - 130
cis-1,3-Dichloropropene	1.00	1.08		ppb v/v		108	70 - 130
Cyclohexane	1.00	1.03		ppb v/v		103	70 - 130
Dibromochloromethane	1.00	1.15		ppb v/v		115	70 - 130
Dichlorodifluoromethane	1.00	1.10		ppb v/v		110	60 - 140
Ethanol	5.00	4.38		ppb v/v		88	60 - 140
Ethylbenzene	1.00	1.08		ppb v/v		108	70 - 130
Hexachlorobutadiene	1.00	1.00		ppb v/v		100	60 - 140
Hexane	1.00	0.960		ppb v/v		96	70 - 130
Methyl tert-butyl ether	1.00	0.933		ppb v/v		93	60 - 140
Methylene Chloride	1.00	0.935		ppb v/v		93	70 - 130
m-Xylene & p-Xylene	2.00	2.28		ppb v/v		114	70 - 130
o-Xylene	1.00	1.09		ppb v/v		109	70 - 130
Styrene	1.00	1.11		ppb v/v		111	70 - 130
t-Butyl alcohol	1.00	0.989		ppb v/v		99	60 - 140
Tetrachloroethene	1.00	1.06		ppb v/v		106	70 - 130
Toluene	1.00	1.06		ppb v/v		106	70 - 130
trans-1,2-Dichloroethene	1.00	0.926		ppb v/v		93	70 - 130
trans-1,3-Dichloropropene	1.00	1.12		ppb v/v		112	70 - 130
Trichloroethene	1.00	0.979		ppb v/v		98	70 - 130
Trichlorofluoromethane	1.00	1.17		ppb v/v		117	60 - 140
Vinyl chloride	1.00	0.969		ppb v/v		97	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	5.5	5.32		ug/m3		98	70 - 130
1,1,2,2-Tetrachloroethane	6.9	7.45		ug/m3		108	70 - 130
1,1,2-Trichloroethane	5.5	5.81		ug/m3		106	70 - 130
1,1,2-Trichlorotrifluoroethane	7.7	7.33		ug/m3		96	70 - 130
1,1-Dichloroethane	4.0	3.85		ug/m3		95	70 - 130
1,1-Dichloroethene	4.0	3.62		ug/m3		91	70 - 130
1,2,4-Trichlorobenzene	7.4	7.27		ug/m3		98	60 - 140
1,2,4-Trimethylbenzene	4.9	5.73		ug/m3		117	70 - 130
1,2-Dibromoethane	7.7	8.30		ug/m3		108	70 - 130
1,2-Dichlorobenzene	6.0	6.26		ug/m3		104	70 - 130
1,2-Dichloroethane	4.0	4.26		ug/m3		105	70 - 130
1,2-Dichloropropane	4.6	4.40		ug/m3		95	70 - 130
1,2-Dichlorotetrafluoroethane	7.0	8.16		ug/m3		117	60 - 140
1,3,5-Trimethylbenzene	4.9	6.63	*	ug/m3		135	70 - 130
1,3-Dichlorobenzene	6.0	6.26		ug/m3		104	70 - 130
1,4-Dichlorobenzene	6.0	6.32		ug/m3		105	70 - 130
1,4-Dioxane	3.6	3.69		ug/m3		102	60 - 140
2,2,4-Trimethylpentane	4.7	4.64		ug/m3		99	70 - 130
2-Butanone	2.9	2.41		ug/m3		82	60 - 140
4-Methyl-2-pentanone (MIBK)	4.1	4.14		ug/m3		101	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-32044/1002
Matrix: Air
Analysis Batch: 32044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	3.2	3.14		ug/m3		98	70 - 130
Benzyl chloride	5.2	5.97		ug/m3		115	70 - 130
Bromodichloromethane	6.7	7.27		ug/m3		109	70 - 130
Bromoform	10	12.5		ug/m3		121	60 - 140
Bromomethane	3.9	3.86		ug/m3		99	70 - 130
Carbon tetrachloride	6.3	7.97		ug/m3		127	70 - 130
Chlorobenzene	4.6	4.89		ug/m3		106	70 - 130
Chloroethane	2.6	2.68		ug/m3		102	70 - 130
Chloroform	4.9	4.89		ug/m3		100	70 - 130
Chloromethane	2.1	1.85		ug/m3		90	60 - 140
cis-1,2-Dichloroethene	4.0	3.71		ug/m3		94	70 - 130
cis-1,3-Dichloropropene	4.5	4.90		ug/m3		108	70 - 130
Cyclohexane	3.4	3.53		ug/m3		103	70 - 130
Dibromochloromethane	8.5	9.78		ug/m3		115	70 - 130
Dichlorodifluoromethane	4.9	5.45		ug/m3		110	60 - 140
Ethanol	9.4	8.25		ug/m3		88	60 - 140
Ethylbenzene	4.3	4.70		ug/m3		108	70 - 130
Hexachlorobutadiene	11	10.7		ug/m3		100	60 - 140
Hexane	3.5	3.38		ug/m3		96	70 - 130
Methyl tert-butyl ether	3.6	3.36		ug/m3		93	60 - 140
Methylene Chloride	3.5	3.25		ug/m3		93	70 - 130
m-Xylene & p-Xylene	8.7	9.92		ug/m3		114	70 - 130
o-Xylene	4.3	4.73		ug/m3		109	70 - 130
Styrene	4.3	4.74		ug/m3		111	70 - 130
t-Butyl alcohol	3.0	3.00		ug/m3		99	60 - 140
Tetrachloroethene	6.8	7.21		ug/m3		106	70 - 130
Toluene	3.8	3.98		ug/m3		106	70 - 130
trans-1,2-Dichloroethene	4.0	3.67		ug/m3		93	70 - 130
trans-1,3-Dichloropropene	4.5	5.08		ug/m3		112	70 - 130
Trichloroethene	5.4	5.26		ug/m3		98	70 - 130
Trichlorofluoromethane	5.6	6.55		ug/m3		117	60 - 140
Vinyl chloride	2.6	2.48		ug/m3		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 140*

Lab Sample ID: MB 140-32181/8
Matrix: Air
Analysis Batch: 32181

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,1-Dichloroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,1-Dichloroethene	ND		0.040		ppb v/v			07/31/19 15:51	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-32181/8 **Client Sample ID: Method Blank**
Matrix: Air **Prep Type: Total/NA**
Analysis Batch: 32181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
1,2-Dibromoethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
1,2-Dichloroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,2-Dichloropropane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
1,4-Dioxane	ND		0.20		ppb v/v			07/31/19 15:51	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			07/31/19 15:51	1
2-Butanone	ND		0.32		ppb v/v			07/31/19 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			07/31/19 15:51	1
Benzene	ND		0.080		ppb v/v			07/31/19 15:51	1
Benzyl chloride	ND		0.16		ppb v/v			07/31/19 15:51	1
Bromodichloromethane	ND		0.080		ppb v/v			07/31/19 15:51	1
Bromoform	ND		0.080		ppb v/v			07/31/19 15:51	1
Bromomethane	ND		0.080		ppb v/v			07/31/19 15:51	1
Carbon tetrachloride	ND		0.032		ppb v/v			07/31/19 15:51	1
Chlorobenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
Chloroethane	ND		0.080		ppb v/v			07/31/19 15:51	1
Chloroform	ND		0.080		ppb v/v			07/31/19 15:51	1
Chloromethane	ND		0.20		ppb v/v			07/31/19 15:51	1
cis-1,2-Dichloroethene	ND		0.040		ppb v/v			07/31/19 15:51	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			07/31/19 15:51	1
Cyclohexane	ND		0.20		ppb v/v			07/31/19 15:51	1
Dibromochloromethane	ND		0.080		ppb v/v			07/31/19 15:51	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			07/31/19 15:51	1
Ethanol	ND		2.0		ppb v/v			07/31/19 15:51	1
Ethylbenzene	ND		0.080		ppb v/v			07/31/19 15:51	1
Hexachlorobutadiene	ND		0.080		ppb v/v			07/31/19 15:51	1
Hexane	ND		0.20		ppb v/v			07/31/19 15:51	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			07/31/19 15:51	1
Methylene Chloride	ND		0.20		ppb v/v			07/31/19 15:51	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			07/31/19 15:51	1
o-Xylene	ND		0.080		ppb v/v			07/31/19 15:51	1
Styrene	ND		0.080		ppb v/v			07/31/19 15:51	1
t-Butyl alcohol	ND		0.32		ppb v/v			07/31/19 15:51	1
Tetrachloroethene	ND		0.080		ppb v/v			07/31/19 15:51	1
Toluene	ND		0.12		ppb v/v			07/31/19 15:51	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			07/31/19 15:51	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			07/31/19 15:51	1
Trichloroethene	ND		0.036		ppb v/v			07/31/19 15:51	1
Trichlorofluoromethane	ND		0.080		ppb v/v			07/31/19 15:51	1
Vinyl chloride	ND		0.040		ppb v/v			07/31/19 15:51	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			07/31/19 15:51	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			07/31/19 15:51	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			07/31/19 15:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			07/31/19 15:51	1
1,1-Dichloroethane	ND		0.32		ug/m3			07/31/19 15:51	1
1,1-Dichloroethene	ND		0.16		ug/m3			07/31/19 15:51	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			07/31/19 15:51	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			07/31/19 15:51	1
1,2-Dibromoethane	ND		0.61		ug/m3			07/31/19 15:51	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			07/31/19 15:51	1
1,2-Dichloroethane	ND		0.32		ug/m3			07/31/19 15:51	1
1,2-Dichloropropane	ND		0.37		ug/m3			07/31/19 15:51	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			07/31/19 15:51	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			07/31/19 15:51	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			07/31/19 15:51	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			07/31/19 15:51	1
1,4-Dioxane	ND		0.72		ug/m3			07/31/19 15:51	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			07/31/19 15:51	1
2-Butanone	ND		0.94		ug/m3			07/31/19 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			07/31/19 15:51	1
Benzene	ND		0.26		ug/m3			07/31/19 15:51	1
Benzyl chloride	ND		0.83		ug/m3			07/31/19 15:51	1
Bromodichloromethane	ND		0.54		ug/m3			07/31/19 15:51	1
Bromoform	ND		0.83		ug/m3			07/31/19 15:51	1
Bromomethane	ND		0.31		ug/m3			07/31/19 15:51	1
Carbon tetrachloride	ND		0.20		ug/m3			07/31/19 15:51	1
Chlorobenzene	ND		0.37		ug/m3			07/31/19 15:51	1
Chloroethane	ND		0.21		ug/m3			07/31/19 15:51	1
Chloroform	ND		0.39		ug/m3			07/31/19 15:51	1
Chloromethane	ND		0.41		ug/m3			07/31/19 15:51	1
cis-1,2-Dichloroethene	ND		0.16		ug/m3			07/31/19 15:51	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			07/31/19 15:51	1
Cyclohexane	ND		0.69		ug/m3			07/31/19 15:51	1
Dibromochloromethane	ND		0.68		ug/m3			07/31/19 15:51	1
Dichlorodifluoromethane	ND		0.40		ug/m3			07/31/19 15:51	1
Ethanol	ND		3.8		ug/m3			07/31/19 15:51	1
Ethylbenzene	ND		0.35		ug/m3			07/31/19 15:51	1
Hexachlorobutadiene	ND		0.85		ug/m3			07/31/19 15:51	1
Hexane	ND		0.70		ug/m3			07/31/19 15:51	1
Methyl tert-butyl ether	ND		0.58		ug/m3			07/31/19 15:51	1
Methylene Chloride	ND		0.69		ug/m3			07/31/19 15:51	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			07/31/19 15:51	1
o-Xylene	ND		0.35		ug/m3			07/31/19 15:51	1
Styrene	ND		0.34		ug/m3			07/31/19 15:51	1
t-Butyl alcohol	ND		0.97		ug/m3			07/31/19 15:51	1
Tetrachloroethene	ND		0.54		ug/m3			07/31/19 15:51	1
Toluene	ND		0.45		ug/m3			07/31/19 15:51	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			07/31/19 15:51	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			07/31/19 15:51	1
Trichloroethene	ND		0.19		ug/m3			07/31/19 15:51	1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-32181/8
Matrix: Air
Analysis Batch: 32181

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.45		ug/m3			07/31/19 15:51	1
Vinyl chloride	ND		0.10		ug/m3			07/31/19 15:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 140*		*07/31/19 15:51*	*1*

Lab Sample ID: LCS 140-32181/1002
Matrix: Air
Analysis Batch: 32181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.00	1.03		ppb v/v		103	70 - 130
1,1,2,2-Tetrachloroethane	1.00	1.11		ppb v/v		111	70 - 130
1,1,2-Trichloroethane	1.00	1.07		ppb v/v		107	70 - 130
1,1,2-Trichlorotrifluoroethane	1.00	1.01		ppb v/v		101	70 - 130
1,1-Dichloroethane	1.00	0.997		ppb v/v		100	70 - 130
1,1-Dichloroethene	1.00	0.952		ppb v/v		95	70 - 130
1,2,4-Trichlorobenzene	1.00	0.998		ppb v/v		100	60 - 140
1,2,4-Trimethylbenzene	1.00	1.19		ppb v/v		119	70 - 130
1,2-Dibromoethane	1.00	1.10		ppb v/v		110	70 - 130
1,2-Dichlorobenzene	1.00	1.08		ppb v/v		108	70 - 130
1,2-Dichloroethane	1.00	1.08		ppb v/v		108	70 - 130
1,2-Dichloropropane	1.00	1.00		ppb v/v		100	70 - 130
1,2-Dichlorotetrafluoroethane	1.00	1.21		ppb v/v		121	60 - 140
1,3,5-Trimethylbenzene	1.00	1.24		ppb v/v		124	70 - 130
1,3-Dichlorobenzene	1.00	1.08		ppb v/v		108	70 - 130
1,4-Dichlorobenzene	1.00	1.10		ppb v/v		110	70 - 130
1,4-Dioxane	1.00	1.00		ppb v/v		100	60 - 140
2,2,4-Trimethylpentane	1.00	1.01		ppb v/v		101	70 - 130
2-Butanone	1.00	0.820		ppb v/v		82	60 - 140
4-Methyl-2-pentanone (MIBK)	1.00	1.03		ppb v/v		103	60 - 140
Benzene	1.00	0.981		ppb v/v		98	70 - 130
Benzyl chloride	1.00	1.13		ppb v/v		113	70 - 130
Bromodichloromethane	1.00	1.12		ppb v/v		112	70 - 130
Bromoform	1.00	1.22		ppb v/v		122	60 - 140
Bromomethane	1.00	1.03		ppb v/v		103	70 - 130
Carbon tetrachloride	1.00	1.27		ppb v/v		127	70 - 130
Chlorobenzene	1.00	1.06		ppb v/v		106	70 - 130
Chloroethane	1.00	1.06		ppb v/v		106	70 - 130
Chloroform	1.00	1.03		ppb v/v		103	70 - 130
Chloromethane	1.00	0.954		ppb v/v		95	60 - 140
cis-1,2-Dichloroethene	1.00	0.963		ppb v/v		96	70 - 130
cis-1,3-Dichloropropene	1.00	1.09		ppb v/v		109	70 - 130
Cyclohexane	1.00	1.03		ppb v/v		103	70 - 130
Dibromochloromethane	1.00	1.15		ppb v/v		115	70 - 130
Dichlorodifluoromethane	1.00	1.09		ppb v/v		109	60 - 140
Ethanol	5.00	5.50		ppb v/v		110	60 - 140

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-32181/1002 **Client Sample ID: Lab Control Sample**
Matrix: Air **Prep Type: Total/NA**
Analysis Batch: 32181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	1.00	1.10		ppb v/v		110	70 - 130
Hexachlorobutadiene	1.00	1.10		ppb v/v		110	60 - 140
Hexane	1.00	1.02		ppb v/v		102	70 - 130
Methyl tert-butyl ether	1.00	0.972		ppb v/v		97	60 - 140
Methylene Chloride	1.00	0.966		ppb v/v		97	70 - 130
m-Xylene & p-Xylene	2.00	2.25		ppb v/v		113	70 - 130
o-Xylene	1.00	1.11		ppb v/v		111	70 - 130
Styrene	1.00	1.11		ppb v/v		111	70 - 130
t-Butyl alcohol	1.00	0.979		ppb v/v		98	60 - 140
Tetrachloroethene	1.00	1.08		ppb v/v		108	70 - 130
Toluene	1.00	1.07		ppb v/v		107	70 - 130
trans-1,2-Dichloroethene	1.00	0.976		ppb v/v		98	70 - 130
trans-1,3-Dichloropropene	1.00	1.08		ppb v/v		108	70 - 130
Trichloroethene	1.00	0.997		ppb v/v		100	70 - 130
Trichlorofluoromethane	1.00	1.24		ppb v/v		124	60 - 140
Vinyl chloride	1.00	0.987		ppb v/v		99	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	5.5	5.60		ug/m3		103	70 - 130
1,1,2,2-Tetrachloroethane	6.9	7.62		ug/m3		111	70 - 130
1,1,2-Trichloroethane	5.5	5.83		ug/m3		107	70 - 130
1,1,2-Trichlorotrifluoroethane	7.7	7.74		ug/m3		101	70 - 130
1,1-Dichloroethane	4.0	4.04		ug/m3		100	70 - 130
1,1-Dichloroethene	4.0	3.77		ug/m3		95	70 - 130
1,2,4-Trichlorobenzene	7.4	7.40		ug/m3		100	60 - 140
1,2,4-Trimethylbenzene	4.9	5.85		ug/m3		119	70 - 130
1,2-Dibromoethane	7.7	8.44		ug/m3		110	70 - 130
1,2-Dichlorobenzene	6.0	6.49		ug/m3		108	70 - 130
1,2-Dichloroethane	4.0	4.36		ug/m3		108	70 - 130
1,2-Dichloropropane	4.6	4.64		ug/m3		100	70 - 130
1,2-Dichlorotetrafluoroethane	7.0	8.43		ug/m3		121	60 - 140
1,3,5-Trimethylbenzene	4.9	6.09		ug/m3		124	70 - 130
1,3-Dichlorobenzene	6.0	6.47		ug/m3		108	70 - 130
1,4-Dichlorobenzene	6.0	6.64		ug/m3		110	70 - 130
1,4-Dioxane	3.6	3.62		ug/m3		100	60 - 140
2,2,4-Trimethylpentane	4.7	4.70		ug/m3		101	70 - 130
2-Butanone	2.9	2.42		ug/m3		82	60 - 140
4-Methyl-2-pentanone (MIBK)	4.1	4.23		ug/m3		103	60 - 140
Benzene	3.2	3.14		ug/m3		98	70 - 130
Benzyl chloride	5.2	5.84		ug/m3		113	70 - 130
Bromodichloromethane	6.7	7.50		ug/m3		112	70 - 130
Bromoform	10	12.6		ug/m3		122	60 - 140
Bromomethane	3.9	3.98		ug/m3		103	70 - 130
Carbon tetrachloride	6.3	8.01		ug/m3		127	70 - 130
Chlorobenzene	4.6	4.87		ug/m3		106	70 - 130
Chloroethane	2.6	2.80		ug/m3		106	70 - 130
Chloroform	4.9	5.03		ug/m3		103	70 - 130

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-32181/1002 **Client Sample ID: Lab Control Sample**
Matrix: Air **Prep Type: Total/NA**
Analysis Batch: 32181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	2.1	1.97		ug/m3		95	60 - 140
cis-1,2-Dichloroethene	4.0	3.82		ug/m3		96	70 - 130
cis-1,3-Dichloropropene	4.5	4.96		ug/m3		109	70 - 130
Cyclohexane	3.4	3.55		ug/m3		103	70 - 130
Dibromochloromethane	8.5	9.76		ug/m3		115	70 - 130
Dichlorodifluoromethane	4.9	5.41		ug/m3		109	60 - 140
Ethanol	9.4	10.4		ug/m3		110	60 - 140
Ethylbenzene	4.3	4.77		ug/m3		110	70 - 130
Hexachlorobutadiene	11	11.7		ug/m3		110	60 - 140
Hexane	3.5	3.61		ug/m3		102	70 - 130
Methyl tert-butyl ether	3.6	3.50		ug/m3		97	60 - 140
Methylene Chloride	3.5	3.36		ug/m3		97	70 - 130
m-Xylene & p-Xylene	8.7	9.79		ug/m3		113	70 - 130
o-Xylene	4.3	4.83		ug/m3		111	70 - 130
Styrene	4.3	4.74		ug/m3		111	70 - 130
t-Butyl alcohol	3.0	2.97		ug/m3		98	60 - 140
Tetrachloroethene	6.8	7.31		ug/m3		108	70 - 130
Toluene	3.8	4.03		ug/m3		107	70 - 130
trans-1,2-Dichloroethene	4.0	3.87		ug/m3		98	70 - 130
trans-1,3-Dichloropropene	4.5	4.89		ug/m3		108	70 - 130
Trichloroethene	5.4	5.36		ug/m3		100	70 - 130
Trichlorofluoromethane	5.6	6.95		ug/m3		124	60 - 140
Vinyl chloride	2.6	2.52		ug/m3		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*60 - 140*

QC Association Summary

Client: New York State D.E.C.
Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Air - GC/MS VOA

Analysis Batch: 32044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-16177-1	356023-SV-T1A	Total/NA	Air	TO 15 LL	
MB 140-32044/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-32044/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 32181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-16177-2	356023-SV-T1B	Total/NA	Air	TO 15 LL	
140-16177-3	356023-SV-21	Total/NA	Air	TO 15 LL	
140-16177-4	356023-SV-22	Total/NA	Air	TO 15 LL	
140-16177-5	356023-SV-23	Total/NA	Air	TO 15 LL	
140-16177-5 - DL	356023-SV-23	Total/NA	Air	TO 15 LL	
MB 140-32181/8	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-32181/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Client Sample ID: 356023-SV-T1A — Lab Sample ID: 140-16177-1

Date Collected: 07/24/19 08:53 — **Matrix: Air**
Date Received: 07/27/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		101.05	25 mL	500 mL	32044	07/30/19 23:47	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: 356023-SV-T1B — Lab Sample ID: 140-16177-2

Date Collected: 07/24/19 17:44 — **Matrix: Air**
Date Received: 07/27/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		340.06	50 mL	500 mL	32181	08/01/19 02:33	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: 356023-SV-21 — Lab Sample ID: 140-16177-3

Date Collected: 07/26/19 10:38 — **Matrix: Air**
Date Received: 07/27/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		334.03	40 mL	500 mL	32181	08/01/19 03:20	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: 356023-SV-22 — Lab Sample ID: 140-16177-4

Date Collected: 07/26/19 11:56 — **Matrix: Air**
Date Received: 07/27/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		37.98	50 mL	500 mL	32181	08/01/19 04:07	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: 356023-SV-23 — Lab Sample ID: 140-16177-5

Date Collected: 07/26/19 13:43 — **Matrix: Air**
Date Received: 07/27/19 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		42.93	60 mL	500 mL	32181	08/01/19 04:55	S1K	TAL KNX
	Instrument ID: MR									
Total/NA	Analysis	TO 15 LL	DL	42.93	30 mL	500 mL	32181	08/01/19 08:16	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Method Blank — Lab Sample ID: MB 140-32044/4

Date Collected: N/A — **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	32044	07/30/19 11:18	S1K	TAL KNX
	Instrument ID: MR									

Lab Chronicle

Client: New York State D.E.C. Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Client Sample ID: Method Blank — Lab Sample ID: MB 140-32181/8

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	32181	07/31/19 15:51	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-32044/1002

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	32044	07/30/19 09:23	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample — Lab Sample ID: LCS 140-32181/1002

Date Collected: N/A **Matrix: Air**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	32181	07/31/19 11:48	S1K	TAL KNX
	Instrument ID: MR									

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: New York State D.E.C. Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Laboratory: Eurofins TestAmerica, Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10781	03-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	1,1,2-Trichlorotrifluoroethane
TO 15 LL		Air	1,2,4-Trimethylbenzene
TO 15 LL		Air	1,2-Dichlorotetrafluoroethane
TO 15 LL		Air	1,3,5-Trimethylbenzene
TO 15 LL		Air	Dichlorodifluoromethane
TO 15 LL		Air	Ethanol
TO 15 LL		Air	o-Xylene
TO 15 LL		Air	Trichlorofluoromethane

Method Summary

Client: New York State D.E.C. Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: New York State D.E.C.
Job ID: 140-16177-1
Project/Site: Mohonk Road Industrial Plant #356023

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-16177-1	356023-SV-T1A	Air	07/24/19 08:53	07/27/19 10:00	Air Canister (6-Liter) #11975
140-16177-2	356023-SV-T1B	Air	07/24/19 17:44	07/27/19 10:00	Air Canister (6-Liter) #10306
140-16177-3	356023-SV-21	Air	07/26/19 10:38	07/27/19 10:00	Air Canister (6-Liter) #10402
140-16177-4	356023-SV-22	Air	07/26/19 11:56	07/27/19 10:00	Air Canister (6-Liter) #11974
140-16177-5	356023-SV-23	Air	07/26/19 13:43	07/27/19 10:00	Air Canister (6-Liter) #10116

Method TO15 Low Level

Volatile Organic Compounds - Low level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Matrix: Air Level: Low

GC Column (1): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	BFB #
356023-SV-T1A	140-16177-1	102
356023-SV-T1B	140-16177-2	99
356023-SV-21	140-16177-3	102
356023-SV-22	140-16177-4	101
356023-SV-23	140-16177-5	101
356023-SV-23 DL	140-16177-5 DL	100
	MB 140-32044/4	100
	MB 140-32181/8	103
	LCS 140-32044/1002	104
	LCS 140-32181/1002	105

	QC LIMITS
BFB = 4-Bromofluorobenzene (Surr)	60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVG30-LCS.d

Lab ID: LCS 140-32044/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1.00	0.976	98	70-130	
1,1,2,2-Tetrachloroethane	1.00	1.08	108	70-130	
1,1,2-Trichloroethane	1.00	1.06	106	70-130	
1,1,2-Trichlorotrifluoroethane	1.00	0.957	96	70-130	
1,1-Dichloroethane	1.00	0.952	95	70-130	
1,1-Dichloroethene	1.00	0.913	91	70-130	
1,2,4-Trichlorobenzene	1.00	0.979	98	60-140	
1,2,4-Trimethylbenzene	1.00	1.17	117	70-130	
1,2-Dibromoethane	1.00	1.08	108	70-130	
1,2-Dichlorobenzene	1.00	1.04	104	70-130	
1,2-Dichloroethane	1.00	1.05	105	70-130	
1,2-Dichloropropane	1.00	0.953	95	70-130	
1,2-Dichlorotetrafluoroethane	1.00	1.17	117	60-140	
1,3,5-Trimethylbenzene	1.00	1.35	135	70-130	*
1,3-Dichlorobenzene	1.00	1.04	104	70-130	
1,4-Dichlorobenzene	1.00	1.05	105	70-130	
1,4-Dioxane	1.00	1.02	102	60-140	
2,2,4-Trimethylpentane	1.00	0.994	99	70-130	
2-Butanone	1.00	0.817	82	60-140	
4-Methyl-2-pentanone (MIBK)	1.00	1.01	101	60-140	
Benzene	1.00	0.982	98	70-130	
Benzyl chloride	1.00	1.15	115	70-130	
Bromodichloromethane	1.00	1.09	109	70-130	
Bromoform	1.00	1.21	121	60-140	
Bromomethane	1.00	0.993	99	70-130	
Carbon tetrachloride	1.00	1.27	127	70-130	
Chlorobenzene	1.00	1.06	106	70-130	
Chloroethane	1.00	1.02	102	70-130	
Chloroform	1.00	1.00	100	70-130	
Chloromethane	1.00	0.895	90	60-140	
cis-1,2-Dichloroethene	1.00	0.935	94	70-130	
cis-1,3-Dichloropropene	1.00	1.08	108	70-130	
Cyclohexane	1.00	1.03	103	70-130	
Dibromochloromethane	1.00	1.15	115	70-130	
Dichlorodifluoromethane	1.00	1.10	110	60-140	
Ethanol	5.00	4.38	88	60-140	
Ethylbenzene	1.00	1.08	108	70-130	
Hexachlorobutadiene	1.00	1.00	100	60-140	
Hexane	1.00	0.960	96	70-130	
Methyl tert-butyl ether	1.00	0.933	93	60-140	
Methylene Chloride	1.00	0.935	93	70-130	
m-Xylene & p-Xylene	2.00	2.28	114	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVG30-LCS.d

Lab ID: LCS 140-32044/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	1.00	1.09	109	70-130	
Styrene	1.00	1.11	111	70-130	
t-Butyl alcohol	1.00	0.989	99	60-140	
Tetrachloroethene	1.00	1.06	106	70-130	
Toluene	1.00	1.06	106	70-130	
trans-1,2-Dichloroethene	1.00	0.926	93	70-130	
trans-1,3-Dichloropropene	1.00	1.12	112	70-130	
Trichloroethene	1.00	0.979	98	70-130	
Trichlorofluoromethane	1.00	1.17	117	60-140	
Vinyl chloride	1.00	0.969	97	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVG31A-LCS.d

Lab ID: LCS 140-32181/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	1.00	1.03	103	70-130	
1,1,2,2-Tetrachloroethane	1.00	1.11	111	70-130	
1,1,2-Trichloroethane	1.00	1.07	107	70-130	
1,1,2-Trichlorotrifluoroethane	1.00	1.01	101	70-130	
1,1-Dichloroethane	1.00	0.997	100	70-130	
1,1-Dichloroethene	1.00	0.952	95	70-130	
1,2,4-Trichlorobenzene	1.00	0.998	100	60-140	
1,2,4-Trimethylbenzene	1.00	1.19	119	70-130	
1,2-Dibromoethane	1.00	1.10	110	70-130	
1,2-Dichlorobenzene	1.00	1.08	108	70-130	
1,2-Dichloroethane	1.00	1.08	108	70-130	
1,2-Dichloropropane	1.00	1.00	100	70-130	
1,2-Dichlorotetrafluoroethane	1.00	1.21	121	60-140	
1,3,5-Trimethylbenzene	1.00	1.24	124	70-130	
1,3-Dichlorobenzene	1.00	1.08	108	70-130	
1,4-Dichlorobenzene	1.00	1.10	110	70-130	
1,4-Dioxane	1.00	1.00	100	60-140	
2,2,4-Trimethylpentane	1.00	1.01	101	70-130	
2-Butanone	1.00	0.820	82	60-140	
4-Methyl-2-pentanone (MIBK)	1.00	1.03	103	60-140	
Benzene	1.00	0.981	98	70-130	
Benzyl chloride	1.00	1.13	113	70-130	
Bromodichloromethane	1.00	1.12	112	70-130	
Bromoform	1.00	1.22	122	60-140	
Bromomethane	1.00	1.03	103	70-130	
Carbon tetrachloride	1.00	1.27	127	70-130	
Chlorobenzene	1.00	1.06	106	70-130	
Chloroethane	1.00	1.06	106	70-130	
Chloroform	1.00	1.03	103	70-130	
Chloromethane	1.00	0.954	95	60-140	
cis-1,2-Dichloroethene	1.00	0.963	96	70-130	
cis-1,3-Dichloropropene	1.00	1.09	109	70-130	
Cyclohexane	1.00	1.03	103	70-130	
Dibromochloromethane	1.00	1.15	115	70-130	
Dichlorodifluoromethane	1.00	1.09	109	60-140	
Ethanol	5.00	5.50	110	60-140	
Ethylbenzene	1.00	1.10	110	70-130	
Hexachlorobutadiene	1.00	1.10	110	60-140	
Hexane	1.00	1.02	102	70-130	
Methyl tert-butyl ether	1.00	0.972	97	60-140	
Methylene Chloride	1.00	0.966	97	70-130	
m-Xylene & p-Xylene	2.00	2.25	113	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Matrix: Air Level: Low Lab File ID: RCCVG31A-LCS.d

Lab ID: LCS 140-32181/1002 Client ID:

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	1.00	1.11	111	70-130	
Styrene	1.00	1.11	111	70-130	
t-Butyl alcohol	1.00	0.979	98	60-140	
Tetrachloroethene	1.00	1.08	108	70-130	
Toluene	1.00	1.07	107	70-130	
trans-1,2-Dichloroethene	1.00	0.976	98	70-130	
trans-1,3-Dichloropropene	1.00	1.08	108	70-130	
Trichloroethene	1.00	0.997	100	70-130	
Trichlorofluoromethane	1.00	1.24	124	60-140	
Vinyl chloride	1.00	0.987	99	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab File ID: R500BG30.D Lab Sample ID: MB 140-32044/4

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 07/30/2019 11:18

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-32044/1002	RCCVG30-LCS.d	07/30/2019 09:23
356023-SV-T1A	140-16177-1	RG30P107.D	07/30/2019 23:47

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab File ID: R500BG31.D Lab Sample ID: MB 140-32181/8

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 07/31/2019 15:51

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-32181/1002	RCCVG31A-LCS.d	07/31/2019 11:48
356023-SV-T1B	140-16177-2	RG31P108.D	08/01/2019 02:33
356023-SV-21	140-16177-3	RG31P109.D	08/01/2019 03:20
356023-SV-22	140-16177-4	RG31P110.D	08/01/2019 04:07
356023-SV-23	140-16177-5	RG31P111.D	08/01/2019 04:55
356023-SV-23 DL	140-16177-5 DL	RG31P111DL.D	08/01/2019 08:16

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab File ID: RBFBG16A.D BFB Injection Date: 07/16/2019

Instrument ID: MR BFB Injection Time: 15:56

Analysis Batch No.: 31732

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.5	
75	30.0 - 60.0 % of mass 95	57.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	84.1	
175	5.0 - 9.0 % of mass 174	6.2	(7.3) 1
176	95.0 - 101.0 % of mass 174	82.0	(97.5) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-31732/3	RG16IC09A.D	07/16/2019	16:26
	IC 140-31732/5	RG16IC10A.D	07/16/2019	18:06
	IC 140-31732/8	RG16IC01.D	07/16/2019	20:37
	IC 140-31732/9	RG16IC02.D	07/16/2019	21:30
	IC 140-31732/10	RG16IC03.D	07/16/2019	22:24
	IC 140-31732/11	RG16IC04.D	07/16/2019	23:13
	IC 140-31732/12	RG16IC05.D	07/17/2019	00:01
	IC 140-31732/13	RG16IC06.D	07/17/2019	00:50
	ICIS 140-31732/14	RG16IC07.D	07/17/2019	01:40
	IC 140-31732/15	RG16IC08.D	07/17/2019	02:30
	ICV 140-31732/17	RG16ICV.D	07/17/2019	04:18

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab File ID: RBFBG30.D BFB Injection Date: 07/30/2019

Instrument ID: MR BFB Injection Time: 08:56

Analysis Batch No.: 32044

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.8	
75	30.0 - 60.0 % of mass 95	60.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.2	(0.2) 1
174	50.0 - 120.00 % of mass 95	80.9	
175	5.0 - 9.0 % of mass 174	6.0	(7.4) 1
176	95.0 - 101.0 % of mass 174	79.1	(97.8) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-32044/2	RCCVG30.D	07/30/2019	09:23
	LCS 140-32044/1002	RCCVG30-LCS.d	07/30/2019	09:23
	MB 140-32044/4	R500BG30.D	07/30/2019	11:18
356023-SV-T1A	140-16177-1	RG30P107.D	07/30/2019	23:47

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab File ID: RBFBG31A.D BFB Injection Date: 07/31/2019

Instrument ID: MR BFB Injection Time: 11:21

Analysis Batch No.: 32181

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.8	
75	30.0 - 60.0 % of mass 95	61.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.4	(0.5) 1
174	50.0 - 120.00 % of mass 95	81.0	
175	5.0 - 9.0 % of mass 174	6.2	(7.7) 1
176	95.0 - 101.0 % of mass 174	79.5	(98.1) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-32181/2	RCCVG31A.D	07/31/2019	11:48
	LCS 140-32181/1002	RCCVG31A-LCS .d	07/31/2019	11:48
	MB 140-32181/8	R500BG31.D	07/31/2019	15:51
356023-SV-T1B	140-16177-2	RG31P108.D	08/01/2019	02:33
356023-SV-21	140-16177-3	RG31P109.D	08/01/2019	03:20
356023-SV-22	140-16177-4	RG31P110.D	08/01/2019	04:07
356023-SV-23	140-16177-5	RG31P111.D	08/01/2019	04:55
356023-SV-23 DL	140-16177-5 DL	RG31P111DL.D	08/01/2019	08:16

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Sample No.: ICIS 140-31732/14 Date Analyzed: 07/17/2019 01:40

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RG16IC07.D Heated Purge: (Y/N) N

Calibration ID: 2031

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		240007	7.33	1380161	9.39	1219396	14.45
UPPER LIMIT		336010	7.66	1932225	9.72	1707154	14.78
LOWER LIMIT		144004	7.00	828097	9.06	731638	14.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-31732/17		247175	7.33	1423370	9.39	1247125	14.45

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Sample No.: CCVIS 140-32044/2 Date Analyzed: 07/30/2019 09:23

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVG30.D Heated Purge: (Y/N) N

Calibration ID: 2031

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		197888	7.31	1067190	9.37	902008	14.44
UPPER LIMIT		277043	7.64	1494066	9.70	1262811	14.77
LOWER LIMIT		118733	6.98	640314	9.04	541205	14.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-32044/1002		197888	7.31	1067190	9.37	902008	14.44
MB 140-32044/4		189396	7.32	1016289	9.37	834589	14.44
140-16177-1	356023-SV-T1A	177749	7.31	936654	9.37	782033	14.44

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Sample No.: CCVIS 140-32181/2 Date Analyzed: 07/31/2019 11:48

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): RCCVG31A.D Heated Purge: (Y/N) N

Calibration ID: 2031

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		190821	7.32	1041722	9.37	892135	14.44
UPPER LIMIT		267149	7.65	1458411	9.70	1248989	14.77
LOWER LIMIT		114493	6.99	625033	9.04	535281	14.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-32181/1002		190821	7.32	1041722	9.37	892135	14.44
MB 140-32181/8		192713	7.33	1040762	9.39	863478	14.44
140-16177-2	356023-SV-T1B	213375	7.32	1166916	9.37	973764	14.44
140-16177-3	356023-SV-21	203735	7.32	1118102	9.37	919578	14.44
140-16177-4	356023-SV-22	191349	7.32	1038490	9.37	866445	14.43
140-16177-5	356023-SV-23	192665	7.33	1030690	9.38	868823	14.44
140-16177-5 DL	356023-SV-23 DL	185028	7.34	1002799	9.39	841824	14.44

CBM = Chlorobromomethane (IS)
DFBZ = 1,4-Difluorobenzene
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
RT Limit = ± 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII TO 15 LL

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1A Lab Sample ID: 140-16177-1

Matrix: Air Lab File ID: RG30P107.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 08:53

Sample wt/vol: 25(mL) Date Analyzed: 07/30/2019 23:47

Soil Aliquot Vol: Dilution Factor: 101.05

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	3600		160	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		160	
79-00-5	1,1,2-Trichloroethane	133.41	ND		160	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		160	
75-34-3	1,1-Dichloroethane	98.96	ND		160	
75-35-4	1,1-Dichloroethene	96.94	760		81	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		160	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		160	
106-93-4	1,2-Dibromoethane	187.87	ND		160	
95-50-1	1,2-Dichlorobenzene	147.00	ND		160	
107-06-2	1,2-Dichloroethane	98.96	ND		160	
78-87-5	1,2-Dichloropropane	112.99	ND		160	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		160	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND	*	160	
541-73-1	1,3-Dichlorobenzene	147.00	ND		160	
106-46-7	1,4-Dichlorobenzene	147.00	ND		160	
123-91-1	1,4-Dioxane	88.11	ND		400	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		400	
78-93-3	2-Butanone	72.11	9500		650	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		400	
71-43-2	Benzene	78.11	ND		160	
100-44-7	Benzyl chloride	126.58	ND		320	
75-27-4	Bromodichloromethane	163.83	ND		160	
75-25-2	Bromoform	252.75	ND		160	
74-83-9	Bromomethane	94.94	ND		160	
56-23-5	Carbon tetrachloride	153.81	ND		65	
108-90-7	Chlorobenzene	112.56	ND		160	
75-00-3	Chloroethane	64.52	ND		160	
67-66-3	Chloroform	119.38	ND		160	
74-87-3	Chloromethane	50.49	ND		400	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		81	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		160	
110-82-7	Cyclohexane	84.16	ND		400	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1A Lab Sample ID: 140-16177-1

Matrix: Air Lab File ID: RG30P107.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 08:53

Sample wt/vol: 25(mL) Date Analyzed: 07/30/2019 23:47

Soil Aliquot Vol: Dilution Factor: 101.05

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		160	
75-71-8	Dichlorodifluoromethane	120.91	ND		160	
64-17-5	Ethanol	46.07	ND		4000	
100-41-4	Ethylbenzene	106.17	ND		160	
87-68-3	Hexachlorobutadiene	260.76	ND		160	
110-54-3	Hexane	86.17	ND		400	
1634-04-4	Methyl tert-butyl ether	88.15	ND		320	
75-09-2	Methylene Chloride	84.93	ND		400	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		160	
95-47-6	o-Xylene	106.17	ND		160	
100-42-5	Styrene	104.15	ND		160	
75-65-0	t-Butyl alcohol	74.12	ND		650	
127-18-4	Tetrachloroethene	165.83	ND		160	
108-88-3	Toluene	92.14	ND		240	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		160	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		160	
79-01-6	Trichloroethene	131.39	140		73	
75-69-4	Trichlorofluoromethane	137.37	ND		160	
75-01-4	Vinyl chloride	62.50	ND		81	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1A Lab Sample ID: 140-16177-1

Matrix: Air Lab File ID: RG30P107.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 08:53

Sample wt/vol: 25(mL) Date Analyzed: 07/30/2019 23:47

Soil Aliquot Vol: Dilution Factor: 101.05

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	20000		880	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1100	
79-00-5	1,1,2-Trichloroethane	133.41	ND		880	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1200	
75-34-3	1,1-Dichloroethane	98.96	ND		650	
75-35-4	1,1-Dichloroethene	96.94	3000		320	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1200	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		790	
106-93-4	1,2-Dibromoethane	187.87	ND		1200	
95-50-1	1,2-Dichlorobenzene	147.00	ND		970	
107-06-2	1,2-Dichloroethane	98.96	ND		650	
78-87-5	1,2-Dichloropropane	112.99	ND		750	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1100	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND	*	790	
541-73-1	1,3-Dichlorobenzene	147.00	ND		970	
106-46-7	1,4-Dichlorobenzene	147.00	ND		970	
123-91-1	1,4-Dioxane	88.11	ND		1500	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		1900	
78-93-3	2-Butanone	72.11	28000		1900	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		1700	
71-43-2	Benzene	78.11	ND		520	
100-44-7	Benzyl chloride	126.58	ND		1700	
75-27-4	Bromodichloromethane	163.83	ND		1100	
75-25-2	Bromoform	252.75	ND		1700	
74-83-9	Bromomethane	94.94	ND		630	
56-23-5	Carbon tetrachloride	153.81	ND		410	
108-90-7	Chlorobenzene	112.56	ND		740	
75-00-3	Chloroethane	64.52	ND		430	
67-66-3	Chloroform	119.38	ND		790	
74-87-3	Chloromethane	50.49	ND		830	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		320	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		730	
110-82-7	Cyclohexane	84.16	ND		1400	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1A Lab Sample ID: 140-16177-1

Matrix: Air Lab File ID: RG30P107.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 08:53

Sample wt/vol: 25(mL) Date Analyzed: 07/30/2019 23:47

Soil Aliquot Vol: Dilution Factor: 101.05

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		1400	
75-71-8	Dichlorodifluoromethane	120.91	ND		800	
64-17-5	Ethanol	46.07	ND		7600	
100-41-4	Ethylbenzene	106.17	ND		700	
87-68-3	Hexachlorobutadiene	260.76	ND		1700	
110-54-3	Hexane	86.17	ND		1400	
1634-04-4	Methyl tert-butyl ether	88.15	ND		1200	
75-09-2	Methylene Chloride	84.93	ND		1400	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		700	
95-47-6	o-Xylene	106.17	ND		700	
100-42-5	Styrene	104.15	ND		690	
75-65-0	t-Butyl alcohol	74.12	ND		2000	
127-18-4	Tetrachloroethene	165.83	ND		1100	
108-88-3	Toluene	92.14	ND		910	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		640	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		730	
79-01-6	Trichloroethene	131.39	760		390	
75-69-4	Trichlorofluoromethane	137.37	ND		910	
75-01-4	Vinyl chloride	62.50	ND		210	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D				
Lims ID:	140-16177-A-1				
Client ID:	356023-SV-T1A				
Sample Type:	Client				
Inject. Date:	30-Jul-2019 23:47:30	ALS Bottle#:	7	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	101.0500		
Sample Info:	140-0012489-014				
Misc. Info.:	140-16177-a-1@101.05				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Jul-2019 13:43:42	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0338				
First Level Reviewer: khachitpongpanits		Date:	31-Jul-2019 13:44:23		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.314	7.314	0.000	68	177749	4.00	
* 2 1,4-Difluorobenzene	114	9.369	9.374	-0.005	95	936654	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	782033	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	88	652955	4.08	
27 1,1-Dichloroethene	96	5.050	5.048	0.006	96	25053	0.3782	
37 1,1-Dichloroethane	63	6.247	6.241	0.011	94	1583	0.0150	
39 2-Butanone (MEK)	72	6.662	6.678	-0.011	97	118848	4.68	
40 Hexane	56	6.802	6.796	0.011	82	795	0.0215	
47 1,1,1-Trichloroethane	97	8.264	8.275	-0.005	95	383691	1.80	
55 Isooctane	57	9.676	9.692	-0.011	92	9322	0.0490	
58 Trichloroethene	130	10.124	10.124	0.000	92	6661	0.0701	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

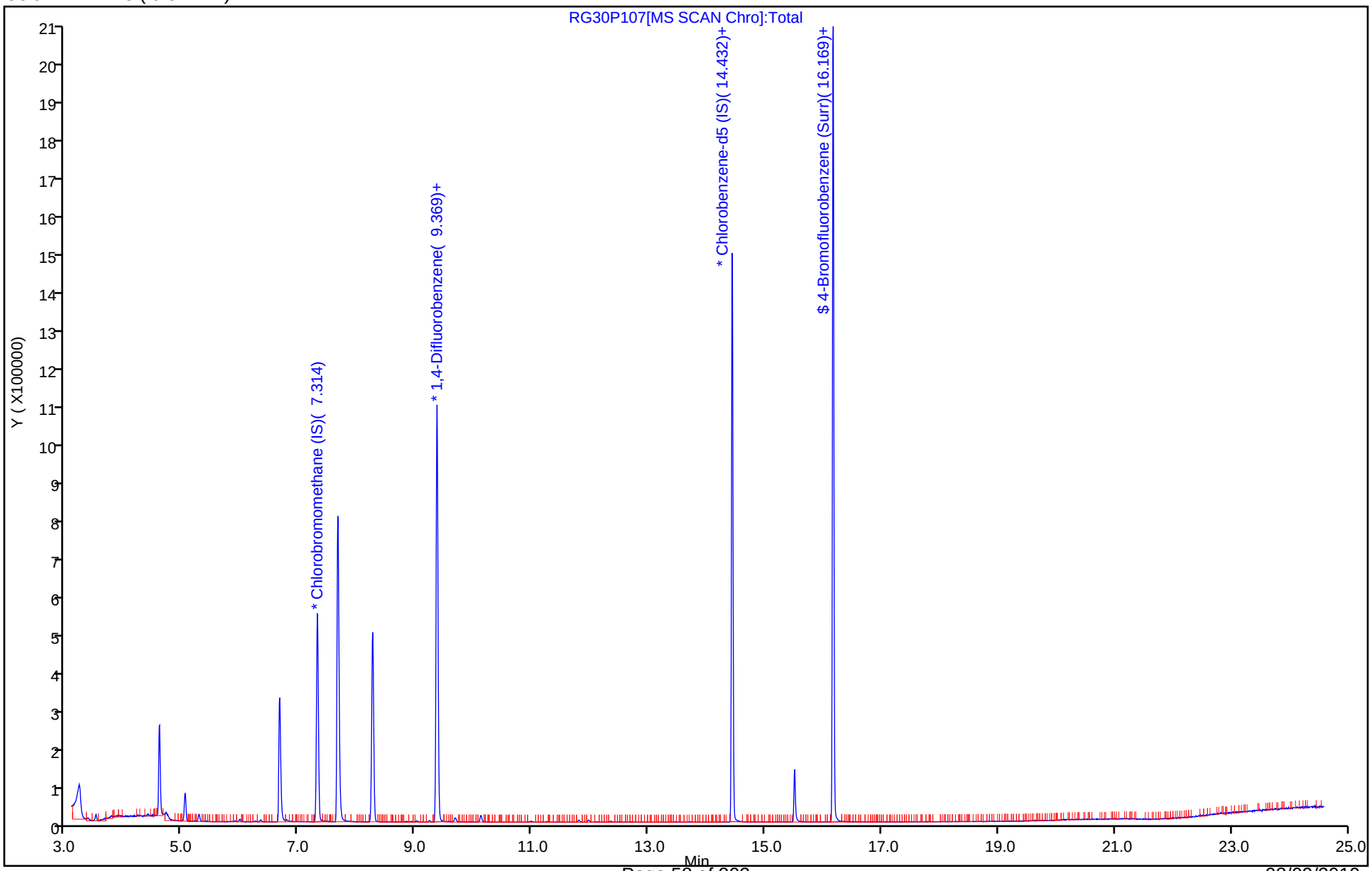
Report Date: 31-Jul-2019 13:44:23 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D

Injection Date:	30-Jul-2019 23:47:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-16177-A-1	Lab Sample ID:	140-16177-1	Worklist Smp#:	14
Client ID:	356023-SV-T1A				
Purge Vol:	500.000 mL	Dil. Factor:	101.0500	ALS Bottle#:	7
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D				
Lims ID:	140-16177-A-1				
Client ID:	356023-SV-T1A				
Sample Type:	Client				
Inject. Date:	30-Jul-2019 23:47:30	ALS Bottle#:	7	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	101.0500		
Sample Info:	140-0012489-014				
Misc. Info.:	140-16177-a-1@101.05				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Jul-2019 13:43:42	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0338				
First Level Reviewer: khachitpongpanits		Date:	31-Jul-2019 13:44:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.08	101.99

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D

Injection Date: 30-Jul-2019 23:47:30 Instrument ID: MR

Lims ID: 140-16177-A-1 Lab Sample ID: 140-16177-1

Client ID: 356023-SV-T1A

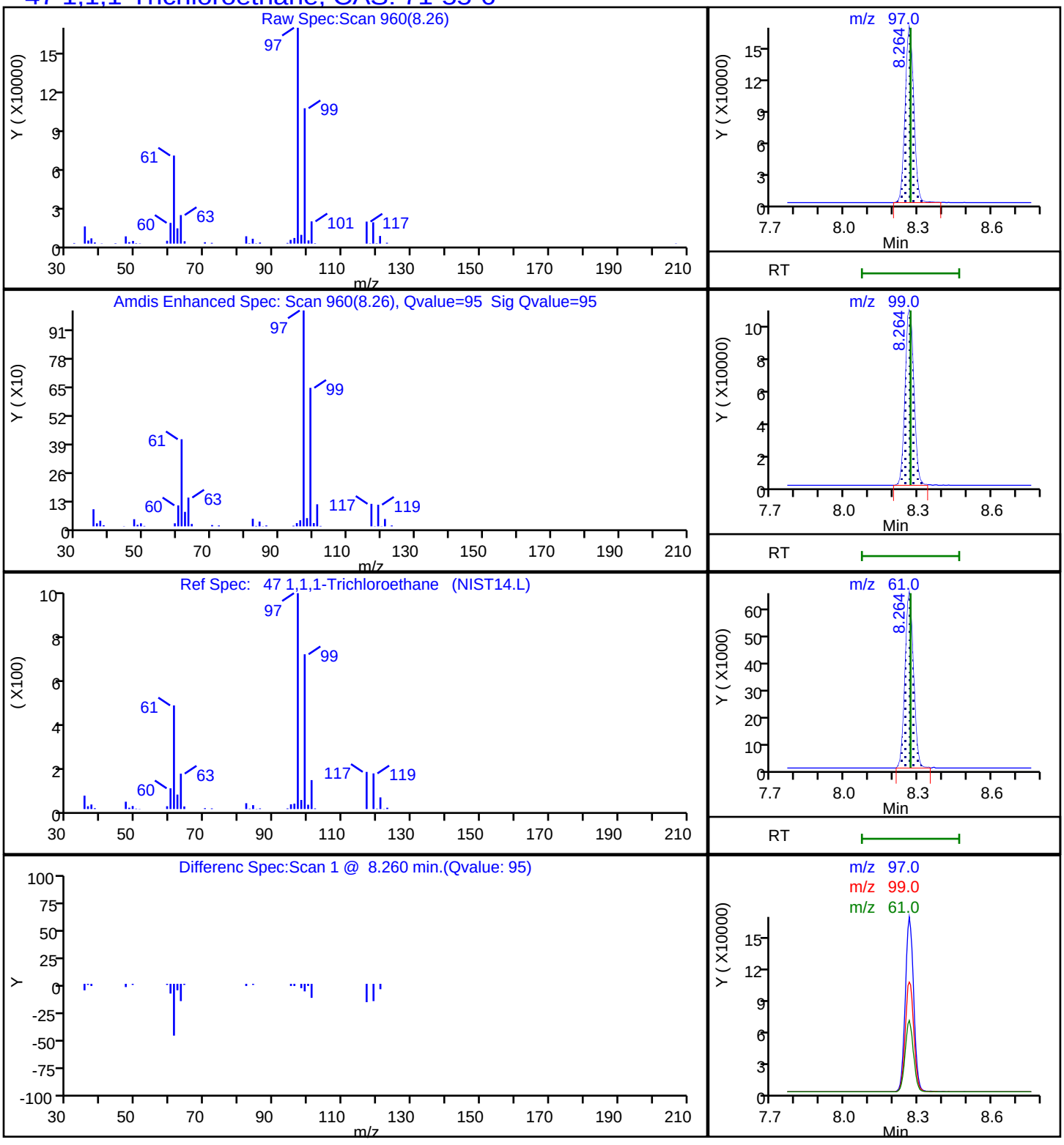
Operator ID: ALS Bottle#: 7 Worklist Smp#: 14

Purge Vol: 500.000 mL Dil. Factor: 101.0500

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D

Injection Date: 30-Jul-2019 23:47:30 Instrument ID: MR

Lims ID: 140-16177-A-1 Lab Sample ID: 140-16177-1

Client ID: 356023-SV-T1A

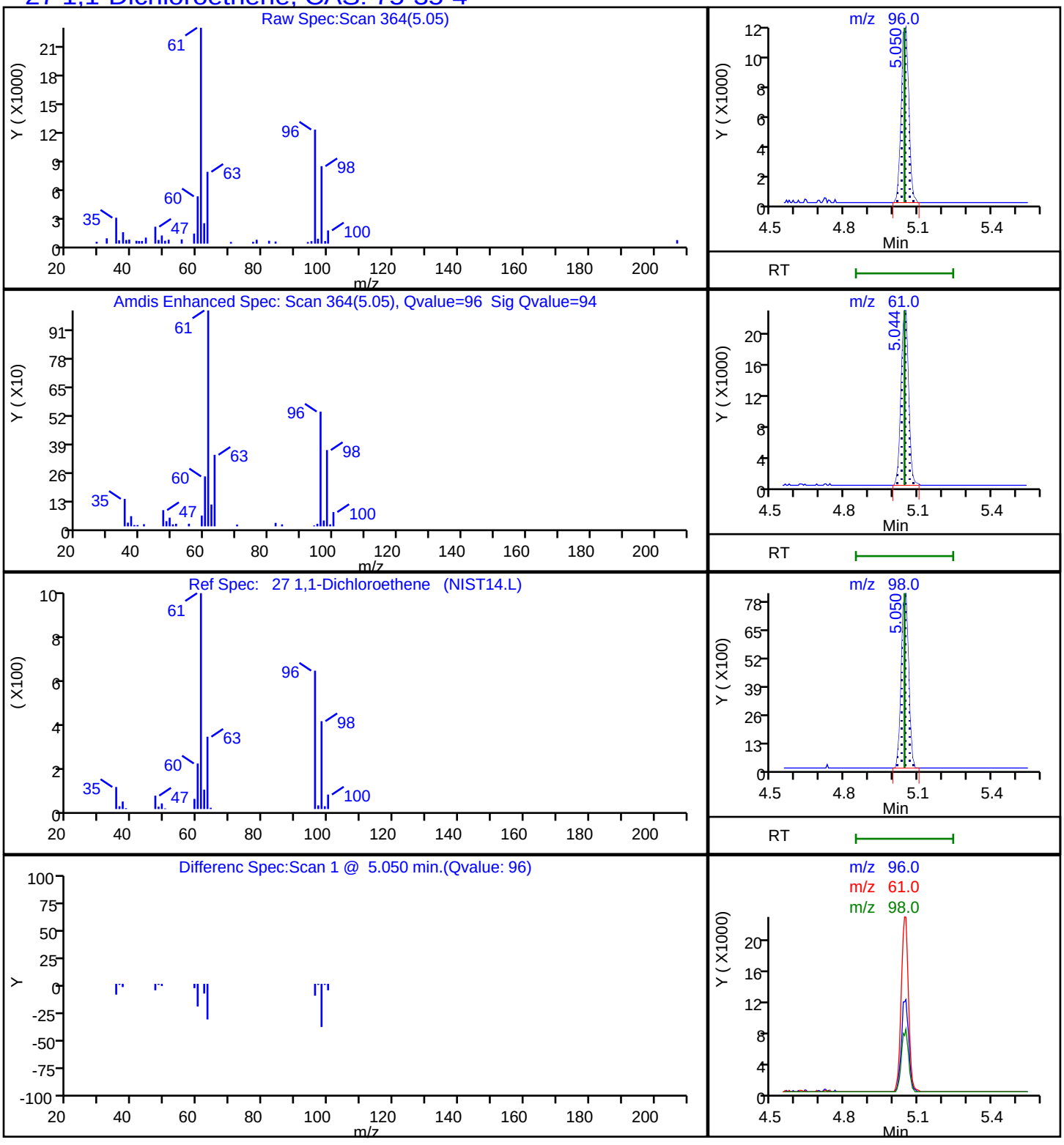
Operator ID: ALS Bottle#: 7 Worklist Smp#: 14

Purge Vol: 500.000 mL Dil. Factor: 101.0500

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D

Injection Date: 30-Jul-2019 23:47:30 Instrument ID: MR

Lims ID: 140-16177-A-1 Lab Sample ID: 140-16177-1

Client ID: 356023-SV-T1A

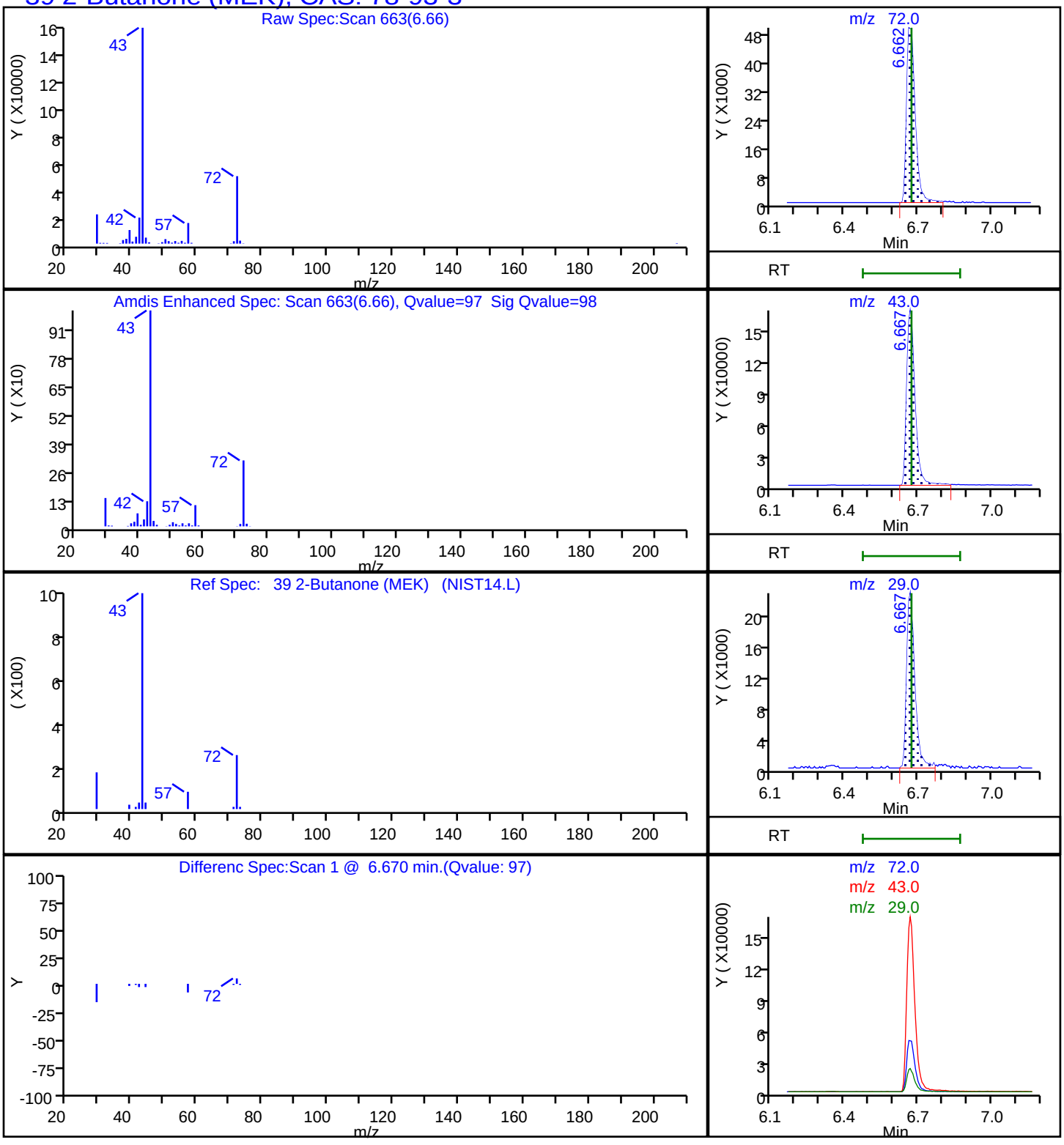
Operator ID: ALS Bottle#: 7 Worklist Smp#: 14

Purge Vol: 500.000 mL Dil. Factor: 101.0500

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

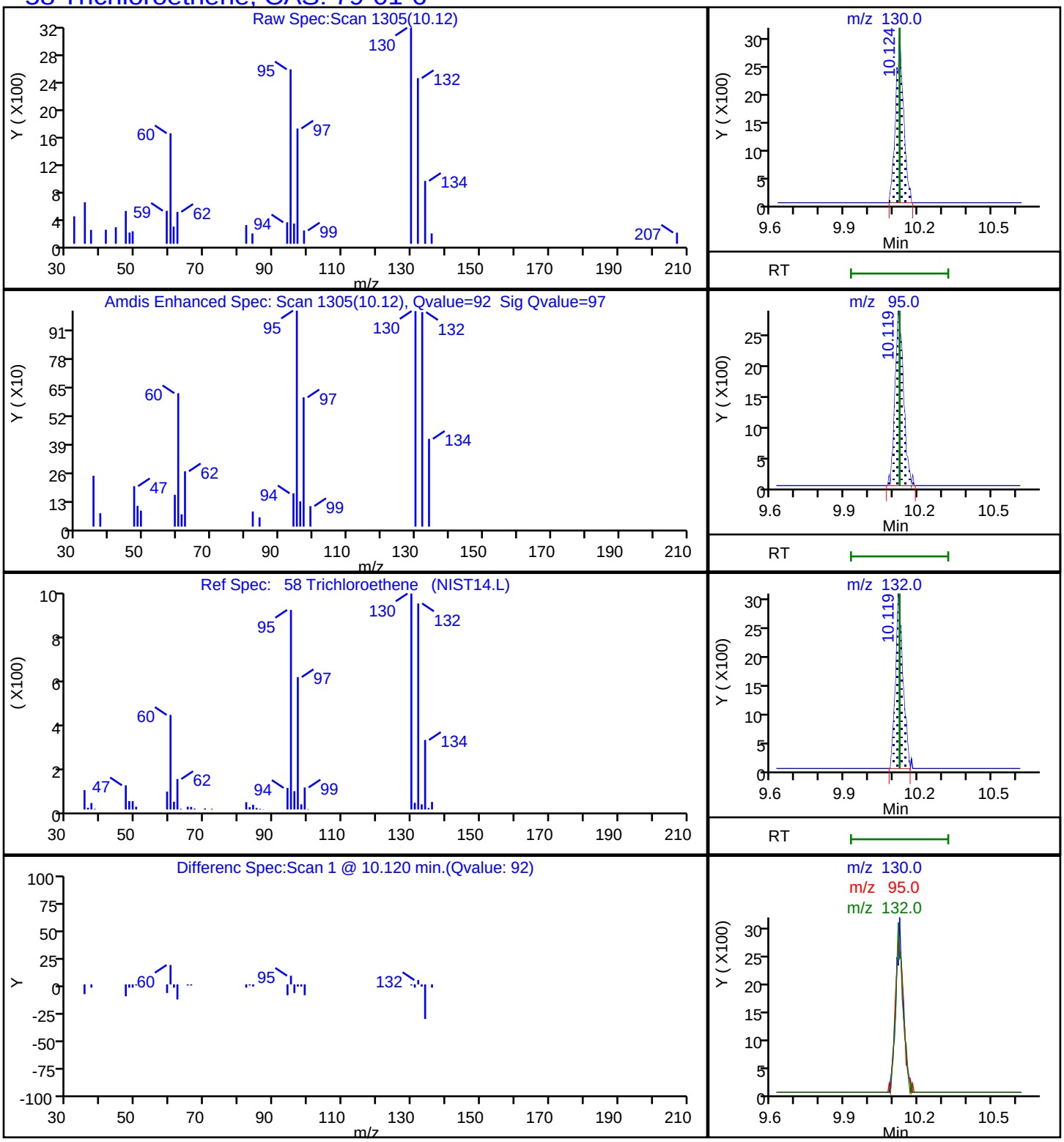
39 2-Butanone (MEK), CAS: 78-93-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\RG30P107.D		
Injection Date:	30-Jul-2019 23:47:30	Instrument ID:	MR
Lims ID:	140-16177-A-1	Lab Sample ID:	140-16177-1
Client ID:	356023-SV-T1A		
Operator ID:		ALS Bottle#:	7 Worklist Smp#: 14
Purge Vol:	500.000 mL	Dil. Factor:	101.0500
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1B Lab Sample ID: 140-16177-2

Matrix: Air Lab File ID: RG31P108.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 17:44

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 02:33

Soil Aliquot Vol: Dilution Factor: 340.06

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	27000		270	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		270	
79-00-5	1,1,2-Trichloroethane	133.41	ND		270	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		270	
75-34-3	1,1-Dichloroethane	98.96	ND		270	
75-35-4	1,1-Dichloroethene	96.94	5200		140	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		270	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		270	
106-93-4	1,2-Dibromoethane	187.87	ND		270	
95-50-1	1,2-Dichlorobenzene	147.00	ND		270	
107-06-2	1,2-Dichloroethane	98.96	ND		270	
78-87-5	1,2-Dichloropropane	112.99	ND		270	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		270	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		270	
541-73-1	1,3-Dichlorobenzene	147.00	ND		270	
106-46-7	1,4-Dichlorobenzene	147.00	ND		270	
123-91-1	1,4-Dioxane	88.11	ND		680	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		680	
78-93-3	2-Butanone	72.11	1900		1100	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		680	
71-43-2	Benzene	78.11	ND		270	
100-44-7	Benzyl chloride	126.58	ND		540	
75-27-4	Bromodichloromethane	163.83	ND		270	
75-25-2	Bromoform	252.75	ND		270	
74-83-9	Bromomethane	94.94	ND		270	
56-23-5	Carbon tetrachloride	153.81	ND		110	
108-90-7	Chlorobenzene	112.56	ND		270	
75-00-3	Chloroethane	64.52	ND		270	
67-66-3	Chloroform	119.38	ND		270	
74-87-3	Chloromethane	50.49	ND		680	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		140	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		270	
110-82-7	Cyclohexane	84.16	ND		680	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1B Lab Sample ID: 140-16177-2

Matrix: Air Lab File ID: RG31P108.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 17:44

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 02:33

Soil Aliquot Vol: Dilution Factor: 340.06

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		270	
75-71-8	Dichlorodifluoromethane	120.91	ND		270	
64-17-5	Ethanol	46.07	ND		6800	
100-41-4	Ethylbenzene	106.17	ND		270	
87-68-3	Hexachlorobutadiene	260.76	ND		270	
110-54-3	Hexane	86.17	ND		680	
1634-04-4	Methyl tert-butyl ether	88.15	ND		540	
75-09-2	Methylene Chloride	84.93	ND		680	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		270	
95-47-6	o-Xylene	106.17	ND		270	
100-42-5	Styrene	104.15	ND		270	
75-65-0	t-Butyl alcohol	74.12	ND		1100	
127-18-4	Tetrachloroethene	165.83	ND		270	
108-88-3	Toluene	92.14	ND		410	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		270	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		270	
79-01-6	Trichloroethene	131.39	890		120	
75-69-4	Trichlorofluoromethane	137.37	ND		270	
75-01-4	Vinyl chloride	62.50	ND		140	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1B Lab Sample ID: 140-16177-2

Matrix: Air Lab File ID: RG31P108.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 17:44

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 02:33

Soil Aliquot Vol: Dilution Factor: 340.06

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	150000		1500	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1900	
79-00-5	1,1,2-Trichloroethane	133.41	ND		1500	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		2100	
75-34-3	1,1-Dichloroethane	98.96	ND		1100	
75-35-4	1,1-Dichloroethene	96.94	21000		540	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2000	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1300	
106-93-4	1,2-Dibromoethane	187.87	ND		2100	
95-50-1	1,2-Dichlorobenzene	147.00	ND		1600	
107-06-2	1,2-Dichloroethane	98.96	ND		1100	
78-87-5	1,2-Dichloropropane	112.99	ND		1300	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1900	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1300	
541-73-1	1,3-Dichlorobenzene	147.00	ND		1600	
106-46-7	1,4-Dichlorobenzene	147.00	ND		1600	
123-91-1	1,4-Dioxane	88.11	ND		2500	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		3200	
78-93-3	2-Butanone	72.11	5700		3200	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		2800	
71-43-2	Benzene	78.11	ND		870	
100-44-7	Benzyl chloride	126.58	ND		2800	
75-27-4	Bromodichloromethane	163.83	ND		1800	
75-25-2	Bromoform	252.75	ND		2800	
74-83-9	Bromomethane	94.94	ND		1100	
56-23-5	Carbon tetrachloride	153.81	ND		680	
108-90-7	Chlorobenzene	112.56	ND		1300	
75-00-3	Chloroethane	64.52	ND		720	
67-66-3	Chloroform	119.38	ND		1300	
74-87-3	Chloromethane	50.49	ND		1400	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		540	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1200	
110-82-7	Cyclohexane	84.16	ND		2300	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-T1B Lab Sample ID: 140-16177-2

Matrix: Air Lab File ID: RG31P108.D

Analysis Method: TO 15 LL Date Collected: 07/24/2019 17:44

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 02:33

Soil Aliquot Vol: Dilution Factor: 340.06

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		2300	
75-71-8	Dichlorodifluoromethane	120.91	ND		1300	
64-17-5	Ethanol	46.07	ND		13000	
100-41-4	Ethylbenzene	106.17	ND		1200	
87-68-3	Hexachlorobutadiene	260.76	ND		2900	
110-54-3	Hexane	86.17	ND		2400	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2000	
75-09-2	Methylene Chloride	84.93	ND		2400	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1200	
95-47-6	o-Xylene	106.17	ND		1200	
100-42-5	Styrene	104.15	ND		1200	
75-65-0	t-Butyl alcohol	74.12	ND		3300	
127-18-4	Tetrachloroethene	165.83	ND		1800	
108-88-3	Toluene	92.14	ND		1500	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1100	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1200	
79-01-6	Trichloroethene	131.39	4800		660	
75-69-4	Trichlorofluoromethane	137.37	ND		1500	
75-01-4	Vinyl chloride	62.50	ND		350	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D				
Lims ID:	140-16177-A-2				
Client ID:	356023-SV-T1B				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 02:33:30	ALS Bottle#:	8	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	340.0600		
Sample Info:	140-0012543-020				
Misc. Info.:	140-16177-a-2@340.06				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 01:11:52	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				
First Level Reviewer: khachitpongpanits		Date:	01-Aug-2019 14:31:25		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.320	7.320	0.000	68	213375	4.00	
* 2 1,4-Difluorobenzene	114	9.369	9.374	-0.005	95	1166916	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	90	973764	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	790298	3.97	
27 1,1-Dichloroethene	96	5.055	5.055	0.000	97	121718	1.53	
37 1,1-Dichloroethane	63	6.242	6.247	-0.005	96	8544	0.0674	
39 2-Butanone (MEK)	72	6.694	6.684	0.010	96	17247	0.5656	
47 1,1,1-Trichloroethane	97	8.264	8.269	-0.005	95	2058217	8.06	
52 Carbon tetrachloride	117	8.862	8.857	0.000	88	1781	0.007888	
58 Trichloroethene	130	10.119	10.118	-0.005	96	30922	0.2614	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

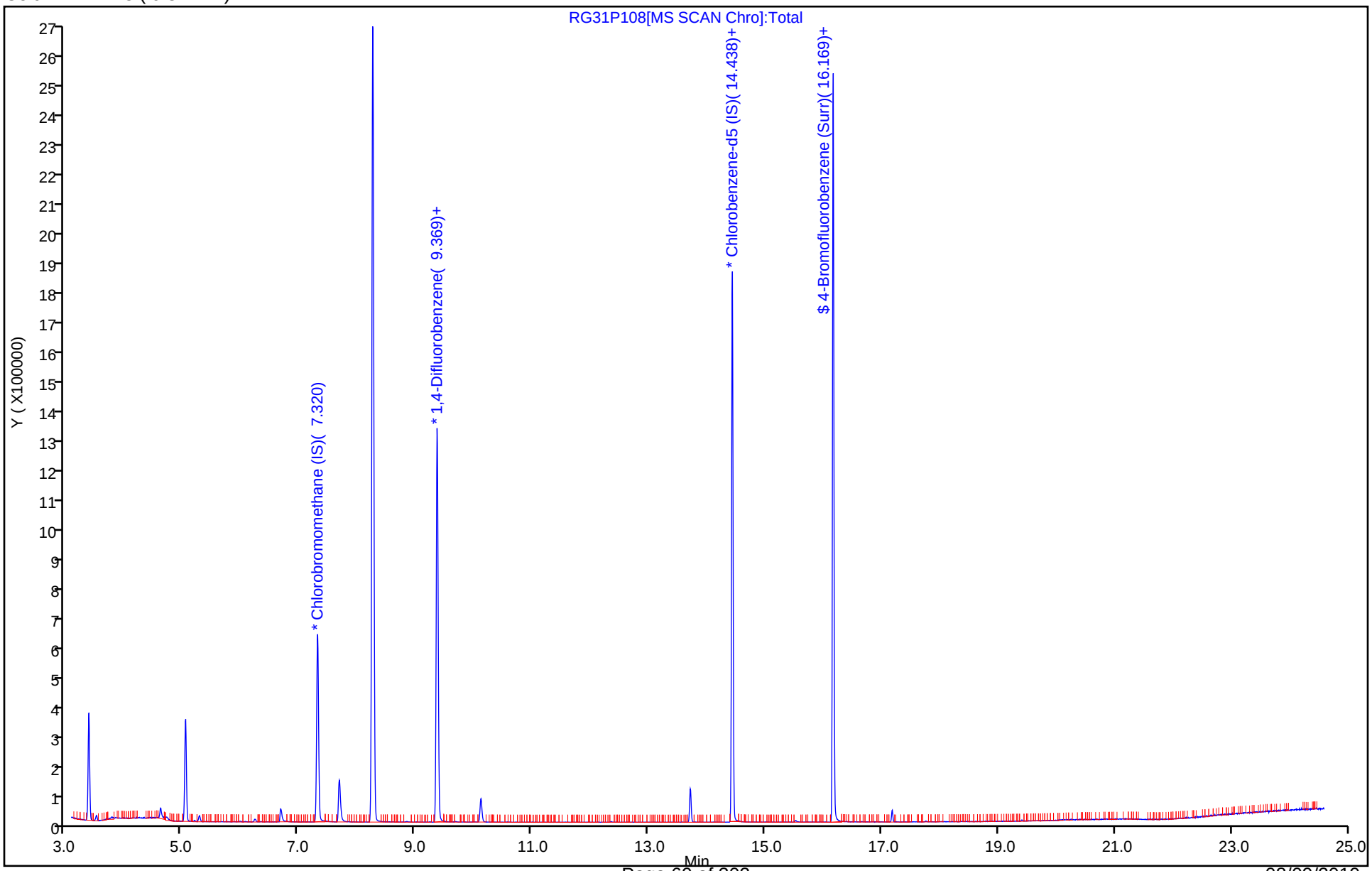
Report Date: 01-Aug-2019 14:31:26 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D

Injection Date:	01-Aug-2019 02:33:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-16177-A-2	Lab Sample ID:	140-16177-2	Worklist Smp#:	20
Client ID:	356023-SV-T1B				
Purge Vol:	500.000 mL	Dil. Factor:	340.0600	ALS Bottle#:	8
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D				
Lims ID:	140-16177-A-2				
Client ID:	356023-SV-T1B				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 02:33:30	ALS Bottle#:	8	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	340.0600		
Sample Info:	140-0012543-020				
Misc. Info.:	140-16177-a-2@340.06				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 01:11:52	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				

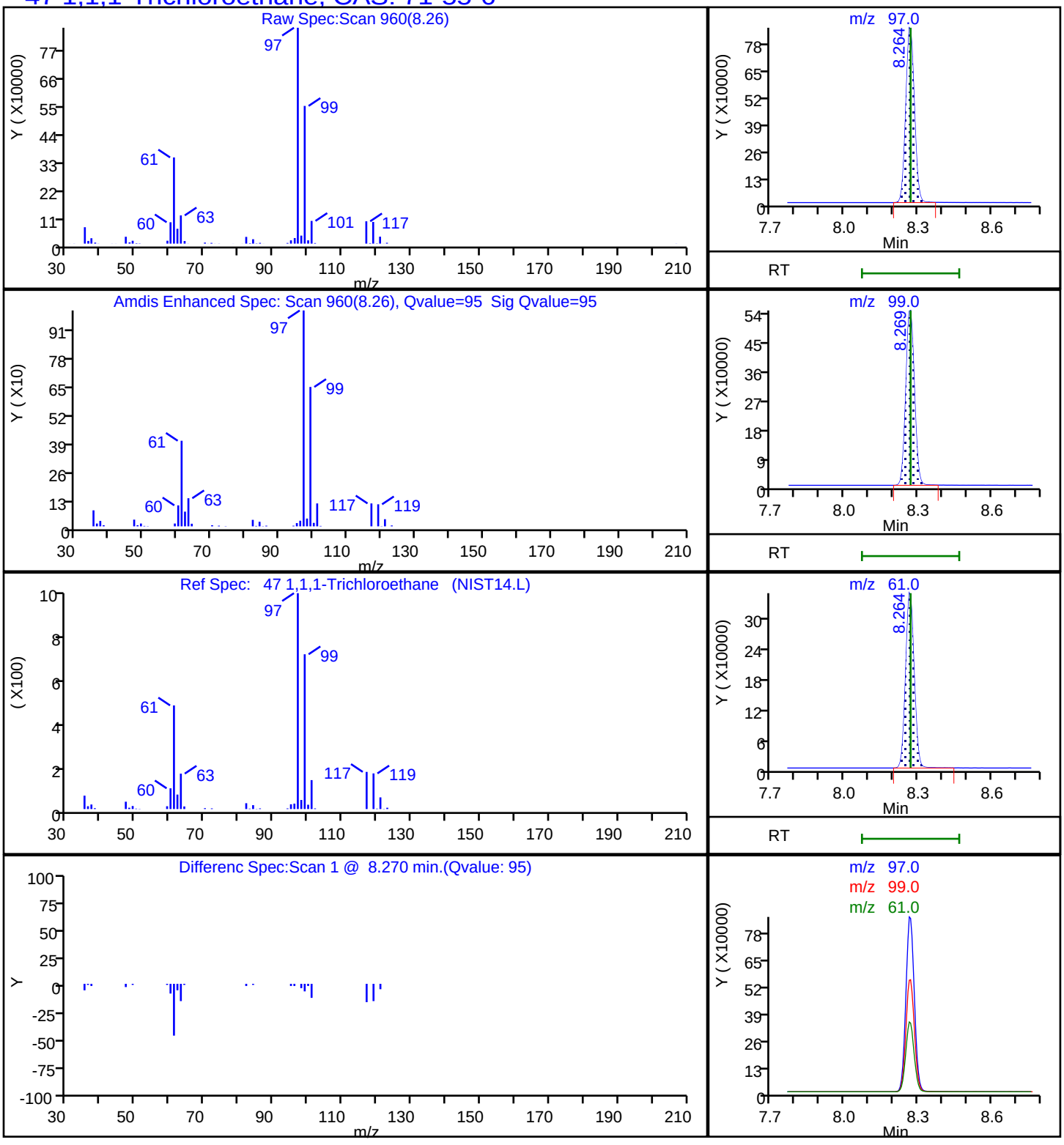
First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 14:31:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.97	99.14

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D		
Injection Date:	01-Aug-2019 02:33:30	Instrument ID:	MR
Lims ID:	140-16177-A-2	Lab Sample ID:	140-16177-2
Client ID:	356023-SV-T1B		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	340.0600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

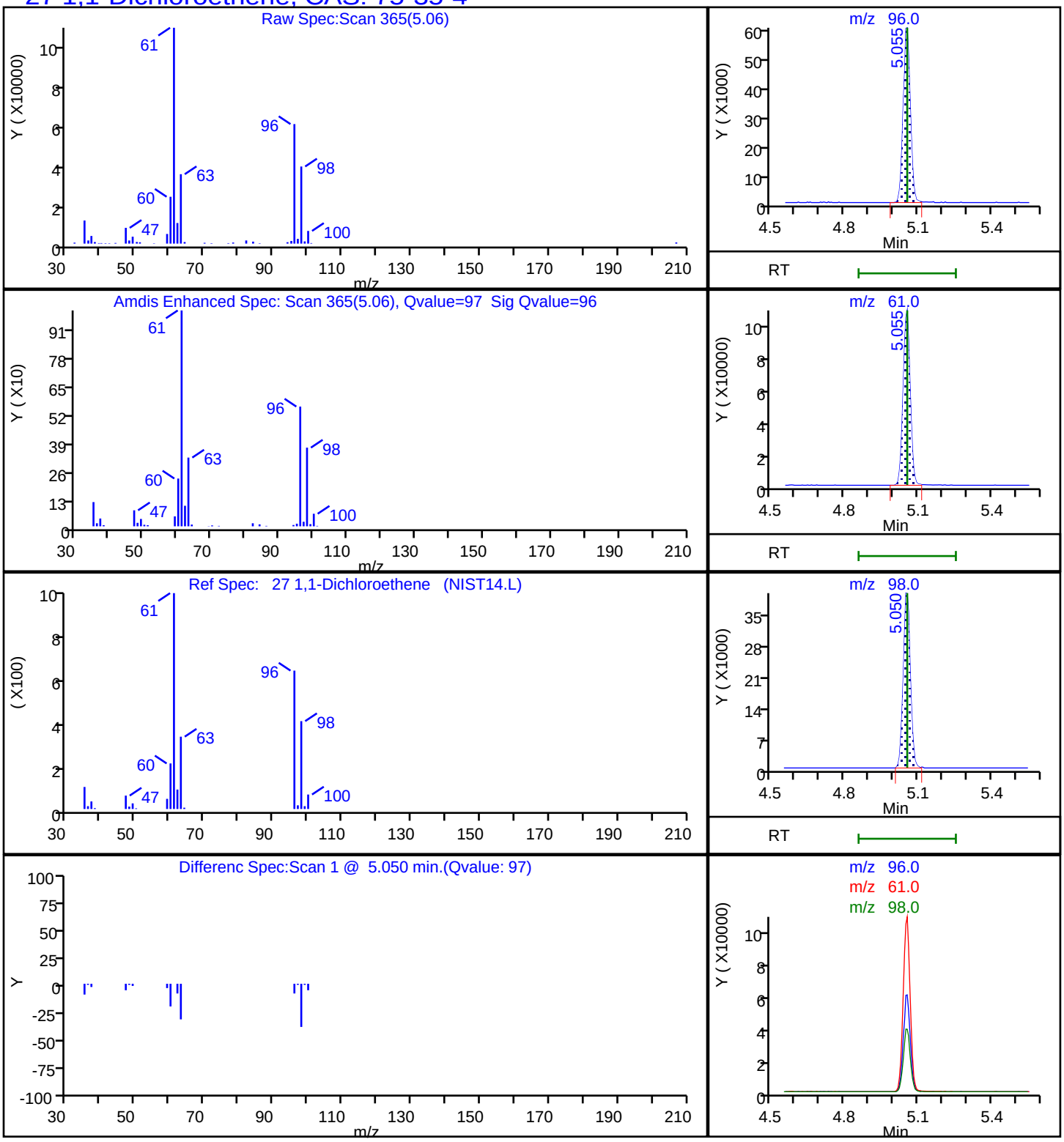
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D		
Injection Date:	01-Aug-2019 02:33:30	Instrument ID:	MR
Lims ID:	140-16177-A-2	Lab Sample ID:	140-16177-2
Client ID:	356023-SV-T1B		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	340.0600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

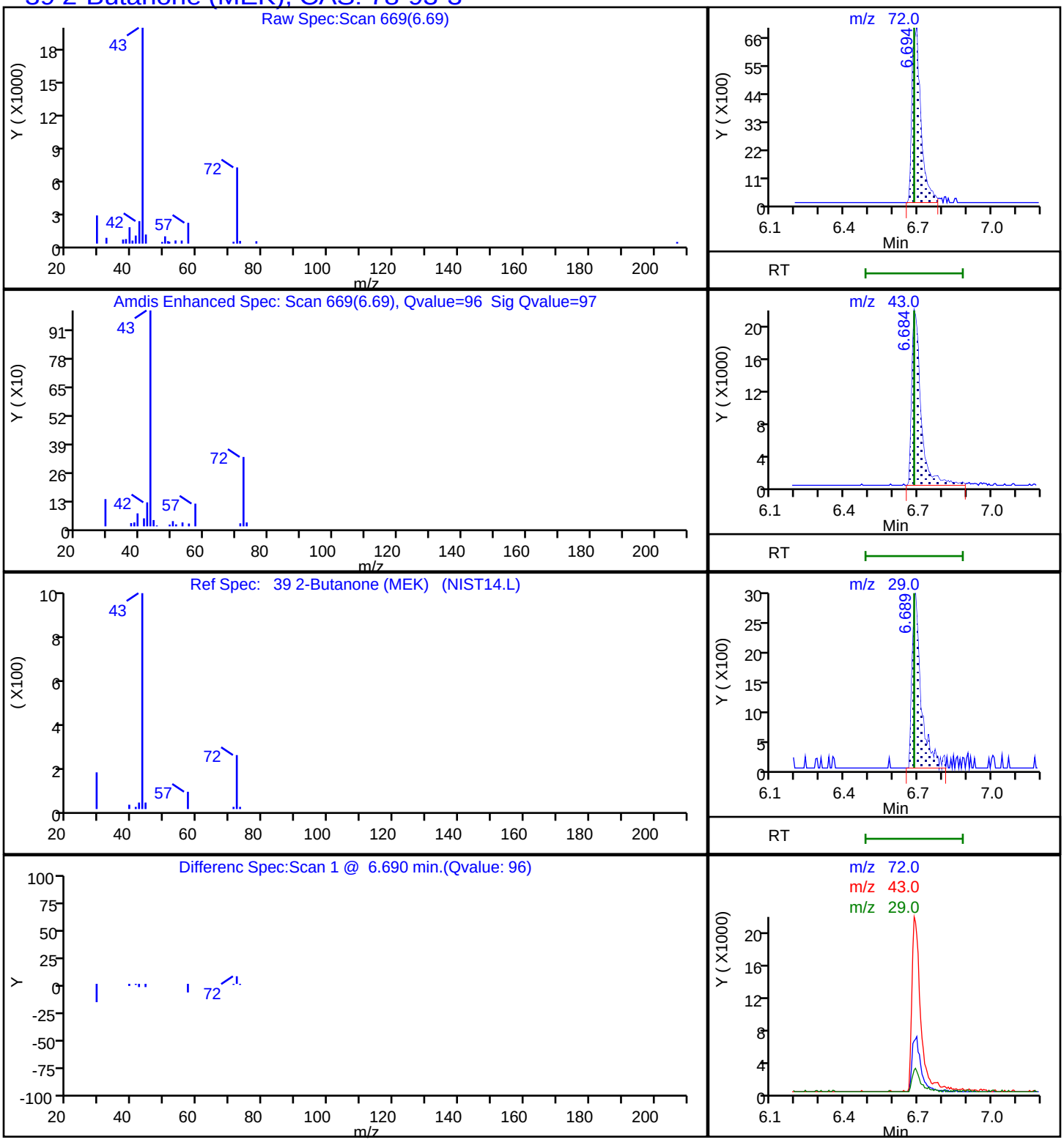
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D		
Injection Date:	01-Aug-2019 02:33:30	Instrument ID:	MR
Lims ID:	140-16177-A-2	Lab Sample ID:	140-16177-2
Client ID:	356023-SV-T1B		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	340.0600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

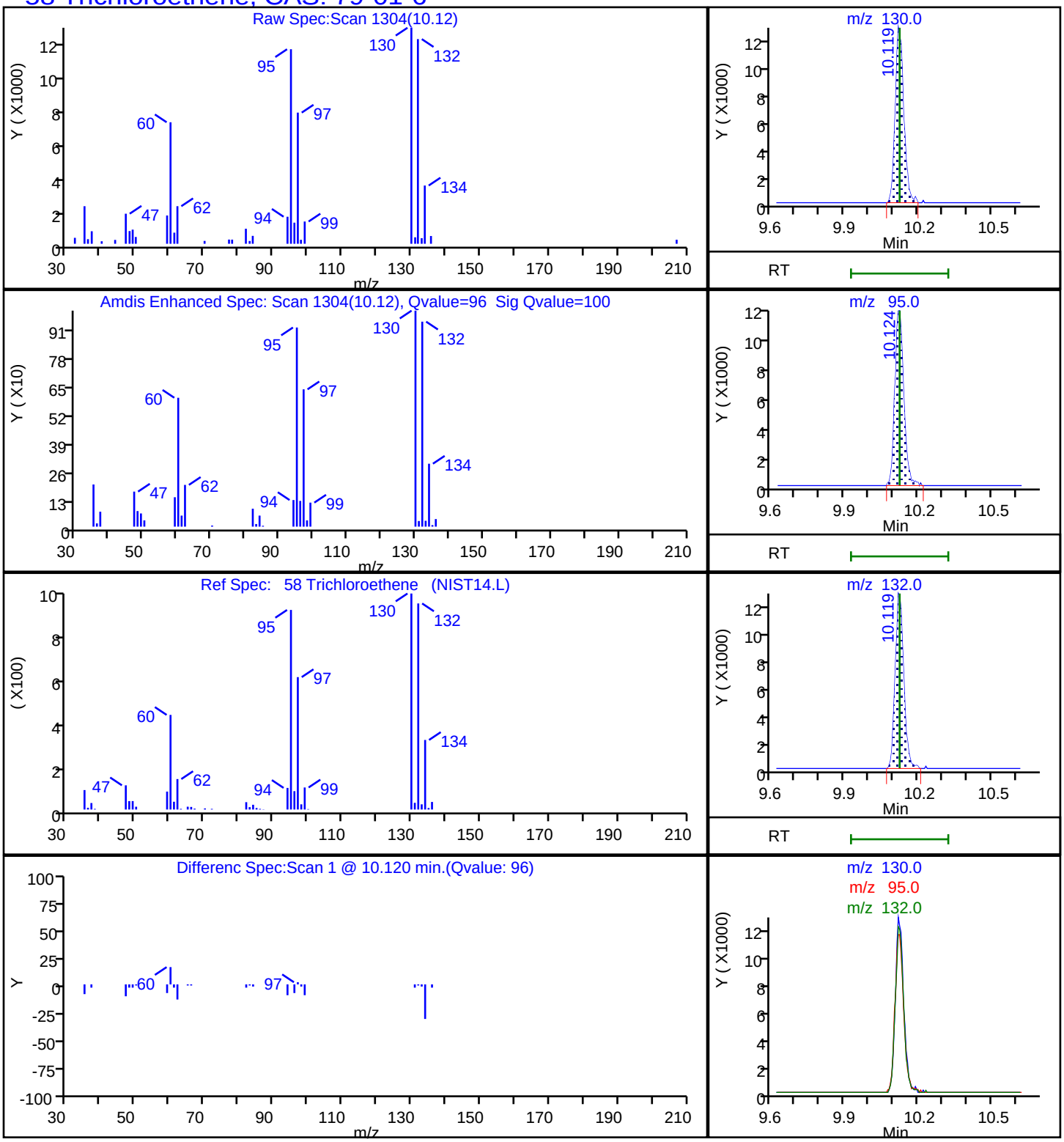
39 2-Butanone (MEK), CAS: 78-93-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P108.D		
Injection Date:	01-Aug-2019 02:33:30	Instrument ID:	MR
Lims ID:	140-16177-A-2	Lab Sample ID:	140-16177-2
Client ID:	356023-SV-T1B		
Operator ID:		ALS Bottle#:	8 Worklist Smp#: 20
Purge Vol:	500.000 mL	Dil. Factor:	340.0600
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Matrix: Air Lab File ID: RG31P109.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 10:38

Sample wt/vol: 40(mL) Date Analyzed: 08/01/2019 03:20

Soil Aliquot Vol: Dilution Factor: 334.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	35000		330	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		330	
79-00-5	1,1,2-Trichloroethane	133.41	ND		330	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		330	
75-34-3	1,1-Dichloroethane	98.96	370		330	
75-35-4	1,1-Dichloroethene	96.94	5900		170	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		330	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		330	
106-93-4	1,2-Dibromoethane	187.87	ND		330	
95-50-1	1,2-Dichlorobenzene	147.00	ND		330	
107-06-2	1,2-Dichloroethane	98.96	ND		330	
78-87-5	1,2-Dichloropropane	112.99	ND		330	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		330	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		330	
541-73-1	1,3-Dichlorobenzene	147.00	ND		330	
106-46-7	1,4-Dichlorobenzene	147.00	ND		330	
123-91-1	1,4-Dioxane	88.11	ND		840	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		840	
78-93-3	2-Butanone	72.11	ND		1300	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		840	
71-43-2	Benzene	78.11	ND		330	
100-44-7	Benzyl chloride	126.58	ND		670	
75-27-4	Bromodichloromethane	163.83	ND		330	
75-25-2	Bromoform	252.75	ND		330	
74-83-9	Bromomethane	94.94	ND		330	
56-23-5	Carbon tetrachloride	153.81	ND		130	
108-90-7	Chlorobenzene	112.56	ND		330	
75-00-3	Chloroethane	64.52	ND		330	
67-66-3	Chloroform	119.38	ND		330	
74-87-3	Chloromethane	50.49	ND		840	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		170	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		330	
110-82-7	Cyclohexane	84.16	ND		840	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Matrix: Air Lab File ID: RG31P109.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 10:38

Sample wt/vol: 40(mL) Date Analyzed: 08/01/2019 03:20

Soil Aliquot Vol: Dilution Factor: 334.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		330	
75-71-8	Dichlorodifluoromethane	120.91	ND		330	
64-17-5	Ethanol	46.07	ND		8400	
100-41-4	Ethylbenzene	106.17	ND		330	
87-68-3	Hexachlorobutadiene	260.76	ND		330	
110-54-3	Hexane	86.17	ND		840	
1634-04-4	Methyl tert-butyl ether	88.15	ND		670	
75-09-2	Methylene Chloride	84.93	ND		840	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		330	
95-47-6	o-Xylene	106.17	ND		330	
100-42-5	Styrene	104.15	ND		330	
75-65-0	t-Butyl alcohol	74.12	ND		1300	
127-18-4	Tetrachloroethene	165.83	ND		330	
108-88-3	Toluene	92.14	ND		500	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		330	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		330	
79-01-6	Trichloroethene	131.39	990		150	
75-69-4	Trichlorofluoromethane	137.37	ND		330	
75-01-4	Vinyl chloride	62.50	ND		170	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Matrix: Air Lab File ID: RG31P109.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 10:38

Sample wt/vol: 40(mL) Date Analyzed: 08/01/2019 03:20

Soil Aliquot Vol: Dilution Factor: 334.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	190000		1800	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		2300	
79-00-5	1,1,2-Trichloroethane	133.41	ND		1800	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		2600	
75-34-3	1,1-Dichloroethane	98.96	1500		1400	
75-35-4	1,1-Dichloroethene	96.94	23000		660	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		2500	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1600	
106-93-4	1,2-Dibromoethane	187.87	ND		2600	
95-50-1	1,2-Dichlorobenzene	147.00	ND		2000	
107-06-2	1,2-Dichloroethane	98.96	ND		1400	
78-87-5	1,2-Dichloropropane	112.99	ND		1500	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		2300	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1600	
541-73-1	1,3-Dichlorobenzene	147.00	ND		2000	
106-46-7	1,4-Dichlorobenzene	147.00	ND		2000	
123-91-1	1,4-Dioxane	88.11	ND		3000	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		3900	
78-93-3	2-Butanone	72.11	ND		3900	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		3400	
71-43-2	Benzene	78.11	ND		1100	
100-44-7	Benzyl chloride	126.58	ND		3500	
75-27-4	Bromodichloromethane	163.83	ND		2200	
75-25-2	Bromoform	252.75	ND		3500	
74-83-9	Bromomethane	94.94	ND		1300	
56-23-5	Carbon tetrachloride	153.81	ND		840	
108-90-7	Chlorobenzene	112.56	ND		1500	
75-00-3	Chloroethane	64.52	ND		880	
67-66-3	Chloroform	119.38	ND		1600	
74-87-3	Chloromethane	50.49	ND		1700	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		660	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1500	
110-82-7	Cyclohexane	84.16	ND		2900	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-21 Lab Sample ID: 140-16177-3

Matrix: Air Lab File ID: RG31P109.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 10:38

Sample wt/vol: 40(mL) Date Analyzed: 08/01/2019 03:20

Soil Aliquot Vol: Dilution Factor: 334.03

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		2800	
75-71-8	Dichlorodifluoromethane	120.91	ND		1700	
64-17-5	Ethanol	46.07	ND		16000	
100-41-4	Ethylbenzene	106.17	ND		1500	
87-68-3	Hexachlorobutadiene	260.76	ND		3600	
110-54-3	Hexane	86.17	ND		2900	
1634-04-4	Methyl tert-butyl ether	88.15	ND		2400	
75-09-2	Methylene Chloride	84.93	ND		2900	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1500	
95-47-6	o-Xylene	106.17	ND		1500	
100-42-5	Styrene	104.15	ND		1400	
75-65-0	t-Butyl alcohol	74.12	ND		4100	
127-18-4	Tetrachloroethene	165.83	ND		2300	
108-88-3	Toluene	92.14	ND		1900	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1300	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1500	
79-01-6	Trichloroethene	131.39	5300		810	
75-69-4	Trichlorofluoromethane	137.37	ND		1900	
75-01-4	Vinyl chloride	62.50	ND		430	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D				
Lims ID:	140-16177-A-3				
Client ID:	356023-SV-21				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 03:20:30	ALS Bottle#:	9	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	334.0300		
Sample Info:	140-0012543-021				
Misc. Info.:	140-16177-a-3@334.03				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 01:59:34	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				
First Level Reviewer: khachitpongpanits		Date:	01-Aug-2019 15:31:06		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.320	7.320	0.000	68	203735	4.00	
* 2 1,4-Difluorobenzene	114	9.369	9.374	-0.005	95	1118102	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	90	919578	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	88	767697	4.08	
27 1,1-Dichloroethene	96	5.050	5.055	-0.005	97	107253	1.41	
37 1,1-Dichloroethane	63	6.247	6.247	0.000	97	10596	0.0875	
39 2-Butanone (MEK)	72	6.694	6.684	0.010	96	7255	0.2492	
47 1,1,1-Trichloroethane	97	8.264	8.269	-0.005	95	2036221	8.35	
58 Trichloroethene	130	10.124	10.118	0.000	94	26915	0.2374	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

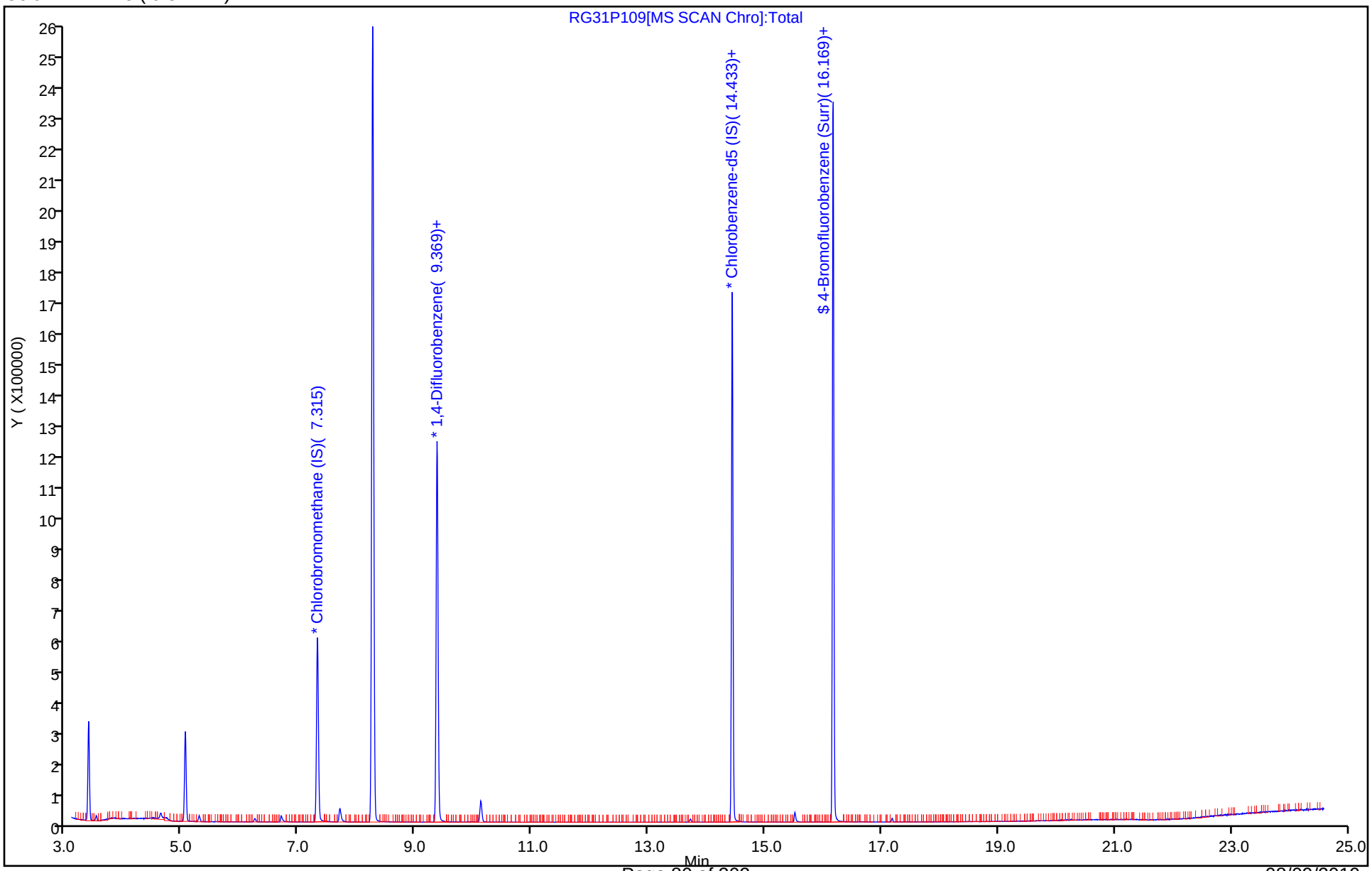
Report Date: 01-Aug-2019 15:31:07 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D

Injection Date:	01-Aug-2019 03:20:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-16177-A-3	Lab Sample ID:	140-16177-3	Worklist Smp#:	21
Client ID:	356023-SV-21				
Purge Vol:	500.000 mL	Dil. Factor:	334.0300	ALS Bottle#:	9
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D				
Lims ID:	140-16177-A-3				
Client ID:	356023-SV-21				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 03:20:30	ALS Bottle#:	9	Worklist Smp#:	21
Purge Vol:	500.000 mL	Dil. Factor:	334.0300		
Sample Info:	140-0012543-021				
Misc. Info.:	140-16177-a-3@334.03				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 01:59:34	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				

First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 15:31:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.08	101.98

Report Date: 01-Aug-2019 15:31:07 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D

Injection Date: 01-Aug-2019 03:20:30 Instrument ID: MR

Lims ID: 140-16177-A-3 Lab Sample ID: 140-16177-3

Client ID: 356023-SV-21

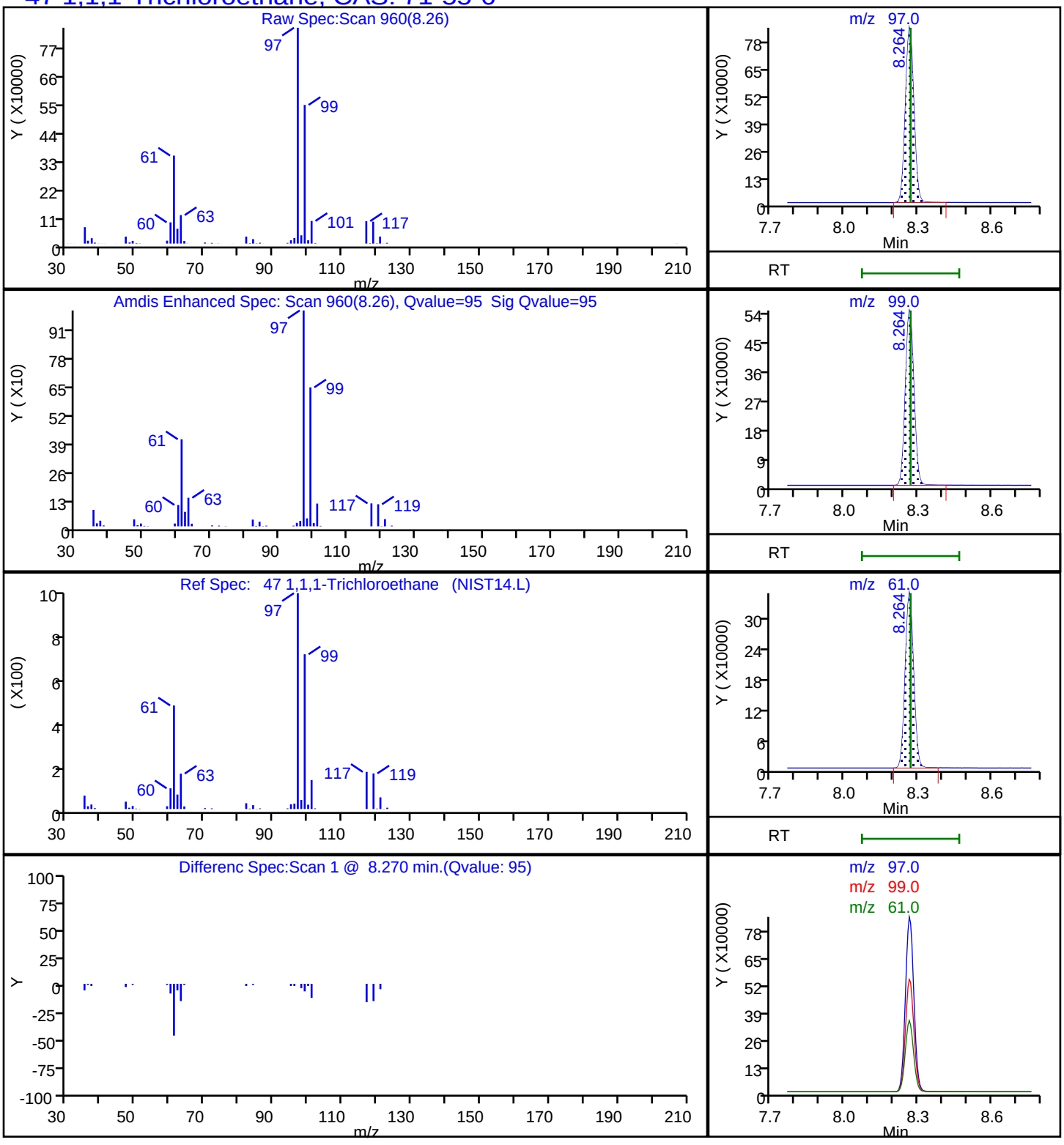
Operator ID: ALS Bottle#: 9 Worklist Smp#: 21

Purge Vol: 500.000 mL Dil. Factor: 334.0300

Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm) Detector MS SCAN

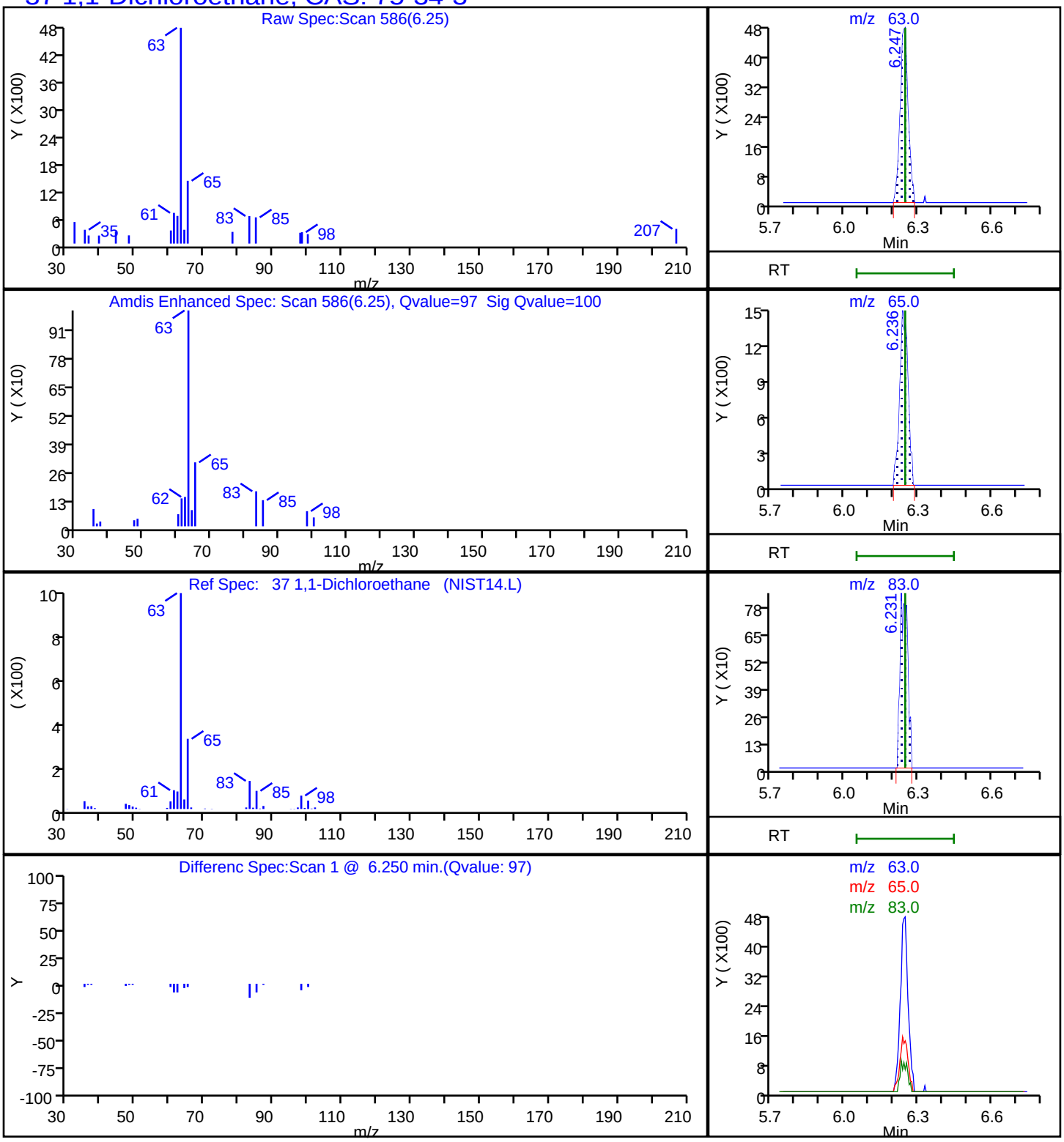
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D		
Injection Date:	01-Aug-2019 03:20:30	Instrument ID:	MR
Lims ID:	140-16177-A-3	Lab Sample ID:	140-16177-3
Client ID:	356023-SV-21		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	334.0300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

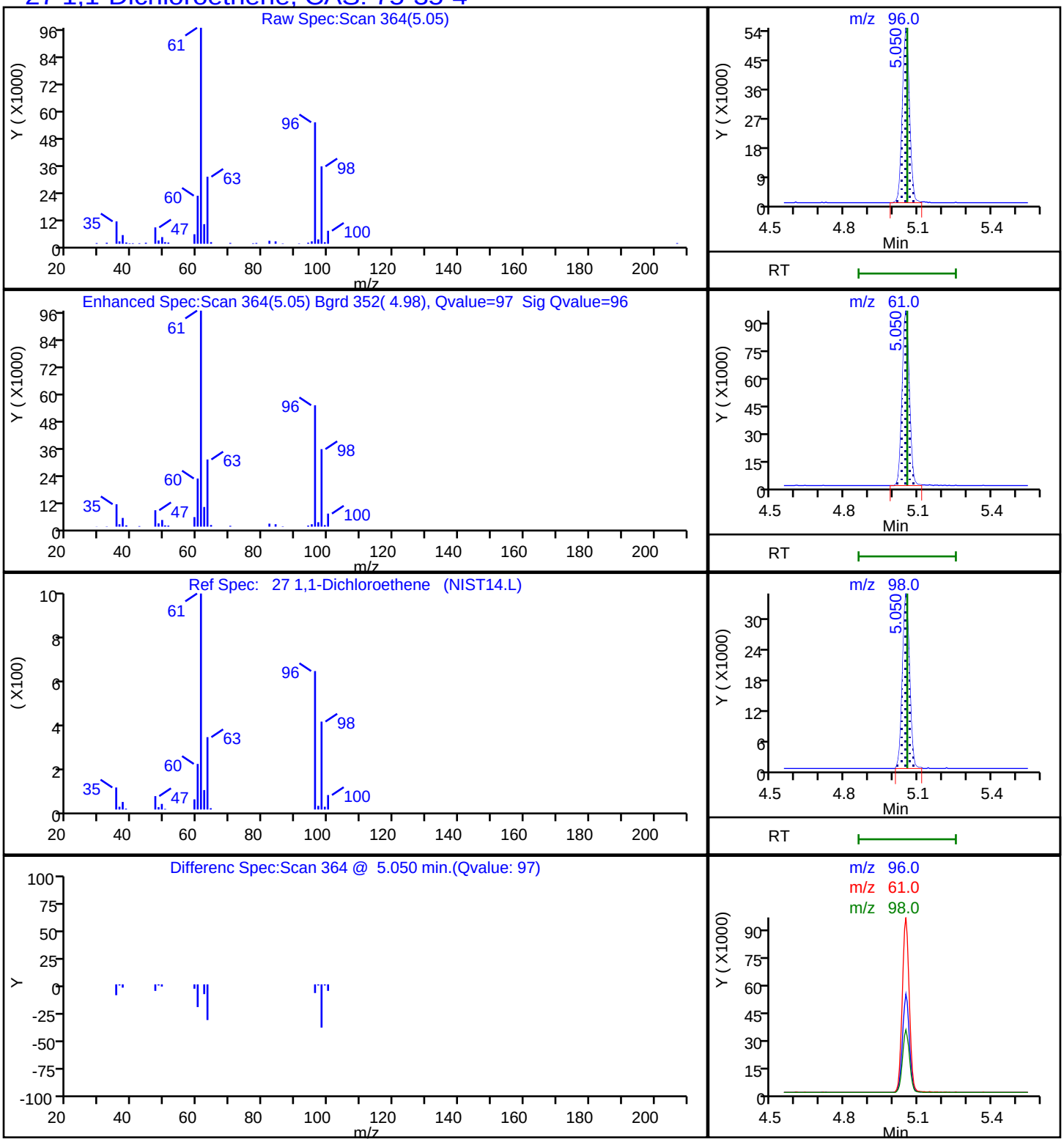
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D		
Injection Date:	01-Aug-2019 03:20:30	Instrument ID:	MR
Lims ID:	140-16177-A-3	Lab Sample ID:	140-16177-3
Client ID:	356023-SV-21		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	334.0300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

27 1,1-Dichloroethene, CAS: 75-35-4



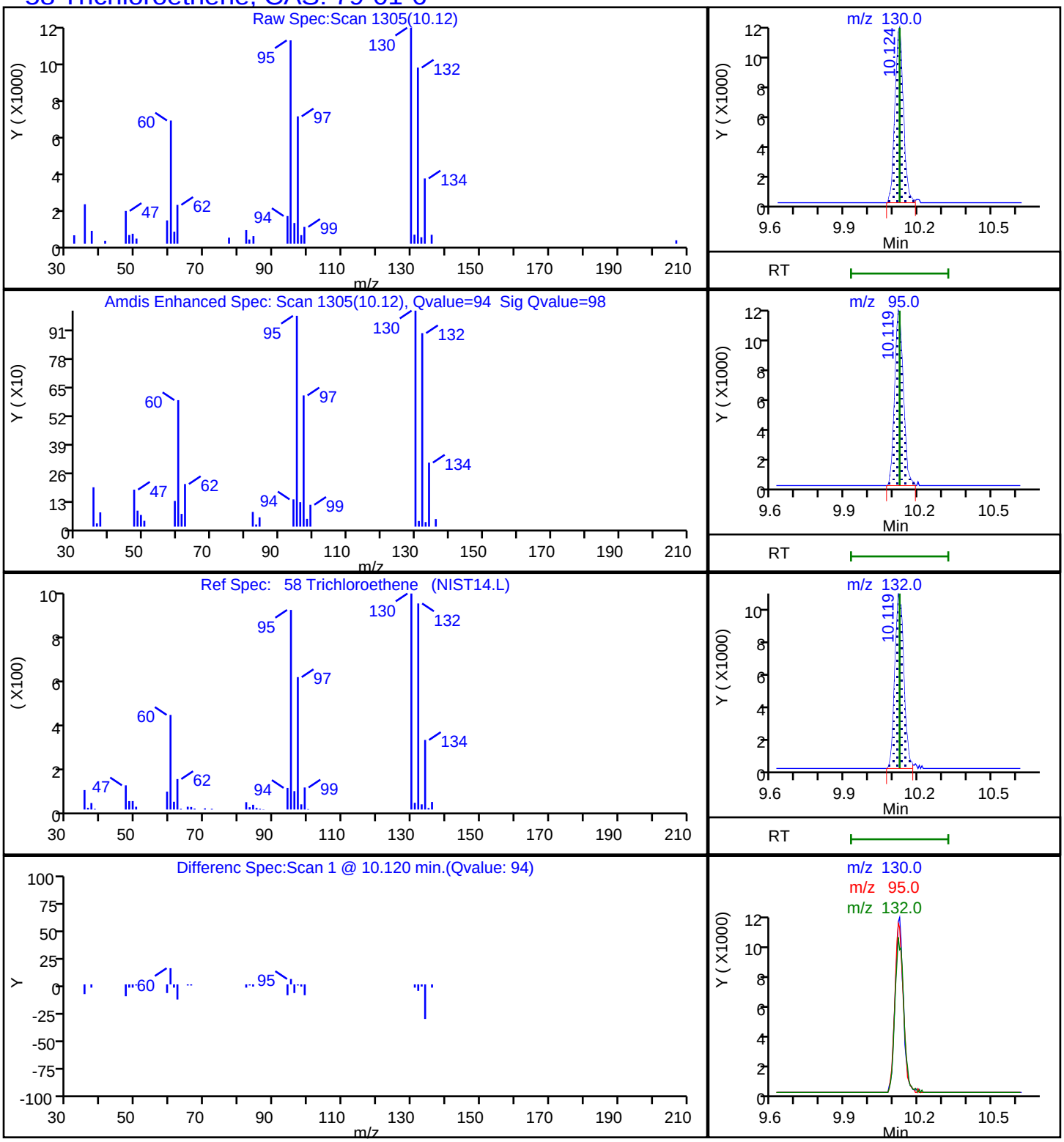
Report Date: 01-Aug-2019 15:31:07 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P109.D

Injection Date:	01-Aug-2019 03:20:30	Instrument ID:	MR
Lims ID:	140-16177-A-3	Lab Sample ID:	140-16177-3
Client ID:	356023-SV-21		
Operator ID:		ALS Bottle#:	9 Worklist Smp#: 21
Purge Vol:	500.000 mL	Dil. Factor:	334.0300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-22 Lab Sample ID: 140-16177-4

Matrix: Air Lab File ID: RG31P110.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 11:56

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 04:07

Soil Aliquot Vol: Dilution Factor: 37.98

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	3100		30	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		30	
79-00-5	1,1,2-Trichloroethane	133.41	ND		30	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		30	
75-34-3	1,1-Dichloroethane	98.96	ND		30	
75-35-4	1,1-Dichloroethene	96.94	430		15	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		30	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		30	
106-93-4	1,2-Dibromoethane	187.87	ND		30	
95-50-1	1,2-Dichlorobenzene	147.00	ND		30	
107-06-2	1,2-Dichloroethane	98.96	ND		30	
78-87-5	1,2-Dichloropropane	112.99	ND		30	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		30	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		30	
541-73-1	1,3-Dichlorobenzene	147.00	ND		30	
106-46-7	1,4-Dichlorobenzene	147.00	ND		30	
123-91-1	1,4-Dioxane	88.11	ND		76	
540-84-1	2,2,4-Trimethylpentane	114.23	120		76	
78-93-3	2-Butanone	72.11	820		120	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		76	
71-43-2	Benzene	78.11	ND		30	
100-44-7	Benzyl chloride	126.58	ND		61	
75-27-4	Bromodichloromethane	163.83	ND		30	
75-25-2	Bromoform	252.75	ND		30	
74-83-9	Bromomethane	94.94	ND		30	
56-23-5	Carbon tetrachloride	153.81	ND		12	
108-90-7	Chlorobenzene	112.56	ND		30	
75-00-3	Chloroethane	64.52	ND		30	
67-66-3	Chloroform	119.38	ND		30	
74-87-3	Chloromethane	50.49	ND		76	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		15	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		30	
110-82-7	Cyclohexane	84.16	ND		76	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-22 Lab Sample ID: 140-16177-4

Matrix: Air Lab File ID: RG31P110.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 11:56

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 04:07

Soil Aliquot Vol: Dilution Factor: 37.98

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		30	
75-71-8	Dichlorodifluoromethane	120.91	ND		30	
64-17-5	Ethanol	46.07	ND		760	
100-41-4	Ethylbenzene	106.17	ND		30	
87-68-3	Hexachlorobutadiene	260.76	ND		30	
110-54-3	Hexane	86.17	180		76	
1634-04-4	Methyl tert-butyl ether	88.15	ND		61	
75-09-2	Methylene Chloride	84.93	ND		76	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		30	
95-47-6	o-Xylene	106.17	ND		30	
100-42-5	Styrene	104.15	ND		30	
75-65-0	t-Butyl alcohol	74.12	ND		120	
127-18-4	Tetrachloroethene	165.83	ND		30	
108-88-3	Toluene	92.14	ND		46	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		30	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		30	
79-01-6	Trichloroethene	131.39	240		14	
75-69-4	Trichlorofluoromethane	137.37	ND		30	
75-01-4	Vinyl chloride	62.50	ND		15	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-22 Lab Sample ID: 140-16177-4

Matrix: Air Lab File ID: RG31P110.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 11:56

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 04:07

Soil Aliquot Vol: Dilution Factor: 37.98

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	17000		170	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		210	
79-00-5	1,1,2-Trichloroethane	133.41	ND		170	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		230	
75-34-3	1,1-Dichloroethane	98.96	ND		120	
75-35-4	1,1-Dichloroethene	96.94	1700		60	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		230	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		150	
106-93-4	1,2-Dibromoethane	187.87	ND		230	
95-50-1	1,2-Dichlorobenzene	147.00	ND		180	
107-06-2	1,2-Dichloroethane	98.96	ND		120	
78-87-5	1,2-Dichloropropane	112.99	ND		140	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		210	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		150	
541-73-1	1,3-Dichlorobenzene	147.00	ND		180	
106-46-7	1,4-Dichlorobenzene	147.00	ND		180	
123-91-1	1,4-Dioxane	88.11	ND		270	
540-84-1	2,2,4-Trimethylpentane	114.23	540		350	
78-93-3	2-Butanone	72.11	2400		360	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		310	
71-43-2	Benzene	78.11	ND		97	
100-44-7	Benzyl chloride	126.58	ND		310	
75-27-4	Bromodichloromethane	163.83	ND		200	
75-25-2	Bromoform	252.75	ND		310	
74-83-9	Bromomethane	94.94	ND		120	
56-23-5	Carbon tetrachloride	153.81	ND		76	
108-90-7	Chlorobenzene	112.56	ND		140	
75-00-3	Chloroethane	64.52	ND		80	
67-66-3	Chloroform	119.38	ND		150	
74-87-3	Chloromethane	50.49	ND		160	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		60	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		140	
110-82-7	Cyclohexane	84.16	ND		260	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-22 Lab Sample ID: 140-16177-4

Matrix: Air Lab File ID: RG31P110.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 11:56

Sample wt/vol: 50(mL) Date Analyzed: 08/01/2019 04:07

Soil Aliquot Vol: Dilution Factor: 37.98

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		260	
75-71-8	Dichlorodifluoromethane	120.91	ND		150	
64-17-5	Ethanol	46.07	ND		1400	
100-41-4	Ethylbenzene	106.17	ND		130	
87-68-3	Hexachlorobutadiene	260.76	ND		320	
110-54-3	Hexane	86.17	630		270	
1634-04-4	Methyl tert-butyl ether	88.15	ND		220	
75-09-2	Methylene Chloride	84.93	ND		260	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		130	
95-47-6	o-Xylene	106.17	ND		130	
100-42-5	Styrene	104.15	ND		130	
75-65-0	t-Butyl alcohol	74.12	ND		370	
127-18-4	Tetrachloroethene	165.83	ND		210	
108-88-3	Toluene	92.14	ND		170	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		120	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		140	
79-01-6	Trichloroethene	131.39	1300		73	
75-69-4	Trichlorofluoromethane	137.37	ND		170	
75-01-4	Vinyl chloride	62.50	ND		39	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D				
Lims ID:	140-16177-A-4				
Client ID:	356023-SV-22				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 04:07:30	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800		
Sample Info:	140-0012543-022				
Misc. Info.:	140-16177-a-4@37.98				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 16:02:56	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				
First Level Reviewer: khachitpongpanits		Date:	01-Aug-2019 16:02:56		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.315	7.320	-0.006	68	191349	4.00	
* 2 1,4-Difluorobenzene	114	9.369	9.374	-0.005	95	1038490	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.432	14.438	-0.006	91	866445	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.163	0.000	88	714321	4.03	
27 1,1-Dichloroethene	96	5.044	5.051	-0.011	97	81445	1.14	
37 1,1-Dichloroethane	63	6.241	6.242	-0.006	96	8548	0.0752	
39 2-Butanone (MEK)	72	6.667	6.679	-0.017	97	59300	2.17	
40 Hexane	56	6.791	6.792	-0.006	79	18721	0.4709	
47 1,1,1-Trichloroethane	97	8.264	8.263	-0.005	95	1868636	8.16	
49 Benzene	78	8.808	8.809	-0.006	53	2907	0.0171	
51 Cyclohexane	69	8.846	8.852	-0.011	87	1158	0.0444	
52 Carbon tetrachloride	117	8.851	8.857	-0.011	37	1669	0.008306	
55 Isooctane	57	9.682	9.682	-0.005	92	64355	0.3054	
58 Trichloroethene	130	10.119	10.118	-0.005	96	67096	0.6372	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

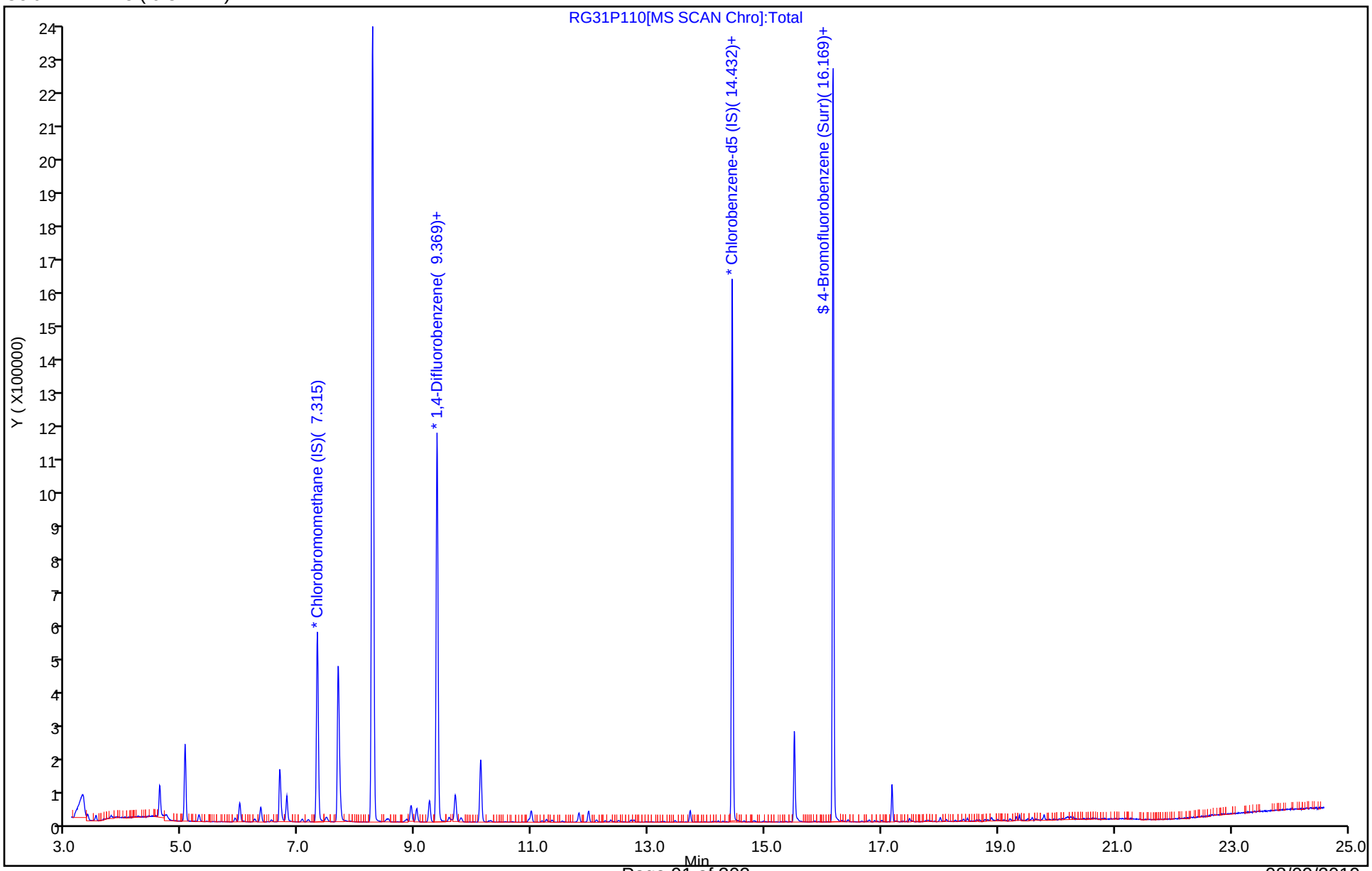
Report Date: 01-Aug-2019 16:02:57 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D

Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4	Worklist Smp#:	22
Client ID:	356023-SV-22				
Purge Vol:	500.000 mL	Dil. Factor:	37.9800	ALS Bottle#:	10
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D				
Lims ID:	140-16177-A-4				
Client ID:	356023-SV-22				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 04:07:30	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800		
Sample Info:	140-0012543-022				
Misc. Info.:	140-16177-a-4@37.98				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 16:02:56	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				

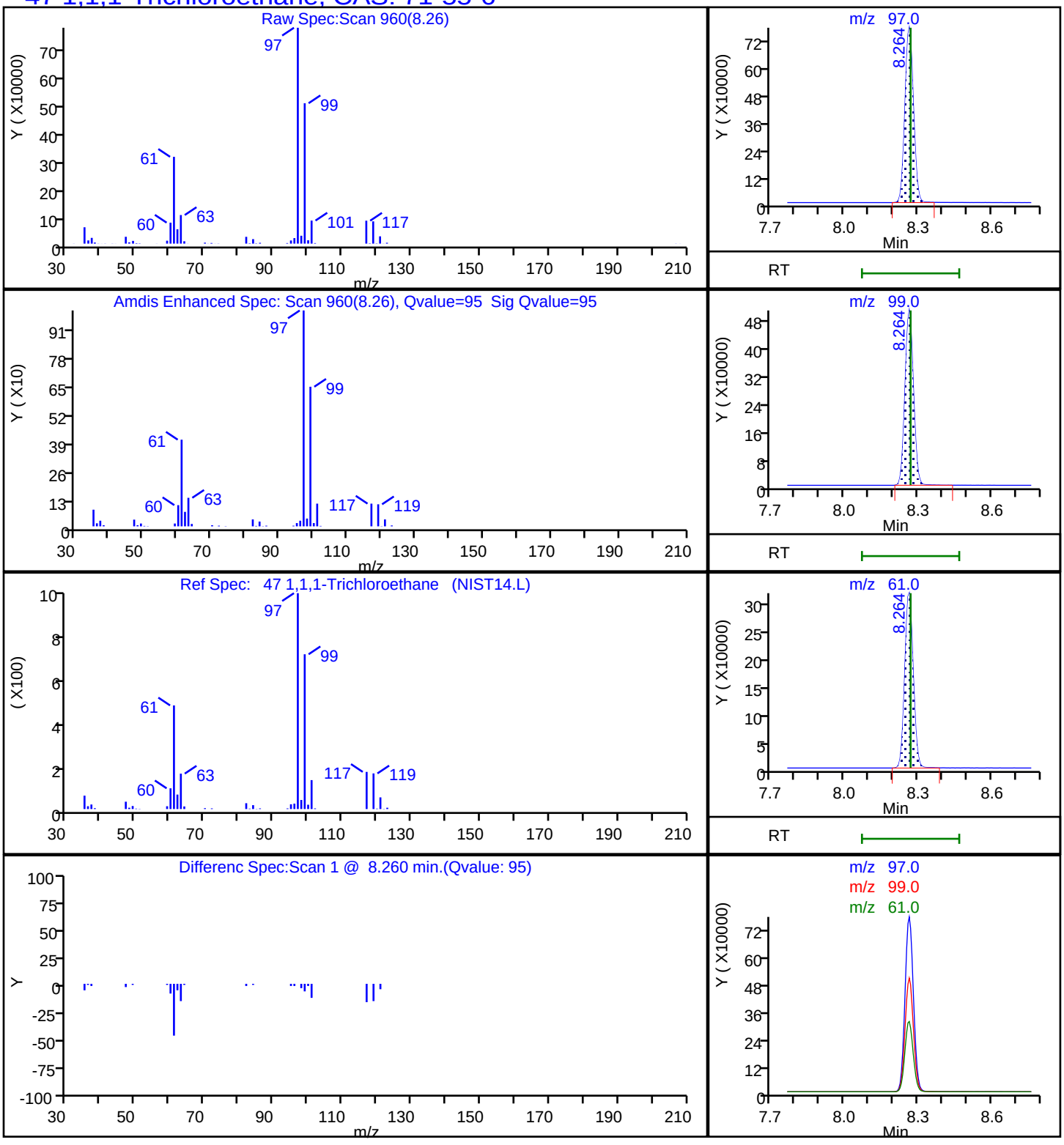
First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 16:02:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.03	100.71

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D		
Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4
Client ID:	356023-SV-22		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

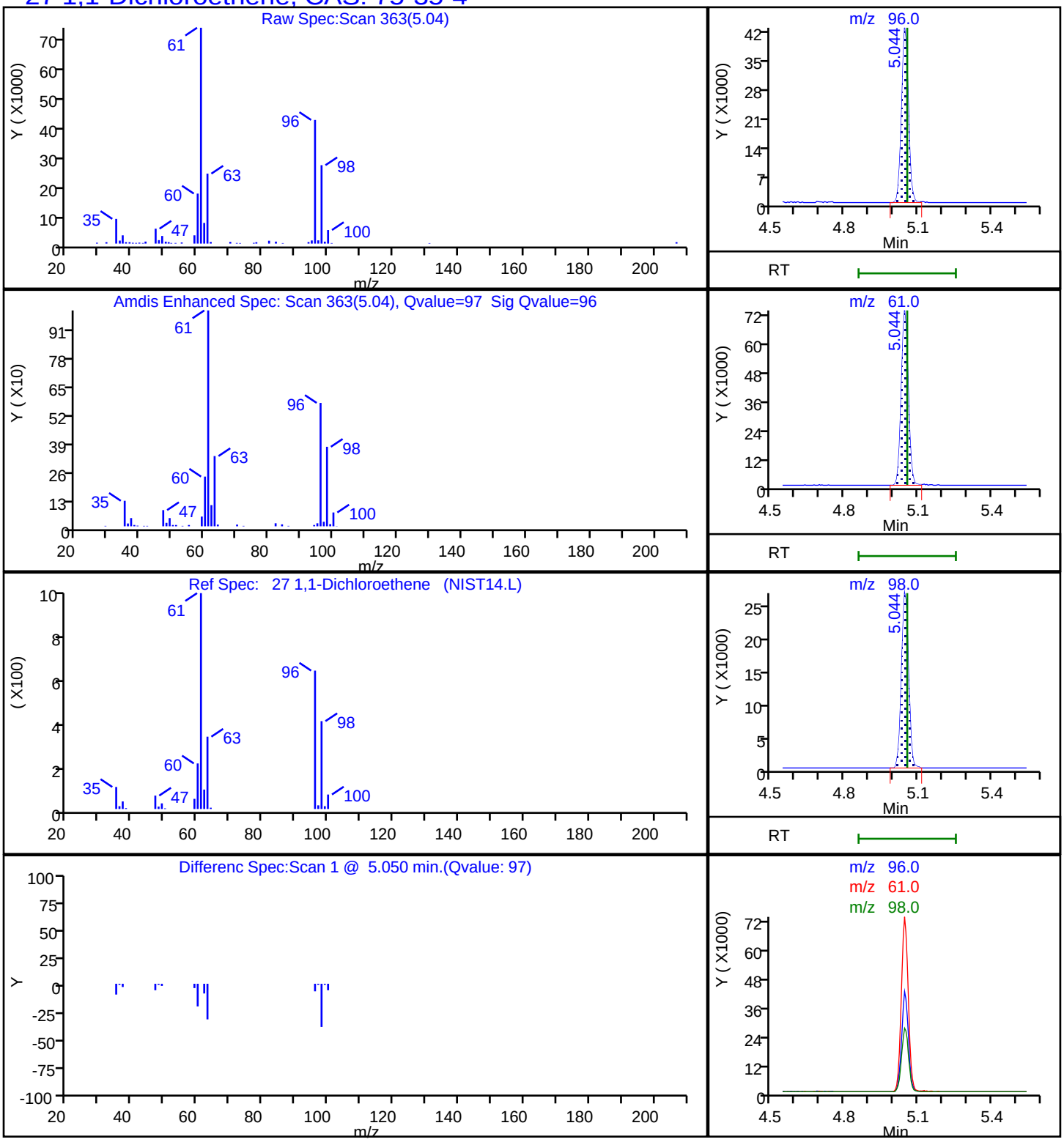
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D		
Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4
Client ID:	356023-SV-22		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

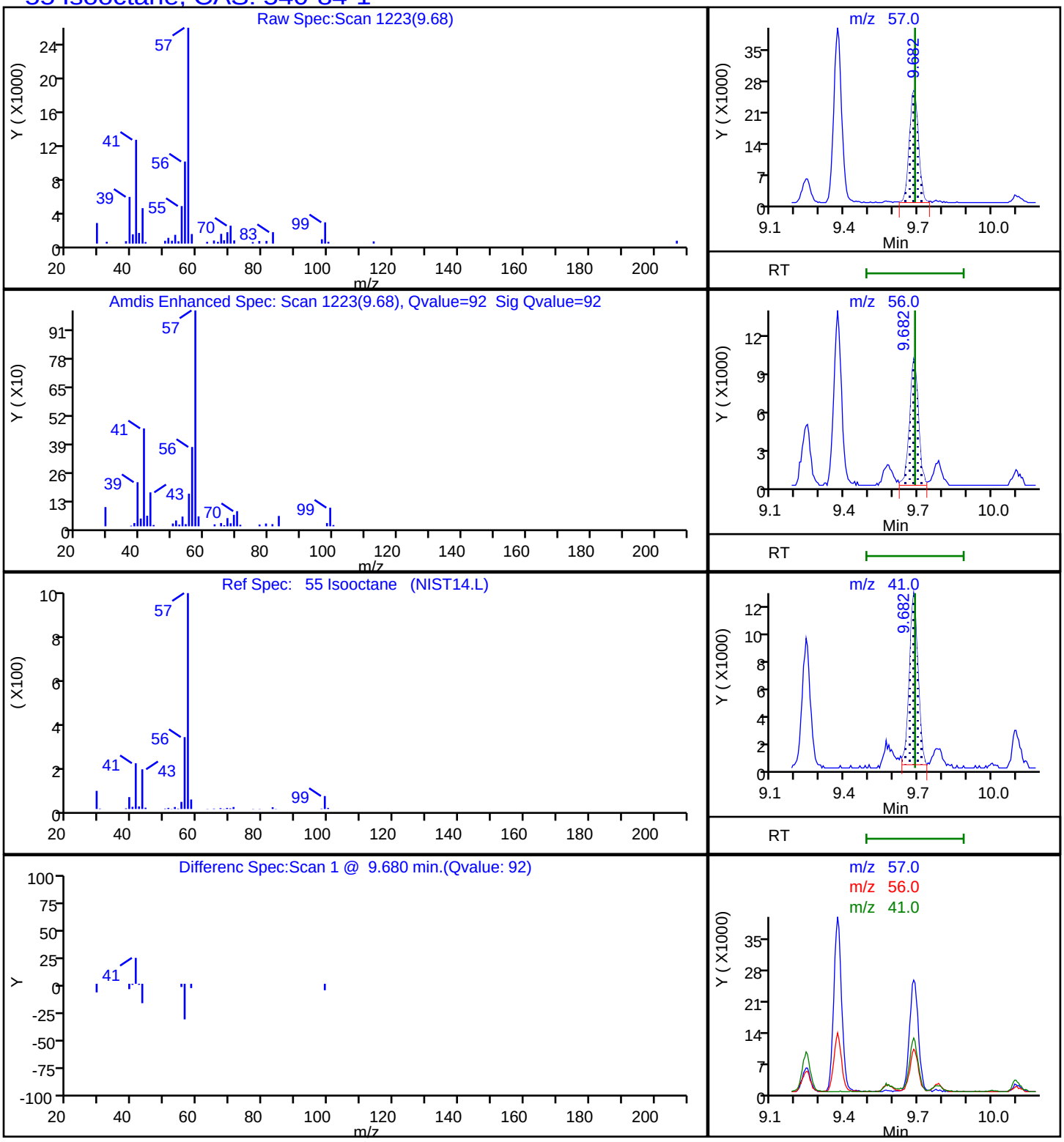
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D		
Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4
Client ID:	356023-SV-22		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

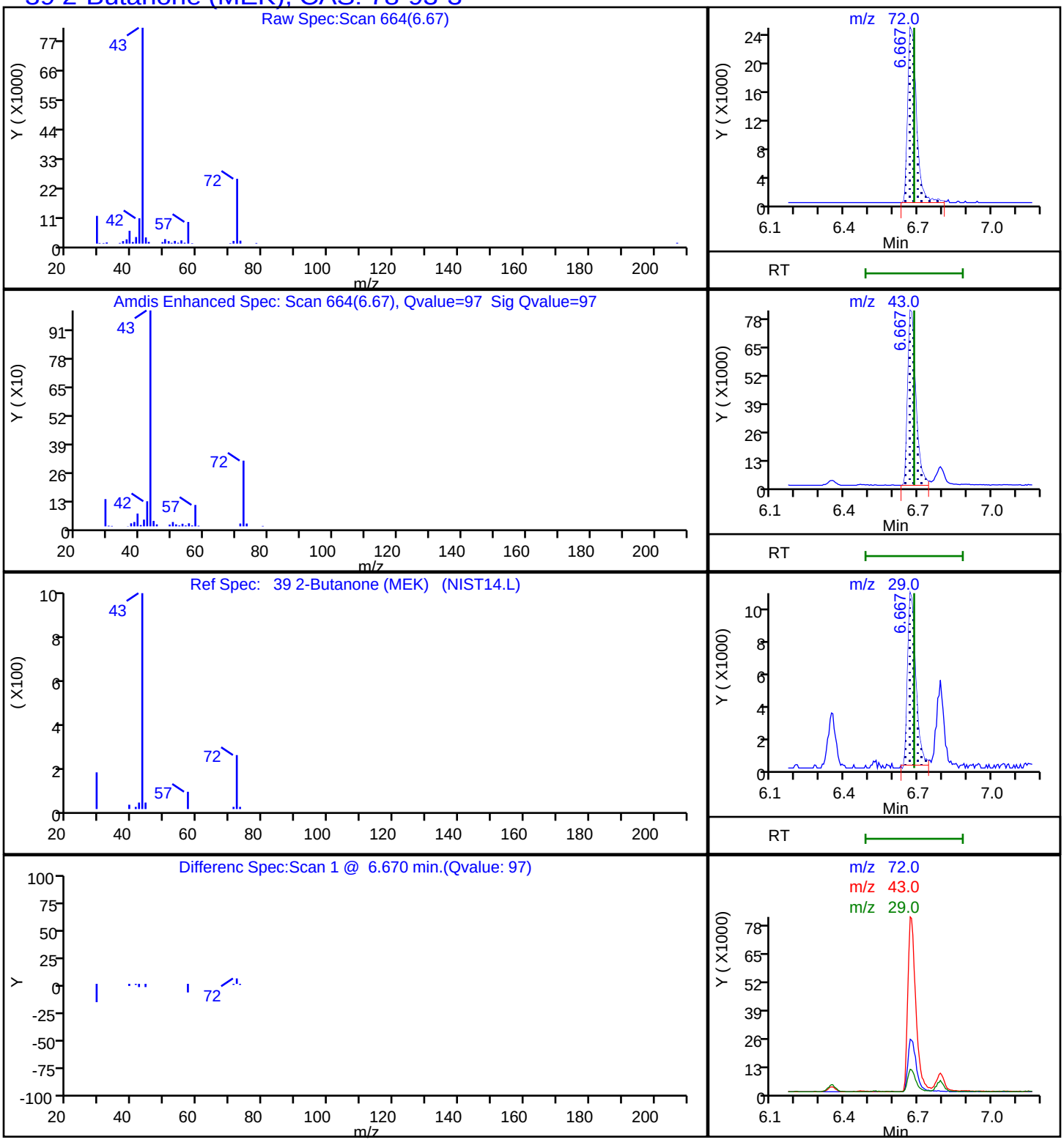
55 Isooctane, CAS: 540-84-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D		
Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4
Client ID:	356023-SV-22		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

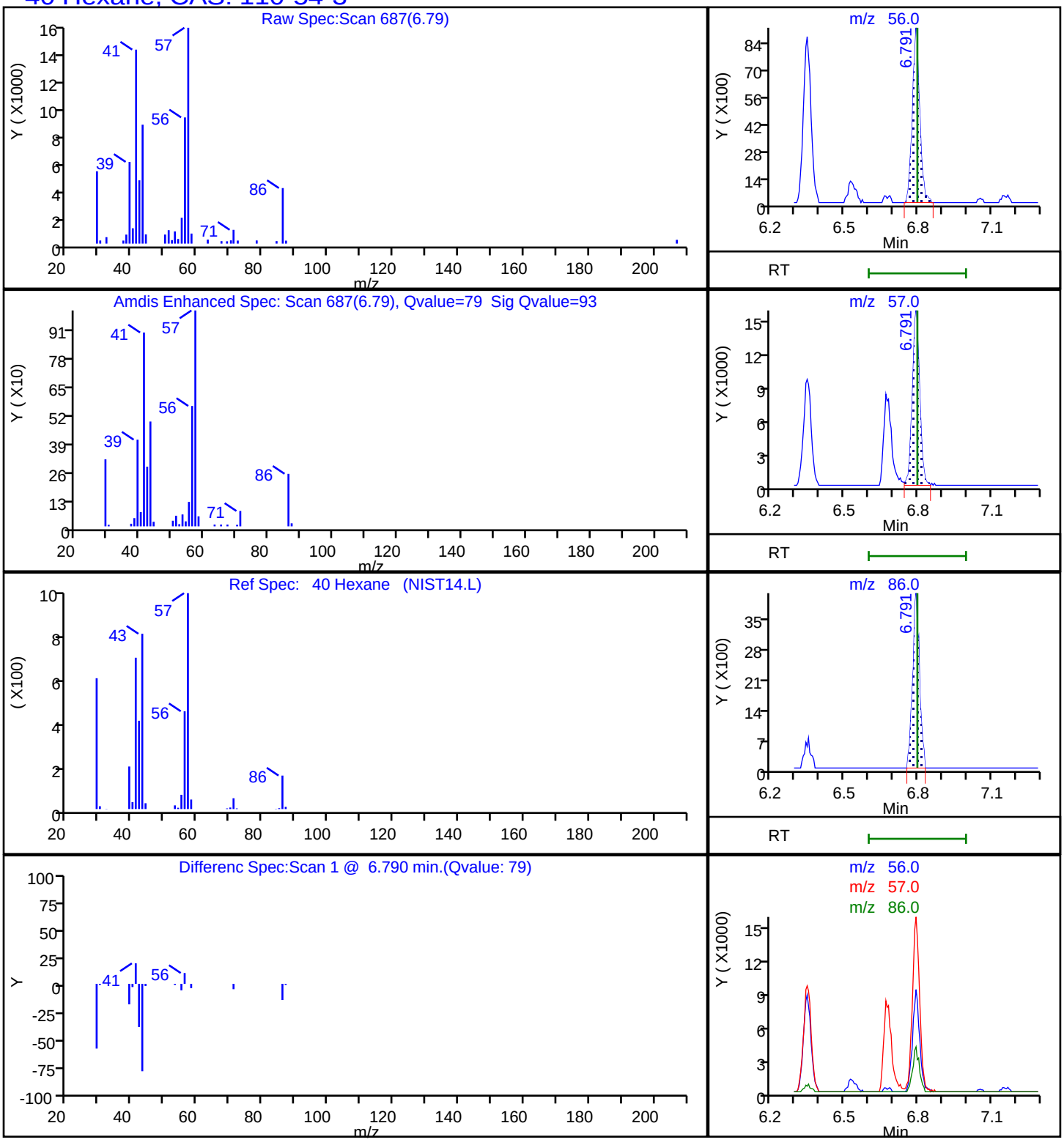
39 2-Butanone (MEK), CAS: 78-93-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D		
Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4
Client ID:	356023-SV-22		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

40 Hexane, CAS: 110-54-3



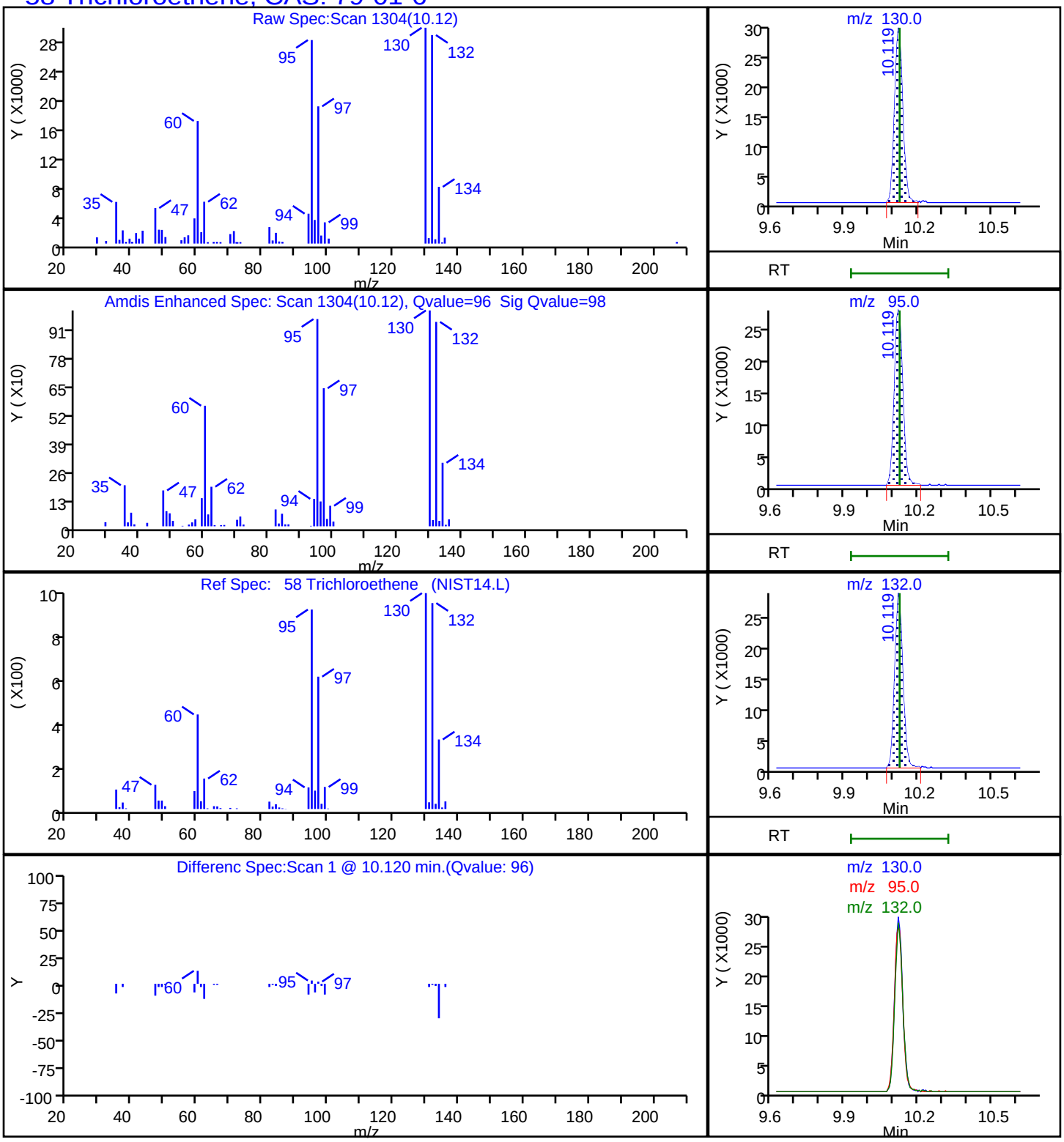
Report Date: 01-Aug-2019 16:02:57 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D

Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4
Client ID:	356023-SV-22		
Operator ID:		ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



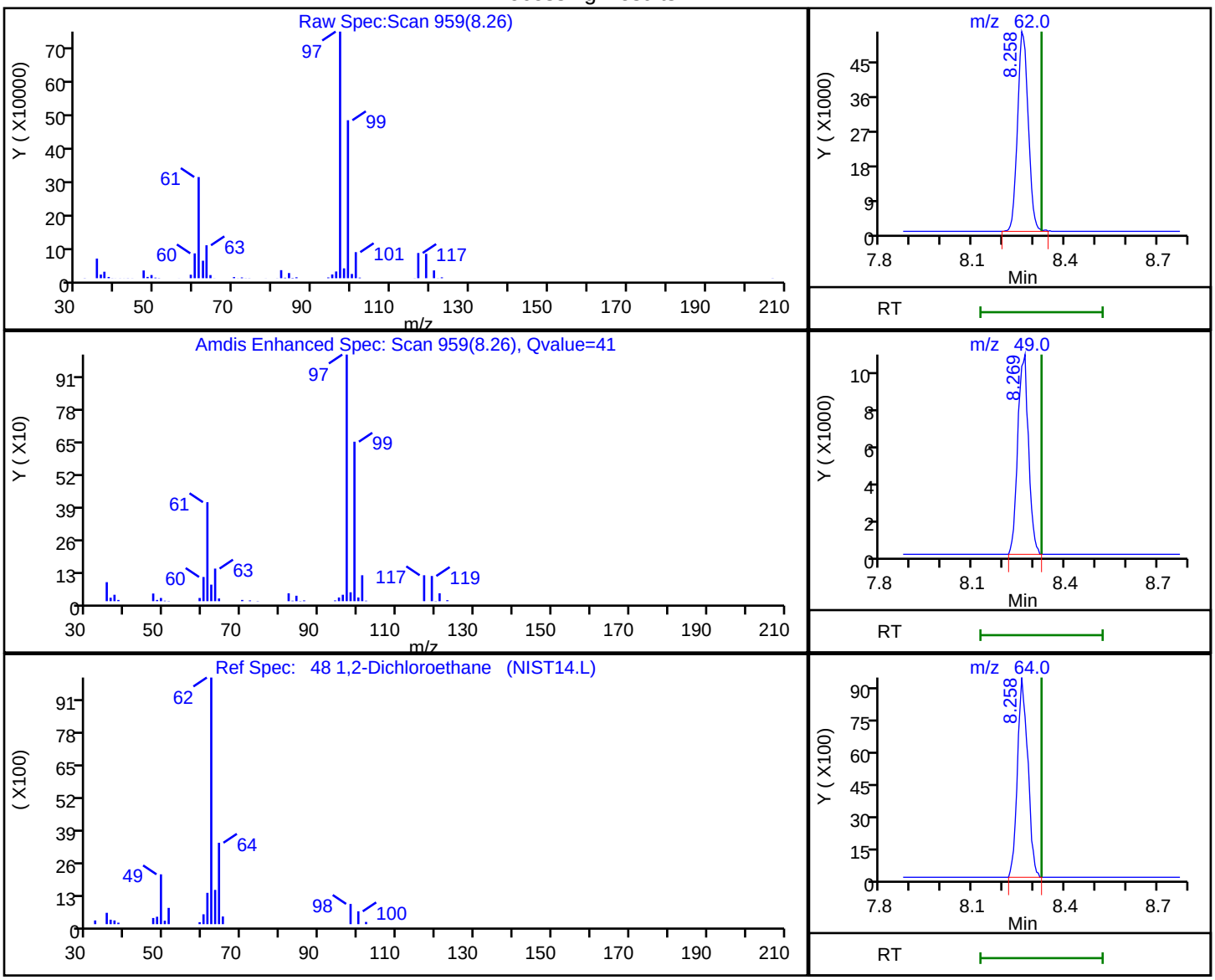
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P110.D				
Injection Date:	01-Aug-2019 04:07:30	Instrument ID:	MR		
Lims ID:	140-16177-A-4	Lab Sample ID:	140-16177-4		
Client ID:	356023-SV-22				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	37.9800		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

48 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
8.26	62.00	128790	0.962238
8.27	49.00	24809	
8.26	64.00	22278	

Reviewer: khachitpongpanits, 01-Aug-2019 16:02:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Matrix: Air Lab File ID: RG31P111.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 13:43

Sample wt/vol: 60(mL) Date Analyzed: 08/01/2019 04:55

Soil Aliquot Vol: Dilution Factor: 42.93

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	3600		29	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		29	
79-00-5	1,1,2-Trichloroethane	133.41	ND		29	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		29	
75-34-3	1,1-Dichloroethane	98.96	ND		29	
75-35-4	1,1-Dichloroethene	96.94	890		14	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		29	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		29	
106-93-4	1,2-Dibromoethane	187.87	ND		29	
95-50-1	1,2-Dichlorobenzene	147.00	ND		29	
107-06-2	1,2-Dichloroethane	98.96	ND		29	
78-87-5	1,2-Dichloropropane	112.99	ND		29	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		29	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		29	
541-73-1	1,3-Dichlorobenzene	147.00	ND		29	
106-46-7	1,4-Dichlorobenzene	147.00	ND		29	
123-91-1	1,4-Dioxane	88.11	ND		72	
540-84-1	2,2,4-Trimethylpentane	114.23	81		72	
78-93-3	*2-Butanone*	*72.11*	*6200*	*E*	*110*	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		72	
71-43-2	Benzene	78.11	ND		29	
100-44-7	Benzyl chloride	126.58	ND		57	
75-27-4	Bromodichloromethane	163.83	ND		29	
75-25-2	Bromoform	252.75	ND		29	
74-83-9	Bromomethane	94.94	ND		29	
56-23-5	Carbon tetrachloride	153.81	ND		11	
108-90-7	Chlorobenzene	112.56	ND		29	
75-00-3	Chloroethane	64.52	ND		29	
67-66-3	Chloroform	119.38	ND		29	
74-87-3	Chloromethane	50.49	ND		72	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		14	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		29	
110-82-7	Cyclohexane	84.16	ND		72	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Matrix: Air Lab File ID: RG31P111.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 13:43

Sample wt/vol: 60(mL) Date Analyzed: 08/01/2019 04:55

Soil Aliquot Vol: Dilution Factor: 42.93

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		29	
75-71-8	Dichlorodifluoromethane	120.91	ND		29	
64-17-5	Ethanol	46.07	ND		720	
100-41-4	Ethylbenzene	106.17	ND		29	
87-68-3	Hexachlorobutadiene	260.76	ND		29	
110-54-3	Hexane	86.17	ND		72	
1634-04-4	Methyl tert-butyl ether	88.15	ND		57	
75-09-2	Methylene Chloride	84.93	ND		72	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		29	
95-47-6	o-Xylene	106.17	ND		29	
100-42-5	Styrene	104.15	ND		29	
75-65-0	t-Butyl alcohol	74.12	ND		110	
127-18-4	Tetrachloroethene	165.83	ND		29	
108-88-3	Toluene	92.14	ND		43	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		29	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		29	
79-01-6	Trichloroethene	131.39	54		13	
75-69-4	Trichlorofluoromethane	137.37	ND		29	
75-01-4	Vinyl chloride	62.50	ND		14	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Matrix: Air Lab File ID: RG31P111.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 13:43

Sample wt/vol: 60(mL) Date Analyzed: 08/01/2019 04:55

Soil Aliquot Vol: Dilution Factor: 42.93

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	20000		160	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		200	
79-00-5	1,1,2-Trichloroethane	133.41	ND		160	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		220	
75-34-3	1,1-Dichloroethane	98.96	ND		120	
75-35-4	1,1-Dichloroethene	96.94	3500		57	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		210	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		140	
106-93-4	1,2-Dibromoethane	187.87	ND		220	
95-50-1	1,2-Dichlorobenzene	147.00	ND		170	
107-06-2	1,2-Dichloroethane	98.96	ND		120	
78-87-5	1,2-Dichloropropane	112.99	ND		130	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		200	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		140	
541-73-1	1,3-Dichlorobenzene	147.00	ND		170	
106-46-7	1,4-Dichlorobenzene	147.00	ND		170	
123-91-1	1,4-Dioxane	88.11	ND		260	
540-84-1	2,2,4-Trimethylpentane	114.23	380		330	
78-93-3	*2-Butanone*	*72.11*	*18000*	*E*	*340*	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		290	
71-43-2	Benzene	78.11	ND		91	
100-44-7	Benzyl chloride	126.58	ND		300	
75-27-4	Bromodichloromethane	163.83	ND		190	
75-25-2	Bromoform	252.75	ND		300	
74-83-9	Bromomethane	94.94	ND		110	
56-23-5	Carbon tetrachloride	153.81	ND		72	
108-90-7	Chlorobenzene	112.56	ND		130	
75-00-3	Chloroethane	64.52	ND		76	
67-66-3	Chloroform	119.38	ND		140	
74-87-3	Chloromethane	50.49	ND		150	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		57	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		130	
110-82-7	Cyclohexane	84.16	ND		250	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-23 Lab Sample ID: 140-16177-5

Matrix: Air Lab File ID: RG31P111.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 13:43

Sample wt/vol: 60(mL) Date Analyzed: 08/01/2019 04:55

Soil Aliquot Vol: Dilution Factor: 42.93

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		240	
75-71-8	Dichlorodifluoromethane	120.91	ND		140	
64-17-5	Ethanol	46.07	ND		1300	
100-41-4	Ethylbenzene	106.17	ND		120	
87-68-3	Hexachlorobutadiene	260.76	ND		310	
110-54-3	Hexane	86.17	ND		250	
1634-04-4	Methyl tert-butyl ether	88.15	ND		210	
75-09-2	Methylene Chloride	84.93	ND		250	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		120	
95-47-6	o-Xylene	106.17	ND		120	
100-42-5	Styrene	104.15	ND		120	
75-65-0	t-Butyl alcohol	74.12	ND		350	
127-18-4	Tetrachloroethene	165.83	ND		190	
108-88-3	Toluene	92.14	ND		160	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		110	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		130	
79-01-6	Trichloroethene	131.39	290		69	
75-69-4	Trichlorofluoromethane	137.37	ND		160	
75-01-4	Vinyl chloride	62.50	ND		37	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D
Lims ID: 140-16177-A-5
Client ID: 356023-SV-23
Sample Type: Client
Inject. Date: 01-Aug-2019 04:55:30 ALS Bottle#: 11 Worklist Smp#: 23
Purge Vol: 500.000 mL Dil. Factor: 42.9300
Sample Info: 140-0012543-023
Misc. Info.: 140-16177-a-5@42.93
Operator ID: Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Aug-2019 09:05:13 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: khachitpongpanits Date: 02-Aug-2019 10:11:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.325	7.320	0.005	68	192665	4.00	
* 2 1,4-Difluorobenzene	114	9.380	9.374	0.006	95	1030690	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	90	868823	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	718965	4.04	
27 1,1-Dichloroethene	96	5.050	5.066	-0.005	96	178534	2.49	
37 1,1-Dichloroethane	63	6.252	6.260	0.005	97	5954	0.0520	
39 2-Butanone (MEK)	72	6.668	6.698	-0.016	97	480153	17.4	E
40 Hexane	56	6.786	6.812	-0.011	87	1745	0.0436	
47 1,1,1-Trichloroethane	97	8.269	8.287	0.000	95	2324696	10.1	
51 Cyclohexane	69	8.846	8.867	-0.011	78	949	0.0366	
52 Carbon tetrachloride	117	8.868	8.872	0.006	88	2982	0.0150	
55 Isooctane	57	9.687	9.698	0.000	93	47640	0.2278	
58 Trichloroethene	130	10.129	10.135	0.005	96	15654	0.1498	
67 Toluene	91	12.351	12.345	0.005	92	11110	0.0530	
92 1,2,4-Trimethylbenzene	105	17.479	17.495	-0.016	97	9207	0.0255	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

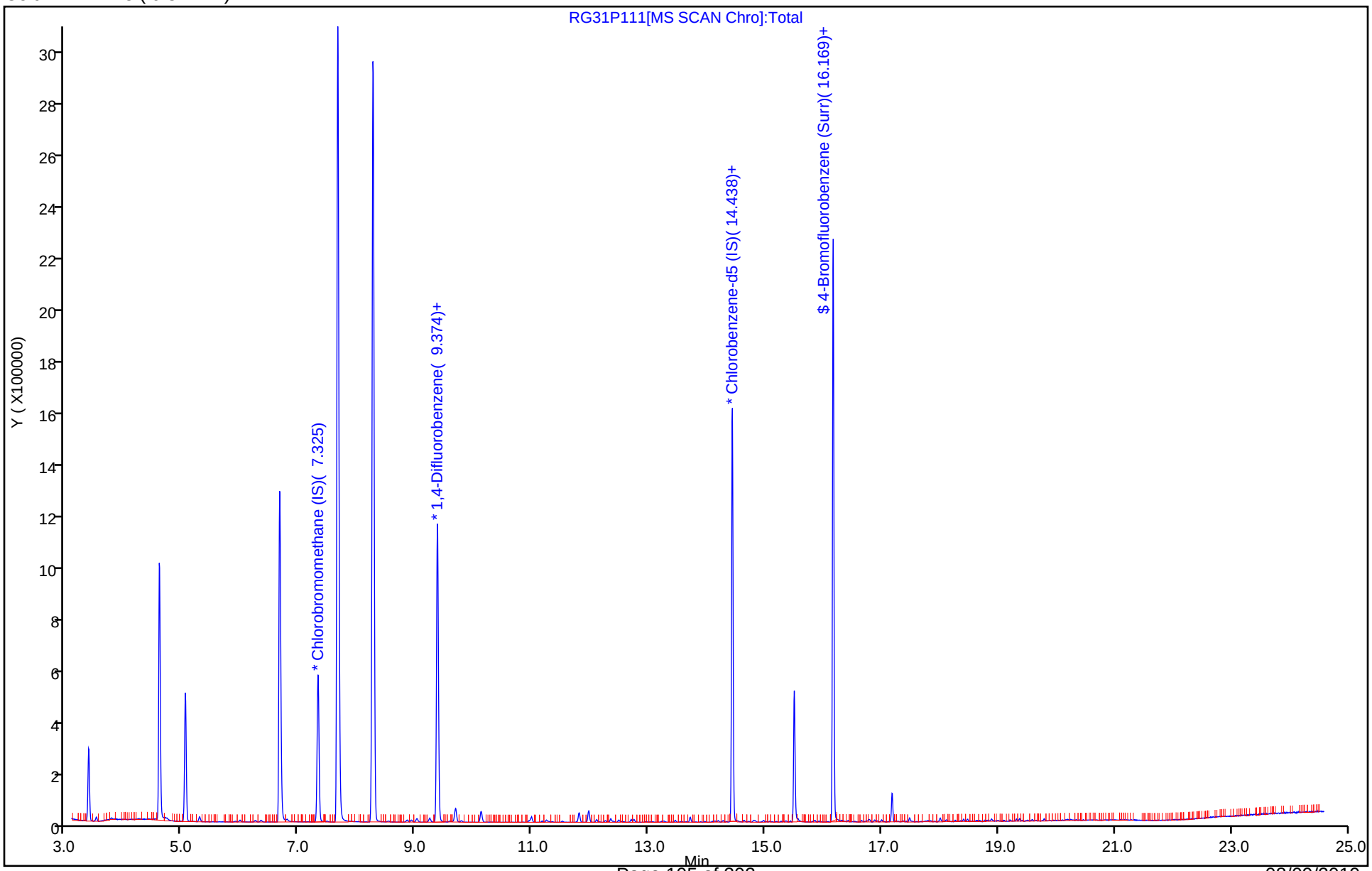
Report Date: 02-Aug-2019 10:11:45 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D

Injection Date:	01-Aug-2019 04:55:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5	Worklist Smp#:	23
Client ID:	356023-SV-23				
Purge Vol:	500.000 mL	Dil. Factor:	42.9300	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D				
Lims ID:	140-16177-A-5				
Client ID:	356023-SV-23				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 04:55:30	ALS Bottle#:	11	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	42.9300		
Sample Info:	140-0012543-023				
Misc. Info.:	140-16177-a-5@42.93				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 09:05:13	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0311				
First Level Reviewer: khachitpongpanits		Date:	02-Aug-2019 10:11:44		

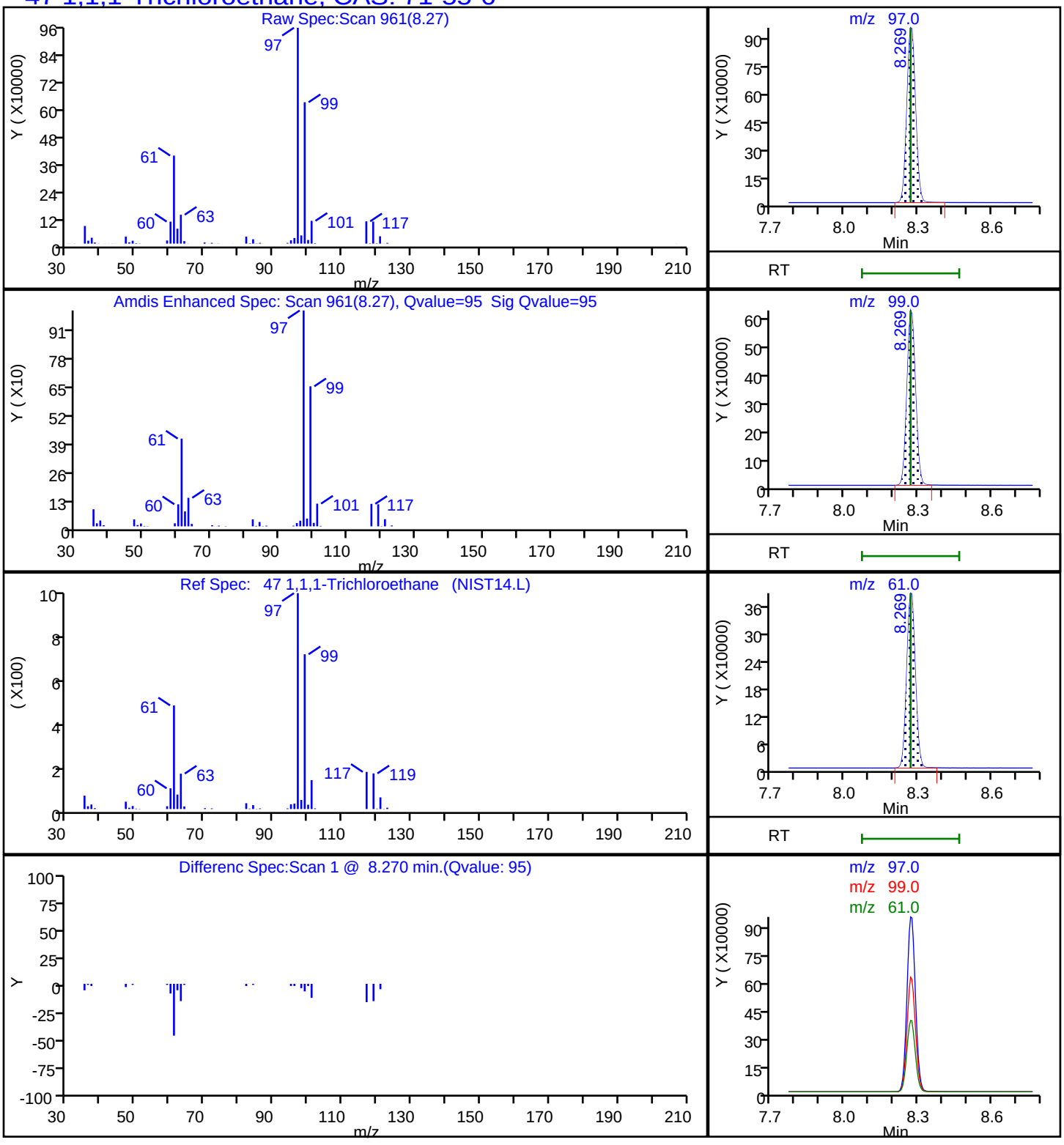
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.04	101.08

Report Date: 02-Aug-2019 10:11:45 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D				
Injection Date:	01-Aug-2019 04:55:30	Instrument ID:	MR		
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5		
Client ID:	356023-SV-23				
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	23
Purge Vol:	500.000 mL	Dil. Factor:	42.9300		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

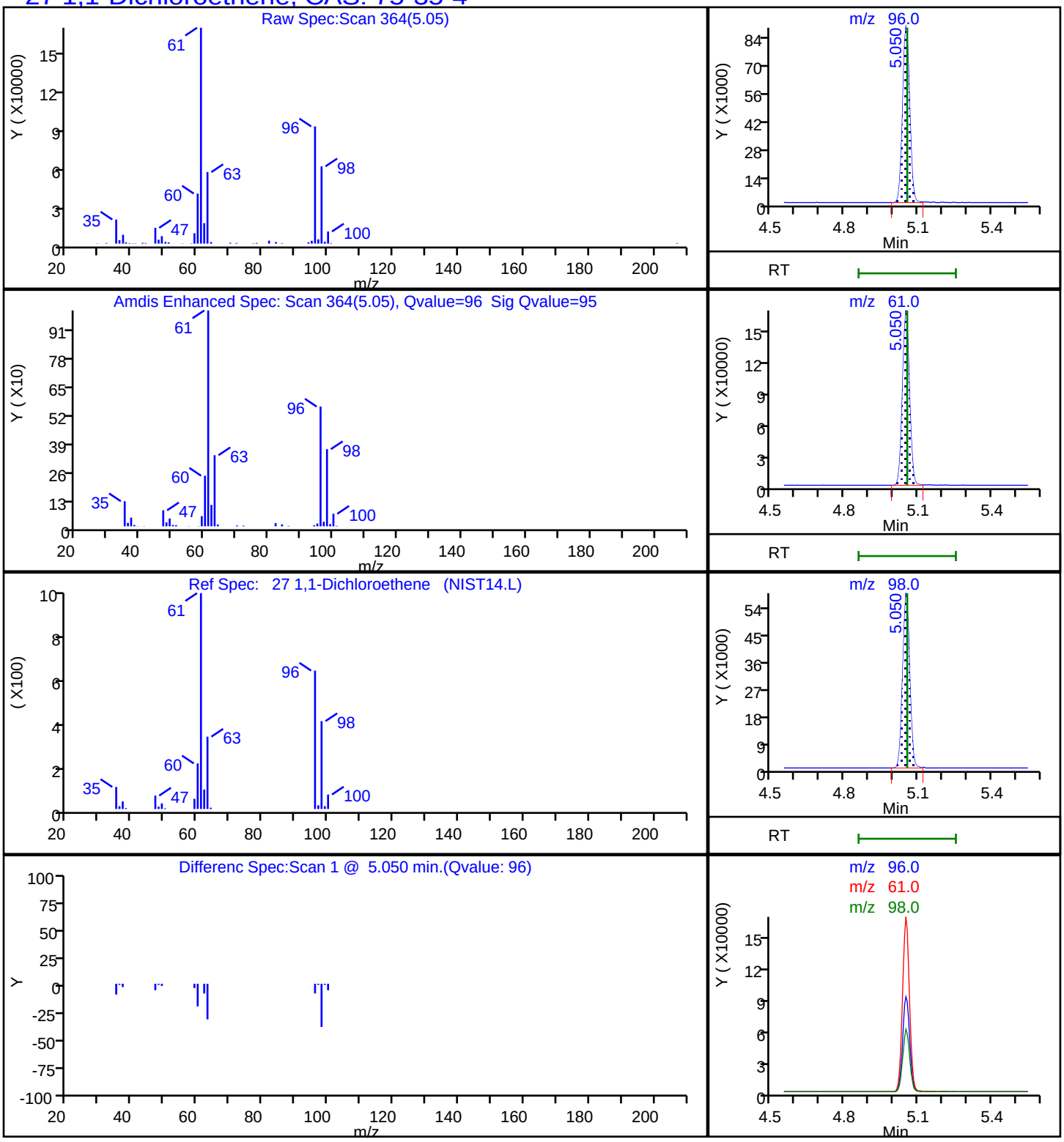
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D		
Injection Date:	01-Aug-2019 04:55:30	Instrument ID:	MR
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5
Client ID:	356023-SV-23		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	42.9300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

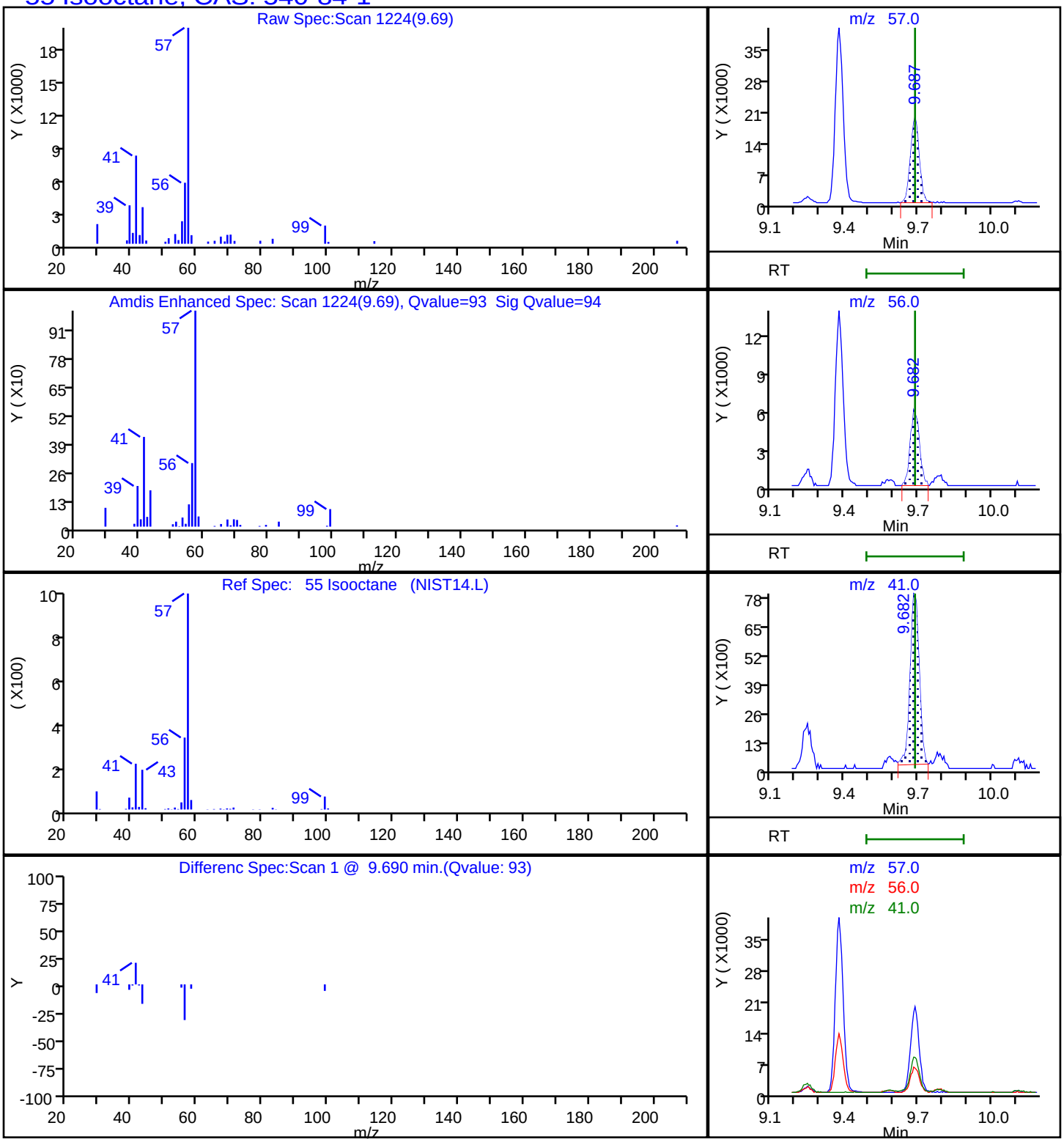
27 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D		
Injection Date:	01-Aug-2019 04:55:30	Instrument ID:	MR
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5
Client ID:	356023-SV-23		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	42.9300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

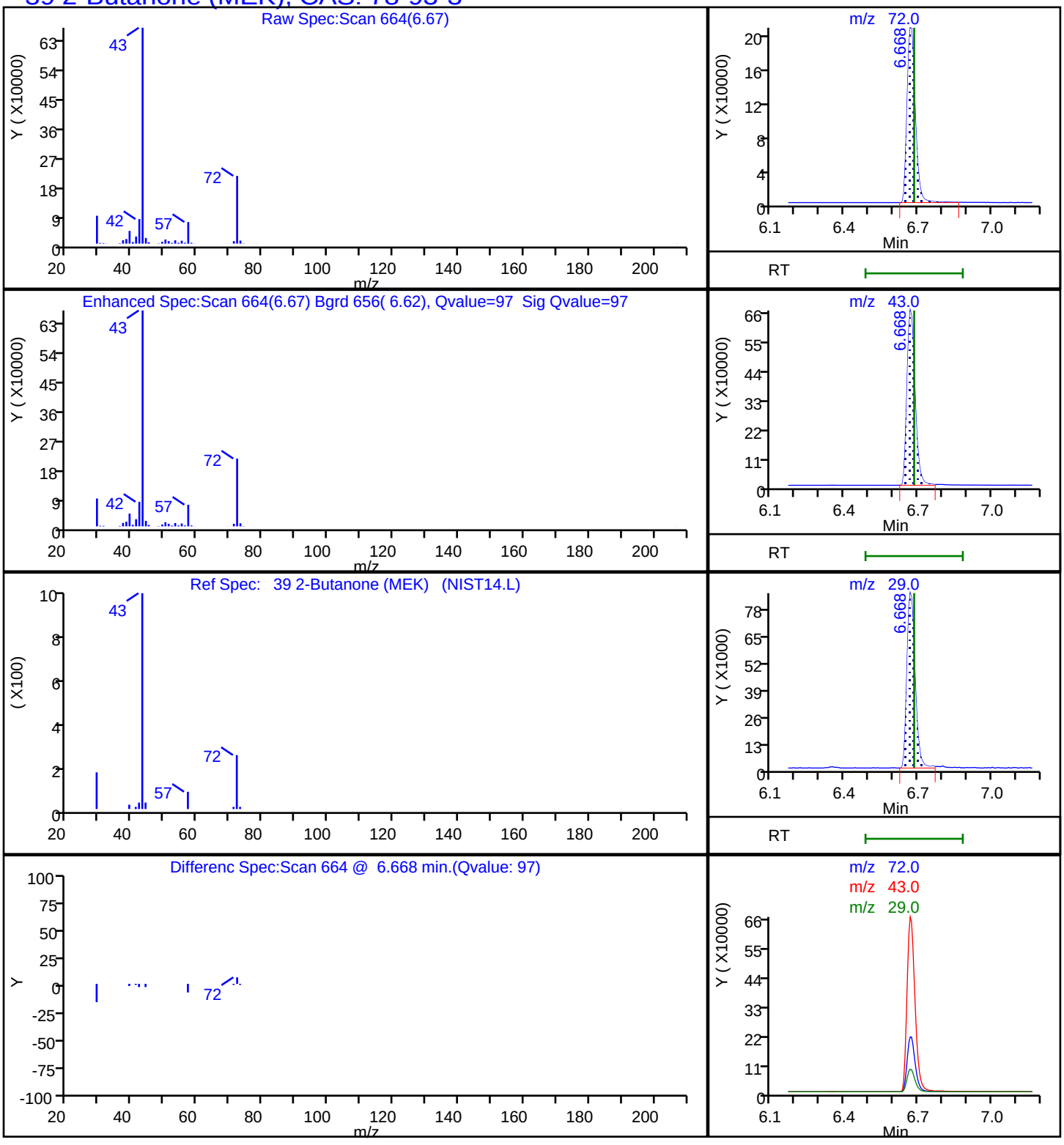
55 Isooctane, CAS: 540-84-1



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D		
Injection Date:	01-Aug-2019 04:55:30	Instrument ID:	MR
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5
Client ID:	356023-SV-23		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	42.9300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

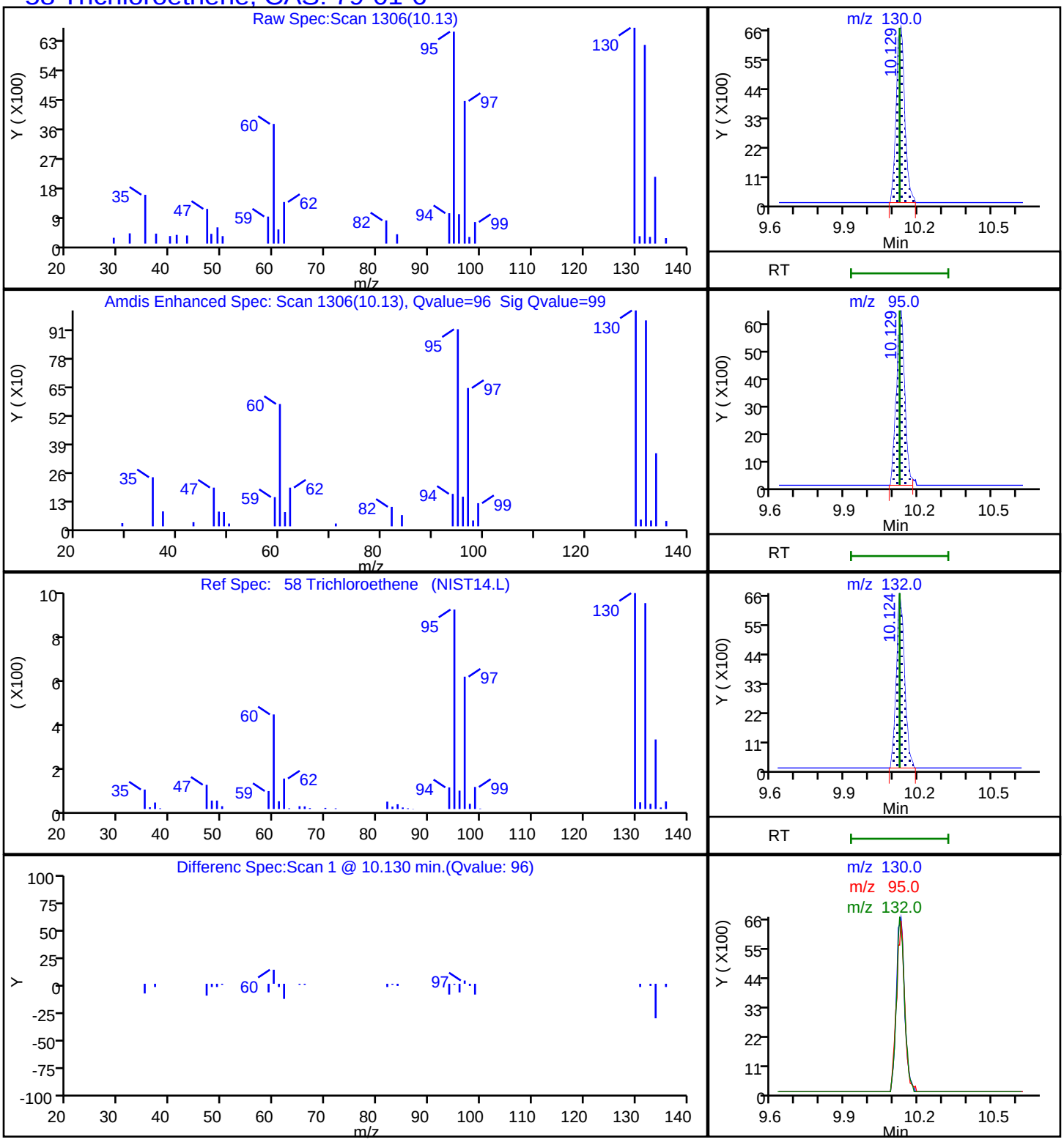
39 2-Butanone (MEK), CAS: 78-93-3



Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111.D		
Injection Date:	01-Aug-2019 04:55:30	Instrument ID:	MR
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5
Client ID:	356023-SV-23		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 23
Purge Vol:	500.000 mL	Dil. Factor:	42.9300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

58 Trichloroethene, CAS: 79-01-6



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-23 DL Lab Sample ID: 140-16177-5 DL

Matrix: Air Lab File ID: RG31P111DL.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 13:43

Sample wt/vol: 30(mL) Date Analyzed: 08/01/2019 08:16

Soil Aliquot Vol: Dilution Factor: 42.93

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
78-93-3	2-Butanone	72.11	5600	D	230	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: 356023-SV-23 DL Lab Sample ID: 140-16177-5 DL

Matrix: Air Lab File ID: RG31P111DL.D

Analysis Method: TO 15 LL Date Collected: 07/26/2019 13:43

Sample wt/vol: 30(mL) Date Analyzed: 08/01/2019 08:16

Soil Aliquot Vol: Dilution Factor: 42.93

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
78-93-3	2-Butanone	72.11	16000	D	680	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111DL.D
Lims ID: 140-16177-A-5
Client ID: 356023-SV-23
Sample Type: Client
Inject. Date: 01-Aug-2019 08:16:30 ALS Bottle#: 11 Worklist Smp#: 27
Purge Vol: 500.000 mL Dil. Factor: 42.9300
Sample Info: 140-0012543-026
Misc. Info.: 140-16177-a-5@42.93
Operator ID: Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 02-Aug-2019 10:18:18 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: khachitpongpanits Date: 02-Aug-2019 10:18:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.336	7.320	0.016	68	185028	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.374	0.011	95	1002799	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	841824	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	685876	3.98	
27 1,1-Dichloroethene	96	5.060	5.051	0.005	96	78637	1.14	
31 Methylene Chloride	84	5.298	5.299	0.011	87	8350	0.1306	
37 1,1-Dichloroethane	63	6.263	6.242	0.016	98	2594	0.0236	
39 2-Butanone (MEK)	72	6.683	6.698	-0.001	97	205331	7.77	
40 Hexane	56	6.802	6.812	0.005	71	674	0.0175	
47 1,1,1-Trichloroethane	97	8.280	8.263	0.011	95	1017154	4.59	
52 Carbon tetrachloride	117	8.862	8.872	0.000	90	1437	0.007406	
55 Isooctane	57	9.692	9.698	0.005	92	19488	0.0958	
58 Trichloroethene	130	10.140	10.118	0.016	93	6455	0.0635	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

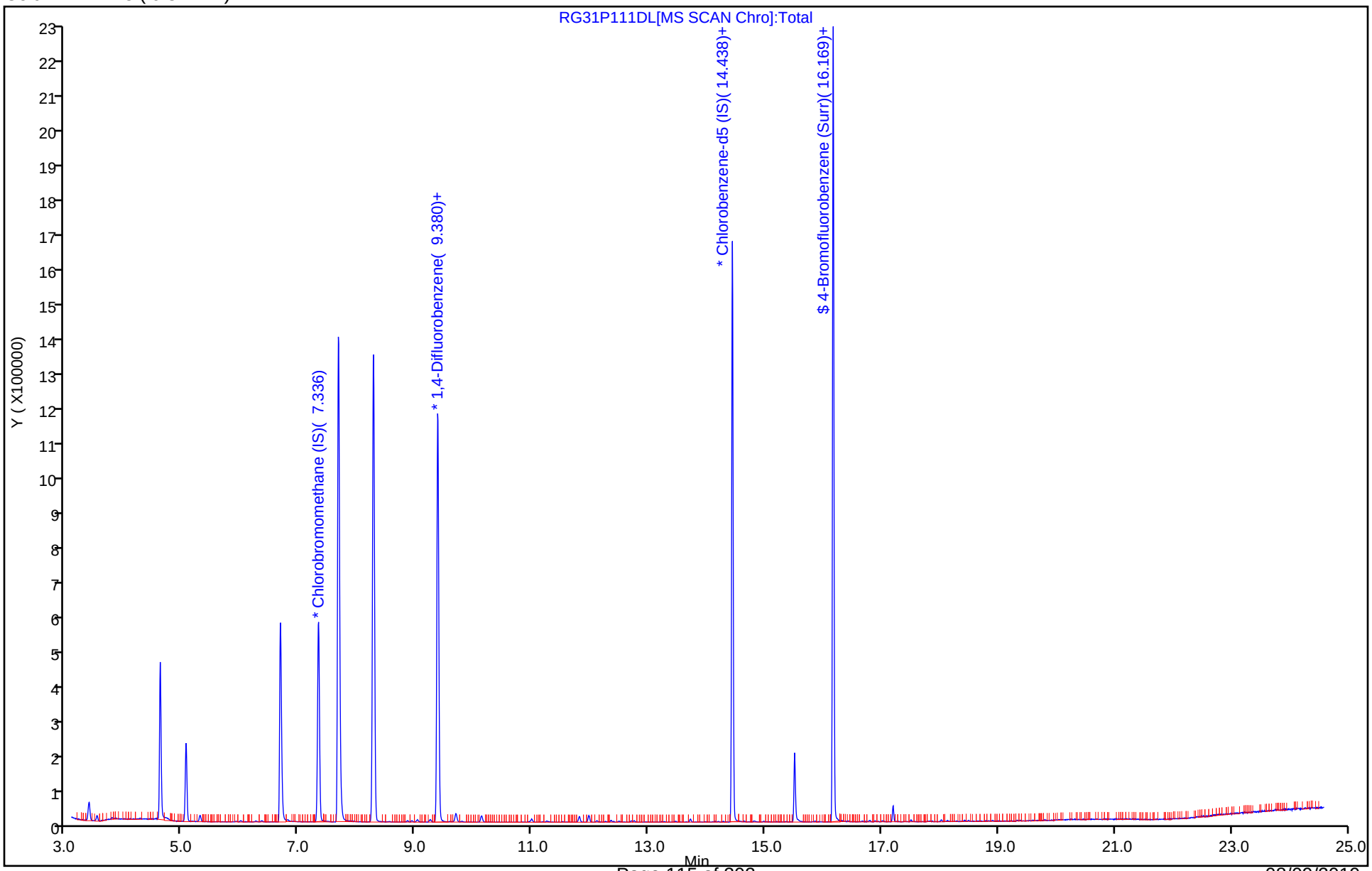
Report Date: 02-Aug-2019 10:18:19 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111DL.D

Injection Date:	01-Aug-2019 08:16:30	Instrument ID:	MR	Operator ID:	
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5	Worklist Smp#:	27
Client ID:	356023-SV-23				
Purge Vol:	500.000 mL	Dil. Factor:	42.9300	ALS Bottle#:	11
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

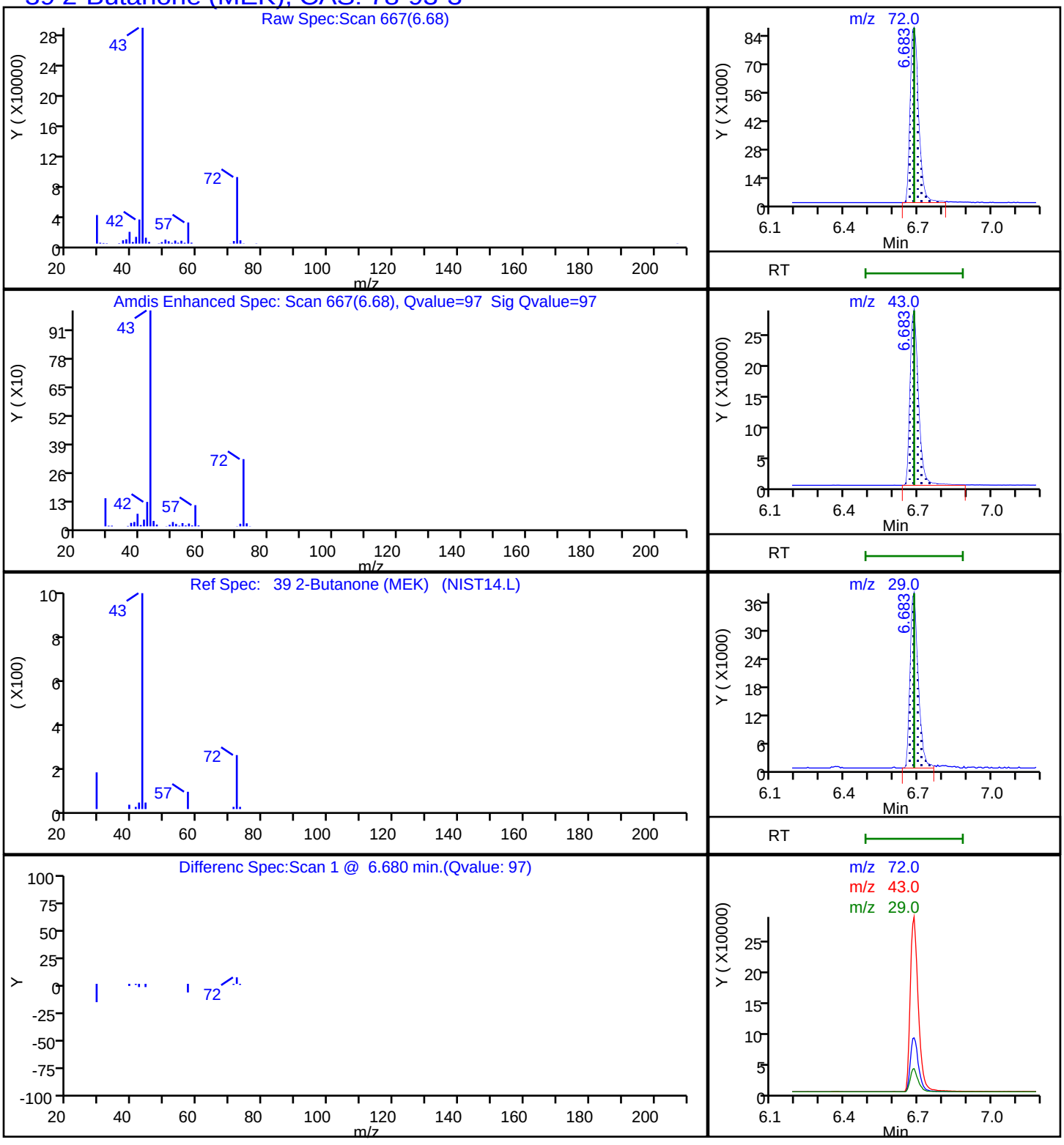
Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111DL.D				
Lims ID:	140-16177-A-5				
Client ID:	356023-SV-23				
Sample Type:	Client				
Inject. Date:	01-Aug-2019 08:16:30	ALS Bottle#:	11	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	42.9300		
Sample Info:	140-0012543-026				
Misc. Info.:	140-16177-a-5@42.93				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	02-Aug-2019 10:18:18	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0311				
First Level Reviewer: khachitpongpanits		Date:	02-Aug-2019 10:18:18		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	3.98	99.52

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\RG31P111DL.D		
Injection Date:	01-Aug-2019 08:16:30	Instrument ID:	MR
Lims ID:	140-16177-A-5	Lab Sample ID:	140-16177-5
Client ID:	356023-SV-23		
Operator ID:		ALS Bottle#:	11 Worklist Smp#: 27
Purge Vol:	500.000 mL	Dil. Factor:	42.9300
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN

39 2-Butanone (MEK), CAS: 78-93-3



FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-31732/8	RG16IC01.D
Level 2	IC 140-31732/9	RG16IC02.D
Level 3	IC 140-31732/10	RG16IC03.D
Level 4	IC 140-31732/11	RG16IC04.D
Level 5	IC 140-31732/12	RG16IC05.D
Level 6	IC 140-31732/13	RG16IC06.D
Level 7	ICIS 140-31732/14	RG16IC07.D
Level 8	IC 140-31732/15	RG16IC08.D
Level 9	IC 140-31732/3	RG16IC09A.D
Level 10	IC 140-31732/5	RG16IC10A.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.3044	+++++ 2.4287	2.3524 2.2996	2.3599 1.9125	2.3119 2.2327	Ave		2.2753				6.9		30.0			
Propene	+++++ 0.6511	+++++ 0.6700	+++++ 0.6367	0.7286 0.5052	0.6775 0.5957	Ave		0.6378				11.2		30.0			
Dichlorodifluoromethane	+++++ 3.9542	4.9005 4.5663	4.1528 3.6958	3.7553 +++++	3.8982 +++++	Ave		4.1319				10.8		30.0			
Chloromethane	+++++ 0.2487	+++++ 0.2659	+++++ 0.2515	0.3882 0.1975	0.2695 0.2271	Ave		0.2641				22.7		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.0674	2.9215 2.8556	2.4320 1.9252	1.9678 +++++	1.9866 +++++	Ave		2.3080				18.7		30.0			
Vinyl chloride	+++++ 0.9009	1.0968 0.9512	1.0830 0.9182	0.9219 0.7724	0.9051 0.8750	Ave		0.9361				10.7		30.0			
1,3-Butadiene	+++++ 0.5875	+++++ 0.6347	0.6244 0.6046	0.5893 0.5071	0.5720 0.5907	Ave		0.5888				6.6		30.0			
Butane	+++++ 0.9260	+++++ 0.9907	1.1053 0.9452	1.0120 0.7749	0.9711 0.9166	Ave		0.9552				9.9		30.0			
Bromomethane	+++++ 1.0248	+++++ 1.0947	1.3500 1.0525	1.2011 0.9557	1.0552 1.0225	Ave		1.0945				11.4		30.0			
Chloroethane	+++++ 0.4301	+++++ 0.4568	0.4482 0.4322	0.4736 0.3822	0.4617 0.4246	Ave		0.4387				6.5		30.0			
Ethanol	+++++ 0.2119	+++++ 0.2353	+++++ 0.2260	0.2376 0.1926	0.2188 0.2169	Ave		0.2199				7.0		30.0			
Vinyl bromide	+++++ 1.0348	+++++ 1.0920	1.0691 1.0507	1.0604 0.9864	1.0453 1.0347	Ave		1.0467				3.0		30.0			
2-Methylbutane	+++++ 0.6533	+++++ 0.6793	+++++ 0.6565	0.6802 0.5773	0.6373 0.6681	Ave		0.6503				5.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Acrolein	+++++ 0.2027	+++++ 0.2223	+++++ 0.2118	0.2939 0.1885	0.2114 0.2029	Ave		0.2191				15.8		30.0			
Trichlorofluoromethane	+++++ 4.7274	5.2495 5.0561	4.8576 4.7344	4.7813 4.5401	4.7705 4.4677	Ave		4.7983				5.0		30.0			
Acetonitrile	+++++ 0.1964	+++++ 0.2105	+++++ 0.2040	+++++ 0.1750	0.1728 0.2076	Ave		0.1944				8.5		30.0			
Acetone	+++++ 0.3922	+++++ 0.3486	+++++ 0.3448	+++++ 0.3203	0.4700 0.3342	Ave		0.3684				15.0		30.0			
Isopropyl alcohol	+++++ 0.9951	+++++ 1.0414	1.2077 1.0091	1.0766 0.8889	0.9957 1.0009	Ave		1.0269				8.8		30.0			
Pentane	+++++ 0.1810	+++++ 0.1818	+++++ 0.1744	0.2036 0.1593	0.1819 0.1740	Ave		0.1794				7.4		30.0			
Ethyl ether	+++++ 0.5467	+++++ 0.5863	+++++ 0.5281	0.5930 0.5092	0.5507 0.5063	Ave		0.5457				6.3		30.0			
1,1-Dichloroethene	+++++ 1.4546	1.6377 1.5333	1.5938 1.4377	1.5146 1.3809	1.4925 1.3725	Ave		1.4908				6.0		30.0			
Acrylonitrile	+++++ 0.6135	+++++ 0.6902	+++++ 0.6530	0.6234 0.6170	0.5908 0.6233	Ave		0.6302				5.1		30.0			
t-Butyl alcohol	+++++ 2.5643	+++++ 2.8428	2.6223 2.6568	2.6706 2.4616	2.6512 2.4906	Ave		2.6200				4.5		30.0			
1,1,2-Trichlorotrifluoroethane	+++++ 3.6790	4.1216 3.8471	3.8154 3.5399	3.6868 3.3591	3.6981 3.2250	Ave		3.6636				7.3		30.0			
Methylene Chloride	+++++ 1.3451	+++++ 1.3113	+++++ 1.1844	2.1391 1.1110	1.5009 1.0823	Ave		1.3820				26.4		30.0			
3-Chloropropene	+++++ 1.2645	+++++ 1.3532	0.8165 1.2789	1.3709 1.1705	1.1778 1.2067	Ave		1.2049				14.4		30.0			
Carbon disulfide	+++++ 3.4072	3.6693 3.7051	3.4460 3.4409	3.6379 3.2340	3.4707 3.3209	Ave		3.4813				4.6		30.0			
trans-1,2-Dichloroethene	+++++ 1.4664	1.4944 1.5601	1.4026 1.4565	1.4498 1.4074	1.4367 1.4125	Ave		1.4540				3.4		30.0			
2-Methylpentane	+++++ 1.8469	+++++ 1.9538	1.8397 1.7197	1.8067 1.6919	1.7415 1.7468	Ave		1.7934				4.8		30.0			
Methyl tert-butyl ether	+++++ 4.6443	+++++ 4.9019	4.5028 4.6651	4.5377 4.4815	4.5834 4.4299	Ave		4.5933				3.2		30.0			
1,1-Dichloroethane	+++++ 2.3470	2.6011 2.4569	2.5306 2.2953	2.3472 2.2191	2.3667 2.2343	Ave		2.3776				5.4		30.0			
Vinyl acetate	+++++ 2.2109	+++++ 2.4841	1.8449 2.3694	2.0225 2.2346	2.0364 2.2405	Ave		2.1804				9.4		30.0			
2-Butanone	+++++ 0.5724	+++++ 0.5770	+++++ 0.5561	0.6643 0.5461	0.5348 0.5506	Ave		0.5716				7.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	+++++ 0.8357	+++++ 0.8974	0.8710 0.8316	0.7883 0.7995	0.8386 0.7860	Ave		0.8310				4.8		30.0			
cis-1,2-Dichloroethene	+++++ 1.4788	1.5393 1.5417	1.5655 1.4642	1.4321 1.4203	1.4307 1.4214	Ave		1.4771				3.9		30.0			
Ethyl acetate	+++++ 1.9156	+++++ 2.0299	+++++ 1.9740	1.5976 1.9279	1.7938 1.9332	Ave		1.8817				7.7		30.0			
Chloroform	+++++ 3.7720	3.9645 3.9765	3.7458 3.7640	3.7894 3.6628	3.8064 3.6149	Ave		3.7885				3.2		30.0			
Tetrahydrofuran	+++++ 0.7966	+++++ 0.8479	0.7158 0.8048	0.7471 0.7779	0.7852 0.7867	Ave		0.7828				5.0		30.0			
1,1,1-Trichloroethane	5.1158 4.6463	5.0185 4.9958	4.6196 4.7687	4.6374 4.7212	4.6771 4.6658	Ave		4.7866				3.9		30.0			
1,2-Dichloroethane	0.5374 0.4952	0.5334 0.5333	0.5311 0.5061	0.4784 0.5157	0.4950 0.5296	Ave		0.5155				4.0		30.0			
Benzene	+++++ 0.6315	0.7677 0.6645	0.6939 0.6369	0.6273 0.6206	0.6400 0.6204	Ave		0.6559				7.3		30.0			
1-Butanol	+++++ 0.0325	+++++ 0.0393	+++++ 0.0400	+++++ 0.0384	0.0218 0.0431	Ave		0.0359				21.5		30.0			
Cyclohexane	+++++ 0.1011	+++++ 0.1087	0.1057 0.1029	0.0951 0.0982	0.0976 0.0949	Ave		0.1005				5.0		30.0			
Carbon tetrachloride	0.7048 0.8755	0.6052 0.9354	0.6145 0.9070	0.8469 0.6254	0.7656 0.8597	Ave		0.7740				16.5		30.0			
2,3-Dimethylpentane	+++++ 0.1366	+++++ 0.1443	0.1335 0.1375	0.1330 0.1351	0.1369 0.1366	Ave		0.1367				2.5		30.0			
Thiophene	+++++ 0.3772	+++++ 0.4032	0.3744 0.3810	0.3633 0.3661	0.3691 0.3694	Ave		0.3755				3.4		30.0			
2,2,4-Trimethylpentane	+++++ 0.7991	0.8338 0.8593	0.8191 0.8124	0.7937 0.7875	0.8011 0.7990	Ave		0.8117				2.8		30.0			
1,2-Dichloropropane	0.2175 0.1943	0.2055 0.2018	0.1955 0.1947	0.1974 0.1954	0.2011 0.2011	Ave		0.2004				3.5		30.0			
Heptane	+++++ 0.2074	+++++ 0.2224	0.1951 0.2136	0.1965 0.2043	0.2034 0.2071	Ave		0.2062				4.3		30.0			
Trichloroethene	0.4769 0.3950	0.4097 0.4128	0.3996 0.3903	0.3823 0.4222	0.3976 0.3690	Ave		0.4056				7.2		30.0			
Dibromomethane	+++++ 0.3432	0.3601 0.3569	0.3447 0.3451	0.3421 0.3531	0.3322 0.3536	Ave		0.3479				2.5		30.0			
Bromodichloromethane	0.6058 0.6384	0.5431 0.6980	0.5587 0.6797	0.5585 0.6835	0.5912 0.7045	Ave		0.6261				10.0		30.0			
1,4-Dioxane	+++++ 0.0953	+++++ 0.1072	0.0950 0.1015	0.0884 0.0944	0.0919 0.0975	Ave		0.0964				6.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	+++++ 0.1947	+++++ 0.2179	+++++ 0.2246	0.1519 0.2275	0.1640 0.2371	Ave		0.2025				16.4		30.0			
Methylcyclohexane	0.4331 0.3978	0.4080 0.4263	0.3832 0.4130	0.3667 0.4068	0.3947 0.4162	Ave		0.4046				4.9		30.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.3305	+++++ 0.3629	0.2843 0.3638	0.2404 0.3635	0.2907 0.3721	Ave		0.3260				15.0		30.0			
cis-1,3-Dichloropropene	+++++ 0.3927	0.3297 0.4319	0.3316 0.4255	0.3428 0.4181	0.3676 0.4223	Ave		0.3847				11.0		30.0			
trans-1,3-Dichloropropene	+++++ 0.4642	+++++ 0.5146	0.3614 0.5031	0.3716 0.5057	0.4171 0.5039	Ave		0.4552				13.9		30.0			
Toluene	+++++ 1.0063	0.9407 1.0623	0.9343 0.9758	0.9598 0.9366	0.9774 0.8936	Ave		0.9652				5.0		30.0			
1,1,2-Trichloroethane	+++++ 0.2677	+++++ 0.2857	0.2535 0.2605	0.2655 0.2505	0.2604 0.2407	Ave		0.2606				5.1		30.0			
2-Hexanone	+++++ 0.1907	+++++ 0.2151	+++++ 0.2176	0.1193 0.2121	0.1506 0.2103	Ave		0.1879				20.4		30.0			
Dibromochloromethane	+++++ 0.7525	+++++ 0.8590	0.5966 0.8247	0.6227 0.8171	0.6695 0.7830	Ave		0.7406				13.4		30.0			
Octane	+++++ 0.3176	+++++ 0.3447	0.2816 0.3163	0.2943 0.3058	0.3004 0.2902	Ave		0.3063				6.5		30.0			
C8 Range	+++++ 2.1174	+++++ 2.2154	+++++ 2.0830	2.0607 2.0633	2.0147 2.0459	Ave		2.0858				3.1		30.0			
1,2-Dibromoethane	+++++ 0.5978	+++++ 0.6330	0.5002 0.5952	0.5208 0.5837	0.5556 0.5625	Ave		0.5686				7.6		30.0			
Tetrachloroethene	0.5636 0.4892	0.5041 0.5096	0.5025 0.4619	0.4703 0.4490	0.4920 0.4176	Ave		0.4860				8.1		30.0			
Chlorobenzene	+++++ 0.8750	0.9440 0.9220	0.8881 0.8438	0.8934 0.8251	0.8732 0.7897	Ave		0.8727				5.5		30.0			
Ethylbenzene	1.4548 1.4251	1.4051 1.5253	1.3279 1.3856	1.3388 1.3125	1.3748 1.2417	Ave		1.3792				5.8		30.0			
m-Xylene & p-Xylene	1.2465 1.2029	1.1036 1.2440	1.1275 1.1019	1.1734 1.0372	1.1769 0.9718	Ave		1.1386				7.8		30.0			
Bromoform	+++++ 0.6692	+++++ 0.8384	0.4983 0.8190	0.5381 0.7849	0.5913 0.7357	Ave		0.6843				19.1		30.0			
Styrene	+++++ 0.7677	0.5580 0.8658	0.5437 0.8094	0.5715 0.7823	0.6571 0.7686	Ave		0.7027				17.3		30.0			
o-Xylene	1.3095 1.2680	1.2108 1.3065	1.1670 1.1507	1.2365 1.1077	1.2639 1.0451	Ave		1.2066				7.3		30.0			
Nonane	+++++ 0.4839	0.4008 0.4835	0.4414 0.4237	0.4677 0.4020	0.4742 0.3801	Ave		0.4397				9.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	+++++ 0.6683	0.5818 0.7115	0.6022 0.6590	0.5953 0.5660	0.6396 0.6190	Ave		0.6270				7.5		30.0			
1,2,3-Trichloropropane	0.3114 0.3068	0.2959 0.3214	0.2896 0.2950	0.3025 0.2934	0.2970 0.2810	Ave		0.2994				3.9		30.0			
Isopropylbenzene	+++++ 1.6958	1.9201 1.7624	1.7523 1.6042	1.7074 1.5583	1.7333 1.4636	Ave		1.6886				7.8		30.0			
Propylbenzene	0.4243 0.4752	0.4366 0.4975	0.4285 0.4456	0.4584 0.4196	0.4627 0.3889	Ave		0.4437				7.0		30.0			
2-Chlorotoluene	0.4772 0.4352	0.4041 0.4490	0.4252 0.3963	0.4438 0.3715	0.4450 0.3406	Ave		0.4188				9.8		30.0			
4-Ethyltoluene	1.6953 1.7841	1.4755 1.8392	1.4779 1.6817	1.6624 1.6089	1.6641 1.4890	Ave		1.6378				7.7		30.0			
1,3,5-Trimethylbenzene	+++++ 0.7228	0.6860 0.7490	0.6728 0.6674	0.6916 0.6353	0.7157 0.5972	Ave		0.6820				6.8		30.0			
Alpha Methyl Styrene	+++++ 0.6624	+++++ 0.7546	+++++ 0.7046	0.4821 0.6777	0.5460 0.6455	Ave		0.6390				14.7		30.0			
Decane	+++++ 0.6931	+++++ 0.7125	0.6067 0.6255	0.6440 0.5767	0.6745 0.5294	Ave		0.6328				9.7		30.0			
tert-Butylbenzene	+++++ 1.9652	1.8892 1.9319	1.9251 1.6263	1.9285 1.5237	1.9881 1.3750	Ave		1.7948				12.6		30.0			
1,2,4-Trimethylbenzene	+++++ 1.8223	1.7085 1.7620	1.7042 1.5253	1.8153 1.4392	1.8611 1.3094	Ave		1.6608				11.6		30.0			
1,3-Dichlorobenzene	+++++ 1.3255	1.3422 1.3384	1.3116 1.1861	1.3190 1.1306	1.3261 1.0109	Ave		1.2545				9.4		30.0			
sec-Butylbenzene	+++++ 2.4940	2.2919 2.4975	2.3522 2.1945	2.3740 2.0758	2.4892 1.8427	Ave		2.2902				9.6		30.0			
Benzyl chloride	+++++ 1.3325	+++++ 1.4870	1.1754 1.3748	0.9691 1.3256	1.1982 1.2412	Ave		1.2630				12.3		30.0			
1,4-Dichlorobenzene	+++++ 1.3252	1.4351 1.3137	1.3880 1.1253	1.4022 1.0430	1.3570 0.9112	Ave		1.2556				14.6		30.0			
4-Isopropyltoluene	2.4987 2.5478	2.2857 2.5471	2.3553 2.2193	2.4043 2.0659	2.5328 1.8368	Ave		2.3294				10.1		30.0			
1,2,3-Trimethylbenzene	+++++ 2.0036	1.9307 1.9972	1.9343 1.7402	2.0068 1.6463	2.0181 1.4920	Ave		1.8633				10.3		30.0			
1,2-Dichlorobenzene	+++++ 1.3151	1.3782 1.3071	1.3723 1.1307	1.4041 1.0533	1.3587 0.9187	Ave		1.2487				13.8		30.0			
Indane	+++++ 1.6925	1.6515 1.6931	1.6304 1.4861	1.6493 1.3960	1.7263 1.2298	Ave		1.5728				10.6		30.0			
Indene	1.1392 1.3620	1.0561 1.4644	1.0690 1.3113	1.1077 1.2521	1.2521 1.1764	Ave		1.2190				11.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	2.0573 2.0941	1.9256 2.0439	1.9311 1.7668	2.0559 1.6827	2.0926 1.5345	Ave		1.9185				10.2		30.0			
Undecane	+++++ 0.9200	+++++ 0.9102	0.7602 0.7609	0.8302 0.7031	0.9250 0.6595	Ave		0.8086				12.8		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.6386	+++++ 0.6975	0.4512 0.6186	0.4991 0.5629	0.5463 0.4594	Ave		0.5592				15.8		30.0			
1,2,4,5-Tetramethylbenzene	+++++ 2.5957	2.1234 2.6245	2.2058 2.2632	2.3697 2.1147	2.5203 1.8651	Ave		2.2980				11.0		30.0			
Dodecane	+++++ 1.0599	+++++ 1.0363	0.7035 0.9195	0.7750 0.8439	0.9251 0.7710	Ave		0.8793				14.6		30.0			
1,2,4-Trichlorobenzene	+++++ 1.5668	1.4209 1.5210	1.5183 1.3039	1.5716 1.1950	1.5487 0.9975	Ave		1.4048				14.3		30.0			
Naphthalene	3.4546 3.2498	2.9166 3.1486	2.9215 2.7266	3.1666 2.4670	3.1383 2.1889	Ave		2.9378				13.1		30.0			
Hexachlorobutadiene	+++++ 1.5739	+++++ 1.4711	1.6925 1.2229	1.6839 1.0836	1.6053 +++++	Ave		1.4762				16.0		30.0			
1,2,3-Trichlorobenzene	+++++ 1.5681	1.5570 1.4821	1.6006 1.2763	1.6255 1.1541	1.5723 +++++	Ave		1.4795				11.6		30.0			
2-Methylnaphthalene	+++++ 1.0936	+++++ 1.1822	+++++ 1.2657	+++++ 1.1337	0.7785 1.2153	Ave		1.1115				15.6		50.0			
1-Methylnaphthalene	+++++ 1.0265	+++++ 1.0537	+++++ 1.0774	+++++ 0.9627	0.8046 1.0407	Ave		0.9943				10.1		50.0			
4-Bromofluorobenzene (Surr)	0.8287 0.8361	0.8219 0.8326	0.8275 0.8052	0.8421 0.7990	0.8320 0.7615	Ave		0.8187				3.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-31732/8	RG16IC01.D
Level 2	IC 140-31732/9	RG16IC02.D
Level 3	IC 140-31732/10	RG16IC03.D
Level 4	IC 140-31732/11	RG16IC04.D
Level 5	IC 140-31732/12	RG16IC05.D
Level 6	IC 140-31732/13	RG16IC06.D
Level 7	ICIS 140-31732/14	RG16IC07.D
Level 8	IC 140-31732/15	RG16IC08.D
Level 9	IC 140-31732/3	RG16IC09A.D
Level 10	IC 140-31732/5	RG16IC10A.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 140071	+++++ 291455	11495 565295	22733 888681	55149 2229665	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 39578	+++++ 80402	+++++ 156529	7019 234746	16160 594854	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 240352	12005 547968	20293 908516	36175 +++++	92988 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Chloromethane	CBM	Ave	+++++ 15117	+++++ 31912	+++++ 61817	3740 91767	6429 226819	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorotetrafluoroethane	CBM	Ave	+++++ 125668	7157 342686	11884 473273	18956 +++++	47388 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 +++++	0.400 +++++
Vinyl chloride	CBM	Ave	+++++ 54759	2687 114146	5292 225725	8881 358924	21589 873854	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 35711	+++++ 76164	3051 148618	5677 235631	13644 589949	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 56287	+++++ 118883	5401 232356	9749 360058	23165 915399	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 62294	+++++ 131364	6597 258730	11570 444072	25170 1021079	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 26142	+++++ 54822	2190 106256	4562 177578	11014 424026	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethanol	CBM	Ave	+++++ 64413	+++++ 141188	+++++ 277836	11445 447583	26096 1082873	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 62898	+++++ 131049	5224 258290	10215 458338	24934 1033351	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 39710	+++++ 81524	+++++ 161393	6552 268277	15203 667238	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Acrolein	CBM	Ave	+++++ 12319	+++++ 26678	+++++ 52054	2831 87602	5043 202595	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Trichlorofluoromethane	CBM	Ave	+++++ 287349	12860 606748	23737 1163823	46059 2109681	113794 4461714	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 11937	+++++ 25263	+++++ 50140	+++++ 81319	4123 207305	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetone	CBM	Ave	+++++ 71524	+++++ 125507	+++++ 254271	+++++ 446534	33633 1001148	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Isopropyl alcohol	CBM	Ave	+++++ 181451	+++++ 374898	17705 744204	31112 1239092	71251 2998598	+++++ 3.00	+++++ 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 11003	+++++ 21817	+++++ 42871	1961 74027	4340 173741	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Ethyl ether	CBM	Ave	+++++ 33233	+++++ 70354	+++++ 129825	5712 236600	13136 505596	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 88415	4012 183999	7788 353429	14590 641689	35602 1370647	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 37294	+++++ 82831	+++++ 160517	6005 286684	14092 622463	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
t-Butyl alcohol	CBM	Ave	+++++ 155871	+++++ 341143	12814 653104	25726 1143829	63242 2487276	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichlorotrifluoroethane	CBM	Ave	+++++ 223628	10097 461662	18644 870196	35516 1560889	88215 3220659	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 81759	+++++ 157365	+++++ 291165	20606 516247	35802 1080816	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
3-Chloropropene	CBM	Ave	+++++ 76860	+++++ 162394	3990 314390	13206 543923	28096 1205062	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 207105	8989 444624	16839 845871	35044 1502752	82789 3316443	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 89132	3661 187222	6854 358049	13966 653968	34270 1410595	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 112262	+++++ 234459	8990 422735	17404 786183	41541 1744433	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 282298	+++++ 588249	22003 1146792	43712 2082436	109332 4423935	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 142663	6372 294833	12366 564248	22611 1031139	56454 2231321	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 134386	+++++ 298101	9015 582450	19483 1038338	48576 2237458	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone	CBM	Ave	+++++ 34790	+++++ 69237	+++++ 136710	6399 253740	12757 549837	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 50796	+++++ 107695	4256 204423	7594 371493	20005 784925	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 89887	3771 185014	7650 359937	13796 659984	34127 1419450	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 116438	+++++ 243593	+++++ 485257	15390 895825	42789 1930625	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 229279	9712 477194	18304 925294	36504 1701999	90798 3610003	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 48422	+++++ 101754	3498 197836	7197 361472	18730 785650	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	6421 282419	12294 599509	22574 1172268	44673 2193820	111567 4659532	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	3926 171477	7615 368007	14810 712977	26465 1336283	67664 2861311	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	+++++ 218690	10959 458548	19349 897222	34700 1608183	87476 3351453	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 11244	+++++ 27107	+++++ 56368	+++++ 99462	2985 233035	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 35020	+++++ 74985	2948 144924	5258 254580	13337 512607	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	5149 303162	8639 645481	17136 1277653	46848 1620527	104641 4644120	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 47315	+++++ 99573	3724 193668	7356 350082	18716 738197	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 130620	+++++ 278234	10441 536696	20094 948723	50447 1995721	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 276722	11903 592958	22840 1144404	43902 2040630	109492 4316307	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	1589 67277	2933 139280	5452 274200	10918 506299	27485 1086283	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 71819	+++++ 153480	5441 300833	10869 529417	27795 1118649	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	3484 136781	5849 284881	11144 549766	21148 1094063	54351 1993678	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 118864	5141 246305	9613 486176	18921 914933	45400 1910288	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	4426 221082	7753 481700	15580 957495	30892 1770996	80812 3805899	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 33014	+++++ 73995	2648 143045	4892 244683	12567 526772	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 67428	+++++ 150375	+++++ 316368	8405 589562	22416 1280779	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	3164 137767	5825 294191	10686 581750	20282 1054161	53954 2248324	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 114434	+++++ 250420	7929 512511	13298 941848	39731 2009943	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	+++++ 136002	4707 298035	9247 599387	18963 1083493	50248 2281652	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	+++++ 140536	+++++ 313779	8795 647010	17702 1211801	49411 2637248	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	+++++ 304684	11654 647673	22739 1254868	45718 2244552	115785 4676498	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	+++++ 81063	+++++ 174192	6169 334983	12648 600348	30850 1259680	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	+++++ 57731	+++++ 131136	+++++ 279830	5682 508306	17835 1100341	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	+++++ 227821	+++++ 523758	14520 1060575	29662 1958174	79307 4097753	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	+++++ 96147	+++++ 210142	6853 406781	14021 732708	35583 1518608	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	+++++ 733245	+++++ 1528791	+++++ 2934226	113989 5346440	275384 11052793	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane	CBZd 5	Ave	+++++ 180979	+++++ 385935	12173 765434	24810 1398842	65810 2943740	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	3553 148109	6245 310727	12229 594023	22404 1075943	58279 2185709	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	+++++ 264928	11695 562130	21615 1085147	42556 1977190	103431 4132834	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	9171 431457	17407 929960	32318 1781937	63775 3145252	162851 6498341	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	15715 728409	27343 1516926	54882 2834265	111786 4970836	278815 10171324	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 32.0
Bromoform	CBZd 5	Ave	+++++ 202596	+++++ 511173	12127 1053252	25633 1880910	70043 3849983	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Styrene	CBZd 5	Ave	+++++ 232424	6913 527849	13232 1040954	27225 1874795	77833 4022594	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	8255 383888	15000 796585	28403 1479889	58901 2654410	149721 5469525	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Nonane	CBZd 5	Ave	+++++ 146494	4965 294785	10743 544933	22279 963439	56170 1989058	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	+++++ 202345	7208 433818	14656 847500	28356 1356361	75762 3239479	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	1963 92897	3666 195960	7049 379322	14410 703177	35181 1470791	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	+++++ 513424	23787 1074562	42649 2063034	81330 3734276	205318 7659417	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propylbenzene	CBZd 5	Ave	2675 143874	5409 303337	10429 573084	21836 1005509	54805 2035054	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	3008 131766	5006 273727	10348 509668	21141 890200	52711 1782598	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Ethyltoluene	CBZd 5	Ave	10687 540151	18279 1121347	35969 2162768	79186 3855543	197120 7792499	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3,5-Trimethylbenzene	CBZd 5	Ave	+++++ 218843	8498 456661	16375 858259	32942 1522353	84776 3125627	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 200540	+++++ 460078	+++++ 906146	22965 1623942	64679 3377981	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	+++++ 209841	+++++ 434421	14767 804397	30676 1381993	79900 2770503	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	+++++ 594991	23404 1177885	46853 2091443	91865 3651451	235503 7195827	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	+++++ 551728	21165 1074286	41478 1961637	86471 3448859	220463 6852738	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Dichlorobenzene	CBZd 5	Ave	+++++ 401318	16628 816005	31923 1525402	62828 2709325	157082 5290313	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
sec-Butylbenzene	CBZd 5	Ave	+++++ 755104	28393 1522735	57248 2822188	113085 4974443	294858 9643724	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	+++++ 403443	+++++ 906634	28608 1768047	46164 3176594	141932 6495517	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dichlorobenzene	CBZd 5	Ave	+++++ 401228	17778 800968	33783 1447159	66793 2499460	160744 4768874	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	15751 771366	28316 1552965	57324 2854146	114529 4950605	300028 9612949	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trimethylbenzene	CBZd 5	Ave	+++++ 606620	23918 1217670	47079 2237947	95595 3945146	239062 7808387	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	+++++ 398177	17074 796954	33400 1454069	66883 2524039	160951 4807970	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indane	CBZd 5	Ave	+++++ 512418	20459 1032309	39681 1911158	78564 3345352	204492 6435847	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	7181 412367	13083 892840	26017 1686311	52763 3000534	148319 6156703	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	12969 634026	23855 1246151	47001 2272141	97932 4032271	247886 8030743	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Undecane	CBZd 5	Ave	+++++ 278548	+++++ 554935	18501 978600	39546 1684790	109574 3451605	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	+++++ 193343	+++++ 425258	10982 795478	23772 1349037	64712 2404289	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	+++++ 785871	26305 1600136	53685 2910573	112880 5067712	298546 9760667	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dodecane	CBZd 5	Ave	+++++ 320907	+++++ 631831	17123 1182543	36916 2022203	109579 4034985	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd5	Ave	+++++ 474362	17602 927347	36954 1676918	74860 2863591	183450 5220406	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd5	Ave	21777 983905	36132 1919706	71104 3506512	150837 5911946	371755 11455350	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Hexachlorobutadiene	CBZd5	Ave	+++++ 476529	+++++ 896951	41194 1572645	80210 2596671	190154 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
1,2,3-Trichlorobenzene	CBZd5	Ave	+++++ 474757	19289 903621	38957 1641409	77428 2765578	186251 +++++	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
2-Methylnaphthalene	CBZd5	Ave	+++++ 331118	+++++ 720816	+++++ 1627774	+++++ 2716913	92221 6360646	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
1-Methylnaphthalene	CBZd5	Ave	+++++ 310807	+++++ 642492	+++++ 1385649	+++++ 2307131	95317 5446642	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
4-Bromofluorobenzene (Surr)	CBZd5	Ave	1044769 1012550	1018246 1015239	1006946 1035518	1002803 957337	985615 996264	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:
Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-31732/8	RG16IC01.D
Level 2	IC 140-31732/9	RG16IC02.D
Level 3	IC 140-31732/10	RG16IC03.D
Level 4	IC 140-31732/11	RG16IC04.D
Level 5	IC 140-31732/12	RG16IC05.D
Level 6	IC 140-31732/13	RG16IC06.D
Level 7	ICIS 140-31732/14	RG16IC07.D
Level 8	IC 140-31732/15	RG16IC08.D
Level 9	IC 140-31732/3	RG16IC09A.D
Level 10	IC 140-31732/5	RG16IC10A.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	3.4						50			
Propene	+++++	+++++	+++++	14.2						50		
Dichlorodifluoromethane	+++++	18.6	+++++	+++++				50				
Chloromethane	+++++	+++++	+++++	47.0						50		
1,2-Dichlorotetrafluoroethane	+++++	26.6	+++++	+++++				50				
Vinyl chloride	+++++	17.2						50				
1,3-Butadiene	+++++	+++++	6.0						50			
Butane	+++++	+++++	15.7						50			
Bromomethane	+++++	+++++	23.3						50			
Chloroethane	+++++	+++++	2.2						50			
Ethanol	+++++	+++++	+++++	8.1						50		
Vinyl bromide	+++++	+++++	2.1						50			
2-Methylbutane	+++++	+++++	+++++	4.6						50		
Acrolein	+++++	+++++	+++++	34.2						50		

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

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	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Trichlorofluoromethane	+++++	9.4						50				
Acetonitrile	+++++	+++++	+++++	+++++	-11.1						50	
Acetone	+++++	+++++	+++++	+++++	27.6						80	
Isopropyl alcohol	+++++	+++++	17.6						50			
Pentane	+++++	+++++	+++++	13.5						50		
Ethyl ether	+++++	+++++	+++++	8.7						50		
1,1-Dichloroethene	+++++	9.9						50				
Acrylonitrile	+++++	+++++	+++++	-1.1						50		
t-Butyl alcohol	+++++	+++++	0.1						50			
1,1,2-Trichlorotrifluoroethane	+++++	12.5						50				
Methylene Chloride	+++++	+++++	+++++	54.8						80		
3-Chloropropene	+++++	+++++	-32.2						50			
Carbon disulfide	+++++	5.4						50				
trans-1,2-Dichloroethene	+++++	2.8						50				
2-Methylpentane	+++++	+++++	2.6						50			
Methyl tert-butyl ether	+++++	+++++	-2.0						50			
1,1-Dichloroethane	+++++	9.4						50				
Vinyl acetate	+++++	+++++	-15.4						50			
2-Butanone	+++++	+++++	+++++	16.2						50		
Hexane	+++++	+++++	4.8						50			
cis-1,2-Dichloroethene	+++++	4.2						50				

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Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Ethyl acetate	+++++	+++++	+++++	-15.1						50		
Chloroform	+++++	4.6						50				
Tetrahydrofuran	+++++	+++++	-8.5						50			
1,1,1-Trichloroethane	6.9						50					
1,2-Dichloroethane	4.2						50					
Benzene	+++++	17.0						50				
1-Butanol	+++++	+++++	+++++	+++++	-39.1						50	
Cyclohexane	+++++	+++++	5.2						50			
Carbon tetrachloride	-8.9						50					
2,3-Dimethylpentane	+++++	+++++	-2.3						50			
Thiophene	+++++	+++++	-0.3						50			
2,2,4-Trimethylpentane	+++++	2.7						50				
1,2-Dichloropropane	8.5						50					
Heptane	+++++	+++++	-5.4						50			
Trichloroethene	17.6						50					
Dibromomethane	+++++	3.5						50				
Bromodichloromethane	-3.2						50					
1,4-Dioxane	+++++	+++++	-1.5						50			
Methyl methacrylate	+++++	+++++	+++++	-25.0						50		
Methylcyclohexane	7.0						50					
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-12.8						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
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Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

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Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

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	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
cis-1,3-Dichloropropene	+++++	-14.3						50				
trans-1,3-Dichloropropene	+++++	+++++	-20.6						50			
Toluene	+++++	-2.5						50				
1,1,2-Trichloroethane	+++++	+++++	-2.7						50			
2-Hexanone	+++++	+++++	+++++	-36.5						50		
Dibromochloromethane	+++++	+++++	-19.5						50			
Octane	+++++	+++++	-8.1						50			
1,2-Dibromoethane	+++++	+++++	-12.0						50			
Tetrachloroethene	16.0						50					
Chlorobenzene	+++++	8.2						50				
Ethylbenzene	5.5						50					
m-Xylene & p-Xylene	9.5						50					
Bromoform	+++++	+++++	-27.2						50			
Styrene	+++++	-20.6						50				
o-Xylene	8.5						50					
Nonane	+++++	-8.9						50				
1,1,2,2-Tetrachloroethane	+++++	-7.2						50				
1,2,3-Trichloropropane	4.0						50					
Isopropylbenzene	+++++	13.7						50				
Propylbenzene	-4.4						50					
2-Chlorotoluene	13.9						50					

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AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
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Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

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	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
4-Ethyltoluene	3.5						50					
1,3,5-Trimethylbenzene	+++++	0.6						50				
Alpha Methyl Styrene	+++++	+++++	+++++	-24.5						50		
Decane	+++++	+++++	-4.1						50			
tert-Butylbenzene	+++++	5.3						50				
1,2,4-Trimethylbenzene	+++++	2.9						50				
1,3-Dichlorobenzene	+++++	7.0						50				
sec-Butylbenzene	+++++	0.1						50				
Benzyl chloride	+++++	+++++	-6.9						50			
1,4-Dichlorobenzene	+++++	14.3						50				
4-Isopropyltoluene	7.3						50					
1,2,3-Trimethylbenzene	+++++	3.6						50				
1,2-Dichlorobenzene	+++++	10.4						50				
Indane	+++++	5.0						50				
Indene	-6.6						50					
Butylbenzene	7.2						50					
Undecane	+++++	+++++	-6.0						50			
1,2-Dibromo-3-Chloropropane	+++++	+++++	-19.3						50			
1,2,4,5-Tetramethylbenzene	+++++	-7.6						50				
Dodecane	+++++	+++++	-20.0						50			
1,2,4-Trichlorobenzene	+++++	1.1						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1 Analy Batch No.: 31732

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/16/2019 16:26 Calibration End Date: 07/17/2019 02:30 Calibration ID: 2031

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	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Naphthalene	17.6						80					
Hexachlorobutadiene	+++++	+++++	14.7	+++++					50			
1,2,3-Trichlorobenzene	+++++	5.2		+++++				50				
2-Methylnaphthalene	+++++	+++++	+++++	+++++	-30.0						80	
1-Methylnaphthalene	+++++	+++++	+++++	+++++	-19.1						80	

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC09A.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 16-Jul-2019 16:26:30 ALS Bottle#: 14 Worklist Smp#: 3
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-003
Misc. Info.: 231544
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:45:11 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: barlozhetskayaa Date: 16-Jul-2019 17:24:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.336	7.330	0.006	67	232337	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.390	9.385	0.005	94	1295614	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.448	14.447	0.001	89	1198190	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.179	16.175	0.004	85	957337	4.00	3.90	
6 Chlorodifluoromethane	51	3.513	3.511	0.002	95	888681	8.00	6.72	
7 Propene	41	3.518	3.518	0.000	91	234746	8.00	6.34	
8 Dichlorodifluoromethane	85	3.556	3.555	0.001	99	928373	8.00	3.87	
9 Chloromethane	52	3.675	3.675	-0.001	98	91767	8.00	5.98	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	90	397344	8.00	2.96	
11 Acetaldehyde	44	3.772	3.776	-0.004	92	465562	40.0	31.4	
12 Vinyl chloride	62	3.793	3.791	0.002	99	358924	8.00	6.60	
13 Butadiene	54	3.852	3.854	-0.002	87	235631	8.00	6.89	
14 Butane	43	3.858	3.858	0.000	85	360058	8.00	6.49	
15 Bromomethane	94	4.063	4.061	0.002	96	444072	8.00	6.98	
16 Chloroethane	64	4.154	4.157	-0.003	97	177578	8.00	6.97	
17 Ethanol	31	4.235	4.237	-0.002	88	447583	40.0	35.0	
18 Vinyl bromide	106	4.365	4.365	0.000	95	458338	8.00	7.54	
19 2-Methylbutane	43	4.413	4.416	-0.003	73	268277	8.00	7.10	
20 Acrolein	56	4.537	4.540	-0.003	99	87602	8.00	6.88	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	99	2109681	8.00	7.57	
24 Acetonitrile	40	4.564	4.568	-0.004	94	81319	8.00	7.20	
22 Acetone	58	4.613	4.621	-0.008	100	446534	24.0	20.9	
23 Isopropyl alcohol	45	4.704	4.713	-0.009	93	1239092	24.0	20.8	
25 Pentane	72	4.721	4.724	-0.003	90	74027	8.00	7.10	
26 Ethyl ether	31	4.823	4.833	-0.010	66	236600	8.00	7.46	
27 1,1-Dichloroethene	96	5.055	5.054	0.001	97	641689	8.00	7.41	
28 Acrylonitrile	53	5.093	5.090	0.003	90	286684	8.00	7.83	
29 2-Methyl-2-propanol	59	5.136	5.149	-0.013	93	1143829	8.00	7.52	
30 1,1,2-Trichloro-1,2,2-trif	101	5.211	5.211	0.000	92	1560889	8.00	7.34	
31 Methylene Chloride	84	5.298	5.294	0.004	86	516247	8.00	6.43	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.314	5.313	0.001	83	543923	8.00	7.77	
33 Carbon disulfide	76	5.422	5.421	0.001	99	1502752	8.00	7.43	
34 trans-1,2-Dichloroethene	96	5.939	5.936	0.003	96	653968	8.00	7.74	
35 2-Methylpentane	43	5.993	5.995	-0.002	82	786183	8.00	7.55	
36 Methyl tert-butyl ether	73	6.042	6.057	-0.015	92	2082436	8.00	7.81	
37 1,1-Dichloroethane	63	6.252	6.252	0.000	98	1031139	8.00	7.47	
38 Vinyl acetate	43	6.349	6.357	-0.008	98	1038338	8.00	8.20	
39 2-Butanone (MEK)	72	6.683	6.702	-0.019	96	253740	8.00	7.64	
40 Hexane	56	6.802	6.801	0.001	80	371493	8.00	7.70	
41 Isopropyl ether	45	6.921	6.929	-0.008	84	1179697	8.00	7.59	
42 cis-1,2-Dichloroethene	96	7.072	7.067	0.005	93	659984	8.00	7.69	
43 Ethyl acetate	43	7.244	7.256	-0.012	98	895825	8.00	8.20	
44 Chloroform	83	7.374	7.368	0.006	96	1701999	8.00	7.73	
45 Tert-butyl ethyl ether	59	7.498	7.508	-0.010	92	1861123	8.00	7.91	
46 Tetrahydrofuran	42	7.686	7.704	-0.018	71	361472	8.00	7.95	
47 1,1,1-Trichloroethane	97	8.280	8.280	0.000	94	2193820	8.00	7.89	
48 1,2-Dichloroethane	62	8.339	8.336	0.003	97	1336283	8.00	8.00	
49 Benzene	78	8.830	8.826	0.004	98	1608183	8.00	7.57	
50 n-Butanol	31	8.840	8.857	-0.017	65	99462	8.00	8.56	
51 Cyclohexane	69	8.862	8.861	0.001	93	254580	8.00	7.82	
52 Carbon tetrachloride	117	8.873	8.868	0.005	98	1620527	8.00	6.46	
53 2,3-Dimethylpentane	71	9.035	9.032	0.003	82	350082	8.00	7.91	
54 Thiophene	84	9.078	9.072	0.006	93	948723	8.00	7.80	
55 Isooctane	57	9.698	9.697	0.001	94	2040630	8.00	7.76	
56 1,2-Dichloropropane	63	10.059	10.054	0.005	71	506299	8.00	7.80	
57 n-Heptane	71	10.118	10.116	0.002	80	529417	8.00	7.93	
58 Trichloroethene	130	10.140	10.134	0.006	95	1094063	8.00	8.33	
59 Dibromomethane	93	10.162	10.159	0.003	91	914933	8.00	8.12	
60 Dichlorobromomethane	83	10.350	10.349	0.001	98	1770996	8.00	8.73	
61 1,4-Dioxane	88	10.361	10.373	-0.012	82	244683	8.00	7.83	
62 Methyl methacrylate	41	10.523	10.531	-0.008	88	589562	8.00	8.99	
63 Methylcyclohexane	83	11.003	11.001	0.002	92	1054161	8.00	8.04	
64 4-Methyl-2-pentanone (MIBK	43	11.418	11.432	-0.014	89	941848	8.00	8.92	
65 cis-1,3-Dichloropropene	75	11.461	11.461	0.000	96	1083493	8.00	8.70	
66 trans-1,3-Dichloropropene	75	12.216	12.218	-0.002	97	1211801	8.00	8.89	
67 Toluene	91	12.362	12.359	0.003	93	2244552	8.00	7.76	
68 1,1,2-Trichloroethane	83	12.410	12.411	-0.001	94	600348	8.00	7.69	
69 2-Hexanone	58	12.879	12.895	-0.016	95	508306	8.00	9.03	
70 Chlorodibromomethane	129	13.144	13.140	0.004	97	1958174	8.00	8.83	
71 n-Octane	85	13.230	13.227	0.003	70	732708	8.00	7.98	
72 Ethylene Dibromide	107	13.440	13.437	0.003	97	1398842	8.00	8.21	
73 Tetrachloroethene	129	13.591	13.586	0.005	94	1075943	8.00	7.39	
74 Chlorobenzene	112	14.497	14.498	-0.001	92	1977190	8.00	7.56	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	74	1197057	8.00	7.62	
76 Ethylbenzene	91	14.842	14.839	0.003	99	3145252	8.00	7.61	
77 m-Xylene & p-Xylene	91	15.020	15.018	0.002	100	4970836	16.0	14.6	
78 Bromoform	173	15.398	15.394	0.004	95	1880910	8.00	9.18	
79 Styrene	104	15.489	15.491	-0.002	97	1874795	8.00	8.91	
80 o-Xylene	91	15.554	15.553	0.001	97	2654410	8.00	7.34	
81 n-Nonane	57	15.570	15.567	0.003	82	963439	8.00	7.31	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	93	1356361	8.00	7.22	
83 1,2,3-Trichloropropane	110	16.028	16.028	0.000	93	703177	8.00	7.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.185	16.185	0.000	98	3734276	8.00	7.38	
85 N-Propylbenzene	120	16.751	16.752	-0.001	97	1005509	8.00	7.56	
86 2-Chlorotoluene	126	16.762	16.761	0.001	92	890200	8.00	7.10	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	3855543	8.00	7.86	
87 1,3,5-Trimethylbenzene	120	17.010	17.006	0.004	91	1522353	8.00	7.45	
89 Alpha Methyl Styrene	118	17.252	17.252	0.000	86	1623942	8.00	8.48	
90 n-Decane	57	17.425	17.423	0.002	97	1381993	8.00	7.29	
91 tert-Butylbenzene	119	17.474	17.469	0.005	88	3651451	8.00	6.79	
92 1,2,4-Trimethylbenzene	105	17.490	17.487	0.003	96	3448859	8.00	6.93	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	2709325	8.00	7.21	
94 sec-Butylbenzene	105	17.792	17.787	0.005	96	4974443	8.00	7.25	
96 Benzyl chloride	91	17.846	17.844	0.002	97	3176594	8.00	8.40	
95 1,4-Dichlorobenzene	146	17.862	17.858	0.004	96	2499460	8.00	6.65	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	4950605	8.00	7.10	
98 1,2,3-Trimethylbenzene	105	18.018	18.014	0.004	98	3945146	8.00	7.07	
99 Butylcyclohexane	83	18.126	18.127	-0.001	91	2166334	8.00	7.06	
100 1,2-Dichlorobenzene	146	18.261	18.258	0.003	94	2524039	8.00	6.75	
101 2,3-Dihydroindene	117	18.277	18.273	0.004	93	3345352	8.00	7.10	
102 Indene	116	18.412	18.412	0.000	90	3000534	8.00	8.22	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	4032271	8.00	7.02	
104 Undecane	57	18.913	18.914	-0.001	83	1684790	8.00	6.96	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	91	1349037	8.00	8.05	
106 1,2,4,5-Tetramethylbenzene	119	19.318	19.315	0.003	95	5067712	8.00	7.36	
107 Dodecane	57	20.057	20.057	0.000	89	2022203	8.00	7.68	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	2863591	8.00	6.80	
109 Naphthalene	128	20.245	20.243	0.002	98	5911946	8.00	6.72	
110 Hexachlorobutadiene	225	20.509	20.510	-0.001	93	2596671	8.00	5.87	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	94	2765578	8.00	6.24	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	98	2716913	8.00	8.16	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	97	2307131	8.00	7.75	
A 115 C8 Range	1	13.237	(13.181-13.278)		0	5346440	8.00	7.91	
S 116 Xylenes, Total	100				0		24.0	21.9	
S 117 1,2-Dichloroethene, Total	1				0		16.0	15.4	

Reagents:

40L9DQP_00011	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

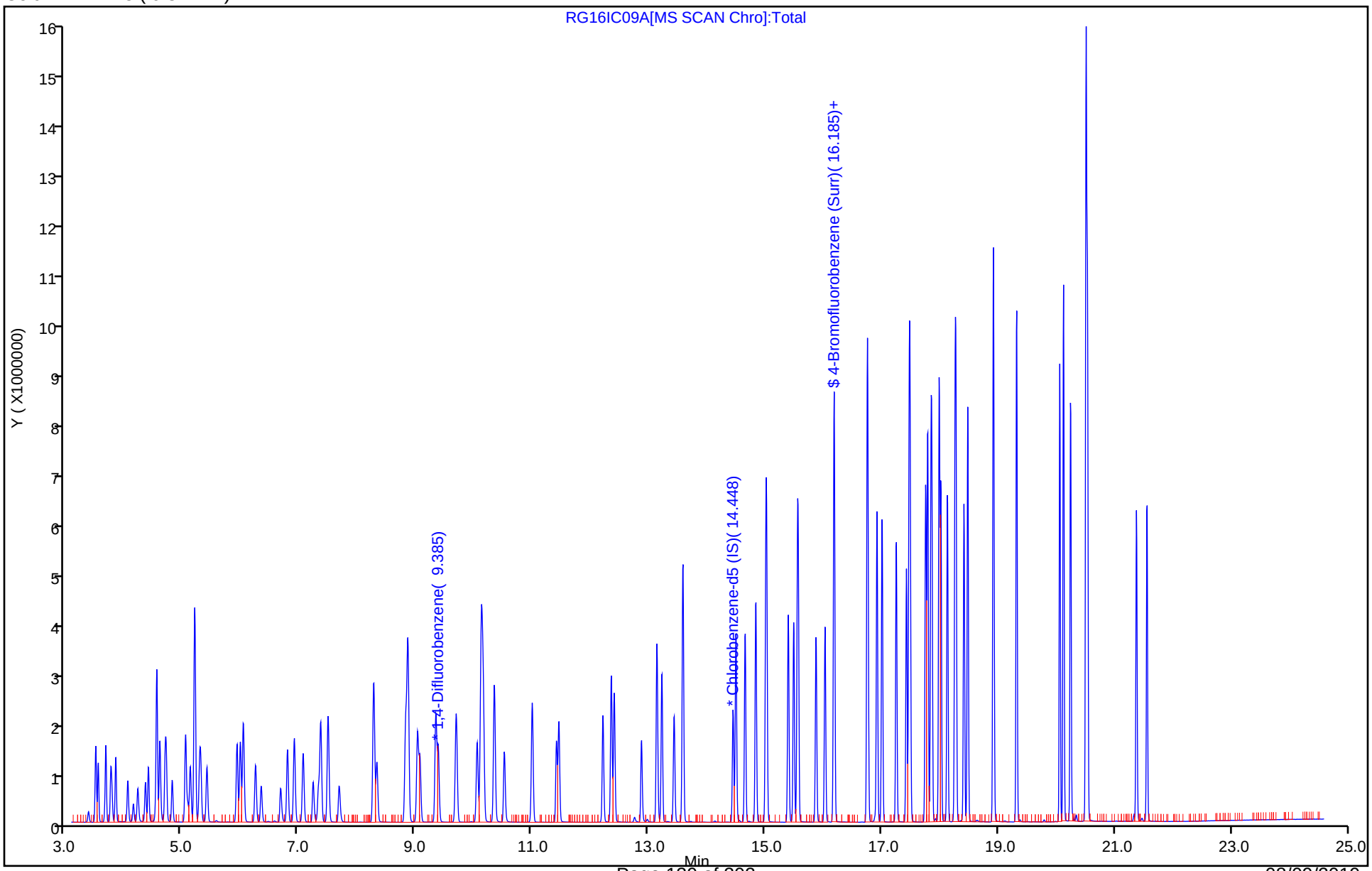
Report Date: 18-Jul-2019 17:45:13 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC09A.D

Injection Date:	16-Jul-2019 16:26:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L9			Worklist Smp#:	3
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

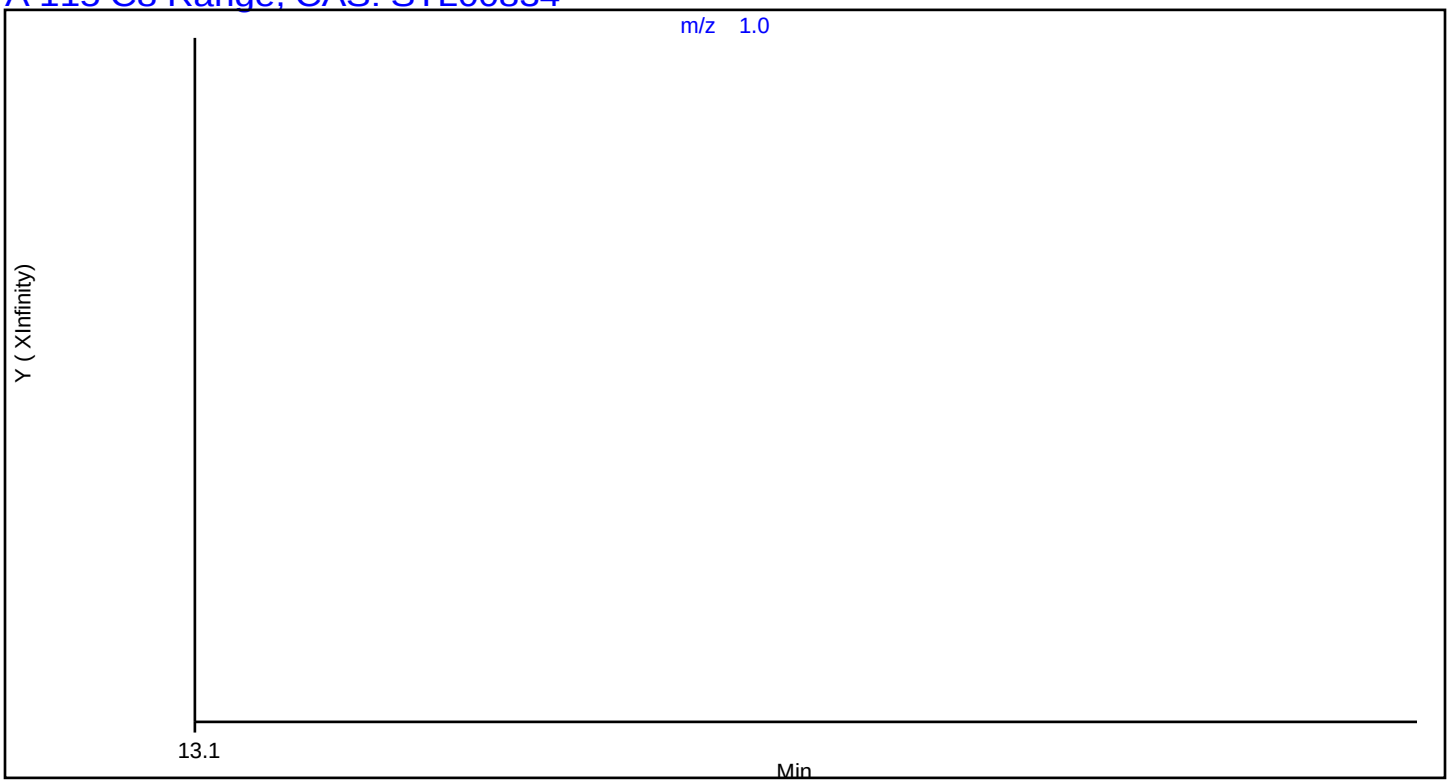


Report Date: 18-Jul-2019 17:45:13 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC09A.D				
Injection Date:	16-Jul-2019 16:26:30	Instrument ID:	MR		
Lims ID:	IC L9				
Client ID:					
Operator ID:	afb	ALS Bottle#:	14	Worklist Smp#:	3
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC10A.D
Lims ID: IC L10
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 16-Jul-2019 18:06:30 ALS Bottle#: 15 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-005
Misc. Info.: 231543
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:45:26 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 09:23:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.341	7.330	0.011	67	249663	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.396	9.385	0.011	93	1350580	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.448	14.447	0.001	88	1308353	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.179	16.175	0.004	86	996264	4.00	3.72	
6 Chlorodifluoromethane	51	3.507	3.511	-0.004	95	2229665	16.0	15.7	
7 Propene	41	3.513	3.518	-0.005	91	594854	16.0	14.9	
8 Dichlorodifluoromethane	85	3.550	3.555	-0.005	100	3785449	16.0	14.7	
9 Chloromethane	52	3.669	3.675	-0.006	97	226819	16.0	13.8	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	90	1884909	16.0	13.1	
11 Acetaldehyde	44	3.772	3.776	-0.004	93	1128536	80.0	70.8	
12 Vinyl chloride	62	3.788	3.791	-0.003	100	873854	16.0	15.0	
13 Butadiene	54	3.852	3.854	-0.002	90	589949	16.0	16.1	
14 Butane	43	3.852	3.858	-0.006	86	915399	16.0	15.4	
15 Bromomethane	94	4.057	4.061	-0.004	96	1021079	16.0	14.9	
16 Chloroethane	64	4.154	4.157	-0.003	96	424026	16.0	15.5	
17 Ethanol	31	4.241	4.237	0.004	89	1082873	80.0	78.9	
18 Vinyl bromide	106	4.365	4.365	0.000	96	1033351	16.0	15.8	
19 2-Methylbutane	43	4.413	4.416	-0.003	76	667238	16.0	16.4	
20 Acrolein	56	4.537	4.540	-0.003	95	202595	16.0	14.8	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	99	4461714	16.0	14.9	
24 Acetonitrile	40	4.570	4.568	0.002	98	207305	16.0	17.1	
22 Acetone	58	4.618	4.621	-0.003	100	1001148	48.0	43.5	
23 Isopropyl alcohol	45	4.715	4.713	0.002	96	2998598	48.0	46.8	
25 Pentane	72	4.721	4.724	-0.003	90	173741	16.0	15.5	
26 Ethyl ether	31	4.823	4.833	-0.010	66	505596	16.0	14.8	
27 1,1-Dichloroethene	96	5.055	5.054	0.001	97	1370647	16.0	14.7	
28 Acrylonitrile	53	5.098	5.090	0.008	89	622463	16.0	15.8	
29 2-Methyl-2-propanol	59	5.141	5.149	-0.008	93	2487276	16.0	15.2	
30 1,1,2-Trichloro-1,2,2-trif	101	5.211	5.211	0.000	93	3220659	16.0	14.1	
31 Methylene Chloride	84	5.298	5.294	0.004	86	1080816	16.0	12.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.314	5.313	0.001	83	1205062	16.0	16.0	
33 Carbon disulfide	76	5.422	5.421	0.001	99	3316443	16.0	15.3	
34 trans-1,2-Dichloroethene	96	5.939	5.936	0.003	96	1410595	16.0	15.5	
35 2-Methylpentane	43	5.993	5.995	-0.002	81	1744433	16.0	15.6	
36 Methyl tert-butyl ether	73	6.047	6.057	-0.010	92	4423935	16.0	15.4	
37 1,1-Dichloroethane	63	6.257	6.252	0.005	98	2231321	16.0	15.0	
38 Vinyl acetate	43	6.355	6.357	-0.002	98	2237458	16.0	16.4	
39 2-Butanone (MEK)	72	6.694	6.702	-0.008	96	549837	16.0	15.4	
40 Hexane	56	6.802	6.801	0.001	79	784925	16.0	15.1	
41 Isopropyl ether	45	6.926	6.929	-0.003	87	2483839	16.0	14.9	
42 cis-1,2-Dichloroethene	96	7.077	7.067	0.010	93	1419450	16.0	15.4	
43 Ethyl acetate	43	7.250	7.256	-0.006	98	1930625	16.0	16.4	
44 Chloroform	83	7.379	7.368	0.011	97	3610003	16.0	15.3	
45 Tert-butyl ethyl ether	59	7.503	7.508	-0.005	92	4004934	16.0	15.8	
46 Tetrahydrofuran	42	7.692	7.704	-0.012	74	785650	16.0	16.1	
47 1,1,1-Trichloroethane	97	8.285	8.280	0.005	95	4659532	16.0	15.6	
48 1,2-Dichloroethane	62	8.344	8.336	0.008	96	2861311	16.0	16.4	
49 Benzene	78	8.835	8.826	0.009	98	3351453	16.0	15.1	
50 n-Butanol	31	8.840	8.857	-0.017	67	233035	16.0	19.2	
51 Cyclohexane	69	8.867	8.861	0.006	90	512607	16.0	15.1	
52 Carbon tetrachloride	117	8.873	8.868	0.005	97	4644120	16.0	17.8	
53 2,3-Dimethylpentane	71	9.040	9.032	0.008	81	738197	16.0	16.0	
54 Thiophene	84	9.078	9.072	0.006	94	1995721	16.0	15.7	
55 Isooctane	57	9.703	9.697	0.006	94	4316307	16.0	15.8	
56 1,2-Dichloropropane	63	10.064	10.054	0.010	73	1086283	16.0	16.1	
57 n-Heptane	71	10.124	10.116	0.008	78	1118649	16.0	16.1	
58 Trichloroethene	130	10.145	10.134	0.011	94	1993678	16.0	14.6	
59 Dibromomethane	93	10.167	10.159	0.008	93	1910288	16.0	16.3	
60 Dichlorobromomethane	83	10.356	10.349	0.007	98	3805899	16.0	18.0	
61 1,4-Dioxane	88	10.361	10.373	-0.012	84	526772	16.0	16.2	
62 Methyl methacrylate	41	10.528	10.531	-0.003	88	1280779	16.0	18.7	
63 Methylcyclohexane	83	11.008	11.001	0.007	92	2248324	16.0	16.5	
64 4-Methyl-2-pentanone (MIBK	43	11.423	11.432	-0.009	89	2009943	16.0	18.3	
65 cis-1,3-Dichloropropene	75	11.466	11.461	0.005	95	2281652	16.0	17.6	
66 trans-1,3-Dichloropropene	75	12.221	12.218	0.003	97	2637248	16.0	17.7	
67 Toluene	91	12.362	12.359	0.003	93	4676498	16.0	14.8	
68 1,1,2-Trichloroethane	83	12.416	12.411	0.005	94	1259680	16.0	14.8	
69 2-Hexanone	58	12.879	12.895	-0.016	95	1100341	16.0	17.9	
70 Chlorodibromomethane	129	13.144	13.140	0.004	96	4097753	16.0	16.9	
71 n-Octane	85	13.230	13.227	0.003	69	1518608	16.0	15.2	
72 Ethylene Dibromide	107	13.440	13.437	0.003	97	2943740	16.0	15.8	
73 Tetrachloroethene	129	13.591	13.586	0.005	91	2185709	16.0	13.7	
74 Chlorobenzene	112	14.502	14.498	0.004	91	4132834	16.0	14.5	
75 2,3-Dimethylheptane	43	14.659	14.655	0.004	72	2444511	16.0	14.3	
76 Ethylbenzene	91	14.842	14.839	0.003	99	6498341	16.0	14.4	
77 m-Xylene & p-Xylene	91	15.020	15.018	0.002	99	10171324	32.0	27.3	
78 Bromoform	173	15.398	15.394	0.004	94	3849983	16.0	17.2	
79 Styrene	104	15.495	15.491	0.004	97	4022594	16.0	17.5	
80 o-Xylene	91	15.554	15.553	0.001	97	5469525	16.0	13.9	
81 n-Nonane	57	15.570	15.567	0.003	79	1989058	16.0	13.8	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	93	3239479	16.0	15.8	
83 1,2,3-Trichloropropane	110	16.028	16.028	0.000	93	1470791	16.0	15.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.190	16.185	0.005	98	7659417	16.0	13.9	
85 N-Propylbenzene	120	16.756	16.752	0.004	97	2035054	16.0	14.0	
86 2-Chlorotoluene	126	16.762	16.761	0.001	94	1782598	16.0	13.0	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	97	7792499	16.0	14.5	
87 1,3,5-Trimethylbenzene	120	17.010	17.006	0.004	91	3125627	16.0	14.0	
89 Alpha Methyl Styrene	118	17.253	17.252	0.000	85	3377981	16.0	16.2	
90 n-Decane	57	17.430	17.423	0.007	96	2770503	16.0	13.4	
91 tert-Butylbenzene	119	17.474	17.469	0.005	87	7195827	16.0	12.3	
92 1,2,4-Trimethylbenzene	105	17.490	17.487	0.003	96	6852738	16.0	12.6	
93 1,3-Dichlorobenzene	146	17.759	17.756	0.003	97	5290313	16.0	12.9	
94 sec-Butylbenzene	105	17.792	17.787	0.005	96	9643724	16.0	12.9	
96 Benzyl chloride	91	17.846	17.844	0.002	96	6495517	16.0	15.7	
95 1,4-Dichlorobenzene	146	17.862	17.858	0.004	93	4768874	16.0	11.6	
97 4-Isopropyltoluene	119	17.991	17.986	0.005	96	9612949	16.0	12.6	
98 1,2,3-Trimethylbenzene	105	18.018	18.014	0.004	99	7808387	16.0	12.8	
99 Butylcyclohexane	83	18.131	18.127	0.004	91	4319590	16.0	12.9	
100 1,2-Dichlorobenzene	146	18.261	18.258	0.003	93	4807970	16.0	11.8	
101 2,3-Dihydroindene	117	18.277	18.273	0.004	92	6435847	16.0	12.5	
102 Indene	116	18.412	18.412	0.000	89	6156703	16.0	15.4	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	8030743	16.0	12.8	
104 Undecane	57	18.913	18.914	-0.001	84	3451605	16.0	13.0	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	82	2404289	16.0	13.1	
106 1,2,4,5-Tetramethylbenzene	119	19.318	19.315	0.003	95	9760667	16.0	13.0	
107 Dodecane	57	20.057	20.057	0.000	87	4034985	16.0	14.0	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	93	5220406	16.0	11.4	
109 Naphthalene	128	20.245	20.243	0.002	98	11455350	16.0	11.9	
110 Hexachlorobutadiene	225	20.509	20.510	-0.001	94	4283107	16.0	8.87	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	93	4836129	16.0	10.0	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	97	6360646	16.0	17.5	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	96	5446642	16.0	16.7	
A 115 C8 Range	1	13.230	(13.181-13.278)		0	11052793	16.0	15.7	
S 116 Xylenes, Total	100				0		48.0	41.2	
S 117 1,2-Dichloroethene, Total	1				0		32.0	30.9	

Reagents:

40L10DQP_00011	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

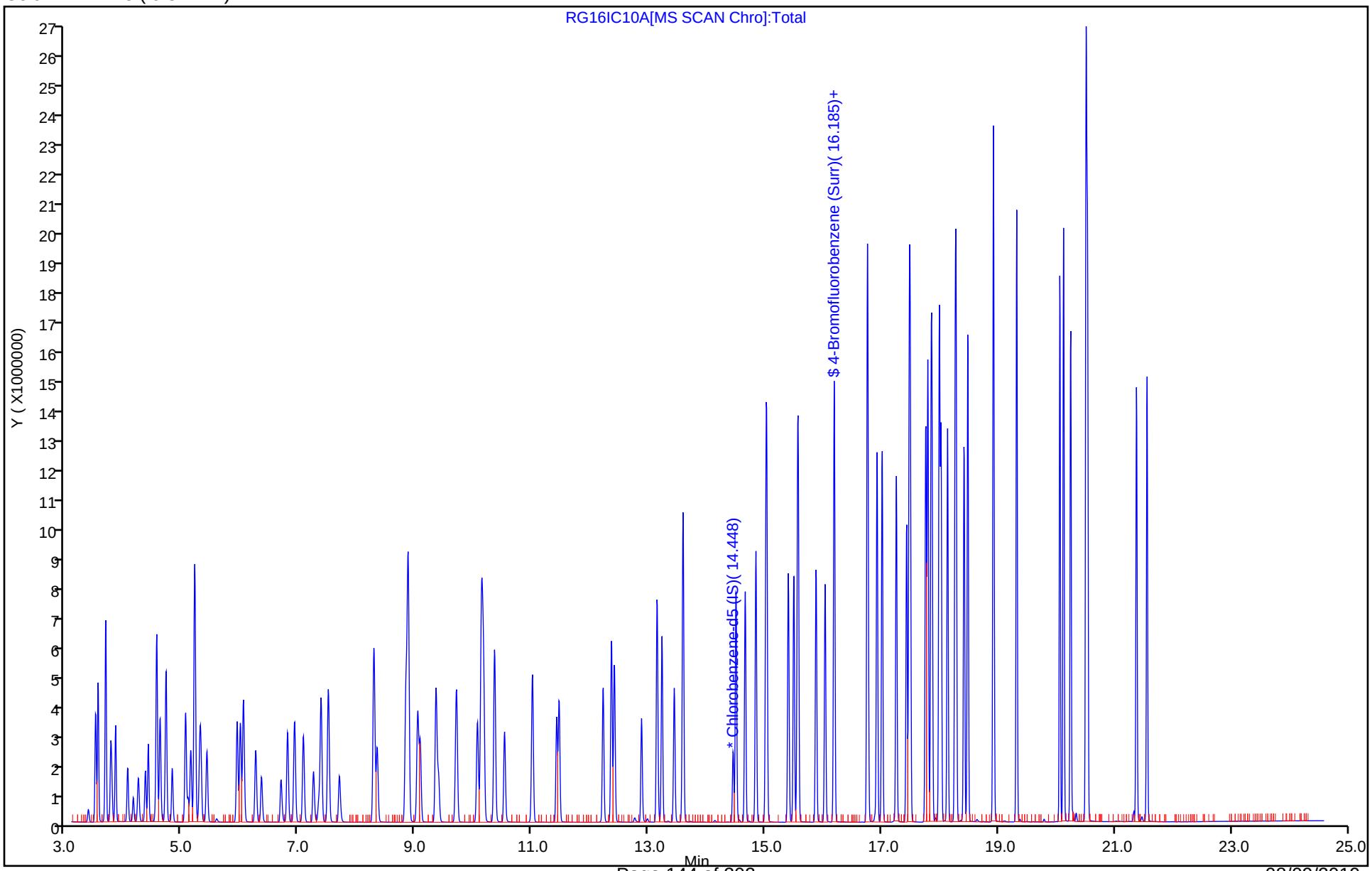
Report Date: 18-Jul-2019 17:45:28 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC10A.D

Injection Date:	16-Jul-2019 18:06:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L10			Worklist Smp#:	5
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

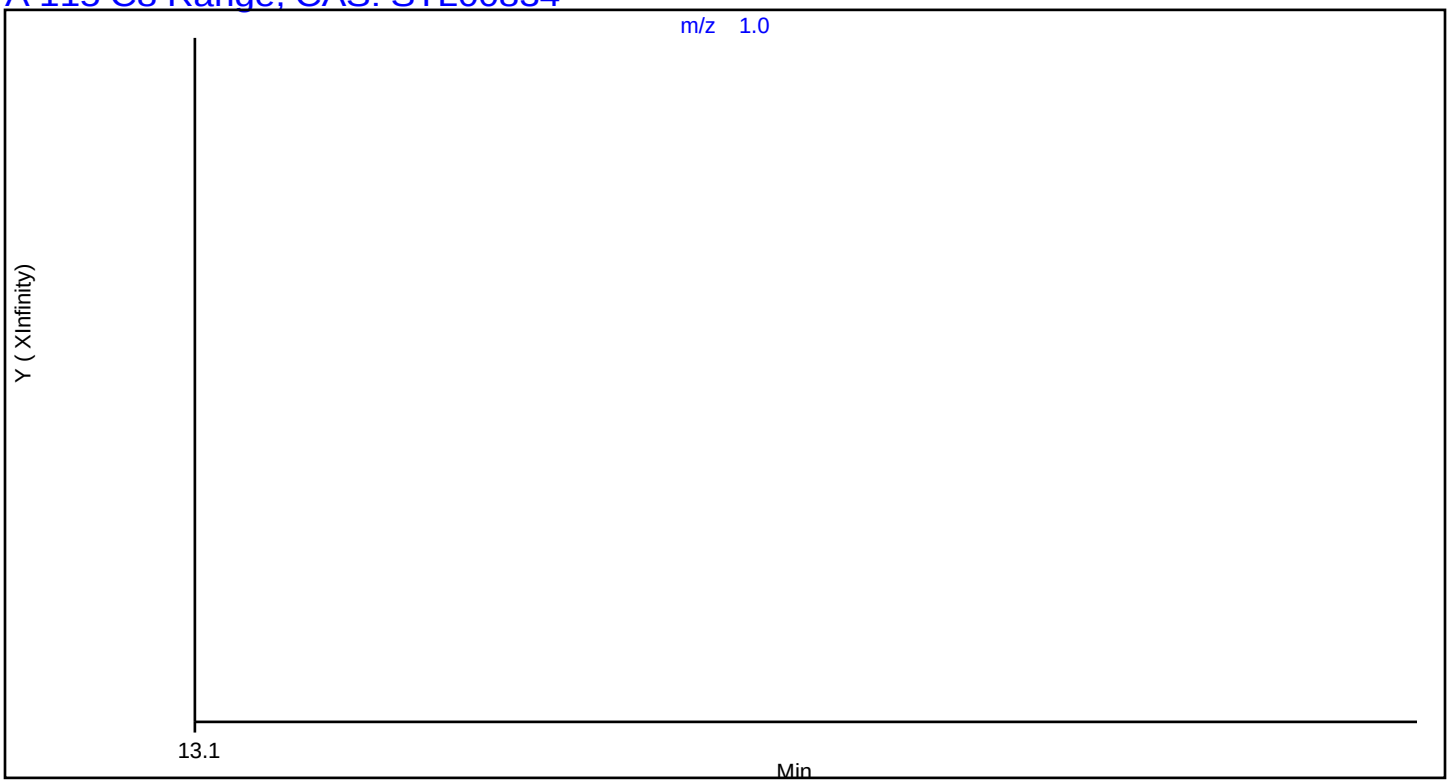


Report Date: 18-Jul-2019 17:45:28 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC10A.D				
Injection Date:	16-Jul-2019 18:06:30	Instrument ID:	MR		
Lims ID:	IC L10				
Client ID:					
Operator ID:	afb	ALS Bottle#:	15	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Jul-2019 20:37:30 ALS Bottle#: 1 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-008
Misc. Info.: 231550
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:45:35 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 09:29:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.325	7.330	-0.005	68	251026	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.380	9.385	-0.005	94	1461208	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.449	14.447	0.002	89	1260754	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	89	1044769	4.00	4.05	
6 Chlorodifluoromethane	51	3.513	3.511	0.002	96	3887	0.0200	0.0272	
7 Propene	41	3.524	3.518	0.006	75	1394	0.0200	0.0348	
8 Dichlorodifluoromethane	85	3.561	3.555	0.006	99	7109	0.0200	0.0274	
9 Chloromethane	52	3.680	3.675	0.005	57	1237	0.0200	0.0746	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.691	3.688	0.003	86	4535	0.0200	0.0313	
11 Acetaldehyde	44	3.788	3.776	0.012	93	5024	0.1000	0.3136	
12 Vinyl chloride	62	3.793	3.791	0.002	39	1384	0.0200	0.0236	
13 Butadiene	54	3.858	3.854	0.004	64	1080	0.0200	0.0292	
14 Butane	43	3.858	3.858	0.000	70	2570	0.0200	0.0429	
15 Bromomethane	94	4.063	4.061	0.002	81	3154	0.0200	0.0459	
16 Chloroethane	64	4.160	4.157	0.003	39	945	0.0200	0.0343	
17 Ethanol	31	4.246	4.237	0.009	82	2721	0.1000	0.1972	
18 Vinyl bromide	106	4.365	4.365	0.000	79	1888	0.0200	0.0287	
19 2-Methylbutane	43	4.424	4.416	0.008	60	1243	0.0200	0.0305	
20 Acrolein	56	4.548	4.540	0.008	31	1036	0.0200	0.0754	
21 Trichlorofluoromethane	101	4.564	4.560	0.004	98	6900	0.0200	0.0229	
22 Acetone	58	4.635	4.621	0.013	100	3888	0.0600	0.1682	
23 Isopropyl alcohol	45	4.726	4.713	0.013	81	7058	0.0600	0.1095	
25 Pentane	72	4.726	4.724	0.002	74	305	0.0200	0.0271	
26 Ethyl ether	31	4.856	4.833	0.023	70	939	0.0200	0.0274	
27 1,1-Dichloroethene	96	5.061	5.054	0.006	96	2386	0.0200	0.0255	
29 2-Methyl-2-propanol	59	5.174	5.149	0.025	55	4301	0.0200	0.0262	
30 1,1,2-Trichloro-1,2,2-trif	101	5.206	5.211	-0.005	96	5995	0.0200	0.0261	
31 Methylene Chloride	84	5.292	5.294	-0.002	87	10723	0.0200	0.1236	
32 3-Chloro-1-propene	39	5.314	5.313	0.001	24	1244	0.0200	0.0165	
33 Carbon disulfide	76	5.422	5.421	0.001	98	5140	0.0200	0.0235	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	5.945	5.936	0.009	94	2156	0.0200	0.0236	
35 2-Methylpentane	43	6.004	5.995	0.009	78	3128	0.0200	0.0278	
36 Methyl tert-butyl ether	73	6.074	6.057	0.017	45	3600	0.0200	0.0125	
37 1,1-Dichloroethane	63	6.252	6.252	0.000	97	3583	0.0200	0.0240	
38 Vinyl acetate	43	6.382	6.357	0.025	55	2880	0.0200	0.0210	
39 2-Butanone (MEK)	72	6.743	6.702	0.041	48	326	0.0200	0.009088	
40 Hexane	56	6.802	6.801	0.001	83	1307	0.0200	0.0251	
41 Isopropyl ether	45	6.953	6.929	0.024	81	3866	0.0200	0.0230	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	92	2198	0.0200	0.0237	
43 Ethyl acetate	43	7.288	7.256	0.032	33	2058	0.0200	0.0174	
44 Chloroform	83	7.363	7.368	-0.005	89	5642	0.0200	0.0237	
45 Tert-butyl ethyl ether	59	7.525	7.508	0.017	92	5393	0.0200	0.0212	
47 1,1,1-Trichloroethane	97	8.280	8.280	0.000	93	6421	0.0200	0.0214	
48 1,2-Dichloroethane	62	8.334	8.336	-0.002	94	3926	0.0200	0.0208	
49 Benzene	78	8.830	8.826	0.004	96	7154	0.0200	0.0299	
51 Cyclohexane	69	8.857	8.861	-0.004	69	719	0.0200	0.0196	
52 Carbon tetrachloride	117	8.862	8.868	-0.006	91	5149	0.0200	0.0182	
53 2,3-Dimethylpentane	71	9.029	9.032	-0.003	82	1179	0.0200	0.0236	
54 Thiophene	84	9.072	9.072	0.000	87	2760	0.0200	0.0201	
55 Isooctane	57	9.698	9.697	0.001	94	5119	0.0200	0.0173	
56 1,2-Dichloropropane	63	10.048	10.054	-0.006	61	1589	0.0200	0.0217	
57 n-Heptane	71	10.119	10.116	0.003	57	1438	0.0200	0.0191	
58 Trichloroethene	130	10.135	10.134	0.001	95	3484	0.0200	0.0235	
59 Dibromomethane	93	10.162	10.159	0.003	88	3448	0.0200	0.0271	
60 Dichlorobromomethane	83	10.356	10.349	0.007	98	4426	0.0200	0.0194	
63 Methylcyclohexane	83	11.003	11.001	0.002	92	3164	0.0200	0.0214	
65 cis-1,3-Dichloropropene	75	11.472	11.461	0.011	95	2675	0.0200	0.0190	
66 trans-1,3-Dichloropropene	75	12.232	12.218	0.014	91	2800	0.0200	0.0195	
67 Toluene	91	12.362	12.359	0.003	92	7064	0.0200	0.0232	
68 1,1,2-Trichloroethane	83	12.421	12.411	0.010	86	1783	0.0200	0.0217	
70 Chlorodibromomethane	129	13.144	13.140	0.004	92	3764	0.0200	0.0161	
71 n-Octane	85	13.230	13.227	0.003	64	1819	0.0200	0.0188	
72 Ethylene Dibromide	107	13.440	13.437	0.003	91	3574	0.0200	0.0199	
73 Tetrachloroethene	129	13.591	13.586	0.005	94	3553	0.0200	0.0232	
74 Chlorobenzene	112	14.497	14.498	-0.001	97	6901	0.0200	0.0251	
75 2,3-Dimethylheptane	43	14.654	14.655	-0.001	71	3757	0.0200	0.0227	
76 Ethylbenzene	91	14.842	14.839	0.003	98	9171	0.0200	0.0211	
77 m-Xylene & p-Xylene	91	15.020	15.018	0.002	98	15715	0.0400	0.0438	
78 Bromoform	173	15.392	15.394	-0.002	89	3429	0.0200	0.0159	
79 Styrene	104	15.506	15.491	0.015	96	3812	0.0200	0.0172	
80 o-Xylene	91	15.554	15.553	0.001	96	8255	0.0200	0.0217	
81 n-Nonane	57	15.570	15.567	0.003	71	3097	0.0200	0.0223	
82 1,1,2,2-Tetrachloroethane	83	15.878	15.872	0.006	85	3804	0.0200	0.0192	
83 1,2,3-Trichloropropane	110	16.034	16.028	0.006	89	1963	0.0200	0.0208	
84 Isopropylbenzene	105	16.185	16.185	0.000	53	14278	0.0200	0.0268	
85 N-Propylbenzene	120	16.751	16.752	-0.001	95	2675	0.0200	0.0191	
86 2-Chlorotoluene	126	16.762	16.761	0.001	90	3008	0.0200	0.0228	
88 4-Ethyltoluene	105	16.924	16.919	0.005	98	10687	0.0200	0.0207	
87 1,3,5-Trimethylbenzene	120	17.005	17.006	-0.001	92	4902	0.0200	0.0228	
89 Alpha Methyl Styrene	118	17.258	17.252	0.006	92	3059	0.0200	0.0152	
90 n-Decane	57	17.425	17.423	0.002	93	3707	0.0200	0.0186	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	90	12900	0.0200	0.0228	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
92 1,2,4-Trimethylbenzene	105	17.490	17.487	0.003	96	11654	0.0200	0.0223	
93 1,3-Dichlorobenzene	146	17.760	17.756	0.004	88	9343	0.0200	0.0236	
94 sec-Butylbenzene	105	17.787	17.787	-0.001	97	16327	0.0200	0.0226	
96 Benzyl chloride	91	17.846	17.844	0.002	73	7449	0.0200	0.0187	
95 1,4-Dichlorobenzene	146	17.862	17.858	0.004	93	9983	0.0200	0.0252	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	96	15751	0.0200	0.0215	
98 1,2,3-Trimethylbenzene	105	18.018	18.014	0.004	98	13277	0.0200	0.0226	
99 Butylcyclohexane	83	18.126	18.127	-0.001	95	7225	0.0200	0.0224	
100 1,2-Dichlorobenzene	146	18.261	18.258	0.003	94	10298	0.0200	0.0262	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	11196	0.0200	0.0226	
102 Indene	116	18.417	18.412	0.005	89	7181	0.0200	0.0187	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	12969	0.0200	0.0214	
104 Undecane	57	18.919	18.914	0.005	83	4376	0.0200	0.0172	
105 1,2-Dibromo-3-Chloropropan	157	18.919	18.924	-0.005	75	3544	0.0200	0.0201	
106 1,2,4,5-Tetramethylbenzene	119	19.318	19.315	0.003	96	14732	0.0200	0.0203	
107 Dodecane	57	20.062	20.057	0.005	91	3295	0.0200	0.0119	
108 1,2,4-Trichlorobenzene	180	20.127	20.122	0.005	93	11205	0.0200	0.0253	
109 Naphthalene	128	20.245	20.243	0.002	98	21777	0.0200	0.0235	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	96	12698	0.0200	0.0273	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	93	13851	0.0200	0.0297	
112 2-Methylnaphthalene	142	21.383	21.375	0.008	95	8216	0.0200	0.0235	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	96	11175	0.0200	0.0357	
A 115 C8 Range	1	13.230	(13.203-13.257)		0	15287	0.0200	0.0201	
S 116 Xylenes, Total	100				0		0.0600	0.0655	
S 117 1,2-Dichloroethene, Total	1				0		0.0400	0.0473	

Reagents:

40L1-3DQP_00015	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

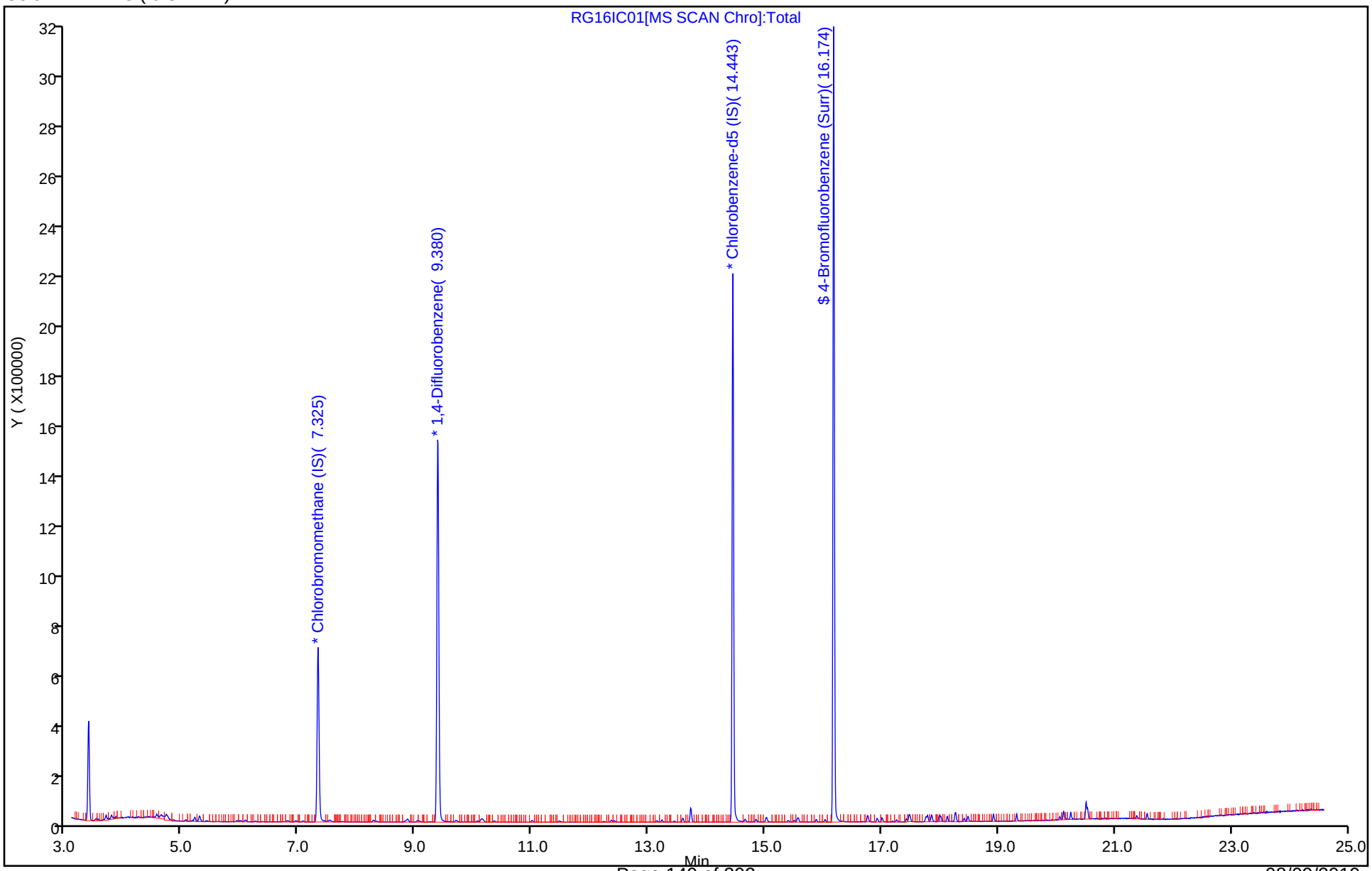
Report Date: 18-Jul-2019 17:45:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D

Injection Date:	16-Jul-2019 20:37:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

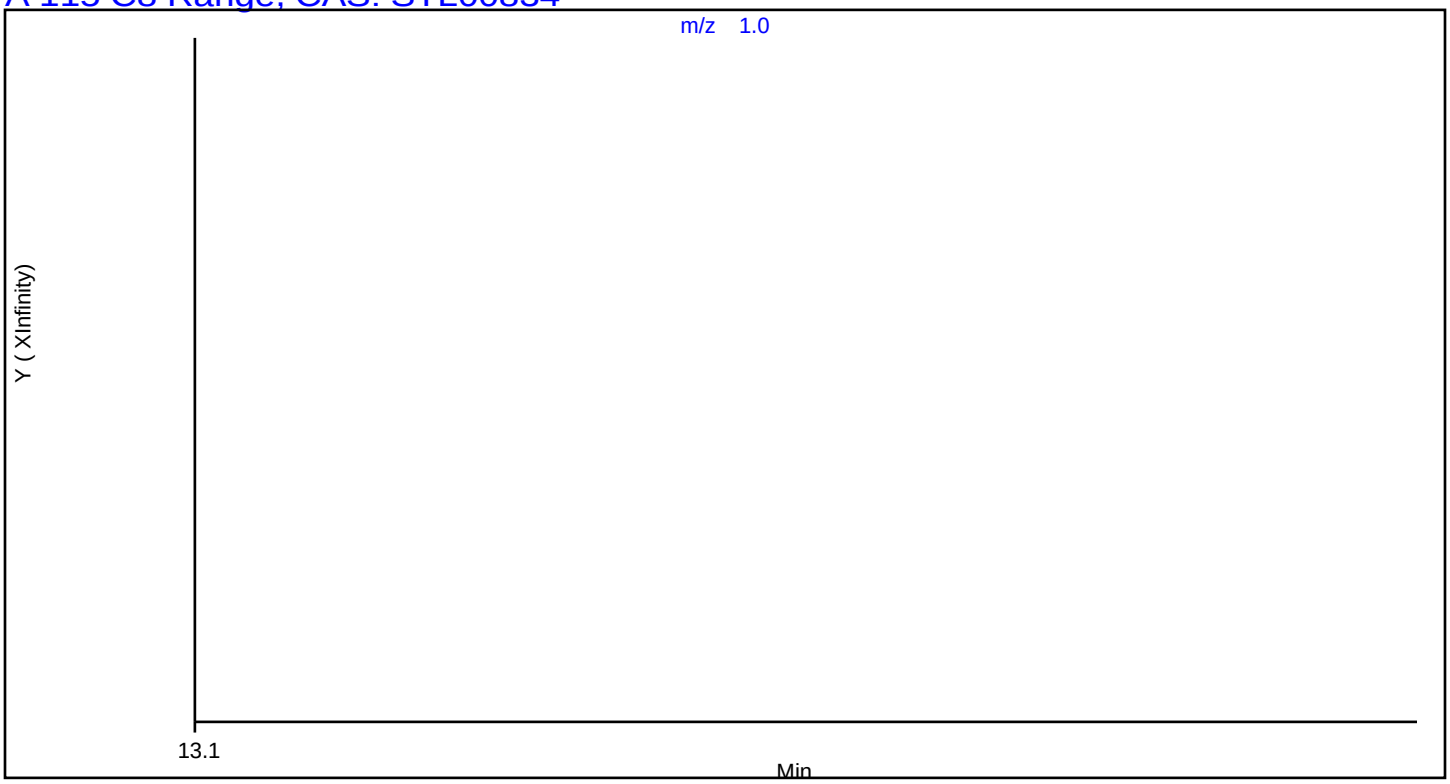


Report Date: 18-Jul-2019 17:45:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D				
Injection Date:	16-Jul-2019 20:37:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



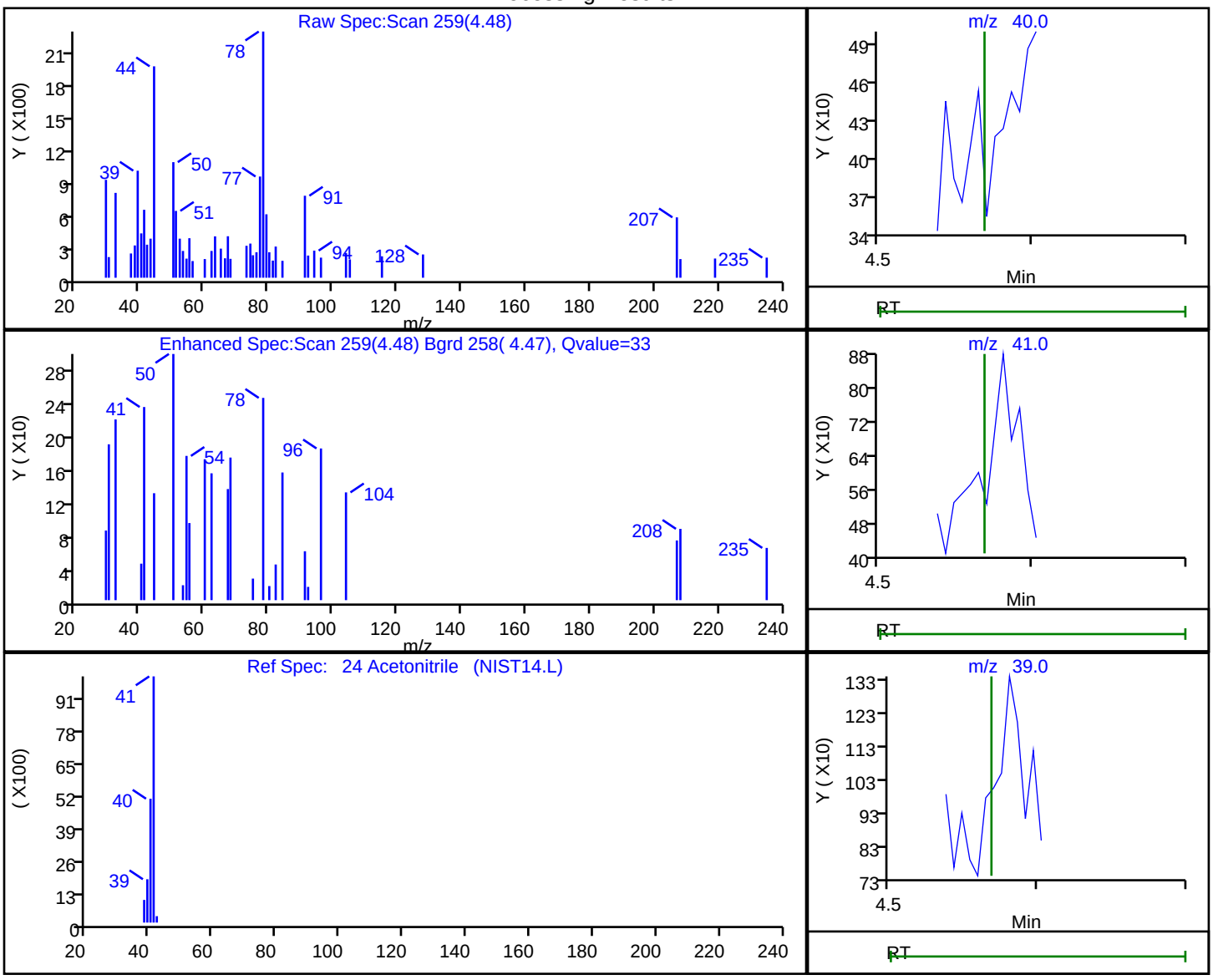
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D				
Injection Date:	16-Jul-2019 20:37:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

24 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.48	40.00	79	0.006476
4.48	41.00	739	
4.48	39.00	784	

Reviewer: barlozhetskayaa, 18-Jul-2019 17:36:06

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

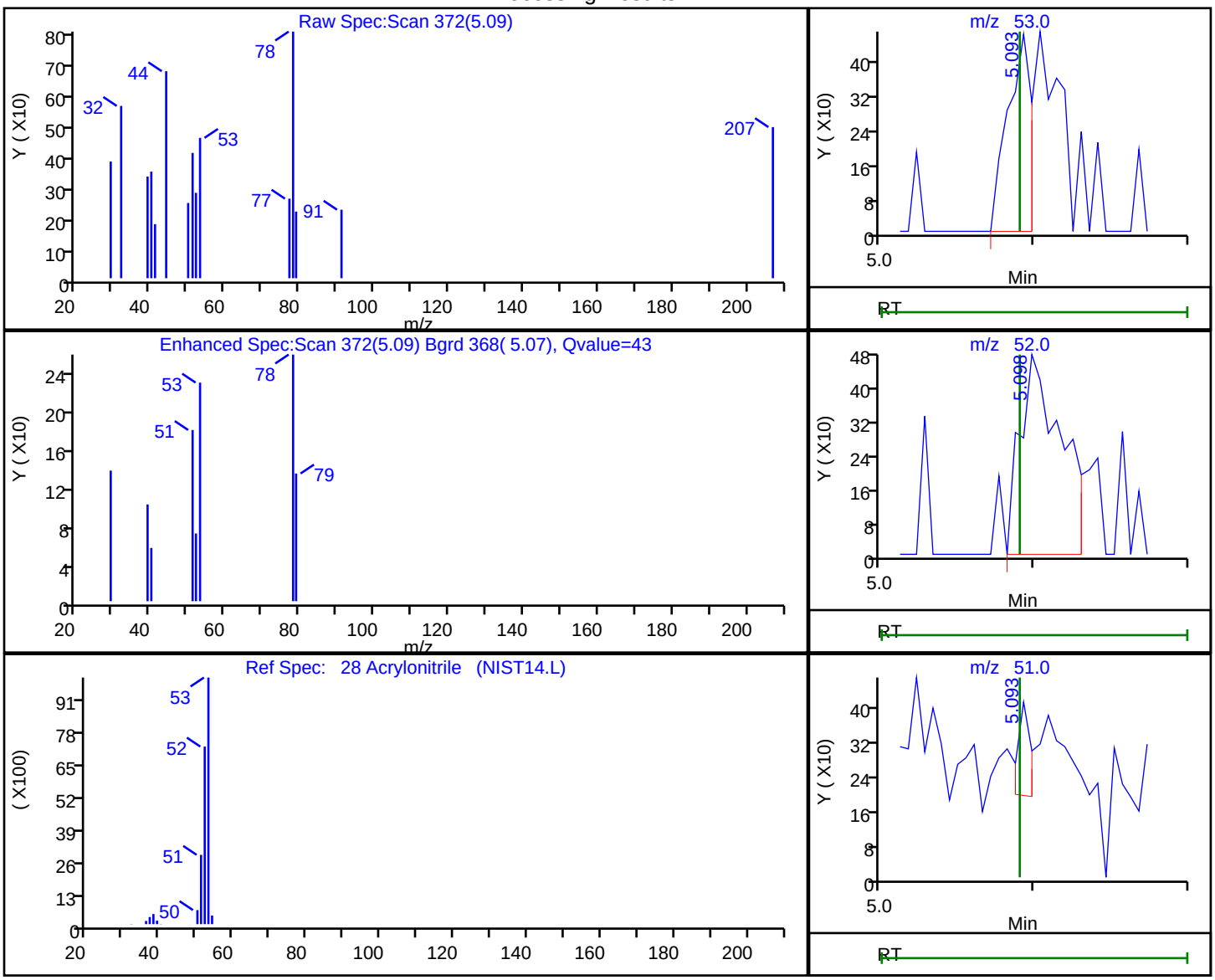
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D				
Injection Date:	16-Jul-2019 20:37:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

28 Acrylonitrile, CAS: 107-13-1

Processing Results



RT	Mass	Response	Amount
5.09	53.00	495	0.012517
5.10	52.00	901	
5.09	51.00	128	

Reviewer: barlozhetskayaa, 18-Jul-2019 17:36:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

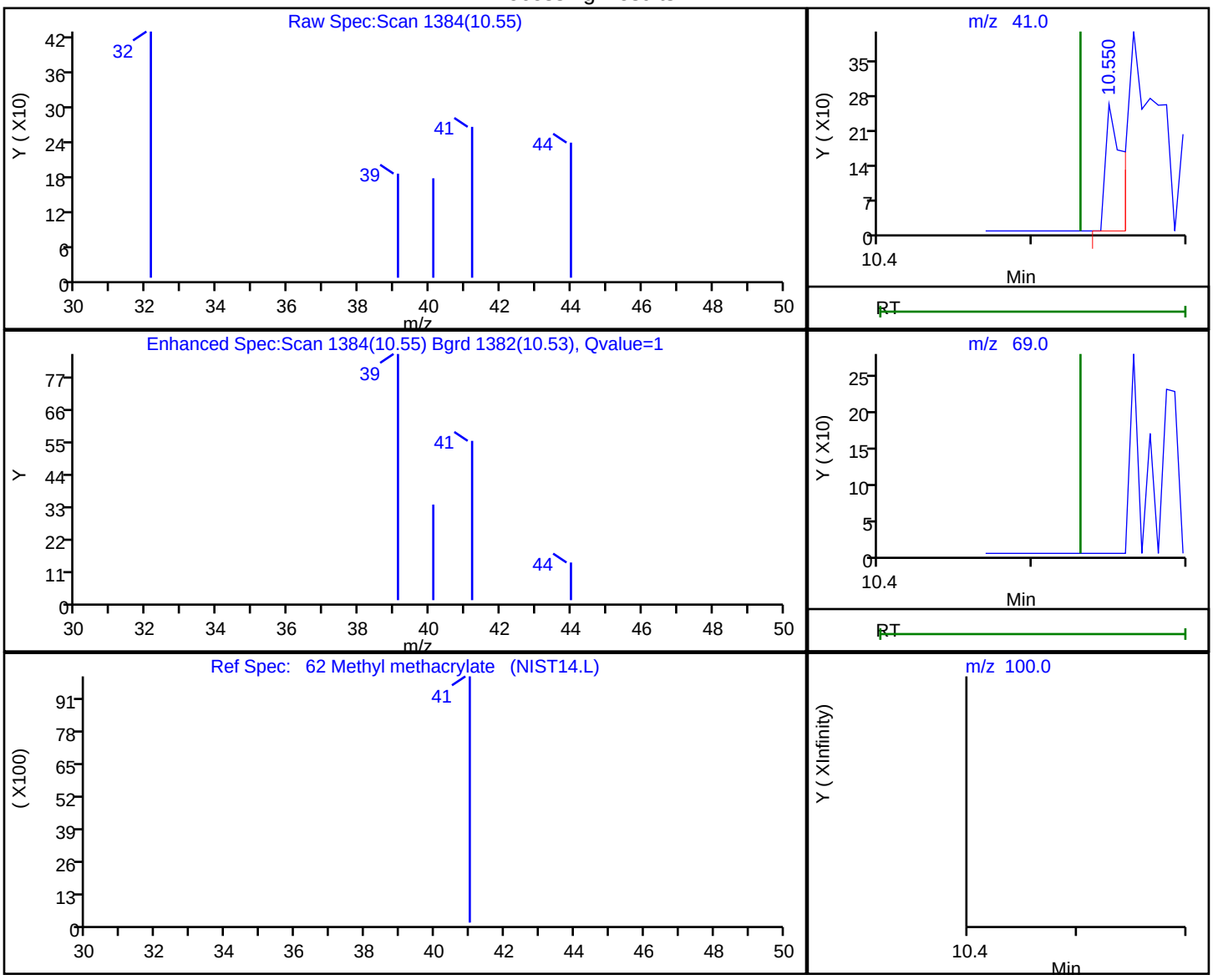
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D				
Injection Date:	16-Jul-2019 20:37:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

62 Methyl methacrylate, CAS: 80-62-6

Processing Results



RT	Mass	Response	Amount
10.55	41.00	189	0.002554
10.53	69.00	0	
10.53	100.00	0	

Reviewer: barlozhetskayaa, 18-Jul-2019 17:36:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

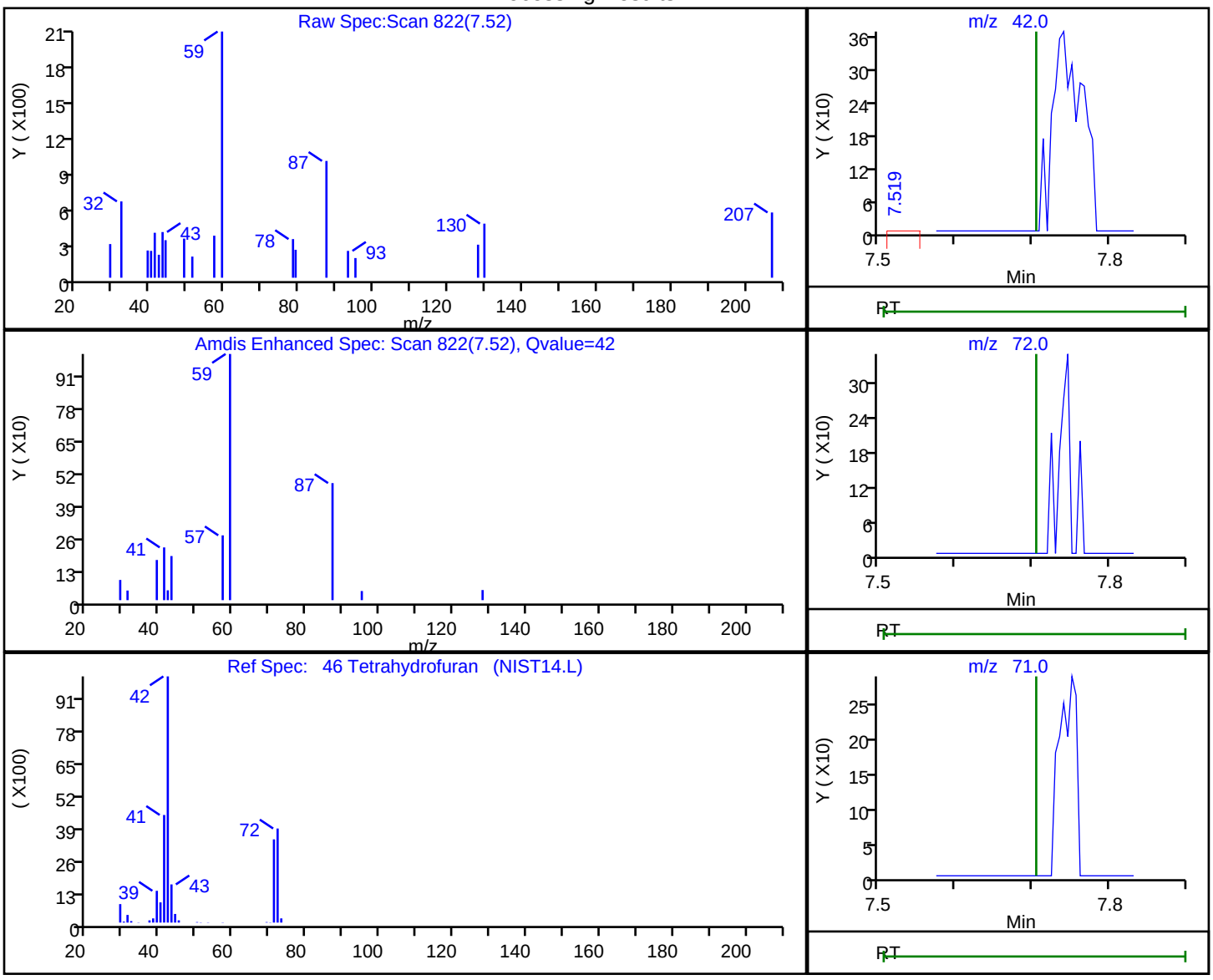
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC01.D				
Injection Date:	16-Jul-2019 20:37:30	Instrument ID:	MR		
Lims ID:	IC L1				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

46 Tetrahydrofuran, CAS: 109-99-9

Processing Results



RT	Mass	Response	Amount
7.52	42.00	175	0.003562
7.69	72.00	0	
7.69	71.00	0	

Reviewer: barlozhetskayaa, 18-Jul-2019 17:36:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC02.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Jul-2019 21:30:30 ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-009
Misc. Info.: 231550
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:45:54 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 09:33:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.325	7.330	-0.005	69	244976	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.385	0.000	94	1427522	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.449	14.447	0.002	89	1238831	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	89	1018246	4.00	4.02	
6 Chlorodifluoromethane	51	3.518	3.511	0.007	94	6728	0.0400	0.0483	
7 Propene	41	3.518	3.518	0.000	46	2294	0.0400	0.0587	
8 Dichlorodifluoromethane	85	3.561	3.555	0.006	99	12005	0.0400	0.0474	
9 Chloromethane	52	3.680	3.675	0.005	68	1398	0.0400	0.0864	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.696	3.688	0.008	89	7157	0.0400	0.0506	
11 Acetaldehyde	44	3.783	3.776	0.007	91	7932	0.2000	0.5073	
12 Vinyl chloride	62	3.793	3.791	0.002	41	2687	0.0400	0.0469	
13 Butadiene	54	3.863	3.854	0.009	80	1574	0.0400	0.0437	
14 Butane	43	3.869	3.858	0.011	67	3180	0.0400	0.0544	
15 Bromomethane	94	4.068	4.061	0.007	94	3586	0.0400	0.0535	
16 Chloroethane	64	4.165	4.157	0.008	94	1328	0.0400	0.0494	
17 Ethanol	31	4.241	4.237	0.004	81	1373	0.2000	0.1020	
18 Vinyl bromide	106	4.376	4.365	0.011	94	3240	0.0400	0.0505	
19 2-Methylbutane	43	4.424	4.416	0.008	76	3148	0.0400	0.0790	
21 Trichlorofluoromethane	101	4.564	4.560	0.004	99	12860	0.0400	0.0438	
22 Acetone	58	4.640	4.621	0.019	100	6255	0.1200	0.2773	
23 Isopropyl alcohol	45	4.732	4.713	0.019	81	10484	0.1200	0.1667	
25 Pentane	72	4.732	4.724	0.008	73	443	0.0400	0.0403	
26 Ethyl ether	31	4.850	4.833	0.017	72	1322	0.0400	0.0396	
27 1,1-Dichloroethene	96	5.061	5.054	0.007	97	4012	0.0400	0.0439	
28 Acrylonitrile	53	5.098	5.090	0.008	49	1493	0.0400	0.0387	
29 2-Methyl-2-propanol	59	5.174	5.149	0.025	92	7586	0.0400	0.0473	
30 1,1,2-Trichloro-1,2,2-trif	101	5.222	5.211	0.011	93	10097	0.0400	0.0450	
31 Methylene Chloride	84	5.298	5.294	0.004	85	11723	0.0400	0.1385	
32 3-Chloro-1-propene	39	5.325	5.313	0.012	36	1812	0.0400	0.0246	
33 Carbon disulfide	76	5.422	5.421	0.001	99	8989	0.0400	0.0422	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	5.939	5.936	0.003	96	3661	0.0400	0.0411	
35 2-Methylpentane	43	6.004	5.995	0.009	84	5345	0.0400	0.0487	
36 Methyl tert-butyl ether	73	6.080	6.057	0.023	92	11607	0.0400	0.0413	
37 1,1-Dichloroethane	63	6.252	6.252	0.000	97	6372	0.0400	0.0438	
38 Vinyl acetate	43	6.371	6.357	0.014	97	4149	0.0400	0.0311	
39 2-Butanone (MEK)	72	6.727	6.702	0.025	78	958	0.0400	0.0274	
40 Hexane	56	6.802	6.801	0.001	79	2415	0.0400	0.0475	
41 Isopropyl ether	45	6.948	6.929	0.019	85	7103	0.0400	0.0433	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	90	3771	0.0400	0.0417	
43 Ethyl acetate	43	7.282	7.256	0.026	95	2914	0.0400	0.0253	
44 Chloroform	83	7.363	7.368	-0.005	92	9712	0.0400	0.0419	
45 Tert-butyl ethyl ether	59	7.525	7.508	0.017	69	5788	0.0400	0.0233	
46 Tetrahydrofuran	42	7.730	7.704	0.026	71	2105	0.0400	0.0439	
47 1,1,1-Trichloroethane	97	8.285	8.280	0.005	95	12294	0.0400	0.0419	
48 1,2-Dichloroethane	62	8.339	8.336	0.003	97	7615	0.0400	0.0414	
49 Benzene	78	8.830	8.826	0.004	97	10959	0.0400	0.0468	
51 Cyclohexane	69	8.868	8.861	0.007	80	1360	0.0400	0.0379	
52 Carbon tetrachloride	117	8.873	8.868	0.005	92	8639	0.0400	0.0313	
53 2,3-Dimethylpentane	71	9.035	9.032	0.003	84	1768	0.0400	0.0362	
54 Thiophene	84	9.067	9.072	-0.005	87	5491	0.0400	0.0410	
55 Isooctane	57	9.698	9.697	0.001	93	11903	0.0400	0.0411	
56 1,2-Dichloropropane	63	10.059	10.054	0.005	69	2933	0.0400	0.0410	
57 n-Heptane	71	10.113	10.116	-0.003	65	2919	0.0400	0.0397	
58 Trichloroethene	130	10.129	10.134	-0.005	95	5849	0.0400	0.0404	
59 Dibromomethane	93	10.162	10.159	0.003	88	5141	0.0400	0.0414	
60 Dichlorobromomethane	83	10.350	10.349	0.001	96	7753	0.0400	0.0347	
61 1,4-Dioxane	88	10.404	10.373	0.031	80	1169	0.0400	0.0340	
62 Methyl methacrylate	41	10.555	10.531	0.024	83	1889	0.0400	0.0261	
63 Methylcyclohexane	83	10.998	11.001	-0.003	91	5825	0.0400	0.0403	
64 4-Methyl-2-pentanone (MIBK	43	11.467	11.432	0.035	68	3095	0.0400	0.0266	
65 cis-1,3-Dichloropropene	75	11.461	11.461	0.000	93	4707	0.0400	0.0343	
66 trans-1,3-Dichloropropene	75	12.227	12.218	0.009	95	4360	0.0400	0.0309	
67 Toluene	91	12.362	12.359	0.003	92	11654	0.0400	0.0390	
68 1,1,2-Trichloroethane	83	12.416	12.411	0.005	93	2837	0.0400	0.0352	
69 2-Hexanone	58	12.950	12.895	0.055	1	275	0.0400	0.004725	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	96	7485	0.0400	0.0326	
71 n-Octane	85	13.230	13.227	0.003	67	3621	0.0400	0.0382	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	91	6070	0.0400	0.0345	
73 Tetrachloroethene	129	13.586	13.586	0.000	85	6245	0.0400	0.0415	
74 Chlorobenzene	112	14.497	14.498	-0.001	93	11695	0.0400	0.0433	
75 2,3-Dimethylheptane	43	14.659	14.655	0.004	71	6400	0.0400	0.0394	
76 Ethylbenzene	91	14.842	14.839	0.003	99	17407	0.0400	0.0408	
77 m-Xylene & p-Xylene	91	15.020	15.018	0.002	99	27343	0.0800	0.0775	
78 Bromoform	173	15.392	15.394	-0.002	94	6409	0.0400	0.0302	
79 Styrene	104	15.495	15.491	0.004	94	6913	0.0400	0.0318	
80 o-Xylene	91	15.559	15.553	0.006	97	15000	0.0400	0.0401	
81 n-Nonane	57	15.565	15.567	-0.002	80	4965	0.0400	0.0365	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	89	7208	0.0400	0.0371	
83 1,2,3-Trichloropropane	110	16.034	16.028	0.006	90	3666	0.0400	0.0395	
84 Isopropylbenzene	105	16.185	16.185	0.000	58	23787	0.0400	0.0455	
85 N-Propylbenzene	120	16.751	16.752	-0.001	96	5409	0.0400	0.0394	
86 2-Chlorotoluene	126	16.762	16.761	0.001	90	5006	0.0400	0.0386	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
88 4-Ethyltoluene	105	16.924	16.919	0.005	98	18279	0.0400	0.0360	
87 1,3,5-Trimethylbenzene	120	17.005	17.006	-0.001	92	8498	0.0400	0.0402	
89 Alpha Methyl Styrene	118	17.258	17.252	0.006	87	5910	0.0400	0.0299	
90 n-Decane	57	17.425	17.423	0.002	95	6810	0.0400	0.0347	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	91	23404	0.0400	0.0421	
92 1,2,4-Trimethylbenzene	105	17.490	17.487	0.003	96	21165	0.0400	0.0411	
93 1,3-Dichlorobenzene	146	17.760	17.756	0.004	98	16628	0.0400	0.0428	
94 sec-Butylbenzene	105	17.787	17.787	0.000	97	28393	0.0400	0.0400	
96 Benzyl chloride	91	17.846	17.844	0.002	91	12610	0.0400	0.0322	
95 1,4-Dichlorobenzene	146	17.857	17.858	-0.001	94	17778	0.0400	0.0457	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	28316	0.0400	0.0393	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	96	23918	0.0400	0.0414	
99 Butylcyclohexane	83	18.126	18.127	-0.001	93	12901	0.0400	0.0407	
100 1,2-Dichlorobenzene	146	18.261	18.258	0.003	92	17074	0.0400	0.0441	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	20459	0.0400	0.0420	
102 Indene	116	18.412	18.412	0.000	93	13083	0.0400	0.0347	
103 n-Butylbenzene	91	18.482	18.477	0.005	96	23855	0.0400	0.0401	
104 Undecane	57	18.914	18.914	0.000	84	8579	0.0400	0.0343	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	95	5691	0.0400	0.0329	
106 1,2,4,5-Tetramethylbenzene	119	19.313	19.315	-0.002	95	26305	0.0400	0.0370	
107 Dodecane	57	20.057	20.057	0.000	92	6809	0.0400	0.0250	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	93	17602	0.0400	0.0405	
109 Naphthalene	128	20.245	20.243	0.002	98	36132	0.0400	0.0397	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	95	21537	0.0400	0.0471	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	93	19289	0.0400	0.0421	
112 2-Methylnaphthalene	142	21.378	21.375	0.003	94	8016	0.0400	0.0233	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	92	11447	0.0400	0.0372	
A 115 C8 Range	1	13.238	(13.192-13.268)		0	28091	0.0400	0.0377	
S 116 Xylenes, Total	100				0		0.1200	0.1177	
S 117 1,2-Dichloroethene, Total	1				0		0.0800	0.0828	

Reagents:

40L1-3DQP_00015	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

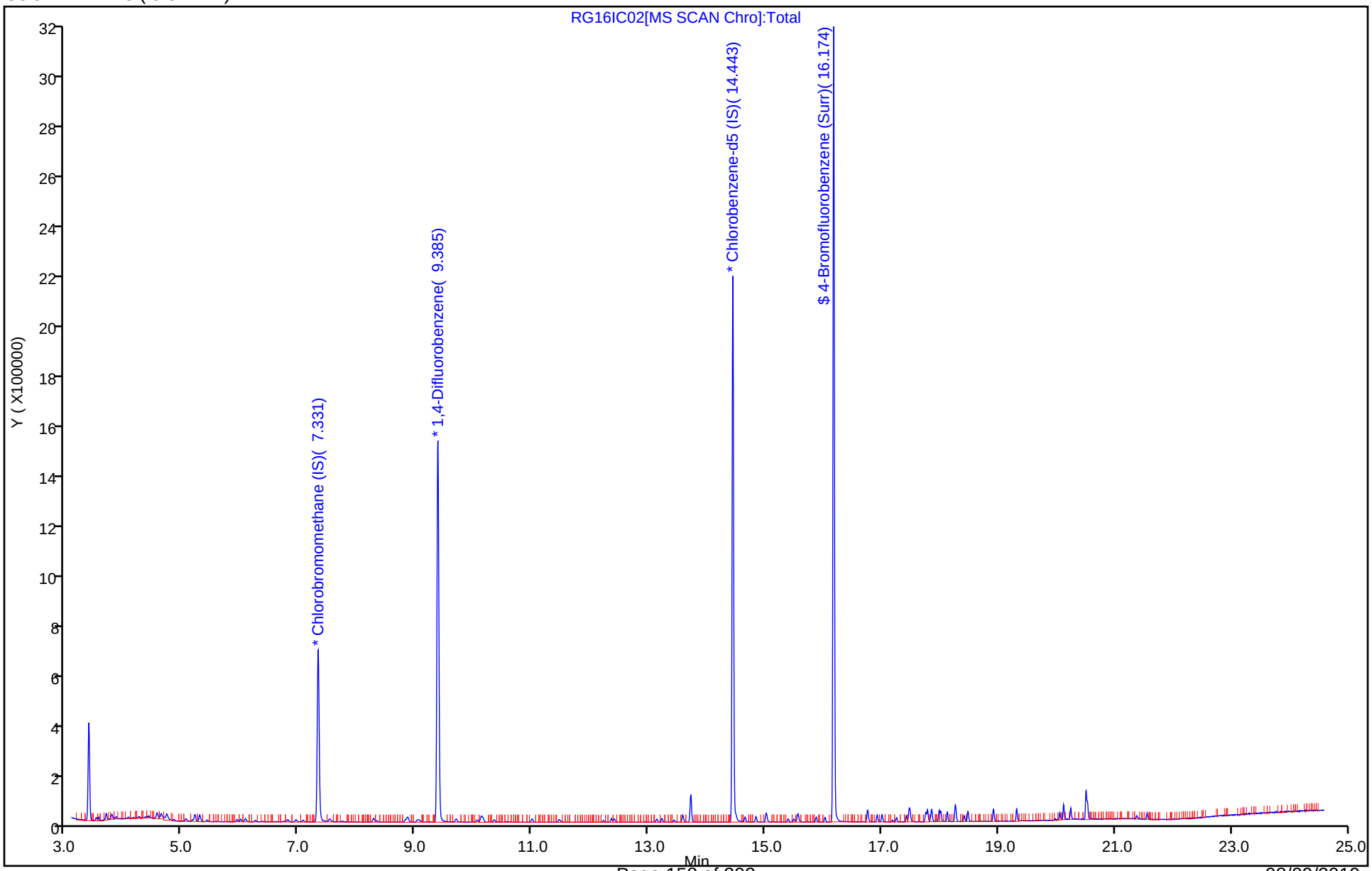
Report Date: 18-Jul-2019 17:45:56 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC02.D

Injection Date:	16-Jul-2019 21:30:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L2			Worklist Smp#:	9
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

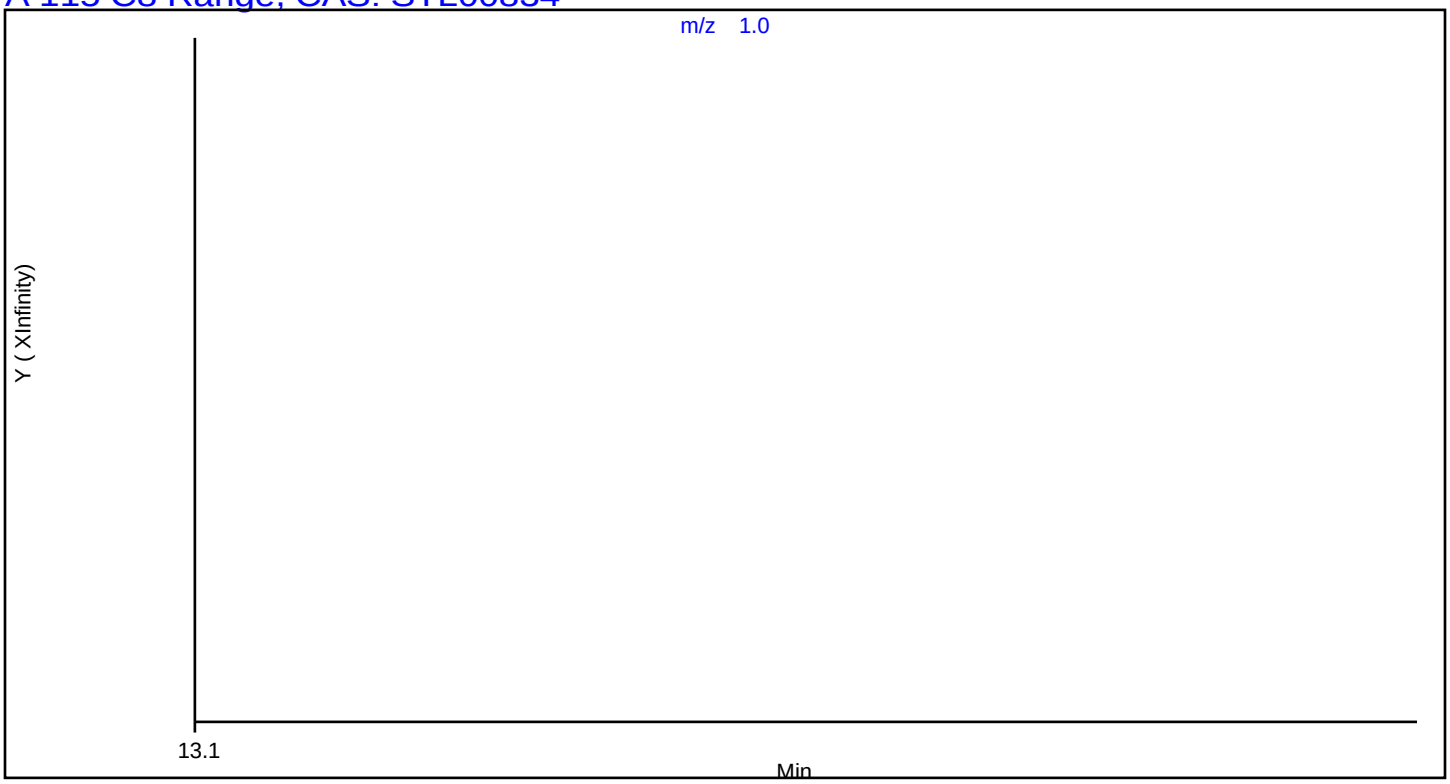


Report Date: 18-Jul-2019 17:45:56 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC02.D				
Injection Date:	16-Jul-2019 21:30:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



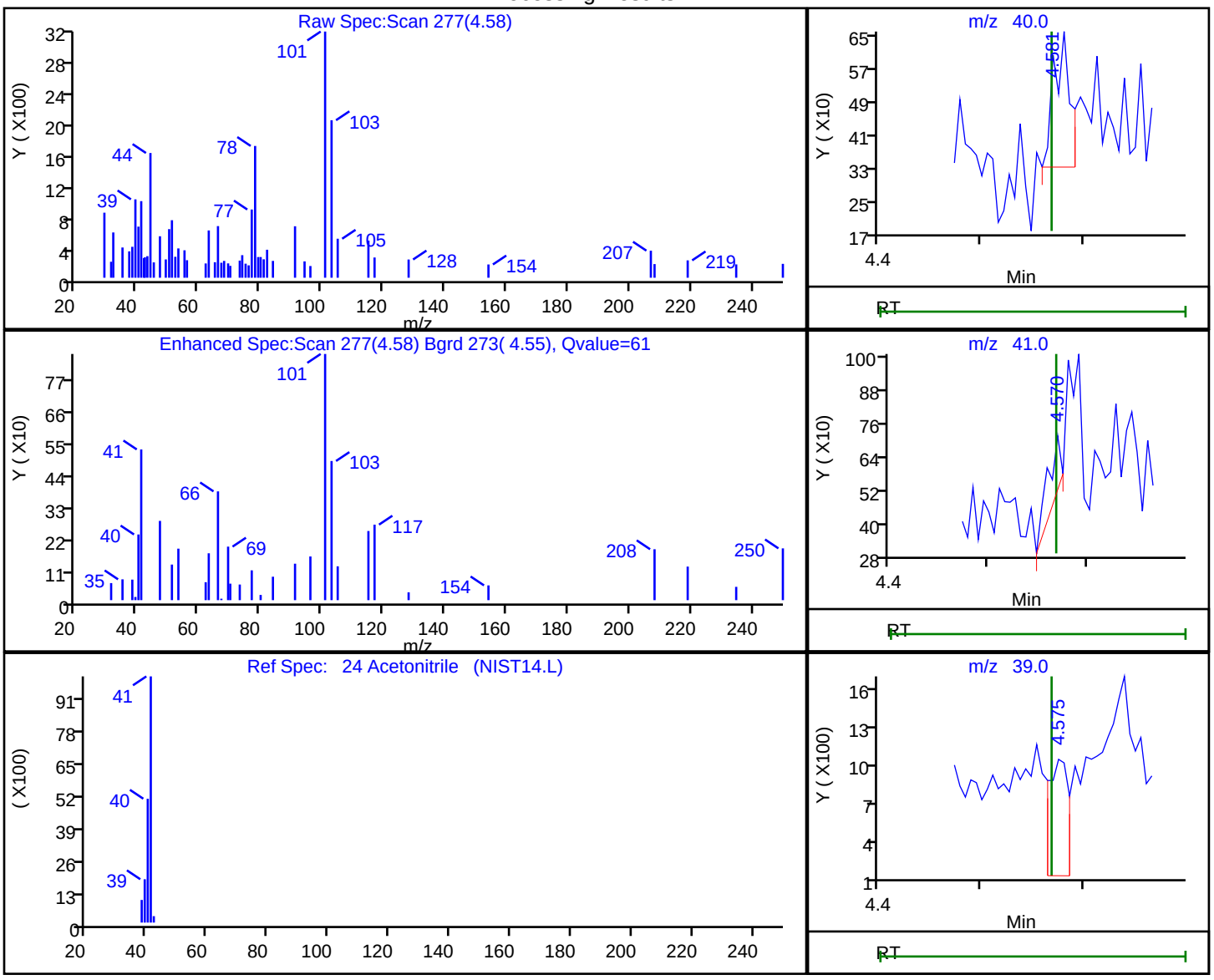
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC02.D				
Injection Date:	16-Jul-2019 21:30:30	Instrument ID:	MR		
Lims ID:	IC L2				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

24 Acetonitrile, CAS: 75-05-8

Processing Results



RT	Mass	Response	Amount
4.58	40.00	363	0.030492
4.57	41.00	194	
4.58	39.00	1219	

Reviewer: barlozhetskayaa, 18-Jul-2019 17:35:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

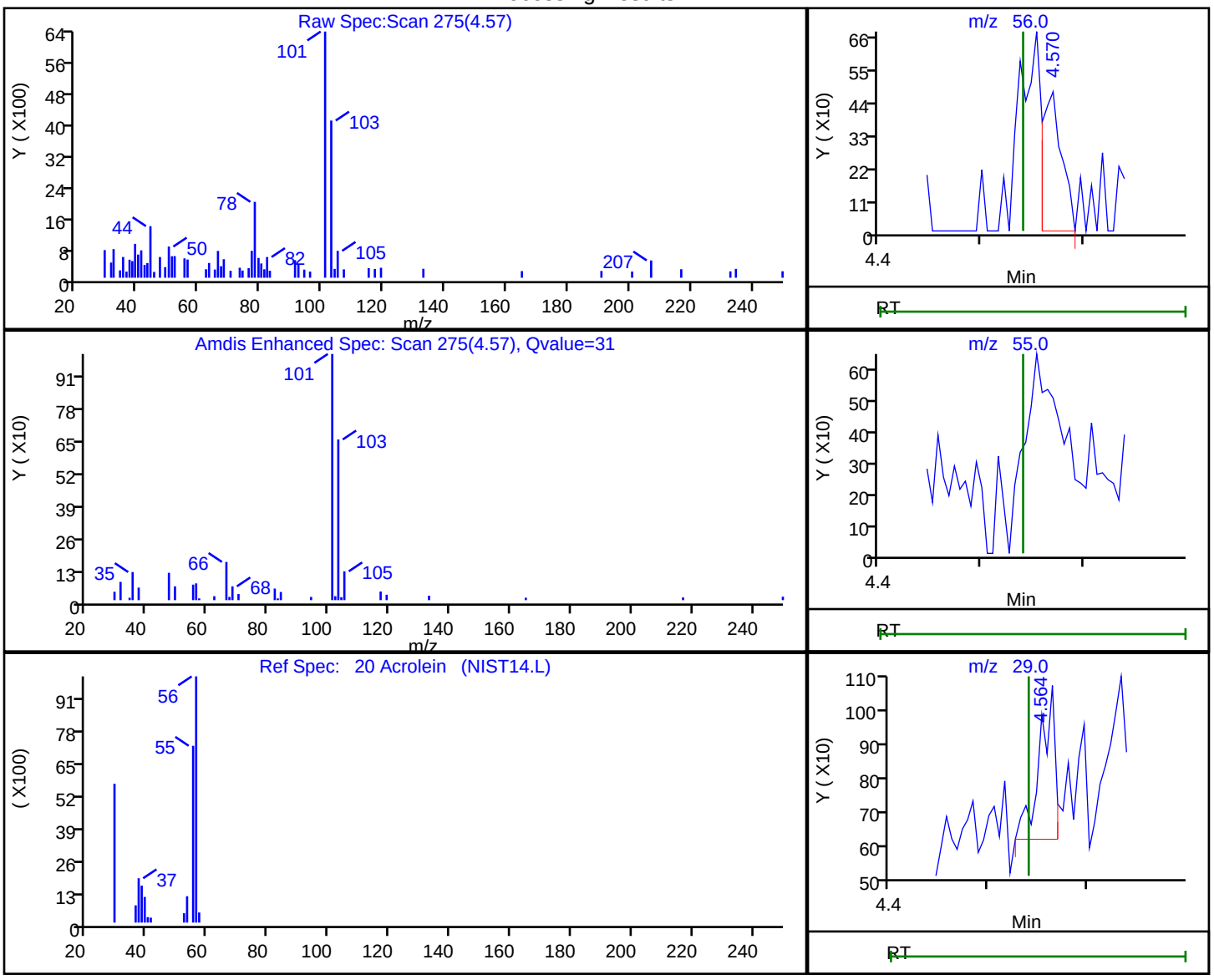
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC02.D
Injection Date: 16-Jul-2019 21:30:30 Instrument ID: MR
Lims ID: IC L2
Client ID:
Operator ID: afb ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

20 Acrolein, CAS: 107-02-8

Processing Results



RT	Mass	Response	Amount
4.57	56.00	625	0.046586
4.54	55.00	0	
4.56	29.00	493	

Reviewer: barlozhetskayaa, 18-Jul-2019 17:35:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC03.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Jul-2019 22:24:30 ALS Bottle#: 1 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-010
Misc. Info.: 231550
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:46:09 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 09:38:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.331	7.330	0.000	71	244328	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.385	0.000	94	1394271	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.448	14.447	0.001	89	1216924	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	91	1006946	4.00	4.04	
6 Chlorodifluoromethane	51	3.518	3.511	0.007	95	11495	0.0800	0.0827	
7 Propene	41	3.518	3.518	0.000	52	4202	0.0800	0.1079	
8 Dichlorodifluoromethane	85	3.556	3.555	0.001	99	20293	0.0800	0.0804	
9 Chloromethane	52	3.680	3.675	0.005	62	1487	0.0800	0.0922	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.696	3.688	0.008	87	11884	0.0800	0.0843	
11 Acetaldehyde	44	3.782	3.776	0.006	93	14516	0.4000	0.9309	
12 Vinyl chloride	62	3.793	3.791	0.002	48	5292	0.0800	0.0926	
13 Butadiene	54	3.858	3.854	0.004	78	3051	0.0800	0.0848	
14 Butane	43	3.863	3.858	0.005	76	5401	0.0800	0.0926	
15 Bromomethane	94	4.063	4.061	0.002	95	6597	0.0800	0.0987	
16 Chloroethane	64	4.160	4.157	0.003	92	2190	0.0800	0.0817	
17 Ethanol	31	4.251	4.237	0.014	88	7296	0.4000	0.5432	
18 Vinyl bromide	106	4.365	4.365	0.000	94	5224	0.0800	0.0817	
19 2-Methylbutane	43	4.419	4.416	0.003	77	4495	0.0800	0.1132	
20 Acrolein	56	4.559	4.540	0.019	27	2633	0.0800	0.1968	
21 Trichlorofluoromethane	101	4.564	4.560	0.004	99	23737	0.0800	0.0810	
24 Acetonitrile	40	4.580	4.568	0.012	69	1036	0.0800	0.0873	
22 Acetone	58	4.634	4.621	0.013	100	10871	0.2400	0.4832	
23 Isopropyl alcohol	45	4.726	4.713	0.013	76	17705	0.2400	0.2823	
25 Pentane	72	4.726	4.724	0.002	74	992	0.0800	0.0905	
26 Ethyl ether	31	4.845	4.833	0.012	68	3126	0.0800	0.0938	
27 1,1-Dichloroethene	96	5.055	5.054	0.001	98	7788	0.0800	0.0855	
28 Acrylonitrile	53	5.093	5.090	0.003	94	1809	0.0800	0.0470	
29 2-Methyl-2-propanol	59	5.174	5.149	0.025	90	12814	0.0800	0.0801	
30 1,1,2-Trichloro-1,2,2-trif	101	5.217	5.211	0.006	93	18644	0.0800	0.0833	
31 Methylene Chloride	84	5.298	5.294	0.004	85	14365	0.0800	0.1702	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.308	5.313	-0.005	93	3990	0.0800	0.0542	
33 Carbon disulfide	76	5.422	5.421	0.001	99	16839	0.0800	0.0792	
34 trans-1,2-Dichloroethene	96	5.939	5.936	0.003	95	6854	0.0800	0.0772	
35 2-Methylpentane	43	5.999	5.995	0.004	84	8990	0.0800	0.0821	
36 Methyl tert-butyl ether	73	6.079	6.057	0.022	92	22003	0.0800	0.0784	
37 1,1-Dichloroethane	63	6.257	6.252	0.005	98	12366	0.0800	0.0851	
38 Vinyl acetate	43	6.365	6.357	0.008	96	9015	0.0800	0.0677	
39 2-Butanone (MEK)	72	6.727	6.702	0.025	95	2513	0.0800	0.0720	
40 Hexane	56	6.802	6.801	0.001	75	4256	0.0800	0.0838	
41 Isopropyl ether	45	6.942	6.929	0.013	88	13119	0.0800	0.0803	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	93	7650	0.0800	0.0848	
43 Ethyl acetate	43	7.271	7.256	0.015	97	7440	0.0800	0.0647	
44 Chloroform	83	7.374	7.368	0.006	89	18304	0.0800	0.0791	
45 Tert-butyl ethyl ether	59	7.519	7.508	0.011	92	18619	0.0800	0.0753	
46 Tetrahydrofuran	42	7.735	7.704	0.031	74	3498	0.0800	0.0732	
47 1,1,1-Trichloroethane	97	8.285	8.280	0.005	93	22574	0.0800	0.0772	
48 1,2-Dichloroethane	62	8.339	8.336	0.003	97	14810	0.0800	0.0824	
49 Benzene	78	8.824	8.826	-0.002	95	19349	0.0800	0.0846	
51 Cyclohexane	69	8.862	8.861	0.001	66	2948	0.0800	0.0841	
52 Carbon tetrachloride	117	8.873	8.868	0.005	92	17136	0.0800	0.0635	
53 2,3-Dimethylpentane	71	9.034	9.032	0.002	80	3724	0.0800	0.0782	
54 Thiophene	84	9.072	9.072	0.000	91	10441	0.0800	0.0798	
55 Isooctane	57	9.698	9.697	0.001	94	22840	0.0800	0.0807	
56 1,2-Dichloropropane	63	10.054	10.054	0.000	67	5452	0.0800	0.0780	
57 n-Heptane	71	10.118	10.116	0.002	74	5441	0.0800	0.0757	
58 Trichloroethene	130	10.135	10.134	0.001	96	11144	0.0800	0.0788	
59 Dibromomethane	93	10.162	10.159	0.003	90	9613	0.0800	0.0793	
60 Dichlorobromomethane	83	10.350	10.349	0.001	98	15580	0.0800	0.0714	
61 1,4-Dioxane	88	10.399	10.373	0.026	76	2648	0.0800	0.0788	
62 Methyl methacrylate	41	10.544	10.531	0.013	84	3596	0.0800	0.0509	
63 Methylcyclohexane	83	11.003	11.001	0.002	92	10686	0.0800	0.0758	
64 4-Methyl-2-pentanone (MIBK	43	11.450	11.432	0.018	92	7929	0.0800	0.0698	
65 cis-1,3-Dichloropropene	75	11.466	11.461	0.005	97	9247	0.0800	0.0690	
66 trans-1,3-Dichloropropene	75	12.221	12.218	0.003	97	8795	0.0800	0.0635	
67 Toluene	91	12.362	12.359	0.003	94	22739	0.0800	0.0774	
68 1,1,2-Trichloroethane	83	12.410	12.411	-0.001	92	6169	0.0800	0.0778	
69 2-Hexanone	58	12.922	12.895	0.027	93	1581	0.0800	0.0277	
70 Chlorodibromomethane	129	13.143	13.140	0.003	95	14520	0.0800	0.0644	
71 n-Octane	85	13.224	13.227	-0.003	70	6853	0.0800	0.0735	
72 Ethylene Dibromide	107	13.440	13.437	0.003	98	12173	0.0800	0.0704	
73 Tetrachloroethene	129	13.586	13.586	0.000	94	12229	0.0800	0.0827	
74 Chlorobenzene	112	14.497	14.498	-0.001	97	21615	0.0800	0.0814	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	74	13091	0.0800	0.0821	
76 Ethylbenzene	91	14.842	14.839	0.003	99	32318	0.0800	0.0770	
77 m-Xylene & p-Xylene	91	15.020	15.018	0.002	99	54882	0.1600	0.1584	
78 Bromoform	173	15.397	15.394	0.003	93	12127	0.0800	0.0582	
79 Styrene	104	15.495	15.491	0.004	97	13232	0.0800	0.0619	
80 o-Xylene	91	15.554	15.553	0.001	97	28403	0.0800	0.0774	
81 n-Nonane	57	15.570	15.567	0.003	74	10743	0.0800	0.0803	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	91	14656	0.0800	0.0768	
83 1,2,3-Trichloropropane	110	16.028	16.028	0.000	92	7049	0.0800	0.0774	
84 Isopropylbenzene	105	16.185	16.185	0.000	72	42649	0.0800	0.0830	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	16.756	16.752	0.004	95	10429	0.0800	0.0773	
86 2-Chlorotoluene	126	16.762	16.761	0.001	90	10348	0.0800	0.0812	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	35969	0.0800	0.0722	
87 1,3,5-Trimethylbenzene	120	17.004	17.006	-0.002	91	16375	0.0800	0.0789	
89 Alpha Methyl Styrene	118	17.252	17.252	0.000	87	11120	0.0800	0.0572	
90 n-Decane	57	17.425	17.423	0.002	96	14767	0.0800	0.0767	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	91	46853	0.0800	0.0858	
92 1,2,4-Trimethylbenzene	105	17.484	17.487	-0.003	94	41478	0.0800	0.0821	
93 1,3-Dichlorobenzene	146	17.759	17.756	0.003	97	31923	0.0800	0.0836	
94 sec-Butylbenzene	105	17.786	17.787	-0.001	98	57248	0.0800	0.0822	
96 Benzyl chloride	91	17.846	17.844	0.002	97	28608	0.0800	0.0745	
95 1,4-Dichlorobenzene	146	17.856	17.858	-0.002	92	33783	0.0800	0.0884	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	96	57324	0.0800	0.0809	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	97	47079	0.0800	0.0831	
99 Butylcyclohexane	83	18.126	18.127	-0.001	93	25538	0.0800	0.0819	
100 1,2-Dichlorobenzene	146	18.261	18.258	0.003	96	33400	0.0800	0.0879	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	39681	0.0800	0.0829	
102 Indene	116	18.412	18.412	0.000	89	26017	0.0800	0.0702	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	47001	0.0800	0.0805	
104 Undecane	57	18.913	18.914	-0.001	84	18501	0.0800	0.0752	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	96	10982	0.0800	0.0646	
106 1,2,4,5-Tetramethylbenzene	119	19.318	19.315	0.003	96	53685	0.0800	0.0768	
107 Dodecane	57	20.057	20.057	-0.001	93	17123	0.0800	0.0640	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	36954	0.0800	0.0865	
109 Naphthalene	128	20.245	20.243	0.002	99	71104	0.0800	0.0796	
110 Hexachlorobutadiene	225	20.509	20.510	-0.001	96	41194	0.0800	0.0917	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	38957	0.0800	0.0865	
112 2-Methylnaphthalene	142	21.378	21.375	0.003	99	13523	0.0800	0.0400	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	97	15903	0.0800	0.0526	
A 115 C8 Range	1	13.230	(13.192-13.268)		0	52265	0.0800	0.0719	
S 116 Xylenes, Total	100				0		0.2400	0.2358	
S 117 1,2-Dichloroethene, Total	1				0		0.1600	0.1620	

Reagents:

40L1-3DQP_00015	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

Report Date: 18-Jul-2019 17:46:12 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC03.D

Injection Date:	16-Jul-2019 22:24:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L3			Worklist Smp#:	10
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

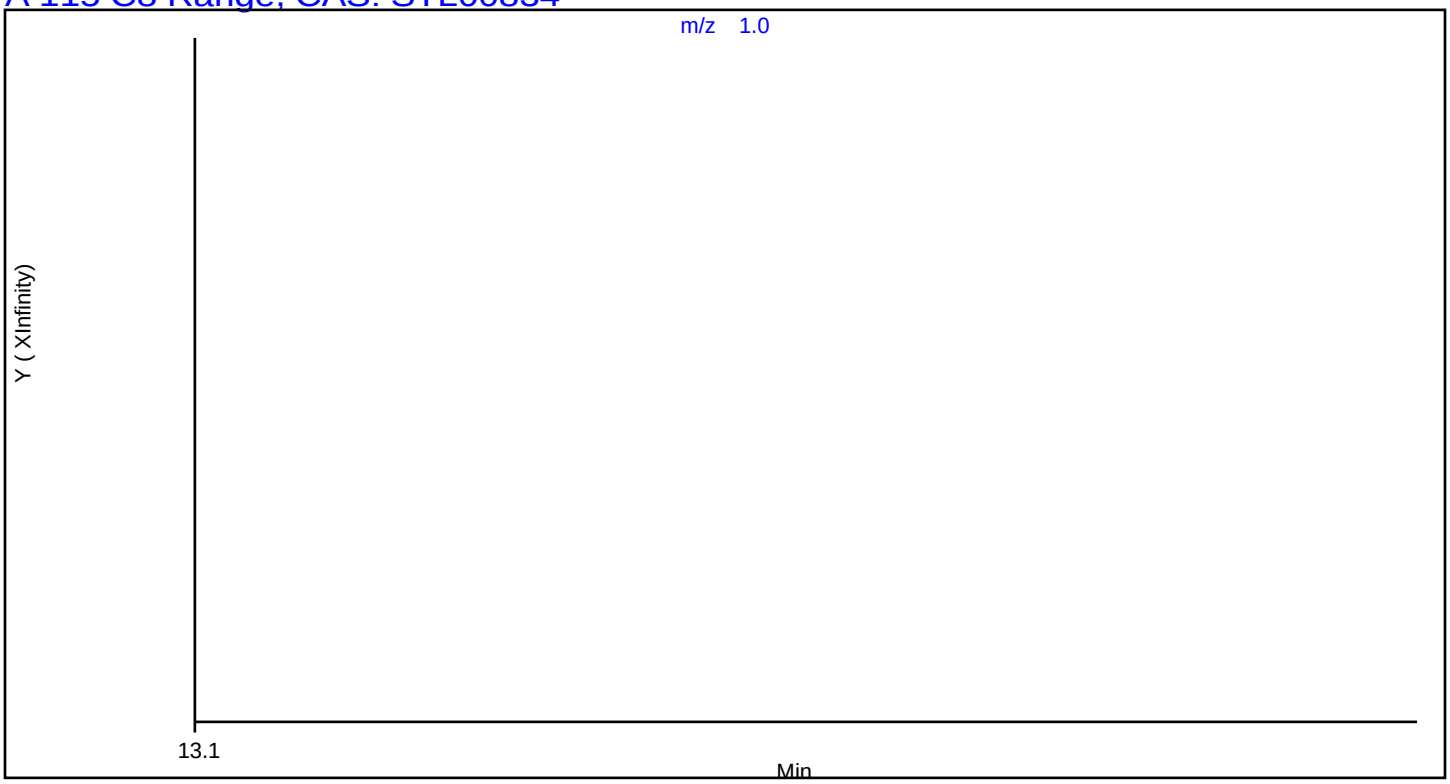
Column: RTX-5 (0.32 mm)

Report Date: 18-Jul-2019 17:46:12 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC03.D				
Injection Date:	16-Jul-2019 22:24:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



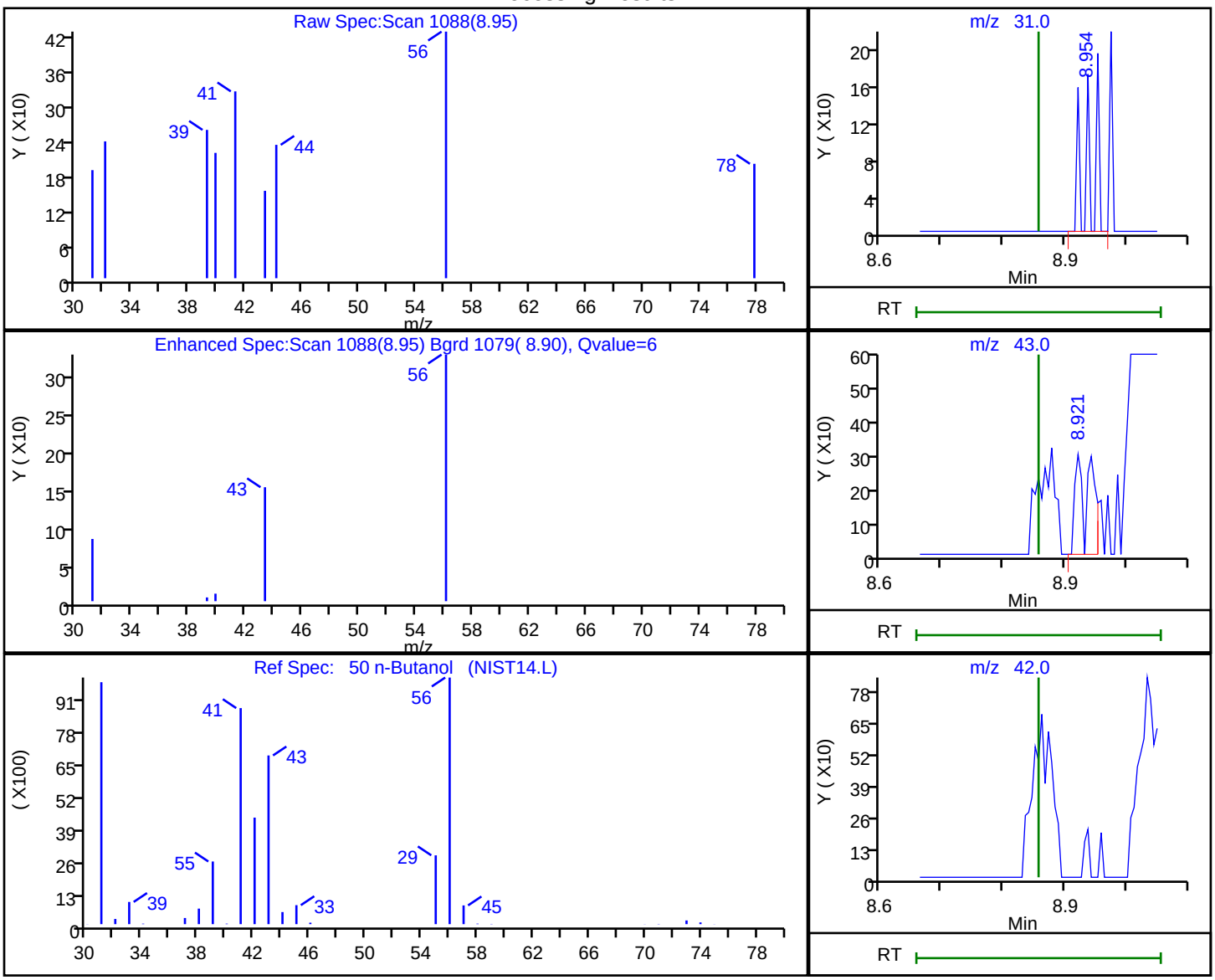
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC03.D				
Injection Date:	16-Jul-2019 22:24:30	Instrument ID:	MR		
Lims ID:	IC L3				
Client ID:					
Operator ID:	afb	ALS Bottle#:	1	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

50 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
8.95	31.00	164	0.013122
8.92	43.00	525	
8.84	42.00	0	

Reviewer: barlozhetskayaa, 18-Jul-2019 13:54:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC04.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Jul-2019 23:13:30 ALS Bottle#: 2 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-011
Misc. Info.: 231549
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:46:24 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 09:40:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.325	7.330	-0.005	68	240829	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.380	9.385	-0.005	95	1382883	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.443	14.447	-0.004	89	1190859	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	91	1002803	4.00	4.11	
6 Chlorodifluoromethane	51	3.508	3.511	-0.003	95	22733	0.1600	0.1660	
7 Propene	41	3.513	3.518	-0.005	75	7019	0.1600	0.1828	
8 Dichlorodifluoromethane	85	3.551	3.555	-0.004	99	36175	0.1600	0.1454	
9 Chloromethane	52	3.675	3.675	0.000	71	3740	0.1600	0.2352	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	89	18956	0.1600	0.1364	
11 Acetaldehyde	44	3.777	3.776	0.001	94	23560	0.8000	1.53	
12 Vinyl chloride	62	3.788	3.791	-0.003	97	8881	0.1600	0.1576	
13 Butadiene	54	3.853	3.854	-0.001	79	5677	0.1600	0.1601	
14 Butane	43	3.858	3.858	0.000	79	9749	0.1600	0.1695	
15 Bromomethane	94	4.058	4.061	-0.003	92	11570	0.1600	0.1756	
16 Chloroethane	64	4.160	4.157	0.003	95	4562	0.1600	0.1727	
17 Ethanol	31	4.235	4.237	-0.002	89	11445	0.8000	0.8645	
18 Vinyl bromide	106	4.365	4.365	0.000	93	10215	0.1600	0.1621	
19 2-Methylbutane	43	4.413	4.416	-0.003	74	6552	0.1600	0.1673	
20 Acrolein	56	4.537	4.540	-0.003	31	2831	0.1600	0.2146	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	98	46059	0.1600	0.1594	
24 Acetonitrile	40	4.570	4.568	0.002	47	166	0.1600	0.0142	
22 Acetone	58	4.624	4.621	0.003	100	20413	0.4800	0.9204	
23 Isopropyl alcohol	45	4.715	4.713	0.002	81	31112	0.4800	0.5032	
25 Pentane	72	4.721	4.724	-0.003	78	1961	0.1600	0.1815	
26 Ethyl ether	31	4.829	4.833	-0.004	71	5712	0.1600	0.1738	
27 1,1-Dichloroethene	96	5.050	5.054	-0.004	98	14590	0.1600	0.1625	
28 Acrylonitrile	53	5.087	5.090	-0.003	94	6005	0.1600	0.1583	
29 2-Methyl-2-propanol	59	5.158	5.149	0.009	93	25726	0.1600	0.1631	
30 1,1,2-Trichloro-1,2,2-trif	101	5.211	5.211	0.000	92	35516	0.1600	0.1610	
31 Methylene Chloride	84	5.292	5.294	-0.002	85	20606	0.1600	0.2476	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.309	5.313	-0.004	84	13206	0.1600	0.1820	
33 Carbon disulfide	76	5.422	5.421	0.001	99	35044	0.1600	0.1672	
34 trans-1,2-Dichloroethene	96	5.929	5.936	-0.007	96	13966	0.1600	0.1595	
35 2-Methylpentane	43	5.993	5.995	-0.002	84	17404	0.1600	0.1612	
36 Methyl tert-butyl ether	73	6.063	6.057	0.006	92	43712	0.1600	0.1581	
37 1,1-Dichloroethane	63	6.247	6.252	-0.005	98	22611	0.1600	0.1580	
38 Vinyl acetate	43	6.360	6.357	0.003	98	19483	0.1600	0.1484	
39 2-Butanone (MEK)	72	6.700	6.702	-0.002	95	6399	0.1600	0.1859	
40 Hexane	56	6.797	6.801	-0.004	79	7594	0.1600	0.1518	
41 Isopropyl ether	45	6.926	6.929	-0.003	89	25789	0.1600	0.1601	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	94	13796	0.1600	0.1551	
43 Ethyl acetate	43	7.261	7.256	0.005	98	15390	0.1600	0.1358	
44 Chloroform	83	7.363	7.368	-0.005	98	36504	0.1600	0.1600	
45 Tert-butyl ethyl ether	59	7.509	7.508	0.001	92	37122	0.1600	0.1522	
46 Tetrahydrofuran	42	7.714	7.704	0.010	70	7197	0.1600	0.1527	
47 1,1,1-Trichloroethane	97	8.274	8.280	-0.006	94	44673	0.1600	0.1550	
48 1,2-Dichloroethane	62	8.334	8.336	-0.002	97	26465	0.1600	0.1485	
49 Benzene	78	8.824	8.826	-0.002	96	34700	0.1600	0.1530	
50 n-Butanol	31	8.900	8.857	0.043	1	482	0.1600	0.0389	
51 Cyclohexane	69	8.851	8.861	-0.010	61	5258	0.1600	0.1513	
52 Carbon tetrachloride	117	8.862	8.868	-0.006	95	46848	0.1600	0.1751	
53 2,3-Dimethylpentane	71	9.029	9.032	-0.003	81	7356	0.1600	0.1556	
54 Thiophene	84	9.067	9.072	-0.005	93	20094	0.1600	0.1548	
55 Isooctane	57	9.698	9.697	0.001	94	43902	0.1600	0.1565	
56 1,2-Dichloropropane	63	10.054	10.054	0.000	72	10918	0.1600	0.1576	
57 n-Heptane	71	10.113	10.116	-0.003	75	10869	0.1600	0.1525	
58 Trichloroethene	130	10.129	10.134	-0.005	96	21148	0.1600	0.1508	
59 Dibromomethane	93	10.162	10.159	0.003	90	18921	0.1600	0.1573	
60 Dichlorobromomethane	83	10.345	10.349	-0.004	98	30892	0.1600	0.1427	
61 1,4-Dioxane	88	10.383	10.373	0.010	86	4892	0.1600	0.1467	
62 Methyl methacrylate	41	10.534	10.531	0.003	86	8405	0.1600	0.1200	
63 Methylcyclohexane	83	10.998	11.001	-0.003	91	20282	0.1600	0.1450	
64 4-Methyl-2-pentanone (MIBK	43	11.440	11.432	0.008	90	13298	0.1600	0.1180	
65 cis-1,3-Dichloropropene	75	11.461	11.461	0.000	95	18963	0.1600	0.1426	
66 trans-1,3-Dichloropropene	75	12.222	12.218	0.004	97	17702	0.1600	0.1306	
67 Toluene	91	12.356	12.359	-0.003	93	45718	0.1600	0.1591	
68 1,1,2-Trichloroethane	83	12.410	12.411	-0.001	94	12648	0.1600	0.1630	
69 2-Hexanone	58	12.901	12.895	0.006	94	5682	0.1600	0.1016	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	96	29662	0.1600	0.1345	
71 n-Octane	85	13.225	13.227	-0.002	71	14021	0.1600	0.1537	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	96	24810	0.1600	0.1466	
73 Tetrachloroethene	129	13.580	13.586	-0.006	94	22404	0.1600	0.1548	
74 Chlorobenzene	112	14.497	14.498	-0.001	93	42556	0.1600	0.1638	
75 2,3-Dimethylheptane	43	14.654	14.655	-0.001	78	25327	0.1600	0.1623	
76 Ethylbenzene	91	14.837	14.839	-0.002	99	63775	0.1600	0.1553	
77 m-Xylene & p-Xylene	91	15.020	15.018	0.002	100	111786	0.3200	0.3298	
78 Bromoform	173	15.392	15.394	-0.002	93	25633	0.1600	0.1258	
79 Styrene	104	15.489	15.491	-0.002	98	27225	0.1600	0.1301	
80 o-Xylene	91	15.554	15.553	0.001	98	58901	0.1600	0.1640	
81 n-Nonane	57	15.565	15.567	-0.002	81	22279	0.1600	0.1702	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	92	28356	0.1600	0.1519	
83 1,2,3-Trichloropropane	110	16.023	16.028	-0.005	93	14410	0.1600	0.1617	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.180	16.185	-0.005	95	81330	0.1600	0.1618	
85 N-Propylbenzene	120	16.751	16.752	-0.001	97	21836	0.1600	0.1653	
86 2-Chlorotoluene	126	16.762	16.761	0.001	95	21141	0.1600	0.1696	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	79186	0.1600	0.1624	
87 1,3,5-Trimethylbenzene	120	17.005	17.006	-0.001	91	32942	0.1600	0.1623	
89 Alpha Methyl Styrene	118	17.253	17.252	0.001	91	22965	0.1600	0.1207	
90 n-Decane	57	17.420	17.423	-0.003	97	30676	0.1600	0.1628	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	90	91865	0.1600	0.1719	
92 1,2,4-Trimethylbenzene	105	17.485	17.487	-0.002	96	86471	0.1600	0.1749	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	62828	0.1600	0.1682	
94 sec-Butylbenzene	105	17.787	17.787	-0.001	97	113085	0.1600	0.1659	
96 Benzyl chloride	91	17.846	17.844	0.002	97	46164	0.1600	0.1228	
95 1,4-Dichlorobenzene	146	17.857	17.858	-0.001	94	66793	0.1600	0.1787	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	114529	0.1600	0.1651	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	98	95595	0.1600	0.1723	
99 Butylcyclohexane	83	18.126	18.127	-0.001	91	52268	0.1600	0.1714	
100 1,2-Dichlorobenzene	146	18.256	18.258	-0.002	95	66883	0.1600	0.1799	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	78564	0.1600	0.1678	
102 Indene	116	18.412	18.412	0.000	90	52763	0.1600	0.1454	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	97932	0.1600	0.1715	
104 Undecane	57	18.914	18.914	0.000	85	39546	0.1600	0.1643	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	98	23772	0.1600	0.1428	
106 1,2,4,5-Tetramethylbenzene	119	19.313	19.315	-0.002	96	112880	0.1600	0.1650	
107 Dodecane	57	20.057	20.057	0.000	92	36916	0.1600	0.1410	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	74860	0.1600	0.1790	
109 Naphthalene	128	20.240	20.243	-0.003	98	150837	0.1600	0.1725	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	96	80210	0.1600	0.1825	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	77428	0.1600	0.1758	
112 2-Methylnaphthalene	142	21.378	21.375	0.003	99	32201	0.1600	0.0973	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	98	36069	0.1600	0.1218	
A 115 C8 Range	1	13.230	(13.187-13.273)		0	113989	0.1600	0.1581	
S 116 Xylenes, Total	100				0		0.4800	0.4938	
S 117 1,2-Dichloroethene, Total	1				0		0.3200	0.3147	

Reagents:

40L4DQP_00011	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

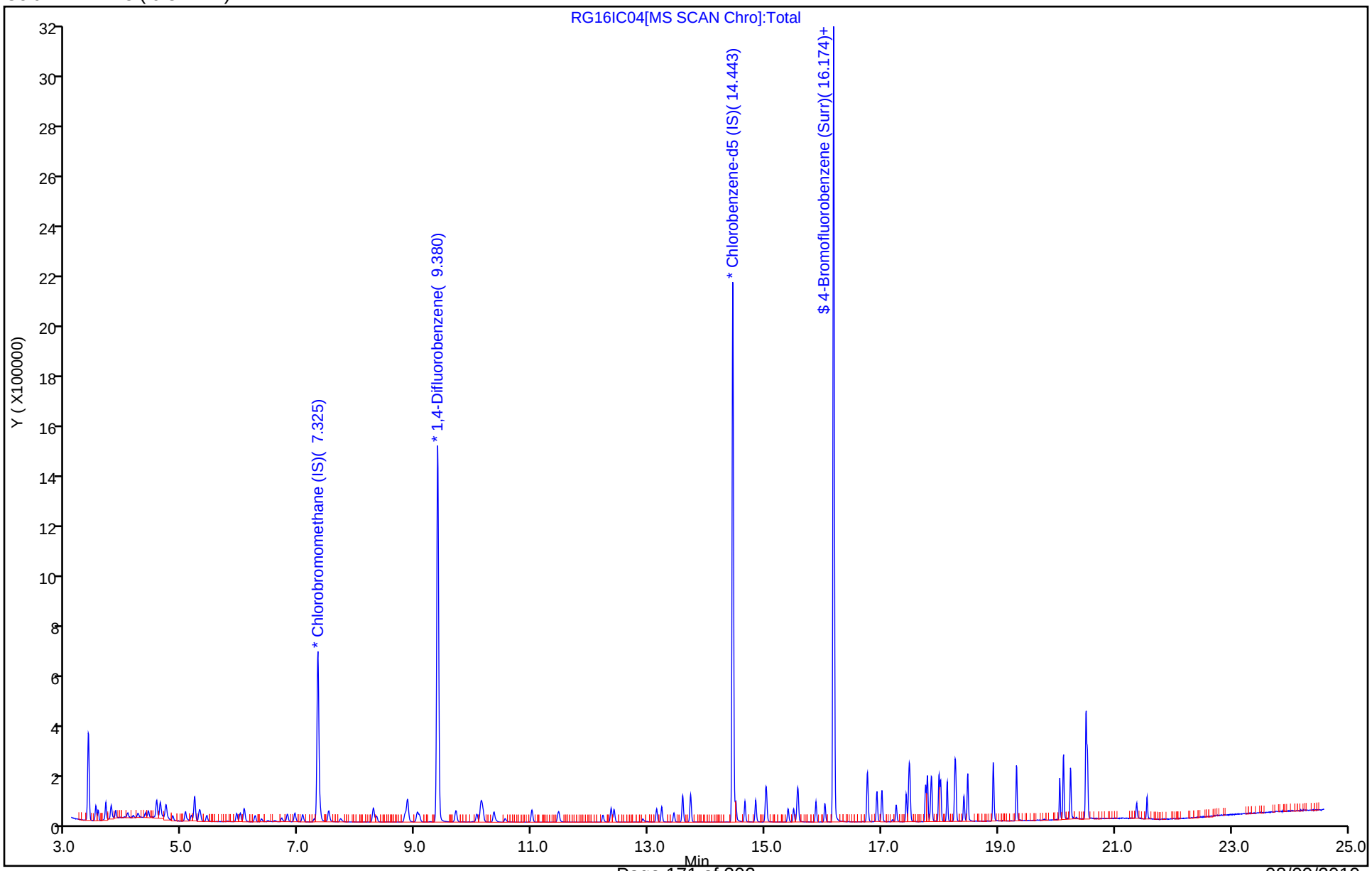
Report Date: 18-Jul-2019 17:46:27 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC04.D

Injection Date:	16-Jul-2019 23:13:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L4			Worklist Smp#:	11
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

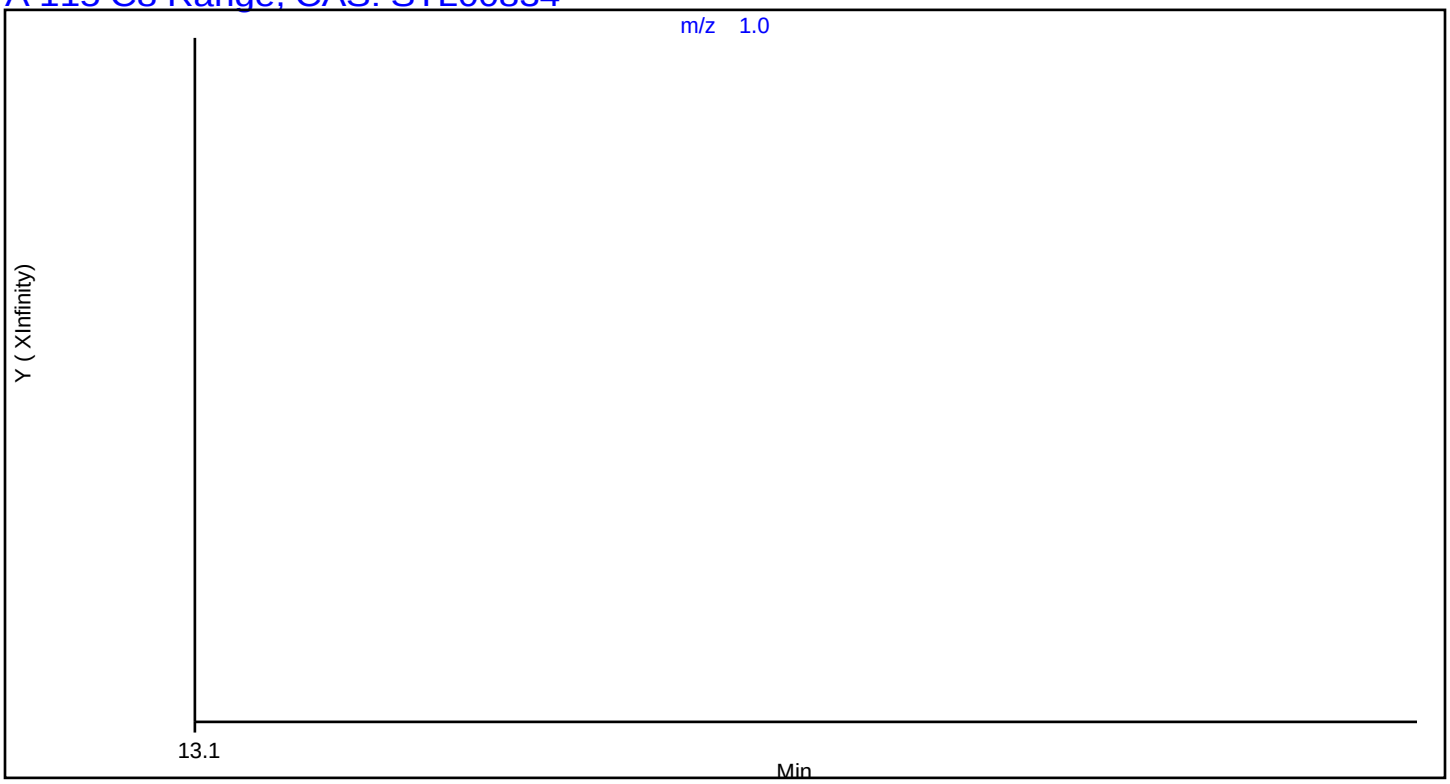


Report Date: 18-Jul-2019 17:46:27 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC04.D				
Injection Date:	16-Jul-2019 23:13:30	Instrument ID:	MR		
Lims ID:	IC L4				
Client ID:					
Operator ID:	afb	ALS Bottle#:	2	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC05.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Jul-2019 00:01:30 ALS Bottle#: 3 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-012
Misc. Info.: 231548
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:46:37 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: barlozhetskayaa Date: 18-Jul-2019 17:44:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.325	7.330	-0.005	67	238539	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.380	9.385	-0.005	94	1366841	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.443	14.447	-0.004	89	1184564	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	91	985615	4.00	4.07	
6 Chlorodifluoromethane	51	3.507	3.511	-0.004	96	55149	0.4000	0.4065	
7 Propene	41	3.518	3.518	0.000	89	16160	0.4000	0.4249	
8 Dichlorodifluoromethane	85	3.556	3.555	0.001	99	92988	0.4000	0.3774	
9 Chloromethane	52	3.669	3.675	-0.006	96	6429	0.4000	0.4083	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	90	47388	0.4000	0.3443	
11 Acetaldehyde	44	3.777	3.776	0.001	93	40695	2.00	2.67	
12 Vinyl chloride	62	3.793	3.791	0.002	99	21589	0.4000	0.3867	
13 Butadiene	54	3.852	3.854	-0.002	81	13644	0.4000	0.3886	
14 Butane	43	3.858	3.858	0.000	75	23165	0.4000	0.4067	
15 Bromomethane	94	4.063	4.061	0.002	96	25170	0.4000	0.3856	
16 Chloroethane	64	4.154	4.157	-0.003	99	11014	0.4000	0.4210	
17 Ethanol	31	4.230	4.237	-0.007	89	26096	2.00	1.99	
18 Vinyl bromide	106	4.359	4.365	-0.006	95	24934	0.4000	0.3995	
19 2-Methylbutane	43	4.419	4.416	0.003	75	15203	0.4000	0.3920	
20 Acrolein	56	4.537	4.540	-0.003	92	5043	0.4000	0.3860	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	100	113794	0.4000	0.3977	
24 Acetonitrile	40	4.570	4.568	0.002	22	4123	0.4000	0.3557	
22 Acetone	58	4.613	4.621	-0.008	100	33633	1.20	1.53	
23 Isopropyl alcohol	45	4.704	4.713	-0.009	96	71251	1.20	1.16	
25 Pentane	72	4.726	4.724	0.002	91	4340	0.4000	0.4056	
26 Ethyl ether	31	4.834	4.833	0.001	69	13136	0.4000	0.4036	
27 1,1-Dichloroethene	96	5.055	5.054	0.001	99	35602	0.4000	0.4004	
28 Acrylonitrile	53	5.087	5.090	-0.003	88	14092	0.4000	0.3750	
29 2-Methyl-2-propanol	59	5.141	5.149	-0.008	93	63242	0.4000	0.4048	
30 1,1,2-Trichloro-1,2,2-trif	101	5.206	5.211	-0.005	94	88215	0.4000	0.4038	
31 Methylene Chloride	84	5.292	5.294	-0.002	87	35802	0.4000	0.4344	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.314	5.313	0.001	84	28096	0.4000	0.3910	
33 Carbon disulfide	76	5.422	5.421	0.001	99	82789	0.4000	0.3988	
34 trans-1,2-Dichloroethene	96	5.928	5.936	-0.008	97	34270	0.4000	0.3952	
35 2-Methylpentane	43	5.993	5.995	-0.002	82	41541	0.4000	0.3884	
36 Methyl tert-butyl ether	73	6.053	6.057	-0.005	92	109332	0.4000	0.3991	
37 1,1-Dichloroethane	63	6.252	6.252	0.000	98	56454	0.4000	0.3982	
38 Vinyl acetate	43	6.349	6.357	-0.008	98	48576	0.4000	0.3736	
39 2-Butanone (MEK)	72	6.694	6.702	-0.008	96	12757	0.4000	0.3743	
40 Hexane	56	6.802	6.801	0.001	81	20005	0.4000	0.4037	
41 Isopropyl ether	45	6.921	6.929	-0.008	84	65105	0.4000	0.4080	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	93	34127	0.4000	0.3874	
43 Ethyl acetate	43	7.244	7.256	-0.012	98	42789	0.4000	0.3813	
44 Chloroform	83	7.363	7.368	-0.005	96	90798	0.4000	0.4019	
45 Tert-butyl ethyl ether	59	7.503	7.508	-0.005	92	95692	0.4000	0.3962	
46 Tetrahydrofuran	42	7.708	7.704	0.004	72	18730	0.4000	0.4012	
47 1,1,1-Trichloroethane	97	8.274	8.280	-0.006	93	111567	0.4000	0.3908	
48 1,2-Dichloroethane	62	8.333	8.336	-0.003	97	67664	0.4000	0.3841	
49 Benzene	78	8.824	8.826	-0.002	98	87476	0.4000	0.3903	
50 n-Butanol	31	8.878	8.857	0.021	48	2985	0.4000	0.2436	
51 Cyclohexane	69	8.862	8.861	0.001	83	13337	0.4000	0.3883	
52 Carbon tetrachloride	117	8.867	8.868	-0.001	95	104641	0.4000	0.3957	
53 2,3-Dimethylpentane	71	9.029	9.032	-0.003	83	18716	0.4000	0.4007	
54 Thiophene	84	9.072	9.072	0.000	90	50447	0.4000	0.3932	
55 Isooctane	57	9.692	9.697	-0.005	95	109492	0.4000	0.3948	
56 1,2-Dichloropropane	63	10.048	10.054	-0.006	74	27485	0.4000	0.4013	
57 n-Heptane	71	10.113	10.116	-0.003	80	27795	0.4000	0.3944	
58 Trichloroethene	130	10.129	10.134	-0.005	96	54351	0.4000	0.3922	
59 Dibromomethane	93	10.156	10.159	-0.003	92	45400	0.4000	0.3819	
60 Dichlorobromomethane	83	10.345	10.349	-0.004	98	80812	0.4000	0.3777	
61 1,4-Dioxane	88	10.372	10.373	-0.001	82	12567	0.4000	0.3814	
62 Methyl methacrylate	41	10.534	10.531	0.003	85	22416	0.4000	0.3239	
63 Methylcyclohexane	83	11.003	11.001	0.002	91	53954	0.4000	0.3903	
64 4-Methyl-2-pentanone (MIBK	43	11.434	11.432	0.002	90	39731	0.4000	0.3566	
65 cis-1,3-Dichloropropene	75	11.456	11.461	-0.005	96	50248	0.4000	0.3822	
66 trans-1,3-Dichloropropene	75	12.211	12.218	-0.007	97	49411	0.4000	0.3665	
67 Toluene	91	12.356	12.359	-0.003	92	115785	0.4000	0.4051	
68 1,1,2-Trichloroethane	83	12.410	12.411	-0.001	94	30850	0.4000	0.3998	
69 2-Hexanone	58	12.890	12.895	-0.005	95	17835	0.4000	0.3204	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	97	79307	0.4000	0.3616	
71 n-Octane	85	13.224	13.227	-0.003	71	35583	0.4000	0.3922	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	97	65810	0.4000	0.3908	
73 Tetrachloroethene	129	13.586	13.586	0.000	95	58279	0.4000	0.4049	
74 Chlorobenzene	112	14.497	14.498	-0.001	93	103431	0.4000	0.4002	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	75	63268	0.4000	0.4076	
76 Ethylbenzene	91	14.837	14.839	-0.002	99	162851	0.4000	0.3987	
77 m-Xylene & p-Xylene	91	15.015	15.018	-0.003	99	278815	0.8000	0.8269	
78 Bromoform	173	15.392	15.394	-0.002	96	70043	0.4000	0.3456	
79 Styrene	104	15.489	15.491	-0.002	98	77833	0.4000	0.3740	
80 o-Xylene	91	15.554	15.553	0.001	97	149721	0.4000	0.4190	
81 n-Nonane	57	15.565	15.567	-0.002	80	56170	0.4000	0.4314	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	93	75762	0.4000	0.4080	
83 1,2,3-Trichloropropane	110	16.028	16.028	0.000	93	35181	0.4000	0.3968	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.185	16.185	0.000	96	205318	0.4000	0.4106	
85 N-Propylbenzene	120	16.751	16.752	-0.001	97	54805	0.4000	0.4171	
86 2-Chlorotoluene	126	16.756	16.761	-0.005	91	52711	0.4000	0.4250	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	197120	0.4000	0.4064	
87 1,3,5-Trimethylbenzene	120	17.004	17.006	-0.002	91	84776	0.4000	0.4198	
89 Alpha Methyl Styrene	118	17.247	17.252	-0.005	87	64679	0.4000	0.3418	
90 n-Decane	57	17.420	17.423	-0.003	96	79900	0.4000	0.4264	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	89	235503	0.4000	0.4431	
92 1,2,4-Trimethylbenzene	105	17.484	17.487	-0.003	96	220463	0.4000	0.4482	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	157082	0.4000	0.4228	
94 sec-Butylbenzene	105	17.786	17.787	-0.001	97	294858	0.4000	0.4347	
96 Benzyl chloride	91	17.840	17.844	-0.004	98	141932	0.4000	0.3795	
95 1,4-Dichlorobenzene	146	17.856	17.858	-0.002	94	160744	0.4000	0.4323	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	300028	0.4000	0.4349	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	99	239062	0.4000	0.4333	
99 Butylcyclohexane	83	18.126	18.127	-0.001	94	133419	0.4000	0.4398	
100 1,2-Dichlorobenzene	146	18.255	18.258	-0.003	95	160951	0.4000	0.4352	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	204492	0.4000	0.4390	
102 Indene	116	18.412	18.412	0.000	91	148319	0.4000	0.4109	
103 n-Butylbenzene	91	18.477	18.477	0.000	98	247886	0.4000	0.4363	
104 Undecane	57	18.913	18.914	-0.001	86	109574	0.4000	0.4576	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	95	64712	0.4000	0.3908	
106 1,2,4,5-Tetramethylbenzene	119	19.312	19.315	-0.003	96	298546	0.4000	0.4387	
107 Dodecane	57	20.056	20.057	-0.001	93	109579	0.4000	0.4208	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	183450	0.4000	0.4410	
109 Naphthalene	128	20.240	20.243	-0.003	99	371755	0.4000	0.4273	
110 Hexachlorobutadiene	225	20.509	20.510	-0.001	96	190154	0.4000	0.4350	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	186251	0.4000	0.4251	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	99	92221	0.4000	0.2802	
113 1-Methylnaphthalene	142	21.550	21.554	-0.004	94	95317	0.4000	0.3237	
A 115 C8 Range	1	13.240	(13.187-13.284)		0	275384	0.4000	0.3864	
S 116 Xylenes, Total	100				0		1.20	1.25	
S 117 1,2-Dichloroethene, Total	1				0		0.8000	0.7826	

Reagents:

40L5DQP_00011	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

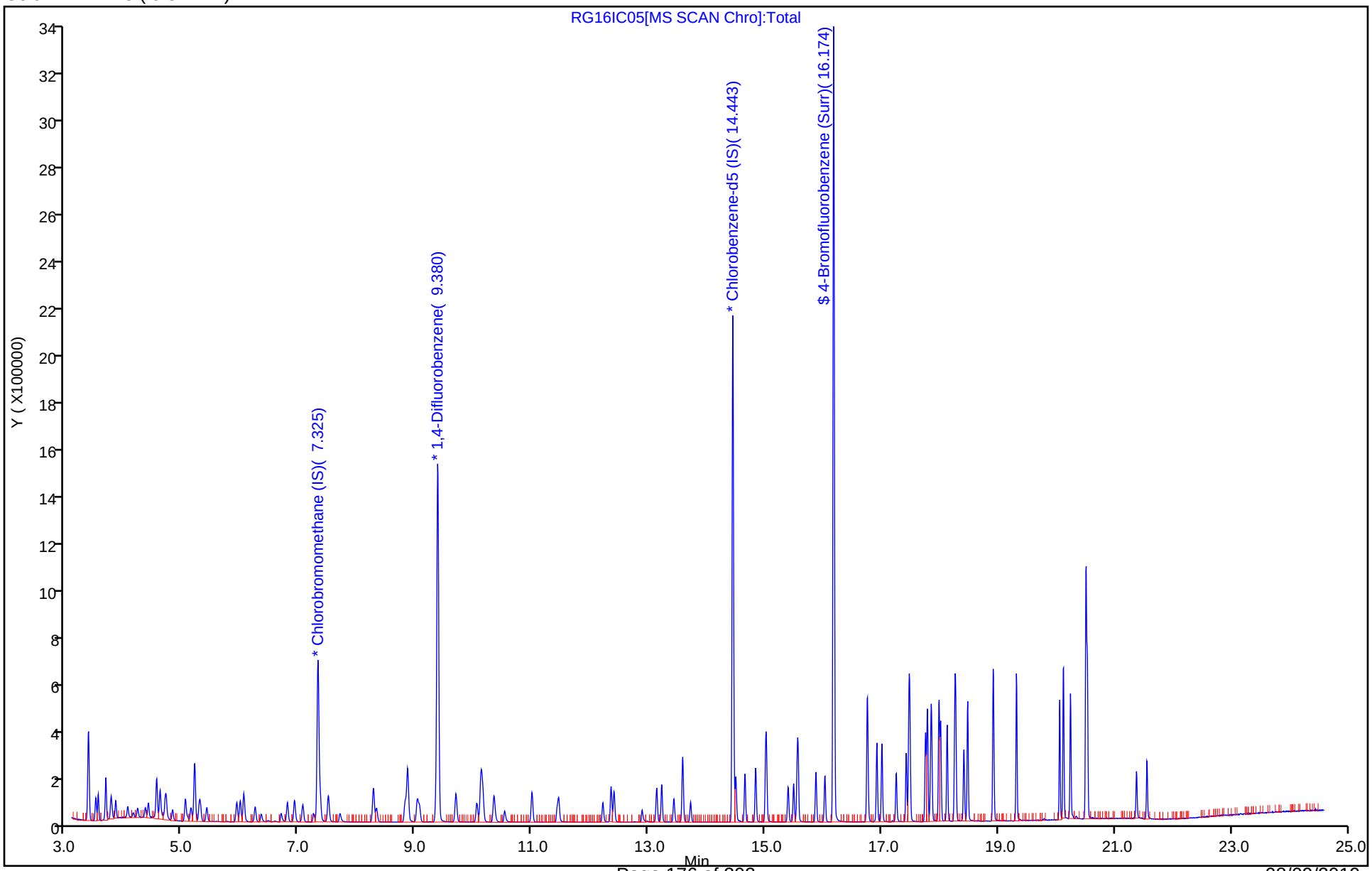
Report Date: 18-Jul-2019 17:46:39 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC05.D

Injection Date:	17-Jul-2019 00:01:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L5			Worklist Smp#:	12
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

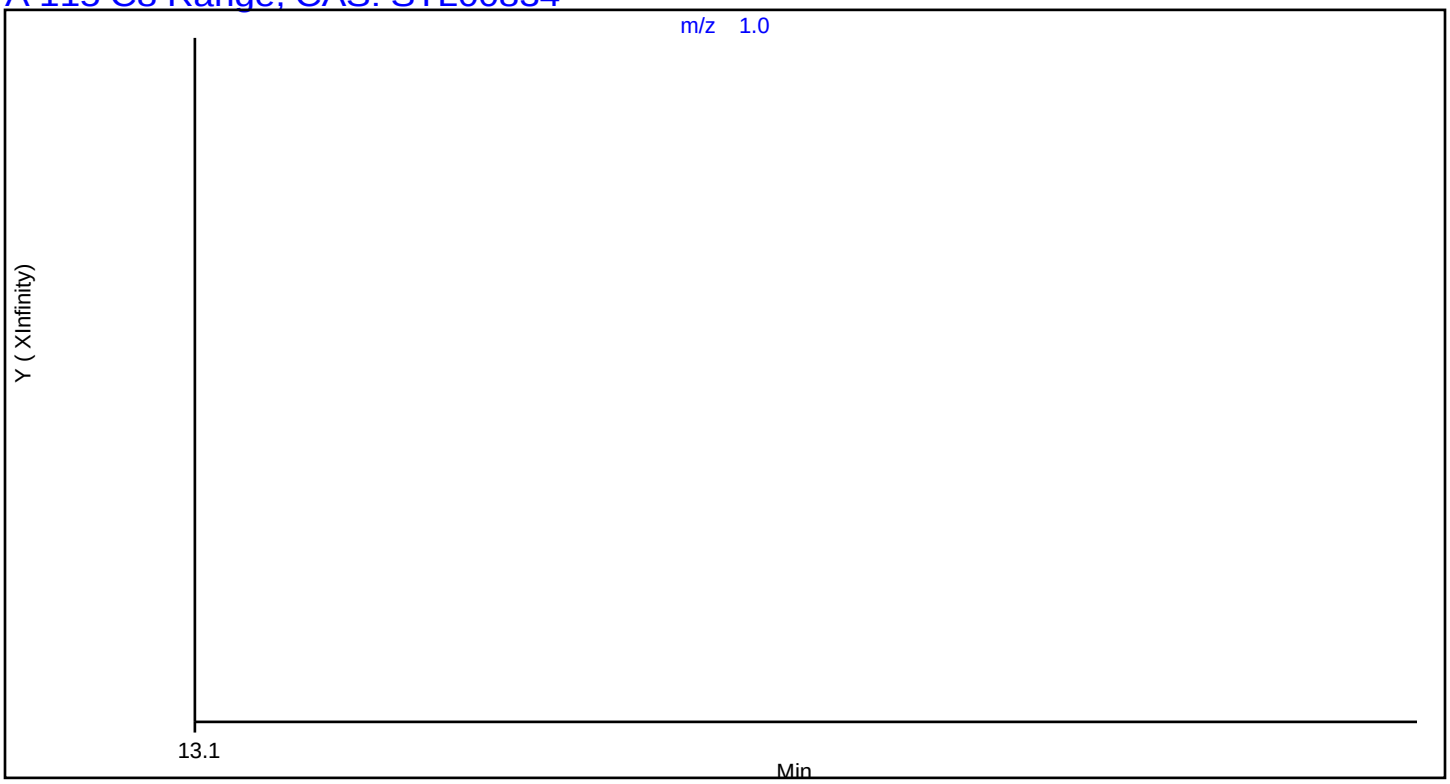


Report Date: 18-Jul-2019 17:46:39 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC05.D				
Injection Date:	17-Jul-2019 00:01:30	Instrument ID:	MR		
Lims ID:	IC L5				
Client ID:					
Operator ID:	afb	ALS Bottle#:	3	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC06.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Jul-2019 00:50:30 ALS Bottle#: 5 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-013
Misc. Info.: 231547
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:46:50 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 07:36:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.325	7.330	-0.005	68	243137	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.380	9.385	-0.005	94	1385162	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.443	14.447	-0.004	89	1211050	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	89	1012550	4.00	4.09	
6 Chlorodifluoromethane	51	3.507	3.511	-0.004	95	140071	1.00	1.01	
7 Propene	41	3.518	3.518	0.000	91	39578	1.00	1.02	
8 Dichlorodifluoromethane	85	3.551	3.555	-0.004	99	240352	1.00	0.9570	
9 Chloromethane	52	3.669	3.675	-0.006	96	15117	1.00	0.9418	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	89	125668	1.00	0.8958	
11 Acetaldehyde	44	3.766	3.776	-0.010	93	82059	5.00	5.29	
12 Vinyl chloride	62	3.788	3.791	-0.003	99	54759	1.00	0.9624	
13 Butadiene	54	3.847	3.854	-0.007	85	35711	1.00	1.00	
14 Butane	43	3.853	3.858	-0.005	86	56287	1.00	0.9694	
15 Bromomethane	94	4.057	4.061	-0.004	95	62294	1.00	0.9363	
16 Chloroethane	64	4.149	4.157	-0.008	97	26142	1.00	0.9804	
17 Ethanol	31	4.225	4.237	-0.012	88	64413	5.00	4.82	
18 Vinyl bromide	106	4.359	4.365	-0.006	96	62898	1.00	0.9886	
19 2-Methylbutane	43	4.408	4.416	-0.008	76	39710	1.00	1.00	
20 Acrolein	56	4.537	4.540	-0.003	96	12319	1.00	0.9252	
21 Trichlorofluoromethane	101	4.554	4.560	-0.006	99	287349	1.00	0.9852	
24 Acetonitrile	40	4.559	4.568	-0.009	23	11937	1.00	1.01	
22 Acetone	58	4.613	4.621	-0.008	100	71524	3.00	3.19	
23 Isopropyl alcohol	45	4.699	4.713	-0.014	98	181451	3.00	2.91	
25 Pentane	72	4.721	4.724	-0.003	90	11003	1.00	1.01	
26 Ethyl ether	31	4.823	4.833	-0.010	69	33233	1.00	1.00	
27 1,1-Dichloroethene	96	5.050	5.054	-0.004	97	88415	1.00	0.9757	
28 Acrylonitrile	53	5.082	5.090	-0.008	89	37294	1.00	0.9736	
29 2-Methyl-2-propanol	59	5.131	5.149	-0.018	94	155871	1.00	0.9787	
30 1,1,2-Trichloro-1,2,2-trif	101	5.206	5.211	-0.005	93	223628	1.00	1.00	
31 Methylene Chloride	84	5.287	5.294	-0.007	85	81759	1.00	0.9733	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.308	5.313	-0.005	83	76860	1.00	1.05	
33 Carbon disulfide	76	5.416	5.421	-0.005	99	207105	1.00	0.9787	
34 trans-1,2-Dichloroethene	96	5.934	5.936	-0.002	96	89132	1.00	1.01	
35 2-Methylpentane	43	5.988	5.995	-0.007	83	112262	1.00	1.03	
36 Methyl tert-butyl ether	73	6.047	6.057	-0.010	92	282298	1.00	1.01	
37 1,1-Dichloroethane	63	6.247	6.252	-0.005	98	142663	1.00	0.9872	
38 Vinyl acetate	43	6.344	6.357	-0.013	98	134386	1.00	1.01	
39 2-Butanone (MEK)	72	6.684	6.702	-0.018	96	34790	1.00	1.00	
40 Hexane	56	6.797	6.801	-0.004	80	50796	1.00	1.01	
41 Isopropyl ether	45	6.915	6.929	-0.014	86	163489	1.00	1.01	
42 cis-1,2-Dichloroethene	96	7.061	7.067	-0.006	93	89887	1.00	1.00	
43 Ethyl acetate	43	7.239	7.256	-0.017	98	116438	1.00	1.02	
44 Chloroform	83	7.363	7.368	-0.005	94	229279	1.00	1.00	
45 Tert-butyl ethyl ether	59	7.498	7.508	-0.010	92	252032	1.00	1.02	
46 Tetrahydrofuran	42	7.697	7.704	-0.007	76	48422	1.00	1.02	
47 1,1,1-Trichloroethane	97	8.274	8.280	-0.006	94	282419	1.00	0.9707	
48 1,2-Dichloroethane	62	8.328	8.336	-0.008	97	171477	1.00	0.9605	
49 Benzene	78	8.819	8.826	-0.007	98	218690	1.00	0.9629	
50 n-Butanol	31	8.857	8.857	0.000	62	11244	1.00	0.9056	
51 Cyclohexane	69	8.862	8.861	0.001	92	35020	1.00	1.01	
52 Carbon tetrachloride	117	8.862	8.868	-0.006	98	303162	1.00	1.13	
53 2,3-Dimethylpentane	71	9.029	9.032	-0.003	83	47315	1.00	1.00	
54 Thiophene	84	9.067	9.072	-0.005	94	130620	1.00	1.00	
55 Isooctane	57	9.692	9.697	-0.005	95	276722	1.00	0.9845	
56 1,2-Dichloropropane	63	10.048	10.054	-0.006	73	67277	1.00	0.9694	
57 n-Heptane	71	10.113	10.116	-0.003	78	71819	1.00	1.01	
58 Trichloroethene	130	10.129	10.134	-0.005	97	136781	1.00	0.9739	
59 Dibromomethane	93	10.151	10.159	-0.008	90	118864	1.00	0.9866	
60 Dichlorobromomethane	83	10.345	10.349	-0.004	98	221082	1.00	1.02	
61 1,4-Dioxane	88	10.367	10.373	-0.006	83	33014	1.00	0.9887	
62 Methyl methacrylate	41	10.523	10.531	-0.008	90	67428	1.00	0.9614	
63 Methylcyclohexane	83	10.997	11.001	-0.004	93	137767	1.00	0.9833	
64 4-Methyl-2-pentanone (MIBK	43	11.423	11.432	-0.009	90	114434	1.00	1.01	
65 cis-1,3-Dichloropropene	75	11.456	11.461	-0.005	97	136002	1.00	1.02	
66 trans-1,3-Dichloropropene	75	12.211	12.218	-0.007	97	140536	1.00	1.02	
67 Toluene	91	12.356	12.359	-0.003	93	304684	1.00	1.04	
68 1,1,2-Trichloroethane	83	12.405	12.411	-0.006	94	81063	1.00	1.03	
69 2-Hexanone	58	12.879	12.895	-0.016	95	57731	1.00	1.01	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	96	227821	1.00	1.02	
71 n-Octane	85	13.224	13.227	-0.003	73	96147	1.00	1.04	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	97	180979	1.00	1.05	
73 Tetrachloroethene	129	13.580	13.586	-0.006	94	148109	1.00	1.01	
74 Chlorobenzene	112	14.497	14.498	-0.001	94	264928	1.00	1.00	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	74	162462	1.00	1.02	
76 Ethylbenzene	91	14.837	14.839	-0.002	99	431457	1.00	1.03	
77 m-Xylene & p-Xylene	91	15.015	15.018	-0.003	100	728409	2.00	2.11	
78 Bromoform	173	15.392	15.394	-0.002	96	202596	1.00	0.9778	
79 Styrene	104	15.484	15.491	-0.007	97	232424	1.00	1.09	
80 o-Xylene	91	15.549	15.553	-0.004	97	383888	1.00	1.05	
81 n-Nonane	57	15.565	15.567	-0.002	74	146494	1.00	1.10	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	94	202345	1.00	1.07	
83 1,2,3-Trichloropropane	110	16.023	16.028	-0.005	94	92897	1.00	1.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.185	16.185	0.000	97	513424	1.00	1.00	
85 N-Propylbenzene	120	16.751	16.752	-0.001	97	143874	1.00	1.07	
86 2-Chlorotoluene	126	16.756	16.761	-0.005	97	131766	1.00	1.04	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	540151	1.00	1.09	
87 1,3,5-Trimethylbenzene	120	17.005	17.006	-0.001	91	218843	1.00	1.06	
89 Alpha Methyl Styrene	118	17.253	17.252	0.001	88	200540	1.00	1.04	
90 n-Decane	57	17.420	17.423	-0.003	97	209841	1.00	1.10	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	88	594991	1.00	1.09	
92 1,2,4-Trimethylbenzene	105	17.484	17.487	-0.003	96	551728	1.00	1.10	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	401318	1.00	1.06	
94 sec-Butylbenzene	105	17.781	17.787	-0.006	97	755104	1.00	1.09	
96 Benzyl chloride	91	17.840	17.844	-0.004	98	403443	1.00	1.06	
95 1,4-Dichlorobenzene	146	17.857	17.858	-0.001	95	401228	1.00	1.06	
97 4-Isopropyltoluene	119	17.981	17.986	-0.005	96	771366	1.00	1.09	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	99	606620	1.00	1.08	
99 Butylcyclohexane	83	18.126	18.127	-0.001	93	335179	1.00	1.08	
100 1,2-Dichlorobenzene	146	18.256	18.258	-0.002	95	398177	1.00	1.05	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	512418	1.00	1.08	
102 Indene	116	18.412	18.412	0.000	90	412367	1.00	1.12	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	634026	1.00	1.09	
104 Undecane	57	18.913	18.914	-0.001	87	278548	1.00	1.14	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	98	193343	1.00	1.14	
106 1,2,4,5-Tetramethylbenzene	119	19.312	19.315	-0.003	96	785871	1.00	1.13	
107 Dodecane	57	20.051	20.057	-0.006	94	320907	1.00	1.21	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	474362	1.00	1.12	
109 Naphthalene	128	20.240	20.243	-0.003	99	983905	1.00	1.11	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	96	476529	1.00	1.07	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	474757	1.00	1.06	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	99	331118	1.00	0.9839	
113 1-Methylnaphthalene	142	21.550	21.554	-0.004	97	310807	1.00	1.03	
A 115 C8 Range	1	13.240	(13.176-13.284)		0	733245	1.00	1.02	
S 116 Xylenes, Total	100				0		3.00	3.16	
S 117 1,2-Dichloroethene, Total	1				0		2.00	2.01	

Reagents:

40L6DQP_00011	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

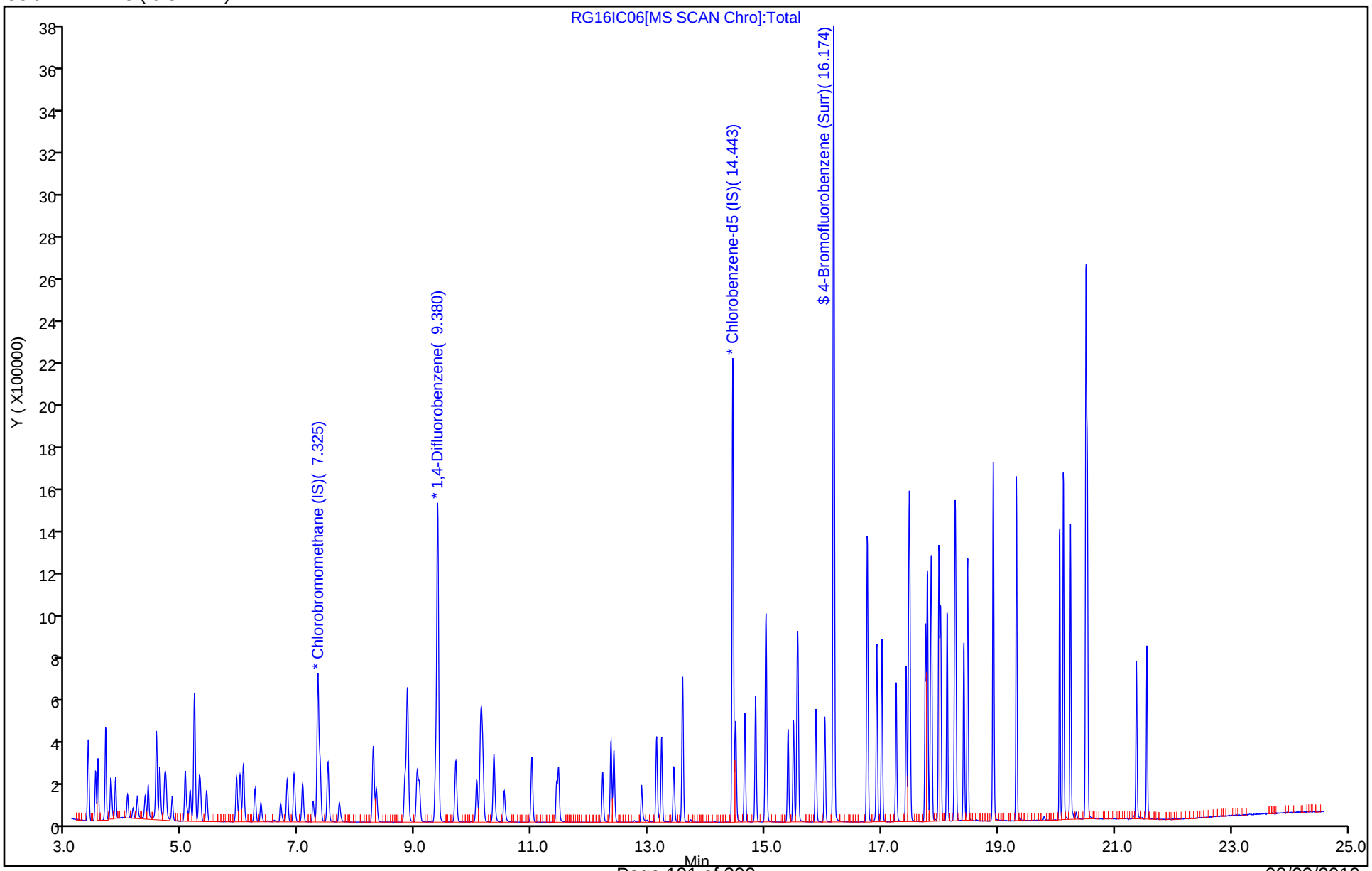
Report Date: 18-Jul-2019 17:46:54 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC06.D

Injection Date:	17-Jul-2019 00:50:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L6			Worklist Smp#:	13
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

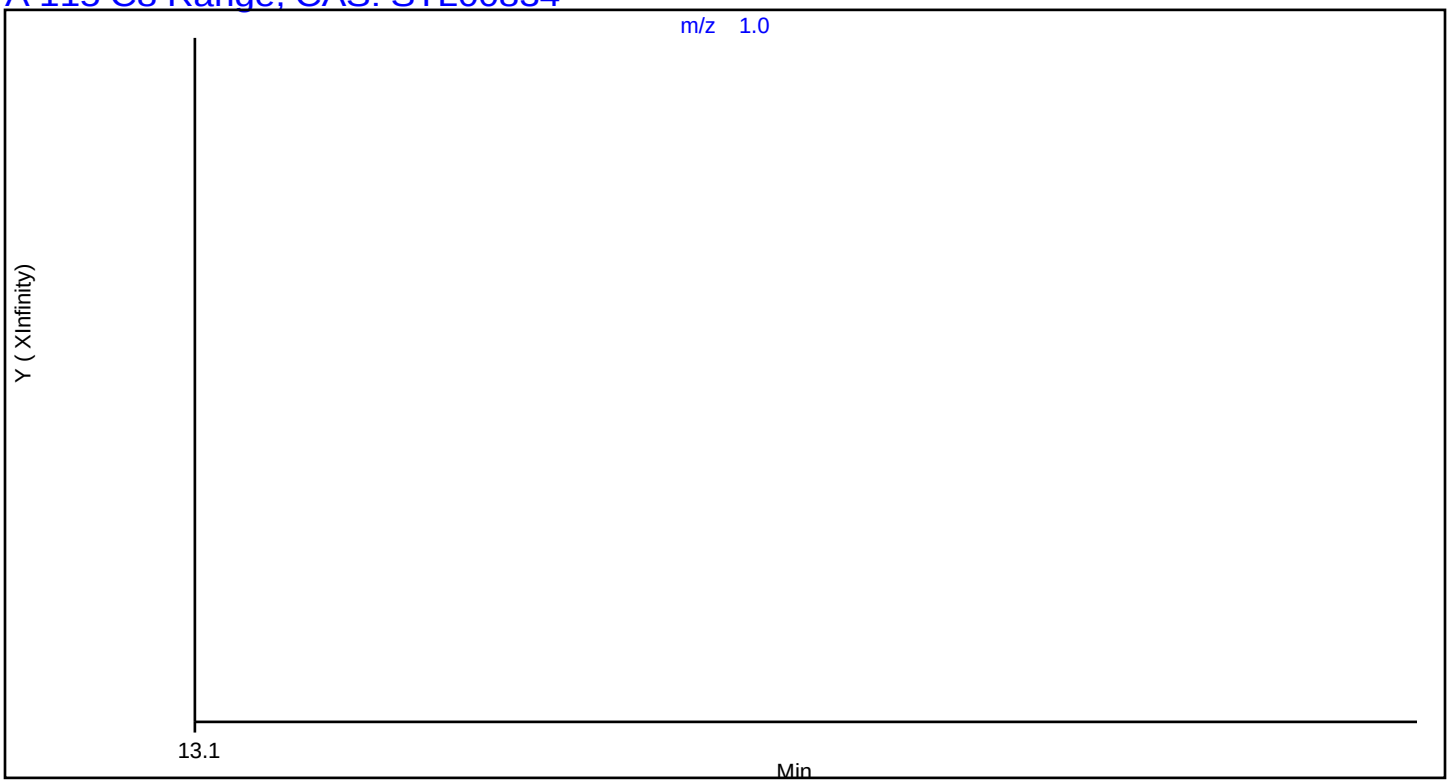


Report Date: 18-Jul-2019 17:46:54 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC06.D				
Injection Date:	17-Jul-2019 00:50:30	Instrument ID:	MR		
Lims ID:	IC L6				
Client ID:					
Operator ID:	afb	ALS Bottle#:	5	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC07.D
Lims ID: ICIS L7
Client ID:
Sample Type: ICIS Calib Level: 7
Inject. Date: 17-Jul-2019 01:40:30 ALS Bottle#: 6 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-014
Misc. Info.: 231545
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:47:05 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: tajh Date: 17-Jul-2019 09:09:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.331	7.330	0.001	72	240007	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.385	0.000	94	1380161	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.448	14.447	0.001	89	1219396	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	87	1015239	4.00	4.07	
6 Chlorodifluoromethane	51	3.513	3.511	0.002	95	291455	2.00	2.13	
7 Propene	41	3.518	3.518	0.000	92	80402	2.00	2.10	
8 Dichlorodifluoromethane	85	3.556	3.555	0.001	100	547968	2.00	2.21	
9 Chloromethane	52	3.675	3.675	-0.001	96	31912	2.00	2.01	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	90	342686	2.00	2.47	
11 Acetaldehyde	44	3.772	3.776	-0.004	95	152902	10.0	9.98	
12 Vinyl chloride	62	3.793	3.791	0.002	99	114146	2.00	2.03	
13 Butadiene	54	3.852	3.854	-0.002	89	76164	2.00	2.16	
14 Butane	43	3.858	3.858	0.000	87	118883	2.00	2.07	
15 Bromomethane	94	4.063	4.061	0.002	96	131364	2.00	2.00	
16 Chloroethane	64	4.154	4.157	-0.003	97	54822	2.00	2.08	
17 Ethanol	31	4.235	4.237	-0.002	89	141188	10.0	10.7	
18 Vinyl bromide	106	4.365	4.365	0.000	95	131049	2.00	2.09	
19 2-Methylbutane	43	4.413	4.416	-0.003	75	81524	2.00	2.09	
20 Acrolein	56	4.537	4.540	-0.003	96	26678	2.00	2.03	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	99	606748	2.00	2.11	
24 Acetonitrile	40	4.570	4.568	0.002	23	25263	2.00	2.17	
22 Acetone	58	4.613	4.621	-0.008	100	125507	6.00	5.68	
23 Isopropyl alcohol	45	4.704	4.713	-0.009	95	374898	6.00	6.08	
25 Pentane	72	4.726	4.724	0.002	90	21817	2.00	2.03	
26 Ethyl ether	31	4.828	4.833	-0.005	68	70354	2.00	2.15	
27 1,1-Dichloroethene	96	5.055	5.054	0.001	98	183999	2.00	2.06	
28 Acrylonitrile	53	5.087	5.090	-0.003	92	82831	2.00	2.19	
29 2-Methyl-2-propanol	59	5.136	5.149	-0.013	93	341143	2.00	2.17	
30 1,1,2-Trichloro-1,2,2-trif	101	5.211	5.211	0.000	93	461662	2.00	2.10	
31 Methylene Chloride	84	5.292	5.294	-0.002	85	157365	2.00	1.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.314	5.313	0.001	84	162394	2.00	2.25	
33 Carbon disulfide	76	5.422	5.421	0.001	99	444624	2.00	2.13	
34 trans-1,2-Dichloroethene	96	5.934	5.936	-0.002	96	187222	2.00	2.15	
35 2-Methylpentane	43	5.993	5.995	-0.002	82	234459	2.00	2.18	
36 Methyl tert-butyl ether	73	6.047	6.057	-0.010	92	588249	2.00	2.13	
37 1,1-Dichloroethane	63	6.252	6.252	0.000	98	294833	2.00	2.07	
38 Vinyl acetate	43	6.349	6.357	-0.008	98	298101	2.00	2.28	
39 2-Butanone (MEK)	72	6.689	6.702	-0.013	96	69237	2.00	2.02	
40 Hexane	56	6.802	6.801	0.001	80	107695	2.00	2.16	
41 Isopropyl ether	45	6.921	6.929	-0.008	85	347766	2.00	2.17	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	93	185014	2.00	2.09	
43 Ethyl acetate	43	7.244	7.256	-0.012	98	243593	2.00	2.16	
44 Chloroform	83	7.368	7.368	0.000	96	477194	2.00	2.10	
45 Tert-butyl ethyl ether	59	7.503	7.508	-0.005	92	525677	2.00	2.16	
46 Tetrahydrofuran	42	7.692	7.704	-0.012	73	101754	2.00	2.17	
47 1,1,1-Trichloroethane	97	8.280	8.280	0.000	95	599509	2.00	2.09	
48 1,2-Dichloroethane	62	8.334	8.336	-0.002	97	368007	2.00	2.07	
49 Benzene	78	8.824	8.826	-0.002	98	458548	2.00	2.03	
50 n-Butanol	31	8.846	8.857	-0.011	63	27107	2.00	2.19	
51 Cyclohexane	69	8.862	8.861	0.001	90	74985	2.00	2.16	
52 Carbon tetrachloride	117	8.867	8.868	-0.001	98	645481	2.00	2.42	
53 2,3-Dimethylpentane	71	9.029	9.032	-0.003	82	99573	2.00	2.11	
54 Thiophene	84	9.072	9.072	0.000	93	278234	2.00	2.15	
55 Isooctane	57	9.698	9.697	0.001	94	592958	2.00	2.12	
56 1,2-Dichloropropane	63	10.054	10.054	0.000	73	139280	2.00	2.01	
57 n-Heptane	71	10.118	10.116	0.002	78	153480	2.00	2.16	
58 Trichloroethene	130	10.135	10.134	0.001	97	284881	2.00	2.04	
59 Dibromomethane	93	10.156	10.159	-0.003	91	246305	2.00	2.05	
60 Dichlorobromomethane	83	10.350	10.349	0.001	98	481700	2.00	2.23	
61 1,4-Dioxane	88	10.356	10.373	-0.017	84	73995	2.00	2.22	
62 Methyl methacrylate	41	10.523	10.531	-0.008	89	150375	2.00	2.15	
63 Methylcyclohexane	83	11.003	11.001	0.002	92	294191	2.00	2.11	
64 4-Methyl-2-pentanone (MIBK	43	11.418	11.432	-0.014	89	250420	2.00	2.23	
65 cis-1,3-Dichloropropene	75	11.456	11.461	-0.005	95	298035	2.00	2.25	
66 trans-1,3-Dichloropropene	75	12.211	12.218	-0.007	97	313779	2.00	2.26	
67 Toluene	91	12.356	12.359	-0.003	93	647673	2.00	2.20	
68 1,1,2-Trichloroethane	83	12.410	12.411	-0.001	95	174192	2.00	2.19	
69 2-Hexanone	58	12.879	12.895	-0.016	96	131136	2.00	2.29	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	97	523758	2.00	2.32	
71 n-Octane	85	13.224	13.227	-0.003	73	210142	2.00	2.25	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	97	385935	2.00	2.23	
73 Tetrachloroethene	129	13.586	13.586	0.000	94	310727	2.00	2.10	
74 Chlorobenzene	112	14.497	14.498	-0.001	93	562130	2.00	2.11	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	75	349450	2.00	2.19	
76 Ethylbenzene	91	14.837	14.839	-0.002	99	929960	2.00	2.21	
77 m-Xylene & p-Xylene	91	15.015	15.018	-0.003	100	1516926	4.00	4.37	
78 Bromoform	173	15.392	15.394	-0.002	95	511173	2.00	2.45	
79 Styrene	104	15.489	15.491	-0.002	98	527849	2.00	2.46	
80 o-Xylene	91	15.549	15.553	-0.005	97	796585	2.00	2.17	
81 n-Nonane	57	15.565	15.567	-0.002	80	294785	2.00	2.20	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	94	433818	2.00	2.27	
83 1,2,3-Trichloropropane	110	16.028	16.028	0.000	94	195960	2.00	2.15	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.185	16.185	0.000	97	1074562	2.00	2.09	
85 N-Propylbenzene	120	16.751	16.752	-0.001	97	303337	2.00	2.24	
86 2-Chlorotoluene	126	16.762	16.761	0.001	91	273727	2.00	2.14	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	1121347	2.00	2.25	
87 1,3,5-Trimethylbenzene	120	17.004	17.006	-0.002	91	456661	2.00	2.20	
89 Alpha Methyl Styrene	118	17.247	17.252	-0.005	87	460078	2.00	2.36	
90 n-Decane	57	17.420	17.423	-0.003	97	434421	2.00	2.25	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	88	1177885	2.00	2.15	
92 1,2,4-Trimethylbenzene	105	17.484	17.487	-0.003	96	1074286	2.00	2.12	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	816005	2.00	2.13	
94 sec-Butylbenzene	105	17.786	17.787	-0.001	97	1522735	2.00	2.18	
96 Benzyl chloride	91	17.840	17.844	-0.004	98	906634	2.00	2.35	
95 1,4-Dichlorobenzene	146	17.856	17.858	-0.002	95	800968	2.00	2.09	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	1552965	2.00	2.19	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	99	1217670	2.00	2.14	
99 Butylcyclohexane	83	18.126	18.127	-0.001	92	674965	2.00	2.16	
100 1,2-Dichlorobenzene	146	18.255	18.258	-0.003	95	796954	2.00	2.09	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	1032309	2.00	2.15	
102 Indene	116	18.412	18.412	0.000	90	892840	2.00	2.40	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	1246151	2.00	2.13	
104 Undecane	57	18.913	18.914	-0.001	87	554935	2.00	2.25	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	97	425258	2.00	2.49	
106 1,2,4,5-Tetramethylbenzene	119	19.312	19.315	-0.003	96	1600136	2.00	2.28	
107 Dodecane	57	20.057	20.057	0.000	92	631831	2.00	2.36	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	927347	2.00	2.17	
109 Naphthalene	128	20.240	20.243	-0.003	98	1919706	2.00	2.14	
110 Hexachlorobutadiene	225	20.509	20.510	-0.001	95	896951	2.00	1.99	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	903621	2.00	2.00	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	99	720816	2.00	2.13	
113 1-Methylnaphthalene	142	21.550	21.554	-0.004	97	642492	2.00	2.12	
A 115 C8 Range	1	13.237	(13.181-13.278)		0	1528791	2.00	2.12	
S 116 Xylenes, Total	100				0		6.00	6.54	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.23	

Reagents:

40L8DQP_00011	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

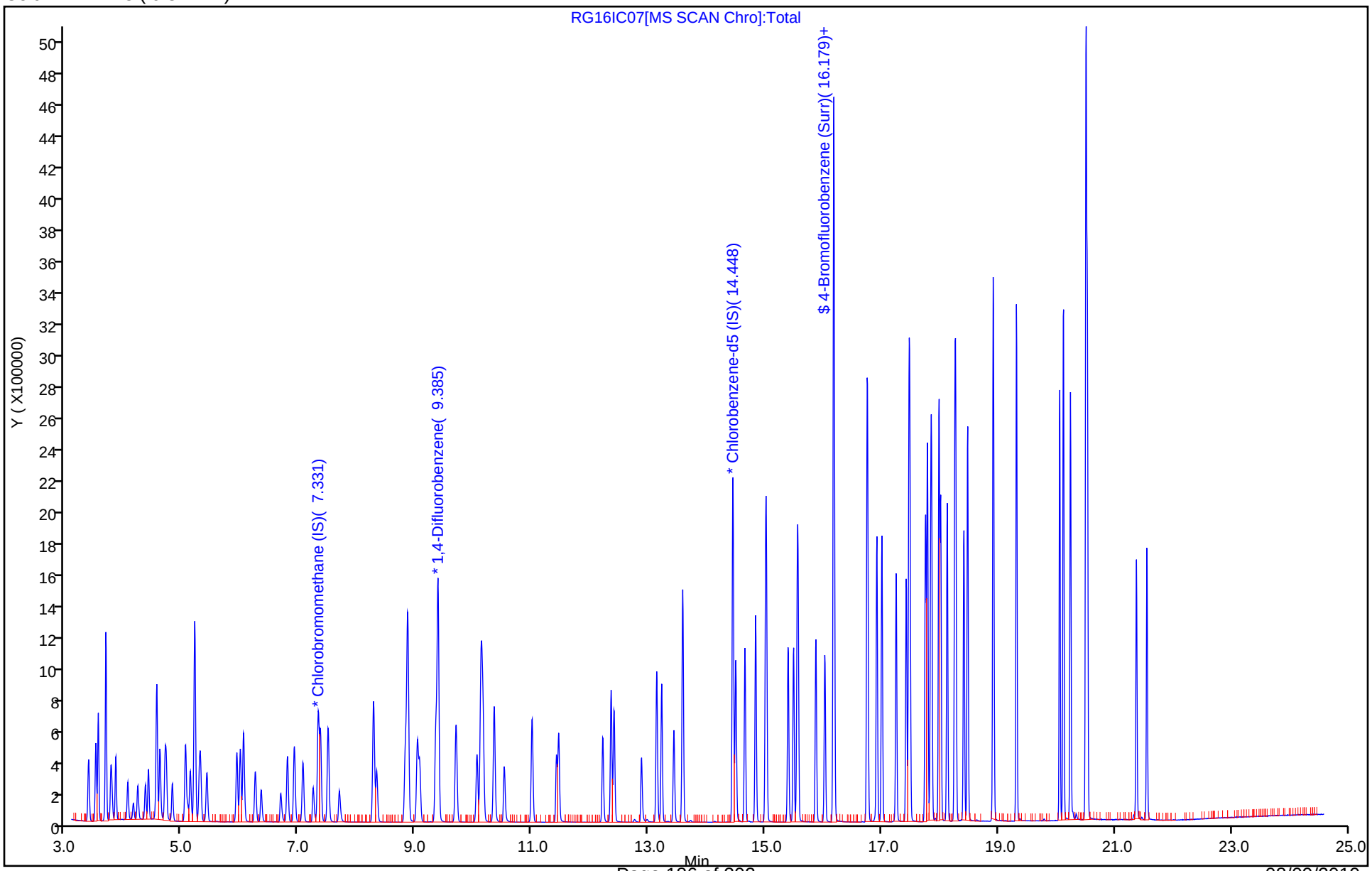
Report Date: 18-Jul-2019 17:47:07 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC07.D

Injection Date:	17-Jul-2019 01:40:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	ICIS L7			Worklist Smp#:	14
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

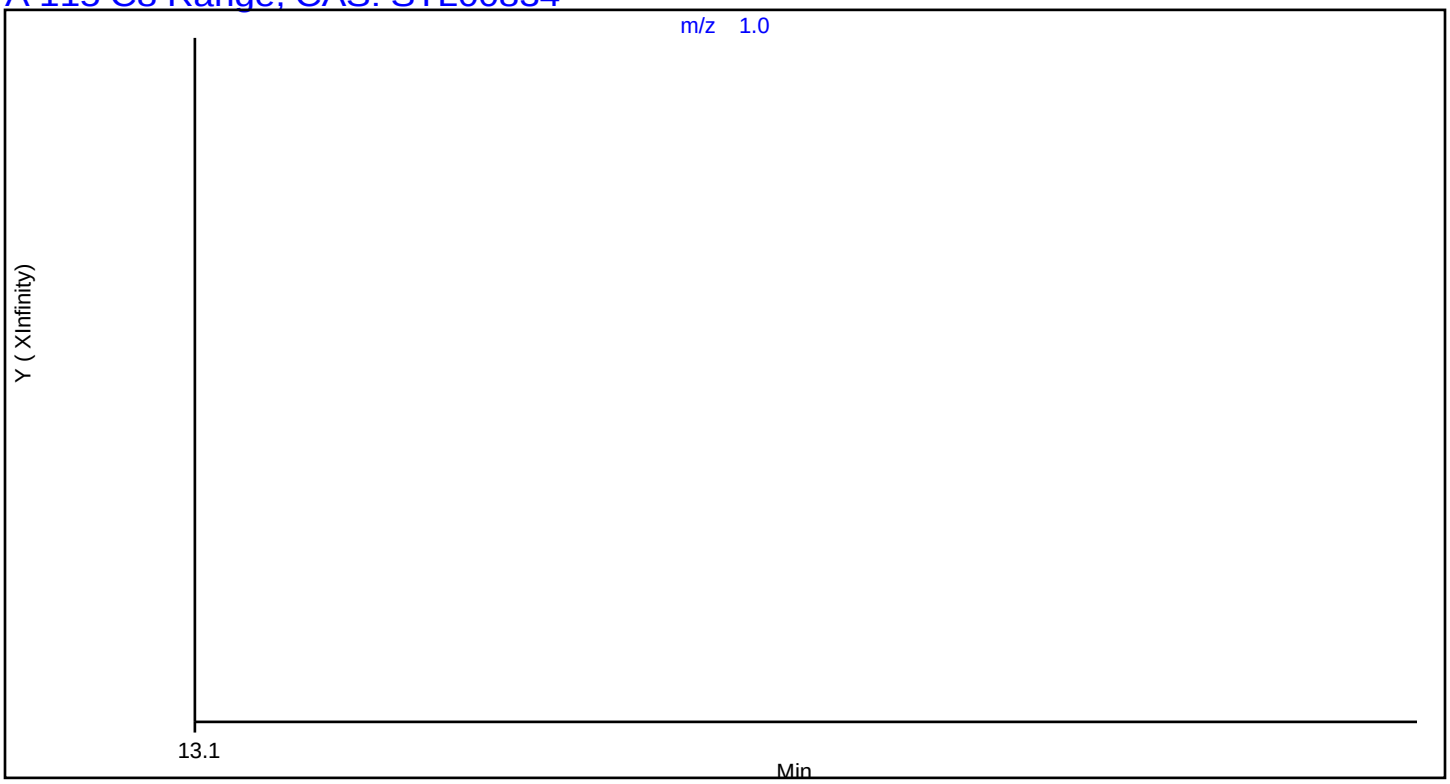


Report Date: 18-Jul-2019 17:47:07 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC07.D				
Injection Date:	17-Jul-2019 01:40:30	Instrument ID:	MR		
Lims ID:	ICIS L7				
Client ID:					
Operator ID:	afb	ALS Bottle#:	6	Worklist Smp#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Jul-2019 02:30:30 ALS Bottle#: 6 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-015
Misc. Info.: 231545
Operator ID: afb Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:47:20 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: barlozhetskayaa Date: 18-Jul-2019 13:47:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.331	7.330	0.001	68	245825	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.385	0.000	94	1408629	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.449	14.447	0.001	89	1286031	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	85	1035518	4.00	3.93	
6 Chlorodifluoromethane	51	3.507	3.511	-0.004	95	565295	4.00	4.04	
7 Propene	41	3.518	3.518	0.000	91	156529	4.00	3.99	
8 Dichlorodifluoromethane	85	3.551	3.555	-0.004	100	908516	4.00	3.58	
9 Chloromethane	52	3.675	3.675	0.000	97	61817	4.00	3.81	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	89	473273	4.00	3.34	
11 Acetaldehyde	44	3.772	3.776	-0.004	93	294210	20.0	18.8	
12 Vinyl chloride	62	3.788	3.791	-0.003	100	225725	4.00	3.92	
13 Butadiene	54	3.852	3.854	-0.002	92	148618	4.00	4.11	
14 Butane	43	3.858	3.858	0.000	89	232356	4.00	3.96	
15 Bromomethane	94	4.057	4.061	-0.004	96	258730	4.00	3.85	
16 Chloroethane	64	4.154	4.157	-0.003	97	106256	4.00	3.94	
17 Ethanol	31	4.230	4.237	-0.007	89	277836	20.0	20.6	
18 Vinyl bromide	106	4.365	4.365	0.000	96	258290	4.00	4.02	
19 2-Methylbutane	43	4.413	4.416	-0.003	75	161393	4.00	4.04	
20 Acrolein	56	4.532	4.540	-0.008	97	52054	4.00	3.87	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	99	1163823	4.00	3.95	
24 Acetonitrile	40	4.564	4.568	-0.004	94	50140	4.00	4.20	
22 Acetone	58	4.613	4.621	-0.008	100	254271	12.0	11.2	
23 Isopropyl alcohol	45	4.704	4.713	-0.009	98	744204	12.0	11.8	
25 Pentane	72	4.721	4.724	-0.003	90	42871	4.00	3.89	
26 Ethyl ether	31	4.823	4.833	-0.010	67	129825	4.00	3.87	
27 1,1-Dichloroethene	96	5.050	5.054	-0.004	97	353429	4.00	3.86	
28 Acrylonitrile	53	5.087	5.090	-0.003	90	160517	4.00	4.14	
29 2-Methyl-2-propanol	59	5.130	5.149	-0.019	93	653104	4.00	4.06	
30 1,1,2-Trichloro-1,2,2-trif	101	5.206	5.211	-0.005	93	870196	4.00	3.86	
31 Methylene Chloride	84	5.292	5.294	-0.002	85	291165	4.00	3.43	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.314	5.313	0.001	84	314390	4.00	4.25	
33 Carbon disulfide	76	5.416	5.421	-0.005	99	845871	4.00	3.95	
34 trans-1,2-Dichloroethene	96	5.934	5.936	-0.002	96	358049	4.00	4.01	
35 2-Methylpentane	43	5.988	5.995	-0.007	82	422735	4.00	3.84	
36 Methyl tert-butyl ether	73	6.042	6.057	-0.015	92	1146792	4.00	4.06	
37 1,1-Dichloroethane	63	6.247	6.252	-0.005	98	564248	4.00	3.86	
38 Vinyl acetate	43	6.349	6.357	-0.008	98	582450	4.00	4.35	
39 2-Butanone (MEK)	72	6.683	6.702	-0.019	96	136710	4.00	3.89	
40 Hexane	56	6.802	6.801	0.001	80	204423	4.00	4.00	
41 Isopropyl ether	45	6.915	6.929	-0.014	85	663699	4.00	4.04	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	93	359937	4.00	3.97	
43 Ethyl acetate	43	7.239	7.256	-0.017	98	485257	4.00	4.20	
44 Chloroform	83	7.368	7.368	0.000	96	925294	4.00	3.97	
45 Tert-butyl ethyl ether	59	7.498	7.508	-0.010	92	1027748	4.00	4.13	
46 Tetrahydrofuran	42	7.686	7.704	-0.018	71	197836	4.00	4.11	
47 1,1,1-Trichloroethane	97	8.280	8.280	0.000	95	1172268	4.00	3.99	
48 1,2-Dichloroethane	62	8.334	8.336	-0.002	96	712977	4.00	3.93	
49 Benzene	78	8.824	8.826	-0.002	98	897222	4.00	3.88	
50 n-Butanol	31	8.835	8.857	-0.022	66	56368	4.00	4.46	
51 Cyclohexane	69	8.857	8.861	-0.004	90	144924	4.00	4.09	
52 Carbon tetrachloride	117	8.867	8.868	-0.001	99	1277653	4.00	4.69	
53 2,3-Dimethylpentane	71	9.029	9.032	-0.003	82	193668	4.00	4.02	
54 Thiophene	84	9.072	9.072	0.000	93	536696	4.00	4.06	
55 Isooctane	57	9.692	9.697	-0.005	94	1144404	4.00	4.00	
56 1,2-Dichloropropane	63	10.054	10.054	0.000	72	274200	4.00	3.89	
57 n-Heptane	71	10.113	10.116	-0.003	80	300833	4.00	4.14	
58 Trichloroethene	130	10.135	10.134	0.001	96	549766	4.00	3.85	
59 Dibromomethane	93	10.156	10.159	-0.003	91	486176	4.00	3.97	
60 Dichlorobromomethane	83	10.345	10.349	-0.004	98	957495	4.00	4.34	
61 1,4-Dioxane	88	10.356	10.373	-0.017	82	143045	4.00	4.21	
62 Methyl methacrylate	41	10.517	10.531	-0.014	88	316368	4.00	4.44	
63 Methylcyclohexane	83	10.997	11.001	-0.004	92	581750	4.00	4.08	
64 4-Methyl-2-pentanone (MIBK	43	11.413	11.432	-0.019	89	512511	4.00	4.46	
65 cis-1,3-Dichloropropene	75	11.456	11.461	-0.005	95	599387	4.00	4.42	
66 trans-1,3-Dichloropropene	75	12.211	12.218	-0.007	97	647010	4.00	4.42	
67 Toluene	91	12.356	12.359	-0.003	93	1254868	4.00	4.04	
68 1,1,2-Trichloroethane	83	12.405	12.411	-0.006	95	334983	4.00	4.00	
69 2-Hexanone	58	12.874	12.895	-0.021	95	279830	4.00	4.63	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	97	1060575	4.00	4.45	
71 n-Octane	85	13.224	13.227	-0.003	73	406781	4.00	4.13	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	97	765434	4.00	4.19	
73 Tetrachloroethene	129	13.586	13.586	0.000	94	594023	4.00	3.80	
74 Chlorobenzene	112	14.497	14.498	-0.001	92	1085147	4.00	3.87	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	74	669485	4.00	3.97	
76 Ethylbenzene	91	14.837	14.839	-0.002	99	1781937	4.00	4.02	
77 m-Xylene & p-Xylene	91	15.015	15.018	-0.003	100	2834265	8.00	7.74	
78 Bromoform	173	15.392	15.394	-0.002	95	1053252	4.00	4.79	
79 Styrene	104	15.484	15.491	-0.007	97	1040954	4.00	4.61	
80 o-Xylene	91	15.549	15.553	-0.004	98	1479889	4.00	3.81	
81 n-Nonane	57	15.565	15.567	-0.002	83	544933	4.00	3.85	
82 1,1,2,2-Tetrachloroethane	83	15.867	15.872	-0.005	95	847500	4.00	4.20	
83 1,2,3-Trichloropropane	110	16.023	16.028	-0.005	94	379322	4.00	3.94	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.185	16.185	0.000	97	2063034	4.00	3.80	
85 N-Propylbenzene	120	16.751	16.752	-0.001	97	573084	4.00	4.02	
86 2-Chlorotoluene	126	16.762	16.761	0.001	95	509668	4.00	3.79	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	2162768	4.00	4.11	
87 1,3,5-Trimethylbenzene	120	17.004	17.006	-0.002	91	858259	4.00	3.91	
89 Alpha Methyl Styrene	118	17.247	17.252	-0.005	86	906146	4.00	4.41	
90 n-Decane	57	17.420	17.423	-0.003	97	804397	4.00	3.95	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	88	2091443	4.00	3.62	
92 1,2,4-Trimethylbenzene	105	17.484	17.487	-0.003	96	1961637	4.00	3.67	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	1525402	4.00	3.78	
94 sec-Butylbenzene	105	17.786	17.787	-0.001	97	2822188	4.00	3.83	
96 Benzyl chloride	91	17.840	17.844	-0.004	97	1768047	4.00	4.35	
95 1,4-Dichlorobenzene	146	17.856	17.858	-0.002	97	1447159	4.00	3.58	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	2854146	4.00	3.81	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	99	2237947	4.00	3.74	
99 Butylcyclohexane	83	18.126	18.127	-0.001	92	1236572	4.00	3.75	
100 1,2-Dichlorobenzene	146	18.256	18.258	-0.002	94	1454069	4.00	3.62	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	1911158	4.00	3.78	
102 Indene	116	18.412	18.412	0.000	90	1686311	4.00	4.30	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	2272141	4.00	3.68	
104 Undecane	57	18.913	18.914	-0.001	86	978600	4.00	3.76	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	94	795478	4.00	4.42	
106 1,2,4,5-Tetramethylbenzene	119	19.312	19.315	-0.003	95	2910573	4.00	3.94	
107 Dodecane	57	20.057	20.057	0.000	91	1182543	4.00	4.18	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	1676918	4.00	3.71	
109 Naphthalene	128	20.240	20.243	-0.003	98	3506512	4.00	3.71	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	95	1572645	4.00	3.31	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	1641409	4.00	3.45	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	99	1627774	4.00	4.56	
113 1-Methylnaphthalene	142	21.550	21.554	-0.004	97	1385649	4.00	4.33	
A 115 C8 Range	1	13.238	(13.181-13.278)		0	2934226	4.00	3.99	
S 116 Xylenes, Total	100				0		12.0	11.6	
S 117 1,2-Dichloroethene, Total	1				0		8.00	7.97	

Reagents:

40L8DQP_00011	Amount Added: 200.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

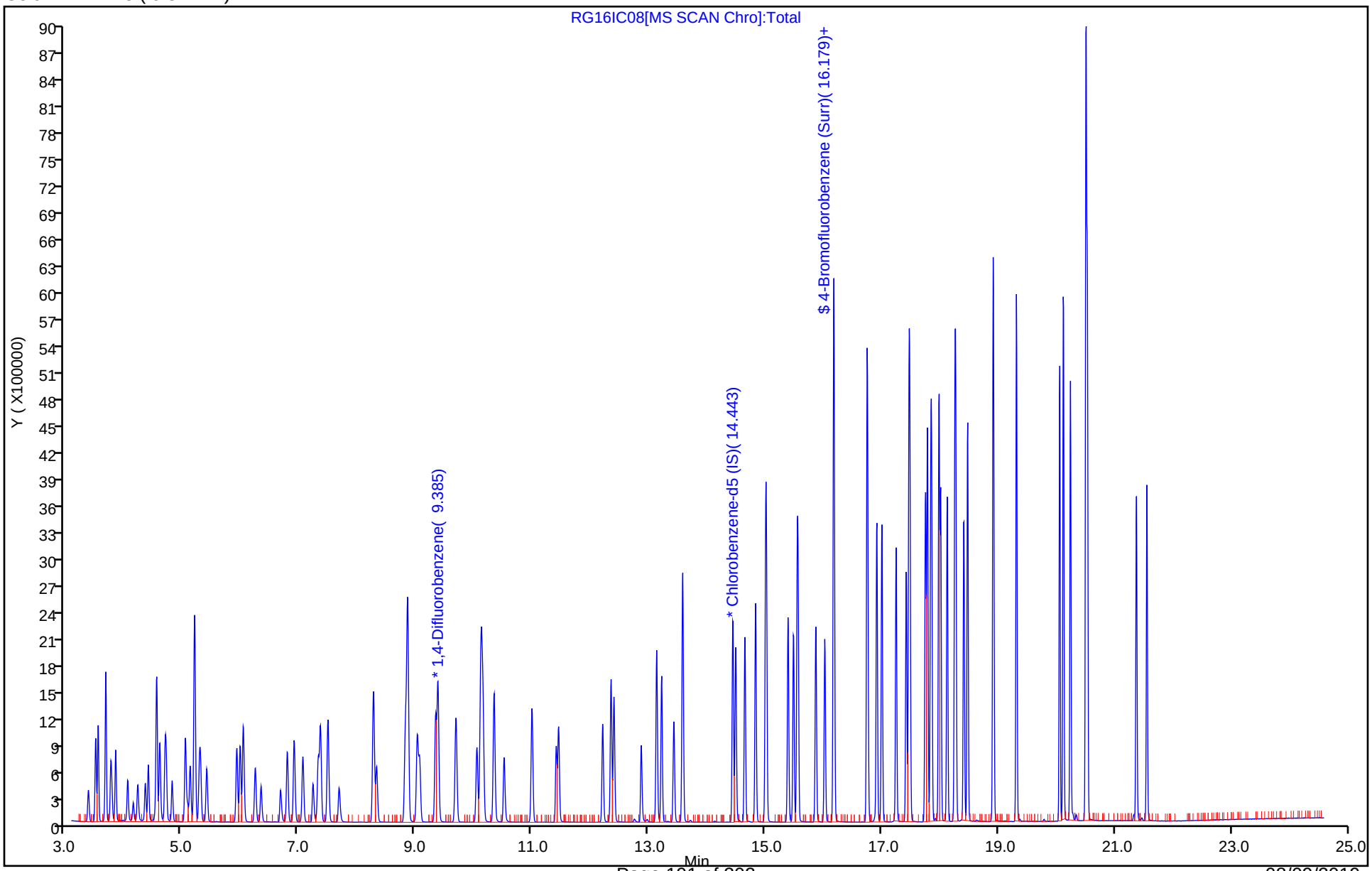
Report Date: 18-Jul-2019 17:47:22 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Injection Date:	17-Jul-2019 02:30:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	IC L8			Worklist Smp#:	15
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)

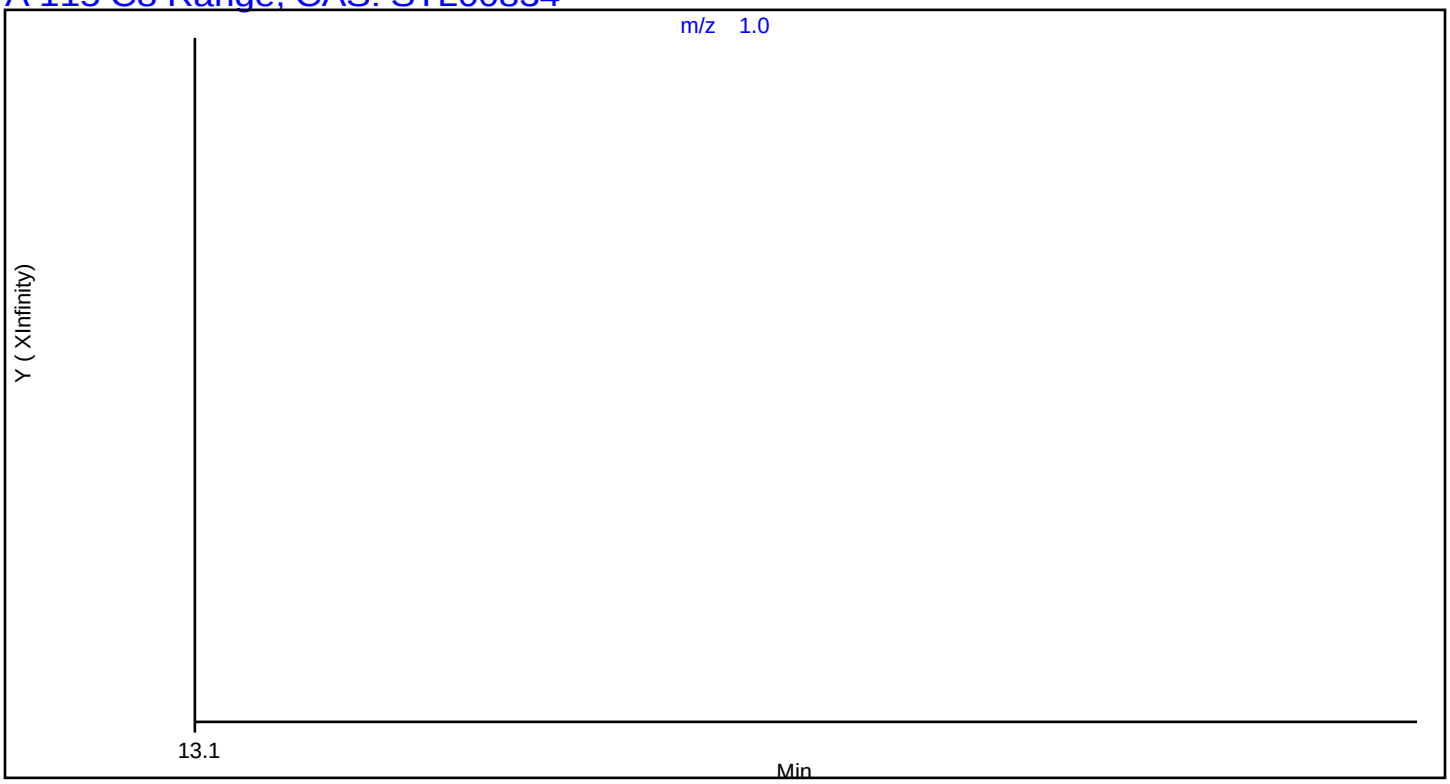


Report Date: 18-Jul-2019 17:47:22 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Injection Date:	17-Jul-2019 02:30:30	Instrument ID:	MR		
Lims ID:	IC L8				
Client ID:					
Operator ID:	afb	ALS Bottle#:	6	Worklist Smp#:	15
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

A 115 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: ICV 140-31732/17 Calibration Date: 07/17/2019 04:18

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RG16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.275	2.377		2.09	2.00	4.5	35.0
Propene	Ave	0.6378	0.6479		2.03	2.00	1.6	35.0
Dichlorodifluoromethane	Ave	4.132	4.479		2.17	2.00	8.4	35.0
Chloromethane	Ave	0.2641	0.2623		1.99	2.00	-0.7	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.308	2.766		2.40	2.00	19.9	35.0
Acetaldehyde	Ave	0.2553	0.2258		8.85	10.0	-11.5	35.0
Vinyl chloride	Ave	0.9361	0.9732		2.08	2.00	4.0	35.0
1,3-Butadiene	Ave	0.5888	0.6236		2.12	2.00	5.9	35.0
Butane	Ave	0.9552	1.020		2.14	2.00	6.8	35.0
Bromomethane	Ave	1.095	1.063		1.94	2.00	-2.9	35.0
Chloroethane	Ave	0.4387	0.4450		2.03	2.00	1.4	35.0
Ethanol	Ave	0.2199	0.1762		8.01	10.0	-19.9	35.0
Vinyl bromide	Ave	1.047	1.115		2.13	2.00	6.5	35.0
2-Methylbutane	Ave	0.6503	0.6890		2.12	2.00	6.0	35.0
Acrolein	Ave	0.2191	0.2523		2.30	2.00	15.2	35.0
Trichlorofluoromethane	Ave	4.798	4.799		2.00	2.00	0.0	35.0
Acetonitrile	Ave	0.1944	0.2132		2.19	2.00	9.7	35.0
Acetone	Ave	0.3684	0.3809		2.07	2.00	3.4	35.0
Isopropyl alcohol	Ave	1.027	1.305		2.54	2.00	27.1	35.0
Pentane	Ave	0.1794	0.1876		2.09	2.00	4.5	35.0
Ethyl ether	Ave	0.5457	0.4054		1.49	2.00	-25.7	35.0
1,1-Dichloroethene	Ave	1.491	1.506		2.02	2.00	1.0	35.0
Acrylonitrile	Ave	0.6302	0.7075		2.25	2.00	12.3	35.0
t-Butyl alcohol	Ave	2.620	2.822		2.15	2.00	7.7	35.0
1,1,2-Trichlorotrifluoroethane	Ave	3.664	3.766		2.06	2.00	2.8	35.0
Methylene Chloride	Ave	1.382	1.309		1.89	2.00	-5.3	35.0
3-Chloropropene	Ave	1.205	1.276		2.12	2.00	5.9	35.0
Carbon disulfide	Ave	3.481	3.577		2.05	2.00	2.7	35.0
trans-1,2-Dichloroethene	Ave	1.454	1.507		2.07	2.00	3.6	35.0
2-Methylpentane	Ave	1.793	1.769		1.97	2.00	-1.4	35.0
Methyl tert-butyl ether	Ave	4.593	4.878		2.12	2.00	6.2	35.0
1,1-Dichloroethane	Ave	2.378	2.441		2.05	2.00	2.7	35.0
Vinyl acetate	Ave	2.180	2.458		2.25	2.00	12.7	35.0
2-Butanone	Ave	0.5716	0.5679		1.99	2.00	-0.6	35.0
Hexane	Ave	0.8310	0.8767		2.11	2.00	5.5	35.0
Isopropyl ether	Ave	2.676	2.900		2.17	2.00	8.4	35.0
cis-1,2-Dichloroethene	Ave	1.477	1.571		2.13	2.00	6.3	35.0
Ethyl acetate	Ave	1.882	1.944		2.07	2.00	3.3	35.0
Chloroform	Ave	3.788	3.955		2.09	2.00	4.4	35.0
Tert-butyl ethyl ether	Ave	4.050	4.088		2.02	2.00	0.9	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: ICV 140-31732/17 Calibration Date: 07/17/2019 04:18

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RG16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	0.7828	0.8273		2.11	2.00	5.7	35.0
1,1,1-Trichloroethane	Ave	4.787	4.905		2.05	2.00	2.5	35.0
1,2-Dichloroethane	Ave	0.5155	0.5198		2.02	2.00	0.8	35.0
Benzene	Ave	0.6559	0.6781		2.07	2.00	3.4	35.0
1-Butanol	Ave	0.0359	0.0402		2.24	2.00	12.1	35.0
Cyclohexane	Ave	0.1005	0.1062		2.11	2.00	5.7	35.0
Carbon tetrachloride	Ave	0.7740	0.9262		2.39	2.00	19.7	35.0
2,3-Dimethylpentane	Ave	0.1367	0.1388		2.03	2.00	1.5	35.0
Thiophene	Ave	0.3755	0.3849		2.05	2.00	2.5	35.0
2,2,4-Trimethylpentane	Ave	0.8117	0.8566		2.11	2.00	5.5	35.0
1,2-Dichloropropane	Ave	0.2004	0.2020		2.02	2.00	0.8	35.0
Heptane	Ave	0.2062	0.2170		2.10	2.00	5.2	35.0
Trichloroethene	Ave	0.4056	0.4123		2.03	2.00	1.7	35.0
Dibromomethane	Ave	0.3479	0.3676		2.11	2.00	5.7	35.0
Bromodichloromethane	Ave	0.6261	0.6842		2.19	2.00	9.3	35.0
1,4-Dioxane	Ave	0.0964	0.1036		2.15	2.00	7.4	35.0
Methyl methacrylate	Ave	0.2025	0.2130		2.10	2.00	5.2	35.0
Methylcyclohexane	Ave	0.4046	0.5115		2.53	2.00	26.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3260	0.3582		2.20	2.00	9.9	35.0
cis-1,3-Dichloropropene	Ave	0.3847	0.4382		2.28	2.00	13.9	35.0
trans-1,3-Dichloropropene	Ave	0.4552	0.5258		2.31	2.00	15.5	35.0
Toluene	Ave	0.9652	1.067		2.21	2.00	10.5	35.0
1,1,2-Trichloroethane	Ave	0.2606	0.2830		2.17	2.00	8.6	35.0
2-Hexanone	Ave	0.1879	0.2192		2.33	2.00	16.6	35.0
Dibromochloromethane	Ave	0.7406	0.8450		2.28	2.00	14.1	35.0
Octane	Ave	0.3063	0.3434		2.24	2.00	12.1	35.0
1,2-Dibromoethane	Ave	0.5686	0.6308		2.22	2.00	10.9	35.0
Tetrachloroethene	Ave	0.4860	0.5052		2.08	2.00	3.9	35.0
Chlorobenzene	Ave	0.8727	0.9410		2.16	2.00	7.8	35.0
2,3-Dimethylheptane	Ave	0.5241	0.5135		1.96	2.00	-2.0	35.0
Ethylbenzene	Ave	1.379	1.534		2.22	2.00	11.2	35.0
m-Xylene & p-Xylene	Ave	1.139	1.258		4.42	4.00	10.5	35.0
Bromoform	Ave	0.6843	0.8017		2.34	2.00	17.1	35.0
Styrene	Ave	0.7027	0.8691		2.47	2.00	23.7	35.0
o-Xylene	Ave	1.207	1.286		2.13	2.00	6.6	35.0
Nonane	Ave	0.4397	0.4870		2.22	2.00	10.8	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6270	0.7043		2.25	2.00	12.3	35.0
1,2,3-Trichloropropane	Ave	0.2994	0.3202		2.14	2.00	6.9	35.0
Isopropylbenzene	Ave	1.689	1.799		2.13	2.00	6.6	35.0
Propylbenzene	Ave	0.4437	0.5102		2.30	2.00	15.0	35.0
2-Chlorotoluene	Ave	0.4188	0.4649		2.22	2.00	11.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: ICV 140-31732/17 Calibration Date: 07/17/2019 04:18

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RG16ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.638	1.790		2.19	2.00	9.3	35.0
1,3,5-Trimethylbenzene	Ave	0.6820	0.8605		2.52	2.00	26.2	35.0
Alpha Methyl Styrene	Ave	0.6390	0.7538		2.36	2.00	18.0	35.0
Decane	Ave	0.6328	0.7216		2.28	2.00	14.0	35.0
tert-Butylbenzene	Ave	1.795	1.947		2.17	2.00	8.5	35.0
1,2,4-Trimethylbenzene	Ave	1.661	1.763		2.12	2.00	6.2	35.0
1,3-Dichlorobenzene	Ave	1.254	1.335		2.13	2.00	6.4	35.0
sec-Butylbenzene	Ave	2.290	2.530		2.21	2.00	10.5	35.0
Benzyl chloride	Ave	1.263	1.466		2.32	2.00	16.1	35.0
1,4-Dichlorobenzene	Ave	1.256	1.299		2.07	2.00	3.5	35.0
4-Isopropyltoluene	Ave	2.329	2.491		2.14	2.00	6.9	35.0
1,2,3-Trimethylbenzene	Ave	1.863	1.495		1.60	2.00	-19.8	35.0
Butylcyclohexane	Ave	1.024	1.038		2.03	2.00	1.4	35.0
1,2-Dichlorobenzene	Ave	1.249	1.290		2.07	2.00	3.3	35.0
Indane	Ave	1.573	1.648		2.10	2.00	4.8	35.0
Indene	Ave	1.219	1.235		2.03	2.00	1.3	35.0
Butylbenzene	Ave	1.918	2.093		2.18	2.00	9.1	35.0
Undecane	Ave	0.8086	0.8926		2.21	2.00	10.4	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.5592	0.5260		1.88	2.00	-5.9	35.0
1,2,4,5-Tetramethylbenzene	Ave	2.298	2.391		2.08	2.00	4.0	35.0
Dodecane	Ave	0.8793	1.036		2.36	2.00	17.9	35.0
1,2,4-Trichlorobenzene	Ave	1.405	1.478		2.10	2.00	5.2	35.0
Naphthalene	Ave	2.938	3.025		2.06	2.00	3.0	35.0
Hexachlorobutadiene	Ave	1.476	1.450		1.96	2.00	-1.8	35.0
1,2,3-Trichlorobenzene	Ave	1.480	1.467		1.98	2.00	-0.9	35.0
2-Methylnaphthalene	Ave	1.111	1.119		2.01	2.00	0.7	50.0
1-Methylnaphthalene	Ave	0.9943	0.7933		1.60	2.00	-20.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8187	0.8208		4.01	4.00	0.3	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16ICV.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 17-Jul-2019 04:18:30 ALS Bottle#: 7 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012366-017
Misc. Info.: S94
Operator ID: afb Instrument ID: MR
Sublist:

Method: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 18-Jul-2019 17:51:22 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0313

First Level Reviewer: barlozhetskayaa Date: 18-Jul-2019 17:52:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.331	7.330	0.000	68	247175	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.385	0.000	94	1423370	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.448	14.447	0.001	89	1247125	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.174	16.175	-0.001	87	1023659	4.00	4.01	
6 Chlorodifluoromethane	51	3.507	3.511	-0.004	95	293780	2.00	2.09	
7 Propene	41	3.513	3.518	-0.005	90	80073	2.00	2.03	
8 Dichlorodifluoromethane	85	3.550	3.555	-0.005	99	553551	2.00	2.17	
9 Chloromethane	52	3.669	3.675	-0.006	97	32415	2.00	1.99	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.688	-0.003	89	341899	2.00	2.40	
11 Acetaldehyde	44	3.772	3.776	-0.004	93	139539	10.0	8.85	
12 Vinyl chloride	62	3.788	3.791	-0.003	100	120276	2.00	2.08	
13 Butadiene	54	3.852	3.854	-0.002	90	77069	2.00	2.12	
14 Butane	43	3.852	3.858	-0.006	83	126105	2.00	2.14	
15 Bromomethane	94	4.063	4.061	0.002	95	131371	2.00	1.94	
16 Chloroethane	64	4.154	4.157	-0.003	96	54995	2.00	2.03	
17 Ethanol	31	4.235	4.237	-0.002	88	108861	10.0	8.01	
18 Vinyl bromide	106	4.365	4.365	0.000	96	137828	2.00	2.13	
19 2-Methylbutane	43	4.413	4.416	-0.003	75	85154	2.00	2.12	
20 Acrolein	56	4.537	4.540	-0.003	97	31176	2.00	2.30	
21 Trichlorofluoromethane	101	4.559	4.560	-0.001	99	593077	2.00	2.00	
24 Acetonitrile	40	4.564	4.568	-0.004	95	26349	2.00	2.19	
22 Acetone	58	4.618	4.621	-0.003	100	47071	2.00	2.07	
23 Isopropyl alcohol	45	4.704	4.713	-0.009	98	161315	2.00	2.54	
25 Pentane	72	4.721	4.724	-0.003	90	23182	2.00	2.09	
26 Ethyl ether	31	4.828	4.833	-0.005	64	50101	2.00	1.49	
27 1,1-Dichloroethene	96	5.050	5.054	-0.004	98	186153	2.00	2.02	
28 Acrylonitrile	53	5.087	5.090	-0.003	91	87435	2.00	2.25	
29 2-Methyl-2-propanol	59	5.136	5.149	-0.013	93	348726	2.00	2.15	
30 1,1,2-Trichloro-1,2,2-trif	101	5.211	5.211	0.000	92	465405	2.00	2.06	
31 Methylene Chloride	84	5.292	5.294	-0.002	85	161815	2.00	1.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.314	5.313	0.001	84	157741	2.00	2.12	
33 Carbon disulfide	76	5.416	5.421	-0.005	99	442054	2.00	2.05	
34 trans-1,2-Dichloroethene	96	5.934	5.936	-0.002	96	186251	2.00	2.07	
35 2-Methylpentane	43	5.993	5.995	-0.002	82	218577	2.00	1.97	
36 Methyl tert-butyl ether	73	6.047	6.057	-0.010	92	602904	2.00	2.12	
37 1,1-Dichloroethane	63	6.247	6.252	-0.005	98	301687	2.00	2.05	
38 Vinyl acetate	43	6.349	6.357	-0.008	98	303757	2.00	2.25	
39 2-Butanone (MEK)	72	6.683	6.702	-0.019	96	70187	2.00	1.99	
40 Hexane	56	6.797	6.801	-0.004	80	108351	2.00	2.11	
41 Isopropyl ether	45	6.921	6.929	-0.008	85	358349	2.00	2.17	
42 cis-1,2-Dichloroethene	96	7.066	7.067	-0.001	93	194143	2.00	2.13	
43 Ethyl acetate	43	7.244	7.256	-0.012	98	240241	2.00	2.07	
44 Chloroform	83	7.368	7.368	0.000	96	488728	2.00	2.09	
45 Tert-butyl ethyl ether	59	7.498	7.508	-0.010	92	505165	2.00	2.02	
46 Tetrahydrofuran	42	7.692	7.704	-0.012	73	102241	2.00	2.11	
47 1,1,1-Trichloroethane	97	8.280	8.280	0.000	94	606181	2.00	2.05	
48 1,2-Dichloroethane	62	8.333	8.336	-0.003	96	369964	2.00	2.02	
49 Benzene	78	8.824	8.826	-0.002	98	482561	2.00	2.07	
50 n-Butanol	31	8.851	8.857	-0.006	68	28595	2.00	2.24	
51 Cyclohexane	69	8.857	8.861	-0.004	90	75581	2.00	2.11	
52 Carbon tetrachloride	117	8.867	8.868	-0.001	98	659173	2.00	2.39	
53 2,3-Dimethylpentane	71	9.034	9.032	0.002	83	98793	2.00	2.03	
54 Thiophene	84	9.072	9.072	0.000	94	273917	2.00	2.05	
55 Isooctane	57	9.692	9.697	-0.005	94	609637	2.00	2.11	
56 1,2-Dichloropropane	63	10.054	10.054	0.000	73	143781	2.00	2.02	
57 n-Heptane	71	10.113	10.116	-0.003	79	154431	2.00	2.10	
58 Trichloroethene	130	10.135	10.134	0.001	97	293432	2.00	2.03	
59 Dibromomethane	93	10.156	10.159	-0.003	91	261622	2.00	2.11	
60 Dichlorobromomethane	83	10.345	10.349	-0.004	98	486921	2.00	2.19	
61 1,4-Dioxane	88	10.361	10.373	-0.012	83	73710	2.00	2.15	
62 Methyl methacrylate	41	10.523	10.531	-0.008	89	151571	2.00	2.10	
63 Methylcyclohexane	83	10.997	11.001	-0.004	92	364001	2.00	2.53	
64 4-Methyl-2-pentanone (MIBK	43	11.418	11.432	-0.014	90	254919	2.00	2.20	
65 cis-1,3-Dichloropropene	75	11.456	11.461	-0.005	96	311837	2.00	2.28	
66 trans-1,3-Dichloropropene	75	12.211	12.218	-0.007	97	327859	2.00	2.31	
67 Toluene	91	12.356	12.359	-0.003	93	665291	2.00	2.21	
68 1,1,2-Trichloroethane	83	12.405	12.411	-0.006	94	176478	2.00	2.17	
69 2-Hexanone	58	12.879	12.895	-0.016	96	136660	2.00	2.33	
70 Chlorodibromomethane	129	13.138	13.140	-0.002	97	526887	2.00	2.28	
71 n-Octane	85	13.224	13.227	-0.003	72	214126	2.00	2.24	
72 Ethylene Dibromide	107	13.435	13.437	-0.002	97	393309	2.00	2.22	
73 Tetrachloroethene	129	13.586	13.586	0.000	95	315000	2.00	2.08	
74 Chlorobenzene	112	14.497	14.498	-0.001	93	586783	2.00	2.16	
75 2,3-Dimethylheptane	43	14.653	14.655	-0.002	75	320174	2.00	1.96	
76 Ethylbenzene	91	14.837	14.839	-0.002	99	956232	2.00	2.22	
77 m-Xylene & p-Xylene	91	15.015	15.018	-0.003	100	1568691	4.00	4.42	
78 Bromoform	173	15.392	15.394	-0.002	96	499883	2.00	2.34	
79 Styrene	104	15.489	15.491	-0.002	97	541928	2.00	2.47	
80 o-Xylene	91	15.554	15.553	0.001	97	801922	2.00	2.13	
81 n-Nonane	57	15.565	15.567	-0.002	78	303658	2.00	2.22	
82 1,1,2,2-Tetrachloroethane	83	15.872	15.872	0.000	94	439180	2.00	2.25	
83 1,2,3-Trichloropropane	110	16.023	16.028	-0.005	94	199634	2.00	2.14	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.185	16.185	0.000	97	1122012	2.00	2.13	
85 N-Propylbenzene	120	16.751	16.752	-0.001	98	318168	2.00	2.30	
86 2-Chlorotoluene	126	16.762	16.761	0.001	92	289876	2.00	2.22	
88 4-Ethyltoluene	105	16.918	16.919	-0.001	98	1116163	2.00	2.19	
87 1,3,5-Trimethylbenzene	120	17.004	17.006	-0.002	91	536549	2.00	2.52	
89 Alpha Methyl Styrene	118	17.247	17.252	-0.005	87	470045	2.00	2.36	
90 n-Decane	57	17.420	17.423	-0.003	97	449981	2.00	2.28	
91 tert-Butylbenzene	119	17.468	17.469	-0.001	89	1214018	2.00	2.17	
92 1,2,4-Trimethylbenzene	105	17.484	17.487	-0.003	96	1099331	2.00	2.12	
93 1,3-Dichlorobenzene	146	17.754	17.756	-0.002	98	832522	2.00	2.13	
94 sec-Butylbenzene	105	17.786	17.787	-0.001	97	1577396	2.00	2.21	
96 Benzyl chloride	91	17.840	17.844	-0.004	98	914181	2.00	2.32	
95 1,4-Dichlorobenzene	146	17.856	17.858	-0.002	95	809985	2.00	2.07	
97 4-Isopropyltoluene	119	17.986	17.986	0.000	95	1553313	2.00	2.14	
98 1,2,3-Trimethylbenzene	105	18.013	18.014	-0.001	98	932148	2.00	1.60	
99 Butylcyclohexane	83	18.126	18.127	-0.001	93	647483	2.00	2.03	
100 1,2-Dichlorobenzene	146	18.255	18.258	-0.003	94	804309	2.00	2.07	
101 2,3-Dihydroindene	117	18.272	18.273	-0.001	93	1027412	2.00	2.10	
102 Indene	116	18.412	18.412	0.000	90	770302	2.00	2.03	
103 n-Butylbenzene	91	18.477	18.477	0.000	97	1305147	2.00	2.18	
104 Undecane	57	18.913	18.914	-0.001	87	556579	2.00	2.21	
105 1,2-Dibromo-3-Chloropropan	157	18.924	18.924	0.000	96	328010	2.00	1.88	
106 1,2,4,5-Tetramethylbenzene	119	19.312	19.315	-0.003	96	1490821	2.00	2.08	
107 Dodecane	57	20.057	20.057	-0.001	92	646195	2.00	2.36	
108 1,2,4-Trichlorobenzene	180	20.121	20.122	-0.001	94	921644	2.00	2.10	
109 Naphthalene	128	20.240	20.243	-0.003	98	1886331	2.00	2.06	
110 Hexachlorobutadiene	225	20.509	20.510	-0.001	96	904187	2.00	1.96	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	914633	2.00	1.98	
112 2-Methylnaphthalene	142	21.372	21.375	-0.003	98	698011	2.00	2.01	
113 1-Methylnaphthalene	142	21.556	21.554	0.002	97	494715	2.00	1.60	
A 115 C8 Range	1	13.240	(13.197-13.284)		0	1551374	2.00	2.09	
S 116 Xylenes, Total	100				0		6.00	6.55	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.20	

Reagents:

40CV101S_00095	Amount Added: 100.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

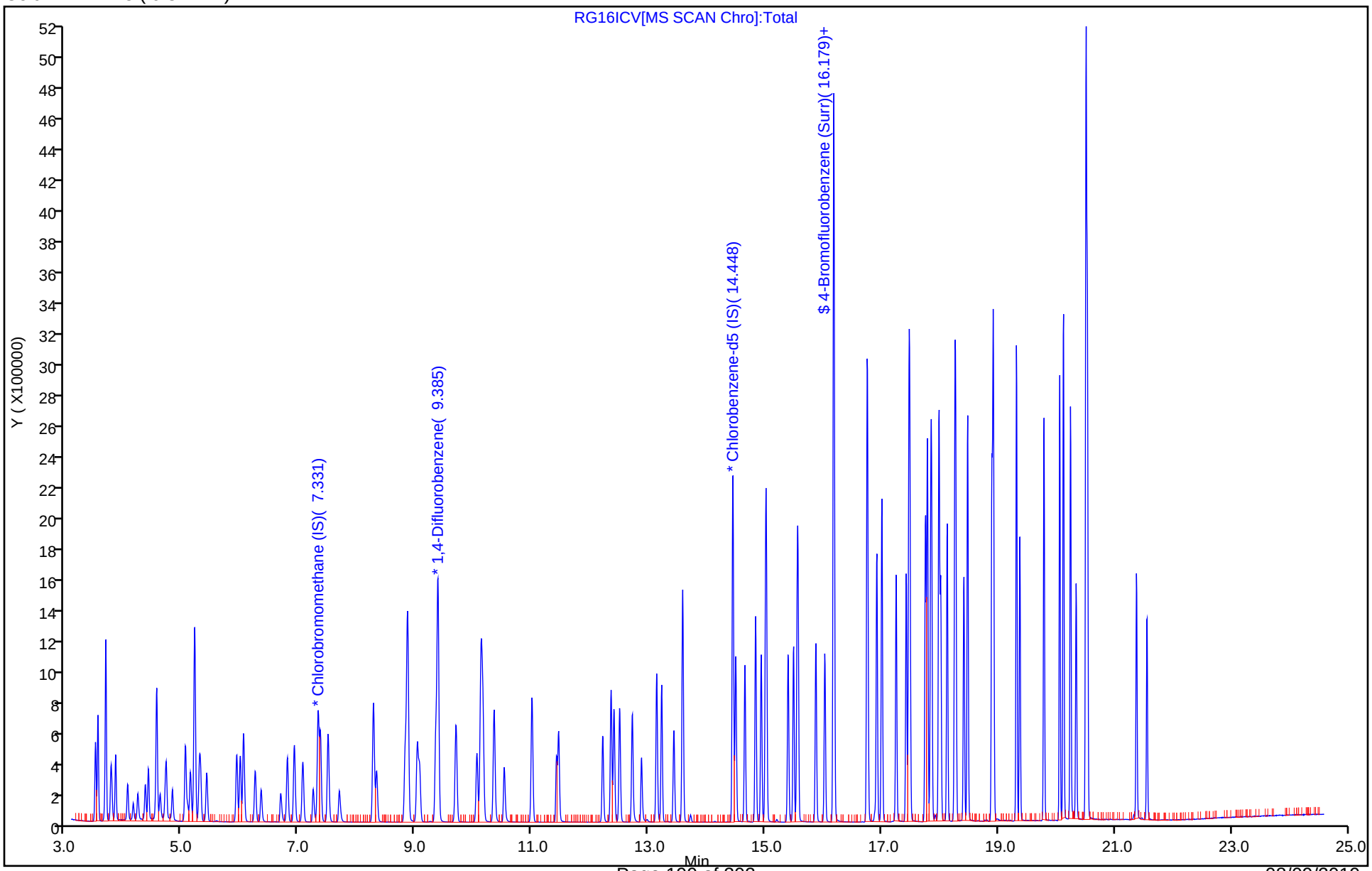
Report Date: 18-Jul-2019 17:59:56 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16ICV.D

Injection Date:	17-Jul-2019 04:18:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	ICV			Worklist Smp#:	17
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: CCVIS 140-32044/2 Calibration Date: 07/30/2019 09:23

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RCCVG30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.275	2.172		0.955	1.00	-4.5	30.0
Propene	Ave	0.6378	0.6583		1.03	1.00	3.2	30.0
Dichlorodifluoromethane	Ave	4.132	4.552		1.10	1.00	10.2	30.0
Chloromethane	Ave	0.2641	0.2364		0.895	1.00	-10.5	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.308	2.695		1.17	1.00	16.8	30.0
Acetaldehyde	Ave	0.2553	0.1971			5.00	-22.8	30.0
Vinyl chloride	Ave	0.9361	0.9072		0.969	1.00	-3.1	30.0
1,3-Butadiene	Ave	0.5888	0.6042		1.03	1.00	2.6	30.0
Butane	Ave	0.9552	0.9542		0.999	1.00	-0.1	30.0
Bromomethane	Ave	1.095	1.087		0.993	1.00	-0.7	30.0
Chloroethane	Ave	0.4387	0.4456		1.02	1.00	1.6	30.0
Ethanol	Ave	0.2199	0.1926		4.38	5.00	-12.4	30.0
Vinyl bromide	Ave	1.047	1.210		1.16	1.00	15.6	30.0
2-Methylbutane	Ave	0.6503	0.7083		1.09	1.00	8.9	30.0
Acrolein	Ave	0.2191	0.2880		1.31	1.00	31.5*	30.0
Trichlorofluoromethane	Ave	4.798	5.593		1.17	1.00	16.6	30.0
Acetonitrile	Ave	0.1944	0.2115		1.09	1.00	8.8	30.0
Acetone	Ave	0.3684	0.3546			1.00	-3.7	30.0
Isopropyl alcohol	Ave	1.027	1.347		1.31	1.00	31.2*	30.0
Pentane	Ave	0.1794	0.1964		1.09	1.00	9.5	30.0
Ethyl ether	Ave	0.5457	0.5590		1.02	1.00	2.4	30.0
1,1-Dichloroethene	Ave	1.491	1.361		0.913	1.00	-8.7	30.0
Acrylonitrile	Ave	0.6302	0.5971		0.948	1.00	-5.2	30.0
t-Butyl alcohol	Ave	2.620	2.592		0.989	1.00	-1.1	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.664	3.506		0.957	1.00	-4.3	30.0
Methylene Chloride	Ave	1.382	1.292		0.935	1.00	-6.5	30.0
3-Chloropropene	Ave	1.205	1.356		1.13	1.00	12.5	30.0
Carbon disulfide	Ave	3.481	3.249		0.933	1.00	-6.7	30.0
trans-1,2-Dichloroethene	Ave	1.454	1.347		0.926	1.00	-7.4	30.0
2-Methylpentane	Ave	1.793	1.545		0.862	1.00	-13.8	30.0
Methyl tert-butyl ether	Ave	4.593	4.287		0.933	1.00	-6.7	30.0
1,1-Dichloroethane	Ave	2.378	2.262		0.952	1.00	-4.8	30.0
Vinyl acetate	Ave	2.180	2.230		1.02	1.00	2.3	30.0
2-Butanone	Ave	0.5716	0.4671		0.817	1.00	-18.3	30.0
Hexane	Ave	0.8310	0.7979		0.960	1.00	-4.0	30.0
Isopropyl ether	Ave	2.676	2.539		0.949	1.00	-5.1	30.0
cis-1,2-Dichloroethene	Ave	1.477	1.382		0.935	1.00	-6.5	30.0
Ethyl acetate	Ave	1.882	1.741		0.925	1.00	-7.5	30.0
Chloroform	Ave	3.788	3.797		1.00	1.00	0.2	30.0
Tert-butyl ethyl ether	Ave	4.050	3.558		0.879	1.00	-12.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: CCVIS 140-32044/2 Calibration Date: 07/30/2019 09:23

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RCCVG30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	0.7828	0.7801		0.997	1.00	-0.3	30.0
1,1,1-Trichloroethane	Ave	4.787	4.671		0.976	1.00	-2.4	30.0
1,2-Dichloroethane	Ave	0.5155	0.5422		1.05	1.00	5.2	30.0
Benzene	Ave	0.6559	0.6441		0.982	1.00	-1.8	30.0
1-Butanol	Ave	0.0359	0.0379		1.06	1.00	5.6	30.0
Cyclohexane	Ave	0.1005	0.1031		1.03	1.00	2.6	30.0
Carbon tetrachloride	Ave	0.7740	0.9811		1.27	1.00	26.8	30.0
2,3-Dimethylpentane	Ave	0.1367	0.1282		0.938	1.00	-6.2	30.0
Thiophene	Ave	0.3755	0.3723		0.992	1.00	-0.8	30.0
2,2,4-Trimethylpentane	Ave	0.8117	0.8068		0.994	1.00	-0.6	30.0
1,2-Dichloropropane	Ave	0.2004	0.1910		0.953	1.00	-4.7	30.0
Heptane	Ave	0.2062	0.2023		0.981	1.00	-1.9	30.0
Trichloroethene	Ave	0.4056	0.3970		0.979	1.00	-2.1	30.0
Dibromomethane	Ave	0.3479	0.3692		1.06	1.00	6.1	30.0
Bromodichloromethane	Ave	0.6261	0.6796		1.09	1.00	8.5	30.0
1,4-Dioxane	Ave	0.0964	0.0988		1.02	1.00	2.4	30.0
Methyl methacrylate	Ave	0.2025	0.1941		0.958	1.00	-4.2	30.0
Methylcyclohexane	Ave	0.4046	0.4700		1.16	1.00	16.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3260	0.3297		1.01	1.00	1.1	30.0
cis-1,3-Dichloropropene	Ave	0.3847	0.4157		1.08	1.00	8.1	30.0
trans-1,3-Dichloropropene	Ave	0.4552	0.5098		1.12	1.00	12.0	30.0
Toluene	Ave	0.9652	1.019		1.06	1.00	5.5	30.0
1,1,2-Trichloroethane	Ave	0.2606	0.2773		1.06	1.00	6.4	30.0
2-Hexanone	Ave	0.1879	0.1856		0.987	1.00	-1.3	30.0
Dibromochloromethane	Ave	0.7406	0.8500		1.15	1.00	14.8	30.0
Octane	Ave	0.3063	0.3210		1.05	1.00	4.8	30.0
1,2-Dibromoethane	Ave	0.5686	0.6144		1.08	1.00	8.1	30.0
Tetrachloroethene	Ave	0.4860	0.5167		1.06	1.00	6.3	30.0
Chlorobenzene	Ave	0.8727	0.9274		1.06	1.00	6.3	30.0
2,3-Dimethylheptane	Ave	0.5241	0.5137		0.980	1.00	-2.0	30.0
Ethylbenzene	Ave	1.379	1.493		1.08	1.00	8.3	30.0
m-Xylene & p-Xylene	Ave	1.139	1.300		2.28	2.00	14.2	30.0
Bromoform	Ave	0.6843	0.8260		1.21	1.00	20.7	30.0
Styrene	Ave	0.7027	0.7816		1.11	1.00	11.2	30.0
o-Xylene	Ave	1.207	1.313		1.09	1.00	8.8	30.0
Nonane	Ave	0.4397	0.4842		1.10	1.00	10.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6270	0.6800		1.08	1.00	8.5	30.0
1,2,3-Trichloropropane	Ave	0.2994	0.3165		1.06	1.00	5.7	30.0
Isopropylbenzene	Ave	1.689	1.804		1.07	1.00	6.9	30.0
Propylbenzene	Ave	0.4437	0.5201		1.17	1.00	17.2	30.0
2-Chlorotoluene	Ave	0.4188	0.4892		1.17	1.00	16.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: CCVIS 140-32044/2 Calibration Date: 07/30/2019 09:23

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RCCVG30.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.638	1.881		1.15	1.00	14.9	30.0
1,3,5-Trimethylbenzene	Ave	0.6820	0.9203		1.35	1.00	34.9*	30.0
Alpha Methyl Styrene	Ave	0.6390	0.7165		1.12	1.00	12.1	30.0
Decane	Ave	0.6328	0.7407		1.17	1.00	17.0	30.0
tert-Butylbenzene	Ave	1.795	2.092		1.17	1.00	16.5	30.0
1,2,4-Trimethylbenzene	Ave	1.661	1.936		1.17	1.00	16.5	30.0
1,3-Dichlorobenzene	Ave	1.254	1.307		1.04	1.00	4.2	30.0
sec-Butylbenzene	Ave	2.290	2.514		1.10	1.00	9.8	30.0
Benzyl chloride	Ave	1.263	1.455		1.15	1.00	15.2	30.0
1,4-Dichlorobenzene	Ave	1.256	1.320		1.05	1.00	5.1	30.0
4-Isopropyltoluene	Ave	2.329	2.467		1.06	1.00	5.9	30.0
1,2,3-Trimethylbenzene	Ave	1.863	1.557		0.836	1.00	-16.4	30.0
Butylcyclohexane	Ave	1.024	1.041		1.02	1.00	1.6	30.0
1,2-Dichlorobenzene	Ave	1.249	1.300		1.04	1.00	4.1	30.0
Indane	Ave	1.573	1.668		1.06	1.00	6.0	30.0
Indene	Ave	1.219	1.151		0.944	1.00	-5.6	30.0
Butylbenzene	Ave	1.918	2.112		1.10	1.00	10.1	30.0
Undecane	Ave	0.8086	0.9223		1.14	1.00	14.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5592	0.5344		0.956	1.00	-4.4	30.0
1,2,4,5-Tetramethylbenzene	Ave	2.298	2.351		1.02	1.00	2.3	30.0
Dodecane	Ave	0.8793	0.8642		0.983	1.00	-1.7	30.0
1,2,4-Trichlorobenzene	Ave	1.405	1.376		0.979	1.00	-2.1	30.0
Naphthalene	Ave	2.938	2.692		0.916	1.00	-8.4	30.0
Hexachlorobutadiene	Ave	1.476	1.481		1.00	1.00	0.4	30.0
1,2,3-Trichlorobenzene	Ave	1.480	1.330		0.899	1.00	-10.1	30.0
2-Methylnaphthalene	Ave	1.111	0.9539			1.00	-14.2	50.0
1-Methylnaphthalene	Ave	0.9943	0.7200			1.00	-27.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8187	0.8504		4.16	4.00	3.9	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RCCVG30.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 30-Jul-2019 09:23:30 ALS Bottle#: 15 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012489-002
Misc. Info.: S97
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub19

Method: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Jul-2019 14:07:40 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: khachitpongpanits Date: 31-Jul-2019 13:27:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.314	7.314	0.000	68	197888	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.374	9.374	0.000	95	1067190	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	902008	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	767048	4.00	4.16	
6 Chlorodifluoromethane	51	3.507	3.507	0.000	96	107465	1.00	0.9547	
7 Propene	41	3.513	3.513	0.000	89	32568	1.00	1.03	
8 Dichlorodifluoromethane	85	3.551	3.551	0.000	100	225212	1.00	1.10	
9 Chloromethane	52	3.669	3.669	0.000	62	11697	1.00	0.8954	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.685	0.000	88	133340	1.00	1.17	
11 Acetaldehyde	44	3.772	3.772	0.000	88	48751	5.00	3.86	
12 Vinyl chloride	62	3.788	3.788	0.000	99	44881	1.00	0.9692	
13 Butadiene	54	3.847	3.847	0.000	82	29891	1.00	1.03	
14 Butane	43	3.853	3.853	0.000	81	47206	1.00	1.00	
15 Bromomethane	94	4.057	4.057	0.000	93	53777	1.00	0.99	
16 Chloroethane	64	4.154	4.154	0.000	94	22043	1.00	1.02	
17 Ethanol	31	4.219	4.219	0.000	89	47642	5.00	4.38	
18 Vinyl bromide	106	4.359	4.359	0.000	94	59837	1.00	1.16	
19 2-Methylbutane	43	4.408	4.408	0.000	75	35041	1.00	1.09	
20 Acrolein	56	4.532	4.532	0.000	97	14248	1.00	1.31	
21 Trichlorofluoromethane	101	4.554	4.554	0.000	99	276706	1.00	1.17	
24 Acetonitrile	40	4.559	4.559	0.000	23	10461	1.00	1.09	
22 Acetone	58	4.613	4.613	0.000	99	17542	1.00	0.9626	
23 Isopropyl alcohol	45	4.694	4.694	0.000	95	66642	1.00	1.31	
25 Pentane	72	4.721	4.721	0.000	89	9716	1.00	1.09	
26 Ethyl ether	31	4.823	4.823	0.000	68	27657	1.00	1.02	
27 1,1-Dichloroethene	96	5.044	5.044	0.000	95	67343	1.00	0.9131	
28 Acrylonitrile	53	5.077	5.077	0.000	89	29539	1.00	0.9475	
29 2-Methyl-2-propanol	59	5.125	5.125	0.000	94	128219	1.00	0.9892	
30 1,1,2-Trichloro-1,2,2-trif	101	5.201	5.201	0.000	92	173434	1.00	0.9569	
31 Methylene Chloride	84	5.287	5.287	0.000	87	63926	1.00	0.9350	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.308	5.308	0.000	84	67072	1.00	1.13	
33 Carbon disulfide	76	5.411	5.411	0.000	98	160726	1.00	0.9332	
34 trans-1,2-Dichloroethene	96	5.923	5.923	0.000	97	66647	1.00	0.9265	
35 2-Methylpentane	43	5.982	5.982	0.000	82	76451	1.00	0.8617	
36 Methyl tert-butyl ether	73	6.036	6.036	0.000	92	212087	1.00	0.9333	
37 1,1-Dichloroethane	63	6.236	6.236	0.000	98	111923	1.00	0.9515	
38 Vinyl acetate	43	6.338	6.338	0.000	98	110330	1.00	1.02	
39 2-Butanone (MEK)	72	6.673	6.673	0.000	97	23109	1.00	0.8172	
40 Hexane	56	6.791	6.791	0.000	79	39473	1.00	0.9601	
41 Isopropyl ether	45	6.910	6.910	0.000	84	125600	1.00	0.9489	
42 cis-1,2-Dichloroethene	96	7.056	7.056	0.000	94	68355	1.00	0.9354	
43 Ethyl acetate	43	7.234	7.234	0.000	97	86140	1.00	0.9253	
44 Chloroform	83	7.352	7.352	0.000	94	187839	1.00	1.00	
45 Tert-butyl ethyl ether	59	7.492	7.492	0.000	92	176025	1.00	0.8786	
46 Tetrahydrofuran	42	7.681	7.681	0.000	73	38594	1.00	1.00	
47 1,1,1-Trichloroethane	97	8.269	8.269	0.000	94	231080	1.00	0.9758	
48 1,2-Dichloroethane	62	8.317	8.317	0.000	97	144665	1.00	1.05	
49 Benzene	78	8.813	8.813	0.000	99	171855	1.00	0.9821	
50 n-Butanol	31	8.846	8.846	0.000	55	10106	1.00	1.06	
51 Cyclohexane	69	8.851	8.851	0.000	86	27509	1.00	1.03	
52 Carbon tetrachloride	117	8.857	8.857	0.000	97	261756	1.00	1.27	
53 2,3-Dimethylpentane	71	9.029	9.029	0.000	82	34215	1.00	0.9381	
54 Thiophene	84	9.056	9.056	0.000	95	99332	1.00	0.99	
55 Isooctane	57	9.687	9.687	0.000	94	215240	1.00	0.99	
56 1,2-Dichloropropane	63	10.043	10.043	0.000	70	50965	1.00	0.9531	
57 n-Heptane	71	10.108	10.108	0.000	82	53961	1.00	0.9808	
58 Trichloroethene	130	10.124	10.124	0.000	94	105928	1.00	0.9790	
59 Dibromomethane	93	10.145	10.145	0.000	90	98511	1.00	1.06	
60 Dichlorobromomethane	83	10.334	10.334	0.000	98	181316	1.00	1.09	
61 1,4-Dioxane	88	10.356	10.356	0.000	86	26350	1.00	1.02	
62 Methyl methacrylate	41	10.512	10.512	0.000	88	51779	1.00	0.9582	
63 Methylcyclohexane	83	10.992	10.992	0.000	92	125401	1.00	1.16	
64 4-Methyl-2-pentanone (MIBK	43	11.413	11.413	0.000	91	87966	1.00	1.01	
65 cis-1,3-Dichloropropene	75	11.445	11.445	0.000	95	110907	1.00	1.08	
66 trans-1,3-Dichloropropene	75	12.205	12.205	0.000	96	114970	1.00	1.12	
67 Toluene	91	12.345	12.345	0.000	93	229694	1.00	1.06	
68 1,1,2-Trichloroethane	83	12.394	12.394	0.000	92	62526	1.00	1.06	
69 2-Hexanone	58	12.874	12.874	0.000	94	41850	1.00	0.9875	
70 Chlorodibromomethane	129	13.133	13.133	0.000	95	191684	1.00	1.15	
71 n-Octane	85	13.219	13.219	0.000	72	72375	1.00	1.05	
72 Ethylene Dibromide	107	13.424	13.424	0.000	97	138552	1.00	1.08	
73 Tetrachloroethene	129	13.580	13.580	0.000	93	116512	1.00	1.06	
74 Chlorobenzene	112	14.492	14.492	0.000	92	209126	1.00	1.06	
75 2,3-Dimethylheptane	43	14.648	14.648	0.000	75	115829	1.00	0.9800	
76 Ethylbenzene	91	14.831	14.831	0.000	99	336688	1.00	1.08	
77 m-Xylene & p-Xylene	91	15.009	15.009	0.000	100	586357	2.00	2.28	
78 Bromoform	173	15.387	15.387	0.000	94	186262	1.00	1.21	
79 Styrene	104	15.484	15.484	0.000	97	176261	1.00	1.11	
80 o-Xylene	91	15.543	15.543	0.000	97	296088	1.00	1.09	
81 n-Nonane	57	15.559	15.559	0.000	74	109178	1.00	1.10	
82 1,1,2,2-Tetrachloroethane	83	15.867	15.867	0.000	92	153338	1.00	1.08	
83 1,2,3-Trichloropropane	110	16.018	16.018	0.000	92	71363	1.00	1.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.174	16.174	0.000	98	406891	1.00	1.07	
85 N-Propylbenzene	120	16.746	16.746	0.000	97	117288	1.00	1.17	
86 2-Chlorotoluene	126	16.756	16.756	0.000	91	110320	1.00	1.17	
88 4-Ethyltoluene	105	16.918	16.918	0.000	98	424203	1.00	1.15	
87 1,3,5-Trimethylbenzene	120	17.010	17.010	0.000	90	207529	1.00	1.35	
89 Alpha Methyl Styrene	118	17.263	17.263	0.000	85	161581	1.00	1.12	
90 n-Decane	57	17.436	17.436	0.000	97	167017	1.00	1.17	
91 tert-Butylbenzene	119	17.484	17.484	0.000	89	471661	1.00	1.17	
92 1,2,4-Trimethylbenzene	105	17.495	17.495	0.000	96	436462	1.00	1.17	
93 1,3-Dichlorobenzene	146	17.765	17.765	0.000	98	294754	1.00	1.04	
94 sec-Butylbenzene	105	17.797	17.797	0.000	97	566916	1.00	1.10	
96 Benzyl chloride	91	17.856	17.856	0.000	98	328159	1.00	1.15	
95 1,4-Dichlorobenzene	146	17.867	17.867	0.000	94	297582	1.00	1.05	
97 4-Isopropyltoluene	119	17.997	17.997	0.000	95	556244	1.00	1.06	
98 1,2,3-Trimethylbenzene	105	18.024	18.024	0.000	98	351056	1.00	0.8355	
99 Butylcyclohexane	83	18.137	18.137	0.000	91	234717	1.00	1.02	
100 1,2-Dichlorobenzene	146	18.266	18.266	0.000	93	293072	1.00	1.04	
101 2,3-Dihydroindene	117	18.282	18.282	0.000	93	376059	1.00	1.06	
102 Indene	116	18.423	18.423	0.000	90	259595	1.00	0.9444	
103 n-Butylbenzene	91	18.487	18.487	0.000	97	476276	1.00	1.10	
104 Undecane	57	18.919	18.919	0.000	86	207971	1.00	1.14	
105 1,2-Dibromo-3-Chloropropan	157	18.930	18.930	0.000	97	120496	1.00	0.9556	
106 1,2,4,5-Tetramethylbenzene	119	19.323	19.323	0.000	95	530178	1.00	1.02	
107 Dodecane	57	20.057	20.057	0.000	91	194874	1.00	0.9828	
108 1,2,4-Trichlorobenzene	180	20.121	20.121	0.000	93	310289	1.00	0.9795	
109 Naphthalene	128	20.245	20.245	0.000	98	607100	1.00	0.9164	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	95	334076	1.00	1.00	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	94	299922	1.00	0.8990	
112 2-Methylnaphthalene	142	21.372	21.372	0.000	99	215127	1.00	0.8583	
113 1-Methylnaphthalene	142	21.550	21.550	0.000	97	162374	1.00	0.7242	
A 115 C8 Range	1	13.227	(13.171-13.268)		0	573094	1.00	1.03	
S 116 Xylenes, Total	100				0		3.00	3.37	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.86	

Reagents:

40CV101S_00097	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

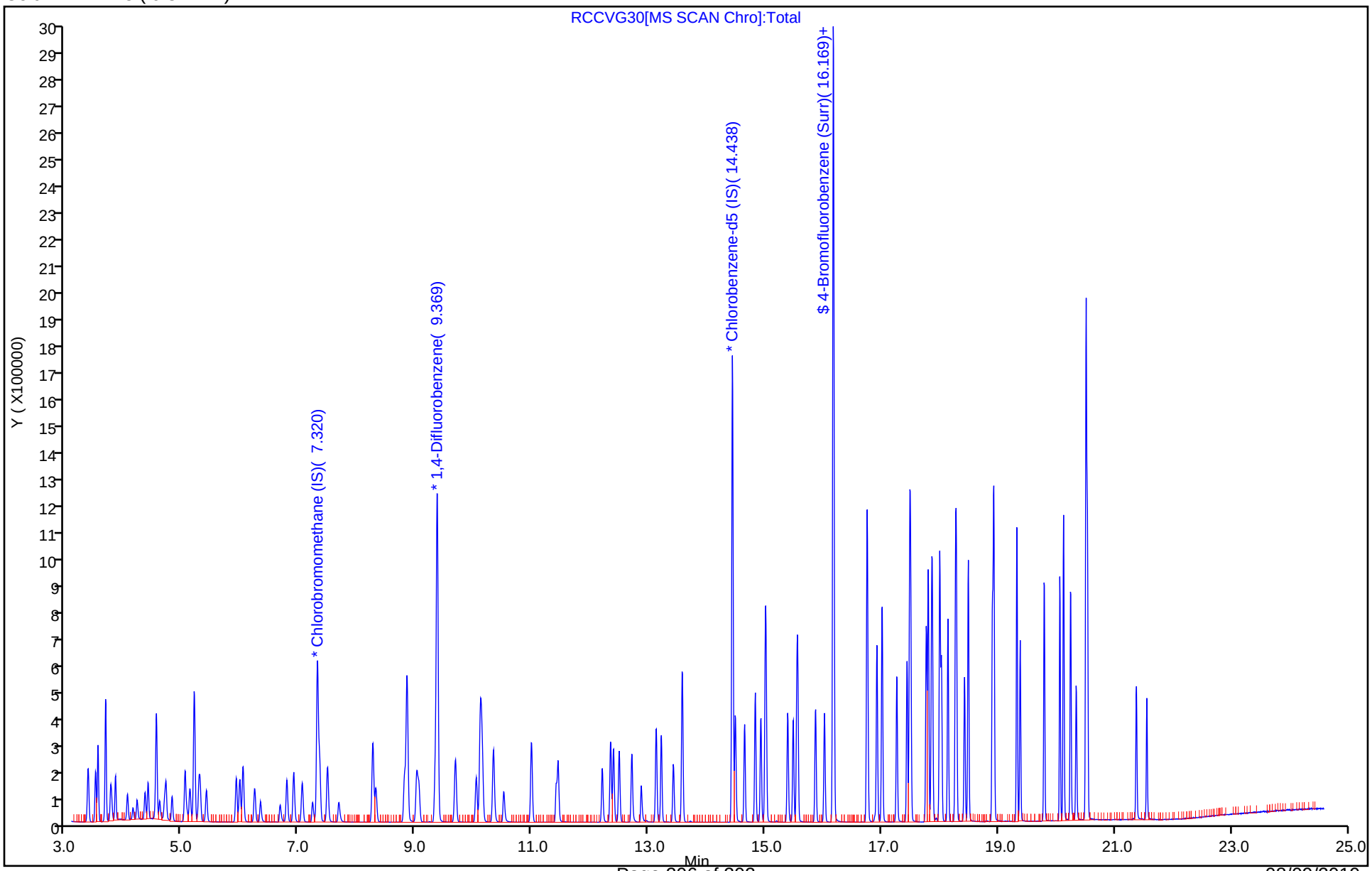
Report Date: 31-Jul-2019 14:07:42 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RCCVG30.D

Injection Date:	30-Jul-2019 09:23:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: CCVIS 140-32181/2 Calibration Date: 07/31/2019 11:48

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RCCVG31A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.275	2.219		0.975	1.00	-2.5	30.0
Propene	Ave	0.6378	0.6762		1.06	1.00	6.0	30.0
Dichlorodifluoromethane	Ave	4.132	4.519		1.09	1.00	9.4	30.0
Chloromethane	Ave	0.2641	0.2519		0.954	1.00	-4.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.308	2.783		1.21	1.00	20.6	30.0
Acetaldehyde	Ave	0.2553	0.2332		4.57	5.00	-8.7	30.0
Vinyl chloride	Ave	0.9361	0.9242		0.987	1.00	-1.3	30.0
1,3-Butadiene	Ave	0.5888	0.6165		1.05	1.00	4.7	30.0
Butane	Ave	0.9552	1.009		1.06	1.00	5.7	30.0
Bromomethane	Ave	1.095	1.123		1.03	1.00	2.6	30.0
Chloroethane	Ave	0.4387	0.4650		1.06	1.00	6.0	30.0
Ethanol	Ave	0.2199	0.2419		5.50	5.00	10.0	30.0
Vinyl bromide	Ave	1.047	1.194		1.14	1.00	14.1	30.0
2-Methylbutane	Ave	0.6503	0.7183		1.10	1.00	10.5	30.0
Acrolein	Ave	0.2191	0.2509		1.15	1.00	14.5	30.0
Trichlorofluoromethane	Ave	4.798	5.936		1.24	1.00	23.7	30.0
Acetonitrile	Ave	0.1944	0.2173		1.12	1.00	11.8	30.0
Acetone	Ave	0.3684	0.3606		2.94	3.00	-2.1	30.0
Isopropyl alcohol	Ave	1.027	1.086		3.17	3.00	5.8	30.0
Pentane	Ave	0.1794	0.1866		1.04	1.00	4.0	30.0
Ethyl ether	Ave	0.5457	0.5932		1.09	1.00	8.7	30.0
1,1-Dichloroethene	Ave	1.491	1.419		0.952	1.00	-4.8	30.0
Acrylonitrile	Ave	0.6302	0.6114		0.970	1.00	-3.0	30.0
t-Butyl alcohol	Ave	2.620	2.564		0.979	1.00	-2.1	30.0
1,1,2-Trichlorotrifluoroethane	Ave	3.664	3.699		1.01	1.00	1.0	30.0
Methylene Chloride	Ave	1.382	1.336		0.966	1.00	-3.4	30.0
3-Chloropropene	Ave	1.205	1.392		1.16	1.00	15.6	30.0
Carbon disulfide	Ave	3.481	3.398		0.976	1.00	-2.4	30.0
trans-1,2-Dichloroethene	Ave	1.454	1.419		0.976	1.00	-2.4	30.0
2-Methylpentane	Ave	1.793	1.781		0.993	1.00	-0.7	30.0
Methyl tert-butyl ether	Ave	4.593	4.463		0.972	1.00	-2.8	30.0
1,1-Dichloroethane	Ave	2.378	2.370		0.997	1.00	-0.3	30.0
Vinyl acetate	Ave	2.180	2.183		1.00	1.00	0.1	30.0
2-Butanone	Ave	0.5716	0.4685		0.820	1.00	-18.0	30.0
Hexane	Ave	0.8310	0.8508		1.02	1.00	2.4	30.0
Isopropyl ether	Ave	2.676	2.590		0.968	1.00	-3.2	30.0
cis-1,2-Dichloroethene	Ave	1.477	1.422		0.963	1.00	-3.7	30.0
Ethyl acetate	Ave	1.882	1.897		1.01	1.00	0.8	30.0
Chloroform	Ave	3.788	3.904		1.03	1.00	3.0	30.0
Tert-butyl ethyl ether	Ave	4.050	3.979		0.983	1.00	-1.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: CCVIS 140-32181/2 Calibration Date: 07/31/2019 11:48

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RCCVG31A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	0.7828	0.7870		1.01	1.00	0.5	30.0
1,1,1-Trichloroethane	Ave	4.787	4.910		1.03	1.00	2.6	30.0
1,2-Dichloroethane	Ave	0.5155	0.5551		1.08	1.00	7.7	30.0
Benzene	Ave	0.6559	0.6437		0.981	1.00	-1.9	30.0
1-Butanol	Ave	0.0359	0.0367		1.02	1.00	2.3	30.0
Cyclohexane	Ave	0.1005	0.1038		1.03	1.00	3.2	30.0
Carbon tetrachloride	Ave	0.7740	0.9854		1.27	1.00	27.3	30.0
2,3-Dimethylpentane	Ave	0.1367	0.1363		0.997	1.00	-0.3	30.0
Thiophene	Ave	0.3755	0.3920		1.04	1.00	4.4	30.0
2,2,4-Trimethylpentane	Ave	0.8117	0.8164		1.01	1.00	0.6	30.0
1,2-Dichloropropane	Ave	0.2004	0.2013		1.00	1.00	0.4	30.0
Heptane	Ave	0.2062	0.2046		0.992	1.00	-0.8	30.0
Trichloroethene	Ave	0.4056	0.4045		0.997	1.00	-0.3	30.0
Dibromomethane	Ave	0.3479	0.3719		1.07	1.00	6.9	30.0
Bromodichloromethane	Ave	0.6261	0.7008		1.12	1.00	11.9	30.0
1,4-Dioxane	Ave	0.0964	0.0968		1.00	1.00	0.4	30.0
Methyl methacrylate	Ave	0.2025	0.2057		1.02	1.00	1.6	30.0
Methylcyclohexane	Ave	0.4046	0.3958		0.978	1.00	-2.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3260	0.3370		1.03	1.00	3.4	30.0
cis-1,3-Dichloropropene	Ave	0.3847	0.4206		1.09	1.00	9.3	30.0
trans-1,3-Dichloropropene	Ave	0.4552	0.4901		1.08	1.00	7.7	30.0
Toluene	Ave	0.9652	1.033		1.07	1.00	7.0	30.0
1,1,2-Trichloroethane	Ave	0.2606	0.2784		1.07	1.00	6.8	30.0
2-Hexanone	Ave	0.1879	0.1857		0.988	1.00	-1.2	30.0
Dibromochloromethane	Ave	0.7406	0.8485		1.15	1.00	14.6	30.0
Octane	Ave	0.3063	0.3206		1.05	1.00	4.6	30.0
1,2-Dibromoethane	Ave	0.5686	0.6245		1.10	1.00	9.8	30.0
Tetrachloroethene	Ave	0.4860	0.5239		1.08	1.00	7.8	30.0
Chlorobenzene	Ave	0.8727	0.9240		1.06	1.00	5.9	30.0
2,3-Dimethylheptane	Ave	0.5241	0.5959		1.14	1.00	13.7	30.0
Ethylbenzene	Ave	1.379	1.516		1.10	1.00	9.9	30.0
m-Xylene & p-Xylene	Ave	1.139	1.283		2.25	2.00	12.7	30.0
Bromoform	Ave	0.6843	0.8324		1.22	1.00	21.6	30.0
Styrene	Ave	0.7027	0.7824		1.11	1.00	11.3	30.0
o-Xylene	Ave	1.207	1.343		1.11	1.00	11.3	30.0
Nonane	Ave	0.4397	0.5130		1.17	1.00	16.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6270	0.6963		1.11	1.00	11.1	30.0
1,2,3-Trichloropropane	Ave	0.2994	0.3205		1.07	1.00	7.0	30.0
Isopropylbenzene	Ave	1.689	1.809		1.07	1.00	7.2	30.0
Propylbenzene	Ave	0.4437	0.5104		1.15	1.00	15.0	30.0
2-Chlorotoluene	Ave	0.4188	0.4881		1.17	1.00	16.6	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Lab Sample ID: CCVIS 140-32181/2 Calibration Date: 07/31/2019 11:48

Instrument ID: MR Calib Start Date: 07/16/2019 16:26

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 07/17/2019 02:30

Lab File ID: RCCVG31A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.638	1.991		1.22	1.00	21.6	30.0
1,3,5-Trimethylbenzene	Ave	0.6820	0.8443		1.24	1.00	23.8	30.0
Alpha Methyl Styrene	Ave	0.6390	0.7329		1.15	1.00	14.7	30.0
Decane	Ave	0.6328	0.7674		1.21	1.00	21.3	30.0
tert-Butylbenzene	Ave	1.795	2.125		1.18	1.00	18.4	30.0
1,2,4-Trimethylbenzene	Ave	1.661	1.977		1.19	1.00	19.0	30.0
1,3-Dichlorobenzene	Ave	1.254	1.350		1.08	1.00	7.6	30.0
sec-Butylbenzene	Ave	2.290	2.553		1.11	1.00	11.5	30.0
Benzyl chloride	Ave	1.263	1.425		1.13	1.00	12.8	30.0
1,4-Dichlorobenzene	Ave	1.256	1.387		1.10	1.00	10.5	30.0
4-Isopropyltoluene	Ave	2.329	2.608		1.12	1.00	12.0	30.0
1,2,3-Trimethylbenzene	Ave	1.863	2.116		1.14	1.00	13.5	30.0
Butylcyclohexane	Ave	1.024	1.123		1.10	1.00	9.6	30.0
1,2-Dichlorobenzene	Ave	1.249	1.347		1.08	1.00	7.9	30.0
Indane	Ave	1.573	1.713		1.09	1.00	8.9	30.0
Indene	Ave	1.219	1.368		1.12	1.00	12.2	30.0
Butylbenzene	Ave	1.918	2.168		1.13	1.00	13.0	30.0
Undecane	Ave	0.8086	0.9406		1.16	1.00	16.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.5592	0.6600		1.18	1.00	18.0	30.0
1,2,4,5-Tetramethylbenzene	Ave	2.298	2.546		1.11	1.00	10.8	30.0
Dodecane	Ave	0.8793	0.9258		1.05	1.00	5.3	30.0
1,2,4-Trichlorobenzene	Ave	1.405	1.402		0.998	1.00	-0.2	30.0
Naphthalene	Ave	2.938	2.763		0.941	1.00	-5.9	30.0
Hexachlorobutadiene	Ave	1.476	1.625		1.10	1.00	10.1	30.0
1,2,3-Trichlorobenzene	Ave	1.480	1.348		0.911	1.00	-8.9	30.0
2-Methylnaphthalene	Ave	1.111	0.7396			1.00	-33.5	50.0
1-Methylnaphthalene	Ave	0.9943	0.5810			1.00	-41.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8187	0.8566		4.19	4.00	4.6	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RCCVG31A.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 31-Jul-2019 11:48:30 ALS Bottle#: 15 Worklist Smp#: 2
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012543-002
Misc. Info.: S97
Operator ID: HMT Instrument ID: MR
Sublist: chrom-MR_TO15*sub16

Method: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Aug-2019 10:55:25 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0307

First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 10:55:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.320	7.320	0.000	68	190821	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.374	9.374	0.000	95	1041722	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	892135	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	88	764215	4.00	4.19	
6 Chlorodifluoromethane	51	3.513	3.513	0.000	95	105868	1.00	0.9754	
7 Propene	41	3.524	3.524	0.000	89	32260	1.00	1.06	
8 Dichlorodifluoromethane	85	3.556	3.556	0.000	100	215592	1.00	1.09	
9 Chloromethane	52	3.675	3.675	0.000	67	12019	1.00	0.9541	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.691	3.691	0.000	91	132745	1.00	1.21	
11 Acetaldehyde	44	3.777	3.777	0.000	92	55614	5.00	4.57	
12 Vinyl chloride	62	3.793	3.793	0.000	98	44091	1.00	0.9874	
13 Butadiene	54	3.853	3.853	0.000	83	29410	1.00	1.05	
14 Butane	43	3.858	3.858	0.000	77	48157	1.00	1.06	
15 Bromomethane	94	4.063	4.063	0.000	94	53566	1.00	1.03	
16 Chloroethane	64	4.160	4.160	0.000	95	22182	1.00	1.06	
17 Ethanol	31	4.230	4.230	0.000	87	57698	5.00	5.50	
18 Vinyl bromide	106	4.365	4.365	0.000	95	56972	1.00	1.14	
19 2-Methylbutane	43	4.419	4.419	0.000	74	34266	1.00	1.10	
20 Acrolein	56	4.538	4.538	0.000	94	11969	1.00	1.15	
21 Trichlorofluoromethane	101	4.559	4.559	0.000	99	283164	1.00	1.24	
24 Acetonitrile	40	4.564	4.564	0.000	23	10367	1.00	1.12	
22 Acetone	58	4.608	4.608	0.000	100	51601	3.00	2.94	
23 Isopropyl alcohol	45	4.694	4.694	0.000	98	155442	3.00	3.17	
25 Pentane	72	4.721	4.721	0.000	90	8900	1.00	1.04	
26 Ethyl ether	31	4.829	4.829	0.000	69	28297	1.00	1.09	
27 1,1-Dichloroethene	96	5.055	5.055	0.000	96	67715	1.00	0.9521	
28 Acrylonitrile	53	5.082	5.082	0.000	90	29169	1.00	0.9703	
29 2-Methyl-2-propanol	59	5.136	5.136	0.000	95	122327	1.00	0.9787	
30 1,1,2-Trichloro-1,2,2-trif	101	5.212	5.212	0.000	92	176468	1.00	1.01	
31 Methylene Chloride	84	5.287	5.287	0.000	89	63712	1.00	0.9664	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.309	5.309	0.000	83	66418	1.00	1.16	
33 Carbon disulfide	76	5.416	5.416	0.000	98	162098	1.00	0.9760	
34 trans-1,2-Dichloroethene	96	5.929	5.929	0.000	97	67678	1.00	0.9757	
35 2-Methylpentane	43	5.988	5.988	0.000	82	84945	1.00	0.99	
36 Methyl tert-butyl ether	73	6.047	6.047	0.000	92	212910	1.00	0.9716	
37 1,1-Dichloroethane	63	6.247	6.247	0.000	97	113076	1.00	1.00	
38 Vinyl acetate	43	6.344	6.344	0.000	98	104153	1.00	1.00	
39 2-Butanone (MEK)	72	6.684	6.684	0.000	97	22350	1.00	0.8196	
40 Hexane	56	6.797	6.797	0.000	80	40587	1.00	1.02	
41 Isopropyl ether	45	6.916	6.916	0.000	84	123541	1.00	0.9679	
42 cis-1,2-Dichloroethene	96	7.061	7.061	0.000	95	67836	1.00	0.9627	
43 Ethyl acetate	43	7.234	7.234	0.000	97	90500	1.00	1.01	
44 Chloroform	83	7.358	7.358	0.000	97	186235	1.00	1.03	
45 Tert-butyl ethyl ether	59	7.493	7.493	0.000	93	189821	1.00	0.9825	
46 Tetrahydrofuran	42	7.687	7.687	0.000	73	37542	1.00	1.01	
47 1,1,1-Trichloroethane	97	8.269	8.269	0.000	94	234227	1.00	1.03	
48 1,2-Dichloroethane	62	8.323	8.323	0.000	96	144573	1.00	1.08	
49 Benzene	78	8.814	8.814	0.000	98	167643	1.00	0.9815	
51 Cyclohexane	69	8.857	8.857	0.000	86	27029	1.00	1.03	
50 n-Butanol	31	8.857	8.857	0.000	55	9554	1.00	1.02	
52 Carbon tetrachloride	117	8.862	8.862	0.000	96	256638	1.00	1.27	
53 2,3-Dimethylpentane	71	9.024	9.024	0.000	83	35495	1.00	1.00	
54 Thiophene	84	9.062	9.062	0.000	96	102082	1.00	1.04	
55 Isooctane	57	9.687	9.687	0.000	94	212614	1.00	1.01	
56 1,2-Dichloropropane	63	10.043	10.043	0.000	68	52427	1.00	1.00	
57 n-Heptane	71	10.102	10.102	0.000	80	53295	1.00	0.99	
58 Trichloroethene	130	10.124	10.124	0.000	94	105351	1.00	1.00	
59 Dibromomethane	93	10.146	10.146	0.000	91	96862	1.00	1.07	
60 Dichlorobromomethane	83	10.334	10.334	0.000	99	182521	1.00	1.12	
61 1,4-Dioxane	88	10.356	10.356	0.000	86	25221	1.00	1.00	
62 Methyl methacrylate	41	10.518	10.518	0.000	88	53575	1.00	1.02	
63 Methylcyclohexane	83	10.992	10.992	0.000	92	103082	1.00	0.9783	
64 4-Methyl-2-pentanone (MIBK	43	11.418	11.418	0.000	91	87766	1.00	1.03	
65 cis-1,3-Dichloropropene	75	11.445	11.445	0.000	96	109525	1.00	1.09	
66 trans-1,3-Dichloropropene	75	12.205	12.205	0.000	96	109299	1.00	1.08	
67 Toluene	91	12.346	12.346	0.000	92	230371	1.00	1.07	
68 1,1,2-Trichloroethane	83	12.400	12.400	0.000	93	62095	1.00	1.07	
69 2-Hexanone	58	12.874	12.874	0.000	94	41427	1.00	0.9883	
70 Chlorodibromomethane	129	13.128	13.128	0.000	96	189234	1.00	1.15	
71 n-Octane	85	13.219	13.219	0.000	72	71499	1.00	1.05	
72 Ethylene Dibromide	107	13.424	13.424	0.000	96	139273	1.00	1.10	
73 Tetrachloroethene	129	13.575	13.575	0.000	93	116845	1.00	1.08	
74 Chlorobenzene	112	14.486	14.486	0.000	91	206075	1.00	1.06	
75 2,3-Dimethylheptane	43	14.648	14.648	0.000	79	132894	1.00	1.14	
76 Ethylbenzene	91	14.832	14.832	0.000	99	338045	1.00	1.10	
77 m-Xylene & p-Xylene	91	15.010	15.010	0.000	100	572250	2.00	2.25	
78 Bromoform	173	15.387	15.387	0.000	94	185650	1.00	1.22	
79 Styrene	104	15.479	15.479	0.000	97	174497	1.00	1.11	
80 o-Xylene	91	15.543	15.543	0.000	97	299586	1.00	1.11	
81 n-Nonane	57	15.560	15.560	0.000	73	114414	1.00	1.17	
82 1,1,2,2-Tetrachloroethane	83	15.862	15.862	0.000	93	155294	1.00	1.11	
83 1,2,3-Trichloropropane	110	16.018	16.018	0.000	92	71484	1.00	1.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	16.174	16.174	0.000	97	403560	1.00	1.07	
85 N-Propylbenzene	120	16.746	16.746	0.000	98	113833	1.00	1.15	
86 2-Chlorotoluene	126	16.757	16.757	0.000	92	108862	1.00	1.17	
88 4-Ethyltoluene	105	16.918	16.918	0.000	98	444092	1.00	1.22	
87 1,3,5-Trimethylbenzene	120	17.005	17.005	0.000	91	188314	1.00	1.24	
89 Alpha Methyl Styrene	118	17.258	17.258	0.000	86	163453	1.00	1.15	
90 n-Decane	57	17.436	17.436	0.000	98	171163	1.00	1.21	
91 tert-Butylbenzene	119	17.479	17.479	0.000	92	474015	1.00	1.18	
92 1,2,4-Trimethylbenzene	105	17.495	17.495	0.000	96	440969	1.00	1.19	
93 1,3-Dichlorobenzene	146	17.765	17.765	0.000	98	300993	1.00	1.08	
94 sec-Butylbenzene	105	17.797	17.797	0.000	97	569311	1.00	1.11	
96 Benzyl chloride	91	17.851	17.851	0.000	97	317763	1.00	1.13	
95 1,4-Dichlorobenzene	146	17.867	17.867	0.000	92	309387	1.00	1.10	
97 4-Isopropyltoluene	119	17.997	17.997	0.000	95	581713	1.00	1.12	
98 1,2,3-Trimethylbenzene	105	18.024	18.024	0.000	99	471836	1.00	1.14	
99 Butylcyclohexane	83	18.137	18.137	0.000	91	250470	1.00	1.10	
100 1,2-Dichlorobenzene	146	18.267	18.267	0.000	93	300529	1.00	1.08	
101 2,3-Dihydroindene	117	18.283	18.283	0.000	93	382038	1.00	1.09	
102 Indene	116	18.423	18.423	0.000	90	305161	1.00	1.12	
103 n-Butylbenzene	91	18.488	18.488	0.000	97	483510	1.00	1.13	
104 Undecane	57	18.919	18.919	0.000	87	209794	1.00	1.16	
105 1,2-Dibromo-3-Chloropropan	157	18.930	18.930	0.000	92	147194	1.00	1.18	
106 1,2,4,5-Tetramethylbenzene	119	19.318	19.318	0.000	95	567895	1.00	1.11	
107 Dodecane	57	20.057	20.057	0.000	91	206473	1.00	1.05	
108 1,2,4-Trichlorobenzene	180	20.121	20.121	0.000	95	312582	1.00	1.00	
109 Naphthalene	128	20.240	20.240	0.000	98	616341	1.00	0.9406	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	95	362352	1.00	1.10	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	300722	1.00	0.9113	
112 2-Methylnaphthalene	142	21.373	21.373	0.000	98	164959	1.00	0.6654	
113 1-Methylnaphthalene	142	21.550	21.550	0.000	97	129583	1.00	0.5843	
A 115 C8 Range	1	13.227	(13.171-13.268)		0	565136	1.00	1.04	
S 116 Xylenes, Total	100				0		3.00	3.37	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.94	

Reagents:

40CV101P_00092	Amount Added: 50.00	Units: ml	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

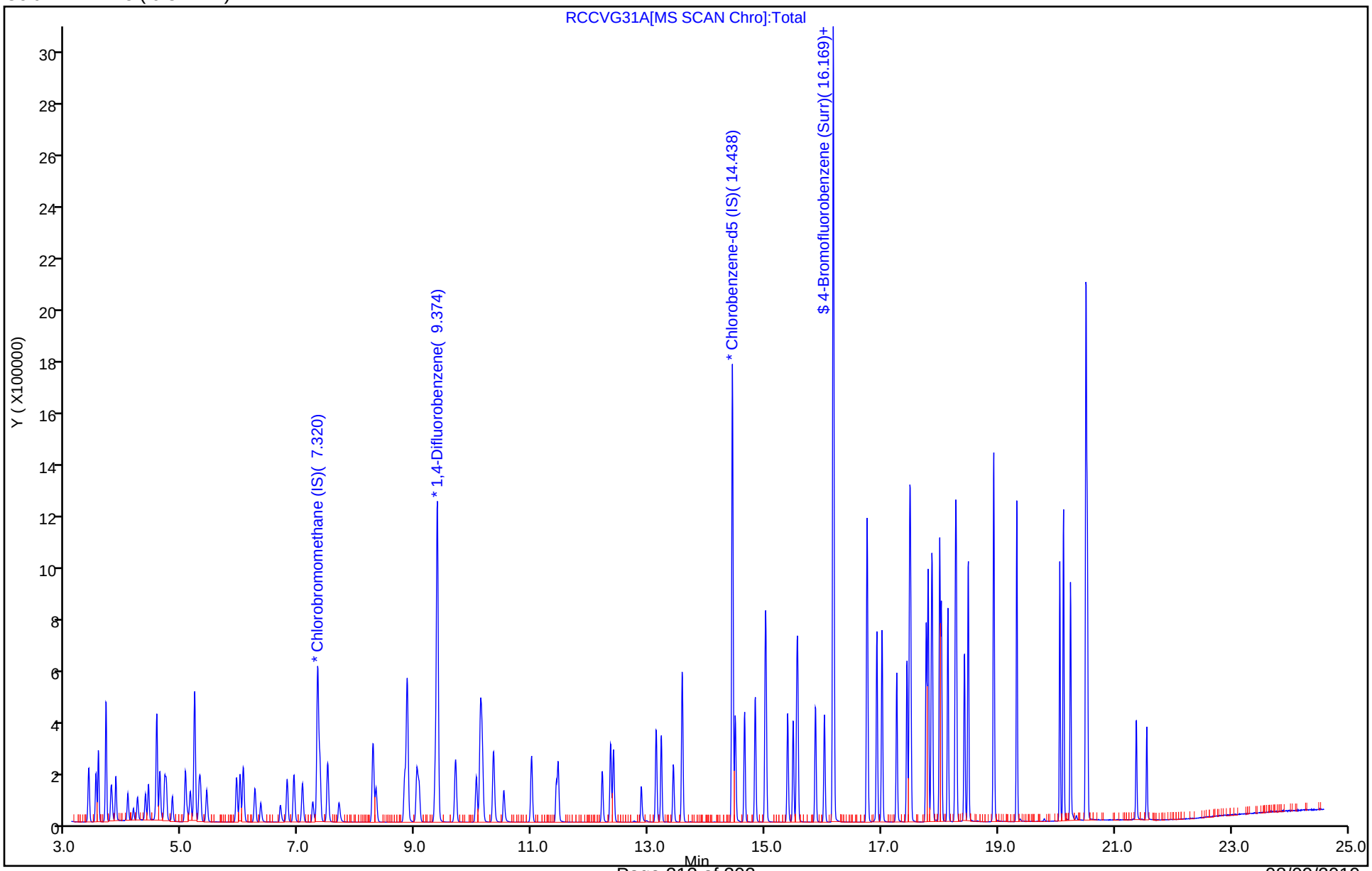
Report Date: 01-Aug-2019 10:55:32 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RCCVG31A.D

Injection Date:	31-Jul-2019 11:48:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	CCVIS			Worklist Smp#:	2
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RBFBG16A.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Jul-2019 15:56:30	ALS Bottle#:	16	Worklist Smp#:	2
Injection Vol:	500.0 mL	Dil. Factor:	1.0000		
Sample Info:	140-0012366-002				
Misc. Info.:	BFB				
Operator ID:	afb	Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	18-Jul-2019 17:42:12	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0313				
First Level Reviewer: barlozhetskayaa		Date:	16-Jul-2019 16:35:01		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.597	5.597	0.000	0	1148029	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

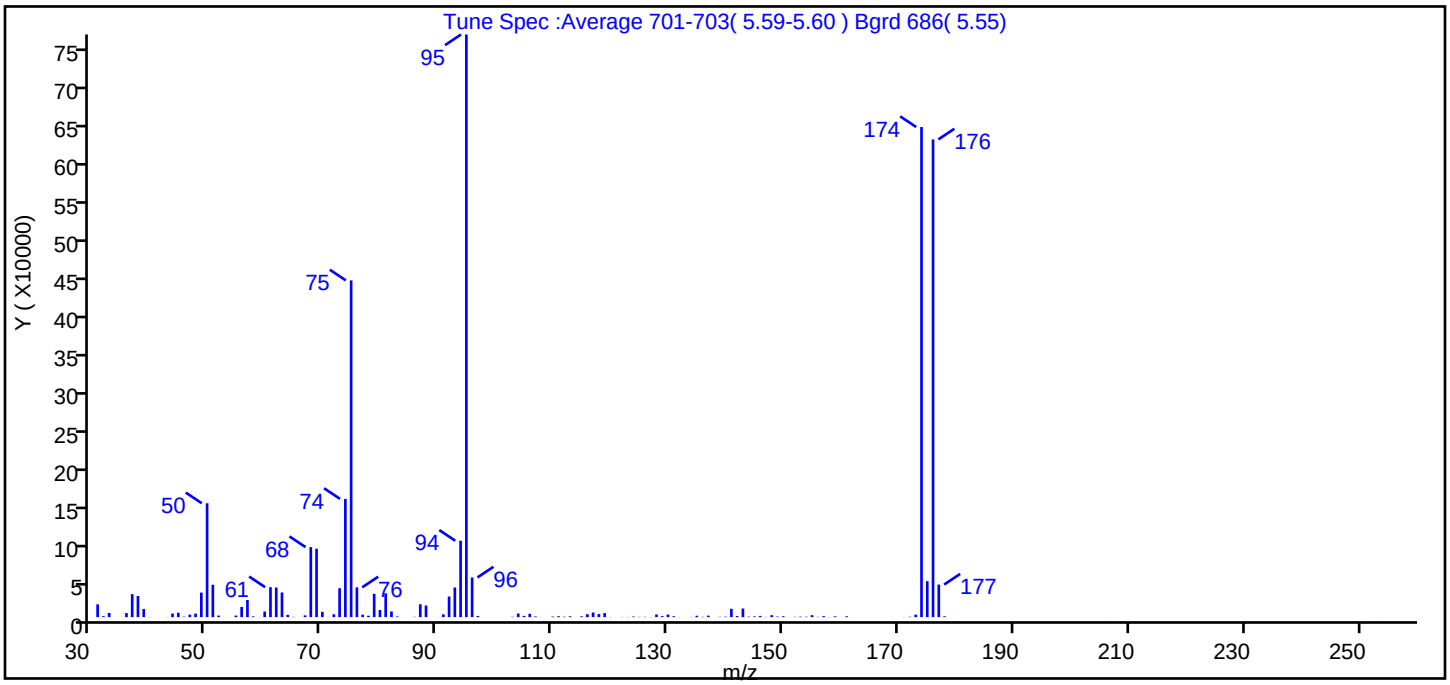
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RBFBG16A.D
Injection Date: 16-Jul-2019 15:56:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: afb ALS Bottle#: 16 Worklist Smp#: 2
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.5
75	30 to 60% of m/z 95	57.8
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	84.1
175	5 to 9% of m/z 174	6.2 (7.3)
176	Greater than 95% but less than 101% of m/z 174	82.0 (97.5)
177	5 to 9% of m/z 176	5.6 (6.8)

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RBFBG16A.D\MR_TO15.rslt\spectra.d
Injection Date: 16-Jul-2019 15:56:30
Spectrum: Tune Spec :Average 701-703(5.59-5.60) Bgrd 686(5.55)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	16792	67.00	2297	107.00	910	144.00	632
32.00	1236	68.00	91920	108.00	65	145.00	961
33.00	5525	69.00	89784	110.00	760	146.00	1657
34.00	55	70.00	6985	111.00	1241	147.00	269
36.00	5362	71.00	234	112.00	587	148.00	2552
37.00	30208	72.00	3767	113.00	1163	149.00	703
38.00	27744	73.00	37960	115.00	1039	150.00	1155
39.00	10670	74.00	155136	116.00	3866	151.00	97
40.00	281	75.00	441856	117.00	6082	152.00	368
41.00	105	76.00	39104	118.00	4034	153.00	671
43.00	151	77.00	3249	119.00	5342	154.00	551
44.00	4738	78.00	1851	120.00	231	155.00	2566
45.00	5752	79.00	30632	122.00	268	156.00	394
46.00	637	80.00	9395	123.00	234	157.00	1295
47.00	3324	81.00	31288	124.00	795	158.00	192
48.00	4650	82.00	7474	125.00	353	159.00	1073
49.00	32176	83.00	910	126.00	435	161.00	1148
50.00	149440	86.00	411	127.00	238	162.00	50
51.00	42552	87.00	16912	128.00	3521	171.00	183
52.00	2033	88.00	15308	129.00	1348	172.00	539
53.00	33	90.00	49	130.00	3404	173.00	3242
55.00	2074	91.00	3699	131.00	1251	174.00	643072
56.00	13376	92.00	27088	132.00	211	175.00	47168
57.00	22512	93.00	38936	134.00	243	176.00	626816
58.00	1043	94.00	100264	135.00	1810	177.00	42720
59.00	167	95.00	764480	136.00	433	178.00	1144
60.00	7365	96.00	52072	137.00	1970	196.00	40
61.00	39296	97.00	1557	139.00	409	207.00	110
62.00	38904	103.00	470	140.00	637	253.00	80
63.00	32384	104.00	4722	141.00	10933		
64.00	2975	105.00	1662	142.00	1461		
65.00	403	106.00	4452	143.00	11285		

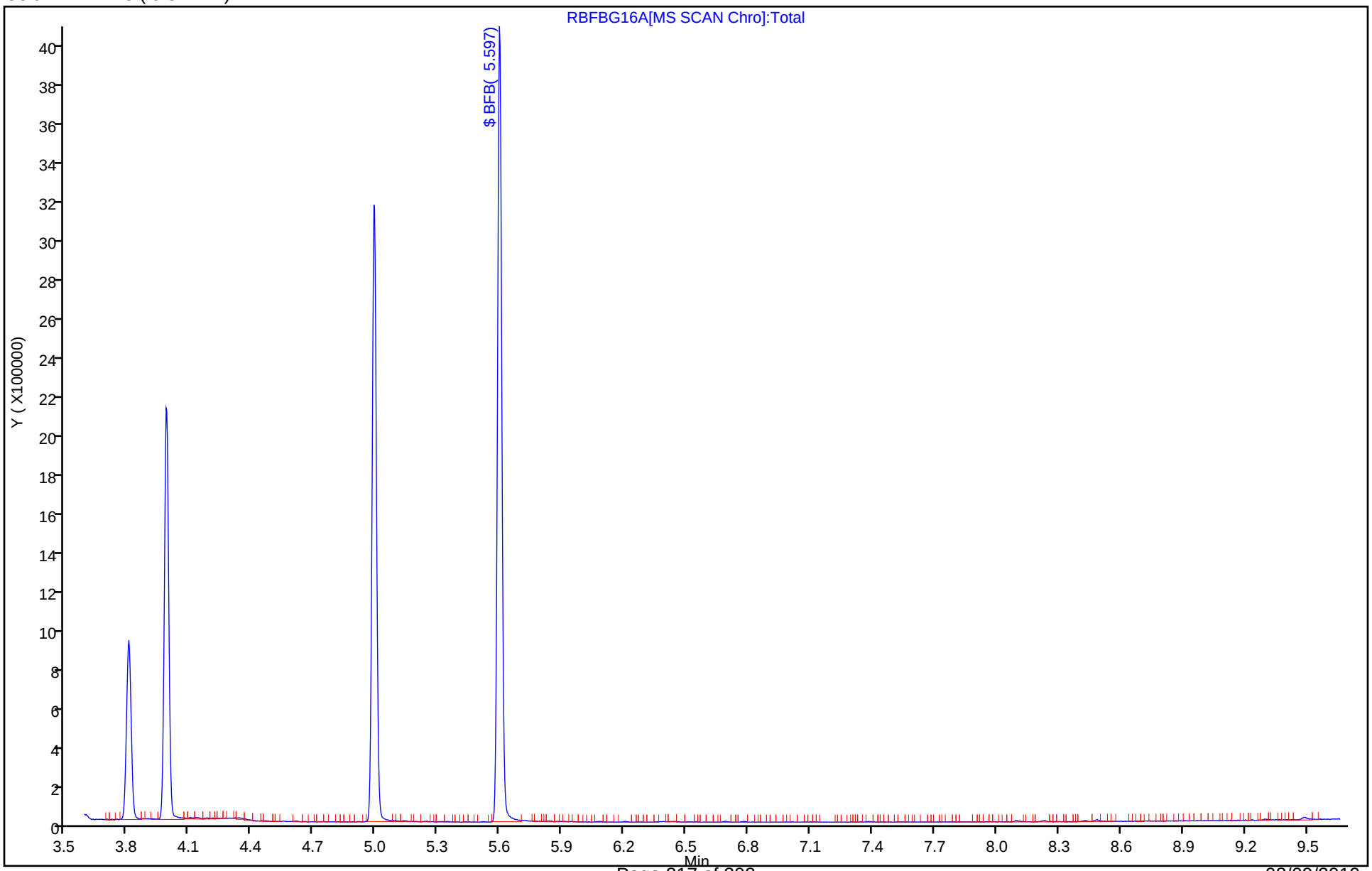
Report Date: 18-Jul-2019 17:42:13 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RBFBG16A.D

Injection Date:	16-Jul-2019 15:56:30	Instrument ID:	MR	Operator ID:	afb
Lims ID:	BFB			Worklist Smp#:	2
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RBFBG30.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Jul-2019 08:56:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0012489-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Jul-2019 14:07:26 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: khachitpongpanits Date: 31-Jul-2019 13:20:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.591	5.591	0.000	0	871624	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

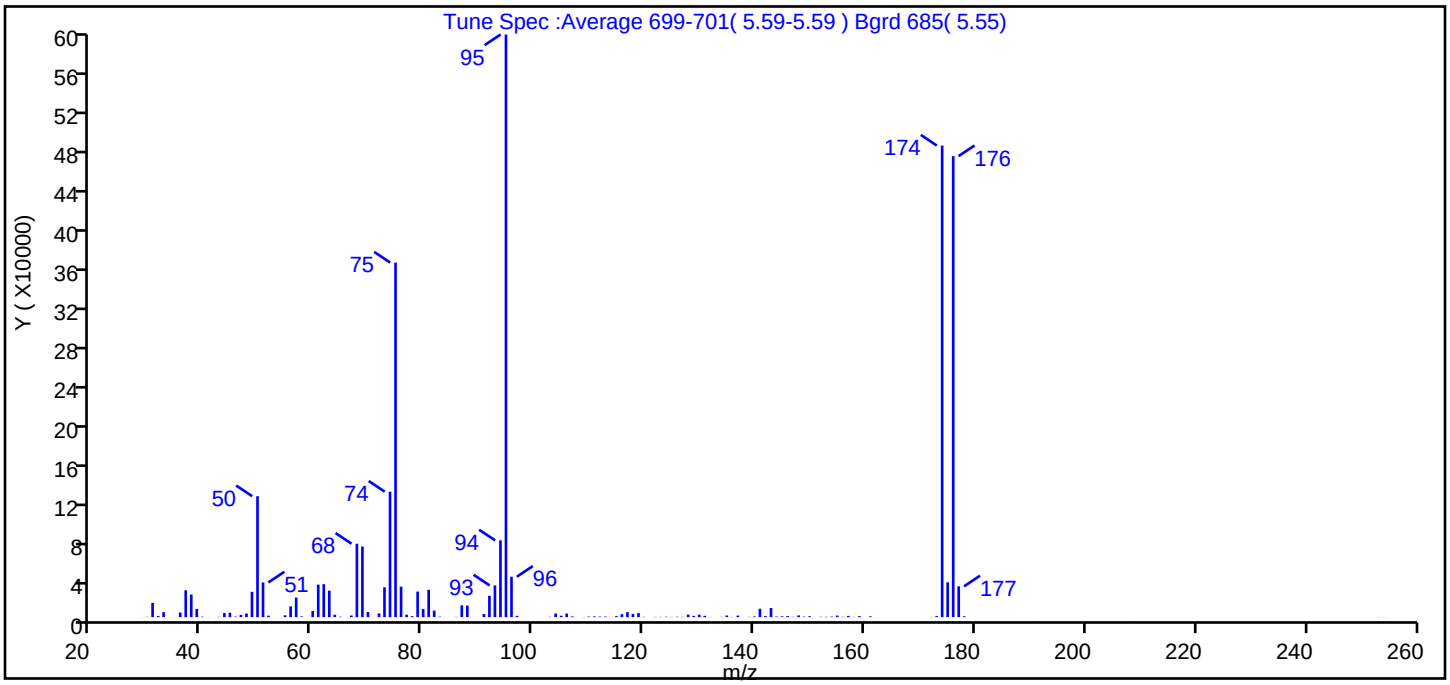
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RBFBG30.D
Injection Date: 30-Jul-2019 08:56:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.8
75	30 to 60% of m/z 95	60.9*
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	80.9
175	5 to 9% of m/z 174	6.0 (7.4)
176	Greater than 95% but less than 101% of m/z 174	79.1 (97.8)
177	5 to 9% of m/z 176	5.3 (6.7)

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RBFBG30.D\MR_TO15.rslt\spectra.d
Injection Date: 30-Jul-2019 08:56:30
Spectrum: Tune Spec :Average 699-701(5.59-5.59) Bgrd 685(5.55)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 128

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	103	62.00	33576	103.00	291	140.00	713
30.00	289	63.00	26976	104.00	3733	141.00	8536
31.00	14510	64.00	2435	105.00	1420	142.00	1133
32.00	1229	65.00	418	106.00	3633	143.00	9252
33.00	5072	67.00	1649	107.00	731	144.00	606
34.00	77	68.00	74696	109.00	109	145.00	823
35.00	41	69.00	71848	110.00	573	146.00	1063
36.00	4715	70.00	5241	111.00	759	147.00	295
37.00	27336	71.00	49	112.00	539	148.00	1750
38.00	23000	72.00	3801	113.00	587	149.00	494
39.00	8394	73.00	30376	115.00	1036	150.00	941
40.00	477	74.00	127664	116.00	3008	152.00	327
41.00	136	75.00	360704	117.00	5093	153.00	384
42.00	36	76.00	30984	118.00	3233	154.00	580
43.00	353	77.00	2470	119.00	4157	155.00	1612
44.00	4255	78.00	997	120.00	298	156.00	319
45.00	4497	79.00	26032	122.00	232	157.00	1285
46.00	542	80.00	8313	123.00	268	158.00	204
47.00	2270	81.00	27784	124.00	416	159.00	1034
48.00	3720	82.00	6661	125.00	216	161.00	859
49.00	25720	83.00	466	126.00	392	162.00	85
50.00	123040	84.00	44	127.00	304	172.00	186
51.00	35312	86.00	267	128.00	2598	173.00	1061
52.00	1476	87.00	12067	129.00	1300	174.00	479744
53.00	42	88.00	11745	130.00	2512	175.00	35416
54.00	38	91.00	3204	131.00	1333	176.00	468992
55.00	1876	92.00	21736	132.00	128	177.00	31344
56.00	11006	93.00	32272	134.00	261	178.00	940
57.00	19960	94.00	78120	135.00	1657	191.00	38
58.00	746	95.00	592768	136.00	167	208.00	38
60.00	6199	96.00	41096	137.00	1577	253.00	187
61.00	33064	97.00	1305	139.00	295	254.00	117

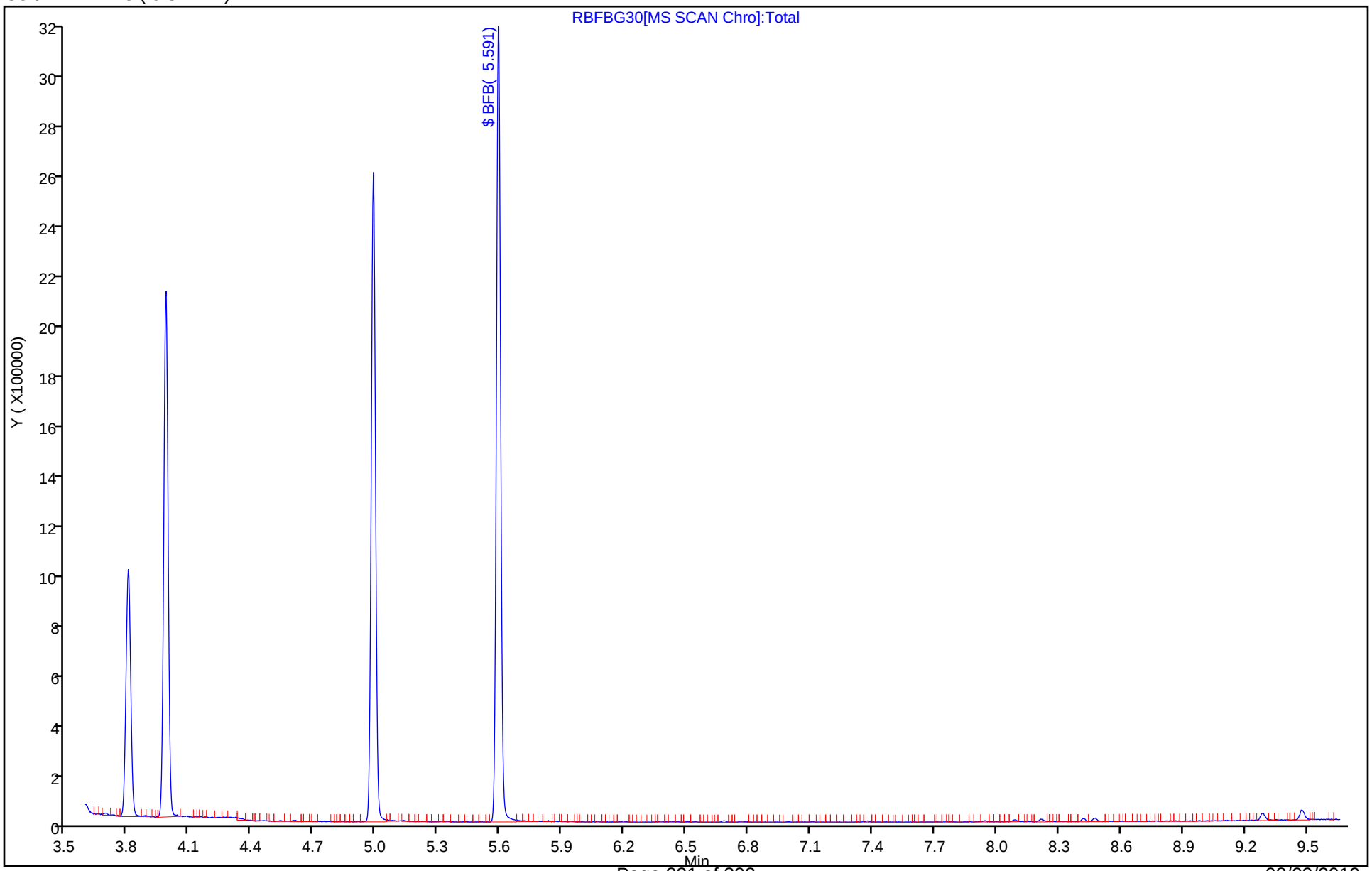
Report Date: 31-Jul-2019 14:07:27 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RBFBG30.D

Injection Date:	30-Jul-2019 08:56:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RBFBG31A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 31-Jul-2019 11:21:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0012543-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Aug-2019 10:48:28 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0307

First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 10:48:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
$ 5 BFB	95	5.594	5.594	0.000	0	814489	NR	NR	8

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

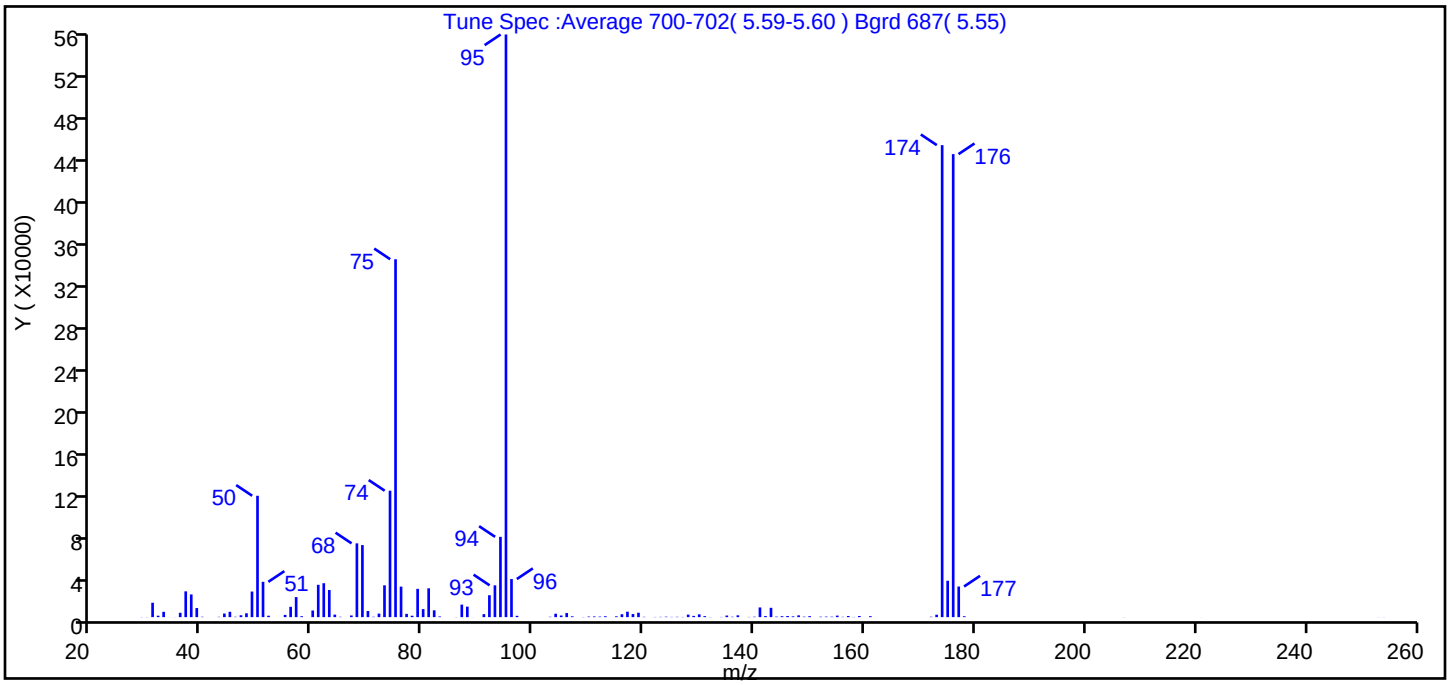
40MXSUR_00003 Amount Added: 40.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RBFBG31A.D
Injection Date: 31-Jul-2019 11:21:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.8
75	30 to 60% of m/z 95	61.4*
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	81.0
175	5 to 9% of m/z 174	6.2 (7.7)
176	Greater than 95% but less than 101% of m/z 174	79.5 (98.1)
177	5 to 9% of m/z 176	5.3 (6.6)

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RBFBG31A.D\MR_TO15.rslt\spectra.d
Injection Date: 31-Jul-2019 11:21:30
Spectrum: Tune Spec :Average 700-702(5.59-5.60) Bgrd 687(5.55)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	132	65.00	326	106.00	3898	143.00	8842
30.00	124	67.00	1570	107.00	785	144.00	484
31.00	13657	68.00	69944	109.00	144	145.00	883
32.00	1368	69.00	68320	110.00	544	146.00	1078
33.00	5047	70.00	5820	111.00	655	147.00	726
34.00	40	71.00	342	112.00	516	148.00	1692
35.00	63	72.00	3361	113.00	847	149.00	448
36.00	4142	73.00	30176	115.00	789	150.00	945
37.00	24464	74.00	119848	116.00	2758	152.00	410
38.00	21520	75.00	339264	117.00	5172	153.00	517
39.00	8626	76.00	28936	118.00	2967	154.00	423
40.00	360	77.00	3110	119.00	4167	155.00	1465
41.00	39	78.00	1326	120.00	308	156.00	279
43.00	292	79.00	26816	122.00	176	157.00	1098
44.00	3430	80.00	7632	123.00	265	158.00	187
45.00	5074	81.00	27328	124.00	445	159.00	1077
46.00	345	82.00	6491	125.00	230	161.00	900
47.00	1785	83.00	629	126.00	323	162.00	38
48.00	3671	86.00	128	127.00	191	172.00	399
49.00	24264	87.00	11860	128.00	2409	173.00	2312
50.00	115056	88.00	9956	129.00	1179	174.00	447424
51.00	33488	89.00	59	130.00	2658	175.00	34496
52.00	1359	91.00	2842	131.00	960	176.00	438912
55.00	2148	92.00	20776	132.00	125	177.00	29032
56.00	9780	93.00	30160	134.00	196	178.00	838
57.00	19024	94.00	76112	135.00	1520	207.00	78
58.00	868	95.00	552320	136.00	373	221.00	53
60.00	6316	96.00	36112	137.00	1732	253.00	76
61.00	30664	97.00	1251	139.00	202	254.00	84
62.00	32160	103.00	333	140.00	406		
63.00	25728	104.00	3240	141.00	9183		
64.00	2402	105.00	1550	142.00	1032		

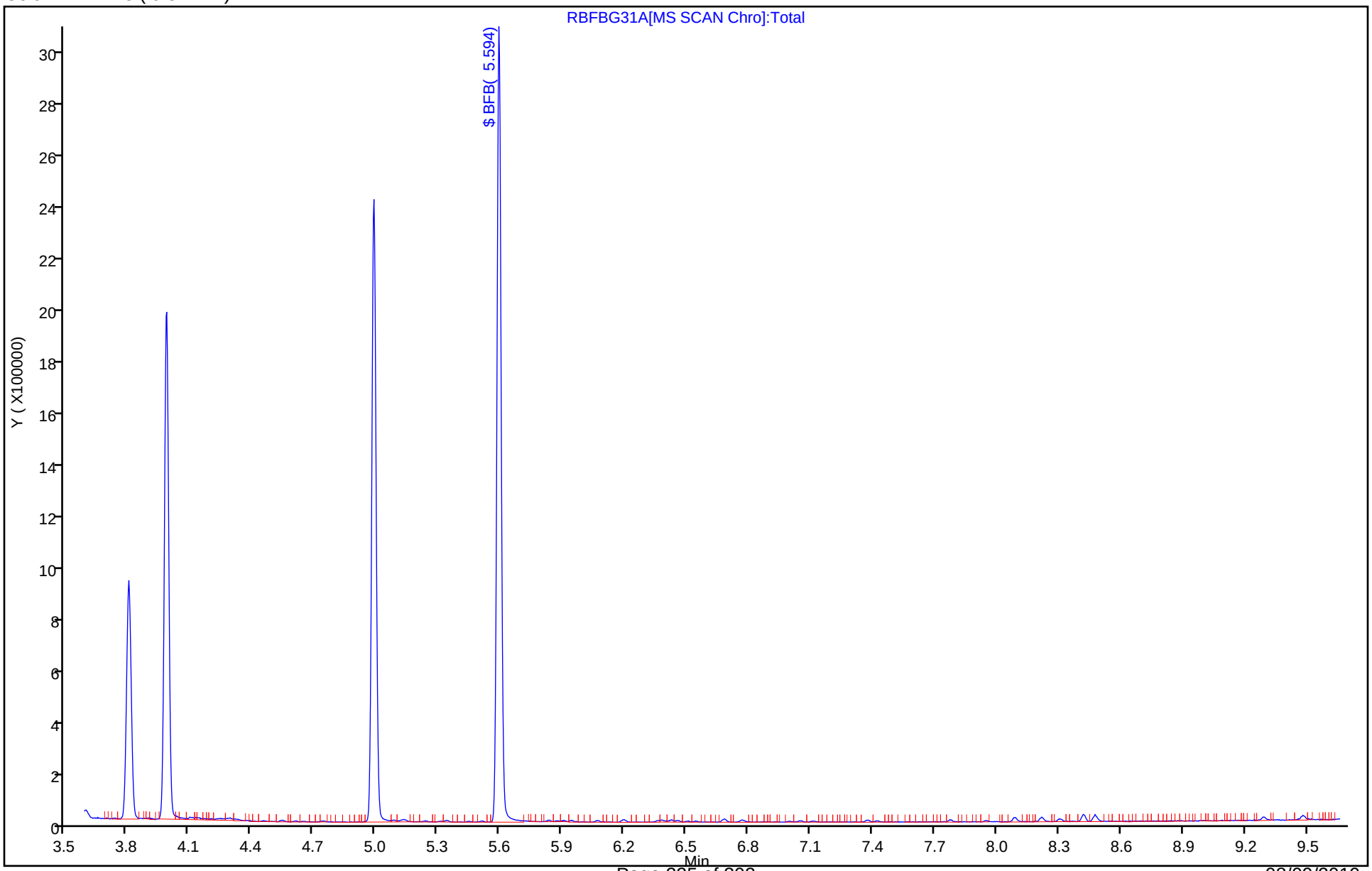
Report Date: 01-Aug-2019 10:48:30 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RBFBG31A.D

Injection Date:	31-Jul-2019 11:21:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	500.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32044/4

Matrix: Air Lab File ID: R500BG30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/30/2019 11:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	ND		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	ND		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	ND		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32044/4

Matrix: Air Lab File ID: R500BG30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/30/2019 11:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	ND		0.036	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32044/4

Matrix: Air Lab File ID: R500BG30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/30/2019 11:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	ND		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32044/4

Matrix: Air Lab File ID: R500BG30.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/30/2019 11:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\R500BG30.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 30-Jul-2019 11:18:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012489-004
Misc. Info.: 500ML BLK
Operator ID: Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Jul-2019 14:07:40 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: khachitpongpanits Date: 31-Jul-2019 13:28:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.320	7.314	0.006	68	189396	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.374	9.374	0.000	95	1016289	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	834589	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	685385	4.00	4.01	
7 Propene	41	3.524	3.513	0.011	86	3493		0.1157	7
31 Methylene Chloride	84	5.292	5.287	0.005	87	8403		0.1284	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

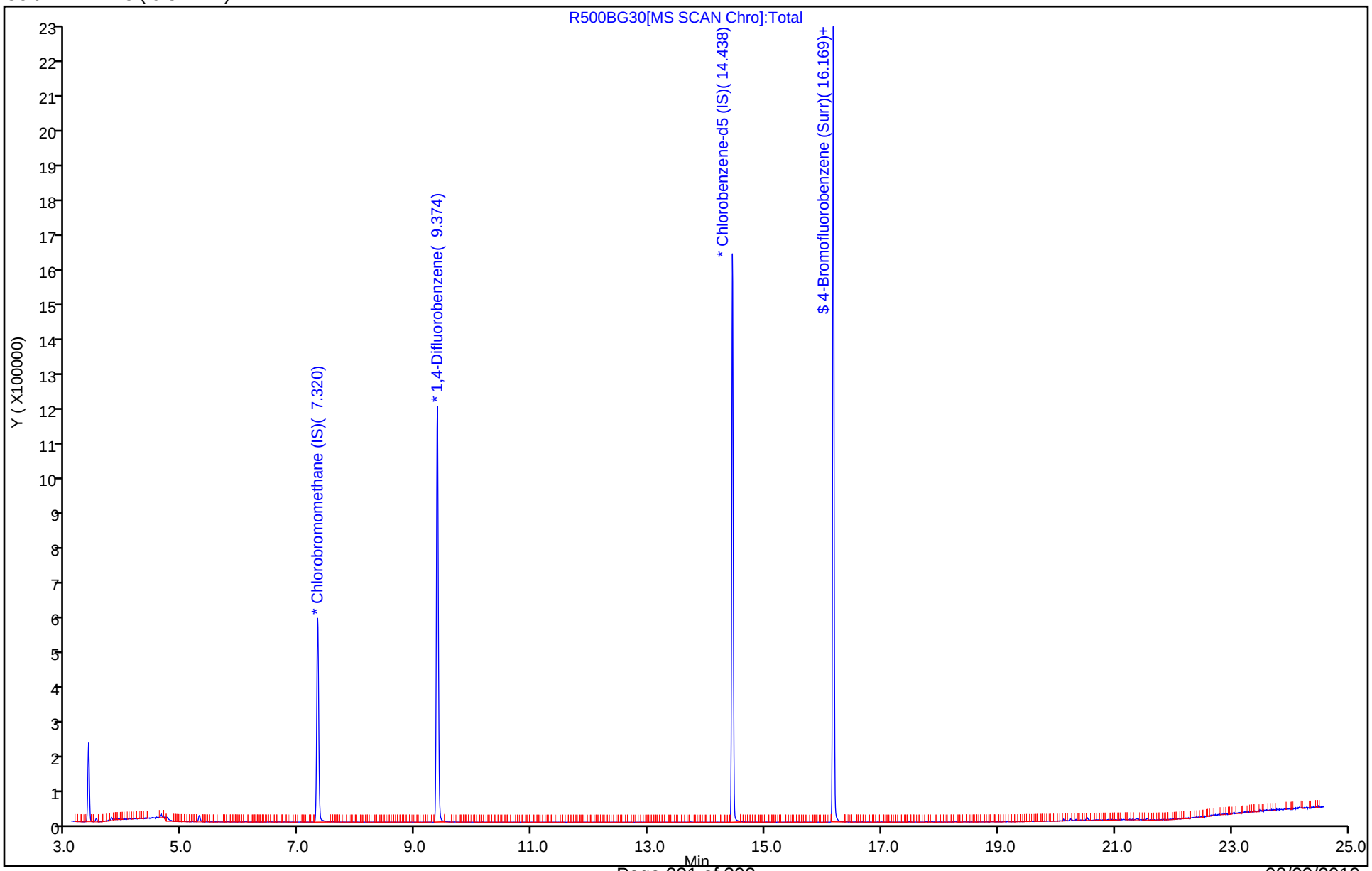
Report Date: 31-Jul-2019 14:08:45 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\R500BG30.D

Injection Date:	30-Jul-2019 11:18:30	Instrument ID:	MR	Operator ID:	
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\R500BG30.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	30-Jul-2019 11:18:30	ALS Bottle#:	16	Worklist Smp#:	4
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0012489-004				
Misc. Info.:	500ML BLK				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Jul-2019 14:07:40	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0338				
First Level Reviewer: khachitpongpanits		Date:	31-Jul-2019 13:28:05		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.01	100.31

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32181/8

Matrix: Air Lab File ID: R500BG31.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2019 15:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	ND		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	ND		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	ND		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32181/8

Matrix: Air Lab File ID: R500BG31.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2019 15:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	ND		0.036	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32181/8

Matrix: Air Lab File ID: R500BG31.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2019 15:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	ND		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-32181/8

Matrix: Air Lab File ID: R500BG31.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2019 15:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\R500BG31.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	31-Jul-2019 15:51:30	ALS Bottle#:	16	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0012543-008				
Misc. Info.:	500ML BLK				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 11:00:35	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				
First Level Reviewer: khachitpongpanits		Date:	01-Aug-2019 11:01:09		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.331	7.320	0.011	69	192713	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.385	9.374	0.011	95	1040762	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.443	14.438	0.005	91	863478	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	725799	4.00	4.11	
7 Propene	41	3.545	3.545	0.021	92	3842		0.1250	7M

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

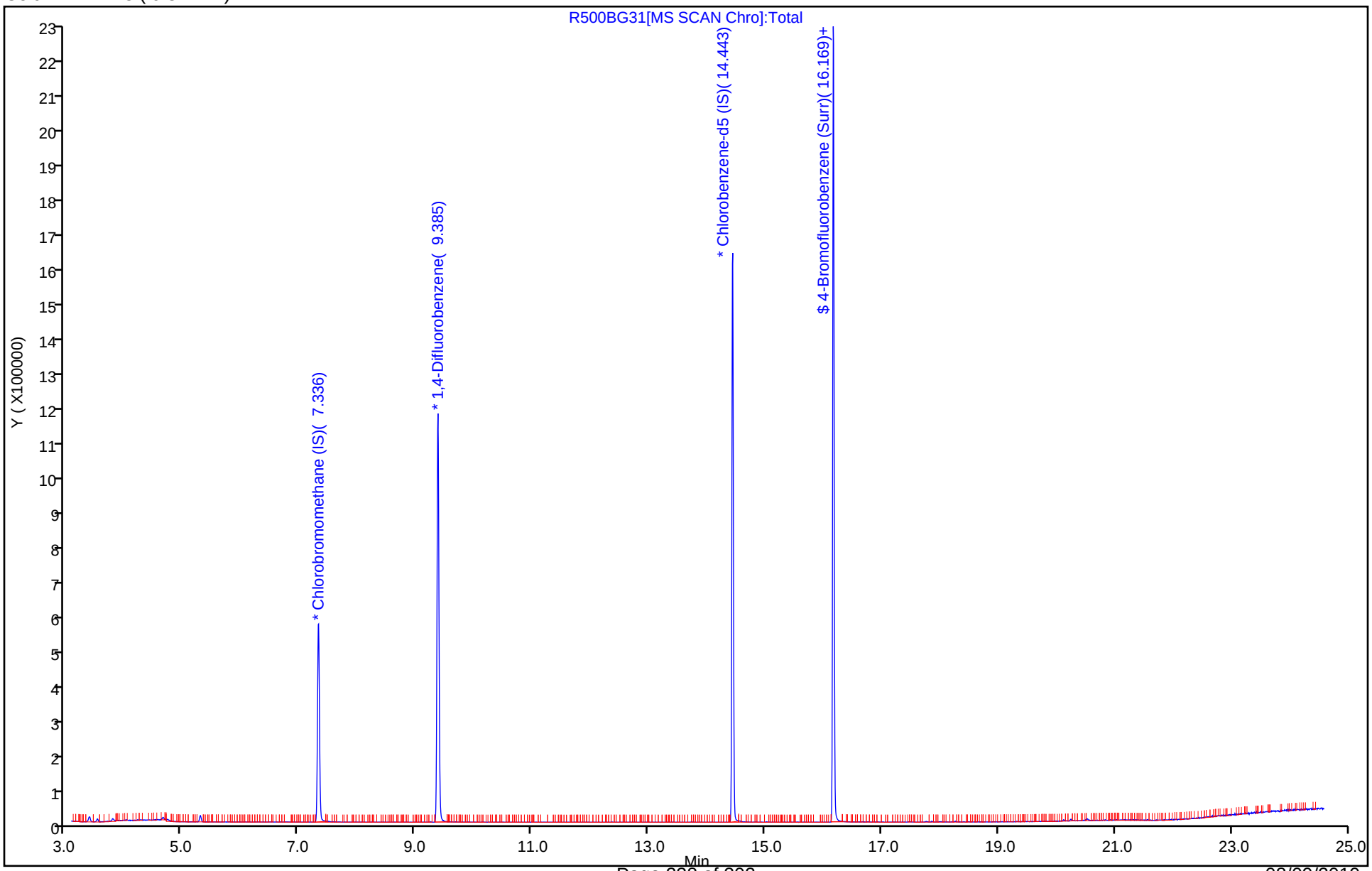
Report Date: 01-Aug-2019 11:01:10 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\R500BG31.D

Injection Date:	31-Jul-2019 15:51:30	Instrument ID:	MR	Operator ID:	
Lims ID:	mb			Worklist Smp#:	8
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\R500BG31.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	31-Jul-2019 15:51:30	ALS Bottle#:	16	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0012543-008				
Misc. Info.:	500ML BLK				
Operator ID:		Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	01-Aug-2019 11:00:35	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0307				
First Level Reviewer: khachitpongpanits		Date:	01-Aug-2019 11:01:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.11	102.68

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-32044/1002

Matrix: Air Lab File ID: RCCVG30-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/30/2019 09:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.976		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.08		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.06		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	0.957		0.080	
75-34-3	1,1-Dichloroethane	98.96	0.952		0.080	
75-35-4	1,1-Dichloroethene	96.94	0.913		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.979		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.17		0.080	
106-93-4	1,2-Dibromoethane	187.87	1.08		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.04		0.080	
107-06-2	1,2-Dichloroethane	98.96	1.05		0.080	
78-87-5	1,2-Dichloropropane	112.99	0.953		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.17		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.35		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.04		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.05		0.080	
123-91-1	1,4-Dioxane	88.11	1.02		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	0.994		0.20	
78-93-3	2-Butanone	72.11	0.817		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.01		0.20	
71-43-2	Benzene	78.11	0.982		0.080	
100-44-7	Benzyl chloride	126.58	1.15		0.16	
75-27-4	Bromodichloromethane	163.83	1.09		0.080	
75-25-2	Bromoform	252.75	1.21		0.080	
74-83-9	Bromomethane	94.94	0.993		0.080	
56-23-5	Carbon tetrachloride	153.81	1.27		0.032	
108-90-7	Chlorobenzene	112.56	1.06		0.080	
75-00-3	Chloroethane	64.52	1.02		0.080	
67-66-3	Chloroform	119.38	1.00		0.080	
74-87-3	Chloromethane	50.49	0.895		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.935		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.08		0.080	
110-82-7	Cyclohexane	84.16	1.03		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-32044/1002

Matrix: Air Lab File ID: RCCVG30-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/30/2019 09:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32044 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	1.15		0.080	
75-71-8	Dichlorodifluoromethane	120.91	1.10		0.080	
64-17-5	Ethanol	46.07	4.38		2.0	
100-41-4	Ethylbenzene	106.17	1.08		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.00		0.080	
110-54-3	Hexane	86.17	0.960		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	0.933		0.16	
75-09-2	Methylene Chloride	84.93	0.935		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	2.28		0.080	
95-47-6	o-Xylene	106.17	1.09		0.080	
100-42-5	Styrene	104.15	1.11		0.080	
75-65-0	t-Butyl alcohol	74.12	0.989		0.32	
127-18-4	Tetrachloroethene	165.83	1.06		0.080	
108-88-3	Toluene	92.14	1.06		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	0.926		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.12		0.080	
79-01-6	Trichloroethene	131.39	0.979		0.036	
75-69-4	Trichlorofluoromethane	137.37	1.17		0.080	
75-01-4	Vinyl chloride	62.50	0.969		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RCCVG30-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 30-Jul-2019 09:23:30 ALS Bottle#: 15 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012489-002
Misc. Info.: S97
Operator ID: HMT Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 31-Jul-2019 14:07:40 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: khachitpongpanits Date: 31-Jul-2019 13:27:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.314	7.314	0.000	68	197888	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.374	9.374	0.000	95	1067190	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	902008	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	87	767048	4.00	4.16	
6 Chlorodifluoromethane	51	3.507	3.507	0.000	96	107465	1.00	0.9547	
7 Propene	41	3.513	3.513	0.000	89	32568	1.00	1.03	
8 Dichlorodifluoromethane	85	3.551	3.551	0.000	100	225212	1.00	1.10	
9 Chloromethane	52	3.669	3.669	0.000	62	11697	1.00	0.8954	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.685	3.685	0.000	88	133340	1.00	1.17	
11 Acetaldehyde	44	3.772	3.772	0.000	88	48751	5.00	3.86	
12 Vinyl chloride	62	3.788	3.788	0.000	99	44881	1.00	0.9692	
13 Butadiene	54	3.847	3.847	0.000	82	29891	1.00	1.03	
14 Butane	43	3.853	3.853	0.000	81	47206	1.00	1.00	
15 Bromomethane	94	4.057	4.057	0.000	93	53777	1.00	0.99	
16 Chloroethane	64	4.154	4.154	0.000	94	22043	1.00	1.02	
17 Ethanol	31	4.219	4.219	0.000	89	47642	5.00	4.38	
18 Vinyl bromide	106	4.359	4.359	0.000	94	59837	1.00	1.16	
19 2-Methylbutane	43	4.408	4.408	0.000	75	35041	1.00	1.09	
20 Acrolein	56	4.532	4.532	0.000	97	14248	1.00	1.31	
21 Trichlorofluoromethane	101	4.554	4.554	0.000	99	276706	1.00	1.17	
24 Acetonitrile	40	4.559	4.559	0.000	23	10461	1.00	1.09	
22 Acetone	58	4.613	4.613	0.000	99	17542	1.00	0.9626	
23 Isopropyl alcohol	45	4.694	4.694	0.000	95	66642	1.00	1.31	
25 Pentane	72	4.721	4.721	0.000	89	9716	1.00	1.09	
26 Ethyl ether	31	4.823	4.823	0.000	68	27657	1.00	1.02	
27 1,1-Dichloroethene	96	5.044	5.044	0.000	95	67343	1.00	0.9131	
28 Acrylonitrile	53	5.077	5.077	0.000	89	29539	1.00	0.9475	
29 2-Methyl-2-propanol	59	5.125	5.125	0.000	94	128219	1.00	0.9892	
30 1,1,2-Trichloro-1,2,2-trif	101	5.201	5.201	0.000	92	173434	1.00	0.9569	
31 Methylene Chloride	84	5.287	5.287	0.000	87	63926	1.00	0.9350	
32 3-Chloro-1-propene	39	5.308	5.308	0.000	84	67072	1.00	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.411	5.411	0.000	98	160726	1.00	0.9332	
34 trans-1,2-Dichloroethene	96	5.923	5.923	0.000	97	66647	1.00	0.9265	
35 2-Methylpentane	43	5.982	5.982	0.000	82	76451	1.00	0.8617	
36 Methyl tert-butyl ether	73	6.036	6.036	0.000	92	212087	1.00	0.9333	
37 1,1-Dichloroethane	63	6.236	6.236	0.000	98	111923	1.00	0.9515	
38 Vinyl acetate	43	6.338	6.338	0.000	98	110330	1.00	1.02	
39 2-Butanone (MEK)	72	6.673	6.673	0.000	97	23109	1.00	0.8172	
40 Hexane	56	6.791	6.791	0.000	79	39473	1.00	0.9601	
41 Isopropyl ether	45	6.910	6.910	0.000	84	125600	1.00	0.9489	
42 cis-1,2-Dichloroethene	96	7.056	7.056	0.000	94	68355	1.00	0.9354	
43 Ethyl acetate	43	7.234	7.234	0.000	97	86140	1.00	0.9253	
44 Chloroform	83	7.352	7.352	0.000	94	187839	1.00	1.00	
45 Tert-butyl ethyl ether	59	7.492	7.492	0.000	92	176025	1.00	0.8786	
46 Tetrahydrofuran	42	7.681	7.681	0.000	73	38594	1.00	1.00	
47 1,1,1-Trichloroethane	97	8.269	8.269	0.000	94	231080	1.00	0.9758	
48 1,2-Dichloroethane	62	8.317	8.317	0.000	97	144665	1.00	1.05	
49 Benzene	78	8.813	8.813	0.000	99	171855	1.00	0.9821	
50 n-Butanol	31	8.846	8.846	0.000	55	10106	1.00	1.06	
51 Cyclohexane	69	8.851	8.851	0.000	86	27509	1.00	1.03	
52 Carbon tetrachloride	117	8.857	8.857	0.000	97	261756	1.00	1.27	
53 2,3-Dimethylpentane	71	9.029	9.029	0.000	82	34215	1.00	0.9381	
54 Thiophene	84	9.056	9.056	0.000	95	99332	1.00	0.99	
55 Isooctane	57	9.687	9.687	0.000	94	215240	1.00	0.99	
56 1,2-Dichloropropane	63	10.043	10.043	0.000	70	50965	1.00	0.9531	
57 n-Heptane	71	10.108	10.108	0.000	82	53961	1.00	0.9808	
58 Trichloroethene	130	10.124	10.124	0.000	94	105928	1.00	0.9790	
59 Dibromomethane	93	10.145	10.145	0.000	90	98511	1.00	1.06	
60 Dichlorobromomethane	83	10.334	10.334	0.000	98	181316	1.00	1.09	
61 1,4-Dioxane	88	10.356	10.356	0.000	86	26350	1.00	1.02	
62 Methyl methacrylate	41	10.512	10.512	0.000	88	51779	1.00	0.9582	
63 Methylcyclohexane	83	10.992	10.992	0.000	92	125401	1.00	1.16	
64 4-Methyl-2-pentanone (MIBK	43	11.413	11.413	0.000	91	87966	1.00	1.01	
65 cis-1,3-Dichloropropene	75	11.445	11.445	0.000	95	110907	1.00	1.08	
66 trans-1,3-Dichloropropene	75	12.205	12.205	0.000	96	114970	1.00	1.12	
67 Toluene	91	12.345	12.345	0.000	93	229694	1.00	1.06	
68 1,1,2-Trichloroethane	83	12.394	12.394	0.000	92	62526	1.00	1.06	
69 2-Hexanone	58	12.874	12.874	0.000	94	41850	1.00	0.9875	
70 Chlorodibromomethane	129	13.133	13.133	0.000	95	191684	1.00	1.15	
71 n-Octane	85	13.219	13.219	0.000	72	72375	1.00	1.05	
72 Ethylene Dibromide	107	13.424	13.424	0.000	97	138552	1.00	1.08	
73 Tetrachloroethene	129	13.580	13.580	0.000	93	116512	1.00	1.06	
74 Chlorobenzene	112	14.492	14.492	0.000	92	209126	1.00	1.06	
75 2,3-Dimethylheptane	43	14.648	14.648	0.000	75	115829	1.00	0.9800	
76 Ethylbenzene	91	14.831	14.831	0.000	99	336688	1.00	1.08	
77 m-Xylene & p-Xylene	91	15.009	15.009	0.000	100	586357	2.00	2.28	
78 Bromoform	173	15.387	15.387	0.000	94	186262	1.00	1.21	
79 Styrene	104	15.484	15.484	0.000	97	176261	1.00	1.11	
80 o-Xylene	91	15.543	15.543	0.000	97	296088	1.00	1.09	
81 n-Nonane	57	15.559	15.559	0.000	74	109178	1.00	1.10	
82 1,1,2,2-Tetrachloroethane	83	15.867	15.867	0.000	92	153338	1.00	1.08	
83 1,2,3-Trichloropropane	110	16.018	16.018	0.000	92	71363	1.00	1.06	
84 Isopropylbenzene	105	16.174	16.174	0.000	98	406891	1.00	1.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	16.746	16.746	0.000	97	117288	1.00	1.17	
86 2-Chlorotoluene	126	16.756	16.756	0.000	91	110320	1.00	1.17	
88 4-Ethyltoluene	105	16.918	16.918	0.000	98	424203	1.00	1.15	
87 1,3,5-Trimethylbenzene	120	17.010	17.010	0.000	90	207529	1.00	1.35	
89 Alpha Methyl Styrene	118	17.263	17.263	0.000	85	161581	1.00	1.12	
90 n-Decane	57	17.436	17.436	0.000	97	167017	1.00	1.17	
91 tert-Butylbenzene	119	17.484	17.484	0.000	89	471661	1.00	1.17	
92 1,2,4-Trimethylbenzene	105	17.495	17.495	0.000	96	436462	1.00	1.17	
93 1,3-Dichlorobenzene	146	17.765	17.765	0.000	98	294754	1.00	1.04	
94 sec-Butylbenzene	105	17.797	17.797	0.000	97	566916	1.00	1.10	
96 Benzyl chloride	91	17.856	17.856	0.000	98	328159	1.00	1.15	
95 1,4-Dichlorobenzene	146	17.867	17.867	0.000	94	297582	1.00	1.05	
97 4-Isopropyltoluene	119	17.997	17.997	0.000	95	556244	1.00	1.06	
98 1,2,3-Trimethylbenzene	105	18.024	18.024	0.000	98	351056	1.00	0.8355	
99 Butylcyclohexane	83	18.137	18.137	0.000	91	234717	1.00	1.02	
100 1,2-Dichlorobenzene	146	18.266	18.266	0.000	93	293072	1.00	1.04	
101 2,3-Dihydroindene	117	18.282	18.282	0.000	93	376059	1.00	1.06	
102 Indene	116	18.423	18.423	0.000	90	259595	1.00	0.9444	
103 n-Butylbenzene	91	18.487	18.487	0.000	97	476276	1.00	1.10	
104 Undecane	57	18.919	18.919	0.000	86	207971	1.00	1.14	
105 1,2-Dibromo-3-Chloropropan	157	18.930	18.930	0.000	97	120496	1.00	0.9556	
106 1,2,4,5-Tetramethylbenzene	119	19.323	19.323	0.000	95	530178	1.00	1.02	
107 Dodecane	57	20.057	20.057	0.000	91	194874	1.00	0.9828	
108 1,2,4-Trichlorobenzene	180	20.121	20.121	0.000	93	310289	1.00	0.9795	
109 Naphthalene	128	20.245	20.245	0.000	98	607100	1.00	0.9164	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	95	334076	1.00	1.00	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	94	299922	1.00	0.8990	
112 2-Methylnaphthalene	142	21.372	21.372	0.000	99	215127	1.00	0.8583	
113 1-Methylnaphthalene	142	21.550	21.550	0.000	97	162374	1.00	0.7242	
A 115 C8 Range	1	13.227	(13.171-13.268)		0	573094	1.00	1.03	
S 116 Xylenes, Total	100				0		3.00	3.37	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.86	

Reagents:

40CV101S_00097	Amount Added: 50.00	Units: mL	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

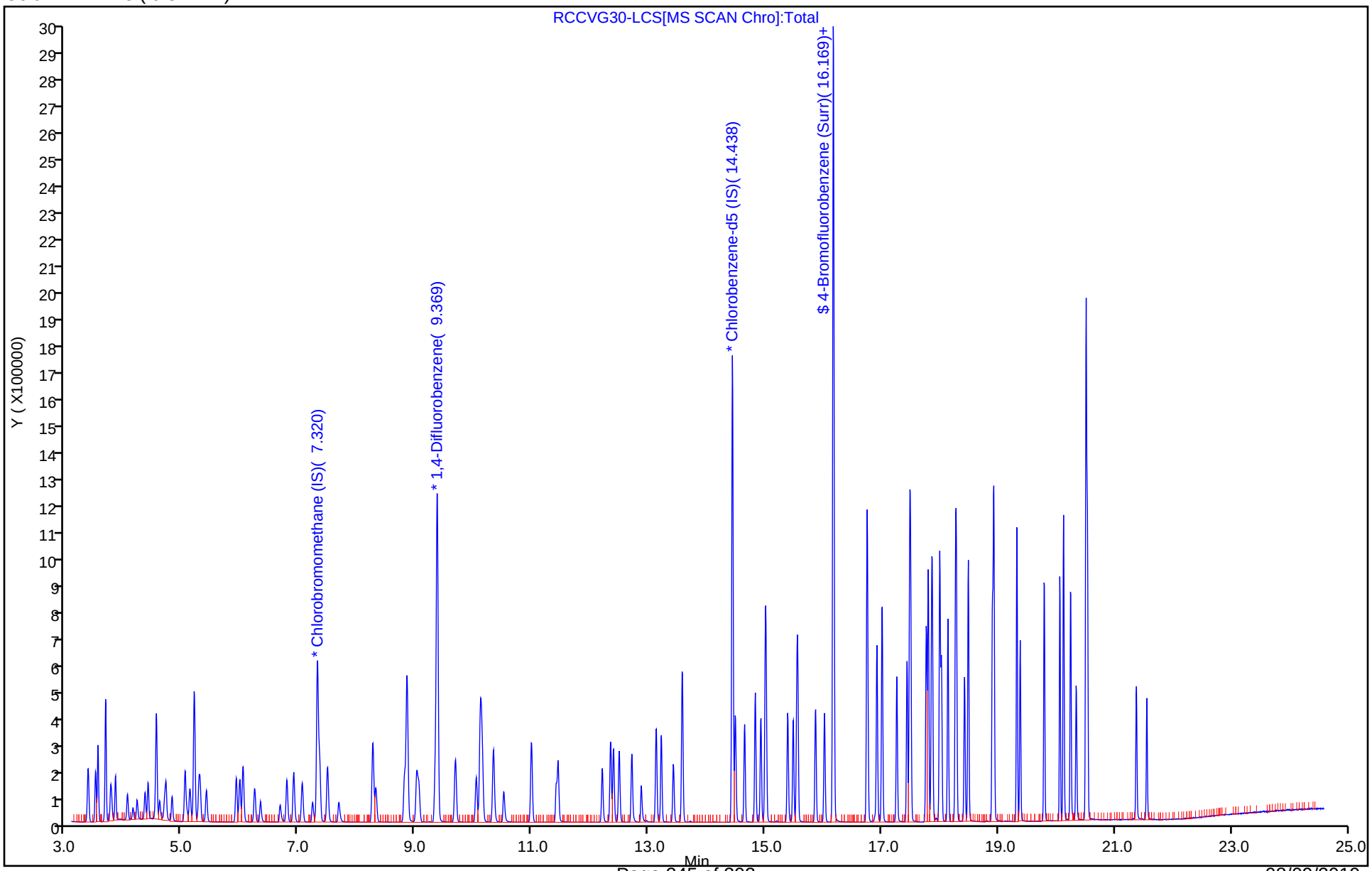
Report Date: 31-Jul-2019 14:07:47 Chrom Revision: 2.3 15-Jul-2019 06:58:08

TestAmerica Laboratories

Data File: \\chromna\Knoxville\ChromData\MR\20190725-12489.b\RCCVG30-LCS.d

Injection Date:	30-Jul-2019 09:23:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\RCCVG30-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	30-Jul-2019 09:23:30	ALS Bottle#:	15	Worklist Smp#:	1002
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0012489-002				
Misc. Info.:	S97				
Operator ID:	HMT	Instrument ID:	MR		
Method:	\\chromna\Knoxville\ChromData\MR\20190725-12489.b\MR_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-Jul-2019 14:07:40	Calib Date:	17-Jul-2019 02:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0338				
First Level Reviewer: khachitpongpanits		Date:	31-Jul-2019 13:27:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.16	103.88

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-32181/1002

Matrix: Air Lab File ID: RCCVG31A-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2019 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.03		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.11		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.07		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	1.01		0.080	
75-34-3	1,1-Dichloroethane	98.96	0.997		0.080	
75-35-4	1,1-Dichloroethene	96.94	0.952		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	0.998		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.19		0.080	
106-93-4	1,2-Dibromoethane	187.87	1.10		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.08		0.080	
107-06-2	1,2-Dichloroethane	98.96	1.08		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.00		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.21		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.24		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.08		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.10		0.080	
123-91-1	1,4-Dioxane	88.11	1.00		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.01		0.20	
78-93-3	2-Butanone	72.11	0.820		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.03		0.20	
71-43-2	Benzene	78.11	0.981		0.080	
100-44-7	Benzyl chloride	126.58	1.13		0.16	
75-27-4	Bromodichloromethane	163.83	1.12		0.080	
75-25-2	Bromoform	252.75	1.22		0.080	
74-83-9	Bromomethane	94.94	1.03		0.080	
56-23-5	Carbon tetrachloride	153.81	1.27		0.032	
108-90-7	Chlorobenzene	112.56	1.06		0.080	
75-00-3	Chloroethane	64.52	1.06		0.080	
67-66-3	Chloroform	119.38	1.03		0.080	
74-87-3	Chloromethane	50.49	0.954		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.963		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.09		0.080	
110-82-7	Cyclohexane	84.16	1.03		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 140-32181/1002

Matrix: Air Lab File ID: RCCVG31A-LCS.d

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 07/31/2019 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 32181 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	1.15		0.080	
75-71-8	Dichlorodifluoromethane	120.91	1.09		0.080	
64-17-5	Ethanol	46.07	5.50		2.0	
100-41-4	Ethylbenzene	106.17	1.10		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.10		0.080	
110-54-3	Hexane	86.17	1.02		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	0.972		0.16	
75-09-2	Methylene Chloride	84.93	0.966		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	2.25		0.080	
95-47-6	o-Xylene	106.17	1.11		0.080	
100-42-5	Styrene	104.15	1.11		0.080	
75-65-0	t-Butyl alcohol	74.12	0.979		0.32	
127-18-4	Tetrachloroethene	165.83	1.08		0.080	
108-88-3	Toluene	92.14	1.07		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	0.976		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.08		0.080	
79-01-6	Trichloroethene	131.39	0.997		0.036	
75-69-4	Trichlorofluoromethane	137.37	1.24		0.080	
75-01-4	Vinyl chloride	62.50	0.987		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RCCVG31A-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Jul-2019 11:48:30 ALS Bottle#: 15 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012543-002
Misc. Info.: S97
Operator ID: HMT Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Aug-2019 10:55:25 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0307

First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 10:55:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.320	7.320	0.000	68	190821	4.00	4.00	
* 2 1,4-Difluorobenzene	114	9.374	9.374	0.000	95	1041722	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	14.438	14.438	0.000	91	892135	4.00	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	16.169	16.169	0.000	88	764215	4.00	4.19	
6 Chlorodifluoromethane	51	3.513	3.513	0.000	95	105868	1.00	0.9754	
7 Propene	41	3.524	3.524	0.000	89	32260	1.00	1.06	
8 Dichlorodifluoromethane	85	3.556	3.556	0.000	100	215592	1.00	1.09	
9 Chloromethane	52	3.675	3.675	0.000	67	12019	1.00	0.9541	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.691	3.691	0.000	91	132745	1.00	1.21	
11 Acetaldehyde	44	3.777	3.777	0.000	92	55614	5.00	4.57	
12 Vinyl chloride	62	3.793	3.793	0.000	98	44091	1.00	0.9874	
13 Butadiene	54	3.853	3.853	0.000	83	29410	1.00	1.05	
14 Butane	43	3.858	3.858	0.000	77	48157	1.00	1.06	
15 Bromomethane	94	4.063	4.063	0.000	94	53566	1.00	1.03	
16 Chloroethane	64	4.160	4.160	0.000	95	22182	1.00	1.06	
17 Ethanol	31	4.230	4.230	0.000	87	57698	5.00	5.50	
18 Vinyl bromide	106	4.365	4.365	0.000	95	56972	1.00	1.14	
19 2-Methylbutane	43	4.419	4.419	0.000	74	34266	1.00	1.10	
20 Acrolein	56	4.538	4.538	0.000	94	11969	1.00	1.15	
21 Trichlorofluoromethane	101	4.559	4.559	0.000	99	283164	1.00	1.24	
24 Acetonitrile	40	4.564	4.564	0.000	23	10367	1.00	1.12	
22 Acetone	58	4.608	4.608	0.000	100	51601	3.00	2.94	
23 Isopropyl alcohol	45	4.694	4.694	0.000	98	155442	3.00	3.17	
25 Pentane	72	4.721	4.721	0.000	90	8900	1.00	1.04	
26 Ethyl ether	31	4.829	4.829	0.000	69	28297	1.00	1.09	
27 1,1-Dichloroethene	96	5.055	5.055	0.000	96	67715	1.00	0.9521	
28 Acrylonitrile	53	5.082	5.082	0.000	90	29169	1.00	0.9703	
29 2-Methyl-2-propanol	59	5.136	5.136	0.000	95	122327	1.00	0.9787	
30 1,1,2-Trichloro-1,2,2-trif	101	5.212	5.212	0.000	92	176468	1.00	1.01	
31 Methylene Chloride	84	5.287	5.287	0.000	89	63712	1.00	0.9664	
32 3-Chloro-1-propene	39	5.309	5.309	0.000	83	66418	1.00	1.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	5.416	5.416	0.000	98	162098	1.00	0.9760	
34 trans-1,2-Dichloroethene	96	5.929	5.929	0.000	97	67678	1.00	0.9757	
35 2-Methylpentane	43	5.988	5.988	0.000	82	84945	1.00	0.99	
36 Methyl tert-butyl ether	73	6.047	6.047	0.000	92	212910	1.00	0.9716	
37 1,1-Dichloroethane	63	6.247	6.247	0.000	97	113076	1.00	1.00	
38 Vinyl acetate	43	6.344	6.344	0.000	98	104153	1.00	1.00	
39 2-Butanone (MEK)	72	6.684	6.684	0.000	97	22350	1.00	0.8196	
40 Hexane	56	6.797	6.797	0.000	80	40587	1.00	1.02	
41 Isopropyl ether	45	6.916	6.916	0.000	84	123541	1.00	0.9679	
42 cis-1,2-Dichloroethene	96	7.061	7.061	0.000	95	67836	1.00	0.9627	
43 Ethyl acetate	43	7.234	7.234	0.000	97	90500	1.00	1.01	
44 Chloroform	83	7.358	7.358	0.000	97	186235	1.00	1.03	
45 Tert-butyl ethyl ether	59	7.493	7.493	0.000	93	189821	1.00	0.9825	
46 Tetrahydrofuran	42	7.687	7.687	0.000	73	37542	1.00	1.01	
47 1,1,1-Trichloroethane	97	8.269	8.269	0.000	94	234227	1.00	1.03	
48 1,2-Dichloroethane	62	8.323	8.323	0.000	96	144573	1.00	1.08	
49 Benzene	78	8.814	8.814	0.000	98	167643	1.00	0.9815	
51 Cyclohexane	69	8.857	8.857	0.000	86	27029	1.00	1.03	
50 n-Butanol	31	8.857	8.857	0.000	55	9554	1.00	1.02	
52 Carbon tetrachloride	117	8.862	8.862	0.000	96	256638	1.00	1.27	
53 2,3-Dimethylpentane	71	9.024	9.024	0.000	83	35495	1.00	1.00	
54 Thiophene	84	9.062	9.062	0.000	96	102082	1.00	1.04	
55 Isooctane	57	9.687	9.687	0.000	94	212614	1.00	1.01	
56 1,2-Dichloropropane	63	10.043	10.043	0.000	68	52427	1.00	1.00	
57 n-Heptane	71	10.102	10.102	0.000	80	53295	1.00	0.99	
58 Trichloroethene	130	10.124	10.124	0.000	94	105351	1.00	1.00	
59 Dibromomethane	93	10.146	10.146	0.000	91	96862	1.00	1.07	
60 Dichlorobromomethane	83	10.334	10.334	0.000	99	182521	1.00	1.12	
61 1,4-Dioxane	88	10.356	10.356	0.000	86	25221	1.00	1.00	
62 Methyl methacrylate	41	10.518	10.518	0.000	88	53575	1.00	1.02	
63 Methylcyclohexane	83	10.992	10.992	0.000	92	103082	1.00	0.9783	
64 4-Methyl-2-pentanone (MIBK	43	11.418	11.418	0.000	91	87766	1.00	1.03	
65 cis-1,3-Dichloropropene	75	11.445	11.445	0.000	96	109525	1.00	1.09	
66 trans-1,3-Dichloropropene	75	12.205	12.205	0.000	96	109299	1.00	1.08	
67 Toluene	91	12.346	12.346	0.000	92	230371	1.00	1.07	
68 1,1,2-Trichloroethane	83	12.400	12.400	0.000	93	62095	1.00	1.07	
69 2-Hexanone	58	12.874	12.874	0.000	94	41427	1.00	0.9883	
70 Chlorodibromomethane	129	13.128	13.128	0.000	96	189234	1.00	1.15	
71 n-Octane	85	13.219	13.219	0.000	72	71499	1.00	1.05	
72 Ethylene Dibromide	107	13.424	13.424	0.000	96	139273	1.00	1.10	
73 Tetrachloroethene	129	13.575	13.575	0.000	93	116845	1.00	1.08	
74 Chlorobenzene	112	14.486	14.486	0.000	91	206075	1.00	1.06	
75 2,3-Dimethylheptane	43	14.648	14.648	0.000	79	132894	1.00	1.14	
76 Ethylbenzene	91	14.832	14.832	0.000	99	338045	1.00	1.10	
77 m-Xylene & p-Xylene	91	15.010	15.010	0.000	100	572250	2.00	2.25	
78 Bromoform	173	15.387	15.387	0.000	94	185650	1.00	1.22	
79 Styrene	104	15.479	15.479	0.000	97	174497	1.00	1.11	
80 o-Xylene	91	15.543	15.543	0.000	97	299586	1.00	1.11	
81 n-Nonane	57	15.560	15.560	0.000	73	114414	1.00	1.17	
82 1,1,2,2-Tetrachloroethane	83	15.862	15.862	0.000	93	155294	1.00	1.11	
83 1,2,3-Trichloropropane	110	16.018	16.018	0.000	92	71484	1.00	1.07	
84 Isopropylbenzene	105	16.174	16.174	0.000	97	403560	1.00	1.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	16.746	16.746	0.000	98	113833	1.00	1.15	
86 2-Chlorotoluene	126	16.757	16.757	0.000	92	108862	1.00	1.17	
88 4-Ethyltoluene	105	16.918	16.918	0.000	98	444092	1.00	1.22	
87 1,3,5-Trimethylbenzene	120	17.005	17.005	0.000	91	188314	1.00	1.24	
89 Alpha Methyl Styrene	118	17.258	17.258	0.000	86	163453	1.00	1.15	
90 n-Decane	57	17.436	17.436	0.000	98	171163	1.00	1.21	
91 tert-Butylbenzene	119	17.479	17.479	0.000	92	474015	1.00	1.18	
92 1,2,4-Trimethylbenzene	105	17.495	17.495	0.000	96	440969	1.00	1.19	
93 1,3-Dichlorobenzene	146	17.765	17.765	0.000	98	300993	1.00	1.08	
94 sec-Butylbenzene	105	17.797	17.797	0.000	97	569311	1.00	1.11	
96 Benzyl chloride	91	17.851	17.851	0.000	97	317763	1.00	1.13	
95 1,4-Dichlorobenzene	146	17.867	17.867	0.000	92	309387	1.00	1.10	
97 4-Isopropyltoluene	119	17.997	17.997	0.000	95	581713	1.00	1.12	
98 1,2,3-Trimethylbenzene	105	18.024	18.024	0.000	99	471836	1.00	1.14	
99 Butylcyclohexane	83	18.137	18.137	0.000	91	250470	1.00	1.10	
100 1,2-Dichlorobenzene	146	18.267	18.267	0.000	93	300529	1.00	1.08	
101 2,3-Dihydroindene	117	18.283	18.283	0.000	93	382038	1.00	1.09	
102 Indene	116	18.423	18.423	0.000	90	305161	1.00	1.12	
103 n-Butylbenzene	91	18.488	18.488	0.000	97	483510	1.00	1.13	
104 Undecane	57	18.919	18.919	0.000	87	209794	1.00	1.16	
105 1,2-Dibromo-3-Chloropropan	157	18.930	18.930	0.000	92	147194	1.00	1.18	
106 1,2,4,5-Tetramethylbenzene	119	19.318	19.318	0.000	95	567895	1.00	1.11	
107 Dodecane	57	20.057	20.057	0.000	91	206473	1.00	1.05	
108 1,2,4-Trichlorobenzene	180	20.121	20.121	0.000	95	312582	1.00	1.00	
109 Naphthalene	128	20.240	20.240	0.000	98	616341	1.00	0.9406	
110 Hexachlorobutadiene	225	20.510	20.510	0.000	95	362352	1.00	1.10	
111 1,2,3-Trichlorobenzene	180	20.531	20.531	0.000	95	300722	1.00	0.9113	
112 2-Methylnaphthalene	142	21.373	21.373	0.000	98	164959	1.00	0.6654	
113 1-Methylnaphthalene	142	21.550	21.550	0.000	97	129583	1.00	0.5843	
A 115 C8 Range	1	13.227	(13.171-13.268)		0	565136	1.00	1.04	
S 116 Xylenes, Total	100				0		3.00	3.37	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.94	

Reagents:

40CV101P_00092	Amount Added: 50.00	Units: ml	
40MXISSURP_00004	Amount Added: 40.00	Units: mL	Run Reagent

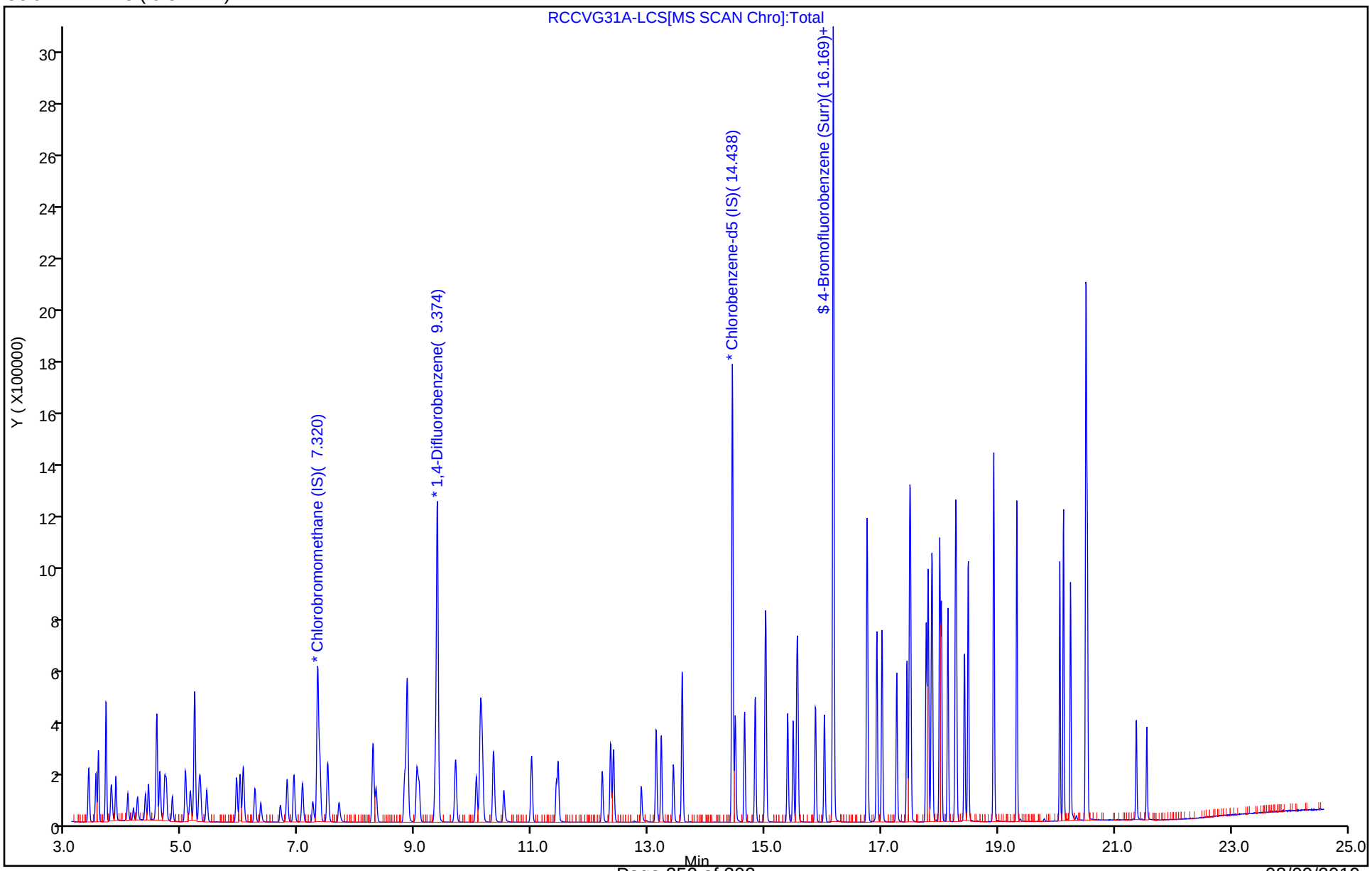
Report Date: 01-Aug-2019 10:55:50 Chrom Revision: 2.3 15-Jul-2019 06:58:08

TestAmerica Laboratories

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RCCVG31A-LCS.d

Injection Date:	31-Jul-2019 11:48:30	Instrument ID:	MR	Operator ID:	HMT
Lims ID:	LCS			Worklist Smp#:	1002
Client ID:					
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MR_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\RCCVG31A-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Jul-2019 11:48:30 ALS Bottle#: 15 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0012543-002
Misc. Info.: S97
Operator ID: HMT Instrument ID: MR

Method: \\chromna\Knoxville\ChromData\MR\20190730-12543.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Aug-2019 10:55:25 Calib Date: 17-Jul-2019 02:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190716-12366.b\RG16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0307

First Level Reviewer: khachitpongpanits Date: 01-Aug-2019 10:55:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 4-Bromofluorobenzene (Surr)	4.00	4.19	104.64

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Instrument ID: MR Start Date: 07/16/2019 15:56

Analysis Batch Number: 31732 End Date: 07/17/2019 07:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-31732/2		07/16/2019 15:56	1	RBFBG16A.D	RTX-5 0.32(mm)
IC 140-31732/3		07/16/2019 16:26	1	RG16IC09A.D	RTX-5 0.32(mm)
IC 140-31732/5		07/16/2019 18:06	1	RG16IC10A.D	RTX-5 0.32(mm)
IC 140-31732/8		07/16/2019 20:37	1	RG16IC01.D	RTX-5 0.32(mm)
IC 140-31732/9		07/16/2019 21:30	1	RG16IC02.D	RTX-5 0.32(mm)
140-14764-A-5 MDLV		07/16/2019 21:30	1		RTX-5 0.32(mm)
IC 140-31732/10		07/16/2019 22:24	1	RG16IC03.D	RTX-5 0.32(mm)
140-14764-A-6 MDLV		07/16/2019 22:24	1		RTX-5 0.32(mm)
IC 140-31732/11		07/16/2019 23:13	1	RG16IC04.D	RTX-5 0.32(mm)
140-14764-A-7 MDLV		07/16/2019 23:13	1		RTX-5 0.32(mm)
IC 140-31732/12		07/17/2019 00:01	1	RG16IC05.D	RTX-5 0.32(mm)
140-14764-A-8 MDLV		07/17/2019 00:01	1		RTX-5 0.32(mm)
IC 140-31732/13		07/17/2019 00:50	1	RG16IC06.D	RTX-5 0.32(mm)
ICIS 140-31732/14		07/17/2019 01:40	1	RG16IC07.D	RTX-5 0.32(mm)
IC 140-31732/15		07/17/2019 02:30	1	RG16IC08.D	RTX-5 0.32(mm)
ICV 140-31732/17		07/17/2019 04:18	1	RG16ICV.D	RTX-5 0.32(mm)
ZZZZZ		07/17/2019 07:18	1		RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Analysis Date:	7/17/19	Instrument:	MR	Chrom WL #:	12366	TALS Batch & Event #	TO14/15: 31732 / 2031	DOD5: 31735 / 2034
							DOD: 31733 / 2032	OHIO: 31736 / 2033

Chrom/Worklist Review	1st	Comments	2nd
1. Re-read each Limit Group [method editor-limit groups]	✓	fhs 7/18/19	na
2. Verify LODV in Chrom [method editor -> edit -> MDL]	✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]	✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]	✓		✓
5. Did BFB meet tune criteria? [F8]	✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]	✓		✓
7. High point checked for saturation and point removed if so? [Chrom]	✓		✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]	NA		NA
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]	✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]	✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]	✓		✓
12. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓	M IW	✓
• 1,2,4- and 1,2,3-trichlorobenzenes	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		✓

MLG Review	TO	DOD	OH	Comments	TO-	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [F6 Σ]	✓	✓	✓		✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]	✓	✓	✓		✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]	✓	✓	✓		✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]	NA →		→		NA →		→
18. If curves were used, is correlation coefficient ≥0.990? [F6]	NA →		→		NA →		→
19. Is the intercept less than the RL for each curve? [F6]	NA →		→		NA →		→
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]	NA →	na			NA →	na	
21. Is low point RSE ≤ 50 %? [F6]	✓	✓	✓		✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]	✓	✓	✓		✓	✓	✓
Analyst/Date: MCL 7/17/19				2nd Level Reviewer/Date: fhs 7/18/19			

TALS Review	TO	DOD	OH	Comments	TO	DOD	OH
23. Upload ICAL		✓			na	na	na
24. Graphics uploaded? [paperclip]	✓	✓	✓		✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed]	✓	✓	✓		✓	✓	✓
26. Runs linked to BFB? [QC Links]	✓	✓	✓		✓	✓	✓
27. Run Checklist and acknowledge findings [F8]	✓	✓	✓		✓	✓	✓
28. If criteria not met, was a NCM generated?	NA →		→		NA	NA	NA
29. After review in TALS, approve the method in TALS.	na	na	na		—	—	—
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>	na	na	na		—	✓	—
31. Checklist & Entech report scanned, attached & assigned properly?	na	na	na		✓	✓	✓

Analyst/date: fhs 7/18/19	2nd Level Reviewer/date: 07/18/19
Comments:	Comments:

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Instrument ID: MR Start Date: 07/30/2019 08:56

Analysis Batch Number: 32044 End Date: 07/30/2019 23:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-32044/1		07/30/2019 08:56	1	RBFBG30.D	RTX-5 0.32(mm)
CCVIS 140-32044/2		07/30/2019 09:23	1	RCCVG30.D	RTX-5 0.32(mm)
LCS 140-32044/1002		07/30/2019 09:23	1	RCCVG30-LCS.d	RTX-5 0.32(mm)
MB 140-32044/4		07/30/2019 11:18	1	R500BG30.D	RTX-5 0.32(mm)
ZZZZZ		07/30/2019 12:55	1		RTX-5 0.32(mm)
ZZZZZ		07/30/2019 21:26	11.26		RTX-5 0.32(mm)
140-16177-1		07/30/2019 23:47	101.05	RG30P107.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 07/30/2019		Routine	DOD	OHIO VAP
CCAL Chrom WL #	12489	CCAL Batch #	32044		32209
ICAL Chrom WL #	12366	ICAL Batch # / Event #	31732 / 2031	/	31734 / 2033

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na
2. Did BFB meet tune criteria? [F8]	✓	☑ [Failed TO-14A, but passes TO-15]	✓
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: 1,3,5-Trimethylbenzene	✓
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		NA
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		NA
6. Has the RT been updated to the method?	✓		✓
Analyst/date Suphawan Kh. 07/31/2019		**2nd Level Reviewer/date** 07/31/19	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓	✓ M scan	✓
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		✓
9. Can dilution history verified? [Mgmt Report]	✓		✓
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	✓
11. All runs - peaks ID'd correctly and false positives removed?	✓		✓
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		✓
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	✓
14. Samples outside calibration range scheduled for dilution?	NA	☐ ICAL – Range Exceeded; Minimum Dilution	NA
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	✓
16. RIC inspected for proper integration for TPH?	NA		NA
17. Obvious non-TPH peaks excluded?	✓		✓
18. Individual TPH peak area < octane high point area?	✓		✓

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	1st	If No, why is data reportable?	2nd
19. Graphics uploaded? [open one paperclip]	✓		✓
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☑ [Failed TO-14A, but passes TO-15] (NCM# 18888)	✓
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☑ CCV - %D - LCS criteria met (NCM# 18889) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	✓
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		BB
23. Project & sample special instructions verified?	✓		✓
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	☐ Air Analysis - Air Sample Transfer to Canister (NCM#____)	NA
25. Sample analyses done within analytical holding time?	✓	☐ Holding Time – Received w/Insufficient Time (NCM#_____) ☐ Holding Time – Receipt (NCM#_____)	✓
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☑ Marginal Exceedances - Within ME Limits and Random; Report (NCM# 18890) ☐ LCS/LCSD - %R High (NCM#_____)	✓
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		✓
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		✓
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		NA
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		✓
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		✓
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 140-32044/4, 140-32209/4 **200 mL blank ID:**	✓
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		✓
34. Correct ICV linked to each MB? [QC Links]	✓		✓
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		✓
37. Run Checklist and acknowledge findings [F8]	✓		✓
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	✓
39. QC checker run and items addressed?	-na-		✓
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		✓

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Suphawara Kh. **Date:** 07/31/2019	**2nd Level Reviewer :** ✓ **Date:** 07/31/19
Comments:	**Comments:**
CI line 6	
lost last.	
Example Calculation: 140-16177-1 MEK	
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF	
$4.679061 \times \frac{900}{25} \times 101.09 = 9456.38$	

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16177-1

SDG No.:

Instrument ID: MR Start Date: 07/31/2019 11:21

Analysis Batch Number: 32181 End Date: 08/01/2019 08:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-32181/1		07/31/2019 11:21	1	RBFBG31A.D	RTX-5 0.32(mm)
CCVIS 140-32181/2		07/31/2019 11:48	1	RCCVG31A.D	RTX-5 0.32(mm)
LCS 140-32181/1002		07/31/2019 11:48	1	RCCVG31A-LCS.d	RTX-5 0.32(mm)
ZZZZZ		07/31/2019 12:57	1		RTX-5 0.32(mm)
MB 140-32181/8		07/31/2019 15:51	1	R500BG31.D	RTX-5 0.32(mm)
ZZZZZ		07/31/2019 16:40	1		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 17:29	2.37		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 18:18	2.33		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 19:55	10.74		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 20:43	3.48		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 21:32	1		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 22:20	1		RTX-5 0.32(mm)
ZZZZZ		07/31/2019 23:08	3.59		RTX-5 0.32(mm)
ZZZZZ		08/01/2019 00:00	1.69		RTX-5 0.32(mm)
ZZZZZ		08/01/2019 00:52	1.58		RTX-5 0.32(mm)
ZZZZZ		08/01/2019 01:44	1.7		RTX-5 0.32(mm)
140-16177-2		08/01/2019 02:33	340.06	RG31P108.D	RTX-5 0.32(mm)
140-16177-3		08/01/2019 03:20	334.03	RG31P109.D	RTX-5 0.32(mm)
140-16177-4		08/01/2019 04:07	37.98	RG31P110.D	RTX-5 0.32(mm)
140-16177-5		08/01/2019 04:55	42.93	RG31P111.D	RTX-5 0.32(mm)
ZZZZZ		08/01/2019 05:43	7055.38		RTX-5 0.32(mm)
ZZZZZ		08/01/2019 07:28	2.31		RTX-5 0.32(mm)
140-16177-5 DL		08/01/2019 08:16	42.93	RG31P111DL.D	RTX-5 0.32(mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Instrument/Date	MR 7/31/2019		Routine	DOD	OHIO VAP
CCAL Chrom WL #	12543	CCAL Batch #	32181		
ICAL Chrom WL #	12366	ICAL Batch # / Event #	31732 / 2031	/	/

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		ns
2. Did BFB meet tune criteria? [F8]	✓	[Failed TO-14A, but passes TO-15]	
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICal File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits:	✓
4. Elution order checked on isomeric pairs? [Chrom]			
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓
• 2-methyl butane / acrolein	✓		✓
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓
• vinyl acetate / hexane	✓		✓
• cis- and trans- isomers	✓		✓
• ethyl benzene / m/p-xylene / o-xylene	✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3- , 1,4- , and 1,2-dichlorobenzene	✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		ns
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		ns
6. Has the RT been updated to the method?	✓		
Analyst/date Suphamon Kh. 8/1/2019		**2nd Level Reviewer/date** ns 8/01/19	

7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓	V On Scr	✓
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		✓
9. Can dilution history verified? [Mgmt Report]	✓		✓
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). *If no, list blank ID:*	✓	☐ Method Blank – Report, ND (NCM#_____) ☐ Method Blank – Report, 10X (NCM#_____)	✓
11. All runs - peaks ID'd correctly and false positives removed?	✓		✓
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		✓
13. IS/Surr within limits? *List samples and reason (e.g., 1 thru 5):* [Batch Results IS & SUR Tab] Sample Reason Sample Reason	✓	☐ (1) Surrogate – Matrix (NCM#_____) ☐ (2) Surrogate – High, ND (NCM#_____) ☐ (3) ISTD – RA/RA Concurs (NCM#_____) ☐ (4) Surrogate –RX concur, Report both (NCM#_____) ☐ (5) ISTD – Matrix, DL required (NCM#_____)	✓
14. Samples outside calibration range scheduled for dilution?	NA	☐ ICAL – Range Exceeded; Minimum Dilution	ns
Chrom Review	**1st**	**If No, why is data reportable?**	**2nd**
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? *List samples and reason:* Sample Reason Sample Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM#_____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM#_____) ☐ (3) Issues with initial collection volume; see DRC.	✓
16. RIC inspected for proper integration for TPH?	NA		ns
17. Obvious non-TPH peaks excluded?	↓		↓
18. Individual TPH peak area < octane high point area?			

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

TALS Review	1st	If No, why is data reportable?	2nd
19. Graphics uploaded? [open one paperclip]	✓		✓
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☑ [Failed TO-14A, but passes TO-15] (NCM# 18911)	✓
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☐ CCV - %D - LCS criteria met (NCM#_____) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#_____)	✓
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na
23. Project & sample special instructions verified?	✓		✓
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	NA	☐ Air Analysis - Air Sample Transfer to Canister (NCM#____)	MS
25. Sample analyses done within analytical holding time?	✓	☐ Holding Time – Received w/Insufficient Time (NCM#_____) ☐ Holding Time – Receipt (NCM#_____)	✓
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☐ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ___) ☐ LCS/LCSD - %R High (NCM#_____)	✓
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	NA		MS
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		✓
29. Analytes over calibration range set to secondary [Conditions Review Tab]	NA		✓
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		✓
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) *(If DUP not reported - set to 'Acceptable' for each job)*	✓		✓
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	**500 mL blank ID:** 140-32181/8 **200 mL blank ID:** 140-32181/9	✓
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		✓
34. Correct ICV linked to each MB? [QC Links]	✓		✓
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		✓
37. Run Checklist and acknowledge findings [F8]	✓		✓
38. Runs set to 1st level review?	✓	Runs set to 2nd level review?	✓
39. QC checker run and items addressed?	-na-		✓
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		✓

Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed
>90	5
71 - 90	4
51 - 70	3
31 - 50	2
11 - 30	1
< 11	0

Analyst: Supraworn K.	**Date:** 8/1/2019	**2nd Level Reviewer :**	**Date:** 2/8/19
Comments: CI line 14		**Comments:**	

Example Calculation: 140-16157-1 TCE

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

$$3.590541 \times \frac{500}{30} \times 10.74 = 642.71$$

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-16177-1

SDG No.:

Batch Number: 32044 Batch Start Date: 07/30/19 08:56 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101S 00097	40MXISSURP 00004
BFB 140-32044/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-32044/2		TO 15 LL		500 mL	500 mL	1	1	50 mL	40 mL
MB 140-32044/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-16177-A-1	356023-SV-T1A	TO 15 LL	T	25 mL	500 mL	1	1		40 mL
LCS 140-32044/1002		TO 15 LL		500 mL	500 mL	1	1	50 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-32044/1		TO 15 LL		40 mL					
CCVIS 140-32044/2		TO 15 LL							
MB 140-32044/4		TO 15 LL							
140-16177-A-1	356023-SV-T1A	TO 15 LL	T						
LCS 140-32044/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxvill Job No.: 140-16177-1

SDG No.:

Batch Number: 32181 Batch Start Date: 07/31/19 11:21 Batch Analyst: Khachitpongpanit, Suphawa

Batch Method: TO 15 LL Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00092	40MXISSURP 00004
BFB 140-32181/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-32181/2		TO 15 LL		500 mL	500 mL	1	1	50 mL	40 mL
MB 140-32181/8		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-16177-A-2	356023-SV-T1B	TO 15 LL	T	50 mL	500 mL	1	1		40 mL
140-16177-A-3	356023-SV-21	TO 15 LL	T	40 mL	500 mL	1	1		40 mL
140-16177-A-4	356023-SV-22	TO 15 LL	T	50 mL	500 mL	1	1		40 mL
140-16177-A-5	356023-SV-23	TO 15 LL	T	60 mL	500 mL	1	1		40 mL
140-16177-A-5	356023-SV-23	TO 15 LL	T	30 mL	500 mL	1	1		40 mL
LCS 140-32181/1002		TO 15 LL		500 mL	500 mL	1	1	50 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-32181/1		TO 15 LL		40 mL					
CCVIS 140-32181/2		TO 15 LL							
MB 140-32181/8		TO 15 LL							
140-16177-A-2	356023-SV-T1B	TO 15 LL	T						
140-16177-A-3	356023-SV-21	TO 15 LL	T						
140-16177-A-4	356023-SV-22	TO 15 LL	T						
140-16177-A-5	356023-SV-23	TO 15 LL	T						
140-16177-A-5	356023-SV-23	TO 15 LL	T						
LCS 140-32181/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Summa Canister Dilution Worksheet

Client: New York State D.E.C.

Job No.: 140-16177-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Date	Analyst
140-16177-1	6	-1.5	0.95	5.70	32.7	3.22	19.35		3.39	3.39	07/30/19 10:44	Barlozhetskaya, Anna F
140-16177-1	6	0	1.00	6.00	32.4	3.20	19.22		3.20	10.88	07/30/19 12:51	Barlozhetskaya, Anna F
140-16177-1	6	0.0	1.00	6.00	27.3	2.86	17.14		2.86	31.08	07/30/19 14:11	Barlozhetskaya, Anna F
140-16177-1	6	0.0	1.00	6.00	33.1	3.25	19.51		3.25	101.05	07/30/19 14:29	Barlozhetskaya, Anna F
140-16177-2	6	-3.0	0.90	5.40	37.4	3.54	21.27		3.94	3.94	07/30/19 10:44	Barlozhetskaya, Anna F
140-16177-2	6	0	1.00	6.00	34.0	3.31	19.88		3.31	13.05	07/30/19 12:52	Barlozhetskaya, Anna F
140-16177-2	6	0.0	1.00	6.00	26.1	2.78	16.65		2.78	36.22	07/30/19 14:11	Barlozhetskaya, Anna F
140-16177-2	6	0.0	1.00	6.00	28.1	2.91	17.47		2.91	105.46	07/30/19 14:29	Barlozhetskaya, Anna F
140-16177-2	6	0.0	1.00	6.00	32.7	3.22	19.35		3.22	340.06	07/30/19 14:45	Barlozhetskaya, Anna F
140-16177-3	6	-5.2	0.83	4.96	33.1	3.25	19.51		3.94	3.94	07/30/19 10:45	Barlozhetskaya, Anna F
140-16177-3	6	0	1.00	6.00	34.4	3.34	20.04		3.34	13.15	07/30/19 12:52	Barlozhetskaya, Anna F
140-16177-3	6	0.0	1.00	6.00	21.1	2.44	14.61		2.44	32.01	07/30/19 14:09	Barlozhetskaya, Anna F
140-16177-3	6	0.0	1.00	6.00	31.5	3.14	18.86		3.14	100.62	07/30/19 14:28	Barlozhetskaya, Anna F
140-16177-3	6	0.0	1.00	6.00	34.1	3.32	19.92		3.32	334.03	07/30/19 14:46	Barlozhetskaya, Anna F
140-16177-4	6	-5.5	0.82	4.90	35.2	3.39	20.37		4.16	4.16	07/30/19 10:46	Barlozhetskaya, Anna F
140-16177-4	6	0	1.00	6.00	33.9	3.31	19.84		3.31	13.75	07/30/19 12:52	Barlozhetskaya, Anna F
140-16177-4	6	0.0	1.00	6.00	25.9	2.76	16.57		2.76	37.98	07/30/19 14:10	Barlozhetskaya, Anna F
140-16177-5	6	-5.6	0.81	4.88	34.7	3.36	20.16		4.13	4.13	07/30/19 10:47	Barlozhetskaya, Anna F
140-16177-5	6	0	1.00	6.00	34.4	3.34	20.04		3.34	13.81	07/30/19 12:53	Barlozhetskaya, Anna F
140-16177-5	6	0.0	1.00	6.00	31.0	3.11	18.65		3.11	42.93	07/30/19 14:06	Barlozhetskaya, Anna F

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg

Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig

Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)

14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15290-1

SDG No.:

Client Sample ID: 11975 Lab Sample ID: 140-15290-1

Matrix: Air Lab File ID: GE16LOT15290.D

Analysis Method: TO 15 LL Date Collected: 05/15/2019 11:50

Sample wt/vol: 500(mL) Date Analyzed: 05/17/2019 10:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30104 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15290-1

SDG No.:

Client Sample ID: 11975 Lab Sample ID: 140-15290-1

Matrix: Air Lab File ID: GE16LOT15290.D

Analysis Method: TO 15 LL Date Collected: 05/15/2019 11:50

Sample wt/vol: 500(mL) Date Analyzed: 05/17/2019 10:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30104 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15290-1

SDG No.:

Client Sample ID: 11975 Lab Sample ID: 140-15290-1

Matrix: Air Lab File ID: GE16LOT15290.D

Analysis Method: TO 15 LL Date Collected: 05/15/2019 11:50

Sample wt/vol: 500(mL) Date Analyzed: 05/17/2019 10:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30104 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15290-1

SDG No.:

Client Sample ID: 11975 Lab Sample ID: 140-15290-1

Matrix: Air Lab File ID: GE16LOT15290.D

Analysis Method: TO 15 LL Date Collected: 05/15/2019 11:50

Sample wt/vol: 500(mL) Date Analyzed: 05/17/2019 10:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30104 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16LOT15290.D
Lims ID: 140-15290-A-1
Client ID: 11975
Sample Type: Client
Inject. Date: 17-May-2019 10:46:30 ALS Bottle#: 11 Worklist Smp#: 27
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0011759-009
Misc. Info.: 222336
Operator ID: 403648 Instrument ID: MG

Method: \\chromna\Knoxville\ChromData\MG\20190516-11759.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-May-2019 16:13:18 Calib Date: 17-May-2019 04:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: tajh Date: 20-May-2019 16:13:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.183	9.187	-0.004	96	336663	4.00	
* 2 1,4-Difluorobenzene	114	11.351	11.358	-0.007	95	2164843	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.026	16.032	-0.006	89	1778562	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.655	17.651	-0.001	84	1015333	3.71	
59 Dibromomethane	93	12.144	12.143	-0.006	81	1443	0.0104	

Reagents:

40L4DQP_00010 Amount Added: 200.00 Units: mL
40MXISSURP_00003 Amount Added: 40.00 Units: mL Run Reagent

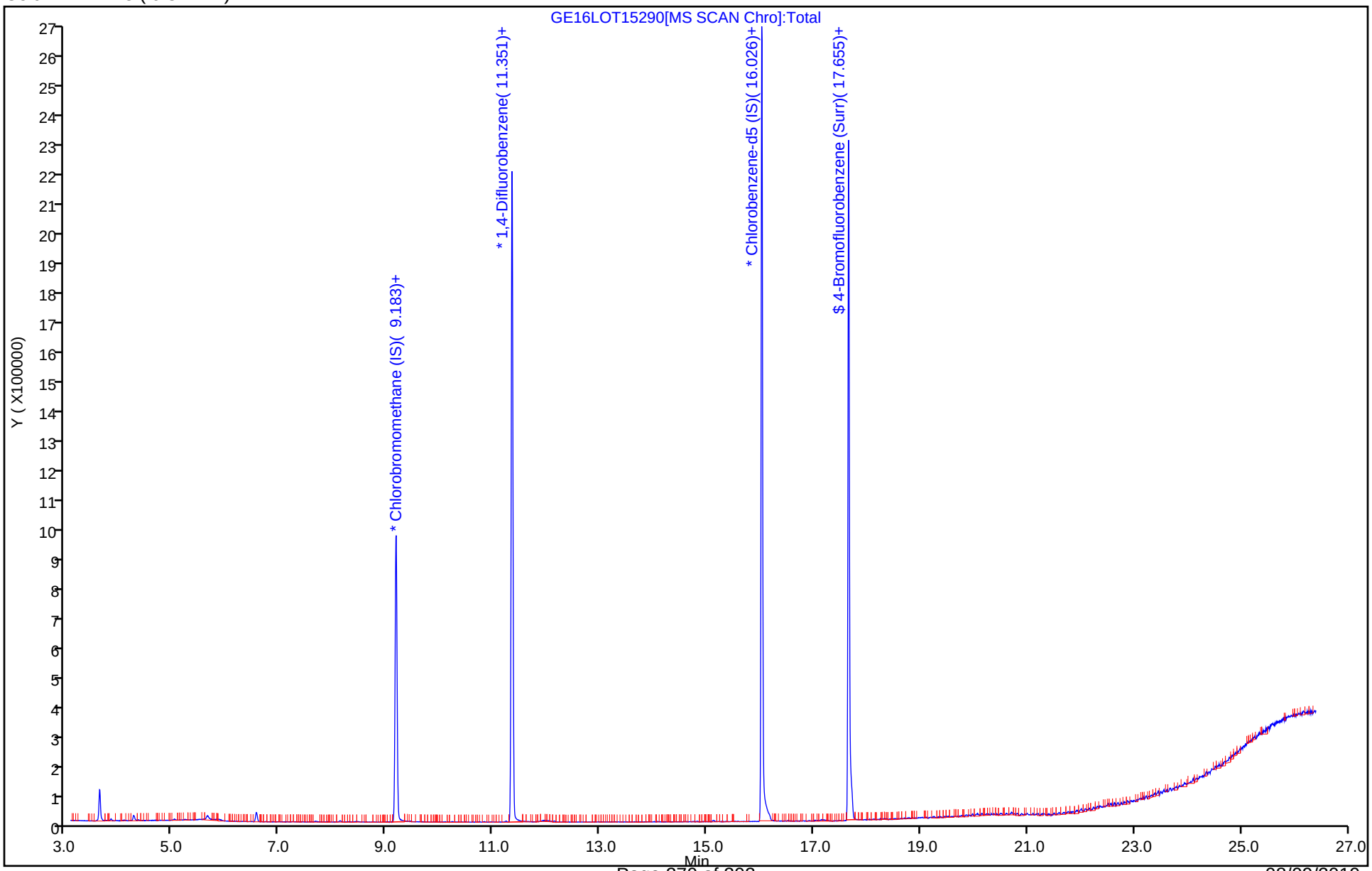
Report Date: 20-May-2019 16:13:19 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16LOT15290.D

Injection Date:	17-May-2019 10:46:30	Instrument ID:	MG	Operator ID:	403648
Lims ID:	140-15290-A-1	Lab Sample ID:	140-15290-1	Worklist Smp#:	27
Client ID:	11975				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



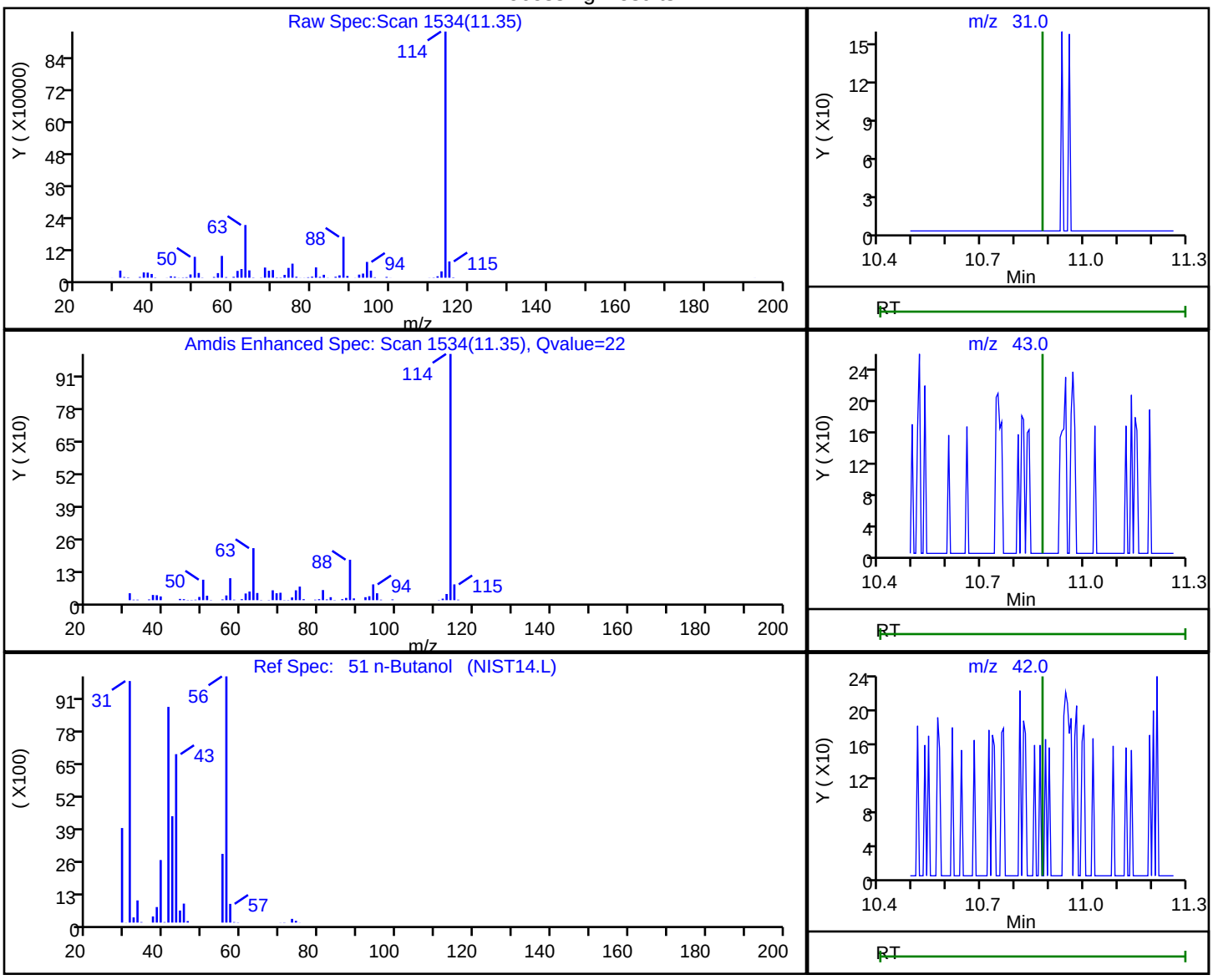
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16LOT15290.D				
Injection Date:	17-May-2019 10:46:30	Instrument ID:	MG		
Lims ID:	140-15290-A-1	Lab Sample ID:	140-15290-1		
Client ID:	11975				
Operator ID:	403648	ALS Bottle#:	11	Worklist Smp#:	27
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
11.35	31.00	62435	2.107480
11.35	43.00	821	
11.42	42.00	108	

Reviewer: tajh, 20-May-2019 16:13:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15312-1

SDG No.:

Client Sample ID: 11974 Lab Sample ID: 140-15312-13

Matrix: Air Lab File ID: E20L15312.D

Analysis Method: TO 15 LL Date Collected: 05/17/2019 11:55

Sample wt/vol: 500(mL) Date Analyzed: 05/21/2019 01:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30151 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15312-1

SDG No.:

Client Sample ID: 11974 Lab Sample ID: 140-15312-13

Matrix: Air Lab File ID: E20L15312.D

Analysis Method: TO 15 LL Date Collected: 05/17/2019 11:55

Sample wt/vol: 500(mL) Date Analyzed: 05/21/2019 01:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30151 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15312-1

SDG No.:

Client Sample ID: 11974 Lab Sample ID: 140-15312-13

Matrix: Air Lab File ID: E20L15312.D

Analysis Method: TO 15 LL Date Collected: 05/17/2019 11:55

Sample wt/vol: 500(mL) Date Analyzed: 05/21/2019 01:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30151 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15312-1

SDG No.:

Client Sample ID: 11974 Lab Sample ID: 140-15312-13

Matrix: Air Lab File ID: E20L15312.D

Analysis Method: TO 15 LL Date Collected: 05/17/2019 11:55

Sample wt/vol: 500(mL) Date Analyzed: 05/21/2019 01:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30151 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MG\20190520-11779.b\E20L15312.D
Lims ID: 140-15312-A-13
Client ID: 11974
Sample Type: Client
Inject. Date: 21-May-2019 01:40:30 ALS Bottle#: 8 Worklist Smp#: 28
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0011779-028
Misc. Info.: 11974
Operator ID: 7126 Instrument ID: MG

Method: \\chromna\Knoxville\ChromData\MG\20190520-11779.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-May-2019 14:46:52 Calib Date: 17-May-2019 04:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0322

First Level Reviewer: khachitpongpanits Date: 21-May-2019 14:46:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.183	9.189	-0.006	96	321451	4.00	
* 2 1,4-Difluorobenzene	114	11.351	11.356	-0.005	95	2067448	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.026	16.032	-0.006	89	1713329	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.655	17.655	0.000	84	941594	3.57	
7 Propene	41	3.834	3.834	0.000	99	15973	0.1539	
25 Isopropyl alcohol	45	5.813	5.721	0.092	99	35538	0.3475	
31 Methylene Chloride	84	6.563	6.568	-0.005	97	16599	0.1287	
40 Hexane	56	8.418	8.418	-0.010	66	1588	0.0150	
59 Dibromomethane	93	12.133	12.149	-0.016	87	1216	0.009148	

Reagents:

40MXISSURP_00003 Amount Added: 40.00 Units: mL Run Reagent

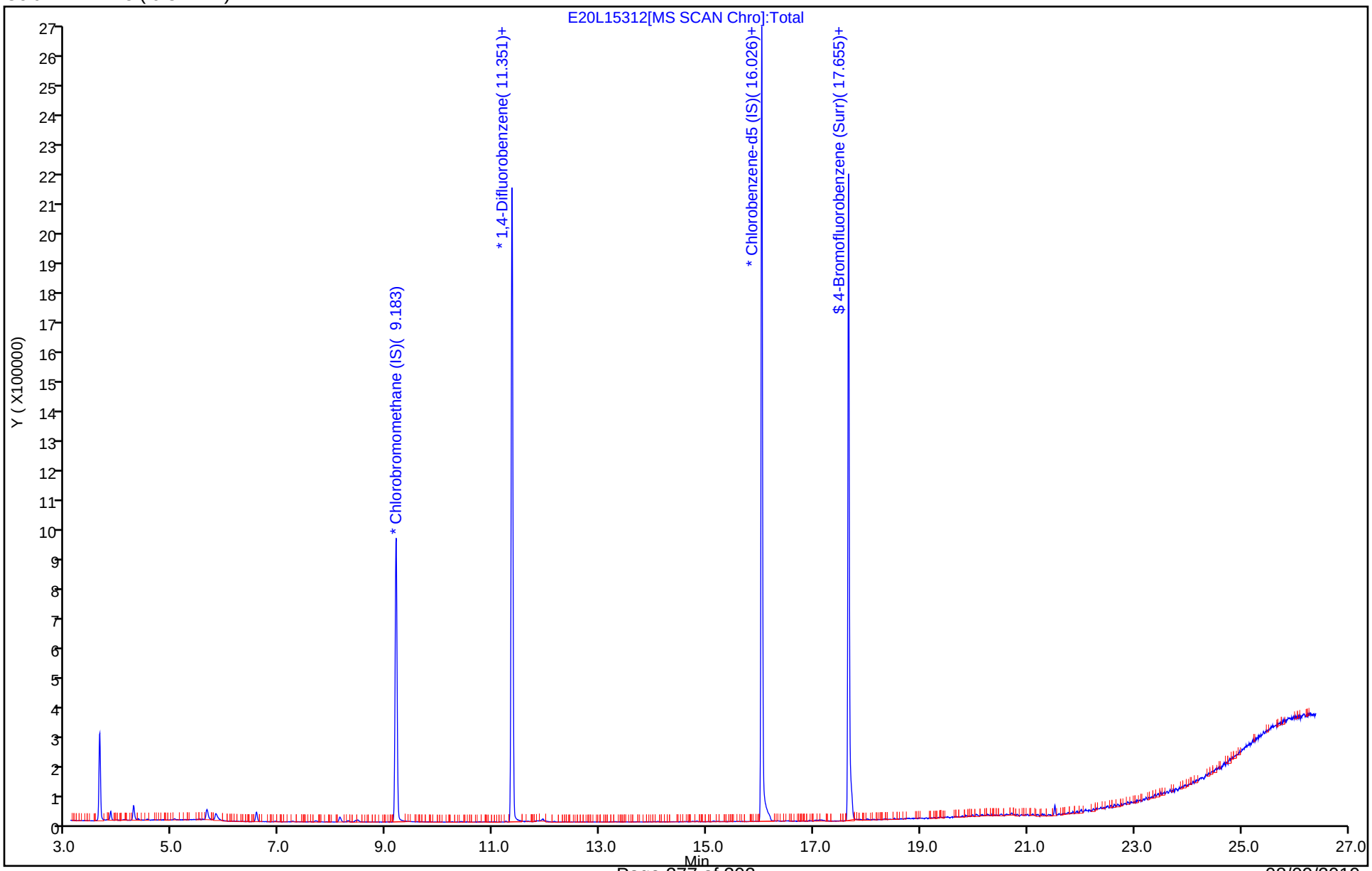
Report Date: 21-May-2019 14:46:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MG\20190520-11779.b\E20L15312.D

Injection Date:	21-May-2019 01:40:30	Instrument ID:	MG	Operator ID:	7126
Lims ID:	140-15312-A-13	Lab Sample ID:	140-15312-13	Worklist Smp#:	28
Client ID:	11974				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



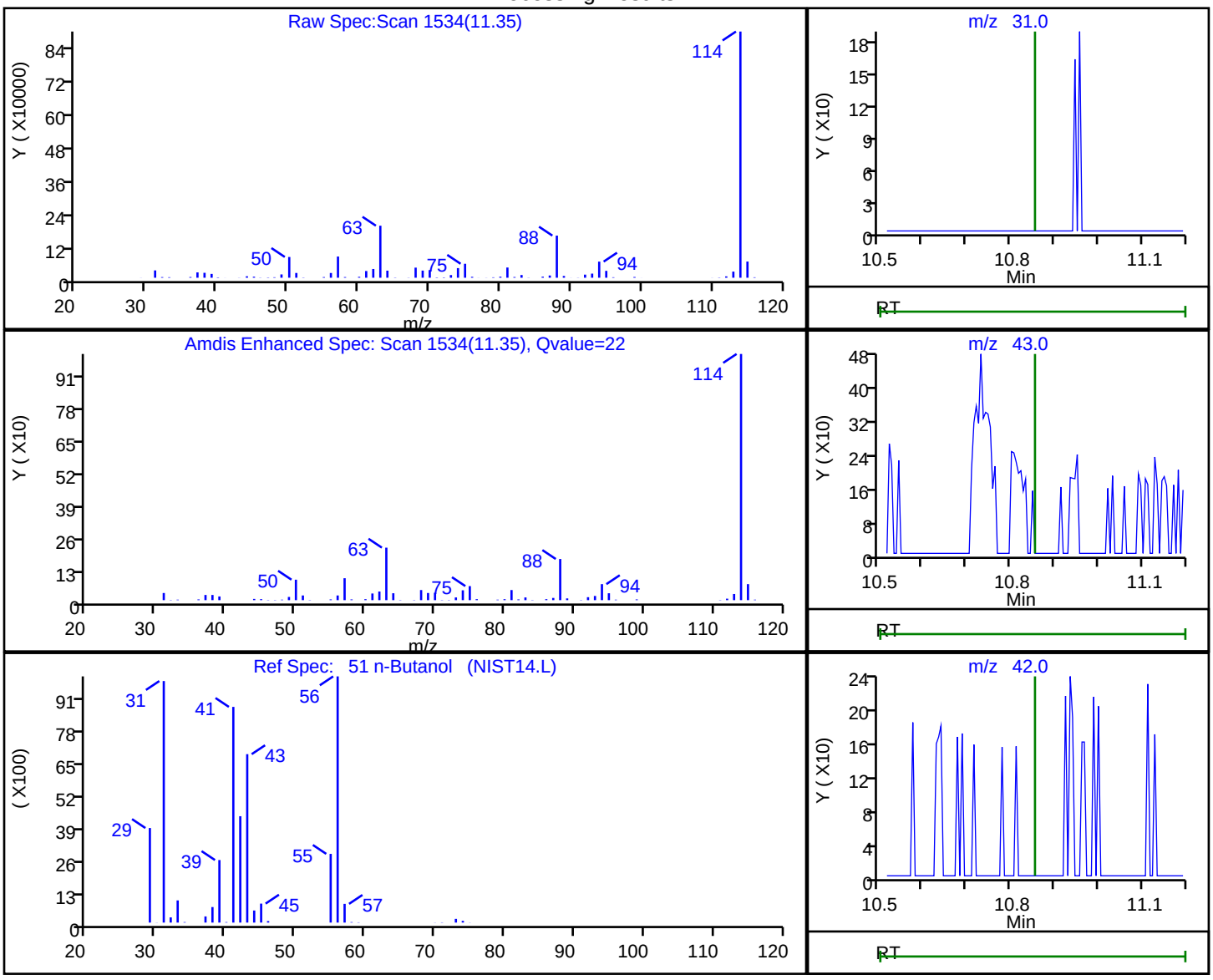
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MG\20190520-11779.b\E20L15312.D				
Injection Date:	21-May-2019 01:40:30	Instrument ID:	MG		
Lims ID:	140-15312-A-13	Lab Sample ID:	140-15312-13		
Client ID:	11974				
Operator ID:	7126	ALS Bottle#:	8	Worklist Smp#:	28
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
11.35	31.00	59964	2.119424
11.35	43.00	951	
11.42	42.00	175	

Reviewer: khachitpongpanits, 21-May-2019 14:46:26

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

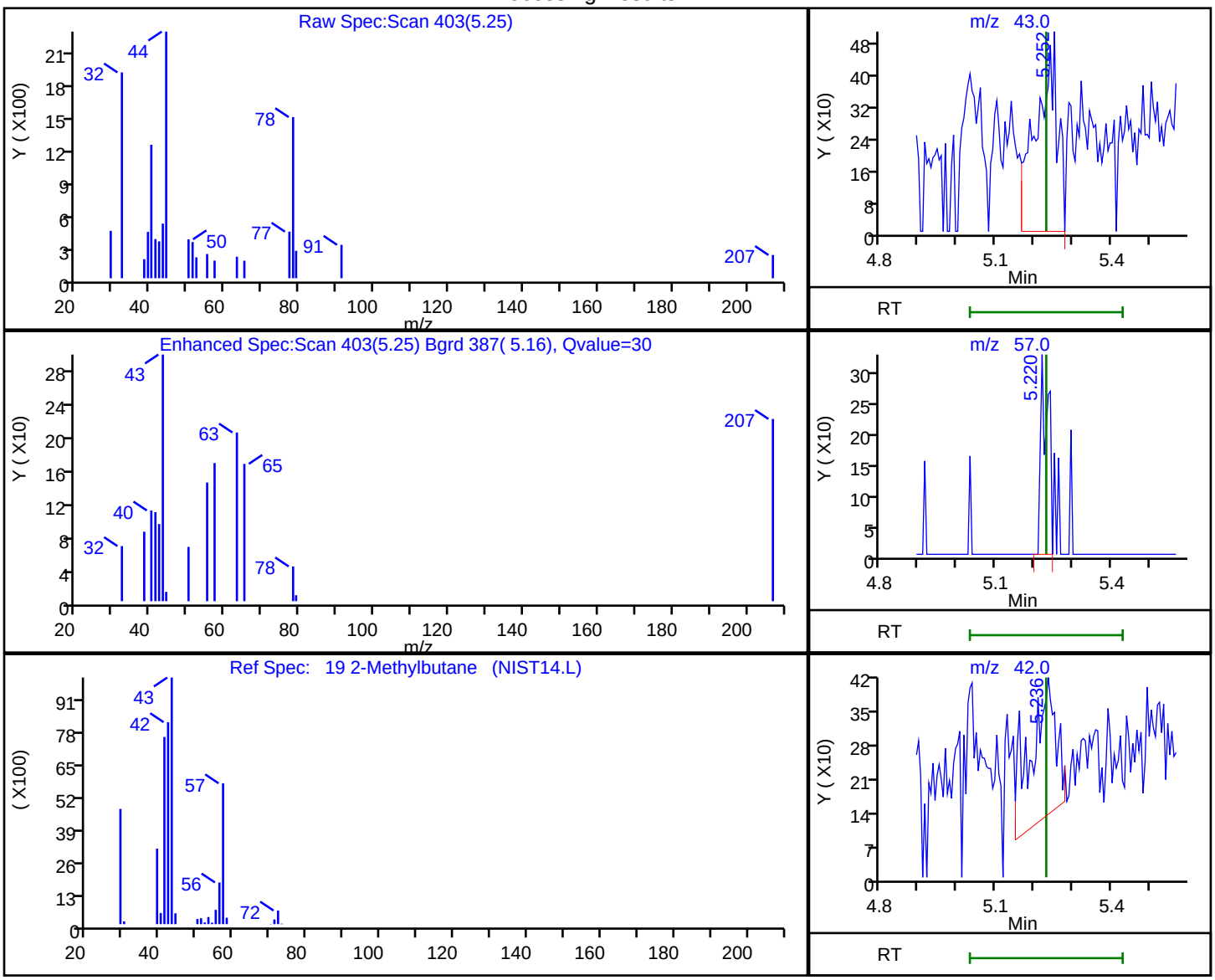
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MG\20190520-11779.b\E20L15312.D				
Injection Date:	21-May-2019 01:40:30	Instrument ID:	MG		
Lims ID:	140-15312-A-13	Lab Sample ID:	140-15312-13		
Client ID:	11974				
Operator ID:	7126	ALS Bottle#:	8	Worklist Smp#:	28
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
5.25	43.00	1883	0.014785
5.22	57.00	442	
5.24	42.00	1313	

Reviewer: khachitpongpanits, 21-May-2019 14:45:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15350-1

SDG No.:

Client Sample ID: 10306 Lab Sample ID: 140-15350-14

Matrix: Air Lab File ID: E23L15350.D

Analysis Method: TO 15 LL Date Collected: 05/21/2019 15:25

Sample wt/vol: 500(mL) Date Analyzed: 05/23/2019 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30233 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15350-1

SDG No.:

Client Sample ID: 10306 Lab Sample ID: 140-15350-14

Matrix: Air Lab File ID: E23L15350.D

Analysis Method: TO 15 LL Date Collected: 05/21/2019 15:25

Sample wt/vol: 500(mL) Date Analyzed: 05/23/2019 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30233 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15350-1

SDG No.:

Client Sample ID: 10306 Lab Sample ID: 140-15350-14

Matrix: Air Lab File ID: E23L15350.D

Analysis Method: TO 15 LL Date Collected: 05/21/2019 15:25

Sample wt/vol: 500(mL) Date Analyzed: 05/23/2019 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30233 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15350-1

SDG No.:

Client Sample ID: 10306 Lab Sample ID: 140-15350-14

Matrix: Air Lab File ID: E23L15350.D

Analysis Method: TO 15 LL Date Collected: 05/21/2019 15:25

Sample wt/vol: 500(mL) Date Analyzed: 05/23/2019 22:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30233 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MH\20190522-11812.b\E23L15350.D				
Lims ID:	140-15350-A-14				
Client ID:	10306				
Sample Type:	Client				
Inject. Date:	23-May-2019 22:39:30	ALS Bottle#:	12	Worklist Smp#:	16
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0011812-016				
Misc. Info.:	10306				
Operator ID:	HMT	Instrument ID:	MH		
Method:	\\chromna\Knoxville\ChromData\MH\20190522-11812.b\MH_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	24-May-2019 13:25:45	Calib Date:	14-May-2019 01:46:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MH\20190513-11710.b\HE13IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0331				
First Level Reviewer: khachitpongpanits		Date:	24-May-2019 13:35:25		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.629	8.629	0.000	86	354396	4.00	
* 2 1,4-Difluorobenzene	114	10.836	10.836	0.000	94	1920357	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.612	15.612	0.000	86	1522456	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.286	17.281	0.005	97	958375	3.69	
19 2-Methylbutane	43	4.820	4.810	0.010	78	2207	0.0201	
31 Methylene Chloride	84	6.086	6.076	0.010	94	20263	0.1388	
45 1,1,1-Trichloroethane	97	9.678	9.668	0.010	97	6763	0.0222	
57 Dibromomethane	93	11.642	11.648	-0.006	93	1494	0.007561	

Reagents:

40MXISSURP_00003 Amount Added: 40.00 Units: mL Run Reagent

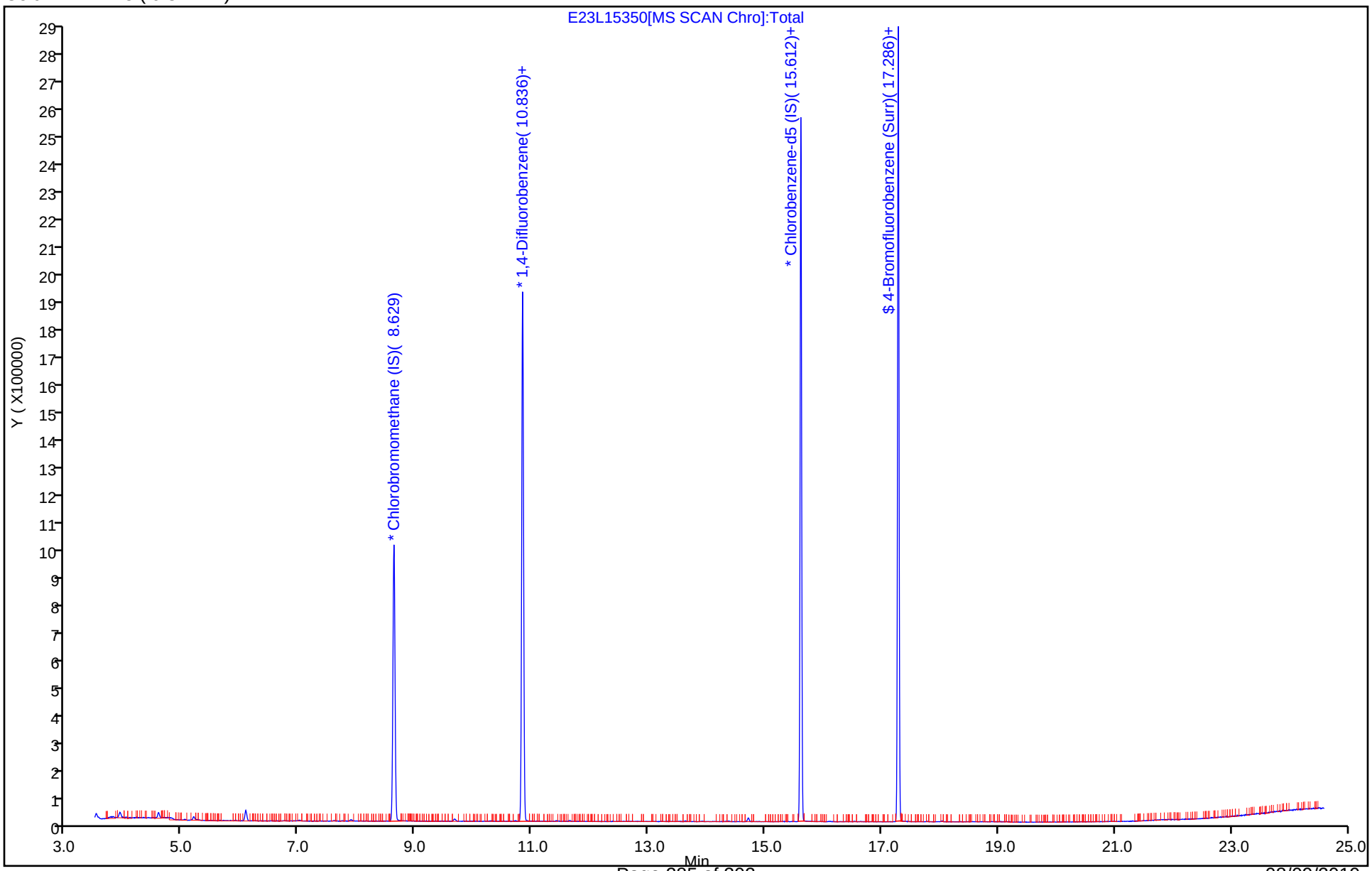
Report Date: 24-May-2019 13:35:26 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MH\20190522-11812.b\E23L15350.D

Injection Date:	23-May-2019 22:39:30	Instrument ID:	MH	Operator ID:	HMT
Lims ID:	140-15350-A-14	Lab Sample ID:	140-15350-14	Worklist Smp#:	16
Client ID:	10306				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MH_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15368-1

SDG No.:

Client Sample ID: 10402 Lab Sample ID: 140-15368-2

Matrix: Air Lab File ID: GE24LOT15368.D

Analysis Method: TO 15 LL Date Collected: 05/23/2019 14:55

Sample wt/vol: 500(mL) Date Analyzed: 05/25/2019 03:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30195 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND	*	0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15368-1

SDG No.:

Client Sample ID: 10402 Lab Sample ID: 140-15368-2

Matrix: Air Lab File ID: GE24LOT15368.D

Analysis Method: TO 15 LL Date Collected: 05/23/2019 14:55

Sample wt/vol: 500(mL) Date Analyzed: 05/25/2019 03:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30195 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15368-1

SDG No.:

Client Sample ID: 10402 Lab Sample ID: 140-15368-2

Matrix: Air Lab File ID: GE24LOT15368.D

Analysis Method: TO 15 LL Date Collected: 05/23/2019 14:55

Sample wt/vol: 500(mL) Date Analyzed: 05/25/2019 03:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30195 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15368-1

SDG No.:

Client Sample ID: 10402 Lab Sample ID: 140-15368-2

Matrix: Air Lab File ID: GE24LOT15368.D

Analysis Method: TO 15 LL Date Collected: 05/23/2019 14:55

Sample wt/vol: 500(mL) Date Analyzed: 05/25/2019 03:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30195 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MG\20190521-11795.b\GE24LOT15368.D
Lims ID: 140-15368-A-2
Client ID: 10402
Sample Type: Client
Inject. Date: 25-May-2019 03:45:30 ALS Bottle#: 15 Worklist Smp#: 22
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0011795-022
Misc. Info.: 10402
Operator ID: 403648 Instrument ID: MG

Method: \\chromna\Knoxville\ChromData\MG\20190521-11795.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 27-May-2019 10:49:47 Calib Date: 17-May-2019 04:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16IC08.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0332

First Level Reviewer: khachitpongpanits Date: 27-May-2019 10:49:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.178	9.183	-0.005	96	319926	4.00	
* 2 1,4-Difluorobenzene	114	11.351	11.351	0.000	95	2064900	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.026	16.026	0.000	89	1779138	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.649	17.655	-0.006	83	1032828	3.77	
31 Methylene Chloride	84	6.563	6.563	0.000	98	19687	0.1534	
59 Dibromomethane	93	12.144	12.144	0.000	93	1138	0.008572	
73 Tetrachloroethene	129	15.207	15.207	0.000	92	1004	0.006813	

Reagents:

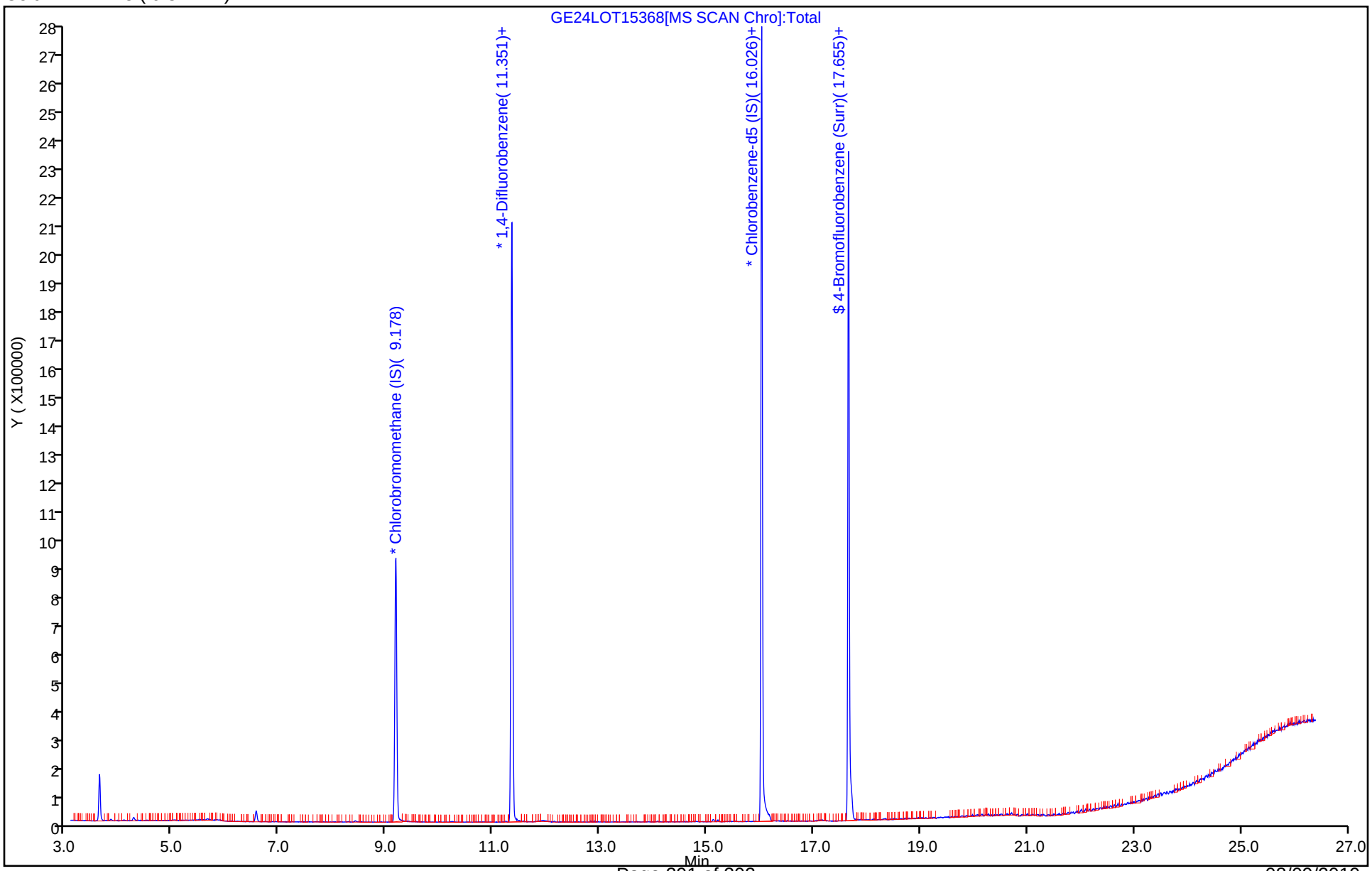
40MXISSURP_00003 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 27-May-2019 10:49:48 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MG\20190521-11795.b\GE24LOT15368.D				
Injection Date:	25-May-2019 03:45:30	Instrument ID:	MG	Operator ID:	403648
Lims ID:	140-15368-A-2	Lab Sample ID:	140-15368-2	Worklist Smp#:	22
Client ID:	10402				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



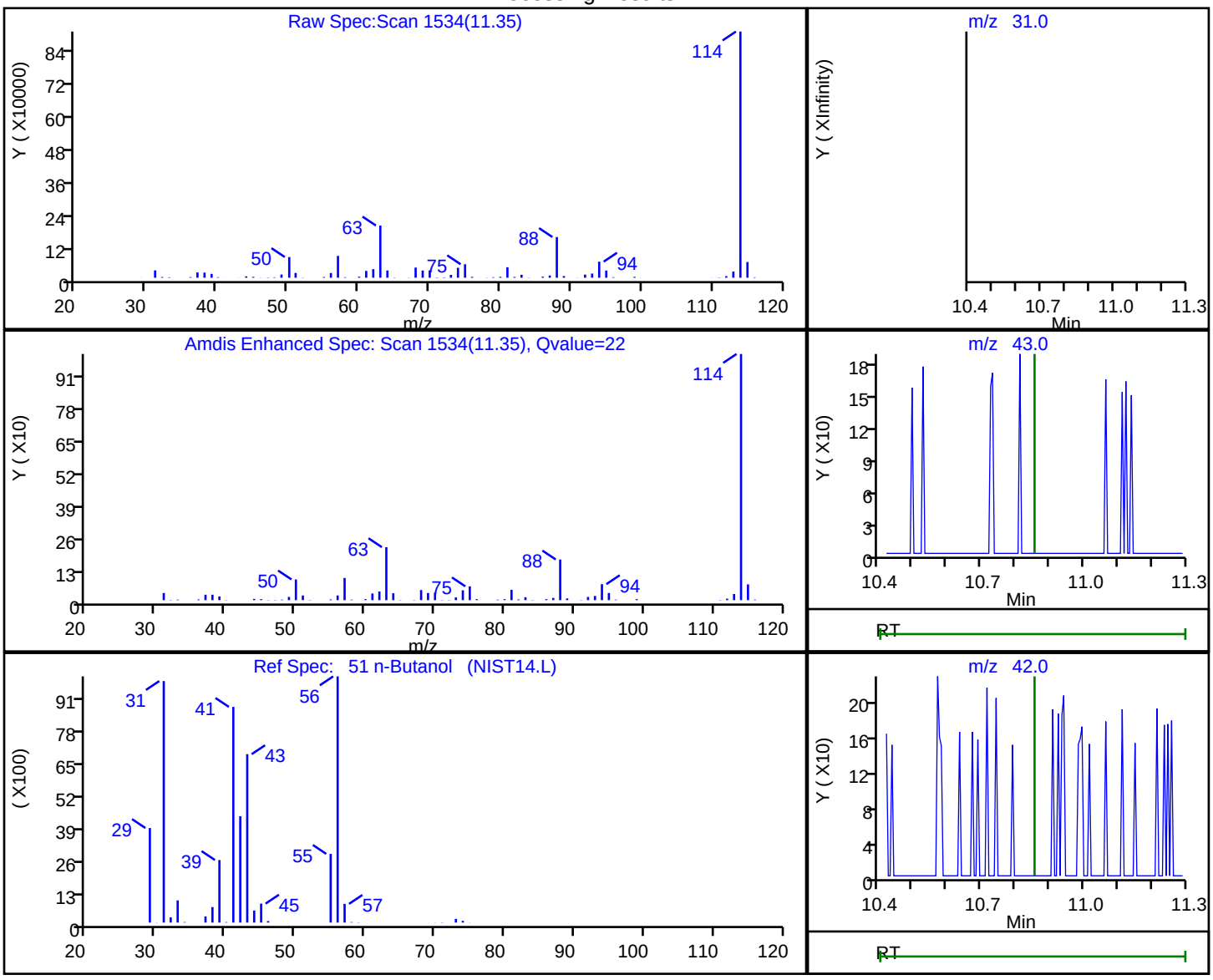
User Disabled Compound Report

Eurofins TestAmerica, Knoxville

Data File:	\\chromna\Knoxville\ChromData\MG\20190521-11795.b\GE24LOT15368.D				
Injection Date:	25-May-2019 03:45:30	Instrument ID:	MG		
Lims ID:	140-15368-A-2	Lab Sample ID:	140-15368-2		
Client ID:	10402				
Operator ID:	403648	ALS Bottle#:	15	Worklist Smp#:	22
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		
Column:	RTX-5 (0.32 mm)	Detector	MS SCAN		

51 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
11.35	31.00	62236	2.202442
11.35	43.00	744	
11.37	42.00	51	

Reviewer: khachitpongpanits, 27-May-2019 10:49:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15421-1

SDG No.:

Client Sample ID: 10116 Lab Sample ID: 140-15421-1

Matrix: Air Lab File ID: E30L15421.D

Analysis Method: TO 15 LL Date Collected: 05/29/2019 14:20

Sample wt/vol: 500(mL) Date Analyzed: 05/31/2019 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30332 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND	*	0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadine	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15421-1

SDG No.:

Client Sample ID: 10116 Lab Sample ID: 140-15421-1

Matrix: Air Lab File ID: E30L15421.D

Analysis Method: TO 15 LL Date Collected: 05/29/2019 14:20

Sample wt/vol: 500(mL) Date Analyzed: 05/31/2019 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30332 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15421-1

SDG No.:

Client Sample ID: 10116 Lab Sample ID: 140-15421-1

Matrix: Air Lab File ID: E30L15421.D

Analysis Method: TO 15 LL Date Collected: 05/29/2019 14:20

Sample wt/vol: 500(mL) Date Analyzed: 05/31/2019 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30332 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-15421-1

SDG No.:

Client Sample ID: 10116 Lab Sample ID: 140-15421-1

Matrix: Air Lab File ID: E30L15421.D

Analysis Method: TO 15 LL Date Collected: 05/29/2019 14:20

Sample wt/vol: 500(mL) Date Analyzed: 05/31/2019 00:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 30332 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File:	\\chromna\Knoxville\ChromData\MG\20190528-11847.b\E30L15421.D				
Lims ID:	140-15421-A-1				
Client ID:	10116				
Sample Type:	Client				
Inject. Date:	31-May-2019 00:14:30	ALS Bottle#:	13	Worklist Smp#:	20
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	140-0011847-020				
Misc. Info.:	10116				
Operator ID:	7126	Instrument ID:	MG		
Method:	\\chromna\Knoxville\ChromData\MG\20190528-11847.b\MG_TO15.m				
Limit Group:	MSA TO14A_15 Routine ICAL				
Last Update:	31-May-2019 13:45:39	Calib Date:	17-May-2019 04:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Knoxville\ChromData\MG\20190516-11759.b\GE16IC08.D				
Column 1 :	RTX-5 (0.32 mm)		Det: MS SCAN		
Process Host:	CTX0304				
First Level Reviewer: khachitpongpanits		Date:	31-May-2019 13:52:37		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.178	9.178	0.000	96	302307	4.00	
* 2 1,4-Difluorobenzene	114	11.346	11.351	-0.005	95	1821231	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.026	16.026	0.000	89	1698115	4.00	
$ 4 4-Bromofluorobenzene (Surr	95	17.649	17.655	-0.006	83	1042149	3.99	
31 Methylene Chloride	84	6.568	6.557	0.011	97	15605	0.1287	
59 Dibromomethane	93	12.138	12.144	-0.006	87	1096	0.009360	

Reagents:

40MXISSURP_00003 Amount Added: 40.00 Units: mL Run Reagent

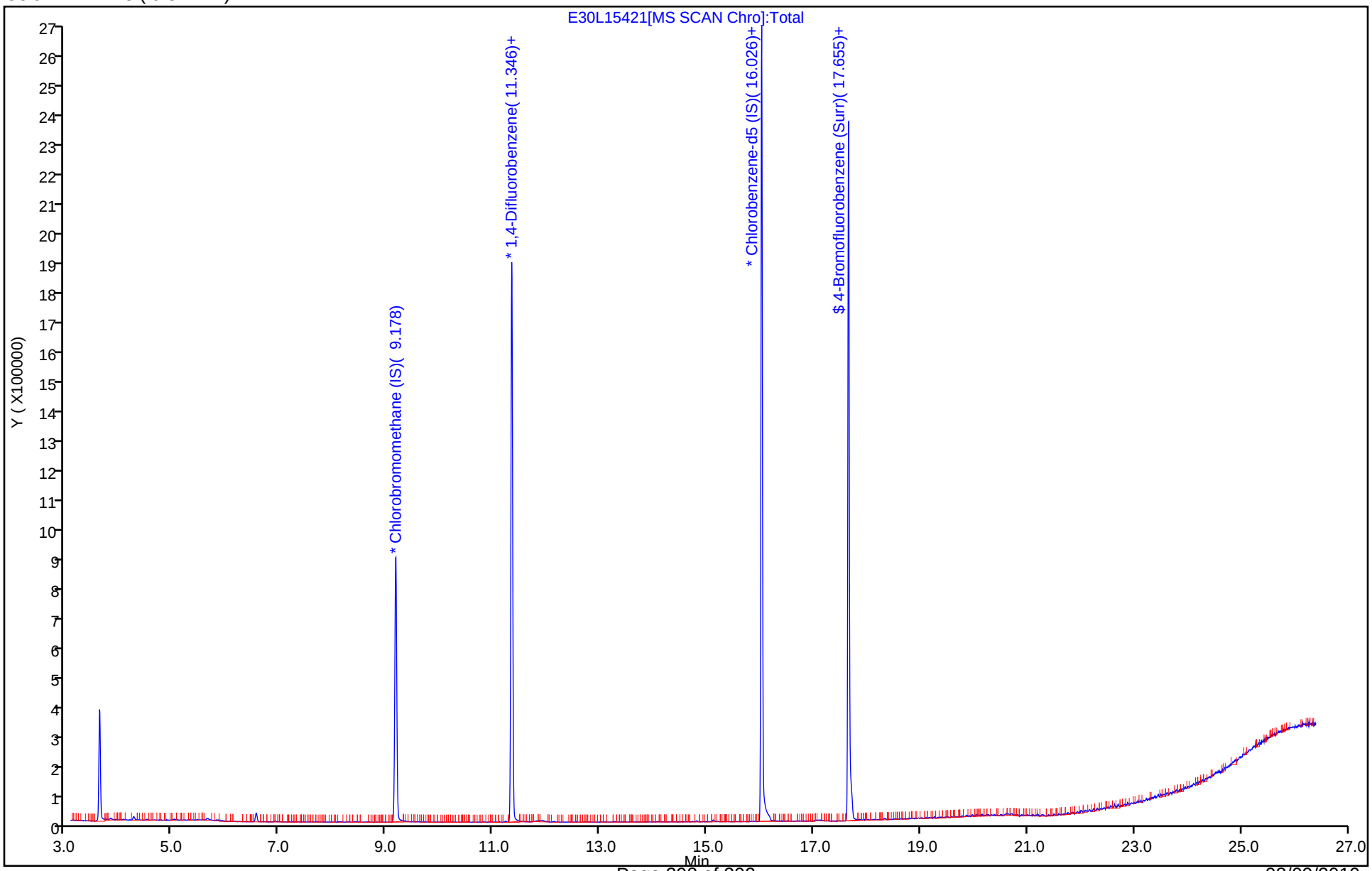
Report Date: 31-May-2019 13:52:38 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MG\20190528-11847.b\E30L15421.D

Injection Date:	31-May-2019 00:14:30	Instrument ID:	MG	Operator ID:	7126
Lims ID:	140-15421-A-1	Lab Sample ID:	140-15421-1	Worklist Smp#:	20
Client ID:	10116				
Purge Vol:	500.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL		

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Jamie Welch	**Samples Collected By:** Lauren Tierney, Tom Eberhard
Company Name: Wood E+IS	Phone: 207-828-3200	COC No: ____ of ____ COCs
Address: 511 Congress St Suite 200	Email: Jamie.Welch@Woodplc.com	
City/State/Zip: Portland ME 04101		For Lab Use Only:
Phone: 207-828-3200	Site Contact: Julie Riccardi	Walk-in Client:
FAX:	Tel/Fax 207-828-3608	Lab Sampling:
Project Name: Mohonk	**Analysis Turnaround Time**	
Site/Location: High Falls NY #356023	Standard (Specific): standard	Job / SDG No.:
P O # 3611191234.02	Rush (Specifiy):	(See below for Add'l Items)

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard/ Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
356023-SV-T1A	~~7/23/19~~ 7/24/19	0851	~~7/23/19~~ 7/24/19	0853	-28.8	-3	K581	A11978	X														11975
356023-SV-T1B	7/24/19	1737	7/24/19	1744	-28.7	-4	K561	10306	X														
356023-SV-21	7/26/19	1035	7/26/19	1038	-28.9	-4	K579	16402	X														
356023-SV-22	7/26/19	1154	7/26/19	1156	-28.9	-4	K580	11974	X														
356023-SV-23	7/26/19	1341	7/26/19	1343	-28.9	-4	K539	10116	X														
		KA 7/26/19																					

140-16177 Chain of Custody

Temperature (Fahrenheit)			
Start	Interior	Ambient	~~80~~ 75
Stop		80	~~75~~

Pressure (inches of Hg)		
Start	Interior	Ambient
Stop		

Received @ ambient, 1 box
FedEx Pak, Custody seal intact
Tr# 1034 8859 5742
KL 7/27/19

Special Instructions/QC Requirements & Comments:

Samples Shipped by: ~~Lauren Tierney Wood E+IS~~	Date / Time:	Samples Received by:
Samples Relinquished by: Lauren Tierney Wood E+IS	Date / Time: 7/26/19 1640	Received by: Karl Zadra 7/26/19 1640
Relinquished by: Karl Zadra	Date / Time: 7/26/19 1700	Received by: KL ETA 7/27/19 1000
Lab Use Only: Shipper Name:	Opened by:	Condition:

5 cans, 5 flow

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓		✓	☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	✓			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: ~~440019~~ 7-29-19 MD054449

PM Instructions: _____

Sample Receiving Associate: _____ Date: 7-29-19

QA026R32.doc, 062719

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08/09/2019

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 7/29/2019

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
AFB	140-16177-a-1	11975	15290	IND	6	-1.3	1730	
AFB	140-16177-a-2	10306	15350	IND	6	-2.7	1731	
AFB	140-16177-a-3	10402	15368	IND	6	-5.0	1732	
AFB	140-16177-a-4	11974	15312	IND	6	-5.2	1733	
AFB	140-16177-a-5	10116	15421	IND	6	-5.4	1734	

□ Receiving –Air Can –Calve Open (NCM #_____)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_____)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#_____)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#_____)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#_____)
□ Air - Can P Low -26 "- Grab Sample (NCM#_____)

APPENDIX B

TABLE 3.5 FROM RSO REPORT

Table 3.5: Summary of Water-Bearing Fractures

Bedrock Well	Water-Bearing Feature Depth	Fracture Strike (azimuth)	Fracture Dip & Direction	Packer Sample 1,1,1-TCA (µg/L)	Specific Capacity (S_c) (gpm/ft)	Estimated Transmissivity (T) (gpd/ft)
MW-7R	81.3	270	4N	35	0.50	1006.45
	93.7	27	11NW	130	0.21	420.44
	98.4	50	15NW			
	138.8	287	16NE	45	0.98	1960.00
	145.4	74	5NW			
	145.7	345	8SW			
	165.2	7	6NW	16	4.17	8333.33
	171.5	343	4SW			
ERT-1	74.4	48	7NW	170	0.01	28.74
	75.5	87	3NW			
	114.5	72	10NW	81	1.37	2747.66
	115.5	300	27NE			
	173.6	52	5NW	64	2.27	4545.45
	180.1	352	5SW			
	180.7	73	14NW			
MW-5R	92.9	275	13SW	94	15.62	31250.00
	114.6	23	3NW	37	4.27	8533.33
SVE-21	51.4	67	16NW	NS	NS	NS
	52.2	309	11NE	NS	NS	NS

NS = No Sample

Prepared By: DF 02/22/16
Checked By: HA 02/26/16

APPENDIX C

MANUAL WATER LEVEL MEASUREMENTS

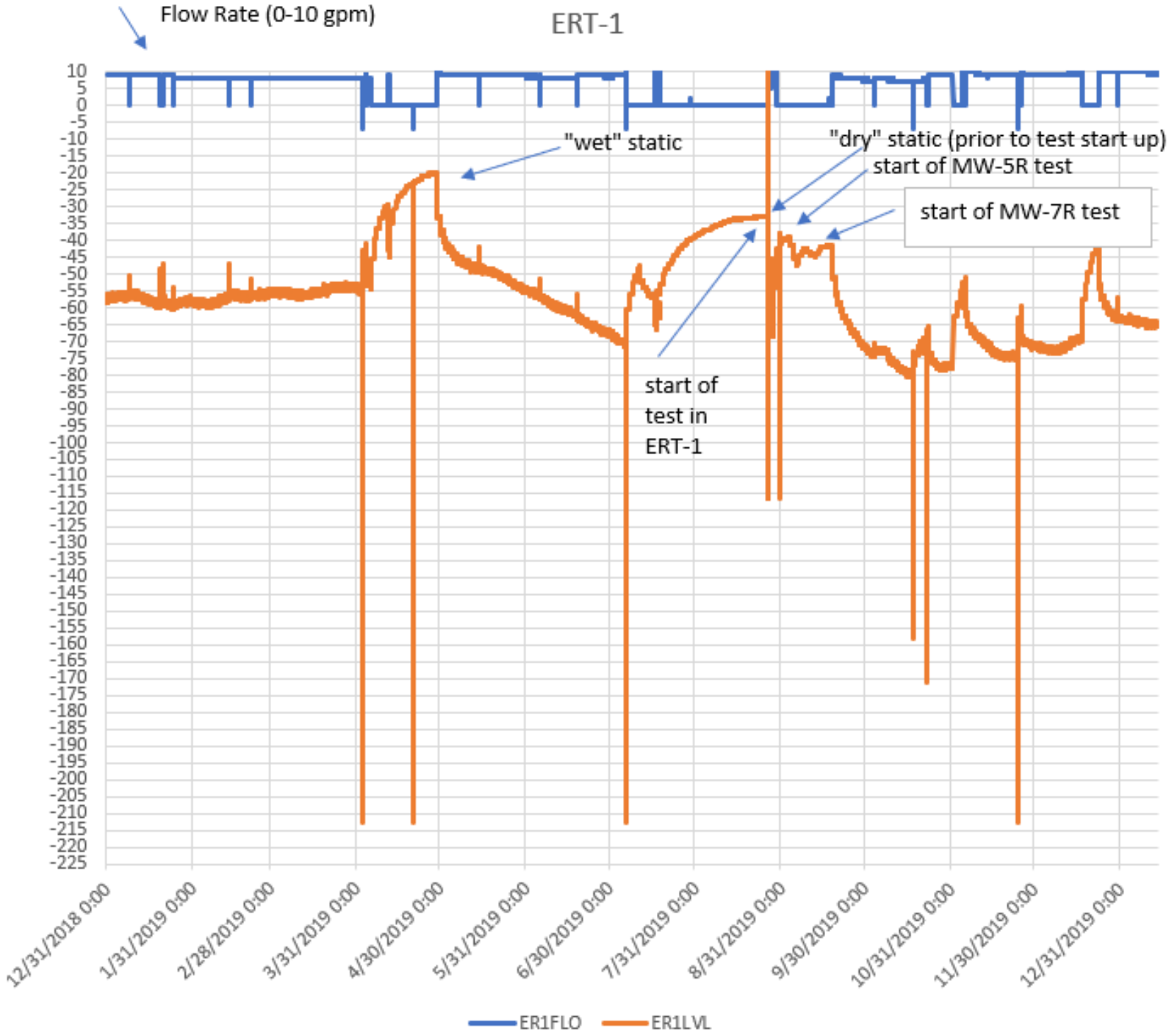
Table 3 - Groundwater Elevations July 8, 2019

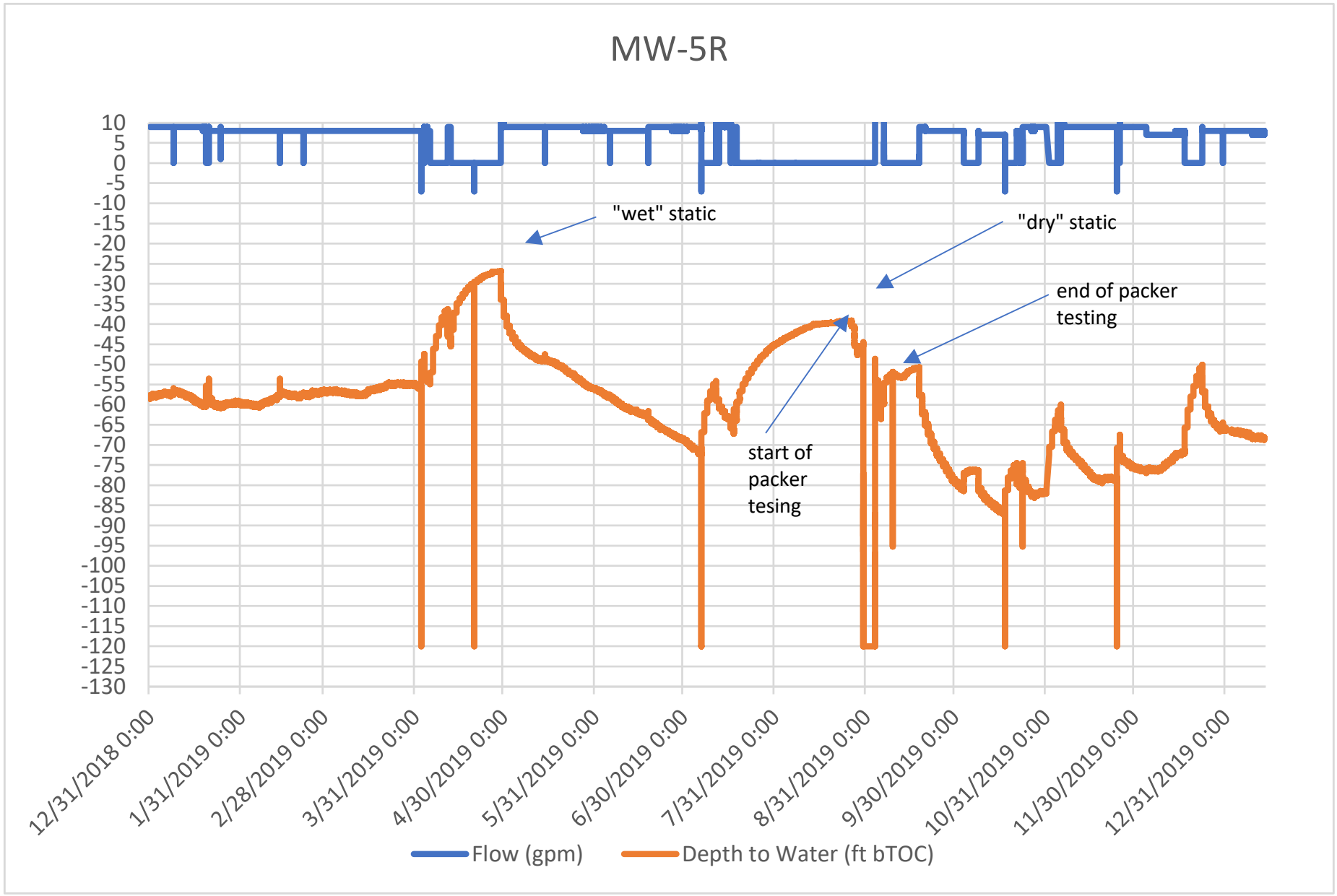
Monitoring Well	X Coordinate	Y Coordinate	Construction Information		Water Level Information															Comments
			Total Depth (ft BGS)	Top of Casing (ft AMSL)	Time	Depth to Water (7/8/19) system off since 7/6 (ft bTOC)	Static DTW (8/26/19)	DTW packer testing of ERT-1 @23.1 gpm	DTW packer testing of MW-7R @11.4 gpm	DTW packer testing of MW-5R @22.6 gpm	Water Elevation on 7/8/19 (ft TOC) system off since 7/6	Static GW Elevation	GW Elevation	delta s	GW Elevation	delta s	GW Elevation	delta s	Casing Stickup (ft AGS)	
SVE-19	UNK	UNK	55	1.4 ft AGS	1310	38.14					No Elevation Data								1.4	
SVE-20	UNK	UNK	55	1.2 ft AGS	1326	39.47					No Elevation Data								1.2	
SVE-21	UNK	UNK	55	1.35 ft AGS	1318	44.45					No Elevation Data								1.35	
SVE-22	UNK	UNK	55	1.15 ft AGS	1313	38.32					No Elevation Data								1.15	
SVE-23	UNK	UNK	55	1.25 ft AGS	1334	26.98					No Elevation Data								1.25	
ERT-1	571897.25	4629866	195	303.94	1432	56.49	35.6	68.32	44.55	46.73	247.5	268.3	235.6	-32.7	259.4	-8.9	257.2	-11.1	2.5	
ERT-2	571843.56	4629843	200	309.81	1422	62.09	41.08	55.21	50.43	50.92	247.7	268.7	254.6	-14.1	259.4	-9.4	258.9	-9.8	1	
ERT-3	571850.19	4629819	220	315.89	1428	68.34	47.21	59.71	56.66	57.2	247.6	268.7	256.2	-12.5	259.2	-9.4	258.7	-10.0	0.8	
ERT-4	571979.5	4629806.5	50	326.67	1322	30.96	33.36	33.5	34.95	34.26	295.7	293.3	293.2	-0.1	291.7	-1.6	292.4	-0.9	2.4	
MW-1B	571967.38	4629665	100	333.53	1510 7/11/2019	53.54					280.0								1.75	TOR to TOC = 0.09'
MW-4	571971.06	4629799	21.5	329.21	1309	9.36	16.02	16.02	17.67	17.02	319.9	313.2	313.2	0.0	311.5	-1.7	312.2	-1.0	2.3	
MW-5B	571981.81	4629825.5	36.2	325.3	1405	31.8	31.58	32.15	34.6	34.3	293.5	293.7	293.2	-0.6	290.7	-3.0	291.0	-2.7	2.5	TOR to TOC = 0.09'
MW-5R2	572003.06	4629852	125	313.63	1352	66.11	56.4	47.63	53.27	63.16	247.5	257.2	266.0	8.8	260.4	3.1	250.5	-6.8	1.25	
MW-6B	572042.38	4629780.5	100	323.95	1344	75.91	54.69	60.65	62.5	66.42	248.0	269.3	263.3	-6.0	261.5	-7.8	257.5	-11.7	2.35	TOR to TOC = 0.41'
MW-7B	571794.25	4629797	100	313.93	1452	65.79	44.83	54.8	79.25	53.32	248.1	269.1	259.1	-10.0	234.7	-34.4	260.6	-8.5	1.75	TOR to TOC = 0.29'
MW-7R2	571790.75	4629797	180	314.3	1450	66.95	57.41	56.17	90.43	54.71	247.4	256.9	258.1	1.2	223.9	-33.0	259.6	2.7	2.7	
MW-8B	572249.41	4630989.19	100	159.68	1045 7/9/2019	30.94					128.7								0	TOC to Top Of Flush Mount = 0.41'
MW-9B	572016.88	4630545	145	248.21	Can't Locate	NM					NM								NM	Can't Locate
MW-10B	572734.6	4630604	100	225.64	Can't Locate	NM					NM								NM	Can't Locate
MW-11B	572126.19	4630011	181	281.72	1504	34.71	17.98	23.7	24.3	25	247.0	263.7	258.0	-5.7	257.4	-6.3	256.7	-7.0	1.6	
MW-11C	572125	4630007	220	284.58	1509	36.68	19.36	24.85	25.9	27.2	247.9	265.2	259.7	-5.5	258.7	-6.5	257.4	-7.8	1.9	
MW-12B	572234.19	4630222.41	200	258.2	1537	12.58					245.6								0.1	
MW-13B3	571312.94	4630103	200	221.93	Can't Open	NM					NM								NM	Capped 1" pipe rusted shut.
MW-14B	572600.32	4630930.34	155	156.67	0930 7/9/2019	6.26					150.4								0	TOC to Top Of Flush Mount = est. 0.3'
MW-15B	571701.56	4630172.5	150	244.89	1843	6.98					237.9								2.2	
MW-16	572083.65	4630265.75	93	274.11	1547	30.89					243.2								2.5	TOR to TOC = 0.27'
MW-17-1	572545.72	4630421.63	57	241.92	1642	9.08					232.8								NM	
MW-17-2			110	241.92	1643	13.15					228.8								NM	
MW-17-3			129	241.92	1644	13.15					228.8								NM	
MW-18-13	571579.98	4630508.22	101	204.45	Artesian	NM					NM								NM	
MW-18-23			128	204.45	Artesian	NM					NM								NM	
MW-18-33			145	204.45	Artesian	NM					NM								NM	
MW-19-13	572596.93	4631100.5	49	129.88	Too tight for WL	NM					NM								NM	Skinny Dipper would not fit in WL port.
MW-19-23			95	129.88	Too tight for WL	NM					NM								NM	Skinny Dipper would not fit in WL port.
MW-19-33			195	129.88	Too tight for WL	NM					NM								NM	Skinny Dipper would not fit in WL port.
MW-20-1	571966.96	4631057.64	77	202.84	1730	58.29					144.6								NM	
MW-20-2			111.5	202.84	1730	55.46					147.4								NM	
MW-20-3			149	202.84	1733	74.92					127.9								NM	
MW-21-13	572596	4630042	48	233.59	Artesian	NM					NM								NM	
MW-21-23			69.5	233.59	Artesian	NM					NM								NM	
MW-21-33			78	233.59	Artesian	NM					NM								NM	
MW-21-43			124	233.59	Artesian	NM					NM								NM	
MW-21-53			145	233.59	Artesian	NM					NM								NM	
MW-21-63			163	233.59	Artesian	NM					NM								NM	

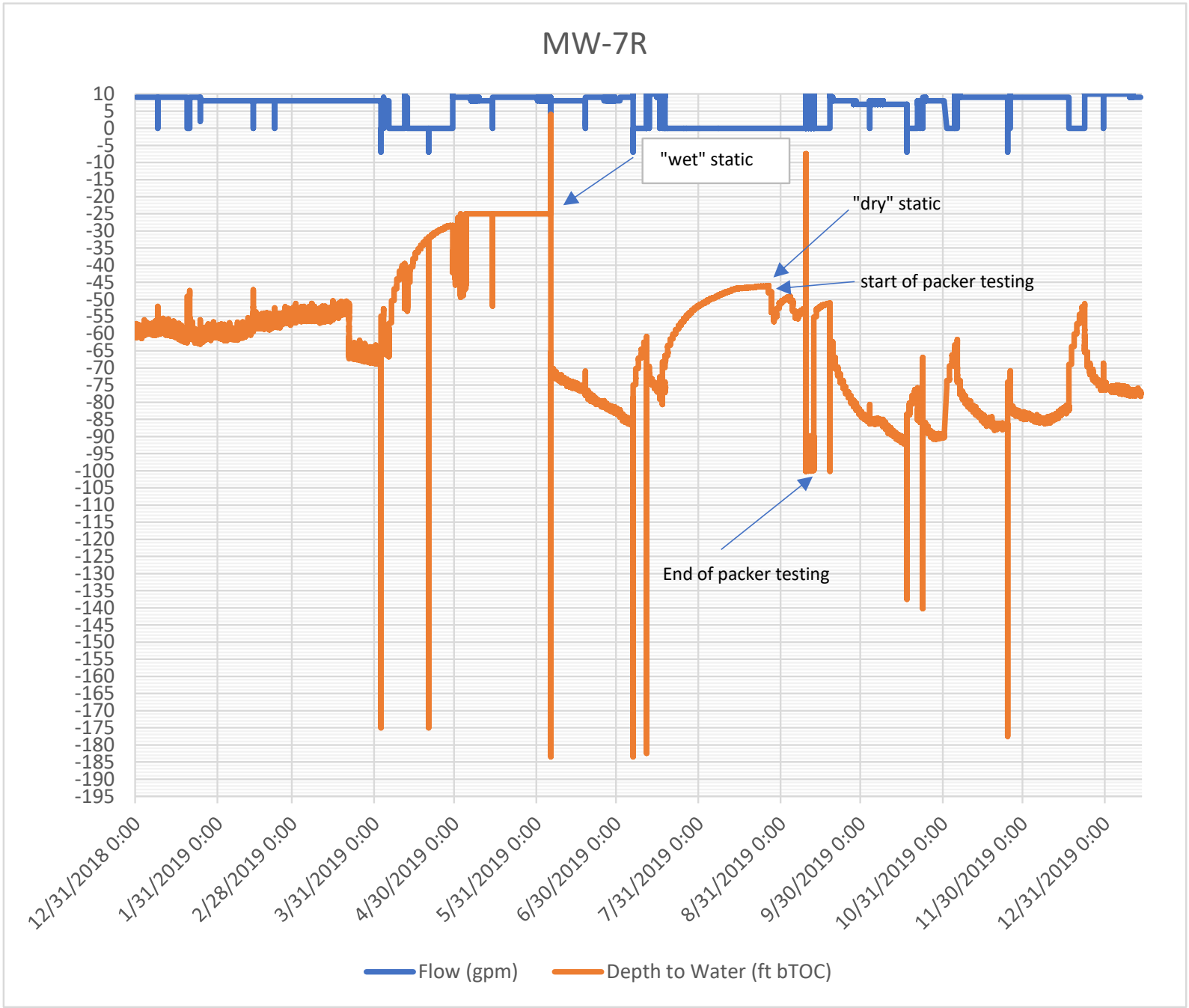
Notes:
BGS: below ground surface
AGS: above ground surface
AMSL: Above mean sea level
bTOC: Below top of casing
NM: Not Measured

APPENDIX D

12 MONTH FLOW AND WATER LEVEL DATA FOR RECOVERY WELLS


Flow Rate (0-10 gpm)
ERT-1
"wet" static
"dry" static (prior to test start up)
start of MW-5R test
start of MW-7R test
start of test in ERT-1
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
-105
-110
-115
-120
-125
-130
-135
-140
-145
-150
-155
-160
-165
-170
-175
-180
-185
-190
-195
-200
-205
-210
-215
-220
-225
12/31/2018 0:00
1/31/2019 0:00
2/28/2019 0:00
3/31/2019 0:00
4/30/2019 0:00
5/31/2019 0:00
6/30/2019 0:00
7/31/2019 0:00
8/31/2019 0:00
9/30/2019 0:00
10/31/2019 0:00
11/30/2019 0:00
12/31/2019 0:00
ER1FLO
ER1LVL


MW-5R
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
-105
-110
-115
-120
-125
-130
"wet" static
"dry" static
end of packer testing
start of packer tesing
12/31/2018 0:00
1/31/2019 0:00
2/28/2019 0:00
3/31/2019 0:00
4/30/2019 0:00
5/31/2019 0:00
6/30/2019 0:00
7/31/2019 0:00
8/31/2019 0:00
9/30/2019 0:00
10/31/2019 0:00
11/30/2019 0:00
12/31/2019 0:00
Flow (gpm)
Depth to Water (ft bTOC)


MW-7R
10
5
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
-105
-110
-115
-120
-125
-130
-135
-140
-145
-150
-155
-160
-165
-170
-175
-180
-185
-190
-195
"wet" static
"dry" static
start of packer testing
End of packer testing
12/31/2018 0:00
1/31/2019 0:00
2/28/2019 0:00
3/31/2019 0:00
4/30/2019 0:00
5/31/2019 0:00
6/30/2019 0:00
7/31/2019 0:00
8/31/2019 0:00
9/30/2019 0:00
10/31/2019 0:00
11/30/2019 0:00
12/31/2019 0:00
Flow (gpm)
Depth to Water (ft bTOC)

DATE/TIME	W7RFLO	ER1FLO	W5RFLO	TNKLVL	PREBAG	PSTBAG	DSCPRS
12/31/2018 6:40	9	9	9	39.6	4.2	3.9	24.5
12/31/2018 6:50	9	9	9	39.54	4.3	3.9	24.4
12/31/2018 7:00	9	9	9	39.6	4.2	3.9	24.5
12/31/2018 7:10	9	9	9	39.66	4.5	3.9	24.5
12/31/2018 7:20	9	9	9	39.63	4.4	4.1	3.9
12/31/2018 7:30	9	9	9	39.63	4.4	4	3.9
12/31/2018 7:40	9	9	9	39.66	4.5	4	3.6
12/31/2018 7:50	9	9	9	39.66	4.6	3.9	2.7
12/31/2018 8:00	9	9	9	39.63	4.6	4	23.5
12/31/2018 8:10	9	9	9	39.69	4.1	3.9	24.1
12/31/2018 8:20	9	9	9	39.63	4.3	4	24
12/31/2018 8:30	9	9	9	39.66	4.4	3.9	24.1
12/31/2018 8:40	9	9	9	39.69	4.5	4	24.2
12/31/2018 8:50	9	9	9	39.63	4.4	3.9	24.3
12/31/2018 9:00	9	9	9	39.63	4.4	4	24.3
12/31/2018 9:10	9	9	9	39.57	4.3	4	24.4
12/31/2018 9:20	9	9	9	39.57	4.3	3.9	24.4
12/31/2018 9:30	9	9	9	39.6	4.2	4	24.5
12/31/2018 9:40	9	9	9	39.63	4.2	3.9	24.5
12/31/2018 9:50	9	9	9	39.57	4.5	3.9	3.3
12/31/2018 10:00	9	9	9	39.57	4.7	3.9	3.7
12/31/2018 10:10	9	9	9	39.6	4.7	4	1
12/31/2018 10:20	9	9	9	39.57	4.5	3.9	23.9
12/31/2018 10:30	9	9	9	39.6	4.3	4	24
12/31/2018 10:40	9	9	9	39.57	4.5	4.1	24.1
12/31/2018 10:50	9	9	9	39.54	4.4	3.9	24.2
12/31/2018 11:00	9	9	9	39.51	4.3	4	24.4
12/31/2018 11:10	9	9	9	39.57	4.4	3.9	24.3
12/31/2018 11:20	9	9	9	39.6	4.5	3.9	24.4
12/31/2018 11:30	9	9	9	39.57	4.3	3.9	24.5
12/31/2018 11:40	9	9	9	39.57	4.2	4	24.4
12/31/2018 11:50	9	9	9	39.54	4.5	4	4.3
12/31/2018 12:00	9	9	9	39.57	4.1	3.9	3.7
12/31/2018 12:10	9	9	9	39.6	4.4	3.9	3.4
12/31/2018 12:20	9	9	9	39.54	4.5	4	2
12/31/2018 12:30	9	9	9	39.57	4.5	3.9	22.8
12/31/2018 12:40	9	9	9	39.57	4.3	3.9	23.9
12/31/2018 12:50	9	9	9	39.6	4.5	4	23.9
12/31/2018 13:00	9	9	9	39.54	4.4	3.9	24
12/31/2018 13:10	9	9	9	39.57	4.4	4	24.1
12/31/2018 13:20	9	9	9	39.57	4.4	4	24.2
12/31/2018 13:30	9	9	9	39.57	4.5	3.9	24.2
12/31/2018 13:40	9	9	9	39.6	4.3	3.9	24.3
12/31/2018 13:50	9	9	9	39.57	4.5	4	24.4
12/31/2018 14:00	9	9	9	39.6	4.4	4.1	24.3
12/31/2018 14:10	9	9	9	39.6	4.3	3.9	24.4

12/31/2018 14:20	9	9	9	39.57	4.3	3.9	24.5
12/31/2018 14:30	9	9	9	39.63	4.2	3.9	24.5
12/31/2018 14:40	9	9	9	39.57	4.4	3.9	3.2
12/31/2018 14:50	9	9	9	39.6	4.5	4	3.5
12/31/2018 15:00	9	9	9	39.51	4.5	4	3.7
12/31/2018 15:10	9	9	9	39.6	4.4	4	1.4
12/31/2018 15:20	9	9	9	39.54	4.6	4	21.4
12/31/2018 15:30	9	9	9	39.51	4.5	3.9	23.9
12/31/2018 15:40	9	9	9	39.63	4.5	4	24
12/31/2018 15:50	9	9	9	39.6	4.3	4	24.1
12/31/2018 16:00	9	9	9	39.54	4.4	3.9	24.2
12/31/2018 16:10	9	9	9	39.54	4.3	3.9	24.3
12/31/2018 16:20	9	9	9	39.66	4.5	4	24.4
12/31/2018 16:30	9	9	9	39.63	4.3	4.1	24.4
12/31/2018 16:40	9	9	9	39.69	4.4	4	24.4
12/31/2018 16:50	9	9	9	39.72	4.3	4	24.5
12/31/2018 17:00	9	9	9	39.63	4	3.8	24.5
12/31/2018 17:10	9	9	9	39.6	4.5	3.9	24.4
12/31/2018 17:20	9	9	9	39.66	4.2	4	3.2
12/31/2018 17:30	9	9	9	39.66	4.4	4	3.4
12/31/2018 17:40	9	9	9	39.72	4.6	3.9	1
12/31/2018 17:50	9	9	9	39.72	4.4	4	23.9
12/31/2018 18:00	9	9	9	39.69	4.4	4	23.8
12/31/2018 18:10	9	9	9	39.69	4.4	3.9	23.9
12/31/2018 18:20	9	9	9	39.72	4.3	4	24
12/31/2018 18:30	9	9	9	39.69	4.3	4	24.1
12/31/2018 18:40	9	9	9	39.69	4.6	3.9	24.2
12/31/2018 18:50	9	9	9	39.72	4.5	4	24.2
12/31/2018 19:00	9	9	9	39.69	4.4	3.9	24.3
12/31/2018 19:10	9	9	9	39.66	4.5	4	24.4
12/31/2018 19:20	9	9	9	39.69	4.5	3.9	24.3
12/31/2018 19:30	9	9	9	39.63	4.5	3.9	24.4
12/31/2018 19:40	9	9	9	39.69	4.3	4	24.5
12/31/2018 19:50	9	9	9	39.69	4.2	4	24.5
12/31/2018 20:00	9	9	9	39.79	4.3	3.9	3.6
12/31/2018 20:10	9	9	9	39.69	4.5	3.9	3
12/31/2018 20:20	9	9	9	39.79	4.2	3.8	1.2
12/31/2018 20:30	9	9	9	39.69	4.3	3.9	24
12/31/2018 20:40	9	9	9	39.72	4.7	4.1	23.9
12/31/2018 20:50	9	9	9	39.79	4.2	3.9	24.1
12/31/2018 21:00	9	9	9	39.82	4.4	3.9	24
12/31/2018 21:10	9	9	9	39.85	4.3	4	24.1
12/31/2018 21:20	9	9	9	39.88	4.3	4	24.1
12/31/2018 21:30	9	9	9	39.69	4.3	4	24.2
12/31/2018 21:40	9	9	9	39.79	4.2	3.9	24.2
12/31/2018 21:50	9	9	9	39.79	4.3	3.9	24.2
12/31/2018 22:00	9	9	9	39.85	4.5	4.1	24.3

12/31/2018 22:10	9	9	9	39.88	4.5	3.9	24.4
12/31/2018 22:20	9	9	9	39.82	4.3	3.9	24.4
12/31/2018 22:30	9	9	9	39.88	4.2	3.9	24.4
12/31/2018 22:40	9	9	9	39.91	4.4	3.9	24.4
12/31/2018 22:50	9	9	9	39.82	4.1	4.1	24.5
12/31/2018 23:00	9	9	9	39.94	4.4	4.1	3.6
12/31/2018 23:10	9	9	9	39.94	4.4	3.9	3.6
12/31/2018 23:20	9	9	9	39.94	4.3	3.9	3.4
12/31/2018 23:30	9	9	9	40.06	4.3	3.9	3.6
12/31/2018 23:40	9	9	9	39.97	4.5	4	1
12/31/2018 23:50	9	9	9	40.03	4.4	4	17.1
1/1/2019 0:00	9	9	9	39.97	4.4	4.1	23.6
1/1/2019 0:10	9	9	9	40.03	4.2	4	23.8
1/1/2019 0:20	9	9	9	40	4.1	4.1	23.9
1/1/2019 0:30	9	9	9	40.03	4.5	3.9	23.8
1/1/2019 0:40	9	9	9	40.06	4.5	3.9	23.8
1/1/2019 0:50	9	9	9	40.03	4.4	3.9	22.7
1/1/2019 1:00	9	9	9	40	4.4	3.9	24
1/1/2019 1:10	9	9	9	40.09	4.3	4	24.1
1/1/2019 1:20	9	9	9	40	4.6	3.9	23.8
1/1/2019 1:30	9	9	9	40.03	4.4	4	23.9
1/1/2019 1:40	9	9	9	40.12	4.2	4	24.1
1/1/2019 1:50	9	9	9	40.12	4.5	4	23.8
1/1/2019 2:00	9	9	9	40.06	4.4	4.1	24
1/1/2019 2:10	9	9	9	40.06	4.2	3.9	23.9
1/1/2019 2:20	9	9	9	40.09	4.2	4	24
1/1/2019 2:30	9	9	9	40.03	4.3	4.1	23.9
1/1/2019 2:40	9	9	9	40.06	4.3	3.9	23.9
1/1/2019 2:50	9	9	9	40	4.5	3.9	24
1/1/2019 3:00	9	9	9	40.06	4.3	3.9	24.2
1/1/2019 3:10	9	9	9	40.06	4	3.9	24.2
1/1/2019 3:20	9	9	9	40.06	4.6	4	24.2
1/1/2019 3:30	9	9	9	40.03	4.3	3.9	24.1
1/1/2019 3:40	9	9	9	40.06	4.5	3.9	24.2
1/1/2019 3:50	9	9	9	40.09	4.2	4	24.2
1/1/2019 4:00	9	9	9	40.06	4.5	4	24.1
1/1/2019 4:10	9	9	9	40.06	4.3	3.8	24.2
1/1/2019 4:20	9	9	9	40.09	4.5	3.9	24.2
1/1/2019 4:30	9	9	9	40.06	4.3	3.9	24.2
1/1/2019 4:40	9	9	9	40.09	4.3	4	24.2
1/1/2019 4:50	9	9	9	40.06	4.3	3.9	24.3
1/1/2019 5:00	9	9	9	40	4.4	4	24.3
1/1/2019 5:10	9	9	9	40.15	4.1	4	24.3
1/1/2019 5:20	9	9	9	40.12	4.3	4	24.3
1/1/2019 5:30	9	9	9	40.12	4.4	4	24.3
1/1/2019 5:40	9	9	9	40.15	4.1	4	24.3
1/1/2019 5:50	9	9	9	40.15	4.2	4	24.5

1/1/2019 6:00	9	9	9	40.09	4.4	4	24.3
1/1/2019 6:10	9	9	9	40.21	4.2	3.9	24.4
1/1/2019 6:20	9	9	9	40.21	4.6	3.9	24.4
1/1/2019 6:30	9	9	9	40.27	4.4	4	24.4
1/1/2019 6:40	9	9	9	40.27	4.5	4	24.4
1/1/2019 6:50	9	9	9	40.27	4.1	3.9	24.4
1/1/2019 7:00	9	9	9	40.21	4.4	4	24.5
1/1/2019 7:10	9	9	9	40.18	4.4	4	24.4
1/1/2019 7:20	9	9	9	40.18	4.2	4	24.4
1/1/2019 7:30	9	9	9	40.21	4.3	4	24.4
1/1/2019 7:40	9	9	9	40.21	4.4	4	24.4
1/1/2019 7:50	9	9	9	40.21	4.3	4	24.4
1/1/2019 8:00	9	9	9	40.27	4.3	3.9	24.4
1/1/2019 8:10	9	9	9	40.18	4.4	3.9	24.4
1/1/2019 8:20	9	9	9	40.24	4.3	3.9	24.5
1/1/2019 8:30	9	9	9	40.15	4.3	3.9	24.4
1/1/2019 8:40	9	9	9	40.18	4.3	4	24.4
1/1/2019 8:50	9	9	9	40.27	4.5	4.1	24.4
1/1/2019 9:00	9	9	9	40.24	4.4	4	24.4
1/1/2019 9:10	9	9	9	40.27	4.2	3.9	24.5
1/1/2019 9:20	9	9	9	40.21	4.6	3.9	24.4
1/1/2019 9:30	9	9	9	40.21	4.2	3.9	24.4
1/1/2019 9:40	9	9	9	40.3	4.4	4	24.5
1/1/2019 9:50	9	9	9	40.27	4.4	4	24.5
1/1/2019 10:00	9	9	9	40.24	4.2	3.8	24.4
1/1/2019 10:10	9	9	9	40.15	4.4	4	24.5
1/1/2019 10:20	9	9	9	40.3	4.8	4	24.5
1/1/2019 10:30	9	9	9	40.24	4.3	4	24.5
1/1/2019 10:40	9	9	9	40.3	4.3	4.1	24.4
1/1/2019 10:50	9	9	9	40.37	4.3	4.1	24.5
1/1/2019 11:00	9	9	9	40.3	4.4	3.9	24.5
1/1/2019 11:10	9	9	9	40.37	4.2	4	24.5
1/1/2019 11:20	9	9	9	40.3	4.3	4	24.4
1/1/2019 11:30	9	9	9	40.27	4.3	4.1	24.5
1/1/2019 11:40	9	9	9	40.27	4.3	4.1	24.4
1/1/2019 11:50	9	9	9	40.3	4.5	3.9	24.5
1/1/2019 12:00	9	9	9	40.37	4.3	3.9	24.4
1/1/2019 12:10	9	9	9	40.3	4.3	3.9	24.5
1/1/2019 12:20	9	9	9	40.33	4.2	4	24.4
1/1/2019 12:30	9	9	9	40.3	4.5	4	24.4
1/1/2019 12:40	9	9	9	40.33	4.4	4	24.5
1/1/2019 12:50	9	9	9	40.27	4.4	3.9	24.4
1/1/2019 13:00	9	9	9	40.33	4.2	4	24.5
1/1/2019 13:10	9	9	9	40.24	4.4	4	24.5
1/1/2019 13:20	9	9	9	40.3	4.5	4	24.4
1/1/2019 13:30	9	9	9	40.3	4.3	4	24.5
1/1/2019 13:40	9	9	9	40.33	4.5	4.1	24.4

1/1/2019 13:50	9	9	9	40.3	4.3	4	24.5
1/1/2019 14:00	9	9	9	40.37	4.4	4	24.4
1/1/2019 14:10	9	9	9	40.33	4.5	4	24.4
1/1/2019 14:20	9	9	9	40.33	4.3	3.9	24.5
1/1/2019 14:30	9	9	9	40.24	4.4	3.9	24.5
1/1/2019 14:40	9	9	9	40.27	4.4	3.8	24.5
1/1/2019 14:50	9	9	9	40.33	4.3	3.9	24.3
1/1/2019 15:00	9	9	9	40.43	4.2	4	24.4
1/1/2019 15:10	9	9	9	40.33	4.5	3.9	24.5
1/1/2019 15:20	9	9	9	40.33	4.6	4.1	24.3
1/1/2019 15:30	9	9	9	40.37	4.4	4	24.4
1/1/2019 15:40	9	9	9	40.37	4.4	4.1	24.4
1/1/2019 15:50	9	9	9	40.3	4.4	4	24.5
1/1/2019 16:00	9	9	9	40.27	4.4	4.1	24.3
1/1/2019 16:10	9	9	9	40.3	4.3	4	24.4
1/1/2019 16:20	9	9	9	40.33	4.2	3.9	24.4
1/1/2019 16:30	9	9	9	40.24	4.4	3.9	24.5
1/1/2019 16:40	9	9	9	40.3	4.6	4	24.4
1/1/2019 16:50	9	9	9	40.3	4.5	4	24.5
1/1/2019 17:00	9	9	9	40.3	4.3	4	24.4
1/1/2019 17:10	9	9	9	40.21	4.3	4	24.4
1/1/2019 17:20	9	9	9	40.18	4.5	3.9	24.4
1/1/2019 17:30	9	9	9	40.21	4.4	3.9	24.5
1/1/2019 17:40	9	9	9	40.18	4.4	4	24.4
1/1/2019 17:50	9	9	9	40.21	4.2	4	24.5
1/1/2019 18:00	9	9	9	40.18	4.6	3.9	24.5
1/1/2019 18:10	9	9	9	40.12	4.5	4	24.5
1/1/2019 18:20	9	9	9	40.15	4.4	4	24.5
1/1/2019 18:30	9	9	9	40.18	4.4	3.9	24.5
1/1/2019 18:40	9	9	9	40.09	4.4	3.9	24.5
1/1/2019 18:50	9	9	9	40.18	4.3	4	24.5
1/1/2019 19:00	9	9	9	40.12	4.2	4.1	24.5
1/1/2019 19:10	9	9	9	40.12	4.4	3.9	24.4
1/1/2019 19:20	9	9	9	40.12	4.3	3.9	24.5
1/1/2019 19:30	9	9	9	40.21	4.2	3.9	24.5
1/1/2019 19:40	9	9	9	40.06	4.3	4.1	24.5
1/1/2019 19:50	9	9	9	40.12	4.3	4.1	24.4
1/1/2019 20:00	9	9	9	40.09	4.5	3.9	24.4
1/1/2019 20:10	9	9	9	40.18	4.7	3.9	24.4
1/1/2019 20:20	9	9	9	40.09	4.4	4	24.5
1/1/2019 20:30	9	9	9	40.12	4.4	3.9	24.5
1/1/2019 20:40	9	9	9	40.15	4.1	4	24.5
1/1/2019 20:50	9	9	9	40.21	4.6	4	24.5
1/1/2019 21:00	9	9	9	40.18	4.3	4	24.6
1/1/2019 21:10	9	9	9	40.24	4.4	4	24.5
1/1/2019 21:20	9	9	9	40.24	4.5	4	24.5
1/1/2019 21:30	9	9	9	40.18	4.5	4	24.5

1/1/2019 21:40	9	9	9	40.21	4.3	3.9	24.5
1/1/2019 21:50	9	9	9	40.24	4.1	3.9	24.4
1/1/2019 22:00	9	9	9	40.18	4.5	3.9	24.5
1/1/2019 22:10	9	9	9	40.15	4.2	3.9	24.5
1/1/2019 22:20	9	9	9	40.15	4.5	3.9	24.5
1/1/2019 22:30	9	9	9	40.18	4.3	4	24.5
1/1/2019 22:40	9	9	9	40.18	4.2	4	24.4
1/1/2019 22:50	9	9	9	40.15	4.8	4	24.5
1/1/2019 23:00	9	9	9	40.18	4.4	4.1	24.5
1/1/2019 23:10	9	9	9	40.18	4.4	4.2	24.5
1/1/2019 23:20	9	9	9	40.21	4.3	4	24.4
1/1/2019 23:30	9	9	9	40.21	4.5	4	24.4
1/1/2019 23:40	9	9	9	40.12	4.5	4	24.5
1/1/2019 23:50	9	9	9	40.18	4.4	4	24.4
1/2/2019 0:00	9	9	9	40.12	4.5	3.9	24.5
1/2/2019 0:10	9	9	9	40.15	4.2	4	24.4
1/2/2019 0:20	9	9	9	40.15	4.3	4	24.5
1/2/2019 0:30	9	9	9	40.12	4.3	4	24.5
1/2/2019 0:40	9	9	9	40.15	4.4	3.9	24.5
1/2/2019 0:50	9	9	9	40.12	4.5	4.2	24.5
1/2/2019 1:00	9	9	9	40.12	4.3	4	24.5
1/2/2019 1:10	9	9	9	40.06	4.3	4	3.2
1/2/2019 1:20	9	9	9	40.18	4.3	4	3.3
1/2/2019 1:30	9	9	9	40.12	4.3	4	3.3
1/2/2019 1:40	9	9	9	40.12	4.4	4	3.2
1/2/2019 1:50	9	9	9	40.12	4.6	4	3.3
1/2/2019 2:00	9	9	9	40.09	4.3	4	3.3
1/2/2019 2:10	9	9	9	40.15	4.6	4	3.3
1/2/2019 2:20	9	9	9	40.12	4.4	3.9	3.3
1/2/2019 2:30	9	9	9	40.09	4.3	4	3.3
1/2/2019 2:40	9	9	9	40.15	4.3	4	3.4
1/2/2019 2:50	9	9	9	40.18	4.3	3.9	2.7
1/2/2019 3:00	9	9	9	40.15	4.1	4.1	1.6
1/2/2019 3:10	9	9	9	40.12	4.1	4	11.7
1/2/2019 3:20	9	9	9	40.12	4.3	4	12
1/2/2019 3:30	9	9	9	40.12	4.3	4	21.2
1/2/2019 3:40	9	9	9	40.15	4.3	4	6.9
1/2/2019 3:50	9	9	9	40.09	4.5	4	1.8
1/2/2019 4:00	9	9	9	40	4.6	4	23.5
1/2/2019 4:10	9	9	9	40.06	4.1	4	23.9
1/2/2019 4:20	9	9	9	40.12	4.6	3.9	23.8
1/2/2019 4:30	9	9	9	40.12	4.4	3.9	24
1/2/2019 4:40	9	9	9	40.12	4.3	3.9	24
1/2/2019 4:50	9	9	9	40.06	4.4	3.9	24.1
1/2/2019 5:00	9	9	9	40.15	4.3	3.9	24.1
1/2/2019 5:10	9	9	9	40.12	4.2	4	24
1/2/2019 5:20	9	9	9	40.12	4.3	4	24.1

1/2/2019 5:30	9	9	9	40.06	4.4	4	24
1/2/2019 5:40	9	9	9	40.09	4.4	4	24.1
1/2/2019 5:50	9	9	9	40.12	4.2	3.9	24.1
1/2/2019 6:00	9	9	9	40.06	4.1	4.1	24.1
1/2/2019 6:10	9	9	9	40.06	4.5	3.9	24.1
1/2/2019 6:20	9	9	9	40.18	4.2	3.9	24.1
1/2/2019 6:30	9	9	9	40.15	4.4	4	24.1
1/2/2019 6:40	9	9	9	40.09	4.4	4	24.1
1/2/2019 6:50	9	9	9	40.09	4.5	3.9	24.2
1/2/2019 7:00	9	9	9	40.15	4.5	4	24.1
1/2/2019 7:10	9	9	9	40.18	4.2	4	24.3
1/2/2019 7:20	9	9	9	40.21	4.7	4	24.2
1/2/2019 7:30	9	9	9	40.15	4.5	3.9	24.3
1/2/2019 7:40	9	9	9	40.18	4.3	4	24.2
1/2/2019 7:50	9	9	9	40.21	4.4	4	24.1
1/2/2019 8:00	9	9	9	40.12	4.3	4.1	24.1
1/2/2019 8:10	9	9	9	40.15	4.3	3.9	24.1
1/2/2019 8:20	9	9	9	40.18	4.6	4	24.2
1/2/2019 8:30	9	9	9	40.18	4.3	4	24.2
1/2/2019 8:40	9	9	9	40.15	4.6	4	24.1
1/2/2019 8:50	9	9	9	40.06	4.3	3.9	24.1
1/2/2019 9:00	9	9	9	40.12	4.4	3.9	24.1
1/2/2019 9:10	9	9	9	40.12	4.3	4	24.1
1/2/2019 9:20	9	9	9	40.12	4.2	4	24.1
1/2/2019 9:30	9	9	9	40.12	4.5	4.1	24.1
1/2/2019 9:40	9	9	9	40.12	4.4	3.9	24.1
1/2/2019 9:50	9	9	9	40.15	4.4	4	24.2
1/2/2019 10:00	9	9	9	40.15	4.5	3.9	24.2
1/2/2019 10:10	9	9	9	40.18	4.2	4	24.3
1/2/2019 10:20	9	9	9	40.12	4.2	4.1	24.2
1/2/2019 10:30	9	9	9	40.12	4.4	3.9	24.2
1/2/2019 10:40	9	9	9	40.12	4.3	4.1	24.2
1/2/2019 10:50	9	9	9	40.18	4.3	4	24.2
1/2/2019 11:00	9	9	9	40.06	4.7	3.9	24.1
1/2/2019 11:10	9	9	9	40.15	4.5	4	24.2
1/2/2019 11:20	9	9	9	40.12	4.5	3.9	24.1
1/2/2019 11:30	9	9	9	40.3	4.5	4.1	24.1
1/2/2019 11:40	9	9	9	40.21	4.1	4	24.1
1/2/2019 11:50	9	9	9	40.18	4.4	4	24.1
1/2/2019 12:00	9	9	9	40.18	4.5	3.9	24.2
1/2/2019 12:10	9	9	9	40.24	4.3	4.1	24.2
1/2/2019 12:20	9	9	9	40.21	4.4	3.8	24.3
1/2/2019 12:30	9	9	9	40.21	4.1	3.9	24.2
1/2/2019 12:40	9	9	9	40.18	4.5	4	24.1
1/2/2019 12:50	9	9	9	40.21	4.4	3.9	24.1
1/2/2019 13:00	9	9	9	40.24	4.5	3.9	24.2
1/2/2019 13:10	9	9	9	40.24	4.6	4.1	24.1

1/2/2019 13:20	9	9	9	40.21	4.2	4	24.2
1/2/2019 13:30	9	9	9	40.21	4.5	3.9	24.2
1/2/2019 13:40	9	9	9	40.18	4.3	3.9	24.1
1/2/2019 13:50	9	9	9	40.18	4.4	4.1	24.1
1/2/2019 14:00	9	9	9	40.15	4.3	4	24.1
1/2/2019 14:10	9	9	9	40.18	4.4	3.9	24.1
1/2/2019 14:20	9	9	9	40.24	4.2	4.1	24.2
1/2/2019 14:30	9	9	9	40.15	4.3	3.9	24.1
1/2/2019 14:40	9	9	9	40.18	4.3	4	24.2
1/2/2019 14:50	9	9	9	40.15	4.4	3.9	24.2
1/2/2019 15:00	9	9	9	40.18	4.4	3.9	24.3
1/2/2019 15:10	9	9	9	40.15	4.4	3.9	24.3
1/2/2019 15:20	9	9	9	40.15	4.6	4	24.3
1/2/2019 15:30	9	9	9	40.15	4.4	3.8	24.2
1/2/2019 15:40	9	9	9	40.18	4.1	4	24.3
1/2/2019 15:50	9	9	9	40.12	4.7	4	24.3
1/2/2019 16:00	9	9	9	40.27	4.2	3.9	24.2
1/2/2019 16:10	9	9	9	40.15	4.7	4	24.2
1/2/2019 16:20	9	9	9	40.21	4.3	4	24.1
1/2/2019 16:30	9	9	9	40.12	4.4	4	24.2
1/2/2019 16:40	9	9	9	40.27	4.3	4	24.2
1/2/2019 16:50	9	9	9	40.24	4.3	4	24.1
1/2/2019 17:00	9	9	9	40.18	4.8	4	24.1
1/2/2019 17:10	9	9	9	40.3	4.4	4	24.2
1/2/2019 17:20	9	9	9	40.18	4.3	3.9	24.1
1/2/2019 17:30	9	9	9	40.24	4.4	4	24.2
1/2/2019 17:40	9	9	9	40.27	4.8	3.9	24.2
1/2/2019 17:50	9	9	9	40.3	4.6	4.1	24.1
1/2/2019 18:00	9	9	9	40.27	4.5	3.9	24.1
1/2/2019 18:10	9	9	9	40.27	4.4	4	24.1
1/2/2019 18:20	9	9	9	40.3	4.2	3.9	24.1
1/2/2019 18:30	9	9	9	40.3	4.3	4	24.1
1/2/2019 18:40	9	9	9	40.33	4.5	3.9	24.1
1/2/2019 18:50	9	9	9	40.33	4.5	4	24
1/2/2019 19:00	9	9	9	40.37	4.3	4	24.1
1/2/2019 19:10	9	9	9	40.37	4.4	4	24.1
1/2/2019 19:20	9	9	9	40.43	4.3	4	24.2
1/2/2019 19:30	9	9	9	40.37	4.5	4	24.1
1/2/2019 19:40	9	9	9	40.49	4.2	3.9	24.1
1/2/2019 19:50	9	9	9	40.3	4.3	4	24.1
1/2/2019 20:00	9	9	9	40.37	4.5	3.8	24.1
1/2/2019 20:10	9	9	9	40.37	4.4	3.9	24.2
1/2/2019 20:20	9	9	9	40.21	4.4	4	24.2
1/2/2019 20:30	9	9	9	40.3	4.3	3.9	24.2
1/2/2019 20:40	9	9	9	40.43	4.8	4	24.2
1/2/2019 20:50	9	9	9	40.37	4.4	4	24.2
1/2/2019 21:00	9	9	9	40.46	4.3	3.9	24.1

1/2/2019 21:10	9	9	9	40.43	4.6	4	24.2
1/2/2019 21:20	9	9	9	40.49	4.6	3.9	24.1
1/2/2019 21:30	9	9	9	40.46	4.8	4	24.1
1/2/2019 21:40	9	9	9	40.46	4.4	4	24.2
1/2/2019 21:50	9	9	9	40.46	4.3	3.9	24.2
1/2/2019 22:00	9	9	9	40.49	4.3	3.9	24.1
1/2/2019 22:10	9	9	9	40.43	4.7	4	24.1
1/2/2019 22:20	9	9	9	40.49	4.6	3.9	24.2
1/2/2019 22:30	9	9	9	40.46	4.5	4.1	24.1
1/2/2019 22:40	9	9	9	40.46	4.4	3.9	24.1
1/2/2019 22:50	9	9	9	40.46	4.3	4	24.1
1/2/2019 23:00	9	9	9	40.43	4.4	4	24
1/2/2019 23:10	9	9	9	40.46	4.4	3.9	24.1
1/2/2019 23:20	9	9	9	40.46	4.4	4	24.1
1/2/2019 23:30	9	9	9	40.43	4.4	3.9	24.1
1/2/2019 23:40	9	9	9	40.46	4.4	4	24.1
1/2/2019 23:50	9	9	9	40.46	4.3	3.9	24.1
1/3/2019 0:00	9	9	9	40.49	4.3	3.9	24.1
1/3/2019 0:10	9	9	9	40.49	4.4	3.9	24.1
1/3/2019 0:20	9	9	9	40.52	4.7	4	24.2
1/3/2019 0:30	9	9	9	40.46	4.5	4	24.1
1/3/2019 0:40	9	9	9	40.49	4.2	3.9	24.1
1/3/2019 0:50	9	9	9	40.58	4.7	4	24.1
1/3/2019 1:00	9	9	9	40.52	4.1	3.9	23.9
1/3/2019 1:10	9	9	9	40.58	4.3	3.9	24.1
1/3/2019 1:20	9	9	9	40.55	4.4	3.9	23.9
1/3/2019 1:30	9	9	9	40.58	4.5	3.9	23.9
1/3/2019 1:40	9	9	9	40.55	4.5	4	23.9
1/3/2019 1:50	9	9	9	40.52	4.5	3.9	24
1/3/2019 2:00	9	9	9	40.55	4.5	4	23.5
1/3/2019 2:10	9	9	9	40.55	4.5	4.1	23.9
1/3/2019 2:20	9	9	9	40.61	4.3	4.1	21
1/3/2019 2:30	9	9	9	40.61	4.3	4	1
1/3/2019 2:40	9	9	9	40.55	4.4	4	1.5
1/3/2019 2:50	9	9	9	40.46	4.3	4	3.2
1/3/2019 3:00	9	9	9	40.49	4.4	4	3.5
1/3/2019 3:10	9	9	9	40.58	4.3	4	3.5
1/3/2019 3:20	9	9	9	40.55	4.7	4.1	3.3
1/3/2019 3:30	9	9	9	40.55	4.3	4	4
1/3/2019 3:40	9	9	9	40.52	4.5	4	24.5
1/3/2019 3:50	9	9	9	40.49	4.5	4	24.5
1/3/2019 4:00	9	9	9	40.52	4.3	3.9	24.5
1/3/2019 4:10	9	9	9	40.55	4.4	4	24.5
1/3/2019 4:20	9	9	9	40.49	3.8	4	24.5
1/3/2019 4:30	9	9	9	40.49	4.5	4	24.4
1/3/2019 4:40	9	9	9	40.55	4.3	4	24.5
1/3/2019 4:50	9	9	9	40.52	4.4	3.9	24.3

1/3/2019 5:00	9	9	9	40.52	4.3	4	24.2
1/3/2019 5:10	9	9	9	40.55	4.4	3.9	24.3
1/3/2019 5:20	9	9	9	40.61	4.5	4.1	24.2
1/3/2019 5:30	9	9	9	40.55	4.7	4	24.1
1/3/2019 5:40	9	9	9	40.55	4.1	4	24.1
1/3/2019 5:50	9	9	9	40.55	4.6	3.9	24
1/3/2019 6:00	9	9	9	40.58	4.5	3.9	23.9
1/3/2019 6:10	9	9	9	40.61	4.9	3.9	23.9
1/3/2019 6:20	9	9	9	40.55	4.4	3.9	23.9
1/3/2019 6:30	9	9	9	40.64	4.3	3.9	24.1
1/3/2019 6:40	9	9	9	40.64	4.5	4	12.4
1/3/2019 6:50	9	9	9	40.67	4.8	3.9	0.9
1/3/2019 7:00	9	9	9	40.67	4.2	4	1.1
1/3/2019 7:10	9	9	9	40.7	4.4	4	1.3
1/3/2019 7:20	9	9	9	40.67	4.7	4	2.4
1/3/2019 7:30	9	9	9	40.73	4.4	4	2.4
1/3/2019 7:40	9	9	9	40.76	4.4	3.9	3.9
1/3/2019 7:50	9	9	9	40.67	4.5	3.9	3.5
1/3/2019 8:00	9	9	9	40.73	4.6	3.9	3.7
1/3/2019 8:10	9	9	9	40.73	4.4	4	3.6
1/3/2019 8:20	9	9	9	40.76	4.4	4	3.6
1/3/2019 8:30	9	9	9	40.61	4.2	4	3.3
1/3/2019 8:40	9	9	9	40.76	4.3	4.1	3.3
1/3/2019 8:50	9	9	9	40.82	4.5	4	3.3
1/3/2019 9:00	9	9	9	40.76	4.4	3.9	3.3
1/3/2019 9:10	9	9	9	40.73	4.2	4	4.2
1/3/2019 9:20	9	9	9	40.73	4.5	4	24.5
1/3/2019 9:30	9	9	9	40.73	4.2	4	24.5
1/3/2019 9:40	9	9	9	40.79	4.4	4.1	24.5
1/3/2019 9:50	9	9	9	40.76	4.3	3.9	24.4
1/3/2019 10:00	9	9	9	40.76	4.4	3.9	24.5
1/3/2019 10:10	9	9	9	40.7	4.4	4	24.5
1/3/2019 10:20	9	9	9	40.7	4.5	4	24.4
1/3/2019 10:30	9	9	9	40.76	4.3	4	24.4
1/3/2019 10:40	9	9	9	40.7	4.2	4	24.4
1/3/2019 10:50	9	9	9	40.73	4.4	4	24.4
1/3/2019 11:00	9	9	9	40.88	4.2	3.9	24.3
1/3/2019 11:10	9	9	9	40.76	4.4	4	24.2
1/3/2019 11:20	9	9	9	40.73	4.4	3.9	24.2
1/3/2019 11:30	9	9	9	40.79	4.5	4	24.3
1/3/2019 11:40	9	9	9	40.76	4.3	3.9	24.1
1/3/2019 11:50	9	9	9	40.7	4.4	4	24
1/3/2019 12:00	9	9	9	40.7	4.4	4	24.1
1/3/2019 12:10	9	9	9	40.73	4.5	4.1	23.9
1/3/2019 12:20	9	9	9	40.73	4.5	4	21.2
1/3/2019 12:30	9	9	9	40.7	4.4	4	3.5
1/3/2019 12:40	9	9	9	40.73	4.5	4	1.9

1/3/2019 12:50	9	9	9	40.76	4.2	4.1	3.5
1/3/2019 13:00	9	9	9	40.73	4.7	4	3.5
1/3/2019 13:10	9	9	9	40.76	4.7	3.9	3.3
1/3/2019 13:20	9	9	9	40.76	4.5	3.9	24.5
1/3/2019 13:30	9	9	9	40.73	4.4	4.1	24.5
1/3/2019 13:40	9	9	9	40.76	4.2	3.9	24.4
1/3/2019 13:50	9	9	9	40.7	4.5	4	24.5
1/3/2019 14:00	9	9	9	40.73	4.4	4	24.5
1/3/2019 14:10	9	9	9	40.76	4.4	4	24.5
1/3/2019 14:20	9	9	9	40.73	4.4	3.9	24.4
1/3/2019 14:30	9	9	9	40.73	4.1	4	24.4
1/3/2019 14:40	9	9	9	40.76	4.3	4.1	24.4
1/3/2019 14:50	9	9	9	40.7	4.4	4	24.4
1/3/2019 15:00	9	9	9	40.79	4.5	4	24.3
1/3/2019 15:10	9	9	9	40.79	4.2	3.9	24.3
1/3/2019 15:20	9	9	9	40.79	4.5	4	24.2
1/3/2019 15:30	9	9	9	40.7	4.5	4	24.2
1/3/2019 15:40	9	9	9	40.76	4.3	3.9	24.1
1/3/2019 15:50	9	9	9	40.7	4.5	4.1	24.1
1/3/2019 16:00	9	9	9	40.73	4.2	4	23.9
1/3/2019 16:10	9	9	9	40.73	4.2	3.9	24.1
1/3/2019 16:20	9	9	9	40.7	4.5	4	23.9
1/3/2019 16:30	9	9	9	40.73	4.4	3.9	23.8
1/3/2019 16:40	9	9	9	40.7	4.4	4	24
1/3/2019 16:50	9	9	9	40.73	4.3	4	23
1/3/2019 17:00	9	9	9	40.76	4.3	4	1.7
1/3/2019 17:10	9	9	9	40.73	4.4	3.9	3.4
1/3/2019 17:20	9	9	9	40.7	4.2	4.1	3.6
1/3/2019 17:30	9	9	9	40.76	4.3	4.1	3.6
1/3/2019 17:40	9	9	9	40.76	4.4	4	3.6
1/3/2019 17:50	9	9	9	40.82	4.5	3.9	3.4
1/3/2019 18:00	9	9	9	40.73	4.4	4	3.3
1/3/2019 18:10	9	9	9	40.7	4.4	4	24.4
1/3/2019 18:20	9	9	9	40.7	4.4	3.9	24.5
1/3/2019 18:30	9	9	9	40.82	4.3	4.1	24.4
1/3/2019 18:40	9	9	9	40.73	4.3	4	24.5
1/3/2019 18:50	9	9	9	40.79	4.4	3.9	24.5
1/3/2019 19:00	9	9	9	40.76	4.5	4	24.4
1/3/2019 19:10	9	9	9	40.73	4.3	4	24.4
1/3/2019 19:20	9	9	9	40.7	4.4	4	24.4
1/3/2019 19:30	9	9	9	40.67	4.5	4.1	24.3
1/3/2019 19:40	9	9	9	40.76	4.3	3.9	24.3
1/3/2019 19:50	9	9	9	40.64	4.2	3.9	24.3
1/3/2019 20:00	9	9	9	40.73	4.6	4	24.2
1/3/2019 20:10	9	9	9	40.73	4.1	4.1	24.2
1/3/2019 20:20	9	9	9	40.73	4.4	4	24.2
1/3/2019 20:30	9	9	9	40.76	4.8	4.1	24.1

1/3/2019 20:40	9	9	9	40.67	4.4	4	24.1
1/3/2019 20:50	9	9	9	40.7	4.2	3.9	24.1
1/3/2019 21:00	9	9	9	40.7	4.5	3.9	24
1/3/2019 21:10	9	9	9	40.73	4.6	4	24.1
1/3/2019 21:20	9	9	9	40.7	4.4	4	24.1
1/3/2019 21:30	9	9	9	40.64	4.5	4	24
1/3/2019 21:40	9	9	9	40.67	4.4	3.9	23.9
1/3/2019 21:50	9	9	9	40.7	4.2	4	23.8
1/3/2019 22:00	9	9	9	40.64	4.3	3.9	3.3
1/3/2019 22:10	9	9	9	40.64	4.3	4	1
1/3/2019 22:20	9	9	9	40.67	4.3	3.9	1.8
1/3/2019 22:30	9	9	9	40.61	4.5	4	1.1
1/3/2019 22:40	9	9	9	40.67	4.6	4	2.7
1/3/2019 22:50	9	9	9	40.67	4.5	4	3.5
1/3/2019 23:00	9	9	9	40.67	4.4	4	3.3
1/3/2019 23:10	9	9	9	40.64	4.2	4	3.6
1/3/2019 23:20	9	9	9	40.67	4.3	3.9	3.2
1/3/2019 23:30	9	9	9	40.58	4.4	3.9	3.3
1/3/2019 23:40	9	9	9	40.73	4.5	4	4.4
1/3/2019 23:50	9	9	9	40.67	4.4	3.9	24.4
1/4/2019 0:00	9	9	9	40.73	4.3	3.9	24.5
1/4/2019 0:10	9	9	9	40.7	4.3	4	24.5
1/4/2019 0:20	9	9	9	40.76	4.7	4	24.5
1/4/2019 0:30	9	9	9	40.79	4.3	3.9	24.4
1/4/2019 0:40	9	9	9	40.82	4.4	3.9	24.4
1/4/2019 0:50	9	9	9	40.79	4.2	4.1	24.3
1/4/2019 1:00	9	9	9	40.76	4.6	3.9	24.3
1/4/2019 1:10	9	9	9	40.76	4.2	3.9	24.2
1/4/2019 1:20	9	9	9	40.73	4.3	4	24.1
1/4/2019 1:30	9	9	9	40.82	4.4	4.1	24.1
1/4/2019 1:40	9	9	9	40.73	4.5	3.8	24
1/4/2019 1:50	9	9	9	40.7	4.4	3.9	23.9
1/4/2019 2:00	9	9	9	40.76	4.6	4.1	23.9
1/4/2019 2:10	9	9	9	40.67	4.6	3.9	23.9
1/4/2019 2:20	9	9	9	40.76	4.3	3.9	23.9
1/4/2019 2:30	9	9	9	40.61	4.4	4	23.9
1/4/2019 2:40	9	9	9	40.7	4.7	4	23.9
1/4/2019 2:50	9	9	9	40.64	4.5	3.9	23.8
1/4/2019 3:00	9	9	9	40.67	4.6	4	23.9
1/4/2019 3:10	9	9	9	40.64	4.6	4.1	24
1/4/2019 3:20	9	9	9	40.61	4.5	3.9	15.1
1/4/2019 3:30	9	9	9	40.67	4.5	4	1.2
1/4/2019 3:40	9	9	9	40.7	4.5	4	1.7
1/4/2019 3:50	9	9	9	40.61	4.6	4.1	1.6
1/4/2019 4:00	9	9	9	40.76	4.7	3.9	1.2
1/4/2019 4:10	9	9	9	40.76	4.4	4	1.3
1/4/2019 4:20	9	9	9	40.79	4.5	3.9	1.5

1/4/2019 4:30	9	9	9	40.76	4.4	3.9	3.5
1/4/2019 4:40	9	9	9	40.82	4.2	4.1	3.9
1/4/2019 4:50	9	9	9	40.79	4.6	4	3.4
1/4/2019 5:00	9	9	9	40.82	4.4	3.9	10.5
1/4/2019 5:10	9	9	9	40.85	4.4	3.9	24.5
1/4/2019 5:20	9	9	9	40.82	4.4	4	24.5
1/4/2019 5:30	9	9	9	40.76	4.5	4.1	24.4
1/4/2019 5:40	9	9	9	40.76	4.4	4.1	24.5
1/4/2019 5:50	9	9	9	40.82	4.3	3.9	24.5
1/4/2019 6:00	9	9	9	40.82	4.7	4	24.5
1/4/2019 6:10	9	9	9	40.79	4.5	3.9	24.5
1/4/2019 6:20	9	9	9	40.79	4.3	4	24.5
1/4/2019 6:30	9	9	9	40.76	4.4	4	24.4
1/4/2019 6:40	9	9	9	40.79	4.7	4	24.5
1/4/2019 6:50	9	9	9	40.82	4.5	3.9	24.4
1/4/2019 7:00	9	9	9	40.79	4.3	4.1	24.4
1/4/2019 7:10	9	9	9	40.76	4.5	4.1	24.4
1/4/2019 7:20	9	9	9	40.76	4.3	4.1	24.3
1/4/2019 7:30	9	9	9	40.79	4.5	4.1	24.3
1/4/2019 7:40	9	9	9	40.82	4.3	4	24.2
1/4/2019 7:50	9	9	9	40.7	4.4	4	24.1
1/4/2019 8:00	9	9	9	40.79	4.4	4	24.1
1/4/2019 8:10	9	9	9	40.82	4.8	4	23.9
1/4/2019 8:20	9	9	9	40.79	4.6	4.1	23.9
1/4/2019 8:30	9	9	9	40.79	4.2	4	23.9
1/4/2019 8:40	9	9	9	40.88	4.4	4	23.2
1/4/2019 8:50	9	9	9	40.79	4.4	4	17.4
1/4/2019 9:00	9	9	9	40.73	4.6	4.1	1.6
1/4/2019 9:10	9	9	9	40.76	4.4	3.9	2.7
1/4/2019 9:20	9	9	9	40.76	4.3	4	3.4
1/4/2019 9:30	9	9	9	40.73	4.3	3.9	3.3
1/4/2019 9:40	9	9	9	40.76	4.3	4	3.5
1/4/2019 9:50	9	9	9	40.79	4.3	3.9	3.6
1/4/2019 10:00	9	9	9	40.76	4.4	3.9	3.3
1/4/2019 10:10	9	9	9	40.82	4.2	4.1	24.5
1/4/2019 10:20	9	9	9	40.82	4.5	3.9	24.5
1/4/2019 10:30	9	9	9	40.85	4.3	4.1	24.5
1/4/2019 10:40	9	9	9	40.82	4.4	4.1	24.4
1/4/2019 10:50	9	9	9	40.91	4.4	4.1	24.4
1/4/2019 11:00	9	9	9	40.91	4.6	4	24.5
1/4/2019 11:10	9	9	9	40.88	4.3	4.1	24.4
1/4/2019 11:20	9	9	9	40.82	4.4	4.1	24.3
1/4/2019 11:30	9	9	9	40.85	4.1	4	24.4
1/4/2019 11:40	9	9	9	40.79	4.5	4	24.2
1/4/2019 11:50	9	9	9	40.82	4.6	4.1	24.3
1/4/2019 12:00	9	9	9	40.85	4.5	4	24.1
1/4/2019 12:10	9	9	9	40.76	4.4	4	24.1

1/4/2019 12:20	9	9	9	40.82	4.5	4	24.1
1/4/2019 12:30	9	9	9	40.73	4.5	4	24.1
1/4/2019 12:40	9	9	9	40.79	4.4	4.1	23.9
1/4/2019 12:50	9	9	9	40.82	4.2	3.9	24
1/4/2019 13:00	9	9	9	40.82	4.4	4.1	23.9
1/4/2019 13:10	9	9	9	40.79	4.2	4	23.9
1/4/2019 13:20	9	9	9	40.7	4.4	4	7
1/4/2019 13:30	9	9	9	40.79	4.5	4	1.1
1/4/2019 13:40	9	9	9	40.85	4.4	4	2.6
1/4/2019 13:50	9	9	9	40.85	4.3	4.1	3.5
1/4/2019 14:00	9	9	9	40.79	4.4	4	3.8
1/4/2019 14:10	9	9	9	40.85	4.4	3.9	3.7
1/4/2019 14:20	9	9	9	40.79	4.5	4.1	3.6
1/4/2019 14:30	9	9	9	40.73	4.5	4.1	3.2
1/4/2019 14:40	9	9	9	40.82	4.3	4	23.3
1/4/2019 14:50	9	9	9	40.88	4.4	4	24.5
1/4/2019 15:00	9	9	9	40.76	4.4	4	24.5
1/4/2019 15:10	9	9	9	40.85	4.2	4	24.4
1/4/2019 15:20	9	9	9	40.79	4.3	3.9	24.4
1/4/2019 15:30	9	9	9	40.82	4.3	3.9	24.4
1/4/2019 15:40	9	9	9	40.82	4	4.1	24.4
1/4/2019 15:50	9	9	9	40.79	4.3	3.9	24.5
1/4/2019 16:00	9	9	9	40.76	4.2	4	24.5
1/4/2019 16:10	9	9	9	40.79	4.5	3.9	24.5
1/4/2019 16:20	9	9	9	40.79	4.3	3.8	24.5
1/4/2019 16:30	9	9	9	40.82	4.5	3.9	24.5
1/4/2019 16:40	9	9	9	40.88	4.3	4.1	24.5
1/4/2019 16:50	9	9	9	40.88	4.6	4	24.4
1/4/2019 17:00	9	9	9	40.85	4.3	4	24.4
1/4/2019 17:10	9	9	9	40.82	4.5	4.1	24.4
1/4/2019 17:20	9	9	9	40.88	4.3	3.9	24.2
1/4/2019 17:30	9	9	9	40.88	4.4	3.9	24.3
1/4/2019 17:40	9	9	9	40.85	4.5	3.9	24.2
1/4/2019 17:50	9	9	9	40.91	4.3	4.1	24.2
1/4/2019 18:00	9	9	9	40.91	4.2	4.1	24.2
1/4/2019 18:10	9	9	9	40.95	4.5	3.8	24.1
1/4/2019 18:20	9	9	9	40.91	4.5	3.9	24.2
1/4/2019 18:30	9	9	9	40.91	4.4	3.9	24.1
1/4/2019 18:40	9	9	9	40.95	4.4	4	23.9
1/4/2019 18:50	9	9	9	41.01	4.3	4	23.9
1/4/2019 19:00	9	9	9	40.95	4.4	4.1	21.1
1/4/2019 19:10	9	9	9	40.95	4.4	4	1
1/4/2019 19:20	9	9	9	41.07	4.3	4	2.4
1/4/2019 19:30	9	9	9	40.95	4.4	4	3.5
1/4/2019 19:40	9	9	9	40.91	4.2	4	3.5
1/4/2019 19:50	9	9	9	41.01	4.4	4.1	3.3
1/4/2019 20:00	9	9	9	41.01	4.2	4	24.5

1/4/2019 20:10	9	9	9	40.95	4.3	4	24.4
1/4/2019 20:20	9	9	9	41.01	4.5	3.9	24.5
1/4/2019 20:30	9	9	9	41.07	4.4	3.9	24.4
1/4/2019 20:40	9	9	9	41.01	4.1	4	24.3
1/4/2019 20:50	9	9	9	41.01	4.5	3.9	24.4
1/4/2019 21:00	9	9	9	40.98	4.6	3.9	24.2
1/4/2019 21:10	9	9	9	40.98	4.2	3.9	24.2
1/4/2019 21:20	9	9	9	40.95	4.1	4.1	24.1
1/4/2019 21:30	9	9	9	40.98	4.5	4	24.1
1/4/2019 21:40	9	9	9	41.01	4.4	4.1	23.9
1/4/2019 21:50	9	9	9	40.98	4.3	4	24
1/4/2019 22:00	9	9	9	40.85	4.5	4	23.4
1/4/2019 22:10	9	9	9	40.91	4.2	3.9	15.7
1/4/2019 22:20	9	9	9	40.95	4.4	4	1
1/4/2019 22:30	9	9	9	40.95	4.5	4	3.1
1/4/2019 22:40	9	9	9	40.91	4.5	4	3.5
1/4/2019 22:50	9	9	9	40.95	4.6	3.9	3.4
1/4/2019 23:00	9	9	9	40.91	4.4	4	3.6
1/4/2019 23:10	9	9	9	40.91	4.6	4	3.3
1/4/2019 23:20	9	9	9	40.95	4.2	4	4.5
1/4/2019 23:30	9	9	9	40.95	4.3	4	24.5
1/4/2019 23:40	9	9	9	40.98	4.3	4	24.5
1/4/2019 23:50	9	9	9	40.95	4.5	4	24.4
1/5/2019 0:00	9	9	9	40.98	4.3	4.1	24.4
1/5/2019 0:10	9	9	9	40.95	4.5	4.1	24.5
1/5/2019 0:20	9	9	9	40.95	4.3	3.9	24.5
1/5/2019 0:30	9	9	9	41.07	4.4	4.1	24.4
1/5/2019 0:40	9	9	9	40.88	4.4	4	24.4
1/5/2019 0:50	9	9	9	41.1	4.3	4	24.4
1/5/2019 1:00	9	9	9	41.01	4.2	4	24.4
1/5/2019 1:10	9	9	9	41.01	4.4	4.1	24.3
1/5/2019 1:20	9	9	9	41.01	4.4	3.8	24.2
1/5/2019 1:30	9	9	9	40.91	4.6	4.1	24.2
1/5/2019 1:40	9	9	9	41.1	4.3	4	24
1/5/2019 1:50	9	9	9	40.91	4.4	3.9	24
1/5/2019 2:00	9	9	9	40.91	4.6	4	23.9
1/5/2019 2:10	9	9	9	40.91	4.3	3.9	23.9
1/5/2019 2:20	9	9	9	41.01	4.2	4	23.9
1/5/2019 2:30	9	9	9	40.98	4.2	4.1	24.1
1/5/2019 2:40	9	9	9	41.01	4.7	3.9	1.8
1/5/2019 2:50	9	9	9	40.95	4.3	3.9	2.2
1/5/2019 3:00	9	9	9	40.95	4.3	4	3.5
1/5/2019 3:10	9	9	9	40.91	4.3	4	3.7
1/5/2019 3:20	9	9	9	40.98	4.5	3.9	3.7
1/5/2019 3:30	9	9	9	41.01	4.4	4	3.5
1/5/2019 3:40	9	9	9	40.98	4.4	3.9	3.2
1/5/2019 3:50	9	9	9	41.01	4.6	4	3.2

1/5/2019 4:00	9	9	9	41.07	4.2	4.1	24.5
1/5/2019 4:10	9	9	9	41.1	4.4	3.9	24.5
1/5/2019 4:20	9	9	9	41.1	4.4	3.9	24.4
1/5/2019 4:30	9	9	9	41.1	4.3	4	24.4
1/5/2019 4:40	9	9	9	41.07	4.7	3.9	24.4
1/5/2019 4:50	9	9	9	41.19	4.1	3.9	24.3
1/5/2019 5:00	9	9	9	41.13	4.3	3.9	24.3
1/5/2019 5:10	9	9	9	41.1	4.3	4.1	24.3
1/5/2019 5:20	9	9	9	41.1	4.6	3.9	24.3
1/5/2019 5:30	9	9	9	41.1	4.9	3.8	24.2
1/5/2019 5:40	9	9	9	41.07	4.3	4	24.2
1/5/2019 5:50	9	9	9	41.1	4.4	4	24.1
1/5/2019 6:00	9	9	9	41.07	4.6	4	24.1
1/5/2019 6:10	9	9	9	41.07	4.4	4.1	24.1
1/5/2019 6:20	9	9	9	41.07	4.3	4	24
1/5/2019 6:30	9	9	9	41.13	4.5	3.9	24
1/5/2019 6:40	9	9	9	41.1	4.5	4.1	23.9
1/5/2019 6:50	9	9	9	41.1	4.6	3.9	22
1/5/2019 7:00	9	9	9	41.13	4.3	3.9	3.3
1/5/2019 7:10	9	9	9	41.07	4.4	4	1.1
1/5/2019 7:20	9	9	9	41.01	4.4	4	3.9
1/5/2019 7:30	9	9	9	41.13	4.5	4	3.6
1/5/2019 7:40	9	9	9	41.07	4.4	4	3.3
1/5/2019 7:50	9	9	9	40.98	4.3	4	24.5
1/5/2019 8:00	9	9	9	41.01	4.5	3.9	24.4
1/5/2019 8:10	9	9	9	41.01	4.5	4	24.4
1/5/2019 8:20	9	9	9	41.16	4.9	4	24.4
1/5/2019 8:30	9	9	9	40.98	4.2	3.9	24.3
1/5/2019 8:40	9	9	9	41.07	4.4	4	24.4
1/5/2019 8:50	9	9	9	40.98	4.4	4	24.4
1/5/2019 9:00	9	9	9	41.01	4.4	4	24.4
1/5/2019 9:10	9	9	9	41.07	4	3.9	24.2
1/5/2019 9:20	9	9	9	41.07	4.2	4	24.2
1/5/2019 9:30	9	9	9	41.13	4.6	4.1	24.1
1/5/2019 9:40	9	9	9	41.07	4.6	4.1	24
1/5/2019 9:50	9	9	9	41.1	4.5	3.9	24
1/5/2019 10:00	9	9	9	40.98	4.5	3.9	24
1/5/2019 10:10	9	9	9	41.1	4.3	4	23.9
1/5/2019 10:20	9	9	9	41.13	4.4	4	0.9
1/5/2019 10:30	9	9	9	41.01	4.3	4	2.7
1/5/2019 10:40	9	9	9	41.1	4.7	4	3.7
1/5/2019 10:50	9	9	9	41.16	4.4	4	3.4
1/5/2019 11:00	9	9	9	41.16	4.2	3.9	3.3
1/5/2019 11:10	9	9	9	41.13	4.4	4	24.4
1/5/2019 11:20	9	9	9	41.1	4.4	4	24.4
1/5/2019 11:30	9	9	9	41.1	4.3	4	24.5
1/5/2019 11:40	9	9	9	41.07	4.4	3.9	24.5

1/5/2019 11:50	9	9	9	41.13	4.2	4	24.4
1/5/2019 12:00	9	9	9	41.19	4.3	4	24.4
1/5/2019 12:10	9	9	9	41.19	4.4	3.9	24.3
1/5/2019 12:20	9	9	9	41.19	3.8	4	24.3
1/5/2019 12:30	9	9	9	41.22	4.4	3.9	24.1
1/5/2019 12:40	9	9	9	41.19	4.5	4	24.1
1/5/2019 12:50	9	9	9	41.25	4.6	4	23.8
1/5/2019 13:00	9	9	9	41.19	4.2	4	23.9
1/5/2019 13:10	9	9	9	41.19	4.3	4	19.5
1/5/2019 13:20	9	9	9	41.25	4.5	4	2.1
1/5/2019 13:30	9	9	9	41.28	4.4	4	3.4
1/5/2019 13:40	9	9	9	41.22	4.6	4	3.5
1/5/2019 13:50	9	9	9	41.22	4.5	4	3.3
1/5/2019 14:00	9	9	9	41.28	4.4	4.1	24.4
1/5/2019 14:10	9	9	9	41.25	4.3	4	24.4
1/5/2019 14:20	9	9	9	41.25	4.4	4	24.4
1/5/2019 14:30	9	9	9	41.22	4.2	4	24.4
1/5/2019 14:40	9	9	9	41.25	4.3	4	24.2
1/5/2019 14:50	9	9	9	41.19	4.4	3.9	24.2
1/5/2019 15:00	9	9	9	41.19	4.5	4	24.1
1/5/2019 15:10	9	9	9	41.22	4.4	4	24
1/5/2019 15:20	9	9	9	41.22	4.4	4	23.9
1/5/2019 15:30	9	9	9	41.19	4.4	4	24
1/5/2019 15:40	9	9	9	41.19	4.5	3.9	1
1/5/2019 15:50	9	9	9	41.19	4.4	3.9	3.6
1/5/2019 16:00	9	9	9	41.22	4.5	3.9	3.8
1/5/2019 16:10	9	9	9	41.22	4.5	4.1	3.6
1/5/2019 16:20	9	9	9	41.25	4.5	4	24.5
1/5/2019 16:30	9	9	9	41.25	4.3	3.9	24.4
1/5/2019 16:40	9	9	9	41.28	4.6	4	24.4
1/5/2019 16:50	9	9	9	41.19	4.4	4.1	24.3
1/5/2019 17:00	9	9	9	41.25	4.4	3.9	24.3
1/5/2019 17:10	9	9	9	41.25	5	4	24.1
1/5/2019 17:20	9	9	9	41.25	4.3	4	24
1/5/2019 17:30	9	9	9	41.22	4.5	3.9	23.9
1/5/2019 17:40	9	9	9	41.25	4.3	3.9	23.8
1/5/2019 17:50	9	9	9	41.25	4.4	3.9	2.1
1/5/2019 18:00	9	9	9	41.25	4.4	4	3.4
1/5/2019 18:10	9	9	9	41.16	4.4	4.1	3.8
1/5/2019 18:20	9	9	9	41.16	4.4	4	23.4
1/5/2019 18:30	9	9	9	41.19	4.3	3.9	24.4
1/5/2019 18:40	9	9	9	41.16	4.4	4.1	24.4
1/5/2019 18:50	9	9	9	41.13	4.6	4	24.5
1/5/2019 19:00	9	9	9	41.16	4.5	4	24.4
1/5/2019 19:10	9	9	9	41.13	4.3	3.9	24.3
1/5/2019 19:20	9	9	9	41.16	4.4	4	24.1
1/5/2019 19:30	9	9	9	41.19	4.4	4.1	24.1

1/5/2019 19:40	9	9	9	41.16	4.4	4.1	24
1/5/2019 19:50	9	9	9	41.1	4.4	4	23.9
1/5/2019 20:00	9	9	9	41.19	4.3	4	15
1/5/2019 20:10	9	9	9	41.16	4.3	4	2.2
1/5/2019 20:20	9	9	9	41.1	4.3	3.9	3.3
1/5/2019 20:30	9	9	9	41.16	4.6	4	3.6
1/5/2019 20:40	9	9	9	41.13	4.3	3.9	24.4
1/5/2019 20:50	9	9	9	41.16	4.1	4	24.5
1/5/2019 21:00	9	9	9	41.1	4.1	3.9	24.5
1/5/2019 21:10	9	9	9	41.1	4.2	3.9	24.4
1/5/2019 21:20	9	9	9	41.13	4.7	4.1	24.4
1/5/2019 21:30	9	9	9	41.07	4.4	4	24.2
1/5/2019 21:40	9	9	9	41.07	4.4	4	24.1
1/5/2019 21:50	9	9	9	41.07	4.5	4	24.1
1/5/2019 22:00	9	9	9	41.01	4.4	4	23.9
1/5/2019 22:10	9	9	9	41.1	4.5	4	23.9
1/5/2019 22:20	9	9	9	40.98	4.6	4	19.5
1/5/2019 22:30	9	9	9	41.01	4.4	3.9	2.8
1/5/2019 22:40	9	9	9	40.98	4.1	4	3.6
1/5/2019 22:50	9	9	9	40.98	4.3	4	4.3
1/5/2019 23:00	9	9	9	41.01	4.4	3.9	24.5
1/5/2019 23:10	9	9	9	40.98	4.4	3.8	24.4
1/5/2019 23:20	9	9	9	40.98	4.8	3.9	24.5
1/5/2019 23:30	9	9	9	40.98	4.3	3.9	24.4
1/5/2019 23:40	9	9	9	41.07	4.4	4	24.4
1/5/2019 23:50	9	9	9	41.01	4.4	4	24.4
1/6/2019 0:00	9	9	9	41.01	4.6	4	24.3
1/6/2019 0:10	9	9	9	41.1	4.6	4.1	24.2
1/6/2019 0:20	9	9	9	41.01	4.4	4	24.2
1/6/2019 0:30	9	9	9	41.01	4.4	3.9	24.1
1/6/2019 0:40	9	9	9	41.13	4.4	4	24
1/6/2019 0:50	9	9	9	41.1	4.1	4	24
1/6/2019 1:00	9	9	9	41.16	4.2	4	24
1/6/2019 1:10	9	9	9	41.16	4.4	3.9	24
1/6/2019 1:20	9	9	9	41.13	4.5	4	2.1
1/6/2019 1:30	9	9	9	41.16	4.2	4	3.3
1/6/2019 1:40	9	9	9	41.13	4.3	4.1	3.7
1/6/2019 1:50	9	9	9	40.98	4.5	4	3.3
1/6/2019 2:00	9	9	9	41.07	4.2	3.9	10.6
1/6/2019 2:10	9	9	9	41.16	4.2	4	24.5
1/6/2019 2:20	9	9	9	41.13	4.4	4	24.5
1/6/2019 2:30	9	9	9	41.19	4.3	3.9	24.5
1/6/2019 2:40	9	9	9	41.16	4.4	3.9	24.4
1/6/2019 2:50	9	9	9	41.16	4.3	4	24.5
1/6/2019 3:00	9	9	9	41.25	4.4	4	24.3
1/6/2019 3:10	9	9	9	41.16	4.4	4	24.3
1/6/2019 3:20	9	9	9	41.16	4.5	3.9	24.2

1/6/2019 3:30	9	9	9	41.25	4.4	3.9	24.1
1/6/2019 3:40	9	9	9	41.25	4.4	3.9	24
1/6/2019 3:50	9	9	9	41.22	4.4	4.1	23.8
1/6/2019 4:00	9	9	9	41.19	4.3	4.1	2.9
1/6/2019 4:10	9	9	9	41.22	4.3	4	3.8
1/6/2019 4:20	9	9	9	41.25	4.6	4.1	4.3
1/6/2019 4:30	9	9	9	41.22	4.1	3.9	24.4
1/6/2019 4:40	9	9	9	41.25	4.4	4	24.5
1/6/2019 4:50	9	9	9	41.19	4.6	4.1	24.5
1/6/2019 5:00	9	9	9	41.16	4.3	3.8	24.4
1/6/2019 5:10	9	9	9	41.22	4.3	4.1	24.4
1/6/2019 5:20	9	9	9	41.28	4.3	4	24.2
1/6/2019 5:30	9	9	9	41.16	4.3	4	24.1
1/6/2019 5:40	9	9	9	41.22	4.4	4	24.1
1/6/2019 5:50	9	9	9	41.19	4.4	4	24
1/6/2019 6:00	9	9	9	41.16	4.6	3.9	24.1
1/6/2019 6:10	9	9	9	41.19	4.3	3.9	24
1/6/2019 6:20	9	9	9	41.19	4.2	3.9	3.5
1/6/2019 6:30	9	9	9	41.19	4.1	4	3.6
1/6/2019 6:40	9	9	9	41.16	4.4	3.9	3.7
1/6/2019 6:50	9	9	9	41.19	4.3	4	3.3
1/6/2019 7:00	9	9	9	41.13	4.4	3.9	24.4
1/6/2019 7:10	9	9	9	41.13	4.4	4	24.5
1/6/2019 7:20	9	9	9	41.13	4.6	4	24.5
1/6/2019 7:30	9	9	9	41.16	4.3	3.9	24.4
1/6/2019 7:40	9	9	9	41.16	4.3	3.9	24.4
1/6/2019 7:50	9	9	9	41.1	4.7	3.9	24.4
1/6/2019 8:00	9	9	9	41.1	4.4	3.9	24.3
1/6/2019 8:10	9	9	9	41.13	4.4	3.9	24.4
1/6/2019 8:20	9	9	9	41.07	4.6	3.9	24.3
1/6/2019 8:30	9	9	9	41.13	4.9	4	24.2
1/6/2019 8:40	9	9	9	41.1	4.5	3.9	24.2
1/6/2019 8:50	9	9	9	41.16	4.4	4	24.1
1/6/2019 9:00	9	9	9	41.16	4.4	3.9	24.1
1/6/2019 9:10	9	9	9	41.19	4.4	3.9	24.1
1/6/2019 9:20	9	9	9	41.1	4.2	3.9	24
1/6/2019 9:30	9	9	9	41.1	4.4	4	24
1/6/2019 9:40	9	9	9	41.13	4.4	4	23.9
1/6/2019 9:50	9	9	9	41.16	4.2	4	23.1
1/6/2019 10:00	9	9	9	41.16	4.5	3.9	11.9
1/6/2019 10:10	9	9	9	41.1	4.4	4	3.7
1/6/2019 10:20	9	9	9	41.1	4.4	4	3.4
1/6/2019 10:30	9	9	9	41.13	4.3	3.9	3.6
1/6/2019 10:40	9	9	9	41.07	4.3	4	3.2
1/6/2019 10:50	9	9	9	41.07	4.4	3.9	24.5
1/6/2019 11:00	9	9	9	41.1	4.2	3.9	24.5
1/6/2019 11:10	9	9	9	40.98	4.4	4	24.4

1/6/2019 11:20	9	9	9	41.01	4.4	4	24.4
1/6/2019 11:30	9	9	9	41.07	4.4	4	24.4
1/6/2019 11:40	9	9	9	41.1	4.4	4	24.3
1/6/2019 11:50	9	9	9	41.01	4.4	3.9	24.3
1/6/2019 12:00	9	9	9	41.07	4.6	3.9	24.3
1/6/2019 12:10	9	9	9	41.07	4.3	3.9	24.2
1/6/2019 12:20	9	9	9	41.13	4.4	3.9	24.1
1/6/2019 12:30	9	9	9	41.13	4.5	4	24.1
1/6/2019 12:40	9	9	9	41.1	4.4	4	23.9
1/6/2019 12:50	9	9	9	41.07	4.6	4.1	23.9
1/6/2019 13:00	9	9	9	40.98	4.3	4	23.8
1/6/2019 13:10	9	9	9	41.07	4.3	3.9	1.7
1/6/2019 13:20	9	9	9	41.01	4.2	4	1.8
1/6/2019 13:30	9	9	9	41.01	4.5	4	2.5
1/6/2019 13:40	9	9	9	40.98	4.2	4	3.6
1/6/2019 13:50	9	9	9	41.01	4.3	4	3.3
1/6/2019 14:00	9	9	9	40.98	4.6	4	3.6
1/6/2019 14:10	9	9	9	40.98	4.3	4	3.3
1/6/2019 14:20	9	9	9	41.01	4.4	4	24.5
1/6/2019 14:30	9	9	9	40.98	4.3	4	24.5
1/6/2019 14:40	9	9	9	40.98	4.6	3.9	24.5
1/6/2019 14:50	9	9	9	40.91	4.3	4	24.5
1/6/2019 15:00	9	9	9	40.95	4.4	4	24.4
1/6/2019 15:10	9	9	9	40.91	4.4	4.1	24.5
1/6/2019 15:20	9	9	9	40.91	4.5	4	24.4
1/6/2019 15:30	9	9	9	40.95	4.2	4	24.4
1/6/2019 15:40	9	9	9	40.95	4.4	4	24.4
1/6/2019 15:50	9	9	9	40.98	4.4	4	24.3
1/6/2019 16:00	9	9	9	40.98	4.6	3.9	24.3
1/6/2019 16:10	9	9	9	41.1	4.4	4	24.2
1/6/2019 16:20	9	9	9	40.95	4.5	4	24.2
1/6/2019 16:30	9	9	9	41.01	4.3	3.9	24.1
1/6/2019 16:40	9	9	9	41.01	4.4	4	24.1
1/6/2019 16:50	9	9	9	40.95	4.3	4.1	24
1/6/2019 17:00	9	9	9	40.91	4.7	4	24
1/6/2019 17:10	9	9	9	41.01	4.3	4	24
1/6/2019 17:20	9	9	9	40.95	4.2	4.1	23.8
1/6/2019 17:30	9	9	9	40.95	4.4	3.9	23.6
1/6/2019 17:40	9	9	9	40.98	4.4	3.9	1.2
1/6/2019 17:50	9	9	9	40.91	4.3	4	3.4
1/6/2019 18:00	9	9	9	40.91	4.3	3.9	3.5
1/6/2019 18:10	9	9	9	40.85	4.5	4	3.3
1/6/2019 18:20	9	9	9	40.98	4.3	4	4.6
1/6/2019 18:30	9	9	9	40.91	4.3	4	24.5
1/6/2019 18:40	9	9	9	40.91	4.4	4	24.5
1/6/2019 18:50	9	9	9	40.85	4.3	4.1	24.5
1/6/2019 19:00	9	9	9	40.91	4.3	4	24.5

1/6/2019 19:10	9	9	9	40.88	4.5	4.1	24.4
1/6/2019 19:20	9	9	9	40.76	4.5	4.1	24.3
1/6/2019 19:30	9	9	9	40.82	4.6	3.9	24.4
1/6/2019 19:40	9	9	9	40.88	4.3	4	24.2
1/6/2019 19:50	9	9	9	40.95	4.7	3.9	24.2
1/6/2019 20:00	9	9	9	40.85	4.5	4	24.1
1/6/2019 20:10	9	9	9	40.79	4.4	3.9	24.1
1/6/2019 20:20	9	9	9	40.95	4.3	3.9	24
1/6/2019 20:30	9	9	9	40.85	4.4	4	24
1/6/2019 20:40	9	9	9	40.82	4.6	3.9	24.1
1/6/2019 20:50	9	9	9	40.88	4.3	3.9	23.9
1/6/2019 21:00	9	9	9	40.88	4.3	3.9	19.4
1/6/2019 21:10	9	9	9	40.88	4.5	4	1.9
1/6/2019 21:20	9	9	9	40.79	4.2	3.9	2.5
1/6/2019 21:30	9	9	9	40.91	4.6	4.1	3.4
1/6/2019 21:40	9	9	9	40.82	4.2	4.1	3.3
1/6/2019 21:50	9	9	9	40.88	4.4	4	4.3
1/6/2019 22:00	9	9	9	40.82	4.5	4	24.5
1/6/2019 22:10	9	9	9	40.79	4.4	4.1	24.4
1/6/2019 22:20	9	9	9	40.79	4.6	3.9	24.4
1/6/2019 22:30	9	9	9	40.82	4.5	3.9	24.5
1/6/2019 22:40	9	9	9	40.85	4.4	4.1	24.5
1/6/2019 22:50	9	9	9	40.88	4.3	4	24.4
1/6/2019 23:00	9	9	9	40.85	4.5	3.9	24.3
1/6/2019 23:10	9	9	9	40.91	4.4	4	24.2
1/6/2019 23:20	9	9	9	40.88	4.2	4	24.2
1/6/2019 23:30	9	9	9	40.88	4.3	4	24
1/6/2019 23:40	9	9	9	40.88	4.5	4.1	24
1/6/2019 23:50	9	9	9	40.88	4.5	4	24
1/7/2019 0:00	9	9	9	40.98	4.5	4.1	23.9
1/7/2019 0:10	9	9	9	40.82	4.5	4	23.9
1/7/2019 0:20	9	9	9	40.82	4.4	3.9	21.4
1/7/2019 0:30	9	9	9	40.76	4.3	4	1.9
1/7/2019 0:40	9	9	9	40.79	4.2	4.1	3.5
1/7/2019 0:50	9	9	9	40.76	4.2	4.1	3.5
1/7/2019 1:00	9	9	9	40.76	4.6	4	24.5
1/7/2019 1:10	9	9	9	40.79	4.6	4.1	24.5
1/7/2019 1:20	9	9	9	40.76	4.5	4	24.5
1/7/2019 1:30	9	9	9	40.82	4.4	4.1	24.5
1/7/2019 1:40	9	9	9	40.76	4.2	4	24.5
1/7/2019 1:50	9	9	9	40.7	4.1	4	24.4
1/7/2019 2:00	9	9	9	40.7	4.5	4	24.5
1/7/2019 2:10	9	9	9	40.76	4.6	4	24.4
1/7/2019 2:20	9	9	9	40.73	4.3	4	24.3
1/7/2019 2:30	9	9	9	40.67	4.1	4	24.3
1/7/2019 2:40	9	9	9	40.64	4.6	3.9	24.2
1/7/2019 2:50	9	9	9	40.73	4.3	3.9	24.2

1/7/2019 3:00	9	9	9	40.67	4.6	4	24.1
1/7/2019 3:10	9	9	9	40.67	4.4	4	24.2
1/7/2019 3:20	9	9	9	40.7	4.6	4	24.2
1/7/2019 3:30	9	9	9	40.7	4.5	3.9	24.1
1/7/2019 3:40	9	9	9	40.73	4.6	4	24.1
1/7/2019 3:50	9	9	9	40.64	4.4	4	23.9
1/7/2019 4:00	9	9	9	40.64	4.3	4.1	23.9
1/7/2019 4:10	9	9	9	40.67	4.2	3.9	17.2
1/7/2019 4:20	9	9	9	40.64	4.5	4	1.2
1/7/2019 4:30	9	9	9	40.7	4.4	4.1	1.7
1/7/2019 4:40	9	9	9	40.7	4.4	4	3.5
1/7/2019 4:50	9	9	9	40.73	4.4	4	3.9
1/7/2019 5:00	9	9	9	40.64	4.7	4	3.2
1/7/2019 5:10	9	9	9	40.73	4.5	4	24.5
1/7/2019 5:20	9	9	9	40.73	4.5	4.1	24.5
1/7/2019 5:30	9	9	9	40.79	4.5	3.9	24.5
1/7/2019 5:40	9	9	9	40.73	4.4	4.1	24.5
1/7/2019 5:50	9	9	9	40.79	4.7	4.1	24.4
1/7/2019 6:00	9	9	9	40.76	4.3	4.1	24.4
1/7/2019 6:10	9	9	9	40.79	4.4	4	24.3
1/7/2019 6:20	9	9	9	40.7	4.3	4	24.2
1/7/2019 6:30	9	9	9	40.76	4.3	4	24.1
1/7/2019 6:40	9	9	9	40.73	4.4	4.1	24.2
1/7/2019 6:50	9	9	9	40.73	4.6	4	24.1
1/7/2019 7:00	9	9	9	40.7	4.2	4.1	23.9
1/7/2019 7:10	9	9	9	40.76	4.6	4	23.9
1/7/2019 7:20	9	9	9	40.7	4.3	4.1	23.9
1/7/2019 7:30	9	9	9	40.76	4.3	4.1	1.9
1/7/2019 7:40	9	9	9	40.73	4.6	4.1	1.2
1/7/2019 7:50	9	9	9	40.76	4.2	4.1	3.4
1/7/2019 8:00	9	9	9	40.79	4.4	3.9	3.7
1/7/2019 8:10	9	9	9	40.76	4.7	4	3.3
1/7/2019 8:20	9	9	9	40.79	4.3	4	3.7
1/7/2019 8:30	9	9	9	40.76	4.4	4	24.6
1/7/2019 8:40	9	9	9	40.76	4.4	4	24.5
1/7/2019 8:50	9	9	9	40.76	4.7	4	24.5
1/7/2019 9:00	9	9	9	40.64	4.5	4	24.5
1/7/2019 9:10	9	9	9	40.7	4.6	4.1	24.5
1/7/2019 9:20	9	9	9	40.82	4.3	4	24.3
1/7/2019 9:30	9	9	9	40.73	4.2	3.9	24.3
1/7/2019 9:40	9	9	9	40.67	4.4	4	24.3
1/7/2019 9:50	9	9	9	40.67	4.5	4	24.3
1/7/2019 10:00	9	9	9	40.64	4.5	3.9	24.2
1/7/2019 10:10	9	9	9	40.64	4.2	4.1	24.2
1/7/2019 10:20	9	9	9	40.64	4.3	4.1	24
1/7/2019 10:30	9	9	9	40.58	4.4	4.1	24
1/7/2019 10:40	9	9	9	40.61	4.3	4	23.9

1/7/2019 10:50	9	9	9	40.64	4.2	4	1.1
1/7/2019 11:00	9	9	9	40.61	4.3	4	3.3
1/7/2019 11:10	9	9	9	40.61	4.7	4	3.6
1/7/2019 11:20	9	9	9	40.67	4.4	4.1	3.3
1/7/2019 11:30	9	9	9	40.7	4.5	4	23.4
1/7/2019 11:40	9	9	9	40.7	4.6	3.9	24.5
1/7/2019 11:50	9	9	9	40.67	4.4	4.1	24.5
1/7/2019 12:00	9	9	9	40.7	4.3	4	24.5
1/7/2019 12:10	9	9	9	40.76	4.6	4.1	24.5
1/7/2019 12:20	9	9	9	40.73	4.5	4	24.4
1/7/2019 12:30	9	9	9	40.7	4.5	4.1	24.3
1/7/2019 12:40	9	9	9	40.73	4.2	4.1	24.2
1/7/2019 12:50	9	9	9	40.76	4.4	4	24.2
1/7/2019 13:00	9	9	9	40.73	4.5	3.9	23.9
1/7/2019 13:10	9	9	9	40.76	4.4	3.9	24.1
1/7/2019 13:20	9	9	9	40.82	4.5	4	24
1/7/2019 13:30	9	9	9	40.67	4.5	3.9	19.6
1/7/2019 13:40	9	9	9	40.73	4.5	4.1	2.3
1/7/2019 13:50	9	9	9	40.73	4.4	4	3.8
1/7/2019 14:00	9	9	9	40.76	4.3	4	3.4
1/7/2019 14:10	9	9	9	40.73	4.2	4.1	3.3
1/7/2019 14:20	9	9	9	40.73	4.4	3.9	24.6
1/7/2019 14:30	9	9	9	40.79	4.5	4	24.5
1/7/2019 14:40	9	9	9	40.76	4.7	4.1	24.5
1/7/2019 14:50	9	9	9	40.7	4.4	4	24.4
1/7/2019 15:00	9	9	9	40.67	4.3	3.9	24.4
1/7/2019 15:10	9	9	9	40.64	4.2	4.1	24.4
1/7/2019 15:20	9	9	9	40.76	4.5	4	24.3
1/7/2019 15:30	9	9	9	40.7	4.5	4	24.4
1/7/2019 15:40	9	9	9	40.67	4.6	4	24.3
1/7/2019 15:50	9	9	9	40.7	4.4	3.8	24.3
1/7/2019 16:00	9	9	9	40.76	4.3	4.1	24.2
1/7/2019 16:10	9	9	9	40.82	4.7	4	24.1
1/7/2019 16:20	9	9	9	40.73	4.3	4	24
1/7/2019 16:30	9	9	9	40.76	4.4	4.1	23.9
1/7/2019 16:40	9	9	9	40.76	4.5	4.1	23.6
1/7/2019 16:50	9	9	9	40.76	4.3	4.1	1.1
1/7/2019 17:00	9	9	9	40.76	4.4	4.1	1.5
1/7/2019 17:10	9	9	9	40.67	4.6	4.1	3.7
1/7/2019 17:20	9	9	9	40.7	4.6	4.1	3.5
1/7/2019 17:30	9	9	9	40.76	4.5	3.9	3.3
1/7/2019 17:40	9	9	9	40.7	4.2	4	24.5
1/7/2019 17:50	9	9	9	40.76	4.3	4.1	24.5
1/7/2019 18:00	9	9	9	40.73	4.6	4.1	24.5
1/7/2019 18:10	9	9	9	40.73	4.3	3.9	24.4
1/7/2019 18:20	9	9	9	40.82	4.2	3.9	24.4
1/7/2019 18:30	9	9	9	40.79	4.4	4.1	24.4

1/7/2019 18:40	9	9	9	40.76	4.6	4	24.5
1/7/2019 18:50	9	9	9	40.79	4.5	4.1	24.4
1/7/2019 19:00	9	9	9	40.79	4.4	4	24.3
1/7/2019 19:10	9	9	9	40.85	4.7	4	24.1
1/7/2019 19:20	9	9	9	40.79	4.3	4	24.1
1/7/2019 19:30	9	9	9	40.79	4.3	4	24.1
1/7/2019 19:40	9	9	9	40.82	4.8	4.1	23.9
1/7/2019 19:50	9	9	9	40.88	4.5	4	22.1
1/7/2019 20:00	9	9	9	40.82	4.5	4	1.1
1/7/2019 20:10	9	9	9	40.76	4.5	4.1	2
1/7/2019 20:20	9	9	9	40.79	4.6	4	3.7
1/7/2019 20:30	9	9	9	40.79	4.6	4.1	4.5
1/7/2019 20:40	9	9	9	40.82	4.7	4	24.5
1/7/2019 20:50	9	9	9	40.82	4.4	4.1	24.5
1/7/2019 21:00	9	9	9	40.79	4.5	4.1	24.4
1/7/2019 21:10	9	9	9	40.79	4.5	3.9	24.5
1/7/2019 21:20	9	9	9	40.85	4.7	4	24.3
1/7/2019 21:30	9	9	9	40.82	4.3	4	24.3
1/7/2019 21:40	9	9	9	40.85	4.3	4.1	24.3
1/7/2019 21:50	9	9	9	40.88	3.9	4	24.2
1/7/2019 22:00	9	9	9	40.91	4.8	3.9	24.2
1/7/2019 22:10	9	9	9	40.88	4.4	4.1	24.1
1/7/2019 22:20	9	9	9	40.88	4.5	4	24
1/7/2019 22:30	9	9	9	40.95	4.3	4	24
1/7/2019 22:40	9	9	9	40.91	4.6	4.1	24
1/7/2019 22:50	9	9	9	40.88	4.5	4	6.9
1/7/2019 23:00	9	9	9	40.85	4.6	4.1	1.2
1/7/2019 23:10	9	9	9	40.88	4.5	4	3.3
1/7/2019 23:20	9	9	9	40.88	4.9	4.1	3.3
1/7/2019 23:30	9	9	9	40.79	4.5	4	3.2
1/7/2019 23:40	9	9	9	40.85	4.5	4	3.5
1/7/2019 23:50	9	9	9	40.79	4.4	4	3.6
1/8/2019 0:00	9	9	9	40.88	4.4	4	3.3
1/8/2019 0:10	9	9	9	40.91	4.5	4	23.3
1/8/2019 0:20	9	9	9	40.76	4.7	4.1	24.5
1/8/2019 0:30	9	9	9	40.79	4.3	4.1	24.5
1/8/2019 0:40	9	9	9	40.79	4.3	4.1	24.5
1/8/2019 0:50	9	9	9	40.76	4.2	4.1	24.5
1/8/2019 1:00	9	9	9	40.76	4.3	4	24.4
1/8/2019 1:10	9	9	9	40.79	4.5	3.9	24.4
1/8/2019 1:20	9	9	9	40.7	4.2	4	24.3
1/8/2019 1:30	9	9	9	40.82	4.4	4.1	24.2
1/8/2019 1:40	9	9	9	40.79	4.6	4	24.3
1/8/2019 1:50	9	9	9	40.79	4.2	4.1	24.1
1/8/2019 2:00	9	9	9	40.76	4.3	4.1	24.1
1/8/2019 2:10	9	9	9	40.7	4.5	4	24
1/8/2019 2:20	9	9	9	40.79	4.7	4.1	24

1/8/2019 2:30	9	9	9	40.67	4.5	4	24
1/8/2019 2:40	9	9	9	40.7	4.3	4	23.9
1/8/2019 2:50	9	9	9	40.64	4.4	4.1	24
1/8/2019 3:00	9	9	9	40.67	4.3	4	24
1/8/2019 3:10	9	9	9	40.67	4.3	4	23.9
1/8/2019 3:20	9	9	9	40.76	4.3	4	21.1
1/8/2019 3:30	9	9	9	40.76	4.7	4.1	15
1/8/2019 3:40	9	9	9	40.73	4.3	4	2.1
1/8/2019 3:50	9	9	9	40.7	4.2	4.1	3.3
1/8/2019 4:00	9	9	9	40.73	4.5	4	3.9
1/8/2019 4:10	9	9	9	40.73	4.5	4.1	3.6
1/8/2019 4:20	9	9	9	40.7	4.4	4	4.1
1/8/2019 4:30	9	9	9	40.76	4.5	4.1	24.4
1/8/2019 4:40	9	9	9	40.73	4.7	4	24.5
1/8/2019 4:50	9	9	9	40.7	4.2	4	24.4
1/8/2019 5:00	9	9	9	40.7	4.5	4	24.5
1/8/2019 5:10	9	9	9	40.73	4.5	4.1	24.4
1/8/2019 5:20	9	9	9	40.76	4.5	4	24.5
1/8/2019 5:30	9	9	9	40.76	4.6	4	24.4
1/8/2019 5:40	9	9	9	40.79	4.6	4	24.3
1/8/2019 5:50	9	9	9	40.82	4.5	4.1	24.3
1/8/2019 6:00	9	9	9	40.79	4.5	4.1	24.2
1/8/2019 6:10	9	9	9	40.85	4.3	3.9	24.2
1/8/2019 6:20	9	9	9	40.76	4.5	4.1	24
1/8/2019 6:30	9	9	9	40.79	4.4	4	24.1
1/8/2019 6:40	9	9	9	40.85	4.5	3.9	21.1
1/8/2019 6:50	9	9	9	40.85	4.3	3.9	6.7
1/8/2019 7:00	9	9	9	40.79	4.5	4	3.7
1/8/2019 7:10	9	9	9	40.79	4.3	4	3.5
1/8/2019 7:20	9	9	9	40.79	4.2	4	3.5
1/8/2019 7:30	9	9	9	40.76	4.2	4.1	3.3
1/8/2019 7:40	9	9	9	40.82	4.3	4.1	24.5
1/8/2019 7:50	9	9	9	40.73	4.4	4	24.5
1/8/2019 8:00	9	9	9	40.91	4.4	4.1	24.4
1/8/2019 8:10	9	9	9	40.85	4.6	4	24.3
1/8/2019 8:20	9	9	9	40.88	4.3	4	24.4
1/8/2019 8:30	9	9	9	40.88	4.4	4	24.4
1/8/2019 8:40	9	9	9	40.88	4.4	4.1	24.4
1/8/2019 8:50	9	9	9	40.98	4.5	4	24.2
1/8/2019 9:00	9	9	9	40.85	4.5	4	24.2
1/8/2019 9:10	9	9	9	40.85	4.6	4	24.2
1/8/2019 9:20	9	9	9	40.91	4.5	4.1	24.1
1/8/2019 9:30	8	9	9	40.88	4.8	4	24
1/8/2019 9:40	9	9	9	40.82	4.2	4	24
1/8/2019 9:50	9	9	9	40.82	4.5	4	23.9
1/8/2019 10:00	2	0	2	41.1	3.5	3.6	0.3
1/8/2019 10:10	0	0	0	41.62	3.5	3.6	0.1

1/8/2019 10:20	9	9	9	41.62	4.3	4.1	24.5
1/8/2019 10:30	9	9	9	41.65	4.5	4.1	24.8
1/8/2019 10:40	9	9	9	41.59	4.4	4.2	1.3
1/8/2019 10:50	9	9	9	41.53	4.5	4.1	24.9
1/8/2019 11:00	9	9	9	41.56	4.6	4	24.8
1/8/2019 11:10	9	9	9	41.59	4.7	4.1	24.6
1/8/2019 11:20	9	9	9	41.59	4.5	4.1	24.7
1/8/2019 11:30	9	9	9	41.62	4.7	4.1	24.5
1/8/2019 11:40	9	9	9	41.59	4.2	4.1	24.7
1/8/2019 11:50	9	9	9	41.53	4.5	4.1	24.7
1/8/2019 12:00	9	9	9	41.53	4.6	4.1	24.7
1/8/2019 12:10	9	9	9	41.49	4.3	4.1	1.4
1/8/2019 12:20	9	9	9	41.53	4.4	4	24.6
1/8/2019 12:30	9	9	9	41.46	4.1	4.1	24.8
1/8/2019 12:40	9	9	9	41.49	4.5	4	2
1/8/2019 12:50	9	9	9	41.49	4.7	3.9	24.5
1/8/2019 13:00	9	9	9	41.53	4.7	4	24.7
1/8/2019 13:10	9	9	9	41.53	4.6	4	24.3
1/8/2019 13:20	9	9	9	41.46	4.5	4.2	24.6
1/8/2019 13:30	9	9	9	41.49	4.3	4	24.1
1/8/2019 13:40	9	9	9	41.49	4.5	4.1	24.7
1/8/2019 13:50	9	9	9	41.53	4.5	4.2	24.3
1/8/2019 14:00	9	9	9	41.49	4.4	4.1	24.7
1/8/2019 14:10	9	9	9	41.43	4.6	4.1	24.4
1/8/2019 14:20	9	9	9	41.49	4.6	3.9	3.8
1/8/2019 14:30	9	9	9	41.53	4.3	4	24.5
1/8/2019 14:40	9	9	9	41.46	4.2	4	24.1
1/8/2019 14:50	9	9	9	41.53	4.6	4.1	4.4
1/8/2019 15:00	9	9	9	41.49	4.6	4	24.5
1/8/2019 15:10	9	9	9	41.53	4.5	4	24.1
1/8/2019 15:20	9	9	9	41.49	4.4	4.1	24.6
1/8/2019 15:30	9	9	9	41.49	4.4	4.1	24.6
1/8/2019 15:40	9	9	9	41.49	4.4	4.1	24.1
1/8/2019 15:50	9	9	9	41.46	4.6	3.9	4.1
1/8/2019 16:00	9	9	9	41.56	4.5	4	24.5
1/8/2019 16:10	9	9	9	41.46	4.5	4.1	24.3
1/8/2019 16:20	9	9	9	41.49	4.5	4	23.3
1/8/2019 16:30	9	9	9	41.4	4.7	4.1	24.6
1/8/2019 16:40	9	9	9	41.46	4.5	4.1	24.5
1/8/2019 16:50	9	9	9	41.43	4.3	4	24.2
1/8/2019 17:00	9	9	9	41.46	4.3	4	24.1
1/8/2019 17:10	9	9	9	41.43	4.4	4	23.4
1/8/2019 17:20	9	9	9	41.49	4.3	4	24.5
1/8/2019 17:30	9	9	9	41.56	4.3	4	24.3
1/8/2019 17:40	9	9	9	41.49	4.5	4.1	24.2
1/8/2019 17:50	9	9	9	41.49	4.4	4	4.1
1/8/2019 18:00	9	9	9	41.53	4.3	4	24.5

1/8/2019 18:10	9	9	9	41.53	4.4	4.2	24.5
1/8/2019 18:20	9	9	9	41.59	4.5	4.1	24.4
1/8/2019 18:30	9	9	9	41.62	4.3	4.1	24.2
1/8/2019 18:40	9	9	9	41.59	4.3	4	21.2
1/8/2019 18:50	9	9	9	41.59	4.4	3.9	3.5
1/8/2019 19:00	9	9	9	41.59	4.5	4	24.6
1/8/2019 19:10	9	9	9	41.62	4.6	4.1	24.5
1/8/2019 19:20	9	9	9	41.65	4.5	4.1	24.3
1/8/2019 19:30	9	9	9	41.68	4.4	4.1	24.2
1/8/2019 19:40	9	9	9	41.62	4.5	4.1	24.1
1/8/2019 19:50	9	9	9	41.68	4.6	4.1	24
1/8/2019 20:00	9	9	9	41.59	4.5	4.1	1.1
1/8/2019 20:10	9	9	9	41.68	4.5	4.1	3.5
1/8/2019 20:20	9	9	9	41.68	4.4	4.1	24.5
1/8/2019 20:30	9	9	9	41.56	4.2	4.1	24.5
1/8/2019 20:40	9	9	9	41.62	4.5	4	24.4
1/8/2019 20:50	9	9	9	41.68	4.3	4.1	24.3
1/8/2019 21:00	9	9	9	41.62	4.5	4.1	24.2
1/8/2019 21:10	9	9	9	41.68	4.4	4	24
1/8/2019 21:20	9	9	9	41.65	4.5	3.9	23.9
1/8/2019 21:30	9	9	9	41.68	4.6	4.1	1
1/8/2019 21:40	9	9	9	41.8	4.5	4	3.4
1/8/2019 21:50	9	9	9	41.68	4.5	4.1	3.2
1/8/2019 22:00	9	9	9	41.74	4.5	4.1	24.5
1/8/2019 22:10	9	9	9	41.8	4.6	4	24.5
1/8/2019 22:20	9	9	9	41.83	4.6	4	24.4
1/8/2019 22:30	9	9	9	41.83	4.6	4	24.3
1/8/2019 22:40	9	9	9	41.8	4.4	3.9	24.2
1/8/2019 22:50	9	9	9	41.89	4.6	4.1	24.1
1/8/2019 23:00	9	9	9	41.86	4	4.1	24
1/8/2019 23:10	9	9	9	41.86	4.4	4.1	24
1/8/2019 23:20	9	9	9	41.8	4.2	4	24.1
1/8/2019 23:30	9	9	9	41.86	4.6	4.1	23.9
1/8/2019 23:40	9	9	9	41.8	4.6	4.1	3.4
1/8/2019 23:50	9	9	9	41.83	4.3	4	2.9
1/9/2019 0:00	9	9	9	41.83	4.3	4.1	3.7
1/9/2019 0:10	9	9	9	41.8	4.4	4	3.7
1/9/2019 0:20	9	9	9	41.83	4.4	4.1	3.6
1/9/2019 0:30	9	9	9	41.86	4.2	4.1	3.5
1/9/2019 0:40	9	9	9	41.83	4.4	4.1	3.4
1/9/2019 0:50	9	9	9	41.74	4.6	4	3.4
1/9/2019 1:00	9	9	9	41.89	4.3	4	3.3
1/9/2019 1:10	9	9	9	41.86	4.5	4.1	3.2
1/9/2019 1:20	9	9	9	41.92	4.6	4.1	3.6
1/9/2019 1:30	9	9	9	41.89	4.6	4.1	3.3
1/9/2019 1:40	9	9	9	41.92	4.1	4	3.3
1/9/2019 1:50	9	9	9	41.95	4.2	4.1	3.7

1/9/2019 2:00	9	9	9	41.89	4.3	4.1	3.2
1/9/2019 2:10	9	9	9	41.95	4.5	4	3.3
1/9/2019 2:20	9	9	9	41.95	4.3	4.1	3.6
1/9/2019 2:30	9	9	9	41.95	4.4	4.1	3.6
1/9/2019 2:40	9	9	9	41.98	4.8	4.1	3.3
1/9/2019 2:50	9	9	9	42.04	4.7	4	3.4
1/9/2019 3:00	9	9	9	42.04	4.1	4.1	3.4
1/9/2019 3:10	9	9	9	42.01	4.3	4.1	2.3
1/9/2019 3:20	9	9	9	42.01	4.3	4	1.1
1/9/2019 3:30	9	9	9	41.98	4.5	4	1.3
1/9/2019 3:40	9	9	9	41.92	4.4	4.1	1.5
1/9/2019 3:50	9	9	9	41.95	4.5	4	1.3
1/9/2019 4:00	9	9	9	41.95	4.4	4	3
1/9/2019 4:10	9	9	9	42.04	4.3	4.1	2.6
1/9/2019 4:20	9	9	9	41.89	4.5	4	2.4
1/9/2019 4:30	9	9	9	41.92	4.4	3.9	1.4
1/9/2019 4:40	9	9	9	41.95	4.4	4.1	1.2
1/9/2019 4:50	9	9	9	41.89	4.9	4	1.8
1/9/2019 5:00	9	9	9	41.86	4.4	4.1	1.5
1/9/2019 5:10	9	9	9	41.92	4.3	4.3	0.9
1/9/2019 5:20	9	9	9	41.98	4.3	4	19.3
1/9/2019 5:30	9	9	9	41.89	4.5	4	22.5
1/9/2019 5:40	9	9	9	41.89	4.5	4	20.9
1/9/2019 5:50	9	9	9	41.89	4.6	4.1	23.9
1/9/2019 6:00	9	9	9	41.95	4.4	4.1	24
1/9/2019 6:10	9	9	9	41.95	4.5	4	23.9
1/9/2019 6:20	9	9	9	41.92	4.6	4	23.8
1/9/2019 6:30	9	9	9	41.92	4.4	4	23.8
1/9/2019 6:40	9	9	9	41.89	4.3	4.1	23.8
1/9/2019 6:50	9	9	9	41.86	4.4	4.2	23.9
1/9/2019 7:00	9	9	9	41.92	4.3	3.9	24
1/9/2019 7:10	9	9	9	41.95	4.5	4	23.9
1/9/2019 7:20	9	9	9	41.98	4.3	4	23.9
1/9/2019 7:30	9	9	9	41.95	4.8	4.1	24
1/9/2019 7:40	9	9	9	41.92	4.5	4	24
1/9/2019 7:50	9	9	9	41.89	4.8	4	23.9
1/9/2019 8:00	9	9	9	41.92	4.7	4	23.8
1/9/2019 8:10	9	9	9	41.89	4.2	3.9	23.9
1/9/2019 8:20	9	9	9	41.92	4.5	4	23.8
1/9/2019 8:30	9	9	9	41.95	4.4	4.1	23.9
1/9/2019 8:40	9	9	9	41.83	4.3	4.1	24
1/9/2019 8:50	9	9	9	41.95	4.4	4.1	23.9
1/9/2019 9:00	9	9	9	41.92	4.4	4.1	23.9
1/9/2019 9:10	9	9	9	41.89	4.4	4	23.8
1/9/2019 9:20	9	9	9	41.89	4.2	4	24.1
1/9/2019 9:30	9	9	9	41.86	4.4	4	23.8
1/9/2019 9:40	9	9	9	41.83	4.6	4	23.7

1/9/2019 9:50	9	9	9	41.86	4.2	4	23.8
1/9/2019 10:00	9	9	9	41.86	4.4	4	23.8
1/9/2019 10:10	9	9	9	41.89	4.3	4.1	23.8
1/9/2019 10:20	9	9	9	41.89	4.1	3.9	23.9
1/9/2019 10:30	9	9	9	41.77	4.5	4	23.9
1/9/2019 10:40	9	9	9	41.86	4.4	4	23.8
1/9/2019 10:50	9	9	9	41.92	4.6	4.1	23.8
1/9/2019 11:00	9	9	9	41.92	4.5	4	24
1/9/2019 11:10	9	9	9	41.92	4.4	4	23.5
1/9/2019 11:20	9	9	9	41.92	4.6	4.1	24
1/9/2019 11:30	9	9	9	41.92	4.2	4	23.8
1/9/2019 11:40	9	9	9	41.89	4.5	3.9	23.8
1/9/2019 11:50	9	9	9	41.86	4.3	4.1	23.8
1/9/2019 12:00	9	9	9	41.92	4.5	4.1	24
1/9/2019 12:10	9	9	9	41.8	4.5	4.1	23.6
1/9/2019 12:20	9	9	9	41.86	4.2	4	22.5
1/9/2019 12:30	9	9	9	41.83	4.6	4.1	15
1/9/2019 12:40	9	9	9	41.8	4.4	4.1	12.2
1/9/2019 12:50	9	9	9	41.86	4.1	4.2	1
1/9/2019 13:00	9	9	9	41.83	4.2	4	1.1
1/9/2019 13:10	9	9	9	41.8	4.2	4.1	3.9
1/9/2019 13:20	9	9	9	41.8	4.4	4	3.4
1/9/2019 13:30	9	9	9	41.83	4.5	4.1	3.5
1/9/2019 13:40	9	9	9	41.8	4.5	4.1	3.3
1/9/2019 13:50	9	9	9	41.86	4.7	4	10.6
1/9/2019 14:00	9	9	9	41.89	4.5	4.1	24.5
1/9/2019 14:10	9	9	9	41.74	4.2	4.1	24.4
1/9/2019 14:20	9	9	9	41.83	4.4	4	24.4
1/9/2019 14:30	9	9	9	41.83	4.3	4.1	24.4
1/9/2019 14:40	9	9	9	41.83	4.4	4.1	24.4
1/9/2019 14:50	9	9	9	41.77	4.4	4	24.3
1/9/2019 15:00	9	9	9	41.74	4.4	4	24.2
1/9/2019 15:10	9	9	9	41.8	4.4	3.9	24.1
1/9/2019 15:20	9	9	9	41.8	4.4	4.1	24.1
1/9/2019 15:30	9	9	9	41.8	4.5	4	24.1
1/9/2019 15:40	9	9	9	41.74	4.5	4	24.1
1/9/2019 15:50	9	9	9	41.77	4.3	4.1	24
1/9/2019 16:00	9	9	9	41.68	4.6	4.1	24.1
1/9/2019 16:10	9	9	9	41.8	4.2	4.1	24
1/9/2019 16:20	9	9	9	41.68	4.5	3.9	24.1
1/9/2019 16:30	9	9	9	41.74	4.6	3.9	24.1
1/9/2019 16:40	9	9	9	41.83	4	4	24
1/9/2019 16:50	9	9	9	41.8	4.5	4	23.8
1/9/2019 17:00	9	9	9	41.83	4.5	4	23.9
1/9/2019 17:10	9	9	9	41.8	4.3	4	24
1/9/2019 17:20	9	9	9	41.77	4.2	3.9	24
1/9/2019 17:30	9	9	9	41.86	4.5	4	24

1/9/2019 17:40	9	9	9	41.86	4.4	4	23.9
1/9/2019 17:50	9	9	9	41.89	4.4	4	23.9
1/9/2019 18:00	9	9	9	41.89	4.5	4	23.8
1/9/2019 18:10	9	9	9	41.89	4.3	4.1	23.8
1/9/2019 18:20	9	9	9	41.83	4.7	4	23.8
1/9/2019 18:30	9	9	9	41.89	4.2	4	1.8
1/9/2019 18:40	9	9	9	41.92	4.4	4.1	3.6
1/9/2019 18:50	9	9	9	41.92	4.6	4.1	3.7
1/9/2019 19:00	9	9	9	41.89	4.5	4	3.6
1/9/2019 19:10	9	9	9	41.86	4.4	4	3.4
1/9/2019 19:20	9	9	9	41.92	4.6	4	3.2
1/9/2019 19:30	9	9	9	41.86	4.4	4	24.5
1/9/2019 19:40	9	9	9	41.92	4.4	4.1	24.5
1/9/2019 19:50	9	9	9	41.92	4.4	4.1	24.4
1/9/2019 20:00	9	9	9	41.92	4.3	4	24.4
1/9/2019 20:10	9	9	9	41.95	4.3	4.1	24.3
1/9/2019 20:20	9	9	9	41.89	4.6	4.1	24.4
1/9/2019 20:30	9	9	9	41.92	4.4	4	24.5
1/9/2019 20:40	9	9	9	41.98	4.4	4	24.3
1/9/2019 20:50	9	9	9	41.98	4.2	4.1	24.3
1/9/2019 21:00	9	9	9	41.98	4.7	4	24.1
1/9/2019 21:10	9	9	9	42.01	4.4	4.1	24.1
1/9/2019 21:20	9	9	9	41.98	4.3	4.1	24.1
1/9/2019 21:30	9	9	9	41.95	4.4	4	24
1/9/2019 21:40	9	9	9	41.95	4.3	4.1	24
1/9/2019 21:50	9	9	9	41.92	4.2	4.1	23.9
1/9/2019 22:00	9	9	9	41.92	4.4	4.1	24.1
1/9/2019 22:10	9	9	9	41.92	4.2	4	23.9
1/9/2019 22:20	9	9	9	41.89	4.5	4	24
1/9/2019 22:30	9	9	9	41.86	4.7	4	15.1
1/9/2019 22:40	9	9	9	41.89	4.5	4.1	1.1
1/9/2019 22:50	9	9	9	41.86	4.5	4.1	2.5
1/9/2019 23:00	9	9	9	41.86	4.7	4	3.5
1/9/2019 23:10	9	9	9	41.83	4.5	4	3.6
1/9/2019 23:20	9	9	9	41.83	4.3	4	3.4
1/9/2019 23:30	9	9	9	41.86	4.8	4	24.4
1/9/2019 23:40	9	9	9	41.86	4.5	4	24.4
1/9/2019 23:50	9	9	9	41.86	4.5	3.9	24.4
1/10/2019 0:00	9	9	9	41.89	4.2	4.1	24.4
1/10/2019 0:10	9	9	9	41.86	4.4	4.1	24.4
1/10/2019 0:20	9	9	9	41.86	4.2	3.9	24.4
1/10/2019 0:30	9	9	9	41.89	4.4	4.1	24.4
1/10/2019 0:40	9	9	9	41.86	4.5	4	24.3
1/10/2019 0:50	9	9	9	41.95	4.7	4.1	24.3
1/10/2019 1:00	9	9	9	41.89	4.4	4	24.3
1/10/2019 1:10	9	9	9	41.92	4.5	4.1	24.4
1/10/2019 1:20	9	9	9	41.89	4.4	4	24.3

1/10/2019 1:30	9	9	9	41.86	4.3	3.9	24.4
1/10/2019 1:40	9	9	9	41.83	4.2	4.1	24.3
1/10/2019 1:50	9	9	9	41.86	4.4	4	24.4
1/10/2019 2:00	9	9	9	41.83	4.4	4	24.4
1/10/2019 2:10	9	9	9	41.8	4.2	4	24.3
1/10/2019 2:20	9	9	9	41.86	4.5	3.9	24.4
1/10/2019 2:30	9	9	9	41.86	4.5	4.1	24.3
1/10/2019 2:40	9	9	9	41.83	4.3	4.1	24.2
1/10/2019 2:50	9	9	9	41.83	4.1	4	24.3
1/10/2019 3:00	9	9	9	41.86	4.4	4	24.3
1/10/2019 3:10	9	9	9	41.83	4.3	4	24.1
1/10/2019 3:20	9	9	9	41.86	4.5	4.1	24.1
1/10/2019 3:30	9	9	9	41.86	4.4	4	24
1/10/2019 3:40	9	9	9	41.83	4.2	4.1	24
1/10/2019 3:50	9	9	9	41.77	4.6	4	24.1
1/10/2019 4:00	9	9	9	41.83	4.3	4.1	24.1
1/10/2019 4:10	9	9	9	41.8	4.3	4.1	24.1
1/10/2019 4:20	9	9	9	41.83	4.7	4.1	24.1
1/10/2019 4:30	9	9	9	41.86	4.7	4.1	24
1/10/2019 4:40	9	9	9	41.83	4.3	4.1	23.9
1/10/2019 4:50	9	9	9	41.86	4.6	4	23.8
1/10/2019 5:00	9	9	9	41.83	4.6	4.1	23.2
1/10/2019 5:10	9	9	9	41.83	4.3	4.1	21
1/10/2019 5:20	9	9	9	41.83	4.2	4.1	1.8
1/10/2019 5:30	9	9	9	41.83	4.3	4	3.5
1/10/2019 5:40	9	9	9	41.89	4.5	4	3.5
1/10/2019 5:50	9	9	9	41.89	4.8	4.1	3.3
1/10/2019 6:00	9	9	9	41.89	5	4.1	24.5
1/10/2019 6:10	9	9	9	41.95	4.6	3.9	24.5
1/10/2019 6:20	9	9	9	41.95	4.5	4	24.5
1/10/2019 6:30	9	9	9	41.95	4.5	4.1	24.4
1/10/2019 6:40	9	9	9	41.95	4.7	4.2	24.4
1/10/2019 6:50	9	9	9	41.89	4.4	3.9	24.4
1/10/2019 7:00	9	9	9	41.95	4.4	4.1	24.3
1/10/2019 7:10	9	9	9	41.98	4.4	4	24.1
1/10/2019 7:20	9	9	9	42.04	4.5	4	24.1
1/10/2019 7:30	9	9	9	41.98	4.2	4.1	24.1
1/10/2019 7:40	9	9	9	41.98	4.4	4.1	23.8
1/10/2019 7:50	9	9	9	42.01	4.5	4.1	1.1
1/10/2019 8:00	9	9	9	41.95	4.5	4.1	3.6
1/10/2019 8:10	9	9	9	42.07	4.3	4	3.6
1/10/2019 8:20	9	9	9	42.07	4.3	4.1	3.2
1/10/2019 8:30	9	9	9	42.04	4.7	4.1	24.4
1/10/2019 8:40	9	9	9	42.04	4.7	4	24.4
1/10/2019 8:50	9	9	9	42.11	4.3	4	24.4
1/10/2019 9:00	9	9	9	42.04	4.5	4.1	24.4
1/10/2019 9:10	9	9	9	42.07	4.3	4	24.3

1/10/2019 9:20	9	9	9	42.01	4.5	4.1	24.2
1/10/2019 9:30	9	9	9	42.01	4.4	4	24.3
1/10/2019 9:40	9	9	9	41.98	4.5	4	24.1
1/10/2019 9:50	9	9	9	42.04	4.6	4.1	24.1
1/10/2019 10:00	9	9	9	42.01	4.4	4.1	24
1/10/2019 10:10	9	9	9	42.01	4.3	4	23.9
1/10/2019 10:20	9	9	9	42.07	4.5	4	22.6
1/10/2019 10:30	9	9	9	41.98	4.8	3.9	3.2
1/10/2019 10:40	9	9	9	42.01	4.1	4	2.5
1/10/2019 10:50	9	9	9	42.14	4.6	4.1	3.7
1/10/2019 11:00	9	9	9	42.04	4.4	4.1	3.6
1/10/2019 11:10	9	9	9	42.07	4.5	4.1	3.4
1/10/2019 11:20	9	9	9	42.04	4.4	4.1	4
1/10/2019 11:30	9	9	9	42.14	4.2	4	24.5
1/10/2019 11:40	9	9	9	42.04	4.6	4	24.4
1/10/2019 11:50	9	9	9	42.04	4.5	4	24.4
1/10/2019 12:00	9	9	9	41.98	4.5	4.1	24.3
1/10/2019 12:10	9	9	9	42.04	4.4	4.1	24.3
1/10/2019 12:20	9	9	9	41.98	4.5	4.1	24.3
1/10/2019 12:30	9	9	9	41.98	4.5	4	24.3
1/10/2019 12:40	9	9	9	41.95	4.6	4.1	24.1
1/10/2019 12:50	9	9	9	42.01	4.2	4.1	24.1
1/10/2019 13:00	9	9	9	41.95	4.8	4	24.1
1/10/2019 13:10	9	9	9	41.95	4.6	4	24.1
1/10/2019 13:20	9	9	9	41.92	4.3	4.1	24.1
1/10/2019 13:30	9	9	9	42.01	4.5	4.1	23.9
1/10/2019 13:40	9	9	9	41.95	4.3	4	23.8
1/10/2019 13:50	9	9	9	41.98	4.5	4.1	21
1/10/2019 14:00	9	9	9	41.98	4.4	4.1	1
1/10/2019 14:10	9	9	9	42.01	4.6	4	3.3
1/10/2019 14:20	9	9	9	41.95	4.2	4	3.5
1/10/2019 14:30	9	9	9	42.01	4.6	4.1	3.3
1/10/2019 14:40	9	9	9	41.89	4.3	4.2	10.5
1/10/2019 14:50	9	9	9	41.92	4.6	4	24.4
1/10/2019 15:00	9	9	9	41.92	4.4	4.1	24.5
1/10/2019 15:10	9	9	9	41.95	4.6	4	24.5
1/10/2019 15:20	9	9	9	41.89	4.4	4	24.4
1/10/2019 15:30	9	9	9	41.89	4.6	3.9	24.4
1/10/2019 15:40	9	9	9	41.98	4.5	3.9	24.3
1/10/2019 15:50	9	9	9	41.89	4.5	4.1	24.3
1/10/2019 16:00	9	9	9	41.98	4.6	4.1	24.3
1/10/2019 16:10	9	9	9	42.01	4.5	4.2	24.3
1/10/2019 16:20	9	9	9	41.92	4.3	4.1	24.1
1/10/2019 16:30	9	9	9	41.92	4.4	4.1	24.2
1/10/2019 16:40	9	9	9	41.89	4.4	4	24.1
1/10/2019 16:50	9	9	9	41.92	4.3	4.1	24.2
1/10/2019 17:00	9	9	9	41.92	4.8	4.1	24.1

1/10/2019 17:10	9	9	9	42.01	4.5	4	24.1
1/10/2019 17:20	9	9	9	42.01	4.9	4.1	24
1/10/2019 17:30	9	9	9	42.01	4.7	4	24
1/10/2019 17:40	9	9	9	41.89	4.5	4.1	23.9
1/10/2019 17:50	9	9	9	41.98	4.6	4	23.9
1/10/2019 18:00	9	9	9	41.89	5	4	23.9
1/10/2019 18:10	9	9	9	41.98	4.4	4.1	22
1/10/2019 18:20	9	9	9	41.92	4.6	4.1	12.1
1/10/2019 18:30	9	9	9	42.04	4.4	4	3.2
1/10/2019 18:40	9	9	9	41.98	4.3	4.1	1.1
1/10/2019 18:50	9	9	9	42.01	4.6	4.1	2.2
1/10/2019 19:00	9	9	9	41.98	4.5	4.1	3.2
1/10/2019 19:10	9	9	9	41.98	4.4	4.1	3.5
1/10/2019 19:20	9	9	9	41.95	4.4	4	3.5
1/10/2019 19:30	9	9	9	42.01	4.5	4.1	3.3
1/10/2019 19:40	9	9	9	41.92	4.4	4	4.6
1/10/2019 19:50	9	9	9	41.89	4.7	4	24.5
1/10/2019 20:00	9	9	9	41.89	4.9	4.1	24.5
1/10/2019 20:10	9	9	9	41.89	4.6	4	24.5
1/10/2019 20:20	9	9	9	41.83	4.6	4	24.5
1/10/2019 20:30	9	9	9	41.86	4.3	4.1	24.3
1/10/2019 20:40	9	9	9	41.83	4.5	4.1	24.4
1/10/2019 20:50	9	9	9	41.83	4.5	4	24.3
1/10/2019 21:00	9	9	9	41.8	4.6	4	24.3
1/10/2019 21:10	9	9	9	41.8	4.4	4.1	24.3
1/10/2019 21:20	9	9	9	41.8	4.2	4.1	24.1
1/10/2019 21:30	9	9	9	41.8	4.7	4.1	24.1
1/10/2019 21:40	9	9	9	41.8	4.8	3.9	24.1
1/10/2019 21:50	9	9	9	41.77	4.5	4.1	24.1
1/10/2019 22:00	9	9	9	41.86	4.6	4.1	24
1/10/2019 22:10	9	9	9	41.83	4.5	4.1	23.9
1/10/2019 22:20	9	9	9	41.8	4.3	3.9	24
1/10/2019 22:30	9	9	9	41.83	4.7	4	12.3
1/10/2019 22:40	9	9	9	41.83	4.7	4.1	1
1/10/2019 22:50	9	9	9	41.74	4.8	3.9	6.7
1/10/2019 23:00	9	9	9	41.77	4.5	4.2	1.2
1/10/2019 23:10	9	9	9	41.77	4.6	4	3.5
1/10/2019 23:20	9	9	9	41.74	4.6	4	3.5
1/10/2019 23:30	9	9	9	41.74	4.6	3.9	3.5
1/10/2019 23:40	9	9	9	41.77	4.3	4.1	3.6
1/10/2019 23:50	9	9	9	41.8	4.3	4.1	3.2
1/11/2019 0:00	9	9	9	41.8	4.8	3.9	4.6
1/11/2019 0:10	9	9	9	41.68	4.3	4.1	24.5
1/11/2019 0:20	9	9	9	41.8	4.4	4.1	24.5
1/11/2019 0:30	9	9	9	41.8	4.2	4.1	24.5
1/11/2019 0:40	9	9	9	41.8	4.4	4.1	24.4
1/11/2019 0:50	9	9	9	41.77	4.3	4	24.4

1/11/2019 1:00	9	9	9	41.77	4.6	4	24.4
1/11/2019 1:10	9	9	9	41.8	4.7	4	24.4
1/11/2019 1:20	9	9	9	41.74	4.9	3.9	24.4
1/11/2019 1:30	9	9	9	41.68	4.7	4.1	24.3
1/11/2019 1:40	9	9	9	41.68	4.4	4.2	24.4
1/11/2019 1:50	9	9	9	41.74	4.3	4.1	24.4
1/11/2019 2:00	9	9	9	41.68	4.3	4.1	24.3
1/11/2019 2:10	9	9	9	41.74	4.3	4.1	24.2
1/11/2019 2:20	9	9	9	41.68	4.3	4	24.2
1/11/2019 2:30	9	9	9	41.77	4.3	4.1	24.2
1/11/2019 2:40	9	9	9	41.62	4.5	4	24.2
1/11/2019 2:50	9	9	9	41.68	4.6	4.1	24.2
1/11/2019 3:00	9	9	9	41.59	4.3	4	24.1
1/11/2019 3:10	9	9	9	41.59	4.6	4.2	24.1
1/11/2019 3:20	9	9	9	41.62	4.4	4.1	24.2
1/11/2019 3:30	9	9	9	41.68	4.4	4.1	24.1
1/11/2019 3:40	9	9	9	41.56	4.3	4.1	24
1/11/2019 3:50	9	9	9	41.62	4.7	4.1	24.1
1/11/2019 4:00	9	9	9	41.65	4.3	4.1	24.1
1/11/2019 4:10	9	9	9	41.59	4.1	3.9	24
1/11/2019 4:20	9	9	9	41.62	4.3	4.1	24
1/11/2019 4:30	9	9	9	41.62	4.3	4.1	24
1/11/2019 4:40	9	9	9	41.62	4.6	4.1	24
1/11/2019 4:50	9	9	9	41.65	4.3	4.1	23.9
1/11/2019 5:00	9	9	9	41.62	4.3	4.1	24
1/11/2019 5:10	9	9	9	41.56	4.5	4.1	24
1/11/2019 5:20	9	9	9	41.56	4.4	4	24
1/11/2019 5:30	9	9	9	41.62	4.4	4	23.9
1/11/2019 5:40	9	9	9	41.62	4.5	4.1	23.9
1/11/2019 5:50	9	9	9	41.59	4.7	4	23.2
1/11/2019 6:00	9	9	9	41.56	4.5	4.1	22.7
1/11/2019 6:10	9	9	9	41.62	4.3	3.9	3.4
1/11/2019 6:20	9	9	9	41.65	4.5	4.1	2.3
1/11/2019 6:30	9	9	9	41.62	4.3	4.1	2.1
1/11/2019 6:40	9	9	9	41.65	4.5	4.2	3.3
1/11/2019 6:50	9	9	9	41.62	4.4	4.1	3.3
1/11/2019 7:00	9	9	9	41.59	4.6	4.1	3.2
1/11/2019 7:10	9	9	9	41.68	4.4	4.1	3.7
1/11/2019 7:20	9	9	9	41.68	4.4	4	3.2
1/11/2019 7:30	9	9	9	41.62	4.6	4.1	4.6
1/11/2019 7:40	9	9	9	41.62	4.3	3.9	24.5
1/11/2019 7:50	9	9	9	41.62	4.6	4	24.5
1/11/2019 8:00	9	9	9	41.65	4.3	4.1	24.5
1/11/2019 8:10	9	9	9	41.62	4.2	3.9	24.5
1/11/2019 8:20	9	9	9	41.59	4.6	4.1	24.5
1/11/2019 8:30	9	9	9	41.56	3.8	4.1	24.4
1/11/2019 8:40	9	9	9	41.56	4.5	4.1	24.5

1/11/2019 8:50	9	9	9	41.53	4.4	4.1	24.5
1/11/2019 9:00	9	9	9	41.56	4.5	4.1	24.4
1/11/2019 9:10	9	9	9	41.62	4.5	4.1	24.5
1/11/2019 9:20	9	9	9	41.56	4.3	4	24.5
1/11/2019 9:30	9	9	9	41.53	4.3	4	24.4
1/11/2019 9:40	9	9	9	41.4	4.6	4.2	24.4
1/11/2019 9:50	9	9	9	41.53	4.4	4.1	24.4
1/11/2019 10:00	9	9	9	41.53	4.4	4.1	24.4
1/11/2019 10:10	9	9	9	41.56	4.6	4.1	24.5
1/11/2019 10:20	9	9	9	41.56	4.4	4.1	24.3
1/11/2019 10:30	9	9	9	41.46	4.4	4	24.3
1/11/2019 10:40	9	9	9	41.49	4.5	4.1	24.2
1/11/2019 10:50	9	9	9	41.56	4.6	4.1	24.1
1/11/2019 11:00	9	9	9	41.53	4.6	4	24
1/11/2019 11:10	9	9	9	41.49	4.5	4.1	24
1/11/2019 11:20	9	9	9	41.53	4.4	4.1	24
1/11/2019 11:30	9	9	9	41.49	4.4	4.1	24
1/11/2019 11:40	9	9	9	41.53	4.4	4.1	23.9
1/11/2019 11:50	9	9	9	41.46	4.5	4.1	23.8
1/11/2019 12:00	9	9	9	41.49	4.5	4.1	21.9
1/11/2019 12:10	9	9	9	41.49	4.6	4.1	22
1/11/2019 12:20	9	9	9	41.43	4.6	4	12.1
1/11/2019 12:30	9	9	9	41.43	4.6	4	1.2
1/11/2019 12:40	9	9	9	41.49	4.5	4	2.5
1/11/2019 12:50	9	9	9	41.53	4.7	4	3.5
1/11/2019 13:00	9	9	9	41.49	4.6	4.1	3.7
1/11/2019 13:10	9	9	9	41.46	4.9	4.1	3.3
1/11/2019 13:20	9	9	9	41.46	4.4	4.1	3.6
1/11/2019 13:30	9	9	9	41.46	4.4	3.9	4.2
1/11/2019 13:40	9	9	9	41.49	4.6	4.1	24.5
1/11/2019 13:50	9	9	9	41.46	4.6	4	24.5
1/11/2019 14:00	9	9	9	41.43	4.4	4	24.5
1/11/2019 14:10	9	9	9	41.46	4.5	4	24.5
1/11/2019 14:20	9	9	9	41.4	4.2	4	24.5
1/11/2019 14:30	9	9	9	41.4	4.6	4.1	24.5
1/11/2019 14:40	9	9	9	41.43	4.7	4.2	24.4
1/11/2019 14:50	9	9	9	41.46	4.6	4	24.4
1/11/2019 15:00	9	9	9	41.37	4.4	4.1	24.4
1/11/2019 15:10	9	9	9	41.46	4.4	4	24.3
1/11/2019 15:20	9	9	9	41.49	4.5	4.1	24.3
1/11/2019 15:30	9	9	9	41.46	4.4	4.2	24.2
1/11/2019 15:40	9	9	9	41.53	4.4	4.1	24.1
1/11/2019 15:50	9	9	9	41.46	4.5	4.1	24.2
1/11/2019 16:00	9	9	9	41.49	4.2	4	24.1
1/11/2019 16:10	9	9	9	41.43	4.5	4	24
1/11/2019 16:20	9	9	9	41.46	4.3	4.1	24.2
1/11/2019 16:30	9	9	9	41.46	4.2	4	24.1

1/11/2019 16:40	9	9	9	41.46	4.5	4	23.9
1/11/2019 16:50	9	9	9	41.43	4.4	4.1	23.9
1/11/2019 17:00	9	9	9	41.49	4.4	4.1	23.1
1/11/2019 17:10	9	9	9	41.46	4.4	4.1	1.7
1/11/2019 17:20	9	9	9	41.56	4.7	4.1	1.1
1/11/2019 17:30	9	9	9	41.49	4.4	4.1	2.5
1/11/2019 17:40	9	9	9	41.49	4.6	4	3.2
1/11/2019 17:50	9	9	9	41.46	4.7	4.1	3.8
1/11/2019 18:00	9	9	9	41.46	4.9	4.1	3.5
1/11/2019 18:10	9	9	9	41.46	4.7	4.1	3.5
1/11/2019 18:20	9	9	9	41.53	4	4.1	3.7
1/11/2019 18:30	9	9	9	41.49	4.4	4.1	3.3
1/11/2019 18:40	9	9	9	41.46	4.5	4	4.3
1/11/2019 18:50	9	9	9	41.4	4.4	4	24.5
1/11/2019 19:00	9	9	9	41.34	4.4	4	24.5
1/11/2019 19:10	9	9	9	41.37	5	4.1	24.3
1/11/2019 19:20	9	9	9	41.34	4.6	4.1	24.3
1/11/2019 19:30	9	9	9	41.34	4.3	4	24.2
1/11/2019 19:40	9	9	9	41.31	4.5	4.1	24
1/11/2019 19:50	9	9	9	41.19	4.3	4.1	23.8
1/11/2019 20:00	9	9	9	41.28	4.5	4.1	15.1
1/11/2019 20:10	9	9	9	41.1	4.4	4.1	3.4
1/11/2019 20:20	9	9	9	41.13	4.6	4	3.3
1/11/2019 20:30	9	9	9	41.1	4.3	4.1	24.5
1/11/2019 20:40	9	9	9	40.98	4.3	4	24.5
1/11/2019 20:50	9	9	9	41.01	4.7	4.1	24.5
1/11/2019 21:00	9	9	9	40.91	4.5	4	24.4
1/11/2019 21:10	9	9	9	40.85	4.4	4.1	24.3
1/11/2019 21:20	9	9	9	40.88	4.5	4.1	24.3
1/11/2019 21:30	9	9	9	40.82	4.5	4.1	24.4
1/11/2019 21:40	9	9	9	40.79	4.6	4.1	24.3
1/11/2019 21:50	9	9	9	40.76	4.5	4	24.3
1/11/2019 22:00	9	9	9	40.76	4.5	4.1	24.1
1/11/2019 22:10	9	9	9	40.73	4	4	24.2
1/11/2019 22:20	9	9	9	40.67	4.5	3.9	24.2
1/11/2019 22:30	9	9	9	40.76	4.5	4.1	24.1
1/11/2019 22:40	9	9	9	40.7	4.5	4	24.1
1/11/2019 22:50	9	9	9	40.7	4.4	3.9	24
1/11/2019 23:00	9	9	9	40.7	4.5	4.1	24
1/11/2019 23:10	9	9	9	40.67	4.5	4	24.1
1/11/2019 23:20	9	9	9	40.73	4.5	3.9	21
1/11/2019 23:30	9	9	9	40.64	4.5	4	1.4
1/11/2019 23:40	9	9	9	40.7	4.3	4.1	3.3
1/11/2019 23:50	9	9	9	40.64	4.5	4.1	3.6
1/12/2019 0:00	9	9	9	40.64	4.4	4.1	3.7
1/12/2019 0:10	9	9	9	40.61	4.7	4	3.7
1/12/2019 0:20	9	9	9	40.64	4.4	4.1	24.5

1/12/2019 0:30	9	9	9	40.61	4.5	4.2	24.5
1/12/2019 0:40	9	9	9	40.61	4.5	4	24.6
1/12/2019 0:50	9	9	9	40.67	4.4	4	24.5
1/12/2019 1:00	9	9	9	40.49	4.5	4.1	24.4
1/12/2019 1:10	9	9	9	40.58	4.4	4.1	24.4
1/12/2019 1:20	9	9	9	40.55	4.3	4	24.4
1/12/2019 1:30	9	9	9	40.55	4.4	4.2	24.3
1/12/2019 1:40	9	9	9	40.49	4.6	4	24.3
1/12/2019 1:50	9	9	9	40.52	4.2	4	24.2
1/12/2019 2:00	9	9	9	40.55	4.5	4.1	24.2
1/12/2019 2:10	9	9	9	40.49	4.4	4.1	24.1
1/12/2019 2:20	9	9	9	40.52	4.2	4.1	24.1
1/12/2019 2:30	9	9	9	40.46	4.3	4.1	24.1
1/12/2019 2:40	9	9	9	40.46	4.3	4	24.1
1/12/2019 2:50	9	9	9	40.43	4.5	4.1	24.1
1/12/2019 3:00	9	9	9	40.46	4.5	3.9	24
1/12/2019 3:10	9	9	9	40.46	4.4	4.1	24
1/12/2019 3:20	9	9	9	40.46	4.3	4.1	24.1
1/12/2019 3:30	9	9	9	40.37	4.3	4.1	24.1
1/12/2019 3:40	9	9	9	40.43	4.7	4.1	24
1/12/2019 3:50	9	9	9	40.43	4.5	4	24
1/12/2019 4:00	9	9	9	40.43	4.4	4.2	23.9
1/12/2019 4:10	9	9	9	40.49	4.4	4.1	22.1
1/12/2019 4:20	9	9	9	40.43	4.4	4.1	1.8
1/12/2019 4:30	9	9	9	40.43	4.7	4	1.9
1/12/2019 4:40	9	9	9	40.43	4.4	4.1	3.5
1/12/2019 4:50	9	9	9	40.46	4.5	4.1	3.4
1/12/2019 5:00	9	9	9	40.46	4.4	4.2	3.5
1/12/2019 5:10	9	9	9	40.3	4.3	4.1	4.4
1/12/2019 5:20	9	9	9	40.43	4.6	4	24.5
1/12/2019 5:30	9	9	9	40.37	4.6	4.1	24.5
1/12/2019 5:40	9	9	9	40.46	4.6	4.1	24.5
1/12/2019 5:50	9	9	9	40.46	4.5	4	24.4
1/12/2019 6:00	9	9	9	40.49	4.3	4	24.5
1/12/2019 6:10	9	9	9	40.3	4.3	4.1	24.4
1/12/2019 6:20	9	9	9	40.46	4.5	4.1	24.4
1/12/2019 6:30	9	9	9	40.49	4.2	4	24.3
1/12/2019 6:40	9	9	9	40.46	4.4	4.1	24.4
1/12/2019 6:50	9	9	9	40.46	4.4	3.9	24.4
1/12/2019 7:00	9	9	9	40.49	4.6	4.1	24.3
1/12/2019 7:10	9	9	9	40.43	4.4	4	24.2
1/12/2019 7:20	9	9	9	40.43	4.5	4.1	24.2
1/12/2019 7:30	9	9	9	40.43	4.5	4	24.2
1/12/2019 7:40	9	9	9	40.49	4.6	4	24.3
1/12/2019 7:50	9	9	9	40.46	4.4	4.1	24.1
1/12/2019 8:00	9	9	9	40.46	4.5	4.1	24.1
1/12/2019 8:10	9	9	9	40.46	4.7	4	24.1

1/12/2019 8:20	9	9	9	40.49	4.2	4.1	24.1
1/12/2019 8:30	9	9	9	40.43	4.4	4	24
1/12/2019 8:40	9	9	9	40.43	4.6	4.1	23.9
1/12/2019 8:50	9	9	9	40.37	4.3	4.1	23.9
1/12/2019 9:00	9	9	9	40.43	5	4.1	23.9
1/12/2019 9:10	9	9	9	40.3	4.4	4.1	23.8
1/12/2019 9:20	9	9	9	40.46	4.5	4.1	23.9
1/12/2019 9:30	9	9	9	40.46	4.4	4.1	23.9
1/12/2019 9:40	9	9	9	40.52	4.2	4	23.9
1/12/2019 9:50	9	9	9	40.49	4.5	4.1	24.1
1/12/2019 10:00	9	9	9	40.43	4	4.1	3.5
1/12/2019 10:10	9	9	9	40.43	4.4	4.1	0.9
1/12/2019 10:20	9	9	9	40.37	4.4	4.1	1.9
1/12/2019 10:30	9	9	9	40.49	4.6	4	3.3
1/12/2019 10:40	9	9	9	40.43	4.5	4	3.4
1/12/2019 10:50	9	9	9	40.33	4.5	4	3.4
1/12/2019 11:00	9	9	9	40.33	4.2	4	3.4
1/12/2019 11:10	9	9	9	40.43	4.5	4.2	3.4
1/12/2019 11:20	9	9	9	40.37	4.6	4	3.4
1/12/2019 11:30	9	9	9	40.43	4.3	4.1	3.4
1/12/2019 11:40	9	9	9	40.33	4.8	4.1	3.6
1/12/2019 11:50	9	9	9	40.43	4.4	4.1	10.5
1/12/2019 12:00	9	9	9	40.46	4.6	4	24.5
1/12/2019 12:10	9	9	9	40.43	4.5	4.1	24.5
1/12/2019 12:20	9	9	9	40.43	4.3	4	24.5
1/12/2019 12:30	9	9	9	40.43	4.2	4.2	24.4
1/12/2019 12:40	9	9	9	40.49	4.6	4	24.5
1/12/2019 12:50	9	9	9	40.37	4.5	4.1	24.5
1/12/2019 13:00	9	9	9	40.46	4.7	4.1	24.4
1/12/2019 13:10	9	9	9	40.46	4.4	4	24.5
1/12/2019 13:20	9	9	9	40.37	4.4	3.9	24.4
1/12/2019 13:30	9	9	9	40.43	4.4	4.1	24.3
1/12/2019 13:40	9	9	9	40.43	4.4	4.1	24.3
1/12/2019 13:50	9	9	9	40.46	4.5	3.9	24.4
1/12/2019 14:00	9	9	9	40.46	4.5	4.1	24.4
1/12/2019 14:10	9	9	9	40.55	4.6	4	24.3
1/12/2019 14:20	9	9	9	40.46	4.3	3.9	24.4
1/12/2019 14:30	9	9	9	40.46	4.4	4	24.3
1/12/2019 14:40	9	9	9	40.43	4.6	4.1	24.3
1/12/2019 14:50	9	9	9	40.46	4.6	4.1	24.3
1/12/2019 15:00	9	9	9	40.55	4.4	4.2	24.3
1/12/2019 15:10	9	9	9	40.49	4.5	4	24.2
1/12/2019 15:20	9	9	9	40.52	4.5	4	24.2
1/12/2019 15:30	9	9	9	40.55	4.2	4.1	24.2
1/12/2019 15:40	9	9	9	40.58	4.6	4	24.1
1/12/2019 15:50	9	9	9	40.52	4.4	4	24.1
1/12/2019 16:00	9	9	9	40.55	4.5	4.1	24.1

1/12/2019 16:10	9	9	9	40.52	4.6	4.1	24.2
1/12/2019 16:20	9	9	9	40.58	4.5	4.1	24
1/12/2019 16:30	9	9	9	40.52	4.3	4	24.2
1/12/2019 16:40	9	9	9	40.55	4.5	4	23.9
1/12/2019 16:50	9	9	9	40.52	4.5	3.9	23.9
1/12/2019 17:00	9	9	9	40.58	4.5	4.1	23.9
1/12/2019 17:10	9	9	9	40.58	4.3	4.1	23.9
1/12/2019 17:20	9	9	9	40.55	4.4	4.1	22
1/12/2019 17:30	9	9	9	40.58	4.4	4.1	1.7
1/12/2019 17:40	9	9	9	40.46	4.3	4	1.2
1/12/2019 17:50	9	9	9	40.49	4.5	4.1	2.2
1/12/2019 18:00	9	9	9	40.55	4.4	4.1	3.1
1/12/2019 18:10	9	9	9	40.52	4.3	4	3
1/12/2019 18:20	9	9	9	40.55	4.3	4.1	2.9
1/12/2019 18:30	9	9	9	40.55	4.5	4.1	3.5
1/12/2019 18:40	9	9	9	40.52	4.5	4.1	3.6
1/12/2019 18:50	9	9	9	40.52	4.5	4.1	3.5
1/12/2019 19:00	9	9	9	40.49	4.6	3.9	3.5
1/12/2019 19:10	9	9	9	40.49	4.4	4	3.6
1/12/2019 19:20	9	9	9	40.43	4.5	4.1	3.5
1/12/2019 19:30	9	9	9	40.43	4.5	4.1	3.6
1/12/2019 19:40	9	9	9	40.49	4.5	4.1	3.6
1/12/2019 19:50	9	9	9	40.46	4.5	4	3.6
1/12/2019 20:00	9	9	9	40.43	4.6	4.1	3.6
1/12/2019 20:10	9	9	9	40.46	4.4	4.1	3.7
1/12/2019 20:20	9	9	9	40.37	4.5	4.1	3.6
1/12/2019 20:30	9	9	9	40.43	4.4	4.1	3.7
1/12/2019 20:40	9	9	9	40.43	4.7	4	3.5
1/12/2019 20:50	9	9	9	40.46	4.7	4	3.5
1/12/2019 21:00	9	9	9	40.43	4.4	4	3.5
1/12/2019 21:10	9	9	9	40.49	4.5	4	3.3
1/12/2019 21:20	9	9	9	40.37	4.3	4.1	3.7
1/12/2019 21:30	9	9	9	40.43	4.5	4	3.7
1/12/2019 21:40	9	9	9	40.43	4.5	4	3.5
1/12/2019 21:50	9	9	9	40.37	4.3	4	3.3
1/12/2019 22:00	9	9	9	40.33	4.5	4	3.6
1/12/2019 22:10	9	9	9	40.37	4.5	4.1	3.4
1/12/2019 22:20	9	9	9	40.43	4.7	4.2	3.4
1/12/2019 22:30	9	9	9	40.46	4.3	4.1	3.3
1/12/2019 22:40	9	9	9	40.43	4.5	4	3.4
1/12/2019 22:50	9	9	9	40.37	4.4	4.1	3.2
1/12/2019 23:00	9	9	9	40.33	4.4	4	3.3
1/12/2019 23:10	9	9	9	40.37	4.5	4	3.3
1/12/2019 23:20	9	9	9	40.37	4.3	4.1	1.7
1/12/2019 23:30	9	9	9	40.37	4.6	4	2.6
1/12/2019 23:40	9	9	9	40.33	4.7	4	1.8
1/12/2019 23:50	9	9	9	40.37	4.5	4.1	2.4

1/13/2019 0:00	9	9	9	40.37	4.5	4.1	2.7
1/13/2019 0:10	9	9	9	40.33	4.7	4.1	3.4
1/13/2019 0:20	9	9	9	40.43	4.5	4	3.5
1/13/2019 0:30	9	9	9	40.43	4.3	4.1	3.4
1/13/2019 0:40	9	9	9	40.33	4.4	4.1	3.6
1/13/2019 0:50	9	9	9	40.33	4.5	4	3.4
1/13/2019 1:00	9	9	9	40.37	4.5	4.1	3.4
1/13/2019 1:10	9	9	9	40.37	4.4	4	3.6
1/13/2019 1:20	9	9	9	40.37	4.4	4.1	3.6
1/13/2019 1:30	9	9	9	40.43	4.2	4.1	3.3
1/13/2019 1:40	9	9	9	40.3	4.6	4.1	3.5
1/13/2019 1:50	9	9	9	40.37	4.6	4.1	3.2
1/13/2019 2:00	9	9	9	40.43	4.6	4.1	3.5
1/13/2019 2:10	9	9	9	40.33	4.4	4.1	3.4
1/13/2019 2:20	9	9	9	40.37	4.6	4.1	3.5
1/13/2019 2:30	9	9	9	40.37	4.7	4	3.2
1/13/2019 2:40	9	9	9	40.3	4.7	4.1	3.3
1/13/2019 2:50	9	9	9	40.43	4.3	4.1	3.3
1/13/2019 3:00	9	9	9	40.43	4.6	4.1	3.3
1/13/2019 3:10	9	9	9	40.37	4.4	4	3.5
1/13/2019 3:20	9	9	9	40.43	4.5	4.1	3.5
1/13/2019 3:30	9	9	9	40.37	4.6	4	3.5
1/13/2019 3:40	9	9	9	40.37	4.4	4	3.4
1/13/2019 3:50	9	9	9	40.24	4.4	4.1	3.4
1/13/2019 4:00	9	9	9	40.37	4.4	4.1	3.2
1/13/2019 4:10	9	9	9	40.37	4.6	4.1	3.8
1/13/2019 4:20	9	9	9	40.33	4.3	4.1	3.5
1/13/2019 4:30	9	9	9	40.33	4.4	4	3.6
1/13/2019 4:40	9	9	9	40.37	4.4	4	3.4
1/13/2019 4:50	9	9	9	40.37	4.5	4	3.4
1/13/2019 5:00	9	9	9	40.3	4.9	4.1	3.8
1/13/2019 5:10	9	9	9	40.27	4.4	4.1	3.2
1/13/2019 5:20	9	9	9	40.33	4.5	4	3.4
1/13/2019 5:30	9	9	9	40.3	4.5	4	3.4
1/13/2019 5:40	9	9	9	40.46	4.8	4	3.4
1/13/2019 5:50	9	9	9	40.37	4.6	4	3.4
1/13/2019 6:00	9	9	9	40.43	4.4	4.1	3.5
1/13/2019 6:10	9	9	9	40.46	4.5	4	3.5
1/13/2019 6:20	9	9	9	40.52	4.7	4	3.3
1/13/2019 6:30	9	9	9	40.43	4.6	4.1	4.5
1/13/2019 6:40	9	9	9	40.46	4.6	4.1	24.5
1/13/2019 6:50	9	9	9	40.33	4.4	4.1	24.5
1/13/2019 7:00	9	9	9	40.37	4.3	4	24.5
1/13/2019 7:10	9	9	9	40.43	4.6	4.2	24.5
1/13/2019 7:20	9	9	9	40.43	4.6	4	24.5
1/13/2019 7:30	9	9	9	40.43	4.6	4	24.5
1/13/2019 7:40	9	9	9	40.43	4.5	4.1	24.4

1/13/2019 7:50	9	9	9	40.33	4.5	4.1	24.5
1/13/2019 8:00	9	9	9	40.43	4.6	4	24.5
1/13/2019 8:10	9	9	9	40.46	4.1	4.1	24.5
1/13/2019 8:20	9	9	9	40.46	4.3	4.1	24.4
1/13/2019 8:30	9	9	9	40.43	4.4	4.1	24.4
1/13/2019 8:40	9	9	9	40.49	4.3	4.1	24.4
1/13/2019 8:50	9	9	9	40.43	4.4	4.1	24.4
1/13/2019 9:00	9	9	9	40.33	4.5	4.1	24.3
1/13/2019 9:10	9	9	9	40.46	4.6	4	24.3
1/13/2019 9:20	9	9	9	40.37	4.6	4	24.3
1/13/2019 9:30	9	9	9	40.33	4.5	4	24.2
1/13/2019 9:40	9	9	9	40.27	4.6	4	24.2
1/13/2019 9:50	9	9	9	40.37	4.6	4.1	24.2
1/13/2019 10:00	9	9	9	40.37	4.3	4	24.2
1/13/2019 10:10	9	9	9	40.27	4.7	4	24.3
1/13/2019 10:20	9	9	9	40.3	3.9	4.1	24.3
1/13/2019 10:30	9	9	9	40.3	4.5	4.1	24.3
1/13/2019 10:40	9	9	9	40.24	4.5	4	24.2
1/13/2019 10:50	9	9	9	40.37	4.4	4.1	24.3
1/13/2019 11:00	9	9	9	40.24	4.4	4.1	24.2
1/13/2019 11:10	9	9	9	40.27	4.3	4.1	24.2
1/13/2019 11:20	9	9	9	40.3	4.5	4.2	24.2
1/13/2019 11:30	9	9	9	40.3	4.7	4.1	24.2
1/13/2019 11:40	9	9	9	40.3	4.5	4.1	24.2
1/13/2019 11:50	9	9	9	40.3	4.6	4.1	24.3
1/13/2019 12:00	9	9	9	40.27	4.4	4.1	24.3
1/13/2019 12:10	9	9	9	40.27	4.4	4.1	24.3
1/13/2019 12:20	9	9	9	40.27	4.5	4.1	24.3
1/13/2019 12:30	9	9	9	40.21	4.4	4.1	24.3
1/13/2019 12:40	9	9	9	40.27	4.4	4	24.2
1/13/2019 12:50	9	9	9	40.27	4.6	4.1	24.2
1/13/2019 13:00	9	9	9	40.18	4.6	4	24.4
1/13/2019 13:10	9	9	9	40.43	4.6	3.9	24.3
1/13/2019 13:20	9	9	9	40.24	4.4	4	24.2
1/13/2019 13:30	9	9	9	40.33	4.2	4.1	24.2
1/13/2019 13:40	9	9	9	40.3	4.6	4	24.2
1/13/2019 13:50	9	9	9	40.3	4.3	4.1	24.2
1/13/2019 14:00	9	9	9	40.3	4.5	4.1	24.2
1/13/2019 14:10	9	9	9	40.33	4.6	4	24.2
1/13/2019 14:20	9	9	9	40.27	4.9	4.1	24.2
1/13/2019 14:30	9	9	9	40.37	4.7	4.1	24.2
1/13/2019 14:40	9	9	9	40.3	4.5	4.1	24.2
1/13/2019 14:50	9	9	9	40.37	4.5	4	24.2
1/13/2019 15:00	9	9	9	40.33	4.5	4	24.2
1/13/2019 15:10	9	9	9	40.37	4.4	4.1	24.1
1/13/2019 15:20	9	9	9	40.37	4.5	4.1	24.1
1/13/2019 15:30	9	9	9	40.33	4.6	4.1	24.1

1/13/2019 15:40	9	9	9	40.46	4.5	4.2	24.1
1/13/2019 15:50	9	9	9	40.33	4.4	4.1	24.1
1/13/2019 16:00	9	9	9	40.37	4.5	4.1	24.1
1/13/2019 16:10	9	9	9	40.43	4.5	4.1	23.9
1/13/2019 16:20	9	9	9	40.37	4.7	3.9	24.2
1/13/2019 16:30	9	9	9	40.33	4.5	4.1	23.9
1/13/2019 16:40	9	9	9	40.37	4.3	4	23.9
1/13/2019 16:50	9	9	9	40.37	4.5	4.1	24
1/13/2019 17:00	9	9	9	40.46	4.6	4.2	23.9
1/13/2019 17:10	9	9	9	40.37	4.5	4.1	24.1
1/13/2019 17:20	9	9	9	40.33	4.5	4.1	24.1
1/13/2019 17:30	9	9	9	40.37	4.7	4.1	24.1
1/13/2019 17:40	9	9	9	40.37	4.3	4.1	24.1
1/13/2019 17:50	9	9	9	40.27	4.5	4.1	24.2
1/13/2019 18:00	9	9	9	40.43	4.4	4.2	24.1
1/13/2019 18:10	9	9	9	40.3	4.5	4.1	24.2
1/13/2019 18:20	9	9	9	40.33	4.7	4.1	24.2
1/13/2019 18:30	9	9	9	40.37	4.6	4.1	24.2
1/13/2019 18:40	9	9	9	40.37	4.3	4.1	24.3
1/13/2019 18:50	9	9	9	40.43	4.4	4.1	24.4
1/13/2019 19:00	9	9	9	40.43	4.4	4.1	24.3
1/13/2019 19:10	9	9	9	40.33	4.6	4.1	24.4
1/13/2019 19:20	9	9	9	40.37	4.3	4	24.4
1/13/2019 19:30	9	9	9	40.46	4.4	4.1	24.4
1/13/2019 19:40	9	9	9	40.43	4.7	4.1	24.3
1/13/2019 19:50	9	9	9	40.37	4.4	4.1	24.3
1/13/2019 20:00	9	9	9	40.37	4.2	4.1	24.4
1/13/2019 20:10	9	9	9	40.43	4.4	4.1	24.4
1/13/2019 20:20	9	9	9	40.46	4.4	4.1	24.4
1/13/2019 20:30	9	9	9	40.49	4.4	4.1	24.4
1/13/2019 20:40	9	9	9	40.43	4.4	4	24.3
1/13/2019 20:50	9	9	9	40.43	4.5	4.1	24.4
1/13/2019 21:00	9	9	9	40.49	4.6	4.1	24.4
1/13/2019 21:10	9	9	9	40.43	4.4	4	24.4
1/13/2019 21:20	9	9	9	40.46	4.4	4.1	24.4
1/13/2019 21:30	9	9	9	40.43	4.5	4.1	24.4
1/13/2019 21:40	9	9	9	40.49	4.6	4.1	24.4
1/13/2019 21:50	9	9	9	40.49	4.5	4.1	24.4
1/13/2019 22:00	9	9	9	40.49	4.5	4	24.3
1/13/2019 22:10	9	9	9	40.46	4.4	4.2	24.4
1/13/2019 22:20	9	9	9	40.43	4.4	3.9	24.4
1/13/2019 22:30	9	9	9	40.46	4.4	4	24.3
1/13/2019 22:40	9	9	9	40.49	4.4	4.1	24.3
1/13/2019 22:50	9	9	9	40.46	4.6	4.1	24.3
1/13/2019 23:00	9	9	9	40.37	4.5	4.1	24.3
1/13/2019 23:10	9	9	9	40.49	4.1	4.1	24.4
1/13/2019 23:20	9	9	9	40.46	4.3	4.1	24.3

1/13/2019 23:30	9	9	9	40.37	4.2	4.1	24.4
1/13/2019 23:40	9	9	9	40.43	4.5	4.1	24.3
1/13/2019 23:50	9	9	9	40.52	4.5	4.1	24.4
1/14/2019 0:00	9	9	9	40.37	4.2	3.9	24.4
1/14/2019 0:10	9	9	9	40.43	4.6	4.1	24.4
1/14/2019 0:20	9	9	9	40.33	4.7	4.1	24.4
1/14/2019 0:30	9	9	9	40.37	4.5	4.1	24.4
1/14/2019 0:40	9	9	9	40.33	4.4	4	24.4
1/14/2019 0:50	9	9	9	40.3	4.5	4.1	24.4
1/14/2019 1:00	9	9	9	40.46	4.4	4.1	24.3
1/14/2019 1:10	9	9	9	40.33	4.7	4.2	24.4
1/14/2019 1:20	9	9	9	40.33	4.4	4	24.5
1/14/2019 1:30	9	9	9	40.43	4.4	4.1	24.5
1/14/2019 1:40	9	9	9	40.43	4.6	4.1	24.4
1/14/2019 1:50	9	9	9	40.43	4.8	4	24.4
1/14/2019 2:00	9	9	9	40.33	4.5	4.1	24.5
1/14/2019 2:10	9	9	9	40.33	4.6	4.1	24.5
1/14/2019 2:20	9	9	9	40.33	4.4	4.1	24.5
1/14/2019 2:30	9	9	9	40.37	4.4	4.1	24.5
1/14/2019 2:40	9	9	9	40.43	4.5	4.1	24.5
1/14/2019 2:50	9	9	9	40.33	4.3	4.1	24.5
1/14/2019 3:00	9	9	9	40.46	4.4	4.1	24.5
1/14/2019 3:10	9	9	9	40.43	4.9	4.1	24.5
1/14/2019 3:20	9	9	9	40.46	4.3	4.1	24.4
1/14/2019 3:30	9	9	9	40.33	4.5	4.1	24.5
1/14/2019 3:40	9	9	9	40.37	4.4	4.2	24.5
1/14/2019 3:50	9	9	9	40.33	4.5	3.9	24.4
1/14/2019 4:00	9	9	9	40.33	4.5	4.1	24.5
1/14/2019 4:10	9	9	9	40.33	4.3	4	24.5
1/14/2019 4:20	9	9	9	40.33	4.3	4	24.4
1/14/2019 4:30	9	9	9	40.3	4.3	4.1	24.5
1/14/2019 4:40	9	9	9	40.33	4.4	4.1	24.4
1/14/2019 4:50	9	9	9	40.37	4.4	4.1	24.5
1/14/2019 5:00	9	9	9	40.33	4.9	4.1	24.4
1/14/2019 5:10	9	9	9	40.21	4.6	4.1	24.4
1/14/2019 5:20	9	9	9	40.3	4.7	4.1	24.5
1/14/2019 5:30	9	9	9	40.21	5	4.2	24.5
1/14/2019 5:40	9	9	9	40.27	4.4	4.1	24.5
1/14/2019 5:50	9	9	9	40.21	4.7	3.9	24.4
1/14/2019 6:00	9	9	9	40.24	4.6	4.1	24.4
1/14/2019 6:10	9	9	9	40.21	4.5	4.1	24.4
1/14/2019 6:20	9	9	9	40.24	4.4	4.1	24.5
1/14/2019 6:30	9	9	9	40.24	4.6	4.1	24.4
1/15/2019 6:40	9	9	9	40	4.7	4.1	24.1
1/15/2019 6:50	9	9	9	39.88	4.1	4.1	24
1/15/2019 7:00	9	9	9	39.88	4.4	4.1	24.2
1/15/2019 7:10	9	9	9	39.91	4.3	4.1	24.3

1/15/2019 7:20	9	9	9	39.97	4.5	4.1	24.3
1/15/2019 7:30	9	9	9	39.97	4.7	4.1	24.3
1/15/2019 7:40	9	9	9	39.97	4.4	4.1	24.4
1/15/2019 7:50	9	9	9	39.91	4.4	4.1	24.5
1/15/2019 8:00	9	9	9	40.03	4.4	4.1	24.5
1/15/2019 8:10	9	9	9	39.94	4.3	4.1	24.5
1/15/2019 8:20	9	9	9	39.97	4.4	4.1	24.5
1/15/2019 8:30	9	9	9	39.97	4.5	4.2	3.9
1/15/2019 8:40	9	9	9	39.94	4.4	4.1	3.3
1/15/2019 8:50	9	9	9	39.97	4.6	4.2	3.6
1/15/2019 9:00	9	9	9	40	4.6	4.1	3.6
1/15/2019 9:10	9	9	9	39.91	4.6	4.2	1.1
1/15/2019 9:20	9	9	9	39.94	4.5	4	1.1
1/15/2019 9:30	9	9	9	40	4.5	4.1	22.6
1/15/2019 9:40	9	9	9	40	4.5	4.1	23.9
1/15/2019 9:50	9	9	9	39.91	4.6	4.1	23.9
1/15/2019 10:00	9	9	9	40.03	4.4	4.1	24
1/15/2019 10:10	9	9	9	39.97	4.6	4.1	24
1/15/2019 10:20	9	9	9	39.97	4.2	4.1	24.1
1/15/2019 10:30	9	9	9	40	4.6	4	24.2
1/15/2019 10:40	9	9	9	40.03	4.8	3.9	24.1
1/15/2019 10:50	9	9	9	39.91	4.3	4	24.2
1/15/2019 11:00	9	9	9	39.91	4.9	4.2	24.2
1/15/2019 11:10	9	9	9	39.88	4.5	4.1	24.3
1/15/2019 11:20	9	9	9	39.91	4.6	4.2	24.4
1/15/2019 11:30	9	9	9	39.97	4.6	4	24.5
1/15/2019 11:40	9	9	9	39.94	4.6	4.2	24.5
1/15/2019 11:50	9	9	9	40	4.5	4	24.5
1/15/2019 12:00	9	9	9	39.94	4.4	4.1	24.5
1/15/2019 12:10	9	9	9	39.97	4.5	4.1	24.5
1/15/2019 12:20	9	9	9	39.97	4.5	4.1	10.5
1/15/2019 12:30	9	9	9	39.94	4.5	4.1	3.6
1/15/2019 12:40	9	9	9	39.97	4.4	4.1	3.4
1/15/2019 12:50	9	9	9	40	4.6	4.1	3.5
1/15/2019 13:00	9	9	9	40	4.3	4.1	1.9
1/15/2019 13:10	9	9	9	39.97	4.6	4.1	1.1
1/15/2019 13:20	9	9	9	39.97	4.5	4	6.5
1/15/2019 13:30	9	9	9	39.97	4.4	4.1	23.9
1/15/2019 13:40	9	9	9	39.94	4.3	4	23.9
1/15/2019 13:50	9	9	9	39.88	4.5	4.2	23.9
1/15/2019 14:00	9	9	9	39.91	4.6	4.1	24
1/15/2019 14:10	9	9	9	39.97	4.5	4	24.1
1/15/2019 14:20	9	9	9	39.94	4.5	4	24.1
1/15/2019 14:30	9	9	9	39.85	4.3	4.1	24.3
1/15/2019 14:40	9	9	9	39.88	4.3	4.1	24.3
1/15/2019 14:50	9	9	9	39.91	4.7	4.1	24.4
1/15/2019 15:00	9	9	9	39.88	4.4	4	24.4

1/15/2019 15:10	9	9	9	39.91	4.7	4.1	24.5
1/15/2019 15:20	9	9	9	39.88	4.4	4	24.5
1/15/2019 15:30	9	9	9	39.88	4.4	4.1	24.5
1/15/2019 15:40	9	9	9	39.85	4.5	4.1	4.3
1/15/2019 15:50	9	9	9	39.85	4.3	4.1	4.6
1/15/2019 16:00	9	9	9	39.88	4.7	4.1	3.6
1/15/2019 16:10	9	9	9	39.82	4.6	4	3.5
1/15/2019 16:20	9	9	9	39.94	4.5	4.1	1.6
1/15/2019 16:30	9	9	9	39.82	4.4	4.1	1.8
1/15/2019 16:40	9	9	9	39.91	4.6	4.1	24.1
1/15/2019 16:50	9	9	9	39.79	4.7	4	23.8
1/15/2019 17:00	9	9	9	39.82	4.3	4.1	24
1/15/2019 17:10	9	9	9	39.85	4.3	4.1	23.9
1/15/2019 17:20	9	9	9	39.94	4.4	4.1	24.1
1/15/2019 17:30	9	9	9	39.88	4.5	4.1	24.1
1/15/2019 17:40	9	9	9	39.88	4.5	4.1	24.3
1/15/2019 17:50	9	9	9	39.91	4.6	4.1	24.3
1/15/2019 18:00	9	9	9	39.88	4.8	4.1	24.4
1/15/2019 18:10	9	9	9	39.88	4.6	4.1	24.4
1/15/2019 18:20	9	9	9	39.97	4.4	4	24.5
1/15/2019 18:30	9	9	9	39.91	4.6	4.1	24.5
1/15/2019 18:40	9	9	9	39.94	4.6	4.1	24.4
1/15/2019 18:50	9	9	9	39.91	4.7	4.1	3.2
1/15/2019 19:00	9	9	9	39.91	4.5	4.1	3.5
1/15/2019 19:10	9	9	9	39.91	4.7	4	2.5
1/15/2019 19:20	9	9	9	39.85	4.5	4.1	11.9
1/15/2019 19:30	9	9	9	39.94	4.6	4.1	23.9
1/15/2019 19:40	9	9	9	39.88	4.5	4.1	24
1/15/2019 19:50	9	9	9	39.94	4.2	4.1	24
1/15/2019 20:00	9	9	9	39.94	4.6	4.1	24.1
1/15/2019 20:10	9	9	9	39.91	4.4	4.1	24.1
1/15/2019 20:20	9	9	9	39.88	4.8	4	24.2
1/15/2019 20:30	9	9	9	40.03	4.6	4.1	24.2
1/15/2019 20:40	9	9	9	39.94	4.7	4	24.3
1/15/2019 20:50	9	9	9	39.88	4.7	4	24.4
1/15/2019 21:00	9	9	9	39.85	4.7	4.1	24.4
1/15/2019 21:10	9	9	9	39.88	4.6	4	24.4
1/15/2019 21:20	9	9	9	39.88	4.5	4.1	24.5
1/15/2019 21:30	9	9	9	39.88	4.6	3.9	24.4
1/15/2019 21:40	9	9	9	39.85	4.5	4	3.7
1/15/2019 21:50	9	9	9	39.91	4.5	4.1	3.4
1/15/2019 22:00	9	9	9	39.85	4.4	4	2.2
1/15/2019 22:10	9	9	9	39.88	4.4	4.1	6.5
1/15/2019 22:20	9	9	9	39.85	4.5	4.1	23.9
1/15/2019 22:30	9	9	9	39.88	4.3	4.1	24
1/15/2019 22:40	9	9	9	39.88	4.6	4.1	24
1/15/2019 22:50	9	9	9	39.82	4.6	4.1	24.1

1/15/2019 23:00	9	9	9	39.85	4.6	4.1	24.2
1/15/2019 23:10	9	9	9	39.88	4.3	3.9	24.3
1/15/2019 23:20	9	9	9	39.88	4.7	4	24.4
1/15/2019 23:30	9	9	9	39.94	4.6	4	24.5
1/15/2019 23:40	9	9	9	39.85	4.6	4.1	24.5
1/15/2019 23:50	9	9	9	39.91	4.6	4	24.5
1/16/2019 0:00	9	9	9	39.88	4.5	4.1	24.5
1/16/2019 0:10	9	9	9	39.94	4.6	4.1	24.5
1/16/2019 0:20	9	9	9	39.94	4.4	4.1	3.3
1/16/2019 0:30	9	9	9	39.91	4.6	4	3.5
1/16/2019 0:40	9	9	9	39.94	4.4	4.1	2.2
1/16/2019 0:50	9	9	9	39.94	4.5	4.1	1.1
1/16/2019 1:00	9	9	9	39.85	4.5	4.1	12.4
1/16/2019 1:10	9	9	9	40	4.6	4	23.9
1/16/2019 1:20	9	9	9	39.91	4.2	4.2	24
1/16/2019 1:30	9	9	9	40.03	4.5	4.1	24
1/16/2019 1:40	9	9	9	39.94	4.3	4.1	24.1
1/16/2019 1:50	9	9	9	40	4.6	4.1	24.2
1/16/2019 2:00	9	9	9	39.94	4.6	4.1	24.2
1/16/2019 2:10	9	9	9	40	4.4	4.2	24.4
1/16/2019 2:20	9	9	9	39.94	4.4	4.1	24.4
1/16/2019 2:30	9	9	9	40	4.5	4.1	24.4
1/16/2019 2:40	9	9	9	39.97	4.7	4.1	24.4
1/16/2019 2:50	9	9	9	40	4.3	4.1	24.5
1/16/2019 3:00	9	9	9	39.94	4.5	4.1	24.5
1/16/2019 3:10	9	9	9	39.97	4.8	4.1	4.3
1/16/2019 3:20	9	9	9	39.94	4.2	4.1	3.6
1/16/2019 3:30	9	9	9	39.91	4.7	4.1	3.5
1/16/2019 3:40	9	9	9	39.94	4.3	4.1	3.4
1/16/2019 3:50	9	9	9	39.94	4.6	4.1	1.1
1/16/2019 4:00	9	9	9	39.94	4.5	4.1	6.7
1/16/2019 4:10	9	9	9	39.88	4.5	4.2	23.9
1/16/2019 4:20	9	9	9	39.88	4.6	4.1	24
1/16/2019 4:30	9	9	9	39.85	4.5	4.1	24.2
1/16/2019 4:40	9	9	9	39.91	4.4	4	24.2
1/16/2019 4:50	9	9	9	39.85	4.8	4.1	24.3
1/16/2019 5:00	9	9	9	39.88	4.4	4.1	24.4
1/16/2019 5:10	9	9	9	39.79	4.4	4.1	24.3
1/16/2019 5:20	9	9	9	39.88	4.3	4.1	24.4
1/16/2019 5:30	9	9	9	39.82	4.7	4.1	24.4
1/16/2019 5:40	9	9	9	39.85	4.7	4.1	24.4
1/16/2019 5:50	9	9	9	39.88	4.5	4.1	3.3
1/16/2019 6:00	9	9	9	39.79	4.8	4.1	3.4
1/16/2019 6:10	9	9	9	39.82	4.7	4.1	1.1
1/16/2019 6:20	9	9	9	39.79	4.7	4.1	17.5
1/16/2019 6:30	9	9	9	39.91	4.8	4.1	23.8
1/16/2019 6:40	9	9	9	39.85	4.4	4	24.1

1/16/2019 6:50	9	9	9	39.85	4.2	4	24
1/16/2019 7:00	9	9	9	39.88	4.4	4.1	24.1
1/16/2019 7:10	9	9	9	39.91	4.6	4.1	24.3
1/16/2019 7:20	9	9	9	39.88	4.7	4.1	24.3
1/16/2019 7:30	9	9	9	39.88	4.8	4.1	24.3
1/16/2019 7:40	9	9	9	39.88	4.6	4.1	24.3
1/16/2019 7:50	9	9	9	39.85	4.5	4	24.4
1/16/2019 8:00	9	9	9	39.91	4.5	4.1	24.5
1/16/2019 8:10	9	9	9	39.85	4.3	4.1	24.5
1/16/2019 8:20	9	9	9	39.94	4.5	4.1	3.7
1/16/2019 8:30	9	9	9	39.94	4.6	4.2	3.4
1/16/2019 8:40	9	9	9	39.94	4.3	4.1	3.7
1/16/2019 8:50	9	9	9	39.94	4.4	4	1
1/16/2019 9:00	9	9	9	39.97	4.6	4.1	22.1
1/16/2019 9:10	9	9	9	39.82	4.5	4.1	23.9
1/16/2019 9:20	9	9	9	39.91	4.5	4.1	23.9
1/16/2019 9:30	9	9	9	39.85	4.2	4.1	24
1/16/2019 9:40	9	9	9	39.85	4.2	4.1	24.2
1/16/2019 9:50	9	9	9	39.85	4.4	4.1	24.3
1/16/2019 10:00	9	9	9	39.79	4.2	4	24.3
1/16/2019 10:10	9	9	9	39.85	4.5	4	24.3
1/16/2019 10:20	9	9	9	39.82	4.8	4.1	24.4
1/16/2019 10:30	9	9	9	39.82	4.6	4	24.5
1/16/2019 10:40	9	9	9	39.82	4.3	4.1	24.5
1/16/2019 10:50	9	9	9	39.82	4.4	4.1	23.3
1/16/2019 11:00	9	9	9	39.82	4.6	4	3.3
1/16/2019 11:10	9	9	9	39.82	4.6	3.9	3.6
1/16/2019 11:20	9	9	9	39.79	4.7	4.1	4.1
1/16/2019 11:30	9	9	9	39.79	4.6	4.1	1.3
1/16/2019 11:40	9	9	9	39.85	4.7	4	6.8
1/16/2019 11:50	9	9	9	39.91	4.5	4.1	19.3
1/16/2019 12:00	9	9	9	39.88	4.4	4.1	23.9
1/16/2019 12:10	9	9	9	39.91	4.4	4.1	24.1
1/16/2019 12:20	9	9	9	39.88	4.6	4	24
1/16/2019 12:30	9	9	9	39.88	4.5	4.1	24.1
1/16/2019 12:40	9	9	9	39.91	4.5	4.1	24.2
1/16/2019 12:50	9	9	9	39.94	4.5	4.1	24.4
1/16/2019 13:00	9	9	9	39.94	4.2	4.1	24.4
1/16/2019 13:10	9	9	9	39.88	4.8	4.1	24.5
1/16/2019 13:20	9	9	9	39.85	4.5	4.1	24.5
1/16/2019 13:30	9	9	9	39.88	4.5	4	24.5
1/16/2019 13:40	9	9	9	39.88	4.5	4.1	24.5
1/16/2019 13:50	9	9	9	39.85	4.7	4	10.6
1/16/2019 14:00	9	9	9	39.88	4.8	4.1	3.4
1/16/2019 14:10	9	9	9	39.88	4.5	4.1	3.4
1/16/2019 14:20	9	9	9	39.85	4.6	4.1	1.9
1/16/2019 14:30	9	9	9	39.88	4.5	4.1	0.9

1/16/2019 14:40	9	9	9	39.79	4.4	4	23.1
1/16/2019 14:50	9	9	9	39.88	4.6	4.1	23.8
1/16/2019 15:00	9	9	9	39.88	4.7	4	24
1/16/2019 15:10	9	9	9	39.85	4.7	4.1	23.9
1/16/2019 15:20	9	9	9	39.85	4.5	4.1	24.1
1/16/2019 15:30	9	9	9	39.82	4.3	4.1	24.1
1/16/2019 15:40	9	9	9	39.82	4.5	4	24.3
1/16/2019 15:50	9	9	9	39.82	4.5	4.1	24.3
1/16/2019 16:00	9	9	9	39.79	4.5	4.1	24.4
1/16/2019 16:10	9	9	9	39.85	4.5	4	24.5
1/16/2019 16:20	9	9	9	39.82	4.4	4.1	24.5
1/16/2019 16:30	9	9	9	39.85	4.6	4.1	24.4
1/16/2019 16:40	9	9	9	39.82	4.3	4.1	3.5
1/16/2019 16:50	9	9	9	39.72	4.5	4	3.3
1/16/2019 17:00	9	9	9	39.85	4.6	4.1	2.2
1/16/2019 17:10	9	9	9	39.82	4.1	4	22
1/16/2019 17:20	9	9	9	39.69	4.4	4.1	23.8
1/16/2019 17:30	9	9	9	39.69	4.6	4	24.1
1/16/2019 17:40	9	9	9	39.72	4.6	4	24
1/16/2019 17:50	9	9	9	39.79	4.5	4.1	24.1
1/16/2019 18:00	9	9	9	39.79	4.3	4.1	24.3
1/16/2019 18:10	9	9	9	39.72	4.4	4	24.3
1/16/2019 18:20	9	9	9	39.66	4.6	4	24.4
1/16/2019 18:30	9	9	9	39.66	4.4	4.1	24.5
1/16/2019 18:40	9	9	9	39.66	4.5	4.1	10.5
1/16/2019 18:50	9	9	9	39.63	4.8	4.1	3.4
1/16/2019 19:00	9	9	9	39.63	4.3	4.1	3.9
1/16/2019 19:10	9	9	9	39.63	4.4	4.1	22.1
1/16/2019 19:20	9	9	9	39.66	4.5	4.1	24
1/16/2019 19:30	9	9	9	39.69	3.9	4.1	24
1/16/2019 19:40	9	9	9	39.6	4.6	4.1	24.1
1/16/2019 19:50	9	9	9	39.6	4.4	4.1	24.3
1/16/2019 20:00	9	9	9	39.54	4.5	3.9	24.4
1/16/2019 20:10	9	9	9	39.51	4.6	4.1	24.5
1/16/2019 20:20	9	9	9	39.51	4.5	4.1	24.4
1/16/2019 20:30	9	9	9	39.48	4.5	4	3.2
1/16/2019 20:40	9	9	9	39.51	4.5	4	3.5
1/16/2019 20:50	9	9	9	39.51	4.7	4	3.7
1/16/2019 21:00	9	9	9	39.42	4.5	4.1	1
1/16/2019 21:10	9	9	9	39.42	4.4	4.1	24
1/16/2019 21:20	9	9	9	39.51	4.7	4.1	24
1/16/2019 21:30	9	9	9	39.51	4.4	4.1	24.1
1/16/2019 21:40	9	9	9	39.51	4.4	4.1	24.2
1/16/2019 21:50	9	9	9	39.51	4.4	4	24.4
1/16/2019 22:00	9	9	9	39.54	4.6	4.1	24.4
1/16/2019 22:10	9	9	9	39.45	4.7	4.1	24.4
1/16/2019 22:20	9	9	9	39.48	4.7	4	24.5

1/16/2019 22:30	9	9	9	39.45	4.7	4.1	3.3
1/16/2019 22:40	9	9	9	39.39	4.3	4	3.4
1/16/2019 22:50	9	9	9	39.42	4.5	4.1	1
1/16/2019 23:00	9	9	9	39.45	4.4	3.9	23.9
1/16/2019 23:10	9	9	9	39.48	4.5	4.1	24.2
1/16/2019 23:20	9	9	9	39.48	4.7	4.1	24.1
1/16/2019 23:30	9	9	9	39.45	4.5	4.1	24.2
1/16/2019 23:40	9	9	9	39.45	4.6	3.9	24.4
1/16/2019 23:50	9	9	9	39.51	4.6	4.1	24.4
1/17/2019 0:00	9	9	9	39.45	4.5	4.1	24.4
1/17/2019 0:10	9	9	9	39.48	4.6	4.1	24.5
1/17/2019 0:20	9	9	9	39.48	4.6	4.1	24.5
1/17/2019 0:30	9	9	9	39.48	4.4	4	24.6
1/17/2019 0:40	9	9	9	39.48	4.2	4.1	3.5
1/17/2019 0:50	9	9	9	39.48	4.4	3.9	3.4
1/17/2019 1:00	9	9	9	39.48	4.6	4.2	1.8
1/17/2019 1:10	9	9	9	39.51	4.5	4.1	23.5
1/17/2019 1:20	9	9	9	39.45	4.5	4.1	24
1/17/2019 1:30	9	9	9	39.45	4.6	4.2	24.1
1/17/2019 1:40	9	9	9	39.51	4.9	4.2	24.1
1/17/2019 1:50	9	9	9	39.42	4.3	4.1	24.3
1/17/2019 2:00	9	9	9	39.45	4.6	4.1	24.4
1/17/2019 2:10	9	9	9	39.45	4.4	4.1	24.4
1/17/2019 2:20	9	9	9	39.45	4.4	4.1	24.4
1/17/2019 2:30	9	9	9	39.42	4.5	4.1	24.4
1/17/2019 2:40	9	9	9	39.33	4.8	4.1	3.7
1/17/2019 2:50	9	9	9	39.33	4.5	4.1	3.5
1/17/2019 3:00	9	9	9	39.36	4.4	4.1	1.7
1/17/2019 3:10	9	9	9	39.36	4.5	4.1	23.5
1/17/2019 3:20	9	9	9	39.36	4.4	4.1	23.9
1/17/2019 3:30	9	9	9	39.3	4.7	4.1	24.2
1/17/2019 3:40	9	9	9	39.3	4.7	4.2	24.3
1/17/2019 3:50	9	9	9	39.3	4.4	4.1	24.4
1/17/2019 4:00	9	9	9	39.33	4.4	4.2	24.4
1/17/2019 4:10	9	9	9	39.36	4.5	4.1	24.5
1/17/2019 4:20	9	9	9	39.24	4.5	4.2	24.6
1/17/2019 4:30	9	9	9	39.27	4.7	4.1	3.3
1/17/2019 4:40	9	9	9	39.24	4.4	4.1	3.5
1/17/2019 4:50	9	9	9	39.36	4.3	4	3.3
1/17/2019 5:00	9	9	9	39.27	4.7	4.1	7
1/17/2019 5:10	9	9	9	39.21	4.8	4.2	23.9
1/17/2019 5:20	9	9	9	39.21	4.4	4.1	24
1/17/2019 5:30	9	9	9	39.27	4.4	4.1	24
1/17/2019 5:40	9	9	9	39.24	4.5	4.1	24.2
1/17/2019 5:50	9	9	9	39.27	4.4	4.1	24.3
1/17/2019 6:00	9	9	9	39.24	4.6	4.1	24.4
1/17/2019 6:10	9	9	9	39.17	4.5	4.1	24.5

1/17/2019 6:20	9	9	9	39.17	4.5	4.1	24.5
1/17/2019 6:30	9	9	9	39.24	4.3	4.2	3.4
1/17/2019 6:40	9	9	9	39.33	5	4.2	1.6
1/17/2019 6:50	9	9	9	39.27	4.5	4.1	24
1/17/2019 7:00	9	9	9	39.27	4.5	4	24
1/17/2019 7:10	9	9	9	39.27	4.3	4.1	24.1
1/17/2019 7:20	9	9	9	39.21	4.4	4	24.3
1/17/2019 7:30	9	9	9	39.27	4.7	4.1	24.4
1/17/2019 7:40	9	9	9	39.27	4.3	4	24.4
1/17/2019 7:50	9	9	9	39.24	4.4	4.1	24.4
1/17/2019 8:00	9	9	9	39.3	4.6	4.1	24.5
1/17/2019 8:10	9	9	9	39.33	4.3	4.1	4.3
1/17/2019 8:20	9	9	9	39.27	4.4	4.1	3.3
1/17/2019 8:30	9	9	9	39.3	4.5	4.1	3.3
1/17/2019 8:40	9	9	9	39.21	4.6	4	1.3
1/17/2019 8:50	9	9	9	39.24	4.3	4.1	23.9
1/17/2019 9:00	9	9	9	39.21	4.6	4.1	24.1
1/17/2019 9:10	9	9	9	39.24	4.4	4.2	24
1/17/2019 9:20	9	9	9	39.24	4.8	4.1	24
1/17/2019 9:30	9	9	9	39.24	4.6	4.1	24.1
1/17/2019 9:40	9	9	9	39.27	4.5	4	24.2
1/17/2019 9:50	9	9	9	39.27	4.4	4.1	24.3
1/17/2019 10:00	9	9	9	39.3	4.4	4	24.4
1/17/2019 10:10	9	9	9	39.27	4.2	4.1	24.5
1/17/2019 10:20	9	9	9	39.33	4.8	4.2	24.5
1/17/2019 10:30	9	9	9	39.3	4.6	4	24.5
1/17/2019 10:40	9	9	9	39.3	4.4	4.1	3.5
1/17/2019 10:50	9	9	9	39.27	4.8	4.1	3.3
1/17/2019 11:00	9	9	9	39.3	4.5	4.1	2.3
1/17/2019 11:10	9	9	9	39.3	4.5	4.1	6.9
1/17/2019 11:20	9	9	9	39.3	4.7	4.1	24
1/17/2019 11:30	9	9	9	39.33	4.7	4.2	24
1/17/2019 11:40	9	9	9	39.3	4.2	4.2	24
1/17/2019 11:50	9	9	9	39.33	4.6	4.1	24.2
1/17/2019 12:00	9	9	9	39.36	4.6	4.1	24.3
1/17/2019 12:10	9	9	9	39.33	4.4	4.2	24.2
1/17/2019 12:20	9	9	9	39.33	4.6	4.1	24.4
1/17/2019 12:30	9	9	9	39.3	4.5	4.1	24.4
1/17/2019 12:40	9	9	9	39.33	4.8	4.1	24.5
1/17/2019 12:50	9	9	9	39.33	4.4	4.1	24.5
1/17/2019 13:00	9	9	9	39.33	4.5	4.2	24.5
1/17/2019 13:10	9	9	9	39.36	4.5	3.9	24.5
1/17/2019 13:20	9	9	9	39.33	4.4	3.9	10.6
1/17/2019 13:30	9	9	9	39.39	4.8	4.1	3.4
1/17/2019 13:40	9	9	9	39.33	4.7	4.1	3.5
1/17/2019 13:50	9	9	9	39.36	4.4	4.1	3.3
1/17/2019 14:00	9	9	9	39.36	4.4	4.1	1

1/17/2019 14:10	9	9	9	39.3	4.3	4.1	22.1
1/17/2019 14:20	9	9	9	39.39	4.6	4.1	23.9
1/17/2019 14:30	9	9	9	39.39	4.6	4.1	24.1
1/17/2019 14:40	9	9	9	39.33	4.5	4	24.1
1/17/2019 14:50	9	9	9	39.42	4	4.1	24.1
1/17/2019 15:00	9	9	9	39.33	4.3	4.1	24.2
1/17/2019 15:10	9	9	9	39.3	4.4	4.1	24.3
1/17/2019 15:20	9	9	9	39.36	4.4	4	24.5
1/17/2019 15:30	9	9	9	39.33	4.8	4.1	24.5
1/17/2019 15:40	9	9	9	39.27	4.5	4.1	24.5
1/17/2019 15:50	9	9	9	39.36	4.5	4.1	24.4
1/17/2019 16:00	9	9	9	39.36	4.3	4.1	24.6
1/17/2019 16:10	9	9	9	39.36	4.3	4.1	3.6
1/17/2019 16:20	9	9	9	39.33	4.6	4.1	3.3
1/17/2019 16:30	9	9	9	39.36	4.4	4.1	1.6
1/17/2019 16:40	9	9	9	39.36	4.6	4.1	11.6
1/17/2019 16:50	9	9	9	39.3	4.5	4.1	23.9
1/17/2019 17:00	9	9	9	39.33	4.5	4.1	24.1
1/17/2019 17:10	9	9	9	39.27	4.6	4.1	24.1
1/17/2019 17:20	9	9	9	39.3	4.6	4	24.2
1/17/2019 17:30	9	9	9	39.36	4.9	4.1	24.2
1/17/2019 17:40	9	9	9	39.3	4.4	4.1	24.3
1/17/2019 17:50	9	9	9	39.3	4.4	4.1	24.4
1/17/2019 18:00	9	9	9	39.33	4.3	4.1	24.4
1/17/2019 18:10	9	9	9	39.3	4.6	4.1	24.5
1/17/2019 18:20	9	9	9	39.27	4.4	4.1	24.5
1/17/2019 18:30	9	9	9	39.33	4.6	4.1	24.5
1/17/2019 18:40	9	9	9	39.33	4.7	4.1	24.5
1/17/2019 18:50	9	9	9	39.27	4.7	4.1	3.3
1/17/2019 19:00	9	9	9	39.36	4.5	4.1	3.7
1/17/2019 19:10	9	9	9	39.33	4.7	4.1	3.5
1/17/2019 19:20	9	9	9	39.33	4.5	4.1	3.9
1/17/2019 19:30	9	9	9	39.3	4.5	4.1	1.1
1/17/2019 19:40	9	9	9	39.3	4.4	4.1	23.9
1/17/2019 19:50	9	9	9	39.3	4.6	4.1	24.1
1/17/2019 20:00	9	9	9	39.27	4.2	4.1	24
1/17/2019 20:10	9	9	9	39.36	4.6	4.1	24.1
1/17/2019 20:20	9	9	9	39.27	4.6	4.1	24.2
1/17/2019 20:30	9	9	9	39.24	4.4	4.1	24.2
1/17/2019 20:40	9	9	9	39.3	4.5	4.1	24.2
1/17/2019 20:50	9	9	9	39.36	4.6	4.1	24.3
1/17/2019 21:00	9	9	9	39.27	4.4	4.1	24.5
1/17/2019 21:10	9	9	9	39.27	4.4	4.1	24.5
1/17/2019 21:20	9	9	9	39.3	4.6	4	24.5
1/17/2019 21:30	9	9	9	39.27	4.4	4	24.6
1/17/2019 21:40	9	9	9	39.24	4.3	4	3.3
1/17/2019 21:50	9	9	9	39.24	4.5	4	3.4

1/17/2019 22:00	9	9	9	39.17	4.4	4.1	3.4
1/17/2019 22:10	9	9	9	39.17	4.7	4	1.1
1/17/2019 22:20	9	9	9	39.14	4.6	4.1	23.9
1/17/2019 22:30	9	9	9	39.17	4.8	4.1	24
1/17/2019 22:40	9	9	9	39.21	4.5	4.1	23.9
1/17/2019 22:50	9	9	9	39.17	4.7	4.1	24.1
1/17/2019 23:00	9	9	9	39.36	4.5	4.1	24.1
1/17/2019 23:10	9	9	9	39.17	4.8	4.1	24.3
1/17/2019 23:20	9	9	9	39.24	4.5	4	24.4
1/17/2019 23:30	9	9	9	39.14	4.7	4.1	24.4
1/17/2019 23:40	9	9	9	39.21	4.2	4.1	24.4
1/17/2019 23:50	9	9	9	39.14	4.6	4.1	24.5
1/18/2019 0:00	9	9	9	39.17	4.6	4.1	24.5
1/18/2019 0:10	9	9	9	39.24	4.5	4.1	24.6
1/18/2019 0:20	9	9	9	39.17	4.4	4.1	24.5
1/18/2019 0:30	9	9	9	39.17	4.4	4.1	3.3
1/18/2019 0:40	9	9	9	39.21	4.7	4.1	3.8
1/18/2019 0:50	9	9	9	39.17	4.6	4.1	3.5
1/18/2019 1:00	9	9	9	39.17	4.7	4.1	3.7
1/18/2019 1:10	9	9	9	39.17	4.4	4.1	1
1/18/2019 1:20	9	9	9	39.14	4.2	4.1	23.6
1/18/2019 1:30	9	9	9	39.21	4.1	4.2	24
1/18/2019 1:40	9	9	9	39.17	4.1	4.1	24.1
1/18/2019 1:50	9	9	9	39.17	4.4	4.1	24.1
1/18/2019 2:00	9	9	9	39.21	4.6	4.1	24.3
1/18/2019 2:10	9	9	9	39.17	4.8	4.1	24.1
1/18/2019 2:20	9	9	9	39.21	4.5	4.1	24.3
1/18/2019 2:30	9	9	9	39.05	4.5	4.1	24.4
1/18/2019 2:40	9	9	9	39.21	4.5	4	24.5
1/18/2019 2:50	9	9	9	39.24	4.7	4	24.5
1/18/2019 3:00	9	9	9	39.17	4.6	4.1	4.4
1/18/2019 3:10	9	9	9	39.24	4.5	4.1	3.5
1/18/2019 3:20	9	9	9	39.21	4.5	4	3.3
1/18/2019 3:30	9	9	9	39.24	4.7	4.2	2.1
1/18/2019 3:40	9	9	9	39.21	4.8	4.1	3.5
1/18/2019 3:50	9	9	9	39.21	4.5	4.1	24
1/18/2019 4:00	9	9	9	39.24	4.4	4.1	24
1/18/2019 4:10	9	9	9	39.17	4.9	4	24
1/18/2019 4:20	9	9	9	39.24	4.5	4.1	24.2
1/18/2019 4:30	9	9	9	39.17	4.7	4.1	24.2
1/18/2019 4:40	9	9	9	39.21	4.7	4.1	24.3
1/18/2019 4:50	9	9	9	39.17	4.3	4.1	24.5
1/18/2019 5:00	9	9	9	39.21	4.4	4.1	24.4
1/18/2019 5:10	9	9	9	39.17	4.5	4.2	24.5
1/18/2019 5:20	9	9	9	39.11	4.1	4.1	24.5
1/18/2019 5:30	9	9	9	39.17	4.8	4.1	24.5
1/18/2019 5:40	9	9	9	39.21	4.5	4.1	3.3

1/18/2019 5:50	9	9	9	39.17	4.6	4.1	3.6
1/18/2019 6:00	9	9	9	39.17	4.5	4.1	2.5
1/18/2019 6:10	9	9	9	39.11	4.5	4.1	1
1/18/2019 6:20	9	9	9	39.14	4.9	4.1	24
1/18/2019 6:30	9	9	9	39.14	4.8	4	24.2
1/18/2019 6:40	9	9	9	39.14	4.7	4.1	24.1
1/18/2019 6:50	9	9	9	39.05	5.1	4.2	24.1
1/18/2019 7:00	9	9	9	39.14	4.4	4.1	24.3
1/18/2019 7:10	9	9	9	39.02	4.4	4.1	24.4
1/18/2019 7:20	9	9	9	39.05	4.5	4.1	24.4
1/18/2019 7:30	9	9	9	39.11	4.7	4.1	24.5
1/18/2019 7:40	9	9	9	39.14	4.5	4.1	24.5
1/18/2019 7:50	9	9	9	39.05	4.6	4.2	10.7
1/18/2019 8:00	9	9	9	39.14	4.6	4	3.5
1/18/2019 8:10	9	9	9	39.02	4.5	4.1	2.4
1/18/2019 8:20	9	9	9	39.14	4.3	4.1	15.2
1/18/2019 8:30	9	9	9	39.11	4.6	4.1	24
1/18/2019 8:40	9	9	9	39.02	4.4	4.1	24
1/18/2019 8:50	9	9	9	39.02	4.5	4.1	24.2
1/18/2019 9:00	9	9	9	39.02	4.5	4.1	24.3
1/18/2019 9:10	9	9	9	39.05	4.5	4.1	24.4
1/18/2019 9:20	9	9	9	39.02	4.6	4.2	24.4
1/18/2019 9:30	9	9	9	38.99	4.5	4.1	24.5
1/18/2019 9:40	9	9	9	39.02	4.7	4.1	3.6
1/18/2019 9:50	9	9	9	39.02	4.8	4.1	2.9
1/18/2019 10:00	9	9	9	39.05	4.5	4	21.9
1/18/2019 10:10	9	9	9	39.02	4.5	4.1	24
1/18/2019 10:20	9	9	9	39.11	4.5	4.1	24
1/18/2019 10:30	9	9	9	38.99	4.5	4.1	24.2
1/18/2019 10:40	9	9	9	39.02	4.5	4.1	24.3
1/18/2019 10:50	9	9	9	38.93	4.6	4.1	24.3
1/18/2019 11:00	9	9	9	38.9	4.3	4	24.4
1/18/2019 11:10	9	9	9	38.99	4.5	4.1	24.5
1/18/2019 11:20	9	9	9	38.99	4.3	4.1	24.5
1/18/2019 11:30	9	9	9	38.99	4.4	4	3.2
1/18/2019 11:40	9	9	9	38.96	4.3	4.1	3.4
1/18/2019 11:50	9	9	9	38.96	4.4	4.1	1.1
1/18/2019 12:00	9	9	9	38.9	4.7	4	23.9
1/18/2019 12:10	9	9	9	39.02	4.5	4	24.1
1/18/2019 12:20	9	9	9	38.99	4.5	4.1	24.1
1/18/2019 12:30	9	9	9	38.99	4.7	4.1	24.3
1/18/2019 12:40	9	9	9	38.99	4.7	4	24.4
1/18/2019 12:50	9	9	9	39.02	4.4	4.2	24.5
1/18/2019 13:00	9	9	9	38.99	4.4	4.1	24.4
1/18/2019 13:10	9	9	9	38.99	4.3	4.1	24.5
1/18/2019 13:20	9	9	9	39.02	4.4	4.1	24.5
1/18/2019 13:30	9	9	9	39.02	4.5	4.2	3.3

1/18/2019 13:40	9	9	9	39.02	4.7	4	3.4
1/18/2019 13:50	9	9	9	39.02	4.6	4.1	1.7
1/18/2019 14:00	9	9	9	38.99	4.3	4	23.9
1/18/2019 14:10	9	9	9	39.05	4.5	4.1	24
1/18/2019 14:20	9	9	9	38.93	4.8	4	24.2
1/18/2019 14:30	9	9	9	39.05	4.2	4.1	24.3
1/18/2019 14:40	9	9	9	39.02	4.7	4.1	24.4
1/18/2019 14:50	9	9	9	38.99	4.7	4	24.4
1/18/2019 15:00	9	9	9	38.96	4.4	4.1	24.4
1/18/2019 15:10	9	9	9	39.11	4.6	4.1	24.5
1/18/2019 15:20	9	9	9	39.05	4.5	4.1	3.4
1/18/2019 15:30	9	9	9	38.99	4.4	4	3.7
1/18/2019 15:40	9	9	9	39.02	4.5	4.1	19.4
1/18/2019 15:50	9	9	9	39.11	4.9	4.1	23.8
1/18/2019 16:00	9	9	9	39.02	4.4	4	24
1/18/2019 16:10	9	9	9	38.99	4.5	4.1	24.2
1/18/2019 16:20	9	9	9	38.96	4.5	4.1	24.3
1/18/2019 16:30	9	9	9	38.96	4.5	4.1	24.4
1/18/2019 16:40	9	9	9	38.99	4.6	4	24.5
1/18/2019 16:50	9	9	9	38.96	4.6	4.1	24.5
1/18/2019 17:00	9	9	9	38.96	4.6	4.1	24.5
1/18/2019 17:10	9	9	9	38.96	4.4	4	3.7
1/18/2019 17:20	9	9	9	38.99	4.5	4.1	0.9
1/18/2019 17:30	9	9	9	38.93	4.6	4.1	23.9
1/18/2019 17:40	9	9	9	38.96	4.5	4.1	24.1
1/18/2019 17:50	9	9	9	38.93	4.3	4	24.1
1/18/2019 18:00	9	9	9	38.99	4.3	4.1	24.3
1/18/2019 18:10	9	9	9	38.93	4.5	4.1	24.4
1/18/2019 18:20	9	9	9	38.9	4.5	4.1	24.5
1/18/2019 18:30	9	9	9	38.87	4.5	4.1	24.5
1/18/2019 18:40	9	9	9	38.93	4.6	4	3.5
1/18/2019 18:50	9	9	9	38.93	4.4	4.1	3.5
1/18/2019 19:00	9	9	9	38.93	4.5	4.1	1.1
1/18/2019 19:10	9	9	9	38.87	4.6	4	23.9
1/18/2019 19:20	9	9	9	38.96	4.6	4	24.1
1/18/2019 19:30	9	9	9	38.9	4.5	3.9	24.2
1/18/2019 19:40	9	9	9	38.93	4.5	4.1	24.3
1/18/2019 19:50	9	9	9	38.84	4.1	4	24.4
1/18/2019 20:00	9	9	9	38.9	4.6	4.1	24.4
1/18/2019 20:10	9	9	9	39.02	4.5	3.9	24.6
1/18/2019 20:20	9	9	9	38.96	4.5	4.1	3.5
1/18/2019 20:30	9	9	9	38.96	4.4	4.1	3.5
1/18/2019 20:40	9	9	9	38.96	4.4	4.1	21.1
1/18/2019 20:50	9	9	9	38.96	4.6	4.1	23.9
1/18/2019 21:00	9	9	9	38.99	4.6	4.1	24
1/18/2019 21:10	9	9	9	38.9	4.3	4.1	24.2
1/18/2019 21:20	9	9	9	38.93	4.4	4.1	24.3

1/18/2019 21:30	9	9	9	38.9	4.5	4.1	24.4
1/18/2019 21:40	9	9	9	38.93	4.7	4.1	24.5
1/18/2019 21:50	9	9	9	38.96	4.6	4	3.7
1/18/2019 22:00	9	9	9	38.93	4.7	4.1	2.7
1/18/2019 22:10	9	9	9	38.87	4.7	4.1	3.5
1/18/2019 22:20	9	9	9	38.9	4.5	4.1	23.9
1/18/2019 22:30	9	9	9	38.84	4.5	4.1	24.1
1/18/2019 22:40	9	9	9	38.84	4.6	4	24.3
1/18/2019 22:50	9	9	9	38.81	4.5	4.1	24.3
1/18/2019 23:00	9	9	9	38.81	4.6	4.1	24.3
1/18/2019 23:10	9	9	9	38.84	4.7	4.1	24.5
1/18/2019 23:20	9	9	9	38.69	4.6	4	3.4
1/18/2019 23:30	9	9	9	38.81	4.6	4.2	3.6
1/18/2019 23:40	9	9	9	38.75	4.3	4.2	22.6
1/18/2019 23:50	9	9	9	38.75	4.8	4	24.1
1/19/2019 0:00	9	9	9	38.75	4.5	4.1	24.2
1/19/2019 0:10	9	9	9	38.78	4.5	4.1	24.3
1/19/2019 0:20	9	9	9	38.81	4.4	4.1	24.5
1/19/2019 0:30	9	9	9	38.81	4.5	4.1	24.5
1/19/2019 0:40	9	9	9	38.84	4.7	4.1	3.3
1/19/2019 0:50	9	9	9	38.75	4.6	4.1	3.7
1/19/2019 1:00	9	9	9	38.75	4.4	4	1
1/19/2019 1:10	9	9	9	38.84	4.8	4.1	23.9
1/19/2019 1:20	9	9	9	38.72	4.7	4	24.1
1/19/2019 1:30	9	9	9	38.72	4.4	4.1	24.2
1/19/2019 1:40	9	9	9	38.69	4.9	4	24.4
1/19/2019 1:50	9	9	9	38.69	4.5	4.1	24.4
1/19/2019 2:00	9	9	9	38.56	4.6	4.1	24.5
1/19/2019 2:10	9	9	9	38.63	4.5	4.1	4.5
1/19/2019 2:20	9	9	9	38.59	4.7	4	3.5
1/19/2019 2:30	9	9	9	38.66	4.4	4.1	15.1
1/19/2019 2:40	9	9	9	38.53	4.5	4	24.1
1/19/2019 2:50	9	9	9	38.66	4.4	4.1	24.1
1/19/2019 3:00	9	9	9	38.59	4.4	4.1	24.2
1/19/2019 3:10	9	9	9	38.53	4.7	4	24.4
1/19/2019 3:20	9	9	9	38.63	4.5	4.1	24.4
1/19/2019 3:30	9	9	9	38.56	4.3	4.1	24.5
1/19/2019 3:40	9	9	9	38.56	4.5	4	3.6
1/19/2019 3:50	9	9	9	38.56	4.6	4.2	1
1/19/2019 4:00	9	9	9	38.59	4.8	4.1	24.1
1/19/2019 4:10	9	9	9	38.56	4.7	4.1	24.1
1/19/2019 4:20	9	9	9	38.56	4.4	4.1	24.3
1/19/2019 4:30	9	9	9	38.53	4.7	4.2	24.4
1/19/2019 4:40	9	9	9	38.5	4.8	4.1	24.5
1/19/2019 4:50	9	9	9	38.53	4.7	4	24.5
1/19/2019 5:00	9	9	9	38.63	4.7	4	3.5
1/19/2019 5:10	9	9	9	38.53	4.7	4.1	1.4

1/19/2019 5:20	9	9	9	38.56	4.6	4.2	23.9
1/19/2019 5:30	9	9	9	38.56	4.4	4.1	24.1
1/19/2019 5:40	9	9	9	38.53	4.5	4.2	24.3
1/19/2019 5:50	9	9	8	38.47	4.4	4	24.4
1/19/2019 6:00	9	9	9	38.47	4.5	4.1	24.4
1/19/2019 6:10	9	9	9	38.41	4.7	4.1	24.5
1/19/2019 6:20	9	9	9	38.47	4.6	4.2	3.6
1/19/2019 6:30	9	9	9	38.41	4.5	4.2	2.9
1/19/2019 6:40	9	9	9	38.41	4.7	4.1	23.9
1/19/2019 6:50	9	9	9	38.5	4.5	4.2	24.2
1/19/2019 7:00	9	9	9	38.47	4.3	4.1	24.4
1/19/2019 7:10	9	9	9	38.5	4.4	4.1	24.5
1/19/2019 7:20	9	9	9	38.5	4.6	4.1	24.5
1/19/2019 7:30	9	9	8	38.41	4.5	4.1	10.6
1/19/2019 7:40	9	9	9	38.35	4.6	4.1	3.5
1/19/2019 7:50	9	9	8	38.41	4.4	4	21.1
1/19/2019 8:00	9	9	9	38.38	4.3	4.1	23.9
1/19/2019 8:10	9	9	9	38.38	4.6	4	24.1
1/19/2019 8:20	9	9	9	38.38	4.5	4	24.3
1/19/2019 8:30	9	9	8	38.35	4.4	4.1	24.5
1/19/2019 8:40	9	9	9	38.38	4.5	4.1	24.5
1/19/2019 8:50	9	9	9	38.32	4.2	4.1	3.4
1/19/2019 9:00	9	9	9	38.29	4.3	4	1
1/19/2019 9:10	9	9	9	38.35	4.3	4.1	24.1
1/19/2019 9:20	9	9	9	38.32	4.2	4	24.2
1/19/2019 9:30	9	9	9	38.29	4.6	4.1	24.3
1/19/2019 9:40	9	9	9	38.38	4.6	4.1	24.4
1/19/2019 9:50	9	9	9	38.38	4.5	4.1	24.5
1/19/2019 10:00	9	9	9	38.41	4.6	4.2	3.7
1/19/2019 10:10	9	9	9	38.41	4.5	4.1	1
1/19/2019 10:20	9	9	9	38.38	4.7	4.1	24
1/19/2019 10:30	9	9	9	38.32	4.4	4.1	24.2
1/19/2019 10:40	9	9	9	38.35	4.6	4.2	24.3
1/19/2019 10:50	9	9	9	38.41	4.3	4.1	24.5
1/19/2019 11:00	9	9	9	38.35	4.4	4	24.5
1/19/2019 11:10	9	9	9	38.38	4.3	4.1	3.3
1/19/2019 11:20	9	9	9	38.41	4.7	4.1	1.6
1/19/2019 11:30	9	9	9	38.41	4.3	4	23.9
1/19/2019 11:40	9	9	9	38.38	4.7	4	24
1/19/2019 11:50	9	9	9	38.38	4.7	4.1	24.2
1/19/2019 12:00	9	9	9	38.41	4.4	4.1	24.5
1/19/2019 12:10	9	9	8	38.38	4.4	4	24.5
1/19/2019 12:20	9	9	9	38.35	4.4	4.1	24.5
1/19/2019 12:30	9	9	9	38.35	4.4	4	3.3
1/19/2019 12:40	9	9	8	38.32	4.5	4.1	15.2
1/19/2019 12:50	9	9	8	38.17	4.7	4.1	23.9
1/19/2019 13:00	9	9	8	38.35	4.2	4	24.2

1/19/2019 13:10	9	9	9	38.23	4.5	4	24.4
1/19/2019 13:20	9	9	8	38.23	4.6	4.1	24.5
1/19/2019 13:30	9	9	9	38.23	4.4	4.1	3.3
1/19/2019 13:40	9	9	8	38.26	4.4	4.1	3.5
1/19/2019 13:50	9	9	9	38.23	4.4	4.1	24
1/19/2019 14:00	9	9	9	38.26	4.4	4.1	24.1
1/19/2019 14:10	9	9	9	38.23	4.4	4.1	24.3
1/19/2019 14:20	9	9	9	38.29	4.7	4.2	24.4
1/19/2019 14:30	9	9	9	38.26	4.5	4.1	24.5
1/19/2019 14:40	9	9	9	38.26	4.8	4.1	3.3
1/19/2019 14:50	9	9	9	38.26	4.4	4.1	3.6
1/19/2019 15:00	9	9	9	38.32	4.5	4.1	23.9
1/19/2019 15:10	9	9	9	38.23	4.3	4.1	24.2
1/19/2019 15:20	9	9	9	38.2	4.4	4.1	24.3
1/19/2019 15:30	9	9	9	38.29	4.4	4.1	24.4
1/19/2019 15:40	9	9	9	38.23	4.6	4	24.5
1/19/2019 15:50	9	9	9	38.29	4.4	4.1	3.5
1/19/2019 16:00	9	9	9	38.26	4.6	4.1	1
1/19/2019 16:10	9	9	8	38.29	4.4	4.1	24
1/19/2019 16:20	9	9	9	38.26	4.7	4.1	24.1
1/19/2019 16:30	9	9	8	38.17	4.4	4	24.2
1/19/2019 16:40	9	9	9	38.23	4	4.1	24.4
1/19/2019 16:50	9	9	8	38.26	4.5	4.1	24.5
1/19/2019 17:00	9	9	9	38.26	4.6	4	3.4
1/19/2019 17:10	9	9	9	38.23	4.5	4	3.2
1/19/2019 17:20	9	9	9	38.23	4.5	4.1	23.9
1/19/2019 17:30	9	9	9	38.26	4.5	4.1	24
1/19/2019 17:40	9	9	9	38.23	4.3	4.1	24.2
1/19/2019 17:50	9	9	9	38.23	4.6	4.1	24.4
1/19/2019 18:00	9	9	9	38.2	4.6	4.1	24.5
1/19/2019 18:10	9	9	8	38.23	4.7	4	24.5
1/19/2019 18:20	9	9	9	38.2	4.4	4.1	3.5
1/19/2019 18:30	9	9	9	38.26	4.4	4.1	23.1
1/19/2019 18:40	9	9	9	38.2	4.5	4.1	24.1
1/19/2019 18:50	9	9	9	38.17	4.6	4.1	24.3
1/19/2019 19:00	9	9	8	38.14	4.6	4.1	24.5
1/19/2019 19:10	9	9	9	38.17	4.5	4.1	24.5
1/19/2019 19:20	9	9	9	38.17	4.3	4.1	3.3
1/19/2019 19:30	9	9	9	38.17	4.6	4.1	3.7
1/19/2019 19:40	9	9	9	38.17	4.6	4.1	24.1
1/19/2019 19:50	9	9	9	38.17	4.4	4.2	24
1/19/2019 20:00	9	9	8	38.08	4.1	4	24.3
1/19/2019 20:10	9	9	9	38.17	4.1	4	24.4
1/19/2019 20:20	9	9	9	38.08	4.6	4.2	24.5
1/19/2019 20:30	9	9	8	38.14	4.9	4.1	3.3
1/19/2019 20:40	9	9	8	38.14	4.7	4.2	3.3
1/19/2019 20:50	9	9	9	38.2	4.6	4	24

1/19/2019 21:00	9	9	9	38.11	4.7	4.1	24.1
1/19/2019 21:10	9	9	9	38.2	4.4	4	24.3
1/19/2019 21:20	9	9	9	38.08	4.3	4.1	24.5
1/19/2019 21:30	9	9	9	38.2	4.6	4.1	24.5
1/19/2019 21:40	9	9	9	38.2	4.6	4.1	3.4
1/19/2019 21:50	9	9	9	38.17	4.5	4	23.3
1/19/2019 22:00	9	9	9	38.08	4.1	4.2	24
1/19/2019 22:10	9	9	9	38.23	4.6	4.1	24.3
1/19/2019 22:20	9	9	9	38.14	4.4	4.1	24.4
1/19/2019 22:30	9	9	9	38.17	4.5	4	24.5
1/19/2019 22:40	9	9	8	38.23	4.4	4.1	24.5
1/19/2019 22:50	9	9	8	38.14	4	4.1	24.5
1/19/2019 23:00	9	9	8	38.2	4.6	4.1	3.6
1/19/2019 23:10	9	9	9	38.17	4.4	4.2	2.5
1/19/2019 23:20	9	9	9	38.23	4.2	4	23.9
1/19/2019 23:30	9	9	9	38.14	4.9	4.2	24
1/19/2019 23:40	9	9	8	38.26	4.5	4.1	24.3
1/19/2019 23:50	9	9	9	38.23	4.7	4.1	24.4
1/20/2019 0:00	9	9	9	38.26	4.5	4.1	24.5
1/20/2019 0:10	9	9	9	38.23	4.5	4.1	4.6
1/20/2019 0:20	9	9	9	38.2	4.5	4.2	3.4
1/20/2019 0:30	9	9	9	38.2	4.4	4.2	23.9
1/20/2019 0:40	9	9	9	38.29	4.3	4.1	24.1
1/20/2019 0:50	9	9	9	38.26	4.7	4	24.3
1/20/2019 1:00	9	9	9	38.26	4.4	4.1	24.5
1/20/2019 1:10	9	9	9	38.17	5	4.1	24.5
1/20/2019 1:20	9	9	9	38.26	4.6	4.1	3.3
1/20/2019 1:30	9	9	9	38.26	4.6	4.1	2.8
1/20/2019 1:40	9	9	9	38.23	4.6	4.2	22
1/20/2019 1:50	9	9	9	38.2	4.4	4.1	24.1
1/20/2019 2:00	9	9	9	38.26	4.3	4.2	24.3
1/20/2019 2:10	9	9	9	38.23	4.9	4	24.3
1/20/2019 2:20	9	9	9	38.26	4.7	4.1	24.5
1/20/2019 2:30	9	9	9	38.23	4.2	4.1	24.5
1/20/2019 2:40	9	9	8	38.23	4.5	4.1	3.6
1/20/2019 2:50	9	9	9	38.29	4.4	4.2	21.2
1/20/2019 3:00	9	9	9	38.32	4.3	4.1	24.1
1/20/2019 3:10	9	9	9	38.29	4.4	4.1	24.1
1/20/2019 3:20	9	9	9	38.26	4.5	4.1	24.3
1/20/2019 3:30	9	9	9	38.35	4.2	4.1	24.4
1/20/2019 3:40	9	9	9	38.26	4.3	4.1	24.5
1/20/2019 3:50	9	9	9	38.32	4.8	4.1	23.4
1/20/2019 4:00	9	9	9	38.32	4.3	4.1	3.5
1/20/2019 4:10	9	9	8	38.26	4.6	4.1	19.4
1/20/2019 4:20	9	9	8	38.35	4.5	4.1	24
1/20/2019 4:30	9	9	9	38.26	4.6	4.1	24.2
1/20/2019 4:40	9	9	8	38.23	4.7	4.1	24.3

1/20/2019 4:50	9	9	8	38.23	4.6	4.1	24.5
1/20/2019 5:00	9	9	8	38.2	4.4	4.1	24.6
1/20/2019 5:10	9	9	8	38.29	4.5	4.1	3.6
1/20/2019 5:20	9	9	8	38.29	4.5	4.1	15.1
1/20/2019 5:30	9	9	8	38.23	4.6	4.1	24
1/20/2019 5:40	9	9	9	38.26	4.5	3.9	24.3
1/20/2019 5:50	9	9	9	38.29	4.5	4.1	24.4
1/20/2019 6:00	9	9	9	38.26	4.6	4.1	24.4
1/20/2019 6:10	9	9	8	38.26	4.7	4.1	24.5
1/20/2019 6:20	9	9	8	38.32	4.6	4.1	3.3
1/20/2019 6:30	9	9	9	38.32	4.2	4.1	2
1/20/2019 6:40	9	9	9	38.32	4.4	4.1	23.9
1/20/2019 6:50	9	9	9	38.35	4.5	4	24.1
1/20/2019 7:00	9	9	9	38.35	4.5	4.1	24.2
1/20/2019 7:10	9	9	9	38.38	4.5	4.2	24.4
1/20/2019 7:20	9	9	9	38.38	4.7	4.1	24.6
1/20/2019 7:30	9	9	9	38.35	4.5	4.1	3.4
1/20/2019 7:40	9	9	9	38.35	4.5	4.1	1
1/20/2019 7:50	9	9	9	38.35	4.3	4	23.9
1/20/2019 8:00	9	9	9	38.38	4.6	4	24.2
1/20/2019 8:10	9	9	9	38.38	4	4.1	24.4
1/20/2019 8:20	9	9	9	38.47	4.5	4.1	24.5
1/20/2019 8:30	9	9	9	38.41	4.6	4	3.3
1/20/2019 8:40	9	9	8	38.47	4.1	4.1	1.7
1/20/2019 8:50	9	9	8	38.38	4.4	4.1	24
1/20/2019 9:00	9	9	9	38.38	4.6	4.1	24.1
1/20/2019 9:10	9	9	9	38.41	4.3	4.1	24.3
1/20/2019 9:20	9	9	8	38.35	4.4	4.1	24.5
1/20/2019 9:30	9	9	8	38.38	4.3	4.1	24.5
1/20/2019 9:40	9	9	9	38.41	4.7	4	3.6
1/20/2019 9:50	9	9	9	38.38	4.3	4.1	1.3
1/20/2019 10:00	9	9	9	38.38	4.5	4.1	23.9
1/20/2019 10:10	9	9	9	38.35	4.5	4.1	24.2
1/20/2019 10:20	9	9	9	38.38	4.5	4	24.4
1/20/2019 10:30	9	9	9	38.38	4.4	4.1	24.5
1/20/2019 10:40	9	9	8	38.32	4.6	4.1	24.5
1/20/2019 10:50	9	9	9	38.35	4.6	4.1	4
1/20/2019 11:00	9	9	9	38.35	4.5	4.1	3.5
1/20/2019 11:10	9	9	9	38.29	4.5	4.1	23.9
1/20/2019 11:20	9	9	8	38.32	4.5	4	24
1/20/2019 11:30	9	9	9	38.32	4.4	4.1	24.3
1/20/2019 11:40	9	9	9	38.35	4.4	4.1	24.4
1/20/2019 11:50	9	9	9	38.35	4.6	4.1	24.5
1/20/2019 12:00	9	9	8	38.35	4.4	4.1	3.2
1/20/2019 12:10	9	9	9	38.38	4.5	4.1	2.8
1/20/2019 12:20	9	9	9	38.38	4.5	4.1	23.9
1/20/2019 12:30	9	9	9	38.38	4.5	4.1	24.1

1/20/2019 12:40	9	9	9	38.41	4.3	4.1	24.3
1/20/2019 12:50	9	9	9	38.47	4.6	4.1	24.4
1/20/2019 13:00	9	9	9	38.47	4.3	4.1	24.6
1/20/2019 13:10	9	9	9	38.41	4.4	4.1	3.4
1/20/2019 13:20	9	9	9	38.38	4.5	4.1	1.1
1/20/2019 13:30	9	9	9	38.47	4.4	4.1	24.1
1/20/2019 13:40	9	9	9	38.41	4.4	4.1	24.2
1/20/2019 13:50	9	9	9	38.47	4.5	3.9	24.3
1/20/2019 14:00	9	9	9	38.38	4.4	4.1	24.5
1/20/2019 14:10	9	9	9	38.38	4.5	4.1	24.6
1/20/2019 14:20	9	9	9	38.38	4.2	4.1	3.5
1/20/2019 14:30	9	9	9	38.32	4.5	4.1	15.1
1/20/2019 14:40	9	9	9	38.47	4.5	4.1	24
1/20/2019 14:50	9	9	9	38.38	4.5	4.1	24.1
1/20/2019 15:00	9	9	9	38.41	4.5	4.1	24.3
1/20/2019 15:10	9	9	9	38.38	4.6	4.2	24.4
1/20/2019 15:20	0	0	0	38.59	3.6	3.6	0.3
1/20/2019 15:30	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 15:40	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 15:50	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 16:00	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 16:10	0	0	0	38.66	3.6	3.6	0.3
1/20/2019 16:20	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 16:30	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 16:40	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 16:50	0	0	0	38.63	3.6	3.6	0.3
1/20/2019 17:00	0	0	0	38.63	3.5	3.6	0.3
1/20/2019 17:10	0	0	0	38.63	3.5	3.6	0.3
1/20/2019 17:20	0	0	0	38.63	3.4	3.5	0.3
1/20/2019 17:30	0	0	0	38.63	3.4	3.5	0.3
1/20/2019 17:40	0	0	0	38.63	3.4	3.4	0.3
1/20/2019 17:50	0	0	0	38.66	3.3	3.4	0.3
1/20/2019 18:00	0	0	0	38.63	3.3	3.4	0.3
1/20/2019 18:10	0	0	0	38.63	3.2	3.3	0.3
1/20/2019 18:20	0	0	0	38.63	3.1	3.2	0.3
1/20/2019 18:30	0	0	0	38.63	3.1	3.1	0.3
1/20/2019 18:40	0	0	0	38.63	3.1	3.1	0.3
1/20/2019 18:50	0	0	0	38.66	3	3.1	0.3
1/20/2019 19:00	0	0	0	38.63	2.9	3	0.3
1/20/2019 19:10	0	0	0	38.63	2.9	2.9	0.3
1/20/2019 19:20	0	0	0	38.66	2.8	2.9	0.3
1/20/2019 19:30	0	0	0	38.69	2.8	2.8	0.3
1/20/2019 19:40	0	0	0	38.66	2.7	2.7	0.3
1/20/2019 19:50	0	0	0	38.66	2.6	2.6	0.3
1/20/2019 20:00	0	0	0	38.66	2.5	2.6	0.3
1/20/2019 20:10	0	0	0	38.66	2.4	2.5	0.3
1/20/2019 20:20	0	0	0	38.66	2.4	2.4	0.3

1/20/2019 20:30	0	0	0	38.66	2.3	2.4	0.3
1/20/2019 20:40	0	0	0	38.69	2.3	2.3	0.3
1/20/2019 20:50	0	0	0	38.66	2.2	2.3	0.3
1/20/2019 21:00	0	0	0	38.69	2.1	2.2	0.3
1/20/2019 21:10	0	0	0	38.66	2.1	2.1	0.3
1/20/2019 21:20	0	0	0	38.69	2	2.1	0.3
1/20/2019 21:30	0	0	0	38.69	2	2	0.3
1/20/2019 21:40	0	0	0	38.69	1.9	1.9	0.3
1/20/2019 21:50	0	0	0	38.69	1.8	1.9	0.3
1/20/2019 22:00	0	0	0	38.69	1.8	1.8	0.3
1/20/2019 22:10	0	0	0	38.69	1.7	1.8	0.3
1/20/2019 22:20	0	0	0	38.69	1.6	1.7	0.3
1/20/2019 22:30	0	0	0	38.66	1.6	1.6	0.3
1/20/2019 22:40	0	0	0	38.69	1.6	1.6	0.3
1/20/2019 22:50	0	0	0	38.69	1.5	1.6	0.3
1/20/2019 23:00	0	0	0	38.69	1.5	1.5	0.3
1/20/2019 23:10	0	0	0	38.69	1.5	1.5	0.3
1/20/2019 23:20	0	0	0	38.69	1.5	1.5	0.3
1/20/2019 23:30	0	0	0	38.69	1.4	1.5	0.3
1/20/2019 23:40	0	0	0	38.69	1.4	1.5	0.3
1/20/2019 23:50	0	0	0	38.69	1.4	1.4	0.3
1/21/2019 0:00	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 0:10	0	0	0	38.69	1.4	1.4	0.3
1/21/2019 0:20	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 0:30	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 0:40	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 0:50	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 1:00	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 1:10	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 1:20	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 1:30	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 1:40	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 1:50	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 2:00	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 2:10	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 2:20	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 2:30	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 2:40	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 2:50	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 3:00	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 3:10	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 3:20	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 3:30	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 3:40	0	0	0	38.75	1.3	1.4	0.3
1/21/2019 3:50	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 4:00	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 4:10	0	0	0	38.72	1.3	1.4	0.3

1/21/2019 4:20	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 4:30	0	0	0	38.75	1.3	1.4	0.3
1/21/2019 4:40	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 4:50	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 5:00	0	0	0	38.75	1.3	1.4	0.3
1/21/2019 5:10	0	0	0	38.75	1.3	1.4	0.3
1/21/2019 5:20	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 5:30	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 5:40	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 5:50	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 6:00	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 6:10	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 6:20	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 6:30	0	0	0	38.75	1.3	1.4	0.3
1/21/2019 6:40	0	0	0	38.72	1.3	1.4	0.3
1/21/2019 6:50	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 7:00	0	0	0	38.72	1.4	1.4	0.3
1/21/2019 7:10	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 7:20	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 7:30	0	0	0	38.75	1.4	1.4	0.3
1/21/2019 7:40	9	9	9	40.37	4.2	3.8	0.6
1/21/2019 7:50	9	9	9	40.18	4.5	4.1	24.6
1/21/2019 8:00	9	9	9	39.91	4.5	4	24.8
1/21/2019 8:10	9	9	9	39.63	4.3	4	24.8
1/21/2019 8:20	9	9	9	39.48	4.7	4.1	3.5
1/21/2019 8:30	9	9	9	39.33	4.6	3.9	3.3
1/21/2019 8:40	9	9	9	39.11	4.3	4.1	24.2
1/21/2019 8:50	9	9	9	38.93	4.3	4	24.5
1/21/2019 9:00	9	9	9	38.69	4.5	3.9	24.7
1/21/2019 9:10	9	9	8	38.5	4.3	3.9	6.7
1/21/2019 9:20	9	9	8	38.26	4.5	4.1	24.6
1/21/2019 9:30	9	9	8	38.08	4.5	4	10.7
1/21/2019 9:40	9	9	8	37.86	4.3	4	24.2
1/21/2019 9:50	9	9	8	37.74	4.7	3.9	24.7
1/21/2019 10:00	9	9	8	37.56	4.4	3.9	24.3
1/21/2019 10:10	9	9	8	37.37	4.6	4	24.7
1/21/2019 10:20	9	9	8	37.22	4.1	4	24.4
1/21/2019 10:30	9	9	8	37.16	4.1	4	3
1/21/2019 10:40	9	9	8	37.01	4.4	4	24.6
1/21/2019 10:50	9	9	8	36.82	4.4	3.9	24.3
1/21/2019 11:00	9	9	9	36.73	4.7	3.9	1.3
1/21/2019 11:10	9	9	8	36.67	4.3	3.9	24.5
1/21/2019 11:20	9	9	8	36.58	4.3	4	24.4
1/21/2019 11:30	9	9	8	36.37	4.2	3.9	24.3
1/21/2019 11:40	9	9	8	36.24	4.2	3.8	23.9
1/21/2019 11:50	9	9	8	36.09	4.5	4	4.3
1/21/2019 12:00	9	9	8	36.03	4.5	3.9	24.5

1/21/2019 12:10	9	9	9	35.97	4.4	3.9	24.5
1/21/2019 12:20	9	9	8	35.85	4.1	4	24.5
1/21/2019 12:30	9	9	8	35.88	4.7	4	24.4
1/21/2019 12:40	9	9	8	35.66	4.4	3.9	24.3
1/21/2019 12:50	9	9	8	35.57	4.4	3.9	24.3
1/21/2019 13:00	9	9	8	35.45	4.5	3.9	24.1
1/21/2019 13:10	9	9	8	35.45	4.4	3.9	24.2
1/21/2019 13:20	9	9	8	35.39	4.4	3.9	24.3
1/21/2019 13:30	9	9	8	35.33	4.3	3.9	24.2
1/21/2019 13:40	9	9	8	35.21	4.6	3.9	24.2
1/21/2019 13:50	9	9	8	35.27	4.2	3.9	24.3
1/21/2019 14:00	9	9	8	35.08	4.6	3.9	24.3
1/21/2019 14:10	9	9	8	35.08	4.3	3.9	24.4
1/21/2019 14:20	9	9	8	35.02	4.2	3.8	24.5
1/21/2019 14:30	9	9	8	34.96	4.4	3.9	24.5
1/21/2019 14:40	9	9	8	34.9	4.1	3.9	3.6
1/21/2019 14:50	9	9	8	34.93	4.5	3.9	11.6
1/21/2019 15:00	9	9	8	34.87	4.5	3.9	23.8
1/21/2019 15:10	9	9	8	34.81	4.5	3.9	24.1
1/21/2019 15:20	9	9	8	34.72	3.8	3.9	24.3
1/21/2019 15:30	9	9	8	34.66	4.5	3.9	24.5
1/21/2019 15:40	9	9	8	34.69	4.4	3.9	3.4
1/21/2019 15:50	9	9	8	34.63	4.3	3.9	1.2
1/21/2019 16:00	9	9	8	34.53	4.2	3.8	23.9
1/21/2019 16:10	9	9	8	34.53	4.4	3.9	24.1
1/21/2019 16:20	9	9	8	34.41	4.5	3.9	24.3
1/21/2019 16:30	9	9	8	34.44	4.2	3.9	24.6
1/21/2019 16:40	9	9	8	34.38	4.3	3.9	2
1/21/2019 16:50	9	9	8	34.35	4.2	3.8	24
1/21/2019 17:00	9	9	8	34.26	4.5	3.8	24.3
1/21/2019 17:10	9	9	8	34.29	4.3	3.8	24.5
1/21/2019 17:20	9	9	8	34.2	4.3	3.9	3.5
1/21/2019 17:30	9	9	8	34.23	4.4	3.8	23.9
1/21/2019 17:40	9	9	8	34.2	4.4	3.9	24.2
1/21/2019 17:50	9	9	8	34.11	4.4	3.9	24.4
1/21/2019 18:00	9	9	8	34.14	4.1	3.9	3.8
1/21/2019 18:10	9	9	8	34.11	4.2	3.9	23.9
1/21/2019 18:20	9	9	8	33.95	4.3	3.9	24.3
1/21/2019 18:30	9	9	8	33.99	4.3	3.9	24.4
1/21/2019 18:40	9	9	8	33.99	4.2	3.9	3.9
1/21/2019 18:50	9	9	8	33.99	4.4	3.9	23.9
1/21/2019 19:00	9	9	8	33.89	4.2	3.9	24.3
1/21/2019 19:10	9	9	8	33.95	4.6	4	24.5
1/21/2019 19:20	9	9	8	33.89	4.2	4	3.3
1/21/2019 19:30	9	9	8	33.92	4.6	3.9	24
1/21/2019 19:40	9	9	8	33.89	4.3	3.8	24.3
1/21/2019 19:50	9	9	8	33.83	4.6	3.9	24.5

1/21/2019 20:00	9	9	8	33.8	4.3	4	4.1
1/21/2019 20:10	9	9	8	33.77	4.3	3.9	23.9
1/21/2019 20:20	9	9	8	33.77	4.4	4	24.1
1/21/2019 20:30	9	9	8	33.62	4.4	3.9	24.5
1/21/2019 20:40	9	9	8	33.59	4.6	3.9	3.6
1/21/2019 20:50	9	9	8	33.65	4.2	3.9	23.8
1/21/2019 21:00	9	9	8	33.65	4.4	3.9	24.3
1/21/2019 21:10	9	9	8	33.59	4.2	4	24.4
1/21/2019 21:20	9	9	8	33.53	4.5	3.9	3.1
1/21/2019 21:30	9	9	8	33.53	4.6	4	24.1
1/21/2019 21:40	9	9	8	33.53	4.3	3.9	24.4
1/21/2019 21:50	9	9	8	33.5	4.3	3.8	3.5
1/21/2019 22:00	9	9	8	33.53	4.4	3.9	23.9
1/21/2019 22:10	9	9	8	33.53	4.3	3.9	24.2
1/21/2019 22:20	9	9	8	33.47	4.4	3.9	24.5
1/21/2019 22:30	9	9	8	33.5	3.9	3.9	3.5
1/21/2019 22:40	9	9	8	33.34	4.3	4	24
1/21/2019 22:50	9	9	8	33.47	4.5	3.8	24.3
1/21/2019 23:00	9	9	8	33.44	4.5	3.9	24.5
1/21/2019 23:10	9	9	8	33.41	4.4	3.8	15.1
1/21/2019 23:20	9	9	8	33.34	4.2	3.9	24.2
1/21/2019 23:30	9	9	8	33.37	4.4	4	24.5
1/21/2019 23:40	9	9	8	33.28	4.2	4	3.9
1/21/2019 23:50	9	9	8	33.28	4.2	3.9	23.9
1/22/2019 0:00	9	9	8	33.31	4.2	3.9	24.3
1/22/2019 0:10	9	9	8	33.22	4.2	3.9	3.8
1/22/2019 0:20	9	9	8	33.13	4.3	4	23.9
1/22/2019 0:30	9	9	8	33.22	4.3	4.1	24.2
1/22/2019 0:40	9	9	8	33.16	4.3	3.8	24.4
1/22/2019 0:50	9	9	8	33.07	4.4	4	1.9
1/22/2019 1:00	9	9	8	33.1	4.1	4	24.1
1/22/2019 1:10	9	9	8	33.1	4.2	3.9	24.4
1/22/2019 1:20	9	9	8	33.04	4.5	4	3.4
1/22/2019 1:30	9	9	8	33.04	4.4	3.9	23.9
1/22/2019 1:40	9	9	8	33.07	4.4	3.9	24.4
1/22/2019 1:50	9	9	8	33.13	4.4	4	23.4
1/22/2019 2:00	9	9	8	33.01	4.3	3.9	23.9
1/22/2019 2:10	9	9	8	33.07	4.6	3.9	24.3
1/22/2019 2:20	9	9	8	33.04	4.2	3.9	10.5
1/22/2019 2:30	9	9	8	33.07	4.2	4	24
1/22/2019 2:40	9	9	8	32.98	4.8	4	24.3
1/22/2019 2:50	9	9	8	33.04	4.4	4	24.5
1/22/2019 3:00	9	9	8	32.89	4.4	3.9	1
1/22/2019 3:10	9	9	8	32.92	4.2	3.9	24.2
1/22/2019 3:20	9	9	8	32.98	4.2	3.8	24.5
1/22/2019 3:30	9	9	8	32.98	4.4	3.9	3.1
1/22/2019 3:40	9	9	8	32.92	4.3	3.9	24.1

1/22/2019 3:50	9	9	8	32.92	4.3	4	24.4
1/22/2019 4:00	9	9	8	32.89	4.4	3.9	3.6
1/22/2019 4:10	9	9	8	32.92	4.2	3.9	24
1/22/2019 4:20	9	9	8	32.86	4.4	3.9	24.4
1/22/2019 4:30	9	9	8	32.92	4.5	4	3.6
1/22/2019 4:40	9	9	8	32.89	4.2	3.9	24.1
1/22/2019 4:50	9	9	8	32.86	4.3	4	24.3
1/22/2019 5:00	9	9	8	32.86	4.4	3.9	4.3
1/22/2019 5:10	9	9	8	32.79	4.3	4	23.8
1/22/2019 5:20	9	9	8	32.83	4.3	4	24.4
1/22/2019 5:30	9	9	8	32.79	4.3	3.8	3.6
1/22/2019 5:40	9	9	8	32.83	4.3	3.9	24.1
1/22/2019 5:50	9	9	8	32.76	4.5	3.9	24.4
1/22/2019 6:00	9	9	8	32.76	4.4	3.9	4
1/22/2019 6:10	9	9	8	32.76	4.2	3.9	24
1/22/2019 6:20	9	9	8	32.76	4.3	4	24.4
1/22/2019 6:30	9	9	8	32.79	4.2	4	3.7
1/22/2019 6:40	9	9	8	32.76	4.1	3.9	24
1/22/2019 6:50	9	9	8	32.73	4.4	3.9	24.4
1/22/2019 7:00	9	9	8	32.73	4.5	4	1.8
1/22/2019 7:10	9	9	8	32.67	4.8	3.9	24.1
1/22/2019 7:20	9	9	8	32.7	4.2	3.9	24.4
1/22/2019 7:30	9	9	8	32.73	4.3	3.9	1.1
1/22/2019 7:40	9	9	8	32.67	4.3	3.9	24.3
1/22/2019 7:50	9	9	8	32.73	4.2	3.9	24.5
1/22/2019 8:00	9	9	8	32.73	4.3	3.9	22.3
1/22/2019 8:10	9	9	8	32.73	4.3	4	24.3
1/22/2019 8:20	9	9	8	32.73	4.5	3.9	24.6
1/22/2019 8:30	9	9	8	32.73	4.3	4	23.9
1/22/2019 8:40	9	9	8	32.67	4.4	3.8	24.3
1/22/2019 8:50	9	9	8	32.7	4.3	4	3.9
1/22/2019 9:00	9	9	8	32.76	4.5	3.9	24
1/22/2019 9:10	9	9	8	32.67	4.2	4	24.5
1/22/2019 9:20	9	9	8	32.7	4.3	3.9	4
1/22/2019 9:30	9	9	8	32.64	4.4	3.9	24.2
1/22/2019 9:40	9	9	8	32.67	4.3	4	24.5
1/22/2019 9:50	9	9	8	32.64	4.5	3.9	1.5
1/22/2019 10:00	9	9	8	32.64	4.2	3.9	24.2
1/22/2019 10:10	9	9	8	32.67	4.3	3.9	24.5
1/22/2019 10:20	9	9	8	32.58	4.6	3.9	7.1
1/22/2019 10:30	9	9	8	32.61	4.4	3.9	24.2
1/22/2019 10:40	9	9	8	32.58	4.2	4	24.5
1/22/2019 10:50	9	9	8	32.61	4.2	3.9	23.9
1/22/2019 11:00	9	9	8	32.61	4.4	3.9	24.3
1/22/2019 11:10	9	9	8	32.58	4.4	3.9	3.3
1/22/2019 11:20	9	9	8	32.67	4.1	3.9	24
1/22/2019 11:30	9	9	8	32.52	4.1	3.9	24.4

1/22/2019 11:40	9	9	8	32.52	4.4	3.9	3.9
1/22/2019 11:50	9	9	8	32.61	4.2	4	24.1
1/22/2019 12:00	9	9	8	32.58	4.4	4	24.3
1/22/2019 12:10	9	9	8	32.58	4.2	3.9	3.7
1/22/2019 12:20	9	9	8	32.52	4.3	3.9	24
1/22/2019 12:30	9	9	8	32.52	4.4	3.9	24.4
1/22/2019 12:40	9	9	8	32.37	4.3	3.9	1.9
1/22/2019 12:50	9	9	8	32.43	4.3	3.9	24.1
1/22/2019 13:00	9	9	8	32.43	4.1	3.8	24.5
1/22/2019 13:10	9	9	8	32.4	4.1	3.9	24.1
1/22/2019 13:20	9	9	8	32.37	4.2	3.8	24.3
1/22/2019 13:30	9	9	8	32.4	4.2	3.8	24.4
1/22/2019 13:40	9	9	8	32.37	4.4	3.9	23.9
1/22/2019 13:50	9	9	8	32.43	4.1	3.8	24.3
1/22/2019 14:00	9	9	8	32.4	4.2	3.8	4.1
1/22/2019 14:10	9	9	8	32.34	4.4	3.9	24.1
1/22/2019 14:20	9	9	8	32.31	4.2	3.9	24.5
1/22/2019 14:30	9	9	8	32.31	4.7	3.8	1.4
1/22/2019 14:40	9	9	8	32.31	4.7	3.9	24.2
1/22/2019 14:50	9	9	8	32.34	4.5	3.8	24.5
1/22/2019 15:00	9	9	8	32.34	4.5	3.9	23.9
1/22/2019 15:10	9	9	8	32.31	4.3	3.9	24.3
1/22/2019 15:20	9	9	8	32.28	4.3	3.9	3.6
1/22/2019 15:30	9	9	8	32.25	4.2	4	24.1
1/22/2019 15:40	9	9	8	32.21	4.1	3.9	24.4
1/22/2019 15:50	9	9	8	32.25	4.3	3.9	1.4
1/22/2019 16:00	9	9	8	32.21	4.2	3.8	24.1
1/22/2019 16:10	9	9	8	32.21	4.2	3.9	24.5
1/22/2019 16:20	9	9	8	32.25	4.2	3.9	23.9
1/22/2019 16:30	9	9	8	32.18	4.4	3.9	24.3
1/22/2019 16:40	9	9	8	32.21	4.2	4	3.6
1/22/2019 16:50	9	9	8	32.18	4.6	3.9	23.8
1/22/2019 17:00	9	9	8	32.21	4.4	3.9	24.4
1/22/2019 17:10	9	9	8	32.15	4.3	3.9	1.4
1/22/2019 17:20	9	9	8	32.21	4.3	3.9	24.1
1/22/2019 17:30	9	9	8	32.21	4.3	3.9	4.3
1/22/2019 17:40	9	9	8	32.18	4.5	3.9	23.9
1/22/2019 17:50	9	9	8	32.28	4.9	4	24.4
1/22/2019 18:00	9	9	8	32.21	4.3	3.7	2.1
1/22/2019 18:10	9	9	8	32.15	4.3	3.9	24.2
1/22/2019 18:20	9	9	8	32.15	4.3	3.9	24.5
1/22/2019 18:30	9	9	8	32.18	4.5	3.9	24
1/22/2019 18:40	9	9	8	32.21	4.5	3.9	24.3
1/22/2019 18:50	9	9	8	32.15	4.2	4	3.5
1/22/2019 19:00	9	9	8	32.18	4.3	3.8	24.1
1/22/2019 19:10	9	9	8	32.15	4.5	3.8	24.5
1/22/2019 19:20	9	9	8	32.15	4.2	3.9	17.1

1/22/2019 19:30	9	9	8	32.15	4.7	3.9	24.4
1/22/2019 19:40	9	9	8	32.15	4.4	4	3.3
1/22/2019 19:50	9	9	8	32.15	4.3	3.9	24
1/22/2019 20:00	9	9	8	32.09	4.4	3.9	24.4
1/22/2019 20:10	9	9	8	32.15	4.3	4	4.2
1/22/2019 20:20	9	9	8	32.09	4.4	3.9	24.1
1/22/2019 20:30	9	9	8	32.09	4.4	3.9	24.5
1/22/2019 20:40	9	9	8	32.12	4.4	3.7	23.9
1/22/2019 20:50	9	9	8	32.12	4.2	3.9	24.3
1/22/2019 21:00	9	9	8	32.12	4.4	3.9	3.6
1/22/2019 21:10	9	9	8	32.09	4.2	3.9	24.2
1/22/2019 21:20	9	9	8	32.12	4.3	3.8	24.5
1/22/2019 21:30	9	9	8	32.03	4.1	3.9	23.6
1/22/2019 21:40	9	9	8	32.09	4.4	3.8	24.3
1/22/2019 21:50	9	9	8	32.03	4.1	3.9	4.2
1/22/2019 22:00	9	9	8	32.03	4	4.1	24
1/22/2019 22:10	9	9	8	32.09	4.2	3.9	24.5
1/22/2019 22:20	9	9	8	32.06	4.2	3.8	23.8
1/22/2019 22:30	9	9	8	32.09	4.3	3.8	24.3
1/22/2019 22:40	9	9	8	32	4.6	3.8	3.5
1/22/2019 22:50	9	9	8	32.03	4.2	3.9	24.1
1/22/2019 23:00	9	9	8	32.09	4.5	3.9	24.5
1/22/2019 23:10	9	9	8	31.97	4.3	3.9	24
1/22/2019 23:20	9	9	8	32.06	4.4	3.9	24.4
1/22/2019 23:30	9	9	8	31.94	4.4	3.9	3.8
1/22/2019 23:40	9	9	8	32.03	4.2	3.8	24.2
1/22/2019 23:50	9	9	8	32.06	4.4	3.8	24.5
1/23/2019 0:00	9	9	8	32.06	4.3	3.9	24
1/23/2019 0:10	9	9	8	32.06	4.4	3.9	24.5
1/23/2019 0:20	9	9	8	32.03	4.5	3.9	1.9
1/23/2019 0:30	9	9	8	31.97	4.8	3.9	24.3
1/23/2019 0:40	9	9	8	32.03	4.5	4	3.4
1/23/2019 0:50	9	9	8	32.03	4.5	3.9	24.1
1/23/2019 1:00	9	9	8	32.03	4.2	3.9	24.5
1/23/2019 1:10	9	9	8	32.12	4	3.9	21.2
1/23/2019 1:20	9	9	8	32.09	4.5	3.8	24.3
1/23/2019 1:30	9	9	8	32	4.4	4	3.6
1/23/2019 1:40	9	9	8	32.06	4.3	3.9	24.2
1/23/2019 1:50	9	9	8	32.15	3.9	3.9	24.5
1/23/2019 2:00	9	9	8	32.03	4.2	3.9	24
1/23/2019 2:10	9	9	8	32.03	4.4	3.8	24.5
1/23/2019 2:20	9	9	8	32.03	4.4	3.9	3.7
1/23/2019 2:30	9	9	8	32.15	4.3	3.8	24.1
1/23/2019 2:40	9	9	8	32.15	4.5	3.8	24.4
1/23/2019 2:50	9	9	8	32.06	4.5	3.9	23.8
1/23/2019 3:00	9	9	8	32.06	4.3	3.9	24.5
1/23/2019 3:10	9	9	8	32.06	4.5	3.9	3.9

1/23/2019 3:20	9	9	8	32.06	4.3	3.9	24.2
1/23/2019 3:30	9	9	8	32.12	4.3	3.9	24.5
1/23/2019 3:40	9	9	8	32.09	4.3	3.9	23.9
1/23/2019 3:50	9	9	8	32.25	4.3	3.9	24.4
1/23/2019 4:00	9	9	8	32.18	4.4	3.9	3.6
1/23/2019 4:10	9	9	8	32.15	4.4	3.9	24.1
1/23/2019 4:20	9	9	8	32.15	4.3	3.9	24.4
1/23/2019 4:30	9	9	8	32.18	4.6	4	24
1/23/2019 4:40	9	9	8	32	4.3	4	24.5
1/23/2019 4:50	9	9	8	32.12	4.4	3.9	1.1
1/23/2019 5:00	9	9	8	32.09	4.4	3.9	24.3
1/23/2019 5:10	9	9	8	32.09	4.1	3.9	3.6
1/23/2019 5:20	9	9	8	32.03	4.2	3.9	24.1
1/23/2019 5:30	9	9	8	32.09	4.4	3.9	24.5
1/23/2019 5:40	9	9	8	32.06	4.3	4	24
1/23/2019 5:50	9	9	8	32.06	4.4	3.9	24.5
1/23/2019 6:00	9	9	8	32	4.3	4	1
1/23/2019 6:10	9	9	8	32	4.2	3.9	24.3
1/23/2019 6:20	9	9	8	32.09	4.2	4	3.5
1/23/2019 6:30	9	9	8	32.09	4.3	3.9	24.1
1/23/2019 6:40	9	9	8	32.03	4.2	3.8	10.5
1/23/2019 6:50	9	9	8	31.88	4.3	3.9	24
1/23/2019 7:00	9	9	8	32.06	4.5	3.9	24.4
1/23/2019 7:10	9	9	8	32.03	4.3	3.8	15.2
1/23/2019 7:20	9	9	8	31.97	4.3	3.9	24.3
1/23/2019 7:30	9	9	8	32.03	4.2	3.9	2.3
1/23/2019 7:40	9	9	8	32.06	4.3	3.9	24.2
1/23/2019 7:50	9	9	8	32	4.2	3.9	3.4
1/23/2019 8:00	9	9	8	32	4.5	3.9	24.1
1/23/2019 8:10	9	9	8	32.03	4.3	4	24.5
1/23/2019 8:20	9	9	8	32	4.4	3.9	24
1/23/2019 8:30	9	9	8	32	4.2	4	24.4
1/23/2019 8:40	9	9	8	32	4.3	3.9	2.8
1/23/2019 8:50	9	9	8	32	4.4	3.9	24.2
1/23/2019 9:00	9	9	8	32	4.2	4	3.4
1/23/2019 9:10	9	9	8	32	4.3	3.8	24.1
1/23/2019 9:20	9	9	8	32	4.4	3.9	24.5
1/23/2019 9:30	9	9	8	32	4.4	3.9	23.9
1/23/2019 9:40	9	9	8	32.03	4.4	3.9	24.3
1/23/2019 9:50	9	9	8	32.03	4.4	3.8	2.8
1/23/2019 10:00	9	9	8	32.06	4.5	3.9	24.1
1/23/2019 10:10	9	9	8	31.94	4.4	3.9	3.5
1/23/2019 10:20	9	9	8	31.97	4.2	3.9	24
1/23/2019 10:30	9	9	8	32.03	4.1	3.7	24.5
1/23/2019 10:40	9	9	8	31.97	4.5	3.9	24
1/23/2019 10:50	9	9	8	32	4.5	4	24.4
1/23/2019 11:00	9	9	8	32	4.1	3.9	1.1

1/23/2019 11:10	9	9	8	32	4.4	3.9	24.3
1/23/2019 11:20	9	9	8	31.85	4.2	3.9	3.6
1/23/2019 11:30	9	9	8	31.94	4.3	4	24.2
1/23/2019 11:40	9	9	8	31.88	4.3	3.9	3.3
1/23/2019 11:50	9	9	8	31.94	4.4	3.9	24
1/23/2019 12:00	9	9	8	32	4.3	3.9	24.5
1/23/2019 12:10	9	9	8	31.94	4.5	3.9	23.9
1/23/2019 12:20	9	9	8	31.88	4.3	4	24.4
1/23/2019 12:30	9	9	8	31.88	4.5	3.9	12.4
1/23/2019 12:40	9	9	8	31.94	4.6	3.9	24.4
1/23/2019 12:50	9	9	8	31.97	4.2	4	3.2
1/23/2019 13:00	9	9	8	31.94	4.2	3.9	24.1
1/23/2019 13:10	9	9	8	31.88	4.5	3.9	3.5
1/23/2019 13:20	9	9	8	31.94	4.1	3.9	24.1
1/23/2019 13:30	9	9	8	31.85	4.5	4	24.5
1/23/2019 13:40	9	9	8	31.85	4.6	3.9	23.8
1/23/2019 13:50	9	9	8	31.97	4.2	3.9	24.4
1/23/2019 14:00	9	9	8	31.97	4.5	3.9	23.6
1/23/2019 14:10	9	9	8	31.88	4.5	3.9	24.3
1/23/2019 14:20	9	9	8	31.85	4.3	3.9	3.2
1/23/2019 14:30	9	9	8	31.94	4.4	3.9	24.2
1/23/2019 14:40	9	9	8	31.94	4.1	3.9	4.3
1/23/2019 14:50	9	9	8	31.88	4.2	3.9	24
1/23/2019 15:00	9	9	8	31.7	4.4	3.9	24.4
1/23/2019 15:10	9	9	8	31.82	4.2	3.8	23.9
1/23/2019 15:20	9	9	8	31.94	4.4	3.8	24.3
1/23/2019 15:30	9	9	8	31.85	4.4	3.8	1.6
1/23/2019 15:40	9	9	8	31.85	4.3	4	24.2
1/23/2019 15:50	9	9	8	31.85	4.4	3.8	3.6
1/23/2019 16:00	9	9	8	31.88	4.6	3.9	24.1
1/23/2019 16:10	9	9	8	31.85	4.3	3.9	3.3
1/23/2019 16:20	9	9	8	31.94	4.2	3.9	24
1/23/2019 16:30	9	9	8	31.94	4.4	3.9	24.4
1/23/2019 16:40	9	9	8	31.94	4.4	3.9	24.1
1/23/2019 16:50	9	9	8	31.97	4.3	3.9	24.4
1/23/2019 17:00	9	9	8	32	4.2	3.8	24
1/23/2019 17:10	9	9	8	31.85	4.3	3.8	24.4
1/23/2019 17:20	9	9	8	31.97	4.5	3.9	3.6
1/23/2019 17:30	9	9	8	31.94	3.9	3.9	24.3
1/23/2019 17:40	9	9	8	31.88	3.9	3.9	3.4
1/23/2019 17:50	9	9	8	31.88	4.4	3.9	24.3
1/23/2019 18:00	9	9	8	31.94	4.4	3.9	3.7
1/23/2019 18:10	9	9	8	31.85	4.1	3.9	24.1
1/23/2019 18:20	9	9	8	31.88	4.3	3.8	24.5
1/23/2019 18:30	9	9	8	31.85	4.5	3.8	23.9
1/23/2019 18:40	9	9	8	31.88	4.3	3.8	24.5
1/23/2019 18:50	9	9	8	31.85	4.3	3.9	23.9

1/23/2019 19:00	9	9	8	31.82	4.5	3.8	24.4
1/23/2019 19:10	9	9	8	31.88	4.2	3.9	1.9
1/23/2019 19:20	9	9	8	31.85	4.1	3.8	24.3
1/23/2019 19:30	9	9	8	31.82	4.3	3.9	1.3
1/23/2019 19:40	9	9	8	31.85	4.2	3.9	24.3
1/23/2019 19:50	9	9	8	31.76	4.5	3.9	3.7
1/23/2019 20:00	9	9	8	31.79	4.4	3.9	24.2
1/23/2019 20:10	9	9	8	31.82	4.5	3.8	3.7
1/23/2019 20:20	9	9	8	31.82	4.6	3.8	24.1
1/23/2019 20:30	9	9	8	31.85	4.2	4	3.6
1/23/2019 20:40	9	9	8	31.85	4.2	3.9	24.1
1/23/2019 20:50	9	9	8	31.79	4.3	3.9	3.3
1/23/2019 21:00	9	9	8	31.82	4.4	3.9	24.1
1/23/2019 21:10	9	9	8	31.94	4.2	3.9	10.6
1/23/2019 21:20	9	9	8	31.85	4.3	3.8	24.1
1/23/2019 21:30	9	9	8	31.85	4.3	3.9	24.4
1/23/2019 21:40	9	9	8	31.82	4.3	3.9	24.1
1/23/2019 21:50	9	9	8	31.82	4.2	3.9	24.5
1/23/2019 22:00	9	9	8	31.88	4.1	4	23.9
1/23/2019 22:10	9	9	8	31.97	4.3	3.9	24.4
1/23/2019 22:20	9	9	8	31.88	4.4	3.8	23.9
1/23/2019 22:30	9	9	8	31.94	4.4	3.8	24.4
1/23/2019 22:40	9	9	8	31.94	4.2	3.8	24.1
1/23/2019 22:50	9	9	8	32	4.4	3.9	24.3
1/23/2019 23:00	9	9	8	31.94	4.3	3.9	1
1/23/2019 23:10	9	9	8	31.94	4.5	3.9	24.4
1/23/2019 23:20	9	9	8	31.94	4.5	3.8	3.7
1/23/2019 23:30	9	9	8	31.85	4.2	3.9	24.1
1/23/2019 23:40	9	9	8	31.88	4.4	3.8	3.6
1/23/2019 23:50	9	9	8	31.94	4.2	3.8	24.1
1/24/2019 0:00	9	9	8	31.97	4.4	3.9	3.5
1/24/2019 0:10	9	9	8	31.94	4.4	3.9	24.1
1/24/2019 0:20	9	9	8	31.88	4.2	3.9	4.4
1/24/2019 0:30	9	9	8	31.88	4.3	3.8	24.2
1/24/2019 0:40	9	9	8	31.94	4.3	3.9	24.5
1/24/2019 0:50	9	9	8	31.94	4.2	3.9	24.1
1/24/2019 1:00	9	9	8	31.88	4.3	3.9	24.5
1/24/2019 1:10	9	9	8	31.94	4.3	3.8	24
1/24/2019 1:20	9	9	8	31.94	4	3.9	24.4
1/24/2019 1:30	9	9	8	31.88	4.3	3.9	3.5
1/24/2019 1:40	9	9	8	31.88	4.5	3.9	24.3
1/24/2019 1:50	9	9	8	31.94	4.4	3.8	3
1/24/2019 2:00	9	9	8	31.88	4.6	3.8	24.3
1/24/2019 2:10	9	9	8	31.94	4.2	3.9	4
1/24/2019 2:20	9	9	8	31.94	4.4	3.8	24.3
1/24/2019 2:30	9	9	8	31.88	4.3	3.9	3.3
1/24/2019 2:40	9	9	8	31.85	4.2	3.9	24.1

1/24/2019 2:50	9	9	8	31.94	4.6	3.8	3.5
1/24/2019 3:00	9	9	8	31.85	4.2	3.8	24.1
1/24/2019 3:10	9	9	8	31.88	4.1	3.9	3.8
1/24/2019 3:20	9	9	8	31.88	4.3	3.9	24
1/24/2019 3:30	9	9	8	31.94	4.3	3.8	24.5
1/24/2019 3:40	9	9	8	31.88	4.3	3.9	24
1/24/2019 3:50	9	9	8	31.94	4.2	3.9	24.4
1/24/2019 4:00	9	9	8	31.88	4.2	3.9	23.9
1/24/2019 4:10	9	9	8	31.97	4.3	4	24.4
1/24/2019 4:20	9	9	8	31.94	4.2	3.9	17.3
1/24/2019 4:30	9	9	8	31.88	4.4	3.9	24.4
1/24/2019 4:40	9	9	8	31.88	4.1	3.9	1.2
1/24/2019 4:50	9	9	8	31.97	4.2	3.9	24.3
1/24/2019 5:00	9	9	8	31.88	4.4	3.8	3.6
1/24/2019 5:10	9	9	8	31.85	4.4	3.9	24.2
1/24/2019 5:20	9	9	8	31.88	4.5	3.8	3.5
1/24/2019 5:30	9	9	8	31.79	4.2	3.8	24.2
1/24/2019 5:40	9	9	8	31.94	4.6	3.8	3.7
1/24/2019 5:50	9	9	8	31.94	4.5	3.8	24.2
1/24/2019 6:00	9	9	8	31.94	4.3	3.9	3.6
1/24/2019 6:10	9	9	8	31.82	4.3	3.8	24.1
1/24/2019 6:20	9	9	8	31.85	4.2	3.9	3.6
1/24/2019 6:30	9	9	8	31.97	4.2	4	24.1
1/24/2019 6:40	9	9	8	31.88	4.6	3.9	3.2
1/24/2019 6:50	9	9	8	31.88	4.2	3.8	24.1
1/24/2019 7:00	9	9	8	31.85	4.2	3.8	24.5
1/24/2019 7:10	9	9	8	31.88	4.1	3.9	24
1/24/2019 7:20	9	9	8	31.85	4.4	3.9	24.5
1/24/2019 7:30	9	9	8	31.94	4.3	3.9	24.1
1/24/2019 7:40	9	9	8	31.73	4.5	3.8	24.5
1/24/2019 7:50	9	9	8	31.85	4.4	3.9	23.9
1/24/2019 8:00	9	9	8	31.85	4	3.9	24.4
1/24/2019 8:10	9	9	8	31.79	4.3	3.8	21
1/24/2019 8:20	9	9	8	31.88	4.3	3.9	24.3
1/24/2019 8:30	9	9	8	31.88	4.2	3.9	1.8
1/24/2019 8:40	9	9	8	31.85	4.6	3.8	24.3
1/24/2019 8:50	9	9	8	31.94	4.3	3.8	2.7
1/24/2019 9:00	9	9	8	31.88	4.2	3.8	24.2
1/24/2019 9:10	9	9	8	31.82	4.2	3.8	3.7
1/24/2019 9:20	9	9	8	31.85	4.3	3.9	24.1
1/24/2019 9:30	9	9	8	32	4.4	3.9	24.4
1/24/2019 9:40	9	9	8	31.85	4.2	3.9	23.9
1/24/2019 9:50	9	9	8	31.88	4.2	3.8	24.4
1/24/2019 10:00	9	9	8	31.94	4.3	3.8	24
1/24/2019 10:10	9	9	8	31.97	4.6	3.9	24.4
1/24/2019 10:20	9	9	8	31.94	4.5	3.8	23.9
1/24/2019 10:30	9	9	8	31.94	4.2	3.9	24.4

1/24/2019 10:40	9	9	8	31.88	4.2	3.9	6.9
1/24/2019 10:50	9	9	8	31.82	4.4	3.9	24.3
1/24/2019 11:00	9	9	8	32	4.2	3.9	3.5
1/24/2019 11:10	9	9	8	32	4.2	3.7	24.2
1/24/2019 11:20	9	9	8	32	4.2	3.8	4.2
1/24/2019 11:30	9	9	8	31.97	4.3	3.8	24.2
1/24/2019 11:40	9	9	8	31.94	4.2	3.8	3.9
1/24/2019 11:50	9	9	8	31.97	4.6	3.8	24.1
1/24/2019 12:00	9	9	8	31.97	4.4	3.9	3.4
1/24/2019 12:10	9	9	8	32	4.2	3.8	24.2
1/24/2019 12:20	9	9	8	31.85	4.3	3.8	3.4
1/24/2019 12:30	9	9	8	31.85	4.4	3.8	24
1/24/2019 12:40	9	9	8	31.82	4.6	3.8	24.4
1/24/2019 12:50	9	9	8	31.97	4	3.8	23.9
1/24/2019 13:00	9	9	8	31.97	4.2	3.8	24.4
1/24/2019 13:10	9	9	8	32	4.2	3.8	1.6
1/24/2019 13:20	9	9	8	31.94	4.3	3.8	24.3
1/24/2019 13:30	9	9	8	31.94	3.9	3.8	3.1
1/24/2019 13:40	9	9	8	32.03	4.3	3.9	24.3
1/24/2019 13:50	9	9	8	31.88	4.3	3.8	3.6
1/24/2019 14:00	9	9	8	32	4.3	3.8	24.1
1/24/2019 14:10	9	9	8	31.94	4.2	3.8	24.4
1/24/2019 14:20	9	9	8	31.88	4.3	3.8	24
1/24/2019 14:30	9	9	8	31.97	4.3	3.9	24.5
1/24/2019 14:40	9	9	8	32	4.5	3.8	23.9
1/24/2019 14:50	9	9	8	31.97	4.4	3.9	24.3
1/24/2019 15:00	9	9	8	32	4.3	3.9	1.1
1/24/2019 15:10	9	9	8	31.94	4.5	3.8	24.2
1/24/2019 15:20	9	9	8	31.97	4.1	3.9	4.3
1/24/2019 15:30	9	9	8	31.88	4.3	3.9	24.1
1/24/2019 15:40	9	9	8	31.97	4.3	3.9	24.4
1/24/2019 15:50	9	9	8	32	4.1	3.8	22.8
1/24/2019 16:00	9	9	8	32	4.4	3.8	24.3
1/24/2019 16:10	9	9	8	31.97	4.1	3.9	4
1/24/2019 16:20	9	9	8	31.88	4.4	3.8	24.2
1/24/2019 16:30	9	9	8	31.94	4.3	3.8	10.6
1/24/2019 16:40	9	9	8	31.94	4.5	3.9	24
1/24/2019 16:50	9	9	8	31.97	4.5	3.8	24.5
1/24/2019 17:00	9	9	8	32	4.3	3.9	1.1
1/24/2019 17:10	9	9	8	31.94	4.3	3.8	24.3
1/24/2019 17:20	9	9	8	31.97	4.3	3.9	3.6
1/24/2019 17:30	9	9	8	32	4.3	3.8	24.2
1/24/2019 17:40	9	9	8	32	4.2	3.9	24.4
1/24/2019 17:50	9	9	8	32	4.4	3.9	22.2
1/24/2019 18:00	9	9	8	32.03	4.6	3.8	24.4
1/24/2019 18:10	9	9	8	32.03	4.5	3.9	3.6
1/24/2019 18:20	9	9	8	31.97	4.4	3.8	24.1

1/24/2019 18:30	9	9	8	32.03	4.5	3.9	24.5
1/24/2019 18:40	9	9	8	32	4.1	3.9	24
1/24/2019 18:50	9	9	8	32.03	4.1	3.8	24.4
1/24/2019 19:00	9	9	8	32.03	4.1	3.8	1.2
1/24/2019 19:10	9	9	8	32.09	4.3	3.9	24.2
1/24/2019 19:20	9	9	8	32.06	4.3	3.9	24.5
1/24/2019 19:30	9	9	8	32.03	4.2	3.9	24
1/24/2019 19:40	9	9	8	32.09	4.2	3.8	24.4
1/24/2019 19:50	9	9	8	32.06	3.8	3.9	3.8
1/24/2019 20:00	9	9	8	31.97	4.4	3.9	24.3
1/24/2019 20:10	9	9	8	32	4.3	3.8	3.3
1/24/2019 20:20	9	9	8	31.97	4.3	3.9	24.2
1/24/2019 20:30	9	9	8	32.03	4.1	3.9	24.5
1/24/2019 20:40	9	9	8	32.09	4.5	3.9	24.1
1/24/2019 20:50	9	9	8	31.97	4.6	3.9	24.3
1/24/2019 21:00	9	9	8	32.09	4.5	3.9	3.6
1/24/2019 21:10	9	9	8	32.06	4.5	3.9	24.1
1/24/2019 21:20	9	9	8	32.03	4.6	3.8	23.4
1/24/2019 21:30	9	9	8	31.97	4.4	3.8	24.2
1/24/2019 21:40	9	9	8	32	4.6	3.8	24.5
1/24/2019 21:50	9	9	8	31.94	4.3	3.9	1.8
1/24/2019 22:00	9	9	8	31.97	4.2	3.9	24.2
1/24/2019 22:10	9	9	8	31.88	4.3	3.9	3.5
1/24/2019 22:20	9	9	8	31.97	4.2	3.9	24.1
1/24/2019 22:30	9	9	8	31.88	4.4	3.9	24.5
1/24/2019 22:40	9	9	8	31.88	4.5	3.9	1.9
1/24/2019 22:50	9	9	8	31.94	4.3	3.9	24.2
1/24/2019 23:00	9	9	8	31.97	4.3	3.9	24.5
1/24/2019 23:10	9	9	8	31.97	4.4	3.9	4
1/24/2019 23:20	9	9	8	31.97	4.2	3.9	24.2
1/24/2019 23:30	9	9	8	31.82	4.2	3.9	24.5
1/24/2019 23:40	9	9	8	31.85	4.4	3.9	1.5
1/24/2019 23:50	9	9	8	31.94	4.3	3.8	24.2
1/25/2019 0:00	9	9	8	31.97	4.4	3.9	24.6
1/25/2019 0:10	9	9	8	31.88	4.3	3.9	23.9
1/25/2019 0:20	9	9	8	31.82	4.9	3.9	24.4
1/25/2019 0:30	9	9	8	31.85	4.4	3.9	3.3
1/25/2019 0:40	9	9	8	31.85	4.3	3.8	24.1
1/25/2019 0:50	9	9	8	31.94	4.2	3.9	24.5
1/25/2019 1:00	9	9	8	31.94	4.3	3.9	16.4
1/25/2019 1:10	9	9	8	31.88	4.5	3.9	24.2
1/25/2019 1:20	9	9	8	31.94	4.5	3.9	3.5
1/25/2019 1:30	9	9	8	31.85	4.7	3.9	24.1
1/25/2019 1:40	9	9	8	31.85	4.3	3.9	24.6
1/25/2019 1:50	9	9	8	31.85	4.2	3.8	23.9
1/25/2019 2:00	9	9	8	31.85	4.5	3.8	24.5
1/25/2019 2:10	9	9	8	31.94	4.7	3.8	1.9

1/25/2019 2:20	9	9	8	31.76	4.5	3.9	24.2
1/25/2019 2:30	9	9	8	31.88	4.2	3.8	24.5
1/25/2019 2:40	9	9	8	31.94	4.3	3.9	24.1
1/25/2019 2:50	9	9	8	31.85	4.5	3.9	24.5
1/25/2019 3:00	9	9	8	31.85	4.2	3.9	1.1
1/25/2019 3:10	9	9	8	31.94	4.2	3.9	24.3
1/25/2019 3:20	9	9	8	31.94	4	3.9	3.9
1/25/2019 3:30	9	9	8	31.88	4.5	3.9	24.2
1/25/2019 3:40	9	9	8	31.88	4.5	3.9	24.5
1/25/2019 3:50	9	9	8	31.97	4.3	3.9	23.7
1/25/2019 4:00	9	9	8	31.88	4.5	3.9	24.5
1/25/2019 4:10	9	9	8	31.88	4.4	3.9	3.6
1/25/2019 4:20	9	9	8	31.97	4.2	3.9	24.2
1/25/2019 4:30	9	9	8	31.94	4.3	3.8	24.5
1/25/2019 4:40	9	9	8	31.97	4.3	3.9	23.3
1/25/2019 4:50	9	9	8	31.94	4.4	3.9	24.3
1/25/2019 5:00	9	9	8	31.97	4.2	3.8	4
1/25/2019 5:10	9	9	8	31.88	4.1	4	24.2
1/25/2019 5:20	9	9	8	31.97	4.4	3.9	24.5
1/25/2019 5:30	9	9	8	31.94	4.5	3.8	23.9
1/25/2019 5:40	9	9	8	31.88	4.3	3.8	24.4
1/25/2019 5:50	9	9	8	31.88	4.4	3.9	3.7
1/25/2019 6:00	9	9	8	31.94	4	4	24.2
1/25/2019 6:10	9	9	8	31.94	4.4	3.9	24.6
1/25/2019 6:20	9	9	8	31.94	4.4	3.8	23.9
1/25/2019 6:30	9	9	8	31.85	4.4	3.8	24.5
1/25/2019 6:40	9	9	8	31.97	4.2	3.8	2.6
1/25/2019 6:50	9	9	8	31.97	4.2	3.9	24.3
1/25/2019 7:00	9	9	8	31.94	4.2	3.8	10.6
1/25/2019 7:10	9	9	8	31.88	4.5	3.9	24.2
1/25/2019 7:20	9	9	8	32.03	4.3	3.8	24.5
1/25/2019 7:30	9	9	8	31.97	4.3	3.9	2.1
1/25/2019 7:40	9	9	8	31.97	4.5	4	24.2
1/25/2019 7:50	9	9	8	32	4.3	3.9	24.6
1/25/2019 8:00	9	9	8	31.97	4.4	3.9	24
1/25/2019 8:10	9	9	8	31.85	4.2	3.8	24.5
1/25/2019 8:20	9	9	8	31.97	4.4	3.9	3.6
1/25/2019 8:30	9	9	8	32.09	4.4	3.9	24.2
1/25/2019 8:40	9	9	8	32.12	4.1	3.9	24.6
1/25/2019 8:50	9	9	8	32	4.4	3.9	24.1
1/25/2019 9:00	9	9	8	31.97	4.3	3.9	24.5
1/25/2019 9:10	9	9	8	32.03	4.5	3.9	3.7
1/25/2019 9:20	9	9	8	32.03	4.6	3.8	24.2
1/25/2019 9:30	9	9	8	32.06	4.2	3.9	24.6
1/25/2019 9:40	9	9	8	32	4.5	3.9	1.1
1/25/2019 9:50	9	9	8	32	4	3.9	24.3
1/25/2019 10:00	9	9	8	32	4.3	3.8	3.2

1/25/2019 10:10	9	9	8	32.03	4.4	3.8	24.1
1/25/2019 10:20	2	0	1	32.21	3.6	3.6	0.3
1/25/2019 10:30	9	9	9	39.97	3.7	3.6	0
1/25/2019 10:40	8	8	8	39.69	4.8	3.9	24.8
1/25/2019 10:50	8	8	8	38.87	4.3	3.9	24.9
1/25/2019 11:00	8	8	8	37.92	4.3	4	24.9
1/25/2019 11:10	8	8	8	37.04	4.4	4	25
1/25/2019 11:20	8	8	8	36.21	4.3	4	24.6
1/25/2019 11:30	8	8	8	35.63	4.7	3.8	24.7
1/25/2019 11:40	8	8	8	34.93	4.3	4	24.8
1/25/2019 11:50	8	8	8	34.17	4.4	3.9	5
1/25/2019 12:00	8	8	8	33.65	4.5	3.9	24.8
1/25/2019 12:10	8	8	8	33.07	4.3	3.9	24.4
1/25/2019 12:20	8	8	8	32.52	4.4	3.8	2.6
1/25/2019 12:30	8	8	8	32	4.4	3.8	4
1/25/2019 12:40	8	8	8	31.48	4.2	3.8	4
1/25/2019 12:50	8	8	8	30.9	4.1	3.8	3.8
1/25/2019 13:00	8	8	8	30.51	4.2	3.9	3.5
1/25/2019 13:10	8	8	8	30.08	4.3	3.8	23.7
1/25/2019 13:20	8	8	8	29.71	4.2	3.9	24.2
1/25/2019 13:30	8	8	8	29.35	4.1	3.8	24.5
1/25/2019 13:40	8	8	8	28.98	4.2	3.8	24.7
1/25/2019 13:50	8	8	8	28.7	4.2	3.8	1.3
1/25/2019 14:00	8	8	8	28.34	4.2	3.8	24.3
1/25/2019 14:10	8	8	8	28.03	4.3	3.8	24.7
1/25/2019 14:20	8	8	8	27.85	4.2	3.9	24.1
1/25/2019 14:30	8	8	8	27.48	4	3.8	24.6
1/25/2019 14:40	8	8	8	27.24	4.2	3.8	1.4
1/25/2019 14:50	8	8	8	27.09	4.2	3.8	24.6
1/25/2019 15:00	8	8	8	26.84	4.3	3.8	14.2
1/25/2019 15:10	8	8	8	26.78	4.3	3.8	24.6
1/25/2019 15:20	8	8	8	26.54	4.1	3.8	24.1
1/25/2019 15:30	8	8	8	26.42	4.4	3.8	24.7
1/25/2019 15:40	8	8	8	26.23	4.2	3.8	24.3
1/25/2019 15:50	8	8	8	26.05	4.2	3.8	3.1
1/25/2019 16:00	8	8	8	25.87	4.3	3.9	24.6
1/25/2019 16:10	8	8	8	25.74	4.3	3.8	24.3
1/25/2019 16:20	8	8	8	25.68	4.2	3.8	1.5
1/25/2019 16:30	8	8	8	25.53	4.1	3.8	24.6
1/25/2019 16:40	8	8	8	25.35	4.2	3.8	24.3
1/25/2019 16:50	8	8	8	25.26	4	3.8	24
1/25/2019 17:00	8	8	8	25.19	4.3	3.8	3.8
1/25/2019 17:10	8	8	8	25.1	4.4	3.8	24.6
1/25/2019 17:20	8	8	8	25.01	4.2	3.8	24.4
1/25/2019 17:30	8	8	8	24.92	4.6	3.8	24.2
1/25/2019 17:40	8	8	8	24.86	4.2	3.8	1.3
1/25/2019 17:50	8	8	8	24.77	4.3	3.8	3.2

1/25/2019 18:00	8	8	8	24.74	4.3	3.8	24.6
1/25/2019 18:10	8	8	8	24.68	4.2	3.8	24.4
1/25/2019 18:20	8	8	8	24.61	4.1	3.8	24.2
1/25/2019 18:30	8	8	8	24.55	4.1	3.8	24
1/25/2019 18:40	8	8	8	24.49	4.2	3.8	3.4
1/25/2019 18:50	8	8	8	24.46	4.4	3.8	2.2
1/25/2019 19:00	8	8	8	24.46	4.2	3.9	4.6
1/25/2019 19:10	8	8	8	24.43	4.2	3.8	3.9
1/25/2019 19:20	8	8	8	24.43	4.5	3.8	24.5
1/25/2019 19:30	8	8	8	24.37	4.2	3.8	24.5
1/25/2019 19:40	8	8	8	24.34	4.6	3.8	24.5
1/25/2019 19:50	8	8	8	24.28	4	3.8	24.4
1/25/2019 20:00	8	8	8	24.28	4.2	3.8	24.4
1/25/2019 20:10	8	8	8	24.25	4.1	3.8	24.5
1/25/2019 20:20	8	8	8	24.22	3.9	3.9	24.4
1/25/2019 20:30	8	8	8	24.25	3.8	3.8	24.4
1/25/2019 20:40	8	8	8	24.19	4	3.8	24.4
1/25/2019 20:50	8	8	8	24.19	4.2	3.8	24.4
1/25/2019 21:00	8	8	8	24.16	4.2	3.8	24.4
1/25/2019 21:10	8	8	8	24.13	4.2	3.8	24.5
1/25/2019 21:20	8	8	8	24.13	4.4	3.8	24.5
1/25/2019 21:30	8	8	8	24.13	4.5	3.8	24.5
1/25/2019 21:40	8	8	8	24.1	4.2	3.9	24.5
1/25/2019 21:50	8	8	8	24.03	4.4	3.8	24.5
1/25/2019 22:00	8	8	8	24.03	4.2	3.8	24.5
1/25/2019 22:10	8	8	8	24.03	4.4	3.8	24.6
1/25/2019 22:20	8	8	8	24	4.2	3.8	4.3
1/25/2019 22:30	8	8	8	24.03	4.6	3.8	4.1
1/25/2019 22:40	8	8	8	24.03	4.3	3.8	3.9
1/25/2019 22:50	8	8	8	24.03	4	3.8	3.4
1/25/2019 23:00	8	8	8	24.1	4.2	3.8	3.2
1/25/2019 23:10	8	8	8	23.97	4.3	3.8	3.5
1/25/2019 23:20	8	8	8	23.97	4.3	3.8	3.8
1/25/2019 23:30	8	8	8	24	4.2	3.8	3.8
1/25/2019 23:40	8	8	8	24.03	4.4	3.9	3.7
1/25/2019 23:50	8	8	8	24	4.2	3.8	2.7
1/26/2019 0:00	8	8	8	24	4.3	3.8	1.6
1/26/2019 0:10	8	8	8	24	4.4	3.8	1.8
1/26/2019 0:20	8	8	8	24	4.3	3.8	1.1
1/26/2019 0:30	8	8	8	24	4.3	3.8	1.1
1/26/2019 0:40	8	8	8	24	4.5	3.9	18.9
1/26/2019 0:50	8	8	8	23.97	4.3	3.9	24.1
1/26/2019 1:00	8	8	8	24	4.4	3.8	23.9
1/26/2019 1:10	8	8	8	23.97	4.2	3.8	24
1/26/2019 1:20	8	8	8	23.97	4.4	3.8	23.9
1/26/2019 1:30	8	8	8	23.94	4.4	3.8	24
1/26/2019 1:40	8	8	8	23.94	4.2	3.8	24.1

1/26/2019 1:50	8	8	8	23.91	4.3	3.8	24.2
1/26/2019 2:00	8	8	8	23.94	4.1	3.8	24.2
1/26/2019 2:10	8	8	8	23.97	4.2	3.8	24.2
1/26/2019 2:20	8	8	8	23.91	4.1	3.8	24.2
1/26/2019 2:30	8	8	8	23.88	4.2	3.9	24.1
1/26/2019 2:40	8	8	8	23.94	4.3	3.9	24.2
1/26/2019 2:50	8	8	8	23.82	4.3	3.8	24.2
1/26/2019 3:00	8	8	8	23.88	4.4	3.8	24.2
1/26/2019 3:10	8	8	8	23.85	4.2	3.8	24.3
1/26/2019 3:20	8	8	8	23.88	4.3	3.9	24.2
1/26/2019 3:30	8	8	8	23.91	4	3.9	24.2
1/26/2019 3:40	8	8	8	23.94	4.3	3.9	24.3
1/26/2019 3:50	8	8	8	23.88	4.1	3.8	24.4
1/26/2019 4:00	8	8	8	23.88	4.1	3.8	24.4
1/26/2019 4:10	8	8	8	23.94	4.4	3.8	24.5
1/26/2019 4:20	8	8	8	23.88	4.2	3.8	24.5
1/26/2019 4:30	8	8	8	23.85	4.1	3.8	24.4
1/26/2019 4:40	8	8	8	23.91	4.1	3.8	24.5
1/26/2019 4:50	8	8	8	23.82	4.5	3.8	24.5
1/26/2019 5:00	8	8	8	23.88	4.4	3.9	24.5
1/26/2019 5:10	8	8	8	23.82	4.2	3.9	24.5
1/26/2019 5:20	8	8	8	23.94	4.1	3.9	24.6
1/26/2019 5:30	8	8	8	23.88	4.2	3.8	24.6
1/26/2019 5:40	8	8	8	23.94	4.1	3.9	24.5
1/26/2019 5:50	8	8	8	23.94	4.2	3.8	10.6
1/26/2019 6:00	8	8	8	23.88	4.4	3.8	3.3
1/26/2019 6:10	8	8	8	23.91	4.4	3.9	3.4
1/26/2019 6:20	8	8	8	23.91	4.3	3.8	3.3
1/26/2019 6:30	8	8	8	23.88	4.2	3.8	3.3
1/26/2019 6:40	8	8	8	23.91	4.3	3.8	3.2
1/26/2019 6:50	8	8	8	23.94	4.2	3.8	3.2
1/26/2019 7:00	8	8	8	23.94	4.3	3.8	3.8
1/26/2019 7:10	8	8	8	23.94	4.2	3.8	3.7
1/26/2019 7:20	8	8	8	23.94	4.2	3.9	3.3
1/26/2019 7:30	8	8	8	23.91	4.3	3.9	4.5
1/26/2019 7:40	8	8	8	23.94	4.3	3.8	4.1
1/26/2019 7:50	8	8	8	23.85	4.4	3.9	10.6
1/26/2019 8:00	8	8	8	23.97	4.3	3.8	3.9
1/26/2019 8:10	8	8	8	23.91	4.3	3.8	24.5
1/26/2019 8:20	8	8	8	23.97	4.5	3.8	24.5
1/26/2019 8:30	8	8	8	23.94	4.3	3.8	24.5
1/26/2019 8:40	8	8	8	23.88	4.2	3.8	24.5
1/26/2019 8:50	8	8	8	23.97	4.2	3.8	24.5
1/26/2019 9:00	8	8	8	23.97	4.3	3.8	24.5
1/26/2019 9:10	8	8	8	23.97	4.2	3.8	24.5
1/26/2019 9:20	8	8	8	23.94	4.2	3.9	24.5
1/26/2019 9:30	8	8	8	23.97	4.2	3.9	24.4

1/26/2019 9:40	8	8	8	24	4.2	3.8	24.5
1/26/2019 9:50	8	8	8	23.94	4.4	3.9	24.5
1/26/2019 10:00	8	8	8	23.97	4.3	3.8	24.5
1/26/2019 10:10	8	8	8	24	4.3	3.9	24.4
1/26/2019 10:20	8	8	8	23.97	4.1	3.8	24.4
1/26/2019 10:30	8	8	8	24	4.3	3.8	24.3
1/26/2019 10:40	8	8	8	24.1	4.3	3.8	24.3
1/26/2019 10:50	8	8	8	24.03	4.3	3.8	24.3
1/26/2019 11:00	8	8	8	24.03	4.1	3.8	24.3
1/26/2019 11:10	8	8	8	24.03	4.1	3.8	24.1
1/26/2019 11:20	8	8	8	24.1	4.2	3.7	24.2
1/26/2019 11:30	8	8	8	24.13	4.3	3.9	24
1/26/2019 11:40	8	8	8	24.1	4.2	3.9	24.1
1/26/2019 11:50	8	8	8	24.1	4.4	3.8	24
1/26/2019 12:00	8	8	8	24.19	4.4	3.8	24
1/26/2019 12:10	8	8	8	24.16	4.1	3.8	24.1
1/26/2019 12:20	8	8	8	24.16	4.3	3.8	24
1/26/2019 12:30	8	8	8	24.25	4.1	3.9	22.7
1/26/2019 12:40	8	8	8	24.25	4.5	3.8	21
1/26/2019 12:50	8	8	8	24.16	4.3	3.8	6.6
1/26/2019 13:00	8	8	8	24.25	4.1	3.8	1.2
1/26/2019 13:10	8	8	8	24.22	4.2	3.9	1.5
1/26/2019 13:20	8	8	8	24.28	4.4	3.8	3.2
1/26/2019 13:30	8	8	8	24.28	4.4	3.9	4.1
1/26/2019 13:40	8	8	8	24.22	4.2	3.8	3.5
1/26/2019 13:50	8	8	8	24.28	4.3	3.9	3.3
1/26/2019 14:00	8	8	8	24.28	4.2	3.8	10.6
1/26/2019 14:10	8	8	8	24.28	4.1	3.8	24.6
1/26/2019 14:20	8	8	8	24.31	4.3	3.8	24.5
1/26/2019 14:30	8	8	8	24.31	4.2	3.8	24.5
1/26/2019 14:40	8	8	8	24.34	4.3	3.7	24.5
1/26/2019 14:50	8	8	8	24.31	4.6	3.9	24.4
1/26/2019 15:00	8	8	8	24.31	4.3	3.7	24.4
1/26/2019 15:10	8	8	8	24.37	4.1	3.8	24.3
1/26/2019 15:20	8	8	8	24.31	4.5	3.8	24.3
1/26/2019 15:30	8	8	8	24.34	4.2	3.8	24.4
1/26/2019 15:40	8	8	8	24.31	4.2	3.8	24.1
1/26/2019 15:50	8	8	8	24.31	4.4	3.8	24.2
1/26/2019 16:00	8	8	8	24.28	4.2	3.8	24.2
1/26/2019 16:10	8	8	8	24.22	4.3	3.9	24
1/26/2019 16:20	8	8	8	24.25	4	3.7	24.1
1/26/2019 16:30	8	8	8	24.31	4.2	3.8	24
1/26/2019 16:40	8	8	8	24.34	4.1	3.9	18.8
1/26/2019 16:50	8	8	8	24.34	4.3	3.8	1.1
1/26/2019 17:00	8	8	8	24.34	4.3	3.8	1.9
1/26/2019 17:10	8	8	8	24.31	4.2	3.8	4.5
1/26/2019 17:20	8	8	8	24.37	4	3.8	4.4

1/26/2019 17:30	8	8	8	24.31	4.1	3.8	3.5
1/26/2019 17:40	8	8	8	24.34	4.2	3.8	4.2
1/26/2019 17:50	8	8	8	24.31	4.3	3.9	24.5
1/26/2019 18:00	8	8	8	24.37	4.2	3.8	24.5
1/26/2019 18:10	8	8	8	24.31	4.2	3.8	24.5
1/26/2019 18:20	8	8	8	24.43	4.1	3.8	24.4
1/26/2019 18:30	8	8	8	24.4	4.4	3.9	24.4
1/26/2019 18:40	8	8	8	24.37	4.2	3.8	24.3
1/26/2019 18:50	8	8	8	24.25	4.3	3.8	24.3
1/26/2019 19:00	8	8	8	24.46	4.2	3.8	24.1
1/26/2019 19:10	8	8	8	24.43	4.3	3.8	24.2
1/26/2019 19:20	8	8	8	24.37	4.2	3.8	24
1/26/2019 19:30	8	8	8	24.4	4.2	3.8	24.1
1/26/2019 19:40	8	8	8	24.43	4.1	3.9	24
1/26/2019 19:50	8	8	8	24.4	4.1	3.8	23.3
1/26/2019 20:00	8	8	8	24.43	4.2	3.8	3.6
1/26/2019 20:10	8	8	8	24.49	4.5	3.9	2.3
1/26/2019 20:20	8	8	8	24.49	4.4	3.9	2
1/26/2019 20:30	8	8	8	24.49	4.1	3.8	3.7
1/26/2019 20:40	8	8	8	24.49	4.2	3.8	3.8
1/26/2019 20:50	8	8	8	24.61	4.2	3.8	3.5
1/26/2019 21:00	8	8	8	24.52	4.3	3.8	3.3
1/26/2019 21:10	8	8	8	24.61	4.2	3.8	24.6
1/26/2019 21:20	8	8	8	24.58	4.1	3.8	24.5
1/26/2019 21:30	8	8	8	24.52	4.2	3.9	24.5
1/26/2019 21:40	8	8	8	24.55	4.1	3.8	24.4
1/26/2019 21:50	8	8	8	24.55	4.2	3.8	24.5
1/26/2019 22:00	8	8	8	24.58	4.1	3.8	24.4
1/26/2019 22:10	8	8	8	24.61	4.2	3.9	24.4
1/26/2019 22:20	8	8	8	24.58	4.2	3.8	24.2
1/26/2019 22:30	8	8	8	24.55	4.4	3.8	24.2
1/26/2019 22:40	8	8	8	24.64	4.2	3.9	24.1
1/26/2019 22:50	8	8	8	24.61	4.2	3.8	24
1/26/2019 23:00	8	8	8	24.61	4.4	3.8	23.3
1/26/2019 23:10	8	8	8	24.58	4.3	3.8	1.1
1/26/2019 23:20	8	8	8	24.61	4.3	3.9	4.3
1/26/2019 23:30	8	8	8	24.61	4.1	3.8	3.4
1/26/2019 23:40	8	8	8	24.64	4.5	3.8	4
1/26/2019 23:50	8	8	8	24.68	4.2	3.8	24.6
1/27/2019 0:00	8	8	8	24.64	4.2	3.9	24.5
1/27/2019 0:10	8	8	8	24.68	4.4	3.9	24.4
1/27/2019 0:20	8	8	8	24.58	4.5	3.8	24.4
1/27/2019 0:30	8	8	8	24.58	4.4	3.8	24.2
1/27/2019 0:40	8	8	8	24.58	4.2	3.9	24.1
1/27/2019 0:50	8	8	8	24.68	4.3	3.8	24
1/27/2019 1:00	8	8	8	24.68	4.2	4	24
1/27/2019 1:10	8	8	8	24.64	4.4	3.8	23.6

1/27/2019 1:20	8	8	8	24.68	4.3	3.9	1.3
1/27/2019 1:30	8	8	8	24.74	4.4	3.9	3.7
1/27/2019 1:40	8	8	8	24.68	4.4	3.8	3.4
1/27/2019 1:50	8	8	8	24.77	4.3	3.8	4.3
1/27/2019 2:00	8	8	8	24.68	4.3	3.9	24.5
1/27/2019 2:10	8	8	8	24.74	4.6	3.9	24.5
1/27/2019 2:20	8	8	8	24.74	4.2	3.8	24.4
1/27/2019 2:30	8	8	8	24.8	4.2	3.8	24.3
1/27/2019 2:40	8	8	8	24.74	4.2	4.1	24.2
1/27/2019 2:50	8	8	8	24.86	4.3	3.8	24.1
1/27/2019 3:00	8	8	8	24.83	4.2	3.8	24.1
1/27/2019 3:10	8	8	8	24.77	4.2	3.8	22.2
1/27/2019 3:20	8	8	8	24.8	4.1	3.8	2.1
1/27/2019 3:30	8	8	8	24.8	4.3	3.8	3.7
1/27/2019 3:40	8	8	8	24.83	4.2	3.9	4.3
1/27/2019 3:50	8	8	8	24.83	4.1	3.8	3.2
1/27/2019 4:00	8	8	8	24.8	4.3	3.8	24.5
1/27/2019 4:10	8	8	8	24.86	4.3	3.8	24.5
1/27/2019 4:20	8	8	8	24.92	4.3	3.7	24.5
1/27/2019 4:30	8	8	8	24.86	4.3	3.8	24.4
1/27/2019 4:40	8	8	8	24.86	4	3.9	24.2
1/27/2019 4:50	8	8	8	24.77	4.3	3.8	24.2
1/27/2019 5:00	8	8	8	24.89	4.4	3.9	24.1
1/27/2019 5:10	8	8	8	24.86	4.3	3.7	23.6
1/27/2019 5:20	8	8	8	24.86	4.1	3.8	2
1/27/2019 5:30	8	8	8	24.86	4.3	3.9	4.4
1/27/2019 5:40	8	8	8	24.86	4.3	3.8	3.9
1/27/2019 5:50	8	8	8	24.95	4.3	3.8	24.5
1/27/2019 6:00	8	8	8	24.83	4.4	3.8	24.5
1/27/2019 6:10	8	8	8	24.86	4.2	3.8	24.4
1/27/2019 6:20	8	8	8	24.86	4.4	3.8	24.3
1/27/2019 6:30	8	8	8	24.86	4.2	3.8	24.2
1/27/2019 6:40	8	8	8	24.86	4.2	3.8	24
1/27/2019 6:50	8	8	8	24.89	4.2	3.8	24.1
1/27/2019 7:00	8	8	8	24.83	4.4	3.8	1.1
1/27/2019 7:10	8	8	8	24.8	4.3	3.8	3.5
1/27/2019 7:20	8	8	8	24.86	4.4	3.8	3.7
1/27/2019 7:30	8	8	8	24.92	4.3	3.9	24.5
1/27/2019 7:40	8	8	8	24.98	4.4	3.8	24.5
1/27/2019 7:50	8	8	8	24.92	4.3	3.8	24.4
1/27/2019 8:00	8	8	8	24.89	4	3.8	24.2
1/27/2019 8:10	8	8	8	24.89	4.2	3.9	24.2
1/27/2019 8:20	8	8	8	24.92	4.2	3.8	24.2
1/27/2019 8:30	8	8	8	24.98	4	3.9	24
1/27/2019 8:40	8	8	8	24.92	4.2	3.9	11.1
1/27/2019 8:50	8	8	8	24.89	4.4	3.9	2.9
1/27/2019 9:00	8	8	8	24.89	4.2	3.9	3.7

1/27/2019 9:10	8	8	8	24.89	4.2	3.9	23.4
1/27/2019 9:20	8	8	8	24.95	4.6	3.8	24.5
1/27/2019 9:30	8	8	8	24.89	4.2	3.9	24.5
1/27/2019 9:40	8	8	8	24.95	4.2	3.8	24.4
1/27/2019 9:50	8	8	8	24.95	4.3	3.9	24.2
1/27/2019 10:00	8	8	8	24.95	4.2	3.8	24.1
1/27/2019 10:10	8	8	8	24.98	4.3	3.8	24.2
1/27/2019 10:20	8	8	8	25.01	4.3	3.8	24.1
1/27/2019 10:30	8	8	8	24.95	4.4	3.8	1
1/27/2019 10:40	8	8	8	24.95	4.3	3.9	3.7
1/27/2019 10:50	8	8	8	24.98	4.3	3.9	3.2
1/27/2019 11:00	8	8	8	24.95	4.5	3.9	24.5
1/27/2019 11:10	8	8	8	25.01	4.5	3.8	24.4
1/27/2019 11:20	8	8	8	24.95	4.4	3.8	24.4
1/27/2019 11:30	8	8	8	25.01	4	3.8	24.2
1/27/2019 11:40	8	8	8	25.01	4.2	3.8	24.2
1/27/2019 11:50	8	8	8	25.07	4.4	3.9	24.3
1/27/2019 12:00	8	8	8	25.01	4.2	3.8	24
1/27/2019 12:10	8	8	8	25.07	4.2	3.8	1.1
1/27/2019 12:20	8	8	8	24.95	4.2	3.8	2.8
1/27/2019 12:30	8	8	8	25.01	4.2	3.8	3.6
1/27/2019 12:40	8	8	8	25.1	4.2	3.8	24.5
1/27/2019 12:50	8	8	8	25.13	4.3	3.9	24.5
1/27/2019 13:00	8	8	8	25.1	4.2	3.9	24.4
1/27/2019 13:10	8	8	8	25.07	4.2	3.8	24.2
1/27/2019 13:20	8	8	8	25.19	4.3	3.8	24.1
1/27/2019 13:30	8	8	8	25.22	4.3	3.8	24.2
1/27/2019 13:40	8	8	8	25.22	4.1	3.9	22.7
1/27/2019 13:50	8	8	8	25.22	4.2	3.8	2.5
1/27/2019 14:00	8	8	8	25.22	3.8	3.9	3.6
1/27/2019 14:10	8	8	8	25.26	4.4	3.9	24.4
1/27/2019 14:20	8	8	8	25.35	4	3.8	24.4
1/27/2019 14:30	8	8	8	25.35	4.3	3.8	24.4
1/27/2019 14:40	8	8	8	25.35	4.3	3.7	24.1
1/27/2019 14:50	8	8	8	25.19	4.1	3.8	24.1
1/27/2019 15:00	8	8	8	25.26	4.2	3.8	23.2
1/27/2019 15:10	8	8	8	25.32	4.2	3.8	1.1
1/27/2019 15:20	8	8	8	25.32	4.3	3.9	4
1/27/2019 15:30	8	8	8	25.29	4.4	3.8	3.3
1/27/2019 15:40	8	8	8	25.26	4.4	3.8	24.5
1/27/2019 15:50	8	8	8	25.26	4.2	3.8	24.5
1/27/2019 16:00	8	8	8	25.29	4.2	3.8	24.3
1/27/2019 16:10	8	8	8	25.32	4.4	3.8	24.2
1/27/2019 16:20	8	8	8	25.26	4.3	3.8	24.1
1/27/2019 16:30	8	8	8	25.26	4.2	3.8	24.1
1/27/2019 16:40	8	8	8	25.29	4.3	3.8	24
1/27/2019 16:50	8	8	8	25.22	4.2	3.8	1.4

1/27/2019 17:00	8	8	8	25.22	4.2	3.8	4
1/27/2019 17:10	8	8	8	25.32	4.4	3.8	3.5
1/27/2019 17:20	8	8	8	25.26	4.2	3.8	24.5
1/27/2019 17:30	8	8	8	25.26	4.2	3.9	24.5
1/27/2019 17:40	8	8	8	25.26	4.1	3.9	24.4
1/27/2019 17:50	8	8	8	25.29	4.5	3.8	24.2
1/27/2019 18:00	8	8	8	25.29	4.3	3.8	24.2
1/27/2019 18:10	8	8	8	25.29	4.2	3.9	24.1
1/27/2019 18:20	8	8	8	25.26	4	3.9	24.2
1/27/2019 18:30	8	8	8	25.26	4.4	3.9	2.9
1/27/2019 18:40	8	8	8	25.26	4.1	3.9	3.4
1/27/2019 18:50	8	8	8	25.26	4.3	3.8	24.5
1/27/2019 19:00	8	8	8	25.29	4	3.8	24.5
1/27/2019 19:10	8	8	8	25.29	4.3	3.9	24.3
1/27/2019 19:20	8	8	8	25.26	4.1	3.8	24.2
1/27/2019 19:30	8	8	8	25.32	4.5	3.8	24.1
1/27/2019 19:40	8	8	8	25.29	4.3	3.9	24
1/27/2019 19:50	8	8	8	25.29	4.1	3.8	1.1
1/27/2019 20:00	8	8	8	25.26	4.4	3.9	3.7
1/27/2019 20:10	8	8	8	25.32	4.1	3.8	3.4
1/27/2019 20:20	8	8	8	25.35	4.2	3.9	24.5
1/27/2019 20:30	8	8	8	25.35	4.3	3.8	24.4
1/27/2019 20:40	8	8	8	25.35	4.2	3.9	24.3
1/27/2019 20:50	8	8	8	25.41	4.5	3.9	24.2
1/27/2019 21:00	8	8	8	25.41	3.9	3.9	24.3
1/27/2019 21:10	8	8	8	25.35	4.2	3.8	19.1
1/27/2019 21:20	8	8	8	25.47	4.3	3.9	1.7
1/27/2019 21:30	8	8	8	25.35	4.4	3.9	3.5
1/27/2019 21:40	8	8	8	25.41	4.7	3.8	24.6
1/27/2019 21:50	8	8	8	25.41	4.3	3.8	24.5
1/27/2019 22:00	8	8	8	25.47	4.1	3.8	24.4
1/27/2019 22:10	8	8	8	25.47	4.3	3.9	24.2
1/27/2019 22:20	8	8	8	25.44	4.3	3.8	24.2
1/27/2019 22:30	8	8	8	25.5	4.3	3.7	6.9
1/27/2019 22:40	8	8	8	25.53	4.2	3.8	3.7
1/27/2019 22:50	8	8	8	25.5	4.3	3.8	24.5
1/27/2019 23:00	8	8	8	25.5	4.3	3.8	24.5
1/27/2019 23:10	8	8	8	25.5	4.3	3.9	24.3
1/27/2019 23:20	8	8	8	25.5	4.6	3.8	24.2
1/27/2019 23:30	8	8	8	25.53	4.1	3.8	24
1/27/2019 23:40	8	8	8	25.62	4.2	3.8	16.7
1/27/2019 23:50	8	8	8	25.5	4.4	3.9	3.8
1/28/2019 0:00	8	8	8	25.5	4.4	3.9	23.6
1/28/2019 0:10	8	8	8	25.53	4.5	3.9	24.5
1/28/2019 0:20	8	8	8	25.53	4.2	3.9	24.4
1/28/2019 0:30	8	8	8	25.47	4.5	3.9	24.3
1/28/2019 0:40	8	8	8	25.5	4.5	3.9	24.2

1/28/2019 0:50	8	8	8	25.44	4.1	3.9	1.9
1/28/2019 1:00	8	8	8	25.47	4.2	3.8	4.4
1/28/2019 1:10	8	8	8	25.56	4.1	3.8	24.5
1/28/2019 1:20	8	8	8	25.47	4.4	3.8	24.3
1/28/2019 1:30	8	8	8	25.53	4.2	3.8	24.1
1/28/2019 1:40	8	8	8	25.59	4.5	3.8	24
1/28/2019 1:50	8	8	8	25.59	4.2	3.9	3.8
1/28/2019 2:00	8	8	8	25.59	4.1	3.9	4.5
1/28/2019 2:10	8	8	8	25.5	4.2	3.9	24.4
1/28/2019 2:20	8	8	8	25.53	4.2	3.9	24.4
1/28/2019 2:30	8	8	8	25.53	4.2	3.8	24.3
1/28/2019 2:40	8	8	8	25.56	4.5	3.8	24.1
1/28/2019 2:50	8	8	8	25.56	4.2	3.9	7
1/28/2019 3:00	8	8	8	25.65	4.3	3.9	3.7
1/28/2019 3:10	8	8	8	25.59	4.7	3.9	23.5
1/28/2019 3:20	8	8	8	25.56	4.3	3.8	24.5
1/28/2019 3:30	8	8	8	25.5	4.2	3.9	24.3
1/28/2019 3:40	8	8	8	25.59	4.3	3.8	24.2
1/28/2019 3:50	8	8	8	25.41	4.3	3.9	24.1
1/28/2019 4:00	8	8	8	25.56	4.3	3.9	1.1
1/28/2019 4:10	8	8	8	25.59	5	3.8	4.3
1/28/2019 4:20	8	8	8	25.59	4	3.8	24.5
1/28/2019 4:30	8	8	8	25.59	4.2	3.8	24.5
1/28/2019 4:40	8	8	8	25.62	3.9	3.9	24.3
1/28/2019 4:50	8	8	8	25.53	4.4	3.8	24
1/28/2019 5:00	8	8	8	25.56	4.3	3.9	1.3
1/28/2019 5:10	8	8	8	25.53	4.5	3.9	3.4
1/28/2019 5:20	8	8	8	25.53	4.3	3.9	24.5
1/28/2019 5:30	8	8	8	25.59	4.1	3.9	24.5
1/28/2019 5:40	8	8	8	25.53	3.9	3.9	24.2
1/28/2019 5:50	8	8	8	25.56	4.4	3.8	24.1
1/28/2019 6:00	8	8	8	25.53	4.6	4.1	1.7
1/28/2019 6:10	8	8	8	25.62	4	3.8	3.2
1/28/2019 6:20	8	8	8	25.59	4.3	3.9	24.6
1/28/2019 6:30	8	8	8	25.53	4.3	3.9	24.5
1/28/2019 6:40	8	8	8	25.56	4.2	3.9	24.2
1/28/2019 6:50	8	8	8	25.56	4.6	3.9	24.2
1/28/2019 7:00	8	8	8	25.56	4.4	3.8	1.1
1/28/2019 7:10	8	8	8	25.62	4.3	3.8	3.7
1/28/2019 7:20	8	8	8	25.5	4.2	3.9	24.6
1/28/2019 7:30	8	8	8	25.56	4.3	3.9	24.4
1/28/2019 7:40	8	8	8	25.65	4.1	3.9	24.3
1/28/2019 7:50	8	8	8	25.56	4.3	3.8	24.3
1/28/2019 8:00	8	8	8	25.68	4.3	3.9	24
1/28/2019 8:10	8	8	8	25.62	4.3	3.9	1.1
1/28/2019 8:20	8	8	8	25.68	4.3	3.9	3.2
1/28/2019 8:30	8	8	8	25.62	4.3	3.9	24.5

1/28/2019 8:40	8	8	8	25.65	4	3.9	24.4
1/28/2019 8:50	8	8	8	25.65	4.1	3.8	24.3
1/28/2019 9:00	8	8	8	25.68	4.5	3.8	24.1
1/28/2019 9:10	8	8	8	25.56	4.3	3.8	6.8
1/28/2019 9:20	8	8	8	25.65	4.3	4	3.9
1/28/2019 9:30	8	8	8	25.68	4.3	3.9	3.3
1/28/2019 9:40	8	8	8	25.68	4.1	3.8	24.5
1/28/2019 9:50	8	8	8	25.59	4.2	4	24.4
1/28/2019 10:00	8	8	8	25.71	4.2	3.9	24.2
1/28/2019 10:10	8	8	8	25.71	4.3	3.8	24.2
1/28/2019 10:20	8	8	8	25.65	4	3.9	16.6
1/28/2019 10:30	8	8	8	25.77	4.2	3.8	4.5
1/28/2019 10:40	8	8	8	25.74	4.5	3.9	3.3
1/28/2019 10:50	8	8	8	25.71	4.4	3.9	24.6
1/28/2019 11:00	8	8	8	25.71	4.4	3.9	24.4
1/28/2019 11:10	8	8	8	25.71	4.2	3.8	24.2
1/28/2019 11:20	8	8	8	25.71	4.3	3.9	24.1
1/28/2019 11:30	8	8	8	25.71	4.2	3.8	14.9
1/28/2019 11:40	8	8	8	25.68	4.2	3.9	3.6
1/28/2019 11:50	8	8	8	25.74	4.1	3.8	3.2
1/28/2019 12:00	8	8	8	25.71	4	3.8	24.5
1/28/2019 12:10	8	8	8	25.74	4.2	3.7	24.4
1/28/2019 12:20	8	8	8	25.74	4.1	3.8	24.3
1/28/2019 12:30	8	8	8	25.71	4.5	3.8	24
1/28/2019 12:40	8	8	8	25.71	4.3	3.9	7.1
1/28/2019 12:50	8	8	8	25.68	4.2	3.8	3.7
1/28/2019 13:00	8	8	8	25.71	4.4	3.9	4.2
1/28/2019 13:10	8	8	8	25.62	4.2	3.8	24.5
1/28/2019 13:20	8	8	8	25.71	4.2	3.8	24.4
1/28/2019 13:30	8	8	8	25.68	4.6	3.8	24.2
1/28/2019 13:40	8	8	8	25.65	4.2	4	23.9
1/28/2019 13:50	8	8	8	25.74	4.2	3.9	1
1/28/2019 14:00	8	8	8	25.62	4.3	3.9	3.6
1/28/2019 14:10	8	8	8	25.71	4.4	3.9	24.5
1/28/2019 14:20	8	8	8	25.65	3.9	3.8	24.4
1/28/2019 14:30	8	8	8	25.74	4.3	3.9	24.3
1/28/2019 14:40	8	8	8	25.71	4.1	3.9	24.1
1/28/2019 14:50	8	8	8	25.71	4.2	3.9	24
1/28/2019 15:00	8	8	8	25.71	4.1	3.9	1.2
1/28/2019 15:10	8	8	8	25.71	4.2	3.8	4.3
1/28/2019 15:20	8	8	8	25.74	4.5	3.8	24.6
1/28/2019 15:30	8	8	8	25.68	4.3	3.9	24.5
1/28/2019 15:40	8	8	8	25.74	4.4	3.9	24.2
1/28/2019 15:50	8	8	8	25.74	4.3	3.8	24.1
1/28/2019 16:00	8	8	8	25.74	4.3	3.9	3.6
1/28/2019 16:10	8	8	8	25.71	4.2	3.9	3.5
1/28/2019 16:20	8	8	8	25.74	4.4	3.9	24.6

1/28/2019 16:30	8	8	8	25.8	4.2	4	24.5
1/28/2019 16:40	8	8	8	25.77	4.2	3.9	24.4
1/28/2019 16:50	8	8	8	25.71	4.1	3.9	24.1
1/28/2019 17:00	8	8	8	25.8	4.4	3.8	24
1/28/2019 17:10	8	8	8	25.8	4.3	3.9	1.6
1/28/2019 17:20	8	8	8	25.8	4.3	3.9	3.4
1/28/2019 17:30	8	8	8	25.77	4.3	3.9	24.6
1/28/2019 17:40	8	8	8	25.8	4.4	3.9	24.5
1/28/2019 17:50	8	8	8	25.87	4.4	3.8	24.3
1/28/2019 18:00	8	8	8	25.8	4.4	4	24.2
1/28/2019 18:10	8	8	8	25.84	4.5	3.8	24.1
1/28/2019 18:20	8	8	8	25.8	4.3	3.9	1.2
1/28/2019 18:30	8	8	8	25.8	4.1	3.9	3.6
1/28/2019 18:40	8	8	8	25.74	4.2	3.9	24.5
1/28/2019 18:50	8	8	8	25.8	4.2	3.8	24.5
1/28/2019 19:00	8	8	8	25.84	4.4	3.8	24.3
1/28/2019 19:10	8	8	8	25.84	4.7	3.9	24.2
1/28/2019 19:20	8	8	8	25.84	4.3	3.9	24.2
1/28/2019 19:30	8	8	8	25.77	4.3	3.9	1.2
1/28/2019 19:40	8	8	8	25.87	4.2	3.9	3.4
1/28/2019 19:50	8	8	8	25.87	4.2	3.9	24.5
1/28/2019 20:00	8	8	8	25.87	4.4	3.9	24.5
1/28/2019 20:10	8	8	8	25.8	4.7	4.1	24.3
1/28/2019 20:20	8	8	8	25.87	4.4	3.8	24.1
1/28/2019 20:30	8	8	8	25.8	4.2	3.9	24.2
1/28/2019 20:40	8	8	8	25.8	4.3	3.9	4.1
1/28/2019 20:50	8	8	8	25.8	4.2	3.8	3.7
1/28/2019 21:00	8	8	8	25.77	4.2	3.8	24.5
1/28/2019 21:10	8	8	8	25.84	4.3	3.9	24.4
1/28/2019 21:20	8	8	8	25.87	4.3	3.9	24.1
1/28/2019 21:30	8	8	8	25.87	4.4	3.9	24
1/28/2019 21:40	8	8	8	25.84	4.3	3.9	2.5
1/28/2019 21:50	8	8	8	25.87	4.4	3.9	3.2
1/28/2019 22:00	8	8	8	25.84	4.1	3.9	24.6
1/28/2019 22:10	8	8	8	25.8	4.2	3.9	24.4
1/28/2019 22:20	8	8	8	25.9	4.2	3.9	24.1
1/28/2019 22:30	8	8	8	25.87	4.2	3.9	23.3
1/28/2019 22:40	8	8	8	25.87	4.5	3.9	3.3
1/28/2019 22:50	8	8	8	25.93	4.3	3.9	4.3
1/28/2019 23:00	8	8	8	25.9	4.3	3.9	24.5
1/28/2019 23:10	8	8	8	25.87	4.3	3.8	24.3
1/28/2019 23:20	8	8	8	25.87	4.4	3.8	24.1
1/28/2019 23:30	8	8	8	25.93	4.2	3.8	24.2
1/28/2019 23:40	8	8	8	25.9	4.3	3.8	3.3
1/28/2019 23:50	8	8	8	25.96	4	3.8	24.6
1/29/2019 0:00	8	8	8	25.87	4.2	3.7	24.4
1/29/2019 0:10	8	8	8	25.93	4.1	4	24.3

1/29/2019 0:20	8	8	8	25.9	4.2	3.8	24.1
1/29/2019 0:30	8	8	8	25.93	4.2	3.9	1
1/29/2019 0:40	8	8	8	25.9	4.3	3.9	3.5
1/29/2019 0:50	8	8	8	25.87	4.2	3.9	24.6
1/29/2019 1:00	8	8	8	25.96	4.3	3.9	24.5
1/29/2019 1:10	8	8	8	25.93	4.3	3.8	24.3
1/29/2019 1:20	8	8	8	25.93	4.5	3.9	24.1
1/29/2019 1:30	8	8	8	25.96	4.3	3.9	4.3
1/29/2019 1:40	8	8	8	25.99	4.1	3.8	24.6
1/29/2019 1:50	8	8	8	25.93	4.3	3.8	24.5
1/29/2019 2:00	8	8	8	25.96	4.3	3.9	24.3
1/29/2019 2:10	8	8	8	25.99	4.3	3.9	24
1/29/2019 2:20	8	8	8	26.05	4.2	3.8	1.8
1/29/2019 2:30	8	8	8	26.05	4.2	3.9	3.2
1/29/2019 2:40	8	8	8	26.08	4.1	3.9	24.6
1/29/2019 2:50	8	8	8	26.08	4.1	3.9	24.3
1/29/2019 3:00	8	8	8	26.11	4.4	3.9	24.2
1/29/2019 3:10	8	8	8	26.08	4.3	3.9	24.1
1/29/2019 3:20	8	8	8	26.05	4	3.8	3.7
1/29/2019 3:30	8	8	8	26.14	4.4	3.8	24.5
1/29/2019 3:40	8	8	8	26.11	4.3	3.9	24.4
1/29/2019 3:50	8	8	8	26.14	4.1	3.9	24.3
1/29/2019 4:00	8	8	8	26.08	4.2	3.9	23.4
1/29/2019 4:10	8	8	8	26.08	4.5	3.9	3.7
1/29/2019 4:20	8	8	8	26.11	4.2	3.9	24.5
1/29/2019 4:30	8	8	8	26.14	4.2	4	24.4
1/29/2019 4:40	8	8	8	26.14	4.3	3.9	24.3
1/29/2019 4:50	8	8	8	26.11	4.4	3.9	22.2
1/29/2019 5:00	8	8	8	26.08	4	3.9	3.5
1/29/2019 5:10	8	8	8	26.14	4.3	3.8	24.6
1/29/2019 5:20	8	8	8	26.14	4.5	3.8	24.5
1/29/2019 5:30	8	8	8	26.11	4.1	3.9	24.2
1/29/2019 5:40	8	8	8	26.14	4.3	3.9	23.8
1/29/2019 5:50	8	8	8	26.14	4.4	3.9	4.3
1/29/2019 6:00	8	8	8	26.2	4.2	3.9	24.6
1/29/2019 6:10	8	8	8	26.17	4.3	3.9	24.3
1/29/2019 6:20	8	8	8	26.2	4.2	3.9	24.3
1/29/2019 6:30	8	8	8	26.17	4.1	3.9	1.7
1/29/2019 6:40	8	8	8	26.05	4.1	4	24.7
1/29/2019 6:50	8	8	8	26.17	4.6	3.9	24.5
1/29/2019 7:00	8	8	8	26.23	4.2	3.9	24.3
1/29/2019 7:10	8	8	8	26.26	4.3	4	24
1/29/2019 7:20	8	8	8	26.23	4.5	3.9	2.1
1/29/2019 7:30	8	8	8	26.26	3.9	3.9	10.6
1/29/2019 7:40	8	8	8	26.2	4.2	3.9	24.5
1/29/2019 7:50	8	8	8	26.17	3.9	3.9	24.2
1/29/2019 8:00	8	8	8	26.23	4.6	3.9	24

1/29/2019 8:10	8	8	8	26.26	4.3	3.9	3.7
1/29/2019 8:20	8	8	8	26.29	4.3	3.9	24.6
1/29/2019 8:30	8	8	8	26.26	4.6	3.9	24.4
1/29/2019 8:40	8	8	8	26.26	4	3.9	24.3
1/29/2019 8:50	8	8	8	26.32	4.2	3.8	23.9
1/29/2019 9:00	8	8	8	26.32	4.2	3.9	4.1
1/29/2019 9:10	8	8	8	26.29	4.2	3.9	10.6
1/29/2019 9:20	8	8	8	26.35	4.2	3.9	24.5
1/29/2019 9:30	8	8	8	26.35	4.3	4	24.3
1/29/2019 9:40	8	8	8	26.32	4.4	4.1	24
1/29/2019 9:50	8	8	8	26.35	4.2	3.8	2.8
1/29/2019 10:00	8	8	8	26.35	4.1	3.8	3.3
1/29/2019 10:10	8	8	8	26.29	4.2	3.9	24.5
1/29/2019 10:20	8	8	8	26.29	4.3	3.8	24.3
1/29/2019 10:30	8	8	8	26.35	4.5	3.9	24.1
1/29/2019 10:40	8	8	8	26.35	4.2	3.9	3.9
1/29/2019 10:50	8	8	8	26.32	4	3.9	24.5
1/29/2019 11:00	8	8	8	26.32	4.4	3.9	24.4
1/29/2019 11:10	8	8	8	26.32	4.2	3.9	24.3
1/29/2019 11:20	8	8	8	26.32	4.3	3.9	1
1/29/2019 11:30	8	8	8	26.35	4.4	3.9	3.3
1/29/2019 11:40	8	8	8	26.29	4.5	3.9	24.5
1/29/2019 11:50	8	8	8	26.42	4.4	3.7	24.3
1/29/2019 12:00	8	8	8	26.42	4.2	3.9	24
1/29/2019 12:10	8	8	8	26.45	4.2	3.9	3.6
1/29/2019 12:20	8	8	8	26.38	4.2	3.8	24.6
1/29/2019 12:30	8	8	8	26.38	4.1	3.9	24.4
1/29/2019 12:40	8	8	8	26.45	4.2	3.9	24.1
1/29/2019 12:50	8	8	8	26.38	4.1	3.9	1.9
1/29/2019 13:00	8	8	8	26.45	4.2	3.9	3.2
1/29/2019 13:10	8	8	8	26.45	4.3	3.9	24.4
1/29/2019 13:20	8	8	8	26.38	4.5	4	24.3
1/29/2019 13:30	8	8	8	26.45	4.4	3.8	24
1/29/2019 13:40	8	8	8	26.38	4.7	3.8	3.8
1/29/2019 13:50	8	8	8	26.38	4.5	3.9	24.6
1/29/2019 14:00	8	8	8	26.42	4.3	3.9	24.4
1/29/2019 14:10	8	8	8	26.38	4.3	3.8	24.1
1/29/2019 14:20	8	8	8	26.45	4.6	3.9	1.2
1/29/2019 14:30	8	8	8	26.45	4.2	3.9	10.5
1/29/2019 14:40	8	8	8	26.51	4.4	3.9	24.4
1/29/2019 14:50	8	8	8	26.48	4.4	3.9	24.3
1/29/2019 15:00	8	8	8	26.38	4.3	3.9	24.1
1/29/2019 15:10	8	8	8	26.48	4.3	3.8	3.5
1/29/2019 15:20	8	8	8	26.38	4.3	3.9	24.5
1/29/2019 15:30	8	8	8	26.51	4.3	3.9	24.3
1/29/2019 15:40	8	8	8	26.54	4.2	4	24
1/29/2019 15:50	8	8	8	26.48	4.1	3.9	3.9

1/29/2019 16:00	8	8	8	26.51	4.6	3.9	24.6
1/29/2019 16:10	8	8	8	26.57	4.5	3.9	24.4
1/29/2019 16:20	8	8	8	26.57	4.3	3.8	24.3
1/29/2019 16:30	8	8	8	26.51	4.2	3.9	16.9
1/29/2019 16:40	8	8	8	26.57	4.2	3.9	3.3
1/29/2019 16:50	8	8	8	26.51	4.3	4	24.5
1/29/2019 17:00	8	8	8	26.54	4.2	3.9	24.2
1/29/2019 17:10	8	8	8	26.57	4.5	3.9	24
1/29/2019 17:20	8	8	8	26.57	4.3	3.9	3.5
1/29/2019 17:30	8	8	8	26.6	4.2	3.8	24.6
1/29/2019 17:40	8	8	8	26.51	4.3	3.9	24.3
1/29/2019 17:50	8	8	8	26.51	4.6	3.9	24.2
1/29/2019 18:00	8	8	8	26.48	4.3	3.9	1.1
1/29/2019 18:10	8	8	8	26.57	4.4	4	3.3
1/29/2019 18:20	8	8	8	26.6	4.1	3.8	24.5
1/29/2019 18:30	8	8	8	26.51	4.6	3.8	24.2
1/29/2019 18:40	8	8	8	26.6	4.5	3.9	24.2
1/29/2019 18:50	8	8	8	26.54	4.2	3.8	3.8
1/29/2019 19:00	8	8	8	26.6	4.6	3.9	24.6
1/29/2019 19:10	8	8	8	26.54	4.5	4	24.3
1/29/2019 19:20	8	8	8	26.54	4.3	3.9	24.2
1/29/2019 19:30	8	8	8	26.63	4.4	3.9	24
1/29/2019 19:40	8	8	8	26.57	4.3	3.8	3.7
1/29/2019 19:50	8	8	8	26.6	4.3	3.9	24.6
1/29/2019 20:00	8	8	8	26.57	4.3	3.9	24.3
1/29/2019 20:10	8	8	8	26.63	4.2	3.9	24.2
1/29/2019 20:20	8	8	8	26.6	4.4	3.9	3
1/29/2019 20:30	8	8	8	26.6	4.5	4	24.6
1/29/2019 20:40	8	8	8	26.72	4.2	3.9	24.3
1/29/2019 20:50	8	8	8	26.63	4.4	3.9	24.1
1/29/2019 21:00	8	8	8	26.63	4.4	3.9	1.1
1/29/2019 21:10	8	8	8	26.6	4.4	3.9	3.5
1/29/2019 21:20	8	8	8	26.6	4.4	3.9	24.5
1/29/2019 21:30	8	8	8	26.75	4.1	3.9	24.3
1/29/2019 21:40	8	8	8	26.6	4.5	3.9	24.2
1/29/2019 21:50	8	8	8	26.63	4.4	3.9	23.6
1/29/2019 22:00	8	8	8	26.6	4.4	3.9	3.7
1/29/2019 22:10	8	8	8	26.69	4.2	3.9	24.6
1/29/2019 22:20	8	8	8	26.75	4.3	3.9	24.4
1/29/2019 22:30	8	8	8	26.69	4.5	3.9	24
1/29/2019 22:40	8	8	8	26.69	4.1	3.9	1
1/29/2019 22:50	8	8	8	26.75	4.1	3.9	3.8
1/29/2019 23:00	8	8	8	26.69	4.1	3.9	24.5
1/29/2019 23:10	8	8	8	26.63	4.3	3.9	24.2
1/29/2019 23:20	8	8	8	26.75	4	3.9	24.1
1/29/2019 23:30	8	8	8	26.72	4.3	3.9	3.8
1/29/2019 23:40	8	8	8	26.75	4.2	3.9	24.5

1/29/2019 23:50	8	8	8	26.69	4.3	3.9	24.3
1/30/2019 0:00	8	8	8	26.78	4.4	3.8	24.1
1/30/2019 0:10	8	8	8	26.78	4.4	3.9	3.4
1/30/2019 0:20	8	8	8	26.72	4.3	3.9	24.6
1/30/2019 0:30	8	8	8	26.72	4.4	3.9	24.5
1/30/2019 0:40	8	8	8	26.72	4.3	3.8	24.2
1/30/2019 0:50	8	8	8	26.75	4.4	3.9	1.3
1/30/2019 1:00	8	8	8	26.75	4.7	3.9	24.6
1/30/2019 1:10	8	8	8	26.72	4.4	4.1	24.5
1/30/2019 1:20	8	8	8	26.78	4.1	4	24.4
1/30/2019 1:30	8	8	8	26.84	4.3	4.1	24.1
1/30/2019 1:40	8	8	8	26.78	4.3	3.8	3.7
1/30/2019 1:50	8	8	8	26.81	4.5	3.9	24.6
1/30/2019 2:00	8	8	8	26.84	4.4	3.9	24.3
1/30/2019 2:10	8	8	8	26.78	4.3	3.9	24.1
1/30/2019 2:20	8	8	8	26.81	4.3	3.9	1.7
1/30/2019 2:30	8	8	8	26.81	4.5	3.9	10.6
1/30/2019 2:40	8	8	8	26.87	4.3	3.8	24.4
1/30/2019 2:50	8	8	8	26.81	4.6	3.9	24.3
1/30/2019 3:00	8	8	8	26.87	4.3	3.9	3.6
1/30/2019 3:10	8	8	8	26.78	4.3	3.9	3.2
1/30/2019 3:20	8	8	8	26.81	4.2	4.1	24.5
1/30/2019 3:30	8	8	8	26.9	4.1	3.9	24.2
1/30/2019 3:40	8	8	8	26.84	4.3	3.8	20.8
1/30/2019 3:50	8	8	8	26.84	4.3	3.8	3.5
1/30/2019 4:00	8	8	8	26.84	4.3	3.9	24.6
1/30/2019 4:10	8	8	8	26.72	4.6	3.9	24.3
1/30/2019 4:20	8	8	8	26.84	4.1	4.1	24.1
1/30/2019 4:30	8	8	8	26.87	4.2	3.9	3.1
1/30/2019 4:40	8	8	8	26.87	4.1	4	24.5
1/30/2019 4:50	8	8	8	26.84	4.4	3.9	24.4
1/30/2019 5:00	8	8	8	26.87	4.1	3.9	24.2
1/30/2019 5:10	8	8	8	26.81	4.3	3.9	16.9
1/30/2019 5:20	8	8	8	26.78	4.4	3.9	3.5
1/30/2019 5:30	8	8	8	26.81	4.2	3.8	24.6
1/30/2019 5:40	8	8	8	26.81	4.1	3.9	24.3
1/30/2019 5:50	8	8	8	26.84	4.2	3.9	24.2
1/30/2019 6:00	8	8	8	26.87	4.5	4	3
1/30/2019 6:10	8	8	8	26.84	4.1	3.9	24.6
1/30/2019 6:20	8	8	8	26.78	4.2	3.8	24.5
1/30/2019 6:30	8	8	8	26.84	4.3	3.9	24.3
1/30/2019 6:40	8	8	8	26.81	4.2	3.8	16.7
1/30/2019 6:50	8	8	8	26.84	4.3	4	3.7
1/30/2019 7:00	8	8	8	26.81	4.3	3.9	24.5
1/30/2019 7:10	8	8	8	26.78	4.5	4	24.3
1/30/2019 7:20	8	8	8	26.81	4.6	3.9	24
1/30/2019 7:30	8	8	8	26.81	4.1	3.9	4.1

1/30/2019 7:40	8	8	8	26.84	4.2	3.9	24.5
1/30/2019 7:50	8	8	8	26.78	4.2	3.9	24.3
1/30/2019 8:00	8	8	8	26.81	4.1	3.9	24.1
1/30/2019 8:10	8	8	8	26.78	4.4	3.9	1.1
1/30/2019 8:20	8	8	8	26.81	4.3	3.9	3.2
1/30/2019 8:30	8	8	8	26.75	4.1	4	24.5
1/30/2019 8:40	8	8	8	26.75	4.2	3.9	24.3
1/30/2019 8:50	8	8	8	26.75	4.3	3.9	24.1
1/30/2019 9:00	8	8	8	26.75	4.3	3.8	2.8
1/30/2019 9:10	8	8	8	26.69	4.3	3.9	23.4
1/30/2019 9:20	8	8	8	26.69	4	4	24.5
1/30/2019 9:30	8	8	8	26.75	4.3	3.9	24.2
1/30/2019 9:40	8	8	8	26.78	4.4	3.9	24.1
1/30/2019 9:50	8	8	8	26.81	4.4	4	4.3
1/30/2019 10:00	8	8	8	26.75	4.2	4	24.6
1/30/2019 10:10	8	8	8	26.75	4.2	3.9	24.4
1/30/2019 10:20	8	8	8	26.81	4.6	4	24.2
1/30/2019 10:30	8	8	8	26.78	4.5	4.1	1
1/30/2019 10:40	8	8	8	26.81	4.5	3.9	3.2
1/30/2019 10:50	8	8	8	26.78	4.5	3.9	24.5
1/30/2019 11:00	8	8	8	26.78	4.3	3.9	24.3
1/30/2019 11:10	8	8	8	26.81	4.3	3.9	24.1
1/30/2019 11:20	8	8	8	26.75	4.2	3.9	3.4
1/30/2019 11:30	8	8	8	26.84	4.3	3.9	24.5
1/30/2019 11:40	8	8	8	26.87	4.2	4.1	24.3
1/30/2019 11:50	8	8	8	26.9	4.1	3.9	24.2
1/30/2019 12:00	8	8	8	26.87	4.3	4	3.4
1/30/2019 12:10	8	8	8	26.93	4.4	3.8	24.5
1/30/2019 12:20	8	8	8	26.81	4.2	3.9	24.3
1/30/2019 12:30	8	8	8	26.84	4.3	3.9	24
1/30/2019 12:40	8	8	8	26.93	4.2	3.9	3.8
1/30/2019 12:50	8	8	8	26.87	4.2	4	24.5
1/30/2019 13:00	8	8	8	26.87	4.3	4	24.3
1/30/2019 13:10	8	8	8	26.84	4.5	3.9	24
1/30/2019 13:20	8	8	8	26.87	4.3	3.9	2.3
1/30/2019 13:30	8	8	8	26.93	4.5	3.9	24.6
1/30/2019 13:40	8	8	8	26.9	4.3	3.8	24.4
1/30/2019 13:50	8	8	8	26.93	4.4	3.9	24.1
1/30/2019 14:00	8	8	8	26.84	4.3	3.9	3.7
1/30/2019 14:10	8	8	8	26.96	4.6	4	24.5
1/30/2019 14:20	8	8	8	26.96	4.2	3.9	24.3
1/30/2019 14:30	8	8	8	26.96	4.4	3.9	24
1/30/2019 14:40	8	8	8	26.87	4.5	3.9	3.9
1/30/2019 14:50	8	8	8	26.96	4.2	3.9	24.6
1/30/2019 15:00	8	8	8	26.9	4.4	4	24.5
1/30/2019 15:10	8	8	8	26.93	4.4	3.9	24.3
1/30/2019 15:20	8	8	8	26.9	4.4	3.9	19.2

1/30/2019 15:30	8	8	8	26.9	4.5	3.9	3.5
1/30/2019 15:40	8	8	8	26.9	4.3	3.9	24.5
1/30/2019 15:50	8	8	8	26.96	4.1	3.8	24.2
1/30/2019 16:00	8	8	8	26.93	4.1	3.9	24
1/30/2019 16:10	8	8	8	27	4.5	3.9	3.6
1/30/2019 16:20	8	8	8	26.9	4	3.9	24.6
1/30/2019 16:30	8	8	8	26.96	4.4	4	24.4
1/30/2019 16:40	8	8	8	26.96	4.3	3.9	24.1
1/30/2019 16:50	8	8	8	27	4.3	3.9	1.2
1/30/2019 17:00	8	8	8	27	4.4	3.9	10.6
1/30/2019 17:10	8	8	8	27.03	4.2	4	24.4
1/30/2019 17:20	8	8	8	27	4.4	3.9	24.2
1/30/2019 17:30	8	8	8	26.93	4.4	3.9	22.8
1/30/2019 17:40	8	8	8	27	4.2	3.9	3.7
1/30/2019 17:50	8	8	8	26.87	4.3	4	24.5
1/30/2019 18:00	8	8	8	26.93	4.3	3.8	24.3
1/30/2019 18:10	8	8	8	26.96	4.4	3.8	24.1
1/30/2019 18:20	8	8	8	26.9	4.4	3.9	3.3
1/30/2019 18:30	8	8	8	26.9	4.2	4	24.6
1/30/2019 18:40	8	8	8	26.96	4.5	3.9	24.5
1/30/2019 18:50	8	8	8	26.93	4.7	4	24.1
1/30/2019 19:00	8	8	8	27	4.2	4	1.1
1/30/2019 19:10	8	8	8	26.96	4.3	3.9	3.2
1/30/2019 19:20	8	8	8	26.96	4.3	4	24.5
1/30/2019 19:30	8	8	8	26.9	4.4	4	24.3
1/30/2019 19:40	8	8	8	26.87	4.4	3.9	23.6
1/30/2019 19:50	8	8	8	26.93	4.4	3.9	3.9
1/30/2019 20:00	8	8	8	26.9	4.2	3.9	24.6
1/30/2019 20:10	8	8	8	26.9	4.4	3.9	24.3
1/30/2019 20:20	8	8	8	26.87	4.4	3.9	24.1
1/30/2019 20:30	8	8	8	26.9	4	3.9	3.1
1/30/2019 20:40	8	8	8	26.87	4.4	3.9	10.6
1/30/2019 20:50	8	8	8	27	4.3	3.9	24.5
1/30/2019 21:00	8	8	8	26.87	4.3	3.9	24.2
1/30/2019 21:10	8	8	8	26.87	4.4	3.9	24.2
1/30/2019 21:20	8	8	8	26.9	4.4	3.9	3.8
1/30/2019 21:30	8	8	8	26.9	4.4	3.9	24.7
1/30/2019 21:40	8	8	8	26.9	4.6	3.9	24.3
1/30/2019 21:50	8	8	8	26.84	4.4	3.9	24.1
1/30/2019 22:00	8	8	8	26.9	4.2	3.9	1.1
1/30/2019 22:10	8	8	8	26.87	4.4	3.9	4.5
1/30/2019 22:20	8	8	8	26.87	4.5	3.9	24.5
1/30/2019 22:30	8	8	8	26.9	4.2	4	24.4
1/30/2019 22:40	8	8	8	26.84	4.5	4	23.4
1/30/2019 22:50	8	8	8	26.87	4.4	3.9	3.8
1/30/2019 23:00	8	8	8	26.87	4.5	4	24.6
1/30/2019 23:10	8	8	8	26.75	4.5	3.9	24.4

1/30/2019 23:20	8	8	8	26.87	4.5	4.1	24.3
1/30/2019 23:30	8	8	8	26.81	4.4	3.9	1.2
1/30/2019 23:40	8	8	8	26.87	4.1	4	3.2
1/30/2019 23:50	8	8	8	26.84	4.4	3.9	24.6
1/31/2019 0:00	8	8	8	26.9	4.3	3.8	24.3
1/31/2019 0:10	8	8	8	26.81	4.4	3.9	24.1
1/31/2019 0:20	8	8	8	26.87	4.4	3.9	3.7
1/31/2019 0:30	8	8	8	26.87	4.5	4	24.5
1/31/2019 0:40	8	8	8	26.84	4.2	4	24.5
1/31/2019 0:50	8	8	8	26.84	4.3	3.9	24.1
1/31/2019 1:00	8	8	8	26.84	4.7	3.9	1
1/31/2019 1:10	8	8	8	26.93	4.5	4	3.2
1/31/2019 1:20	8	8	8	26.87	4.3	4	24.6
1/31/2019 1:30	8	8	8	26.84	4.6	3.9	24.3
1/31/2019 1:40	8	8	8	26.87	4.3	3.9	24.1
1/31/2019 1:50	8	8	8	26.9	4.3	4	3.7
1/31/2019 2:00	8	8	8	26.81	4.5	4.1	24.5
1/31/2019 2:10	8	8	8	26.75	4.2	3.9	24.4
1/31/2019 2:20	8	8	8	26.78	4.3	4	24.2
1/31/2019 2:30	8	8	8	26.87	4.4	4	1.1
1/31/2019 2:40	8	8	8	26.81	4.4	4.1	3.3
1/31/2019 2:50	8	8	8	26.84	4.1	3.9	24.6
1/31/2019 3:00	8	8	8	26.75	4.2	3.9	24.2
1/31/2019 3:10	8	8	8	26.78	4.2	4	24
1/31/2019 3:20	8	8	8	26.78	4.3	3.9	3.7
1/31/2019 3:30	8	8	8	26.84	4.3	4	24.6
1/31/2019 3:40	8	8	8	26.87	4.3	3.9	24.3
1/31/2019 3:50	8	8	8	26.84	4.2	4	24.2
1/31/2019 4:00	8	8	8	26.81	4.4	3.9	2.6
1/31/2019 4:10	8	8	8	26.81	4.4	4	23.6
1/31/2019 4:20	8	8	8	26.81	4.2	4	24.5
1/31/2019 4:30	8	8	8	26.84	4.1	4	24.3
1/31/2019 4:40	8	8	8	26.78	4.5	3.9	24.1
1/31/2019 4:50	8	8	8	26.78	4.4	4	3.8
1/31/2019 5:00	8	8	8	26.81	4.2	4	24.6
1/31/2019 5:10	8	8	8	26.81	4.5	3.9	24.5
1/31/2019 5:20	8	8	8	26.75	4.6	3.9	24.2
1/31/2019 5:30	8	8	8	26.87	4.6	4.1	19.2
1/31/2019 5:40	8	8	8	26.84	4.2	3.9	4.1
1/31/2019 5:50	8	8	8	26.84	4.5	4	24.6
1/31/2019 6:00	8	8	8	26.81	4.3	4	24.3
1/31/2019 6:10	8	8	8	26.81	4.5	4	24.1
1/31/2019 6:20	8	8	8	26.81	4.5	3.9	1
1/31/2019 6:30	8	8	8	26.78	4.2	4	3.3
1/31/2019 6:40	8	8	8	26.87	4.4	4.1	24.6
1/31/2019 6:50	8	8	8	26.75	4.2	4	24.4
1/31/2019 7:00	8	8	8	26.87	4.2	4	24.3

1/31/2019 7:10	8	8	8	26.72	4.2	4	1.1
1/31/2019 7:20	8	8	8	26.75	4.4	4.1	3.3
1/31/2019 7:30	8	8	8	26.75	4.2	4	24.6
1/31/2019 7:40	8	8	8	26.69	4.3	4.1	24.3
1/31/2019 7:50	8	8	8	26.72	4.4	4	24.2
1/31/2019 8:00	8	8	8	26.78	4.4	4.1	1.3
1/31/2019 8:10	8	8	8	26.75	4.4	3.9	3.2
1/31/2019 8:20	8	8	8	26.75	4.2	4.1	24.6
1/31/2019 8:30	8	8	8	26.75	4.5	4	24.4
1/31/2019 8:40	8	8	8	26.81	4.3	4	24.3
1/31/2019 8:50	8	8	8	26.75	4.4	4.1	1.5
1/31/2019 9:00	8	8	8	26.81	4.1	4	3.2
1/31/2019 9:10	8	8	8	26.81	4.2	4	24.5
1/31/2019 9:20	8	8	8	26.81	4.4	4	24.3
1/31/2019 9:30	8	8	8	26.81	4.5	4	24.2
1/31/2019 9:40	8	8	8	26.81	4.5	4	1.4
1/31/2019 9:50	8	8	8	26.87	4.5	4.1	4.1
1/31/2019 10:00	8	8	8	26.84	4.4	4.1	24.5
1/31/2019 10:10	8	8	8	26.81	4	3.9	24.4
1/31/2019 10:20	8	8	8	26.84	4.3	4	24.1
1/31/2019 10:30	8	8	8	26.87	4.4	3.9	1.7
1/31/2019 10:40	8	8	8	26.69	4.1	4	24.7
1/31/2019 10:50	8	8	8	26.9	4.4	4	24.5
1/31/2019 11:00	8	8	8	26.87	4.1	4.1	24.3
1/31/2019 11:10	8	8	8	26.87	4.4	4	24
1/31/2019 11:20	8	8	8	26.9	4.4	4	1.9
1/31/2019 11:30	8	8	8	26.87	4.3	4	10.6
1/31/2019 11:40	8	8	8	26.87	4.5	3.9	24.5
1/31/2019 11:50	8	8	8	26.93	4.4	4	24.3
1/31/2019 12:00	8	8	8	26.93	4.4	3.9	24.1
1/31/2019 12:10	8	8	8	26.96	4.3	4	2.4
1/31/2019 12:20	8	8	8	26.87	4.4	4.1	23.5
1/31/2019 12:30	8	8	8	26.93	4.5	4	24.6
1/31/2019 12:40	8	8	8	27	4.3	4	24.3
1/31/2019 12:50	8	8	8	26.84	3.8	3.9	24.2
1/31/2019 13:00	8	8	8	26.9	4.5	4	2.8
1/31/2019 13:10	8	8	8	26.9	4.4	4	10.5
1/31/2019 13:20	8	8	8	26.84	4.2	4	24.5
1/31/2019 13:30	8	8	8	26.9	4.2	4.1	24.3
1/31/2019 13:40	8	8	8	26.9	4.4	4	24.1
1/31/2019 13:50	8	8	8	26.96	4.1	4	1.5
1/31/2019 14:00	8	8	8	26.87	4.3	4	3.4
1/31/2019 14:10	8	8	8	26.9	4.4	4	24.5
1/31/2019 14:20	8	8	8	26.96	4.6	3.9	24.4
1/31/2019 14:30	8	8	8	26.87	4.3	4	24.2
1/31/2019 14:40	8	8	8	26.9	4.3	4.1	24.1
1/31/2019 14:50	8	8	8	26.87	4.4	4	4

1/31/2019 15:00	8	8	8	26.96	4.4	4	24.5
1/31/2019 15:10	8	8	8	27	4.2	4.1	24.5
1/31/2019 15:20	8	8	8	27	4.1	3.9	24.2
1/31/2019 15:30	8	8	8	27	4.3	4.1	23.7
1/31/2019 15:40	8	8	8	26.96	4.4	3.9	3.5
1/31/2019 15:50	8	8	8	26.96	4.3	4.1	24.6
1/31/2019 16:00	8	8	8	27.03	4.4	4	24.5
1/31/2019 16:10	8	8	8	26.96	4.2	4	24.3
1/31/2019 16:20	8	8	8	26.96	4.4	4.1	24
1/31/2019 16:30	8	8	8	26.93	4.2	4.1	1.3
1/31/2019 16:40	8	8	8	26.96	4.8	4	3.3
1/31/2019 16:50	8	8	8	26.96	4.4	3.9	24.6
1/31/2019 17:00	8	8	8	26.96	4.1	3.8	24.2
1/31/2019 17:10	8	8	8	26.96	4.3	3.9	24.1
1/31/2019 17:20	8	8	8	27	4.4	4	1.4
1/31/2019 17:30	8	8	8	27.03	4.4	4	10.6
1/31/2019 17:40	8	8	8	26.96	4.4	4	24.5
1/31/2019 17:50	8	8	8	26.96	4.2	3.8	24.2
1/31/2019 18:00	8	8	8	27.06	4.5	3.9	24.1
1/31/2019 18:10	8	8	8	26.96	3.8	4.1	2
1/31/2019 18:20	8	8	8	27	4.2	3.9	3.4
1/31/2019 18:30	8	8	8	26.93	4.2	4	24.5
1/31/2019 18:40	8	8	8	27	4.2	3.9	24.4
1/31/2019 18:50	8	8	8	26.96	4.4	3.9	24.1
1/31/2019 19:00	8	8	8	27.06	4.7	3.9	3.5
1/31/2019 19:10	8	8	8	27.03	4.4	4	3.7
1/31/2019 19:20	8	8	8	27.03	4.4	3.9	24.6
1/31/2019 19:30	8	8	8	27	4.5	3.9	24.5
1/31/2019 19:40	8	8	8	27	4.4	4	24.2
1/31/2019 19:50	8	8	8	26.9	4.7	3.9	24
1/31/2019 20:00	8	8	8	27.03	4.4	3.9	2.4
1/31/2019 20:10	8	8	8	27	4.4	3.9	24.6
1/31/2019 20:20	8	8	8	27.03	4.4	3.9	24.5
1/31/2019 20:30	8	8	8	27	4.3	3.9	24.2
1/31/2019 20:40	8	8	8	27.03	4.3	4	24.1
1/31/2019 20:50	8	8	8	27.03	4.4	4	3.1
1/31/2019 21:00	8	8	8	27.06	4.7	4	24.6
1/31/2019 21:10	8	8	8	27.03	4.3	4	24.5
1/31/2019 21:20	8	8	8	26.93	4.4	4	24.2
1/31/2019 21:30	8	8	8	27	4.3	4.1	24
1/31/2019 21:40	8	8	8	26.96	4.3	4	2.4
1/31/2019 21:50	8	8	8	26.93	4.3	4	23.5
1/31/2019 22:00	8	8	8	26.96	4.6	3.8	24.4
1/31/2019 22:10	8	8	8	27.06	4.4	4	24.3
1/31/2019 22:20	8	8	8	27.03	4.3	3.9	24
1/31/2019 22:30	8	8	8	27.03	4.1	4	2.3
1/31/2019 22:40	8	8	8	27	4.3	3.9	3.7

1/31/2019 22:50	8	8	8	26.93	4.3	4	24.5
1/31/2019 23:00	8	8	8	27.03	4.3	4	24.3
1/31/2019 23:10	8	8	8	26.96	4.5	3.9	24
1/31/2019 23:20	8	8	8	27	4.3	4.1	1.8
1/31/2019 23:30	8	8	8	27.03	4.2	4	3.2
1/31/2019 23:40	8	8	8	26.9	4.4	4.1	24.6
1/31/2019 23:50	8	8	8	27	4.4	4.1	24.4
2/1/2019 0:00	8	8	8	26.93	4.5	3.9	24.2
2/1/2019 0:10	8	8	8	27	4.6	3.9	23.4
2/1/2019 0:20	8	8	8	26.96	4.4	4.1	3.7
2/1/2019 0:30	8	8	8	27.03	4.3	4	24.6
2/1/2019 0:40	8	8	8	26.93	4.5	3.9	24.5
2/1/2019 0:50	8	8	8	26.96	4.4	4.1	24.3
2/1/2019 1:00	8	8	8	26.93	4.4	4	24
2/1/2019 1:10	8	8	8	26.93	4.3	4	3.4
2/1/2019 1:20	8	8	8	26.93	4.6	3.9	10.6
2/1/2019 1:30	8	8	8	26.93	4.3	3.9	24.6
2/1/2019 1:40	8	8	8	26.96	4.5	3.9	24.4
2/1/2019 1:50	8	8	8	26.9	4.1	4.1	24.1
2/1/2019 2:00	8	8	8	26.93	4.4	4.1	1.2
2/1/2019 2:10	8	8	8	26.96	4.5	4	3.5
2/1/2019 2:20	8	8	8	26.87	4.4	3.9	24.6
2/1/2019 2:30	8	8	8	27.03	4.3	3.9	24.4
2/1/2019 2:40	8	8	8	26.96	4.6	4	24.4
2/1/2019 2:50	8	8	8	27	4.3	4	24
2/1/2019 3:00	8	8	8	26.93	4.5	4.1	3
2/1/2019 3:10	8	8	8	27	4.3	4	4.3
2/1/2019 3:20	8	8	8	26.93	4.4	4.1	24.6
2/1/2019 3:30	8	8	8	27.06	4.3	4	24.4
2/1/2019 3:40	8	8	8	26.93	4.3	4	24.2
2/1/2019 3:50	8	8	8	27	4.6	3.9	23.7
2/1/2019 4:00	8	8	8	26.96	4.8	4	3.9
2/1/2019 4:10	8	8	8	27	4.3	4.1	24.5
2/1/2019 4:20	8	8	8	26.93	4.6	4	24.4
2/1/2019 4:30	8	8	8	27	4.4	4.1	24.3
2/1/2019 4:40	8	8	8	27.03	4.4	4	24
2/1/2019 4:50	8	8	8	26.93	4.5	3.9	1.1
2/1/2019 5:00	8	8	8	27.03	4.3	4	3.7
2/1/2019 5:10	8	8	8	26.93	4.9	4.1	24.6
2/1/2019 5:20	8	8	8	27	4.4	4.1	24.5
2/1/2019 5:30	8	8	8	27.03	4.4	4.2	24.3
2/1/2019 5:40	8	8	8	27.09	4.7	4.1	24.3
2/1/2019 5:50	8	8	8	27.03	4.2	4	3.7
2/1/2019 6:00	8	8	8	26.93	4.5	4	3.3
2/1/2019 6:10	8	8	8	26.93	4.1	4	24.5
2/1/2019 6:20	8	8	8	27.03	4.5	4.1	24.4
2/1/2019 6:30	8	8	8	26.96	4.2	4	24.2

2/1/2019 6:40	8	8	8	27	4.3	4.1	24.2
2/1/2019 6:50	8	8	8	27.03	4.3	4.1	4.1
2/1/2019 7:00	8	8	8	27	4.4	4	4.4
2/1/2019 7:10	8	8	8	27	4.4	4.1	24.6
2/1/2019 7:20	8	8	8	27.06	4.3	4.2	24.3
2/1/2019 7:30	8	8	8	27	4.4	4	24.1
2/1/2019 7:40	8	8	8	26.96	4.5	4	22.8
2/1/2019 7:50	8	8	8	27	4.2	4.1	3.3
2/1/2019 8:00	8	8	8	27	4.5	4	3.2
2/1/2019 8:10	8	8	8	26.96	4.6	4	24.5
2/1/2019 8:20	8	8	8	27.09	4.2	4.1	24.3
2/1/2019 8:30	8	8	8	27	4.5	4.2	24
2/1/2019 8:40	8	8	8	27.03	4.4	3.9	1.1
2/1/2019 8:50	8	8	8	27.06	4.2	4	3.3
2/1/2019 9:00	8	8	8	27	4.5	4.1	24.6
2/1/2019 9:10	8	8	8	27.03	4	4	24.5
2/1/2019 9:20	8	8	8	27	4.2	4.1	24.2
2/1/2019 9:30	8	8	8	27.06	4.4	4.2	24
2/1/2019 9:40	8	8	8	27.03	4.3	4.1	2.5
2/1/2019 9:50	8	8	8	27	4.2	4	3.2
2/1/2019 10:00	8	8	8	27.06	4.2	4	24.5
2/1/2019 10:10	8	8	8	27.03	4.2	4	24.3
2/1/2019 10:20	8	8	8	27.03	4.3	4.1	24.1
2/1/2019 10:30	8	8	8	27.09	4.3	4	23.3
2/1/2019 10:40	8	8	8	27	4.3	4	3.2
2/1/2019 10:50	8	8	8	27.03	4.4	4.2	3.3
2/1/2019 11:00	8	8	8	26.96	4.1	4.1	24.5
2/1/2019 11:10	8	8	8	27	4.4	4.1	24.4
2/1/2019 11:20	8	8	8	27.03	4.4	4	24.3
2/1/2019 11:30	8	8	8	27.06	4.2	3.9	24
2/1/2019 11:40	8	8	8	27.09	4.4	4	2.7
2/1/2019 11:50	8	8	8	27.06	4.3	4	23.5
2/1/2019 12:00	8	8	8	27.12	4.5	4.1	24.5
2/1/2019 12:10	8	8	8	27.15	4.2	4	24.3
2/1/2019 12:20	8	8	8	27.18	4.5	4.1	24
2/1/2019 12:30	8	8	8	27.15	4.3	4	16.9
2/1/2019 12:40	8	8	8	27.18	4.5	4	3.9
2/1/2019 12:50	8	8	8	27.15	4.3	4	24.5
2/1/2019 13:00	8	8	8	27.21	4.5	4.1	24.4
2/1/2019 13:10	8	8	8	27.21	4.2	4	24.2
2/1/2019 13:20	8	8	8	27.21	4.4	4	23.2
2/1/2019 13:30	8	8	8	27.27	4.3	4.1	4.3
2/1/2019 13:40	8	8	8	27.24	4.1	4.1	24.6
2/1/2019 13:50	8	8	8	27.27	4.3	3.9	24.4
2/1/2019 14:00	8	8	8	27.27	4.5	4.1	24.3
2/1/2019 14:10	8	8	8	27.24	4.4	4	24.1
2/1/2019 14:20	8	8	8	27.27	4.2	4.1	1.6

2/1/2019 14:30	8	8	8	27.24	4.2	4	3.4
2/1/2019 14:40	8	8	8	27.24	4.4	4	24.5
2/1/2019 14:50	8	8	8	27.18	4.4	4	24.3
2/1/2019 15:00	8	8	8	27.27	4.4	4	24.2
2/1/2019 15:10	8	8	8	27.24	4.4	4	1
2/1/2019 15:20	8	8	8	27.27	4.3	4	4.4
2/1/2019 15:30	8	8	8	27.27	4.3	3.9	24.5
2/1/2019 15:40	8	8	8	27.36	4.4	4.1	24.4
2/1/2019 15:50	8	8	8	27.27	4.2	4	24.1
2/1/2019 16:00	8	8	8	27.36	4	4	24
2/1/2019 16:10	8	8	8	27.21	4.3	4.1	3.2
2/1/2019 16:20	8	8	8	27.27	4.3	4	3.2
2/1/2019 16:30	8	8	8	27.3	4.5	4	24.5
2/1/2019 16:40	8	8	8	27.3	4.3	3.9	24.3
2/1/2019 16:50	8	8	8	27.36	4.5	4	24.1
2/1/2019 17:00	8	8	8	27.27	4.5	4.1	24.1
2/1/2019 17:10	8	8	8	27.39	4.3	3.9	4.3
2/1/2019 17:20	8	8	8	27.3	4.5	4.1	3.9
2/1/2019 17:30	8	8	8	27.36	4.2	4	24.5
2/1/2019 17:40	8	8	8	27.39	4.6	3.9	24.4
2/1/2019 17:50	8	8	8	27.27	4.5	4	24.3
2/1/2019 18:00	8	8	8	27.36	4.2	3.9	24
2/1/2019 18:10	8	8	8	27.39	4.3	3.9	1.2
2/1/2019 18:20	8	8	8	27.36	4.4	4	3.3
2/1/2019 18:30	8	8	8	27.36	4.2	3.9	24.5
2/1/2019 18:40	8	8	8	27.39	4.4	4	24.3
2/1/2019 18:50	8	8	8	27.42	4.2	4	24.2
2/1/2019 19:00	8	8	8	27.45	4.2	4	1.1
2/1/2019 19:10	8	8	8	27.45	4.6	4	3.5
2/1/2019 19:20	8	8	8	27.39	4.5	4	24.5
2/1/2019 19:30	8	8	8	27.45	4.3	4	24.4
2/1/2019 19:40	8	8	8	27.45	4.3	3.9	24.3
2/1/2019 19:50	8	8	8	27.51	4.4	4	24.1
2/1/2019 20:00	8	8	8	27.45	4.3	4.1	4.3
2/1/2019 20:10	8	8	8	27.48	4.3	3.8	24.5
2/1/2019 20:20	8	8	8	27.51	4.4	4	24.5
2/1/2019 20:30	8	8	8	27.48	4.4	4	24.2
2/1/2019 20:40	8	8	8	27.45	4.3	4.1	24
2/1/2019 20:50	8	8	8	27.45	4.5	3.9	1.3
2/1/2019 21:00	8	8	8	27.48	4.3	4	3.3
2/1/2019 21:10	8	8	8	27.51	4.2	4.1	24.5
2/1/2019 21:20	8	8	8	27.51	4.3	4	24.3
2/1/2019 21:30	8	8	8	27.51	4.2	4.1	24.1
2/1/2019 21:40	8	8	8	27.48	4.3	4	23.5
2/1/2019 21:50	8	8	8	27.42	4.5	4.1	3.3
2/1/2019 22:00	8	8	8	27.48	4.4	4	3.2
2/1/2019 22:10	8	8	8	27.48	4.5	4	24.5

2/1/2019 22:20	8	8	8	27.21	4.3	4.1	24.4
2/1/2019 22:30	8	8	8	27.42	4.2	4	24.2
2/1/2019 22:40	8	8	8	27.45	4.4	4	23.9
2/1/2019 22:50	8	8	8	27.48	4.3	4	2.6
2/1/2019 23:00	8	8	8	27.45	4.2	4	3.5
2/1/2019 23:10	8	8	8	27.42	4.2	4	24.6
2/1/2019 23:20	8	8	8	27.42	4.3	4.1	24.5
2/1/2019 23:30	8	8	8	27.39	4.4	4	24.3
2/1/2019 23:40	8	8	8	27.39	4.2	4	24.3
2/1/2019 23:50	8	8	8	27.42	4.4	4.1	1.1
2/2/2019 0:00	8	8	8	27.42	4.4	4.1	3.7
2/2/2019 0:10	8	8	8	27.42	4.2	4	24.6
2/2/2019 0:20	8	8	8	27.48	4.6	4	24.5
2/2/2019 0:30	8	8	8	27.39	4.1	3.9	24.3
2/2/2019 0:40	8	8	8	27.42	4.4	4.1	24.2
2/2/2019 0:50	8	8	8	27.36	3.8	4	24
2/2/2019 1:00	8	8	8	27.48	4.4	4.1	3.7
2/2/2019 1:10	8	8	8	27.39	4.8	4.1	4.6
2/2/2019 1:20	8	8	8	27.45	4.6	4.1	24.5
2/2/2019 1:30	8	8	8	27.42	4.2	4	24.5
2/2/2019 1:40	8	8	8	27.48	4.4	4.1	24.1
2/2/2019 1:50	8	8	8	27.51	4.5	4	16.9
2/2/2019 2:00	8	8	8	27.48	4.3	4.1	3.7
2/2/2019 2:10	8	8	8	27.48	4	4.2	24.6
2/2/2019 2:20	8	8	8	27.48	4.5	4	24.5
2/2/2019 2:30	8	8	8	27.51	4.3	4.1	24.3
2/2/2019 2:40	8	8	8	27.45	4.2	4	24.1
2/2/2019 2:50	8	8	8	27.54	4.6	4.1	21.1
2/2/2019 3:00	8	8	8	27.51	4.5	4	4.1
2/2/2019 3:10	8	8	8	27.58	4.1	3.9	4.3
2/2/2019 3:20	8	8	8	27.51	4.6	4.1	24.6
2/2/2019 3:30	8	8	8	27.54	4.4	4.1	24.4
2/2/2019 3:40	8	8	8	27.48	4.3	4.1	24.1
2/2/2019 3:50	8	8	8	27.51	4.5	4.1	23.3
2/2/2019 4:00	8	8	8	27.45	4.4	4	4
2/2/2019 4:10	8	8	8	27.51	4.7	4.1	24.6
2/2/2019 4:20	8	8	8	27.45	4.3	4.2	24.5
2/2/2019 4:30	8	8	8	27.45	4.3	4	24.5
2/2/2019 4:40	8	8	8	27.39	4.3	4.2	24.1
2/2/2019 4:50	8	8	8	27.48	4.7	4.1	1.5
2/2/2019 5:00	8	8	8	27.36	4.3	4	3.4
2/2/2019 5:10	8	8	8	27.45	4.4	4.1	24.5
2/2/2019 5:20	8	8	8	27.45	4.4	4	24.4
2/2/2019 5:30	8	8	8	27.48	4.2	4	24.3
2/2/2019 5:40	8	8	8	27.36	4.4	4.1	24
2/2/2019 5:50	8	8	8	27.42	4.3	4.1	3.6
2/2/2019 6:00	8	8	8	27.39	4.4	4	3.8

2/2/2019 6:10	8	8	8	27.39	4.4	4	24.5
2/2/2019 6:20	8	8	8	27.42	4.3	4.2	24.3
2/2/2019 6:30	8	8	8	27.45	4.5	4.1	24.2
2/2/2019 6:40	8	8	8	27.27	4.6	4.1	11.4
2/2/2019 6:50	8	8	8	27.45	4.2	4.1	3.8
2/2/2019 7:00	8	8	8	27.39	4.4	4.1	4.3
2/2/2019 7:10	8	8	8	27.42	4.5	4.1	24.5
2/2/2019 7:20	8	8	8	27.51	4.3	4.1	24.3
2/2/2019 7:30	8	8	8	27.45	4.6	4.1	24.1
2/2/2019 7:40	8	8	8	27.42	4.5	4	24.1
2/2/2019 7:50	8	8	8	27.51	4.4	4.1	3.1
2/2/2019 8:00	8	8	8	27.48	4	4.1	3.7
2/2/2019 8:10	8	8	8	27.45	4.6	4.1	24.5
2/2/2019 8:20	8	8	8	27.39	4.6	4.2	24.3
2/2/2019 8:30	8	8	8	27.48	4.6	4.1	24.1
2/2/2019 8:40	8	8	8	27.45	4.4	4	23.7
2/2/2019 8:50	8	8	8	27.48	4.4	4.1	3.5
2/2/2019 9:00	8	8	8	27.48	4.4	4.1	4.5
2/2/2019 9:10	8	8	8	27.51	4.4	4.1	24.6
2/2/2019 9:20	8	8	8	27.39	4.8	4.1	24.5
2/2/2019 9:30	8	8	8	27.36	4.2	4.1	24.2
2/2/2019 9:40	8	8	8	27.45	4.3	4.2	24.1
2/2/2019 9:50	8	8	8	27.48	4.3	4	18.6
2/2/2019 10:00	8	8	8	27.42	4.3	4.1	3.8
2/2/2019 10:10	8	8	8	27.45	4.1	4.1	10.5
2/2/2019 10:20	8	8	8	27.48	4.7	4.1	24.5
2/2/2019 10:30	8	8	8	27.3	4.6	4.1	24.4
2/2/2019 10:40	8	8	8	27.48	4.8	4.1	24.2
2/2/2019 10:50	8	8	8	27.45	4.2	4.1	24
2/2/2019 11:00	8	8	8	27.39	4.2	4	24
2/2/2019 11:10	8	8	8	27.39	4.5	4.1	2.4
2/2/2019 11:20	8	8	8	27.39	4.5	3.9	3.3
2/2/2019 11:30	8	8	8	27.42	4.3	4	24.5
2/2/2019 11:40	8	8	8	27.39	4.4	4.1	24.5
2/2/2019 11:50	8	8	8	27.39	4.4	4.1	24.3
2/2/2019 12:00	8	8	8	27.45	4.4	4.1	24.1
2/2/2019 12:10	8	8	8	27.45	4.2	4.1	23.9
2/2/2019 12:20	8	8	8	27.51	4.6	4.1	1.2
2/2/2019 12:30	8	8	8	27.51	4.3	4.1	3.5
2/2/2019 12:40	8	8	8	27.51	4.3	4.1	24.5
2/2/2019 12:50	8	8	8	27.48	4.5	4.1	24.4
2/2/2019 13:00	8	8	8	27.54	4.2	3.9	24.3
2/2/2019 13:10	8	8	8	27.54	4.4	4	24.2
2/2/2019 13:20	8	8	8	27.51	4.5	4.1	22.7
2/2/2019 13:30	8	8	8	27.58	4.2	4.1	3.9
2/2/2019 13:40	8	8	8	27.61	4.3	4.1	3.8
2/2/2019 13:50	8	8	8	27.54	4.7	4	24.4

2/2/2019 14:00	8	8	8	27.54	4.5	4	24.4
2/2/2019 14:10	8	8	8	27.7	4.4	4	24.2
2/2/2019 14:20	8	8	8	27.67	4.5	4	24
2/2/2019 14:30	8	8	8	27.67	4.4	3.9	1.1
2/2/2019 14:40	8	8	8	27.7	4.5	4	3.3
2/2/2019 14:50	8	8	8	27.76	4.5	4	24.5
2/2/2019 15:00	8	8	8	27.7	4.3	4	24.5
2/2/2019 15:10	8	8	8	27.7	4.5	3.9	24.1
2/2/2019 15:20	8	8	8	27.73	4.4	4	24
2/2/2019 15:30	8	8	8	27.73	4.2	4	2.3
2/2/2019 15:40	8	8	8	27.73	4.5	4	3.2
2/2/2019 15:50	8	8	8	27.79	4.2	4	24.4
2/2/2019 16:00	8	8	8	27.79	4.3	3.9	24.3
2/2/2019 16:10	8	8	8	27.82	4.6	4	24
2/2/2019 16:20	8	8	8	27.76	4.3	3.9	16.9
2/2/2019 16:30	8	8	8	27.76	4.4	4	3.7
2/2/2019 16:40	8	8	8	27.76	4.3	4.1	24.5
2/2/2019 16:50	8	8	8	27.79	4.3	4	24.3
2/2/2019 17:00	8	8	8	27.82	4.4	4	24.2
2/2/2019 17:10	8	8	8	27.76	4.4	4	22.2
2/2/2019 17:20	8	8	8	27.82	4.3	4	3.7
2/2/2019 17:30	8	8	8	27.7	4.5	4.1	24.5
2/2/2019 17:40	8	8	8	27.73	4.5	3.9	24.4
2/2/2019 17:50	8	8	8	27.76	4.3	4	24.2
2/2/2019 18:00	8	8	8	27.76	4.6	4	23.9
2/2/2019 18:10	8	8	8	27.76	4.5	4	2
2/2/2019 18:20	8	8	8	27.82	4.4	4.1	4.6
2/2/2019 18:30	8	8	8	27.73	4.4	4	24.5
2/2/2019 18:40	8	8	8	27.7	4.4	3.9	24.3
2/2/2019 18:50	8	8	8	27.73	4.5	4.1	24.1
2/2/2019 19:00	8	8	8	27.79	4.2	4.1	23.5
2/2/2019 19:10	8	8	8	27.82	4.4	4	3.2
2/2/2019 19:20	8	8	8	27.76	4.4	4.1	3.9
2/2/2019 19:30	8	8	8	27.79	4.2	4	24.4
2/2/2019 19:40	8	8	8	27.7	4.4	4	24.3
2/2/2019 19:50	8	8	8	27.76	4.5	4.2	24.1
2/2/2019 20:00	8	8	8	27.79	4.3	3.9	19.1
2/2/2019 20:10	8	8	8	27.76	4.3	3.9	3.6
2/2/2019 20:20	8	8	8	27.73	4.5	4	24.6
2/2/2019 20:30	8	8	8	27.79	4.5	4.1	24.4
2/2/2019 20:40	8	8	8	27.73	4.4	4.1	24.2
2/2/2019 20:50	8	8	8	27.76	4.5	4	24.1
2/2/2019 21:00	8	8	8	27.76	4.4	4.1	1.4
2/2/2019 21:10	8	8	8	27.76	4.3	4	4.4
2/2/2019 21:20	8	8	8	27.79	4.3	4	24.4
2/2/2019 21:30	8	8	8	27.73	4.5	4	24.3
2/2/2019 21:40	8	8	8	27.64	4.3	4	24.1

2/2/2019 21:50	8	8	8	27.76	4.2	4.1	1.4
2/2/2019 22:00	8	8	8	27.76	4.4	4	4.6
2/2/2019 22:10	8	8	8	27.82	4.4	4.1	24.5
2/2/2019 22:20	8	8	8	27.73	4.2	4.1	24.3
2/2/2019 22:30	8	8	8	27.79	4.4	4.1	24
2/2/2019 22:40	8	8	8	27.76	4.4	4.1	1.4
2/2/2019 22:50	8	8	8	27.76	4.2	4.1	3.4
2/2/2019 23:00	8	8	8	27.76	4.4	4.1	24.5
2/2/2019 23:10	8	8	8	27.73	4.5	4	24.4
2/2/2019 23:20	8	8	8	27.73	4.3	3.9	24.1
2/2/2019 23:30	8	8	8	27.82	4.4	4.2	24
2/2/2019 23:40	8	8	8	27.79	4.6	4	2.1
2/2/2019 23:50	8	8	8	27.79	4.5	4	3.4
2/3/2019 0:00	8	8	8	27.79	4.4	4	24.5
2/3/2019 0:10	8	8	8	27.82	4.4	4.1	24.4
2/3/2019 0:20	8	8	8	27.85	4.3	4	24.1
2/3/2019 0:30	8	8	8	27.7	4.3	4	24
2/3/2019 0:40	8	8	8	27.76	4.4	4.1	1.7
2/3/2019 0:50	8	8	8	27.79	4.4	4	3.5
2/3/2019 1:00	8	8	8	27.79	4.5	4	24.6
2/3/2019 1:10	8	8	8	27.82	4.2	4	24.5
2/3/2019 1:20	8	8	8	27.76	4.4	4.1	24.3
2/3/2019 1:30	8	8	8	27.79	4.4	4	24.1
2/3/2019 1:40	8	8	8	27.85	4.2	4	24
2/3/2019 1:50	8	8	8	27.79	4.5	4	1.2
2/3/2019 2:00	8	8	8	27.85	4.4	4	3.6
2/3/2019 2:10	8	8	8	27.85	4.5	4	24.5
2/3/2019 2:20	8	8	8	27.82	4.4	4	24.4
2/3/2019 2:30	8	8	8	27.88	4.5	4	24.2
2/3/2019 2:40	8	8	8	27.85	4.3	4	24.1
2/3/2019 2:50	8	8	8	27.88	4.6	4	24.1
2/3/2019 3:00	8	8	8	27.79	4.3	4.1	2.1
2/3/2019 3:10	8	8	8	27.85	4.4	4.1	3.4
2/3/2019 3:20	8	8	8	27.88	4.4	4	24.5
2/3/2019 3:30	8	8	8	27.82	4.4	4	24.4
2/3/2019 3:40	8	8	8	27.85	4.4	4	24.2
2/3/2019 3:50	8	8	8	27.88	4.4	3.9	24.1
2/3/2019 4:00	8	8	8	27.94	4.7	3.9	1.2
2/3/2019 4:10	8	8	8	27.85	4.6	4	4.4
2/3/2019 4:20	8	8	8	27.94	4.4	3.9	24.5
2/3/2019 4:30	8	8	8	27.91	4.4	4	24.5
2/3/2019 4:40	8	8	8	27.91	4.4	4	24.3
2/3/2019 4:50	8	8	8	27.88	4.5	4	24.1
2/3/2019 5:00	8	8	8	27.91	4.2	4	24
2/3/2019 5:10	8	8	8	27.88	4.5	4.1	1.6
2/3/2019 5:20	8	8	8	27.85	4.2	4.1	3.5
2/3/2019 5:30	8	8	8	27.82	4.5	4.1	24.5

2/3/2019 5:40	8	8	8	27.85	4.3	4.1	24.5
2/3/2019 5:50	8	8	8	27.85	4.5	3.9	24.2
2/3/2019 6:00	8	8	8	27.88	4.4	4.1	24
2/3/2019 6:10	8	8	8	27.82	4.4	4.1	23.2
2/3/2019 6:20	8	8	8	27.79	4.3	4.1	2.1
2/3/2019 6:30	8	8	8	27.85	4.5	3.9	3.5
2/3/2019 6:40	8	8	8	27.82	4.3	4	24.5
2/3/2019 6:50	8	8	8	27.82	4.6	4.1	24.5
2/3/2019 7:00	8	8	8	27.82	4.5	3.9	24.3
2/3/2019 7:10	8	8	8	27.82	4.3	4	24.2
2/3/2019 7:20	8	8	8	27.79	4.5	4	24
2/3/2019 7:30	8	8	8	27.79	4.4	4	1.2
2/3/2019 7:40	8	8	8	27.76	4.5	3.9	4.2
2/3/2019 7:50	8	8	8	27.82	4	3.9	24.5
2/3/2019 8:00	8	8	8	27.82	4.4	4	24.4
2/3/2019 8:10	8	8	8	27.82	4.5	4.1	24.2
2/3/2019 8:20	8	8	8	27.79	4.4	4	24.2
2/3/2019 8:30	8	8	8	27.76	4.5	3.9	24
2/3/2019 8:40	8	8	8	27.79	4.4	4.1	20.9
2/3/2019 8:50	8	8	8	27.82	4.4	4	3.7
2/3/2019 9:00	8	8	8	27.79	4.7	4	3.3
2/3/2019 9:10	8	8	8	27.82	4.4	4.2	24.5
2/3/2019 9:20	8	8	8	27.82	4.3	4.1	24.4
2/3/2019 9:30	8	8	8	27.88	4.5	4	24.2
2/3/2019 9:40	8	8	8	27.85	5	3.9	24.1
2/3/2019 9:50	8	8	8	27.82	4.5	4.1	23.9
2/3/2019 10:00	8	8	8	27.82	4.4	4	1.2
2/3/2019 10:10	8	8	8	27.82	4.4	4.1	3.8
2/3/2019 10:20	8	8	8	27.91	4.4	4	24.5
2/3/2019 10:30	8	8	8	27.85	4.4	4	24.4
2/3/2019 10:40	8	8	8	27.82	4.4	4	24.2
2/3/2019 10:50	8	8	8	27.82	4.4	4	23.9
2/3/2019 11:00	8	8	8	27.85	4.2	4.1	24
2/3/2019 11:10	8	8	8	27.88	4.5	4	1.1
2/3/2019 11:20	8	8	8	27.91	4.5	4	3.5
2/3/2019 11:30	8	8	8	27.82	4.4	4.1	24.5
2/3/2019 11:40	8	8	8	27.91	4.3	3.9	24.5
2/3/2019 11:50	8	8	8	27.88	4.4	3.9	24.4
2/3/2019 12:00	8	8	8	27.85	4.2	4	24.2
2/3/2019 12:10	8	8	8	27.88	4.1	3.9	23.9
2/3/2019 12:20	8	8	8	27.91	4.5	3.9	21.1
2/3/2019 12:30	8	8	8	27.88	4.3	3.9	3.8
2/3/2019 12:40	8	8	8	28	4.3	4	3.3
2/3/2019 12:50	8	8	8	27.94	4.3	4	24.5
2/3/2019 13:00	8	8	8	28	4.8	4	24.4
2/3/2019 13:10	8	8	8	27.94	4.2	4	24.3
2/3/2019 13:20	8	8	8	27.94	4.6	3.9	24.2

2/3/2019 13:30	8	8	8	28	4.4	4	24.1
2/3/2019 13:40	8	8	8	28.09	4.5	3.9	24.1
2/3/2019 13:50	8	8	8	27.94	4.3	3.9	1
2/3/2019 14:00	8	8	8	28.03	4.7	3.9	3.8
2/3/2019 14:10	8	8	8	28	4.4	4	3.2
2/3/2019 14:20	8	8	8	27.91	4.7	3.9	24.5
2/3/2019 14:30	8	8	8	28.03	4.5	4	24.4
2/3/2019 14:40	8	8	8	28	4.2	3.9	24.2
2/3/2019 14:50	8	8	8	28	4.4	3.9	24.2
2/3/2019 15:00	8	8	8	28	4.4	4	23.9
2/3/2019 15:10	8	8	8	28	4.5	3.9	23.3
2/3/2019 15:20	8	8	8	27.94	4.3	4	2.8
2/3/2019 15:30	8	8	8	28	4.6	4	3.4
2/3/2019 15:40	8	8	8	28	4.3	4	24.4
2/3/2019 15:50	8	8	8	28	4.3	4	24.5
2/3/2019 16:00	8	8	8	28	4.3	3.9	24.4
2/3/2019 16:10	8	8	8	27.94	4.6	4	24.2
2/3/2019 16:20	8	8	8	27.91	4.4	4.1	24.2
2/3/2019 16:30	8	8	8	28.06	4.4	3.9	23.9
2/3/2019 16:40	8	8	8	28.03	4.5	4	19.2
2/3/2019 16:50	8	8	8	27.91	4.3	4	3
2/3/2019 17:00	8	8	8	27.94	4.4	3.9	4
2/3/2019 17:10	8	8	8	28	4.3	3.9	23.4
2/3/2019 17:20	8	8	8	27.94	4.2	4.1	24.4
2/3/2019 17:30	8	8	8	27.94	4.2	3.9	24.2
2/3/2019 17:40	8	8	8	28.03	4.4	4.1	24.2
2/3/2019 17:50	8	8	8	28	4.2	4.1	24
2/3/2019 18:00	8	8	8	28.03	4.4	3.9	22.7
2/3/2019 18:10	8	8	8	28	4.2	3.9	4.3
2/3/2019 18:20	8	8	8	28	4.4	3.9	3.6
2/3/2019 18:30	8	8	8	27.94	4.6	4	24.5
2/3/2019 18:40	8	8	8	27.91	4.6	3.9	24.4
2/3/2019 18:50	8	8	8	27.94	4.3	3.9	24.2
2/3/2019 19:00	8	8	8	27.91	4.4	4	24
2/3/2019 19:10	8	8	8	28	4.2	3.9	24
2/3/2019 19:20	8	8	8	28	4.4	3.9	1
2/3/2019 19:30	8	8	8	28	4.2	3.9	3.8
2/3/2019 19:40	8	8	8	28	4.4	3.9	4
2/3/2019 19:50	8	8	8	27.88	4.2	3.9	24.5
2/3/2019 20:00	8	8	8	28.06	4.4	4.1	24.4
2/3/2019 20:10	8	8	8	27.91	4.5	4	24.3
2/3/2019 20:20	8	8	8	28	4.3	3.9	24.2
2/3/2019 20:30	8	8	8	27.94	4.4	4	24
2/3/2019 20:40	8	8	8	28	4.3	4	23.5
2/3/2019 20:50	8	8	8	28.03	4.6	4	1.1
2/3/2019 21:00	8	8	8	27.94	4.5	4.1	3.6
2/3/2019 21:10	8	8	8	28	4.2	4	4.4

2/3/2019 21:20	8	8	8	28.03	4.4	3.9	24.5
2/3/2019 21:30	8	8	8	28	4.2	3.9	24.3
2/3/2019 21:40	8	8	8	27.91	4.6	4.1	24.2
2/3/2019 21:50	8	8	8	28.03	4.3	4	24.1
2/3/2019 22:00	8	8	8	28	4.4	3.9	24
2/3/2019 22:10	8	8	8	27.91	4.5	4	22.1
2/3/2019 22:20	8	8	8	27.94	4.4	3.9	1.5
2/3/2019 22:30	8	8	8	28	4.6	4	3.6
2/3/2019 22:40	8	8	8	28	4.3	3.9	24.5
2/3/2019 22:50	8	8	8	28.03	4.3	4.1	24.5
2/3/2019 23:00	8	8	8	28.03	4.5	4	24.4
2/3/2019 23:10	8	8	8	28.06	4.3	3.9	24.1
2/3/2019 23:20	8	8	8	28.03	4.5	4	24
2/3/2019 23:30	8	8	8	28.06	4.8	4	24.1
2/3/2019 23:40	8	8	8	28.09	4.5	3.9	1.2
2/3/2019 23:50	8	8	8	28.06	4.4	4	4.3
2/4/2019 0:00	8	8	8	28.09	4.3	4	24.4
2/4/2019 0:10	8	8	8	28	4.2	3.9	24.4
2/4/2019 0:20	8	8	8	28.09	4.3	4	24.2
2/4/2019 0:30	8	8	8	28.09	4.5	3.9	24.2
2/4/2019 0:40	8	8	8	28.09	4.2	3.9	24
2/4/2019 0:50	8	8	8	28.06	4.4	4	23.8
2/4/2019 1:00	8	8	8	28.09	4.5	4	1.5
2/4/2019 1:10	8	8	8	28.12	4.6	4	4.2
2/4/2019 1:20	8	8	8	28.12	4.2	3.9	24.5
2/4/2019 1:30	8	8	8	28.12	4.3	3.9	24.5
2/4/2019 1:40	8	8	8	28.09	4.5	4	24.4
2/4/2019 1:50	8	8	8	28.12	4.5	4.1	24.2
2/4/2019 2:00	8	8	8	28.09	4.4	4	24
2/4/2019 2:10	8	8	8	28.16	4.4	3.9	24
2/4/2019 2:20	8	8	8	28.09	4.5	4	1
2/4/2019 2:30	8	8	8	28.09	4.3	4	3.6
2/4/2019 2:40	8	8	8	28.16	4.3	4.1	24.5
2/4/2019 2:50	8	8	8	28.03	4.4	3.9	24.4
2/4/2019 3:00	8	8	8	28.16	4.6	3.9	24.4
2/4/2019 3:10	8	8	8	28.12	4.4	3.9	24.2
2/4/2019 3:20	8	8	8	28.16	4	4.1	23.9
2/4/2019 3:30	8	8	8	28.09	4.3	3.8	22.8
2/4/2019 3:40	8	8	8	28.09	4.4	4	2.5
2/4/2019 3:50	8	8	8	28.09	4.5	3.9	3.5
2/4/2019 4:00	8	8	8	28.12	4.4	4	24.6
2/4/2019 4:10	8	8	8	28.12	4.2	4.1	24.4
2/4/2019 4:20	8	8	8	28.12	4.3	3.9	24.3
2/4/2019 4:30	8	8	8	28.12	4.3	4	24.1
2/4/2019 4:40	8	8	8	28.09	4.3	4	23.9
2/4/2019 4:50	8	8	8	28.09	4.3	3.9	1.1
2/4/2019 5:00	8	8	8	28.16	4.7	4	3.6

2/4/2019 5:10	8	8	8	28.06	4.3	3.9	3.7
2/4/2019 5:20	8	8	8	28.09	4.6	4	24.5
2/4/2019 5:30	8	8	8	27.91	4.3	3.9	24.4
2/4/2019 5:40	8	8	8	28.06	4.6	3.9	24.1
2/4/2019 5:50	8	8	8	28.06	4.5	4.1	24
2/4/2019 6:00	8	8	8	28.03	4.4	4	24
2/4/2019 6:10	8	8	8	28.06	4.3	3.9	1
2/4/2019 6:20	8	8	8	28.16	4.4	3.9	3.7
2/4/2019 6:30	8	8	8	28.09	4.5	3.9	24.6
2/4/2019 7:00	8	8	8	28.16	4.5	3.9	24.2
2/4/2019 7:10	8	8	8	28.16	4.4	4.1	24.1
2/4/2019 7:20	8	8	8	28.16	4.5	3.9	23.9
2/4/2019 7:30	8	8	8	28.06	4.4	4	1.1
2/4/2019 7:40	8	8	8	28.09	4.5	3.9	3.8
2/4/2019 7:50	8	8	8	28.16	4.4	4	24.5
2/4/2019 8:00	8	8	8	28.12	4.1	4	24.5
2/4/2019 8:10	8	8	8	28.19	4.4	3.9	24.3
2/4/2019 8:20	8	8	8	28.16	4.5	4.1	24.2
2/4/2019 8:30	8	8	8	28.12	4.2	4.1	24
2/4/2019 8:40	8	8	8	28.19	4.6	4.1	20.8
2/4/2019 8:50	8	8	8	28.22	4.3	4.1	1.7
2/4/2019 9:00	8	8	8	28.22	4.4	3.9	3.6
2/4/2019 9:10	8	8	8	28.22	4.4	4	3.3
2/4/2019 9:20	8	8	8	28.19	4.4	4.1	24.4
2/4/2019 9:30	8	8	8	28.19	4.3	4	24.4
2/4/2019 9:40	8	8	8	28.22	4.4	4	24.3
2/4/2019 9:50	8	8	8	28.16	4.3	3.9	24.2
2/4/2019 10:00	8	8	8	28.16	4.6	4	24.1
2/4/2019 10:10	8	8	8	28.22	4.4	4	21
2/4/2019 10:20	8	8	8	28.22	4.4	3.9	2.8
2/4/2019 10:30	8	8	8	28.22	4.6	4	4.3
2/4/2019 10:40	8	8	8	28.19	4.3	3.9	4.3
2/4/2019 10:50	8	8	8	28.22	4.5	4	24.5
2/4/2019 11:00	8	8	8	28.22	4.6	4.1	24.4
2/4/2019 11:10	8	8	8	28.22	4.4	3.9	24.3
2/4/2019 11:20	8	8	8	28.22	4.3	4	24.1
2/4/2019 11:30	8	8	8	28.19	4.4	3.9	23.9
2/4/2019 11:40	8	8	8	28.22	4.2	4.2	6.9
2/4/2019 11:50	8	8	8	28.12	4.7	4	1.9
2/4/2019 12:00	8	8	8	28.19	4.4	4	3.6
2/4/2019 12:10	8	8	8	28.25	4.4	4	24.5
2/4/2019 12:20	8	8	8	28.25	4.2	4.1	24.4
2/4/2019 12:30	8	8	8	28.22	4.7	3.9	24.3
2/4/2019 12:40	8	8	8	28.22	4.3	4	24.1
2/4/2019 12:50	8	8	8	28.22	4.4	4.1	24
2/4/2019 13:00	8	8	8	28.31	4.6	4	23.9
2/4/2019 13:10	8	8	8	28.31	4.4	4	3.2

2/4/2019 13:20	8	8	8	28.31	4.4	3.9	3.4
2/4/2019 13:30	8	8	8	28.28	4.1	3.9	24.4
2/4/2019 13:40	8	8	8	28.28	4.3	3.9	24.5
2/4/2019 13:50	8	8	8	28.22	4.5	4	24.3
2/4/2019 14:00	8	8	8	28.28	4.6	4.1	24.2
2/4/2019 14:10	8	8	8	28.28	4.4	4.1	24.2
2/4/2019 14:20	8	8	8	28.25	4.5	3.9	24
2/4/2019 14:30	8	8	8	28.22	4.2	4	23.9
2/4/2019 14:40	8	8	8	28.25	4.3	4	1
2/4/2019 14:50	8	8	8	28.31	4.3	4	3.8
2/4/2019 15:00	8	8	8	28.22	4.3	4	24.4
2/4/2019 15:10	8	8	8	28.28	4.4	3.9	24.5
2/4/2019 15:20	8	8	8	28.31	4.2	3.9	24.3
2/4/2019 15:30	8	8	8	28.31	4.4	4.2	24.1
2/4/2019 15:40	8	8	8	28.28	4.4	4	24
2/4/2019 15:50	8	8	8	28.28	4.4	4.1	24
2/4/2019 16:00	8	8	8	28.31	4.2	3.9	1.8
2/4/2019 16:10	8	8	8	28.28	4.5	3.9	4.3
2/4/2019 16:20	8	8	8	28.25	4.2	3.9	3.3
2/4/2019 16:30	8	8	8	28.34	4.4	3.9	24.5
2/4/2019 16:40	8	8	8	28.28	4.2	4.1	24.4
2/4/2019 16:50	8	8	8	28.22	4.4	4	24.3
2/4/2019 17:00	8	8	8	28.25	4.3	3.9	24.1
2/4/2019 17:10	8	8	8	28.28	4.4	3.8	23.9
2/4/2019 17:20	8	8	8	28.28	4.5	4	23.9
2/4/2019 17:30	8	8	8	28.34	4.4	3.9	1.3
2/4/2019 17:40	8	8	8	28.28	4.5	4.1	3.9
2/4/2019 17:50	8	8	8	28.31	4.4	4.1	24.5
2/4/2019 18:00	8	8	8	28.31	4.5	4	24.4
2/4/2019 18:10	8	8	8	28.34	4.4	4.1	24.3
2/4/2019 18:20	8	8	8	28.28	4.2	4.1	24.2
2/4/2019 18:30	8	8	8	28.37	4.4	4	24
2/4/2019 18:40	8	8	8	28.31	4.4	4	23.9
2/4/2019 18:50	8	8	8	28.43	4	4	1.8
2/4/2019 19:00	8	8	8	28.34	4.5	4	3.6
2/4/2019 19:10	8	8	8	28.31	4.4	3.9	3.7
2/4/2019 19:20	8	8	8	28.37	4.1	4.1	24.4
2/4/2019 19:30	8	8	8	28.37	4.4	4.1	24.4
2/4/2019 19:40	8	8	8	28.34	4.3	4	24.1
2/4/2019 19:50	8	8	8	28.34	4.4	3.8	23.8
2/4/2019 20:00	8	8	8	28.31	4.4	3.9	16.7
2/4/2019 20:10	8	8	8	28.34	4.5	4	3
2/4/2019 20:20	8	8	8	28.31	4.5	4	3.5
2/4/2019 20:30	8	8	8	28.31	4.6	3.8	24.5
2/4/2019 20:40	8	8	8	28.28	4.7	4	24.5
2/4/2019 20:50	8	8	8	28.34	4.5	4.1	24.3
2/4/2019 21:00	8	8	8	28.31	4.4	3.8	24.2

2/4/2019 21:10	8	8	8	28.31	4	3.9	24.1
2/4/2019 21:20	8	8	8	28.28	4.2	3.9	24
2/4/2019 21:30	8	8	8	28.37	4.2	3.9	16.7
2/4/2019 21:40	8	8	8	28.22	4.4	3.9	3.5
2/4/2019 21:50	8	8	8	28.34	4.3	4	3.6
2/4/2019 22:00	8	8	8	28.34	4.3	4	24.4
2/4/2019 22:10	8	8	8	28.34	4.6	4	24.3
2/4/2019 22:20	8	8	8	28.31	4.4	3.9	24.2
2/4/2019 22:30	8	8	8	28.34	4.3	3.9	24
2/4/2019 22:40	8	8	8	28.28	4.2	3.9	23.8
2/4/2019 22:50	8	8	8	28.31	4.4	3.9	1.7
2/4/2019 23:00	8	8	8	28.34	4.5	3.9	4.1
2/4/2019 23:10	8	8	8	28.37	4.4	4	24.6
2/4/2019 23:20	8	8	8	28.31	4.3	4	24.4
2/4/2019 23:30	8	8	8	28.34	4.5	3.9	24.3
2/4/2019 23:40	8	8	8	28.34	4.4	3.9	24.2
2/4/2019 23:50	8	8	8	28.34	4.2	4.1	24
2/5/2019 0:00	8	8	8	28.31	4.3	4	23.5
2/5/2019 0:10	8	8	8	28.31	4.3	3.9	2.4
2/5/2019 0:20	8	8	8	28.34	4.3	3.9	3.6
2/5/2019 0:30	8	8	8	28.37	4.3	4.1	24.5
2/5/2019 0:40	8	8	8	28.34	4.6	4	24.4
2/5/2019 0:50	8	8	8	28.37	4.5	3.9	24.3
2/5/2019 1:00	8	8	8	28.34	4.5	4	24.1
2/5/2019 1:10	8	8	8	28.34	4.1	4	24.1
2/5/2019 1:20	8	8	8	28.31	4.4	4	22.8
2/5/2019 1:30	8	8	8	28.22	4.5	3.9	3.8
2/5/2019 1:40	8	8	8	28.34	4.4	3.8	3.2
2/5/2019 1:50	8	8	8	28.34	4.7	4	24.5
2/5/2019 2:00	8	8	8	28.31	4.4	4.1	24.4
2/5/2019 2:10	8	8	8	28.31	4.4	4	24.3
2/5/2019 2:20	8	8	8	28.28	4.3	4	24.2
2/5/2019 2:30	8	8	8	28.4	4.5	4	24
2/5/2019 2:40	8	8	8	28.31	4.4	4	1
2/5/2019 2:50	8	8	8	28.37	4.3	3.9	3.8
2/5/2019 3:00	8	8	8	28.34	4.5	3.9	24.5
2/5/2019 3:10	8	8	8	28.34	4.4	4	24.4
2/5/2019 3:20	8	8	8	28.31	4.5	3.8	24.3
2/5/2019 3:30	8	8	8	28.34	4.3	3.9	24.1
2/5/2019 3:40	8	8	8	28.34	4.4	3.9	23.9
2/5/2019 3:50	8	8	8	28.4	4.4	3.9	1
2/5/2019 4:00	8	8	8	28.37	4.2	3.9	3.8
2/5/2019 4:10	8	8	8	28.34	4.7	4.1	24.5
2/5/2019 4:20	8	8	8	28.37	4.3	4	24.5
2/5/2019 4:30	8	8	8	28.4	4.2	4	24.3
2/5/2019 4:40	8	8	8	28.37	4.2	3.9	24.2
2/5/2019 4:50	8	8	8	28.37	4.2	4.1	24

2/5/2019 5:00	8	8	8	28.31	4.4	4	20.8
2/5/2019 5:10	8	8	8	28.34	4.5	4	2
2/5/2019 5:20	8	8	8	28.37	4.3	4	4.3
2/5/2019 5:30	8	8	8	28.31	4.3	4	3.9
2/5/2019 5:40	8	8	8	28.34	4.3	3.9	24.4
2/5/2019 5:50	8	8	8	28.34	4.4	3.9	24.3
2/5/2019 6:00	8	8	8	28.34	4.5	4	24.3
2/5/2019 6:10	8	8	8	28.28	4.8	4	24
2/5/2019 6:20	8	8	8	28.31	4.4	3.9	16.7
2/5/2019 6:30	8	8	8	28.4	4.4	4	3.9
2/5/2019 6:40	8	8	8	28.4	4.2	4	4.1
2/5/2019 6:50	8	8	8	28.37	4.2	4.1	24.5
2/5/2019 7:00	8	8	8	28.31	4.6	4.1	24.5
2/5/2019 7:10	8	8	8	28.34	4.3	4.1	24.3
2/5/2019 7:20	8	8	8	28.37	4.4	3.9	24.2
2/5/2019 7:30	8	8	8	28.37	4.7	4.1	23.9
2/5/2019 7:40	8	8	8	28.43	4.2	3.8	14.8
2/5/2019 7:50	8	8	8	28.37	4.5	4	4.2
2/5/2019 8:00	8	8	8	28.37	4.6	4	3.3
2/5/2019 8:10	8	8	8	28.34	4.4	3.9	24.5
2/5/2019 8:20	8	8	8	28.46	4.4	4.1	24.5
2/5/2019 8:30	8	8	8	28.34	4.4	4	24.3
2/5/2019 8:40	8	8	8	28.4	4.4	3.9	24.3
2/5/2019 8:50	8	8	8	28.37	4.4	4	24.2
2/5/2019 9:00	8	8	8	28.37	4.2	4.1	24
2/5/2019 9:10	8	8	8	28.31	4.6	4	7
2/5/2019 9:20	8	8	8	28.46	4.5	4	3.9
2/5/2019 9:30	8	8	8	28.4	4.5	4	4.6
2/5/2019 9:40	8	8	8	28.46	4	4	24.5
2/5/2019 9:50	8	8	8	28.4	4.2	4	24.3
2/5/2019 10:00	8	8	8	28.43	4.5	4.1	24.2
2/5/2019 10:10	8	8	8	28.46	4.6	4	24.1
2/5/2019 10:20	8	8	8	28.49	4.3	4	23.9
2/5/2019 10:30	8	8	8	28.46	4.5	4.1	6.6
2/5/2019 10:40	8	8	8	28.46	4.4	4	4.1
2/5/2019 10:50	8	8	8	28.52	4.6	4	3.2
2/5/2019 11:00	8	8	8	28.58	4.4	4	24.5
2/5/2019 11:10	8	8	8	28.49	4.4	4.1	24.4
2/5/2019 11:20	8	8	8	28.46	4.2	4	24.3
2/5/2019 11:30	8	8	8	28.49	4.2	3.9	24.2
2/5/2019 11:40	8	8	8	28.46	4.2	4	24.1
2/5/2019 11:50	8	8	8	28.49	4.3	4	23.9
2/5/2019 12:00	8	8	8	28.55	4.4	3.9	23.9
2/5/2019 12:10	8	8	8	28.49	4.3	4.2	6.8
2/5/2019 12:20	8	8	8	28.61	4.5	4.1	3.1
2/5/2019 12:30	8	8	8	28.58	4.4	4	3.4
2/5/2019 12:40	8	8	8	28.55	4.1	4.1	24.4

2/5/2019 12:50	8	8	8	28.61	4.4	4	24.4
2/5/2019 13:00	8	8	8	28.58	4.5	4	24.4
2/5/2019 13:10	8	8	8	28.61	4.4	4	24.3
2/5/2019 13:20	8	8	8	28.61	4.3	4	24.1
2/5/2019 13:30	8	8	8	28.61	4.5	4	24.1
2/5/2019 13:40	8	8	8	28.58	4.3	4.1	23.1
2/5/2019 13:50	8	8	8	28.61	4.2	4	2.7
2/5/2019 14:00	8	8	8	28.58	4.4	4	3.5
2/5/2019 14:10	8	8	8	28.61	4.4	3.9	24.5
2/5/2019 14:20	8	8	8	28.58	4.4	4	24.3
2/5/2019 14:30	8	8	8	28.55	4.4	4.1	24.3
2/5/2019 14:40	8	8	8	28.55	4.2	4	24.1
2/5/2019 14:50	8	8	8	28.58	4.3	4	24
2/5/2019 15:00	8	8	8	28.55	4.5	4.1	23.9
2/5/2019 15:10	8	8	8	28.49	4.5	3.9	1.1
2/5/2019 15:20	8	8	8	28.52	4.5	4	3.5
2/5/2019 15:30	8	8	8	28.58	4.3	4	3.2
2/5/2019 15:40	8	8	8	28.58	4.4	4	24.5
2/5/2019 15:50	8	8	8	28.55	4.3	4	24.4
2/5/2019 16:00	8	8	8	28.52	4.2	4	24.3
2/5/2019 16:10	8	8	8	28.58	4.3	4	24.2
2/5/2019 16:20	8	8	8	28.58	4.6	3.9	24
2/5/2019 16:30	8	8	8	28.58	4.4	4	23.9
2/5/2019 16:40	8	8	8	28.46	4.7	3.9	18.7
2/5/2019 16:50	8	8	8	28.46	4.4	4	3.7
2/5/2019 17:00	8	8	8	28.52	4.3	4	3.5
2/5/2019 17:10	8	8	8	28.55	4.4	4	24.5
2/5/2019 17:20	8	8	8	28.52	4.4	4	24.4
2/5/2019 17:30	8	8	8	28.52	4.4	4	24.3
2/5/2019 17:40	8	8	8	28.52	4.3	4	24.1
2/5/2019 17:50	8	8	8	28.58	4.3	4	23.9
2/5/2019 18:00	8	8	8	28.55	4.4	3.9	23.9
2/5/2019 18:10	8	8	8	28.55	4.3	4	6.7
2/5/2019 18:20	8	8	8	28.58	4.5	3.9	4.1
2/5/2019 18:30	8	8	8	28.61	4.4	4	3.3
2/5/2019 18:40	8	8	8	28.55	4.2	4.1	24.4
2/5/2019 18:50	8	8	8	28.55	4.4	4	24.5
2/5/2019 19:00	8	8	8	28.55	4.2	4.1	24.3
2/5/2019 19:10	8	8	8	28.55	4.3	4	24.1
2/5/2019 19:20	8	8	8	28.55	4.5	4.1	23.9
2/5/2019 19:30	8	8	8	28.58	4.4	4	1.4
2/5/2019 19:40	8	8	8	28.55	5.4	3.9	3.2
2/5/2019 19:50	8	8	8	28.55	4.3	4	24.5
2/5/2019 20:00	8	8	8	28.58	4.1	4	24.4
2/5/2019 20:10	8	8	8	28.61	4.3	4	24.2
2/5/2019 20:20	8	8	8	28.61	4.5	3.9	24.1
2/5/2019 20:30	8	8	8	28.58	4.4	3.9	23.9

2/5/2019 20:40	8	8	8	28.55	4.5	4.1	1.1
2/5/2019 20:50	8	8	8	28.58	4.2	4	3.7
2/5/2019 21:00	8	8	8	28.58	4.6	3.9	3.2
2/5/2019 21:10	8	8	8	28.52	4.5	3.9	24.5
2/5/2019 21:20	8	8	8	28.55	4.4	4.1	24.4
2/5/2019 21:30	8	8	8	28.7	4.3	3.9	24.3
2/5/2019 21:40	8	8	8	28.61	4.3	3.9	24.2
2/5/2019 21:50	8	8	8	28.58	4.5	4	23.9
2/5/2019 22:00	8	8	8	28.61	4.5	4	1
2/5/2019 22:10	8	8	8	28.55	4.6	4	3.8
2/5/2019 22:20	8	8	8	28.61	4.4	3.9	24.6
2/5/2019 22:30	8	8	8	28.61	4.2	4	24.5
2/5/2019 22:40	8	8	8	28.55	4.5	4	24.4
2/5/2019 22:50	8	8	8	28.67	4.2	3.8	24.2
2/5/2019 23:00	8	8	8	28.61	4.3	4	24.1
2/5/2019 23:10	8	8	8	28.58	4.1	3.9	23.9
2/5/2019 23:20	8	8	8	28.61	4.3	3.9	1.1
2/5/2019 23:30	8	8	8	28.58	4.3	3.9	3.7
2/5/2019 23:40	8	8	8	28.67	4.3	4.1	24.5
2/5/2019 23:50	8	8	8	28.58	4.2	3.9	24.5
2/6/2019 0:00	8	8	8	28.58	4.7	3.9	24.3
2/6/2019 0:10	8	8	8	28.7	4.2	3.9	24.2
2/6/2019 0:20	8	8	8	28.58	4.4	4	24
2/6/2019 0:30	8	8	8	28.7	4.5	3.9	1.1
2/6/2019 0:40	8	8	8	28.58	4.4	3.9	4.4
2/6/2019 0:50	8	8	8	28.61	4.2	4	24.5
2/6/2019 1:00	8	8	8	28.58	4.4	3.9	24.4
2/6/2019 1:10	8	8	8	28.58	4.2	3.9	24.3
2/6/2019 1:20	8	8	8	28.61	4.3	4	24.1
2/6/2019 1:30	8	8	8	28.7	4.5	3.9	24
2/6/2019 1:40	8	8	8	28.67	4.3	4	1.1
2/6/2019 1:50	8	8	8	28.67	4.4	4.1	3.8
2/6/2019 2:00	8	8	8	28.61	4.5	3.9	24.5
2/6/2019 2:10	8	8	8	28.67	4.4	3.9	24.4
2/6/2019 2:20	8	8	8	28.67	4.4	4	24.3
2/6/2019 2:30	8	8	8	28.55	4.4	3.9	24.1
2/6/2019 2:40	8	8	8	28.67	4.5	4	23.9
2/6/2019 2:50	8	8	8	28.58	4.3	4.1	2.1
2/6/2019 3:00	8	8	8	28.67	4.3	4	4.1
2/6/2019 3:10	8	8	8	28.58	4.4	4.1	24.5
2/6/2019 3:20	8	8	8	28.58	4.5	4	24.5
2/6/2019 3:30	8	8	8	28.58	4.3	4	24.2
2/6/2019 3:40	8	8	8	28.52	4.5	3.9	24.2
2/6/2019 3:50	8	8	8	28.58	4.4	3.9	24.1
2/6/2019 4:00	8	8	8	28.58	4.1	4.1	24.1
2/6/2019 4:10	8	8	8	28.58	4.3	4	1.2
2/6/2019 4:20	8	8	8	28.55	4.4	4.1	3.7

2/6/2019 4:30	8	8	8	28.55	4.1	4	4.7
2/6/2019 4:40	8	8	8	28.55	4.2	4	24.5
2/6/2019 4:50	8	8	8	28.58	4.1	4	24.4
2/6/2019 5:00	8	8	8	28.52	4.3	3.9	24.3
2/6/2019 5:10	8	8	8	28.58	4.4	4.1	24.1
2/6/2019 5:20	8	8	8	28.55	4.4	4	24
2/6/2019 5:30	8	8	8	28.58	4.5	3.9	1
2/6/2019 5:40	8	8	8	28.49	4.4	3.9	3.7
2/6/2019 5:50	8	8	8	28.52	4.4	3.9	4.7
2/6/2019 6:00	8	8	8	28.58	4.4	4	24.5
2/6/2019 6:10	8	8	8	28.49	4.5	3.9	24.4
2/6/2019 6:20	8	8	8	28.55	4.4	4	24.3
2/6/2019 6:30	8	8	8	28.55	4.2	4	24.2
2/6/2019 6:40	8	8	8	28.46	4.2	4	24.1
2/6/2019 6:50	8	8	8	28.55	4.5	4	18.9
2/6/2019 7:00	8	8	8	28.52	4.4	4	3.5
2/6/2019 7:10	8	8	8	28.61	4.4	4	3.3
2/6/2019 7:20	8	8	8	28.55	4.5	4	24.5
2/6/2019 7:30	8	8	8	28.49	4.5	3.9	24.5
2/6/2019 7:40	8	8	8	28.49	4.4	4.2	24.2
2/6/2019 7:50	8	8	8	28.61	4.4	4	24.2
2/6/2019 8:00	8	8	8	28.52	4.2	3.9	24.1
2/6/2019 8:10	8	8	8	28.49	4.4	4	19
2/6/2019 8:20	8	8	8	28.58	4.3	4	4.1
2/6/2019 8:30	8	8	8	28.55	4.4	4.1	3.5
2/6/2019 8:40	8	8	8	28.55	4.3	4	24.5
2/6/2019 8:50	8	8	8	28.55	4.6	4.1	24.5
2/6/2019 9:00	8	8	8	28.49	4.3	4	24.5
2/6/2019 9:10	8	8	8	28.58	4	4.1	24.2
2/6/2019 9:20	8	8	8	28.55	4.8	3.9	24.1
2/6/2019 9:30	8	8	8	28.55	4.4	4.1	23.4
2/6/2019 9:40	8	8	8	28.49	4.4	4.1	2.9
2/6/2019 9:50	8	8	8	28.52	4.3	3.9	3.7
2/6/2019 10:00	8	8	8	28.58	4.3	4.2	24.5
2/6/2019 10:10	8	8	8	28.49	4.2	3.9	24.5
2/6/2019 10:20	8	8	8	28.52	4.3	4	24.4
2/6/2019 10:30	8	8	8	28.58	4.2	4.1	24.3
2/6/2019 10:40	8	8	8	28.52	4.3	4	24.1
2/6/2019 10:50	8	8	8	28.58	4.3	3.9	24.1
2/6/2019 11:00	8	8	8	28.55	4.5	4	24
2/6/2019 11:10	8	8	8	28.58	4.2	3.9	1.2
2/6/2019 11:20	8	8	8	28.58	4.3	3.9	3.5
2/6/2019 11:30	8	8	8	28.67	4.5	3.9	3.8
2/6/2019 11:40	8	8	8	28.61	4.2	3.9	24.5
2/6/2019 11:50	8	8	8	28.61	4.3	3.9	24.4
2/6/2019 12:00	8	8	8	28.58	4.4	4.1	24.3
2/6/2019 12:10	8	8	8	28.67	4.4	4.1	24.2

2/6/2019 12:20	8	8	8	28.67	4.5	4.1	24
2/6/2019 12:30	8	8	8	28.7	4.1	3.9	22.1
2/6/2019 12:40	8	8	8	28.74	4.4	4	3.4
2/6/2019 12:50	8	8	8	28.74	4.3	4	3.2
2/6/2019 13:00	8	8	8	28.7	4.5	4	24.5
2/6/2019 13:10	8	8	8	28.77	4.4	4.1	24.3
2/6/2019 13:20	8	8	8	28.74	4.3	3.9	24.3
2/6/2019 13:30	8	8	8	28.77	4.2	3.9	24
2/6/2019 13:40	8	8	8	28.67	4.2	4.1	23.9
2/6/2019 13:50	8	8	8	28.7	4.5	4	2
2/6/2019 14:00	8	8	8	28.77	4.4	4	4.5
2/6/2019 14:10	8	8	8	28.77	4.2	4.1	24.5
2/6/2019 14:20	8	8	8	28.77	4.6	4.1	24.4
2/6/2019 14:30	8	8	8	28.77	4.4	3.9	24.4
2/6/2019 14:40	8	8	8	28.74	4.2	3.9	24.2
2/6/2019 14:50	8	8	8	28.77	4.2	4.1	24.1
2/6/2019 15:00	8	8	8	28.83	4.5	3.9	24
2/6/2019 15:10	8	8	8	28.77	4.4	4	1.9
2/6/2019 15:20	8	8	8	28.74	4.3	4	4.3
2/6/2019 15:30	8	8	8	28.8	4.5	4	3.4
2/6/2019 15:40	8	8	8	28.77	4.2	4	24.5
2/6/2019 15:50	8	8	8	28.77	4.4	4	24.4
2/6/2019 16:00	8	8	8	28.7	4	3.9	24.3
2/6/2019 16:10	8	8	8	28.7	4.2	3.9	24.2
2/6/2019 16:20	8	8	8	28.74	4.2	4.1	24
2/6/2019 16:30	8	8	8	28.74	4.4	4	22.6
2/6/2019 16:40	8	8	8	28.77	4.5	3.9	2.2
2/6/2019 16:50	8	8	8	28.74	4.1	3.9	4.1
2/6/2019 17:00	8	8	8	28.74	4.4	4	24.5
2/6/2019 17:10	8	8	8	28.8	4.4	4	24.5
2/6/2019 17:20	8	8	8	28.83	4.3	3.9	24.3
2/6/2019 17:30	8	8	8	28.8	4.4	4	24.2
2/6/2019 17:40	8	8	8	28.8	4.3	4	24.2
2/6/2019 17:50	8	8	8	28.8	4.5	3.9	20.8
2/6/2019 18:00	8	8	8	28.86	4.3	4	4.1
2/6/2019 18:10	8	8	8	28.89	4.4	4	3.3
2/6/2019 18:20	8	8	8	28.8	4.3	4	24.5
2/6/2019 18:30	8	8	8	28.8	4.6	4.1	24.5
2/6/2019 18:40	8	8	8	28.89	4.5	4.1	24.4
2/6/2019 18:50	8	8	8	28.83	4.5	4	24.1
2/6/2019 19:00	8	8	8	28.86	4.3	3.9	24
2/6/2019 19:10	8	8	8	28.86	4.4	4	24
2/6/2019 19:20	8	8	8	28.86	4.5	4	2
2/6/2019 19:30	8	8	8	28.86	4.4	4	3.4
2/6/2019 19:40	8	8	8	28.92	4.4	4.1	24.5
2/6/2019 19:50	8	8	8	28.92	4.5	3.9	24.4
2/6/2019 20:00	8	8	8	28.89	4.4	3.9	24.3

2/6/2019 20:10	8	8	8	28.95	4.3	3.9	24
2/6/2019 20:20	8	8	8	28.95	4.7	4	23.5
2/6/2019 20:30	8	8	8	28.95	4.2	4	3.7
2/6/2019 20:40	8	8	8	28.89	4.6	4.1	3.7
2/6/2019 20:50	8	8	8	28.98	4.7	3.9	24.6
2/6/2019 21:00	8	8	8	28.95	4.4	3.9	24.4
2/6/2019 21:10	8	8	8	29.01	4.5	4.1	24.2
2/6/2019 21:20	8	8	8	29.01	4.4	4	24.1
2/6/2019 21:30	8	8	8	28.98	4.2	4.1	24.1
2/6/2019 21:40	8	8	8	29.04	4.5	4	3.5
2/6/2019 21:50	8	8	8	29.01	4.6	4	4.3
2/6/2019 22:00	8	8	8	29.04	4.3	4	4
2/6/2019 22:10	8	8	8	29.1	4.6	4.1	24.6
2/6/2019 22:20	8	8	8	29.04	4.4	3.9	24.4
2/6/2019 22:30	8	8	8	29.01	4.5	3.9	24.1
2/6/2019 22:40	8	8	8	29.01	4.4	4	24.2
2/6/2019 22:50	8	8	8	28.95	4.4	4	3.5
2/6/2019 23:00	8	8	8	29.04	4.3	3.9	3.7
2/6/2019 23:10	8	8	8	29.01	4.4	4.1	10.6
2/6/2019 23:20	8	8	8	29.1	4.2	4	24.5
2/6/2019 23:30	8	8	8	29.07	4.6	3.9	24.3
2/6/2019 23:40	8	8	8	29.04	4.5	4	24.3
2/6/2019 23:50	8	8	8	29.07	4.2	4	24.1
2/7/2019 0:00	8	8	8	29.16	4.3	3.9	23.9
2/7/2019 0:10	8	8	8	29.07	4.3	3.9	2.5
2/7/2019 0:20	8	8	8	29.1	4.1	3.9	3.3
2/7/2019 0:30	8	8	8	29.04	4.4	4	24.5
2/7/2019 0:40	8	8	8	29.07	4.5	4.1	24.3
2/7/2019 0:50	8	8	8	29.1	4.7	4	24.1
2/7/2019 1:00	8	8	8	29.07	4.5	4.1	24.2
2/7/2019 1:10	8	8	8	29.04	4.3	4.1	10.9
2/7/2019 1:20	8	8	8	29.1	4.6	3.9	3.7
2/7/2019 1:30	8	8	8	29.07	4.5	4	24.5
2/7/2019 1:40	8	8	8	29.13	4.3	4.1	24.5
2/7/2019 1:50	8	8	8	29.04	4.4	4.1	24.3
2/7/2019 2:00	8	8	8	29.07	4.3	4.1	24.3
2/7/2019 2:10	8	8	8	29.01	4.6	4	24
2/7/2019 2:20	8	8	8	29.1	4.5	4.1	1.3
2/7/2019 2:30	8	8	8	29.1	4.2	4	4.3
2/7/2019 2:40	8	8	8	29.13	4.4	4	24.5
2/7/2019 2:50	8	8	8	29.16	4.3	4	24.4
2/7/2019 3:00	8	8	8	29.13	4.4	4.1	24.3
2/7/2019 3:10	8	8	8	29.13	4.8	4	24.1
2/7/2019 3:20	8	8	8	29.22	4.5	4	24
2/7/2019 3:30	8	8	8	29.13	5	4.1	2.2
2/7/2019 3:40	8	8	8	29.1	4.6	4	4.3
2/7/2019 3:50	8	8	8	29.16	4.5	4	24.6

2/7/2019 4:00	8	8	8	29.19	4.4	4.1	24.4
2/7/2019 4:10	8	8	8	29.16	4.3	4	24.3
2/7/2019 4:20	8	8	8	29.16	4.6	4	24
2/7/2019 4:30	8	8	8	29.16	4.4	3.9	23.8
2/7/2019 4:40	8	8	8	29.22	4.5	3.9	3.8
2/7/2019 4:50	8	8	8	29.19	4.5	4.1	4.5
2/7/2019 5:00	8	8	8	29.22	4.2	4	24.5
2/7/2019 5:10	8	8	8	29.13	4.3	4.1	24.2
2/7/2019 5:20	8	8	8	29.16	4.2	4	24
2/7/2019 5:30	8	8	8	29.19	4.4	3.9	23.3
2/7/2019 5:40	8	8	8	29.1	4.3	4.1	3
2/7/2019 5:50	8	8	8	29.22	4.3	3.9	4
2/7/2019 6:00	8	8	8	29.19	4.2	4	24.5
2/7/2019 6:10	8	8	8	29.19	4.5	4.1	24.3
2/7/2019 6:20	8	8	8	29.22	4.4	3.9	24
2/7/2019 6:30	8	8	8	29.22	4.5	4	14.4
2/7/2019 6:40	8	8	8	29.32	4.3	4	4
2/7/2019 6:50	8	8	8	29.32	4.3	4	3.3
2/7/2019 7:00	8	8	8	29.32	4.3	3.9	24.5
2/7/2019 7:10	8	8	8	29.32	4.2	4.1	24.4
2/7/2019 7:20	8	8	8	29.32	4.3	4	24.2
2/7/2019 7:30	8	8	8	29.35	4.1	4.1	24.1
2/7/2019 7:40	8	8	8	29.25	4.5	4.2	22.8
2/7/2019 7:50	8	8	8	29.32	4.3	3.9	3.9
2/7/2019 8:00	8	8	8	29.35	4.4	4.1	23.5
2/7/2019 8:10	8	8	8	29.38	4.4	4	24.4
2/7/2019 8:20	8	8	8	29.25	4.4	3.9	24.3
2/7/2019 8:30	8	8	8	29.32	4.3	4.1	24.1
2/7/2019 8:40	8	8	8	29.38	4.3	4	24
2/7/2019 8:50	8	8	8	29.25	4.4	4	1.9
2/7/2019 9:00	8	8	8	29.35	4.6	4.2	3.8
2/7/2019 9:10	8	8	8	29.35	4.4	4.1	24.5
2/7/2019 9:20	8	8	8	29.32	4.3	4	24.4
2/7/2019 9:30	8	8	8	29.41	4.3	4.1	24.2
2/7/2019 9:40	8	8	8	29.38	4.3	3.9	24
2/7/2019 9:50	8	8	8	29.32	4.4	4	1
2/7/2019 10:00	8	8	8	29.38	4.4	4	4.5
2/7/2019 10:10	8	8	8	29.35	4.3	4	24.5
2/7/2019 10:20	8	8	8	29.25	4.5	3.9	24.4
2/7/2019 10:30	8	8	8	29.25	4.1	4	24.4
2/7/2019 10:40	8	8	8	29.19	4.2	4	24.2
2/7/2019 10:50	8	8	8	25.9	4.2	4	24.1
2/7/2019 11:00	8	8	8	26.2	4.3	3.9	24.3
2/7/2019 11:10	8	8	8	26.23	4.3	4.1	24.5
2/7/2019 11:20	8	8	8	26.54	4.3	4.2	4
2/7/2019 11:30	8	8	8	26.75	4.3	4	3.3
2/7/2019 11:40	8	8	8	26.93	4.3	4	3.3

2/7/2019 11:50	8	8	8	27.09	4.3	4	3.3
2/7/2019 12:00	8	8	8	27.15	4.3	4	24.6
2/7/2019 12:10	8	8	8	27.36	4.3	3.9	24.5
2/7/2019 12:20	8	8	8	27.58	4.4	4	24.5
2/7/2019 12:30	8	8	8	27.7	4.9	3.9	24.4
2/7/2019 12:40	8	8	8	27.79	4.3	4	24.4
2/7/2019 12:50	8	8	8	27.91	4.4	4	24.3
2/7/2019 13:00	8	8	8	28.03	4.1	4	24.1
2/7/2019 13:10	8	8	8	28.12	4.3	4	23.9
2/7/2019 13:20	8	8	8	28.22	4.5	4.1	2.1
2/7/2019 13:30	8	8	8	28.34	4.5	4.1	3.3
2/7/2019 13:40	8	8	8	28.37	4.3	4.1	24.6
2/7/2019 13:50	8	8	8	28.46	4.2	4.1	24.4
2/7/2019 14:00	8	8	8	28.49	4.6	4.1	24.2
2/7/2019 14:10	8	8	8	28.67	4.4	4.1	24.1
2/7/2019 14:20	8	8	8	28.77	4.5	4.1	10.7
2/7/2019 14:30	8	8	8	28.74	4.3	4.1	4.5
2/7/2019 14:40	8	8	8	28.83	4.3	3.9	24.5
2/7/2019 14:50	8	8	8	28.83	4.5	4.1	24.5
2/7/2019 15:00	8	8	8	28.95	4	4	24.3
2/7/2019 15:10	8	8	8	28.98	4.5	3.9	24.1
2/7/2019 15:20	8	8	8	28.95	4.5	4	23.9
2/7/2019 15:30	8	8	8	29.07	4.3	4.1	1.9
2/7/2019 15:40	8	8	8	29.1	4.2	4	3.2
2/7/2019 15:50	8	8	8	29.16	4.3	3.8	24.5
2/7/2019 16:00	8	8	8	29.19	4.2	4	24.4
2/7/2019 16:10	8	8	8	29.19	4.1	4	24.2
2/7/2019 16:20	8	8	8	29.25	4.3	3.9	24.1
2/7/2019 16:30	8	8	8	29.32	4.5	4.1	1.1
2/7/2019 16:40	8	8	8	29.35	4.5	4	3.8
2/7/2019 16:50	8	8	8	29.38	4.2	3.9	24.6
2/7/2019 17:00	8	8	8	29.35	4.4	4.1	24.5
2/7/2019 17:10	8	8	8	29.41	4.2	4	24.3
2/7/2019 17:20	8	8	8	29.41	4.4	3.9	23.8
2/7/2019 17:30	8	8	8	29.41	4.6	4	1.1
2/7/2019 17:40	8	8	8	29.38	4.4	4.1	3.3
2/7/2019 17:50	8	8	8	29.38	4.5	4	24.5
2/7/2019 18:00	8	8	8	29.44	4.3	3.9	24.3
2/7/2019 18:10	8	8	8	29.5	4.2	4	24.2
2/7/2019 18:20	8	8	8	29.44	4.3	3.9	23.9
2/7/2019 18:30	8	8	8	29.5	4.3	4	2.9
2/7/2019 18:40	8	8	8	29.41	4.2	4.1	4.6
2/7/2019 18:50	8	8	8	29.5	4.2	3.9	24.4
2/7/2019 19:00	8	8	8	29.47	4.2	4	24.4
2/7/2019 19:10	8	8	8	29.53	4.9	4.1	24.2
2/7/2019 19:20	8	8	8	29.47	4.3	4	23.9
2/7/2019 19:30	8	8	8	29.56	4.1	4	3.1

2/7/2019 19:40	8	8	8	29.59	4.3	4.1	24.6
2/7/2019 19:50	8	8	8	29.59	4.1	4	24.5
2/7/2019 20:00	8	8	8	29.62	4.5	4	24.2
2/7/2019 20:10	8	8	8	29.65	4.3	4.1	24
2/7/2019 20:20	8	8	8	29.65	4.1	4	24.1
2/7/2019 20:30	8	8	8	29.65	4.3	4.1	4.4
2/7/2019 20:40	8	8	8	29.68	4.4	4.1	24.5
2/7/2019 20:50	8	8	8	29.65	4.3	4	24.4
2/7/2019 21:00	8	8	8	29.68	4.3	4.1	24.2
2/7/2019 21:10	8	8	8	29.65	4.2	3.9	24
2/7/2019 21:20	8	8	8	29.77	4.3	4	24.1
2/7/2019 21:30	8	8	8	29.68	4.3	4.1	3.6
2/7/2019 21:40	8	8	8	29.77	4.3	4	24.5
2/7/2019 21:50	8	8	8	29.77	4.2	4.1	24.5
2/7/2019 22:00	8	8	8	29.71	4.3	4	24.2
2/7/2019 22:10	8	8	8	29.8	4.3	3.9	24
2/7/2019 22:20	8	8	8	29.74	4.4	4.1	22.8
2/7/2019 22:30	8	8	8	29.8	4.3	4	4.2
2/7/2019 22:40	8	8	8	29.74	4.5	4	24.6
2/7/2019 22:50	8	8	8	29.8	4.4	4	24.4
2/7/2019 23:00	8	8	8	29.83	4.1	4	24.2
2/7/2019 23:10	8	8	8	29.74	4.4	3.9	23.3
2/7/2019 23:20	8	8	8	29.77	4.5	4	4
2/7/2019 23:30	8	8	8	29.77	4.1	4.1	24.5
2/7/2019 23:40	8	8	8	29.86	4.6	4.1	24.3
2/7/2019 23:50	8	8	8	29.8	4.4	4	24.1
2/8/2019 0:00	8	8	8	29.83	4.4	3.9	22
2/8/2019 0:10	8	8	8	29.86	4.5	4.1	3.7
2/8/2019 0:20	8	8	8	29.99	4.4	3.9	24.5
2/8/2019 0:30	8	8	8	29.86	4.5	4.1	24.5
2/8/2019 0:40	8	8	8	29.96	4.5	4	24.2
2/8/2019 0:50	8	8	8	29.96	4.4	4	24.1
2/8/2019 1:00	8	8	8	29.99	4.4	4.1	1.5
2/8/2019 1:10	8	8	8	29.8	4.2	3.9	3.3
2/8/2019 1:20	8	8	8	30.02	4.7	4.1	24.5
2/8/2019 1:30	8	8	8	29.96	4.5	4.1	24.3
2/8/2019 1:40	8	8	8	29.89	4.7	4.1	24
2/8/2019 1:50	8	8	8	29.89	4.5	4.1	3.1
2/8/2019 2:00	8	8	8	29.86	4.4	3.9	24.5
2/8/2019 2:10	8	8	8	30.05	4.2	4.1	24.4
2/8/2019 2:20	8	8	8	29.96	4.2	4.1	24.1
2/8/2019 2:30	8	8	8	29.89	4.1	3.9	3.4
2/8/2019 2:40	8	8	8	29.89	4.2	4.1	3.3
2/8/2019 2:50	8	8	8	30.08	4.4	4	24.4
2/8/2019 3:00	8	8	8	29.96	4.3	4.1	24.3
2/8/2019 3:10	8	8	8	29.99	4.6	4.1	24.2
2/8/2019 3:20	8	8	8	29.96	4.5	4	1.6

2/8/2019 3:30	8	8	8	29.99	4.4	4	4.4
2/8/2019 3:40	8	8	8	29.96	4.2	4	24.4
2/8/2019 3:50	8	8	8	30.02	4.4	4.2	24.3
2/8/2019 4:00	8	8	8	30.05	4.5	3.9	24
2/8/2019 4:10	8	8	8	30.02	4.4	4.1	3.2
2/8/2019 4:20	8	8	8	30.08	4.2	4.1	24.5
2/8/2019 4:30	8	8	8	30.05	4.3	4	24.4
2/8/2019 4:40	8	8	8	30.05	4.5	4	24.2
2/8/2019 4:50	8	8	8	30.05	4.4	4	24
2/8/2019 5:00	8	8	8	30.11	4.3	4	3.2
2/8/2019 5:10	8	8	8	29.99	4.6	4	24.6
2/8/2019 5:20	8	8	8	30.17	4.2	4.1	24.4
2/8/2019 5:30	8	8	8	30.08	4.2	4.1	24.2
2/8/2019 5:40	8	8	8	30.2	4.3	4.1	24.1
2/8/2019 5:50	8	8	8	30.08	4.2	4.1	3.7
2/8/2019 6:00	8	8	8	30.05	4.3	4	24.5
2/8/2019 6:10	8	8	8	30.05	4.2	4.1	24.4
2/8/2019 6:20	8	8	8	30.08	4.2	4.1	24.2
2/8/2019 6:30	8	8	8	30.08	4.5	4.1	20.9
2/8/2019 6:40	8	8	8	30.02	4.5	4.1	3.7
2/8/2019 6:50	8	8	8	30.14	4.4	4	24.5
2/8/2019 7:00	8	8	8	30.11	4.4	4	24.3
2/8/2019 7:10	8	8	8	30.17	4.1	4	24.1
2/8/2019 7:20	8	8	8	30.14	4.4	4	1.2
2/8/2019 7:30	8	8	8	30.02	4.1	4.1	3.4
2/8/2019 7:40	8	8	8	30.14	4.3	4	24.5
2/8/2019 7:50	8	8	8	30.11	4.4	4	24.2
2/8/2019 8:00	8	8	8	30.08	4.2	4	24.3
2/8/2019 8:10	8	8	8	30.14	4.5	4	2.8
2/8/2019 8:20	8	8	8	30.14	4.3	3.9	24.6
2/8/2019 8:30	8	8	8	30.11	4.4	4.1	24.4
2/8/2019 8:40	8	8	8	30.17	4.3	4.1	24.2
2/8/2019 8:50	8	8	8	30.11	4.4	4.1	22.8
2/8/2019 9:00	8	8	8	30.14	4.4	4	4.3
2/8/2019 9:10	8	8	8	30.2	4.2	4.1	24.5
2/8/2019 9:20	8	8	8	30.14	4.4	4.1	24.5
2/8/2019 9:30	8	8	8	30.14	4.1	4	24.1
2/8/2019 9:40	8	8	8	30.17	4.3	4.1	1.2
2/8/2019 9:50	8	8	8	30.14	4.2	3.9	3.4
2/8/2019 10:00	8	8	8	30.2	4.3	3.9	24.5
2/8/2019 10:10	8	8	8	30.23	4.6	4.1	24.3
2/8/2019 10:20	8	8	8	30.2	4.3	4.1	24.1
2/8/2019 10:30	8	8	8	30.17	4.3	4	1.4
2/8/2019 10:40	8	8	8	30.17	4.2	4	3.2
2/8/2019 10:50	8	8	8	30.17	4.2	4	24.5
2/8/2019 11:00	8	8	8	30.17	4.4	4.1	24.3
2/8/2019 11:10	8	8	8	30.2	4.1	4	24

2/8/2019 11:20	8	8	8	30.14	4.5	4	3.4
2/8/2019 11:30	8	8	8	30.26	4.4	3.9	24.5
2/8/2019 11:40	8	8	8	30.14	4.6	4.1	24.4
2/8/2019 11:50	8	8	8	30.29	4.3	4	24.2
2/8/2019 12:00	8	8	8	30.26	4.3	3.9	24.1
2/8/2019 12:10	8	8	8	30.26	4.4	4	3.8
2/8/2019 12:20	8	8	8	30.29	4.3	4.1	24.5
2/8/2019 12:30	8	8	8	30.32	4.5	4	24.2
2/8/2019 12:40	8	8	8	30.29	4.3	4	24.1
2/8/2019 12:50	8	8	8	30.29	4.5	4.1	3.2
2/8/2019 13:00	8	8	8	30.32	4.7	4.1	24.6
2/8/2019 13:10	8	8	8	30.35	4.5	4	24.3
2/8/2019 13:20	8	8	8	30.41	4.3	4	24
2/8/2019 13:30	8	8	8	30.41	4.5	4.1	1.2
2/8/2019 13:40	8	8	8	30.35	4.4	4	4.5
2/8/2019 13:50	8	8	8	30.35	4.1	4.1	24.4
2/8/2019 14:00	8	8	8	30.41	4.3	3.9	24.2
2/8/2019 14:10	8	8	8	30.41	4.4	4	1.1
2/8/2019 14:20	8	8	8	30.38	4.5	4.1	10.6
2/8/2019 14:30	8	8	8	30.44	4.3	4	24.5
2/8/2019 14:40	8	8	8	30.44	4.6	4	24
2/8/2019 14:50	8	8	8	30.41	4.6	4	1.1
2/8/2019 15:00	8	8	8	30.44	4.5	4.1	4.7
2/8/2019 15:10	8	8	8	30.47	4.4	4	24.5
2/8/2019 15:20	8	8	8	30.47	4.3	4	24.2
2/8/2019 15:30	8	8	8	30.44	4.3	4	24.1
2/8/2019 15:40	8	8	8	30.41	4.5	4	3.6
2/8/2019 15:50	8	8	8	30.44	4.5	4.1	24.5
2/8/2019 16:00	8	8	8	30.47	4.2	3.9	24.3
2/8/2019 16:10	8	8	8	30.41	3.9	4	24.1
2/8/2019 16:20	8	8	8	30.44	4.2	4	4.5
2/8/2019 16:30	8	8	8	30.41	4.3	4	24.4
2/8/2019 16:40	8	8	8	30.38	4.3	4	24.2
2/8/2019 16:50	8	8	8	30.32	4.9	4	23.9
2/8/2019 17:00	8	8	8	30.41	4.5	4	3.7
2/8/2019 17:10	8	8	8	30.38	4.4	4	24.5
2/8/2019 17:20	8	8	8	30.41	4.6	4.1	24.4
2/8/2019 17:30	8	8	8	30.41	4.4	4	24.1
2/8/2019 17:40	8	8	8	30.47	4.4	4	2.5
2/8/2019 17:50	8	8	8	30.41	4.2	4.1	24.5
2/8/2019 18:00	8	8	8	30.38	4.3	3.9	24.3
2/8/2019 18:10	8	8	8	30.41	4.6	4	24
2/8/2019 18:20	8	8	8	30.44	4.5	4.1	4.3
2/8/2019 18:30	8	8	8	30.44	4.3	4.1	24.5
2/8/2019 18:40	8	8	8	30.44	4.5	4	24.3
2/8/2019 18:50	8	8	8	30.41	4.5	4.1	24.1
2/8/2019 19:00	8	8	8	30.41	4.4	3.9	3.2

2/8/2019 19:10	8	8	8	30.44	4.4	4.1	24.5
2/8/2019 19:20	8	8	8	30.41	4.3	4.1	24.3
2/8/2019 19:30	8	8	8	30.44	4.2	3.9	24.3
2/8/2019 19:40	8	8	8	30.38	4.5	4.1	1.7
2/8/2019 19:50	8	8	8	30.38	4.2	4	24.6
2/8/2019 20:00	8	8	8	30.35	4.3	4.1	24.4
2/8/2019 20:10	8	8	8	30.38	4.4	4	24.2
2/8/2019 20:20	8	8	8	30.44	4.5	3.9	3.4
2/8/2019 20:30	8	8	8	30.38	4.5	4	24.5
2/8/2019 20:40	8	8	8	30.41	4.7	4	24.4
2/8/2019 20:50	8	8	8	30.41	4.7	3.9	24.1
2/8/2019 21:00	8	8	8	30.35	4.6	4.1	1.7
2/8/2019 21:10	8	8	8	30.41	4.3	4	24.5
2/8/2019 21:20	8	8	8	30.41	4.5	4	24.5
2/8/2019 21:30	8	8	8	30.32	4.4	4.1	24.1
2/8/2019 21:40	8	8	8	30.41	4.5	4	1
2/8/2019 21:50	8	8	8	30.41	4.5	3.9	3.3
2/8/2019 22:00	8	8	8	30.41	4.5	3.9	24.5
2/8/2019 22:10	8	8	8	30.35	4.4	3.9	24.2
2/8/2019 22:20	8	8	8	30.41	4.3	4	24
2/8/2019 22:30	8	8	8	30.41	4.3	4	3.8
2/8/2019 22:40	8	8	8	30.38	4.3	3.9	24.6
2/8/2019 22:50	8	8	8	30.41	4.2	4.1	24.3
2/8/2019 23:00	8	8	8	30.47	4.2	3.9	23.9
2/8/2019 23:10	8	8	8	30.41	4.5	3.9	4
2/8/2019 23:20	8	8	8	30.47	4.3	4	24.6
2/8/2019 23:30	8	8	8	30.38	4.4	3.9	24.3
2/8/2019 23:40	8	8	8	30.41	4.5	3.9	24.1
2/8/2019 23:50	8	8	8	30.35	4.3	4	1.7
2/9/2019 0:00	8	8	8	30.29	4.3	4	24.6
2/9/2019 0:10	8	8	8	30.32	4.3	4	24.3
2/9/2019 0:20	8	8	8	30.32	4.4	3.9	24.1
2/9/2019 0:30	8	8	8	30.41	4.1	4	2.4
2/9/2019 0:40	8	8	8	30.41	4.3	4	24.5
2/9/2019 0:50	8	8	8	30.38	4.4	4.1	24.3
2/9/2019 1:00	8	8	8	30.35	4.4	4	24
2/9/2019 1:10	8	8	8	30.38	4.5	4.1	2.2
2/9/2019 1:20	8	8	8	30.35	4.3	4	24.5
2/9/2019 1:30	8	8	8	30.32	4.3	4.1	24.4
2/9/2019 1:40	8	8	8	30.38	4.5	3.9	24.1
2/9/2019 1:50	8	8	8	30.41	4.3	4	1.2
2/9/2019 2:00	8	8	8	30.38	4.2	4	24.6
2/9/2019 2:10	8	8	8	30.35	4.2	4.1	24.5
2/9/2019 2:20	8	8	8	30.41	4.4	3.9	24.2
2/9/2019 2:30	8	8	8	30.38	4.2	4.1	1.9
2/9/2019 2:40	8	8	8	30.32	4.3	4	4.6
2/9/2019 2:50	8	8	8	30.35	4.4	3.9	24.5

2/9/2019 3:00	8	8	8	30.38	4.3	4	24.2
2/9/2019 3:10	8	8	8	30.41	4.6	4	1.1
2/9/2019 3:20	8	8	8	30.47	4.6	4	4.1
2/9/2019 3:30	8	8	8	30.51	4.2	4.1	24.4
2/9/2019 3:40	8	8	8	30.38	4.1	3.9	24.2
2/9/2019 3:50	8	8	8	30.47	4.5	4	1.1
2/9/2019 4:00	8	8	8	30.44	4.5	4.1	4
2/9/2019 4:10	8	8	8	30.44	4.5	4.1	24.5
2/9/2019 4:20	8	8	8	30.41	4.6	4	24.1
2/9/2019 4:30	8	8	8	30.44	4.2	4.1	3.1
2/9/2019 4:40	8	8	8	30.38	4.3	4.1	24.6
2/9/2019 4:50	8	8	8	30.47	4.4	4.1	24.3
2/9/2019 5:00	8	8	8	30.38	4.3	4.1	24
2/9/2019 5:10	8	8	8	30.32	4.3	4	3.7
2/9/2019 5:20	8	8	8	30.41	4.3	4	24.6
2/9/2019 5:30	8	8	8	30.35	4.5	4.1	24.3
2/9/2019 5:40	8	8	8	30.38	4.5	4	24.2
2/9/2019 5:50	8	8	8	30.44	4.3	4.1	3.5
2/9/2019 6:00	8	8	8	30.38	4	4	24.5
2/9/2019 6:10	8	8	8	30.32	4.7	4	24.3
2/9/2019 6:20	8	8	8	30.32	4.3	4	3.7
2/9/2019 6:30	8	8	8	30.29	4.4	4.1	3.8
2/9/2019 6:40	8	8	8	30.35	4.4	4	24.5
2/9/2019 6:50	8	8	8	30.29	4.3	4	24.1
2/9/2019 7:00	8	8	8	30.35	4.4	4	1.1
2/9/2019 7:10	8	8	8	30.41	4.4	4	4.6
2/9/2019 7:20	8	8	8	30.44	4.5	4.1	24.5
2/9/2019 7:30	8	8	8	30.41	4.9	4.1	24.2
2/9/2019 7:40	8	8	8	30.44	4.6	4.1	1.1
2/9/2019 7:50	8	8	8	30.41	4.2	4	24.6
2/9/2019 8:00	8	8	8	30.38	4.1	4	24.4
2/9/2019 8:10	8	8	8	30.29	4.5	4.1	24.2
2/9/2019 8:20	8	8	8	30.38	4.2	4.1	1.9
2/9/2019 8:30	8	8	8	30.35	4.2	4.1	24.7
2/9/2019 8:40	8	8	8	30.35	4.7	3.9	24.5
2/9/2019 8:50	8	8	8	30.35	4.4	4.1	24.1
2/9/2019 9:00	8	8	8	30.44	4	4	3.6
2/9/2019 9:10	8	8	8	30.38	4.1	4.1	24.5
2/9/2019 9:20	8	8	8	30.44	4.4	4.2	24.3
2/9/2019 9:30	8	8	8	30.47	4.4	4	24.3
2/9/2019 9:40	8	8	8	30.41	4.2	4	3.3
2/9/2019 9:50	8	8	8	30.44	4.2	4	24.5
2/9/2019 10:00	8	8	8	30.38	4.3	4.1	24.2
2/9/2019 10:10	8	8	8	30.44	4.3	4.1	11.1
2/9/2019 10:20	8	8	8	30.44	4.3	4.1	3.1
2/9/2019 10:30	8	8	8	30.41	4.4	4.1	24.5
2/9/2019 10:40	8	8	8	30.32	4.6	3.9	24.2

2/9/2019 10:50	8	8	8	30.41	4.3	4	1.2
2/9/2019 11:00	8	8	8	30.35	4.2	4.1	24.5
2/9/2019 11:10	8	8	8	30.41	4.2	4.1	24.4
2/9/2019 11:20	8	8	8	30.47	4.2	4	24.2
2/9/2019 11:30	8	8	8	30.47	4.3	4	1.1
2/9/2019 11:40	8	8	8	30.51	4.2	4	24.6
2/9/2019 11:50	8	8	8	30.51	4	4.1	24.4
2/9/2019 12:00	8	8	8	30.47	4.9	4	24
2/9/2019 12:10	8	8	8	30.54	4.3	4	4.1
2/9/2019 12:20	8	8	8	30.54	4.4	4	24.6
2/9/2019 12:30	8	8	8	30.47	4.4	4	24.2
2/9/2019 12:40	8	8	8	30.63	4.2	4.1	24.2
2/9/2019 12:50	8	8	8	30.54	4.2	4	3.3
2/9/2019 13:00	8	8	8	30.57	4.4	3.9	24.5
2/9/2019 13:10	8	8	8	30.51	4.5	4.1	24.4
2/9/2019 13:20	8	8	8	30.51	4.3	4	24.1
2/9/2019 13:30	8	8	8	30.54	4.8	4.1	1.1
2/9/2019 13:40	8	8	8	30.63	4.5	3.9	3.4
2/9/2019 13:50	8	8	8	30.54	4.1	4.1	24.5
2/9/2019 14:00	8	8	8	30.47	4.4	4.1	24.2
2/9/2019 14:10	8	8	8	30.41	4.5	3.9	24
2/9/2019 14:20	8	8	8	30.51	4.4	3.9	3.6
2/9/2019 14:30	8	8	8	30.57	4.6	4	24.5
2/9/2019 14:40	8	8	8	30.51	4.3	4	24.4
2/9/2019 14:50	8	8	8	30.57	4.2	4.1	24.1
2/9/2019 15:00	8	8	8	30.57	4.5	3.9	3.6
2/9/2019 15:10	8	8	8	30.63	4.4	4	24.5
2/9/2019 15:20	8	8	8	30.54	4.2	4.1	24.2
2/9/2019 15:30	8	8	8	30.54	4.2	4	24
2/9/2019 15:40	8	8	8	30.54	4.6	4	4.2
2/9/2019 15:50	8	8	8	30.57	4.2	3.9	24.6
2/9/2019 16:00	8	8	8	30.54	4.5	4	24.4
2/9/2019 16:10	8	8	8	30.57	4.3	3.9	24.2
2/9/2019 16:20	8	8	8	30.63	4.3	4.1	1
2/9/2019 16:30	8	8	8	30.54	4.3	3.9	3.3
2/9/2019 16:40	8	8	8	30.63	4.6	4	24.4
2/9/2019 16:50	8	8	8	30.57	4.4	4	24.1
2/9/2019 17:00	8	8	8	30.51	4.4	4	24
2/9/2019 17:10	8	8	8	30.63	4.4	4.1	3.7
2/9/2019 17:20	8	8	8	30.51	4.2	4	24.6
2/9/2019 17:30	8	8	8	30.57	4.2	4	24.3
2/9/2019 17:40	8	8	8	30.63	4.5	4.1	24.3
2/9/2019 17:50	8	8	8	30.57	4.4	3.9	1.2
2/9/2019 18:00	8	8	8	30.63	4.2	4.1	24.6
2/9/2019 18:10	8	8	8	30.57	4.1	4.1	24.4
2/9/2019 18:20	8	8	8	30.63	4.7	4	24.1
2/9/2019 18:30	8	8	8	30.69	4.4	4	1

2/9/2019 18:40	8	8	8	30.66	4.4	4	4.1
2/9/2019 18:50	8	8	8	30.57	4.4	4.1	24.5
2/9/2019 19:00	8	8	8	30.69	4.2	4.1	24.2
2/9/2019 19:10	8	8	8	30.66	4.4	4.1	23.3
2/9/2019 19:20	8	8	8	30.72	4.3	3.9	4.4
2/9/2019 19:30	8	8	8	30.63	4.5	4	24.5
2/9/2019 19:40	8	8	8	30.69	4.4	4	24.3
2/9/2019 19:50	8	8	8	30.69	4.6	4.1	24.2
2/9/2019 20:00	8	8	8	30.75	4.2	4	2.2
2/9/2019 20:10	8	8	8	30.69	4.2	4	4.8
2/9/2019 20:20	8	8	8	30.66	4.3	4	24.5
2/9/2019 20:30	8	8	8	30.75	4.4	4.1	24.3
2/9/2019 20:40	8	8	8	30.78	4.5	4.1	24
2/9/2019 20:50	8	8	8	30.78	4.1	4	4.1
2/9/2019 21:00	8	8	8	30.75	4.5	4.1	24.5
2/9/2019 21:10	8	8	8	30.81	4.6	4.1	24.4
2/9/2019 21:20	8	8	8	30.81	4.5	4	24.2
2/9/2019 21:30	8	8	8	30.81	4.3	4	11.2
2/9/2019 21:40	8	8	8	30.72	4.6	4	3.5
2/9/2019 21:50	8	8	8	30.75	4.3	4	24.5
2/9/2019 22:00	8	8	8	30.75	4.2	4.1	24.3
2/9/2019 22:10	8	8	8	30.78	4.6	4	23.9
2/9/2019 22:20	8	8	8	30.75	4.3	4	1.2
2/9/2019 22:30	8	8	8	30.66	4	4.1	4.6
2/9/2019 22:40	8	8	8	30.75	4.2	3.9	24.5
2/9/2019 22:50	8	8	8	30.72	4.5	4.1	24.2
2/9/2019 23:00	8	8	8	30.54	4.5	4.1	24
2/9/2019 23:10	8	8	8	30.78	4.5	4.1	3.5
2/9/2019 23:20	8	8	8	30.75	4.3	4.1	24.5
2/9/2019 23:30	8	8	8	30.75	4.3	4	24.5
2/9/2019 23:40	8	8	8	30.69	4.2	4	24.3
2/9/2019 23:50	8	8	8	30.69	4.6	4	24
2/10/2019 0:00	8	8	8	30.66	4.4	4	3.7
2/10/2019 0:10	8	8	8	30.75	4.5	3.9	24.6
2/10/2019 0:20	8	8	8	30.75	3.9	4.1	24.4
2/10/2019 0:30	8	8	8	30.78	4.6	4.1	24.2
2/10/2019 0:40	8	8	8	30.78	4.6	4	1.7
2/10/2019 0:50	8	8	8	30.75	4.7	4.1	24.6
2/10/2019 1:00	8	8	8	30.66	4.5	4.1	24.4
2/10/2019 1:10	8	8	8	30.81	4.5	4.1	24.2
2/10/2019 1:20	8	8	8	30.87	4.3	4.1	22.2
2/10/2019 1:30	8	8	8	30.81	4.3	3.9	3.8
2/10/2019 1:40	8	8	8	30.78	4.6	4	24.5
2/10/2019 1:50	8	8	8	30.84	4.4	4.1	24.3
2/10/2019 2:00	8	8	8	30.81	4.2	4.1	24.3
2/10/2019 2:10	8	8	8	30.87	4.4	4	2
2/10/2019 2:20	8	8	8	30.87	4.4	4.1	24.6

2/10/2019 2:30	8	8	8	30.81	4.5	4.1	24.3
2/10/2019 2:40	8	8	8	30.87	4.5	4.1	24
2/10/2019 2:50	8	8	8	30.84	4.3	4	1.5
2/10/2019 3:00	8	8	8	30.9	4.4	4	24.6
2/10/2019 3:10	8	8	8	30.9	4.2	4.1	24.5
2/10/2019 3:20	8	8	8	30.84	4.4	4.1	24.2
2/10/2019 3:30	8	8	8	30.81	4.5	4.1	1.1
2/10/2019 3:40	8	8	8	30.87	4.3	4.1	3.2
2/10/2019 3:50	8	8	8	30.84	4.5	4.1	24.5
2/10/2019 4:00	8	8	8	30.84	4.4	4.1	24.2
2/10/2019 4:10	8	8	8	30.72	4.5	4.2	24.2
2/10/2019 4:20	8	8	8	30.84	4.3	4.1	3.8
2/10/2019 4:30	8	8	8	30.84	4.3	4.1	24.4
2/10/2019 4:40	8	8	8	30.81	4.6	4.2	24.3
2/10/2019 4:50	8	8	8	30.84	4.4	4.1	24.1
2/10/2019 5:00	8	8	8	30.84	4.5	4.1	3.8
2/10/2019 5:10	8	8	8	30.87	4.1	4	24.6
2/10/2019 5:20	8	8	8	30.93	4.8	4	24.4
2/10/2019 5:30	8	8	8	30.93	4.3	4.2	24.1
2/10/2019 5:40	8	8	8	30.93	4.5	4	4.3
2/10/2019 5:50	8	8	8	30.9	4.5	3.9	24.6
2/10/2019 6:00	8	8	8	30.96	4	4.1	24.4
2/10/2019 6:10	8	8	8	30.99	4.5	4.1	24
2/10/2019 6:20	8	8	8	31.02	4.4	4.1	1.1
2/10/2019 6:30	8	8	8	30.96	4.6	4	3.4
2/10/2019 6:40	8	8	8	31.05	4.7	4	24.5
2/10/2019 6:50	8	8	8	30.99	4.2	4	24.3
2/10/2019 7:00	8	8	8	31.02	4.5	4.1	23.6
2/10/2019 7:10	8	8	8	30.9	4.5	4.1	3.8
2/10/2019 7:20	8	8	8	30.99	4	4	24.5
2/10/2019 7:30	8	8	8	30.96	4.3	4.1	24.2
2/10/2019 7:40	8	8	8	30.9	4.5	4.1	24
2/10/2019 7:50	8	8	8	30.93	4.5	4.1	3.9
2/10/2019 8:00	8	8	8	30.96	4.7	4.1	24.5
2/10/2019 8:10	8	8	8	30.96	4.3	4	24.3
2/10/2019 8:20	8	8	8	30.93	4.4	4.2	24
2/10/2019 8:30	8	8	8	31.05	4.3	4.1	3.7
2/10/2019 8:40	8	8	8	31.02	4.2	4.1	24.5
2/10/2019 8:50	8	8	8	30.96	4.5	4.1	24.3
2/10/2019 9:00	8	8	8	31.09	4.4	4.2	24
2/10/2019 9:10	8	8	8	31.02	4.4	4.2	3.1
2/10/2019 9:20	8	8	8	31.02	4.1	4.1	24.6
2/10/2019 9:30	8	8	8	31.09	4.5	4.1	24.5
2/10/2019 9:40	8	8	8	30.99	4.2	4.1	24.1
2/10/2019 9:50	8	8	8	31.05	4.5	4.1	1
2/10/2019 10:00	8	8	8	31.12	4.7	4.1	4.1
2/10/2019 10:10	8	8	8	31.05	4.2	4.1	24.4

2/10/2019 10:20	8	8	8	31.12	4.2	4.1	24.1
2/10/2019 10:30	8	8	8	31.12	4.4	4	1.3
2/10/2019 10:40	8	8	8	31.09	4.2	4.1	24.6
2/10/2019 10:50	8	8	8	31.15	4.2	4.1	24.4
2/10/2019 11:00	8	8	8	31.18	4.6	4.1	24
2/10/2019 11:10	8	8	8	31.15	4.2	4.1	1.7
2/10/2019 11:20	8	8	8	31.18	4.3	4.1	24.6
2/10/2019 11:30	8	8	8	31.21	4.3	4	24.4
2/10/2019 11:40	8	8	8	31.3	4.6	4.1	24
2/10/2019 11:50	8	8	8	31.21	4.3	4.1	1.2
2/10/2019 12:00	8	8	8	31.21	4.5	4.2	10.5
2/10/2019 12:10	8	8	8	31.21	4.5	4.1	24.5
2/10/2019 12:20	8	8	8	31.21	4.5	4.1	24.2
2/10/2019 12:30	8	8	8	31.15	4.3	4.1	14.8
2/10/2019 12:40	8	8	8	31.21	4.5	4.1	3.4
2/10/2019 12:50	8	8	8	31.3	4.3	4	24.4
2/10/2019 13:00	8	8	8	31.21	4.2	4.1	24.2
2/10/2019 13:10	8	8	8	31.27	4.5	3.9	3.6
2/10/2019 13:20	8	8	8	31.27	4.3	4.1	3.5
2/10/2019 13:30	8	8	8	31.3	4.4	4.1	24.5
2/10/2019 13:40	8	8	8	31.33	4.3	4.1	24.1
2/10/2019 13:50	8	8	8	31.33	4.4	4	1.1
2/10/2019 14:00	8	8	8	31.33	4.3	4.1	3.9
2/10/2019 14:10	8	8	8	31.36	4.4	4.1	24.4
2/10/2019 14:20	8	8	8	31.33	4.4	4.1	24.1
2/10/2019 14:30	8	8	8	31.36	4.5	4.1	1.2
2/10/2019 14:40	8	8	8	31.3	4.5	4.1	24.5
2/10/2019 14:50	8	8	8	31.3	4.5	4	24.4
2/10/2019 15:00	8	8	8	31.36	4.4	4.1	24.1
2/10/2019 15:10	8	8	8	31.36	4.5	4	2
2/10/2019 15:20	8	8	8	31.3	4.4	4.1	24.5
2/10/2019 15:30	8	8	8	31.3	4.5	4	24.4
2/10/2019 15:40	8	8	8	31.33	4.3	4	24.1
2/10/2019 15:50	8	8	8	31.42	4.2	4.1	1.1
2/10/2019 16:00	8	8	8	31.33	4.4	4.1	3.3
2/10/2019 16:10	8	8	8	31.39	4.5	4.1	24.5
2/10/2019 16:20	8	8	8	31.36	4.6	4	24.2
2/10/2019 16:30	8	8	8	31.33	4.2	4.1	24.1
2/10/2019 16:40	8	8	8	31.39	4.4	4.1	3.5
2/10/2019 16:50	8	8	8	31.36	4.9	4.1	24.5
2/10/2019 17:00	8	8	8	31.42	4.3	4.1	24.3
2/10/2019 17:10	8	8	8	31.33	4.6	4.1	23.9
2/10/2019 17:20	8	8	8	31.33	4.4	4.1	3.8
2/10/2019 17:30	8	8	8	31.33	4.4	4	24.5
2/10/2019 17:40	8	8	8	31.39	4.3	4.1	24.3
2/10/2019 17:50	8	8	8	31.42	4.4	4.1	24
2/10/2019 18:00	8	8	8	31.45	4.2	4	3.5

2/10/2019 18:10	8	8	8	31.36	4.3	4	24.5
2/10/2019 18:20	8	8	8	31.42	4.4	4.2	24.3
2/10/2019 18:30	8	8	8	31.45	4.1	4.1	23.9
2/10/2019 18:40	8	8	8	31.42	4.3	4.1	3.9
2/10/2019 18:50	8	8	8	31.42	4.2	4.1	24.5
2/10/2019 19:00	8	8	8	31.45	4.4	4.1	24.2
2/10/2019 19:10	8	8	8	31.48	4.6	4.1	23.9
2/10/2019 19:20	8	8	8	31.48	4.6	4.1	4.5
2/10/2019 19:30	8	8	8	31.48	4.5	4	24.5
2/10/2019 19:40	8	8	8	31.48	4.3	4	24.3
2/10/2019 19:50	8	8	8	31.57	4.4	4	24
2/10/2019 20:00	8	8	8	31.51	4.3	4.1	4.4
2/10/2019 20:10	8	8	8	31.51	4.4	4	24.5
2/10/2019 20:20	8	8	8	31.51	4.3	4.1	24.3
2/10/2019 20:30	8	8	8	31.51	4.4	4.1	23.6
2/10/2019 20:40	8	8	8	31.54	4.4	4.1	3.3
2/10/2019 20:50	8	8	8	31.51	4.3	4.1	24.5
2/10/2019 21:00	8	8	8	31.7	4.8	4	24.2
2/10/2019 21:10	8	8	8	31.6	4.3	4.1	1.2
2/10/2019 21:20	8	8	8	31.63	4.5	4	24.6
2/10/2019 21:30	8	8	8	31.51	4.6	3.9	24.5
2/10/2019 21:40	8	8	8	31.57	4.6	4	24.1
2/10/2019 21:50	8	8	8	31.63	4.2	4.1	3.2
2/10/2019 22:00	8	8	8	31.63	4.5	4	24.6
2/10/2019 22:10	8	8	8	31.6	4.5	4.2	24.3
2/10/2019 22:20	8	8	8	31.57	4.1	4.1	24
2/10/2019 22:30	8	8	8	31.57	4.4	4	3.3
2/10/2019 22:40	8	8	8	31.67	4.3	4	24.5
2/10/2019 22:50	8	8	8	31.63	4.6	4	24.2
2/10/2019 23:00	8	8	8	31.76	4.6	4.1	11.1
2/10/2019 23:10	8	8	8	31.73	4.4	4.1	4
2/10/2019 23:20	8	8	8	31.7	4.4	4.1	24.4
2/10/2019 23:30	8	8	8	31.7	4.6	4.1	24.1
2/10/2019 23:40	8	8	8	31.67	4.5	4.1	3.3
2/10/2019 23:50	8	8	8	31.6	4.7	4.1	24.5
2/11/2019 0:00	8	8	8	31.67	4.3	4.1	24.3
2/11/2019 0:10	8	8	8	31.7	4.5	4.1	24
2/11/2019 0:20	8	8	8	31.7	4.5	4.1	4.1
2/11/2019 0:30	8	8	8	31.7	4.7	4.1	24.5
2/11/2019 0:40	8	8	8	31.7	4.3	4.1	24.1
2/11/2019 0:50	8	8	8	31.76	4.4	4	1.1
2/11/2019 1:00	8	8	8	31.76	4.3	4	24.5
2/11/2019 1:10	8	8	8	31.76	4.6	4	24.4
2/11/2019 1:20	8	8	8	31.76	4.5	4.1	24
2/11/2019 1:30	8	8	8	31.63	4.5	4.1	3.4
2/11/2019 1:40	8	8	8	31.73	4.1	4	24.5
2/11/2019 1:50	8	8	8	31.73	4.5	4.1	24.2

2/11/2019 2:00	8	8	8	31.79	4.7	4.1	1
2/11/2019 2:10	8	8	8	31.76	4.2	4.1	24.6
2/11/2019 2:20	8	8	8	31.79	4.4	4.1	24.5
2/11/2019 2:30	8	8	8	31.82	4.6	4.1	24
2/11/2019 2:40	8	8	8	31.79	4.5	4	4.5
2/11/2019 2:50	8	8	8	31.82	4.5	4.1	24.5
2/11/2019 3:00	8	8	8	31.79	4.6	4.1	24.3
2/11/2019 3:10	8	8	8	31.82	4.7	3.9	3.4
2/11/2019 3:20	8	8	8	31.85	4.7	4	24.6
2/11/2019 3:30	8	8	8	31.82	4.4	4.1	24.3
2/11/2019 3:40	8	8	8	31.79	4.4	4.1	24.2
2/11/2019 3:50	8	8	8	31.82	4.6	4	1.6
2/11/2019 4:00	8	8	8	31.82	4.5	4	24.6
2/11/2019 4:10	8	8	8	31.82	4.2	4.1	24.2
2/11/2019 4:20	8	8	8	31.85	4.3	4.1	14.5
2/11/2019 4:30	8	8	8	31.88	4.6	4	3.4
2/11/2019 4:40	8	8	8	31.85	4.2	4.1	24.4
2/11/2019 4:50	8	8	8	31.82	4.5	4.1	24.1
2/11/2019 5:00	8	8	8	31.82	4.6	4.1	3.8
2/11/2019 5:10	8	8	8	31.85	4.7	4.1	24.5
2/11/2019 5:20	8	8	8	31.85	4.4	4.1	24.1
2/11/2019 5:30	8	8	8	31.85	4.4	4	2.9
2/11/2019 5:40	8	8	8	31.85	4.4	4.1	24.6
2/11/2019 5:50	8	8	8	31.85	4.6	4.1	24.4
2/11/2019 6:00	8	8	8	31.76	4.5	4.1	24
2/11/2019 6:10	8	8	8	31.97	4.4	4.1	3.5
2/11/2019 6:20	8	8	8	31.88	4.5	4.1	24.5
2/11/2019 6:30	8	8	8	31.79	4.3	4.1	24.2
2/11/2019 6:40	8	8	8	31.85	4.3	4.1	22.2
2/11/2019 6:50	8	8	8	31.94	4.6	4.1	3.3
2/11/2019 7:00	8	8	8	31.88	4.5	4.1	24.5
2/11/2019 7:10	8	8	8	31.88	4.6	4.1	24.2
2/11/2019 7:20	8	8	8	31.97	4.6	4.1	1
2/11/2019 7:30	8	8	8	31.88	4.6	4.1	24.5
2/11/2019 7:40	8	8	8	31.94	4.3	4	24.4
2/11/2019 7:50	8	8	8	31.94	4.4	4.1	24.2
2/11/2019 8:00	8	8	8	31.85	4.3	4.1	4.1
2/11/2019 8:10	8	8	8	31.97	4.4	4.1	24.5
2/11/2019 8:20	8	8	8	32.03	4.6	4.2	24.3
2/11/2019 8:30	8	8	8	31.88	4.4	4	23.9
2/11/2019 8:40	8	8	8	31.94	4.5	4.1	3.6
2/11/2019 8:50	8	8	8	31.79	4.3	4.1	24.6
2/11/2019 9:00	8	8	8	32	4.3	4.1	24.2
2/11/2019 9:10	8	8	8	31.88	4.4	4	3.6
2/11/2019 9:20	8	8	8	31.94	4.5	4.1	4.8
2/11/2019 9:30	8	8	8	31.97	4.5	4.1	24.4
2/11/2019 9:40	8	8	8	32	4.3	4.2	24.2

2/11/2019 9:50	8	8	8	32	4.5	4.1	1.1
2/11/2019 10:00	8	8	8	32	4.5	4.1	24.6
2/11/2019 10:10	8	8	8	32.03	4.4	4.1	24.5
2/11/2019 10:20	8	8	8	32.03	4.1	4.1	24.1
2/11/2019 10:30	8	8	8	32	4.3	4.1	1.5
2/11/2019 10:40	8	8	8	32.03	4.2	4.1	24.6
2/11/2019 10:50	8	8	8	32.06	4.5	4.1	24.3
2/11/2019 11:00	8	8	8	32.09	4.4	4.1	22.9
2/11/2019 11:10	8	8	8	32.18	4.5	4.1	4.6
2/11/2019 11:20	8	8	8	32.03	4.2	4.1	24.5
2/11/2019 11:30	8	8	8	32.09	4.5	4.1	24
2/11/2019 11:40	8	8	8	32.03	4.4	4.1	3.6
2/11/2019 11:50	8	8	8	32.09	4.5	4.1	24.5
2/11/2019 12:00	8	8	8	32.06	4.5	4.1	24.3
2/11/2019 12:10	8	8	8	32.15	4.4	4.2	23.8
2/11/2019 12:20	8	8	8	32.09	4.3	4.1	4.7
2/11/2019 12:30	8	8	8	32.12	4.4	4.1	24.4
2/11/2019 12:40	8	8	8	32.12	4.5	4.1	24.1
2/11/2019 12:50	8	8	8	32.09	4.7	4.2	2.1
2/11/2019 13:00	8	8	8	32.18	4.6	3.9	24.5
2/11/2019 13:10	8	8	8	32.12	4.6	4.1	24.3
2/11/2019 13:20	8	8	8	32.15	4.5	4	24
2/11/2019 13:30	8	8	8	32.15	4.2	4.1	3.5
2/11/2019 13:40	8	8	8	32.18	4.4	4.1	24.5
2/11/2019 13:50	8	8	8	32.15	4.7	4.1	24.1
2/11/2019 14:00	8	8	8	32.18	4.6	4.2	1.3
2/11/2019 14:10	8	8	8	32.18	4.4	4.1	24.5
2/11/2019 14:20	8	8	8	32.21	4.4	4.1	24.3
2/11/2019 14:30	8	8	8	32.21	4.6	4.2	24.2
2/11/2019 14:40	8	8	8	32.15	4.4	4	4.4
2/11/2019 14:50	8	8	8	32.18	4.3	4.1	24.6
2/11/2019 15:00	8	8	8	32.21	4.5	4.1	24.3
2/11/2019 15:10	8	8	8	32.25	4.8	4.1	1.1
2/11/2019 15:20	8	8	8	32.25	4.5	4.1	24.6
2/11/2019 15:30	8	8	8	32.28	4.4	4.1	24.3
2/11/2019 15:40	8	8	8	32.18	4.4	4.1	24.1
2/11/2019 15:50	8	8	8	32.28	4.5	4	3.5
2/11/2019 16:00	8	8	8	32.25	4.2	4.1	24.5
2/11/2019 16:10	8	8	8	32.31	4.7	4.1	24.2
2/11/2019 16:20	8	8	8	32.31	4.3	4	15.1
2/11/2019 16:30	8	8	8	32.28	4.6	4.1	24.6
2/11/2019 16:40	8	8	8	32.31	4.5	4.1	24.5
2/11/2019 16:50	8	8	8	32.28	4.5	4.1	24.1
2/11/2019 17:00	8	8	8	32.28	4.5	4.1	3.6
2/11/2019 17:10	8	8	8	32.4	4.5	4.1	24.5
2/11/2019 17:20	8	8	8	32.31	4.5	4.2	24.2
2/11/2019 17:30	8	8	8	32.28	4.6	4.1	3.5

2/11/2019 17:40	8	8	8	32.28	4.6	4.1	3.8
2/11/2019 17:50	8	8	8	32.28	4.3	4.1	24.4
2/11/2019 18:00	8	8	8	32.31	4.1	4.1	24.1
2/11/2019 18:10	8	8	8	32.28	4.5	4.1	1.1
2/11/2019 18:20	8	8	8	32.25	4.5	4	24.5
2/11/2019 18:30	8	8	8	32.31	4.3	4.1	24.3
2/11/2019 18:40	8	8	8	32.21	4.4	4	24.1
2/11/2019 18:50	8	8	8	32.18	4.4	4.1	3.6
2/11/2019 19:00	8	8	8	32.18	4.5	4.1	24.5
2/11/2019 19:10	8	8	8	32.18	4.4	4.1	24.2
2/11/2019 19:20	8	8	8	32.18	4.2	4.1	22.8
2/11/2019 19:30	8	8	8	32.18	4.5	4.1	3.2
2/11/2019 19:40	8	8	8	32.15	4.4	4.2	24.5
2/11/2019 19:50	8	8	8	32.18	4.5	4.1	24.2
2/11/2019 20:00	8	8	8	32.15	4.1	4.1	2.5
2/11/2019 20:10	8	8	8	32.28	4.8	4.1	24.6
2/11/2019 20:20	8	8	8	32.15	4.3	4.1	24.4
2/11/2019 20:30	8	8	8	32.15	4.4	4.1	24.2
2/11/2019 20:40	8	8	8	32.18	4.4	4	3.6
2/11/2019 20:50	8	8	8	32.15	4.1	4.2	24.5
2/11/2019 21:00	8	8	8	32.18	4.4	4.1	24.3
2/11/2019 21:10	8	8	8	32.15	4.3	4.2	24
2/11/2019 21:20	8	8	8	32.15	4.7	4.1	4.3
2/11/2019 21:30	8	8	8	32.21	4.5	4.1	24.5
2/11/2019 21:40	8	8	8	32.18	4.7	3.9	24.3
2/11/2019 21:50	8	8	8	32.21	4.5	4.1	16.8
2/11/2019 22:00	8	8	8	32.21	4.4	4.1	4.5
2/11/2019 22:10	8	8	8	32.31	4.4	4.1	24.4
2/11/2019 22:20	8	8	8	32.21	4.3	4.1	24.3
2/11/2019 22:30	8	8	8	32.21	4.3	4.1	11.2
2/11/2019 22:40	8	8	8	32.21	4.5	4.1	4.4
2/11/2019 22:50	8	8	8	32.21	4.4	4	24.4
2/11/2019 23:00	8	8	8	32.25	4.3	4.1	24.1
2/11/2019 23:10	8	8	8	32.28	4.5	4.2	3.9
2/11/2019 23:20	8	8	8	32.21	4.3	4.2	24.5
2/11/2019 23:30	8	8	8	32.25	4.3	4.1	24.3
2/11/2019 23:40	8	8	8	32.21	4.3	4.1	24.2
2/11/2019 23:50	8	8	8	32.28	4.6	4.1	3.3
2/12/2019 0:00	8	8	8	32.25	4.5	4.1	24.5
2/12/2019 0:10	8	8	8	32.21	4.3	4.1	24.3
2/12/2019 0:20	8	8	8	32.25	4.7	4.1	1.1
2/12/2019 0:30	8	8	8	32.31	4.3	4.1	24.5
2/12/2019 0:40	8	8	8	32.25	4.5	4.1	24.2
2/12/2019 0:50	8	8	8	32.28	4.4	4.1	24.2
2/12/2019 1:00	8	8	8	32.28	4.5	4.1	3.9
2/12/2019 1:10	8	8	8	32.28	4.4	4.1	24.4
2/12/2019 1:20	8	8	8	32.31	4.4	4.1	24.2

2/12/2019 1:30	8	8	8	32.28	4.5	4.1	3.7
2/12/2019 1:40	8	8	8	32.28	4.3	4.1	24.5
2/12/2019 1:50	8	8	8	32.31	4.4	4.1	24.3
2/12/2019 2:00	8	8	8	32.34	4.5	4.1	1
2/12/2019 2:10	8	8	8	32.34	4.4	4.1	24.6
2/12/2019 2:20	8	8	8	32.34	4.3	4.2	24.4
2/12/2019 2:30	8	8	8	32.31	4.1	4.1	24.1
2/12/2019 2:40	8	8	8	32.25	4.4	4.1	3.7
2/12/2019 2:50	8	8	8	32.31	4.2	4.2	24.5
2/12/2019 3:00	8	8	8	32.28	4.6	4	24.3
2/12/2019 3:10	8	8	8	32.31	4.4	4.1	1.2
2/12/2019 3:20	8	8	8	32.34	4.7	4.2	24.5
2/12/2019 3:30	8	8	8	32.31	4.5	4.1	24.4
2/12/2019 3:40	8	8	8	32.31	4.2	4.1	24.1
2/12/2019 3:50	8	8	8	32.34	4.5	4.1	3.8
2/12/2019 4:00	8	8	8	32.28	4.2	4.1	24.5
2/12/2019 4:10	8	8	8	32.31	4.4	4.1	24.2
2/12/2019 4:20	8	8	8	32.31	4	4.1	24.1
2/12/2019 4:30	8	8	8	32.37	4.6	4.1	3.5
2/12/2019 4:40	8	8	8	32.43	4.5	4.1	24.4
2/12/2019 4:50	8	8	8	32.34	4.3	4.1	24.2
2/12/2019 5:00	8	8	8	32.37	4.3	4.2	3.6
2/12/2019 5:10	8	8	8	32.34	4.5	4.1	24.5
2/12/2019 5:20	8	8	8	32.37	4.3	4.2	24.3
2/12/2019 5:30	8	8	8	32.34	4.7	4.1	11.2
2/12/2019 5:40	8	8	8	32.28	4.7	4.2	4.8
2/12/2019 5:50	8	8	8	32.37	4.6	4	24.4
2/12/2019 6:00	8	8	8	32.31	4.6	4.1	24.1
2/12/2019 6:10	8	8	8	32.37	4.2	4.1	3.5
2/12/2019 6:20	8	8	8	32.28	4.4	4.2	24.4
2/12/2019 6:30	8	8	8	32.34	4.3	4.1	24.2
2/12/2019 6:40	8	8	8	32.34	4.3	4.1	3.6
2/12/2019 6:40	8	8	8	32.34	4.3	4.1	3.6
2/12/2019 6:50	8	8	8	32.31	4.4	4.1	24.6
2/12/2019 6:50	8	8	8	32.31	4.4	4.1	24.6
2/12/2019 7:00	8	8	8	32.4	4.5	4	24.3
2/12/2019 7:10	8	8	8	32.34	4.5	4.1	1.3
2/12/2019 7:20	8	8	8	32.34	4.5	4.1	4.4
2/12/2019 7:30	8	8	8	32.31	4.2	4.1	24.4
2/12/2019 7:40	8	8	8	32.28	4.1	4.1	24.1
2/12/2019 7:50	8	8	8	32.28	4.5	4.1	3.4
2/12/2019 8:00	8	8	8	32.31	4.4	4.2	24.4
2/12/2019 8:10	8	8	8	32.4	4.6	4.1	24.2
2/12/2019 8:20	8	8	8	32.31	4.9	4.1	4
2/12/2019 8:30	8	8	8	32.34	4.4	4.1	24.5
2/12/2019 8:40	8	8	8	32.31	4.3	4.1	24.3
2/12/2019 8:50	8	8	8	32.43	4.7	4.1	1.1

2/12/2019 9:00	8	8	8	32.34	4.3	4	24.6
2/12/2019 9:10	8	8	8	32.4	4.7	3.9	24.3
2/12/2019 9:20	8	8	8	32.4	4.5	4.2	23.9
2/12/2019 9:30	8	8	8	32.4	4.3	4.1	3.2
2/12/2019 9:40	8	8	8	32.43	4.2	4.2	24.5
2/12/2019 9:50	8	8	8	32.37	4.7	4.2	24.1
2/12/2019 10:00	8	8	8	32.34	4.5	4.2	2.8
2/12/2019 10:10	8	8	8	32.4	4.4	4.1	24.5
2/12/2019 10:20	8	8	8	32.4	4.4	4.1	24.2
2/12/2019 10:30	8	8	8	32.43	4.7	4.1	16.8
2/12/2019 10:40	8	8	8	32.34	4.4	4.2	23.5
2/12/2019 10:50	8	8	8	32.28	4.5	4.1	24.3
2/12/2019 11:00	8	8	8	32.34	4.3	4.1	24.1
2/12/2019 11:10	8	8	8	32.34	4.5	4.1	4.1
2/12/2019 11:20	8	8	8	32.31	4.6	4.1	24.5
2/12/2019 11:30	8	8	8	32.31	4.3	4	24.1
2/12/2019 11:40	8	8	8	32.37	4.5	4.2	1.2
2/12/2019 11:50	8	8	8	32.43	4.3	4.1	24.6
2/12/2019 12:00	8	8	8	32.34	4.3	4.1	24.3
2/12/2019 12:10	8	8	8	32.43	4.4	4.1	24
2/12/2019 12:20	8	8	8	32.4	4.9	4.1	3.3
2/12/2019 12:30	8	8	8	32.37	4.5	4.2	24.5
2/12/2019 12:40	8	8	8	32.43	4.8	4.2	24.1
2/12/2019 12:50	8	8	8	32.4	4.4	4.2	3.8
2/12/2019 13:00	8	8	8	32.46	4.7	4.2	24.6
2/12/2019 13:10	8	8	8	32.46	4.2	4.1	24.2
2/12/2019 13:20	8	8	8	32.46	4.7	4.2	1.2
2/12/2019 13:30	8	8	8	32.43	5	4.2	24.5
2/12/2019 13:40	8	8	8	32.43	4.8	4.1	24.3
2/12/2019 13:50	8	8	8	32.46	4.5	4.2	1.9
2/12/2019 14:00	8	8	8	32.46	4.7	4.1	24.6
2/12/2019 14:10	8	8	8	32.43	4.6	4.1	24.4
2/12/2019 14:20	8	8	8	32.46	4.6	4.1	23.9
2/12/2019 14:30	8	8	8	32.58	4.4	4.1	4.2
2/12/2019 14:40	8	8	8	32.61	4.6	4.1	24.5
2/12/2019 14:50	8	8	8	32.52	4.7	4.2	24.1
2/12/2019 15:00	8	8	8	32.49	4.7	4.1	1.9
2/12/2019 15:10	8	8	8	32.58	4.2	4.1	24.6
2/12/2019 15:20	8	8	8	32.67	4.3	4.1	24.3
2/12/2019 15:30	8	8	8	32.64	4.4	4.1	1.1
2/12/2019 15:40	8	8	8	32.64	4.3	4.2	24.5
2/12/2019 15:50	8	8	8	32.64	4.5	4.1	24.4
2/12/2019 16:00	8	8	8	32.64	4.8	4.2	24.1
2/12/2019 16:10	8	8	8	32.7	4.2	4.2	3.5
2/12/2019 16:20	8	8	8	32.7	4.5	4.2	24.6
2/12/2019 16:30	8	8	8	32.67	4.5	4.2	24.1
2/12/2019 16:40	8	8	8	32.73	4.4	4.1	3.8

2/12/2019 16:50	8	8	8	32.73	4.7	4.1	24.5
2/12/2019 17:00	8	8	8	32.7	4.5	4.2	24.2
2/12/2019 17:10	8	8	8	32.67	4.5	4.1	2.8
2/12/2019 17:20	8	8	8	32.76	4.6	4.1	24.6
2/12/2019 17:30	8	8	8	32.73	4.4	4.1	24.3
2/12/2019 17:40	8	8	8	32.79	4.6	4.2	1.1
2/12/2019 17:50	8	8	8	32.7	4.5	4.2	24.6
2/12/2019 18:00	8	8	8	32.73	4.4	4.2	24.3
2/12/2019 18:10	8	8	8	32.73	4.6	4.2	23.6
2/12/2019 18:20	8	8	8	32.83	4.4	4.2	4.8
2/12/2019 18:30	8	8	8	32.86	4.2	4.2	24.4
2/12/2019 18:40	8	8	8	32.86	4.4	4.2	24.1
2/12/2019 18:50	8	8	8	32.83	4.6	4.1	4.1
2/12/2019 19:00	8	8	8	32.73	4.8	4.1	24.5
2/12/2019 19:10	8	8	8	32.89	4.5	4.2	24.3
2/12/2019 19:20	8	8	8	32.83	4.4	4.1	1
2/12/2019 19:30	8	8	8	32.86	4.2	4.2	24.6
2/12/2019 19:40	8	8	8	32.79	4.6	4.2	24.4
2/12/2019 19:50	8	8	8	32.86	4.4	4.2	23.9
2/12/2019 20:00	8	8	8	32.86	4.4	4.1	3.3
2/12/2019 20:10	8	8	8	32.83	4.3	4.2	24.4
2/12/2019 20:20	8	8	8	32.83	4.5	4.2	24
2/12/2019 20:30	8	8	8	32.83	4.7	4.1	3.4
2/12/2019 20:40	8	8	8	32.83	4.4	4.1	24.5
2/12/2019 20:50	8	8	8	32.92	4.4	4.1	24.1
2/12/2019 21:00	8	8	8	32.89	4.5	4.1	3.2
2/12/2019 21:10	8	8	8	32.92	4.3	4.2	24.5
2/12/2019 21:20	8	8	8	32.89	4.4	4.2	24.2
2/12/2019 21:30	8	8	8	32.86	4.4	4.2	2.8
2/12/2019 21:40	8	8	8	32.86	4.5	4.1	24.6
2/12/2019 21:50	8	8	8	32.92	4.8	4.1	24.3
2/12/2019 22:00	8	8	8	32.89	4.4	4.2	1.2
2/12/2019 22:10	8	8	8	32.95	4.3	4.1	24.6
2/12/2019 22:20	8	8	8	32.95	4.5	4.2	24.3
2/12/2019 22:30	8	8	8	32.98	4.8	4.2	1.1
2/12/2019 22:40	8	8	8	32.95	4.3	4.2	24.6
2/12/2019 22:50	8	8	8	32.98	4.4	4.2	24.3
2/12/2019 23:00	8	8	8	32.95	4.4	4.2	23.2
2/12/2019 23:10	8	8	8	32.92	4.6	4.1	4.5
2/12/2019 23:20	8	8	8	32.92	4.5	4.1	24.4
2/12/2019 23:30	8	8	8	33.04	4.3	4.2	22.8
2/12/2019 23:40	8	8	8	33.04	4.4	4.1	23.5
2/12/2019 23:50	8	8	8	33.01	4.7	4	24.3
2/13/2019 0:00	8	8	8	33.01	4.3	4.1	24
2/13/2019 0:10	8	8	8	32.95	4.5	4.2	4.6
2/13/2019 0:20	8	8	8	33.01	4.7	4.2	24.4
2/13/2019 0:30	8	8	8	32.95	4.3	4.2	24

2/13/2019 0:40	8	8	8	33.04	4.6	4.2	23.5
2/13/2019 0:50	8	8	8	33.01	4.3	4.2	24.3
2/13/2019 1:00	8	8	8	33.04	4.5	4.1	20.8
2/13/2019 1:10	8	8	8	33.01	4.5	4.1	24.5
2/13/2019 1:20	8	8	8	33.01	4.3	4.2	24.3
2/13/2019 1:30	8	8	8	33.04	4.3	4.1	1.1
2/13/2019 1:40	8	8	8	33.04	4.6	4.2	24.6
2/13/2019 1:50	8	8	8	33.04	4.4	4.2	24.4
2/13/2019 2:00	8	8	8	33.07	4.9	4.1	1.3
2/13/2019 2:10	8	8	8	33.07	4.4	4.1	24.4
2/13/2019 2:20	8	8	8	33.1	4.4	4.2	24.3
2/13/2019 2:30	8	8	8	33.1	4.4	4.1	1.1
2/13/2019 2:40	8	8	8	33.13	4.6	4.2	24.5
2/13/2019 2:50	8	8	8	33.13	4.6	4.1	24.2
2/13/2019 3:00	8	8	8	33.16	4.6	4.2	3.5
2/13/2019 3:10	8	8	8	33.22	4.4	4.1	24.5
2/13/2019 3:20	8	8	8	33.22	4.4	4.1	24.3
2/13/2019 3:30	0	0	0	33.44	3.6	3.7	0.3
2/13/2019 3:40	0	0	0	33.44	3.6	3.7	0.3
2/13/2019 3:50	0	0	0	33.44	3.6	3.7	0.3
2/13/2019 4:00	0	0	0	33.44	3.6	3.6	0.3
2/13/2019 4:10	0	0	0	33.44	3.6	3.6	0.3
2/13/2019 4:20	0	0	0	33.44	3.6	3.7	0.3
2/13/2019 4:30	0	0	0	33.44	3.6	3.7	0.3
2/13/2019 4:40	0	0	0	33.44	3.6	3.6	0.3
2/13/2019 4:50	0	0	0	33.44	3.5	3.6	0.3
2/13/2019 5:00	0	0	0	33.44	3.4	3.6	0.3
2/13/2019 5:10	0	0	0	33.44	3.4	3.5	0.3
2/13/2019 5:20	0	0	0	33.47	3.3	3.5	0.3
2/13/2019 5:30	0	0	0	33.44	3.3	3.4	0.3
2/13/2019 5:40	0	0	0	33.44	3.2	3.4	0.3
2/13/2019 5:50	0	0	0	33.44	3.1	3.3	0.3
2/13/2019 6:00	0	0	0	33.47	3.1	3.2	0.3
2/13/2019 6:10	0	0	0	33.47	3	3.1	0.3
2/13/2019 6:20	0	0	0	33.44	2.9	3.1	0.3
2/13/2019 6:30	0	0	0	33.44	2.8	3	0.3
2/13/2019 6:40	0	0	0	33.44	2.7	2.9	0.3
2/13/2019 6:50	0	0	0	33.44	2.6	2.8	0.3
2/13/2019 7:00	0	0	0	33.47	2.5	2.7	0.3
2/13/2019 7:10	0	0	0	33.44	2.4	2.6	0.3
2/13/2019 7:20	0	0	0	33.44	2.3	2.5	0.3
2/13/2019 7:30	0	0	0	33.47	2.2	2.4	0.3
2/13/2019 7:40	0	0	0	33.44	2.1	2.4	0.3
2/13/2019 7:50	0	0	0	33.47	2.1	2.2	0.3
2/13/2019 8:00	0	0	0	33.47	2	2.1	0.3
2/13/2019 8:10	0	0	0	33.47	1.9	2.1	0.3
2/13/2019 8:20	0	0	0	33.47	1.8	2	0.3

2/13/2019 8:30	0	0	0	33.44	1.7	1.9	0.3
2/13/2019 8:40	0	0	0	33.44	1.6	1.8	0.3
2/13/2019 8:50	0	0	0	33.47	1.6	1.8	0.3
2/13/2019 9:00	8	8	8	40.12	1.5	1.6	0.1
2/13/2019 9:10	8	8	8	39.85	4.4	3.8	24
2/13/2019 9:20	8	8	8	39.39	4.6	3.9	24.8
2/13/2019 9:30	8	8	8	38.96	4.4	3.9	1.9
2/13/2019 9:40	8	8	8	38.59	4.4	4	24.6
2/13/2019 9:50	8	8	8	38.17	4.8	4.2	24.9
2/13/2019 10:00	8	8	8	37.8	4.4	4.1	24.3
2/13/2019 10:10	8	8	8	37.4	4.3	4.1	24.8
2/13/2019 10:20	8	8	8	37.01	4.4	4	24.3
2/13/2019 10:30	8	8	8	36.7	4.5	4.1	3.4
2/13/2019 10:40	8	8	8	36.46	4.4	4.1	24.7
2/13/2019 10:50	8	8	8	36.18	4.5	4.1	24.4
2/13/2019 11:00	8	8	8	35.97	4.4	4.2	24.4
2/13/2019 11:10	8	8	8	35.69	4.5	4	3.4
2/13/2019 11:20	8	8	8	35.45	4.5	4	4.5
2/13/2019 11:30	8	8	8	35.15	4.3	4	4.7
2/13/2019 11:40	8	8	8	34.96	4.2	4	3.3
2/13/2019 11:50	8	8	8	34.78	4.2	4	3.9
2/13/2019 12:00	8	8	8	34.53	4.2	4.1	1.5
2/13/2019 12:10	8	8	8	34.35	4.6	4.1	24.3
2/13/2019 12:20	8	8	8	34.17	3.8	3.9	24.4
2/13/2019 12:30	8	8	8	34.05	4.2	4.1	24.5
2/13/2019 12:40	8	8	8	33.8	4.4	4	4.3
2/13/2019 12:50	8	8	8	33.77	4.4	4	24
2/13/2019 13:00	8	8	8	33.53	4.2	4	24.4
2/13/2019 13:10	8	8	8	33.47	4.3	4.1	24.5
2/13/2019 13:20	8	8	8	33.34	4.6	4.1	24.1
2/13/2019 13:30	8	8	8	33.22	4.5	4	24.5
2/13/2019 13:40	8	8	8	33.1	4.4	4	4.3
2/13/2019 13:50	8	8	8	32.98	4.3	4	24.2
2/13/2019 14:00	8	8	8	32.86	4.4	4.1	24.6
2/13/2019 14:10	8	8	8	32.79	4.3	3.9	24.1
2/13/2019 14:20	8	8	8	32.67	4.2	4	24.5
2/13/2019 14:30	8	8	8	32.52	4.3	4.1	24.2
2/13/2019 14:40	8	8	8	32.4	4.4	3.9	24.4
2/13/2019 14:50	8	8	8	32.37	4.5	4	24.1
2/13/2019 15:00	8	8	8	32.31	4.4	3.9	24.5
2/13/2019 15:10	8	8	8	32.21	4	4	24.1
2/13/2019 15:20	8	8	8	32.06	4.2	3.9	24.6
2/13/2019 15:30	8	8	8	32.06	4.6	4.1	24.2
2/13/2019 15:40	8	8	8	32	4.4	3.9	24.5
2/13/2019 15:50	8	8	8	31.94	4.4	4.1	24.1
2/13/2019 16:00	8	8	8	31.88	4.3	4	24.5
2/13/2019 16:10	8	8	8	31.76	4.1	4	24

2/13/2019 16:20	8	8	8	31.76	4.4	4	24.5
2/13/2019 16:30	8	8	8	31.7	4.1	4	1.8
2/13/2019 16:40	8	8	8	31.6	4.2	4	24.4
2/13/2019 16:50	8	8	8	31.51	4.8	4.1	1.3
2/13/2019 17:00	8	8	8	31.54	4.3	3.9	24.3
2/13/2019 17:10	8	8	8	31.42	4.4	4	2.3
2/13/2019 17:20	8	8	8	31.39	4.4	4	24.4
2/13/2019 17:30	8	8	8	31.36	4.3	3.9	19
2/13/2019 17:40	8	8	8	31.3	4.3	4.1	24.5
2/13/2019 17:50	8	8	8	31.33	4.4	4	24.1
2/13/2019 18:00	8	8	8	31.27	4.3	4	24.4
2/13/2019 18:10	8	8	8	31.15	4.3	3.9	24.1
2/13/2019 18:20	8	8	8	31.12	4.6	4	3.3
2/13/2019 18:30	8	8	8	31.09	4.5	4	24.3
2/13/2019 18:40	8	8	8	31.09	4.2	4.1	3.2
2/13/2019 18:50	8	8	8	31.02	4.4	3.9	24.5
2/13/2019 19:00	8	8	8	30.96	4.1	4	24
2/13/2019 19:10	8	8	8	30.96	4.3	4	24.5
2/13/2019 19:20	8	8	8	30.96	4.2	4.1	24.3
2/13/2019 19:30	8	8	8	30.93	4.5	3.9	3.6
2/13/2019 19:40	8	8	8	30.84	4.4	4	24.4
2/13/2019 19:50	8	8	8	30.87	4.2	4	24
2/13/2019 20:00	8	8	8	30.84	4.5	3.9	24.6
2/13/2019 20:10	8	8	8	30.84	4.6	3.9	24.2
2/13/2019 20:20	8	8	8	30.72	4.4	4	3.6
2/13/2019 20:30	8	8	8	30.75	4.2	4	24.4
2/13/2019 20:40	8	8	8	30.78	4.3	3.8	23.9
2/13/2019 20:50	8	8	8	30.63	4.3	4	24.5
2/13/2019 21:00	8	8	8	30.69	4.5	3.9	24.3
2/13/2019 21:10	8	8	8	30.72	4.3	4.1	1.3
2/13/2019 21:20	8	8	8	30.69	4.2	3.9	24.5
2/13/2019 21:30	8	8	8	30.63	4.4	3.9	24.1
2/13/2019 21:40	8	8	8	30.69	4.3	4	23.5
2/13/2019 21:50	8	8	8	30.66	4.5	4.1	24.3
2/13/2019 22:00	8	8	8	30.66	4.5	3.9	4.5
2/13/2019 22:10	8	8	8	30.57	4.4	4.1	24.4
2/13/2019 22:20	8	8	8	30.57	4.3	4	1.1
2/13/2019 22:30	8	8	8	30.63	4.4	4.1	24.5
2/13/2019 22:40	8	8	8	30.57	4.3	4.1	24.2
2/13/2019 22:50	8	8	8	30.63	4.2	4	24.6
2/13/2019 23:00	8	8	8	30.69	4.2	4.1	24.3
2/13/2019 23:10	8	8	8	30.57	4.3	4.1	4.1
2/13/2019 23:20	8	8	8	30.57	4.4	3.9	24.4
2/13/2019 23:30	8	8	8	30.57	4.5	3.9	24
2/13/2019 23:40	8	8	8	30.57	4.3	3.9	24.6
2/13/2019 23:50	8	8	8	30.57	4.6	4	24.3
2/14/2019 0:00	8	8	8	30.54	4.4	3.9	3.7

2/14/2019 0:10	8	8	8	30.57	4.4	4	24.5
2/14/2019 0:20	8	8	8	30.57	4.3	4	23.9
2/14/2019 0:30	8	8	8	30.47	4.3	4.1	24.5
2/14/2019 0:40	8	8	8	30.57	4.4	4	24.3
2/14/2019 0:50	8	8	8	30.54	4	4	3.4
2/14/2019 1:00	8	8	8	30.54	4.3	4	24.4
2/14/2019 1:10	8	8	8	30.57	4.2	4.1	24.1
2/14/2019 1:20	8	8	8	30.54	4.2	4	3.4
2/14/2019 1:30	8	8	8	30.54	4.3	4.1	24.4
2/14/2019 1:40	8	8	8	30.54	4.4	4	24
2/14/2019 1:50	8	8	8	30.57	4.4	4	24.6
2/14/2019 2:00	8	8	8	30.57	4.2	4	24.2
2/14/2019 2:10	8	8	8	30.57	4.4	3.9	1.9
2/14/2019 2:20	8	8	8	30.63	4.1	4.1	24.4
2/14/2019 2:30	8	8	8	30.63	4.4	4.1	24.1
2/14/2019 2:40	8	8	8	30.57	4.5	4.1	3.3
2/14/2019 2:50	8	8	8	30.51	4.1	4	24.4
2/14/2019 3:00	8	8	8	30.57	3.9	4.1	20.8
2/14/2019 3:10	8	8	8	30.63	4.5	4	24.5
2/14/2019 3:20	8	8	8	30.57	4.5	4	24.2
2/14/2019 3:30	8	8	8	30.66	4.4	4.1	1.7
2/14/2019 3:40	8	8	8	30.57	4.4	4	24.5
2/14/2019 3:50	8	8	8	30.51	4.3	4	24.2
2/14/2019 4:00	8	8	8	30.66	4.4	4	4.9
2/14/2019 4:10	8	8	8	30.57	4.4	4.1	24.4
2/14/2019 4:20	8	8	8	30.54	4.4	4	11.3
2/14/2019 4:30	8	8	8	30.54	4.3	3.9	24.6
2/14/2019 4:40	8	8	8	30.63	4.5	4	24.2
2/14/2019 4:50	8	8	8	30.51	4.4	4	2.7
2/14/2019 5:00	8	8	8	30.44	4.2	4.1	24.6
2/14/2019 5:10	8	8	8	30.47	4.4	4	24.3
2/14/2019 5:20	8	8	8	30.41	4.2	4.1	3.4
2/14/2019 5:30	8	8	8	30.51	4.4	4.1	24.5
2/14/2019 5:40	8	8	8	30.44	4.4	4	24.1
2/14/2019 5:50	8	8	8	30.44	4.2	4	4.7
2/14/2019 6:00	8	8	8	30.41	4.4	3.9	24.3
2/14/2019 6:10	8	8	8	30.35	4.3	4.1	4
2/14/2019 6:20	8	8	8	30.41	4.2	4.1	24.5
2/14/2019 6:30	8	8	8	30.35	4.6	4.1	3.5
2/14/2019 6:40	8	8	8	30.41	4.5	4	24.5
2/14/2019 6:50	8	8	8	30.38	4.4	4.1	24.2
2/14/2019 7:00	8	8	8	30.38	4.2	4	24.6
2/14/2019 7:10	8	8	8	30.35	4.5	3.9	24.3
2/14/2019 7:20	8	8	8	30.32	4.4	4	2.7
2/14/2019 7:30	8	8	8	30.35	4.1	4.1	24.5
2/14/2019 7:40	8	8	8	30.35	4.4	4	24.1
2/14/2019 7:50	8	8	8	30.35	4.4	4.1	3.9

2/14/2019 8:00	8	8	8	30.32	4.4	3.9	24.3
2/14/2019 8:10	8	8	8	30.35	4.3	4	1.1
2/14/2019 8:20	8	8	8	30.35	4.4	4	24.6
2/14/2019 8:30	8	8	8	30.32	4.3	4.1	24.2
2/14/2019 8:40	8	8	8	30.32	4.4	4	2.7
2/14/2019 8:50	8	8	8	30.26	4.4	4.1	24.5
2/14/2019 9:00	8	8	8	30.32	4.5	4.1	24.2
2/14/2019 9:10	8	8	8	30.32	4.3	3.9	3.5
2/14/2019 9:20	8	8	8	30.32	4.5	4.1	24.4
2/14/2019 9:30	8	8	8	30.38	4.1	4.1	11
2/14/2019 9:40	8	8	8	30.41	4.7	3.9	24.5
2/14/2019 9:50	8	8	8	30.41	4.2	3.7	24.1
2/14/2019 10:00	8	8	8	30.41	4.4	3.8	3.7
2/14/2019 10:10	8	8	8	30.35	4.2	4.1	24.5
2/14/2019 10:20	8	8	8	30.41	4.3	4.1	24
2/14/2019 10:30	8	8	8	30.38	4.3	4.1	24.6
2/14/2019 10:40	8	8	8	30.38	4.4	4	24.3
2/14/2019 10:50	8	8	8	30.35	4.4	4.1	1.2
2/14/2019 11:00	8	8	8	30.32	4.4	4.1	24.5
2/14/2019 11:10	8	8	8	30.44	4.4	4.1	24.1
2/14/2019 11:20	8	8	8	30.35	4	4.1	4.2
2/14/2019 11:30	8	8	8	30.32	4.3	4.1	24.4
2/14/2019 11:40	8	8	8	30.35	4.2	4.1	24.1
2/14/2019 11:50	8	8	8	30.32	4.5	4.1	3.3
2/14/2019 12:00	8	8	8	30.35	4.2	4.1	24.3
2/14/2019 12:10	8	8	8	30.32	3.7	4.1	1.2
2/14/2019 12:20	8	8	8	30.32	4.3	4.1	24.6
2/14/2019 12:30	8	8	8	30.29	4.3	3.9	24.2
2/14/2019 12:40	8	8	8	30.38	4.5	3.8	3.3
2/14/2019 12:50	8	8	8	30.38	4.4	3.7	24.5
2/14/2019 13:00	8	8	8	30.35	4.2	3.7	24.1
2/14/2019 13:10	8	8	8	30.38	4.2	4	4.1
2/14/2019 13:20	8	8	8	30.35	4.2	3.9	24.5
2/14/2019 13:30	8	8	8	30.38	4.1	4.1	24.1
2/14/2019 13:40	8	8	8	30.35	4.4	4.1	4.2
2/14/2019 13:50	8	8	8	30.38	4.3	4.1	24.4
2/14/2019 14:00	8	8	8	30.38	4.5	4.1	24
2/14/2019 14:10	8	8	8	30.35	4.2	4.1	3.4
2/14/2019 14:20	8	8	8	30.38	4.4	4.1	24.3
2/14/2019 14:30	8	8	8	30.41	4.2	4.1	6.4
2/14/2019 14:40	8	8	8	30.32	4.6	4.1	24.5
2/14/2019 14:50	8	8	8	30.35	4.4	4.1	24.2
2/14/2019 15:00	8	8	8	30.38	4.3	4.1	1.2
2/14/2019 15:10	8	8	8	30.35	4.6	4.1	24.6
2/14/2019 15:20	8	8	8	30.32	4.4	4.1	24.3
2/14/2019 15:30	8	8	8	30.32	4.4	4	2.6
2/14/2019 15:40	8	8	8	30.29	4.1	4.1	24.5

2/14/2019 15:50	8	8	8	30.32	4.5	4.1	24.2
2/14/2019 16:00	8	8	8	30.35	4.3	4.1	4.3
2/14/2019 16:10	8	8	8	30.38	4.6	4	24.5
2/14/2019 16:20	8	8	8	30.32	4.2	4.1	24.2
2/14/2019 16:30	8	8	8	30.29	4.5	4.1	4.7
2/14/2019 16:40	8	8	8	30.38	4.5	3.9	24.4
2/14/2019 16:50	8	8	8	30.29	4.6	4.2	24.1
2/14/2019 17:00	8	8	8	30.35	4.6	4.1	3.2
2/14/2019 17:10	8	8	8	30.38	4.4	4.1	24.3
2/14/2019 17:20	8	8	8	30.35	4.1	4.1	24
2/14/2019 17:30	8	8	8	30.35	4.2	3.9	3.3
2/14/2019 17:40	8	8	8	30.32	4.2	4	24.5
2/14/2019 17:50	8	8	8	30.38	4.4	4	24
2/14/2019 18:00	8	8	8	30.32	4.5	4.1	3.9
2/14/2019 18:10	8	8	8	30.32	4.4	4	24.4
2/14/2019 18:20	8	8	8	30.23	4.1	4	23.9
2/14/2019 18:30	8	8	8	30.26	4.5	3.9	24.6
2/14/2019 18:40	8	8	8	30.35	4.3	4.1	24.3
2/14/2019 18:50	8	8	8	30.23	4.1	3.9	2.1
2/14/2019 19:00	8	8	8	30.29	4.4	3.9	24.6
2/14/2019 19:10	8	8	8	30.35	4.3	4.1	24.3
2/14/2019 19:20	8	8	8	30.26	4.3	4	1.3
2/14/2019 19:30	8	8	8	30.23	4.4	4.1	24.5
2/14/2019 19:40	8	8	8	30.35	4.4	4	24.2
2/14/2019 19:50	8	8	8	30.26	4.5	4.1	3.8
2/14/2019 20:00	8	8	8	30.26	4.5	4	24.5
2/14/2019 20:10	8	8	8	30.29	4.3	4	24.3
2/14/2019 20:20	8	8	8	30.32	4.2	4.1	24.7
2/14/2019 20:30	8	8	8	30.29	4.2	4.1	24.3
2/14/2019 20:40	8	8	8	30.29	4.4	4	1.5
2/14/2019 20:50	8	8	8	30.29	4.4	4	24.5
2/14/2019 21:00	8	8	8	30.32	4.2	4	24.2
2/14/2019 21:10	8	8	8	30.29	4.6	4.1	3.4
2/14/2019 21:20	8	8	8	30.32	4.6	3.9	24.4
2/14/2019 21:30	8	8	8	30.2	4.3	4	23.9
2/14/2019 21:40	8	8	8	30.35	4.5	4	10.8
2/14/2019 21:50	8	8	8	30.32	4.3	4	24.3
2/14/2019 22:00	8	8	8	30.38	4.5	3.9	1.2
2/14/2019 22:10	8	8	8	30.32	4.4	3.9	24.5
2/14/2019 22:20	8	8	8	30.32	4.4	4.1	24.1
2/14/2019 22:30	8	8	8	30.32	4.3	4	3.9
2/14/2019 22:40	8	8	8	30.32	4.3	4.1	24.4
2/14/2019 22:50	8	8	8	30.32	4.4	3.9	24.1
2/14/2019 23:00	8	8	8	30.35	4.5	4.1	4.7
2/14/2019 23:10	8	8	8	30.29	4.3	4	24.4
2/14/2019 23:20	8	8	8	30.35	4.3	3.9	23.2
2/14/2019 23:30	8	8	8	30.35	4.3	4	24.5

2/14/2019 23:40	8	8	8	30.35	4.2	4.1	24.3
2/14/2019 23:50	8	8	8	30.38	4.4	4	18.8
2/15/2019 0:00	8	8	8	30.35	4.2	3.9	24.6
2/15/2019 0:10	8	8	8	30.35	4.3	4	24.3
2/15/2019 0:20	8	8	8	30.29	4.3	3.9	1.1
2/15/2019 0:30	8	8	8	30.38	4.3	4.1	24.5
2/15/2019 0:40	8	8	8	30.38	4.3	4	24.2
2/15/2019 0:50	8	8	8	30.38	4.3	4	1.2
2/15/2019 1:00	8	8	8	30.35	4.2	4	24.6
2/15/2019 1:10	8	8	8	30.38	4.5	4	24.3
2/15/2019 1:20	8	8	8	30.32	4.3	4	3.6
2/15/2019 1:30	8	8	8	30.35	4.3	4	24.5
2/15/2019 1:40	8	8	8	30.35	4.1	4	24.2
2/15/2019 1:50	8	8	8	30.29	4.2	4.1	21
2/15/2019 2:00	8	8	8	30.26	3.9	3.9	24.6
2/15/2019 2:10	8	8	8	30.29	4.3	4.1	24.4
2/15/2019 2:20	8	8	8	30.29	4.3	4	24.3
2/15/2019 2:30	8	8	8	30.35	4.4	4	3.4
2/15/2019 2:40	8	8	8	30.32	4	4	24.5
2/15/2019 2:50	8	8	8	30.38	4.5	4	24.1
2/15/2019 3:00	8	8	8	30.35	4.7	4	3.3
2/15/2019 3:10	8	8	8	30.35	4.1	4.1	24.5
2/15/2019 3:20	8	8	8	30.38	4.5	4.1	24
2/15/2019 3:30	8	8	8	30.35	4.2	4.1	3.2
2/15/2019 3:40	8	8	8	30.38	4.4	4.1	24.4
2/15/2019 3:50	8	8	8	30.41	4.3	4	16.4
2/15/2019 4:00	8	8	8	30.35	4.4	4.1	24.6
2/15/2019 4:10	8	8	8	30.44	4.3	4	24.3
2/15/2019 4:20	8	8	8	30.38	4.4	3.9	1.4
2/15/2019 4:30	8	8	8	30.44	4.3	4.1	24.6
2/15/2019 4:40	8	8	8	30.47	4.1	4	24.2
2/15/2019 4:50	8	8	8	30.38	4.3	4.1	4.2
2/15/2019 5:00	8	8	8	30.35	4.2	4.1	24.5
2/15/2019 5:10	8	8	8	30.44	5	4.1	24.1
2/15/2019 5:20	8	8	8	30.44	4.2	3.9	24.6
2/15/2019 5:30	8	8	8	30.44	4.4	4.1	24.3
2/15/2019 5:40	8	8	8	30.44	4.3	4.1	1.3
2/15/2019 5:50	8	8	8	30.41	4.4	4.1	24.6
2/15/2019 6:00	8	8	8	30.41	4.3	4.1	24.3
2/15/2019 6:10	8	8	8	30.47	4.3	4.1	1.7
2/15/2019 6:20	8	8	8	30.44	4.4	4.1	24.5
2/15/2019 6:30	8	8	8	30.47	4.3	4.2	24.3
2/15/2019 6:40	8	8	8	30.47	4.2	4.1	1.6
2/15/2019 6:50	8	8	8	30.47	4.6	4.1	24.5
2/15/2019 7:00	8	8	8	30.51	4.3	4.1	24.2
2/15/2019 7:10	8	8	8	30.51	4.2	4.1	1.3
2/15/2019 7:20	8	8	8	30.47	4.4	4.1	24.6

2/15/2019 7:30	8	8	8	30.54	4.2	4	24.3
2/15/2019 7:40	8	8	8	30.47	4.5	4.1	6.5
2/15/2019 7:50	8	8	8	30.41	4.6	4.1	24.6
2/15/2019 8:00	8	8	8	30.51	4.4	4	24.3
2/15/2019 8:10	8	8	8	30.57	4.3	4	24
2/15/2019 8:20	8	8	8	30.57	4.2	4	3.4
2/15/2019 8:30	8	8	8	30.54	4.5	4.1	24.5
2/15/2019 8:40	8	8	8	30.54	4.3	4	24
2/15/2019 8:50	8	8	8	30.57	4.1	4.1	2.6
2/15/2019 9:00	8	8	8	30.54	4.3	4.1	24.5
2/15/2019 9:10	8	8	8	30.63	4.5	4.1	24.3
2/15/2019 9:20	8	8	8	30.57	4.2	4	23.6
2/15/2019 9:30	8	8	8	30.66	4.4	4.1	3.3
2/15/2019 9:40	8	8	8	30.54	4.4	4.1	24.4
2/15/2019 9:50	8	8	8	30.54	4.4	4.1	24.1
2/15/2019 10:00	8	8	8	30.57	4.4	4.1	1.1
2/15/2019 10:10	8	8	8	30.66	4.4	4.1	24.5
2/15/2019 10:20	8	8	8	30.66	4.4	4	24.5
2/15/2019 10:30	8	8	8	30.63	4.2	4.1	24.2
2/15/2019 10:40	8	8	8	30.57	4.2	4.1	18.6
2/15/2019 10:50	8	8	8	30.66	4.3	4.1	4.4
2/15/2019 11:00	8	8	8	30.57	4.3	4.1	24.4
2/15/2019 11:10	8	8	8	30.63	4.5	4.1	24.1
2/15/2019 11:20	8	8	8	30.72	4.4	4.1	1.1
2/15/2019 11:30	8	8	8	30.69	4.3	4.1	24.5
2/15/2019 11:40	8	8	8	30.75	4.5	4.1	24.3
2/15/2019 11:50	8	8	8	30.72	4.3	4	24.1
2/15/2019 12:00	8	8	8	30.72	4.2	4	3.6
2/15/2019 12:10	8	8	8	30.63	4.4	4.1	24.5
2/15/2019 12:20	8	8	8	30.66	4.2	4.2	24.2
2/15/2019 12:30	8	8	8	30.69	4.1	4.1	23.9
2/15/2019 12:40	8	8	8	30.72	4.4	4.1	3.4
2/15/2019 12:50	8	8	8	30.72	4.3	4.1	24.4
2/15/2019 13:00	8	8	8	30.63	4.3	4.1	24.1
2/15/2019 13:10	8	8	8	30.69	4.5	4.1	6.8
2/15/2019 13:20	8	8	8	30.75	4.2	4.1	24.5
2/15/2019 13:30	8	8	8	30.63	4.3	4.1	24.4
2/15/2019 13:40	8	8	8	30.69	4.3	4.1	24.1
2/15/2019 13:50	8	8	8	30.75	4.4	4.1	6.7
2/15/2019 14:00	8	8	8	30.75	4.4	4.1	4.1
2/15/2019 14:10	8	8	8	30.72	4.4	4.1	24.4
2/15/2019 14:20	8	8	8	30.72	4.4	4.1	24.1
2/15/2019 14:30	8	8	8	30.75	4.3	4.1	2.4
2/15/2019 14:40	8	8	8	30.72	4.3	4.1	24.4
2/15/2019 14:50	8	8	8	30.75	4.3	4.1	24.2
2/15/2019 15:00	8	8	8	30.66	4.5	4.1	16.4
2/15/2019 15:10	8	8	8	30.72	4.4	4.2	3.9

2/15/2019 15:20	8	8	8	30.75	4.3	4.1	24.3
2/15/2019 15:30	8	8	8	30.78	4.2	4.1	24
2/15/2019 15:40	8	8	8	30.75	4.2	4	1.5
2/15/2019 15:50	8	8	8	30.75	4.4	4	24.5
2/15/2019 16:00	8	8	8	30.75	4.3	4	24.3
2/15/2019 16:10	8	8	8	30.72	4.5	4.1	24
2/15/2019 16:20	8	8	8	30.72	4.6	4.1	3.3
2/15/2019 16:30	8	8	8	30.78	4.1	4.1	24.5
2/15/2019 16:40	8	8	8	30.75	4.4	4.1	24.2
2/15/2019 16:50	8	8	8	30.72	4.4	4.2	24
2/15/2019 17:00	8	8	8	30.69	4.4	4.1	3.3
2/15/2019 17:10	8	8	8	30.75	4.5	4	24.5
2/15/2019 17:20	8	8	8	30.72	4.4	4.1	24.3
2/15/2019 17:30	8	8	8	30.75	4.5	4.1	24.1
2/15/2019 17:40	8	8	8	30.81	4.4	4	3.3
2/15/2019 17:50	8	8	8	30.78	4.6	4.1	24.5
2/15/2019 18:00	8	8	8	30.75	5	4	24.2
2/15/2019 18:10	8	8	8	30.75	4.3	4.1	24.1
2/15/2019 18:20	8	8	8	30.87	4.3	4.1	3.7
2/15/2019 18:30	8	8	8	30.78	4.5	4.1	24.5
2/15/2019 18:40	8	8	8	30.87	4.4	4.1	24.3
2/15/2019 18:50	8	8	8	30.84	4.2	4.1	24.1
2/15/2019 19:00	8	8	8	30.81	4.4	4.2	1.4
2/15/2019 19:10	8	8	8	30.84	4.5	4.1	24.5
2/15/2019 19:20	8	8	8	30.87	4.1	4.1	24.3
2/15/2019 19:30	8	8	8	30.84	4.2	4.1	24.2
2/15/2019 19:40	8	8	8	30.9	4.4	4.1	4.1
2/15/2019 19:50	8	8	8	30.93	4.3	4.1	24.5
2/15/2019 20:00	8	8	8	30.87	4.4	4	24.1
2/15/2019 20:10	8	8	8	30.87	4.4	4.1	1.1
2/15/2019 20:20	8	8	8	30.9	4.3	4.1	24.5
2/15/2019 20:30	8	8	8	30.9	4.4	3.9	24.4
2/15/2019 20:40	8	8	8	30.93	4.4	4.2	24
2/15/2019 20:50	8	8	8	31.05	4.6	4	3.7
2/15/2019 21:00	8	8	8	30.99	4.4	4	24.5
2/15/2019 21:10	8	8	8	30.99	4.3	4.1	24.2
2/15/2019 21:20	8	8	8	30.99	4.4	4.1	2
2/15/2019 21:30	8	8	8	30.93	4.4	4	4.4
2/15/2019 21:40	8	8	8	30.99	4.5	3.9	24.5
2/15/2019 21:50	8	8	8	31.02	4.6	4.2	24.1
2/15/2019 22:00	8	8	8	30.96	4.4	4	2.2
2/15/2019 22:10	8	8	8	30.99	4.4	4.1	24.5
2/15/2019 22:20	8	8	8	31.02	4.2	4.1	24.4
2/15/2019 22:30	8	8	8	30.99	4.6	3.9	24.1
2/15/2019 22:40	8	8	8	30.9	4.3	4	4.2
2/15/2019 22:50	8	8	8	30.96	4.2	4.1	24.5
2/15/2019 23:00	8	8	8	30.93	4.4	4	24.4

2/15/2019 23:10	8	8	8	30.93	4.3	4.1	24
2/15/2019 23:20	8	8	8	30.93	4.4	4.1	2.7
2/15/2019 23:30	8	8	8	30.87	4.3	4.1	24.6
2/15/2019 23:40	8	8	8	30.9	4.3	4.1	24.3
2/15/2019 23:50	8	8	8	30.87	4.4	4.1	23.9
2/16/2019 0:00	8	8	8	30.87	4.3	4.1	4.2
2/16/2019 0:10	8	8	8	30.87	4.4	4	24.5
2/16/2019 0:20	8	8	8	30.84	4.3	4.1	24.2
2/16/2019 0:30	8	8	8	30.87	4.6	4.1	1.6
2/16/2019 0:40	8	8	8	30.96	4.4	4.1	24.5
2/16/2019 0:50	8	8	8	30.93	4.2	4.1	24.3
2/16/2019 1:00	8	8	8	30.96	4.5	4	24
2/16/2019 1:10	8	8	8	30.9	4.4	4.1	3.3
2/16/2019 1:20	8	8	8	30.9	4.4	4	24.4
2/16/2019 1:30	8	8	8	30.9	4.3	4.1	24.3
2/16/2019 1:40	8	8	8	30.93	4.6	4	23.4
2/16/2019 1:50	8	8	8	30.84	4.3	4.1	3.3
2/16/2019 2:00	8	8	8	30.84	4.2	4.1	24.5
2/16/2019 2:10	8	8	8	30.9	4.4	4.1	24.2
2/16/2019 2:20	8	8	8	30.87	4.2	4	1.4
2/16/2019 2:30	8	8	8	30.84	4.3	4.1	24.6
2/16/2019 2:40	8	8	8	30.9	4.3	4.1	24.4
2/16/2019 2:50	8	8	8	30.87	4.4	4.1	24.1
2/16/2019 3:00	8	8	8	30.93	4.3	4.1	4
2/16/2019 3:10	8	8	8	30.87	4.1	4	24.6
2/16/2019 3:20	8	8	8	30.81	4.4	4	24.4
2/16/2019 3:30	8	8	8	30.87	4.4	4.1	24.1
2/16/2019 3:40	8	8	8	30.9	4.3	4	2.8
2/16/2019 3:50	8	8	8	30.87	4.4	4	24.6
2/16/2019 4:00	8	8	8	30.96	4.5	3.9	24.2
2/16/2019 4:10	8	8	8	30.87	4.2	4	23.9
2/16/2019 4:20	8	8	8	30.9	4.4	4.1	3.5
2/16/2019 4:30	8	8	8	30.84	4.3	4.1	24.5
2/16/2019 4:40	8	8	8	30.87	4.4	4.1	24.1
2/16/2019 4:50	8	8	8	30.81	4.3	4	2.3
2/16/2019 5:00	8	8	8	30.81	4.5	4.1	24.5
2/16/2019 5:10	8	8	8	30.84	4.1	3.9	24.2
2/16/2019 5:20	8	8	8	30.9	4.3	4.1	6.5
2/16/2019 5:30	8	8	8	30.84	4.4	4.1	4.6
2/16/2019 5:40	8	8	8	30.84	4.2	4.1	24.4
2/16/2019 5:50	8	8	8	30.87	4.4	4	24
2/16/2019 6:00	8	8	8	30.75	4.2	4.1	1.4
2/16/2019 6:10	8	8	8	30.87	4.3	4	24.5
2/16/2019 6:20	8	8	8	30.78	4.4	4.1	24.3
2/16/2019 6:30	8	8	8	30.9	4.3	4	24.1
2/16/2019 6:40	8	8	8	30.9	4.2	4	4
2/16/2019 6:50	8	8	8	30.9	4.5	4	24.5

2/16/2019 7:00	8	8	8	30.87	4.3	3.9	24.3
2/16/2019 7:10	8	8	8	30.96	4.3	4	1.4
2/16/2019 7:20	8	8	8	30.96	4.3	4.1	24.5
2/16/2019 7:30	8	8	8	30.93	4.3	4.1	24.4
2/16/2019 7:40	8	8	8	30.93	4.2	3.8	24.1
2/16/2019 7:50	8	8	8	30.96	4.5	4.1	3.9
2/16/2019 8:00	8	8	8	30.96	4.3	4.1	24.5
2/16/2019 8:10	8	8	8	30.99	4.1	3.8	24.2
2/16/2019 8:20	8	8	8	30.96	4.3	4.1	22.1
2/16/2019 8:30	8	8	8	30.99	4.1	4.1	3.4
2/16/2019 8:40	8	8	8	30.99	4.5	4	24.5
2/16/2019 8:50	8	8	8	30.99	4.3	4.1	24.2
2/16/2019 9:00	8	8	8	30.96	4.5	4.1	2.5
2/16/2019 9:10	8	8	8	30.99	4.3	4.2	24.5
2/16/2019 9:20	8	8	8	31.02	4.3	4.1	24.3
2/16/2019 9:30	8	8	8	30.96	4.5	4.1	24
2/16/2019 9:40	8	8	8	30.9	4.3	4.1	3.6
2/16/2019 9:50	8	8	8	30.84	4.4	4.1	24.5
2/16/2019 10:00	8	8	8	30.96	4.3	4.1	24.3
2/16/2019 10:10	8	8	8	30.99	4.2	4.2	1.1
2/16/2019 10:20	8	8	8	30.9	4.4	4.1	24.5
2/16/2019 10:30	8	8	8	30.9	4.3	4.1	24.4
2/16/2019 10:40	8	8	8	30.93	4.2	4.1	24
2/16/2019 10:50	8	8	8	30.96	4.3	4.1	4.2
2/16/2019 11:00	8	8	8	30.93	4.3	4.1	24.5
2/16/2019 11:10	8	8	8	30.96	4.4	4.1	24.2
2/16/2019 11:20	8	8	8	30.99	4.4	4.1	1.1
2/16/2019 11:30	8	8	8	30.96	4.5	4.1	24.5
2/16/2019 11:40	8	8	8	30.99	4.5	4.1	24.4
2/16/2019 11:50	8	8	8	30.96	4.5	4.2	24.2
2/16/2019 12:00	8	8	8	31.02	4.5	4.1	3.8
2/16/2019 12:10	8	8	8	30.93	4.4	4.1	24.5
2/16/2019 12:20	8	8	8	30.96	4.3	4.1	24.2
2/16/2019 12:30	8	8	8	30.93	4.5	4.2	21
2/16/2019 12:40	8	8	8	30.96	4.3	4.1	3.3
2/16/2019 12:50	8	8	8	30.9	3.9	4.1	24.4
2/16/2019 13:00	8	8	8	30.9	4.4	4.1	24
2/16/2019 13:10	8	8	8	30.93	4.4	4.2	3.7
2/16/2019 13:20	8	8	8	30.87	4.3	4.1	24.5
2/16/2019 13:30	8	8	8	30.9	4.4	4.1	24.2
2/16/2019 13:40	8	8	8	30.96	4.2	4.1	1.3
2/16/2019 13:50	8	8	8	30.87	4.3	4.1	24.5
2/16/2019 14:00	8	8	8	30.9	4.4	4.1	24.2
2/16/2019 14:10	8	8	8	30.96	4.5	4.1	23.9
2/16/2019 14:20	8	8	8	30.87	4.2	4.1	3.2
2/16/2019 14:30	8	8	8	30.87	4.5	4.1	24.5
2/16/2019 14:40	8	8	8	30.9	4.5	4.1	24

2/16/2019 14:50	8	8	8	30.87	4.3	4.1	1.3
2/16/2019 15:00	8	8	8	30.9	4.4	4.1	24.5
2/16/2019 15:10	8	8	8	30.84	4.2	4.1	24.3
2/16/2019 15:20	8	8	8	30.87	4.2	4.2	24.1
2/16/2019 15:30	8	8	8	30.87	4.3	4.1	3.5
2/16/2019 15:40	8	8	8	30.9	4.4	4.1	24.5
2/16/2019 15:50	8	8	8	30.81	4.4	4.1	24.1
2/16/2019 16:00	8	8	8	30.87	4.4	4.1	3
2/16/2019 16:10	8	8	8	30.87	4.2	4.1	24.5
2/16/2019 16:20	8	8	8	30.9	4.3	4.1	24.2
2/16/2019 16:30	8	8	8	30.84	4.3	4.1	1.2
2/16/2019 16:40	8	8	8	30.93	4.4	4.2	24.6
2/16/2019 16:50	8	8	8	30.96	4.3	4	24.4
2/16/2019 17:00	8	8	8	30.9	4.5	4.2	23.9
2/16/2019 17:10	8	8	8	30.9	4.3	4.2	3.3
2/16/2019 17:20	8	8	8	30.9	4.2	4.1	24.5
2/16/2019 17:30	8	8	8	30.9	4.4	4.1	24.1
2/16/2019 17:40	8	8	8	30.96	4.3	4.1	3.6
2/16/2019 17:50	8	8	8	30.96	4.4	4.2	24.5
2/16/2019 18:00	8	8	8	30.96	4.2	4.1	24.2
2/16/2019 18:10	8	8	8	30.96	4.3	4.2	1.1
2/16/2019 18:20	8	8	8	30.96	4.3	4	24.6
2/16/2019 18:30	8	8	8	30.96	4.2	4.1	24.3
2/16/2019 18:40	8	8	8	30.87	4.4	4.1	24
2/16/2019 18:50	8	8	8	30.96	4.4	4.1	3.3
2/16/2019 19:00	8	8	8	30.93	4.5	4.1	24.5
2/16/2019 19:10	8	8	8	30.93	4.3	4.2	24.2
2/16/2019 19:20	8	8	8	30.99	4.3	4	3.7
2/16/2019 19:30	8	8	8	30.96	4.5	4	24.6
2/16/2019 19:40	8	8	8	30.96	4.3	4.1	24.2
2/16/2019 19:50	8	8	8	30.96	4.3	4	1.1
2/16/2019 20:00	8	8	8	30.9	4.2	4.1	24.6
2/16/2019 20:10	8	8	8	30.87	4.1	4	24.3
2/16/2019 20:20	8	8	8	30.93	4.3	4	24
2/16/2019 20:30	8	8	8	30.93	4.5	4.1	3.3
2/16/2019 20:40	8	8	8	30.93	4.4	4	24.5
2/16/2019 20:50	8	8	8	30.93	4.3	4	24.1
2/16/2019 21:00	8	8	8	30.87	4.3	4.2	3.9
2/16/2019 21:10	8	8	8	30.96	4.5	3.8	24.5
2/16/2019 21:20	8	8	8	30.99	4.3	4.1	24.2
2/16/2019 21:30	8	8	8	30.93	4.2	4.2	14.5
2/16/2019 21:40	8	8	8	30.93	4.4	4.1	3.2
2/16/2019 21:50	8	8	8	30.96	4.3	4	24.3
2/16/2019 22:00	8	8	8	30.9	4.5	4.1	24.1
2/16/2019 22:10	8	8	8	30.9	4.5	4	3.8
2/16/2019 22:20	8	8	8	30.9	4	4.1	24.6
2/16/2019 22:30	8	8	8	30.9	4.4	4.1	24.3

2/16/2019 22:40	8	8	8	30.9	4.4	4	23.6
2/16/2019 22:50	8	8	8	30.99	4.3	4.1	3.4
2/16/2019 23:00	8	8	8	30.96	4.3	4	24.5
2/16/2019 23:10	8	8	8	31.05	4.4	4.1	24.2
2/16/2019 23:20	8	8	8	31.02	4.8	4.1	3.4
2/16/2019 23:30	8	8	8	30.96	4.4	4.1	24.6
2/16/2019 23:40	8	8	8	30.99	4.3	4.1	24.2
2/16/2019 23:50	8	8	8	30.93	4.8	4	1.1
2/17/2019 0:00	8	8	8	30.99	4.4	4.1	24.5
2/17/2019 0:10	8	8	8	30.96	4.7	4.1	24.3
2/17/2019 0:20	8	8	8	31.02	4.2	4.1	24.1
2/17/2019 0:30	8	8	8	30.99	4.3	4.1	3.4
2/17/2019 0:40	8	8	8	31.02	4.2	4.1	24.5
2/17/2019 0:50	8	8	8	30.99	4.5	4.1	24.1
2/17/2019 1:00	8	8	8	30.99	4.4	4.1	4.1
2/17/2019 1:10	8	8	8	30.99	4.6	4	24.5
2/17/2019 1:20	8	8	8	31.02	4.3	4.2	24.2
2/17/2019 1:30	8	8	8	30.99	4.3	4.1	2.3
2/17/2019 1:40	8	8	8	30.96	4.6	4.1	24.5
2/17/2019 1:50	8	8	8	31.05	4.2	4.2	24.2
2/17/2019 2:00	8	8	8	31.05	4.5	4	14.5
2/17/2019 2:10	8	8	8	31.05	4.3	4.1	4.9
2/17/2019 2:20	8	8	8	31.09	4.5	4.1	24.4
2/17/2019 2:30	8	8	8	31.05	4.2	4.1	24.1
2/17/2019 2:40	8	8	8	31.12	4.4	4.1	3.5
2/17/2019 2:50	8	8	8	31.05	4.4	4.2	24.5
2/17/2019 3:00	8	8	8	31.18	4.5	4.1	24.3
2/17/2019 3:10	8	8	8	31.09	4.4	4.2	3.6
2/17/2019 3:20	8	8	8	31.12	4.6	4.1	24.6
2/17/2019 3:30	8	8	8	31.05	4.3	4.1	24.3
2/17/2019 3:40	8	8	8	31.05	4.4	4.1	15
2/17/2019 3:50	8	8	8	31.05	4.4	4	24.6
2/17/2019 4:00	8	8	8	31.12	4.4	4.2	24.4
2/17/2019 4:10	8	8	8	30.99	4.5	4.1	24.1
2/17/2019 4:20	8	8	8	31.05	4.4	4.2	3.5
2/17/2019 4:30	8	8	8	31.05	4.4	4.1	24.5
2/17/2019 4:40	8	8	8	31.02	4.3	4.1	24.1
2/17/2019 4:50	8	8	8	31.05	4.4	4.1	3.4
2/17/2019 5:00	8	8	8	31.02	4.5	4.1	24.5
2/17/2019 5:10	8	8	8	31.05	4.4	4.1	24.4
2/17/2019 5:20	8	8	8	31.02	4.3	4.1	24.2
2/17/2019 5:30	8	8	8	31.05	4.5	4.1	4.5
2/17/2019 5:40	8	8	8	31.09	4.4	3.9	24.4
2/17/2019 5:50	8	8	8	31.09	4.5	4	23.9
2/17/2019 6:00	8	8	8	31.09	4.3	4	4.5
2/17/2019 6:10	8	8	8	31.05	4.3	4.1	24.5
2/17/2019 6:20	8	8	8	31.02	4.4	4.1	24.1

2/17/2019 6:30	8	8	8	31.05	4.2	4.1	3
2/17/2019 6:40	8	8	8	31.12	4.4	4.1	24.6
2/17/2019 6:50	8	8	8	31.05	4.8	4.2	24.3
2/17/2019 7:00	8	8	8	31.09	4.4	4.1	1.2
2/17/2019 7:10	8	8	8	31.12	4.3	4.1	24.6
2/17/2019 7:20	8	8	8	31.05	4.3	4.1	24.3
2/17/2019 7:30	8	8	8	30.96	4.2	4.1	24.1
2/17/2019 7:40	8	8	8	31.02	4.3	4.1	3.5
2/17/2019 7:50	8	8	8	31.02	4.4	4.1	24.5
2/17/2019 8:00	8	8	8	31.09	4.5	4.1	24.1
2/17/2019 8:10	8	8	8	31.02	4.3	4.2	3.5
2/17/2019 8:20	8	8	8	31.12	4.1	4.2	24.5
2/17/2019 8:30	8	8	8	31.02	4.1	4.2	24.1
2/17/2019 8:40	8	8	8	31.09	4.3	4.1	3.7
2/17/2019 8:50	8	8	8	31.02	4.5	4.1	24.5
2/17/2019 9:00	8	8	8	31.05	4	4.1	24.1
2/17/2019 9:10	8	8	8	31.05	4.5	4.1	4.3
2/17/2019 9:20	8	8	8	31.05	4.4	4.2	24.4
2/17/2019 9:30	8	8	8	31.05	4.4	4.1	24.1
2/17/2019 9:40	8	8	8	31.09	4.5	4.1	4.1
2/17/2019 9:50	8	8	8	31.12	4.3	4.2	24.5
2/17/2019 10:00	8	8	8	31.18	4.4	4.1	23.9
2/17/2019 10:10	8	8	8	31.18	4.6	4.2	3.6
2/17/2019 10:20	8	8	8	31.12	4.3	4.1	24.5
2/17/2019 10:30	8	8	8	31.12	4.4	4.1	24.1
2/17/2019 10:40	8	8	8	31.18	4.4	4.1	3.2
2/17/2019 10:50	8	8	8	31.09	4.4	4.1	24.6
2/17/2019 11:00	8	8	8	31.12	4.2	4.2	24.2
2/17/2019 11:10	8	8	8	31.15	4.1	4.1	4
2/17/2019 11:20	8	8	8	31.18	4.3	4.1	24.5
2/17/2019 11:30	8	8	8	31.15	4.3	4.2	24.1
2/17/2019 11:40	8	8	8	31.21	4.9	4.2	4
2/17/2019 11:50	8	8	8	31.09	4.4	4.2	24.5
2/17/2019 12:00	8	8	8	31.15	4.5	4.2	24.3
2/17/2019 12:10	8	8	8	31.21	4.2	4.1	1.3
2/17/2019 12:20	8	8	8	31.27	4.4	4.1	24.6
2/17/2019 12:30	8	8	8	31.21	4.9	4.2	24.2
2/17/2019 12:40	8	8	8	31.21	4.6	4.1	1.1
2/17/2019 12:50	8	8	8	31.27	4.5	4.1	24.6
2/17/2019 13:00	8	8	8	31.27	4.6	4.1	24.4
2/17/2019 13:10	8	8	8	31.21	4.4	4.2	24.1
2/17/2019 13:20	8	8	8	31.21	4.6	4.1	3.7
2/17/2019 13:30	8	8	8	31.18	4.4	4.2	24.4
2/17/2019 13:40	8	8	8	31.18	4.3	4.2	24
2/17/2019 13:50	8	8	8	31.3	4.1	4.1	3.7
2/17/2019 14:00	8	8	8	31.3	4.4	4.1	24.5
2/17/2019 14:10	8	8	8	31.27	4.3	4.1	24.1

2/17/2019 14:20	8	8	8	31.21	4.4	4.1	4.2
2/17/2019 14:30	8	8	8	31.36	4.6	4.2	24.6
2/17/2019 14:40	8	8	8	31.27	4.4	4.1	24.2
2/17/2019 14:50	8	8	8	31.21	4.6	4.1	3.7
2/17/2019 15:00	8	8	8	31.33	4.1	4.2	24.5
2/17/2019 15:10	8	8	8	31.3	4.4	4.1	24.1
2/17/2019 15:20	8	8	8	31.3	4.4	4.2	4.1
2/17/2019 15:30	8	8	8	31.3	4.5	4.1	24.5
2/17/2019 15:40	8	8	8	31.33	4.2	4.2	24.2
2/17/2019 15:50	8	8	8	31.33	4.5	4.1	3.8
2/17/2019 16:00	8	8	8	31.3	4.4	4.1	24.5
2/17/2019 16:10	8	8	8	31.36	4.4	4.1	24.1
2/17/2019 16:20	8	8	8	31.33	4.2	4.1	3.4
2/17/2019 16:30	8	8	8	31.3	4.5	4.1	24.5
2/17/2019 16:40	8	8	8	31.36	4.5	4.1	24.1
2/17/2019 16:50	8	8	8	31.3	4.4	4.1	3.4
2/17/2019 17:00	8	8	8	31.27	4.1	4.1	24.4
2/17/2019 17:10	8	8	8	31.33	4.5	4.1	24.1
2/17/2019 17:20	8	8	8	31.33	4.5	4.1	3.3
2/17/2019 17:30	8	8	8	31.33	4.3	4.1	24.5
2/17/2019 17:40	8	8	8	31.33	4.3	4.1	24.1
2/17/2019 17:50	8	8	8	31.39	4.3	4.1	3.5
2/17/2019 18:00	8	8	8	31.36	4.4	4.1	24.5
2/17/2019 18:10	8	8	8	31.36	4.4	4.1	24.1
2/17/2019 18:20	8	8	8	31.36	4.7	4	4.4
2/17/2019 18:30	8	8	8	31.39	4.7	4.1	24.5
2/17/2019 18:40	8	8	8	31.36	4.4	4.1	24.2
2/17/2019 18:50	8	8	8	31.33	4.4	4.1	3.5
2/17/2019 19:00	8	8	8	31.42	4.5	4.2	24.5
2/17/2019 19:10	8	8	8	31.39	4.4	4	24.3
2/17/2019 19:20	8	8	8	31.45	4.3	4.1	3.7
2/17/2019 19:30	8	8	8	31.42	4.3	4	24.5
2/17/2019 19:40	8	8	8	31.42	4.5	4.1	24.1
2/17/2019 19:50	8	8	8	31.48	4.4	4.2	3.6
2/17/2019 20:00	8	8	8	31.39	4.2	4.1	24.5
2/17/2019 20:10	8	8	8	31.42	4.3	4.1	24.2
2/17/2019 20:20	8	8	8	31.45	4.3	4.1	4.1
2/17/2019 20:30	8	8	8	31.45	4.2	4.1	24.5
2/17/2019 20:40	8	8	8	31.42	4.1	4	24.3
2/17/2019 20:50	8	8	8	31.39	4.4	4.2	3.9
2/17/2019 21:00	8	8	8	31.45	4.4	4.1	24.5
2/17/2019 21:10	8	8	8	31.42	4.4	4.1	24.2
2/17/2019 21:20	8	8	8	31.42	4.4	4.1	3.5
2/17/2019 21:30	8	8	8	31.45	4.6	4.1	24.4
2/17/2019 21:40	8	8	8	31.45	4.6	4.2	24.1
2/17/2019 21:50	8	8	8	31.42	4.3	4.1	3.7
2/17/2019 22:00	8	8	8	31.42	4.5	4.1	24.6

2/17/2019 22:10	8	8	8	31.42	4.6	4.1	24.2
2/17/2019 22:20	8	8	8	31.48	4.4	4.1	3.5
2/17/2019 22:30	8	8	8	31.45	4.5	4.1	24.6
2/17/2019 22:40	8	8	8	31.45	4.3	4.2	24.3
2/17/2019 22:50	8	8	8	31.45	4.4	4.2	3.4
2/17/2019 23:00	8	8	8	31.45	4.4	4	24.5
2/17/2019 23:10	8	8	8	31.45	4.4	4.1	24
2/17/2019 23:20	8	8	8	31.45	4.5	4.1	4.6
2/17/2019 23:30	8	8	8	31.45	4.4	4.1	24.5
2/17/2019 23:40	8	8	8	31.39	4.5	4.1	24.1
2/17/2019 23:50	8	8	8	31.42	4.7	4.1	10.7
2/18/2019 0:00	8	8	8	31.33	4.6	4.1	24.4
2/18/2019 0:10	8	8	8	31.42	4.2	4.2	24
2/18/2019 0:20	8	8	8	31.42	4.5	4	3.2
2/18/2019 0:30	8	8	8	31.39	4.5	4.1	24.4
2/18/2019 0:40	8	8	8	31.42	4.3	4.1	24.1
2/18/2019 0:50	8	8	8	31.33	4.3	4.1	4.3
2/18/2019 1:00	8	8	8	31.45	4.5	4.1	24.3
2/18/2019 1:10	8	8	8	31.42	4.4	4.1	24.3
2/18/2019 1:20	8	8	8	31.48	4.1	3.9	24.6
2/18/2019 1:30	8	8	8	31.42	4.3	4.2	24.3
2/18/2019 1:40	8	8	8	31.48	4.5	4.2	1.9
2/18/2019 1:50	8	8	8	31.42	4.5	4.1	24.6
2/18/2019 2:00	8	8	8	31.48	3.9	4.2	24.3
2/18/2019 2:10	8	8	8	31.45	4.6	4.1	1.5
2/18/2019 2:20	8	8	8	31.45	4.6	4.1	24.5
2/18/2019 2:30	8	8	8	31.51	4.6	4.1	24.2
2/18/2019 2:40	8	8	8	31.51	4.4	4.2	3.8
2/18/2019 2:50	8	8	8	31.45	4.4	4.1	24.5
2/18/2019 3:00	8	8	8	31.48	4.5	4.1	24.1
2/18/2019 3:10	8	8	8	31.48	4.4	4.1	3.2
2/18/2019 3:20	8	8	8	31.48	4.5	4.1	24.5
2/18/2019 3:30	8	8	8	31.54	4.6	4	24.1
2/18/2019 3:40	8	8	8	31.48	4.4	4.2	24.7
2/18/2019 3:50	8	8	8	31.48	4.4	4	24.4
2/18/2019 4:00	8	8	8	31.54	4.2	4.1	1.1
2/18/2019 4:10	8	8	8	31.54	4.4	4.2	24.6
2/18/2019 4:20	8	8	8	31.54	4.4	4.1	24.2
2/18/2019 4:30	8	8	8	31.54	4.7	4.2	3.2
2/18/2019 4:40	8	8	8	31.57	4.4	4.1	24.6
2/18/2019 4:50	8	8	8	31.57	4.2	4.1	23.9
2/18/2019 5:00	8	8	8	31.57	4.4	4.1	3.2
2/18/2019 5:10	8	8	8	31.6	4.5	4.2	24.4
2/18/2019 5:20	8	8	8	31.57	4.6	4.1	24
2/18/2019 5:30	8	8	8	31.6	4.4	4.1	24.6
2/18/2019 5:40	8	8	8	31.7	4.6	4.2	24.3
2/18/2019 5:50	8	8	8	31.54	4.4	4.1	1.2

2/18/2019 6:00	8	8	8	31.57	4.3	4.2	24.6
2/18/2019 6:10	8	8	8	31.54	4.4	4.2	24.5
2/18/2019 6:20	8	8	8	31.57	4.4	4.1	23.5
2/18/2019 6:30	8	8	8	31.57	4.9	4.1	24.3
2/18/2019 6:40	8	8	8	31.54	4.4	4.1	3.8
2/18/2019 6:50	8	8	8	31.6	4.4	4.1	24.5
2/18/2019 7:00	8	8	8	31.57	4.4	4.1	2
2/18/2019 7:10	8	8	8	31.54	4.4	4.1	24.5
2/18/2019 7:20	8	8	8	31.6	4.5	4.1	24.1
2/18/2019 7:30	8	8	8	31.54	4.7	4.2	24.5
2/18/2019 7:40	8	8	8	31.54	4.1	4.1	24.2
2/18/2019 7:50	8	8	8	31.54	4.3	4.1	3.4
2/18/2019 8:00	8	8	8	31.54	4.5	4.1	24.4
2/18/2019 8:10	8	8	8	31.51	4.5	4.1	1.2
2/18/2019 8:20	8	8	8	31.63	4.3	4.1	24.6
2/18/2019 8:30	8	8	8	31.54	4.5	4.1	24.2
2/18/2019 8:40	8	8	8	31.51	4.5	4.2	3.8
2/18/2019 8:50	8	8	8	31.51	4.4	4	24.5
2/18/2019 9:00	8	8	8	31.57	4.5	4.1	24.3
2/18/2019 9:10	8	8	8	31.57	4.4	4.1	24.6
2/18/2019 9:20	8	8	8	31.57	4.3	4.2	24.3
2/18/2019 9:30	8	8	8	31.51	4.4	4.1	1.2
2/18/2019 9:40	8	8	8	31.51	4.4	4.2	24.5
2/18/2019 9:50	8	8	8	31.51	4.4	3.9	24.3
2/18/2019 10:00	8	8	8	31.54	4.6	4.1	3.2
2/18/2019 10:10	8	8	8	31.48	4.4	4.2	24.5
2/18/2019 10:20	8	8	8	31.54	4.4	4.1	24
2/18/2019 10:30	8	8	8	31.51	4.4	4.1	3.6
2/18/2019 10:40	8	8	8	31.51	4.5	4.1	24.5
2/18/2019 10:50	8	8	8	31.51	4.6	4.1	24
2/18/2019 11:00	8	8	8	31.48	4.5	4	3.5
2/18/2019 11:10	8	8	8	31.48	4.6	3.9	24.4
2/18/2019 11:20	8	8	8	31.51	4.5	4.1	24.1
2/18/2019 11:30	8	8	8	31.51	4.2	4.1	24.6
2/18/2019 11:40	8	8	8	31.51	4.2	4.1	24.4
2/18/2019 11:50	8	8	8	31.57	4.5	4.1	1.2
2/18/2019 12:00	8	8	8	31.51	4.4	4.1	24.6
2/18/2019 12:10	8	8	8	31.42	4.4	4.2	24.3
2/18/2019 12:20	8	8	8	31.57	4.5	4.2	3.8
2/18/2019 12:30	8	8	8	31.51	4.3	4.1	24.6
2/18/2019 12:40	8	8	8	31.54	4.5	4.1	24.1
2/18/2019 12:50	8	8	8	31.51	4.5	4.1	3.4
2/18/2019 13:00	8	8	8	31.54	4.5	4.1	24.5
2/18/2019 13:10	8	8	8	31.51	4.2	4.2	24
2/18/2019 13:20	8	8	8	31.6	4.4	4.2	3.2
2/18/2019 13:30	8	8	8	31.6	4.5	4.2	24.4
2/18/2019 13:40	8	8	8	31.45	4.4	4.2	23

2/18/2019 13:50	8	8	8	31.51	4.4	4.2	24.6
2/18/2019 14:00	8	8	8	31.63	4.3	4.2	24.3
2/18/2019 14:10	8	8	8	31.57	4.3	4.1	1.1
2/18/2019 14:20	8	8	8	31.57	4.4	4.2	24.6
2/18/2019 14:30	8	8	8	31.57	4.4	4.1	24.2
2/18/2019 14:40	8	8	8	31.6	4.1	4.1	3.3
2/18/2019 14:50	8	8	8	31.51	4.4	4.2	24.4
2/18/2019 15:00	8	8	8	31.6	4.4	4.1	1.9
2/18/2019 15:10	8	8	8	31.63	4.6	4.1	24.7
2/18/2019 15:20	8	8	8	31.67	4.3	4.1	24.2
2/18/2019 15:30	8	8	8	31.63	4.3	4.1	3.8
2/18/2019 15:40	8	8	8	31.67	4.4	4.1	24.5
2/18/2019 15:50	8	8	8	31.63	4.4	4.1	24.1
2/18/2019 16:00	8	8	8	31.63	4.4	4.2	4.1
2/18/2019 16:10	8	8	8	31.67	4.3	4	24.4
2/18/2019 16:20	8	8	8	31.63	4.4	4.2	22.8
2/18/2019 16:30	8	8	8	31.67	4.3	4.2	24.6
2/18/2019 16:40	8	8	8	31.57	4.5	4.1	24.3
2/18/2019 16:50	8	8	8	31.6	4.5	4.2	2.5
2/18/2019 17:00	8	8	8	31.63	4.4	4.2	24.5
2/18/2019 17:10	8	8	8	31.6	4.7	4.2	24.3
2/18/2019 17:20	8	8	8	31.6	4.3	4.2	3.2
2/18/2019 17:30	8	8	8	31.57	4.7	4.1	24.4
2/18/2019 17:40	8	8	8	31.51	4.2	4.2	7.1
2/18/2019 17:50	8	8	8	31.6	4.2	4.1	24.6
2/18/2019 18:00	8	8	8	31.6	4.3	4.2	24.3
2/18/2019 18:10	8	8	8	31.6	4.2	4.1	3.6
2/18/2019 18:20	8	8	8	31.6	4.3	4.1	24.5
2/18/2019 18:30	8	8	8	31.67	4.3	4.1	14.8
2/18/2019 18:40	8	8	8	31.63	4.4	4.1	24.6
2/18/2019 18:50	8	8	8	31.63	4.4	4.1	24.3
2/18/2019 19:00	8	8	8	31.67	4.5	4.2	3.6
2/18/2019 19:10	8	8	8	31.63	4.5	4	24.5
2/18/2019 19:20	8	8	8	31.6	4.5	4.2	24.2
2/18/2019 19:30	8	8	8	31.7	4.4	4.1	4.8
2/18/2019 19:40	8	8	8	31.67	4.4	4	24.3
2/18/2019 19:50	8	8	8	31.7	4.5	4.1	2.1
2/18/2019 20:00	8	8	8	31.76	4.3	4.1	24.6
2/18/2019 20:10	8	8	8	31.67	4.4	4	24.2
2/18/2019 20:20	8	8	8	31.67	4.1	4.1	24.6
2/18/2019 20:30	8	8	8	31.67	4.7	4.2	24.3
2/18/2019 20:40	8	8	8	31.6	4.2	4.1	4.5
2/18/2019 20:50	8	8	8	31.63	4.5	4.1	24.4
2/18/2019 21:00	8	8	8	31.6	4.5	4.2	3.5
2/18/2019 21:10	8	8	8	31.57	4.2	4.1	24.7
2/18/2019 21:20	8	8	8	31.63	4.2	4.1	24.2
2/18/2019 21:30	8	8	8	31.51	4.5	4.1	4.5

2/18/2019 21:40	8	8	8	31.57	4.6	4.1	24.5
2/18/2019 21:50	8	8	8	31.57	4.7	4	23.3
2/18/2019 22:00	8	8	8	31.54	4.6	4.1	24.6
2/18/2019 22:10	8	8	8	31.63	4.6	4.1	24.2
2/18/2019 22:20	8	8	8	31.57	4.2	4.2	3.4
2/18/2019 22:30	8	8	8	31.54	4.3	4.2	24.5
2/18/2019 22:40	8	8	8	31.6	4.3	4.1	22.3
2/18/2019 22:50	8	8	8	31.54	4.4	4.1	24.6
2/18/2019 23:00	8	8	8	31.57	4.6	4.2	24.3
2/18/2019 23:10	8	8	8	31.6	4.5	4.2	2.5
2/18/2019 23:20	8	8	8	31.6	4.3	4.1	24.6
2/18/2019 23:30	8	8	8	31.6	4.3	4.2	24.2
2/18/2019 23:40	8	8	8	31.54	4.4	4.1	3.3
2/18/2019 23:50	8	8	8	31.6	4.3	4.1	24.5
2/19/2019 0:00	8	8	8	31.63	4.1	4.1	7.2
2/19/2019 0:10	8	8	8	31.57	4.5	4.1	24.7
2/19/2019 0:20	8	8	8	31.6	4.3	4.2	24.2
2/19/2019 0:30	8	8	8	31.63	4.6	4.1	4.5
2/19/2019 0:40	8	8	8	31.6	4.3	4.1	24.5
2/19/2019 0:50	8	8	8	31.57	4	4.1	24.1
2/19/2019 1:00	8	8	8	31.6	4.4	4.1	24.6
2/19/2019 1:10	8	8	8	31.63	4.3	4.1	24.4
2/19/2019 1:20	8	8	8	31.54	4.3	4.1	3.3
2/19/2019 1:30	8	8	8	31.63	4.2	4.2	24.5
2/19/2019 1:40	8	8	8	31.6	4.5	4.2	24.1
2/19/2019 1:50	8	8	8	31.57	4.7	4.1	24.6
2/19/2019 2:00	8	8	8	31.57	4.5	4.1	24.4
2/19/2019 2:10	8	8	8	31.6	4.4	4.1	3.9
2/19/2019 2:20	8	8	8	31.57	4.6	4.1	24.5
2/19/2019 2:30	8	8	8	31.57	4.4	4.1	24.1
2/19/2019 2:40	8	8	8	31.57	4.4	4.1	10.8
2/19/2019 2:50	8	8	8	31.6	4.4	3.9	24.4
2/19/2019 3:00	8	8	8	31.54	4.5	4.1	4.1
2/19/2019 3:10	8	8	8	31.57	4.4	4.2	24.6
2/19/2019 3:20	8	8	8	31.57	4.5	4.1	24.1
2/19/2019 3:30	8	8	8	31.6	4.6	4.2	24.7
2/19/2019 3:40	8	8	8	31.54	4.1	4.1	24.3
2/19/2019 3:50	8	8	8	31.6	4.4	4	3.8
2/19/2019 4:00	8	8	8	31.67	4.2	4.2	24.5
2/19/2019 4:10	8	8	8	31.54	4.4	4.1	22.9
2/19/2019 4:20	8	8	8	31.51	4.4	4.1	24.7
2/19/2019 4:30	8	8	8	31.6	4.3	4.2	24.4
2/19/2019 4:40	8	8	8	31.54	4.5	4.1	3.7
2/19/2019 4:50	8	8	8	31.6	4.4	4.1	24.5
2/19/2019 5:00	8	8	8	31.57	4.4	4.1	24.3
2/19/2019 5:10	8	8	8	31.63	4.5	4.1	24.7
2/19/2019 5:20	8	8	8	31.57	4.4	4.1	24.3

2/19/2019 5:30	8	8	8	31.63	4.5	4.1	4.2
2/19/2019 5:40	8	8	8	31.67	4.6	4.1	24.6
2/19/2019 5:50	8	8	8	31.57	4.5	4.2	24.3
2/19/2019 6:00	8	8	8	31.57	4.6	4.1	4.8
2/19/2019 6:10	8	8	8	31.6	4.4	4.1	24.4
2/19/2019 6:20	8	8	8	31.6	4.3	4.1	1.1
2/19/2019 6:30	8	8	8	31.67	4.6	4.1	24.6
2/19/2019 6:40	8	8	8	31.7	4.3	4.1	24.2
2/19/2019 6:50	8	8	8	31.73	4.5	4.1	3.8
2/19/2019 7:00	8	8	8	31.67	4.4	4.2	24.5
2/19/2019 7:10	8	8	8	31.63	4.3	4.1	16.9
2/19/2019 7:20	8	8	8	31.67	4.3	4.2	24.6
2/19/2019 7:30	8	8	8	31.7	4.5	4.2	24.3
2/19/2019 7:40	8	8	8	31.67	4.2	4.2	3.6
2/19/2019 7:50	8	8	8	31.6	4.5	4.2	24.5
2/19/2019 8:00	8	8	8	31.6	4.3	4.1	24.2
2/19/2019 8:10	8	8	8	31.67	4.4	4.2	24.7
2/19/2019 8:20	8	8	8	31.6	4.5	4.2	24.3
2/19/2019 8:30	8	8	8	31.54	4.4	4.1	1.6
2/19/2019 8:40	8	8	8	31.63	4.3	4.2	24.6
2/19/2019 8:50	8	8	8	31.6	4.8	4.2	24.3
2/19/2019 9:00	8	8	8	31.57	4.5	4.2	3.2
2/19/2019 9:10	8	8	8	31.63	4.8	4.2	24.4
2/19/2019 9:20	8	8	8	31.54	4.4	4.2	1.2
2/19/2019 9:30	8	8	8	31.63	4.5	4.2	24.6
2/19/2019 9:40	8	8	8	31.6	4.6	4.2	24.2
2/19/2019 9:50	8	8	8	31.63	4.4	4.2	3.3
2/19/2019 10:00	8	8	8	31.73	4.5	4.2	24.3
2/19/2019 10:10	8	8	8	31.63	4.4	4.2	1.3
2/19/2019 10:20	8	8	8	31.67	4.5	4.3	24.6
2/19/2019 10:30	8	8	8	31.67	4.3	4.2	24.2
2/19/2019 10:40	8	8	8	31.7	4.4	4.2	24.7
2/19/2019 10:50	8	8	8	31.76	4.6	4.2	24.4
2/19/2019 11:00	8	8	8	31.7	4.2	4.2	3.5
2/19/2019 11:10	8	8	8	31.73	4.7	4.1	24.5
2/19/2019 11:20	8	8	8	31.7	4.5	4.2	3.6
2/19/2019 11:30	8	8	8	31.82	4.2	4.2	24.6
2/19/2019 11:40	8	8	8	31.63	4.7	4.2	24.4
2/19/2019 11:50	8	8	8	31.76	4.4	4.2	3.3
2/19/2019 12:00	8	8	8	31.79	4.4	4.2	24.5
2/19/2019 12:10	8	8	8	31.67	4.4	4.2	1.6
2/19/2019 12:20	8	8	8	31.7	4.4	4.2	24.6
2/19/2019 12:30	8	8	8	31.67	4.6	4.2	24.1
2/19/2019 12:40	8	8	8	31.7	4.4	4.2	4.5
2/19/2019 12:50	8	8	8	31.7	4.5	4.2	24.3
2/19/2019 13:00	8	8	8	31.73	4.6	4.1	4.1
2/19/2019 13:10	8	8	8	31.67	4.4	4.2	24.6

2/19/2019 13:20	8	8	8	31.7	4.4	4.2	21
2/19/2019 13:30	8	8	8	31.73	4.2	4.2	24.7
2/19/2019 13:40	8	8	8	31.73	4.5	4.2	24.2
2/19/2019 13:50	8	8	8	31.76	4.6	4.2	4.5
2/19/2019 14:00	8	8	8	31.76	4.4	4.2	24.5
2/19/2019 14:10	8	8	8	31.76	4.5	4.1	3.6
2/19/2019 14:20	8	8	8	31.85	4.4	4.2	24.6
2/19/2019 14:30	8	8	8	31.82	4.4	4.2	24.3
2/19/2019 14:40	8	8	8	31.7	4.3	4.1	4.1
2/19/2019 14:50	8	8	8	31.79	4.1	4.2	24.4
2/19/2019 15:00	8	8	8	31.82	4.2	4	1.2
2/19/2019 15:10	8	8	8	31.76	4.4	4.1	24.6
2/19/2019 15:20	8	8	8	31.85	4.3	4.1	24
2/19/2019 15:30	8	8	8	31.85	4.4	4.2	24.7
2/19/2019 15:40	8	8	8	31.79	4.6	4.2	24.3
2/19/2019 15:50	8	8	8	31.82	4.4	4.2	3.9
2/19/2019 16:00	8	8	8	31.82	4.4	4.2	24.5
2/19/2019 16:10	8	8	8	31.85	4.6	4.2	23
2/19/2019 16:20	8	8	8	31.79	4.2	4.2	24.7
2/19/2019 16:30	8	8	8	31.79	4.2	4.1	24.2
2/19/2019 16:40	8	8	8	31.82	4.4	4.1	3.6
2/19/2019 16:50	8	8	8	31.85	4.3	4.2	24.5
2/19/2019 17:00	8	8	8	32	4.4	4.1	3.7
2/19/2019 17:10	8	8	8	31.85	4.3	4.1	24.6
2/19/2019 17:20	8	8	8	32.06	4.3	4.2	24.2
2/19/2019 17:30	8	8	8	31.82	4.6	4.1	4.5
2/19/2019 17:40	8	8	8	31.79	4.4	4.1	24.3
2/19/2019 17:50	8	8	8	31.82	4.5	4.2	3.7
2/19/2019 18:00	8	8	8	31.82	4.4	4.2	24.5
2/19/2019 18:10	8	8	8	31.85	4.4	4	24.2
2/19/2019 18:20	8	8	8	31.82	4.3	4.2	3.5
2/19/2019 18:30	8	8	8	31.82	4.6	4.1	24.4
2/19/2019 18:40	8	8	8	31.88	4.3	4.1	1.1
2/19/2019 18:50	8	8	8	31.88	4.4	4.2	24.6
2/19/2019 19:00	8	8	8	31.82	4.3	4.1	24.2
2/19/2019 19:10	8	8	8	31.82	4.4	4.1	3.5
2/19/2019 19:20	8	8	8	31.85	4.6	4.1	24.4
2/19/2019 19:30	8	8	8	31.85	4.5	4.2	1.1
2/19/2019 19:40	8	8	8	31.94	4.4	4.1	24.6
2/19/2019 19:50	8	8	8	31.94	4.5	4.1	24.3
2/19/2019 20:00	8	8	8	31.85	4.3	4.1	24.7
2/19/2019 20:10	8	8	8	31.88	4.3	4.1	24.3
2/19/2019 20:20	8	8	8	31.88	4.5	4.1	3.8
2/19/2019 20:30	8	8	8	31.88	4.4	4.2	24.5
2/19/2019 20:40	8	8	8	31.76	4.4	4.1	11.1
2/19/2019 20:50	8	8	8	31.94	4.5	4.1	24.7
2/19/2019 21:00	8	8	8	31.88	4.5	4.1	24.2

2/19/2019 21:10	8	8	8	31.97	4.6	4.2	3.3
2/19/2019 21:20	8	8	8	31.94	4.4	4.1	24.5
2/19/2019 21:30	8	8	8	31.88	4.3	4.1	1.2
2/19/2019 21:40	8	8	8	31.94	4.5	4.1	24.7
2/19/2019 21:50	8	8	8	32	4.5	4.2	24.2
2/19/2019 22:00	8	8	8	31.97	4.4	4.1	4.7
2/19/2019 22:10	8	8	8	31.97	4.3	4.1	24.4
2/19/2019 22:20	8	8	8	31.97	4.6	4.1	2.5
2/19/2019 22:30	8	8	8	31.97	4.6	4.2	24.6
2/19/2019 22:40	8	8	8	32	4.5	4.2	24.1
2/19/2019 22:50	8	8	8	31.97	4.4	4.1	24.6
2/19/2019 23:00	8	8	8	31.97	4.3	4.1	24.4
2/19/2019 23:10	8	8	8	31.97	4.4	4.2	4.4
2/19/2019 23:20	8	8	8	31.79	4.5	4.1	24.5
2/19/2019 23:30	8	8	8	32	4.5	4.2	15.1
2/19/2019 23:40	8	8	8	31.88	4.6	4.2	24.7
2/19/2019 23:50	8	8	8	31.94	4.4	4.2	24.2
2/20/2019 0:00	8	8	8	32	4.7	4.1	3.4
2/20/2019 0:10	8	8	8	31.85	4.8	4.1	24.5
2/20/2019 0:20	8	8	8	31.88	4.4	4.2	3.7
2/20/2019 0:30	8	8	8	31.88	4.5	4.2	24.6
2/20/2019 0:40	8	8	8	32.03	4.5	4.2	23.8
2/20/2019 0:50	8	8	8	31.97	4.5	4.2	24.7
2/20/2019 1:00	8	8	8	31.97	4.8	4.1	24.4
2/20/2019 1:10	8	8	8	31.94	4.8	4.2	3.6
2/20/2019 1:20	8	8	8	31.97	4.4	4.2	24.5
2/20/2019 1:30	8	8	8	31.94	4.3	4.2	21.2
2/20/2019 1:40	8	8	8	31.85	4.2	4.2	24.6
2/20/2019 1:50	8	8	8	31.85	4.9	4.1	24.2
2/20/2019 2:00	8	8	8	31.88	4.4	4.2	4.1
2/20/2019 2:10	8	8	8	31.88	4.4	4.2	24.4
2/20/2019 2:20	8	8	8	31.85	4.4	4.2	1.1
2/20/2019 2:30	8	8	8	31.88	4.4	4.1	24.6
2/20/2019 2:40	8	8	8	31.88	4.4	4.2	24.2
2/20/2019 2:50	8	8	8	31.94	4.7	4.2	4.5
2/20/2019 3:00	8	8	8	31.82	4.3	4.2	24.3
2/20/2019 3:10	8	8	8	31.82	4.3	4	3.3
2/20/2019 3:20	8	8	8	31.94	4.5	4.2	24.6
2/20/2019 3:30	8	8	8	31.94	4.5	4.2	24.2
2/20/2019 3:40	8	8	8	31.82	4.5	4.2	24.6
2/20/2019 3:50	8	8	8	31.85	4.5	4.1	24.4
2/20/2019 4:00	8	8	8	31.94	4.3	4.1	3.7
2/20/2019 4:10	8	8	8	31.88	4.9	4.2	24.5
2/20/2019 4:20	8	8	8	32	4.5	4.2	6.9
2/20/2019 4:30	8	8	8	31.94	4.7	4.1	24.6
2/20/2019 4:40	8	8	8	31.97	4.4	4.1	24.2
2/20/2019 4:50	8	8	8	31.97	4.5	4.1	3.2

2/20/2019 5:00	8	8	8	32	4.1	4.1	24.4
2/20/2019 5:10	8	8	8	32	4.5	4.1	3
2/20/2019 5:20	8	8	8	32	4.9	4.2	24.5
2/20/2019 5:30	8	8	8	31.94	4.3	4.2	24.3
2/20/2019 5:40	8	8	8	32	4.4	4.2	24.7
2/20/2019 5:50	8	8	8	32	4.6	4.2	24.1
2/20/2019 6:00	8	8	8	32	4.6	4.1	4.1
2/20/2019 6:10	8	8	8	32	4.7	4.2	24.4
2/20/2019 6:20	8	8	8	31.94	4.5	4.2	1.8
2/20/2019 6:30	8	8	8	32.03	4.4	4.1	24.6
2/20/2019 6:40	8	8	8	31.97	4.8	4.2	24.2
2/20/2019 6:50	8	8	8	31.94	4.2	4.2	24.7
2/20/2019 7:00	8	8	8	32	4.5	4.2	24.3
2/20/2019 7:10	8	8	8	32.06	4.5	4.2	3.6
2/20/2019 7:20	8	8	8	32.06	4.3	4.2	24.5
2/20/2019 7:30	8	8	8	32.03	4.6	4.2	1.1
2/20/2019 7:40	8	8	8	32.03	4.5	4.3	24.6
2/20/2019 7:50	8	8	8	32	4.6	4.2	24.3
2/20/2019 8:00	8	8	8	32.06	4.5	4.1	3.2
2/20/2019 8:10	8	8	8	32.06	4.4	4.2	24.5
2/20/2019 8:20	8	8	8	32	4.5	4.2	2.1
2/20/2019 8:30	8	8	8	32	4.4	4.2	24.6
2/20/2019 8:40	8	8	8	32	4.3	4.2	24.1
2/20/2019 8:50	8	8	8	32	4.2	4.2	24.7
2/20/2019 9:00	8	8	8	32.06	4.5	4.1	24.4
2/20/2019 9:10	8	8	8	31.97	4.6	4.2	4.3
2/20/2019 9:20	8	8	8	32.06	4.7	4.2	24.3
2/20/2019 9:30	8	8	8	32.06	4.5	4.2	1.1
2/20/2019 9:40	8	8	8	32.12	4.4	4.2	24.7
2/20/2019 9:50	8	8	8	32.03	4.6	4.2	24
2/20/2019 10:00	8	8	8	31.97	4.3	4.2	24.6
2/20/2019 10:10	8	8	8	32.09	4.6	4.2	24.3
2/20/2019 10:20	8	8	8	32.12	4.4	4.1	2.8
2/20/2019 10:30	8	8	8	32.09	4.5	4.2	24.7
2/20/2019 10:40	8	8	8	32.09	4.6	4.3	24.2
2/20/2019 10:50	8	8	8	32.12	3.8	4.2	24.7
2/20/2019 11:00	8	8	8	32.12	4.3	4.2	24.4
2/20/2019 11:10	8	8	8	32.15	4.7	4.2	4.1
2/20/2019 11:20	8	8	8	32.18	4.6	4.1	24.5
2/20/2019 11:30	8	8	8	32.12	4.6	4.2	14.9
2/20/2019 11:40	8	8	8	32.15	4.5	4.2	24.7
2/20/2019 11:50	8	8	8	32.18	4.4	4.2	24.3
2/20/2019 12:00	8	8	8	32.18	4.5	4.2	24.7
2/20/2019 12:10	8	8	8	32.31	4.3	4.2	24.4
2/20/2019 12:20	8	8	8	32.21	4.4	4.2	3.6
2/20/2019 12:30	8	8	8	32.25	4.5	4.2	24.5
2/20/2019 12:40	8	8	8	32.21	4.5	4.2	1.4

2/20/2019 12:50	8	8	8	32.31	4.6	4.2	24.5
2/20/2019 13:00	8	8	8	32.15	4.4	4.2	24.2
2/20/2019 13:10	8	8	8	32.18	4.2	4.2	24.6
2/20/2019 13:20	8	8	8	32.25	4.4	4.2	24.4
2/20/2019 13:30	8	8	8	32.18	4.4	4.2	3.4
2/20/2019 13:40	8	8	8	32.21	4.5	4.2	24.4
2/20/2019 13:50	8	8	8	32.21	4.5	4.2	1.1
2/20/2019 14:00	8	8	8	32.25	4.3	4.2	24.6
2/20/2019 14:10	8	8	8	32.21	4.2	4.2	24.1
2/20/2019 14:20	8	8	8	32.18	4.6	4.3	24.7
2/20/2019 14:30	8	8	8	32.18	4.7	4.2	24.3
2/20/2019 14:40	8	8	8	32.18	4.5	4.2	3.8
2/20/2019 14:50	8	8	8	32.25	4.3	4.2	24.6
2/20/2019 15:00	8	8	8	32.21	4.5	4.2	7
2/20/2019 15:10	8	8	8	32.21	4.6	4.2	24.6
2/20/2019 15:20	8	8	8	32.21	4.4	4.3	24.1
2/20/2019 15:30	8	8	8	32.21	4.3	4.2	24.7
2/20/2019 15:40	8	8	8	32.18	4.2	4.1	24.3
2/20/2019 15:50	8	8	8	32.21	4.5	4.1	3.8
2/20/2019 16:00	8	8	8	32.28	4.3	4.2	24.5
2/20/2019 16:10	8	8	8	32.28	4.4	4.2	22.1
2/20/2019 16:20	8	8	8	32.25	4.4	4.2	24.7
2/20/2019 16:30	8	8	8	32.28	4.2	4.2	24.2
2/20/2019 16:40	8	8	8	32.25	4.5	4.2	3.3
2/20/2019 16:50	8	8	8	32.31	4.5	4.1	24.5
2/20/2019 17:00	8	8	8	32.31	4.4	4.2	1.9
2/20/2019 17:10	8	8	8	32.31	4.4	4.2	24.6
2/20/2019 17:20	8	8	8	32.28	4.3	4.3	18.9
2/20/2019 17:30	8	8	8	32.28	4.1	4.2	24.6
2/20/2019 17:40	8	8	8	32.28	4.3	4.1	24.3
2/20/2019 17:50	8	8	8	32.25	4.5	4.2	4.7
2/20/2019 18:00	8	8	8	32.21	4.4	4.1	24.4
2/20/2019 18:10	8	8	8	32.34	4.4	4.1	3.7
2/20/2019 18:20	8	8	8	32.4	4.7	4.2	24.5
2/20/2019 18:30	8	8	8	32.37	4.5	4.2	2.2
2/20/2019 18:40	8	8	8	32.37	4.6	4.2	24.6
2/20/2019 18:50	8	8	8	32.37	4.5	4.1	24
2/20/2019 19:00	8	8	8	32.49	4.5	4.2	24.7
2/20/2019 19:10	8	8	8	32.4	4.5	4.2	24.2
2/20/2019 19:20	8	8	8	32.37	4.4	4.2	3.2
2/20/2019 19:30	8	8	8	32.61	4.4	4.2	24.4
2/20/2019 19:40	8	8	8	32.49	4.4	4.1	3.8
2/20/2019 19:50	8	8	8	32.43	4.8	4.2	24.6
2/20/2019 20:00	8	8	8	32.52	4.4	4.1	24.3
2/20/2019 20:10	8	8	8	32.52	4.7	4.2	24.7
2/20/2019 20:20	8	8	8	32.52	4.4	4.3	24.1
2/20/2019 20:30	8	8	8	32.52	4.7	4.1	4.3

2/20/2019 20:40	8	8	8	32.58	4.3	4.2	24.4
2/20/2019 20:50	8	8	8	32.49	4.2	4.2	3.6
2/20/2019 21:00	8	8	8	32.52	4.4	4.2	24.6
2/20/2019 21:10	8	8	8	32.46	4.6	4.2	1.2
2/20/2019 21:20	8	8	8	32.52	4.7	4.2	24.6
2/20/2019 21:30	8	8	8	32.52	4.3	4.2	24.1
2/20/2019 21:40	8	8	8	32.49	4.5	4.1	24.7
2/20/2019 21:50	8	8	8	32.61	4.1	4.2	24.2
2/20/2019 22:00	8	8	8	32.52	4.4	4.2	4.6
2/20/2019 22:10	8	8	8	32.49	4.5	4.1	24.3
2/20/2019 22:20	8	8	8	32.61	4.7	4.2	3.4
2/20/2019 22:30	8	8	8	32.46	4.8	4.2	24.4
2/20/2019 22:40	8	8	8	32.43	4.6	4.1	3.7
2/20/2019 22:50	8	8	8	32.52	4.6	4.2	24.5
2/20/2019 23:00	8	8	8	32.52	4.4	4.1	1.1
2/20/2019 23:10	8	8	8	32.49	4.5	4.2	24.5
2/20/2019 23:20	8	8	8	32.46	4.4	4.2	24.1
2/20/2019 23:30	8	8	8	32.49	4.3	4.2	24.7
2/20/2019 23:40	8	8	8	32.61	4.5	4.2	24.2
2/20/2019 23:50	8	8	8	32.58	4.4	4.2	24.7
2/21/2019 0:00	8	8	8	32.46	4.5	4.2	24.4
2/21/2019 0:10	8	8	8	32.58	4.5	4.2	3.6
2/21/2019 0:20	8	8	8	32.46	4.7	4.1	24.5
2/21/2019 0:30	8	8	8	32.58	4.6	4.2	1.1
2/21/2019 0:40	8	8	8	32.61	4.3	4.2	24.6
2/21/2019 0:50	8	8	8	32.58	4.6	4.3	24.1
2/21/2019 1:00	8	8	8	32.52	4.5	4.1	24.7
2/21/2019 1:10	8	8	8	32.67	4.5	4.2	24.3
2/21/2019 1:20	8	8	8	32.61	4.5	4.1	3.2
2/21/2019 1:30	8	8	8	32.67	4.5	4.2	24.4
2/21/2019 1:40	8	8	8	32.67	4.6	4.2	2.3
2/21/2019 1:50	8	8	8	32.61	4.3	4.2	24.5
2/21/2019 2:00	8	8	8	32.7	4.6	4.1	23.4
2/21/2019 2:10	8	8	8	32.7	4.2	4.1	24.7
2/21/2019 2:20	8	8	8	32.61	4.4	4.2	24.3
2/21/2019 2:30	8	8	8	32.73	4.4	4.2	23.5
2/21/2019 2:40	8	8	8	32.7	4.5	4.2	24.3
2/21/2019 2:50	8	8	8	32.67	4.7	4.2	3.5
2/21/2019 3:00	8	8	8	32.73	4.3	4.2	24.5
2/21/2019 3:10	8	8	8	32.7	4.7	4.2	1.4
2/21/2019 3:20	8	8	8	32.7	4.4	4.2	24.6
2/21/2019 3:30	8	8	8	32.67	4.4	4.2	22.4
2/21/2019 3:40	8	8	8	32.64	4.3	4.2	24.6
2/21/2019 3:50	8	8	8	32.67	4.4	4.2	24.2
2/21/2019 4:00	8	8	8	32.7	4.4	4.2	24.7
2/21/2019 4:10	8	8	8	32.7	4.8	4.1	24.3
2/21/2019 4:20	8	8	8	32.7	4.3	4.2	3.3

2/21/2019 4:30	8	8	8	32.76	4.4	4.1	24.4
2/21/2019 4:40	8	8	8	32.76	4.4	4.2	3.7
2/21/2019 4:50	8	8	8	32.67	4.4	4.2	24.5
2/21/2019 5:00	8	8	8	32.73	4.5	4.2	1.2
2/21/2019 5:10	8	8	8	32.79	4.3	4.2	24.6
2/21/2019 5:20	8	8	8	32.76	4.7	4.2	24.1
2/21/2019 5:30	8	8	8	32.7	4.5	4.2	24.6
2/21/2019 5:40	8	8	8	32.76	4.5	4.1	24.2
2/21/2019 5:50	8	8	8	32.79	4.5	4.2	3.2
2/21/2019 6:00	8	8	8	32.79	4.2	4.2	24.3
2/21/2019 6:10	8	8	8	32.76	4.7	4.2	3.9
2/21/2019 6:20	8	8	8	32.92	4.4	4.2	24.5
2/21/2019 6:30	8	8	8	32.79	4.5	4.1	21
2/21/2019 6:40	8	8	8	32.89	4.5	4.2	24.7
2/21/2019 6:50	8	8	8	32.89	4.4	4.2	24.2
2/21/2019 7:00	8	8	8	32.95	4.5	4.2	24.6
2/21/2019 7:10	8	8	8	32.95	4.5	4.2	24.3
2/21/2019 7:20	8	8	8	32.89	4.5	4.2	3.1
2/21/2019 7:30	8	8	8	32.95	4.5	4.2	24.4
2/21/2019 7:40	8	8	8	32.86	4.6	4.2	3.6
2/21/2019 7:50	8	8	8	32.92	4.5	4.2	24.5
2/21/2019 8:00	8	8	8	32.89	4.5	4.2	1.1
2/21/2019 8:10	8	8	8	32.95	4.7	4.1	24.5
2/21/2019 8:20	8	8	8	32.95	4.2	4.2	11.2
2/21/2019 8:30	8	8	8	32.95	4.5	4.3	24.5
2/21/2019 8:40	8	8	8	32.95	4.3	4.2	24.1
2/21/2019 8:50	8	8	8	33.01	4.6	4.2	24.6
2/21/2019 9:00	8	8	8	32.98	4.4	4.2	24.2
2/21/2019 9:10	8	8	8	33.01	4.4	4.1	3.2
2/21/2019 9:20	8	8	8	32.95	4.6	4.1	24.4
2/21/2019 9:30	8	8	8	33.07	4.4	4.2	4.3
2/21/2019 9:40	8	8	8	32.98	4.6	4.3	24.3
2/21/2019 9:50	8	8	8	33.01	4.3	4.1	3.2
2/21/2019 10:00	8	8	8	32.95	4.6	4.2	24.5
2/21/2019 10:10	8	8	8	33.04	4.5	4.2	1.1
2/21/2019 10:20	8	8	8	33.1	4.5	4.2	23.5
2/21/2019 10:30	0	0	0	31.7	4.3	4.2	24.4
2/21/2019 10:40	8	8	8	30.2	4.4	4.2	24.2
2/21/2019 10:50	8	8	8	30.2	4.5	4.2	3.6
2/21/2019 11:00	8	8	8	30.29	4.3	4.2	24.5
2/21/2019 11:10	8	8	8	30.26	4.6	4.2	24.3
2/21/2019 11:20	8	8	8	30.35	4.5	4.2	24.2
2/21/2019 11:30	8	8	8	30.35	4.3	4.2	3.7
2/21/2019 11:40	8	8	8	30.41	4.4	4.2	24.6
2/21/2019 11:50	8	8	8	30.38	4.6	4.2	24.3
2/21/2019 12:00	8	8	8	30.51	4.4	4.2	24.1
2/21/2019 12:10	8	8	8	30.54	4.5	4.1	3.2

2/21/2019 12:20	8	8	8	30.57	4.1	4.1	24.5
2/21/2019 12:30	8	8	8	30.51	4.6	4.2	24.1
2/21/2019 12:40	8	8	8	30.57	4.5	4.2	3.2
2/21/2019 12:50	8	8	8	30.57	4.9	4.3	24.4
2/21/2019 13:00	8	8	8	30.57	4.5	4.2	24.1
2/21/2019 13:10	8	8	8	30.63	4.4	4.2	4.3
2/21/2019 13:20	8	8	8	30.72	4.4	4.2	24.6
2/21/2019 13:30	8	8	8	30.63	4.1	4.2	24.1
2/21/2019 13:40	8	8	8	30.72	4.3	4.2	4.5
2/21/2019 13:50	8	8	8	30.72	4.6	4.2	24.5
2/21/2019 14:00	8	8	8	30.75	4.4	4.2	24.2
2/21/2019 14:10	8	8	8	30.75	4.4	4.2	4.1
2/21/2019 14:20	8	8	8	30.81	4.5	4.2	24.6
2/21/2019 14:30	8	8	8	30.78	4.4	4.2	24.2
2/21/2019 14:40	8	8	8	30.84	4.3	4.2	21
2/21/2019 14:50	8	8	8	30.81	4.4	4.2	24.7
2/21/2019 15:00	8	8	8	30.78	4.8	4.2	24.4
2/21/2019 15:10	8	8	8	30.87	4.9	4.1	24.2
2/21/2019 15:20	8	8	8	30.87	4.5	4.2	3.5
2/21/2019 15:30	8	8	8	30.9	4.4	4.2	24.5
2/21/2019 15:40	8	8	8	30.93	4.5	4.2	24.3
2/21/2019 15:50	8	8	8	30.9	4.4	4.2	2.5
2/21/2019 16:00	8	8	8	30.96	4.2	4.2	24.6
2/21/2019 16:10	8	8	8	30.93	4.5	4.2	24.4
2/21/2019 16:20	8	8	8	30.96	4.3	4.1	14.6
2/21/2019 16:30	8	8	8	30.99	4.3	4.2	24.6
2/21/2019 16:40	8	8	8	30.99	4.5	4.1	24.4
2/21/2019 16:50	8	8	8	31.02	4.4	4.2	24.2
2/21/2019 17:00	8	8	8	30.99	4.3	4.2	3.1
2/21/2019 17:10	8	8	8	31.02	4.4	4.2	24.5
2/21/2019 17:20	8	8	8	30.96	4.6	4.2	24.2
2/21/2019 17:30	8	8	8	31.02	4.4	4.1	4.5
2/21/2019 17:40	8	8	8	31.02	4.7	4.2	24.5
2/21/2019 17:50	8	8	8	30.96	4.3	4.2	24.1
2/21/2019 18:00	8	8	8	31.21	4.6	4.1	3.7
2/21/2019 18:10	8	8	8	31.02	4.5	4.2	24.5
2/21/2019 18:20	8	8	8	31.05	4.5	4.1	24.2
2/21/2019 18:30	8	8	8	31.09	4.3	4.1	3.7
2/21/2019 18:40	8	8	8	30.99	4.6	4.2	24.5
2/21/2019 18:50	8	8	8	30.99	4.2	4.2	24.2
2/21/2019 19:00	8	8	8	31.05	4.2	4.1	3.5
2/21/2019 19:10	8	8	8	31.02	4.6	4.1	24.6
2/21/2019 19:20	8	8	8	30.99	4.4	4.1	24.2
2/21/2019 19:30	8	8	8	31.05	4.5	4.1	4.1
2/21/2019 19:40	8	8	8	31.05	4.2	4.2	24.6
2/21/2019 19:50	8	8	8	31.05	4.2	4.1	24.4
2/21/2019 20:00	8	8	8	31.05	4.2	4.1	1.1

2/21/2019 20:10	8	8	8	31.02	4.1	4.2	24.6
2/21/2019 20:20	8	8	8	30.99	4.6	4.1	24.4
2/21/2019 20:30	8	8	8	30.99	4.4	4.2	1.9
2/21/2019 20:40	8	8	8	31.05	4.5	4.2	24.7
2/21/2019 20:50	8	8	8	31.05	4.6	4.2	24.3
2/21/2019 21:00	8	8	8	31.18	4.3	4.1	1.7
2/21/2019 21:10	8	8	8	31.12	4.5	4.1	24.6
2/21/2019 21:20	8	8	8	31.05	4.6	4.2	24.3
2/21/2019 21:30	8	8	8	31.15	4.5	4.2	3.2
2/21/2019 21:40	8	8	8	31.05	4.4	4.2	24.6
2/21/2019 21:50	8	8	8	31.12	4.3	4.2	24.3
2/21/2019 22:00	8	8	8	31.15	4.3	4.2	2.6
2/21/2019 22:10	8	8	8	31.15	4.4	4.2	24.6
2/21/2019 22:20	8	8	8	31.09	4.7	4.1	24.2
2/21/2019 22:30	8	8	8	31.09	4.3	4.2	3.6
2/21/2019 22:40	8	8	8	31.09	4.4	4.1	24.5
2/21/2019 22:50	8	8	8	31.09	4.5	4.2	24.2
2/21/2019 23:00	8	8	8	31.12	4.6	4.1	4.5
2/21/2019 23:10	8	8	8	31.09	4.3	4.2	24.5
2/21/2019 23:20	8	8	8	31.12	4.5	4.2	24.2
2/21/2019 23:30	8	8	8	31.09	4.4	4.1	3.3
2/21/2019 23:40	8	8	8	31.12	4.7	4.1	24.5
2/21/2019 23:50	8	8	8	31.15	4.4	4.2	24.2
2/22/2019 0:00	8	8	8	31.09	4.6	4.2	3.3
2/22/2019 0:10	8	8	8	31.15	4.2	4.1	24.5
2/22/2019 0:20	8	8	8	31.15	4.2	4.1	24.1
2/22/2019 0:30	8	8	8	31.12	4.5	4.2	3.7
2/22/2019 0:40	8	8	8	31.12	4.3	4.2	24.5
2/22/2019 0:50	8	8	8	31.09	4.6	4.1	10.9
2/22/2019 1:00	8	8	8	31.05	4.2	4.2	24.7
2/22/2019 1:10	8	8	8	31.09	4.4	4.2	24.2
2/22/2019 1:20	8	8	8	31.15	4.3	4.1	4.6
2/22/2019 1:30	8	8	8	31.15	4.5	4.1	24.4
2/22/2019 1:40	8	8	8	31.12	4.6	4.1	19
2/22/2019 1:50	8	8	8	31.15	4.3	4.2	24.7
2/22/2019 2:00	8	8	8	31.21	4.5	4.2	24.4
2/22/2019 2:10	8	8	8	31.21	4.5	4.2	2.1
2/22/2019 2:20	8	8	8	31.18	4.5	4.1	24.6
2/22/2019 2:30	8	8	8	31.21	4.3	4.2	24.3
2/22/2019 2:40	8	8	8	31.21	4.4	4.2	1.4
2/22/2019 2:50	8	8	8	31.21	4.3	4.1	24.6
2/22/2019 3:00	8	8	8	31.21	4.4	4.1	24.3
2/22/2019 3:10	8	8	8	31.15	4.4	4.1	1.3
2/22/2019 3:20	8	8	8	31.27	4.6	4.1	24.6
2/22/2019 3:30	8	8	8	31.21	4.3	4.2	24.3
2/22/2019 3:40	8	8	8	31.27	4.3	4.1	2.3
2/22/2019 3:50	8	8	8	31.33	4.4	4.1	24.6

2/22/2019 4:00	8	8	8	31.27	4.4	4.2	24.2
2/22/2019 4:10	8	8	8	31.21	4.3	4.2	2.2
2/22/2019 4:20	8	8	8	31.18	4.6	4.1	24.5
2/22/2019 4:30	8	8	8	31.27	4.3	4.1	24.3
2/22/2019 4:40	8	8	8	31.21	4.6	4.1	2.2
2/22/2019 4:50	8	8	8	31.18	4.5	4.2	24.7
2/22/2019 5:00	8	8	8	31.27	4.6	4.1	24.4
2/22/2019 5:10	8	8	8	31.21	4.5	4.1	1.1
2/22/2019 5:20	8	8	8	31.27	4.5	4.1	24.6
2/22/2019 5:30	8	8	8	31.27	4.1	4.2	24.3
2/22/2019 5:40	8	8	8	31.21	4.4	4.2	1.1
2/22/2019 5:50	8	8	8	31.18	4.6	4.2	24.7
2/22/2019 6:00	8	8	8	31.15	4.3	4.1	24.4
2/22/2019 6:10	8	8	8	31.21	4.5	4.2	3
2/22/2019 6:20	8	8	8	31.27	4.2	4.1	24.6
2/22/2019 6:30	8	8	8	31.21	4.4	4.2	24.2
2/22/2019 6:40	8	8	8	31.21	4.5	4.1	3.7
2/22/2019 6:50	8	8	8	31.18	4.4	4.1	24.6
2/22/2019 7:00	8	8	8	31.21	4.5	4.2	24.2
2/22/2019 7:10	8	8	8	31.33	4.3	4.2	4.4
2/22/2019 7:20	8	8	8	31.18	4.5	4.2	24.5
2/22/2019 7:30	8	8	8	31.27	4.5	4.2	24.3
2/22/2019 7:40	8	8	8	31.21	4.4	4.1	3.6
2/22/2019 7:50	8	8	8	31.27	4.6	4.1	24.5
2/22/2019 8:00	8	8	8	31.27	4.6	4.2	24.1
2/22/2019 8:10	8	8	8	31.21	4.3	4.2	3.8
2/22/2019 8:20	8	8	8	31.15	4.2	4.2	24.5
2/22/2019 8:30	8	8	8	31.21	4.7	4.1	24.1
2/22/2019 8:40	8	8	8	31.3	4.6	4.2	4.2
2/22/2019 8:50	8	8	8	31.27	4.6	4.2	24.6
2/22/2019 9:00	8	8	8	31.18	4.4	4.2	24.1
2/22/2019 9:10	8	8	8	31.12	4.4	4.2	3.5
2/22/2019 9:20	8	8	8	31.15	4.2	4.3	24.5
2/22/2019 9:30	8	8	8	31.21	4.8	4.2	24.2
2/22/2019 9:40	8	8	8	31.27	4.4	4.2	3.5
2/22/2019 9:50	8	8	8	31.33	4.6	4.2	24.5
2/22/2019 10:00	8	8	8	31.27	4.4	4.2	24.1
2/22/2019 10:10	8	8	8	31.33	4.4	4.2	4.2
2/22/2019 10:20	8	8	8	31.39	4.3	4.2	24.5
2/22/2019 10:30	8	8	8	31.27	4.5	4.2	24.1
2/22/2019 10:40	8	8	8	31.33	4.4	4.2	3.6
2/22/2019 10:50	8	8	8	31.21	4.5	4.3	24.6
2/22/2019 11:00	8	8	8	31.18	4.5	4.2	24.1
2/22/2019 11:10	8	8	8	31.3	4.5	4.2	3.5
2/22/2019 11:20	8	8	8	31.3	4.6	4.2	24.6
2/22/2019 11:30	8	8	8	31.3	4.4	4.2	24.3
2/22/2019 11:40	8	8	8	31.27	4.4	4.2	1.5

2/22/2019 11:50	8	8	8	31.3	4.5	4.1	24.6
2/22/2019 12:00	8	8	8	31.21	4.3	4.1	24.3
2/22/2019 12:10	8	8	8	31.33	4.7	4.2	3.7
2/22/2019 12:20	8	8	8	31.3	4.5	4.2	24.6
2/22/2019 12:30	8	8	8	31.21	4.4	4.2	24.2
2/22/2019 12:40	8	8	8	31.3	4.2	4.2	24.7
2/22/2019 12:50	8	8	8	31.39	4.5	4.2	24.4
2/22/2019 13:00	8	8	8	31.36	4.4	4.2	3.4
2/22/2019 13:10	8	8	8	31.33	4.4	4.2	24.6
2/22/2019 13:20	8	8	8	31.39	4.5	4.2	24.3
2/22/2019 13:30	8	8	8	31.33	4.5	4.2	24.7
2/22/2019 13:40	8	8	8	31.36	4.4	4.1	24.4
2/22/2019 13:50	8	8	8	31.3	4.6	4.2	1.8
2/22/2019 14:00	8	8	8	31.21	4.3	4.2	24.7
2/22/2019 14:10	8	8	8	31.21	4.6	4.2	24.2
2/22/2019 14:20	8	8	8	31.3	4.4	4.2	4.3
2/22/2019 14:30	8	8	8	31.33	4.2	4.2	24.5
2/22/2019 14:40	8	8	8	31.39	4.4	4.2	24.3
2/22/2019 14:50	8	8	8	31.3	4.5	4.2	3
2/22/2019 15:00	8	8	8	31.3	4.4	4.2	24.6
2/22/2019 15:10	8	8	8	31.3	4.3	4.2	24.3
2/22/2019 15:20	8	8	8	31.33	4.5	4.2	2.3
2/22/2019 15:30	8	8	8	31.33	4.4	4.2	24.6
2/22/2019 15:40	8	8	8	31.39	4.4	4.2	24.3
2/22/2019 15:50	8	8	8	31.33	4.5	4.1	2.2
2/22/2019 16:00	8	8	8	31.3	4.5	4.2	24.6
2/22/2019 16:10	8	8	8	31.36	4.5	4.2	24.3
2/22/2019 16:20	8	8	8	31.33	4.5	4.2	1.1
2/22/2019 16:30	8	8	8	31.36	4.4	4.1	24.6
2/22/2019 16:40	8	8	8	31.27	4.4	4.2	24.3
2/22/2019 16:50	8	8	8	31.33	4.3	4.2	1.2
2/22/2019 17:00	8	8	8	31.33	4.3	4.2	24.6
2/22/2019 17:10	8	8	8	31.33	4.5	4.2	24.2
2/22/2019 17:20	8	8	8	31.3	4.1	4.2	3.5
2/22/2019 17:30	8	8	8	31.27	4.6	4.1	24.6
2/22/2019 17:40	8	8	8	31.33	4.6	4.2	24.3
2/22/2019 17:50	8	8	8	31.33	4.6	4.1	3.7
2/22/2019 18:00	8	8	8	31.33	4.5	4.2	24.6
2/22/2019 18:10	8	8	8	31.3	4.4	4.2	24.3
2/22/2019 18:20	8	8	8	31.3	4.5	4.1	3.8
2/22/2019 18:30	8	8	8	31.3	4.1	4.2	24.6
2/22/2019 18:40	8	8	8	31.39	4.4	4.1	24.3
2/22/2019 18:50	8	8	8	31.36	4.2	4.2	1.6
2/22/2019 19:00	8	8	8	31.36	4.5	4.1	24.6
2/22/2019 19:10	8	8	8	31.36	4.6	4.2	24.3
2/22/2019 19:20	8	8	8	31.33	4.7	4.1	1.2
2/22/2019 19:30	8	8	8	31.3	4.5	4.2	24.6

2/22/2019 19:40	8	8	8	31.42	4.6	4.2	24.4
2/22/2019 19:50	8	8	8	31.42	4.6	4.1	6.7
2/22/2019 20:00	8	8	8	31.39	4.5	4.2	24.6
2/22/2019 20:10	8	8	8	31.39	4.5	4.2	24.4
2/22/2019 20:20	8	8	8	31.36	4.4	4.1	3.2
2/22/2019 20:30	8	8	8	31.45	4.3	4.1	24.6
2/22/2019 20:40	8	8	8	31.45	4.3	4.1	24.2
2/22/2019 20:50	8	8	8	31.45	4.4	4.1	4.5
2/22/2019 21:00	8	8	8	31.48	4.4	4.2	24.6
2/22/2019 21:10	8	8	8	31.42	4.5	4.2	24.2
2/22/2019 21:20	8	8	8	31.45	4.5	4.2	3.7
2/22/2019 21:30	8	8	8	31.48	4.4	4.2	24.5
2/22/2019 21:40	8	8	8	31.48	4.5	4.1	24.3
2/22/2019 21:50	8	8	8	31.51	4.5	4.1	3.9
2/22/2019 22:00	8	8	8	31.51	4.3	4.2	24.7
2/22/2019 22:10	8	8	8	31.6	4.7	4.2	24.2
2/22/2019 22:20	8	8	8	31.48	4.4	4.1	3.8
2/22/2019 22:30	8	8	8	31.48	4.5	4.2	24.6
2/22/2019 22:40	8	8	8	31.57	4.4	4.2	24.3
2/22/2019 22:50	8	8	8	31.45	4.3	4.1	3.9
2/22/2019 23:00	8	8	8	31.51	4.6	4.1	24.7
2/22/2019 23:10	8	8	8	31.57	4.6	4.2	24.3
2/22/2019 23:20	8	8	8	31.48	4.3	4.1	3
2/22/2019 23:30	8	8	8	31.51	4.1	4.2	24.6
2/22/2019 23:40	8	8	8	31.51	4.4	4.1	24.2
2/22/2019 23:50	8	8	8	31.48	4.5	4.1	3.5
2/23/2019 0:00	8	8	8	31.51	4.2	4.1	24.6
2/23/2019 0:10	8	8	8	31.48	4.5	4.2	24.1
2/23/2019 0:20	8	8	8	31.45	4.4	4.2	3.6
2/23/2019 0:30	8	8	8	31.48	4.5	4.2	24.6
2/23/2019 0:40	8	8	8	31.42	4.5	4.2	24.2
2/23/2019 0:50	8	8	8	31.51	4.5	4.2	4.4
2/23/2019 1:00	8	8	8	31.45	4.5	4.2	24.6
2/23/2019 1:10	8	8	8	31.45	4.6	4.2	24.2
2/23/2019 1:20	8	8	8	31.42	4.5	4.2	3.3
2/23/2019 1:30	8	8	8	31.45	4.6	4.1	24.5
2/23/2019 1:40	8	8	8	31.48	4.5	4.2	24.2
2/23/2019 1:50	8	8	8	31.42	4.5	4.2	3.4
2/23/2019 2:00	8	8	8	31.45	4.5	4.1	24.5
2/23/2019 2:10	8	8	8	31.42	4.5	4.2	24.1
2/23/2019 2:20	8	8	8	31.39	4.3	4.1	3.3
2/23/2019 2:30	8	8	8	31.39	4.5	4.3	24.5
2/23/2019 2:40	8	8	8	31.42	4.5	4.2	24.2
2/23/2019 2:50	8	8	8	31.42	4.4	4.2	3.6
2/23/2019 3:00	8	8	8	31.39	4.3	4.2	24.6
2/23/2019 3:10	8	8	8	31.42	4.8	4.1	24.2
2/23/2019 3:20	8	8	8	31.3	4.5	4.2	4.1

2/23/2019 3:30	8	8	8	31.39	4.4	4.1	24.6
2/23/2019 3:40	8	8	8	31.42	4.5	4.2	24.2
2/23/2019 3:50	8	8	8	31.36	4.5	4.1	4.2
2/23/2019 4:00	8	8	8	31.42	4.4	4.2	24.6
2/23/2019 4:10	8	8	8	31.42	4.4	4.1	24.2
2/23/2019 4:20	8	8	8	31.42	4.3	4.2	4.1
2/23/2019 4:30	8	8	8	31.39	4.4	4.2	24.6
2/23/2019 4:40	8	8	8	31.36	4.3	4.2	24.2
2/23/2019 4:50	8	8	8	31.39	4.6	4.1	2
2/23/2019 5:00	8	8	8	31.39	4.3	4.1	24.6
2/23/2019 5:10	8	8	8	31.39	4.5	4.1	24.3
2/23/2019 5:20	8	8	8	31.42	4.4	4.1	1.1
2/23/2019 5:30	8	8	8	31.3	4.6	4.1	24.7
2/23/2019 5:40	8	8	8	31.36	4.6	4.2	24.4
2/23/2019 5:50	8	8	8	31.42	4.4	4.1	1.1
2/23/2019 6:00	8	8	8	31.36	4.5	4.2	24.7
2/23/2019 6:10	8	8	8	31.36	4.5	4.1	24.4
2/23/2019 6:20	8	8	8	31.39	4.5	4.2	1.2
2/23/2019 6:30	8	8	8	31.39	4.5	4.2	24.7
2/23/2019 6:40	8	8	8	31.42	4.4	4.1	24.3
2/23/2019 6:50	8	8	8	31.42	4.3	4.2	1.1
2/23/2019 7:00	8	8	8	31.39	4.3	4.2	24.6
2/23/2019 7:10	8	8	8	31.42	4.5	4.2	24.4
2/23/2019 7:20	8	8	8	31.42	4.3	4.2	14.7
2/23/2019 7:30	8	8	8	31.36	4.3	4.2	24.7
2/23/2019 7:40	8	8	8	31.36	4.5	4.1	24.4
2/23/2019 7:50	8	8	8	31.33	4.2	4.2	24.1
2/23/2019 8:00	8	8	8	31.42	4.3	4.3	3.5
2/23/2019 8:10	8	8	8	31.39	4.6	4.2	24.5
2/23/2019 8:20	8	8	8	31.36	4.7	4.2	24.2
2/23/2019 8:30	8	8	8	31.42	4.6	4.2	3.6
2/23/2019 8:40	8	8	8	31.45	4.4	4.2	24.6
2/23/2019 8:50	8	8	8	31.39	4.5	4.2	24.2
2/23/2019 9:00	8	8	8	31.51	4.3	4.2	2.5
2/23/2019 9:10	8	8	8	31.54	4.4	4.2	24.6
2/23/2019 9:20	8	8	8	31.48	4.4	4.3	24.3
2/23/2019 9:30	8	8	8	31.48	4.5	4.2	1.3
2/23/2019 9:40	8	8	8	31.48	4.5	4.2	24.6
2/23/2019 9:50	8	8	8	31.48	4.7	4.3	24.3
2/23/2019 10:00	8	8	8	31.42	4.5	4.2	1.2
2/23/2019 10:10	8	8	8	31.39	4.4	4.2	24.7
2/23/2019 10:20	8	8	8	31.48	3.9	4.2	24.4
2/23/2019 10:30	8	8	8	31.45	4.5	4.3	20.8
2/23/2019 10:40	8	8	8	31.48	4.4	4.2	24.7
2/23/2019 10:50	8	8	8	31.45	4.4	4.2	24.5
2/23/2019 11:00	8	8	8	31.42	4.4	4.3	24.2
2/23/2019 11:10	8	8	8	31.42	4.4	4.2	4.5

2/23/2019 11:20	8	8	8	31.39	4.3	4.2	24.5
2/23/2019 11:30	8	8	8	31.45	4.6	4.2	24.2
2/23/2019 11:40	8	8	8	31.45	4.4	4.2	2.6
2/23/2019 11:50	8	8	8	31.42	4.4	4.2	24.7
2/23/2019 12:00	8	8	8	31.45	4.6	4.2	24.4
2/23/2019 12:10	8	8	8	31.45	4.5	4.2	6.8
2/23/2019 12:20	8	8	8	31.48	4.5	4.2	24.7
2/23/2019 12:30	8	8	8	31.48	4.5	4.2	24.4
2/23/2019 12:40	8	8	8	31.45	4.5	4.3	24.1
2/23/2019 12:50	8	8	8	31.42	4.5	4.2	3.2
2/23/2019 13:00	8	8	8	31.51	4.5	4.2	24.5
2/23/2019 13:10	8	8	8	31.51	4.5	4.2	24.2
2/23/2019 13:20	8	8	8	31.51	4.5	4.2	3.9
2/23/2019 13:30	8	8	8	31.54	4.6	4.2	24.6
2/23/2019 13:40	8	8	8	31.57	4.4	4.2	24.2
2/23/2019 13:50	8	8	8	31.57	4.5	4.2	2.7
2/23/2019 14:00	8	8	8	31.6	4.4	4.2	24.6
2/23/2019 14:10	8	8	8	31.54	4.4	4.2	24.3
2/23/2019 14:20	8	8	8	31.6	4.4	4.2	1.2
2/23/2019 14:30	8	8	8	31.57	4.4	4.1	24.6
2/23/2019 14:40	8	8	8	31.6	4.4	4.2	24.4
2/23/2019 14:50	8	8	8	31.57	4.2	4.1	24.4
2/23/2019 15:00	8	8	8	31.6	4.7	4.3	10.8
2/23/2019 15:10	8	8	8	31.54	4.5	4.2	24.5
2/23/2019 15:20	8	8	8	31.57	4.4	4.2	24.2
2/23/2019 15:30	8	8	8	31.57	4.4	4.2	3.4
2/23/2019 15:40	8	8	8	31.54	4.2	4.2	24.5
2/23/2019 15:50	8	8	8	31.63	4.5	4.2	24.1
2/23/2019 16:00	8	8	8	31.63	4.5	4.2	3.5
2/23/2019 16:10	8	8	8	31.67	4.6	4.2	24.5
2/23/2019 16:20	8	8	8	31.63	4.5	4.2	24
2/23/2019 16:30	8	8	8	31.63	4.5	4.2	4.4
2/23/2019 16:40	8	8	8	31.63	4.5	4.2	24.5
2/23/2019 16:50	8	8	8	31.7	4.3	4.2	24.2
2/23/2019 17:00	8	8	8	31.73	4.3	4.2	3.7
2/23/2019 17:10	8	8	8	31.6	4.3	4.2	24.6
2/23/2019 17:20	8	8	8	31.67	4.5	4.2	24.3
2/23/2019 17:30	8	8	8	31.7	4.5	4.2	3.8
2/23/2019 17:40	8	8	8	31.7	4	4.2	24.6
2/23/2019 17:50	8	8	8	31.7	4.6	4.2	24.3
2/23/2019 18:00	8	8	8	31.76	4.4	4.2	1.9
2/23/2019 18:10	8	8	8	31.73	4.5	4.2	24.6
2/23/2019 18:20	8	8	8	31.73	4.6	4.2	24.3
2/23/2019 18:30	8	8	8	31.73	4.5	4.2	22.1
2/23/2019 18:40	8	8	8	31.7	4.7	4.1	23.6
2/23/2019 18:50	8	8	8	31.67	4.5	4.2	24.4
2/23/2019 19:00	8	8	8	31.67	4.6	4.2	24.3

2/23/2019 19:10	8	8	8	31.7	4.5	4.3	3.2
2/23/2019 19:20	8	8	8	31.73	4.3	4.2	24.5
2/23/2019 19:30	8	8	8	31.63	4.2	4.1	24.1
2/23/2019 19:40	8	8	8	31.7	4.6	4.1	3.4
2/23/2019 19:50	8	8	8	31.6	4.5	4.2	24.6
2/23/2019 20:00	8	8	8	31.67	4.4	4.2	24
2/23/2019 20:10	8	8	8	31.82	4.3	4.2	4.5
2/23/2019 20:20	8	8	8	31.67	4.5	4.2	24.5
2/23/2019 20:30	8	8	8	31.73	4.5	4.2	24.2
2/23/2019 20:40	8	8	8	31.7	4.4	4.2	4.3
2/23/2019 20:50	8	8	8	31.67	4.6	4.1	24.6
2/23/2019 21:00	8	8	8	31.7	4.3	4.2	24.3
2/23/2019 21:10	8	8	8	31.76	4.6	4.2	1.2
2/23/2019 21:20	8	8	8	31.76	4.5	4.2	24.6
2/23/2019 21:30	8	8	8	31.76	4.5	4.1	24.3
2/23/2019 21:40	8	8	8	31.79	4.2	4.2	14.3
2/23/2019 21:50	8	8	8	31.79	4.4	4.1	24.6
2/23/2019 22:00	8	8	8	31.76	4.4	4.2	24.4
2/23/2019 22:10	8	8	8	31.79	4.8	4.2	11.3
2/23/2019 22:20	8	8	8	31.79	4.1	4.2	24.6
2/23/2019 22:30	8	8	8	31.73	4.4	4.2	24.4
2/23/2019 22:40	8	8	8	31.76	4.6	4.2	24.3
2/23/2019 22:50	8	8	8	31.67	4.6	4.2	3.8
2/23/2019 23:00	8	8	8	31.76	4.6	4.2	24.6
2/23/2019 23:10	8	8	8	31.79	4.5	4.2	24.2
2/23/2019 23:20	8	8	8	31.76	4.4	4.2	3.6
2/23/2019 23:30	8	8	8	31.76	4.5	4.1	24.6
2/23/2019 23:40	8	8	8	31.76	4.5	4.2	24.2
2/23/2019 23:50	8	8	8	31.82	4.4	4.2	2
2/24/2019 0:00	8	8	8	31.6	4.4	4.1	24.6
2/24/2019 0:10	8	8	8	31.73	4.5	4.2	24.4
2/24/2019 0:20	8	8	8	31.73	4.4	4.1	19.3
2/24/2019 0:30	8	8	8	31.76	4.4	4.2	24.6
2/24/2019 0:40	8	8	8	31.76	4.6	4.2	24.5
2/24/2019 0:50	8	8	8	31.79	4.5	4.2	24.1
2/24/2019 1:00	8	8	8	31.76	4.5	4.2	3.5
2/24/2019 1:10	8	8	8	31.79	4.5	4.1	24.5
2/24/2019 1:20	8	8	8	31.73	4.5	4.1	24.2
2/24/2019 1:30	8	8	8	31.82	4.3	4.2	3.3
2/24/2019 1:40	8	8	8	31.82	4.4	4.2	24.6
2/24/2019 1:50	8	8	8	31.85	4.5	4.2	24.3
2/24/2019 2:00	8	8	8	31.85	4.5	4.1	19
2/24/2019 2:10	8	8	8	31.85	4.2	4.2	24.6
2/24/2019 2:20	8	8	8	31.94	4.8	4.1	24.5
2/24/2019 2:30	8	8	8	31.94	4.3	4.2	24.2
2/24/2019 2:40	8	8	8	31.97	4.6	4.2	3.7
2/24/2019 2:50	8	8	8	31.97	4.3	4.2	24.6

2/24/2019 3:00	8	8	8	31.88	3.8	4.2	24.2
2/24/2019 3:10	8	8	8	32	4.7	4.2	4.4
2/24/2019 3:20	8	8	8	32	4.3	4.1	24.5
2/24/2019 3:30	8	8	8	31.94	4.3	4.2	24.2
2/24/2019 3:40	8	8	8	32	4.4	4.2	3.6
2/24/2019 3:50	8	8	8	32.06	4.6	4.2	24.6
2/24/2019 4:00	8	8	8	32.03	4.6	4.2	24.2
2/24/2019 4:10	8	8	8	32	4.4	4.2	3.3
2/24/2019 4:20	8	8	8	32	4.3	4.2	24.5
2/24/2019 4:30	8	8	8	32.06	4.3	4.2	24.2
2/24/2019 4:40	8	8	8	32	4.5	4.2	4.3
2/24/2019 4:50	8	8	8	31.97	4.8	4.1	24.6
2/24/2019 5:00	8	8	8	32.03	4.5	4.2	24.3
2/24/2019 5:10	8	8	8	32	4.5	4.2	1.2
2/24/2019 5:20	8	8	8	32.03	4.4	4.2	24.6
2/24/2019 5:30	8	8	8	32	4.5	4.1	24.3
2/24/2019 5:40	8	8	8	32	4.3	4.1	23.7
2/24/2019 5:50	8	8	8	32.06	4.3	4.2	4.8
2/24/2019 6:00	8	8	8	32	4.7	4.1	24.4
2/24/2019 6:10	8	8	8	32	4.6	4.2	24.1
2/24/2019 6:20	8	8	8	32.09	4.5	4	3.7
2/24/2019 6:30	8	8	8	32	4.5	4.2	24.5
2/24/2019 6:40	8	8	8	32.06	4.8	4.2	24.2
2/24/2019 6:50	8	8	8	32.09	4.3	4.2	10.8
2/24/2019 7:00	8	8	8	32.09	4.2	4.2	24.4
2/24/2019 7:10	8	8	8	32.09	4.3	4.2	24.1
2/24/2019 7:20	8	8	8	32.03	4.4	4.2	3.4
2/24/2019 7:30	8	8	8	32.12	4.5	4.2	24.5
2/24/2019 7:40	8	8	8	32.15	4.4	4.1	24.2
2/24/2019 7:50	8	8	8	32.15	4.3	4.2	3.3
2/24/2019 8:00	8	8	8	32.15	4.4	4.1	24.5
2/24/2019 8:10	8	8	8	32.15	4.5	4.2	24.1
2/24/2019 8:20	8	8	8	32.12	4.5	4.2	3.3
2/24/2019 8:30	8	8	8	32.18	4.7	4.2	24.6
2/24/2019 8:40	8	8	8	32.25	4.7	4.2	24.1
2/24/2019 8:50	8	8	8	32.15	4.4	4.2	4.6
2/24/2019 9:00	8	8	8	32.12	4.3	4.2	24.5
2/24/2019 9:10	8	8	8	32.21	4.3	4.2	24.1
2/24/2019 9:20	8	8	8	32.15	4.6	4.2	4.6
2/24/2019 9:30	8	8	8	32.12	4.7	4.2	24.5
2/24/2019 9:40	8	8	8	32.21	4.2	4.2	24.1
2/24/2019 9:50	8	8	8	32.18	4.3	4.2	4.5
2/24/2019 10:00	8	8	8	32.25	4.5	4.3	24.6
2/24/2019 10:10	8	8	8	32.18	4.3	4.2	24.2
2/24/2019 10:20	8	8	8	32.28	4.5	4.2	4.1
2/24/2019 10:30	8	8	8	32.21	4.7	4.2	24.6
2/24/2019 10:40	8	8	8	32.31	4.6	4.2	24.2

2/24/2019 10:50	8	8	8	32.31	4.4	4.3	3.2
2/24/2019 11:00	8	8	8	32.34	4.5	4.2	24.6
2/24/2019 11:10	8	8	8	32.18	4.3	4.2	24.2
2/24/2019 11:20	8	8	8	32.28	4.3	4.2	1.4
2/24/2019 11:30	8	8	8	32.31	4.4	4.2	24.6
2/24/2019 11:40	8	8	8	32.31	4.5	4.3	24.3
2/24/2019 11:50	8	8	8	32.31	4.6	4.2	2.8
2/24/2019 12:00	8	8	8	32.34	4.3	4.2	24.5
2/24/2019 12:10	8	8	8	32.34	4.6	4.2	24.2
2/24/2019 12:20	8	8	8	32.34	4.9	4.2	3.6
2/24/2019 12:30	8	8	8	32.28	4.6	4.2	24.6
2/24/2019 12:40	8	8	8	32.37	4.7	4.2	24
2/24/2019 12:50	8	8	8	32.37	4.2	4.2	3.5
2/24/2019 13:00	8	8	8	32.37	4.5	4.3	24.5
2/24/2019 13:10	8	8	8	32.4	4.5	4.2	24.1
2/24/2019 13:20	8	8	8	32.37	4.8	4.2	3.7
2/24/2019 13:30	8	8	8	32.4	4.5	4.2	24.8
2/24/2019 13:40	8	8	8	32.4	4.5	4.2	24.1
2/24/2019 13:50	8	8	8	32.4	4.5	4.2	3.6
2/24/2019 14:00	8	8	8	32.43	4.8	4.3	24.4
2/24/2019 14:10	8	8	8	32.49	4.6	4.2	24.3
2/24/2019 14:20	8	8	8	32.46	4.3	4.2	24.6
2/24/2019 14:30	8	8	8	32.52	4.5	4.2	24.4
2/24/2019 14:40	8	8	8	32.49	4.6	4.3	22.7
2/24/2019 14:50	8	8	8	32.61	4.5	4.3	24.7
2/24/2019 15:00	8	8	8	32.52	4.3	4.2	24.4
2/24/2019 15:10	8	8	8	32.52	4.4	4.3	1.3
2/24/2019 15:20	8	8	8	32.58	4.3	4.2	24.5
2/24/2019 15:30	8	8	8	32.61	4.2	4.1	24.3
2/24/2019 15:40	8	8	8	32.58	4.4	4.2	2.4
2/24/2019 15:50	8	8	8	32.61	4.4	4.2	24.5
2/24/2019 16:00	8	8	8	32.52	4.5	4.2	24.1
2/24/2019 16:10	8	8	8	32.61	4.3	4.2	3.4
2/24/2019 16:20	8	8	8	32.64	4.5	4.3	24.4
2/24/2019 16:30	8	8	8	32.61	4.6	4.2	24.1
2/24/2019 16:40	8	8	8	32.67	4.5	4.2	4.5
2/24/2019 16:50	8	8	8	32.67	4.7	4.2	24.4
2/24/2019 17:00	8	8	8	32.76	4.4	4.3	24.1
2/24/2019 17:10	8	8	8	32.73	4.6	4.2	4.8
2/24/2019 17:20	8	8	8	32.79	4.4	4.2	24.4
2/24/2019 17:30	8	8	8	32.79	4.2	4.2	24
2/24/2019 17:40	8	8	8	32.76	4.4	4.2	24.6
2/24/2019 17:50	8	8	8	32.76	4.3	4.2	24.4
2/24/2019 18:00	8	8	8	32.79	4.5	4.2	1.6
2/24/2019 18:10	8	8	8	32.79	4.4	4.2	24.5
2/24/2019 18:20	8	8	8	32.79	4.5	4.2	24
2/24/2019 18:30	8	8	8	32.83	4.6	4.3	24.6

2/24/2019 18:40	8	8	8	32.86	4.2	4.2	24.1
2/24/2019 18:50	8	8	8	32.86	4.4	4.2	24.7
2/24/2019 19:00	8	8	8	32.92	4.2	4.2	24.3
2/24/2019 19:10	8	8	8	32.98	4.6	4.2	3.2
2/24/2019 19:20	8	8	8	32.92	4.3	4.2	24.3
2/24/2019 19:30	8	8	8	32.95	4.4	4.2	2.8
2/24/2019 19:40	8	8	8	32.95	4.3	4.2	24.5
2/24/2019 19:50	8	8	8	32.98	4.5	4.1	1.2
2/24/2019 20:00	8	8	8	32.98	4.5	4.2	24.6
2/24/2019 20:10	8	8	8	32.92	4.7	4.2	24.2
2/24/2019 20:20	8	8	8	32.95	4.5	4.2	24.6
2/24/2019 20:30	8	8	8	32.98	4.6	4.2	24.2
2/24/2019 20:40	8	8	8	32.95	4.5	4.2	3.6
2/24/2019 20:50	8	8	8	32.98	4.4	4.2	24.5
2/24/2019 21:00	8	8	8	32.98	4.8	4.1	1.1
2/24/2019 21:10	8	8	8	33.01	4.3	4.2	24.6
2/24/2019 21:20	8	8	8	32.98	4.4	4.3	24.1
2/24/2019 21:30	8	8	8	33.01	4.7	4.2	4.9
2/24/2019 21:40	8	8	8	33.04	4.3	4.2	24.4
2/24/2019 21:50	8	8	8	32.98	4.2	4.2	2.1
2/24/2019 22:00	8	8	8	33.04	4.7	4.2	24.6
2/24/2019 22:10	8	8	8	33.01	4.5	4.2	24
2/24/2019 22:20	8	8	8	33.01	4.3	4.2	3.4
2/24/2019 22:30	8	8	8	33.01	4.6	4.2	24.4
2/24/2019 22:40	8	8	8	33.04	4.9	4.2	1.8
2/24/2019 22:50	8	8	8	33.04	4.2	4.2	24.6
2/24/2019 23:00	8	8	8	33.07	4.7	4.2	24.1
2/24/2019 23:10	8	8	8	32.98	4.5	4.2	3.3
2/24/2019 23:20	8	8	8	33.04	4.5	4.2	24.5
2/24/2019 23:30	8	8	8	33.07	4.5	4.1	2.6
2/24/2019 23:40	8	8	8	33.1	4.4	4.2	24.5
2/24/2019 23:50	8	8	8	33.1	4.5	4.3	22.9
2/25/2019 0:00	8	8	8	33.07	4.8	4.2	24.6
2/25/2019 0:10	8	8	8	33.13	4.6	4.2	24.2
2/25/2019 0:20	8	8	8	33.13	4.6	4.2	3.3
2/25/2019 0:30	8	8	8	33.1	4.6	4.2	24.4
2/25/2019 0:40	8	8	8	33.22	4.5	4.2	1.2
2/25/2019 0:50	8	8	8	33.13	4.5	4.2	24.6
2/25/2019 1:00	8	8	8	33.16	4.5	4.2	24.1
2/25/2019 1:10	8	8	8	33.22	4.7	4.2	3.5
2/25/2019 1:20	8	8	8	33.16	4.5	4.2	24.5
2/25/2019 1:30	8	8	8	33.16	4.7	4.2	14.4
2/25/2019 1:40	8	8	8	33.16	4.5	4.2	24.6
2/25/2019 1:50	8	8	8	33.13	4.5	4.2	24.2
2/25/2019 2:00	8	8	8	33.16	4.6	4.2	3.8
2/25/2019 2:10	8	8	8	33.13	4.2	4.2	24.5
2/25/2019 2:20	8	8	8	33.16	4.4	4.2	24.1

2/25/2019 2:30	8	8	8	33.13	4.5	4.2	10.8
2/25/2019 2:40	8	8	8	33.13	4.7	4.2	24.3
2/25/2019 2:50	8	8	8	33.13	4.5	4.2	1.7
2/25/2019 3:00	8	8	8	33.16	4.4	4.2	24.6
2/25/2019 3:10	8	8	8	33.16	4.4	4.2	24.2
2/25/2019 3:20	8	8	8	33.16	4.3	4.2	4.3
2/25/2019 3:30	8	8	8	33.13	4.7	4.2	24.5
2/25/2019 3:40	8	8	8	33.1	4.6	4.2	24.2
2/25/2019 3:50	8	8	8	33.1	4.4	4.2	24.7
2/25/2019 4:00	8	8	8	33.22	4.8	4.2	24.3
2/25/2019 4:10	8	8	8	33.13	4.6	4.1	1.3
2/25/2019 4:20	8	8	8	33.16	4.4	4.2	24.6
2/25/2019 4:30	8	8	8	33.22	4.6	4.2	24.2
2/25/2019 4:40	8	8	8	33.16	4.5	4.1	23.5
2/25/2019 4:50	8	8	8	33.16	4.3	4.2	24.3
2/25/2019 5:00	8	8	8	33.13	4.8	4.1	3.8
2/25/2019 5:10	8	8	8	33.22	4.5	4.2	24.5
2/25/2019 5:20	8	8	8	33.28	4.5	4.2	20.7
2/25/2019 5:30	8	8	8	33.31	4.4	4.2	24.6
2/25/2019 5:40	8	8	8	33.31	4.5	4.2	24.3
2/25/2019 5:50	8	8	8	33.25	4.3	4.2	2.4
2/25/2019 6:00	8	8	8	33.25	4.7	4.2	24.5
2/25/2019 6:10	8	8	8	33.37	4.5	4.1	24.1
2/25/2019 6:20	8	8	8	33.25	4.6	4.2	3.3
2/25/2019 6:30	8	8	8	33.37	4.9	4.2	24.4
2/25/2019 6:40	8	8	8	33.34	4.6	4.2	18.4
2/25/2019 6:50	8	8	8	33.28	4.5	4.2	24.6
2/25/2019 7:00	8	8	8	33.34	4.5	4.2	24.3
2/25/2019 7:10	8	8	8	33.34	4.2	4.2	4.3
2/25/2019 7:20	8	8	8	33.34	4.4	4.3	24.5
2/25/2019 7:30	8	8	8	33.34	4.8	4.3	24.1
2/25/2019 7:40	8	8	8	33.34	4.7	4.2	23.6
2/25/2019 7:50	8	8	8	33.34	4.6	4.3	24.3
2/25/2019 8:00	8	8	8	33.37	4.4	4.2	1.1
2/25/2019 8:10	8	8	8	33.34	4.7	4.2	24.6
2/25/2019 8:20	8	8	8	33.37	4.7	4.2	24.1
2/25/2019 8:30	8	8	8	33.37	4.4	4.2	3.2
2/25/2019 8:40	8	8	8	33.31	4.6	4.2	24.4
2/25/2019 8:50	8	8	8	33.34	4.5	4.2	2.1
2/25/2019 9:00	8	8	8	33.34	4.3	4.2	24.6
2/25/2019 9:10	8	8	8	33.37	4.5	4.2	24.3
2/25/2019 9:20	8	8	8	33.28	4.5	4.2	3.3
2/25/2019 9:30	8	8	8	33.34	4.5	4.2	24.5
2/25/2019 9:40	8	8	8	33.37	4.5	4.2	24.2
2/25/2019 9:50	8	8	8	33.31	4.6	4.2	3.2
2/25/2019 10:00	8	8	8	33.37	4.5	4.2	24.4
2/25/2019 10:10	8	8	8	33.34	4.5	4.2	24.3

2/25/2019 10:20	8	8	8	33.31	4.7	4.2	24.6
2/25/2019 10:30	8	8	8	33.31	4.8	4.2	24.3
2/25/2019 10:40	8	8	8	33.37	4.6	4.2	4.4
2/25/2019 10:50	8	8	8	33.34	4.5	4.2	24.5
2/25/2019 11:00	8	8	8	33.28	4	4.2	24.1
2/25/2019 11:10	8	8	8	33.28	4.4	4.2	24.6
2/25/2019 11:20	8	8	8	33.25	4.6	4.3	24.4
2/25/2019 11:30	8	8	8	33.34	4.5	4.2	2.8
2/25/2019 11:40	8	8	8	33.31	4.5	4.2	24.5
2/25/2019 11:50	8	8	8	33.31	4.5	4.1	24
2/25/2019 12:00	8	8	8	33.34	4.5	4.2	3.5
2/25/2019 12:10	8	8	8	33.28	4.5	4.2	24.4
2/25/2019 12:20	8	8	8	33.37	4.3	4.3	3.2
2/25/2019 12:30	8	8	8	33.34	4.5	4.2	24.5
2/25/2019 12:40	8	8	8	33.25	4.4	4.3	22.7
2/25/2019 12:50	8	8	8	33.28	4.4	4.3	24.6
2/25/2019 13:00	8	8	8	33.31	4.4	4.2	24.3
2/25/2019 13:10	8	8	8	33.25	4.2	4.2	3.2
2/25/2019 13:20	8	8	8	33.28	4.3	4.2	24.4
2/25/2019 13:30	8	8	8	33.22	4.6	4.2	2.6
2/25/2019 13:40	8	8	8	33.28	4.5	4.2	24.6
2/25/2019 13:50	8	8	8	33.28	4.7	4.2	24.3
2/25/2019 14:00	8	8	8	33.34	4.6	4.2	3.3
2/25/2019 14:10	8	8	8	33.25	4.5	4.2	24.4
2/25/2019 14:20	8	8	8	33.25	4.1	4.2	24.3
2/25/2019 14:30	8	8	8	33.28	4.5	4.2	24.6
2/25/2019 14:40	8	8	8	33.28	4.3	4.2	24.3
2/25/2019 14:50	8	8	8	33.34	4.3	4.2	1.1
2/25/2019 15:00	8	8	8	33.16	4.7	4.2	24.6
2/25/2019 15:10	8	8	8	33.28	4.5	4.2	24.3
2/25/2019 15:20	8	8	8	33.31	4.5	4.2	1.3
2/25/2019 15:30	8	8	8	33.28	4.4	4.2	24.6
2/25/2019 15:40	8	8	8	33.25	4.8	4.2	24.2
2/25/2019 15:50	8	8	8	33.28	4.4	4.2	3.8
2/25/2019 16:00	8	8	8	33.25	4.5	4.1	24.6
2/25/2019 16:10	8	8	8	33.31	4.4	4.3	24.2
2/25/2019 16:20	8	8	8	33.25	4.5	4.2	2.3
2/25/2019 16:30	8	8	8	33.25	4.3	4.2	24.6
2/25/2019 16:40	8	8	8	33.34	4.5	4.1	24.4
2/25/2019 16:50	8	8	8	33.34	4.3	4.2	1.2
2/25/2019 17:00	8	8	8	33.34	4.4	4.2	24.6
2/25/2019 17:10	8	8	8	33.34	4.7	4.2	24.3
2/25/2019 17:20	8	8	8	33.34	4.6	4.3	24.1
2/25/2019 17:30	8	8	8	33.34	4.3	4	3.4
2/25/2019 17:40	8	8	8	33.41	4.2	4.1	24.5
2/25/2019 17:50	8	8	8	33.34	4.3	4.1	23.9
2/25/2019 18:00	8	8	8	33.25	4.6	4.2	3.3

2/25/2019 18:10	8	8	8	33.37	4.6	4.1	24.5
2/25/2019 18:20	8	8	8	33.34	4.6	4.2	24.2
2/25/2019 18:30	8	8	8	33.37	4.6	4.1	3.7
2/25/2019 18:40	8	8	8	33.34	4.2	4.1	24.5
2/25/2019 18:50	8	8	8	33.31	4.6	4.2	24.1
2/25/2019 19:00	8	8	8	33.31	4.7	4.1	4.1
2/25/2019 19:10	8	8	8	33.28	4.5	4.1	24.5
2/25/2019 19:20	8	8	8	33.31	4.3	4.2	24.1
2/25/2019 19:30	8	8	8	33.31	4.6	4.1	3.5
2/25/2019 19:40	8	8	8	33.41	4.6	4.1	24.6
2/25/2019 19:50	8	8	8	33.31	4.6	4.2	24.2
2/25/2019 20:00	8	8	8	33.31	4.4	4.2	3.9
2/25/2019 20:10	8	8	8	33.28	4.5	4.2	24.5
2/25/2019 20:20	8	8	8	33.25	4.9	4.2	24.2
2/25/2019 20:30	8	8	8	33.31	4.6	4.2	4.1
2/25/2019 20:40	8	8	8	33.28	4.3	4.1	24.6
2/25/2019 20:50	8	8	8	33.34	4.5	4.2	24.3
2/25/2019 21:00	8	8	8	33.34	4.3	4.2	2.8
2/25/2019 21:10	8	8	8	33.34	4.5	4.2	24.6
2/25/2019 21:20	8	8	8	33.25	4.3	4.2	24.3
2/25/2019 21:30	8	8	8	33.44	4.6	4.2	1.7
2/25/2019 21:40	8	8	8	33.47	4.5	4.2	24.6
2/25/2019 21:50	8	8	8	33.37	4.2	4.2	24.2
2/25/2019 22:00	8	8	8	33.41	4.5	4.2	3.4
2/25/2019 22:10	8	8	8	33.41	4.3	4.2	24.6
2/25/2019 22:20	8	8	8	33.41	4.7	4.2	24.2
2/25/2019 22:30	8	8	8	33.44	4.2	4.1	4.3
2/25/2019 22:40	8	8	8	33.41	5	4.2	24.6
2/25/2019 22:50	8	8	8	33.44	4.8	4.2	24
2/25/2019 23:00	8	8	8	33.34	4.6	4.2	3.7
2/25/2019 23:10	8	8	8	33.34	4.8	4.2	24.5
2/25/2019 23:20	8	8	8	33.47	4.6	4.2	24.2
2/25/2019 23:30	8	8	8	33.37	4.5	4.2	3.9
2/25/2019 23:40	8	8	8	33.37	4.3	4.2	24.6
2/25/2019 23:50	8	8	8	33.41	4.7	4.2	24.1
2/26/2019 0:00	8	8	8	33.34	4.6	4.2	3.5
2/26/2019 0:10	8	8	8	33.37	4.5	4.2	24.4
2/26/2019 0:20	8	8	8	33.37	4.4	4.2	24
2/26/2019 0:30	8	8	8	33.34	4.5	4.2	3.4
2/26/2019 0:40	8	8	8	33.37	4.6	4.2	24.4
2/26/2019 0:50	8	8	8	33.41	4.5	4.2	24.1
2/26/2019 1:00	8	8	8	33.37	4.4	4.2	4.2
2/26/2019 1:10	8	8	8	33.44	4.3	4.2	24.3
2/26/2019 1:20	8	8	8	33.34	4.3	4.1	23.3
2/26/2019 1:30	8	8	8	33.41	4.4	4.2	24.6
2/26/2019 1:40	8	8	8	33.44	4.6	4.2	24.4
2/26/2019 1:50	8	8	8	33.41	4.5	4.1	24.1

2/26/2019 2:00	8	8	8	33.44	4.4	4.2	10.8
2/26/2019 2:10	8	8	8	33.47	4.5	4.2	24.4
2/26/2019 2:20	8	8	8	33.44	4.4	4.2	22.9
2/26/2019 2:30	8	8	8	33.44	4.9	4.2	4.3
2/26/2019 2:40	8	8	8	33.5	4.6	4.1	24.4
2/26/2019 2:50	8	8	8	33.44	4.5	4.2	24.3
2/26/2019 3:00	8	8	8	33.44	4.6	4.2	24.6
2/26/2019 3:10	8	8	8	33.44	4.6	4.2	24.4
2/26/2019 3:20	8	8	8	33.47	4.2	4.2	1.3
2/26/2019 3:30	8	8	8	33.5	4.8	4.1	24.6
2/26/2019 3:40	8	8	8	33.47	4.3	4.2	24.3
2/26/2019 3:50	8	8	8	33.5	4.5	4.2	2.9
2/26/2019 4:00	8	8	8	33.44	4.8	4.2	24.6
2/26/2019 4:10	8	8	8	33.44	4.7	4.2	24.2
2/26/2019 4:20	8	8	8	33.47	4.6	4.2	3.7
2/26/2019 4:30	8	8	8	33.44	4.2	4.2	24.6
2/26/2019 4:40	8	8	8	33.47	4.6	4.3	24.2
2/26/2019 4:50	8	8	8	33.41	4.4	4.2	3.6
2/26/2019 5:00	8	8	8	33.34	4.5	4.2	24.6
2/26/2019 5:10	8	8	8	33.37	4.5	4.3	24.2
2/26/2019 5:20	8	8	8	33.34	4.5	4.2	4.4
2/26/2019 5:30	8	8	8	33.31	4.5	4.2	24.5
2/26/2019 5:40	8	8	8	33.28	4.5	4.2	24.1
2/26/2019 5:50	8	8	8	33.34	4.2	4.3	10.7
2/26/2019 6:00	8	8	8	33.25	4.1	4.2	24.4
2/26/2019 6:10	8	8	8	33.22	4.7	4.2	11.1
2/26/2019 6:20	8	8	8	33.22	4.8	4.3	24.6
2/26/2019 6:30	8	8	8	33.13	4.8	4.2	24.3
2/26/2019 6:40	8	8	8	33.16	4.6	4.1	2.8
2/26/2019 6:50	8	8	8	33.07	4.5	4.2	24.6
2/26/2019 7:00	8	8	8	33.1	4.6	4.2	24.1
2/26/2019 7:10	8	8	8	33.16	4.7	4.2	4.1
2/26/2019 7:20	8	8	8	33.13	4.6	4.2	24.5
2/26/2019 7:30	8	8	8	33.16	4.6	4.2	24.2
2/26/2019 7:40	8	8	8	33.1	4.6	4.2	3.4
2/26/2019 7:50	8	8	8	33.16	4.7	4.2	24.4
2/26/2019 8:00	8	8	8	33.07	4.4	4.2	24.3
2/26/2019 8:10	8	8	8	33.13	4.4	4.3	24.7
2/26/2019 8:20	8	8	8	33.13	4.5	4.3	24.3
2/26/2019 8:30	8	8	8	33.22	4.4	4.2	6.5
2/26/2019 8:40	8	8	8	33.13	4.4	4.3	24.6
2/26/2019 8:50	8	8	8	33.13	4.7	4.2	24.3
2/26/2019 9:00	8	8	8	33.16	4.5	4.2	1.4
2/26/2019 9:10	8	8	8	33.22	4.4	4.3	24.6
2/26/2019 9:20	8	8	8	33.16	4.6	4.2	24.3
2/26/2019 9:30	8	8	8	33.16	4.7	4.2	4.1
2/26/2019 9:40	8	8	8	33.16	4.6	4.3	24.6

2/26/2019 9:50	8	8	8	33.22	4.8	4.2	24.3
2/26/2019 10:00	8	8	8	33.22	3.8	4.3	3.3
2/26/2019 10:10	8	8	8	33.25	4.5	4.2	24.4
2/26/2019 10:20	8	8	8	33.16	4.5	4.2	24.2
2/26/2019 10:30	8	8	8	33.22	4.5	4.3	24.6
2/26/2019 10:40	8	8	8	33.1	4.4	4.2	24.3
2/26/2019 10:50	8	8	8	33.28	4.5	4.3	1.9
2/26/2019 11:00	8	8	8	33.04	4.2	4.2	24.6
2/26/2019 11:10	8	8	8	33.28	4.5	4.2	24.3
2/26/2019 11:20	8	8	8	33.25	4.8	4.3	10.8
2/26/2019 11:30	8	8	8	33.22	4.7	4.3	24.5
2/26/2019 11:40	8	8	8	33.25	4.5	4.2	3.6
2/26/2019 11:50	8	8	8	33.25	4.6	4.2	24.5
2/26/2019 12:00	8	8	8	33.22	4.6	4.3	1.2
2/26/2019 12:10	8	8	8	33.34	4.4	4.2	24.6
2/26/2019 12:20	8	8	8	33.31	4.3	4.3	24
2/26/2019 12:30	8	8	8	33.28	4.6	4.2	10.9
2/26/2019 12:40	8	8	8	33.28	4.8	4.2	24.3
2/26/2019 12:50	8	8	8	33.28	4.4	4.2	3.2
2/26/2019 13:00	8	8	8	33.31	4.1	4.2	24.5
2/26/2019 13:10	8	8	8	33.34	4.5	4.2	24.1
2/26/2019 13:20	8	8	8	33.25	4.6	4.2	4.6
2/26/2019 13:30	8	8	8	33.28	4.9	4.1	24.4
2/26/2019 13:40	8	8	8	33.34	4.5	4.2	2.1
2/26/2019 13:50	8	8	8	33.28	4.4	4.2	24.7
2/26/2019 14:00	8	8	8	33.25	4.4	4.3	24.3
2/26/2019 14:10	8	8	8	33.28	4.7	4.1	2
2/26/2019 14:20	8	8	8	33.22	4.5	4.3	24.5
2/26/2019 14:30	8	8	8	33.41	4.5	4.2	24.3
2/26/2019 14:40	8	8	8	33.31	4.5	4.2	3.7
2/26/2019 14:50	8	8	8	33.31	4.6	4.2	24.6
2/26/2019 15:00	8	8	8	33.25	4.3	4.2	24.1
2/26/2019 15:10	8	8	8	33.25	4.3	4.2	3.2
2/26/2019 15:20	8	8	8	33.31	4.5	4.2	24.5
2/26/2019 15:30	8	8	8	33.28	4.4	4.1	24.3
2/26/2019 15:40	8	8	8	33.25	4.6	4.2	24.7
2/26/2019 15:50	8	8	8	33.28	4.6	4.2	24.4
2/26/2019 16:00	8	8	8	33.28	4.7	4.2	22.1
2/26/2019 16:10	8	8	8	33.22	4.8	4.2	24.5
2/26/2019 16:20	8	8	8	33.16	4.5	4.2	24.3
2/26/2019 16:30	8	8	8	33.13	4.5	4.2	1.1
2/26/2019 16:40	8	8	8	33.25	4.3	4.2	24.7
2/26/2019 16:50	8	8	8	33.16	4.6	4.1	24.3
2/26/2019 17:00	8	8	8	33.25	4.5	4.2	1.9
2/26/2019 17:10	8	8	8	33.25	4.3	4.2	24.6
2/26/2019 17:20	8	8	8	33.25	4.4	4.2	24.3
2/26/2019 17:30	8	8	8	33.31	4.4	4.2	3.5

2/26/2019 17:40	8	8	8	33.22	4.2	4.3	24.6
2/26/2019 17:50	8	8	8	33.22	4.6	4.2	24.2
2/26/2019 18:00	8	8	8	33.25	4.5	4.2	3.7
2/26/2019 18:10	8	8	8	33.25	4.4	4.2	24.5
2/26/2019 18:20	8	8	8	33.16	4.2	4.2	24.1
2/26/2019 18:30	8	8	8	33.22	4.4	4.2	3.9
2/26/2019 18:40	8	8	8	33.22	4.8	4.2	24.5
2/26/2019 18:50	8	8	8	33.22	4.5	4.2	24.2
2/26/2019 19:00	8	8	8	33.22	4.6	4.2	3.4
2/26/2019 19:10	8	8	8	33.16	4.4	4.1	24.5
2/26/2019 19:20	8	8	8	33.28	4.6	4.2	23.3
2/26/2019 19:30	8	8	8	33.28	4.7	4.2	24.7
2/26/2019 19:40	8	8	8	33.25	4.6	4.2	24.4
2/26/2019 19:50	8	8	8	33.31	4.3	4.2	1.1
2/26/2019 20:00	8	8	8	33.28	4.8	4.2	24.6
2/26/2019 20:10	8	8	8	33.28	4.6	4.2	24.3
2/26/2019 20:20	8	8	8	33.25	4.7	4.2	2.1
2/26/2019 20:30	8	8	8	33.22	4.4	4.2	24.6
2/26/2019 20:40	8	8	8	33.28	4.7	4.2	24.4
2/26/2019 20:50	8	8	8	33.34	4.2	4.2	3.2
2/26/2019 21:00	8	8	8	33.16	4.4	4.1	24.5
2/26/2019 21:10	8	8	8	33.28	4.3	4.2	24.3
2/26/2019 21:20	8	8	8	33.34	4.7	4.2	3.5
2/26/2019 21:30	8	8	8	33.28	4.3	4.2	24.5
2/26/2019 21:40	8	8	8	33.31	4.7	4.2	24.1
2/26/2019 21:50	8	8	8	33.25	4.5	4.2	3.3
2/26/2019 22:00	8	8	8	33.34	4.6	4.2	24.4
2/26/2019 22:10	8	8	8	33.28	4.4	4.2	1.1
2/26/2019 22:20	8	8	8	33.22	4.3	4.2	24.7
2/26/2019 22:30	8	8	8	33.25	4.5	4.2	24.3
2/26/2019 22:40	8	8	8	33.28	4.5	4.2	1.2
2/26/2019 22:50	8	8	8	33.31	4.3	4.2	24.6
2/26/2019 23:00	8	8	8	33.22	4.6	4.2	24.1
2/26/2019 23:10	8	8	8	33.16	4.6	4.2	4
2/26/2019 23:20	8	8	8	33.16	4.3	4.2	24.5
2/26/2019 23:30	8	8	8	33.13	4.7	4.2	24.1
2/26/2019 23:40	8	8	8	33.22	4.6	4.2	3.5
2/26/2019 23:50	8	8	8	33.16	4.4	4.2	24.6
2/27/2019 0:00	8	8	8	33.13	4.7	4.3	24.1
2/27/2019 0:10	8	8	8	33.25	4.8	4.3	3.6
2/27/2019 0:20	8	8	8	33.22	4.5	4.2	24.5
2/27/2019 0:30	8	8	8	33.13	4.5	4.2	24.1
2/27/2019 0:40	8	8	8	33.28	4.5	4.2	24.6
2/27/2019 0:50	8	8	8	33.16	4.6	4.3	24.4
2/27/2019 1:00	8	8	8	33.28	4.7	4.2	6.8
2/27/2019 1:10	8	8	8	33.22	4.5	4.2	24.6
2/27/2019 1:20	8	8	8	33.22	4.6	4.2	24.4

2/27/2019 1:30	8	8	8	33.22	4.4	4.2	1.2
2/27/2019 1:40	8	8	8	33.22	4.5	4.2	24.6
2/27/2019 1:50	8	8	8	33.22	4.4	4.2	24.3
2/27/2019 2:00	8	8	8	33.28	4.3	4.2	3.7
2/27/2019 2:10	8	8	8	33.22	4.2	4.2	24.6
2/27/2019 2:20	8	8	8	33.25	4.6	4.2	24.4
2/27/2019 2:30	8	8	8	33.28	4	4.2	3.3
2/27/2019 2:40	8	8	8	33.34	4.6	4.2	24.5
2/27/2019 2:50	8	8	8	33.34	4.5	4.2	24
2/27/2019 3:00	8	8	8	33.28	4.6	4.2	3.9
2/27/2019 3:10	8	8	8	33.31	4.7	4.3	24.5
2/27/2019 3:20	8	8	8	33.28	4.6	4.2	24.1
2/27/2019 3:30	8	8	8	33.37	4.3	4.1	4.9
2/27/2019 3:40	8	8	8	33.34	4.5	4.3	24.4
2/27/2019 3:50	8	8	8	33.31	4.5	4.3	1.1
2/27/2019 4:00	8	8	8	33.37	4.4	4.2	24.6
2/27/2019 4:10	8	8	8	33.37	4.6	4.2	24.3
2/27/2019 4:20	8	8	8	33.31	4.6	4.2	4.1
2/27/2019 4:30	8	8	8	33.34	4.6	4.2	24.5
2/27/2019 4:40	8	8	8	33.41	4.9	4.2	24.2
2/27/2019 4:50	8	8	8	33.41	4.5	4.2	3.5
2/27/2019 5:00	8	8	8	33.37	4.5	4.3	24.5
2/27/2019 5:10	8	8	8	33.34	4.5	4.3	24.1
2/27/2019 5:20	8	8	8	33.37	4.5	4.2	4.5
2/27/2019 5:30	8	8	8	33.37	4.6	4.3	24.5
2/27/2019 5:40	8	8	8	33.31	4.6	4.2	24.2
2/27/2019 5:50	8	8	8	33.28	4.3	4.3	24.6
2/27/2019 6:00	8	8	8	33.31	4.7	4.2	24.5
2/27/2019 6:10	8	8	8	33.37	4.4	4.2	23.7
2/27/2019 6:20	8	8	8	33.41	4.5	4.3	24.6
2/27/2019 6:30	8	8	8	33.31	4.6	4.2	24.4
2/27/2019 6:40	8	8	8	33.41	4.4	4.2	24.1
2/27/2019 6:50	8	8	8	33.31	4.6	4.2	4.9
2/27/2019 7:00	8	8	8	33.37	4.3	4.2	24.5
2/27/2019 7:10	8	8	8	33.37	4.6	4.2	14.6
2/27/2019 7:20	8	8	8	33.34	4.6	4.2	24.6
2/27/2019 7:30	8	8	8	33.31	4.5	4.2	24.4
2/27/2019 7:40	8	8	8	33.34	4.3	4.2	2.7
2/27/2019 7:50	8	8	8	33.41	4.6	4.2	24.6
2/27/2019 8:00	8	8	8	33.31	4.7	4.2	24.3
2/27/2019 8:10	8	8	8	33.34	4.3	4.2	4.1
2/27/2019 8:20	8	8	8	33.37	4.7	4.3	24.5
2/27/2019 8:30	8	8	8	33.37	4.6	4.2	24.2
2/27/2019 8:40	8	8	8	33.41	4.4	4.2	3.7
2/27/2019 8:50	8	8	8	33.37	4.7	4.3	24.5
2/27/2019 9:00	8	8	8	33.41	4.7	4.2	24.1
2/27/2019 9:10	8	8	8	33.41	4.6	4.2	4.5

2/27/2019 9:20	8	8	8	33.41	4.5	4.3	24.6
2/27/2019 9:30	8	8	8	33.44	4.4	4.3	24.2
2/27/2019 9:40	8	8	8	33.47	4.3	4.4	4.4
2/27/2019 9:50	8	8	8	33.47	4	4.2	24.5
2/27/2019 10:00	8	8	8	33.44	4.4	4.3	24.1
2/27/2019 10:10	8	8	8	33.47	4.8	4.2	24.7
2/27/2019 10:20	8	8	8	33.44	4.8	4.3	24.4
2/27/2019 10:30	8	8	8	33.44	4.4	4.2	1.2
2/27/2019 10:40	8	8	8	33.37	4.8	4.3	24.6
2/27/2019 10:50	8	8	8	33.5	4.8	4.3	24.2
2/27/2019 11:00	8	8	8	33.44	4.4	4.3	3.7
2/27/2019 11:10	8	8	8	33.44	4.5	4.3	24.5
2/27/2019 11:20	8	8	8	33.53	4.6	4.2	24.1
2/27/2019 11:30	8	8	8	33.53	4.6	4.4	24.7
2/27/2019 11:40	8	8	8	33.5	4.9	4.3	24.3
2/27/2019 11:50	8	8	8	33.47	4.3	4.3	1.9
2/27/2019 12:00	8	8	8	33.53	4.3	4.3	24.6
2/27/2019 12:10	8	8	8	33.53	4.6	4.3	24
2/27/2019 12:20	8	8	8	33.53	4.5	4.3	3.5
2/27/2019 12:30	8	8	8	33.53	4.6	4.3	24.5
2/27/2019 12:40	8	8	8	33.5	4.4	4.2	23.4
2/27/2019 12:50	8	8	8	33.53	4.8	4.3	24.7
2/27/2019 13:00	8	8	8	33.53	4.7	4.3	24.4
2/27/2019 13:10	8	8	8	33.56	4.6	4.3	1.3
2/27/2019 13:20	8	8	8	33.56	4.6	4.3	24.6
2/27/2019 13:30	8	8	8	33.5	4.7	4.3	24.2
2/27/2019 13:40	8	8	8	33.56	4.3	4.4	4.3
2/27/2019 13:50	8	8	8	33.53	4.3	4.3	24.5
2/27/2019 14:00	8	8	8	33.56	4.4	4.3	24.1
2/27/2019 14:10	8	8	8	33.5	4.5	4.2	24.7
2/27/2019 14:20	8	8	8	33.59	4.5	4.3	24.4
2/27/2019 14:30	8	8	8	33.5	4.4	4.3	1.3
2/27/2019 14:40	8	8	8	33.5	4.4	4.2	24.5
2/27/2019 14:50	8	8	8	33.47	4.5	4.3	24.2
2/27/2019 15:00	8	8	8	33.47	4.5	4.3	4.5
2/27/2019 15:10	8	8	8	33.34	4.8	4.3	24.4
2/27/2019 15:20	8	8	8	33.53	4.6	4.2	1.2
2/27/2019 15:30	8	8	8	33.44	4.5	4.2	24.6
2/27/2019 15:40	8	8	8	33.47	4.8	4.3	24.2
2/27/2019 15:50	8	8	8	33.44	4.4	4.2	3.3
2/27/2019 16:00	8	8	8	33.44	4.6	4.3	24.6
2/27/2019 16:10	8	8	8	33.41	4.6	4.2	24.3
2/27/2019 16:20	8	8	8	33.53	4.5	4.3	4
2/27/2019 16:30	8	8	8	33.44	4.8	4.1	24.5
2/27/2019 16:40	8	8	8	33.44	4.4	4.2	24
2/27/2019 16:50	8	8	8	33.47	4.5	4.2	23.6
2/27/2019 17:00	8	8	8	33.5	4.5	4.2	24.3

2/27/2019 17:10	8	8	8	33.44	4.7	4.2	1.1
2/27/2019 17:20	8	8	8	33.44	4.4	4.3	24.6
2/27/2019 17:30	8	8	8	33.47	4.4	4.2	24.3
2/27/2019 17:40	8	8	8	33.44	4.6	4.3	4
2/27/2019 17:50	8	8	8	33.5	4.7	4.2	24.6
2/27/2019 18:00	8	8	8	33.41	4.6	4.3	24.2
2/27/2019 18:10	8	8	8	33.41	4.5	4.2	4.5
2/27/2019 18:20	8	8	8	33.53	4.3	4.2	24.3
2/27/2019 18:30	8	8	8	33.47	4.6	4.3	1.2
2/27/2019 18:40	8	8	8	33.5	4.4	4.2	24.6
2/27/2019 18:50	8	8	8	33.47	4.5	4.2	24.2
2/27/2019 19:00	8	8	8	33.53	4.7	4.2	3.6
2/27/2019 19:10	8	8	8	33.53	4.3	4.2	24.5
2/27/2019 19:20	8	8	8	33.56	4.6	4.2	24.1
2/27/2019 19:30	8	8	8	33.56	4.7	4.3	24.6
2/27/2019 19:40	8	8	8	33.62	4.6	4.2	24.4
2/27/2019 19:50	8	8	8	33.65	4.8	4.3	1.2
2/27/2019 20:00	8	8	8	33.53	4.4	4.3	24.5
2/27/2019 20:10	8	8	8	33.65	4.6	4.3	24.1
2/27/2019 20:20	8	8	8	33.62	4.7	4.3	3.9
2/27/2019 20:30	8	8	8	33.62	4.8	4.3	24.5
2/27/2019 20:40	8	8	8	33.62	4.6	4.3	23.7
2/27/2019 20:50	8	8	8	33.62	4.5	4.2	24.6
2/27/2019 21:00	8	8	8	33.65	4.7	4.3	24.3
2/27/2019 21:10	8	8	8	33.65	4.6	4.3	3.8
2/27/2019 21:20	8	8	8	33.68	4.4	4.2	24.5
2/27/2019 21:30	8	8	8	33.65	4.9	4.3	24.2
2/27/2019 21:40	8	8	8	33.65	4.6	4.2	3.2
2/27/2019 21:50	8	8	8	33.62	4.5	4.3	24.4
2/27/2019 22:00	8	8	8	33.71	4.6	4.2	7
2/27/2019 22:10	8	8	8	33.68	4.6	4.3	24.6
2/27/2019 22:20	8	8	8	33.68	4.5	4.2	24.3
2/27/2019 22:30	8	8	8	33.65	4.4	4.3	3.3
2/27/2019 22:40	8	8	8	33.62	4.5	4.3	24.5
2/27/2019 22:50	8	8	8	33.74	4.5	4.2	23.9
2/27/2019 23:00	8	8	8	33.65	4.5	4.2	3.4
2/27/2019 23:10	8	8	8	33.71	4.7	4.3	24.5
2/27/2019 23:20	8	8	8	33.77	4.7	4.3	20.9
2/27/2019 23:30	8	8	8	33.68	4.3	4.3	24.6
2/27/2019 23:40	8	8	8	33.62	4.6	4.3	24.3
2/27/2019 23:50	8	8	8	33.74	4.4	4.3	3.6
2/28/2019 0:00	8	8	8	33.74	4.7	4.3	24.5
2/28/2019 0:10	8	8	8	33.71	4.8	4.3	24.1
2/28/2019 0:20	8	8	8	33.77	4.5	4.3	24.7
2/28/2019 0:30	8	8	8	33.68	4.7	4.2	24.4
2/28/2019 0:40	8	8	8	33.77	4.6	4.3	1.2
2/28/2019 0:50	8	8	8	33.74	4.4	4.2	24.5

2/28/2019 1:00	8	8	8	33.77	4.3	4.3	24.2
2/28/2019 1:10	8	8	8	33.77	4.5	4.2	4.6
2/28/2019 1:20	8	8	8	33.71	4.7	4.3	24.5
2/28/2019 1:30	8	8	8	33.71	4.4	4.2	23.9
2/28/2019 1:40	8	8	8	33.8	5	4.2	24.7
2/28/2019 1:50	8	8	8	33.65	4.7	4.3	24.4
2/28/2019 2:00	8	8	8	33.8	4.7	4.3	1.2
2/28/2019 2:10	8	8	8	33.8	4.5	4.3	24.6
2/28/2019 2:20	8	8	8	33.74	4.4	4.2	24.2
2/28/2019 2:30	8	8	8	33.74	4.5	4.3	3.6
2/28/2019 2:40	8	8	8	33.71	4.5	4.3	24.5
2/28/2019 2:50	8	8	8	33.71	4.6	4.3	24
2/28/2019 3:00	8	8	8	33.71	4.4	4.3	3.2
2/28/2019 3:10	8	8	8	33.71	4.7	4.3	24.5
2/28/2019 3:20	8	8	8	33.62	4.4	4.2	18.8
2/28/2019 3:30	8	8	8	33.71	4.6	4.3	24.6
2/28/2019 3:40	8	8	8	33.68	4.3	4.3	24.2
2/28/2019 3:50	8	8	8	33.71	4.3	4.2	3.8
2/28/2019 4:00	8	8	8	33.68	4.6	4.2	24.5
2/28/2019 4:10	8	8	8	33.71	4.8	4.2	24.3
2/28/2019 4:20	8	8	8	33.65	4.6	4.2	24.6
2/28/2019 4:30	8	8	8	33.65	4.8	4.2	24.3
2/28/2019 4:40	8	8	8	33.65	4.4	4.3	1.2
2/28/2019 4:50	8	8	8	33.71	4.4	4.3	24.6
2/28/2019 5:00	8	8	8	33.68	4.5	4.3	24.1
2/28/2019 5:10	8	8	8	33.62	4.6	4.3	3.7
2/28/2019 5:20	8	8	8	33.65	4.8	4.3	24.5
2/28/2019 5:30	8	8	8	33.74	4.6	4.2	24.2
2/28/2019 5:40	8	8	8	33.71	4.6	4.2	4.8
2/28/2019 5:50	8	8	8	33.71	4.7	4.3	24.2
2/28/2019 6:00	8	8	8	33.65	5	4.3	1.3
2/28/2019 6:10	8	8	8	33.65	4.4	4.3	24.6
2/28/2019 6:20	8	8	8	33.74	4.6	4.2	24.4
2/28/2019 6:30	8	8	8	33.71	4.6	4.2	3.3
2/28/2019 6:40	8	8	8	33.68	4.3	4.2	24.4
2/28/2019 6:50	8	8	8	33.71	4.5	4.2	1.2
2/28/2019 7:00	8	8	8	33.65	4.6	4.2	24.6
2/28/2019 7:10	8	8	8	33.71	4.7	4.3	24.3
2/28/2019 7:20	8	8	8	33.65	4.8	4.3	3.8
2/28/2019 7:30	8	8	8	33.68	5	4.2	24.5
2/28/2019 7:40	8	8	8	33.68	4.6	4.2	24.1
2/28/2019 7:50	8	8	8	33.71	4.4	4.3	4.2
2/28/2019 8:00	8	8	8	33.71	4.1	4.3	24.4
2/28/2019 8:10	8	8	8	33.65	4.6	4.2	1.2
2/28/2019 8:20	8	8	8	33.68	4.8	4.3	24.6
2/28/2019 8:30	8	8	8	33.74	4.5	4.1	24.1
2/28/2019 8:40	8	8	8	33.68	4.7	4.2	3.4

2/28/2019 8:50	8	8	8	33.65	4.5	4.3	24.5
2/28/2019 9:00	8	8	8	33.65	4.6	4.2	22.2
2/28/2019 9:10	8	8	8	33.68	4.7	4.3	24.7
2/28/2019 9:20	8	8	8	33.65	4.7	4.2	24.3
2/28/2019 9:30	8	8	8	33.65	4.6	4.3	3.2
2/28/2019 9:40	8	8	8	33.68	4.7	4.3	24.5
2/28/2019 9:50	8	8	8	33.65	4.3	4.4	24.1
2/28/2019 10:00	8	8	8	33.62	4.7	4.3	3.3
2/28/2019 10:10	8	8	8	33.71	4.6	4.3	24.4
2/28/2019 10:20	8	8	8	33.65	4.6	4.3	16.5
2/28/2019 10:30	8	8	8	33.68	4.5	4.4	24.6
2/28/2019 10:40	8	8	8	33.68	4.3	4.3	24.2
2/28/2019 10:50	8	8	8	33.65	4.4	4.4	3.3
2/28/2019 11:00	8	8	8	33.62	4.6	4.3	24.6
2/28/2019 11:10	8	8	8	33.62	4.9	4.3	24.2
2/28/2019 11:20	8	8	8	33.62	4.3	4.3	3.2
2/28/2019 11:30	8	8	8	33.65	4.5	4.4	24.3
2/28/2019 11:40	8	8	8	33.68	4.4	4.3	1.4
2/28/2019 11:50	8	8	8	33.74	4.6	4.3	24.6
2/28/2019 12:00	8	8	8	33.65	4.7	4.2	24.1
2/28/2019 12:10	8	8	8	33.65	4.4	4.3	3.9
2/28/2019 12:20	8	8	8	33.62	4.7	4.3	24.5
2/28/2019 12:30	8	8	8	33.68	4.5	4.3	24.1
2/28/2019 12:40	8	8	8	33.71	4.5	4.3	24.6
2/28/2019 12:50	8	8	8	33.65	4.4	4.2	24.4
2/28/2019 13:00	8	8	8	33.62	4.4	4.3	3.9
2/28/2019 13:10	8	8	8	33.68	4.8	4.3	24.5
2/28/2019 13:20	8	8	8	33.59	4.5	4.3	24
2/28/2019 13:30	8	8	8	33.59	4.5	4.2	3.3
2/28/2019 13:40	8	8	8	33.71	4.4	4.2	24.4
2/28/2019 13:50	8	8	8	33.56	4.4	4.2	22.2
2/28/2019 14:00	8	8	8	33.62	4.4	4.3	24.6
2/28/2019 14:10	8	8	8	33.59	4.8	4.2	24.3
2/28/2019 14:20	8	8	8	33.62	4.4	4.3	3.3
2/28/2019 14:30	8	8	8	33.56	4.6	4.3	24.7
2/28/2019 14:40	8	8	8	33.59	4.7	4.2	24.1
2/28/2019 14:50	8	8	8	33.65	4.4	4.2	3.6
2/28/2019 15:00	8	8	8	33.71	4.6	4.3	24.4
2/28/2019 15:10	8	8	8	33.59	4.7	4.2	24.2
2/28/2019 15:20	8	8	8	33.56	4.4	4.2	24.5
2/28/2019 15:30	8	8	8	33.65	4.3	4.2	24.3
2/28/2019 15:40	8	8	8	33.65	4.6	4.3	3.3
2/28/2019 15:50	8	8	8	33.65	4.5	4.2	24.5
2/28/2019 16:00	8	8	8	33.59	4.5	4.2	23.9
2/28/2019 16:10	8	8	8	33.68	4.7	4.3	24.6
2/28/2019 16:20	8	8	8	33.71	4.4	4.2	24.2
2/28/2019 16:30	8	8	8	33.62	4.6	4.2	3.5

2/28/2019 16:40	8	8	8	33.68	4.5	4.2	24.5
2/28/2019 16:50	8	8	8	33.65	4.5	4.2	24
2/28/2019 17:00	8	8	8	33.68	4.5	4.1	24.6
2/28/2019 17:10	8	8	8	33.68	4.7	4.2	24.3
2/28/2019 17:20	8	8	8	33.71	4.4	4.2	3.8
2/28/2019 17:30	8	8	8	33.68	4.6	4.2	24.5
2/28/2019 17:40	8	8	8	33.74	4.4	4.2	24.1
2/28/2019 17:50	8	8	8	33.74	4.6	4.2	24.6
2/28/2019 18:00	8	8	8	33.68	4.7	4.2	24.2
2/28/2019 18:10	8	8	8	33.68	4.4	4.3	3.9
2/28/2019 18:20	8	8	8	33.62	4.5	4.3	24.4
2/28/2019 18:30	8	8	8	33.68	4.6	4.2	2.1
2/28/2019 18:40	8	8	8	33.71	4.5	4.2	24.6
2/28/2019 18:50	8	8	8	33.68	4.6	4.2	24.3
2/28/2019 19:00	8	8	8	33.71	4.6	4.2	3.9
2/28/2019 19:10	8	8	8	33.71	4.7	4.2	24.4
2/28/2019 19:20	8	8	8	33.65	4.5	4.3	6.8
2/28/2019 19:30	8	8	8	33.65	4.4	4.2	24.6
2/28/2019 19:40	8	8	8	33.56	4.7	4.2	24.2
2/28/2019 19:50	8	8	8	33.74	4.5	4.3	4.3
2/28/2019 20:00	8	8	8	33.68	4.7	4.2	24.5
2/28/2019 20:10	8	8	8	33.74	4.7	4.2	22.1
2/28/2019 20:20	8	8	8	33.68	4.5	4.3	24.6
2/28/2019 20:30	8	8	8	33.68	4.4	4.3	24.3
2/28/2019 20:40	8	8	8	33.71	4.7	4.3	3.7
2/28/2019 20:50	8	8	8	33.71	4.4	4.3	24.4
2/28/2019 21:00	8	8	8	33.71	4.3	4.3	1.2
2/28/2019 21:10	8	8	8	33.71	4.7	4.2	24.6
2/28/2019 21:20	8	8	8	33.71	4.8	4.2	24.1
2/28/2019 21:30	8	8	8	33.71	4.7	4.2	24.7
2/28/2019 21:40	8	8	8	33.65	4.6	4.3	24.1
2/28/2019 21:50	8	8	8	33.68	4.1	4.2	24.6
2/28/2019 22:00	8	8	8	33.71	4.4	4.3	24.2
2/28/2019 22:10	8	8	8	33.77	4.5	4.2	24.6
2/28/2019 22:20	8	8	8	33.71	4.8	4.2	24.1
2/28/2019 22:30	8	8	8	33.65	4.5	4.2	24.7
2/28/2019 22:40	8	8	8	33.65	4.4	4.3	24.2
2/28/2019 22:50	8	8	8	33.71	4.5	4.4	24.6
2/28/2019 23:00	8	8	8	33.71	4.4	4.2	24.1
2/28/2019 23:10	8	8	8	33.77	4.3	4.2	24.7
2/28/2019 23:20	8	8	8	33.71	4.2	4.3	24.2
2/28/2019 23:30	8	8	8	33.71	4.4	4.2	3.2
2/28/2019 23:40	8	8	8	33.71	4.7	4.2	24.4
2/28/2019 23:50	8	8	8	33.68	4.4	4.3	3.3
3/1/2019 0:00	8	8	8	33.71	4.8	4.2	24.5
3/1/2019 0:10	8	8	8	33.74	4.6	4.2	1.3
3/1/2019 0:20	8	8	8	33.65	4.3	4.2	24.6

3/1/2019 0:30	8	8	8	33.74	4.2	4.2	24.2
3/1/2019 0:40	8	8	8	33.77	4.4	4.2	3.5
3/1/2019 0:50	8	8	8	33.68	4.6	4.2	24.4
3/1/2019 1:00	8	8	8	33.71	4.2	4.1	2.7
3/1/2019 1:10	8	8	8	33.77	4.4	4.2	24.6
3/1/2019 1:20	8	8	8	33.71	4.8	4.3	24
3/1/2019 1:30	8	8	8	33.8	4.6	4.3	24.6
3/1/2019 1:40	8	8	8	33.77	4.6	4.3	24.3
3/1/2019 1:50	8	8	8	33.77	4.3	4.2	3.7
3/1/2019 2:00	8	8	8	33.77	4.4	4.2	24.5
3/1/2019 2:10	8	8	8	33.71	4.7	4.3	1.2
3/1/2019 2:20	8	8	8	33.68	4.6	4.2	24.6
3/1/2019 2:30	8	8	8	33.56	4.5	4.2	24.2
3/1/2019 2:40	8	8	8	33.71	4.8	4.2	24.7
3/1/2019 2:50	8	8	8	33.68	4.4	4.3	24.3
3/1/2019 3:00	8	8	8	33.74	4.6	4.3	3.7
3/1/2019 3:10	8	8	8	33.71	4.3	4.3	24.5
3/1/2019 3:20	8	8	8	33.68	4.6	4.3	23.4
3/1/2019 3:30	8	8	8	33.62	4.4	4.2	24.6
3/1/2019 3:40	8	8	8	33.62	4.2	4.2	24
3/1/2019 3:50	8	8	8	33.65	4.5	4.3	4.5
3/1/2019 4:00	8	8	8	33.65	4.6	4.3	24.3
3/1/2019 4:10	8	8	8	33.68	4.9	4.3	2.5
3/1/2019 4:20	8	8	8	33.74	4.6	4.2	24.5
3/1/2019 4:30	8	8	8	33.68	4.6	4.2	24.1
3/1/2019 4:40	8	8	8	33.59	4.3	4.3	24.6
3/1/2019 4:50	8	8	8	33.62	4.5	4.3	24.3
3/1/2019 5:00	8	8	8	33.59	4.6	4.3	1.4
3/1/2019 5:10	8	8	8	33.65	4.9	4.4	24.6
3/1/2019 5:20	8	8	8	33.62	4.4	4.2	24.1
3/1/2019 5:30	8	8	8	33.65	4.5	4.2	4.2
3/1/2019 5:40	8	8	8	33.62	4.5	4.3	24.5
3/1/2019 5:50	8	8	8	33.65	4.8	4.3	24.1
3/1/2019 6:00	8	8	8	33.62	4.4	4.2	23.6
3/1/2019 6:10	8	8	8	33.65	4.5	4.2	24.4
3/1/2019 6:20	8	8	8	33.65	4.6	4.2	1.7
3/1/2019 6:30	8	8	8	33.65	4.6	4.3	24.6
3/1/2019 6:40	8	8	8	33.59	4.7	4.2	24.1
3/1/2019 6:50	8	8	8	33.59	4.5	4.3	24.7
3/1/2019 7:00	8	8	8	33.53	4.7	4.2	24.3
3/1/2019 7:10	8	8	8	33.65	4.6	4.3	1.2
3/1/2019 7:20	8	8	8	33.59	4.5	4.2	24.6
3/1/2019 7:30	8	8	8	33.56	5	4.2	24.3
3/1/2019 7:40	8	8	8	33.62	4.8	4.2	3.6
3/1/2019 7:50	8	8	8	33.53	4.6	4.2	24.5
3/1/2019 8:00	8	8	8	33.59	4.7	4.3	24.1
3/1/2019 8:10	8	8	8	33.62	4.6	4.2	4.3

3/1/2019 8:20	8	8	8	33.59	4.5	4.2	24.3
3/1/2019 8:30	8	8	8	33.62	4.3	4.3	3.1
3/1/2019 8:40	8	8	8	33.53	4.5	4.3	24.5
3/1/2019 8:50	8	8	8	33.53	4.6	4.3	24.1
3/1/2019 9:00	8	8	8	33.56	4.6	4.2	3.2
3/1/2019 9:10	8	8	8	33.59	4.4	4.3	24.5
3/1/2019 9:20	8	8	8	33.59	4.4	4.3	1.1
3/1/2019 9:30	8	8	8	33.59	4.5	4.3	24.6
3/1/2019 9:40	8	8	8	33.62	4.5	4.3	24.2
3/1/2019 9:50	8	8	8	33.56	4.7	4.2	3.5
3/1/2019 10:00	8	8	8	33.68	4.5	4.3	24.5
3/1/2019 10:10	8	8	8	33.65	4.5	4.2	24.1
3/1/2019 10:20	8	8	8	33.62	4.2	4.4	24.6
3/1/2019 10:30	8	8	8	33.62	4.5	4.3	24.3
3/1/2019 10:40	8	8	8	33.65	4.5	4.3	4.3
3/1/2019 10:50	8	8	8	33.71	4.9	4.3	24.6
3/1/2019 11:00	8	8	8	33.74	4.5	4.3	24.1
3/1/2019 11:10	8	8	8	33.71	4.4	4.3	4.3
3/1/2019 11:20	8	8	8	33.83	4.6	4.4	24.3
3/1/2019 11:30	8	8	8	33.71	4.5	4.3	1.9
3/1/2019 11:40	8	8	8	33.71	4.4	4.3	24.6
3/1/2019 11:50	8	8	8	33.74	4.5	4.4	24.2
3/1/2019 12:00	8	8	8	33.74	4.3	4.3	4.5
3/1/2019 12:10	8	8	8	33.71	4.5	4.4	24.3
3/1/2019 12:20	8	8	8	33.8	4.7	4.3	1.1
3/1/2019 12:30	8	8	8	33.71	4.3	4.4	24.6
3/1/2019 12:40	8	8	8	33.77	4.4	4.2	24.3
3/1/2019 12:50	8	8	8	33.65	4.6	4.3	3.7
3/1/2019 13:00	8	8	8	33.74	4.7	4.3	24.5
3/1/2019 13:10	8	8	8	33.77	4.5	4.2	16.6
3/1/2019 13:20	8	8	8	33.77	4.5	4.3	24.6
3/1/2019 13:30	8	8	8	33.74	4.5	4.3	24.1
3/1/2019 13:40	8	8	8	33.74	4.4	4.2	4.5
3/1/2019 13:50	8	8	8	33.77	4.5	4.2	24.5
3/1/2019 14:00	8	8	8	33.77	4.5	4.3	24.2
3/1/2019 14:10	8	8	8	33.77	4.7	4.3	24.6
3/1/2019 14:20	8	8	8	33.77	4.5	4.3	24.3
3/1/2019 14:30	8	8	8	33.8	4.5	4.3	3.6
3/1/2019 14:40	8	8	8	33.89	4.5	4.3	24.5
3/1/2019 14:50	8	8	8	33.74	4.6	4.3	14.6
3/1/2019 15:00	8	8	8	33.83	4.5	4.3	24.6
3/1/2019 15:10	8	8	8	33.77	4.4	4.3	24.2
3/1/2019 15:20	8	8	8	33.8	4.7	4.2	3.4
3/1/2019 15:30	8	8	8	33.83	4.6	4.3	24.4
3/1/2019 15:40	8	8	8	33.83	4.7	4.3	6.6
3/1/2019 15:50	8	8	8	33.89	4.5	4.3	24.5
3/1/2019 16:00	8	8	8	33.83	4.7	4.3	24.2

3/1/2019 16:10	8	8	8	33.89	4.6	4.3	4.3
3/1/2019 16:20	8	8	8	33.83	4.7	4.2	24.5
3/1/2019 16:30	8	8	8	33.89	4.4	4.3	24.2
3/1/2019 16:40	8	8	8	33.92	4.8	4.3	24.7
3/1/2019 16:50	8	8	8	33.8	4.6	4.2	24.2
3/1/2019 17:00	8	8	8	33.92	4.5	4.3	4.5
3/1/2019 17:10	8	8	8	33.95	4.8	4.2	24.5
3/1/2019 17:20	8	8	8	33.92	4.6	4.2	1.1
3/1/2019 17:30	8	8	8	33.89	4.8	4.2	24.6
3/1/2019 17:40	8	8	8	33.89	4.6	4.2	24.1
3/1/2019 17:50	8	8	8	33.83	4.6	4.3	23.6
3/1/2019 18:00	8	8	8	33.8	4.4	4.2	24.3
3/1/2019 18:10	8	8	8	33.92	4.5	4.2	3.7
3/1/2019 18:20	8	8	8	33.83	4.4	4.3	24.5
3/1/2019 18:30	8	8	8	33.8	4.4	4.3	24
3/1/2019 18:40	8	8	8	33.83	4.7	4.2	24.6
3/1/2019 18:50	8	8	8	33.77	4.5	4.2	24.2
3/1/2019 19:00	8	8	8	33.8	4.5	4.2	4.1
3/1/2019 19:10	8	8	8	33.77	4.6	4.2	24.5
3/1/2019 19:20	8	8	8	33.8	4.6	4.2	23.4
3/1/2019 19:30	8	8	8	33.65	4.6	4.2	24.6
3/1/2019 19:40	8	8	8	33.65	4.5	4.2	24.2
3/1/2019 19:50	8	8	8	33.71	4.4	4.3	4.2
3/1/2019 20:00	8	8	8	33.71	4.5	4.2	24.5
3/1/2019 20:10	8	8	8	33.74	4.5	4.2	22.3
3/1/2019 20:20	8	8	8	33.71	4.7	4.3	24.6
3/1/2019 20:30	8	8	8	33.68	4.6	4.2	24.2
3/1/2019 20:40	8	8	8	33.65	4.8	4.2	4.5
3/1/2019 20:50	8	8	8	33.65	4.6	4.2	24.3
3/1/2019 21:00	8	8	8	33.71	4.2	4.2	3.7
3/1/2019 21:10	8	8	8	33.71	4.6	4.2	24.5
3/1/2019 21:20	8	8	8	33.62	4.7	4.2	24.1
3/1/2019 21:30	8	8	8	33.68	4.5	4.2	24.6
3/1/2019 21:40	8	8	8	33.71	4.6	4.3	24.3
3/1/2019 21:50	8	8	8	33.68	4.4	4.3	3.8
3/1/2019 22:00	8	8	8	33.68	4.6	4.2	24.4
3/1/2019 22:10	8	8	8	33.74	4.8	4.2	22.9
3/1/2019 22:20	8	8	8	33.77	4.6	4.2	24.6
3/1/2019 22:30	8	8	8	33.74	4.6	4.2	24.2
3/1/2019 22:40	8	8	8	33.74	4.6	4.2	3.5
3/1/2019 22:50	8	8	8	33.77	4.5	4.2	24.4
3/1/2019 23:00	8	8	8	33.71	4.6	4.2	1.3
3/1/2019 23:10	8	8	8	33.8	4.5	4.3	24.6
3/1/2019 23:20	8	8	8	33.74	4.5	4.2	24.1
3/1/2019 23:30	8	8	8	33.74	4.8	4.2	24.6
3/1/2019 23:40	8	8	8	33.71	4.5	4.2	24.4
3/1/2019 23:50	8	8	8	33.71	4.5	4.3	4

3/2/2019 0:00	8	8	8	33.74	4.2	4.3	24.5
3/2/2019 0:10	8	8	8	33.74	4.8	4.2	23.7
3/2/2019 0:20	8	8	8	33.74	4.6	4.3	24.6
3/2/2019 0:30	8	8	8	33.68	4.7	4.3	24.2
3/2/2019 0:40	8	8	8	33.74	4.8	4.2	3.7
3/2/2019 0:50	8	8	8	33.68	4.7	4.2	24.4
3/2/2019 1:00	8	8	8	33.68	4.5	4.2	1.4
3/2/2019 1:10	8	8	8	33.74	4.6	4.2	24.6
3/2/2019 1:20	8	8	8	33.77	4.7	4.1	24.2
3/2/2019 1:30	8	8	8	33.74	4.5	4.2	4.8
3/2/2019 1:40	8	8	8	33.77	4.6	4.3	24.3
3/2/2019 1:50	8	8	8	33.77	4.4	4.2	2.6
3/2/2019 2:00	8	8	8	33.71	4.5	4.3	24.5
3/2/2019 2:10	8	8	8	33.77	4.5	4.2	24.1
3/2/2019 2:20	8	8	8	33.56	4.6	4.2	23.6
3/2/2019 2:30	8	8	8	33.77	4.9	4.2	24.3
3/2/2019 2:40	8	8	8	33.74	4.3	4.2	3.5
3/2/2019 2:50	8	8	8	33.83	4.6	4.3	24.5
3/2/2019 3:00	8	8	8	33.71	4.7	4.2	24
3/2/2019 3:10	8	8	8	33.8	4.6	4.2	24.6
3/2/2019 3:20	8	8	8	33.77	4.6	4.3	24.2
3/2/2019 3:30	8	8	8	33.8	4.4	4.3	4.5
3/2/2019 3:40	8	8	8	33.8	4.3	4.2	24.5
3/2/2019 3:50	8	8	8	33.8	4.4	4.2	22.2
3/2/2019 4:00	8	8	8	33.74	4.5	4.2	24.6
3/2/2019 4:10	8	8	8	33.8	4.3	4.2	24.1
3/2/2019 4:20	8	8	8	33.8	4.3	4.2	3.5
3/2/2019 4:30	8	8	8	33.8	4.3	4.2	24.4
3/2/2019 4:40	8	8	8	33.8	4.5	4.2	1.8
3/2/2019 4:50	8	8	8	33.77	4.4	4.2	24.5
3/2/2019 5:00	8	8	8	33.74	4.5	4.2	24.1
3/2/2019 5:10	8	8	8	33.8	4.5	4.3	4.3
3/2/2019 5:20	8	8	8	33.74	4.6	4.3	24.3
3/2/2019 5:30	8	8	8	33.77	4.4	4.2	3.9
3/2/2019 5:40	8	8	8	33.83	4.4	4.2	24.5
3/2/2019 5:50	8	8	8	33.77	4.4	4.2	23.7
3/2/2019 6:00	8	8	8	33.65	4.5	4.2	24.6
3/2/2019 6:10	8	8	8	33.8	4.7	4.3	24.3
3/2/2019 6:20	8	8	8	33.74	4.6	4.3	4.5
3/2/2019 6:30	8	8	8	33.65	4.5	4.3	24.5
3/2/2019 6:40	8	8	8	33.68	4.7	4.2	24
3/2/2019 6:50	8	8	8	33.68	4.7	4.3	24.6
3/2/2019 7:00	8	8	8	33.77	4.4	4.3	24.1
3/2/2019 7:10	8	8	8	33.68	4.8	4.2	24.6
3/2/2019 7:20	8	8	8	33.68	4.6	4.2	24.3
3/2/2019 7:30	8	8	8	33.65	4.5	4.3	3.6
3/2/2019 7:40	8	8	8	33.71	4.4	4.2	24.5

3/2/2019 7:50	8	8	8	33.74	4.4	4.2	14.7
3/2/2019 8:00	8	8	8	33.74	4.4	4.3	24.6
3/2/2019 8:10	8	8	8	33.65	4.4	4.2	24.1
3/2/2019 8:20	8	8	8	33.59	4.5	4.3	3.4
3/2/2019 8:30	8	8	8	33.65	4.5	4.2	24.3
3/2/2019 8:40	8	8	8	33.71	4.7	4.2	1.8
3/2/2019 8:50	8	8	8	33.65	4.3	4.3	24.5
3/2/2019 9:00	8	8	8	33.71	4.4	4.3	24.1
3/2/2019 9:10	8	8	8	33.71	4.4	4.3	24.6
3/2/2019 9:20	8	8	8	33.65	4.5	4.3	24.2
3/2/2019 9:30	8	8	8	33.65	4.6	4.2	3.5
3/2/2019 9:40	8	8	8	33.65	4.5	4.3	24.5
3/2/2019 9:50	8	8	8	33.65	4.5	4.3	6.6
3/2/2019 10:00	8	8	8	33.65	4.6	4.2	24.6
3/2/2019 10:10	8	8	8	33.62	4.6	4.3	24
3/2/2019 10:20	8	8	8	33.65	4.5	4.2	3.3
3/2/2019 10:30	8	8	8	33.59	4.7	4.3	24.3
3/2/2019 10:40	8	8	8	33.59	4.8	4.3	3.3
3/2/2019 10:50	8	8	8	33.71	4.5	4.3	24.5
3/2/2019 11:00	8	8	8	33.59	4.5	4.3	6.7
3/2/2019 11:10	8	8	8	33.65	4.6	4.2	24.6
3/2/2019 11:20	8	8	8	33.62	4.5	4.3	24
3/2/2019 11:30	8	8	8	33.62	4.7	4.2	24.6
3/2/2019 11:40	8	8	8	33.59	4.4	4.3	24.2
3/2/2019 11:50	8	8	8	33.65	4.6	4.3	4.2
3/2/2019 12:00	8	8	8	33.59	4.6	4.3	24.4
3/2/2019 12:10	8	8	8	33.62	4.7	4.4	3.3
3/2/2019 12:20	8	8	8	33.59	4.6	4.4	24.5
3/2/2019 12:30	8	8	8	33.68	4.5	4.3	24.1
3/2/2019 12:40	8	8	8	33.65	4.6	4.3	24.7
3/2/2019 12:50	8	8	8	33.65	4.2	4.4	24.3
3/2/2019 13:00	8	8	8	33.65	4.6	4.3	3.2
3/2/2019 13:10	8	8	8	33.68	4.7	4.3	24.5
3/2/2019 13:20	8	8	8	33.71	4.7	4.3	18.7
3/2/2019 13:30	8	8	8	33.65	4.6	4.3	24.6
3/2/2019 13:40	8	8	8	33.68	4.5	4.3	24.2
3/2/2019 13:50	8	8	8	33.62	4.6	4.2	3.6
3/2/2019 14:00	8	8	8	33.74	4.4	4.3	24.4
3/2/2019 14:10	8	8	8	33.65	4.2	4.3	1.2
3/2/2019 14:20	8	8	8	33.68	4.4	4.3	24.7
3/2/2019 14:30	8	8	8	33.74	4.6	4.3	24.1
3/2/2019 14:40	8	8	8	33.74	4.5	4.3	24.6
3/2/2019 14:50	8	8	8	33.65	4.6	4.2	24.2
3/2/2019 15:00	8	8	8	33.74	4.6	4.3	3.3
3/2/2019 15:10	8	8	8	33.68	4.4	4.3	24.3
3/2/2019 15:20	8	8	8	33.74	4.5	4.3	4.4
3/2/2019 15:30	8	8	8	33.74	4.2	4.2	24.5

3/2/2019 15:40	8	8	8	33.68	4.6	4.2	16.8
3/2/2019 15:50	8	8	8	33.74	4.5	4.3	24.6
3/2/2019 16:00	8	8	8	33.74	4.5	4.3	24.2
3/2/2019 16:10	8	8	8	33.74	4.7	4.3	4.4
3/2/2019 16:20	8	8	8	33.8	4.8	4.2	24.3
3/2/2019 16:30	8	8	8	33.77	4.4	4.4	3.8
3/2/2019 16:40	8	8	8	33.77	4.5	4.3	24.5
3/2/2019 16:50	8	8	8	33.71	4.6	4.3	22.9
3/2/2019 17:00	8	8	8	33.74	4.7	4.3	24.6
3/2/2019 17:10	8	8	8	33.68	4.6	4.2	24.3
3/2/2019 17:20	8	8	8	33.77	4.8	4.2	24.6
3/2/2019 17:30	8	8	8	33.71	4.6	4.3	24.2
3/2/2019 17:40	8	8	8	33.74	4.6	4.2	4.2
3/2/2019 17:50	8	8	8	33.77	4.8	4.2	24.4
3/2/2019 18:00	8	8	8	33.71	4.6	4.2	1.9
3/2/2019 18:10	8	8	8	33.74	4.7	4.3	24.6
3/2/2019 18:20	8	8	8	33.71	4.4	4.3	24.1
3/2/2019 18:30	8	8	8	33.74	4.6	4.2	24.6
3/2/2019 18:40	8	8	8	33.74	4.6	4.2	24.3
3/2/2019 18:50	8	8	8	33.77	4.6	4.3	3.8
3/2/2019 19:00	8	8	8	33.71	4.3	4.3	24.4
3/2/2019 19:10	8	8	8	33.68	4.4	4.3	2
3/2/2019 19:20	8	8	8	33.83	4.7	4.3	24.5
3/2/2019 19:30	8	8	8	33.8	4.5	4.3	24.1
3/2/2019 19:40	8	8	8	33.77	4.6	4.2	24.7
3/2/2019 19:50	8	8	8	33.8	4.2	4.2	24.3
3/2/2019 20:00	8	8	8	33.8	4.3	4.3	3.5
3/2/2019 20:10	8	8	8	33.8	4.6	4.2	24.4
3/2/2019 20:20	8	8	8	33.77	4.3	4.3	2.1
3/2/2019 20:30	8	8	8	33.77	4.5	4.2	24.5
3/2/2019 20:40	8	8	8	33.74	4.5	4.3	24
3/2/2019 20:50	8	8	8	33.74	4.6	4.2	24.6
3/2/2019 21:00	8	8	8	33.74	4.4	4.2	24.1
3/2/2019 21:10	8	8	8	33.74	4.4	4.3	3.3
3/2/2019 21:20	8	8	8	33.71	4.5	4.2	24.3
3/2/2019 21:30	8	8	8	33.8	4.4	4.3	3.1
3/2/2019 21:40	8	8	8	33.74	4.5	4.3	24.5
3/2/2019 21:50	8	8	8	33.77	4.5	4.3	24.2
3/2/2019 22:00	8	8	8	33.68	4.6	4.2	24.6
3/2/2019 22:10	8	8	8	33.77	4.5	4.3	24.2
3/2/2019 22:20	8	8	8	33.71	4.7	4.3	3.2
3/2/2019 22:30	8	8	8	33.74	4.4	4.2	24.4
3/2/2019 22:40	8	8	8	33.77	4.4	4.3	1.8
3/2/2019 22:50	8	8	8	33.68	4.5	4.2	24.6
3/2/2019 23:00	8	8	8	33.68	4.6	4.3	23.4
3/2/2019 23:10	8	8	8	33.62	4.3	4.2	24.5
3/2/2019 23:20	8	8	8	33.74	4.5	4.2	24.3

3/2/2019 23:30	8	8	8	33.62	4.5	4.2	24.6
3/2/2019 23:40	8	8	8	33.68	4.6	4.3	24.3
3/2/2019 23:50	8	8	8	33.74	4.6	4.2	4.4
3/3/2019 0:00	8	8	8	33.65	4.6	4.2	24.4
3/3/2019 0:10	8	8	8	33.74	4.5	4.2	3.1
3/3/2019 0:20	8	8	8	33.68	4.4	4.2	24.5
3/3/2019 0:30	8	8	8	33.77	4.4	4.2	24.1
3/3/2019 0:40	8	8	8	33.71	4.6	4.2	24.6
3/3/2019 0:50	8	8	8	33.68	4.6	4.3	24.2
3/3/2019 1:00	8	8	8	33.68	4.6	4.3	3.3
3/3/2019 1:10	8	8	8	33.74	4.5	4.2	24.4
3/3/2019 1:20	8	8	8	33.62	4.5	4.3	2.8
3/3/2019 1:30	8	8	8	33.71	4.4	4.3	24.5
3/3/2019 1:40	8	8	8	33.71	4.6	4.2	22.8
3/3/2019 1:50	8	8	8	33.71	4.4	4.2	24.7
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3/3/2019 2:20	8	8	8	33.71	4.8	4.3	24.4
3/3/2019 2:30	8	8	8	33.65	4.7	4.2	3.6
3/3/2019 2:40	8	8	8	33.68	4.5	4.2	24.5
3/3/2019 2:50	8	8	8	33.65	4.4	4.2	2.4
3/3/2019 3:00	8	8	8	33.71	4.5	4.2	24.5
3/3/2019 3:10	8	8	8	33.68	4.4	4.2	24.1
3/3/2019 3:20	8	8	8	33.56	4.5	4.2	24.6
3/3/2019 3:30	8	8	8	33.59	4.5	4.2	24.4
3/3/2019 3:40	8	8	8	33.56	4.6	4.2	3.7
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3/3/2019 4:00	8	8	8	33.68	4.3	4.2	1.1
3/3/2019 4:10	8	8	8	33.71	4.5	4.2	24.5
3/3/2019 4:20	8	8	8	33.65	4.2	4.2	16.6
3/3/2019 4:30	8	8	8	33.68	4.4	4.2	24.6
3/3/2019 4:40	8	8	8	33.65	4.7	4.2	24
3/3/2019 4:50	8	8	8	33.68	4.6	4.2	24.7
3/3/2019 5:00	8	8	8	33.71	4.3	4.1	24.2
3/3/2019 5:10	8	8	8	33.74	4.4	4.2	3.3
3/3/2019 5:20	8	8	8	33.71	4.6	4.2	24.3
3/3/2019 5:30	8	8	8	33.74	4.4	4.2	4
3/3/2019 5:40	8	8	8	33.68	4.5	4.2	24.5
3/3/2019 5:50	8	8	8	33.68	4.4	4.2	16.4
3/3/2019 6:00	8	8	8	33.74	4.8	4.2	24.6
3/3/2019 6:10	8	8	8	33.71	4.4	4.3	24.1
3/3/2019 6:20	8	8	8	33.62	4.7	4.2	4.9
3/3/2019 6:30	8	8	8	33.68	4.5	4.3	24.2
3/3/2019 6:40	8	8	8	33.74	4.2	4.2	3.5
3/3/2019 6:50	8	8	8	33.68	4.5	4.2	24.4
3/3/2019 7:00	8	8	8	33.65	4.7	4.3	3.3
3/3/2019 7:10	8	8	8	33.68	4.2	4.2	24.4

3/3/2019 7:20	8	8	8	33.65	4.5	4.2	4.3
3/3/2019 7:30	8	8	8	33.62	4.5	4.3	24.5
3/3/2019 7:40	8	8	8	33.62	4.8	4.3	1.4
3/3/2019 7:50	8	8	8	33.62	4.7	4.3	24.6
3/3/2019 8:00	8	8	8	33.65	4.3	4.1	24.2
3/3/2019 8:10	8	8	8	33.65	4.6	4.3	24.6
3/3/2019 8:20	8	8	8	33.68	4.6	4.2	24.3
3/3/2019 8:30	8	8	8	33.56	4.6	4.2	24.7
3/3/2019 8:40	8	8	8	33.68	4.5	4.3	24.3
3/3/2019 8:50	8	8	8	33.62	4.4	4.3	3.7
3/3/2019 9:00	8	8	8	33.62	4.6	4.3	24.4
3/3/2019 9:10	8	8	8	33.68	4.6	4.3	1.1
3/3/2019 9:20	8	8	8	33.62	4.7	4.3	24.6
3/3/2019 9:30	8	8	8	33.68	4.4	4.3	24.1
3/3/2019 9:40	8	8	8	33.62	4.4	4.2	24.6
3/3/2019 9:50	8	8	8	33.65	4.7	4.3	24.1
3/3/2019 10:00	8	8	8	33.62	4.6	4.2	3.3
3/3/2019 10:10	8	8	8	33.65	4.5	4.3	24.4
3/3/2019 10:20	8	8	8	33.62	4.4	4.2	3.7
3/3/2019 10:30	8	8	8	33.62	4.3	4.4	24.5
3/3/2019 10:40	8	8	8	33.62	4.5	4.3	1.2
3/3/2019 10:50	8	8	8	33.56	4.6	4.3	24.5
3/3/2019 11:00	8	8	8	33.62	4.7	4.3	24
3/3/2019 11:10	8	8	8	33.62	4.6	4.3	24.6
3/3/2019 11:20	8	8	8	33.65	4.4	4.3	24.2
3/3/2019 11:30	8	8	8	33.62	4.5	4.3	3.2
3/3/2019 11:40	8	8	8	33.59	4.6	4.4	24.3
3/3/2019 11:50	8	8	8	33.65	4.5	4.3	4.1
3/3/2019 12:00	8	8	8	33.53	4.4	4.3	24.5
3/3/2019 12:10	8	8	8	33.62	4.3	4.3	6.7
3/3/2019 12:20	8	8	8	33.65	4.4	4.3	24.7
3/3/2019 12:30	8	8	8	33.62	4.5	4.3	24.1
3/3/2019 12:40	8	8	8	33.65	4.6	4.3	24.6
3/3/2019 12:50	8	8	8	33.65	4.4	4.3	24.2
3/3/2019 13:00	8	8	8	33.68	4.6	4.3	3.4
3/3/2019 13:10	8	8	8	33.77	4.4	4.2	24.3
3/3/2019 13:20	8	8	8	33.71	4.5	4.4	4.3
3/3/2019 13:30	8	8	8	33.71	4.5	4.3	24.5
3/3/2019 13:40	8	8	8	33.65	4.6	4.3	1.1
3/3/2019 13:50	8	8	8	33.65	4.6	4.3	24.5
3/3/2019 14:00	8	8	8	33.68	4.4	4.3	24.1
3/3/2019 14:10	8	8	8	33.71	4.3	4.3	24.6
3/3/2019 14:20	8	8	8	33.68	4.6	4.3	24.2
3/3/2019 14:30	8	8	8	33.71	4.4	4.4	3.2
3/3/2019 14:40	8	8	8	33.62	4.3	4.4	24.4
3/3/2019 14:50	8	8	8	33.65	4.6	4.2	4.2
3/3/2019 15:00	8	8	8	33.71	4.5	4.3	24.5

3/3/2019 15:10	8	8	8	33.68	4.3	4.2	1.1
3/3/2019 15:20	8	8	8	33.71	4.9	4.3	24.5
3/3/2019 15:30	8	8	8	33.65	4.5	4.3	24
3/3/2019 15:40	8	8	8	33.65	4.5	4.2	24.6
3/3/2019 15:50	8	8	8	33.62	4.7	4.3	24.3
3/3/2019 16:00	8	8	8	33.68	4.8	4.3	24.6
3/3/2019 16:10	8	8	8	33.74	4.5	4.3	24.2
3/3/2019 16:20	8	8	8	33.62	4.2	4.3	3.5
3/3/2019 16:30	8	8	8	33.62	4.3	4.2	24.3
3/3/2019 16:40	8	8	8	33.62	4.5	4.3	3.3
3/3/2019 16:50	8	8	8	33.71	4.2	4.3	24.4
3/3/2019 17:00	8	8	8	33.62	4.5	4.2	1.1
3/3/2019 17:10	8	8	8	33.59	4.6	4.2	24.6
3/3/2019 17:20	8	8	8	33.65	4.3	4.2	24
3/3/2019 17:30	8	8	8	33.59	4.5	4.3	24.7
3/3/2019 17:40	8	8	8	33.56	4.7	4.3	24.2
3/3/2019 17:50	8	8	8	33.56	4.8	4.3	24.6
3/3/2019 18:00	8	8	8	33.62	4.8	4.3	24.2
3/3/2019 18:10	8	8	8	33.62	4.3	4.2	4.9
3/3/2019 18:20	8	8	8	33.59	4.4	4.3	24.4
3/3/2019 18:30	8	8	8	33.56	4.6	4.2	3.6
3/3/2019 18:40	8	8	8	33.59	4.5	4.3	24.5
3/3/2019 18:50	8	8	8	33.65	4.3	4.2	1.2
3/3/2019 19:00	8	8	8	33.62	4.7	4.2	24.5
3/3/2019 19:10	8	8	8	33.62	4.7	4.2	22.9
3/3/2019 19:20	8	8	8	33.62	4.6	4.3	24.6
3/3/2019 19:30	8	8	8	33.65	4.5	4.3	24.3
3/3/2019 19:40	8	8	8	33.59	4.5	4.3	3.4
3/3/2019 19:50	8	8	8	33.56	4.4	4.3	24.3
3/3/2019 20:00	8	8	8	33.62	4.4	4.3	4.3
3/3/2019 20:10	8	8	8	33.59	4.7	4.3	24.3
3/3/2019 20:20	8	8	8	33.59	4.4	4.2	3.9
3/3/2019 20:30	8	8	8	33.56	4.1	4.3	24.5
3/3/2019 20:40	8	8	8	33.62	4.5	4.2	23.4
3/3/2019 20:50	8	8	8	33.62	4.1	4.2	24.6
3/3/2019 21:00	8	8	8	33.62	4.4	4.2	24.4
3/3/2019 21:10	8	8	8	33.62	4.7	4.3	24.6
3/3/2019 21:20	8	8	8	33.59	4.5	4.2	24.2
3/3/2019 21:30	8	8	8	33.65	4.6	4.3	3.6
3/3/2019 21:40	8	8	8	33.68	4.4	4.2	24.4
3/3/2019 21:50	8	8	8	33.65	4.7	4.3	3.3
3/3/2019 22:00	8	8	8	33.59	4.7	4.3	24.5
3/3/2019 22:10	8	8	8	33.65	4.7	4.3	1.2
3/3/2019 22:20	8	8	8	33.65	4.6	4.2	24.5
3/3/2019 22:30	8	8	8	33.62	4.4	4.2	23
3/3/2019 22:40	8	8	8	33.59	4.5	4.3	24.6
3/3/2019 22:50	8	8	8	33.65	4.4	4.3	24

3/3/2019 23:00	8	8	8	33.71	4.6	4.2	24.6
3/3/2019 23:10	8	8	8	33.68	4.3	4.2	24.3
3/3/2019 23:20	8	8	8	33.62	4.7	4.3	3.4
3/3/2019 23:30	8	8	8	33.68	4.6	4.2	24.4
3/3/2019 23:40	8	8	8	33.62	4.6	4.2	3.8
3/3/2019 23:50	8	8	8	33.62	4.6	4.2	24.5
3/4/2019 0:00	8	8	8	33.62	4.6	4.3	1.8
3/4/2019 0:10	8	8	8	33.65	4.5	4.2	24.6
3/4/2019 0:20	8	8	8	33.62	4.6	4.2	11
3/4/2019 0:30	8	8	8	33.59	4.4	4.2	24.6
3/4/2019 0:40	8	8	8	33.62	4.6	4.3	24
3/4/2019 0:50	8	8	8	33.62	4.4	4.2	24.7
3/4/2019 1:00	8	8	8	33.62	4.7	4.3	24.4
3/4/2019 1:10	8	8	8	33.59	4.7	4.2	3.9
3/4/2019 1:20	8	8	8	33.62	4.4	4.2	24.4
3/4/2019 1:30	8	8	8	33.68	4.4	4.2	3
3/4/2019 1:40	8	8	8	33.68	4.3	4.1	24.6
3/4/2019 1:50	8	8	8	33.53	4.4	4.3	18.9
3/4/2019 2:00	8	8	8	33.62	4.9	4.2	24.6
3/4/2019 2:10	8	8	8	33.71	4.4	4.2	24.1
3/4/2019 2:20	8	8	8	33.62	4.6	4.3	24.7
3/4/2019 2:30	8	8	8	33.65	4.5	4.2	24.3
3/4/2019 2:40	8	8	8	33.65	4.6	4.2	24.7
3/4/2019 2:50	8	8	8	33.68	4.5	4.2	24.3
3/4/2019 3:00	8	8	8	33.68	4.4	4.2	3.4
3/4/2019 3:10	8	8	8	33.65	4.7	4.3	24.4
3/4/2019 3:20	8	8	8	33.68	4.5	4.2	3.8
3/4/2019 3:30	8	8	8	33.68	4.5	4.2	24.5
3/4/2019 3:40	8	8	8	33.68	4.3	4.2	2.9
3/4/2019 3:50	8	8	8	33.89	4.3	4.3	24.6
3/4/2019 4:00	8	8	8	33.71	4.5	4.3	1.4
3/4/2019 4:10	8	8	8	33.77	4.4	4.2	24.6
3/4/2019 4:20	8	8	8	33.74	4.2	4.3	24.2
3/4/2019 4:30	8	8	8	33.71	5	4.2	24.6
3/4/2019 4:40	8	8	8	33.74	4.5	4.2	24.2
3/4/2019 4:50	8	8	8	33.77	4.7	4.2	3.3
3/4/2019 5:00	8	8	8	33.8	4.3	4.2	24.4
3/4/2019 5:10	8	8	8	33.83	4.4	4.2	3.6
3/4/2019 5:20	8	8	8	33.77	4.5	4.3	24.5
3/4/2019 5:30	8	8	8	33.83	4.7	4.2	1.9
3/4/2019 5:40	8	8	8	33.77	4.5	4.3	24.5
3/4/2019 5:50	8	8	8	33.8	4.6	4.3	1.1
3/4/2019 6:00	8	8	8	33.8	4.6	4.2	24.6
3/4/2019 6:10	8	8	8	33.8	4.4	4.3	24.3
3/4/2019 6:20	8	8	8	33.8	4.4	4.3	24.7
3/4/2019 6:30	8	8	8	33.77	4.8	4.2	24.2
3/4/2019 6:40	8	8	8	33.8	4.4	4.2	3.4

3/4/2019 6:50	8	8	8	33.74	4.7	4.2	24.4
3/4/2019 7:00	8	8	8	33.74	4.6	4.3	4
3/4/2019 7:10	8	8	8	33.74	4.5	4.2	24.5
3/4/2019 7:20	8	8	8	33.74	4.3	4.2	1.1
3/4/2019 7:30	8	8	8	33.74	4.8	4.3	24.6
3/4/2019 7:40	8	8	8	33.77	4.7	4.2	24.2
3/4/2019 7:50	8	8	8	33.68	4.4	4.2	24.6
3/4/2019 8:00	8	8	8	33.77	4.6	4.2	24.3
3/4/2019 8:10	8	8	8	33.71	4.4	4.3	24.7
3/4/2019 8:20	8	8	8	33.74	4.5	4.2	24.3
3/4/2019 8:30	8	8	8	33.71	4.4	4.3	3.3
3/4/2019 8:40	8	8	8	33.77	4.5	4.2	24.3
3/4/2019 8:50	8	8	8	33.74	4.5	4.3	3.6
3/4/2019 9:00	8	8	8	33.8	4.7	4.2	24.4
3/4/2019 9:10	8	8	8	33.68	4.4	4.4	1.7
3/4/2019 9:20	8	8	8	33.83	4.6	4.2	24.5
3/4/2019 9:30	8	8	8	33.77	4.5	4.3	24
3/4/2019 9:40	8	8	8	33.74	4.7	4.2	24.6
3/4/2019 9:50	8	8	8	33.74	4.3	4.3	24.1
3/4/2019 10:00	8	8	8	33.77	4.5	4.2	24.7
3/4/2019 10:10	8	8	8	33.77	4.5	4.2	24.3
3/4/2019 10:20	8	8	8	33.74	4.5	4.2	3.4
3/4/2019 10:30	8	8	8	33.68	4.6	4.3	24.4
3/4/2019 10:40	8	8	8	33.77	4.5	4.3	3.7
3/4/2019 10:50	8	8	8	33.71	4.5	4.2	24.5
3/4/2019 11:00	8	8	8	33.74	4.4	4.3	1.1
3/4/2019 11:10	8	8	8	33.74	4.6	4.3	24.6
3/4/2019 11:20	8	8	8	33.77	4.4	4.2	23.9
3/4/2019 11:30	8	8	8	33.71	4.6	4.3	24.7
3/4/2019 11:40	8	8	8	33.71	4.3	4.3	24.1
3/4/2019 11:50	8	8	8	33.74	4.5	4.3	24.6
3/4/2019 12:00	8	8	8	33.74	4.6	4.3	24.2
3/4/2019 12:10	8	8	8	33.71	4.6	4.3	24.6
3/4/2019 12:20	8	8	8	33.8	4.5	4.3	24.2
3/4/2019 12:30	8	8	8	33.83	4.6	4.2	4.8
3/4/2019 12:40	8	8	8	33.71	4.5	4.3	24.4
3/4/2019 12:50	8	8	8	33.8	4.5	4.3	3.3
3/4/2019 13:00	8	8	8	33.77	4.5	4.3	24.4
3/4/2019 13:10	8	8	8	33.8	4.6	4.3	3.9
3/4/2019 13:20	8	8	8	33.77	4.4	4.3	24.4
3/4/2019 13:30	8	8	8	33.77	4.5	4.3	2.7
3/4/2019 13:40	8	8	8	33.71	4.6	4.2	24.5
3/4/2019 13:50	8	8	8	33.71	4.6	4.3	3.5
3/4/2019 14:00	8	8	8	33.74	4.4	4.3	24.5
3/4/2019 14:10	8	8	8	33.89	4.5	4.2	24.3
3/4/2019 14:20	8	8	8	33.71	4.2	4.3	24.7
3/4/2019 14:30	8	8	8	33.8	4.4	4.4	24.3

3/4/2019 14:40	8	8	8	33.74	4.6	4.4	24.6
3/4/2019 14:50	8	8	8	33.77	4.5	4.3	24.3
3/4/2019 15:00	8	8	8	33.8	4.5	4.4	3.3
3/4/2019 15:10	8	8	8	33.77	4.5	4.2	24.3
3/4/2019 15:20	8	8	8	33.77	4.6	4.2	4.2
3/4/2019 15:30	8	8	8	33.71	4.7	4.2	24.4
3/4/2019 15:40	8	8	8	33.65	4.6	4.3	1.9
3/4/2019 15:50	8	8	8	33.74	4.5	4.2	24.5
3/4/2019 16:00	8	8	8	33.71	4.6	4.3	1.1
3/4/2019 16:10	8	8	8	33.74	4.6	4.3	24.6
3/4/2019 16:20	8	8	8	33.59	4.7	4.2	22.7
3/4/2019 16:30	8	8	8	33.68	4.5	4.3	24.7
3/4/2019 16:40	8	8	8	33.71	4.5	4.2	24.2
3/4/2019 16:50	8	8	8	33.71	4.6	4.3	24.6
3/4/2019 17:00	8	8	8	33.71	4.5	4.3	24
3/4/2019 17:10	8	8	8	33.68	4.5	4.3	24.7
3/4/2019 17:20	8	8	8	33.71	4.6	4.3	24.3
3/4/2019 17:30	8	8	8	33.83	4.4	4.2	23.7
3/4/2019 17:40	8	8	8	33.68	4.5	4.2	24.2
3/4/2019 17:50	8	8	8	33.68	4.6	4.2	3.3
3/4/2019 18:00	8	8	8	33.68	4.7	4.2	24.4
3/4/2019 18:10	8	8	8	33.68	4.3	4.2	3.6
3/4/2019 18:20	8	8	8	33.65	4.7	4.1	24.5
3/4/2019 18:30	8	8	8	33.62	4.9	4.2	2.3
3/4/2019 18:40	8	8	8	33.59	4.3	4.2	24.5
3/4/2019 18:50	8	8	8	33.65	4.6	4.1	11.1
3/4/2019 19:00	8	8	8	33.65	4.5	4.1	24.6
3/4/2019 19:10	8	8	8	33.56	4.4	4.1	24.2
3/4/2019 19:20	8	8	8	33.56	4.5	4.1	24.7
3/4/2019 19:30	8	8	8	33.68	4.2	4.2	24.2
3/4/2019 19:40	8	8	8	33.59	4.2	4.2	24.8
3/4/2019 19:50	8	8	8	33.62	4.5	4.2	24.3
3/4/2019 20:00	8	8	8	33.65	4.5	4.2	3.2
3/4/2019 20:10	8	8	8	33.62	4.8	4.1	24.4
3/4/2019 20:20	8	8	8	33.65	4.5	4.2	3.8
3/4/2019 20:30	8	8	8	33.62	4.5	4.2	24.4
3/4/2019 20:40	8	8	8	33.65	4.4	4.2	2.5
3/4/2019 20:50	8	8	8	33.65	4.3	4.2	24.6
3/4/2019 21:00	8	8	8	33.65	4.7	4.2	1.2
3/4/2019 21:10	8	8	8	33.62	4.4	4.2	24.6
3/4/2019 21:20	8	8	8	33.65	4.4	4.2	11
3/4/2019 21:30	8	8	8	33.65	4.6	4.2	24.6
3/4/2019 21:40	8	8	8	33.56	4.6	4.2	24
3/4/2019 21:50	8	8	8	33.65	4.4	4.2	24.6
3/4/2019 22:00	8	8	8	33.65	4.5	4.2	24.1
3/4/2019 22:10	8	8	8	33.59	4.5	4.2	24.7
3/4/2019 22:20	8	8	8	33.53	4.6	4.2	24.3

3/4/2019 22:30	8	8	8	33.56	4.6	4.2	3.7
3/4/2019 22:40	8	8	8	33.59	4.4	4.2	24.5
3/4/2019 22:50	8	8	8	33.62	4.6	4.2	3.1
3/4/2019 23:00	8	8	8	33.62	4.4	4.2	24.6
3/4/2019 23:10	8	8	8	33.59	4.8	4.2	14.5
3/4/2019 23:20	8	8	8	33.56	4.5	4.2	24.7
3/4/2019 23:30	8	8	8	33.59	4.6	4.3	24.1
3/4/2019 23:40	8	8	8	33.5	4.6	4.3	24.7
3/4/2019 23:50	8	8	8	33.53	4.6	4.2	24.1
3/5/2019 0:00	8	8	8	33.5	4.3	4.2	24.7
3/5/2019 0:10	8	8	8	33.5	4.5	4.2	24.3
3/5/2019 0:20	8	8	8	33.62	4.4	4.2	24.7
3/5/2019 0:30	8	8	8	33.5	4.7	4.2	24.3
3/5/2019 0:40	8	8	8	33.53	4.5	4.2	4.9
3/5/2019 0:50	8	8	8	33.53	4.4	4.1	24.4
3/5/2019 1:00	8	8	8	33.56	4.2	4.2	4.4
3/5/2019 1:10	8	8	8	33.53	4.5	4.3	24.4
3/5/2019 1:20	8	8	8	33.5	4.5	4.2	3.2
3/5/2019 1:30	8	8	8	33.56	4.4	4.2	24.5
3/5/2019 1:40	8	8	8	33.47	4.6	4.2	15
3/5/2019 1:50	8	8	8	33.53	4.6	4.2	24.6
3/5/2019 2:00	8	8	8	33.53	4.3	4.3	24.3
3/5/2019 2:10	8	8	8	33.53	4.4	4.2	24.7
3/5/2019 2:20	8	8	8	33.56	4.4	4.3	24.3
3/5/2019 2:30	8	8	8	33.53	4.6	4.2	24.7
3/5/2019 2:40	8	8	8	33.62	4.6	4.2	24.3
3/5/2019 2:50	8	8	8	33.59	4.9	4.2	3.3
3/5/2019 3:00	8	8	8	33.5	4.3	4.2	24.4
3/5/2019 3:10	8	8	8	33.47	4.7	4.2	4.5
3/5/2019 3:20	8	8	8	33.53	4.7	4.2	24.3
3/5/2019 3:30	8	8	8	33.53	4.9	4.3	4.3
3/5/2019 3:40	8	8	8	33.56	4.5	4.2	24.5
3/5/2019 3:50	8	8	8	33.53	4.3	4.2	2.5
3/5/2019 4:00	8	8	8	33.5	5.2	4.2	24.6
3/5/2019 4:10	8	8	8	33.5	4.7	4.3	19
3/5/2019 4:20	8	8	8	33.5	4.7	4.2	24.7
3/5/2019 4:30	8	8	8	33.5	4.4	4.3	24.3
3/5/2019 4:40	8	8	8	33.44	4.3	4.2	24.7
3/5/2019 4:50	8	8	8	33.44	4.3	4.3	24.3
3/5/2019 5:00	8	8	8	33.5	4.6	4.4	3.3
3/5/2019 5:10	8	8	8	33.47	4.3	4.3	24.4
3/5/2019 5:20	8	8	8	33.5	4.5	4.2	4.2
3/5/2019 5:30	8	8	8	33.47	4.5	4.3	24.4
3/5/2019 5:40	8	8	8	33.53	4.7	4.3	3.5
3/5/2019 5:50	8	8	8	33.47	4.2	4.3	24.4
3/5/2019 6:00	8	8	8	33.47	4.4	4.2	3.7
3/5/2019 6:10	8	8	8	33.44	5.1	4.2	24.5

3/5/2019 6:20	8	8	8	33.47	4.7	4.2	3.9
3/5/2019 6:30	8	8	8	33.44	4.5	4.2	24.5
3/5/2019 6:40	8	8	8	33.37	4.4	4.3	1.5
3/5/2019 6:50	8	8	8	33.47	4.6	4.3	24.6
3/5/2019 7:00	8	8	8	33.44	4.6	4.2	22.8
3/5/2019 7:10	8	8	8	33.47	4.4	4.2	24.6
3/5/2019 7:20	8	8	8	33.53	4.6	4.2	24.1
3/5/2019 7:30	8	8	8	33.5	4.7	4.2	24.6
3/5/2019 7:40	8	8	8	33.5	4.4	4.2	24.2
3/5/2019 7:50	8	8	8	33.47	4.5	4.4	3.5
3/5/2019 8:00	8	8	8	33.47	4.6	4.3	24.4
3/5/2019 8:10	8	8	8	33.5	4.4	4.2	4.1
3/5/2019 8:20	8	8	8	33.56	4.5	4.3	24.4
3/5/2019 8:30	8	8	8	33.47	4.4	4.3	3.8
3/5/2019 8:40	8	8	8	33.37	4.7	4.3	24.6
3/5/2019 8:50	8	8	8	33.47	4.9	4.3	1.3
3/5/2019 9:00	8	8	8	33.47	4.4	4.3	24.6
3/5/2019 9:10	8	8	8	33.5	4.5	4.3	24.1
3/5/2019 9:20	8	8	8	33.34	4.4	4.3	24.7
3/5/2019 9:30	8	8	8	33.5	4.5	4.4	24.1
3/5/2019 9:40	8	8	8	33.56	4.5	4.3	24.7
3/5/2019 9:50	8	8	8	33.5	4.7	4.3	24.2
3/5/2019 10:00	8	8	8	33.47	4.8	4.4	3.3
3/5/2019 10:10	8	8	8	33.5	4.6	4.3	24.3
3/5/2019 10:20	8	8	8	33.47	4.7	4.3	4.1
3/5/2019 10:30	8	8	8	33.5	4.5	4.3	24.4
3/5/2019 10:40	8	8	8	33.44	4.5	4.3	3.9
3/5/2019 10:50	8	8	8	33.5	4.6	4.3	24.4
3/5/2019 11:00	8	8	8	33.5	4.6	4.4	1.1
3/5/2019 11:10	8	8	8	33.53	4.5	4.3	24.5
3/5/2019 11:20	8	8	8	33.41	4.6	4.4	24.1
3/5/2019 11:30	8	8	8	33.53	4.6	4.3	24.6
3/5/2019 11:40	8	8	8	33.56	5.1	4.2	24.1
3/5/2019 11:50	8	8	8	33.53	4.4	4.4	24.8
3/5/2019 12:00	8	8	8	33.53	4.5	4.4	24.3
3/5/2019 12:10	8	8	8	33.56	4.2	4.4	3.5
3/5/2019 12:20	8	8	8	33.37	4.8	4.3	24.4
3/5/2019 12:30	8	8	8	33.53	4.8	4.3	3.7
3/5/2019 12:40	8	8	8	33.53	4.5	4.3	24.5
3/5/2019 12:50	8	8	8	33.53	4.6	4.3	1.2
3/5/2019 13:00	8	8	8	33.62	4.6	4.3	24.6
3/5/2019 13:10	8	8	8	33.5	4.4	4.3	24.1
3/5/2019 13:20	8	8	8	33.56	4.9	4.4	24.7
3/5/2019 13:30	8	8	8	33.59	4.3	4.3	24.2
3/5/2019 13:40	8	8	8	33.65	4.6	4.4	3.4
3/5/2019 13:50	8	8	8	33.62	4.4	4.3	24.4
3/5/2019 14:00	8	8	8	33.62	4.6	4.3	1.8

3/5/2019 14:10	8	8	8	33.59	4.6	4.2	24.5
3/5/2019 14:20	8	8	8	33.59	4.3	4.3	1.3
3/5/2019 14:30	8	8	8	33.62	4.6	4.2	24.6
3/5/2019 14:40	8	8	8	33.71	4.6	4.3	18.6
3/5/2019 14:50	8	8	8	33.65	4.4	4.3	24.6
3/5/2019 15:00	8	8	8	33.68	4.4	4.4	24
3/5/2019 15:10	8	8	8	33.62	4.4	4.2	24.6
3/5/2019 15:20	8	8	8	33.59	4.6	4.3	24.1
3/5/2019 15:30	8	8	8	33.65	4.5	4.2	3.8
3/5/2019 15:40	8	8	8	33.65	4.5	4.3	24.4
3/5/2019 15:50	8	8	8	33.68	4.4	4.3	4.6
3/5/2019 16:00	8	8	8	33.71	4.5	4.2	24.4
3/5/2019 16:10	8	8	8	33.71	4.5	4.3	2.3
3/5/2019 16:20	8	8	8	33.71	4.6	4.3	24.6
3/5/2019 16:30	8	8	8	33.74	4.2	4.3	24.1
3/5/2019 16:40	8	8	8	33.68	4.6	4.2	24.6
3/5/2019 16:50	8	8	8	33.71	4.4	4.3	24.2
3/5/2019 17:00	8	8	8	33.62	4.5	4.2	24.7
3/5/2019 17:10	8	8	8	33.71	4.4	4.3	24.3
3/5/2019 17:20	8	8	8	33.71	4.5	4.2	3.3
3/5/2019 17:30	8	8	8	33.68	4.5	4.2	24.4
3/5/2019 17:40	8	8	8	33.65	4.6	4.3	3.3
3/5/2019 17:50	8	8	8	33.74	4.5	4.3	24.5
3/5/2019 18:00	8	8	8	33.65	4.8	4.3	1.2
3/5/2019 18:10	8	8	8	33.65	4.5	4.2	24.6
3/5/2019 18:20	8	8	8	33.68	4.3	4.2	24.2
3/5/2019 18:30	8	8	8	33.71	4.4	4.3	24.6
3/5/2019 18:40	8	8	8	33.65	4.4	4.2	24.1
3/5/2019 18:50	8	8	8	33.62	4.7	4.2	24.6
3/5/2019 19:00	8	8	8	33.65	4.9	4.3	24
3/5/2019 19:10	8	8	8	33.74	4.6	4.2	24.7
3/5/2019 19:20	8	8	8	33.68	4.4	4.2	24.2
3/5/2019 19:30	8	8	8	33.68	4.7	4.3	23.6
3/5/2019 19:40	8	8	8	33.65	4.5	4.2	24.3
3/5/2019 19:50	8	8	8	33.65	4.6	4.2	3.5
3/5/2019 20:00	8	8	8	33.74	4.5	4.2	24.5
3/5/2019 20:10	8	8	8	33.68	4.4	4.3	3.3
3/5/2019 20:20	8	8	8	33.71	4.7	4.2	24.6
3/5/2019 20:30	8	8	8	33.68	4.3	4.3	22.3
3/5/2019 20:40	8	8	8	33.71	4.4	4.2	24.7
3/5/2019 20:50	8	8	8	33.74	4.2	4.2	24
3/5/2019 21:00	8	8	8	33.65	4.6	4.2	24.7
3/5/2019 21:10	8	8	8	33.65	4.8	4.2	24.4
3/5/2019 21:20	8	8	8	33.8	4.5	4.2	3.5
3/5/2019 21:30	8	8	8	33.65	4.5	4.1	24.4
3/5/2019 21:40	8	8	8	33.65	4.7	4.1	3.7
3/5/2019 21:50	8	8	8	33.68	4.7	4.2	24.5

3/5/2019 22:00	8	8	8	33.65	4.5	4.2	1.9
3/5/2019 22:10	8	8	8	33.68	4.6	4.1	24.6
3/5/2019 22:20	8	8	8	33.65	4.6	4.2	23.6
3/5/2019 22:30	8	8	8	33.68	4.5	4.1	24.6
3/5/2019 22:40	8	8	8	33.68	4.6	4.2	24.2
3/5/2019 22:50	8	8	8	33.65	4.4	4.1	24.7
3/5/2019 23:00	8	8	8	33.68	4.6	4.2	24.4
3/5/2019 23:10	8	8	8	33.68	4.6	4.2	4
3/5/2019 23:20	8	8	8	33.65	4.4	4.2	24.5
3/5/2019 23:30	8	8	8	33.62	4.6	4.2	2.5
3/5/2019 23:40	8	8	8	33.74	4.9	4.2	24.6
3/5/2019 23:50	8	8	8	33.62	4.7	4.2	11.2
3/6/2019 0:00	8	8	8	33.65	4.6	4.2	24.7
3/6/2019 0:10	8	8	8	33.68	4.8	4.3	24.1
3/6/2019 0:20	8	8	8	33.68	4.8	4.2	24.7
3/6/2019 0:30	8	8	8	33.62	4.4	4.2	24.3
3/6/2019 0:40	8	8	8	33.74	4.6	4.2	3.3
3/6/2019 0:50	8	8	8	33.68	4.8	4.2	24.4
3/6/2019 1:00	8	8	8	33.62	4.5	4.2	4.4
3/6/2019 1:10	8	8	8	33.68	4.8	4.2	24.4
3/6/2019 1:20	8	8	8	33.68	4.4	4.3	3.3
3/6/2019 1:30	8	8	8	33.71	4.5	4.2	24.5
3/6/2019 1:40	8	8	8	33.68	4.5	4.2	24.4
3/6/2019 1:50	8	8	8	33.68	4.7	4.2	24.7
3/6/2019 2:00	8	8	8	33.65	4.4	4.2	24.1
3/6/2019 2:10	8	8	8	33.71	4.7	4.2	10.8
3/6/2019 2:20	8	8	8	33.68	4.7	4.1	24.3
3/6/2019 2:30	8	8	8	33.74	4.6	4.2	3.3
3/6/2019 2:40	8	8	8	33.62	4.4	4.3	24.5
3/6/2019 2:50	8	8	8	33.68	4.3	4.2	2.6
3/6/2019 3:00	8	8	8	33.71	4.8	4.2	24.6
3/6/2019 3:10	8	8	8	33.74	4.6	4.2	24.4
3/6/2019 3:20	8	8	8	33.74	4.6	4.2	24.6
3/6/2019 3:30	8	8	8	33.71	4.6	4.2	24.1
3/6/2019 3:40	8	8	8	33.65	4.4	4.2	24.7
3/6/2019 3:50	8	8	8	33.68	4.5	4.1	24.4
3/6/2019 4:00	8	8	8	33.68	4.5	4.2	3.4
3/6/2019 4:10	8	8	8	33.68	4.6	4.3	24.4
3/6/2019 4:20	8	8	8	33.71	4.6	4.3	3.9
3/6/2019 4:30	8	8	8	33.71	4.5	4.2	24.5
3/6/2019 4:40	8	8	8	33.68	4.6	4.2	3.7
3/6/2019 4:50	8	8	8	33.74	4.5	4.2	24.6
3/6/2019 5:00	8	8	8	33.71	4.1	4.4	24.2
3/6/2019 5:10	8	8	8	33.68	4.7	4.3	24.8
3/6/2019 5:20	8	8	8	33.68	4.4	4.2	24.2
3/6/2019 5:30	8	8	8	33.71	4.6	4.3	3.6
3/6/2019 5:40	8	8	8	33.71	4.6	4.3	24.5

3/6/2019 5:50	8	8	8	33.65	4.6	4.2	3.1
3/6/2019 6:00	8	8	8	33.74	4.7	4.3	24.6
3/6/2019 6:10	8	8	8	33.68	4.4	4.3	24.1
3/6/2019 6:20	8	8	8	33.74	4.9	4.3	24.7
3/6/2019 6:30	8	8	8	33.65	4.2	4.3	24.1
3/6/2019 6:40	8	8	8	33.59	4.3	4.2	10.9
3/6/2019 6:50	8	8	8	33.68	4.6	4.2	24.4
3/6/2019 7:00	8	8	8	33.62	4.5	4.2	4.6
3/6/2019 7:10	8	8	8	33.65	4.6	4.2	24.5
3/6/2019 7:20	8	8	8	33.56	4.4	4.2	1.6
3/6/2019 7:30	8	8	8	33.65	4.6	4.3	24.5
3/6/2019 7:40	8	8	8	33.65	4.6	4.3	11.2
3/6/2019 7:50	8	8	8	33.65	4.8	4.2	24.7
3/6/2019 8:00	8	8	8	33.62	4.4	4.3	24.1
3/6/2019 8:10	8	8	8	33.62	4.5	4.2	24.7
3/6/2019 8:20	8	8	8	33.65	4.2	4.3	24.3
3/6/2019 8:30	8	8	8	33.62	4.5	4.3	3.5
3/6/2019 8:40	8	8	8	33.65	4.6	4.3	24.4
3/6/2019 8:50	8	8	8	33.62	4.4	4.4	1.2
3/6/2019 9:00	8	8	8	33.59	4.6	4.2	24.6
3/6/2019 9:10	8	8	8	33.65	4.5	4.3	24.1
3/6/2019 9:20	8	8	8	33.59	4.8	4.4	24.7
3/6/2019 9:30	8	8	8	33.62	4.7	4.3	24.4
3/6/2019 9:40	8	8	8	33.53	4.5	4.4	24.6
3/6/2019 9:50	8	8	8	33.59	4.6	4.5	24.3
3/6/2019 10:00	8	8	8	33.56	4.8	4.4	3.3
3/6/2019 10:10	8	8	8	33.56	4.6	4.3	24.4
3/6/2019 10:20	8	8	8	33.59	4.4	4.3	3.7
3/6/2019 10:30	8	8	8	33.59	4.3	4.4	24.5
3/6/2019 10:40	8	8	8	33.56	4.6	4.3	1.2
3/6/2019 10:50	8	8	8	33.65	4.5	4.4	24.6
3/6/2019 11:00	8	8	8	33.65	4.5	4.4	24.1
3/6/2019 11:10	8	8	8	33.62	4.8	4.4	24.7
3/6/2019 11:20	8	8	8	33.59	4.6	4.3	24.2
3/6/2019 11:30	8	8	8	33.59	4.7	4.4	3.2
3/6/2019 11:40	8	8	8	33.62	4.3	4.4	24.4
3/6/2019 11:50	8	8	8	33.53	4.6	4.3	3.1
3/6/2019 12:00	8	8	8	33.5	4.8	4.3	24.5
3/6/2019 12:10	8	8	8	33.59	4.5	4.4	1
3/6/2019 12:20	8	8	8	33.62	4.2	4.4	24.7
3/6/2019 12:30	8	8	8	33.62	4.7	4.3	24.3
3/6/2019 12:40	8	8	8	33.56	4.7	4.4	24.6
3/6/2019 12:50	8	8	8	33.56	4.4	4.4	24.3
3/6/2019 13:00	8	8	8	33.56	4.7	4.4	3.7
3/6/2019 13:10	8	8	8	33.59	4.5	4.4	24.5
3/6/2019 13:20	8	8	8	33.59	4.4	4.3	4.2
3/6/2019 13:30	8	8	8	33.56	4.6	4.4	24.5

3/6/2019 13:40	8	8	8	33.53	4.4	4.4	1.2
3/6/2019 13:50	8	8	8	33.56	4.5	4.4	24.6
3/6/2019 14:00	8	8	8	33.56	4.7	4.3	23.5
3/6/2019 14:10	8	8	8	33.56	4.5	4.3	24.7
3/6/2019 14:20	8	8	8	33.59	4.6	4.4	24.1
3/6/2019 14:30	8	8	8	33.53	4.8	4.4	24.7
3/6/2019 14:40	8	8	8	33.53	4.7	4.3	24.3
3/6/2019 14:50	8	8	8	33.56	4.7	4.4	3.4
3/6/2019 15:00	8	8	8	33.5	4.7	4.5	24.3
3/6/2019 15:10	8	8	8	33.5	4.5	4.4	3.3
3/6/2019 15:20	8	8	8	33.5	4.4	4.2	24.6
3/6/2019 15:30	8	8	8	33.56	4.7	4.3	3.8
3/6/2019 15:40	8	8	8	33.5	4.6	4.4	24.6
3/6/2019 15:50	8	8	8	33.47	4.4	4.2	24.1
3/6/2019 16:00	8	8	8	33.5	4.3	4.3	24.7
3/6/2019 16:10	8	8	8	33.5	4.3	4.4	24.3
3/6/2019 16:20	8	8	8	33.5	4.5	4.3	3.2
3/6/2019 16:30	8	8	8	33.44	4.3	4.2	24.4
3/6/2019 16:40	8	8	8	33.47	5	4.4	3.2
3/6/2019 16:50	8	8	8	33.53	4.6	4.2	24.5
3/6/2019 17:00	8	8	8	33.47	4.3	4.3	22.2
3/6/2019 17:10	8	8	8	33.56	4.9	4.3	24.6
3/6/2019 17:20	8	8	8	33.5	4.5	4.3	24.1
3/6/2019 17:30	8	8	8	33.5	4.6	4.3	23.6
3/6/2019 17:40	8	8	8	33.53	4.3	4.4	24.3
3/6/2019 17:50	8	8	8	33.53	4.6	4.3	3.7
3/6/2019 18:00	8	8	8	33.5	4.7	4.3	24.5
3/6/2019 18:10	8	8	8	33.53	4.6	4.3	1.1
3/6/2019 18:20	8	8	8	33.44	4.6	4.3	24.6
3/6/2019 18:30	8	8	8	33.53	4.6	4.3	24.2
3/6/2019 18:40	8	8	8	33.5	4.7	4.3	24.7
3/6/2019 18:50	8	8	8	33.56	4.6	4.3	24.3
3/6/2019 19:00	8	8	8	33.56	4.5	4.3	3.8
3/6/2019 19:10	8	8	8	33.53	4.6	4.2	24.5
3/6/2019 19:20	8	8	8	33.5	4.7	4.3	3.6
3/6/2019 19:30	8	8	8	33.47	4.8	4.2	24.6
3/6/2019 19:40	8	8	8	33.47	4.5	4.2	24.2
3/6/2019 19:50	8	8	8	33.37	4.3	4.3	24.7
3/6/2019 20:00	8	8	8	33.37	4.5	4.3	24.4
3/6/2019 20:10	8	8	8	33.44	4.5	4.2	3.4
3/6/2019 20:20	8	8	8	33.44	4.7	4.3	24.4
3/6/2019 20:30	8	8	8	33.44	4.4	4.2	2.3
3/6/2019 20:40	8	8	8	33.37	4.5	4.4	24.7
3/6/2019 20:50	8	8	8	33.31	4.4	4.4	24.1
3/6/2019 21:00	8	8	8	33.37	4.5	4.2	4.4
3/6/2019 21:10	8	8	8	33.37	4.9	4.2	24.4
3/6/2019 21:20	8	8	8	33.37	4.8	4.2	3.8

3/6/2019 21:30	8	8	8	33.44	4.7	4.2	24.6
3/6/2019 21:40	8	8	8	33.5	4.7	4.2	22.8
3/6/2019 21:50	8	8	8	33.47	4.2	4.3	24.7
3/6/2019 22:00	8	8	8	33.47	4.5	4.2	24.1
3/6/2019 22:10	8	8	8	33.53	4.6	4.3	24.7
3/6/2019 22:20	8	8	8	33.59	4.6	4.2	24.4
3/6/2019 22:30	8	8	8	33.47	4.6	4.3	3.3
3/6/2019 22:40	8	8	8	33.56	4.7	4.3	24.4
3/6/2019 22:50	8	8	8	33.53	4.5	4.3	3.8
3/6/2019 23:00	8	8	8	33.53	4.5	4.2	24.5
3/6/2019 23:10	8	8	8	33.53	4.4	4.2	1.2
3/6/2019 23:20	8	8	8	33.5	4.4	4.2	24.7
3/6/2019 23:30	8	8	8	33.62	4.7	4.3	24.1
3/6/2019 23:40	8	8	8	33.56	4.4	4.3	24.7
3/6/2019 23:50	8	8	8	33.5	4.8	4.3	24.3
3/7/2019 0:00	8	8	8	33.59	4.9	4.3	3.5
3/7/2019 0:10	8	8	8	33.47	4.8	4.3	24.5
3/7/2019 0:20	8	8	8	33.56	4.3	4.2	1.7
3/7/2019 0:30	8	8	8	33.56	4.2	4.3	24.6
3/7/2019 0:40	8	8	8	33.53	4.6	4.2	23
3/7/2019 0:50	8	8	8	33.59	4.7	4.2	24.8
3/7/2019 1:00	8	8	8	33.56	4.6	4.3	24.2
3/7/2019 1:10	8	8	8	33.56	4.6	4.3	24.7
3/7/2019 1:20	8	8	8	33.59	4.9	4.3	24.4
3/7/2019 1:30	8	8	8	33.56	4.7	4.3	3.8
3/7/2019 1:40	8	8	8	33.56	4.7	4.4	24.5
3/7/2019 1:50	8	8	8	33.56	4.5	4.3	1.3
3/7/2019 2:00	8	8	8	33.59	4.6	4.2	24.6
3/7/2019 2:10	8	8	8	33.47	4.7	4.3	24.2
3/7/2019 2:20	8	8	8	33.56	4.7	4.3	24.7
3/7/2019 2:30	8	8	8	33.5	4.5	4.3	24.3
3/7/2019 2:40	8	8	8	33.5	4.6	4.3	3.6
3/7/2019 2:50	8	8	8	33.5	4.6	4.3	24.6
3/7/2019 3:00	8	8	8	33.47	4.6	4.3	22.3
3/7/2019 3:10	8	8	8	33.41	4.9	4.3	24.6
3/7/2019 3:20	8	8	8	33.44	4.6	4.4	24.1
3/7/2019 3:30	8	8	8	33.5	4.3	4.3	3.5
3/7/2019 3:40	8	8	8	33.47	4.7	4.3	24.4
3/7/2019 3:50	8	8	8	33.53	4.6	4.2	4.2
3/7/2019 4:00	8	8	8	33.53	4.6	4.2	24.5
3/7/2019 4:10	8	8	8	33.5	4.2	4.4	21.1
3/7/2019 4:20	8	8	8	33.47	4.6	4.3	24.7
3/7/2019 4:30	8	8	8	33.53	4.2	4.4	24.3
3/7/2019 4:40	8	8	8	33.5	4.6	4.3	3.8
3/7/2019 4:50	8	8	8	33.53	4.9	4.3	24.5
3/7/2019 5:00	8	8	8	33.56	4.4	4.4	1.1
3/7/2019 5:10	8	8	8	33.53	4.7	4.3	24.6

3/7/2019 5:20	8	8	8	33.68	4.8	4.5	24.2
3/7/2019 5:30	8	8	8	33.5	4.6	4.3	24.7
3/7/2019 5:40	8	8	8	33.41	4.4	4.3	24.4
3/7/2019 5:50	8	8	8	33.53	4.7	4.3	4.1
3/7/2019 6:00	8	8	8	33.5	4.5	4.3	24.5
3/7/2019 6:10	8	8	8	33.47	4.6	4.3	11
3/7/2019 6:20	8	8	8	33.34	4.6	4.3	24.7
3/7/2019 6:30	8	8	8	33.53	4.3	4.2	24.4
3/7/2019 6:40	8	8	8	33.5	4.7	4.3	4.3
3/7/2019 6:50	8	8	8	33.59	4.5	4.3	24.4
3/7/2019 7:00	8	8	8	33.65	4.9	4.4	4.4
3/7/2019 7:10	8	8	8	33.47	4.6	4.3	24.6
3/7/2019 7:20	8	8	8	33.56	4.6	4.3	24.1
3/7/2019 7:30	8	8	8	33.59	4.7	4.3	24.6
3/7/2019 7:40	8	8	8	33.53	4.9	4.4	24.4
3/7/2019 7:50	8	8	8	33.53	4.8	4.2	4.4
3/7/2019 8:00	8	8	8	33.59	4.6	4.2	24.3
3/7/2019 8:10	8	8	8	33.59	4.6	4.3	3.7
3/7/2019 8:20	8	8	8	33.56	4.8	4.4	24.6
3/7/2019 8:30	8	8	8	33.56	4.8	4.3	24
3/7/2019 8:40	8	8	8	33.5	4.8	4.3	24.7
3/7/2019 8:50	8	8	8	33.5	4.6	4.3	24.2
3/7/2019 9:00	8	8	8	33.5	4.3	4.3	3.3
3/7/2019 9:10	8	8	8	33.44	4.3	4.4	24.4
3/7/2019 9:20	8	8	8	33.5	4.6	4.2	3.8
3/7/2019 9:30	8	8	8	33.5	4.8	4.3	24.6
3/7/2019 9:40	8	8	8	33.53	4.5	4.2	24.1
3/7/2019 9:50	8	8	8	33.59	4.5	4.4	24.7
3/7/2019 10:00	8	8	8	33.44	4.9	4.3	24.4
3/7/2019 10:10	8	8	8	35.3	3.5	3.9	0.1
3/7/2019 10:20	8	8	8	40.15	4.9	4.4	23.5
3/7/2019 10:30	8	8	8	39.72	4.8	4.3	24.9
3/7/2019 10:40	8	8	8	39.45	4.7	4.4	25.1
3/7/2019 10:50	8	8	8	39.14	4.6	4.4	3.3
3/7/2019 11:00	8	8	8	38.93	4.6	4.4	3.7
3/7/2019 11:10	8	8	8	38.59	4.8	4.5	24.9
3/7/2019 11:20	8	8	8	38.26	4.6	4.3	25.1
3/7/2019 11:30	8	8	8	38.01	4.3	4.3	1.7
3/7/2019 11:40	8	8	8	37.74	4.5	4.4	25
3/7/2019 11:50	8	8	8	37.5	4.7	4.4	1.7
3/7/2019 12:00	8	8	8	37.22	4.6	4.5	24.9
3/7/2019 12:10	8	8	8	37.04	4.6	4.5	24.7
3/7/2019 12:20	8	8	8	36.82	4.7	4.4	3.7
3/7/2019 12:30	8	8	8	36.67	4.9	4.3	24.9
3/7/2019 12:40	8	8	8	36.52	4.8	4.5	24.8
3/7/2019 12:50	8	8	8	36.31	4.5	4.5	24.4
3/7/2019 13:00	8	8	8	36.12	4.7	4.4	2.1

3/7/2019 13:10	8	8	8	35.97	4.6	4.4	3.3
3/7/2019 13:20	8	8	8	35.91	4.7	4.5	24.9
3/7/2019 13:30	8	8	8	35.73	4.6	4.5	24.9
3/7/2019 13:40	8	8	8	35.6	4.6	4.5	24.9
3/7/2019 13:50	8	8	8	35.51	4.2	4.5	24.9
3/7/2019 14:00	8	8	8	35.39	4.8	4.4	24.9
3/7/2019 14:10	8	8	8	35.27	4.5	4.5	24.8
3/7/2019 14:20	8	8	8	35.15	4.4	4.4	24.9
3/7/2019 14:30	8	8	8	34.96	4.4	4.5	24.8
3/7/2019 14:40	8	8	8	34.93	4.5	4.4	24.8
3/7/2019 14:50	8	8	8	34.78	4.5	4.4	24.9
3/7/2019 15:00	8	8	8	34.75	4.6	4.4	3.5
3/7/2019 15:10	8	8	8	34.72	4.6	4.5	1.6
3/7/2019 15:20	8	8	8	34.6	4.7	4.4	24.3
3/7/2019 15:30	8	8	8	34.6	4.5	4.3	24.6
3/7/2019 15:40	8	8	8	34.44	4.7	4.4	24.7
3/7/2019 15:50	8	8	8	34.35	4.7	4.4	24.8
3/7/2019 16:00	8	8	8	34.32	4.7	4.4	2.7
3/7/2019 16:10	8	8	8	34.26	4.6	4.4	24.4
3/7/2019 16:20	8	8	8	34.2	4.6	4.4	24.7
3/7/2019 16:30	8	8	8	34.14	4.6	4.4	3.3
3/7/2019 16:40	8	8	8	34.08	4.5	4.3	24.3
3/7/2019 16:50	8	8	8	33.99	4.9	4.4	24.6
3/7/2019 17:00	8	8	8	34.05	4.3	4.4	10.9
3/7/2019 17:10	8	8	8	34.02	4.6	4.3	24.2
3/7/2019 17:20	8	8	8	33.95	4.9	4.4	24.7
3/7/2019 17:30	8	8	8	33.89	4.5	4.4	4.6
3/7/2019 17:40	8	8	8	33.83	4.9	4.4	24.4
3/7/2019 17:50	8	8	8	33.8	4.6	4.4	24.7
3/7/2019 18:00	8	8	8	33.77	4.6	4.3	24.2
3/7/2019 18:10	8	8	8	33.77	4.4	4.4	24.7
3/7/2019 18:20	8	8	8	33.68	4.6	4.3	23.4
3/7/2019 18:30	8	8	8	33.65	4.5	4.4	24.7
3/7/2019 18:40	8	8	8	33.65	4.6	4.3	24.2
3/7/2019 18:50	8	8	8	33.65	4.6	4.4	24.6
3/7/2019 19:00	8	8	8	33.65	4.4	4.3	24.3
3/7/2019 19:10	8	8	8	33.56	4.4	4.3	3.5
3/7/2019 19:20	8	8	8	33.53	4.6	4.4	24.4
3/7/2019 19:30	8	8	8	33.37	4.5	4.3	1.2
3/7/2019 19:40	8	8	8	33.5	4.9	4.3	24.7
3/7/2019 19:50	8	8	8	33.47	4.9	4.3	24.4
3/7/2019 20:00	8	8	8	33.37	4.6	4.3	3.3
3/7/2019 20:10	8	8	8	33.41	4.7	4.3	24.5
3/7/2019 20:20	8	8	8	33.44	4.7	4.3	1.9
3/7/2019 20:30	8	8	8	33.41	4.4	4.3	24.7
3/7/2019 20:40	8	8	8	33.41	4.7	4.3	24.3
3/7/2019 20:50	8	8	8	33.31	4.6	4.3	3.7

3/7/2019 21:00	8	8	8	33.37	4.7	4.2	24.5
3/7/2019 21:10	8	8	8	33.37	4.5	4.3	20.8
3/7/2019 21:20	8	8	8	33.37	4.7	4.3	24.7
3/7/2019 21:30	8	8	8	33.41	4.5	4.2	24.3
3/7/2019 21:40	8	8	8	33.22	4.5	4.3	24.7
3/7/2019 21:50	8	8	8	33.31	4.3	4.3	24.4
3/7/2019 22:00	8	8	8	33.31	4.5	4.3	4.1
3/7/2019 22:10	8	8	8	33.34	4.4	4.2	24.5
3/7/2019 22:20	8	8	8	33.28	4.7	4.2	1.2
3/7/2019 22:30	8	8	8	33.44	4.6	4.3	24.6
3/7/2019 22:40	8	8	8	33.28	4.5	4.2	24.2
3/7/2019 22:50	8	8	8	33.07	4.3	4.2	24.7
3/7/2019 23:00	8	8	8	33.28	4.6	4.3	24.4
3/7/2019 23:10	8	8	8	33.25	4.7	4.3	1.3
3/7/2019 23:20	8	8	8	33.16	4.7	4.3	24.6
3/7/2019 23:30	8	8	8	33.22	4.4	4.2	24.2
3/7/2019 23:40	8	8	8	33.22	4.3	4.3	3.3
3/7/2019 23:50	8	8	8	33.16	4.7	4.4	24.5
3/8/2019 0:00	8	8	8	33.13	4.8	4.3	23.4
3/8/2019 0:10	8	8	8	33.22	4.4	4.3	24.7
3/8/2019 0:20	8	8	8	33.04	4.4	4.3	24.4
3/8/2019 0:30	8	8	8	33.16	4.5	4.3	3.5
3/8/2019 0:40	8	8	8	33.13	4.2	4.2	24.6
3/8/2019 0:50	8	8	8	33.01	4.5	4.3	17
3/8/2019 1:00	8	8	8	33.04	4.5	4.3	24.7
3/8/2019 1:10	8	8	8	33.01	4.6	4.4	24.3
3/8/2019 1:20	8	8	8	33.04	4.8	4.2	3.7
3/8/2019 1:30	8	8	8	33.04	4.9	4.3	24.6
3/8/2019 1:40	8	8	8	32.95	4.6	4.2	24.2
3/8/2019 1:50	8	8	8	33.04	4.7	4.3	24.7
3/8/2019 2:00	8	8	8	32.98	4.6	4.3	24.2
3/8/2019 2:10	8	8	8	33.04	4.5	4.3	3.3
3/8/2019 2:20	8	8	8	32.95	4.5	4.3	24.5
3/8/2019 2:30	8	8	8	33.01	4.6	4.3	1.2
3/8/2019 2:40	8	8	8	32.98	4.7	4.3	24.7
3/8/2019 2:50	8	8	8	32.98	4.7	4.2	24.3
3/8/2019 3:00	8	8	8	33.04	4.5	4.3	3.5
3/8/2019 3:10	8	8	8	33.07	4.5	4.3	24.6
3/8/2019 3:20	8	8	8	33.1	4.5	4.2	24.1
3/8/2019 3:30	8	8	8	33.04	4.6	4.3	24.7
3/8/2019 3:40	8	8	8	33.04	4.5	4.3	24.4
3/8/2019 3:50	8	8	8	33.07	4.5	4.3	2
3/8/2019 4:00	8	8	8	33.1	4.7	4.2	24.6
3/8/2019 4:10	8	8	8	33.1	4.5	4.4	24.3
3/8/2019 4:20	8	8	8	33.13	4.5	4.3	3.4
3/8/2019 4:30	8	8	8	33.13	4.4	4.4	24.5
3/8/2019 4:40	8	8	8	33.1	4.4	4.3	11.5

3/8/2019 4:50	8	8	8	33.13	4.6	4.3	24.7
3/8/2019 5:00	8	8	8	33.1	4.5	4.4	24.3
3/8/2019 5:10	8	8	8	33.16	4.5	4.3	3.7
3/8/2019 5:20	8	8	8	33.1	4.7	4.3	24.6
3/8/2019 5:30	8	8	8	33.16	4.5	4.3	24.2
3/8/2019 5:40	8	8	8	33.1	4.6	4.4	24.7
3/8/2019 5:50	8	8	8	33.16	4.8	4.4	24.5
3/8/2019 6:00	8	8	8	33.13	4.7	4.4	2.5
3/8/2019 6:10	8	8	8	33.13	4.5	4.3	24.6
3/8/2019 6:20	8	8	8	33.13	4.7	4.4	24.2
3/8/2019 6:30	8	8	8	33.13	4.4	4.3	3.4
3/8/2019 6:40	8	8	8	33.16	4.4	4.3	24.5
3/8/2019 6:50	8	8	8	33.16	4.3	4.4	22.3
3/8/2019 7:00	8	8	8	33.1	4.6	4.4	24.7
3/8/2019 7:10	8	8	8	33.16	4.8	4.4	24.4
3/8/2019 7:20	8	8	8	33.22	4.7	4.3	3.8
3/8/2019 7:30	8	8	8	33.13	4.6	4.3	24.6
3/8/2019 7:40	8	8	8	33.1	4.9	4.3	24.2
3/8/2019 7:50	8	8	8	33.07	4.6	4.3	24.8
3/8/2019 8:00	8	8	8	33.07	4.5	4.3	24.3
3/8/2019 8:10	8	8	8	33.1	4.4	4.3	4.2
3/8/2019 8:20	8	8	8	33.1	4.2	4.4	24.7
3/8/2019 8:30	8	8	8	33.04	4.8	4.3	24.3
3/8/2019 8:40	8	8	8	33.1	4.3	4.3	4.3
3/8/2019 8:50	8	8	8	33.07	4.6	4.3	24.6
3/8/2019 9:00	8	8	8	33.13	4.5	4.3	24.1
3/8/2019 9:10	8	8	8	33.01	4.9	4.2	24.7
3/8/2019 9:20	8	8	8	32.98	4.5	4.4	24.4
3/8/2019 9:30	8	8	8	33.01	4.5	4.4	1.7
3/8/2019 9:40	8	8	8	32.86	4.7	4.4	24.6
3/8/2019 9:50	8	8	8	33.01	4.6	4.4	24.3
3/8/2019 10:00	8	8	8	33.01	5.1	4.4	4.6
3/8/2019 10:10	8	8	8	33.01	4.8	4.4	24.6
3/8/2019 10:20	8	8	8	32.95	4.7	4.5	24.3
3/8/2019 10:30	8	8	8	32.98	4.6	4.3	24.7
3/8/2019 10:40	8	8	8	33.01	4.5	4.4	24.4
3/8/2019 10:50	8	8	8	32.98	4.7	4.4	1.2
3/8/2019 11:00	8	8	8	33.01	4.7	4.4	24.6
3/8/2019 11:10	8	8	8	33.04	4.6	4.3	24.3
3/8/2019 11:20	8	8	8	32.98	4.8	4.4	4
3/8/2019 11:30	8	8	8	33.01	4.7	4.3	24.7
3/8/2019 11:40	8	8	8	33.04	4.5	4.4	24.1
3/8/2019 11:50	8	8	8	32.98	4.5	4.4	3.8
3/8/2019 12:00	8	8	8	33.01	4.8	4.3	24.5
3/8/2019 12:10	8	8	8	32.98	4.7	4.4	24
3/8/2019 12:20	8	8	8	33.01	4.7	4.4	24.7
3/8/2019 12:30	8	8	8	32.95	4.6	4.4	24.4

3/8/2019 12:40	8	8	8	33.07	4.7	4.5	1.2
3/8/2019 12:50	8	8	8	33.1	4.7	4.5	24.7
3/8/2019 13:00	8	8	8	33.01	4.4	4.5	24.3
3/8/2019 13:10	8	8	8	33.07	4.6	4.5	3.7
3/8/2019 13:20	8	8	8	33.1	4.4	4.4	24.6
3/8/2019 13:30	8	8	8	33.07	4.5	4.5	24
3/8/2019 13:40	8	8	8	33.07	4.6	4.5	24.8
3/8/2019 13:50	8	8	8	33.16	4.6	4.5	24.4
3/8/2019 14:00	8	8	8	33.13	4.5	4.4	3.3
3/8/2019 14:10	8	8	8	33.13	4.5	4.4	24.6
3/8/2019 14:20	8	8	8	33.07	4.6	4.4	24.3
3/8/2019 14:30	8	8	8	33.16	4.6	4.4	24.7
3/8/2019 14:40	8	8	8	33.16	4.4	4.4	24.4
3/8/2019 14:50	8	8	8	33.25	4.6	4.4	3.2
3/8/2019 15:00	8	8	8	33.22	5	4.3	24.6
3/8/2019 15:10	8	8	8	33.16	4.6	4.4	24.2
3/8/2019 15:20	8	8	8	33.22	4.4	4.4	3.6
3/8/2019 15:30	8	8	8	33.16	4.7	4.4	24.4
3/8/2019 15:40	8	8	8	33.16	4.7	4.4	23.7
3/8/2019 15:50	8	8	8	33.13	4.8	4.4	24.7
3/8/2019 16:00	8	8	8	33.22	4.6	4.4	24.3
3/8/2019 16:10	8	8	8	33.16	4.6	4.3	3.7
3/8/2019 16:20	8	8	8	33.22	4.3	4.4	24.6
3/8/2019 16:30	8	8	8	33.16	4.5	4.4	24.1
3/8/2019 16:40	8	8	8	33.22	4.7	4.4	24.7
3/8/2019 16:50	8	8	8	33.25	4.4	4.3	24.3
3/8/2019 17:00	8	8	8	33.25	4.7	4.4	3.1
3/8/2019 17:10	8	8	8	33.25	4.6	4.4	24.6
3/8/2019 17:20	8	8	8	33.25	4.5	4.3	24.2
3/8/2019 17:30	8	8	8	33.25	4.3	4.3	3.3
3/8/2019 17:40	8	8	8	33.28	4.7	4.3	24.4
3/8/2019 17:50	8	8	8	33.34	4.4	4.4	6.8
3/8/2019 18:00	8	8	8	33.34	4.6	4.4	24.7
3/8/2019 18:10	8	8	8	33.31	4.7	4.3	24.3
3/8/2019 18:20	8	8	8	33.31	4.4	4.3	4.3
3/8/2019 18:30	8	8	8	33.28	4.2	4.3	24.5
3/8/2019 18:40	8	8	8	33.31	4.6	4.4	14.5
3/8/2019 18:50	8	8	8	33.34	4.6	4.4	24.6
3/8/2019 19:00	8	8	8	33.22	4.8	4.2	24.3
3/8/2019 19:10	8	8	8	33.31	4.5	4.3	3.7
3/8/2019 19:20	8	8	8	33.28	4.6	4.3	24.6
3/8/2019 19:30	8	8	8	33.31	4.5	4.3	22.2
3/8/2019 19:40	8	8	8	33.31	4.7	4.3	24.7
3/8/2019 19:50	8	8	8	33.34	4.5	4.2	24.3
3/8/2019 20:00	8	8	8	33.28	4.6	4.3	3.8
3/8/2019 20:10	8	8	8	33.34	4.4	4.3	24.6
3/8/2019 20:20	8	8	8	33.37	4.8	4.3	18.8

3/8/2019 20:30	8	8	8	33.28	4.6	4.3	24.7
3/8/2019 20:40	8	8	8	33.31	4.5	4.2	24.2
3/8/2019 20:50	8	8	8	33.34	4.3	4.3	4.1
3/8/2019 21:00	8	8	8	33.28	4.8	4.4	24.5
3/8/2019 21:10	8	8	8	33.34	4.6	4.3	23.4
3/8/2019 21:20	8	8	8	33.37	4.4	4.3	24.7
3/8/2019 21:30	8	8	8	33.16	4.7	4.3	24.3
3/8/2019 21:40	8	8	8	33.31	4.7	4.2	3.3
3/8/2019 21:50	8	8	8	33.31	4.6	4.3	24.5
3/8/2019 22:00	8	8	8	33.37	4.8	4.3	1.1
3/8/2019 22:10	8	8	8	33.34	4.5	4.3	24.6
3/8/2019 22:20	8	8	8	33.34	4.5	4.3	24.2
3/8/2019 22:30	8	8	8	33.34	4.5	4.2	24.8
3/8/2019 22:40	8	8	8	33.41	4.6	4.3	24.4
3/8/2019 22:50	8	8	8	33.31	4.7	4.3	3.4
3/8/2019 23:00	8	8	8	33.34	4.5	4.3	24.6
3/8/2019 23:10	8	8	8	33.28	4.7	4.3	24.1
3/8/2019 23:20	8	8	8	33.31	4.6	4.3	24.6
3/8/2019 23:30	8	8	8	33.25	4.4	4.3	24.4
3/8/2019 23:40	8	8	8	33.31	4.7	4.3	3.3
3/8/2019 23:50	8	8	8	33.31	4.5	4.2	24.6
3/9/2019 0:00	8	8	8	33.28	4.5	4.2	24.2
3/9/2019 0:10	8	8	8	33.34	4.5	4.3	24.7
3/9/2019 0:20	8	8	8	33.31	4.2	4.3	24.4
3/9/2019 0:30	8	8	8	33.28	4.6	4.3	4.2
3/9/2019 0:40	8	8	8	33.34	4.6	4.3	24.6
3/9/2019 0:50	8	8	8	33.28	4.3	4.4	24.2
3/9/2019 1:00	8	8	8	33.28	4.7	4.2	3.2
3/9/2019 1:10	8	8	8	33.31	4.8	4.3	24.5
3/9/2019 1:20	8	8	8	33.28	4.4	4.2	22.3
3/9/2019 1:30	8	8	8	33.31	4.6	4.2	24.7
3/9/2019 1:40	8	8	8	33.34	4.4	4.3	24.3
3/9/2019 1:50	8	8	8	33.34	4.6	4.3	1.7
3/9/2019 2:00	8	8	8	33.31	4.5	4.4	24.7
3/9/2019 2:10	8	8	8	33.22	4.7	4.2	24.3
3/9/2019 2:20	8	8	8	33.25	4.7	4.3	3.8
3/9/2019 2:30	8	8	8	33.25	4.5	4.2	24.6
3/9/2019 2:40	8	8	8	33.25	4.7	4.3	24.3
3/9/2019 2:50	8	8	8	33.25	4.4	4.3	3.7
3/9/2019 3:00	8	8	8	33.25	4.7	4.4	24.5
3/9/2019 3:10	8	8	8	33.16	4.4	4.3	24.1
3/9/2019 3:20	8	8	8	33.25	4.7	4.2	24.7
3/9/2019 3:30	8	8	8	33.13	4.6	4.3	24.3
3/9/2019 3:40	8	8	8	33.13	4.7	4.3	2.1
3/9/2019 3:50	8	8	8	33.28	4.6	4.2	24.7
3/9/2019 4:00	8	8	8	33.22	4.6	4.2	24.3
3/9/2019 4:10	8	8	8	33.16	4.3	4.3	3.3

3/9/2019 4:20	8	8	8	33.16	4.4	4.3	24.6
3/9/2019 4:30	8	8	8	33.16	4.7	4.3	24.3
3/9/2019 4:40	8	8	8	33.22	4.7	4.3	4.1
3/9/2019 4:50	8	8	8	33.22	4.6	4.3	24.6
3/9/2019 5:00	8	8	8	33.16	4.6	4.2	24.3
3/9/2019 5:10	8	8	8	33.22	4.6	4.4	3.4
3/9/2019 5:20	8	8	8	33.22	4.3	4.3	24.4
3/9/2019 5:30	8	8	8	33.01	4.8	4.4	24.2
3/9/2019 5:40	8	8	8	33.22	4.6	4.1	24.7
3/9/2019 5:50	8	8	8	33.25	4.8	4.2	24.6
3/9/2019 6:00	8	8	8	33.13	4.5	4.3	16.8
3/9/2019 6:10	8	8	8	33.22	4.4	4.3	24.7
3/9/2019 6:20	8	8	8	33.16	4.8	4.3	24.4
3/9/2019 6:30	8	8	8	33.16	4.4	4.4	20.9
3/9/2019 6:40	8	8	8	33.13	4.6	4.4	24.7
3/9/2019 6:50	8	8	8	33.16	4.7	4.4	24.4
3/9/2019 7:00	8	8	8	33.22	4.8	4.3	24.2
3/9/2019 7:10	8	8	8	33.22	4.6	4.3	3.8
3/9/2019 7:20	8	8	8	33.22	4.4	4.3	24.5
3/9/2019 7:30	8	8	8	33.16	4.4	4.4	24.1
3/9/2019 7:40	8	8	8	33.28	4.7	4.5	3.5
3/9/2019 7:50	8	8	8	33.28	4.5	4.3	24.5
3/9/2019 8:00	8	8	8	33.31	4.3	4.3	24.1
3/9/2019 8:10	8	8	8	33.28	4.5	4.3	3.4
3/9/2019 8:20	8	8	8	33.22	4.7	4.3	24.5
3/9/2019 8:30	8	8	8	33.28	4.6	4.3	22.8
3/9/2019 8:40	8	8	8	33.28	4.7	4.4	24.7
3/9/2019 8:50	8	8	8	33.25	4.7	4.3	24.4
3/9/2019 9:00	8	8	8	33.25	4.5	4.4	1.2
3/9/2019 9:10	8	8	8	33.25	4.8	4.4	24.6
3/9/2019 9:20	8	8	8	33.25	4.6	4.3	24.3
3/9/2019 9:30	8	8	8	33.25	4.6	4.4	1.3
3/9/2019 9:40	8	8	8	33.25	4.6	4.4	24.6
3/9/2019 9:50	8	8	8	33.28	4.6	4.4	24.3
3/9/2019 10:00	8	8	8	33.28	4.3	4.3	3.7
3/9/2019 10:10	8	8	8	33.28	4.5	4.4	24.6
3/9/2019 10:20	8	8	8	33.28	4.4	4.3	24.3
3/9/2019 10:30	8	8	8	33.25	4.7	4.4	3.2
3/9/2019 10:40	8	8	8	33.22	4.6	4.4	24.5
3/9/2019 10:50	8	8	8	33.22	4.6	4.4	18.9
3/9/2019 11:00	8	8	8	33.22	4.7	4.4	24.7
3/9/2019 11:10	8	8	8	33.22	4.6	4.4	24.4
3/9/2019 11:20	8	8	8	33.28	4.7	4.5	16.7
3/9/2019 11:30	8	8	8	33.28	4.7	4.4	24.7
3/9/2019 11:40	8	8	8	33.28	4.5	4.4	24.4
3/9/2019 11:50	8	8	8	33.31	4.7	4.5	24
3/9/2019 12:00	8	8	8	33.16	4.6	4.4	24.6

3/9/2019 12:10	8	8	8	33.25	4.6	4.4	24.4
3/9/2019 12:20	8	8	8	33.25	4.3	4.5	24.1
3/9/2019 12:30	8	8	8	33.22	4.4	4.4	24.6
3/9/2019 12:40	8	8	8	33.25	4.4	4.4	24.4
3/9/2019 12:50	8	8	8	33.22	4.6	4.5	16.8
3/9/2019 13:00	8	8	8	33.25	4.8	4.4	24.7
3/9/2019 13:10	8	8	8	33.25	4.7	4.4	24.4
3/9/2019 13:20	8	8	8	33.25	4.6	4.5	2
3/9/2019 13:30	8	8	8	33.31	4.4	4.4	24.7
3/9/2019 13:40	8	8	8	33.25	4.4	4.5	24.3
3/9/2019 13:50	8	8	8	33.28	4.5	4.4	1.3
3/9/2019 14:00	8	8	8	33.16	4.6	4.5	24.5
3/9/2019 14:10	8	8	8	33.25	4.7	4.3	24.2
3/9/2019 14:20	8	8	8	33.25	4.5	4.4	3.6
3/9/2019 14:30	8	8	8	33.28	4.8	4.5	24.6
3/9/2019 14:40	8	8	8	33.28	4.5	4.4	24.1
3/9/2019 14:50	8	8	8	33.25	4.7	4.4	3.5
3/9/2019 15:00	8	8	8	33.25	4.5	4.4	24.6
3/9/2019 15:10	8	8	8	33.28	4.7	4.4	24.2
3/9/2019 15:20	8	8	8	33.31	4.4	4.4	3.3
3/9/2019 15:30	8	8	8	33.28	4.7	4.4	24.4
3/9/2019 15:40	8	8	8	33.25	4.6	4.4	24.1
3/9/2019 15:50	8	8	8	33.28	4.5	4.4	24.7
3/9/2019 16:00	8	8	8	33.28	4.6	4.3	24.5
3/9/2019 16:10	8	8	8	33.22	4.4	4.4	24.3
3/9/2019 16:20	8	8	8	33.22	5	4.4	24.6
3/9/2019 16:30	8	8	8	33.25	4.2	4.3	24.4
3/9/2019 16:40	8	8	8	33.25	4.6	4.4	14.6
3/9/2019 16:50	8	8	8	33.16	4.5	4.4	24.6
3/9/2019 17:00	8	8	8	33.16	4.6	4.4	24.4
3/9/2019 17:10	8	8	8	33.16	4.5	4.3	1.3
3/9/2019 17:20	8	8	8	33.13	4.8	4.3	24.6
3/9/2019 17:30	8	8	8	33.1	4.5	4.4	24.3
3/9/2019 17:40	8	8	8	33.1	4.5	4.3	3.7
3/9/2019 17:50	8	8	8	33.1	4.5	4.4	24.6
3/9/2019 18:00	8	8	8	33.07	4.5	4.4	24.3
3/9/2019 18:10	8	8	8	33.13	4.5	4.3	4.4
3/9/2019 18:20	8	8	8	33.07	4.6	4.4	24.5
3/9/2019 18:30	8	8	8	33.04	4.6	4.4	24.2
3/9/2019 18:40	8	8	8	33.07	4.7	4.2	3.6
3/9/2019 18:50	8	8	8	33.04	4.7	4.3	24.6
3/9/2019 19:00	8	8	8	33.04	4.4	4.3	24.4
3/9/2019 19:10	8	8	8	33.07	4.6	4.3	3.5
3/9/2019 19:20	8	8	8	33.01	4.7	4.3	24.5
3/9/2019 19:30	8	8	8	33.04	4.5	4.3	24.1
3/9/2019 19:40	8	8	8	33.04	4.5	4.3	4.9
3/9/2019 19:50	8	8	8	33.04	4.7	4.3	24.5

3/9/2019 20:00	8	8	8	33.07	4.7	4.3	22.4
3/9/2019 20:10	8	8	8	33.04	4.5	4.3	24.7
3/9/2019 20:20	8	8	8	32.98	4.5	4.3	24.4
3/9/2019 20:30	8	8	8	33.04	4.6	4.3	23.7
3/9/2019 20:40	8	8	8	33.01	4.6	4.2	24.7
3/9/2019 20:50	8	8	8	33.01	4.5	4.2	24.4
3/9/2019 21:00	8	8	8	33.01	4.5	4.3	1.1
3/9/2019 21:10	8	8	8	33.04	4.7	4.3	24.7
3/9/2019 21:20	8	8	8	33.07	4.8	4.2	24.3
3/9/2019 21:30	8	8	8	33.01	4.4	4.2	2.7
3/9/2019 21:40	8	8	8	33.01	4.6	4.3	24.6
3/9/2019 21:50	8	8	8	32.95	4.7	4.3	24.3
3/9/2019 22:00	8	8	8	33.04	4.6	4.3	3.9
3/9/2019 22:10	8	8	8	33.07	4.5	4.3	24.6
3/9/2019 22:20	8	8	8	33.01	4.6	4.3	24.4
3/9/2019 22:30	8	8	8	33.04	4.5	4.3	4.1
3/9/2019 22:40	8	8	8	33.01	4.6	4.2	24.5
3/9/2019 22:50	8	8	8	33.01	4.5	4.2	24.1
3/9/2019 23:00	8	8	8	32.98	4.6	4.3	3.3
3/9/2019 23:10	8	8	8	32.95	4.5	4.2	24.5
3/9/2019 23:20	8	8	8	32.95	4.7	4.2	24.1
3/9/2019 23:30	8	8	8	33.01	4.3	4.3	4.4
3/9/2019 23:40	8	8	8	33.04	4.6	4.3	24.5
3/9/2019 23:50	8	8	8	32.98	4.5	4.3	3.7
3/10/2019 0:00	8	8	8	32.98	4.7	4.2	24.7
3/10/2019 0:10	8	8	8	33.04	4.4	4.3	24.4
3/10/2019 0:20	8	8	8	32.98	4.4	4.2	1.1
3/10/2019 0:30	8	8	8	32.95	4.6	4.3	24.6
3/10/2019 0:40	8	8	8	32.95	4.2	4.3	24.4
3/10/2019 0:50	8	8	8	33.01	4.5	4.2	2.1
3/10/2019 1:00	8	8	8	32.95	4.6	4.2	24.6
3/10/2019 1:10	8	8	8	32.95	4.3	4.2	24.3
3/10/2019 1:20	8	8	8	32.92	4.9	4.3	3.7
3/10/2019 1:30	8	8	8	32.98	4.4	4.3	24.6
3/10/2019 1:40	8	8	8	32.92	4.5	4.4	24.4
3/10/2019 1:50	8	8	8	32.92	4.6	4.3	3.6
3/10/2019 2:00	8	8	8	32.92	4.4	4.3	24.6
3/10/2019 2:10	8	8	8	32.92	4.6	4.3	24.3
3/10/2019 2:20	8	8	8	32.89	4.5	4.3	3.3
3/10/2019 2:30	8	8	8	32.92	4.5	4.3	24.6
3/10/2019 2:40	8	8	8	32.86	4.4	4.3	24.1
3/10/2019 2:50	8	8	8	32.92	4.6	4.3	4.7
3/10/2019 3:00	8	8	8	32.92	4.5	4.3	24.5
3/10/2019 3:10	8	8	8	32.89	4.6	4.3	24.1
3/10/2019 3:20	8	8	8	32.89	4.5	4.3	24.7
3/10/2019 3:30	8	8	8	32.89	4.4	4.3	24.4
3/10/2019 3:40	8	8	8	32.89	4.7	4.3	2

3/10/2019 3:50	8	8	8	32.89	4.7	4.3	24.6
3/10/2019 4:00	8	8	8	33.01	4.6	4.3	24.3
3/10/2019 4:10	8	8	8	32.92	4.3	4.4	3.6
3/10/2019 4:20	8	8	8	32.95	4.4	4.3	24.6
3/10/2019 4:30	8	8	8	32.92	4.7	4.3	24.2
3/10/2019 4:40	8	8	8	32.98	4.5	4.4	3.7
3/10/2019 4:50	8	8	8	33.04	4.3	4.3	24.5
3/10/2019 5:00	8	8	8	32.95	4.4	4.3	24.2
3/10/2019 5:10	8	8	8	33.04	4.5	4.4	3.4
3/10/2019 5:20	8	8	8	33.04	4.5	4.3	24.5
3/10/2019 5:30	8	8	8	32.92	4.5	4.3	24.3
3/10/2019 5:40	8	8	8	33.01	4.4	4.3	24.6
3/10/2019 5:50	8	8	8	32.98	4.6	4.4	24.3
3/10/2019 6:00	8	8	8	33.04	4.9	4.3	7
3/10/2019 6:10	8	8	8	33.04	4.6	4.3	24.6
3/10/2019 6:20	8	8	8	33.04	4.6	4.3	24.4
3/10/2019 6:30	8	8	8	33.04	4.6	4.3	1.1
3/10/2019 6:40	8	8	8	33.01	4.4	4.3	24.6
3/10/2019 6:50	8	8	8	33.01	4.2	4.3	24.3
3/10/2019 7:00	8	8	8	33.07	4.7	4.3	3.5
3/10/2019 7:10	8	8	8	33.01	4.7	4.3	24.6
3/10/2019 7:20	8	8	8	32.95	4.5	4.4	24.3
3/10/2019 7:30	8	8	8	32.98	4.6	4.2	3.5
3/10/2019 7:40	8	8	8	32.98	4.2	4.4	24.5
3/10/2019 7:50	8	8	8	32.98	4.9	4.2	24.2
3/10/2019 8:00	8	8	8	32.98	4.5	4.3	4.1
3/10/2019 8:10	8	8	8	32.95	4.5	4.3	24.6
3/10/2019 8:20	8	8	8	33.01	4.5	4.4	24.1
3/10/2019 8:30	8	8	8	33.01	4.7	4.3	3.3
3/10/2019 8:40	8	8	8	32.92	4.6	4.3	24.5
3/10/2019 8:50	8	8	8	33.01	4.4	4.4	24.1
3/10/2019 9:00	8	8	8	33.01	4.5	4.3	4.3
3/10/2019 9:10	8	8	8	32.95	4.6	4.3	24.4
3/10/2019 9:20	8	8	8	32.95	4.6	4.3	18.7
3/10/2019 9:30	8	8	8	32.95	4.5	4.3	24.6
3/10/2019 9:40	8	8	8	33.01	4.6	4.4	24.3
3/10/2019 9:50	8	8	8	32.98	4.8	4.3	1.6
3/10/2019 10:00	8	8	8	32.92	4.8	4.4	24.6
3/10/2019 10:10	8	8	8	33.01	4.7	4.4	24.3
3/10/2019 10:20	8	8	8	33.04	4.6	4.4	3.1
3/10/2019 10:30	8	8	8	32.98	4.5	4.4	24.6
3/10/2019 10:40	8	8	8	33.01	4.5	4.4	24.1
3/10/2019 10:50	8	8	8	33.07	4.6	4.3	3.4
3/10/2019 11:00	8	8	8	33.07	4.9	4.3	24.6
3/10/2019 11:10	8	8	8	33.07	4.3	4.3	24.4
3/10/2019 11:20	8	8	8	33.1	4.5	4.3	3.5
3/10/2019 11:30	8	8	8	33.07	4.5	4.3	24.4

3/10/2019 11:40	8	8	8	33.16	4.6	4.4	24
3/10/2019 11:50	8	8	8	33.07	4.5	4.3	24.6
3/10/2019 12:00	8	8	8	33.13	4.6	4.3	24.4
3/10/2019 12:10	8	8	8	33.16	4.8	4.4	1.1
3/10/2019 12:20	8	8	8	33.04	4.8	4.4	24.6
3/10/2019 12:30	8	8	8	33.1	4.5	4.3	24.4
3/10/2019 12:40	8	8	8	33.1	4.4	4.3	2.3
3/10/2019 12:50	8	8	8	33.1	4.6	4.3	24.5
3/10/2019 13:00	8	8	8	33.07	4.5	4.2	24.2
3/10/2019 13:10	8	8	8	33.1	4.5	4.3	3.4
3/10/2019 13:20	8	8	8	32.98	4.5	4.3	24.5
3/10/2019 13:30	8	8	8	33.13	4.4	4.3	24.1
3/10/2019 13:40	8	8	8	33.1	4.6	4.4	3.2
3/10/2019 13:50	8	8	8	33.13	4.6	4.3	24.4
3/10/2019 14:00	8	8	8	33.1	4.7	4.4	24.1
3/10/2019 14:10	8	8	8	33.1	4.5	4.3	4.4
3/10/2019 14:20	8	8	8	33.22	4.6	4.4	24.4
3/10/2019 14:30	8	8	8	33.16	4.7	4.2	6.4
3/10/2019 14:40	8	8	8	33.07	4.7	4.3	24.6
3/10/2019 14:50	8	8	8	33.22	4.6	4.4	24.2
3/10/2019 15:00	8	8	8	33.28	4.7	4.3	4.5
3/10/2019 15:10	8	8	8	33.25	4.6	4.3	24.5
3/10/2019 15:20	8	8	8	33.22	4.7	4.3	24
3/10/2019 15:30	8	8	8	33.25	4.4	4.3	10.7
3/10/2019 15:40	8	8	8	33.25	4.6	4.4	24.4
3/10/2019 15:50	8	8	8	33.25	4.7	4.3	11.3
3/10/2019 16:00	8	8	8	33.28	4.4	4.4	24.6
3/10/2019 16:10	8	8	8	33.22	4.6	4.4	24.3
3/10/2019 16:20	8	8	8	33.25	4.5	4.3	3.7
3/10/2019 16:30	8	8	8	33.25	4.7	4.3	24.6
3/10/2019 16:40	8	8	8	33.16	4.4	4.3	24
3/10/2019 16:50	8	8	8	33.22	4.4	4.3	3.3
3/10/2019 17:00	8	8	8	33.25	4.5	4.3	24.4
3/10/2019 17:10	8	8	8	33.25	4.5	4.4	18.6
3/10/2019 17:20	8	8	8	33.22	4.5	4.3	24.6
3/10/2019 17:30	8	8	8	33.13	4.6	4.4	24.2
3/10/2019 17:40	8	8	8	33.22	4.3	4.3	3.8
3/10/2019 17:50	8	8	8	33.22	4.4	4.3	24.6
3/10/2019 18:00	8	8	8	33.22	4.3	4.3	24
3/10/2019 18:10	8	8	8	33.22	4.6	4.3	3.4
3/10/2019 18:20	8	8	8	33.22	4.5	4.3	24.5
3/10/2019 18:30	8	8	8	33.13	4.4	4.4	24.1
3/10/2019 18:40	8	8	8	33.13	4.6	4.4	24.7
3/10/2019 18:50	8	8	8	33.16	4.6	4.3	24.4
3/10/2019 19:00	8	8	8	33.1	4.7	4.3	6.8
3/10/2019 19:10	8	8	8	33.13	4.4	4.3	24.6
3/10/2019 19:20	8	8	8	33.1	4.4	4.3	24.2

3/10/2019 19:30	8	8	8	33.13	4.6	4.3	3.6
3/10/2019 19:40	8	8	8	33.13	4.6	4.3	24.5
3/10/2019 19:50	8	8	8	33.01	4.7	4.3	24.1
3/10/2019 20:00	8	8	8	33.04	4.6	4.3	4.4
3/10/2019 20:10	8	8	8	33.13	4.6	4.2	24.3
3/10/2019 20:20	8	8	8	33.04	4.4	4.3	3.7
3/10/2019 20:30	8	8	8	33.04	4.5	4.3	24.6
3/10/2019 20:40	8	8	8	33.04	4.4	4.3	24.3
3/10/2019 20:50	8	8	8	33.07	4.6	4.3	3.6
3/10/2019 21:00	8	8	8	33.04	4.6	4.4	24.5
3/10/2019 21:10	8	8	8	33.04	4.6	4.3	24.2
3/10/2019 21:20	8	8	8	32.95	4.5	4.3	3.3
3/10/2019 21:30	8	8	8	32.95	4.6	4.2	24.4
3/10/2019 21:40	8	8	8	33.07	4.4	4.3	6.8
3/10/2019 21:50	8	8	8	33.04	4.8	4.3	24.5
3/10/2019 22:00	8	8	8	33.01	4.5	4.2	24.3
3/10/2019 22:10	8	8	8	33.07	4.5	4.2	3.7
3/10/2019 22:20	8	8	8	33.04	4.5	4.3	24.5
3/10/2019 22:30	8	8	8	33.01	4.3	4.3	24.1
3/10/2019 22:40	8	8	8	33.04	4.7	4.3	4.4
3/10/2019 22:50	8	8	8	32.95	4.7	4.3	24.3
3/10/2019 23:00	8	8	8	32.89	4.5	4.2	1.1
3/10/2019 23:10	8	8	8	33.01	4.6	4.4	24.6
3/10/2019 23:20	8	8	8	32.95	4.7	4.3	24.3
3/10/2019 23:30	8	8	8	33.01	4.6	4.2	3.7
3/10/2019 23:40	8	8	8	32.95	4.3	4.3	24.5
3/10/2019 23:50	8	8	8	32.95	4.2	4.2	24.2
3/11/2019 0:00	8	8	8	32.95	4.7	4.3	3.4
3/11/2019 0:10	8	8	8	32.98	4.5	4.4	24.5
3/11/2019 0:20	8	8	8	32.95	4.5	4.2	24.1
3/11/2019 0:30	8	8	8	32.95	4.7	4.3	3.2
3/11/2019 0:40	8	8	8	32.98	4.6	4.3	24.5
3/11/2019 0:50	8	8	8	32.98	4.6	4.4	24.3
3/11/2019 1:00	8	8	8	33.01	4.8	4.4	24.7
3/11/2019 1:10	8	8	8	33.04	4.7	4.4	24.4
3/11/2019 1:20	8	8	8	32.98	4.6	4.3	1.4
3/11/2019 1:30	8	8	8	32.98	4.6	4.3	24.6
3/11/2019 1:40	8	8	8	32.92	4.5	4.3	24.3
3/11/2019 1:50	8	8	8	33.01	4.4	4.4	4.1
3/11/2019 2:00	8	8	8	33.1	4.7	4.3	24.5
3/11/2019 2:10	8	8	8	33.01	4.3	4.3	24
3/11/2019 2:20	8	8	8	33.04	4.7	4.3	4.3
3/11/2019 2:30	8	8	8	32.98	4.6	4.3	24.4
3/11/2019 2:40	8	8	8	33.01	4.3	4.4	1.1
3/11/2019 2:50	8	8	8	33.01	4.7	4.3	24.6
3/11/2019 3:00	8	8	8	33.01	4.5	4.3	24.3
3/11/2019 3:10	8	8	8	32.95	4.6	4.3	3.6

3/11/2019 3:20	8	8	8	33.04	4.4	4.3	24.5
3/11/2019 3:30	8	8	8	33.04	4.9	4.4	24
3/11/2019 3:40	8	8	8	33.01	4.4	4.4	24.7
3/11/2019 3:50	8	8	8	33.01	5	4.4	24.3
3/11/2019 4:00	8	8	8	32.92	4.5	4.4	1.3
3/11/2019 4:10	8	8	8	32.95	4.4	4.4	24.6
3/11/2019 4:20	8	8	8	32.95	4.6	4.3	24.2
3/11/2019 4:30	8	8	8	32.95	4.6	4.3	3.6
3/11/2019 4:40	8	8	8	32.92	4.6	4.3	24.5
3/11/2019 4:50	8	8	8	32.95	4.5	4.3	24.2
3/11/2019 5:00	8	8	8	32.95	4.3	4.2	3.3
3/11/2019 5:10	8	8	8	32.95	4.4	4.3	24.4
3/11/2019 5:20	8	8	8	32.98	4.4	4.3	22.8
3/11/2019 5:30	8	8	8	33.04	4.6	4.4	24.6
3/11/2019 5:40	8	8	8	32.92	4.2	4.2	24.3
3/11/2019 5:50	8	8	8	32.92	4.4	4.4	20.9
3/11/2019 6:00	8	8	8	32.86	4.6	4.3	24.6
3/11/2019 6:10	8	8	8	32.86	4.7	4.3	24.3
3/11/2019 6:20	8	8	8	32.89	4.8	4.4	3.7
3/11/2019 6:30	8	8	8	32.89	4.6	4.3	24.5
3/11/2019 6:40	8	8	8	32.89	4.7	4.3	24.1
3/11/2019 6:50	8	8	8	32.89	4.4	4.3	3.5
3/11/2019 7:00	8	8	8	32.86	4.6	4.5	24.5
3/11/2019 7:10	8	8	8	32.89	4.2	4.5	24.1
3/11/2019 7:20	8	8	8	32.86	4.5	4.4	24.7
3/11/2019 7:30	8	8	8	32.79	4.5	4.3	24.3
3/11/2019 7:40	8	8	8	32.89	4.5	4.3	1.3
3/11/2019 7:50	8	8	8	32.86	4.4	4.3	24.6
3/11/2019 8:00	8	8	8	32.92	4.7	4.3	24.3
3/11/2019 8:10	8	8	8	32.89	4.7	4.3	3.1
3/11/2019 8:20	8	8	8	32.83	4.5	4.4	24.6
3/11/2019 8:30	8	8	8	32.83	4.6	4.3	24.1
3/11/2019 8:40	8	8	8	32.89	4.2	4.2	4.4
3/11/2019 8:50	8	8	8	32.86	4.4	4.3	24.4
3/11/2019 9:00	8	8	8	32.89	4.5	4.3	22
3/11/2019 9:10	8	8	8	32.83	4.5	4.3	24.6
3/11/2019 9:20	8	8	8	32.86	4.5	4.4	24.3
3/11/2019 9:30	8	8	8	32.89	4.5	4.3	1.6
3/11/2019 9:40	8	8	8	32.86	4.3	4.3	24.5
3/11/2019 9:50	8	8	8	32.86	4.3	4.4	24.2
3/11/2019 10:00	8	8	8	32.89	4.4	4.3	3.6
3/11/2019 10:10	8	8	8	32.92	4.4	4.3	24.5
3/11/2019 10:20	8	8	8	32.86	4.6	4.3	24.1
3/11/2019 10:30	8	8	8	32.92	4.5	4.3	24.6
3/11/2019 10:40	8	8	8	32.92	4.7	4.3	24.3
3/11/2019 10:50	8	8	8	32.86	4.5	4.3	1.2
3/11/2019 11:00	8	8	8	32.83	4.4	4.4	24.5

3/11/2019 11:10	8	8	8	32.89	4.7	4.3	24.2
3/11/2019 11:20	8	8	8	32.92	4.5	4.4	3.7
3/11/2019 11:30	8	8	8	32.89	4.7	4.3	24.4
3/11/2019 11:40	8	8	8	32.92	4.5	4.4	24.1
3/11/2019 11:50	8	8	8	32.95	4.3	4.4	4.4
3/11/2019 12:00	8	8	8	32.92	4.6	4.3	24.4
3/11/2019 12:10	8	8	8	32.92	4.3	4.3	1.1
3/11/2019 12:20	8	8	8	32.92	4.5	4.3	24.6
3/11/2019 12:30	8	8	8	32.89	4.4	4.4	24.2
3/11/2019 12:40	8	8	8	32.89	4.6	4.4	4.1
3/11/2019 12:50	8	8	8	32.89	4.4	4.4	24.5
3/11/2019 13:00	8	8	8	32.89	4.4	4.4	24.2
3/11/2019 13:10	8	8	8	32.86	4.3	4.4	3.5
3/11/2019 13:20	8	8	8	32.89	4.7	4.4	24.5
3/11/2019 13:30	8	8	8	32.92	5	4.3	24.1
3/11/2019 13:40	8	8	8	32.89	4.6	4.3	4.9
3/11/2019 13:50	8	8	8	32.86	4.5	4.2	24.4
3/11/2019 14:00	8	8	8	32.89	4.7	4.3	6.8
3/11/2019 14:10	8	8	8	32.89	4.5	4.4	24.5
3/11/2019 14:20	8	8	8	32.89	4.6	4.3	24.3
3/11/2019 14:30	8	8	8	32.89	4.4	4.3	3.7
3/11/2019 14:40	8	8	8	32.92	4.5	4.4	24.5
3/11/2019 14:50	8	8	8	32.79	4.5	4.2	24
3/11/2019 15:00	8	8	8	32.86	4.7	4.3	4.3
3/11/2019 15:10	8	8	8	32.86	4.4	4.4	24.3
3/11/2019 15:20	8	8	8	32.83	4.9	4.3	1.4
3/11/2019 15:30	8	8	8	32.83	4.4	4.2	24.6
3/11/2019 15:40	8	8	8	32.76	4.5	4.4	24.2
3/11/2019 15:50	8	8	8	32.79	4.4	4.3	3.5
3/11/2019 16:00	8	8	8	32.86	4.5	4.3	24.4
3/11/2019 16:10	8	8	8	32.83	4.8	4.4	1.2
3/11/2019 16:20	8	8	8	32.83	4.7	4.3	24.6
3/11/2019 16:30	8	8	8	32.73	4.5	4.2	24.2
3/11/2019 16:40	8	8	8	32.73	4.9	4.3	3.9
3/11/2019 16:50	8	8	8	32.73	4.7	4.3	24.4
3/11/2019 17:00	8	8	8	32.73	4.5	4.3	23.9
3/11/2019 17:10	8	8	8	32.76	4.5	4.4	10.7
3/11/2019 17:20	8	8	8	32.86	4.5	4.3	24.4
3/11/2019 17:30	8	8	8	32.83	4.5	4.3	1.4
3/11/2019 17:40	8	8	8	32.79	4.3	4.5	24.6
3/11/2019 17:50	8	8	8	32.79	4.7	4.3	24.3
3/11/2019 18:00	8	8	8	32.79	4.6	4.3	3.6
3/11/2019 18:10	8	8	8	32.79	4.6	4.3	24.6
3/11/2019 18:20	8	8	8	32.83	4.5	4.3	24.1
3/11/2019 18:30	8	8	8	32.79	4.4	4.3	3.2
3/11/2019 18:40	8	8	8	32.76	4.3	4.2	24.4
3/11/2019 18:50	8	8	8	32.83	4.1	4.2	24.3

3/11/2019 19:00	8	8	8	32.83	4.5	4.2	24.7
3/11/2019 19:10	8	8	8	32.83	4.4	4.3	24.3
3/11/2019 19:20	8	8	8	32.79	4.6	4.2	3.3
3/11/2019 19:30	8	8	8	32.83	4.5	4.2	24.6
3/11/2019 19:40	8	8	8	32.83	4.7	4.2	24.2
3/11/2019 19:50	8	8	8	32.83	4.6	4.3	3.2
3/11/2019 20:00	8	8	8	32.79	4.6	4.3	24.4
3/11/2019 20:10	8	8	8	32.76	4.6	4.2	16.5
3/11/2019 20:20	8	8	8	32.79	4.5	4.2	24.6
3/11/2019 20:30	8	8	8	32.83	4.7	4	24.3
3/11/2019 20:40	8	8	8	32.79	4.3	4.3	4.1
3/11/2019 20:50	8	8	8	32.83	4.6	4.2	24.6
3/11/2019 21:00	8	8	8	32.79	4.6	4.2	24.1
3/11/2019 21:10	8	8	8	32.86	4.4	4.3	24.6
3/11/2019 21:20	8	8	8	32.73	4.4	4.2	24.3
3/11/2019 21:30	8	8	8	32.76	4.3	4.2	2
3/11/2019 21:40	8	8	8	32.83	4.5	4.3	24.6
3/11/2019 21:50	8	8	8	32.76	4.4	4.2	24.1
3/11/2019 22:00	8	8	8	32.76	4.6	4.2	4.4
3/11/2019 22:10	8	8	8	32.73	4.4	4.2	24.4
3/11/2019 22:20	8	8	8	32.73	4.5	4.2	3.7
3/11/2019 22:30	8	8	8	32.61	4.4	4.3	24.5
3/11/2019 22:40	8	8	8	32.79	4.4	4.2	3.6
3/11/2019 22:50	8	8	8	32.7	4.4	4.1	24.6
3/11/2019 23:00	8	8	8	32.76	4.6	4.2	24.1
3/11/2019 23:10	8	8	8	32.79	4.4	4.3	24.6
3/11/2019 23:20	8	8	8	32.73	4.4	4.3	24.2
3/11/2019 23:30	8	8	8	32.79	4.4	4.2	4.3
3/11/2019 23:40	8	8	8	32.76	4.6	4.2	24.5
3/11/2019 23:50	8	8	8	32.79	4.6	4.3	6.7
3/12/2019 0:00	8	8	8	32.76	4.6	4.2	24.6
3/12/2019 0:10	8	8	8	32.79	4.5	4.3	24.2
3/12/2019 0:20	8	8	8	32.76	4.6	4.2	3.3
3/12/2019 0:30	8	8	8	32.73	4.8	4.2	24.5
3/12/2019 0:40	8	8	8	32.73	4.2	4.2	22.1
3/12/2019 0:50	8	8	8	32.7	4.6	4.2	24.6
3/12/2019 1:00	8	8	8	32.7	4.5	4.2	24.2
3/12/2019 1:10	8	8	8	32.79	4.5	4.2	3.6
3/12/2019 1:20	8	8	8	32.76	4.9	4.3	24.5
3/12/2019 1:30	8	8	8	32.76	4.4	4.3	1.3
3/12/2019 1:40	8	8	8	32.79	4.2	4.2	24.6
3/12/2019 1:50	8	8	8	32.73	4.3	4.2	24.1
3/12/2019 2:00	8	8	8	32.67	4.5	4.4	24.6
3/12/2019 2:10	8	8	8	32.7	4.4	4.3	24.3
3/12/2019 2:20	8	8	8	32.7	4.8	4.3	3.2
3/12/2019 2:30	8	8	8	32.64	4.4	4.3	24.6
3/12/2019 2:40	8	8	8	32.73	4.3	4.2	24.3

3/12/2019 2:50	8	8	8	32.67	4.7	4.2	24.6
3/12/2019 3:00	8	8	8	32.7	4.5	4.3	24.3
3/12/2019 3:10	8	8	8	32.67	4.7	4.2	3.3
3/12/2019 3:20	8	8	8	32.7	4.4	4.3	24.4
3/12/2019 3:30	8	8	8	32.7	4.3	4.2	3
3/12/2019 3:40	8	8	8	32.64	4.3	4.3	24.6
3/12/2019 3:50	8	8	8	32.67	4.5	4.2	2.8
3/12/2019 4:00	8	8	8	32.49	4.4	4.3	24.5
3/12/2019 4:10	8	8	8	32.61	4.9	4.3	1.3
3/12/2019 4:20	8	8	8	32.61	4.7	4.3	24.6
3/12/2019 4:30	8	8	8	32.61	4.6	4.2	1.3
3/12/2019 4:40	8	8	8	32.52	4.6	4.2	24.6
3/12/2019 4:50	8	8	8	32.49	4.7	4.3	10.9
3/12/2019 5:00	8	8	8	32.58	4.7	4.3	24.6
3/12/2019 5:10	8	8	8	32.52	4.4	4.2	24.1
3/12/2019 5:20	8	8	8	32.52	4.5	4.2	24.7
3/12/2019 5:30	8	8	8	32.58	4.5	4.2	24.2
3/12/2019 5:40	8	8	8	32.58	4.3	4.3	24.7
3/12/2019 5:50	8	8	8	32.58	4.4	4.2	24.3
3/12/2019 6:00	8	8	8	32.61	4.4	4.3	4.6
3/12/2019 6:10	8	8	8	32.52	4.6	4.3	24.5
3/12/2019 6:20	8	8	8	32.64	4.8	4.2	16.5
3/12/2019 6:30	8	8	8	32.61	4.6	4.3	24.6
3/12/2019 6:40	8	8	8	32.61	4.7	4.3	24.2
3/12/2019 6:50	8	8	8	32.61	4.5	4.3	3.5
3/12/2019 7:00	8	8	8	32.64	4.6	4.2	24.5
3/12/2019 7:10	8	8	8	32.64	4.6	4.2	24.1
3/12/2019 7:20	8	8	8	32.64	4.4	4.2	24.7
3/12/2019 7:30	8	8	8	32.64	4.4	4.3	24.4
3/12/2019 7:40	8	8	8	32.61	4.6	4.3	1.4
3/12/2019 7:50	8	8	8	32.64	4.2	4.2	24.6
3/12/2019 8:00	8	8	8	32.64	4.6	4.3	24.1
3/12/2019 8:10	8	8	8	32.64	4.8	4.3	3.3
3/12/2019 8:20	8	8	8	32.61	4.7	4.2	24.5
3/12/2019 8:30	8	8	8	32.64	4.3	4.3	3.5
3/12/2019 8:40	8	8	8	32.64	4.6	4.3	24.7
3/12/2019 8:50	8	8	8	32.64	4.4	4.3	24.2
3/12/2019 9:00	8	8	8	32.61	4.6	4.2	3.8
3/12/2019 9:10	8	8	8	32.7	4.5	4.3	24.4
3/12/2019 9:20	8	8	8	32.61	4.6	4.3	24
3/12/2019 9:30	8	8	8	32.61	4.3	4.3	24.6
3/12/2019 9:40	8	8	8	32.61	4.5	4.2	24.3
3/12/2019 9:50	8	8	8	32.58	4.3	4.2	3.2
3/12/2019 10:00	8	8	8	32.67	4.4	4.3	24.6
3/12/2019 10:10	8	8	8	32.64	4.6	4.3	24.2
3/12/2019 10:20	8	8	8	32.58	4.4	4.2	4.4
3/12/2019 10:30	8	8	8	32.52	4.5	4.2	24.4

3/12/2019 10:40	8	8	8	32.67	4.2	4.3	1.1
3/12/2019 10:50	8	8	8	32.61	4.9	4.3	24.6
3/12/2019 11:00	8	8	8	32.49	4.4	4.2	24.2
3/12/2019 11:10	8	8	8	32.52	4.5	4.4	4.2
3/12/2019 11:20	8	8	8	32.58	4.4	4.2	24.6
3/12/2019 11:30	8	8	8	32.58	4.1	4.3	24.2
3/12/2019 11:40	8	8	8	32.46	4.5	4.3	3.2
3/12/2019 11:50	8	8	8	32.58	4.5	4.3	24.5
3/12/2019 12:00	8	8	8	32.58	4.6	4.3	23.7
3/12/2019 12:10	8	8	8	32.58	4.4	4.3	24.6
3/12/2019 12:20	8	8	8	32.58	4.5	4.3	24.3
3/12/2019 12:30	8	8	8	32.61	4.5	4.4	1.5
3/12/2019 12:40	8	8	8	32.52	4.5	4.2	24.6
3/12/2019 12:50	8	8	8	32.64	4.3	4.3	24.2
3/12/2019 13:00	8	8	8	32.64	4.2	4.2	4.1
3/12/2019 13:10	8	8	8	32.58	4.8	4.3	24.4
3/12/2019 13:20	8	8	8	32.64	4.5	4.4	24.1
3/12/2019 13:30	8	8	8	32.67	4.7	4.2	4.9
3/12/2019 13:40	8	8	8	32.67	4.6	4.2	24.4
3/12/2019 13:50	8	8	8	32.64	4.6	4.4	24.1
3/13/2019 14:00	8	8	8	32.49	4.5	4.4	24.4
3/13/2019 14:10	8	8	8	32.43	4.5	4.4	3.3
3/13/2019 14:20	8	8	8	32.4	4.7	4.4	24.6
3/13/2019 14:30	8	8	8	32.49	4.4	4.5	24.2
3/13/2019 14:40	8	8	8	32.52	4.6	4.4	3.3
3/13/2019 14:50	8	8	8	32.58	4.3	4.4	24.5
3/13/2019 15:00	8	8	8	32.52	4.5	4.3	1
3/13/2019 15:10	8	8	8	32.52	4.6	4.4	24.6
3/13/2019 15:20	8	8	8	32.43	4.4	4.4	24.3
3/13/2019 15:30	8	8	8	32.46	4.7	4.4	3.6
3/13/2019 15:40	8	8	8	32.46	4.6	4.5	24.5
3/13/2019 15:50	8	8	8	32.58	4.4	4.4	24.1
3/13/2019 16:00	8	8	8	32.52	4.6	4.4	3.4
3/13/2019 16:10	8	8	8	32.46	4.6	4.4	24.4
3/13/2019 16:20	8	8	8	32.52	4.3	4.4	23.4
3/13/2019 16:30	8	8	8	32.46	4.4	4.3	24.6
3/13/2019 16:40	8	8	8	32.52	4.6	4.4	24.4
3/13/2019 16:50	8	8	8	32.52	4.3	4.4	2.8
3/13/2019 17:00	8	8	8	32.34	4.7	4.3	24.6
3/13/2019 17:10	8	8	8	32.46	4.6	4.3	24.1
3/13/2019 17:20	8	8	8	32.46	4.4	4.3	3.7
3/13/2019 17:30	8	8	8	32.49	4.7	4.3	24.5
3/13/2019 17:40	8	8	8	32.58	4.6	4.3	24.1
3/13/2019 17:50	8	8	8	32.43	4.5	4.4	4.3
3/13/2019 18:00	8	8	8	32.52	4.4	4.3	24.4
3/13/2019 18:10	8	8	8	32.58	4.6	4.3	6.7
3/13/2019 18:20	8	8	8	32.49	4.5	4.3	24.6

3/13/2019 18:30	8	8	8	32.58	4.5	4.4	24.4
3/13/2019 18:40	8	8	8	32.58	4.3	4.3	4.2
3/13/2019 18:50	8	8	8	32.58	4.4	4.3	24.5
3/13/2019 19:00	8	8	8	32.49	4.4	4.3	24.1
3/13/2019 19:10	8	8	8	32.52	4.7	4.3	4.2
3/13/2019 19:20	8	8	8	32.49	4.5	4.3	24.4
3/13/2019 19:30	8	8	8	32.52	4.5	4.3	1.9
3/13/2019 19:40	8	8	8	32.49	4.5	4.3	24.6
3/13/2019 19:50	8	8	8	32.58	4.2	4.3	24.2
3/13/2019 20:00	8	8	8	32.52	4.4	4.3	3.2
3/13/2019 20:10	8	8	8	32.49	4.5	4.2	24.4
3/13/2019 20:20	8	8	8	32.52	4.6	4.3	2.1
3/13/2019 20:30	8	8	8	32.52	4.8	4.3	24.6
3/13/2019 20:40	8	8	8	32.52	4.4	4.3	24.2
3/13/2019 20:50	8	8	8	32.58	4.6	4.3	3.5
3/13/2019 21:00	8	8	8	32.58	4.7	4.2	24.5
3/13/2019 21:10	8	8	8	32.61	4.6	4.3	24.1
3/13/2019 21:20	8	8	8	32.58	4.4	4.3	24.7
3/13/2019 21:30	8	8	8	32.61	4.6	4.3	24.4
3/13/2019 21:40	8	8	8	32.58	4.3	4.4	3.3
3/13/2019 21:50	8	8	8	32.61	4.7	4.3	24.5
3/13/2019 22:00	8	8	8	32.52	4.4	4.3	24.1
3/13/2019 22:10	8	8	8	32.52	4.6	4.3	24.7
3/13/2019 22:20	8	8	8	32.61	4.4	4.3	24.4
3/13/2019 22:30	8	8	8	32.67	4.5	4.4	3.9
3/13/2019 22:40	8	8	8	32.61	4.2	4.2	24.6
3/13/2019 22:50	8	8	8	32.58	4.1	4.2	24.2
3/13/2019 23:00	8	8	8	32.52	4.3	4.3	24.6
3/13/2019 23:10	8	8	8	32.58	4.5	4.3	24.4
3/13/2019 23:20	8	8	8	32.58	4.5	4.3	3.1
3/13/2019 23:30	8	8	8	32.52	4.4	4.3	24.6
3/13/2019 23:40	8	8	8	32.49	4.6	4.3	24.2
3/13/2019 23:50	8	8	8	32.58	4.5	4.3	4.6
3/14/2019 0:00	8	8	8	32.58	4.7	4.2	24.4
3/14/2019 0:10	8	8	8	32.58	4.6	4.2	1.1
3/14/2019 0:20	8	8	8	32.52	4.4	4.2	24.6
3/14/2019 0:30	8	8	8	32.46	4.6	4.2	24.2
3/14/2019 0:40	8	8	8	32.49	4.5	4.3	3.5
3/14/2019 0:50	8	8	8	32.61	4.5	4.2	24.5
3/14/2019 1:00	8	8	8	32.58	4.5	4.2	22.2
3/14/2019 1:10	8	8	8	32.52	4.5	4.3	24.6
3/14/2019 1:20	8	8	8	32.61	4.5	4.3	24.3
3/14/2019 1:30	8	8	8	32.58	4.3	4.3	3.2
3/14/2019 1:40	8	8	8	32.52	4.5	4.2	24.6
3/14/2019 1:50	8	8	8	32.58	4.5	4.2	24.3
3/14/2019 2:00	8	8	8	32.58	4.7	4.3	3.8
3/14/2019 2:10	8	8	8	32.58	4.5	4.4	24.5

3/14/2019 2:20	8	8	8	32.49	4.5	4.2	2.1
3/14/2019 2:30	8	8	8	32.58	4.4	4.3	24.6
3/14/2019 2:40	8	8	8	32.61	4.5	4.3	24.3
3/14/2019 2:50	8	8	8	32.49	4.5	4.2	3.6
3/14/2019 3:00	8	8	8	32.46	4.6	4.2	24.5
3/14/2019 3:10	8	8	8	32.58	4.7	4.2	24.1
3/14/2019 3:20	8	8	8	32.58	4.6	4.3	4.4
3/14/2019 3:30	8	8	8	32.61	4.7	4.4	24.4
3/14/2019 3:40	8	8	8	32.52	4.5	4.3	19.1
3/14/2019 3:50	8	8	8	32.58	4.5	4.3	24.7
3/14/2019 4:00	8	8	8	32.61	4.4	4.4	24.3
3/14/2019 4:10	8	8	8	32.58	4.4	4.3	4.1
3/14/2019 4:20	8	8	8	32.64	4.6	4.3	24.5
3/14/2019 4:30	8	8	8	32.64	4.3	4.3	24.3
3/14/2019 4:40	8	8	8	32.61	4.7	4.3	24.6
3/14/2019 4:50	8	8	8	32.7	4.5	4.3	24.3
3/14/2019 5:00	8	8	8	32.61	4.5	4.3	3.3
3/14/2019 5:10	8	8	8	32.64	4.6	4.3	24.5
3/14/2019 5:20	8	8	8	32.61	4.4	4.2	24
3/14/2019 5:30	8	8	8	32.64	4.5	4.3	4.4
3/14/2019 5:40	8	8	8	32.58	4.5	4.3	24.4
3/14/2019 5:50	8	8	8	32.58	4.6	4.4	3.6
3/14/2019 6:00	8	8	8	32.61	4.4	4.3	24.7
3/14/2019 6:10	8	8	8	32.52	4.6	4.3	24.2
3/14/2019 6:20	8	8	8	32.58	4.5	4.4	3.7
3/14/2019 6:30	8	8	8	32.61	4.6	4.3	24.5
3/14/2019 6:40	8	8	8	32.61	4.6	4.2	24
3/14/2019 6:50	8	8	8	32.58	4.5	4.4	4.3
3/14/2019 7:00	8	8	8	32.67	3.9	4.3	24.4
3/14/2019 7:10	8	8	8	32.52	4.6	4.3	1.1
3/14/2019 7:20	8	8	8	32.67	4.4	4.3	24.6
3/14/2019 7:30	8	8	8	32.46	4.7	4.3	24.2
3/14/2019 7:40	8	8	8	32.67	4.4	4.4	3.6
3/14/2019 7:50	8	8	8	32.64	4.5	4.3	24.5
3/14/2019 8:00	8	8	8	32.64	4.6	4.3	24
3/14/2019 8:10	8	8	8	32.64	4.5	4.4	24.7
3/14/2019 8:20	8	8	8	32.61	4.4	4.4	24.4
3/14/2019 8:30	8	8	8	32.67	4.4	4.3	2.9
3/14/2019 8:40	8	8	8	32.58	4.6	4.3	24.6
3/14/2019 8:50	8	8	8	32.64	4.5	4.3	24.2
3/14/2019 9:00	8	8	8	32.67	4.4	4.3	4.3
3/14/2019 9:10	8	8	8	32.64	4.6	4.4	24.4
3/14/2019 9:20	8	8	8	32.73	4.4	4.3	1.3
3/14/2019 9:30	8	8	8	32.76	4.2	4.4	24.7
3/14/2019 9:40	8	8	8	32.67	4.3	4.4	24.2
3/14/2019 9:50	8	8	8	32.67	4.7	4.3	3.2
3/14/2019 10:00	8	8	8	32.7	4.7	4.3	24.5

3/14/2019 10:10	8	8	8	32.76	4.5	4.3	22.2
3/14/2019 10:20	8	8	8	32.67	4.3	4.3	24.6
3/14/2019 10:30	8	8	8	32.67	4.8	4.3	24.4
3/14/2019 10:40	8	8	8	32.73	4.5	4.4	4
3/14/2019 10:50	8	8	8	32.67	4.5	4.4	24.5
3/14/2019 11:00	8	8	8	32.7	4.5	4.3	24.1
3/14/2019 11:10	8	8	8	32.7	4.5	4.4	24.6
3/14/2019 11:20	8	8	8	32.76	4.6	4.3	24.2
3/14/2019 11:30	8	8	8	32.7	4.6	4.4	3.3
3/14/2019 11:40	8	8	8	32.73	4.5	4.4	24.3
3/14/2019 11:50	8	8	8	32.76	4.9	4.3	4.1
3/14/2019 12:00	8	8	8	32.79	4.7	4.3	24.4
3/14/2019 12:10	8	8	8	32.76	4.5	4.3	3.6
3/14/2019 12:20	8	8	8	32.79	4.6	4.2	24.5
3/14/2019 12:30	8	8	8	32.79	4.7	4.3	4.2
3/14/2019 12:40	8	8	8	32.79	4.7	4.4	24.5
3/14/2019 12:50	8	8	8	32.79	4.6	4.4	3.4
3/14/2019 13:00	8	8	8	32.76	4.5	4.3	24.6
3/14/2019 13:10	8	8	8	32.83	4	4.4	2.1
3/14/2019 13:20	8	8	8	32.83	4.5	4.4	24.6
3/14/2019 13:30	8	8	8	32.79	4.5	4.4	24.3
3/14/2019 13:40	8	8	8	32.83	4.7	4.3	24.7
3/14/2019 13:50	8	8	8	32.83	4.5	4.4	24.1
3/14/2019 14:00	8	8	8	32.76	4.4	4.4	3.9
3/14/2019 14:10	8	8	8	32.86	4.6	4.4	24.4
3/14/2019 14:20	8	8	8	32.83	4.4	4.4	1.3
3/14/2019 14:30	8	8	8	32.79	4.4	4.3	24.5
3/14/2019 14:40	8	8	8	32.79	4.6	4.3	24.2
3/14/2019 14:50	8	8	8	32.79	4.4	4.3	3.3
3/14/2019 15:00	8	8	8	32.86	4.5	4.4	24.5
3/14/2019 15:10	8	8	8	32.79	4.3	4.4	2
3/14/2019 15:20	8	8	8	32.83	4.8	4.4	24.6
3/14/2019 15:30	8	8	8	32.79	4.6	4.4	24.2
3/14/2019 15:40	8	8	8	32.86	4.5	4.3	3.7
3/14/2019 15:50	8	8	8	32.76	4.5	4.3	24.4
3/14/2019 16:00	8	8	8	32.79	4.6	4.3	1.1
3/14/2019 16:10	8	8	8	32.86	4.4	4.3	24.5
3/14/2019 16:20	8	8	8	32.92	4.5	4.3	24.1
3/14/2019 16:30	8	8	8	32.86	4.5	4.3	3.4
3/14/2019 16:40	8	8	8	32.89	4.2	4.3	24.4
3/14/2019 16:50	8	8	8	32.86	4.4	4.4	1.1
3/14/2019 17:00	8	8	8	32.83	4.6	4.3	24.6
3/14/2019 17:10	8	8	8	32.89	4.6	4.4	24.2
3/14/2019 17:20	8	8	8	32.89	4.7	4.3	24.6
3/14/2019 17:30	8	8	8	32.83	4.7	4.2	24.4
3/14/2019 17:40	8	8	8	32.92	4.4	4.3	3.2
3/14/2019 17:50	8	8	8	32.92	4.7	4.3	24.5

3/14/2019 18:00	8	8	8	32.89	4.3	4.4	24.1
3/14/2019 18:10	8	8	8	32.86	4.6	4.3	4.4
3/14/2019 18:20	8	8	8	32.86	4.6	4.3	24.4
3/14/2019 18:30	8	8	8	32.89	4.2	4.3	2.5
3/14/2019 18:40	8	8	8	32.79	4.6	4.2	24.5
3/14/2019 18:50	8	8	8	32.92	4.2	4.3	24.2
3/14/2019 19:00	8	8	8	32.89	4.2	4.2	24.6
3/14/2019 19:10	8	8	8	32.86	4.5	4.2	24.3
3/14/2019 19:20	8	8	8	32.95	4.4	4.3	3.7
3/14/2019 19:30	8	8	8	32.89	4.4	4.2	24.5
3/14/2019 19:40	8	8	8	32.86	4.5	4.3	22.9
3/14/2019 19:50	8	8	8	32.86	4.6	4.2	24.6
3/14/2019 20:00	8	8	8	32.92	4.6	4.2	24.2
3/14/2019 20:10	8	8	8	32.73	4.4	4.2	3.5
3/14/2019 20:20	8	8	8	32.83	4.5	4.2	24.4
3/14/2019 20:30	8	8	8	32.86	4.5	4.2	16.7
3/14/2019 20:40	8	8	8	32.83	4.6	4.2	24.6
3/14/2019 20:50	8	8	8	32.89	4.5	4.2	24.3
3/14/2019 21:00	8	8	8	32.89	4.6	4.2	3.4
3/14/2019 21:10	8	8	8	32.79	4.4	4.2	24.4
3/14/2019 21:20	8	8	8	32.89	4.5	4.3	3.2
3/14/2019 21:30	8	8	8	32.83	4.2	4.2	24.6
3/14/2019 21:40	8	8	8	32.95	4.4	4.2	24.1
3/14/2019 21:50	8	8	8	32.92	4.4	4.2	24.6
3/14/2019 22:00	8	8	8	32.98	4.5	4.2	24.3
3/14/2019 22:10	8	8	8	32.89	4.3	4.1	3.6
3/14/2019 22:20	8	8	8	32.92	4.6	4.3	24.5
3/14/2019 22:30	8	8	8	32.89	4.6	4.2	1.1
3/14/2019 22:40	8	8	8	32.86	4.7	4.2	24.5
3/14/2019 22:50	8	8	8	32.92	4.5	4.3	24.3
3/14/2019 23:00	8	8	8	32.95	4.4	4.2	3.2
3/14/2019 23:10	8	8	8	32.95	4.4	4.2	24.4
3/14/2019 23:20	8	8	8	32.92	4.5	4.3	1.2
3/14/2019 23:30	8	8	8	32.98	4.5	4.2	24.6
3/14/2019 23:40	8	8	8	33.01	4.5	4.3	24.1
3/14/2019 23:50	8	8	8	33.01	4.6	4.2	4.7
3/15/2019 0:00	8	8	8	33.01	4.5	4.3	24.4
3/15/2019 0:10	8	8	8	33.01	4.3	4.2	3.6
3/15/2019 0:20	8	8	8	33.01	4.4	4.2	24.4
3/15/2019 0:30	8	8	8	33.04	4.4	4.2	1.2
3/15/2019 0:40	8	8	8	33.07	4.5	4.3	24.6
3/15/2019 0:50	8	8	8	33.1	4.4	4.3	24.1
3/15/2019 1:00	8	8	8	33.1	4.5	4.1	24.7
3/15/2019 1:10	8	8	8	33.04	4.4	4.2	24.1
3/15/2019 1:20	8	8	8	33.04	4.5	4.2	3.5
3/15/2019 1:30	8	8	8	33.1	4.3	4.3	24.3
3/15/2019 1:40	8	8	8	33.07	4.6	4.2	4.3

3/15/2019 1:50	8	8	8	33.07	4.4	4.2	24.5
3/15/2019 2:00	8	8	8	33.04	4.1	4.2	6.6
3/15/2019 2:10	8	8	8	33.04	4.3	4.3	24.5
3/15/2019 2:20	8	8	8	33.07	4.6	4.4	24.3
3/15/2019 2:30	8	8	8	33.01	4.6	4.2	10.8
3/15/2019 2:40	8	8	8	33.1	4.6	4.3	24.3
3/15/2019 2:50	8	8	8	33.04	4.6	4.2	3.5
3/15/2019 3:00	8	8	8	33.04	4.6	4.2	24.5
3/15/2019 3:10	8	8	8	33.01	4.5	4.3	1.1
3/15/2019 3:20	8	8	8	33.01	4.3	4.3	24.6
3/15/2019 3:30	8	8	8	33.01	4.5	4.2	24.2
3/15/2019 3:40	8	8	8	33.01	4.6	4.2	24.6
3/15/2019 3:50	8	8	8	33.07	4.6	4.3	24.3
3/15/2019 4:00	8	8	8	33.04	4.6	4.3	3.4
3/15/2019 4:10	8	8	8	33.01	4.2	4.2	24.4
3/15/2019 4:20	8	8	8	33.01	4.5	4.3	3.6
3/15/2019 4:30	8	8	8	33.04	4.5	4.3	24.5
3/15/2019 4:40	8	8	8	33.04	4.3	4.3	3.5
3/15/2019 4:50	8	8	8	33.01	4.5	4.2	24.3
3/15/2019 5:00	8	8	8	33.01	4.3	4.3	24.7
3/15/2019 5:10	8	8	8	33.04	4.7	4.3	24.2
3/15/2019 5:20	8	8	8	33.04	4.3	4.2	24.6
3/15/2019 5:30	8	8	8	32.98	4.5	4.3	18.5
3/15/2019 5:40	8	8	8	32.98	4.7	4.2	24.5
3/15/2019 5:50	8	8	8	32.98	4.6	4.2	1.6
3/15/2019 6:00	8	8	8	33.04	4.6	4.2	24.5
3/15/2019 6:10	8	8	8	33.04	4.5	4.3	3.9
3/15/2019 6:20	8	8	8	33.1	4.4	4.2	24.5
3/15/2019 6:30	8	8	8	33.07	4.4	4.2	3.3
3/15/2019 6:40	8	8	8	33.1	4.4	4.2	24.4
3/15/2019 6:50	8	8	8	33.01	4.6	4.2	3.3
3/15/2019 7:00	8	8	8	33.1	4.6	4.2	24.4
3/15/2019 7:10	8	8	8	33.1	4.4	4.2	3.8
3/15/2019 7:20	8	8	8	33.16	4.6	4.2	24.4
3/15/2019 7:30	8	8	8	33.1	4.7	4.2	4.1
3/15/2019 7:40	8	8	8	33.1	4.5	4.2	24.4
3/15/2019 7:50	8	8	8	33.1	4.3	4.3	3.4
3/15/2019 8:00	8	8	8	33.16	4.8	4.3	24.5
3/15/2019 8:10	8	8	8	33.13	4.4	4.2	4
3/15/2019 8:20	8	8	8	33.16	4.6	4.3	24.4
3/15/2019 8:30	8	8	8	33.16	4.5	4.2	3.9
3/15/2019 8:40	8	8	8	33.16	4.5	4.2	24.4
3/15/2019 8:50	8	8	8	33.16	4.6	4.2	3.6
3/15/2019 9:00	8	8	8	33.25	4.4	4.3	24.5
3/15/2019 9:10	8	8	8	33.25	4.4	4.3	4.1
3/15/2019 9:20	8	8	8	33.22	4.6	4.3	24.4
3/15/2019 9:30	8	8	8	33.22	4.5	4.2	3.6

3/15/2019 9:40	8	8	8	33.28	4.4	4.3	24.3
3/15/2019 9:50	8	8	8	33.25	4.6	4.3	3.9
3/15/2019 10:00	8	8	8	33.25	4.5	4.3	24.3
3/15/2019 10:10	8	8	8	33.28	4.7	4.3	3.4
3/15/2019 10:20	8	8	8	33.31	4.8	4.3	24.3
3/15/2019 10:30	8	8	8	33.31	4.7	4.2	4.5
3/15/2019 10:40	8	8	8	33.34	4.4	4.4	24.3
3/15/2019 10:50	8	8	8	33.34	4.7	4.2	3.4
3/15/2019 11:00	8	8	8	33.37	4.6	4.4	24.4
3/15/2019 11:10	8	8	8	33.34	4.5	4.3	5.1
3/15/2019 11:20	8	8	8	33.37	4.4	4.4	24.2
3/15/2019 11:30	8	8	8	33.37	4.3	4.3	24.7
3/15/2019 11:40	8	8	8	33.37	4.3	4.3	24.3
3/15/2019 11:50	8	8	8	33.41	4.5	4.3	24.6
3/15/2019 12:00	8	8	8	33.44	4.5	4.2	24.2
3/15/2019 12:10	8	8	8	33.37	4.5	4.3	24.7
3/15/2019 12:20	8	8	8	33.41	4.5	4.3	24.2
3/15/2019 12:30	8	8	8	33.31	4.4	4.3	24.6
3/15/2019 12:40	8	8	8	33.34	4.6	4.4	24.1
3/15/2019 12:50	8	8	8	33.34	4.5	4.4	24.7
3/15/2019 13:00	8	8	8	33.41	4.5	4.3	24.1
3/15/2019 13:10	8	8	8	33.41	4.5	4.4	24.7
3/15/2019 13:20	8	8	8	33.37	4.5	4.3	24.4
3/15/2019 13:30	8	8	8	33.41	4.5	4.4	24.6
3/15/2019 13:40	8	8	8	33.41	4.4	4.3	24.1
3/15/2019 13:50	8	8	8	33.41	4.4	4.3	24.7
3/15/2019 14:00	8	8	8	33.37	4.5	4.3	24.1
3/15/2019 14:10	8	8	8	33.34	4.4	4.4	24.6
3/15/2019 14:20	8	8	8	33.44	4.5	4.5	24.1
3/15/2019 14:30	8	8	8	33.44	4.5	4.4	24.6
3/15/2019 14:40	8	8	8	33.37	4.4	4.4	24.1
3/15/2019 14:50	8	8	8	33.41	4.6	4.4	24.6
3/15/2019 15:00	8	8	8	33.41	4.6	4.4	22.9
3/15/2019 15:10	8	8	8	33.41	4.5	4.4	24.5
3/15/2019 15:20	8	8	8	33.44	4.5	4.4	13.9
3/15/2019 15:30	8	8	8	33.41	4.4	4.3	24.5
3/15/2019 15:40	8	8	8	33.5	4.4	4.4	1.3
3/15/2019 15:50	8	8	8	33.5	4.4	4.4	24.5
3/15/2019 16:00	8	8	8	33.44	4.4	4.4	3.3
3/15/2019 16:10	8	8	8	33.47	4.4	4.4	24.4
3/15/2019 16:20	8	8	8	33.47	4.5	4.3	3.7
3/15/2019 16:30	8	8	8	33.5	4.6	4.3	24.4
3/15/2019 16:40	8	8	8	33.53	4.5	4.3	24.6
3/15/2019 16:50	8	8	8	33.5	4.3	4.3	24.3
3/15/2019 17:00	8	8	8	33.53	4.5	4.3	24.6
3/15/2019 17:10	8	8	8	33.47	4.6	4.3	24
3/15/2019 17:20	8	8	8	33.53	4.6	4.4	24.6

3/15/2019 17:30	8	8	8	33.53	4.6	4.3	23
3/15/2019 17:40	8	8	8	33.5	4.4	4.4	24.5
3/15/2019 17:50	8	8	8	33.53	4.5	4.3	3.4
3/15/2019 18:00	8	8	8	33.53	4.6	4.3	24.4
3/15/2019 18:10	8	8	8	33.5	4.8	4.3	3.4
3/15/2019 18:20	8	8	8	33.53	4.6	4.3	24.3
3/15/2019 18:30	8	8	8	33.5	4.4	4.2	24.6
3/15/2019 18:40	8	8	8	33.44	4.5	4.3	24.2
3/15/2019 18:50	8	8	8	33.53	4.7	4.3	24.7
3/15/2019 19:00	8	8	8	33.41	4.4	4.3	24.2
3/15/2019 19:10	8	8	8	33.37	4.6	4.3	24.6
3/15/2019 19:20	8	8	8	33.41	4.5	4.3	3.3
3/15/2019 19:30	8	8	8	33.37	4.5	4.3	24.3
3/15/2019 19:40	8	8	8	33.44	4.6	4.3	24.7
3/15/2019 19:50	8	8	8	33.41	4.7	4.3	24
3/15/2019 20:00	8	8	8	33.41	4.6	4.3	24.6
3/15/2019 20:10	8	8	8	33.44	4.5	4.2	1.3
3/15/2019 20:20	8	8	8	33.47	4.2	4.3	24.5
3/15/2019 20:30	8	8	8	33.44	4.5	4.3	4.5
3/15/2019 20:40	8	8	8	33.44	4.3	4.2	24.4
3/15/2019 20:50	8	8	8	33.37	4.6	4.3	10.8
3/15/2019 21:00	8	8	8	33.41	4.7	4.2	24.1
3/15/2019 21:10	8	8	8	33.41	4.4	4.2	24.6
3/15/2019 21:20	8	8	8	33.41	4.7	4.2	14
3/15/2019 21:30	8	8	8	33.41	4.2	4.2	24.5
3/15/2019 21:40	8	8	8	33.44	4.3	4.2	3.3
3/15/2019 21:50	8	8	8	33.37	4.5	4.2	24.3
3/15/2019 22:00	8	8	8	33.37	4.5	4.3	24.7
3/15/2019 22:10	8	8	8	33.41	4.4	4.2	3.6
3/15/2019 22:20	8	8	8	33.44	4.4	4.2	24.6
3/15/2019 22:30	8	8	8	33.37	4.3	4.2	3.3
3/15/2019 22:40	8	8	8	33.28	4.4	4.2	24.3
3/15/2019 22:50	8	8	8	33.34	4.3	4.2	24.5
3/15/2019 23:00	8	8	8	33.34	4.7	4.2	3.9
3/15/2019 23:10	8	8	8	33.37	4.4	4.1	24.3
3/15/2019 23:20	8	8	8	33.34	4.7	4.2	24.7
3/15/2019 23:30	8	8	8	33.37	4.4	4.1	23
3/15/2019 23:40	8	8	8	33.37	4.4	4.2	24.6
3/15/2019 23:50	8	8	8	33.34	4.9	4.2	3.2
3/16/2019 0:00	8	8	8	33.34	4.3	4.2	24.4
3/16/2019 0:10	8	8	8	33.31	4.5	4.2	24.7
3/16/2019 0:20	8	8	8	33.31	4.4	4.2	2
3/16/2019 0:30	8	8	8	33.37	4.4	4.2	24.5
3/16/2019 0:40	8	8	8	33.34	4.7	4.2	24.7
3/16/2019 0:50	8	8	8	33.31	4.4	4.2	6.3
3/16/2019 1:00	8	8	8	33.31	4.4	4.2	24.5
3/16/2019 1:10	8	8	8	33.31	4.2	4.2	24.7

3/16/2019 1:20	8	8	8	33.25	4.5	4.1	18.6
3/16/2019 1:30	8	8	8	33.25	4.4	4.2	24.5
3/16/2019 1:40	8	8	8	33.31	4.6	4.2	24.7
3/16/2019 1:50	8	8	8	33.22	4.5	4.2	24.1
3/16/2019 2:00	8	8	8	33.25	4.4	4.2	24.6
3/16/2019 2:10	8	8	8	33.22	4.5	4.2	3.4
3/16/2019 2:20	8	8	8	33.16	4.3	4.2	24.3
3/16/2019 2:30	8	8	8	33.22	4.5	4.2	24.6
3/16/2019 2:40	8	8	8	33.22	4.5	4.2	4
3/16/2019 2:50	8	8	8	33.1	4.3	4.2	24.4
3/16/2019 3:00	8	8	8	33.22	4.4	4.1	24.7
3/16/2019 3:10	8	8	8	33.13	4.3	4.2	1.3
3/16/2019 3:20	8	8	8	33.13	4.4	4.2	24.5
3/16/2019 3:30	8	8	8	33.1	4.4	4.2	24.8
3/16/2019 3:40	8	8	8	33.13	4.5	4.2	24.1
3/16/2019 3:50	8	8	8	33.1	4.5	4.2	24.6
3/16/2019 4:00	8	8	8	33.13	4.4	4.2	3.3
3/16/2019 4:10	8	8	8	33.07	4.7	4.2	24.2
3/16/2019 4:20	8	8	8	33.07	4.4	4.2	24.5
3/16/2019 4:30	8	8	8	33.07	4.5	4.2	3.7
3/16/2019 4:40	8	8	8	32.98	4.3	4.2	24.5
3/16/2019 4:50	8	8	8	33.01	4.7	4.2	24.6
3/16/2019 5:00	8	8	8	33.04	4.5	4.2	10.8
3/16/2019 5:10	8	8	8	32.95	4.4	4.2	24.6
3/16/2019 5:20	8	8	8	32.95	4.5	4.2	4.7
3/16/2019 5:30	8	8	8	32.95	4.5	4.2	24.1
3/16/2019 5:40	8	8	8	32.92	4.4	4.2	24.6
3/16/2019 5:50	8	8	8	32.95	4.6	4.2	3.9
3/16/2019 6:00	8	8	8	32.89	4.7	4.2	24.3
3/16/2019 6:10	8	8	8	32.89	4.8	4.1	24.7
3/16/2019 6:20	8	8	8	32.95	4.4	4.2	3.5
3/16/2019 6:30	8	8	8	32.86	4.4	4.2	24.5
3/16/2019 6:40	8	8	8	32.86	4.5	4.2	24.7
3/16/2019 6:50	8	8	8	32.89	4.3	4.2	1.2
3/16/2019 7:00	8	8	8	32.89	4.3	4.1	24.5
3/16/2019 7:10	8	8	8	32.86	4.6	4.2	3.5
3/16/2019 7:20	8	8	8	32.83	4.6	4.2	24.3
3/16/2019 7:30	8	8	8	32.76	4.4	4.2	24.6
3/16/2019 7:40	8	8	8	32.83	4.5	4.2	4.4
3/16/2019 7:50	8	8	8	32.79	4.5	4.2	24.4
3/16/2019 8:00	8	8	8	32.79	4.4	4.2	24.7
3/16/2019 8:10	8	8	8	32.73	4.4	4.2	18.7
3/16/2019 8:20	8	8	8	32.79	4.3	4.3	24.5
3/16/2019 8:30	8	8	8	32.73	4.4	4.2	3.4
3/16/2019 8:40	8	8	8	32.76	4.9	4.1	24.3
3/16/2019 8:50	8	8	8	32.76	4.8	4.2	24.7
3/16/2019 9:00	8	8	8	32.73	4.4	4.2	3.5

3/16/2019 9:10	8	8	8	32.7	4.3	4.2	24.4
3/16/2019 9:20	8	8	8	32.73	4.4	4.2	24.7
3/16/2019 9:30	8	8	8	32.64	4.7	4.2	24.3
3/16/2019 9:40	8	8	8	32.52	4.6	4.2	24.6
3/16/2019 9:50	8	8	8	32.64	4.4	4.2	3.7
3/16/2019 10:00	8	8	8	32.67	4.7	4.2	24.4
3/16/2019 10:10	8	8	8	32.61	4.5	4.2	24.7
3/16/2019 10:20	8	8	8	32.7	4.6	4.2	1.3
3/16/2019 10:30	8	8	8	32.61	4.4	4.3	24.4
3/16/2019 10:40	8	8	8	32.7	4.5	4.2	3.2
3/16/2019 10:50	8	8	8	32.64	4.5	4.1	24.2
3/16/2019 11:00	8	8	8	32.64	4.4	4.2	24.6
3/16/2019 11:10	8	8	8	32.67	4.5	4.2	3.6
3/16/2019 11:20	8	8	8	32.7	4.5	4.2	24.2
3/16/2019 11:30	8	8	8	32.67	4.3	4.2	24.7
3/16/2019 11:40	8	8	8	32.61	4.3	4.2	3.9
3/16/2019 11:50	8	8	8	32.67	4.4	4.2	24.3
3/16/2019 12:00	8	8	8	32.67	4.4	4.2	24.7
3/16/2019 12:10	8	8	8	32.7	4.4	4.2	4.6
3/16/2019 12:20	8	8	8	32.64	4.5	4.2	24.2
3/16/2019 12:30	8	8	8	32.64	4.5	4.2	24.6
3/16/2019 12:40	8	8	8	32.64	4.7	4.2	4.7
3/16/2019 12:50	8	8	8	32.61	4.5	4.2	24.5
3/16/2019 13:00	8	8	8	32.58	4.3	4.3	24.7
3/16/2019 13:10	8	8	8	32.61	4.4	4.3	4.6
3/16/2019 13:20	8	8	8	32.49	4.3	4.2	24.4
3/16/2019 13:30	8	8	8	32.58	4.3	4.2	24.7
3/16/2019 13:40	8	8	8	32.58	4.4	4.2	3.5
3/16/2019 13:50	8	8	8	32.58	4.4	4.2	24.3
3/16/2019 14:00	8	8	8	32.52	4.3	4.2	24.7
3/16/2019 14:10	8	8	8	32.49	4.6	4.2	3.7
3/16/2019 14:20	8	8	8	32.49	4.5	4.2	24.4
3/16/2019 14:30	8	8	8	32.52	4.3	4.3	24.7
3/16/2019 14:40	8	8	8	32.49	4.3	4.2	4.8
3/16/2019 14:50	8	8	8	32.43	4.5	4.2	24.5
3/16/2019 15:00	8	8	8	32.46	4.5	4.3	24.7
3/16/2019 15:10	8	8	8	32.46	4.5	4.2	4.2
3/16/2019 15:20	8	8	8	32.49	4.4	4.3	24.3
3/16/2019 15:30	8	8	8	32.46	4.3	4.2	24.6
3/16/2019 15:40	8	8	8	32.43	4.3	4.2	4.6
3/16/2019 15:50	8	8	8	32.46	4.5	4.2	24.3
3/16/2019 16:00	8	8	8	32.43	4.5	4.2	24.7
3/16/2019 16:10	8	8	8	32.46	4.5	4.2	2.1
3/16/2019 16:20	8	8	8	32.46	4.6	4.3	24.5
3/16/2019 16:30	8	8	8	32.43	4.4	4.2	24.7
3/16/2019 16:40	8	8	8	32.49	4.4	4.2	1.3
3/16/2019 16:50	8	8	8	32.46	4.2	4.2	24.5

3/16/2019 17:00	8	8	8	32.49	4.6	4.2	24.8
3/16/2019 17:10	8	8	8	32.46	4.2	4.3	1.7
3/16/2019 17:20	8	8	8	32.43	4.2	4.2	24.4
3/16/2019 17:30	8	8	8	32.46	4.5	4.2	24.7
3/16/2019 17:40	8	8	8	32.46	4.5	4.2	3.6
3/16/2019 17:50	8	8	8	32.37	4.6	4.2	24.4
3/16/2019 18:00	8	8	8	32.4	4.5	4.2	24.7
3/16/2019 18:10	8	8	8	32.46	4.5	4.3	2.1
3/16/2019 18:20	8	8	8	32.43	4.4	4.2	24.5
3/16/2019 18:30	8	8	8	32.43	4.7	4.3	24.7
3/16/2019 18:40	8	8	8	32.46	4.3	4.3	2.5
3/16/2019 18:50	8	8	8	32.43	4.4	4.2	24.4
3/16/2019 19:00	8	8	8	32.43	4.4	4.2	24.7
3/16/2019 19:10	8	8	8	32.43	4.5	4.2	1.2
3/16/2019 19:20	8	8	8	32.43	4.3	4.2	24.5
3/16/2019 19:30	8	8	8	32.46	5	4.2	24.8
3/16/2019 19:40	8	8	8	32.46	4.5	4.2	1.5
3/16/2019 19:50	8	8	8	32.31	4.5	4.2	24.5
3/16/2019 20:00	8	8	8	32.34	4.5	4.2	24.7
3/16/2019 20:10	8	8	8	32.34	4.6	4.3	1.3
3/16/2019 20:20	8	8	8	32.4	4.5	4.3	24.6
3/16/2019 20:30	8	8	8	32.37	4.4	4.3	24.8
3/16/2019 20:40	8	8	8	32.37	4.5	4.2	16.4
3/16/2019 20:50	8	8	8	32.34	4.2	4.2	24.5
3/16/2019 21:00	8	8	8	32.34	4.5	4.2	24.7
3/16/2019 21:10	8	8	8	32.34	4.3	4.2	23.6
3/16/2019 21:20	8	8	8	32.34	4.4	4.2	24.6
3/16/2019 21:30	8	8	8	32.34	4.6	4.2	3.2
3/16/2019 21:40	8	8	8	32.37	4.5	4.2	24.3
3/16/2019 21:50	8	8	8	32.28	4.4	4.2	24.7
3/16/2019 22:00	8	8	8	32.28	4.3	4.2	4.3
3/16/2019 22:10	8	8	8	32.25	4.5	4.2	24.4
3/16/2019 22:20	8	8	8	32.28	4.5	4.1	24.7
3/16/2019 22:30	8	8	8	32.21	4.5	4.2	1.4
3/16/2019 22:40	8	8	8	32.28	4.4	4.2	24.6
3/16/2019 22:50	8	8	8	32.31	4.3	4.2	24.8
3/16/2019 23:00	8	8	8	32.25	4.3	4.2	24.5
3/16/2019 23:10	8	8	8	32.28	4.5	4.2	24.7
3/16/2019 23:20	8	8	8	32.12	4.4	4.3	3.3
3/16/2019 23:30	8	8	8	32.25	4.2	4.2	24.2
3/16/2019 23:40	8	8	8	32.21	4.2	4.2	24.7
3/16/2019 23:50	8	8	8	32.25	4.4	4.2	2
3/17/2019 0:00	8	8	8	32.18	4.4	4.3	24.5
3/17/2019 0:10	8	8	8	32.21	4.3	4.2	24.8
3/17/2019 0:20	8	8	8	32.18	4.5	4.3	23.7
3/17/2019 0:30	8	8	8	32.18	4.6	4.2	24.6
3/17/2019 0:40	8	8	8	32.09	4.5	4.1	3.9

3/17/2019 0:50	8	8	8	32.15	4.4	4.2	24.2
3/17/2019 1:00	8	8	8	32.18	4.6	4.2	24.8
3/17/2019 1:10	8	8	8	32.15	4.2	4.3	4.5
3/17/2019 1:20	8	8	8	32.12	4.3	4.1	24.3
3/17/2019 1:30	8	8	8	32.15	4.2	4.1	24.7
3/17/2019 1:40	8	8	8	32.21	4.2	4.2	2.6
3/17/2019 1:50	8	8	8	32.15	4.3	4.2	24.5
3/17/2019 2:00	8	8	8	32.15	4.3	4.2	24.8
3/17/2019 2:10	8	8	8	32.03	4.6	4.2	24.2
3/17/2019 2:20	8	8	8	32.06	4.4	4.2	24.7
3/17/2019 2:30	8	8	8	32.09	4.3	4.2	3.6
3/17/2019 2:40	8	8	8	32.09	4.4	4.2	24.5
3/17/2019 2:50	8	8	8	32.12	4.4	4.2	3.6
3/17/2019 3:00	8	8	8	32.12	4.5	4.2	24.2
3/17/2019 3:10	8	8	8	32.09	4.3	4.2	24.7
3/17/2019 3:20	8	8	8	32.15	4.2	4.2	24.1
3/17/2019 3:30	8	8	8	32.03	4.3	4.3	24.7
3/17/2019 3:40	8	8	8	32.09	4.6	4.2	24.2
3/17/2019 3:50	8	8	8	32.09	4.2	4.2	24.7
3/17/2019 4:00	8	8	8	32.12	4.4	4.2	24.3
3/17/2019 4:10	8	8	8	32.12	4.5	4.2	24.7
3/17/2019 4:20	8	8	8	32.06	4.4	4.2	24.1
3/17/2019 4:30	8	8	8	32.09	4.4	4.2	24.7
3/17/2019 4:40	8	8	8	32.09	4.5	4.3	24.1
3/17/2019 4:50	8	8	8	32.12	4.4	4.3	24.6
3/17/2019 5:00	8	8	8	32.09	4.4	4.3	24.4
3/17/2019 5:10	8	8	8	32.09	4.5	4.2	24.7
3/17/2019 5:20	8	8	8	32.03	4.4	4.2	24.3
3/17/2019 5:30	8	8	8	32.06	4.7	4.2	24.7
3/17/2019 5:40	8	8	8	32.03	4.3	4.2	24.2
3/17/2019 5:50	8	8	8	32.03	4.3	4.2	10.9
3/17/2019 6:00	8	8	8	31.88	4.5	4.2	24.3
3/17/2019 6:10	8	8	8	32.06	4.2	4.2	24.7
3/17/2019 6:20	8	8	8	32.06	4.5	4.2	24.3
3/17/2019 6:30	8	8	8	32.09	4.2	4.2	24.7
3/17/2019 6:40	8	8	8	32.09	4.4	4.2	24.2
3/17/2019 6:50	8	8	8	32	4.6	4.2	24.7
3/17/2019 7:00	8	8	8	32	4.4	4.2	24.2
3/17/2019 7:10	8	8	8	32.03	4.4	4.2	24.7
3/17/2019 7:20	8	8	8	32	4.6	4.1	24.1
3/17/2019 7:30	8	8	8	32.03	4.4	4.2	24.7
3/17/2019 7:40	8	8	8	32	4.6	4.2	24.2
3/17/2019 7:50	8	8	8	32.03	4.4	4.2	24.7
3/17/2019 8:00	8	8	8	32.03	4.4	4.2	3.8
3/17/2019 8:10	8	8	8	32.03	4.3	4.2	24.5
3/17/2019 8:20	8	8	8	32	4.5	4.3	24.8
3/17/2019 8:30	8	8	8	32.06	4.4	4.2	24.4

3/17/2019 8:40	8	8	8	32.06	4.5	4.2	24.6
3/17/2019 8:50	8	8	8	32.12	4.5	4.2	4.7
3/17/2019 9:00	8	8	8	32.15	4.2	4.2	24.3
3/17/2019 9:10	8	8	8	32.03	4.6	4.1	24.7
3/17/2019 9:20	8	8	8	32.03	4.5	4.3	24.1
3/17/2019 9:30	8	8	8	32.06	4.6	4.3	24.6
3/17/2019 9:40	8	8	8	32.03	4.3	4.3	2.3
3/17/2019 9:50	8	8	8	32.09	4.6	4.2	24.5
3/17/2019 10:00	8	8	8	32.06	4.5	4.2	4.2
3/17/2019 10:10	8	8	8	32.06	4.6	4.3	24.4
3/17/2019 10:20	8	8	8	32.09	4.7	4.2	24.7
3/17/2019 10:30	8	8	8	32.06	4.5	4.2	24.3
3/17/2019 10:40	8	8	8	32.12	4.5	4.2	24.7
3/17/2019 10:50	8	8	8	32.12	4.7	4.2	1.7
3/17/2019 11:00	8	8	8	32.03	4.6	4.1	24.5
3/17/2019 11:10	8	8	8	32.06	4.5	4.2	24.8
3/17/2019 11:20	8	8	8	32	4.4	4.2	24.3
3/17/2019 11:30	8	8	8	32.06	4.4	4.2	24.7
3/17/2019 11:40	8	8	8	32.03	4.1	4.1	2.7
3/17/2019 11:50	8	8	8	32.03	4.4	4.2	24.4
3/17/2019 12:00	8	8	8	32.03	4.2	4.2	3.2
3/17/2019 12:10	8	8	8	32.03	4.4	4.2	24.3
3/17/2019 12:20	8	8	8	32.03	4.5	4.2	24.7
3/17/2019 12:30	8	8	8	32.03	4.5	4.3	24.2
3/17/2019 12:40	8	8	8	31.94	4.4	4.3	24.7
3/17/2019 12:50	8	8	8	32	4.3	4.3	1.7
3/17/2019 13:00	8	8	8	32	4.4	4.3	24.5
3/17/2019 13:10	8	8	8	32	4.5	4.3	4.2
3/17/2019 13:20	8	8	8	31.94	4.4	4.3	24.4
3/17/2019 13:30	8	8	8	31.97	4.4	4.3	3.3
3/17/2019 13:40	8	8	8	31.94	4.6	4.3	24.2
3/17/2019 13:50	8	8	8	31.97	4.6	4.4	24.7
3/17/2019 14:00	8	8	8	31.88	4.4	4.3	24.1
3/17/2019 14:10	8	8	8	31.94	4.3	4.3	24.7
3/17/2019 14:20	8	8	8	32.03	4.3	4.3	24.1
3/17/2019 14:30	8	8	8	31.94	4.4	4.3	24.7
3/17/2019 14:40	8	8	8	31.97	4.4	4.3	23.5
3/17/2019 14:50	8	8	8	31.79	4.3	4.3	24.6
3/17/2019 15:00	8	8	8	31.94	4.2	4.3	2.3
3/17/2019 15:10	8	8	8	31.94	4.6	4.3	24.5
3/17/2019 15:20	8	8	8	31.94	4.4	4.3	4.1
3/17/2019 15:30	8	8	8	31.94	4.2	4.3	24.4
3/17/2019 15:40	8	8	8	31.94	4.5	4.3	3.4
3/17/2019 15:50	8	8	8	32.03	4.5	4.3	24.3
3/17/2019 16:00	8	8	8	31.97	4.5	4.3	24.7
3/17/2019 16:10	8	8	8	31.94	4.5	4.2	24.2
3/17/2019 16:20	8	8	8	31.88	4.5	4.2	24.6

3/17/2019 16:30	8	8	8	32	4.4	4.3	1.4
3/17/2019 16:40	8	8	8	31.85	4.3	4.3	24.6
3/17/2019 16:50	8	8	8	31.79	4.5	4.3	4.3
3/17/2019 17:00	8	8	8	31.82	4.2	4.3	24.5
3/17/2019 17:10	8	8	8	31.82	4.4	4.2	3.9
3/17/2019 17:20	8	8	8	31.85	4.5	4.3	24.4
3/17/2019 17:30	8	8	8	31.79	4.6	4.3	3.6
3/17/2019 17:40	8	8	8	31.88	4.5	4.3	24.2
3/17/2019 17:50	8	8	8	31.82	4.3	4.2	24.7
3/17/2019 18:00	8	8	8	31.79	4.4	4.3	24.1
3/17/2019 18:10	8	8	8	31.85	4.6	4.3	24.7
3/17/2019 18:20	8	8	8	31.82	4.5	4.3	1.4
3/17/2019 18:30	8	8	8	31.82	4.3	4.2	24.6
3/17/2019 18:40	8	8	8	31.76	4.4	4.2	3.4
3/17/2019 18:50	8	8	8	31.85	4	4.2	24.5
3/17/2019 19:00	8	8	8	31.79	4.4	4.3	4.2
3/17/2019 19:10	8	8	8	31.82	4.6	4.2	24.4
3/17/2019 19:20	8	8	8	31.76	4.4	4.2	3.3
3/17/2019 19:30	8	8	8	31.76	4.3	4.3	24.3
3/17/2019 19:40	8	8	8	31.73	4.5	4.2	24.8
3/17/2019 19:50	8	8	8	31.79	4.5	4.2	24.2
3/17/2019 20:00	8	8	8	31.82	4.2	4.2	24.6
3/17/2019 20:10	8	8	8	31.79	4.4	4.2	24.1
3/17/2019 20:20	8	8	8	31.79	4.5	4.2	24.6
3/17/2019 20:30	8	8	8	31.76	4.3	4.2	2.1
3/17/2019 20:40	8	8	8	31.79	4.4	4.2	24.6
3/17/2019 20:50	8	8	8	31.73	4.4	4.2	1.8
3/17/2019 21:00	8	8	8	31.7	4.6	4.1	24.5
3/17/2019 21:10	8	8	8	31.76	4.3	4.2	4.7
3/17/2019 21:20	8	8	8	31.73	4.2	4.2	24.4
3/17/2019 21:30	8	8	8	31.73	4.5	4.2	4
3/17/2019 21:40	8	8	8	31.7	4.4	4.2	24.3
3/17/2019 21:50	8	8	8	31.73	4.7	4.3	24.8
3/17/2019 22:00	8	8	8	31.7	4.5	4.2	24.3
3/17/2019 22:10	8	8	8	31.67	4.3	4.2	24.7
3/17/2019 22:20	8	8	8	31.7	4.5	4.2	24.2
3/17/2019 22:30	8	8	8	31.67	4.4	4.2	24.7
3/17/2019 22:40	8	8	8	31.7	4.3	4.1	24.1
3/17/2019 22:50	8	8	8	31.63	4.4	4.2	24.6
3/17/2019 23:00	8	8	8	31.7	4.3	4.2	1.9
3/17/2019 23:10	8	8	8	31.7	4.6	4.2	24.6
3/17/2019 23:20	8	8	8	31.6	4.5	4.2	3.5
3/17/2019 23:30	8	8	8	31.6	4.6	4.2	24.6
3/17/2019 23:40	8	8	8	31.6	4.5	4.2	2.9
3/17/2019 23:50	8	8	8	31.6	4.4	4.1	24.5
3/18/2019 0:00	8	8	8	31.51	4.3	4.2	3.4
3/18/2019 0:10	8	8	8	31.57	4.2	4.2	24.6

3/18/2019 0:20	8	8	8	31.57	4.5	4.1	4.4
3/18/2019 0:30	8	8	8	31.6	4.5	4.2	24.5
3/18/2019 0:40	8	8	8	31.57	4.5	4.2	3.4
3/18/2019 0:50	8	8	8	31.67	4.2	4.2	24.5
3/18/2019 1:00	8	8	8	31.57	4.5	4.1	4.6
3/18/2019 1:10	8	8	8	31.54	4.5	4.2	24.3
3/18/2019 1:20	8	8	8	31.54	4.6	4.2	24.7
3/18/2019 1:30	8	8	8	31.57	4.3	4.1	24.2
3/18/2019 1:40	8	8	8	31.54	4.5	4.2	24.7
3/18/2019 1:50	8	8	8	31.57	4.6	4.2	24.2
3/18/2019 2:00	8	8	8	31.51	4.3	4.2	24.9
3/18/2019 2:10	8	8	8	31.48	4.6	4.1	24.2
3/18/2019 2:20	8	8	8	31.45	4.2	4.2	24.7
3/18/2019 2:30	8	8	8	31.51	4.2	4.2	24.2
3/18/2019 2:40	8	8	8	31.54	4.7	4.2	24.7
3/18/2019 2:50	8	8	8	31.54	4.4	4.2	24.2
3/18/2019 3:00	8	8	8	31.45	4.3	4.2	24.7
3/18/2019 3:10	8	8	8	31.51	4	4.2	24.1
3/18/2019 3:20	8	8	8	31.54	4.4	4.1	24.7
3/18/2019 3:30	8	8	8	31.57	4.4	4.2	24.1
3/18/2019 3:40	8	8	8	31.57	4.3	4.2	24.6
3/18/2019 3:50	8	8	8	31.54	4.3	4.2	11.2
3/18/2019 4:00	8	8	8	31.6	4.4	4.2	24.6
3/18/2019 4:10	8	8	8	31.51	4.6	4.2	3.4
3/18/2019 4:20	8	8	8	31.42	4.2	4.3	24.6
3/18/2019 4:30	8	8	8	31.54	4.5	4.2	1.5
3/18/2019 4:40	8	8	8	31.48	4.4	4.1	24.6
3/18/2019 4:50	8	8	8	31.51	4.4	4.2	1.5
3/18/2019 5:00	8	8	8	31.54	4.1	4.2	24.5
3/18/2019 5:10	8	8	8	31.45	4.5	4.2	3.1
3/18/2019 5:20	8	8	8	31.51	4.5	4.2	24.4
3/18/2019 5:30	8	8	8	31.6	4.5	4.2	4.3
3/18/2019 5:40	8	8	8	31.51	4.7	4.2	24.5
3/18/2019 5:50	8	8	8	31.51	4.4	4.2	3.8
3/18/2019 6:00	8	8	8	31.48	4.4	4.2	24.5
3/18/2019 6:10	8	8	8	31.54	4.9	4.2	3.8
3/18/2019 6:20	8	8	8	31.48	4.4	4.2	24.5
3/18/2019 6:30	8	8	8	31.48	4.3	4.2	4.3
3/18/2019 6:40	8	8	8	31.6	4.6	4.2	24.4
3/18/2019 6:50	8	8	8	31.54	4.4	4.2	3.5
3/18/2019 7:00	8	8	8	31.51	4.3	4.2	24.4
3/18/2019 7:10	8	8	8	31.54	4.4	4.2	4.5
3/18/2019 7:20	8	8	8	31.54	4.6	4.1	24.5
3/18/2019 7:30	8	8	8	31.54	4.4	4.2	3.3
3/18/2019 7:40	8	8	8	31.54	4.6	4.2	24.5
3/18/2019 7:50	8	8	8	31.51	4.4	4.1	5.2
3/18/2019 8:00	8	8	8	31.51	4.2	4.2	24.3

3/18/2019 8:10	8	8	8	31.51	4.4	4.2	3.6
3/18/2019 8:20	8	8	8	31.51	4.3	4.3	24.5
3/18/2019 8:30	8	8	8	31.48	4.3	4.2	3.4
3/18/2019 8:40	8	8	8	31.48	4.5	4.2	24.5
3/18/2019 8:50	8	8	8	31.54	4.3	4.2	3.3
3/18/2019 9:00	8	8	8	31.48	4.4	4.2	24.4
3/18/2019 9:10	8	8	8	31.45	4.3	4.2	23.6
3/18/2019 9:20	8	8	8	31.45	4.7	4.1	24.5
3/18/2019 9:30	8	8	8	31.45	4.5	4.2	4.8
3/18/2019 9:40	8	8	8	31.39	4.3	4.3	24.4
3/18/2019 9:50	8	8	8	31.45	4.3	4.3	3.3
3/18/2019 10:00	8	8	8	31.48	4.6	4.3	24.4
3/18/2019 10:10	8	8	8	31.45	4.4	4.2	3.3
3/18/2019 10:20	8	8	8	31.48	4.1	4.2	24.4
3/18/2019 10:30	8	8	8	31.39	4.3	4.3	3.3
3/18/2019 10:40	8	8	8	31.48	4.3	4.3	24.5
3/18/2019 10:50	8	8	8	31.45	4.4	4.3	4.1
3/18/2019 11:00	8	8	8	31.39	4.4	4.3	24.5
3/18/2019 11:10	8	8	8	31.45	4.4	4.2	3.9
3/18/2019 11:20	8	8	8	31.45	4.4	4.3	24.6
3/18/2019 11:30	8	8	8	31.45	4.3	4.3	4.4
3/18/2019 11:40	8	8	8	31.45	4.5	4.3	24.5
3/18/2019 11:50	8	8	8	31.42	4.5	4.3	4.7
3/18/2019 12:00	8	8	8	31.45	4.1	4.3	24.4
3/18/2019 12:10	8	8	8	31.48	4.2	4.5	4.2
3/18/2019 12:20	8	8	8	31.42	4.4	4.4	24.5
3/18/2019 12:30	8	8	8	31.45	4.8	4.3	2.6
3/18/2019 12:40	8	8	8	31.39	4.6	4.4	24.6
3/18/2019 12:50	8	8	8	31.39	4.5	4.3	3.9
3/18/2019 13:00	8	8	8	31.42	4.7	4.3	24.5
3/18/2019 13:10	8	8	8	31.45	4.4	4.3	4.6
3/18/2019 13:20	8	8	8	31.42	4.6	4.3	24.5
3/18/2019 13:30	8	8	8	31.48	4.5	4.3	3.7
3/18/2019 13:40	8	8	8	31.42	4.4	4.4	24.4
3/18/2019 13:50	8	8	8	31.45	4.4	4.4	4.6
3/18/2019 14:00	8	8	8	31.45	4.4	4.4	24.4
3/18/2019 14:10	8	8	8	31.45	4.2	4.3	3.7
3/18/2019 14:20	8	8	8	31.42	4.5	4.3	24.5
3/18/2019 14:30	8	8	8	31.45	4.5	4.2	3.7
3/18/2019 14:40	8	8	8	31.45	4.4	4.3	24.5
3/18/2019 14:50	8	8	8	31.48	4.4	4.3	3.2
3/18/2019 15:00	8	8	8	31.45	4.6	4.4	24.7
3/18/2019 15:10	8	8	8	31.45	4.1	4.3	2.6
3/18/2019 15:20	8	8	8	31.42	4.6	4.3	24.5
3/18/2019 15:30	8	8	8	31.36	4.2	4.2	2.6
3/18/2019 15:40	8	8	8	31.42	4.3	4.3	24.5
3/18/2019 15:50	8	8	8	31.45	4.5	4.3	1.8

3/18/2019 16:00	8	8	8	31.45	4.5	4.2	24.5
3/18/2019 16:10	8	8	8	31.39	4.2	4.2	2
3/18/2019 16:20	8	8	8	31.54	4.5	4.2	24.5
3/18/2019 16:30	8	8	8	31.39	4.4	4.2	3.4
3/18/2019 16:40	8	8	8	31.48	4.5	4.2	24.6
3/18/2019 16:50	8	8	8	31.42	4.6	4.2	1.8
3/18/2019 17:00	8	8	8	31.48	4.4	4.2	24.5
3/18/2019 17:10	8	8	8	31.42	4.4	4.2	2.4
3/18/2019 17:20	8	8	8	31.51	4.4	4.2	24.6
3/18/2019 17:30	8	8	8	31.48	4.4	4.2	3.9
3/18/2019 17:40	8	8	8	31.51	4.4	4.2	24.4
3/18/2019 17:50	8	8	8	31.39	4.4	4.3	4.2
3/18/2019 18:00	8	8	8	31.45	4.4	4.2	24.4
3/18/2019 18:10	8	8	8	31.45	4.6	4.2	4.7
3/18/2019 18:20	8	8	8	31.48	4.3	4.2	24.5
3/18/2019 18:30	8	8	8	31.45	4.5	4.3	3.4
3/18/2019 18:40	8	8	8	31.48	4.2	4.2	24.6
3/18/2019 18:50	8	8	8	31.45	4.4	4.2	4.3
3/18/2019 19:00	8	8	8	31.36	4.4	4.3	24.5
3/18/2019 19:10	8	8	8	31.45	4.5	4.2	4.5
3/18/2019 19:20	8	8	8	31.45	4.6	4.2	24.5
3/18/2019 19:30	8	8	8	31.42	4.5	4.2	4.3
3/18/2019 19:40	8	8	8	31.36	4.4	4.2	24.5
3/18/2019 19:50	8	8	8	31.42	4.4	4.2	4.1
3/18/2019 20:00	8	8	8	31.42	4.3	4.2	24.4
3/18/2019 20:10	8	8	8	31.39	4.4	4.2	4.3
3/18/2019 20:20	8	8	8	31.42	4.3	4.2	24.6
3/18/2019 20:30	8	8	8	31.39	4.4	4.2	1.4
3/18/2019 20:40	8	8	8	31.33	4.3	4.2	24.6
3/18/2019 20:50	8	8	8	31.39	4.3	4.2	1.3
3/18/2019 21:00	8	8	8	31.39	4.6	4.2	24.6
3/18/2019 21:10	8	8	8	31.39	4.5	4.2	1.2
3/18/2019 21:20	8	8	8	31.42	4.5	4.2	24.6
3/18/2019 21:30	8	8	8	31.45	4.2	4.2	10.9
3/18/2019 21:40	8	8	8	31.39	4.4	4.2	24.6
3/18/2019 21:50	8	8	8	31.45	4.5	4.2	14.3
3/18/2019 22:00	8	8	8	31.48	4.2	4.1	24.6
3/18/2019 22:10	8	8	8	31.48	4.4	4.1	18.7
3/18/2019 22:20	8	8	8	31.39	4.5	4.2	24.6
3/18/2019 22:30	8	8	8	31.48	4.2	4.2	22.3
3/18/2019 22:40	8	8	8	31.51	4.3	4.1	24.7
3/18/2019 22:50	8	8	8	31.33	4.2	4.2	24
3/18/2019 23:00	8	8	8	31.45	4.6	4.2	24.7
3/18/2019 23:10	8	8	8	31.45	4.3	4.2	1.4
3/18/2019 23:20	8	8	8	31.42	4.4	4.2	24.6
3/18/2019 23:30	8	8	8	31.45	4.6	4.2	3.6
3/18/2019 23:40	8	8	8	31.48	4.2	4.2	24.4

3/18/2019 23:50	8	8	8	31.45	4.4	4.1	4.7
3/19/2019 0:00	8	8	8	31.36	4.7	4.2	24.4
3/19/2019 0:10	8	8	8	31.42	4.5	4.2	3.9
3/19/2019 0:20	8	8	8	31.48	4.7	4.2	24.5
3/19/2019 0:30	8	8	8	31.42	4.5	4.1	3.9
3/19/2019 0:40	8	8	8	31.51	4.3	4.2	24.5
3/19/2019 0:50	8	8	8	31.45	4.5	4.2	4.8
3/19/2019 1:00	8	8	8	31.39	4.7	4.2	24.4
3/19/2019 1:10	8	8	8	31.39	4.4	4.2	3.6
3/19/2019 1:20	8	8	8	31.45	4.5	4.2	24.5
3/19/2019 1:30	8	8	8	31.45	4.3	4.2	5.2
3/19/2019 1:40	8	8	8	31.39	4.6	4.2	24.5
3/19/2019 1:50	8	8	8	31.45	4.7	4.1	4.9
3/19/2019 2:00	8	8	8	31.48	4.4	4.2	24.3
3/19/2019 2:10	8	8	8	31.48	4.4	4.2	24.8
3/19/2019 2:20	8	8	8	31.54	4.5	4.2	24.4
3/19/2019 2:30	8	8	8	31.48	4.3	4.2	24.7
3/19/2019 2:40	8	8	8	31.48	4.6	4.2	24.2
3/19/2019 2:50	8	8	8	31.48	4.5	4.1	24.6
3/19/2019 3:00	8	8	8	31.51	4.3	4	24.1
3/19/2019 3:10	8	8	8	31.54	4.5	4.2	24.7
3/19/2019 3:20	8	8	8	31.42	4.8	4.1	24.1
3/19/2019 3:30	8	8	8	31.45	4.4	4.2	24.8
3/19/2019 3:40	8	8	8	31.42	4.9	4.2	24.2
3/19/2019 3:50	8	8	8	31.51	4.6	4.2	24.8
3/19/2019 4:00	8	8	8	31.39	4.6	4.2	24.3
3/19/2019 4:10	8	8	8	31.39	4.4	4.2	24.8
3/19/2019 4:20	8	8	8	31.45	4.4	4	24.2
3/19/2019 4:30	8	8	8	31.42	4.3	4.2	24.7
3/19/2019 4:40	8	8	8	31.39	4.2	4.2	24.2
3/19/2019 4:50	8	8	8	31.3	4.2	4.2	24.8
3/19/2019 5:00	8	8	8	31.39	4.4	4.2	24.3
3/19/2019 5:10	8	8	8	31.42	4.2	4.2	24.7
3/19/2019 5:20	8	8	8	31.39	4.4	4.1	24.2
3/19/2019 5:30	8	8	8	31.39	4.3	4.2	24.7
3/19/2019 5:40	8	8	8	31.39	4.2	4.2	24.2
3/19/2019 5:50	8	8	8	31.45	4.6	4.2	24.7
3/19/2019 6:00	8	8	8	31.42	4.4	4.2	24.3
3/19/2019 6:10	8	8	8	31.48	4.4	4.2	24.7
3/19/2019 6:20	8	8	8	31.42	4.5	4.3	24.3
3/19/2019 6:30	8	8	8	31.42	4.3	4.2	24.7
3/19/2019 6:40	8	8	8	31.39	4.4	4.2	24.1
3/19/2019 6:50	8	8	8	31.45	4.6	4.2	24.7
3/19/2019 7:00	8	8	8	31.45	4.3	4.2	24.2
3/19/2019 7:10	8	8	8	31.42	4.4	4.2	24.7
3/19/2019 7:20	8	8	8	31.39	4.6	4.2	24.2
3/19/2019 7:30	8	8	8	31.42	4.4	4.1	24.7

3/19/2019 7:40	8	8	8	31.45	4.2	4.2	24.1
3/19/2019 7:50	8	8	8	31.39	4.5	4.2	24.7
3/19/2019 8:00	8	8	8	31.45	4.6	4.2	24.3
3/19/2019 8:10	8	8	8	31.45	4.6	4.2	24.7
3/19/2019 8:20	8	8	8	31.51	4.4	4.2	24.2
3/19/2019 8:30	8	8	8	31.51	4.4	4.2	24.7
3/19/2019 8:40	8	8	8	31.45	4.4	4.2	24.2
3/19/2019 8:50	8	8	8	31.48	4.5	4.2	24.7
3/19/2019 9:00	8	8	8	31.36	4.7	4.2	1.4
3/19/2019 9:10	8	8	8	31.48	4.5	4.3	24.5
3/19/2019 9:20	8	8	8	31.48	4.5	4.2	3.5
3/19/2019 9:30	8	8	8	31.48	4.8	4.3	24.5
3/19/2019 9:40	8	8	8	31.48	4.4	4.2	3.9
3/19/2019 9:50	8	8	8	31.45	4.1	4.2	24.5
3/19/2019 10:00	8	8	8	31.48	4.3	4.2	3.3
3/19/2019 10:10	8	8	8	31.48	4.3	4.2	24.6
3/19/2019 10:20	8	8	8	31.42	4.5	4.3	1.8
3/19/2019 10:30	8	8	8	31.48	4.4	4.2	24.6
3/19/2019 10:40	8	8	8	31.51	4.4	4.2	1.5
3/19/2019 10:50	8	8	8	31.51	4.3	4.3	24.6
3/19/2019 11:00	8	8	8	31.45	4.6	4.3	3.3
3/19/2019 11:10	8	8	8	31.48	4.5	4.3	24.5
3/19/2019 11:20	8	8	8	31.48	4.3	4.3	4.2
3/19/2019 11:30	8	8	8	31.42	4.4	4.3	24.5
3/19/2019 11:40	8	8	8	31.42	4.4	4.3	4
3/19/2019 11:50	8	8	8	31.42	4.5	4.3	24.4
3/19/2019 12:00	8	8	8	31.42	4.4	4.3	3.9
3/19/2019 12:10	8	8	8	31.33	4.5	4.3	24.4
3/19/2019 12:20	8	8	8	31.27	4.4	4.3	3.9
3/19/2019 12:30	8	8	8	31.39	4.1	4.3	24.5
3/19/2019 12:40	8	8	8	31.33	4.4	4.2	3.3
3/19/2019 12:50	8	8	8	31.3	4.5	4.2	24.4
3/19/2019 13:00	8	8	8	31.36	4.4	4.3	3.4
3/19/2019 13:10	8	8	8	31.3	4.4	4.3	24.4
3/19/2019 13:20	8	8	8	31.39	4.4	4.3	3.4
3/19/2019 13:30	8	8	8	31.27	4.5	4.2	24.5
3/19/2019 13:40	8	8	8	31.36	4.3	4.3	4.7
3/19/2019 13:50	8	8	8	31.36	4.3	4.3	24.5
3/19/2019 14:00	8	8	8	31.36	4.4	4.2	4.7
3/19/2019 14:10	8	8	8	31.33	4.4	4.3	24.5
3/19/2019 14:20	8	8	8	31.33	4.4	4.3	3.9
3/19/2019 14:30	8	8	8	31.36	4.3	4.3	24.5
3/19/2019 14:40	8	8	8	31.39	4.5	4.2	4.7
3/19/2019 14:50	8	8	8	31.27	4.5	4.4	24.4
3/19/2019 15:00	8	8	8	31.42	4.4	4.3	3.9
3/19/2019 15:10	8	8	8	31.3	4.5	4.3	24.5
3/19/2019 15:20	8	8	8	31.33	4.5	4.3	4

3/19/2019 15:30	8	8	8	31.42	4.5	4.3	24.4
3/19/2019 15:40	8	8	8	31.39	4.5	4.3	4.3
3/19/2019 15:50	8	8	8	31.42	4.3	4.3	24.5
3/19/2019 16:00	8	8	8	31.39	4.6	4.2	3.5
3/19/2019 16:10	8	8	8	31.39	4.4	4.2	24.5
3/19/2019 16:20	8	8	8	31.33	4.7	4.2	3.9
3/19/2019 16:30	8	8	8	31.39	4.5	4.3	24.4
3/19/2019 16:40	8	8	8	31.42	4.3	4.3	3.6
3/19/2019 16:50	8	8	8	31.45	4.3	4.2	24.4
3/19/2019 17:00	8	8	8	31.3	4.4	4.3	3.5
3/19/2019 17:10	8	8	8	31.39	4.4	4.2	24.4
3/19/2019 17:20	8	8	8	31.42	4.2	4.2	4.7
3/19/2019 17:30	8	8	8	31.42	4.7	4.2	24.5
3/19/2019 17:40	8	8	8	31.45	4.3	4.3	4.3
3/19/2019 17:50	8	8	8	31.48	4.3	4.3	24.4
3/19/2019 18:00	8	8	8	31.42	4.2	4.2	3.3
3/19/2019 18:10	8	8	8	31.39	4.6	4.2	24.5
3/19/2019 18:20	8	8	8	31.45	4.5	4.2	11
3/19/2019 18:30	8	8	8	31.48	4.6	4.3	24.3
3/19/2019 18:40	8	8	8	31.48	4.5	4.3	24.8
3/19/2019 18:50	8	8	8	31.39	4.2	4.2	24.2
3/19/2019 19:00	8	8	8	31.48	4.1	4.2	24.7
3/19/2019 19:10	8	8	8	31.51	4.5	4.2	24.5
3/19/2019 19:20	8	8	8	31.48	4.4	4.3	24.6
3/19/2019 19:30	8	8	8	31.39	4.4	4.2	1.4
3/19/2019 19:40	8	8	8	31.45	4.3	4.2	24.6
3/19/2019 19:50	8	8	8	31.45	4.5	4.2	3.4
3/19/2019 20:00	8	8	8	31.48	4.6	4.2	24.5
3/19/2019 20:10	8	8	8	31.48	4.6	4.2	4.5
3/19/2019 20:20	8	8	8	31.54	4.2	4.2	24.5
3/19/2019 20:30	8	8	8	31.51	4.5	4.2	3.6
3/19/2019 20:40	8	8	8	31.54	4.4	4.2	24.5
3/19/2019 20:50	8	8	8	31.54	4.2	4.2	3.7
3/19/2019 21:00	8	8	8	31.51	4.3	4.2	24.5
3/19/2019 21:10	8	8	8	31.54	4.4	4.2	3.3
3/19/2019 21:20	8	8	8	31.39	4.4	4.2	24.5
3/19/2019 21:30	8	8	8	31.51	4.3	4.2	4.5
3/19/2019 21:40	8	8	8	31.57	4.5	4.2	24.5
3/19/2019 21:50	8	8	8	31.51	4.4	4.2	3.4
3/19/2019 22:00	8	8	8	31.51	4.4	4.2	24.5
3/19/2019 22:10	8	8	8	31.51	4.6	4.2	3.4
3/19/2019 22:20	8	8	8	31.51	4.5	4.2	24.7
3/19/2019 22:30	8	8	8	31.51	4.3	4.2	2.1
3/19/2019 22:40	8	8	8	31.45	4.4	4.2	24.7
3/19/2019 22:50	8	8	8	31.54	4.4	4.2	1.7
3/19/2019 23:00	8	8	8	31.48	4.3	4.2	24.6
3/19/2019 23:10	8	8	8	31.54	4.6	4.2	1.9

3/19/2019 23:20	8	8	8	31.54	4.4	4.2	24.6
3/19/2019 23:30	8	8	8	31.54	4.3	4.2	3.7
3/19/2019 23:40	8	8	8	31.54	4.3	4.2	24.5
3/19/2019 23:50	8	8	8	31.54	4.2	4.1	4.5
3/20/2019 0:00	8	8	8	31.51	4.5	4.2	24.5
3/20/2019 0:10	8	8	8	31.54	4.6	4.2	4.1
3/20/2019 0:20	8	8	8	31.54	4.3	4.2	24.5
3/20/2019 0:30	8	8	8	31.54	4.6	4.2	2.2
3/20/2019 0:40	8	8	8	31.54	4.3	4.2	24.6
3/20/2019 0:50	8	8	8	31.54	4.4	4.2	2.7
3/20/2019 1:00	8	8	8	31.6	4.3	4.2	24.7
3/20/2019 1:10	8	8	8	31.6	4.1	4.1	1.5
3/20/2019 1:20	8	8	8	31.57	4.3	4.2	24.7
3/20/2019 1:30	8	8	8	31.57	4.6	4.2	23.9
3/20/2019 1:40	8	8	8	31.54	4.5	4.2	24.7
3/20/2019 1:50	8	8	8	31.6	4.5	4.1	23.1
3/20/2019 2:00	8	8	8	31.6	4.7	4.1	24.7
3/20/2019 2:10	8	8	8	31.57	4.4	4.2	24.3
3/20/2019 2:20	8	8	8	31.57	4.5	4.2	24.7
3/20/2019 2:30	8	8	8	31.63	4.4	4.3	24.1
3/20/2019 2:40	8	8	8	31.6	4.6	4.2	24.7
3/20/2019 2:50	8	8	8	31.54	4.4	4.1	24.2
3/20/2019 3:00	8	8	8	31.51	4.4	4.2	24.8
3/20/2019 3:10	8	8	8	31.54	4.6	4.2	24.3
3/20/2019 3:20	8	8	8	31.45	4.4	4.2	24.8
3/20/2019 3:30	8	8	8	31.6	4.2	4.2	24.3
3/20/2019 3:40	8	8	8	31.54	4.4	4.2	3.7
3/20/2019 3:50	8	8	8	31.57	4.6	4.2	24.4
3/20/2019 4:00	8	8	8	31.6	4.4	4.2	3.9
3/20/2019 4:10	8	8	8	31.51	4.4	4.2	24.4
3/20/2019 4:20	8	8	8	31.63	4.5	4.2	24.8
3/20/2019 4:30	8	8	8	31.63	4.5	4.3	24.4
3/20/2019 4:40	8	8	8	31.57	4.6	4.2	23.7
3/20/2019 4:50	8	8	8	31.51	4.6	4.2	24.3
3/20/2019 5:00	8	8	8	31.57	4.4	4.2	4.6
3/20/2019 5:10	8	8	8	31.48	4.4	4.2	24.5
3/20/2019 5:20	8	8	8	31.63	4.4	4.2	3.9
3/20/2019 5:30	8	8	8	31.57	4.4	4.2	24.4
3/20/2019 5:40	8	8	8	31.63	4.7	4.2	4.3
3/20/2019 5:50	8	8	8	31.57	4.2	4.3	24.6
3/20/2019 6:00	8	8	8	31.67	4.6	4.2	1.5
3/20/2019 6:10	8	8	8	31.6	4.6	4.2	24.6
3/20/2019 6:20	8	8	8	31.6	4.3	4.2	23
3/20/2019 6:30	8	8	8	31.63	4	4.2	24.7
3/20/2019 6:40	8	8	8	31.6	4.5	4.3	24.1
3/20/2019 6:50	8	8	8	31.63	4.3	4.2	24.7
3/20/2019 7:00	8	8	8	31.7	5	4.3	6.6

3/20/2019 7:10	8	8	8	31.63	4.4	4.3	24.6
3/20/2019 7:20	8	8	8	31.63	4.4	4.1	24.3
3/20/2019 7:30	8	8	8	31.63	4.4	4.2	24.7
3/20/2019 7:40	8	8	8	31.57	4.4	4.2	24.2
3/20/2019 7:50	8	8	8	31.67	4.4	4.2	24.7
3/20/2019 8:00	8	8	8	31.63	4.3	4.2	24.1
3/20/2019 8:10	8	8	8	31.6	4.4	4.2	24.6
3/20/2019 8:20	8	8	8	31.67	4.6	4.2	24.2
3/20/2019 8:30	8	8	8	31.7	4.5	4.1	24.7
3/20/2019 8:40	8	8	8	31.57	4.4	4.2	24.1
3/20/2019 8:50	8	8	8	31.63	4.5	4.2	24.7
3/20/2019 9:00	8	8	8	31.63	4.3	4.2	24.2
3/20/2019 9:10	8	8	8	31.6	4.5	4.1	24.8
3/20/2019 9:20	8	8	8	31.57	4.4	4.3	24.3
3/20/2019 9:30	8	8	8	31.67	4.4	4.2	3.4
3/20/2019 9:40	8	8	8	31.63	4.6	4.3	24.5
3/20/2019 9:50	8	8	8	31.6	4.4	4.2	3.4
3/20/2019 10:00	8	8	8	31.6	4.4	4.2	24.5
3/20/2019 10:10	8	8	8	31.67	4.5	4.2	4
3/20/2019 10:20	8	8	8	31.7	4.5	4.3	24.5
3/20/2019 10:30	8	8	8	31.67	4.7	4.2	4.5
3/20/2019 10:40	8	8	8	31.63	4.7	4.2	24.6
3/20/2019 10:50	8	8	8	31.7	4.2	4.3	1.9
3/20/2019 11:00	8	8	8	31.73	4.3	4.3	24.6
3/20/2019 11:10	8	8	8	31.7	4.4	4.3	1.3
3/20/2019 11:20	8	8	8	31.7	4.5	4.3	24.7
3/20/2019 11:30	8	8	8	31.76	4.4	4.3	24.2
3/20/2019 11:40	8	8	8	31.73	4.7	4.3	24.7
3/20/2019 11:50	8	8	8	31.73	4.3	4.2	24.1
3/20/2019 12:00	8	8	8	31.63	4.5	4.4	24.8
3/20/2019 12:10	8	8	8	31.67	4.4	4.5	24.1
3/20/2019 12:20	8	8	8	31.67	4.1	4.4	24.7
3/20/2019 12:30	8	8	8	31.67	4.4	4.5	24.2
3/20/2019 12:40	8	8	8	31.7	4.4	4.4	24.7
3/20/2019 12:50	8	8	8	31.7	4.4	4.3	24.2
3/20/2019 13:00	8	8	8	31.7	4.3	4.2	24.7
3/20/2019 13:10	8	8	8	31.73	4.2	4.3	24.2
3/20/2019 13:20	8	8	8	31.73	4.6	4.2	3.2
3/20/2019 13:30	8	8	8	31.67	4.5	4.4	24.4
3/20/2019 13:40	8	8	8	31.7	4.6	4.3	4.5
3/20/2019 13:50	8	8	8	31.73	4.1	4.3	24.4
3/20/2019 14:00	8	8	8	31.73	4.3	4.3	3.4
3/20/2019 14:10	8	8	8	31.7	4.2	4.5	24.4
3/20/2019 14:20	8	8	8	31.73	4.5	4.3	3.8
3/20/2019 14:30	8	8	8	31.63	4.4	4.3	24.5
3/20/2019 14:40	8	8	8	31.73	4.4	4.3	3.8
3/20/2019 14:50	8	8	8	31.67	4.2	4.4	24.5

3/20/2019 15:00	8	8	8	31.73	4.4	4.3	2.6
3/20/2019 15:10	8	8	8	31.7	4.4	4.2	24.5
3/20/2019 15:20	8	8	8	31.73	4.8	4.4	2.7
3/20/2019 15:30	8	8	8	31.63	4.4	4.3	24.6
3/20/2019 15:40	8	8	8	31.67	4.4	4.3	3.5
3/20/2019 15:50	8	8	8	31.73	4.3	4.2	24.6
3/20/2019 16:00	8	8	8	31.76	4.6	4.3	24.2
3/20/2019 16:10	8	8	8	31.82	4.4	4.3	24.8
3/20/2019 16:20	8	8	8	31.76	4.5	4.3	24.3
3/20/2019 16:30	8	8	8	31.85	4.3	4.3	24.7
3/20/2019 16:40	8	8	8	31.73	4.4	4.4	24.1
3/20/2019 16:50	8	8	8	31.82	4.6	4.3	24.7
3/20/2019 17:00	8	8	8	31.82	4.4	4.2	24.1
3/20/2019 17:10	8	8	8	31.82	4.4	4.2	24.7
3/20/2019 17:20	8	8	8	31.76	4.4	4.3	24.1
3/20/2019 17:30	8	8	8	31.82	4.2	4.2	24.8
3/20/2019 17:40	8	8	8	31.73	4.3	4.3	24.3
3/20/2019 17:50	8	8	8	31.88	4.5	4.2	24.7
3/20/2019 18:00	8	8	8	31.82	4.4	4.2	24.3
3/20/2019 18:10	8	8	8	31.82	4.1	4.2	4.8
3/20/2019 18:20	8	8	8	31.79	4.4	4.2	24.4
3/20/2019 18:30	8	8	8	31.6	4.5	4.2	3.3
3/20/2019 18:40	8	8	8	31.82	4.4	4.3	24.4
3/20/2019 18:50	8	8	8	31.76	4.3	4.3	3.8
3/20/2019 19:00	8	8	8	31.82	4.2	4.2	24.4
3/20/2019 19:10	8	8	8	31.76	4.3	4.3	3.5
3/20/2019 19:20	8	8	8	31.76	4.5	4.2	24.6
3/20/2019 19:30	8	8	8	31.79	4.6	4.2	3.4
3/20/2019 19:40	8	8	8	31.82	4.5	4.2	24.6
3/20/2019 19:50	8	8	8	31.76	4.5	4.1	4.5
3/20/2019 20:00	8	8	8	31.85	4.6	4.1	24.4
3/20/2019 20:10	8	8	8	31.79	4.5	4.2	4.5
3/20/2019 20:20	8	8	8	31.88	4.3	4.3	24.6
3/20/2019 20:30	8	8	8	31.85	4.4	4.2	3.3
3/20/2019 20:40	8	8	8	31.85	4.5	4.2	24.5
3/20/2019 20:50	8	8	8	31.85	4.5	4.2	1.5
3/20/2019 21:00	8	8	8	31.82	4.5	4.2	24.6
3/20/2019 21:10	8	8	8	31.82	4.4	4.2	14.2
3/20/2019 21:20	8	8	8	31.88	4.6	4.1	24.6
3/20/2019 21:30	8	8	8	31.85	4.2	4.2	22.3
3/20/2019 21:40	8	8	8	31.88	4.5	4.2	24.7
3/20/2019 21:50	8	8	8	31.82	4.4	4.2	23.8
3/20/2019 22:00	8	8	8	31.82	4.4	4.2	24.7
3/20/2019 22:10	8	8	8	31.76	4.3	4.2	24.1
3/20/2019 22:20	8	8	8	31.85	4.4	4.2	24.7
3/20/2019 22:30	8	8	8	31.82	4.5	4.2	24.2
3/20/2019 22:40	8	8	8	31.82	4.5	4.2	24.7

3/20/2019 22:50	8	8	8	31.85	4.4	4.3	24.3
3/20/2019 23:00	8	8	8	31.82	4.2	4.2	24.7
3/20/2019 23:10	8	8	8	31.85	4.2	4.2	24.3
3/20/2019 23:20	8	8	8	31.88	4.4	4.2	24.8
3/20/2019 23:30	8	8	8	31.82	4.6	4.2	24.5
3/20/2019 23:40	8	8	8	31.88	4.3	4.2	4.6
3/20/2019 23:50	8	8	8	31.97	4.5	4.2	24.4
3/21/2019 0:00	8	8	8	31.88	4.4	4.2	3.3
3/21/2019 0:10	8	8	8	31.85	4.5	4.2	24.3
3/21/2019 0:20	8	8	8	31.85	4.5	4.2	3.2
3/21/2019 0:30	8	8	8	31.79	4.4	4.2	24.5
3/21/2019 0:40	8	8	8	31.82	4.3	4.2	3.5
3/21/2019 0:50	8	8	8	31.85	4.5	4.2	24.4
3/21/2019 1:00	8	8	8	31.94	4.4	4.2	3.4
3/21/2019 1:10	8	8	8	31.85	4.5	4.2	24.4
3/21/2019 1:20	8	8	8	31.82	4.2	4.2	4.9
3/21/2019 1:30	8	8	8	31.94	4.3	4.2	24.5
3/21/2019 1:40	8	8	8	31.82	4.4	4.1	3.3
3/21/2019 1:50	8	8	8	31.88	4.7	4.2	24.4
3/21/2019 2:00	8	8	8	31.88	4.6	4.2	4.4
3/21/2019 2:10	8	8	8	31.88	4.3	4.1	24.5
3/21/2019 2:20	8	8	8	31.82	4.5	4.2	3.8
3/21/2019 2:30	8	8	8	31.85	4.4	4.2	24.5
3/21/2019 2:40	8	8	8	31.85	4.4	4.2	4.1
3/21/2019 2:50	8	8	8	31.82	4.9	4.2	24.5
3/21/2019 3:00	8	8	8	32	4.3	4.2	4.6
3/21/2019 3:10	8	8	8	31.94	4.5	4.3	24.5
3/21/2019 3:20	8	8	8	31.94	4.7	4.2	4.3
3/21/2019 3:30	8	8	8	31.88	4.5	4.2	24.5
3/21/2019 3:40	8	8	8	32	4.3	4.2	4
3/21/2019 3:50	8	8	8	31.94	4.4	4.2	24.5
3/21/2019 4:00	8	8	8	31.97	4.3	4.2	3.8
3/21/2019 4:10	8	8	8	31.94	4.5	4.2	24.5
3/21/2019 4:20	8	8	8	31.94	4.3	4.2	4.3
3/21/2019 4:30	8	8	8	31.85	4.3	4.2	24.5
3/21/2019 4:40	8	8	8	31.94	4.4	4.2	3.6
3/21/2019 4:50	8	8	8	31.97	4.4	4.2	24.4
3/21/2019 5:00	8	8	8	31.88	4.3	4.2	3.5
3/21/2019 5:10	8	8	8	31.94	4.3	4.2	24.6
3/21/2019 5:20	8	8	8	31.85	4.5	4.2	3.3
3/21/2019 5:30	8	8	8	31.97	4.5	4.1	24.6
3/21/2019 5:40	8	8	8	31.88	4.2	4.2	1.8
3/21/2019 5:50	8	8	8	31.94	4.2	4.2	24.6
3/21/2019 6:00	8	8	8	31.85	4.6	4.2	2.5
3/21/2019 6:10	8	8	8	31.85	4.4	4.2	24.5
3/21/2019 6:20	8	8	8	31.88	4.4	4.2	2.6
3/21/2019 6:30	8	8	8	31.97	4.5	4.2	24.6

3/21/2019 6:40	8	8	8	31.85	4.3	4.2	1.6
3/21/2019 6:50	8	8	8	31.94	4.2	4.2	24.6
3/21/2019 7:00	8	8	8	31.94	4.5	4.2	1.5
3/21/2019 7:10	8	8	8	31.94	4.2	4.2	24.7
3/21/2019 7:20	8	8	8	31.97	4.6	4.2	1.5
3/21/2019 7:30	8	8	8	31.97	4.4	4.2	24.6
3/21/2019 7:40	8	8	8	31.94	4.3	4.2	2.9
3/21/2019 7:50	8	8	8	31.94	4.2	4.2	24.5
3/21/2019 8:00	8	8	8	31.94	4.4	4.2	1.6
3/21/2019 8:10	8	8	8	31.97	4.7	4.2	24.7
3/21/2019 8:20	8	8	8	31.97	4.6	4.2	1.6
3/21/2019 8:30	8	8	8	31.97	4.2	4.2	24.6
3/21/2019 8:40	8	8	8	31.97	4.3	4.2	3.5
3/21/2019 8:50	8	8	8	31.94	4.3	4.3	24.5
3/21/2019 9:00	8	8	8	31.94	4.4	4.3	4.2
3/21/2019 9:10	8	8	8	32	4.4	4.3	24.5
3/21/2019 9:20	8	8	8	32	4.6	4.2	4.7
3/21/2019 9:30	8	8	8	32.03	3.8	4.3	24.4
3/21/2019 9:40	8	8	8	31.97	4.7	4.2	3.5
3/21/2019 9:50	8	8	8	31.97	4.3	4.2	24.4
3/21/2019 10:00	8	8	8	32	4.5	4.2	3.4
3/21/2019 10:10	8	8	8	31.97	4.6	4.2	24.4
3/21/2019 10:20	8	8	8	32	4.3	4.2	4.7
3/21/2019 10:30	8	8	8	32	4.4	4.2	24.3
3/21/2019 10:40	8	8	8	32.03	4.3	4.3	24.8
3/21/2019 10:50	8	8	8	32	4.6	4.3	24.3
3/21/2019 11:00	8	8	8	32.03	4.4	4.1	24.7
3/21/2019 11:10	8	8	8	32.03	4.2	4.3	24.2
3/21/2019 11:20	8	8	8	32	4.2	4.3	24.7
3/21/2019 11:30	8	8	8	32.03	4.4	4.2	24.2
3/21/2019 11:40	8	8	8	31.94	4.6	4.2	24.8
3/21/2019 11:50	8	8	8	32.03	4.2	4.2	24.3
3/21/2019 12:00	8	8	8	32.12	4.4	4.3	24.7
3/21/2019 12:10	8	8	8	32.09	4.5	4.3	24.1
3/21/2019 12:20	8	8	8	32.09	4.3	4.3	24.7
3/21/2019 12:30	8	8	8	32.06	4.6	4.3	20.8
3/21/2019 12:40	8	8	8	32.09	3.9	4.3	24.6
3/21/2019 12:50	8	8	8	32.09	4.5	4.3	1.9
3/21/2019 13:00	8	8	8	32.12	4.3	4.2	24.5
3/21/2019 13:10	8	8	8	32.09	4.6	4.4	4.4
3/21/2019 13:20	8	8	8	32.03	4.2	4.2	24.5
3/21/2019 13:30	8	8	8	32.06	4.5	4.3	3.4
3/21/2019 13:40	8	8	8	32.12	4.5	4.3	24.4
3/21/2019 13:50	8	8	8	32.09	4.5	4.3	3.3
3/21/2019 14:00	8	8	8	32	4.5	4.3	24.3
3/21/2019 14:10	8	8	8	32.15	4.3	4.2	3.3
3/21/2019 14:20	8	8	8	32.12	4.5	4.2	24.4

3/21/2019 14:30	8	8	8	32.15	4.4	4.3	4.7
3/21/2019 14:40	8	8	8	32.15	4.7	4.2	24.3
3/21/2019 14:50	8	8	8	32.12	4.7	4.2	24.7
3/21/2019 15:00	8	8	8	32.34	4.2	4.2	24.3
3/21/2019 15:10	8	8	8	32.15	4.2	4.2	24.7
3/21/2019 15:20	8	8	8	32.21	4.6	4.3	24.3
3/21/2019 15:30	8	8	8	32.21	4.7	4.1	24.7
3/21/2019 15:40	8	8	8	32.28	4.6	4.2	24.1
3/21/2019 15:50	8	8	8	32.25	4.4	4.2	24.7
3/21/2019 16:00	8	8	8	32.25	4.4	4.2	20.8
3/21/2019 16:10	8	8	8	32.28	4.2	4.3	24.6
3/21/2019 16:20	8	8	8	32.21	4.4	4.2	1.7
3/21/2019 16:30	8	8	8	32.28	4.3	4.3	24.6
3/21/2019 16:40	8	8	8	32.28	4.8	4.3	4.6
3/21/2019 16:50	8	8	8	32.28	4.6	4.3	24.5
3/21/2019 17:00	8	8	8	32.25	4.4	4.2	3.7
3/21/2019 17:10	8	8	8	32.25	4.3	4.2	24.3
3/21/2019 17:20	8	8	8	32.25	4.2	4.2	24.7
3/21/2019 17:30	8	8	8	32.34	4.6	4.2	24.2
3/21/2019 17:40	8	8	8	32.31	4.6	4.2	24.7
3/21/2019 17:50	8	8	8	32.31	4.3	4.2	24.1
3/21/2019 18:00	8	8	8	32.28	4.1	4.3	24.6
3/21/2019 18:10	8	8	8	32.25	4.5	4.2	1.4
3/21/2019 18:20	8	8	8	32.21	4.4	4.2	24.6
3/21/2019 18:30	8	8	8	32.21	4.4	4.2	4
3/21/2019 18:40	8	8	8	32.25	4.6	4.2	24.4
3/21/2019 18:50	8	8	8	32.21	4.5	4.3	3.4
3/21/2019 19:00	8	8	8	32.28	4.2	4.3	24.4
3/21/2019 19:10	8	8	8	32.21	4.7	4.2	23.6
3/21/2019 19:20	8	8	8	32.28	4.5	4.3	24.2
3/21/2019 19:30	8	8	8	32.21	4.2	4.2	24.7
3/21/2019 19:40	8	8	8	32.25	4.4	4.3	24.2
3/21/2019 19:50	8	8	8	32.25	4.6	4.3	24.7
3/21/2019 20:00	8	8	8	32.18	4.5	4.2	24.2
3/21/2019 20:10	8	8	8	32.28	4.4	4.3	24.6
3/21/2019 20:20	8	8	8	32.25	4.3	4.2	1.4
3/21/2019 20:30	8	8	8	32.21	4.5	4.2	24.6
3/21/2019 20:40	8	8	8	32.21	4.3	4.2	4.2
3/21/2019 20:50	8	8	8	32.28	4.5	4.2	24.5
3/21/2019 21:00	8	8	8	32.25	4.4	4.2	3.3
3/21/2019 21:10	8	8	8	32.25	4.3	4.2	24.3
3/21/2019 21:20	8	8	8	32.28	4.6	4.2	24.7
3/21/2019 21:30	8	8	8	32.18	4.5	4.3	24.3
3/21/2019 21:40	8	8	8	32.28	4.5	4.3	24.7
3/21/2019 21:50	8	8	8	32.28	4.4	4.2	24.2
3/21/2019 22:00	8	8	8	32.25	4.5	4.2	24.7
3/21/2019 22:10	8	8	8	32.28	4.6	4.2	11.2

3/21/2019 22:20	8	8	8	32.28	4.5	4.2	24.6
3/21/2019 22:30	8	8	8	32.25	4.3	4.2	2.5
3/21/2019 22:40	8	8	8	32.28	4.6	4.2	24.5
3/21/2019 22:50	8	8	8	32.21	4.6	4.3	4.8
3/21/2019 23:00	8	8	8	32.31	4.4	4.2	24.5
3/21/2019 23:10	8	8	8	32.18	4.4	4.2	3.3
3/21/2019 23:20	8	8	8	32.28	4.5	4.1	24.3
3/21/2019 23:30	8	8	8	32.31	4.6	4.2	24.8
3/21/2019 23:40	8	8	8	32.28	4.5	4.2	24.2
3/21/2019 23:50	8	8	8	32.21	4.3	4.2	24.7
3/22/2019 0:00	8	8	8	32.34	4.4	4.2	1.3
3/22/2019 0:10	8	8	8	32.31	4.6	4.3	24.6
3/22/2019 0:20	8	8	8	32.34	4.4	4.2	3.6
3/22/2019 0:30	8	8	8	32.25	4.4	4.2	24.3
3/22/2019 0:40	8	8	8	32.34	4.4	4.3	24.7
3/22/2019 0:50	8	8	8	32.37	4.5	4.2	24.4
3/22/2019 1:00	8	8	8	32.37	4.3	4.3	24.6
3/22/2019 1:10	8	8	8	32.37	4.2	4.2	3.9
3/22/2019 1:20	8	8	8	32.34	4.1	4.2	24.5
3/22/2019 1:30	8	8	8	32.43	4.3	4.3	3.7
3/22/2019 1:40	8	8	8	32.43	4.2	4.2	24.3
3/22/2019 1:50	8	8	8	32.43	4.3	4.2	24.7
3/22/2019 2:00	8	8	8	32.43	4.5	4.2	24.3
3/22/2019 2:10	8	8	8	32.49	4.4	4.2	24.6
3/22/2019 2:20	8	8	8	32.4	4.7	4.2	4
3/22/2019 2:30	8	8	8	32.4	4.4	4.3	24.5
3/22/2019 2:40	8	8	8	32.43	4.4	4.2	24.7
3/22/2019 2:50	8	8	8	32.43	4.6	4.3	24.3
3/22/2019 3:00	8	8	8	32.4	4.4	4.2	24.6
3/22/2019 3:10	8	8	8	32.46	4.7	4.2	2.6
3/22/2019 3:20	8	8	8	32.49	4.8	4.2	24.5
3/22/2019 3:30	8	8	8	32.4	4.4	4.2	4.1
3/22/2019 3:40	8	8	8	32.46	4.6	4.3	24.4
3/22/2019 3:50	8	8	8	32.37	4.5	4.2	24.7
3/22/2019 4:00	8	8	8	32.46	4.4	4.2	22.2
3/22/2019 4:10	8	8	8	32.28	4.5	4.2	24.6
3/22/2019 4:20	8	8	8	32.37	4.4	4.2	4.1
3/22/2019 4:30	8	8	8	32.37	4.5	4.2	24.4
3/22/2019 4:40	8	8	8	32.37	4.6	4.2	24.7
3/22/2019 4:50	8	8	8	32.4	4.8	4.2	24.2
3/22/2019 5:00	8	8	8	32.34	4.3	4.2	24.6
3/22/2019 5:10	8	8	8	32.34	4.6	4.3	3.2
3/22/2019 5:20	8	8	8	32.4	4.6	4.2	24.5
3/22/2019 5:30	8	8	8	32.46	4.3	4.2	4
3/22/2019 5:40	8	8	8	32.43	4.4	4.2	24.2
3/22/2019 5:50	8	8	8	32.43	4.4	4.2	24.7
3/22/2019 6:00	8	8	8	32.4	4.5	4.3	10.5

3/22/2019 6:10	8	8	8	32.43	4.4	4.2	24.6
3/22/2019 6:20	8	8	8	32.49	4.5	4.2	3.8
3/22/2019 6:30	8	8	8	32.52	4.3	4.2	24.4
3/22/2019 6:40	8	8	8	32.43	4.4	4.2	24.7
3/22/2019 6:50	8	8	8	32.46	4.6	4.1	24.2
3/22/2019 7:00	8	8	8	32.4	4.5	4.2	24.6
3/22/2019 7:10	8	8	8	32.52	4.3	4.2	4.6
3/22/2019 7:20	8	8	8	32.49	4.3	4.3	24.4
3/22/2019 7:30	8	8	8	32.49	4.4	4.2	24.8
3/22/2019 7:40	8	8	8	32.43	4.4	4.3	24.2
3/22/2019 7:50	8	8	8	32.52	4.3	4.3	24.7
3/22/2019 8:00	8	8	8	32.52	4.4	4.2	4.1
3/22/2019 8:10	8	8	8	32.58	4.2	4.2	24.5
3/22/2019 8:20	8	8	8	32.52	4.5	4.2	4.9
3/22/2019 8:30	8	8	8	32.58	4.5	4.2	24.4
3/22/2019 8:40	8	8	8	32.49	4.6	4.2	24.6
3/22/2019 8:50	8	8	8	32.49	4.4	4.3	1.5
3/22/2019 9:00	8	8	8	32.52	4.2	4.2	24.6
3/22/2019 9:10	8	8	8	32.52	4.4	4.2	11
3/22/2019 9:20	8	8	8	32.61	4.8	4.2	24.3
3/22/2019 9:30	8	8	8	32.52	4.4	4.2	24.6
3/22/2019 9:40	8	8	8	32.52	4.6	4.2	3.9
3/22/2019 9:50	8	8	8	32.58	4.4	4.3	24.3
3/22/2019 10:00	8	8	8	32.46	4.5	4.3	24.7
3/22/2019 10:10	8	8	8	32.46	4.4	4.2	10.7
3/22/2019 10:20	8	8	8	32.52	4.5	4.2	24.6
3/22/2019 10:30	8	8	8	32.49	4.8	4.3	4
3/22/2019 10:40	8	8	8	32.49	4.4	4.3	24.5
3/22/2019 10:50	8	8	8	32.49	4.4	4.2	4.8
3/22/2019 11:00	8	8	8	32.52	4.4	4.2	24.1
3/22/2019 11:10	8	8	8	32.52	4.3	4.3	24.7
3/22/2019 11:20	8	8	8	32.58	4.6	4.3	4.7
3/22/2019 11:30	8	8	8	32.49	4.4	4.2	24.5
3/22/2019 11:40	8	8	8	32.58	4.4	4.2	24.8
3/22/2019 11:50	8	8	8	32.61	4.3	4.2	24.3
3/22/2019 12:00	8	8	8	32.43	4.4	4.2	24.7
3/22/2019 12:10	8	8	8	32.52	4.4	4.2	1.7
3/22/2019 12:20	8	8	8	32.61	4.3	4.2	24.5
3/22/2019 12:30	8	8	8	32.49	4.6	4.2	3.4
3/22/2019 12:40	8	8	8	32.52	4.5	4.2	24.3
3/22/2019 12:50	8	8	8	32.52	4.4	4.2	24.8
3/22/2019 13:00	8	8	8	32.52	4.3	4.2	24.3
3/22/2019 13:10	8	8	8	32.49	4.5	4.3	24.6
3/22/2019 13:20	8	8	8	32.58	4.2	4.3	3.8
3/22/2019 13:30	8	8	8	32.58	4.3	4.3	24.4
3/22/2019 13:40	8	8	8	32.52	4.2	4.1	24.8
3/22/2019 13:50	8	8	8	32.58	4.5	4.3	24.1

3/22/2019 14:00	8	8	8	32.49	4.2	4.3	24.6
3/22/2019 14:10	8	8	8	32.58	4.5	4.3	3.5
3/22/2019 14:20	8	8	8	32.61	4.4	4.2	24.5
3/22/2019 14:30	8	8	8	32.58	4.5	4.3	3.3
3/22/2019 14:40	8	8	8	32.58	4.6	4.3	24.3
3/22/2019 14:50	8	8	8	32.64	4.5	4.2	24.7
3/22/2019 15:00	8	8	8	32.67	4.4	4.2	23.1
3/22/2019 15:10	8	8	8	32.61	4.3	4.2	24.6
3/22/2019 15:20	8	8	8	32.64	4.5	4.2	3.8
3/22/2019 15:30	8	8	8	32.7	4.5	4.3	24.3
3/22/2019 15:40	8	8	8	32.61	4.3	4.3	24.7
3/22/2019 15:50	8	8	8	32.67	4.5	4.2	3.4
3/22/2019 16:00	8	8	8	32.61	4.4	4.2	24.4
3/22/2019 16:10	8	8	8	32.61	4.4	4.3	24.7
3/22/2019 16:20	8	8	8	32.64	4.5	4.3	3.6
3/22/2019 16:30	8	8	8	32.67	4.4	4.2	24.4
3/22/2019 16:40	8	8	8	32.64	4.4	4.2	24.7
3/22/2019 16:50	8	8	8	32.67	4.4	4.2	1.9
3/22/2019 17:00	8	8	8	32.67	4.6	4.2	24.5
3/22/2019 17:10	8	8	8	32.73	4.3	4.3	24.8
3/22/2019 17:20	8	8	8	32.7	4.4	4.2	24.1
3/22/2019 17:30	8	8	8	32.67	4.2	4.2	24.6
3/22/2019 17:40	8	8	8	32.67	4.4	4.3	17
3/22/2019 17:50	8	8	8	32.7	4.5	4.2	24.6
3/22/2019 18:00	8	8	8	32.67	4.5	4.3	4.5
3/22/2019 18:10	8	8	8	32.67	4.3	4.2	24.4
3/22/2019 18:20	8	8	8	32.73	4.3	4.3	24.7
3/22/2019 18:30	8	8	8	32.7	4.6	4.2	24.4
3/22/2019 18:40	8	8	8	32.67	4.2	4.3	24.7
3/22/2019 18:50	8	8	8	32.67	4.6	4.2	24.3
3/22/2019 19:00	8	8	8	32.73	4.3	4.3	24.6
3/22/2019 19:10	8	8	8	32.73	4.6	4.3	4.3
3/22/2019 19:20	8	8	8	32.7	4.6	4.2	24.5
3/22/2019 19:30	8	8	8	32.7	4.2	4.2	24.7
3/22/2019 19:40	8	8	8	32.61	4.2	4.3	1.9
3/22/2019 19:50	8	8	8	32.7	4.3	4.2	24.5
3/22/2019 20:00	8	8	8	32.67	4.5	4.2	4.9
3/22/2019 20:10	8	8	8	32.58	4.6	4.3	24.1
3/22/2019 20:20	8	8	8	32.7	4.7	4.3	24.5
3/22/2019 20:30	8	8	8	32.7	4.4	4.2	4.3
3/22/2019 20:40	8	8	8	32.7	4.4	4.2	24.5
3/22/2019 20:50	8	8	8	32.67	4.5	4.2	23.8
3/22/2019 21:00	8	8	8	32.61	4.5	4.2	24.3
3/22/2019 21:10	8	8	8	32.67	4.5	4.2	24.7
3/22/2019 21:20	8	8	8	32.7	4.2	4.2	1.5
3/22/2019 21:30	8	8	8	32.67	4.3	4.2	24.6
3/22/2019 21:40	8	8	8	32.67	4.3	4.2	23.7

3/22/2019 21:50	8	8	8	32.64	4.6	4.2	24.2
3/22/2019 22:00	8	8	8	32.61	4.5	4.2	24.6
3/22/2019 22:10	8	8	8	32.67	4.5	4.2	4.4
3/22/2019 22:20	8	8	8	32.7	4.3	4.1	24.4
3/22/2019 22:30	8	8	8	32.73	4.5	4.2	24.7
3/22/2019 22:40	8	8	8	32.73	4.5	4.3	2
3/22/2019 22:50	8	8	8	32.73	4.3	4.2	24.5
3/22/2019 23:00	8	8	8	32.67	4.6	4.3	24.8
3/22/2019 23:10	8	8	8	32.7	4.5	4.2	24.1
3/22/2019 23:20	8	8	8	32.64	4.4	4.2	24.5
3/22/2019 23:30	8	8	8	32.7	4.6	4.2	4.5
3/22/2019 23:40	8	8	8	32.64	4.5	4.2	24.4
3/22/2019 23:50	8	8	8	32.64	4.3	4.2	24.8
3/23/2019 0:00	8	8	8	32.67	4.3	4.2	24.2
3/23/2019 0:10	8	8	8	32.64	4.5	4.2	24.7
3/23/2019 0:20	8	8	8	32.64	4.6	4.2	1.5
3/23/2019 0:30	8	8	8	32.67	4.6	4.2	24.5
3/23/2019 0:40	8	8	8	32.7	4.4	4.1	10.9
3/23/2019 0:50	8	8	8	32.67	4.3	4.1	24.1
3/23/2019 1:00	8	8	8	32.61	4.5	4.2	24.8
3/23/2019 1:10	8	8	8	32.58	4.5	4.2	10.8
3/23/2019 1:20	8	8	8	32.64	4.7	4.3	24.6
3/23/2019 1:30	8	8	8	32.67	4.3	4.2	3.5
3/23/2019 1:40	8	8	8	32.7	4.5	4.2	24.4
3/23/2019 1:50	8	8	8	32.73	4.7	4.2	24.7
3/23/2019 2:00	8	8	8	32.7	4.7	4.1	1.6
3/23/2019 2:10	8	8	8	32.67	4.5	4.2	24.5
3/23/2019 2:20	8	8	8	32.67	4.6	4.3	4
3/23/2019 2:30	8	8	8	32.73	4.4	4.2	24.3
3/23/2019 2:40	8	8	8	32.58	4.6	4.3	24.7
3/23/2019 2:50	8	8	8	32.52	4.9	4.2	1.7
3/23/2019 3:00	8	8	8	32.7	4.4	4.2	24.5
3/23/2019 3:10	8	8	8	32.64	4.5	4.3	23.7
3/23/2019 3:20	8	8	8	32.58	4.2	4.2	24.3
3/23/2019 3:30	8	8	8	32.61	4.6	4.2	24.7
3/23/2019 3:40	8	8	8	32.64	4.4	4.2	4.4
3/23/2019 3:50	8	8	8	32.58	4.4	4.2	24.5
3/23/2019 4:00	8	8	8	32.61	4.4	4.2	24.8
3/23/2019 4:10	8	8	8	32.58	4.4	4.1	24.2
3/23/2019 4:20	8	8	8	32.61	4.3	4.2	24.7
3/23/2019 4:30	8	8	8	32.64	4.4	4.2	3.3
3/23/2019 4:40	8	8	8	32.58	4.4	4.2	24.3
3/23/2019 4:50	8	8	8	32.49	4.5	4.2	24.7
3/23/2019 5:00	8	8	8	32.58	4.5	4.2	1.6
3/23/2019 5:10	8	8	8	32.58	4.6	4.2	24.6
3/23/2019 5:20	8	8	8	32.58	4.5	4.2	3.3
3/23/2019 5:30	8	8	8	32.58	4.2	4.2	24.3

3/23/2019 5:40	8	8	8	32.49	4.3	4.2	24.7
3/23/2019 5:50	8	8	8	32.46	4.6	4.1	2
3/23/2019 6:00	8	8	8	32.49	4.4	4.3	24.6
3/23/2019 6:10	8	8	8	32.61	4.2	4.2	3.3
3/23/2019 6:20	8	8	8	32.61	4.2	4.2	24.3
3/23/2019 6:30	8	8	8	32.64	4.6	4.2	24.7
3/23/2019 6:40	8	8	8	32.61	4.7	4.2	3.7
3/23/2019 6:50	8	8	8	32.61	4.5	4.2	24.4
3/23/2019 7:00	8	8	8	32.52	4.3	4.2	24.8
3/23/2019 7:10	8	8	8	32.58	4.6	4.2	1.3
3/23/2019 7:20	8	8	8	32.61	4.5	4.2	24.6
3/23/2019 7:30	8	8	8	32.58	4.7	4.2	3.3
3/23/2019 7:40	8	8	8	32.64	4.8	4.1	24.1
3/23/2019 7:50	8	8	8	32.61	4.4	4.2	24.7
3/23/2019 8:00	8	8	8	32.58	4.2	4.2	1.4
3/23/2019 8:10	8	8	8	32.64	4.4	4.2	24.6
3/23/2019 8:20	8	8	8	32.61	4.3	4.2	24.8
3/23/2019 8:30	8	8	8	32.49	4.1	4.2	24.2
3/23/2019 8:40	8	8	8	32.58	4.3	4.3	24.7
3/23/2019 8:50	8	8	8	32.52	4.4	4.3	3.6
3/23/2019 9:00	8	8	8	32.52	4.3	4.2	24.5
3/23/2019 9:10	8	8	8	32.61	4.1	4.2	24.8
3/23/2019 9:20	8	8	8	32.61	4.4	4.2	2.6
3/23/2019 9:30	8	8	8	32.61	4.3	4.2	24.6
3/23/2019 9:40	8	8	8	32.52	4.6	4.3	24.8
3/23/2019 9:50	8	8	8	32.58	4.3	4.3	2.5
3/23/2019 10:00	8	8	8	32.64	4.4	4.2	24.6
3/23/2019 10:10	8	8	8	32.61	4.5	4.2	24.8
3/23/2019 10:20	8	8	8	32.58	4.4	4.2	16.5
3/23/2019 10:30	8	8	8	32.58	4.5	4.2	24.7
3/23/2019 10:40	8	8	8	32.61	4.3	4.3	23.7
3/23/2019 10:50	8	8	8	32.64	4.3	4.3	24.2
3/23/2019 11:00	8	8	8	32.67	4.3	4.3	24.6
3/23/2019 11:10	8	8	8	32.64	4.4	4.2	4
3/23/2019 11:20	8	8	8	32.58	4.4	4.2	24.5
3/23/2019 11:30	8	8	8	32.64	4.3	4.2	24.8
3/23/2019 11:40	8	8	8	32.64	4.5	4.3	1.7
3/23/2019 11:50	8	8	8	32.67	4.3	4.3	24.5
3/23/2019 12:00	8	8	8	32.64	4.7	4.2	24.7
3/23/2019 12:10	8	8	8	32.58	4.7	4.4	19
3/23/2019 12:20	8	8	8	32.67	4.3	4.3	24.6
3/23/2019 12:30	8	8	8	32.64	4.5	4.3	3.9
3/23/2019 12:40	8	8	8	32.52	4.2	4.2	24.4
3/23/2019 12:50	8	8	8	32.58	4.4	4.2	24.8
3/23/2019 13:00	8	8	8	32.61	4.4	4.3	24.1
3/23/2019 13:10	8	8	8	32.58	4.6	4.3	24.6
3/23/2019 13:20	8	8	8	32.58	4.5	4.2	4

3/23/2019 13:30	8	8	8	32.52	4.4	4.2	24.5
3/23/2019 13:40	8	8	8	32.58	4.4	4.2	24.7
3/23/2019 13:50	8	8	8	32.52	4.4	4.2	24.1
3/23/2019 14:00	8	8	8	32.46	4.8	4.3	24.6
3/23/2019 14:10	8	8	8	32.58	4.3	4.2	4.7
3/23/2019 14:20	8	8	8	32.52	4.5	4.3	24.3
3/23/2019 14:30	8	8	8	32.52	4.7	4.3	24.7
3/23/2019 14:40	8	8	8	32.58	4.3	4.3	2
3/23/2019 14:50	8	8	8	32.58	4.5	4.3	24.5
3/23/2019 15:00	8	8	8	32.61	4.5	4.3	24.8
3/23/2019 15:10	8	8	8	32.52	4.6	4.2	24.2
3/23/2019 15:20	8	8	8	32.61	4.3	4.2	24.6
3/23/2019 15:30	8	8	8	32.49	4.2	4.2	3.5
3/23/2019 15:40	8	8	8	32.64	4.2	4.2	24.5
3/23/2019 15:50	8	8	8	32.52	4.4	4.2	24.8
3/23/2019 16:00	8	8	8	32.4	4.2	4.4	24.2
3/23/2019 16:10	8	8	8	32.52	4.3	4.3	24.7
3/23/2019 16:20	8	8	8	32.52	4.5	4.3	2.5
3/23/2019 16:30	8	8	8	32.52	4.4	4.2	24.5
3/23/2019 16:40	8	8	8	32.52	4.5	4.2	24.7
3/23/2019 16:50	8	8	8	32.49	4.7	4.3	24.2
3/23/2019 17:00	8	8	8	32.49	4.2	4.3	24.6
3/23/2019 17:10	8	8	8	32.49	4.5	4.3	4.3
3/23/2019 17:20	8	8	8	32.52	4.3	4.2	24.4
3/23/2019 17:30	8	8	8	32.49	4.5	4.2	24.7
3/23/2019 17:40	8	8	8	32.61	4.4	4.3	16.6
3/23/2019 17:50	8	8	8	32.52	4.5	4.2	24.5
3/23/2019 18:00	8	8	8	32.61	4.5	4.3	23.6
3/23/2019 18:10	8	8	8	32.49	4.5	4.2	24.1
3/23/2019 18:20	8	8	8	32.52	4.4	4.2	24.6
3/23/2019 18:30	8	8	8	32.52	4.4	4.2	1.8
3/23/2019 18:40	8	8	8	32.58	4.3	4.3	24.5
3/23/2019 18:50	8	8	8	32.61	4.4	4.2	24.8
3/23/2019 19:00	8	8	8	32.61	4.3	4.2	24.2
3/23/2019 19:10	8	8	8	32.49	4.5	4.2	24.6
3/23/2019 19:20	8	8	8	32.52	4.5	4.3	3.2
3/23/2019 19:30	8	8	8	32.52	4.5	4.2	24.3
3/23/2019 19:40	8	8	8	32.58	4.3	4.3	24.7
3/23/2019 19:50	8	8	8	32.58	4.3	4.2	1.6
3/23/2019 20:00	8	8	8	32.64	4.5	4.2	24.5
3/23/2019 20:10	8	8	8	32.61	4.5	4.2	24.7
3/23/2019 20:20	8	8	8	32.61	4.5	4.1	24.2
3/23/2019 20:30	8	8	8	32.61	4.5	4.3	24.7
3/23/2019 20:40	8	8	8	32.52	4.4	4.2	3.6
3/23/2019 20:50	8	8	8	32.61	4.3	4.2	24.4
3/23/2019 21:00	8	8	8	32.61	4.7	4.2	24.7
3/23/2019 21:10	8	8	8	32.61	4.2	4.2	1.5

3/23/2019 21:20	8	8	8	32.61	4.4	4.2	24.5
3/23/2019 21:30	8	8	8	32.61	4.4	4.2	4.7
3/23/2019 21:40	8	8	8	32.58	4.3	4.1	24.3
3/23/2019 21:50	8	8	8	32.61	4.5	4.3	24.6
3/23/2019 22:00	8	8	8	32.58	4.6	4.2	4.3
3/23/2019 22:10	8	8	8	32.58	4.5	4.2	24.5
3/23/2019 22:20	8	8	8	32.58	4.4	4.2	24.6
3/23/2019 22:30	8	8	8	32.52	4.4	4.2	20.7
3/23/2019 22:40	8	8	8	32.64	4.5	4.2	24.6
3/23/2019 22:50	8	8	8	32.61	4.2	4.2	3.2
3/23/2019 23:00	8	8	8	32.58	4.4	4.2	24.3
3/23/2019 23:10	8	8	8	32.61	4.3	4.2	24.7
3/23/2019 23:20	8	8	8	32.64	4.4	4.2	1.6
3/23/2019 23:30	8	8	8	32.67	4.4	4.2	24.6
3/23/2019 23:40	8	8	8	32.61	4.4	4.2	10.9
3/23/2019 23:50	8	8	8	32.49	4.3	4.2	24.3
3/24/2019 0:00	8	8	8	32.52	4.3	4.2	24.7
3/24/2019 0:10	8	8	8	32.58	4.5	4.2	4.4
3/24/2019 0:20	8	8	8	32.61	4.2	4.1	24.5
3/24/2019 0:30	8	8	8	32.58	4.3	4.2	24.8
3/24/2019 0:40	8	8	8	32.61	4.4	4.2	13.9
3/24/2019 0:50	8	8	8	32.52	4.3	4.2	24.6
3/24/2019 1:00	8	8	8	32.52	4.5	4.2	4.9
3/24/2019 1:10	8	8	8	32.61	4.5	4.2	24.2
3/24/2019 1:20	8	8	8	32.58	4.5	4.2	24.7
3/24/2019 1:30	8	8	8	32.52	4.5	4.2	3.6
3/24/2019 1:40	8	8	8	32.52	4.6	4.2	24.5
3/24/2019 1:50	8	8	8	32.61	4.5	4.2	24.8
3/24/2019 2:00	8	8	8	32.52	4.4	4.2	24.2
3/24/2019 2:10	8	8	8	32.52	4.2	4.2	24.7
3/24/2019 2:20	8	8	8	32.58	4.3	4.2	3.7
3/24/2019 2:30	8	8	8	32.52	4.3	4.3	24.4
3/24/2019 2:40	8	8	8	32.52	4.7	4.2	24.7
3/24/2019 2:50	8	8	8	32.58	4.6	4.2	4
3/24/2019 3:00	8	8	8	32.58	4.7	4.2	24
3/24/2019 3:10	8	8	8	32.58	4.6	4.3	24.6
3/24/2019 3:20	8	8	8	32.64	4.5	4.2	24.8
3/24/2019 3:30	8	8	8	32.67	4.4	4.1	1.6
3/24/2019 3:40	8	8	8	32.7	4.2	4.2	24.5
3/24/2019 3:50	8	8	8	32.61	4.5	4.2	24.8
3/24/2019 4:00	8	8	8	32.64	4.5	4.2	23.1
3/24/2019 4:10	8	8	8	32.52	4.4	4.1	24.6
3/24/2019 4:20	8	8	8	32.58	4.2	4.2	5.3
3/24/2019 4:30	8	8	8	32.61	4.5	4.2	24.2
3/24/2019 4:40	8	8	8	32.49	4.4	4.2	24.7
3/24/2019 4:50	8	8	8	32.67	4.4	4.2	4.4
3/24/2019 5:00	8	8	8	32.64	4.1	4.2	24.5

3/24/2019 5:10	8	8	8	32.67	4.5	4.2	24.7
3/24/2019 5:20	8	8	8	32.61	4.2	4.2	24.4
3/24/2019 5:30	8	8	8	32.61	4.4	4.2	24.7
3/24/2019 5:40	8	8	8	32.67	4.3	4.2	4
3/24/2019 5:50	8	8	8	32.64	4.4	4.2	24.4
3/24/2019 6:00	8	8	8	32.7	4.4	4.1	24.7
3/24/2019 6:10	8	8	8	32.64	4.5	4.2	2.7
3/24/2019 6:20	8	8	8	32.64	4.3	4.2	24.5
3/24/2019 6:30	8	8	8	32.61	4.4	4.2	24.8
3/24/2019 6:40	8	8	8	32.67	4.4	4.1	3.4
3/24/2019 6:50	8	8	8	32.64	4.5	4.2	24.2
3/24/2019 7:00	8	8	8	32.7	4.5	4.1	24.6
3/24/2019 7:10	8	8	8	32.64	4.3	4.2	24.8
3/24/2019 7:20	8	8	8	32.64	4.3	4.2	1.5
3/24/2019 7:30	8	8	8	32.64	4.2	4.2	24.5
3/24/2019 7:40	8	8	8	32.67	4.4	4.2	24.9
3/24/2019 7:50	8	8	8	32.58	4.4	4.2	23.9
3/24/2019 8:00	8	8	8	32.58	4.7	4.1	24.6
3/24/2019 8:10	8	8	8	32.64	4.3	4.2	3.4
3/24/2019 8:20	8	8	8	32.61	4.3	4.2	24.3
3/24/2019 8:30	8	8	8	32.61	4.3	4.2	24.7
3/24/2019 8:40	8	8	8	32.67	4.5	4.2	3.4
3/24/2019 8:50	8	8	8	32.73	4.3	4.2	24.5
3/24/2019 9:00	8	8	8	32.61	4.2	4.2	24.7
3/24/2019 9:10	8	8	8	32.64	4.1	4.2	20.8
3/24/2019 9:20	8	8	8	32.73	4.5	4.3	24.6
3/24/2019 9:30	8	8	8	32.61	4.6	4.2	3.3
3/24/2019 9:40	8	8	8	32.64	4.4	4.2	24.4
3/24/2019 9:50	8	8	8	32.64	4.4	4.3	24.7
3/24/2019 10:00	8	8	8	32.7	4.4	4.2	3.5
3/24/2019 10:10	8	8	8	32.67	4.6	4.2	24.4
3/24/2019 10:20	8	8	8	32.64	4.5	4.2	24.7
3/24/2019 10:30	8	8	8	32.7	4.4	4.2	10.8
3/24/2019 10:40	8	8	8	32.7	4.6	4.4	24.6
3/24/2019 10:50	8	8	8	32.64	4.5	4.3	4.7
3/24/2019 11:00	8	8	8	32.7	4.2	4.2	24.2
3/24/2019 11:10	8	8	8	32.7	4.3	4.3	24.7
3/24/2019 11:20	8	8	8	32.64	4.4	4.3	3.8
3/24/2019 11:30	8	8	8	32.67	4.2	4.3	24.3
3/24/2019 11:40	8	8	8	32.73	4.4	4.3	24.8
3/24/2019 11:50	8	8	8	32.7	4.3	4.4	1.8
3/24/2019 12:00	8	8	8	32.76	4.4	4.2	24.5
3/24/2019 12:10	8	8	8	32.7	4.4	4.4	24.8
3/24/2019 12:20	8	8	8	32.67	4.5	4.4	16.7
3/24/2019 12:30	8	8	8	32.73	4.3	4.4	24.6
3/24/2019 12:40	8	8	8	32.76	4.3	4.3	3.3
3/24/2019 12:50	8	8	8	32.73	4.4	4.4	24.3

3/24/2019 13:00	8	8	8	32.73	4.6	4.4	24.7
3/24/2019 13:10	8	8	8	32.83	4.4	4.5	24.4
3/24/2019 13:20	8	8	8	32.7	4.4	4.4	24.6
3/24/2019 13:30	8	8	8	32.79	4.3	4.3	3.3
3/24/2019 13:40	8	8	8	32.76	4.6	4.3	24.2
3/24/2019 13:50	8	8	8	32.76	4.4	4.3	24.6
3/24/2019 14:00	8	8	8	32.79	4.4	4.3	3.4
3/24/2019 14:10	8	8	8	32.76	4.2	4.3	24.2
3/24/2019 14:20	8	8	8	32.79	4.3	4.4	24.7
3/24/2019 14:30	8	8	8	32.76	4.3	4.4	2.9
3/24/2019 14:40	8	8	8	32.79	4.5	4.4	24.4
3/24/2019 14:50	8	8	8	32.79	4.4	4.3	24.8
3/24/2019 15:00	8	8	8	32.79	4.5	4.3	18.8
3/24/2019 15:10	8	8	8	32.76	4.4	4.4	24.7
3/24/2019 15:20	8	8	8	32.83	4.5	4.3	3.4
3/24/2019 15:30	8	8	8	32.83	4.4	4.3	24.3
3/24/2019 15:40	8	8	8	32.83	4.3	4.3	24.7
3/24/2019 15:50	8	8	8	32.79	4.3	4.3	4
3/24/2019 16:00	8	8	8	32.83	4.3	4.2	24.4
3/24/2019 16:10	8	8	8	32.79	4.2	4.3	24.8
3/24/2019 16:20	8	8	8	32.79	4.5	4.3	2
3/24/2019 16:30	8	8	8	32.86	4.4	4.3	24.5
3/24/2019 16:40	8	8	8	32.89	4.6	4.3	24.8
3/24/2019 16:50	8	8	8	32.86	4.4	4.3	24.2
3/24/2019 17:00	8	8	8	32.92	4.5	4.4	24.7
3/24/2019 17:10	8	8	8	32.95	4.4	4.3	3.4
3/24/2019 17:20	8	8	8	32.95	4.6	4.2	24.1
3/24/2019 17:30	8	8	8	32.95	4.5	4.3	24.8
3/24/2019 17:40	8	8	8	32.98	4.5	4.3	4.7
3/24/2019 17:50	8	8	8	32.95	4.3	4.3	24.5
3/24/2019 18:00	8	8	8	32.98	4.5	4.2	24.7
3/24/2019 18:10	8	8	8	32.95	4.4	4.2	1.5
3/24/2019 18:20	8	8	8	32.98	4.4	4.2	24.5
3/24/2019 18:30	8	8	8	32.92	4.6	4.2	24.8
3/24/2019 18:40	8	8	8	32.89	4.5	4.3	24.3
3/24/2019 18:50	8	8	8	32.98	4.5	4.1	24.5
3/24/2019 19:00	8	8	8	32.95	4.5	4.2	4.6
3/24/2019 19:10	8	8	8	32.98	4.7	4.2	24.1
3/24/2019 19:20	8	8	8	33.04	4.4	4.2	24.7
3/24/2019 19:30	8	8	8	33.01	4.3	4.3	3.9
3/24/2019 19:40	8	8	8	32.98	4.4	4.2	24.4
3/24/2019 19:50	8	8	8	33.07	4.5	4.2	24.7
3/24/2019 20:00	8	8	8	33.01	4.5	4.2	4.7
3/24/2019 20:10	8	8	8	33.01	4.4	4.2	24.4
3/24/2019 20:20	8	8	8	32.98	4.3	4.1	24.7
3/24/2019 20:30	8	8	8	32.98	4.3	4.2	1.6
3/24/2019 20:40	8	8	8	32.98	4.5	4.2	24.5

3/24/2019 20:50	8	8	8	32.95	4.4	4.3	24.7
3/24/2019 21:00	8	8	8	32.98	4.3	4.3	24.5
3/24/2019 21:10	8	8	8	33.07	4.5	4.2	24.6
3/24/2019 21:20	8	8	8	32.92	4.5	4.1	4.6
3/24/2019 21:30	8	8	8	32.98	4.4	4.2	24.3
3/24/2019 21:40	8	8	8	33.01	4.5	4.2	24.7
3/24/2019 21:50	8	8	8	32.98	4.4	4.2	2.7
3/24/2019 22:00	8	8	8	32.98	4.6	4.2	24.4
3/24/2019 22:10	8	8	8	33.04	4.5	4.2	24.8
3/24/2019 22:20	8	8	8	32.98	4.4	4.2	10.8
3/24/2019 22:30	8	8	8	32.98	4.6	4.2	24.5
3/24/2019 22:40	8	8	8	33.01	4.4	4.2	24.8
3/24/2019 22:50	8	8	8	32.98	4.2	4.2	2.2
3/24/2019 23:00	8	8	8	32.98	4.4	4.2	24.5
3/24/2019 23:10	8	8	8	33.01	4.5	4.2	24.8
3/24/2019 23:20	8	8	8	33.01	4.4	4.2	4.7
3/24/2019 23:30	8	8	8	32.95	4.4	4.2	24.3
3/24/2019 23:40	8	8	8	33.04	4.5	4.2	24.6
3/24/2019 23:50	8	8	8	32.95	4.4	4.2	24.8
3/25/2019 0:00	8	8	8	32.98	4.3	4.2	1.3
3/25/2019 0:10	8	8	8	32.98	4.5	4.2	24.5
3/25/2019 0:20	8	8	8	33.04	4.3	4.2	24.7
3/25/2019 0:30	8	8	8	33.01	4.4	4.2	1.6
3/25/2019 0:40	8	8	8	32.98	4.2	4.2	24.5
3/25/2019 0:50	8	8	8	33.07	4.2	4.2	24.8
3/25/2019 1:00	8	8	8	33.04	4.5	4.2	3.1
3/25/2019 1:10	8	8	8	32.98	4.4	4.2	24.4
3/25/2019 1:20	8	8	8	33.04	4.4	4.2	24.7
3/25/2019 1:30	8	8	8	33.07	4.8	4.2	24
3/25/2019 1:40	8	8	8	33.04	4.5	4.2	24.6
3/25/2019 1:50	8	8	8	33.04	4.4	4.2	4.7
3/25/2019 2:00	8	8	8	33.1	4.6	4.3	24.2
3/25/2019 2:10	8	8	8	33.01	4.5	4.2	24.6
3/25/2019 2:20	8	8	8	33.07	4.4	4.2	4.8
3/25/2019 2:30	8	8	8	33.04	4.1	4.2	24.2
3/25/2019 2:40	8	8	8	33.04	4.5	4.2	24.6
3/25/2019 2:50	8	8	8	33.1	4.6	4.2	3.2
3/25/2019 3:00	8	8	8	33.13	4.4	4.2	24.3
3/25/2019 3:10	8	8	8	33.07	4.5	4.2	24.6
3/25/2019 3:20	8	8	8	33.01	4.5	4.2	4.8
3/25/2019 3:30	8	8	8	33.1	4.3	4.2	24.2
3/25/2019 3:40	8	8	8	33.1	4.6	4.2	24.6
3/25/2019 3:50	8	8	8	33.1	4.4	4.2	4.7
3/25/2019 4:00	8	8	8	33.1	4.3	4.2	24.2
3/25/2019 4:10	8	8	8	33.04	4.6	4.2	24.6
3/25/2019 4:20	8	8	8	33.1	4.5	4.2	3.6
3/25/2019 4:30	8	8	8	33.16	4.3	4.2	24.2

3/25/2019 4:40	8	8	8	33.04	4.4	4.2	24.6
3/25/2019 4:50	8	8	8	33.1	4.5	4.2	3.3
3/25/2019 5:00	8	8	8	33.13	4.4	4.2	24.2
3/25/2019 5:10	8	8	8	33.04	4.5	4.2	24.6
3/25/2019 5:20	8	8	8	33.07	4.4	4.2	24.8
3/25/2019 5:30	8	8	8	33.07	4.4	4.2	23.1
3/25/2019 5:40	8	8	8	33.07	4.3	4.1	24.5
3/25/2019 5:50	8	8	8	33.1	4.3	4.1	24.8
3/25/2019 6:00	8	8	8	33.1	4.8	4.1	23.6
3/25/2019 6:10	8	8	8	33.07	4.2	4.2	24.6
3/25/2019 6:20	8	8	8	33.07	4.5	4.2	24.8
3/25/2019 6:30	8	8	8	33.1	4.4	4.2	24.4
3/25/2019 6:40	8	8	8	33.07	4.3	4.2	24.5
3/25/2019 6:50	8	8	8	33.13	4.5	4.2	24.8
3/25/2019 7:00	8	8	8	33.04	4.4	4.2	18.9
3/25/2019 7:10	8	8	8	33.07	4.4	4.1	24.5
3/25/2019 7:20	8	8	8	33.07	4.6	4.2	24.8
3/25/2019 7:30	8	8	8	33.1	4.3	4.3	3.6
3/25/2019 7:40	8	8	8	33.1	4.4	4.2	24.5
3/25/2019 7:50	8	8	8	33.04	4.3	4.2	24.7
3/25/2019 8:00	8	8	8	33.04	4.4	4.2	24.8
3/25/2019 8:10	8	8	8	33.07	4.4	4.2	1.6
3/25/2019 8:20	8	8	8	33.01	4.4	4.2	24.5
3/25/2019 8:30	8	8	8	32.98	4.2	4.2	24.7
3/25/2019 8:40	8	8	8	32.98	4.5	4.2	3.3
3/25/2019 8:50	8	8	8	33.04	4.7	4.2	24.2
3/25/2019 9:00	8	8	8	32.98	4.4	4.2	24.6
3/25/2019 9:10	8	8	8	32.98	4.1	4.2	24.7
3/25/2019 9:20	8	8	8	33.01	4.5	4.2	3.7
3/25/2019 9:30	8	8	8	32.98	4.5	4.3	24.1
3/25/2019 9:40	8	8	8	32.95	4.5	4.2	24.6
3/25/2019 9:50	8	8	8	32.95	4.3	4.2	3.4
3/25/2019 10:00	8	8	8	32.98	4.5	4.2	24.4
3/25/2019 10:10	8	8	8	32.92	4.7	4.2	24.7
3/25/2019 10:20	8	8	8	32.98	4.2	4.2	3.7
3/25/2019 10:30	8	8	8	32.89	4.5	4.3	24.2
3/25/2019 10:40	8	8	8	33.01	4.3	4.2	24.7
3/25/2019 10:50	8	8	8	32.95	4.3	4.3	3.5
3/25/2019 11:00	8	8	8	33.01	4.4	4.3	24.5
3/25/2019 11:10	8	8	8	33.01	4.4	4.2	24.8
3/25/2019 11:20	8	8	8	32.92	4.5	4.2	1.8
3/25/2019 11:30	8	8	8	33.01	4.5	4.3	24.5
3/25/2019 11:40	8	8	8	33.01	4.3	4.2	24.7
3/25/2019 11:50	8	8	8	32.95	4.6	4.3	2.9
3/25/2019 12:00	8	8	8	32.98	4.4	4.3	24.3
3/25/2019 12:10	8	8	8	32.95	4.3	4.3	24.7
3/25/2019 12:20	8	8	8	32.98	4.2	4.2	3.2

3/25/2019 12:30	8	8	8	32.95	4.3	4.2	24.2
3/25/2019 12:40	8	8	8	33.07	4.6	4.3	24.6
3/25/2019 12:50	8	8	8	32.89	4.4	4.3	24.8
3/25/2019 13:00	8	8	8	32.95	4.3	4.2	24.4
3/25/2019 13:10	8	8	8	32.98	4.4	4.3	24.6
3/25/2019 13:20	8	8	8	32.95	4.6	4.3	24.7
3/25/2019 13:30	8	8	8	32.98	4.2	4.3	1.5
3/25/2019 13:40	8	8	8	32.92	4.5	4.3	24.4
3/25/2019 13:50	8	8	8	32.92	4.6	4.3	24.7
3/25/2019 14:00	8	8	8	32.98	4.1	4.3	1.4
3/25/2019 14:10	8	8	8	32.92	4.5	4.2	24.5
3/25/2019 14:20	8	8	8	32.92	4.8	4.2	24.8
3/25/2019 14:30	8	8	8	32.95	4.4	4.3	1.4
3/25/2019 14:40	8	8	8	32.98	4	4.2	24.5
3/25/2019 14:50	8	8	8	32.95	4.6	4.2	24.8
3/25/2019 15:00	8	8	8	32.89	4.4	4.3	1.4
3/25/2019 15:10	8	8	8	32.95	4.5	4.2	24.5
3/25/2019 15:20	8	8	8	32.95	4.3	4.2	24.7
3/25/2019 15:30	8	8	8	33.01	4.5	4.2	19.1
3/25/2019 15:40	8	8	8	33.01	4.4	4.2	24.5
3/25/2019 15:50	8	8	8	32.98	4.3	4.2	24.8
3/25/2019 16:00	8	8	8	32.98	4.5	4.2	1.6
3/25/2019 16:10	8	8	8	33.01	4.3	4.2	24.4
3/25/2019 16:20	8	8	8	33.04	4.4	4.3	24.7
3/25/2019 16:30	8	8	8	33.01	4.3	4.3	4.5
3/25/2019 16:40	8	8	8	32.95	4.5	4.2	24.2
3/25/2019 16:50	8	8	8	33.07	4.5	4.2	24.6
3/25/2019 17:00	8	8	8	33.07	4.1	4.2	24.8
3/25/2019 17:10	8	8	8	33.01	4.4	4.2	23.6
3/25/2019 17:20	8	8	8	33.01	4.6	4.3	24.6
3/25/2019 17:30	8	8	8	33.04	4.5	4.2	24.8
3/25/2019 17:40	8	8	8	33.01	4.5	4.2	24.5
3/25/2019 17:50	8	8	8	33.04	4.5	4.2	24.5
3/25/2019 18:00	8	8	8	33.01	4.6	4.2	24.8
3/25/2019 18:10	8	8	8	33.04	4.6	4.2	1.6
3/25/2019 18:20	8	8	8	33.04	4.5	4.2	24.5
3/25/2019 18:30	8	8	8	33.04	4.4	4.2	24.8
3/25/2019 18:40	8	8	8	33.04	4.6	4.2	3.9
3/25/2019 18:50	8	8	8	33.04	4.2	4.2	24.4
3/25/2019 19:00	8	8	8	33.04	4.6	4.2	24.6
3/25/2019 19:10	8	8	8	33.07	4.4	4.2	24.8
3/25/2019 19:20	8	8	8	33.1	4.3	4.2	1.7
3/25/2019 19:30	8	8	8	33.07	4.4	4.3	24.6
3/25/2019 19:40	8	8	8	33.13	4.6	4.1	24.8
3/25/2019 19:50	8	8	8	33.04	4.3	4.2	3.9
3/25/2019 20:00	8	8	8	33.13	4.7	4.2	24.1
3/25/2019 20:10	8	8	8	33.1	4.4	4.2	24.6

3/25/2019 20:20	8	8	8	33.07	4.7	4.2	5.2
3/25/2019 20:30	8	8	8	33.07	4.4	4.1	24.3
3/25/2019 20:40	8	8	8	33.01	4.5	4.2	24.6
3/25/2019 20:50	8	8	8	33.1	4.5	4.2	24.8
3/25/2019 21:00	8	8	8	33.07	4.5	4.2	3.8
3/25/2019 21:10	8	8	8	33.01	4.6	4.2	24.4
3/25/2019 21:20	8	8	8	33.04	4.3	4.2	24.6
3/25/2019 21:30	8	8	8	33.04	4.7	4.2	24.8
3/25/2019 21:40	8	8	8	33.07	4.4	4.1	3.4
3/25/2019 21:50	8	8	8	33.07	4.5	4.1	24.6
3/25/2019 22:00	8	8	8	32.92	4.3	4.1	24.8
3/25/2019 22:10	8	8	8	33.07	4.5	4.2	11
3/25/2019 22:20	8	8	8	33.07	4.3	4.1	24.3
3/25/2019 22:30	8	8	8	33.13	4.3	4.2	24.5
3/25/2019 22:40	8	8	8	33.04	4.4	4.1	24.8
3/25/2019 22:50	8	8	8	33.04	4.3	4.1	1.5
3/25/2019 23:00	8	8	8	33.07	4.8	4.1	24.5
3/25/2019 23:10	8	8	8	33.04	4.7	4.2	24.8
3/25/2019 23:20	8	8	8	33.04	4.3	4.2	3.6
3/25/2019 23:30	8	8	8	33.1	4.3	4.2	24.2
3/25/2019 23:40	8	8	8	33.04	4.6	4.1	24.6
3/25/2019 23:50	8	8	8	33.07	4.5	4.2	24.8
3/26/2019 0:00	8	8	8	33.04	4.3	4.2	1.2
3/26/2019 0:10	8	8	8	33.04	4.4	4.2	24.6
3/26/2019 0:20	8	8	8	33.07	4.2	4.1	24.8
3/26/2019 0:30	8	8	8	33.07	4.3	4.2	23.8
3/26/2019 0:40	8	8	8	33.07	4.4	4.2	2.7
3/26/2019 0:50	8	8	8	33.1	4.4	4.2	24.5
3/26/2019 1:00	8	8	8	33.04	4.4	4.2	24.6
3/26/2019 1:10	8	8	8	33.04	4.3	4.2	24.9
3/26/2019 1:20	8	8	8	33.1	4.4	4.2	5.3
3/26/2019 1:30	8	8	8	33.07	4.5	4.3	1.6
3/26/2019 1:40	8	8	8	33.1	4.5	4.2	24.4
3/26/2019 1:50	8	8	8	33.01	4.5	4.2	24.7
3/26/2019 2:00	8	8	8	32.98	4.8	4.2	24.8
3/26/2019 2:10	8	8	8	33.01	4.6	4.2	1.5
3/26/2019 2:20	8	8	8	33.16	4.6	4.2	24.3
3/26/2019 2:30	8	8	8	33.04	4.3	4.2	24.8
3/26/2019 2:40	8	8	8	33.01	4.3	4.2	3.4
3/26/2019 2:50	8	8	8	33.04	4.3	4.2	24.2
3/26/2019 3:00	8	8	8	33.01	4.6	4.2	24.6
3/26/2019 3:10	8	8	8	33.01	4.6	4.3	24.8
3/26/2019 3:20	8	8	8	33.01	4.2	4.2	1.5
3/26/2019 3:30	8	8	8	33.04	4.7	4.2	24.4
3/26/2019 3:40	8	8	8	33.04	4.9	4.2	24.8
3/26/2019 3:50	8	8	8	33.1	4.5	4.2	4.3
3/26/2019 4:00	8	8	8	33.04	4.8	4.2	24.4

3/26/2019 4:10	8	8	8	33.01	4.5	4.2	24.6
3/26/2019 4:20	8	8	8	33.07	4.4	4.2	24.8
3/26/2019 4:30	8	8	8	32.95	4.6	4.2	3.3
3/26/2019 4:40	8	8	8	33.07	4.3	4.3	24.4
3/26/2019 4:50	8	8	8	33.07	4.3	4.2	24.7
3/26/2019 5:00	8	8	8	33.07	4.5	4.2	24.8
3/26/2019 5:10	8	8	8	33.01	4.5	4.2	1.7
3/26/2019 5:20	8	8	8	33.07	4.8	4.2	24.5
3/26/2019 5:30	8	8	8	33.1	4.6	4.2	24.8
3/26/2019 5:40	8	8	8	33.16	4.6	4.2	3.4
3/26/2019 5:50	8	8	8	33.1	4.4	4.1	24.2
3/26/2019 6:00	8	8	8	33.1	4.4	4.2	24.6
3/26/2019 6:10	8	8	8	33.1	4.5	4.2	24.7
3/26/2019 6:20	8	8	8	33.16	4.4	4.2	4.6
3/26/2019 6:30	8	8	8	33.16	4.4	4.2	24.4
3/26/2019 6:40	8	8	8	33.1	4.5	4.2	24.6
3/26/2019 6:50	8	8	8	33.07	4.3	4.2	24.8
3/26/2019 7:00	8	8	8	33.1	4.5	4.2	1.5
3/26/2019 7:10	8	8	8	33.16	4.5	4.2	24.5
3/26/2019 7:20	8	8	8	33.1	4.4	4.2	24.8
3/26/2019 7:30	8	8	8	33.13	4.5	4.2	3.2
3/26/2019 7:40	8	8	8	33.01	4.2	4.2	24.2
3/26/2019 7:50	8	8	8	33.07	4.3	4.2	24.6
3/26/2019 8:00	8	8	8	33.16	4.7	4.2	24.8
3/26/2019 8:10	8	8	8	33.13	4.3	4.2	3.6
3/26/2019 8:20	8	8	8	33.07	4.1	4.1	24.4
3/26/2019 8:30	8	8	8	33.07	4.3	4.2	24.6
3/26/2019 8:40	8	8	8	33.04	4.3	4.3	24.8
3/26/2019 8:50	8	8	8	33.1	4.3	4.2	3.9
3/26/2019 9:00	8	8	8	33.04	4.5	4.2	24.6
3/26/2019 9:10	8	8	8	33.16	4.5	4.3	24.6
3/26/2019 9:20	8	8	8	33.1	4	4.3	23.7
3/26/2019 9:30	8	8	8	33.07	4.6	4.3	24
3/26/2019 9:40	8	8	8	33.1	4.3	4.3	24.6
3/26/2019 9:50	8	8	8	32.98	4.4	4.2	24.8
3/26/2019 10:00	8	8	8	33.13	4.2	4.4	3.3
3/26/2019 10:10	8	8	8	33.16	4.5	4.3	24.2
3/26/2019 10:20	8	8	8	33.16	4.5	4.2	24.6
3/26/2019 10:30	8	8	8	33.13	4.3	4.3	24.8
3/26/2019 10:40	8	8	8	33.1	4.5	4.2	3.4
3/26/2019 10:50	8	8	8	33.1	4.7	4.3	24.1
3/26/2019 11:00	8	8	8	33.07	4.2	4.3	24.6
3/26/2019 11:10	8	8	8	33.13	4.3	4.2	24.8
3/26/2019 11:20	8	8	8	33.13	4.4	4.3	3.5
3/26/2019 11:30	8	8	8	33.1	4.2	4.3	24.4
3/26/2019 11:40	8	8	8	33.1	4.7	4.4	24.7
3/26/2019 11:50	8	8	8	33.13	4.3	4.3	24.8

3/26/2019 12:00	8	8	8	33.1	4.2	4.4	1.5
3/26/2019 12:10	8	8	8	33.22	4.3	4.4	24.5
3/26/2019 12:20	8	8	8	33.13	4.4	4.4	24.7
3/26/2019 12:30	8	8	8	33.07	4.4	4.3	11
3/26/2019 12:40	8	8	8	33.22	4.7	4.3	1.4
3/26/2019 12:50	8	8	8	33.16	4.4	4.3	24.4
3/26/2019 13:00	8	8	8	33.22	4.6	4.3	24.7
3/26/2019 13:10	8	8	8	33.22	4.3	4.3	24.9
3/26/2019 13:20	8	8	8	33.16	4.5	4.4	2.1
3/26/2019 13:30	8	8	8	33.25	4.4	4.3	24.4
3/26/2019 13:40	8	8	8	33.22	4.9	4.4	24.7
3/26/2019 13:50	8	8	8	33.22	4.5	4.4	11
3/26/2019 14:00	8	8	8	33.25	4.7	4.4	14.5
3/26/2019 14:10	8	8	8	33.34	4.2	4.3	24.5
3/26/2019 14:20	8	8	8	33.16	4.4	4.3	24.7
3/26/2019 14:30	8	8	8	33.28	4.4	4.3	24.8
3/26/2019 14:40	8	8	8	33.28	4.5	4.4	24.9
3/26/2019 14:50	8	8	8	33.22	4.6	4.4	3.5
3/26/2019 15:00	8	8	8	33.25	4.4	4.3	24.3
3/26/2019 15:10	8	8	8	33.28	4.5	4.4	24.5
3/26/2019 15:20	8	8	8	33.28	4.8	4.3	24.7
3/26/2019 15:30	8	8	8	33.16	4.3	4.3	24.9
3/26/2019 15:40	8	8	8	33.31	4.4	4.2	3.4
3/26/2019 15:50	8	8	8	33.25	4.6	4.3	24.3
3/26/2019 16:00	8	8	8	33.28	4.4	4.2	24.5
3/26/2019 16:10	8	8	8	33.25	4.4	4.3	24.8
3/26/2019 16:20	8	8	8	33.25	4.4	4.3	4.3
3/26/2019 16:30	8	8	8	33.28	4.2	4.3	24.2
3/26/2019 16:40	8	8	8	33.25	4.7	4.3	24.5
3/26/2019 16:50	8	8	8	33.16	4.5	4.3	24.8
3/26/2019 17:00	8	8	8	33.22	4.5	4.3	3.9
3/26/2019 17:10	8	8	8	33.25	4.4	4.3	24.3
3/26/2019 17:20	8	8	8	33.28	4.6	4.2	24.6
3/26/2019 17:30	8	8	8	33.28	4.4	4.2	24.8
3/26/2019 17:40	8	8	8	33.28	4.4	4.1	3.7
3/26/2019 17:50	8	8	8	33.28	4.4	4.3	24.2
3/26/2019 18:00	8	8	8	33.25	4.4	4.2	24.6
3/26/2019 18:10	8	8	8	33.25	4.6	4.3	24.8
3/26/2019 18:20	8	8	8	33.28	4.5	4.3	3.9
3/26/2019 18:30	8	8	8	33.22	4.4	4.3	24.3
3/26/2019 18:40	8	8	8	33.31	4.6	4.3	24.6
3/26/2019 18:50	8	8	8	33.34	4.8	4.3	24.7
3/26/2019 19:00	8	8	8	33.28	4.4	4.3	4
3/26/2019 19:10	8	8	8	33.28	4.5	4.3	1.9
3/26/2019 19:20	8	8	8	33.34	4.3	4.3	24.4
3/26/2019 19:30	8	8	8	33.22	4.6	4.2	24.7
3/26/2019 19:40	8	8	8	33.37	4.2	4.3	24.8

3/26/2019 19:50	8	8	8	33.28	4.3	4.3	4.4
3/26/2019 20:00	8	8	8	33.31	4.6	4.2	24.3
3/26/2019 20:10	8	8	8	33.28	4.6	4.3	24.5
3/26/2019 20:20	8	8	8	33.31	4.4	4.3	24.8
3/26/2019 20:30	8	8	8	33.28	4.5	4.3	4.5
3/26/2019 20:40	8	8	8	33.34	4.3	4.2	24.4
3/26/2019 20:50	8	8	8	33.34	4.2	4.2	24.6
3/26/2019 21:00	8	8	8	33.37	4.2	4.2	24.7
3/26/2019 21:10	8	8	8	33.31	4.3	4.3	5.2
3/26/2019 21:20	8	8	8	33.28	4.6	4.2	2
3/26/2019 21:30	8	8	8	33.28	4.5	4.3	24.4
3/26/2019 21:40	8	8	8	33.25	4.5	4.2	24.7
3/26/2019 21:50	8	8	8	33.37	4.4	4.3	24.9
3/26/2019 22:00	8	8	8	33.37	4.2	4.2	4.2
3/26/2019 22:10	8	8	8	33.31	4.5	4.2	24.3
3/26/2019 22:20	8	8	8	33.28	4.2	4.2	24.6
3/26/2019 22:30	8	8	8	33.28	4	4.2	24.8
3/26/2019 22:40	8	8	8	33.28	4.4	4.2	3.9
3/26/2019 22:50	8	8	8	33.34	4.6	4.2	23
3/26/2019 23:00	8	8	8	33.37	4.6	4.2	24.5
3/26/2019 23:10	8	8	8	33.37	4.4	4.2	24.7
3/26/2019 23:20	8	8	8	33.47	4.6	4.2	24.8
3/26/2019 23:30	8	8	8	33.34	4.2	4.2	3.5
3/26/2019 23:40	8	8	8	33.34	4.7	4.2	24.6
3/26/2019 23:50	8	8	8	33.37	4.4	4.3	24.6
3/27/2019 0:00	8	8	8	33.41	4.2	4.3	24.8
3/27/2019 0:10	8	8	8	33.44	4.3	4.1	4.8
3/27/2019 0:20	8	8	8	33.44	4.4	4.3	11.1
3/27/2019 0:30	8	8	8	33.41	4.5	4.3	24.4
3/27/2019 0:40	8	8	8	33.41	4.5	4.1	24.7
3/27/2019 0:50	8	8	8	33.44	4.5	4.2	24.9
3/27/2019 1:00	8	8	8	33.47	4.2	4.3	3.8
3/27/2019 1:10	8	8	8	33.47	4.5	4.2	24.5
3/27/2019 1:20	8	8	8	33.47	4.4	4.2	24.6
3/27/2019 1:30	8	8	8	33.53	4.6	4.1	24.7
3/27/2019 1:40	8	8	8	33.41	4.5	4.2	24.9
3/27/2019 1:50	8	8	8	33.37	4.5	4.2	3.5
3/27/2019 2:00	8	8	8	33.53	4.4	4.2	24.3
3/27/2019 2:10	8	8	8	33.41	4.4	4.2	24.6
3/27/2019 2:20	8	8	8	33.41	4.3	4.2	24.8
3/27/2019 2:30	8	8	8	33.34	4.5	4.2	4.9
3/27/2019 2:40	8	8	8	33.41	4.4	4.2	1.4
3/27/2019 2:50	8	8	8	33.44	4.1	4.2	24.4
3/27/2019 3:00	8	8	8	33.41	4.4	4.2	24.6
3/27/2019 3:10	8	8	8	33.41	4.6	4.3	24.8
3/27/2019 3:20	8	8	8	33.41	4.3	4.2	3.5
3/27/2019 3:30	8	8	8	33.41	4.4	4.2	21.1

3/27/2019 3:40	8	8	8	33.31	4.5	4.2	24.5
3/27/2019 3:50	8	8	8	33.37	4.6	4.2	24.9
3/27/2019 4:00	8	8	8	33.34	4.3	4.2	24.8
3/27/2019 4:10	8	8	8	33.47	4.3	4.2	2.2
3/27/2019 4:20	8	8	8	33.44	4.7	4.2	24.5
3/27/2019 4:30	8	8	8	33.41	4.3	4.2	24.7
3/27/2019 4:40	8	8	8	33.44	4.6	4.2	24.8
3/27/2019 4:50	8	8	8	33.41	4.5	4.2	4.8
3/27/2019 5:00	8	8	8	33.41	4.5	4.2	24.5
3/27/2019 5:10	8	8	8	33.44	4.3	4.2	24.5
3/27/2019 5:20	8	8	8	33.37	4.6	4.1	24.8
3/27/2019 5:30	8	8	8	33.37	4.5	4.2	24.9
3/27/2019 5:40	8	8	8	33.31	4.4	4.2	2.4
3/27/2019 5:50	8	8	8	33.34	4.4	4.2	24.4
3/27/2019 6:00	8	8	8	33.37	4.7	4.2	24.7
3/27/2019 6:10	8	8	8	33.37	4.5	4.2	24.8
3/27/2019 6:20	8	8	8	33.41	4.4	4.2	4.7
3/27/2019 6:30	8	8	8	33.41	4.5	4.2	24.6
3/27/2019 6:40	8	8	8	33.41	4.5	4.2	24.6
3/27/2019 6:50	8	8	8	33.44	4.4	4.2	24.8
3/27/2019 7:00	8	8	8	33.41	4.5	4.2	24.8
3/27/2019 7:10	8	8	8	33.41	4.3	4.3	2.5
3/27/2019 7:20	8	8	8	33.41	4.6	4.2	24.5
3/27/2019 7:30	8	8	8	33.5	4.3	4.3	24.7
3/27/2019 7:40	8	8	8	33.41	4.5	4.2	24.8
3/27/2019 7:50	8	8	8	33.41	4.3	4.2	3.9
3/27/2019 8:00	8	8	8	33.41	4.4	4.2	24.3
3/27/2019 8:10	8	8	8	33.37	4.6	4.3	24.6
3/27/2019 8:20	8	8	8	33.44	4.5	4.2	24.8
3/27/2019 8:30	8	8	8	33.44	4.4	4.2	3.3
3/27/2019 8:40	8	8	8	33.5	4.6	4.3	24.5
3/27/2019 8:50	8	8	8	33.44	4.3	4.3	24.6
3/27/2019 9:00	8	8	8	33.37	4.4	4.2	24.8
3/27/2019 9:10	8	8	8	33.41	4.5	4.2	11
3/27/2019 9:20	8	8	8	33.41	4.5	4.3	1.4
3/27/2019 9:30	8	8	8	33.47	4.4	4.3	24.4
3/27/2019 9:40	8	8	8	33.44	4.5	4.2	24.7
3/27/2019 9:50	8	8	8	33.47	4.5	4.3	24.8
3/27/2019 10:00	8	8	8	33.41	4.5	4.3	3.4
3/27/2019 10:10	8	8	8	33.44	4.3	4.3	24
3/27/2019 10:20	8	8	8	33.47	4.3	4.3	24.6
3/27/2019 10:30	8	8	8	33.5	4.5	4.3	24.7
3/27/2019 10:40	8	8	8	33.44	4.5	4.3	24.8
3/27/2019 10:50	8	8	8	33.41	4.3	4.3	3.5
3/27/2019 11:00	8	8	8	33.41	4.6	4.3	24.2
3/27/2019 11:10	8	8	8	33.28	5.1	4.4	24.7
3/27/2019 11:20	8	8	8	33.28	4.4	4.4	24.8

3/27/2019 11:30	8	8	8	33.31	4.5	4.4	5.2
3/27/2019 11:40	8	8	8	33.34	4.5	4.3	6.7
3/27/2019 11:50	8	8	8	33.31	4.4	4.4	24.5
3/27/2019 12:00	8	8	8	33.34	4.3	4.3	24.6
3/27/2019 12:10	8	8	8	33.41	4.4	4.4	24.8
3/27/2019 12:20	8	8	8	33.41	4.6	4.4	24.9
3/27/2019 12:30	8	8	8	33.37	4.7	4.4	24.9
3/27/2019 12:40	8	8	8	33.47	4.5	4.5	4.6
3/27/2019 12:50	8	8	8	33.37	4.5	4.4	2
3/27/2019 13:00	8	8	8	33.44	4.7	4.4	24.3
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3/27/2019 13:20	8	8	8	33.41	4.3	4.4	24.7
3/27/2019 13:30	8	8	8	33.37	4.5	4.2	24.8
3/27/2019 13:40	8	8	8	33.44	4.5	4.4	10.9
3/27/2019 13:50	8	8	8	33.41	4.5	4.3	1.7
3/27/2019 14:00	8	8	8	33.37	4.6	4.4	24.6
3/27/2019 14:10	8	8	8	33.37	4.4	4.3	24.6
3/27/2019 14:20	8	8	8	33.44	4.3	4.4	24.8
3/27/2019 14:30	8	8	8	33.44	4.3	4.3	3.6
3/27/2019 14:40	8	8	8	33.37	4.6	4.4	24.3
3/27/2019 14:50	8	8	8	33.44	4.7	4.4	24.5
3/27/2019 15:00	8	8	8	33.37	4.5	4.3	24.8
3/27/2019 15:10	8	8	8	33.44	4.7	4.3	24.9
3/27/2019 15:20	8	8	8	33.47	4.5	4.4	3.9
3/27/2019 15:30	8	8	8	33.44	4.3	4.4	24.1
3/27/2019 15:40	8	8	8	33.47	4.2	4.4	24.5
3/27/2019 15:50	8	8	8	33.5	4.6	4.4	24.7
3/27/2019 16:00	8	8	8	33.47	4.6	4.4	24.9
3/27/2019 16:10	8	8	8	33.47	4.2	4.4	3.8
3/27/2019 16:20	8	8	8	33.53	4.5	4.3	24.3
3/27/2019 16:30	8	8	8	33.47	4.6	4.4	24.5
3/27/2019 16:40	8	8	8	33.47	4.4	4.3	24.7
3/27/2019 16:50	8	8	8	33.56	4.3	4.3	24.8
3/27/2019 17:00	8	8	8	33.53	4.5	4.2	24.8
3/27/2019 17:10	8	8	8	33.53	4.5	4.3	3.4
3/27/2019 17:20	8	8	8	33.53	4.5	4.3	1.4
3/27/2019 17:30	8	8	8	33.5	4.3	4.3	24.5
3/27/2019 17:40	8	8	8	33.53	4.5	4.3	24.6
3/27/2019 17:50	8	8	8	33.56	4.4	4.3	24.7
3/27/2019 18:00	8	8	8	33.56	4.4	4.3	24.8
3/27/2019 18:10	8	8	8	33.56	4.5	4.2	24.9
3/27/2019 18:20	8	8	8	33.62	4.7	4.3	3.7
3/27/2019 18:30	8	8	8	33.59	4.4	4.3	1.3
3/27/2019 18:40	8	8	8	33.56	4.5	4.4	24.5
3/27/2019 18:50	8	8	8	33.56	4.3	4.3	24.6
3/27/2019 19:00	8	8	8	33.59	4.8	4.3	24.7
3/27/2019 19:10	8	8	8	33.56	4.7	4.2	24.8

3/27/2019 19:20	8	8	8	33.59	4.5	4.2	24.8
3/27/2019 19:30	8	8	8	33.56	4.5	4.3	3.4
3/27/2019 19:40	8	8	8	33.59	4.5	4.2	1.5
3/27/2019 19:50	8	8	8	33.59	4.5	4.2	24.3
3/27/2019 20:00	8	8	8	33.62	4.4	4.2	24.5
3/27/2019 20:10	8	8	8	33.56	4.3	4.3	24.7
3/27/2019 20:20	8	8	8	33.62	4.6	4.2	24.8
3/27/2019 20:30	8	8	8	33.53	4.4	4.2	24.8
3/27/2019 20:40	8	8	8	33.56	4.6	4.2	24.9
3/27/2019 20:50	8	8	8	33.62	4.6	4.2	3.5
3/27/2019 21:00	8	8	8	33.62	4.6	4.2	1.6
3/27/2019 21:10	8	8	8	33.62	4.2	4.2	24.3
3/27/2019 21:20	8	8	8	33.56	4.8	4.2	24.4
3/27/2019 21:30	8	8	8	33.59	4.8	4.2	24.6
3/27/2019 21:40	8	8	8	33.56	4.5	4.2	24.8
3/27/2019 21:50	8	8	8	33.62	4.6	4.3	24.8
3/27/2019 22:00	8	8	8	33.59	4.6	4.2	4.2
3/27/2019 22:10	8	8	8	33.56	4.7	4.2	24.2
3/27/2019 22:20	8	8	8	33.62	4.6	4.3	24.5
3/27/2019 22:30	8	8	8	33.56	4.4	4.2	24.7
3/27/2019 22:40	8	8	8	33.59	4.6	4.2	24.8
3/27/2019 22:50	8	8	8	33.59	4.7	4.2	4.2
3/27/2019 23:00	8	8	8	33.65	4.1	4.3	18.7
3/27/2019 23:10	8	8	8	33.59	4.4	4.2	24.4
3/27/2019 23:20	8	8	8	33.62	4.4	4.3	24.6
3/27/2019 23:30	8	8	8	33.56	4.7	4.3	24.8
3/27/2019 23:40	8	8	8	33.56	4.4	4.2	24.9
3/27/2019 23:50	8	8	8	33.59	4.7	4.2	3.6
3/28/2019 0:00	8	8	8	33.59	4.4	4.2	23.2
3/28/2019 0:10	8	8	8	33.56	4.2	4.2	24.5
3/28/2019 0:20	8	8	8	33.56	4.3	4.3	24.5
3/28/2019 0:30	8	8	8	33.59	4.6	4.4	24.8
3/28/2019 0:40	8	8	8	33.62	4.3	4.3	24.9
3/28/2019 0:50	8	8	8	33.71	4.6	4.3	4.1
3/28/2019 1:00	8	8	8	33.68	4.3	4.2	1.2
3/28/2019 1:10	8	8	8	33.71	4.4	4.2	24.6
3/28/2019 1:20	8	8	8	33.65	4.5	4.3	24.6
3/28/2019 1:30	8	8	8	33.71	4.7	4.2	24.8
3/28/2019 1:40	8	8	8	33.68	4.6	4.2	24.8
3/28/2019 1:50	8	8	8	33.65	4.5	4.3	11.1
3/28/2019 2:00	8	8	8	33.65	4.3	4.2	3.4
3/28/2019 2:10	8	8	8	33.65	4.3	4.2	24.3
3/28/2019 2:20	8	8	8	33.65	4.5	4.2	24.5
3/28/2019 2:30	8	8	8	33.65	4.6	4.3	24.7
3/28/2019 2:40	8	8	8	33.68	4.3	4.2	24.8
3/28/2019 2:50	8	8	8	33.68	4.6	4.3	24.8
3/28/2019 3:00	8	8	8	33.65	4.5	4.2	3.8

3/28/2019 3:10	8	8	8	33.62	4.2	4.3	16.9
3/28/2019 3:20	8	8	8	33.68	4.4	4.2	24.3
3/28/2019 3:30	8	8	8	33.71	4.4	4.2	24.6
3/28/2019 3:40	8	8	8	33.62	4.5	4.2	24.8
3/28/2019 3:50	8	8	8	33.5	4.3	4.3	24.9
3/28/2019 4:00	8	8	8	33.65	4.6	4.2	4.7
3/28/2019 4:10	8	8	8	33.62	4.4	4.3	2.6
3/28/2019 4:20	8	8	8	33.62	4.5	4.3	24.3
3/28/2019 4:30	8	8	8	33.62	4.6	4.3	24.5
3/28/2019 4:40	8	8	8	33.62	4.3	4.2	24.6
3/28/2019 4:50	8	8	8	33.62	4.3	4.3	24.8
3/28/2019 5:00	8	8	8	33.59	4.6	4.3	24.9
3/28/2019 5:10	8	8	8	33.65	4.5	4.2	3.7
3/28/2019 5:20	8	8	8	33.68	4.4	4.3	1.3
3/28/2019 5:30	8	8	8	33.65	4.7	4.3	24.4
3/28/2019 5:40	8	8	8	33.65	4.6	4.4	24.5
3/28/2019 5:50	8	8	8	33.65	4.6	4.3	24.6
3/28/2019 6:00	8	8	8	33.65	4.4	4.2	24.8
3/28/2019 6:10	8	8	8	33.53	4.5	4.3	24.9
3/28/2019 6:20	8	8	8	33.56	4.4	4.3	23.9
3/28/2019 6:30	8	8	8	33.59	4.4	4.2	3.3
3/28/2019 6:40	8	8	8	33.56	4.5	4.2	24.5
3/28/2019 6:50	8	8	8	33.62	4.5	4.2	24.4
3/28/2019 7:00	8	8	8	33.68	4.7	4.2	24.7
3/28/2019 7:10	8	8	8	33.62	4.4	4.2	24.8
3/28/2019 7:20	8	8	8	33.62	4.5	4.2	24.9
3/28/2019 7:30	8	8	8	33.59	4.3	4.2	5.2
3/28/2019 7:40	8	8	8	33.59	4.5	4.2	2.6
3/28/2019 7:50	8	8	8	33.62	4.6	4.2	24.3
3/28/2019 8:00	8	8	8	33.68	4.5	4.3	24.5
3/28/2019 8:10	8	8	8	33.65	4.5	4.2	24.7
3/28/2019 8:20	8	8	8	33.65	4.2	4.3	24.8
3/28/2019 8:30	8	8	8	33.65	4.6	4.3	24.8
3/28/2019 8:40	8	8	8	33.65	4.2	4.3	25
3/28/2019 8:50	8	8	8	33.62	4.6	4.3	4.5
3/28/2019 9:00	8	8	8	33.62	4.7	4.3	6.5
3/28/2019 9:10	8	8	8	33.68	4.4	4.2	24.5
3/28/2019 9:20	8	8	8	33.65	4.3	4.4	24.6
3/28/2019 9:30	8	8	8	33.59	4.7	4.2	24.7
3/28/2019 9:40	8	8	8	33.68	4.3	4.4	24.8
3/28/2019 9:50	8	8	8	33.62	4.6	4.3	24.9
3/28/2019 10:00	8	8	8	33.59	4.3	4.3	3.7
3/28/2019 10:10	8	8	8	33.71	4.5	4.4	20.9
3/28/2019 10:20	8	8	8	33.65	4.4	4.4	24.3
3/28/2019 10:30	8	8	8	33.68	4.5	4.3	24.6
3/28/2019 10:40	8	8	8	33.74	4.5	4.4	24.8
3/28/2019 10:50	8	8	8	33.74	4.5	4.3	24.8

3/28/2019 11:00	8	8	8	33.71	4.5	4.4	24.9
3/28/2019 11:10	8	8	8	33.74	4.6	4.4	4.7
3/28/2019 11:20	8	8	8	33.71	4.4	4.4	1.5
3/28/2019 11:30	8	8	8	33.74	4.5	4.4	24.3
3/28/2019 11:40	8	8	8	33.74	4.6	4.4	24.6
3/28/2019 11:50	8	8	8	33.68	4.4	4.4	24.7
3/28/2019 12:00	8	8	8	33.71	4.5	4.3	24.7
3/28/2019 12:10	8	8	8	33.77	4.5	4.4	24.8
3/28/2019 12:20	8	8	8	33.8	4.2	4.4	24.9
3/28/2019 12:30	8	8	8	33.8	4.6	4.3	4.4
3/28/2019 12:40	8	8	8	33.74	4.4	4.4	1.4
3/28/2019 12:50	8	8	8	33.77	4.5	4.4	24.4
3/28/2019 13:00	8	8	8	33.8	4.4	4.4	24.6
3/28/2019 13:10	8	8	8	33.77	4.5	4.3	24.7
3/28/2019 13:20	8	8	8	33.77	4.5	4.4	24.8
3/28/2019 13:30	8	8	8	33.8	4.4	4.5	24.9
3/28/2019 13:40	8	8	8	33.8	4.6	4.4	5.1
3/28/2019 13:50	8	8	8	33.8	4.6	4.4	4
3/28/2019 14:00	8	8	8	33.77	4.6	4.4	16.7
3/28/2019 14:10	8	8	8	33.89	4.2	4.5	24.3
3/28/2019 14:20	8	8	8	33.83	4.6	4.4	24.5
3/28/2019 14:30	8	8	8	33.8	4.4	4.4	24.6
3/28/2019 14:40	8	8	8	33.8	4.6	4.3	24.8
3/28/2019 14:50	8	8	8	33.83	4.4	4.4	24.8
3/28/2019 15:00	8	8	8	33.8	4.7	4.4	5.2
3/28/2019 15:10	8	8	8	33.89	4.5	4.3	4
3/28/2019 15:20	8	8	8	33.83	4.3	4.3	14.7
3/28/2019 15:30	8	8	8	33.89	4.2	4.4	24.4
3/28/2019 15:40	8	8	8	33.8	4.5	4.4	24.6
3/28/2019 15:50	8	8	8	33.83	4.3	4.4	24.7
3/28/2019 16:00	8	8	8	33.89	4.7	4.3	24.8
3/28/2019 16:10	8	8	8	33.89	4.4	4.3	24.9
3/28/2019 16:20	8	8	8	33.77	4.5	4.3	3.7
3/28/2019 16:30	8	8	8	33.89	4.5	4.3	11.1
3/28/2019 16:40	8	8	8	33.77	4.4	4.3	24.3
3/28/2019 16:50	8	8	8	33.8	4.5	4.3	24.4
3/28/2019 17:00	8	8	8	33.83	4.7	4.3	24.6
3/28/2019 17:10	8	8	8	33.83	4.6	4.3	24.7
3/28/2019 17:20	8	8	8	33.92	4.3	4.3	24.8
3/28/2019 17:30	8	8	8	33.83	4.5	4.3	23.8
3/28/2019 17:40	8	8	8	33.92	4.5	4.4	4.1
3/28/2019 17:50	8	8	8	33.8	4.4	4.3	6.6
3/28/2019 18:00	8	8	8	33.83	4.6	4.3	24.4
3/28/2019 18:10	8	8	8	33.89	4.5	4.3	24.6
3/28/2019 18:20	8	8	8	33.83	4.3	4.3	24.7
3/28/2019 18:30	8	8	8	33.89	4.6	4.3	24.7
3/28/2019 18:40	8	8	8	33.83	4.3	4.2	24.9

3/28/2019 18:50	8	8	8	33.8	4.5	4.3	3.1
3/28/2019 19:00	8	8	8	33.8	4.5	4.2	4.4
3/28/2019 19:10	8	8	8	33.83	4.5	4.2	18.8
3/28/2019 19:20	8	8	8	33.83	4.4	4.3	24.3
3/28/2019 19:30	8	8	8	33.89	4.1	4.3	24.7
3/28/2019 19:40	8	8	8	33.89	4.3	4.3	24.7
3/28/2019 19:50	8	8	8	33.83	4.4	4.2	24.8
3/28/2019 20:00	8	8	8	33.83	4.5	4.3	24.8
3/28/2019 20:10	8	8	8	33.89	4.5	4.3	4
3/28/2019 20:20	8	8	8	33.92	4.4	4.2	3.5
3/28/2019 20:30	8	8	8	33.83	4.6	4.2	21
3/28/2019 20:40	8	8	8	33.95	4.4	4.2	24.3
3/28/2019 20:50	8	8	8	33.89	4.6	4.2	24.6
3/28/2019 21:00	8	8	8	33.92	4.7	4.3	24.7
3/28/2019 21:10	8	8	8	33.92	4.7	4.3	24.8
3/28/2019 21:20	8	8	8	33.92	4.4	4.2	24.8
3/28/2019 21:30	8	8	8	33.89	4.6	4.2	24.9
3/28/2019 21:40	8	8	8	33.92	4.5	4.2	4.3
3/28/2019 21:50	8	8	8	33.92	4.5	4.2	1.5
3/28/2019 22:00	8	8	8	33.89	4.4	4.2	24.3
3/28/2019 22:10	8	8	8	33.89	4.7	4.2	24.6
3/28/2019 22:20	8	8	8	33.92	4.4	4.2	24.7
3/28/2019 22:30	8	8	8	33.83	4.6	4.3	24.8
3/28/2019 22:40	8	8	8	33.92	4.4	4.2	24.9
3/28/2019 22:50	8	8	8	33.95	4.4	4.3	24.9
3/28/2019 23:00	8	8	8	33.92	4.4	4.2	4.1
3/28/2019 23:10	8	8	8	33.92	4.4	4.3	3.4
3/28/2019 23:20	8	8	8	33.83	4.3	4.2	24.3
3/28/2019 23:30	8	8	8	33.95	4.4	4.2	24.5
3/28/2019 23:40	8	8	8	33.83	4.5	4.1	24.7
3/28/2019 23:50	8	8	8	33.92	4.3	4.2	24.7
3/29/2019 0:00	8	8	8	33.92	4.7	4.2	24.9
3/29/2019 0:10	8	8	8	33.83	4.4	4.2	23.8
3/29/2019 0:20	8	8	8	33.95	4.3	4.2	4.6
3/29/2019 0:30	8	8	8	33.89	4.4	4.2	20.9
3/29/2019 0:40	8	8	8	33.99	4.6	4.3	24.3
3/29/2019 0:50	8	8	8	33.95	4.4	4.2	24.7
3/29/2019 1:00	8	8	8	33.89	4.7	4.2	24.8
3/29/2019 1:10	8	8	8	33.92	4.4	4.3	24.9
3/29/2019 1:20	8	8	8	33.92	4.4	4.2	11
3/29/2019 1:30	8	8	8	33.92	4.5	4.3	4.5
3/29/2019 1:40	8	8	8	33.95	4.5	4.3	18.6
3/29/2019 1:50	8	8	8	33.95	4.6	4.3	24.5
3/29/2019 2:00	8	8	8	33.95	4.5	4.3	24.5
3/29/2019 2:10	8	8	8	33.95	4.3	4.3	24.6
3/29/2019 2:20	8	8	8	33.89	4.9	4.2	24.8
3/29/2019 2:30	8	8	8	33.95	4.6	4.2	24.8

3/29/2019 2:40	8	8	8	33.95	4.7	4.3	3.2
3/29/2019 2:50	8	8	8	33.92	4.4	4.3	3.3
3/29/2019 3:00	8	8	8	33.92	4.5	4.2	20.9
3/29/2019 3:10	8	8	8	33.99	4.2	4.2	24.3
3/29/2019 3:20	8	8	8	33.99	4.6	4.2	24.6
3/29/2019 3:30	8	8	8	33.95	4.4	4.2	24.7
3/29/2019 3:40	8	8	8	33.92	4.4	4.3	24.8
3/29/2019 3:50	8	8	8	33.99	4.2	4.2	24.9
3/29/2019 4:00	8	8	8	33.99	4.6	4.2	4.4
3/29/2019 4:10	8	8	8	34.05	4.4	4.2	24.6
3/29/2019 4:20	8	8	8	34.02	4.5	4.2	24.5
3/29/2019 4:30	8	8	8	34.02	4.5	4.2	24.7
3/29/2019 4:40	8	8	8	33.99	4.5	4.2	24.7
3/29/2019 4:50	8	8	8	34.02	4.6	4.3	24.9
3/29/2019 5:00	8	8	8	33.99	4.5	4.2	3.2
3/29/2019 5:10	8	8	8	33.99	4.5	4.2	2.2
3/29/2019 5:20	8	8	8	34.02	4.5	4.2	24.3
3/29/2019 5:30	8	8	8	33.95	4.5	4.2	24.6
3/29/2019 5:40	8	8	8	33.95	4.5	4.2	24.8
3/29/2019 5:50	8	8	8	33.89	4.4	4.4	24.8
3/29/2019 6:00	8	8	8	33.99	4.6	4.3	3.2
3/29/2019 6:10	8	8	8	34.05	4.4	4.3	2.8
3/29/2019 6:20	8	8	8	34.02	4.7	4.2	24.3
3/29/2019 6:30	8	8	8	34.02	4.5	4.1	24.3
3/29/2019 6:40	8	8	8	34.02	4.4	4.3	24.6
3/29/2019 6:50	8	8	8	33.99	4.6	4.2	24.7
3/29/2019 7:00	8	8	8	34.08	4.4	4.4	24.8
3/29/2019 7:10	8	8	8	34.05	4.4	4.3	3.3
3/29/2019 7:20	8	8	8	34.02	4.3	4.3	2.5
3/29/2019 7:30	8	8	8	34.11	4.7	4.3	24.5
3/29/2019 7:40	8	8	8	34.08	4.5	4.2	24.5
3/29/2019 7:50	8	8	8	34.08	4.4	4.2	24.6
3/29/2019 8:00	8	8	8	34.02	4.6	4.2	24.8
3/29/2019 8:10	8	8	8	34.02	4.4	4.3	24.8
3/29/2019 8:20	8	8	8	34.11	4.6	4.2	3.3
3/29/2019 8:30	8	8	8	34.11	4.8	4.3	2.1
3/29/2019 8:40	8	8	8	34.08	4.4	4.2	24.3
3/29/2019 8:50	8	8	8	34.08	4.4	4.3	24.4
3/29/2019 9:00	8	8	8	34.08	4.5	4.3	24.6
3/29/2019 9:10	8	8	8	34.08	4.7	4.3	24.8
3/29/2019 9:20	8	8	8	34.14	4.7	4.3	24.8
3/29/2019 9:30	8	8	8	34.08	4.5	4.3	24.9
3/29/2019 9:40	8	8	8	34.11	4.4	4.3	4.6
3/29/2019 9:50	8	8	8	34.14	4.3	4.3	1.5
3/29/2019 10:00	8	8	8	34.08	4.7	4.2	24.3
3/29/2019 10:10	8	8	8	34.14	4.7	4.2	24.5
3/29/2019 10:20	8	8	8	34.05	4.5	4.3	24.6

3/29/2019 10:30	8	8	8	34.02	4.4	4.2	24.8
3/29/2019 10:40	8	8	8	34.08	4.5	4.3	24.8
3/29/2019 10:50	8	8	8	34.05	4.5	4.3	24.9
3/29/2019 11:00	8	8	8	34.05	4.5	4.3	3.4
3/29/2019 11:10	8	8	8	34.05	4.5	4.2	1.6
3/29/2019 11:20	8	8	8	34.05	4.6	4.2	24.3
3/29/2019 11:30	8	8	8	34.08	4.8	4.3	24.4
3/29/2019 11:40	8	8	8	34.02	4.5	4.4	24.6
3/29/2019 11:50	8	8	8	34.02	4.2	4.2	24.8
3/29/2019 12:00	8	8	8	34.05	4.4	4.3	24.9
3/29/2019 12:10	8	8	8	34.02	4.6	4.3	3.5
3/29/2019 12:20	8	8	8	34.05	4.3	4.3	3.2
3/29/2019 12:30	8	8	8	34.02	4.4	4.3	23.6
3/29/2019 12:40	8	8	8	34.08	4.6	4.2	24.4
3/29/2019 12:50	8	8	8	34.05	4.4	4.3	24.6
3/29/2019 13:00	8	8	8	34.02	4.5	4.3	24.8
3/29/2019 13:10	8	8	8	34.08	4.6	4.3	24.8
3/29/2019 13:20	8	8	8	34.05	4.5	4.2	24.9
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3/29/2019 13:40	8	8	8	34.05	4.5	4.3	14.2
3/29/2019 13:50	8	8	8	33.99	4.5	4.3	24.3
3/29/2019 14:00	8	8	8	34.02	4.5	4.3	24.5
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3/29/2019 14:20	8	8	8	34.05	4.4	4.3	24.8
3/29/2019 14:30	8	8	8	34.02	4.5	4.3	24.9
3/29/2019 14:40	8	8	8	34.05	4.5	4.3	3.9
3/29/2019 14:50	8	8	8	34.02	4.3	4.3	23.1
3/29/2019 15:00	8	8	8	33.89	4.4	4.3	24.4
3/29/2019 15:10	8	8	8	34.05	4.5	4.3	24.5
3/29/2019 15:20	8	8	8	33.95	4.6	4.4	24.7
3/29/2019 15:30	8	8	8	33.95	4.6	4.3	24.8
3/29/2019 15:40	8	8	8	34.02	4.3	4.3	24.8
3/29/2019 15:50	8	8	8	34.02	4.2	4.3	5.3
3/29/2019 16:00	8	8	8	33.99	4.7	4.3	3.5
3/29/2019 16:10	8	8	8	33.95	4.5	4.3	18.6
3/29/2019 16:20	8	8	8	34.02	4.5	4.3	24.4
3/29/2019 16:30	8	8	8	33.95	4.4	4.3	24.5
3/29/2019 16:40	8	8	8	34.05	4.5	4.3	24.6
3/29/2019 16:50	8	8	8	33.95	4.4	4.2	24.8
3/29/2019 17:00	8	8	8	34.02	4.6	4.3	24.8
3/29/2019 17:10	8	8	8	33.99	4.5	4.3	24.8
3/29/2019 17:20	8	8	8	34.02	4.6	4.3	3.8
3/29/2019 17:30	8	8	8	33.89	4.5	4.3	1.5
3/29/2019 17:40	8	8	8	33.8	4.5	4.3	24.4
3/29/2019 17:50	8	8	8	33.89	4.3	4.4	24.5
3/29/2019 18:00	8	8	8	33.89	4.6	4.3	24.6
3/29/2019 18:10	8	8	8	33.92	4.5	4.3	24.8

3/29/2019 18:20	8	8	8	33.95	4.5	4.3	24.9
3/29/2019 18:30	8	8	8	33.92	4.5	4.3	3.4
3/29/2019 18:40	8	8	8	33.83	4.7	4.3	2.1
3/29/2019 18:50	8	8	8	33.89	4.4	4.3	24.3
3/29/2019 19:00	8	8	8	33.83	4.3	4.3	24.5
3/29/2019 19:10	8	8	8	33.89	4.3	4.3	24.6
3/29/2019 19:20	8	8	8	33.92	4.4	4.3	24.7
3/29/2019 19:30	8	8	8	33.89	4.5	4.2	24.8
3/29/2019 19:40	8	8	8	33.89	4.5	4.3	24.8
3/29/2019 19:50	8	8	8	33.83	4.3	4.3	3.7
3/29/2019 20:00	8	8	8	33.92	4.5	4.3	13.7
3/29/2019 20:10	8	8	8	33.92	4.4	4.2	24.6
3/29/2019 20:20	8	8	8	33.99	4.4	4.3	24.6
3/29/2019 20:30	8	8	8	33.95	4.4	4.4	24.8
3/29/2019 20:40	8	8	8	33.99	4.6	4.3	24.9
3/29/2019 20:50	8	8	8	33.95	4.4	4.2	24.9
3/29/2019 21:00	8	8	8	33.95	3.9	4.3	3.3
3/29/2019 21:10	8	8	8	33.95	4.3	4.3	2.2
3/29/2019 21:20	8	8	8	34.02	4.5	4.3	24.5
3/29/2019 21:30	8	8	8	33.99	4.7	4.2	24.3
3/29/2019 21:40	8	8	8	33.99	4.3	4.2	24.6
3/29/2019 21:50	8	8	8	33.95	4.5	4.3	24.8
3/29/2019 22:00	8	8	8	33.95	4.4	4.2	24.8
3/29/2019 22:10	8	8	8	33.95	4.3	4.2	24.8
3/29/2019 22:20	8	8	8	33.95	4.3	4.2	3.7
3/29/2019 22:30	8	8	8	33.92	4.4	4.2	1.2
3/29/2019 22:40	8	8	8	33.89	4.6	4.3	24.5
3/29/2019 22:50	8	8	8	33.92	4.5	4.3	24.6
3/29/2019 23:00	8	8	8	33.89	4.4	4.3	24.8
3/29/2019 23:10	8	8	8	33.95	4.5	4.3	24.8
3/29/2019 23:20	8	8	8	33.99	4.7	4.3	24.9
3/29/2019 23:30	8	8	8	33.95	4.4	4.2	4.4
3/29/2019 23:40	8	8	8	33.99	4.4	4.2	6.8
3/29/2019 23:50	8	8	8	33.89	4.3	4.2	24.3
3/30/2019 0:00	8	8	8	33.95	4.5	4.3	24.5
3/30/2019 0:10	8	8	8	33.95	4.4	4.2	24.7
3/30/2019 0:20	8	8	8	33.95	4.4	4.2	24.8
3/30/2019 0:30	8	8	8	34.02	4.7	4.2	24.9
3/30/2019 0:40	8	8	8	33.83	4.6	4.2	24.9
3/30/2019 0:50	8	8	8	33.95	4.3	4.2	4.3
3/30/2019 1:00	8	8	8	33.99	4.6	4.2	2
3/30/2019 1:10	8	8	8	33.95	4.5	4.2	24.3
3/30/2019 1:20	8	8	8	34.05	4.4	4.2	24.5
3/30/2019 1:30	8	8	8	34.05	4.4	4.2	24.7
3/30/2019 1:40	8	8	8	34.08	4.4	4.3	24.8
3/30/2019 1:50	8	8	8	34.05	4.5	4.2	24.8
3/30/2019 2:00	8	8	8	34.05	4.6	4.3	24.9

3/30/2019 2:10	8	8	8	34.11	4.4	4.2	4.7
3/30/2019 2:20	8	8	8	34.05	4.3	4.2	1.2
3/30/2019 2:30	8	8	8	34.02	4.4	4.2	24.3
3/30/2019 2:40	8	8	8	34.08	4	4.2	24.5
3/30/2019 2:50	8	8	8	34.02	4.3	4.2	24.6
3/30/2019 3:00	8	8	8	34.05	4.4	4.2	24.8
3/30/2019 3:10	8	8	8	34.08	4.7	4.2	24.8
3/30/2019 3:20	8	8	8	34.11	4.4	4.2	3.2
3/30/2019 3:30	8	8	8	34.05	4.5	4.2	3.1
3/30/2019 3:40	8	8	8	33.99	4.5	4.2	23.7
3/30/2019 3:50	8	8	8	33.99	4.5	4.2	24.6
3/30/2019 4:00	8	8	8	33.99	4.7	4.2	24.6
3/30/2019 4:10	8	8	8	34.02	4.7	4.2	24.7
3/30/2019 4:20	8	8	8	34.02	4.1	4.2	24.8
3/30/2019 4:30	8	8	8	33.99	4.6	4.2	24.8
3/30/2019 4:40	8	8	8	34.02	4.6	4.2	3.3
3/30/2019 4:50	8	8	8	33.92	4.3	4.2	2.7
3/30/2019 5:00	8	8	8	33.99	4.4	4.2	24.3
3/30/2019 5:10	8	8	8	33.95	4.2	4.2	24.5
3/30/2019 5:20	8	8	8	34.02	4.4	4.3	24.7
3/30/2019 5:30	8	8	8	33.95	4.4	4.2	24.8
3/30/2019 5:40	8	8	8	33.99	4	4.1	24.9
3/30/2019 5:50	8	8	8	33.95	4.5	4.3	3.4
3/30/2019 6:00	8	8	8	33.95	4.4	4.2	1.5
3/30/2019 6:10	8	8	8	33.99	4.3	4.2	24.3
3/30/2019 6:20	8	8	8	33.89	4.4	4.2	24.5
3/30/2019 6:30	8	8	8	33.89	4.5	4.3	24.7
3/30/2019 6:40	8	8	8	33.95	4.4	4.2	24.7
3/30/2019 6:50	8	8	8	33.95	4.3	4.2	24.8
3/30/2019 7:00	8	8	8	34.02	4.6	4.2	3.3
3/30/2019 7:10	8	8	8	33.95	4.6	4.2	1.9
3/30/2019 7:20	8	8	8	34.02	4.4	4.3	24.4
3/30/2019 7:30	8	8	8	33.95	4.4	4.2	24.5
3/30/2019 7:40	8	8	8	33.99	4.2	4.2	24.7
3/30/2019 7:50	8	8	8	34.05	4.4	4.2	24.8
3/30/2019 8:00	8	8	8	34.02	4.6	4.2	24.8
3/30/2019 8:10	8	8	8	33.99	4.6	4.2	4.7
3/30/2019 8:20	8	8	8	34.02	4.5	4.2	3.7
3/30/2019 8:30	8	8	8	34.02	4.6	4.3	1.2
3/30/2019 8:40	8	8	8	34.02	4.5	4.3	24.3
3/30/2019 8:50	8	8	8	34.02	4.6	4.2	24.3
3/30/2019 9:00	8	8	8	33.99	4.7	4.2	24.7
3/30/2019 9:10	8	8	8	34.02	4.5	4.2	24.7
3/30/2019 9:20	8	8	8	33.92	4.3	4.2	24.9
3/30/2019 9:30	8	8	8	34.05	4.5	4.2	23.9
3/30/2019 9:40	8	8	8	33.99	4.4	4.2	3.3
3/30/2019 9:50	8	8	8	33.95	4.2	4.3	24.4

3/30/2019 10:00	8	8	8	33.95	4.2	4.3	24.4
3/30/2019 10:10	8	8	8	34.02	4.6	4.2	24.6
3/30/2019 10:20	8	8	8	33.99	4.5	4.2	24.7
3/30/2019 10:30	8	8	8	33.95	4.5	4.3	24.8
3/30/2019 10:40	8	8	8	34.02	4.4	4.2	3.3
3/30/2019 10:50	8	8	8	33.92	4.5	4.2	1.9
3/30/2019 11:00	8	8	8	33.99	4.6	4.2	24.3
3/30/2019 11:10	8	8	8	34.08	4.5	4.2	24.6
3/30/2019 11:20	8	8	8	33.99	4.4	4.2	24.7
3/30/2019 11:30	8	8	8	33.95	4.5	4.3	24.8
3/30/2019 11:40	8	8	8	33.95	4.5	4.2	3.3
3/30/2019 11:50	8	8	8	33.83	4.5	4.2	3.1
3/30/2019 12:00	8	8	8	33.92	4.5	4.2	24.2
3/30/2019 12:10	8	8	8	33.92	4.3	4.3	24.5
3/30/2019 12:20	8	8	8	33.92	4.3	4.3	24.7
3/30/2019 12:30	8	8	8	33.92	4.5	4.4	24.8
3/30/2019 12:40	8	8	8	33.95	4.4	4.3	24.8
3/30/2019 12:50	8	8	8	33.89	4.5	4.3	3.2
3/30/2019 13:00	8	8	8	33.95	4.6	4.3	2.9
3/30/2019 13:10	8	8	8	33.99	4.7	4.2	24.5
3/30/2019 13:20	8	8	8	33.92	4.5	4.3	24.5
3/30/2019 13:30	8	8	8	33.92	4.6	4.3	24.4
3/30/2019 13:40	8	8	8	33.92	4.5	4.3	24.5
3/30/2019 13:50	8	8	8	33.92	4.4	4.3	24.6
3/30/2019 14:00	8	8	8	33.89	4.4	4.3	24.7
3/30/2019 14:10	8	8	8	33.99	4.5	4.3	24.7
3/30/2019 14:20	8	8	8	33.99	4.4	4.4	24.7
3/30/2019 14:30	8	8	8	33.99	4.4	4.3	24.7
3/30/2019 14:40	8	8	8	33.99	4.6	4.2	24.7
3/30/2019 14:50	8	8	8	33.83	4.7	4.4	24.8
3/30/2019 15:00	8	8	8	33.95	4.2	4.4	24.7
3/30/2019 15:10	8	8	8	33.99	4.4	4.4	24.8
3/30/2019 15:20	8	8	8	33.95	4.6	4.3	24.8
3/30/2019 15:30	8	8	8	33.95	4.4	4.4	24.8
3/30/2019 15:40	8	8	8	33.92	4.2	4.4	24.8
3/30/2019 15:50	8	8	8	33.99	4.4	4.4	24.8
3/30/2019 16:00	8	8	8	34.02	4.5	4.4	24.9
3/30/2019 16:10	8	8	8	34.02	4.8	4.3	24.8
3/30/2019 16:20	8	8	8	34.02	4.4	4.3	24.9
3/30/2019 16:30	8	8	8	33.99	4.6	4.3	24.9
3/30/2019 16:40	8	8	8	33.95	4.5	4.3	24.9
3/30/2019 16:50	8	8	8	34.05	4.4	4.3	24.9
3/30/2019 17:00	8	8	8	34.02	4.3	4.3	24.9
3/30/2019 17:10	8	8	8	33.99	4.1	4.3	24.9
3/30/2019 17:20	8	8	8	33.99	4.5	4.3	3.3
3/30/2019 17:30	8	8	8	34.02	4.4	4.3	4.4
3/30/2019 17:40	8	8	8	34.05	4.4	4.3	3.4

3/30/2019 17:50	8	8	8	34.05	4.3	4.3	1.3
3/30/2019 18:00	8	8	8	34.05	4.5	4.3	24.5
3/30/2019 18:10	8	8	8	34.05	4.3	4.2	24.4
3/30/2019 18:20	8	8	8	34.05	4.6	4.2	24.5
3/30/2019 18:30	8	8	8	34.05	4.6	4.2	24.7
3/30/2019 18:40	8	8	8	34.02	4.3	4.2	24.8
3/30/2019 18:50	8	8	8	34.05	4.6	4.2	24.9
3/30/2019 19:00	8	8	8	34.08	4.4	4.3	24.8
3/30/2019 19:10	8	8	8	34.08	4.4	4.2	4
3/30/2019 19:20	8	8	8	34.17	4.4	4.3	2.1
3/30/2019 19:30	8	8	8	34.05	4.6	4.2	24.5
3/30/2019 19:40	8	8	8	34.08	4.5	4.2	24.5
3/30/2019 19:50	8	8	8	34.08	4.4	4.3	24.8
3/30/2019 20:00	8	8	8	34.14	4.5	4.2	24.8
3/30/2019 20:10	8	8	8	34.14	4.3	4.2	11.1
3/30/2019 20:20	8	8	8	34.11	4.3	4.2	4.3
3/30/2019 20:30	8	8	8	34.11	4.4	4.2	14.2
3/30/2019 20:40	8	8	8	34.11	4.4	4.2	24.4
3/30/2019 20:50	8	8	8	34.08	4.6	4.2	24.5
3/30/2019 21:00	8	8	8	34.11	4.6	4.2	24.7
3/30/2019 21:10	8	8	8	34.08	4.4	4.2	24.7
3/30/2019 21:20	8	8	8	34.08	4.4	4.2	24.8
3/30/2019 21:30	8	8	8	34.11	4.3	4.2	24.9
3/30/2019 21:40	8	8	8	34.14	4.4	4.2	3.9
3/30/2019 21:50	8	8	8	34.08	4.5	4.2	3
3/30/2019 22:00	8	8	8	34.14	4.5	4.2	24.2
3/30/2019 22:10	8	8	8	34.11	4.2	4.2	24.5
3/30/2019 22:20	8	8	8	34.17	4.3	4.2	24.6
3/30/2019 22:30	8	8	8	34.14	4.6	4.2	24.7
3/30/2019 22:40	8	8	8	34.17	4.5	4.1	24.7
3/30/2019 22:50	8	8	8	34.17	4.4	4.2	24.8
3/30/2019 23:00	8	8	8	34.2	4.5	4.2	3.2
3/30/2019 23:10	8	8	8	34.17	4.4	4.2	3.4
3/30/2019 23:20	8	8	8	34.17	4.2	4.2	24.5
3/30/2019 23:30	8	8	8	34.14	4.5	4.2	24.5
3/30/2019 23:40	8	8	8	34.11	4.4	4.1	24.6
3/30/2019 23:50	8	8	8	34.2	4.4	4.2	24.7
3/31/2019 0:00	8	8	8	34.14	4.6	4.2	24.8
3/31/2019 0:10	8	8	8	34.17	4.3	4.2	24.8
3/31/2019 0:20	8	8	8	34.14	4.3	4.2	4.2
3/31/2019 0:30	8	8	8	34.2	4.4	4.2	1.9
3/31/2019 0:40	8	8	8	34.2	4.3	4.2	24.3
3/31/2019 0:50	8	8	8	34.23	4.3	4.2	24.5
3/31/2019 1:00	8	8	8	34.14	4.1	4.3	24.6
3/31/2019 1:10	8	8	8	34.23	4.5	4.2	24.8
3/31/2019 1:20	8	8	8	34.17	4.6	4.2	24.8
3/31/2019 1:30	8	8	8	34.17	4.4	4.2	24.8

3/31/2019 1:40	8	8	8	34.23	4.5	4.2	4
3/31/2019 1:50	8	8	8	34.2	4.3	4.2	1.7
3/31/2019 2:00	8	8	8	34.23	4.5	4.3	24.3
3/31/2019 2:10	8	8	8	34.26	4.4	4.2	24.4
3/31/2019 2:20	8	8	8	34.23	4.2	4.2	24.6
3/31/2019 2:30	8	8	8	34.26	4.8	4.2	24.8
3/31/2019 2:40	8	8	8	34.29	4.3	4.2	24.8
3/31/2019 2:50	8	8	8	34.2	4.5	4.2	24.8
3/31/2019 3:00	8	8	8	34.29	4.4	4.2	4.5
3/31/2019 3:10	8	8	8	34.26	4.3	4.1	18.6
3/31/2019 3:20	8	8	8	34.23	4.5	4.2	24.5
3/31/2019 3:30	8	8	8	34.29	4.4	4.1	24.6
3/31/2019 3:40	8	8	8	34.29	4.6	4.2	24.7
3/31/2019 3:50	8	8	8	34.35	4.5	4.2	24.8
3/31/2019 4:00	8	8	8	34.29	4.6	4.2	24.8
3/31/2019 4:10	8	8	8	34.26	4.5	4.2	3.3
3/31/2019 4:20	8	8	8	34.26	4.3	4.2	3.1
3/31/2019 4:30	8	8	8	34.26	4.2	4.2	24.3
3/31/2019 4:40	8	8	8	34.29	4.9	4.2	24.5
3/31/2019 4:50	8	8	8	34.26	4.2	4.1	24.7
3/31/2019 5:00	8	8	8	34.26	4.6	4.2	24.7
3/31/2019 5:10	8	8	8	34.26	4.6	4.2	24.8
3/31/2019 5:20	8	8	8	34.26	4.4	4.2	3.3
3/31/2019 5:30	8	8	8	34.26	4.4	4.2	1.6
3/31/2019 5:40	8	8	8	34.26	4.6	4.2	24.3
3/31/2019 5:50	8	8	8	34.26	4.6	4.2	24.4
3/31/2019 6:00	8	8	8	34.23	4.4	4.2	24.6
3/31/2019 6:10	8	8	8	34.26	4.2	4.2	24.7
3/31/2019 6:20	8	8	8	34.29	4.4	4.2	24.9
3/31/2019 6:30	8	8	8	34.23	4.2	4.2	3.2
3/31/2019 6:40	8	8	8	34.29	4.2	4.2	2.4
3/31/2019 6:50	8	8	8	34.23	4.4	4.2	24.4
3/31/2019 7:00	8	8	8	34.23	4.3	4.2	24.5
3/31/2019 7:10	8	8	8	34.23	4.4	4.2	24.6
3/31/2019 7:20	8	8	8	34.23	4.4	4.2	24.7
3/31/2019 7:30	8	8	8	34.26	4.4	4.1	24.8
3/31/2019 7:40	8	8	8	34.26	4.3	4.3	3.3
3/31/2019 7:50	8	8	8	34.23	4.4	4.2	3.5
3/31/2019 8:00	8	8	8	34.29	4.3	4.2	24.3
3/31/2019 8:10	8	8	8	34.23	4.5	4.3	24.3
3/31/2019 8:20	8	8	8	34.23	4.2	4.2	24.6
3/31/2019 8:30	8	8	8	34.32	4.4	4.2	24.7
3/31/2019 8:40	8	8	8	34.32	4.7	4.3	24.9
3/31/2019 8:50	8	8	8	34.29	4.3	4.2	4.2
3/31/2019 9:00	8	8	8	34.32	4.5	4.2	20.8
3/31/2019 9:10	8	8	8	34.23	4.6	4.3	24.5
3/31/2019 9:20	8	8	8	34.26	4.5	4.2	24.6

3/31/2019 9:30	8	8	8	34.32	4.3	4.2	24.8
3/31/2019 9:40	8	8	8	34.32	4.4	4.3	24.9
3/31/2019 9:50	8	8	8	34.26	4.6	4.2	3.9
3/31/2019 10:00	8	8	8	34.32	4.4	4.2	24.5
3/31/2019 10:10	8	8	8	34.32	4.2	4.3	24.5
3/31/2019 10:20	8	8	8	34.29	4.4	4.2	24.6
3/31/2019 10:30	8	8	8	34.32	4.4	4.2	24.7
3/31/2019 10:40	8	8	8	34.29	4.5	4.2	24.8
3/31/2019 10:50	8	8	8	34.23	4.4	4.2	3.2
3/31/2019 11:00	8	8	8	34.26	4.5	4.2	1.5
3/31/2019 11:10	8	8	8	34.29	4.5	4.2	24.2
3/31/2019 11:20	8	8	8	34.32	4.5	4.2	24.6
3/31/2019 11:30	8	8	8	34.2	4.5	4.2	24.7
3/31/2019 11:40	8	8	8	34.2	4.4	4.3	24.8
3/31/2019 11:50	8	8	8	34.23	4.5	4.2	3.3
3/31/2019 12:00	8	8	8	34.26	4.4	4.2	1.5
3/31/2019 12:10	8	8	8	34.23	4.3	4.2	24.4
3/31/2019 12:20	8	8	8	34.23	4.5	4.3	24.6
3/31/2019 12:30	8	8	8	34.2	4.4	4.2	24.7
3/31/2019 12:40	8	8	8	34.2	4.4	4.2	24.8
3/31/2019 12:50	8	8	8	34.2	4.4	4.2	3.3
3/31/2019 13:00	8	8	8	34.26	4.5	4.2	1.4
3/31/2019 13:10	8	8	8	34.26	4.3	4.2	24.2
3/31/2019 13:20	8	8	8	34.23	4.3	4.2	24.6
3/31/2019 13:30	8	8	8	34.2	4.6	4.3	24.7
3/31/2019 13:40	8	8	8	34.29	4.5	4.1	24.9
3/31/2019 13:50	8	8	8	34.23	4.4	4.2	3.3
3/31/2019 14:00	8	8	8	34.23	4.3	4.1	1.6
3/31/2019 14:10	8	8	8	34.26	4.4	4.2	24.2
3/31/2019 14:20	8	8	8	34.23	4.4	4.2	24.6
3/31/2019 14:30	8	8	8	34.23	4.4	4.2	24.8
3/31/2019 14:40	8	8	8	34.23	4.6	4.2	24.8
3/31/2019 14:50	8	8	8	34.26	4.4	4.2	4.9
3/31/2019 15:00	8	8	8	34.26	4.5	4.2	3.6
3/31/2019 15:10	8	8	8	34.29	4.4	4.1	6.6
3/31/2019 15:20	8	8	8	34.23	4.4	4.1	24.3
3/31/2019 15:30	8	8	8	34.23	4.5	4.2	24.5
3/31/2019 15:40	8	8	8	34.26	4.5	4.2	24.6
3/31/2019 15:50	8	8	8	34.17	4.6	4.2	24.7
3/31/2019 16:00	8	8	8	34.17	4.3	4.2	24.8
3/31/2019 16:10	8	8	8	34.17	4.3	4.2	24.9
3/31/2019 16:20	8	8	8	34.14	4.3	4.2	4.8
3/31/2019 16:30	8	8	8	34.2	4.4	4.2	3.5
3/31/2019 16:40	8	8	8	34.2	4.5	4.2	24.3
3/31/2019 16:50	8	8	8	34.23	4.4	4.3	24.4
3/31/2019 17:00	8	8	8	34.2	4.2	4.2	24.7
3/31/2019 17:10	8	8	8	34.2	4.4	4.2	24.8

3/31/2019 17:20	8	8	8	34.14	4.4	4.2	24.9
3/31/2019 17:30	8	8	8	34.17	4.4	4.2	4.7
3/31/2019 17:40	8	8	8	34.14	4.4	4.1	1.3
3/31/2019 17:50	8	8	8	34.17	4.3	3.9	24.5
3/31/2019 18:00	8	8	8	34.11	4.7	4.2	24.6
3/31/2019 18:10	8	8	8	34.14	4.4	4.1	24.7
3/31/2019 18:20	8	8	8	34.14	4.4	4.2	24.8
3/31/2019 18:30	8	8	8	34.14	3.9	4.2	24.9
3/31/2019 18:40	8	8	8	34.08	4.5	4.2	24.9
3/31/2019 18:50	8	8	8	34.17	4.4	4.2	24.9
3/31/2019 19:00	8	8	8	34.17	4.5	4.2	3.9
3/31/2019 19:10	8	8	8	34.17	4.4	4.2	3.3
3/31/2019 19:20	8	8	8	34.08	4.3	4.2	16.4
3/31/2019 19:30	8	8	8	34.14	4.5	4.1	24.3
3/31/2019 19:40	8	8	8	34.14	4.4	4.2	24.5
3/31/2019 19:50	8	8	8	34.17	4.1	4.2	24.6
3/31/2019 20:00	8	8	8	34.17	4.6	4.2	24.8
3/31/2019 20:10	8	8	8	34.17	4.2	4.2	24.8
3/31/2019 20:20	8	8	8	34.17	4.3	4.2	24.9
3/31/2019 20:30	8	8	8	34.17	4.1	4.1	4.7
3/31/2019 20:40	8	8	8	34.2	4.7	4.2	1.4
3/31/2019 20:50	8	8	8	34.17	4.6	4.1	24.3
3/31/2019 21:00	8	8	8	34.14	4.4	4.2	24.5
3/31/2019 21:10	8	8	8	34.11	4.5	4.2	24.7
3/31/2019 21:20	8	8	8	34.11	4.4	4.2	24.8
3/31/2019 21:30	8	8	8	34.17	4.2	4.2	24.9
3/31/2019 21:40	8	8	8	34.14	4.5	4.2	3.4
3/31/2019 21:50	8	8	8	34.14	4.1	4.2	4.4
3/31/2019 22:00	8	8	8	34.14	4.3	4.2	1.5
3/31/2019 22:10	8	8	8	34.14	4.4	4.1	24.3
3/31/2019 22:20	8	8	8	34.17	4.5	4.2	24.5
3/31/2019 22:30	8	8	8	34.17	4.2	4.2	24.7
3/31/2019 22:40	8	8	8	34.17	4.3	4.2	24.8
3/31/2019 22:50	8	8	8	34.14	4.3	4.2	24.8
3/31/2019 23:00	8	8	8	34.2	4.5	4.2	3.3
3/31/2019 23:10	8	8	8	34.08	4.4	4.1	3.2
3/31/2019 23:20	8	8	8	34.08	4.6	4.2	23.7
3/31/2019 23:30	8	8	8	34.05	4.5	4.2	24.3
3/31/2019 23:40	8	8	8	34.14	4.5	4.2	24.6
3/31/2019 23:50	8	8	8	34.11	4.5	4.2	24.7
4/1/2019 0:00	8	8	8	34.11	4.4	4.2	24.8
4/1/2019 0:10	8	8	8	34.05	4.5	4.1	24.8
4/1/2019 0:20	8	8	8	33.99	4.5	4.2	4
4/1/2019 0:30	8	8	8	34.02	4.5	4.2	23.6
4/1/2019 0:40	8	8	8	33.95	4.4	4.1	24.5
4/1/2019 0:50	8	8	8	34.05	4.5	4.2	24.6
4/1/2019 1:00	8	8	8	33.99	4.3	4.2	24.8

4/1/2019 1:10	8	8	8	34.02	4.5	4.2	24.8
4/1/2019 1:20	8	8	8	33.99	4.5	4.2	4.8
4/1/2019 1:30	8	8	8	33.99	4.3	4.2	3.5
4/1/2019 1:40	8	8	8	33.89	4.2	4.2	24.1
4/1/2019 1:50	8	8	8	33.92	4.5	4.2	24.4
4/1/2019 2:00	8	8	8	33.95	4.4	4.2	24.6
4/1/2019 2:10	8	8	8	34.02	4.4	4.2	24.7
4/1/2019 2:20	8	8	8	33.92	4.6	4.1	24.9
4/1/2019 2:30	8	8	8	33.99	4.4	4.2	3.7
4/1/2019 2:40	8	8	8	33.95	4.4	4.2	3.9
4/1/2019 2:50	8	8	8	34.02	4.4	4.2	4.8
4/1/2019 3:00	8	8	8	33.99	4.5	4.2	2
4/1/2019 3:10	8	8	8	33.99	4.4	4.2	13.9
4/1/2019 3:20	8	8	8	33.92	4.6	4.1	24.3
4/1/2019 3:30	8	8	8	33.92	4.5	4.2	24.5
4/1/2019 3:40	8	8	8	33.83	4.5	4.2	24.5
4/1/2019 3:50	8	8	8	33.83	4.3	4.2	24.7
4/1/2019 4:00	8	8	8	33.95	4.6	4.2	24.7
4/1/2019 4:10	8	8	8	33.83	4.2	4.1	24.8
4/1/2019 4:20	8	8	8	33.8	4.4	4.2	24.8
4/1/2019 4:30	8	8	8	33.77	4.6	4.2	24.9
4/1/2019 4:40	8	8	8	33.74	4.2	4.2	24.9
4/1/2019 4:50	8	8	8	33.71	4.6	4.2	3.4
4/1/2019 5:00	8	8	8	33.77	4.3	4.2	3.2
4/1/2019 5:10	8	8	8	33.8	4.4	4.2	10.6
4/1/2019 5:20	8	8	8	33.83	4.7	4.2	24.3
4/1/2019 5:30	8	8	8	33.83	4.4	4.2	24.5
4/1/2019 5:40	8	8	8	33.77	4.5	4.2	24.7
4/1/2019 5:50	8	8	8	33.77	4.6	4.2	24.9
4/1/2019 6:00	8	8	8	33.8	4.3	4.2	24.8
4/1/2019 6:10	8	8	8	33.8	4.4	4.3	3.2
4/1/2019 6:20	8	8	8	33.71	4.4	4.2	3.5
4/1/2019 6:30	8	8	8	33.77	4.5	4.2	24.3
4/1/2019 6:40	8	8	8	33.83	4.6	4.2	24.5
4/1/2019 6:50	8	8	8	33.77	4.1	4.2	24.8
4/1/2019 7:00	8	8	8	33.8	4.5	4.2	24.9
4/1/2019 7:10	8	8	8	33.8	4.4	4.2	4.7
4/1/2019 7:20	8	8	8	33.77	4.2	4.2	22.5
4/1/2019 7:30	8	8	8	33.77	4.5	4.3	24.5
4/1/2019 7:40	8	8	8	33.89	4.4	4.2	24.7
4/1/2019 7:50	8	8	8	33.89	4.3	4.2	24.9
4/1/2019 8:00	8	8	8	33.8	4.4	4.2	1.7
4/1/2019 8:10	8	8	8	33.8	4.2	4.1	24.4
4/1/2019 8:20	8	8	8	33.8	4.4	4.2	24.7
4/1/2019 8:30	8	8	8	33.8	4.4	4.3	24.8
4/1/2019 8:40	8	8	8	33.74	4.2	4.3	1.3
4/1/2019 8:50	8	8	8	33.83	4.4	4.2	24.5

4/1/2019 9:00	8	8	8	33.83	4.4	4.3	24.8
4/1/2019 9:10	8	8	8	33.77	4.4	4.3	2.3
4/1/2019 9:20	8	8	8	33.8	4.5	4.2	24.4
4/1/2019 9:30	8	8	8	33.74	4.2	4.1	24.8
4/1/2019 9:40	8	8	8	33.74	4.3	4.2	3.6
4/1/2019 9:50	8	8	8	33.74	4.3	4.3	24.4
4/1/2019 10:00	8	8	8	33.68	4.6	4.2	24.7
4/1/2019 10:10	8	8	8	33.74	4.4	4.2	4.6
4/1/2019 10:20	8	8	8	33.71	4.5	4.2	24.2
4/1/2019 10:30	8	8	8	33.74	4.4	4.2	24.7
4/1/2019 10:40	8	8	8	33.74	4.4	4.3	3.8
4/1/2019 10:50	8	8	8	33.71	4.4	4.2	24.2
4/1/2019 11:00	8	8	8	33.62	4.4	4.2	24.7
4/1/2019 11:10	8	8	8	33.71	4.3	4.3	4.5
4/1/2019 11:20	8	8	8	33.68	4.5	4.3	24.4
4/1/2019 11:30	8	8	8	33.56	4.4	4.2	24.7
4/1/2019 11:40	8	8	8	33.74	4.2	4.3	4.8
4/1/2019 11:50	8	8	8	33.68	4.5	4.3	24.3
4/1/2019 12:00	8	8	8	33.68	4.2	4.3	24.6
4/1/2019 12:10	8	8	8	33.59	4.3	4.2	24.8
4/1/2019 12:20	8	8	8	33.62	4.4	4.2	20.9
4/1/2019 12:30	8	8	8	33.68	4.4	4.3	24.6
4/1/2019 12:40	8	8	8	33.62	4.5	4.2	24.8
4/1/2019 12:50	8	8	8	33.62	4.3	4.2	1.3
4/1/2019 13:00	8	8	8	33.59	4.7	4.3	24.6
4/1/2019 13:10	8	8	8	33.59	4.5	4.3	24.8
4/1/2019 13:20	8	8	8	33.56	4.2	4.2	3.3
4/1/2019 13:30	8	8	8	33.59	4.4	4.3	24.3
4/1/2019 13:40	8	8	8	33.59	4.4	4.2	24.8
4/1/2019 13:50	8	8	8	33.53	4.4	4.3	3.4
4/1/2019 14:00	8	8	8	33.56	4.5	4.2	24.5
4/1/2019 14:10	8	8	8	33.62	4.2	4.3	24.7
4/1/2019 14:20	8	8	8	33.59	4.3	4.4	3.4
4/1/2019 14:30	8	8	8	33.59	4.4	4.3	24.2
4/1/2019 14:40	8	8	8	33.59	4.4	4.2	24.7
4/1/2019 14:50	8	8	8	33.59	4.4	4.3	3.4
4/1/2019 15:00	8	8	8	33.59	4.3	4.3	24.2
4/1/2019 15:10	8	8	8	33.59	4.5	4.3	24.6
4/1/2019 15:20	8	8	8	33.59	4.7	4.2	24.9
4/1/2019 15:30	8	8	8	33.53	4.5	4.3	1.7
4/1/2019 15:40	8	8	8	33.62	4.4	4.3	24.5
4/1/2019 15:50	8	8	8	33.53	3.7	4.3	24.8
4/1/2019 16:00	8	8	8	33.53	4.4	4.2	3.3
4/1/2019 16:10	8	8	8	33.53	4.5	4.3	24.2
4/1/2019 16:20	8	8	8	33.56	4.5	4.2	24.6
4/1/2019 16:30	8	8	8	33.56	4.6	4.2	24.8
4/1/2019 16:40	8	8	8	33.53	4.5	4.4	3.1

4/1/2019 16:50	8	8	8	33.53	4.4	4.3	24.5
4/1/2019 17:00	8	8	8	33.53	4.5	4.3	24.8
4/1/2019 17:10	8	8	8	33.5	4.4	4.3	1.7
4/1/2019 17:20	8	8	8	33.56	4.6	4.3	24.5
4/1/2019 17:30	8	8	8	33.53	4.7	4.3	24.8
4/1/2019 17:40	8	8	8	33.5	4.4	4.3	1.3
4/1/2019 17:50	8	8	8	33.5	4.6	4.2	24.5
4/1/2019 18:00	8	8	8	33.47	4.4	4.4	24.7
4/1/2019 18:10	8	8	8	33.53	4.6	4.3	1.2
4/1/2019 18:20	8	8	8	33.56	4.7	4.3	24.6
4/1/2019 18:30	8	8	8	33.47	4.3	4.3	24.8
4/1/2019 18:40	8	8	8	33.56	4.8	4.3	24.2
4/1/2019 18:50	8	8	8	33.5	4.3	4.4	24.7
4/1/2019 19:00	8	8	8	33.53	4.4	4.3	4.6
4/1/2019 19:10	8	8	8	33.56	4.6	4.3	24.3
4/1/2019 19:20	8	8	8	33.53	4.5	4.2	24.6
4/1/2019 19:30	8	8	8	33.53	4.4	4.3	3.9
4/1/2019 19:40	8	8	8	33.56	4.2	4.3	24.2
4/1/2019 19:50	8	8	8	33.5	4.3	4.2	24.7
4/1/2019 20:00	8	8	8	33.5	4.2	4.2	3.4
4/1/2019 20:10	8	8	8	33.5	4.6	4.3	24.3
4/1/2019 20:20	8	8	8	33.47	4.2	4.2	24.7
4/1/2019 20:30	8	8	8	33.41	4.3	4.3	3.7
4/1/2019 20:40	8	8	8	33.5	4.3	4.2	24.4
4/1/2019 20:50	8	8	8	33.47	4.5	4.2	24.7
4/1/2019 21:00	8	8	8	33.5	4.3	4.2	4.5
4/1/2019 21:10	8	8	8	33.44	4.3	4.2	24.2
4/1/2019 21:20	8	8	8	33.5	4.7	4.3	24.7
4/1/2019 21:30	8	8	8	33.44	4.5	4.2	4.7
4/1/2019 21:40	8	8	8	33.53	3.8	4.3	24.2
4/1/2019 21:50	8	8	8	33.47	4.4	4.2	24.7
4/1/2019 22:00	8	8	8	33.47	4	4.2	3.3
4/1/2019 22:10	8	8	8	33.41	4.4	4.2	24.3
4/1/2019 22:20	8	8	8	33.5	4.3	4.3	24.6
4/1/2019 22:30	8	8	8	33.5	4.5	4.2	3.3
4/1/2019 22:40	8	8	8	33.47	4.4	4.2	24.3
4/1/2019 22:50	8	8	8	33.41	4.3	4.2	24.6
4/1/2019 23:00	8	8	8	33.47	4.3	4.2	24.6
4/1/2019 23:10	8	8	8	33.47	4.3	4.2	18.6
4/1/2019 23:20	8	8	8	33.5	4.5	4.2	24.5
4/1/2019 23:30	8	8	8	33.47	4.5	4.2	24.9
4/1/2019 23:40	8	8	8	33.44	4.4	4.2	1.3
4/1/2019 23:50	8	8	8	33.56	4.4	4.3	24.7
4/2/2019 0:00	8	8	8	33.47	4.3	4.1	24.7
4/2/2019 0:10	8	8	8	33.44	4.2	4.2	1.2
4/2/2019 0:20	8	8	8	33.41	4.6	4.2	24.5
4/2/2019 0:30	8	8	8	33.44	4.4	4.2	24.8

4/2/2019 0:40	8	8	8	33.47	4.3	4.3	1.3
4/2/2019 0:50	8	8	8	33.53	4.5	4.2	24.6
4/2/2019 1:00	8	8	8	33.47	4.6	4.2	24.8
4/2/2019 1:10	8	8	8	33.53	4.9	4.2	1.5
4/2/2019 1:20	8	8	8	33.47	4.3	4.2	24.5
4/2/2019 1:30	8	8	8	33.47	4.3	4.2	24.8
4/2/2019 1:40	8	8	8	33.47	4.5	4.2	2.8
4/2/2019 1:50	8	8	8	33.62	4.3	4.2	24.4
4/2/2019 2:00	8	8	8	33.5	4.5	4.2	24.8
4/2/2019 2:10	8	8	8	33.41	4.2	4.2	2.6
4/2/2019 2:20	8	8	8	33.56	4.4	4.2	24.4
4/2/2019 2:30	8	8	8	33.5	4.7	4.2	24.7
4/2/2019 2:40	8	8	8	33.5	4.6	4.2	4.3
4/2/2019 2:50	8	8	8	33.56	4.5	4.2	24.4
4/2/2019 3:00	8	8	8	33.5	4.5	4.2	24.7
4/2/2019 3:10	8	8	8	33.53	4.5	4.2	4.1
4/2/2019 3:20	8	8	8	33.56	4.2	4.2	24.3
4/2/2019 3:30	8	8	8	33.56	4.6	4.2	24.7
4/2/2019 3:40	8	8	8	33.5	4.2	4.2	3.3
4/2/2019 3:50	8	8	8	33.59	4.2	4.2	24.1
4/2/2019 4:00	8	8	8	33.53	4.3	4.2	24.7
4/2/2019 4:10	8	8	8	33.56	4.4	4.2	3.2
4/2/2019 4:20	8	8	8	33.59	4.5	4.2	24.3
4/2/2019 4:30	8	8	8	33.59	4.4	4.2	24.6
4/2/2019 4:40	8	8	8	33.59	4.4	4.2	4.6
4/2/2019 4:50	8	8	8	33.56	4.4	4.3	24.3
4/2/2019 5:00	8	8	8	33.59	4.3	4.2	24.7
4/2/2019 5:10	8	8	8	33.5	4.7	4.2	3.2
4/2/2019 5:20	8	8	8	33.53	4.5	4.2	24.1
4/2/2019 5:30	8	8	8	33.59	4.4	4.1	24.6
4/2/2019 5:40	8	8	8	33.56	4.4	4.2	4.7
4/2/2019 5:50	8	8	8	33.56	4.2	4.2	24.1
4/2/2019 6:00	8	8	8	33.56	4.3	4.3	24.5
4/2/2019 6:10	8	8	8	33.59	4.3	4.2	24.8
4/2/2019 6:20	8	8	8	33.53	4.7	4.2	23.6
4/2/2019 6:30	8	8	8	33.53	4.4	4.3	24.6
4/2/2019 6:40	8	8	8	33.56	4.3	4.2	24.8
4/2/2019 6:50	8	8	8	33.59	4.4	4.2	24.1
4/2/2019 7:00	8	8	8	33.53	4.5	4.2	24.6
4/2/2019 7:10	8	8	8	33.59	4.5	4.3	24.8
4/2/2019 7:20	8	8	8	33.5	4.5	4.2	18.9
4/2/2019 7:30	8	8	8	33.53	4.5	4.2	24.5
4/2/2019 7:40	8	8	8	33.53	4.4	4.3	24.8
4/2/2019 7:50	8	8	8	33.53	4.4	4.2	3.4
4/2/2019 8:00	8	8	8	33.56	4.6	4.3	24.4
4/2/2019 8:10	8	8	8	33.53	4.7	4.2	24.7
4/2/2019 8:20	8	8	8	33.53	4.4	4.3	3.3

4/2/2019 8:30	8	8	8	33.56	4.6	4.2	24.4
4/2/2019 8:40	8	8	8	33.53	4.3	4.3	24.8
4/2/2019 8:50	8	8	8	33.53	4.4	4.2	4.5
4/2/2019 9:00	8	8	8	33.5	4.6	4.2	24.4
4/2/2019 9:10	8	8	8	33.53	4.9	4.3	24.7
4/2/2019 9:20	8	8	8	33.53	4.5	4.3	5
4/2/2019 9:30	8	8	8	33.56	4.5	4.3	24.3
4/2/2019 9:40	8	8	8	33.53	4.5	4.3	24.6
4/2/2019 9:50	8	8	8	33.5	4.5	4.2	24.8
4/2/2019 10:00	8	8	8	33.53	4.4	4.4	22.2
4/2/2019 10:10	8	8	8	33.56	4.2	4.3	24.6
4/2/2019 10:20	8	8	8	33.5	4.3	4.3	24.8
4/2/2019 10:30	8	8	8	33.53	4.5	4.2	1.6
4/2/2019 10:40	8	8	8	33.56	4.4	4.3	24.5
4/2/2019 10:50	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 11:00	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 11:10	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 11:20	-7	-7	-7	-13.94	-25	-25	-7.5
4/2/2019 11:30	-7	-7	-7	-13.94	-25	-25	-7.5
4/2/2019 11:40	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 11:50	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 12:00	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 12:10	-7	-7	-7	-13.94	-24.9	-25	-7.5
4/2/2019 12:20	0	0	0	33.74	3.5	3.8	0.3
4/2/2019 12:30	0	0	0	33.71	3.5	3.9	0.3
4/2/2019 12:40	0	0	0	33.71	3.5	3.9	0.3
4/2/2019 12:50	0	0	0	33.71	3.5	3.9	0.3
4/2/2019 13:00	0	0	0	33.71	3.4	3.9	0.3
4/2/2019 13:10	0	0	0	33.71	3.4	3.8	0.3
4/2/2019 13:20	0	0	0	33.71	3.4	3.8	0.3
4/2/2019 13:30	0	0	0	33.71	3.4	3.8	0.3
4/2/2019 13:40	0	0	0	33.71	3.3	3.7	0.3
4/2/2019 13:50	0	0	0	33.71	3.3	3.7	0.3
4/2/2019 14:00	0	0	0	33.71	3.2	3.7	0.3
4/2/2019 14:10	0	0	0	33.71	3.1	3.6	0.3
4/2/2019 14:20	0	0	0	33.71	3.1	3.6	0.3
4/2/2019 14:30	0	0	0	33.71	3.1	3.6	0.3
4/2/2019 14:40	0	0	0	33.71	3.1	3.5	0.3
4/2/2019 14:50	0	0	0	33.71	3	3.5	0.3
4/2/2019 15:00	0	0	0	33.71	3	3.4	0.3
4/2/2019 15:10	0	0	0	33.71	2.9	3.4	0.3
4/2/2019 15:20	0	0	0	33.71	2.9	3.3	0.3
4/2/2019 15:30	0	0	0	33.71	2.8	3.2	0.3
4/2/2019 15:40	0	0	0	33.71	2.8	3.2	0.3
4/2/2019 15:50	0	0	0	33.71	2.7	3.1	0.3
4/2/2019 16:00	0	0	0	33.71	2.7	3.1	0.3
4/2/2019 16:10	0	0	0	33.71	2.6	3.1	0.3

4/2/2019 16:20	0	0	0	33.71	2.5	3	0.3
4/2/2019 16:30	0	0	0	33.71	2.4	2.9	0.3
4/2/2019 16:40	0	0	0	33.71	2.4	2.8	0.3
4/2/2019 16:50	0	0	0	33.71	2.4	2.8	0.3
4/2/2019 17:00	0	0	0	33.71	2.3	2.7	0.3
4/2/2019 17:10	0	0	0	33.71	2.3	2.7	0.3
4/2/2019 17:20	0	0	0	33.71	2.2	2.6	0.3
4/2/2019 17:30	0	0	0	33.71	2.2	2.5	0.3
4/2/2019 17:40	0	0	0	33.71	2.1	2.5	0.3
4/2/2019 17:50	0	0	0	33.71	2.1	2.4	0.3
4/2/2019 18:00	0	0	0	33.74	2	2.4	0.3
4/2/2019 18:10	0	0	0	33.71	2	2.4	0.3
4/2/2019 18:20	0	0	0	33.71	1.9	2.3	0.3
4/2/2019 18:30	0	0	0	33.71	1.9	2.3	0.3
4/2/2019 18:40	0	0	0	33.71	1.8	2.2	0.3
4/2/2019 18:50	0	0	0	33.71	1.8	2.2	0.3
4/2/2019 19:00	0	0	0	33.71	1.7	2.1	0.3
4/2/2019 19:10	0	0	0	33.71	1.7	2.1	0.3
4/2/2019 19:20	0	0	0	33.71	1.6	2	0.3
4/2/2019 19:30	0	0	0	33.71	1.6	2	0.3
4/2/2019 19:40	0	0	0	33.74	1.6	1.9	0.3
4/2/2019 19:50	0	0	0	33.74	1.5	1.9	0.3
4/2/2019 20:00	0	0	0	33.74	1.5	1.8	0.3
4/2/2019 20:10	0	0	0	33.71	1.5	1.8	0.3
4/2/2019 20:20	0	0	0	33.74	1.4	1.8	0.3
4/2/2019 20:30	0	0	0	33.74	1.4	1.7	0.3
4/2/2019 20:40	0	0	0	33.74	1.4	1.7	0.3
4/2/2019 20:50	0	0	0	33.74	1.4	1.7	0.3
4/2/2019 21:00	0	0	0	33.74	1.3	1.6	0.3
4/2/2019 21:10	0	0	0	33.71	1.3	1.6	0.3
4/2/2019 21:20	0	0	0	33.74	1.2	1.6	0.3
4/2/2019 21:30	0	0	0	33.74	1.2	1.6	0.3
4/2/2019 21:40	0	0	0	33.71	1.2	1.6	0.3
4/2/2019 21:50	0	0	0	33.71	1.2	1.5	0.3
4/2/2019 22:00	0	0	0	33.74	1.2	1.5	0.3
4/2/2019 22:10	0	0	0	33.71	1.1	1.5	0.3
4/2/2019 22:20	0	0	0	33.71	1.1	1.5	0.3
4/2/2019 22:30	0	0	0	33.74	1.1	1.5	0.3
4/2/2019 22:40	0	0	0	33.74	1.1	1.4	0.3
4/2/2019 22:50	0	0	0	33.71	1.1	1.4	0.3
4/2/2019 23:00	0	0	0	33.74	1.1	1.4	0.3
4/2/2019 23:10	0	0	0	33.74	1.1	1.4	0.3
4/2/2019 23:20	0	0	0	33.74	1.1	1.4	0.3
4/2/2019 23:30	0	0	0	33.74	1.1	1.4	0.3
4/2/2019 23:40	0	0	0	33.74	1.1	1.4	0.3
4/2/2019 23:50	0	0	0	33.71	1.1	1.4	0.3
4/3/2019 0:00	0	0	0	33.71	1.1	1.4	0.3

4/3/2019 0:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 0:20	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 0:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 0:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 0:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 1:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 1:10	0	0	0	33.77	1.1	1.4	0.3
4/3/2019 1:20	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 1:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 1:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 1:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 2:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 2:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 2:20	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 2:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 2:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 2:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 3:00	0	0	0	33.71	1.1	1.4	0.3
4/3/2019 3:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 3:20	0	0	0	33.71	1.1	1.4	0.3
4/3/2019 3:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 3:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 3:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 4:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 4:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 4:20	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 4:30	0	0	0	33.71	1.1	1.4	0.3
4/3/2019 4:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 4:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 5:00	0	0	0	33.71	1.1	1.4	0.3
4/3/2019 5:10	0	0	0	33.71	1.1	1.4	0.3
4/3/2019 5:20	0	0	0	33.77	1.1	1.4	0.3
4/3/2019 5:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 5:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 5:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 6:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 6:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 6:20	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 6:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 6:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 6:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 7:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 7:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 7:20	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 7:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 7:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 7:50	0	0	0	33.71	1.1	1.4	0.3

4/3/2019 8:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 8:10	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 8:20	0	0	0	33.77	1.1	1.4	0.3
4/3/2019 8:30	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 8:40	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 8:50	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 9:00	0	0	0	33.74	1.1	1.4	0.3
4/3/2019 9:10	0	0	0	34.87	1.1	1.4	0
4/3/2019 9:20	0	0	0	34.87	1.1	1.4	0
4/3/2019 9:30	9	9	9	38.53	1.2	1.4	0
4/3/2019 9:40	9	9	9	40.21	4.2	3.9	24.5
4/3/2019 9:50	9	9	9	39.97	4.6	4	24.6
4/3/2019 10:00	9	9	9	39.63	4.5	4.1	24.9
4/3/2019 10:10	9	9	9	39.42	4.3	4.1	24.9
4/3/2019 10:20	9	9	9	39.24	4.2	4.1	24.9
4/3/2019 10:30	9	8	9	38.93	4.4	4.2	24.9
4/3/2019 10:40	8	9	9	38.78	4.4	4.3	24.9
4/3/2019 10:50	8	8	9	38.59	4.4	4.3	24.3
4/3/2019 11:00	8	9	8	38.32	4.3	4.3	24.7
4/3/2019 11:10	8	8	9	38.14	4.4	4.3	24.8
4/3/2019 11:20	8	9	9	37.83	4.2	4.4	24.5
4/3/2019 11:30	8	8	9	37.74	4.4	4.3	24.8
4/3/2019 11:40	8	8	9	37.56	4.8	4.3	24.5
4/3/2019 11:50	8	8	9	37.34	4.3	4.3	2.6
4/3/2019 12:00	8	8	9	37.1	4.5	4.3	24.7
4/3/2019 12:10	0	0	0	34.96	4.2	4.2	24.4
4/3/2019 12:20	8	8	9	32.49	4.3	4.4	24.5
4/3/2019 12:30	8	8	9	32.61	4.1	4.2	24.6
4/3/2019 12:40	8	9	9	32.67	4.3	4.2	1.3
4/3/2019 12:50	8	8	9	32.79	4.2	4.3	24.2
4/3/2019 13:00	8	9	9	32.86	4.4	4.2	24.5
4/3/2019 13:10	8	8	9	32.89	4.4	4.3	24.6
4/3/2019 13:20	8	8	9	32.95	4.2	4.3	1.3
4/3/2019 13:30	8	8	9	32.89	4.2	4.2	24.3
4/3/2019 13:40	8	9	9	33.04	4.5	4.2	24.5
4/3/2019 13:50	8	8	9	33.1	4.2	4.2	24.6
4/3/2019 14:00	8	8	9	33.13	4	4.2	1.3
4/3/2019 14:10	8	8	9	33.1	4.2	4.2	24.3
4/3/2019 14:20	8	8	9	33.16	4.4	4.2	24.5
4/3/2019 14:30	8	8	9	33.22	4.3	4.3	3.4
4/3/2019 14:40	8	8	8	33.34	4.3	4.2	23.9
4/3/2019 14:50	8	8	9	33.25	4.4	4.3	24.3
4/3/2019 15:00	8	8	9	33.34	4.2	4.2	24.6
4/3/2019 15:10	8	8	9	33.37	4.3	4.2	4.2
4/3/2019 15:20	8	8	9	33.31	4.3	4.2	24.2
4/3/2019 15:30	8	8	9	33.34	4.3	4.3	24.5
4/3/2019 15:40	8	8	9	33.37	4.2	4.3	24.6

4/3/2019 15:50	8	8	9	33.41	4.2	4.2	3.2
4/3/2019 16:00	8	8	9	33.44	4.2	4.3	24.3
4/3/2019 16:10	8	8	8	33.41	4.3	4.2	24.4
4/3/2019 16:20	8	8	8	33.47	4	4.2	24.5
4/3/2019 16:30	8	8	9	33.44	4.2	4.1	3.4
4/3/2019 16:40	8	8	8	33.44	4.3	4.2	24.3
4/3/2019 16:50	8	8	8	33.5	4.3	4.2	24.3
4/3/2019 17:00	8	8	8	33.44	4.3	4.2	24.6
4/3/2019 17:10	8	8	8	33.41	4.3	4.2	24.6
4/3/2019 17:20	8	8	9	33.41	4.1	4.2	1.4
4/3/2019 17:30	8	8	9	33.41	4.4	4.1	24.1
4/3/2019 17:40	8	8	8	33.41	4.5	4.2	24.4
4/3/2019 17:50	8	8	9	33.37	4.2	4.2	24.6
4/3/2019 18:00	8	8	9	33.37	4.4	4.2	3.9
4/3/2019 18:10	8	8	9	33.34	4.3	4.2	23.8
4/3/2019 18:20	8	8	9	33.37	4.3	4.1	24.3
4/3/2019 18:30	8	8	8	33.34	4.2	4.1	24.5
4/3/2019 18:40	8	8	9	33.34	4.4	4.2	23.6
4/3/2019 18:50	8	8	8	33.34	4.2	4.2	1.6
4/3/2019 19:00	8	8	8	33.28	4.2	4.2	24.1
4/3/2019 19:10	8	8	8	33.31	4.4	4.2	24.5
4/3/2019 19:20	8	8	9	33.31	4.4	4.1	24.7
4/3/2019 19:30	8	8	9	33.31	4.5	4.1	3.4
4/3/2019 19:40	8	8	9	33.25	4.3	4.2	1.5
4/3/2019 19:50	8	8	9	33.25	4.2	4.2	24.1
4/3/2019 20:00	8	8	9	33.28	4.4	4.1	24.4
4/3/2019 20:10	8	8	8	33.22	4.3	4.2	24.6
4/3/2019 20:20	8	8	9	33.25	4.1	4.1	24.6
4/3/2019 20:30	8	8	8	33.22	4.4	4.1	4.6
4/3/2019 20:40	8	8	9	33.13	4.3	4.1	24.1
4/3/2019 20:50	8	8	9	33.1	4.3	4.1	24.3
4/3/2019 21:00	8	8	8	33.13	4.2	4.1	24.5
4/3/2019 21:10	8	8	8	33.13	3.9	4.1	24.6
4/3/2019 21:20	8	8	9	33.07	4.2	4.1	4.4
4/3/2019 21:30	8	8	9	33.04	4.4	4.2	21
4/3/2019 21:40	8	8	8	33.04	4.4	4.2	24.3
4/3/2019 21:50	8	8	8	32.98	4.4	4.2	24.5
4/3/2019 22:00	8	8	9	33.04	4.1	4.1	24.6
4/3/2019 22:10	8	8	9	33.01	4.2	4.1	4.5
4/3/2019 22:20	8	8	8	33.1	4.5	4.1	24.1
4/3/2019 22:30	8	8	9	33.01	4.3	4.1	24.4
4/3/2019 22:40	8	8	8	33.01	4.2	4.1	24.6
4/3/2019 22:50	8	8	9	32.95	4.2	4.2	3.4
4/3/2019 23:00	8	8	8	32.89	4.3	4	24.1
4/3/2019 23:10	8	8	9	32.95	4.3	4.1	24.4
4/3/2019 23:20	8	8	8	32.89	4.2	4	24.6
4/3/2019 23:30	8	8	8	32.89	4.2	4	4.7

4/3/2019 23:40	8	8	9	32.86	4.5	4	24.1
4/3/2019 23:50	8	8	8	32.83	4.1	4.1	24.3
4/4/2019 0:00	8	8	8	32.79	4.4	4.1	24.6
4/4/2019 0:10	8	8	9	32.83	4.6	4.1	5.1
4/4/2019 0:20	8	8	8	32.86	4.5	4.1	22.2
4/4/2019 0:30	8	8	8	32.73	4.3	4.1	24.4
4/4/2019 0:40	8	8	8	32.73	4.1	4.1	24.6
4/4/2019 0:50	8	8	8	32.7	4.4	4.1	4.5
4/4/2019 1:00	8	8	8	32.7	4.4	4	2.1
4/4/2019 1:10	8	8	8	32.7	4.3	4.1	24.3
4/4/2019 1:20	8	8	8	32.67	4.6	4	24.6
4/4/2019 1:30	8	8	8	32.7	3.9	3.9	3.3
4/4/2019 1:40	8	8	8	32.67	4.2	4.1	22.9
4/4/2019 1:50	8	8	9	32.64	4.2	4.1	24.3
4/4/2019 2:00	8	8	8	32.61	4.4	4.1	24.7
4/4/2019 2:10	8	8	8	32.58	4.4	4.2	3.7
4/4/2019 2:20	8	8	8	32.52	4.5	4	24.2
4/4/2019 2:30	8	8	8	32.46	4.4	4.1	24.5
4/4/2019 2:40	8	8	9	32.61	4.5	4.1	24.6
4/4/2019 2:50	8	8	9	32.49	4.3	4.1	6.8
4/4/2019 3:00	8	8	9	32.52	4.3	4	24.3
4/4/2019 3:10	8	8	8	32.52	4.1	4.1	24.6
4/4/2019 3:20	8	8	8	32.52	4.4	4	4.4
4/4/2019 3:30	8	8	9	32.49	4.4	4.1	24.1
4/4/2019 3:40	8	8	8	32.52	4.5	4.1	24.5
4/4/2019 3:50	8	8	8	32.52	4.4	4.2	4
4/4/2019 4:00	8	8	8	32.43	4.3	4.1	24.2
4/4/2019 4:10	8	8	8	32.43	4.3	4.2	24.4
4/4/2019 4:20	8	8	8	32.4	4.3	4.1	24.6
4/4/2019 4:30	8	8	8	32.37	4.3	4.2	1.4
4/4/2019 4:40	8	8	8	32.34	4.4	4.1	24.3
4/4/2019 4:50	8	8	8	32.37	4.3	4.1	24.6
4/4/2019 5:00	8	8	8	32.4	4.2	4.1	4.3
4/4/2019 5:10	8	8	8	32.37	4.3	4.1	24.2
4/4/2019 5:20	8	8	8	32.28	4.3	4	24.6
4/4/2019 5:30	8	8	8	32.28	4.5	4	3.6
4/4/2019 5:40	8	8	8	32.25	4.4	4.2	24.2
4/4/2019 5:50	8	8	8	32.28	4.8	4.1	24.6
4/4/2019 6:00	8	8	8	32.28	4.2	4.1	3.6
4/4/2019 6:10	8	8	8	32.18	4.6	4.1	24.1
4/4/2019 6:20	8	8	8	32.18	4.2	4.1	24.5
4/4/2019 6:30	8	8	9	32.21	4.2	4.1	24.6
4/4/2019 6:40	8	8	8	32.06	4.2	4.1	23.5
4/4/2019 6:50	8	8	8	32.15	4.5	4	24.5
4/4/2019 7:00	8	8	8	32.12	4.5	4	24.7
4/4/2019 7:10	8	8	8	32.09	4.3	4.1	1.3
4/4/2019 7:20	8	8	8	32.12	4.2	4.1	24.4

4/4/2019 7:30	8	8	8	32.12	4.3	4.1	24.6
4/4/2019 7:40	8	8	9	32.03	4.3	4.1	1.4
4/4/2019 7:50	8	8	8	32.06	4.6	4.1	24.3
4/4/2019 8:00	8	8	8	32.09	4.4	4.3	24.6
4/4/2019 8:10	8	8	8	32.12	4.4	4.1	6.8
4/4/2019 8:20	8	8	8	32.09	4.3	4.2	24.4
4/4/2019 8:30	8	8	8	32.06	4.2	4	24.7
4/4/2019 8:40	8	8	8	32	4.2	4.1	1.3
4/4/2019 8:50	8	8	8	32.03	4.4	4.1	24.4
4/4/2019 9:00	8	8	8	31.97	4.5	4.1	24.7
4/4/2019 9:10	8	8	8	32	4.3	4.2	24.3
4/4/2019 9:20	8	8	8	32	4.4	4.1	24.5
4/4/2019 9:30	8	8	8	31.97	4.2	4.2	4.8
4/4/2019 9:40	8	8	8	32	4.5	4.2	24.1
4/4/2019 9:50	8	8	8	31.94	4.3	4.2	24.5
4/4/2019 10:00	8	8	8	31.94	4.4	4.2	3.5
4/4/2019 10:10	8	8	8	31.88	4.2	4.2	24.3
4/4/2019 10:20	8	8	8	31.85	4.2	4.1	24.6
4/4/2019 10:30	8	8	8	31.82	4.3	4.1	3.3
4/4/2019 10:40	8	8	8	31.85	4.3	4.2	24.3
4/4/2019 10:50	8	8	8	31.88	4.3	4.2	24.6
4/4/2019 11:00	8	8	8	31.79	4.3	4.2	16.5
4/4/2019 11:10	8	8	8	31.82	4.4	4.2	24.4
4/4/2019 11:20	8	8	8	31.79	4.3	4.2	4.5
4/4/2019 11:30	8	8	8	31.82	4.3	4.1	24.1
4/4/2019 11:40	8	8	8	31.7	4.2	4.2	24.5
4/4/2019 11:50	8	8	8	31.6	4.1	4.2	3.9
4/4/2019 12:00	8	8	8	31.6	4.2	4.2	24.1
4/4/2019 12:10	8	8	8	31.6	4.2	4.2	24.5
4/4/2019 12:20	8	8	8	31.57	4.2	4	3.3
4/4/2019 12:30	8	8	8	31.51	4.7	4.1	24.3
4/4/2019 12:40	8	8	8	31.6	4.1	4.1	24.7
4/4/2019 12:50	8	8	8	31.6	4.1	4.2	3.5
4/4/2019 13:00	8	8	8	31.63	4.3	4.2	24.4
4/4/2019 13:10	8	8	8	31.6	4.3	4.2	24.7
4/4/2019 13:20	8	8	8	31.51	4.4	4.2	24.1
4/4/2019 13:30	8	8	8	31.6	4.4	4.2	24.5
4/4/2019 13:40	8	8	8	31.54	4.2	4.2	3.4
4/4/2019 13:50	8	8	8	31.54	4.5	4.3	24.1
4/4/2019 14:00	8	8	8	31.48	4.4	4.2	24.6
4/4/2019 14:10	8	8	8	31.51	4.2	4.2	3.4
4/4/2019 14:20	8	8	8	31.57	4.4	4.2	24.3
4/4/2019 14:30	8	8	8	31.54	4.2	4.2	24.7
4/4/2019 14:40	8	8	8	31.54	4.4	4.2	23.5
4/4/2019 14:50	8	8	8	31.54	4.3	4.2	24.5
4/4/2019 15:00	8	8	8	31.57	4.3	4.2	3.5
4/4/2019 15:10	8	8	8	31.48	4.2	4.2	24.2

4/4/2019 15:20	8	8	8	31.6	4.3	4.2	24.6
4/4/2019 15:30	8	8	8	31.54	4.3	4.2	24.2
4/4/2019 15:40	8	8	8	31.54	4.5	4.2	24.5
4/4/2019 15:50	8	8	8	31.54	4.4	4.2	4.4
4/4/2019 16:00	8	8	8	31.51	4.3	4.2	24.3
4/4/2019 16:10	8	8	8	31.54	4.3	4.2	5.1
4/4/2019 16:20	8	8	8	31.42	4.3	4.2	24.1
4/4/2019 16:30	8	8	8	31.48	4.4	4.2	24.6
4/4/2019 16:40	8	8	8	31.51	4.2	4.2	3.9
4/4/2019 16:50	8	8	8	31.45	4.3	4.2	24.2
4/4/2019 17:00	8	8	8	31.45	4.5	4.2	24.7
4/4/2019 17:10	8	8	8	31.48	4.2	4.1	1.8
4/4/2019 17:20	8	8	8	31.45	4.3	4.1	24.3
4/4/2019 17:30	8	8	8	31.42	4.2	4.2	24.7
4/4/2019 17:40	8	8	8	31.45	4.4	4.1	24.3
4/4/2019 17:50	8	8	8	31.48	4.3	4.1	24.5
4/4/2019 18:00	8	8	8	31.48	4.4	4.2	4.5
4/4/2019 18:10	8	8	8	31.39	4.4	4.2	24.3
4/4/2019 18:20	8	8	8	31.45	4.4	4.2	24.7
4/4/2019 18:30	8	8	8	31.45	4.4	4.1	24
4/4/2019 18:40	8	8	8	31.42	4.2	4.1	24.6
4/4/2019 18:50	8	8	8	31.42	4.2	4.1	3.4
4/4/2019 19:00	8	8	8	31.36	4.3	4.2	24.4
4/4/2019 19:10	8	8	8	31.45	4.5	4.2	24.7
4/4/2019 19:20	8	8	8	31.36	4.2	4.1	24.1
4/4/2019 19:30	8	8	8	31.36	4.3	4.1	24.5
4/4/2019 19:40	8	8	8	31.39	4.3	4.2	3.6
4/4/2019 19:50	8	8	8	31.42	4.2	4.2	24.3
4/4/2019 20:00	8	8	8	31.36	4.2	4.2	24.6
4/4/2019 20:10	8	8	8	31.33	4.5	4.2	24.2
4/4/2019 20:20	8	8	8	31.42	4.2	4.2	24.5
4/4/2019 20:30	8	8	8	31.42	4.2	4.1	3.4
4/4/2019 20:40	8	8	8	31.39	4.2	4.1	24.2
4/4/2019 20:50	8	8	8	31.36	4.3	4.2	24.7
4/4/2019 21:00	8	8	8	31.36	4.4	4.1	22.2
4/4/2019 21:10	8	8	8	31.39	4.4	4.2	24.5
4/4/2019 21:20	8	8	8	31.36	4.3	4.1	4.7
4/4/2019 21:30	8	8	8	31.36	4.6	4.1	24.3
4/4/2019 21:40	8	8	8	31.45	4.4	4.1	24.6
4/4/2019 21:50	8	8	8	31.36	4.3	4.1	24
4/4/2019 22:00	8	8	8	31.18	4.2	4.1	24.7
4/4/2019 22:10	8	8	8	31.3	4.5	4.1	24.2
4/4/2019 22:20	8	8	8	31.39	4.4	4.1	24.5
4/4/2019 22:30	8	8	8	31.39	4.3	4.1	1.4
4/4/2019 22:40	8	8	8	31.42	4.3	4.1	24.4
4/4/2019 22:50	8	8	8	31.42	4.4	4.1	4.7
4/4/2019 23:00	8	8	8	31.36	4.2	4.1	24.3

4/4/2019 23:10	8	8	8	31.3	4.3	4.1	24.6
4/4/2019 23:20	8	8	8	31.18	4.3	4.1	24.2
4/4/2019 23:30	8	8	8	31.3	4.3	4.1	24.5
4/4/2019 23:40	8	8	8	31.36	4.2	4.1	3.2
4/4/2019 23:50	8	8	8	31.27	4.2	4.1	24.4
4/5/2019 0:00	8	8	8	31.36	4.4	4.2	3.4
4/5/2019 0:10	8	8	8	31.3	4.5	4.1	24.3
4/5/2019 0:20	8	8	8	31.21	4.3	4.2	24.6
4/5/2019 0:30	8	8	8	31.33	4.4	4.1	24
4/5/2019 0:40	8	8	8	31.27	4.6	4.1	24.5
4/5/2019 0:50	8	8	8	31.18	4.2	4.1	1.8
4/5/2019 1:00	8	8	8	31.27	4.5	4	24.4
4/5/2019 1:10	8	8	8	31.21	4.3	4.1	3.3
4/5/2019 1:20	8	8	8	31.27	4.5	4.1	24.2
4/5/2019 1:30	8	8	8	31.33	4.4	4.1	24.7
4/5/2019 1:40	8	8	8	31.27	4.5	4.1	24.1
4/5/2019 1:50	8	8	8	31.18	4.9	4.1	24.6
4/5/2019 2:00	8	8	8	31.15	4.1	4.2	2
4/5/2019 2:10	8	8	8	31.18	4.2	4.1	24.5
4/5/2019 2:20	8	8	8	31.3	4.3	4.1	3.5
4/5/2019 2:30	8	8	8	31.27	4.4	4.1	24.3
4/5/2019 2:40	8	8	8	31.27	4.3	4.1	3.3
4/5/2019 2:50	8	8	8	31.21	4.4	4.2	24.2
4/5/2019 3:00	8	8	8	31.21	4.2	4.2	24.6
4/5/2019 3:10	8	8	8	31.33	4.2	4.1	23
4/5/2019 3:20	8	8	8	31.21	4.3	4	24.5
4/5/2019 3:30	8	8	8	31.18	4.3	4.1	3.6
4/5/2019 3:40	8	8	8	31.18	4.2	4.1	24.4
4/5/2019 3:50	8	8	8	31.21	4.2	4.1	24.7
4/5/2019 4:00	8	8	8	31.21	4.7	4.1	24.1
4/5/2019 4:10	8	8	8	31.21	4.3	4.1	24.7
4/5/2019 4:20	8	8	8	31.02	4.5	4.2	24
4/5/2019 4:30	8	8	8	31.18	4.4	4.1	24.6
4/5/2019 4:40	8	8	8	31.12	4.5	4.1	1.4
4/5/2019 4:50	8	8	8	31.21	4.3	4.1	24.5
4/5/2019 5:00	8	8	8	31.21	4.2	4.2	2.2
4/5/2019 5:10	8	8	8	31.09	4.5	4.2	24.5
4/5/2019 5:20	8	8	8	31.12	4.1	4.2	3.4
4/5/2019 5:30	8	8	8	31.21	4.1	4.2	24.4
4/5/2019 5:40	8	8	8	31.15	4.3	4	3.9
4/5/2019 5:50	8	8	8	31.18	4.4	4.2	24.3
4/5/2019 6:00	8	8	8	31.12	4.2	4.1	4.7
4/5/2019 6:10	8	8	8	31.12	4.1	4.2	24.2
4/5/2019 6:20	8	8	8	31.09	4.4	4.2	24.7
4/5/2019 6:30	8	8	8	31.12	4.6	4.2	24
4/5/2019 6:40	8	8	8	31.15	4.4	4.2	24.7
4/5/2019 6:50	8	8	8	31.12	4.3	4.1	24.1

4/5/2019 7:00	8	8	8	31.15	4.5	4.2	24.6
4/5/2019 7:10	8	8	8	31.12	4.3	4.1	1.5
4/5/2019 7:20	8	8	8	31.05	4.3	4.1	24.5
4/5/2019 7:30	8	8	8	31.02	4.4	4.1	2.6
4/5/2019 7:40	8	8	8	31.09	4.3	4.1	24.4
4/5/2019 7:50	8	8	8	31.02	4.2	4.2	3.4
4/5/2019 8:00	8	8	8	30.96	4.3	4.1	24.5
4/5/2019 8:10	8	8	8	31.05	4.2	4.2	3.7
4/5/2019 8:20	8	8	8	30.96	4.3	4.1	24.3
4/5/2019 8:30	8	8	8	31.02	4.6	4.2	3.3
4/5/2019 8:40	8	8	8	30.99	4.4	4.1	24.3
4/5/2019 8:50	8	8	8	31.02	4.3	4.1	3.3
4/5/2019 9:00	8	8	8	31.02	4.2	4.2	24.4
4/5/2019 9:10	8	8	8	30.96	4.4	4.1	3.3
4/5/2019 9:20	8	8	8	30.96	4.1	4.2	24.2
4/5/2019 9:30	8	8	8	30.99	4.7	4.2	3.9
4/5/2019 9:40	8	8	8	31.02	4.4	4.2	24.3
4/5/2019 9:50	8	8	8	31.09	3.9	4.2	5.1
4/5/2019 10:00	8	8	8	30.99	4.3	4.2	24.3
4/5/2019 10:10	8	8	8	31.02	4.3	4.2	23.5
4/5/2019 10:20	8	8	8	31.02	4.6	4.2	24.1
4/5/2019 10:30	8	8	8	30.99	4.2	4.2	24.7
4/5/2019 10:40	8	8	8	30.99	4.2	4.2	24.2
4/5/2019 10:50	8	8	8	31.02	4.3	4.2	24.7
4/5/2019 11:00	8	8	8	31.02	4.3	4.2	24.1
4/5/2019 11:10	8	8	8	31.05	4.2	4.2	24.7
4/5/2019 11:20	8	8	8	30.99	4.6	4.2	24.1
4/5/2019 11:30	8	8	8	31.02	4.3	4.2	24.7
4/5/2019 11:40	8	8	8	31.02	4.7	4.2	24.2
4/5/2019 11:50	8	8	8	31.02	4.2	4.2	24.6
4/5/2019 12:00	8	8	8	30.96	4.6	4.2	24.4
4/5/2019 12:10	8	8	8	31.05	4.3	4.2	24.7
4/5/2019 12:20	8	8	8	31.05	4.3	4.2	24.1
4/5/2019 12:30	8	8	8	31.05	4.3	4.2	24.6
4/5/2019 12:40	8	8	8	31.05	4.3	4.2	24
4/5/2019 12:50	8	8	8	31.02	4.2	4.2	24.6
4/5/2019 13:00	8	8	8	31.05	4.6	4.1	24.1
4/5/2019 13:10	8	8	8	30.99	4.2	4.2	24.6
4/5/2019 13:20	8	8	8	31.09	4.3	4.1	24.2
4/5/2019 13:30	8	8	8	31.02	4.6	4.2	24.6
4/5/2019 13:40	8	8	8	31.02	4.4	4.1	24
4/5/2019 13:50	8	8	8	31.05	4.6	4.2	24.6
4/5/2019 14:00	8	8	8	31.02	4.3	4.2	24
4/5/2019 14:10	8	8	8	31.02	4.7	4.1	24.7
4/5/2019 14:20	8	8	8	31.02	4.4	4.2	24.1
4/5/2019 14:30	8	8	8	31.05	4.2	4.2	24.6
4/5/2019 14:40	8	8	8	31.09	4.4	4.2	24.2

4/5/2019 14:50	8	8	8	30.99	4.6	4.2	24.5
4/5/2019 15:00	8	8	8	31.02	4.4	4.1	20.8
4/5/2019 15:10	8	8	8	30.99	4.3	4.2	24.6
4/5/2019 15:20	8	8	8	31.05	4.3	4	3.6
4/5/2019 15:30	8	8	8	31.05	4.5	4.2	24.5
4/5/2019 15:40	8	8	8	31.05	4.4	4.2	14.5
4/5/2019 15:50	8	8	8	30.96	4.1	4.1	24.5
4/5/2019 16:00	8	8	8	31.05	4.2	4.2	1.3
4/5/2019 16:10	8	8	8	31.09	4.3	4.2	24.5
4/5/2019 16:20	8	8	8	31.05	4.8	4.2	1.4
4/5/2019 16:30	8	8	8	31.12	4.2	4.2	24.5
4/5/2019 16:40	8	8	8	31.09	4.4	4.2	1.4
4/5/2019 16:50	8	8	8	31.09	4.3	4.2	24.5
4/5/2019 17:00	8	8	8	31.02	4.5	4.2	1.3
4/5/2019 17:10	8	8	8	30.99	4.5	4.2	24.6
4/5/2019 17:20	8	8	8	31.05	4.2	4.2	6.6
4/5/2019 17:30	8	8	8	31.09	4.2	4.2	24.5
4/5/2019 17:40	8	8	8	31.05	4.3	4.2	6.6
4/5/2019 17:50	8	8	8	31.15	4.3	4.1	24.6
4/5/2019 18:00	8	8	8	31.09	4.4	4.2	23
4/5/2019 18:10	8	8	8	30.99	4.2	4.2	24.6
4/5/2019 18:20	8	8	8	31.05	4.3	4.2	20.9
4/5/2019 18:30	8	8	8	30.96	4.3	4.1	24.6
4/5/2019 18:40	8	8	8	30.99	4.3	4.1	22.9
4/5/2019 18:50	8	8	8	30.93	4.2	4.1	24.5
4/5/2019 19:00	8	8	8	30.96	4.4	4.2	24.1
4/5/2019 19:10	8	8	8	30.99	4.3	4.1	24.6
4/5/2019 19:20	8	8	8	30.96	4.6	4	23.9
4/5/2019 19:30	8	8	8	30.93	4.3	4.1	24.6
4/5/2019 19:40	8	8	8	30.99	4.2	4.1	23.9
4/5/2019 19:50	8	8	8	30.99	4.2	4.1	24.6
4/5/2019 20:00	8	8	8	30.99	4.5	4.2	24.3
4/5/2019 20:10	8	8	8	30.99	4.3	4.1	24.6
4/5/2019 20:20	8	8	8	30.99	4.4	4.1	24.2
4/5/2019 20:30	8	8	8	31.02	3.8	4.2	24.6
4/5/2019 20:40	8	8	8	30.99	4.2	4.2	24.3
4/5/2019 20:50	8	8	8	30.99	4.3	4.2	3.3
4/5/2019 21:00	8	8	8	30.99	4.5	4.2	24.3
4/5/2019 21:10	8	8	8	30.93	4.2	4.2	4.8
4/5/2019 21:20	8	8	8	30.99	4.3	4.1	24.4
4/5/2019 21:30	8	8	8	30.96	4.6	4.2	3.8
4/5/2019 21:40	8	8	8	30.96	4.2	4.2	24.3
4/5/2019 21:50	8	8	8	30.99	4.3	4.2	2.4
4/5/2019 22:00	0	0	0	31.18	3.5	3.8	0.2
4/5/2019 22:10	0	0	0	31.21	3.5	3.8	0.3
4/5/2019 22:20	0	0	0	31.21	3.5	3.9	0.3
4/5/2019 22:30	0	0	0	31.21	3.5	3.8	0.3

4/5/2019 22:40	0	0	0	31.18	3.5	3.8	0.3
4/5/2019 22:50	0	0	0	31.21	3.5	3.8	0.3
4/5/2019 23:00	0	0	0	31.21	3.5	3.8	0.3
4/5/2019 23:10	0	0	0	31.18	3.5	3.8	0.3
4/5/2019 23:20	0	0	0	31.21	3.5	3.8	0.3
4/5/2019 23:30	0	0	0	31.21	3.5	3.8	0.3
4/5/2019 23:40	0	0	0	31.21	3.5	3.8	0.3
4/5/2019 23:50	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 0:00	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 0:10	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 0:20	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 0:30	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 0:40	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 0:50	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 1:00	0	0	0	31.21	3.5	3.8	0.3
4/6/2019 1:10	0	0	0	31.18	3.4	3.7	0.3
4/6/2019 1:20	0	0	0	31.21	3.4	3.7	0.3
4/6/2019 1:30	0	0	0	31.21	3.4	3.7	0.3
4/6/2019 1:40	0	0	0	31.18	3.4	3.6	0.3
4/6/2019 1:50	0	0	0	31.21	3.4	3.6	0.3
4/6/2019 2:00	0	0	0	31.18	3.4	3.6	0.3
4/6/2019 2:10	0	0	0	31.21	3.3	3.6	0.3
4/6/2019 2:20	0	0	0	31.18	3.3	3.6	0.3
4/6/2019 2:30	0	0	0	31.18	3.3	3.6	0.3
4/6/2019 2:40	0	0	0	31.21	3.2	3.5	0.3
4/6/2019 2:50	0	0	0	31.21	3.2	3.5	0.3
4/6/2019 3:00	0	0	0	31.21	3.2	3.5	0.3
4/6/2019 3:10	0	0	0	31.21	3.1	3.5	0.3
4/6/2019 3:20	0	0	0	31.21	3.1	3.4	0.3
4/6/2019 3:30	0	0	0	31.21	3.1	3.4	0.3
4/6/2019 3:40	0	0	0	31.21	3.1	3.4	0.3
4/6/2019 3:50	0	0	0	31.21	3.1	3.4	0.3
4/6/2019 4:00	0	0	0	31.21	3	3.4	0.3
4/6/2019 4:10	0	0	0	31.21	3	3.3	0.3
4/6/2019 4:20	0	0	0	31.21	3	3.2	0.3
4/6/2019 4:30	0	0	0	31.21	3	3.2	0.2
4/6/2019 4:40	0	0	0	31.21	2.9	3.2	0.3
4/6/2019 4:50	0	0	0	31.21	2.9	3.1	0.3
4/6/2019 5:00	0	0	0	31.21	2.8	3.1	0.3
4/6/2019 5:10	0	0	0	31.21	2.8	3.1	0.3
4/6/2019 5:20	0	0	0	31.21	2.7	3.1	0.3
4/6/2019 5:30	0	0	0	31.18	2.7	3	0.3
4/6/2019 5:40	0	0	0	31.21	2.7	3	0.3
4/6/2019 5:50	0	0	0	31.21	2.7	2.9	0.3
4/6/2019 6:00	0	0	0	31.21	2.7	2.9	0.3
4/6/2019 6:10	0	0	0	31.21	2.6	2.9	0.3
4/6/2019 6:20	0	0	0	31.21	2.5	2.8	0.3

4/6/2019 6:30	0	0	0	31.18	2.5	2.8	0.3
4/6/2019 6:40	0	0	0	31.21	2.4	2.7	0.3
4/6/2019 6:50	0	0	0	31.18	2.4	2.7	0.3
4/6/2019 7:00	0	0	0	31.21	2.4	2.7	0.3
4/6/2019 7:10	0	0	0	31.21	2.4	2.7	0.3
4/6/2019 7:20	0	0	0	31.21	2.4	2.6	0.3
4/6/2019 7:30	0	0	0	31.18	2.3	2.6	0.3
4/6/2019 7:40	0	0	0	31.21	2.3	2.6	0.3
4/6/2019 7:50	0	0	0	31.21	2.2	2.5	0.3
4/6/2019 8:00	0	0	0	31.21	2.2	2.5	0.3
4/6/2019 8:10	0	0	0	31.21	2.2	2.5	0.3
4/6/2019 8:20	0	0	0	31.21	2.2	2.4	0.3
4/6/2019 8:30	0	0	0	31.21	2.1	2.4	0.3
4/6/2019 8:40	0	0	0	31.21	2.1	2.4	0.3
4/6/2019 8:50	0	0	0	31.21	2.1	2.4	0.3
4/6/2019 9:00	0	0	0	31.18	2.1	2.4	0.3
4/6/2019 9:10	0	0	0	31.21	2	2.3	0.3
4/6/2019 9:20	0	0	0	31.21	2	2.3	0.3
4/6/2019 9:30	0	0	0	31.18	2	2.3	0.3
4/6/2019 9:40	0	0	0	31.18	2	2.2	0.3
4/6/2019 9:50	0	0	0	31.18	1.9	2.2	0.3
4/6/2019 10:00	0	0	0	31.21	1.9	2.2	0.3
4/6/2019 10:10	0	0	0	31.18	1.9	2.2	0.3
4/6/2019 10:20	0	0	0	31.18	1.8	2.1	0.3
4/6/2019 10:30	0	0	0	31.18	1.8	2.1	0.3
4/6/2019 10:40	0	0	0	31.21	1.8	2.1	0.3
4/6/2019 10:50	0	0	0	31.21	1.7	2.1	0.3
4/6/2019 11:00	0	0	0	31.21	1.7	2	0.3
4/6/2019 11:10	0	0	0	31.18	1.7	2	0.3
4/6/2019 11:20	0	0	0	31.18	1.7	2	0.3
4/6/2019 11:30	0	0	0	31.21	1.7	2	0.3
4/6/2019 11:40	0	0	0	31.18	1.7	1.9	0.3
4/6/2019 11:50	0	0	0	31.18	1.6	1.9	0.3
4/6/2019 12:00	0	0	0	31.18	1.6	1.9	0.3
4/6/2019 12:10	0	0	0	31.18	1.6	1.9	0.3
4/6/2019 12:20	0	0	0	31.21	1.6	1.9	0.3
4/6/2019 12:30	0	0	0	31.21	1.6	1.8	0.3
4/6/2019 12:40	0	0	0	31.21	1.6	1.8	0.3
4/6/2019 12:50	0	0	0	31.21	1.5	1.8	0.3
4/6/2019 13:00	0	0	0	31.21	1.5	1.8	0.2
4/6/2019 13:10	0	0	0	31.21	1.5	1.8	0.3
4/6/2019 13:20	0	0	0	31.18	1.5	1.8	0.3
4/6/2019 13:30	0	0	0	31.21	1.4	1.8	0.3
4/6/2019 13:40	0	0	0	31.21	1.4	1.8	0.3
4/6/2019 13:50	0	0	0	31.21	1.4	1.8	0.3
4/6/2019 14:00	0	0	0	31.21	1.4	1.8	0.3
4/6/2019 14:10	0	0	0	31.21	1.4	1.8	0.3

4/6/2019 14:20	0	0	0	31.18	1.4	1.7	0.3
4/6/2019 14:30	0	0	0	31.21	1.4	1.7	0.3
4/6/2019 14:40	0	0	0	31.21	1.4	1.7	0.3
4/6/2019 14:50	0	0	0	31.18	1.3	1.7	0.3
4/6/2019 15:00	0	0	0	31.21	1.3	1.7	0.3
4/6/2019 15:10	0	0	0	31.21	1.3	1.7	0.3
4/6/2019 15:20	0	0	0	31.21	1.3	1.7	0.3
4/6/2019 15:30	0	0	0	31.18	1.3	1.6	0.3
4/6/2019 15:40	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 15:50	0	0	0	31.21	1.2	1.6	0.3
4/6/2019 16:00	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 16:10	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 16:20	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 16:30	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 16:40	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 16:50	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 17:00	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 17:10	0	0	0	31.21	1.2	1.6	0.3
4/6/2019 17:20	0	0	0	31.18	1.2	1.6	0.3
4/6/2019 17:30	0	0	0	31.18	1.2	1.5	0.3
4/6/2019 17:40	0	0	0	31.18	1.2	1.5	0.3
4/6/2019 17:50	0	0	0	31.18	1.2	1.5	0.3
4/6/2019 18:00	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 18:10	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 18:20	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 18:30	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 18:40	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 18:50	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 19:00	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 19:10	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 19:20	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 19:30	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 19:40	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 19:50	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 20:00	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 20:10	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 20:20	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 20:30	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 20:40	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 20:50	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 21:00	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 21:10	0	0	0	31.15	1.1	1.5	0.3
4/6/2019 21:20	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 21:30	0	0	0	31.15	1.1	1.5	0.3
4/6/2019 21:40	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 21:50	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 22:00	0	0	0	31.18	1.1	1.5	0.3

4/6/2019 22:10	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 22:20	0	0	0	31.18	1.1	1.4	0.3
4/6/2019 22:30	0	0	0	31.18	1.1	1.5	0.3
4/6/2019 22:40	0	0	0	31.15	1.1	1.4	0.3
4/6/2019 22:50	0	0	0	31.18	1.1	1.4	0.3
4/6/2019 23:00	0	0	0	31.18	1.1	1.4	0.3
4/6/2019 23:10	0	0	0	31.18	1.1	1.4	0.3
4/6/2019 23:20	0	0	0	31.15	1.1	1.4	0.3
4/6/2019 23:30	0	0	0	31.18	1.1	1.4	0.3
4/6/2019 23:40	0	0	0	31.18	1.1	1.4	0.3
4/6/2019 23:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 0:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 0:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 0:20	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 0:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 0:40	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 0:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 1:00	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 1:10	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 1:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 1:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 1:40	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 1:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 2:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 2:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 2:20	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 2:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 2:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 2:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 3:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 3:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 3:20	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 3:30	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 3:40	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 3:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 4:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 4:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 4:20	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 4:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 4:40	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 4:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 5:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 5:10	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 5:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 5:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 5:40	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 5:50	0	0	0	31.18	1.1	1.4	0.3

4/7/2019 6:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 6:10	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 6:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 6:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 6:40	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 6:50	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 7:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 7:10	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 7:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 7:30	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 7:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 7:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 8:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 8:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 8:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 8:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 8:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 8:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 9:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 9:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 9:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 9:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 9:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 9:50	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 10:00	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 10:10	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 10:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 10:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 10:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 10:50	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 11:00	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 11:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 11:20	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 11:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 11:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 11:50	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 12:00	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 12:10	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 12:20	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 12:30	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 12:40	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 12:50	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 13:00	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 13:10	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 13:20	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 13:30	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 13:40	0	0	0	31.18	1.1	1.5	0.3

4/7/2019 13:50	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 14:00	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 14:10	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 14:20	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 14:30	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 14:40	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 14:50	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 15:00	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 15:10	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 15:20	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 15:30	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 15:40	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 15:50	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 16:00	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 16:10	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 16:20	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 16:30	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 16:40	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 16:50	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 17:00	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 17:10	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 17:20	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 17:30	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 17:40	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 17:50	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 18:00	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 18:10	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 18:20	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 18:30	0	0	0	31.15	1.1	1.5	0.2
4/7/2019 18:40	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 18:50	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 19:00	0	0	0	31.18	1.1	1.5	0.2
4/7/2019 19:10	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 19:20	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 19:30	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 19:40	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 19:50	0	0	0	31.15	1.1	1.5	0.2
4/7/2019 20:00	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 20:10	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 20:20	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 20:30	0	0	0	31.18	1.1	1.5	0.3
4/7/2019 20:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 20:50	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 21:00	0	0	0	31.15	1.1	1.5	0.3
4/7/2019 21:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 21:20	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 21:30	0	0	0	31.15	1.1	1.5	0.2

4/7/2019 21:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 21:50	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 22:00	0	0	0	31.15	1.1	1.4	0.2
4/7/2019 22:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 22:20	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 22:30	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 22:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 22:50	0	0	0	31.18	1.1	1.4	0.3
4/7/2019 23:00	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 23:10	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 23:20	0	0	0	31.18	1.1	1.4	0.2
4/7/2019 23:30	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 23:40	0	0	0	31.15	1.1	1.4	0.3
4/7/2019 23:50	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 0:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 0:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 0:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 0:30	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 0:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 0:50	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 1:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 1:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 1:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 1:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 1:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 1:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 2:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 2:10	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 2:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 2:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 2:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 2:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 3:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 3:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 3:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 3:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 3:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 3:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 4:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 4:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 4:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 4:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 4:40	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 4:50	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 5:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 5:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 5:20	0	0	0	31.15	1.1	1.4	0.2

4/8/2019 5:30	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 5:40	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 5:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 6:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 6:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 6:20	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 6:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 6:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 6:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 7:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 7:10	0	0	0	31.18	1.1	1.3	0.3
4/8/2019 7:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 7:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 7:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 7:50	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 8:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 8:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 8:20	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 8:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 8:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 8:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 9:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 9:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 9:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 9:30	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 9:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 9:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 10:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 10:10	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 10:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 10:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 10:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 10:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 11:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 11:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 11:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 11:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 11:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 11:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 12:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 12:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 12:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 12:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 12:40	0	0	0	31.15	1	1.4	0.3
4/8/2019 12:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 13:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 13:10	0	0	0	31.18	1.1	1.4	0.3

4/8/2019 13:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 13:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 13:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 13:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 14:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 14:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 14:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 14:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 14:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 14:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 15:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 15:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 15:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 15:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 15:40	0	0	0	31.15	1	1.4	0.2
4/8/2019 15:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 16:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 16:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 16:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 16:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 16:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 16:50	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 17:00	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 17:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 17:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 17:30	0	0	0	31.18	1.1	1.4	0.3
4/8/2019 17:40	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 17:50	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 18:00	0	0	0	31.15	1	1.4	0.3
4/8/2019 18:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 18:20	0	0	0	31.15	1	1.4	0.2
4/8/2019 18:30	0	0	0	31.15	1.1	1.5	0.2
4/8/2019 18:40	0	0	0	31.12	1.1	1.4	0.3
4/8/2019 18:50	0	0	0	31.15	1.1	1.5	0.3
4/8/2019 19:00	0	0	0	31.15	1.1	1.5	0.2
4/8/2019 19:10	0	0	0	31.15	1.1	1.5	0.3
4/8/2019 19:20	0	0	0	31.15	1	1.5	0.3
4/8/2019 19:30	0	0	0	31.12	1.1	1.5	0.3
4/8/2019 19:40	0	0	0	31.15	1	1.5	0.3
4/8/2019 19:50	0	0	0	31.15	1	1.5	0.3
4/8/2019 20:00	0	0	0	31.12	1	1.4	0.3
4/8/2019 20:10	0	0	0	31.12	1	1.5	0.3
4/8/2019 20:20	0	0	0	31.15	1.1	1.5	0.2
4/8/2019 20:30	0	0	0	31.15	1	1.5	0.3
4/8/2019 20:40	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 20:50	0	0	0	31.12	1.1	1.4	0.2
4/8/2019 21:00	0	0	0	31.15	1.1	1.4	0.2

4/8/2019 21:10	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 21:20	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 21:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 21:40	0	0	0	31.12	1	1.4	0.3
4/8/2019 21:50	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 22:00	0	0	0	31.12	1	1.4	0.2
4/8/2019 22:10	0	0	0	31.15	1.1	1.4	0.2
4/8/2019 22:20	0	0	0	31.12	1	1.4	0.3
4/8/2019 22:30	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 22:40	0	0	0	31.12	1	1.4	0.3
4/8/2019 22:50	0	0	0	31.15	1	1.4	0.3
4/8/2019 23:00	0	0	0	31.15	1	1.4	0.2
4/8/2019 23:10	0	0	0	31.15	1	1.4	0.3
4/8/2019 23:20	0	0	0	31.15	1.1	1.4	0.3
4/8/2019 23:30	0	0	0	31.12	1.1	1.4	0.2
4/8/2019 23:40	0	0	0	31.12	1.1	1.4	0.2
4/8/2019 23:50	0	0	0	31.12	1	1.4	0.3
4/9/2019 0:00	0	0	0	31.15	1	1.4	0.3
4/9/2019 0:10	0	0	0	31.12	1	1.4	0.3
4/9/2019 0:20	0	0	0	31.12	1	1.4	0.2
4/9/2019 0:30	0	0	0	31.12	1.1	1.4	0.2
4/9/2019 0:40	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 0:50	0	0	0	31.12	1	1.4	0.2
4/9/2019 1:00	0	0	0	31.12	1	1.4	0.3
4/9/2019 1:10	0	0	0	31.12	1	1.4	0.3
4/9/2019 1:20	0	0	0	31.12	1	1.4	0.2
4/9/2019 1:30	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 1:40	0	0	0	31.12	1	1.4	0.3
4/9/2019 1:50	0	0	0	31.12	1	1.4	0.3
4/9/2019 2:00	0	0	0	31.15	1	1.4	0.2
4/9/2019 2:10	0	0	0	31.12	1.1	1.4	0.2
4/9/2019 2:20	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 2:30	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 2:40	0	0	0	31.12	1	1.4	0.2
4/9/2019 2:50	0	0	0	31.12	1.1	1.4	0.2
4/9/2019 3:00	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 3:10	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 3:20	0	0	0	31.15	1	1.4	0.3
4/9/2019 3:30	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 3:40	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 3:50	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 4:00	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 4:10	0	0	0	31.15	1.1	1.4	0.3
4/9/2019 4:20	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 4:30	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 4:40	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 4:50	0	0	0	31.12	1.1	1.4	0.3

4/9/2019 5:00	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 5:10	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 5:20	0	0	0	31.15	1	1.4	0.3
4/9/2019 5:30	0	0	0	31.12	1.1	1.3	0.2
4/9/2019 5:40	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 5:50	0	0	0	31.12	1.1	1.3	0.2
4/9/2019 6:00	0	0	0	31.12	1	1.4	0.3
4/9/2019 6:10	0	0	0	31.12	1	1.3	0.3
4/9/2019 6:20	0	0	0	31.12	1	1.3	0.3
4/9/2019 6:30	0	0	0	31.12	1.1	1.3	0.2
4/9/2019 6:40	0	0	0	31.12	1	1.4	0.3
4/9/2019 6:50	0	0	0	31.12	1	1.3	0.3
4/9/2019 7:00	0	0	0	31.12	1	1.3	0.3
4/9/2019 7:10	0	0	0	31.12	1	1.3	0.3
4/9/2019 7:20	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 7:30	0	0	0	31.12	1.1	1.3	0.2
4/9/2019 7:40	0	0	0	31.12	1	1.3	0.3
4/9/2019 7:50	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 8:00	0	0	0	31.12	1	1.3	0.3
4/9/2019 8:10	0	0	0	31.12	1	1.3	0.3
4/9/2019 8:20	0	0	0	31.12	1	1.4	0.3
4/9/2019 8:30	0	0	0	31.12	1	1.3	0.2
4/9/2019 8:40	0	0	0	31.12	1.1	1.3	0.2
4/9/2019 8:50	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 9:00	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 9:10	0	0	0	31.12	1	1.3	0.3
4/9/2019 9:20	0	0	0	31.15	1.1	1.3	0.3
4/9/2019 9:30	0	0	0	31.12	1	1.3	0.3
4/9/2019 9:40	0	0	0	31.12	1	1.3	0.3
4/9/2019 9:50	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 10:00	0	0	0	31.12	1.1	1.3	0.3
4/9/2019 10:10	0	0	0	31.15	1.1	1.3	0.2
4/9/2019 10:20	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 10:30	0	0	0	31.15	1	1.3	0.3
4/9/2019 10:40	0	0	0	31.15	1	1.4	0.3
4/9/2019 10:50	0	0	0	31.12	1	1.3	0.3
4/9/2019 11:00	0	0	0	31.15	1.1	1.3	0.3
4/9/2019 11:10	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 11:20	0	0	0	31.15	1	1.4	0.3
4/9/2019 11:30	0	0	0	31.12	1	1.4	0.2
4/9/2019 11:40	0	0	0	31.15	1.1	1.4	0.3
4/9/2019 11:50	0	0	0	31.12	1	1.3	0.3
4/9/2019 12:00	0	0	0	31.12	1	1.4	0.3
4/9/2019 12:10	0	0	0	31.12	1.1	1.4	0.2
4/9/2019 12:20	0	0	0	31.12	1	1.4	0.3
4/9/2019 12:30	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 12:40	0	0	0	31.12	1	1.4	0.3

4/9/2019 12:50	0	0	0	31.12	1	1.4	0.3
4/9/2019 13:00	0	0	0	31.12	1	1.4	0.2
4/9/2019 13:10	0	0	0	31.12	1.1	1.4	0.3
4/9/2019 13:20	0	0	0	31.15	1	1.4	0.2
4/9/2019 13:30	0	0	0	31.12	1	1.4	0.3
4/9/2019 13:40	0	0	0	31.12	1	1.4	0.3
4/9/2019 13:50	0	0	0	31.12	1	1.4	0.3
4/9/2019 14:00	0	0	0	31.15	1	1.4	0.3
4/9/2019 14:10	0	0	0	31.15	1	1.4	0.2
4/9/2019 14:20	0	0	0	31.15	1	1.4	0.3
4/9/2019 14:30	0	0	0	31.12	1	1.4	0.2
4/9/2019 14:40	0	0	0	31.12	1	1.4	0.3
4/9/2019 14:50	0	0	0	32.67	1.1	1.4	0
4/9/2019 15:00	0	0	0	32.83	1	1.4	0
4/9/2019 15:10	0	0	0	32.83	1	1.4	0
4/9/2019 15:20	0	0	0	32.83	1	1.4	0
4/9/2019 15:30	0	0	0	32.83	1	1.4	0
4/9/2019 15:40	0	0	0	32.83	1	1.4	0
4/9/2019 15:50	0	0	0	32.83	1.1	1.4	0
4/9/2019 16:00	0	0	0	32.83	1	1.4	0
4/9/2019 16:10	0	0	0	32.83	1	1.4	0
4/9/2019 16:20	0	0	0	32.83	1.1	1.4	0
4/9/2019 16:30	0	0	0	32.83	1	1.4	0
4/9/2019 16:40	0	0	0	32.83	1.1	1.4	0
4/9/2019 16:50	0	0	0	32.86	1	1.4	0
4/9/2019 17:00	0	0	0	32.83	1	1.4	0
4/9/2019 17:10	0	0	0	32.83	1	1.4	0
4/9/2019 17:20	0	0	0	32.83	1	1.4	0
4/9/2019 17:30	0	0	0	32.83	1.1	1.4	0
4/9/2019 17:40	0	0	0	32.83	1	1.4	0
4/9/2019 17:50	0	0	0	32.83	1.1	1.4	0
4/9/2019 18:00	0	0	0	32.83	1.1	1.4	0
4/9/2019 18:10	0	0	0	32.86	1	1.4	0
4/9/2019 18:20	0	0	0	32.83	1	1.4	0
4/9/2019 18:30	0	0	0	32.83	1	1.4	0
4/9/2019 18:40	0	0	0	32.83	1	1.4	0
4/9/2019 18:50	0	0	0	32.83	1	1.4	0
4/9/2019 19:00	0	0	0	32.83	1	1.3	0
4/9/2019 19:10	0	0	0	32.83	1	1.3	0
4/9/2019 19:20	0	0	0	32.86	1	1.3	0
4/9/2019 19:30	0	0	0	32.83	1	1.4	0
4/9/2019 19:40	0	0	0	32.83	1	1.4	0
4/9/2019 19:50	0	0	0	32.83	1.1	1.4	0
4/9/2019 20:00	0	0	0	32.83	1.1	1.4	0
4/9/2019 20:10	0	0	0	32.83	1	1.3	0
4/9/2019 20:20	0	0	0	32.83	1	1.3	0
4/9/2019 20:30	0	0	0	32.79	1	1.3	0.1

4/9/2019 20:40	0	0	0	32.83	1	1.3	0.1
4/9/2019 20:50	0	0	0	32.79	1	1.3	0.1
4/9/2019 21:00	0	0	0	32.83	1	1.3	0.1
4/9/2019 21:10	0	0	0	32.79	1	1.4	0.1
4/9/2019 21:20	0	0	0	32.83	1	1.3	0.1
4/9/2019 21:30	0	0	0	32.83	1	1.3	0.1
4/9/2019 21:40	0	0	0	32.83	1	1.3	0.1
4/9/2019 21:50	0	0	0	32.79	1	1.3	0.1
4/9/2019 22:00	0	0	0	32.83	1	1.3	0.1
4/9/2019 22:10	0	0	0	32.83	1	1.3	0.1
4/9/2019 22:20	0	0	0	32.83	1.1	1.3	0.1
4/9/2019 22:30	0	0	0	32.83	1	1.3	0.1
4/9/2019 22:40	0	0	0	32.79	1	1.3	0.1
4/9/2019 22:50	0	0	0	32.83	1	1.3	0.1
4/9/2019 23:00	0	0	0	32.83	1	1.3	0.1
4/9/2019 23:10	0	0	0	32.83	1	1.3	0.1
4/9/2019 23:20	0	0	0	32.83	1	1.3	0.1
4/9/2019 23:30	0	0	0	32.83	1	1.3	0.1
4/9/2019 23:40	0	0	0	32.83	1	1.3	0.1
4/9/2019 23:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 0:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 0:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 0:20	0	0	0	32.79	1	1.3	0.1
4/10/2019 0:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 0:40	0	0	0	32.79	1	1.3	0.1
4/10/2019 0:50	0	0	0	32.79	1	1.3	0.1
4/10/2019 1:00	0	0	0	32.79	1	1.3	0.1
4/10/2019 1:10	0	0	0	32.79	1	1.3	0.1
4/10/2019 1:20	0	0	0	32.79	1	1.3	0.1
4/10/2019 1:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 1:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 1:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 2:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 2:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 2:20	0	0	0	32.79	1.1	1.3	0.1
4/10/2019 2:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 2:40	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 2:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 3:00	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 3:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 3:20	0	0	0	32.79	1	1.3	0.1
4/10/2019 3:30	0	0	0	32.79	1	1.3	0.1
4/10/2019 3:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 3:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 4:00	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 4:10	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 4:20	0	0	0	32.79	1	1.3	0.1

4/10/2019 4:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 4:40	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 4:50	0	0	0	32.79	1.1	1.3	0.1
4/10/2019 5:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 5:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 5:20	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 5:30	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 5:40	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 5:50	0	0	0	32.79	1.1	1.3	0.1
4/10/2019 6:00	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 6:10	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 6:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 6:30	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 6:40	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 6:50	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 7:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 7:10	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 7:20	0	0	0	32.79	1.1	1.3	0.1
4/10/2019 7:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 7:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 7:50	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 8:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 8:10	0	0	0	32.83	1.1	1.3	0.1
4/10/2019 8:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 8:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 8:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 8:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 9:00	0	0	0	32.79	1	1.3	0.1
4/10/2019 9:10	0	0	0	32.79	1	1.3	0.1
4/10/2019 9:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 9:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 9:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 9:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 10:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 10:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 10:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 10:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 10:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 10:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 11:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 11:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 11:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 11:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 11:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 11:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 12:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 12:10	0	0	0	32.83	1	1.3	0.1

4/10/2019 12:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 12:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 12:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 12:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 13:00	0	0	0	32.83	1	1.4	0.1
4/10/2019 13:10	0	0	0	32.86	1	1.3	0.1
4/10/2019 13:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 13:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 13:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 13:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 14:00	0	0	0	32.83	1	1.4	0.1
4/10/2019 14:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 14:20	0	0	0	32.83	1	1.4	0.1
4/10/2019 14:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 14:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 14:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 15:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 15:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 15:20	0	0	0	32.83	1	1.4	0.1
4/10/2019 15:30	0	0	0	32.86	1	1.4	0.1
4/10/2019 15:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 15:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 16:00	0	0	0	32.83	1	1.4	0.1
4/10/2019 16:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 16:20	0	0	0	32.83	1	1.4	0.1
4/10/2019 16:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 16:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 16:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 17:00	0	0	0	32.83	1	1.4	0.1
4/10/2019 17:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 17:20	0	0	0	32.83	1	1.4	0.1
4/10/2019 17:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 17:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 17:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 18:00	0	0	0	32.83	1	1.4	0.1
4/10/2019 18:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 18:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 18:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 18:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 18:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 19:00	0	0	0	32.83	1	1.4	0.1
4/10/2019 19:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 19:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 19:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 19:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 19:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 20:00	0	0	0	32.86	1	1.4	0.1

4/10/2019 20:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 20:20	0	0	0	32.83	1	1.4	0.1
4/10/2019 20:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 20:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 20:50	0	0	0	32.83	1	1.3	0.1
4/10/2019 21:00	0	0	0	32.86	1	1.4	0.1
4/10/2019 21:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 21:20	0	0	0	32.79	1	1.4	0.1
4/10/2019 21:30	0	0	0	32.83	1	1.4	0.1
4/10/2019 21:40	0	0	0	32.83	1	1.4	0.1
4/10/2019 21:50	0	0	0	32.83	1	1.4	0.1
4/10/2019 22:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 22:10	0	0	0	32.83	1	1.4	0.1
4/10/2019 22:20	0	0	0	32.83	1	1.3	0.1
4/10/2019 22:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 22:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 22:50	0	0	0	32.86	1	1.3	0.1
4/10/2019 23:00	0	0	0	32.83	1	1.3	0.1
4/10/2019 23:10	0	0	0	32.83	1	1.3	0.1
4/10/2019 23:20	0	0	0	32.79	1	1.3	0.1
4/10/2019 23:30	0	0	0	32.83	1	1.3	0.1
4/10/2019 23:40	0	0	0	32.83	1	1.3	0.1
4/10/2019 23:50	0	0	0	32.83	1	1.3	0.1
4/11/2019 0:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 0:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 0:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 0:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 0:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 0:50	0	0	0	32.83	1	1.3	0.1
4/11/2019 1:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 1:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 1:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 1:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 1:40	0	0	0	32.86	1	1.3	0.1
4/11/2019 1:50	0	0	0	32.86	1	1.3	0.1
4/11/2019 2:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 2:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 2:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 2:30	0	0	0	32.86	1	1.3	0.1
4/11/2019 2:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 2:50	0	0	0	32.86	1	1.3	0.1
4/11/2019 3:00	0	0	0	32.86	1	1.3	0.1
4/11/2019 3:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 3:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 3:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 3:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 3:50	0	0	0	32.83	1	1.3	0.1

4/11/2019 4:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 4:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 4:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 4:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 4:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 4:50	0	0	0	32.86	1	1.3	0.1
4/11/2019 5:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 5:10	0	0	0	32.86	1	1.3	0.1
4/11/2019 5:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 5:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 5:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 5:50	0	0	0	32.83	1	1.3	0.1
4/11/2019 6:00	0	0	0	32.83	1.1	1.4	0.1
4/11/2019 6:10	0	0	0	32.83	1.1	1.3	0.1
4/11/2019 6:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 6:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 6:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 6:50	0	0	0	32.83	1	1.3	0.1
4/11/2019 7:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 7:10	0	0	0	32.86	1.1	1.3	0.1
4/11/2019 7:20	0	0	0	32.83	1	1.3	0.1
4/11/2019 7:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 7:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 7:50	0	0	0	32.83	1	1.3	0.1
4/11/2019 8:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 8:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 8:20	0	0	0	32.79	1.1	1.3	0.1
4/11/2019 8:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 8:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 8:50	0	0	0	32.83	1	1.3	0.1
4/11/2019 9:00	0	0	0	32.83	1	1.3	0.1
4/11/2019 9:10	0	0	0	32.83	1	1.3	0.1
4/11/2019 9:20	0	0	0	32.86	1	1.3	0.1
4/11/2019 9:30	0	0	0	32.83	1	1.3	0.1
4/11/2019 9:40	0	0	0	32.83	1	1.3	0.1
4/11/2019 9:50	10	9	9	32.92	4.2	3.9	0.6
4/11/2019 10:00	9	9	9	34.47	4.4	3.9	13.1
4/11/2019 10:10	9	9	9	34.9	4.3	3.8	1.4
4/11/2019 10:20	9	9	9	35.08	4.3	3.8	2.7
4/11/2019 10:30	9	9	9	35.27	4.1	3.9	25.3
4/11/2019 10:40	9	9	9	35.36	4.1	3.8	25.3
4/11/2019 10:50	9	9	9	35.57	4.2	3.8	25.2
4/11/2019 11:00	9	9	9	35.66	4	3.8	25.2
4/11/2019 11:10	9	9	9	35.79	4.3	3.8	25.2
4/11/2019 11:20	9	9	9	35.91	4.3	3.9	25.2
4/11/2019 11:30	9	9	9	36.03	4.2	4	4.7
4/11/2019 11:40	9	9	9	36.03	4	4	24.7

4/11/2019 11:50	9	9	9	36.09	4	4.1	25
4/11/2019 12:00	9	9	9	36.12	4.2	4.2	25.1
4/11/2019 12:10	9	9	9	36.12	4.2	4.2	24.7
4/11/2019 12:20	9	9	9	36.18	4.3	4.2	24.9
4/11/2019 12:30	9	9	9	36.12	4.2	4.2	1.2
4/11/2019 12:40	9	9	9	36.21	4.6	4.3	24.9
4/11/2019 12:50	9	9	9	36.15	4.3	4.3	24.7
4/11/2019 13:00	9	9	9	36.15	4.2	4.3	25
4/11/2019 13:10	9	9	9	36.12	4.2	4.4	24.8
4/11/2019 13:20	9	9	9	36.09	4.5	4.4	3.4
4/11/2019 13:30	9	9	9	36.06	4.3	4.5	24.9
4/11/2019 13:40	9	9	9	36.06	4.3	4.5	24.7
4/11/2019 13:50	9	9	9	35.97	4.1	4.5	3.5
4/11/2019 14:00	9	9	9	35.97	4.3	4.5	24.9
4/11/2019 14:10	9	9	9	35.94	4.2	4.5	24.7
4/11/2019 14:20	9	9	9	35.88	4.2	4.5	3.2
4/11/2019 14:30	9	9	9	35.88	4.1	4.5	24.9
4/11/2019 14:40	9	9	9	35.76	4.2	4.4	24.8
4/11/2019 14:50	9	9	9	35.76	4.1	4.6	24.5
4/11/2019 15:00	9	9	9	35.73	4.2	4.5	1.3
4/11/2019 15:10	9	9	9	35.6	4.4	4.5	25
4/11/2019 15:20	9	9	9	35.69	4.1	4.5	24.9
4/11/2019 15:30	9	9	9	35.63	4.2	4.4	24.5
4/11/2019 15:40	9	9	9	35.63	4.2	4.3	4.2
4/11/2019 15:50	9	9	9	35.51	3.8	4.4	24.9
4/11/2019 16:00	9	9	9	35.57	4.2	4.4	24.6
4/11/2019 16:10	9	9	9	35.48	4	4.4	3.8
4/11/2019 16:20	9	9	9	35.45	4.1	4.4	24.9
4/11/2019 16:30	9	9	9	35.39	4.5	4.4	24.8
4/11/2019 16:40	9	9	9	35.3	4.1	4.4	24.5
4/11/2019 16:50	9	9	9	35.3	4.2	4.4	3.5
4/11/2019 17:00	9	9	9	35.27	4.1	4.4	24.9
4/11/2019 17:10	9	9	9	35.15	4.1	4.4	24.7
4/11/2019 17:20	9	9	9	35.11	4.1	4.4	24.5
4/11/2019 17:30	9	9	9	35.08	4.1	4.3	3.3
4/11/2019 17:40	9	9	9	35.02	4.2	4.4	24.9
4/11/2019 17:50	9	9	9	35.02	4.2	4.4	24.8
4/11/2019 18:00	9	9	9	34.99	4.2	4.3	3.7
4/11/2019 18:10	9	9	9	34.93	4.3	4.4	25
4/11/2019 18:20	9	9	9	34.93	4.2	4.3	24.8
4/11/2019 18:30	9	9	9	34.81	4.3	4.2	2.3
4/11/2019 18:40	9	9	9	34.81	4.1	4.3	25
4/11/2019 18:50	9	9	9	34.81	4.2	4.2	24.8
4/11/2019 19:00	9	9	9	34.72	4.2	4.2	4.8
4/11/2019 19:10	9	9	9	34.72	4.1	4.1	25
4/11/2019 19:20	9	9	9	34.63	4.3	4.2	24.7
4/11/2019 19:30	9	9	9	34.63	4.2	4.1	3.9

4/11/2019 19:40	9	9	9	34.57	4.1	4.2	24.9
4/11/2019 19:50	9	9	9	34.57	4.2	4.2	24.7
4/11/2019 20:00	9	9	9	34.47	4.2	4.2	2.6
4/11/2019 20:10	9	9	9	34.44	4.2	4.2	24.9
4/11/2019 20:20	9	9	9	34.38	4	4.2	24.8
4/11/2019 20:30	9	9	9	34.29	4.3	4.2	24.7
4/11/2019 20:40	9	9	9	34.26	4.2	4.2	4.7
4/11/2019 20:50	9	9	9	34.2	4.1	4.2	24.9
4/11/2019 21:00	9	9	9	34.17	4.2	4.1	24.8
4/11/2019 21:10	9	9	9	34.11	4.1	4.2	24.5
4/11/2019 21:20	9	9	9	34.02	3.9	4.1	4.3
4/11/2019 21:30	9	9	9	34.02	4.2	4.2	24.9
4/11/2019 21:40	9	9	9	33.99	4.4	4.2	24.8
4/11/2019 21:50	9	9	9	33.99	4.2	4.2	24.6
4/11/2019 22:00	9	9	9	33.92	4.4	4.2	3.7
4/11/2019 22:10	9	9	9	33.89	4.2	4.1	25
4/11/2019 22:20	9	9	9	33.8	3.9	4.1	24.9
4/11/2019 22:30	9	9	9	33.83	4.3	4.2	24.7
4/11/2019 22:40	9	9	9	33.77	3.9	4.4	14.3
4/11/2019 22:50	9	9	9	33.74	3.8	4.2	3.3
4/11/2019 23:00	9	9	9	33.65	4.1	4.1	25
4/11/2019 23:10	9	9	9	33.71	4.1	4.2	24.8
4/11/2019 23:20	9	9	9	33.62	4.1	4.2	24.7
4/11/2019 23:30	9	9	9	33.68	4.2	4.2	19.4
4/11/2019 23:40	9	9	9	33.59	4.1	4.2	3.4
4/11/2019 23:50	9	9	9	33.5	4.3	4.2	24.9
4/12/2019 0:00	9	9	9	33.5	4.1	4.2	24.8
4/12/2019 0:10	9	9	9	33.47	4.3	4.2	24.7
4/12/2019 0:20	9	9	9	33.41	4.2	4.3	1.3
4/12/2019 0:30	9	9	9	33.41	4.4	4.2	4.7
4/12/2019 0:40	9	9	9	33.44	4.2	4.1	25
4/12/2019 0:50	9	9	9	33.34	4.1	4.2	24.9
4/12/2019 1:00	9	9	9	33.28	4.2	4.2	24.7
4/12/2019 1:10	9	9	9	33.34	4.1	4.2	24.5
4/12/2019 1:20	9	9	9	33.28	3.9	4.2	2.7
4/12/2019 1:30	9	9	9	33.22	4.3	4.2	3.4
4/12/2019 1:40	9	9	9	33.16	4	4.2	24.9
4/12/2019 1:50	9	9	9	33.16	4.2	4.2	24.8
4/12/2019 2:00	9	9	9	33.22	4.1	4.3	24.7
4/12/2019 2:10	9	9	9	33.1	4.4	4.2	24.7
4/12/2019 2:20	9	9	9	33.1	4.2	4.2	24.5
4/12/2019 2:30	9	9	9	33.07	4.4	4.2	3.9
4/12/2019 2:40	9	9	9	33.04	4.4	4.3	25
4/12/2019 2:50	9	9	9	33.04	4.1	4.2	25
4/12/2019 3:00	9	9	9	32.92	4	4.2	24.8
4/12/2019 3:10	9	9	9	32.95	4.2	4.2	24.7
4/12/2019 3:20	9	9	9	32.83	4.2	4.2	24.5

4/12/2019 3:30	9	9	9	32.89	4.3	4.2	23.6
4/12/2019 3:40	9	9	9	32.86	4.3	4.2	4.7
4/12/2019 3:50	9	9	9	32.83	4.1	4.2	5.5
4/12/2019 4:00	9	9	9	32.79	4.3	4.2	24.9
4/12/2019 4:10	9	9	9	32.76	4.4	4.3	24.9
4/12/2019 4:20	9	9	9	32.7	4.2	4.2	24.9
4/12/2019 4:30	9	9	9	32.67	4.2	4.2	24.7
4/12/2019 4:40	9	9	9	32.58	4.3	4.2	24.5
4/12/2019 4:50	9	9	9	32.61	4.2	4.2	24.3
4/12/2019 5:00	9	9	9	32.52	4.2	4.2	1.5
4/12/2019 5:10	9	9	9	32.46	4.4	4.2	4.2
4/12/2019 5:20	9	9	9	32.46	4.2	4.2	3.3
4/12/2019 5:30	9	9	9	32.46	3.9	4.2	25
4/12/2019 5:40	9	9	9	32.34	4.1	4.2	25
4/12/2019 5:50	9	9	9	32.34	4.1	4.3	24.9
4/12/2019 6:00	9	9	9	32.28	4.4	4.2	24.8
4/12/2019 6:10	9	9	9	32.31	4.1	4.2	24.8
4/12/2019 6:20	9	9	9	32.34	3.8	4.1	24.7
4/12/2019 6:30	9	9	9	32.25	4.2	4.2	24.5
4/12/2019 6:40	9	9	9	32.25	4.1	4.1	14.5
4/12/2019 6:50	9	9	9	32.18	4.2	4.2	1.6
4/12/2019 7:00	9	9	9	32.09	4.1	4.2	3.7
4/12/2019 7:10	9	9	9	32.12	4.5	4.1	11.5
4/12/2019 7:20	9	9	9	32.09	4.2	4.2	24.9
4/12/2019 7:30	9	9	9	32.06	4.1	4.1	24.9
4/12/2019 7:40	9	9	9	32.06	4.1	4.1	24.9
4/12/2019 7:50	9	9	9	32	4.3	4.2	24.9
4/12/2019 8:00	9	9	9	31.97	4.2	4.2	24.9
4/12/2019 8:10	9	9	9	31.88	4	4.2	24.9
4/12/2019 8:20	9	9	9	31.85	4.2	4	24.9
4/12/2019 8:30	9	9	9	31.85	4.2	4.1	24.7
4/12/2019 8:40	9	9	9	31.79	4.2	4.1	24.7
4/12/2019 8:50	9	9	9	31.82	3.9	4.1	24.7
4/12/2019 9:00	9	9	9	31.79	4.3	4.2	24.6
4/12/2019 9:10	9	9	9	31.73	4.1	4.1	24.8
4/12/2019 9:20	9	9	9	31.76	4.1	4.1	24.5
4/12/2019 9:30	9	9	9	31.7	4.3	4.1	24.6
4/12/2019 9:40	9	9	9	31.7	3.6	4.1	24.5
4/12/2019 9:50	9	9	9	31.67	4.4	4.1	23.9
4/12/2019 10:00	9	9	9	31.67	4.2	4.1	1.5
4/12/2019 10:10	9	9	9	31.63	4.2	4.1	3.4
4/12/2019 10:20	9	9	9	31.6	4	4.1	4.6
4/12/2019 10:30	9	9	9	31.6	4.2	4	4.6
4/12/2019 10:40	9	9	9	31.54	4.1	4.1	3.4
4/12/2019 10:50	9	9	9	31.6	4.2	4.1	24
4/12/2019 11:00	9	9	9	31.6	3.8	4.1	25
4/12/2019 11:10	9	9	9	31.57	4.3	4	25

4/12/2019 11:20	9	9	9	31.57	4.2	4.1	24.9
4/12/2019 11:30	9	9	9	31.45	4	4	24.9
4/12/2019 11:40	9	9	9	31.54	4	4	24.9
4/12/2019 11:50	9	9	9	31.48	4.1	4	24.9
4/12/2019 12:00	9	9	9	31.48	4.2	4	24.9
4/12/2019 12:10	9	9	9	31.51	4.3	4	24.8
4/12/2019 12:20	9	9	9	31.36	4.2	4	24.8
4/12/2019 12:30	9	9	9	31.42	4.2	4	24.7
4/12/2019 12:40	9	9	9	31.42	4.2	4	24.7
4/12/2019 12:50	9	9	9	31.39	4.1	4	24.8
4/12/2019 13:00	9	9	9	31.36	4.2	3.9	24.7
4/12/2019 13:10	9	9	9	31.18	4.2	4	24.5
4/12/2019 13:20	9	9	9	31.27	4.2	4	24.5
4/12/2019 13:30	9	9	9	31.18	4.3	4	24.6
4/12/2019 13:40	9	9	9	31.3	4.3	3.9	24.5
4/12/2019 13:50	9	9	9	31.15	4	4	24.4
4/12/2019 14:00	9	9	9	31.15	4.1	3.9	24.4
4/12/2019 14:10	9	9	9	31.15	4.1	3.9	24.5
4/12/2019 14:20	9	9	9	31.12	4	3.9	24.5
4/12/2019 14:30	9	9	9	31.05	4.2	3.9	24.6
4/12/2019 14:40	9	9	9	31.05	4	3.9	22.8
4/12/2019 14:50	9	9	9	31.02	4	3.9	2.3
4/12/2019 15:00	9	9	9	31.05	4.4	3.9	3.9
4/12/2019 15:10	9	9	9	30.99	4.1	3.9	24
4/12/2019 15:20	9	9	9	30.96	4.2	3.9	24.6
4/12/2019 15:30	9	9	9	30.96	4.2	3.9	24.4
4/12/2019 15:40	9	9	9	30.96	4	3.9	24.5
4/12/2019 15:50	9	9	9	30.87	4.4	3.9	24.6
4/12/2019 16:00	9	9	9	30.87	4	3.9	24.7
4/12/2019 16:10	9	9	9	30.87	4.2	3.9	24.7
4/12/2019 16:20	9	9	9	30.84	4.2	3.9	24.7
4/12/2019 16:30	9	9	9	30.84	4	3.9	24.8
4/12/2019 16:40	9	9	9	30.84	4.2	3.8	24.9
4/12/2019 16:50	9	9	9	30.81	4.1	3.9	24.9
4/12/2019 17:00	9	9	9	30.69	4.1	3.8	25
4/12/2019 17:10	9	9	9	30.66	4.2	3.9	24.9
4/12/2019 17:20	9	9	9	30.57	4	3.9	25
4/12/2019 17:30	9	9	9	30.57	4	3.8	24.9
4/12/2019 17:40	9	9	9	30.51	4	3.8	3.4
4/12/2019 17:50	9	9	9	30.54	4.1	3.8	3.5
4/12/2019 18:00	9	9	9	30.51	4.2	3.8	3.9
4/12/2019 18:10	9	9	9	30.47	4.3	3.8	1.7
4/12/2019 18:20	9	9	9	30.44	4.1	3.8	21.8
4/12/2019 18:30	9	9	9	30.47	4.1	3.9	24.5
4/12/2019 18:40	9	9	9	30.44	3.9	3.8	24.6
4/12/2019 18:50	0	0	0	30.69	3.4	3.6	0.3
4/12/2019 19:00	0	0	0	30.69	3.4	3.6	0.3

4/12/2019 19:10	0	0	0	30.69	3.4	3.6	0.3
4/12/2019 19:20	0	0	0	30.69	3.4	3.6	0.3
4/12/2019 19:30	0	0	0	30.69	3.4	3.6	0.3
4/12/2019 19:40	0	0	0	30.72	3.4	3.6	0.3
4/12/2019 19:50	0	0	0	30.69	3.4	3.6	0.3
4/12/2019 20:00	0	0	0	30.69	3.4	3.6	0.3
4/12/2019 20:10	0	0	0	30.72	3.4	3.5	0.3
4/12/2019 20:20	0	0	0	30.72	3.3	3.5	0.3
4/12/2019 20:30	0	0	0	30.69	3.3	3.4	0.3
4/12/2019 20:40	0	0	0	30.72	3.2	3.4	0.3
4/12/2019 20:50	0	0	0	30.69	3.1	3.3	0.3
4/12/2019 21:00	0	0	0	30.72	3.1	3.2	0.3
4/12/2019 21:10	0	0	0	30.72	3	3.2	0.3
4/12/2019 21:20	0	0	0	30.69	3	3.1	0.3
4/12/2019 21:30	0	0	0	30.69	2.9	3.1	0.3
4/12/2019 21:40	0	0	0	30.72	2.8	3	0.3
4/12/2019 21:50	0	0	0	30.72	2.7	2.9	0.3
4/12/2019 22:00	0	0	0	30.72	2.7	2.8	0.3
4/12/2019 22:10	0	0	0	30.69	2.5	2.7	0.3
4/12/2019 22:20	0	0	0	30.72	2.5	2.6	0.3
4/12/2019 22:30	0	0	0	30.72	2.4	2.5	0.3
4/12/2019 22:40	0	0	0	30.72	2.3	2.4	0.3
4/12/2019 22:50	0	0	0	30.69	2.2	2.4	0.3
4/12/2019 23:00	0	0	0	30.72	2.2	2.3	0.3
4/12/2019 23:10	0	0	0	30.72	2.1	2.2	0.3
4/12/2019 23:20	0	0	0	30.72	2	2.1	0.3
4/12/2019 23:30	0	0	0	30.72	1.9	2	0.3
4/12/2019 23:40	0	0	0	30.72	1.8	1.9	0.3
4/12/2019 23:50	0	0	0	30.72	1.7	1.8	0.3
4/13/2019 0:00	0	0	0	30.72	1.7	1.8	0.3
4/13/2019 0:10	0	0	0	30.75	1.6	1.7	0.3
4/13/2019 0:20	0	0	0	30.72	1.5	1.6	0.3
4/13/2019 0:30	0	0	0	30.75	1.5	1.6	0.3
4/13/2019 0:40	0	0	0	30.75	1.4	1.5	0.3
4/13/2019 0:50	0	0	0	30.72	1.3	1.4	0.3
4/13/2019 1:00	0	0	0	30.75	1.3	1.4	0.3
4/13/2019 1:10	0	0	0	30.75	1.2	1.3	0.3
4/13/2019 1:20	0	0	0	30.72	1.1	1.3	0.3
4/13/2019 1:30	0	0	0	30.75	1.1	1.2	0.3
4/13/2019 1:40	0	0	0	30.75	1	1.2	0.3
4/13/2019 1:50	0	0	0	30.72	1	1.2	0.3
4/13/2019 2:00	0	0	0	30.72	1	1.1	0.3
4/13/2019 2:10	0	0	0	30.72	1	1.1	0.3
4/13/2019 2:20	0	0	0	30.75	1	1.1	0.3
4/13/2019 2:30	0	0	0	30.75	1	1.1	0.3
4/13/2019 2:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 2:50	0	0	0	30.75	1	1.1	0.3

4/13/2019 3:00	0	0	0	30.75	1	1.1	0.3
4/13/2019 3:10	0	0	0	30.72	1	1.1	0.3
4/13/2019 3:20	0	0	0	30.72	1	1.1	0.3
4/13/2019 3:30	0	0	0	30.72	1	1.1	0.3
4/13/2019 3:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 3:50	0	0	0	30.75	1	1.1	0.3
4/13/2019 4:00	0	0	0	30.72	1	1.1	0.3
4/13/2019 4:10	0	0	0	30.75	1	1.1	0.3
4/13/2019 4:20	0	0	0	30.75	1	1.1	0.3
4/13/2019 4:30	0	0	0	30.72	1	1.1	0.3
4/13/2019 4:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 4:50	0	0	0	30.75	1	1.1	0.3
4/13/2019 5:00	0	0	0	30.72	1	1.1	0.3
4/13/2019 5:10	0	0	0	30.72	1	1.1	0.3
4/13/2019 5:20	0	0	0	30.75	1	1.1	0.3
4/13/2019 5:30	0	0	0	30.72	1	1.1	0.3
4/13/2019 5:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 5:50	0	0	0	30.72	1	1.1	0.3
4/13/2019 6:00	0	0	0	30.72	1	1.1	0.3
4/13/2019 6:10	0	0	0	30.72	1	1.1	0.3
4/13/2019 6:20	0	0	0	30.72	1	1.1	0.3
4/13/2019 6:30	0	0	0	30.72	1	1.1	0.3
4/13/2019 6:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 6:50	0	0	0	30.72	1	1.1	0.3
4/13/2019 7:00	0	0	0	30.72	1	1.1	0.3
4/13/2019 7:10	0	0	0	30.72	1	1.1	0.3
4/13/2019 7:20	0	0	0	30.72	1	1.1	0.3
4/13/2019 7:30	0	0	0	30.75	1	1.1	0.3
4/13/2019 7:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 7:50	0	0	0	30.72	1	1.1	0.3
4/13/2019 8:00	0	0	0	30.72	1	1	0.3
4/13/2019 8:10	0	0	0	30.72	0.9	1.1	0.3
4/13/2019 8:20	0	0	0	30.72	0.9	1.1	0.3
4/13/2019 8:30	0	0	0	30.72	1	1.1	0.3
4/13/2019 8:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 8:50	0	0	0	30.72	1	1	0.3
4/13/2019 9:00	0	0	0	30.72	1	1	0.3
4/13/2019 9:10	0	0	0	30.72	1	1	0.3
4/13/2019 9:20	0	0	0	30.72	1	1	0.3
4/13/2019 9:30	0	0	0	30.72	0.9	1	0.3
4/13/2019 9:40	0	0	0	30.72	1	1.1	0.3
4/13/2019 9:50	0	0	0	30.72	0.9	1.1	0.3
4/13/2019 10:00	0	0	0	30.72	1	1	0.3
4/13/2019 10:10	0	0	0	30.72	0.9	1	0.3
4/13/2019 10:20	0	0	0	30.72	1	1.1	0.3
4/13/2019 10:30	0	0	0	30.72	0.9	1	0.3
4/13/2019 10:40	0	0	0	30.72	0.9	1	0.3

4/13/2019 10:50	0	0	0	30.72	0.9	1.1	0.3
4/13/2019 11:00	0	0	0	30.72	0.9	1	0.3
4/13/2019 11:10	0	0	0	30.72	0.9	1	0.3
4/13/2019 11:20	0	0	0	30.72	0.9	1.1	0.3
4/13/2019 11:30	0	0	0	30.72	0.9	1	0.3
4/13/2019 11:40	0	0	0	30.72	0.9	1	0.3
4/13/2019 11:50	0	0	0	30.72	0.9	1	0.3
4/13/2019 12:00	0	0	0	30.72	0.9	1	0.3
4/13/2019 12:10	0	0	0	30.72	0.9	1	0.3
4/13/2019 12:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 12:30	0	0	0	30.69	0.9	1	0.3
4/13/2019 12:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 12:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 13:00	0	0	0	30.72	0.8	1	0.3
4/13/2019 13:10	0	0	0	30.69	0.8	1	0.3
4/13/2019 13:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 13:30	0	0	0	30.69	0.9	1	0.3
4/13/2019 13:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 13:50	0	0	0	30.69	0.8	1	0.3
4/13/2019 14:00	0	0	0	30.69	0.9	1	0.3
4/13/2019 14:10	0	0	0	30.69	0.8	1	0.3
4/13/2019 14:20	0	0	0	30.69	0.8	1	0.3
4/13/2019 14:30	0	0	0	30.69	0.9	1	0.3
4/13/2019 14:40	0	0	0	30.69	0.8	1	0.3
4/13/2019 14:50	0	0	0	30.69	0.8	1	0.3
4/13/2019 15:00	0	0	0	30.69	0.8	1	0.3
4/13/2019 15:10	0	0	0	30.69	0.8	1	0.3
4/13/2019 15:20	0	0	0	30.69	0.8	1	0.3
4/13/2019 15:30	0	0	0	30.69	0.8	1	0.3
4/13/2019 15:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 15:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 16:00	0	0	0	30.69	0.9	1	0.3
4/13/2019 16:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 16:20	0	0	0	30.66	0.9	1	0.3
4/13/2019 16:30	0	0	0	30.69	0.9	1	0.3
4/13/2019 16:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 16:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 17:00	0	0	0	30.69	0.9	1	0.3
4/13/2019 17:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 17:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 17:30	0	0	0	30.69	0.9	1	0.3
4/13/2019 17:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 17:50	0	0	0	30.66	0.9	1	0.3
4/13/2019 18:00	0	0	0	30.66	0.9	1	0.3
4/13/2019 18:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 18:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 18:30	0	0	0	30.66	0.9	1	0.3

4/13/2019 18:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 18:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 19:00	0	0	0	30.66	0.9	1	0.3
4/13/2019 19:10	0	0	0	30.69	0.8	1	0.3
4/13/2019 19:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 19:30	0	0	0	30.66	0.9	1	0.3
4/13/2019 19:40	0	0	0	30.66	0.9	1	0.3
4/13/2019 19:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 20:00	0	0	0	30.69	0.9	1	0.3
4/13/2019 20:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 20:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 20:30	0	0	0	30.66	0.9	1	0.3
4/13/2019 20:40	0	0	0	30.66	0.9	1	0.3
4/13/2019 20:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 21:00	0	0	0	30.69	0.9	1	0.3
4/13/2019 21:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 21:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 21:30	0	0	0	30.66	0.9	1	0.3
4/13/2019 21:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 21:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 22:00	0	0	0	30.66	0.9	1	0.3
4/13/2019 22:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 22:20	0	0	0	30.66	0.9	1	0.3
4/13/2019 22:30	0	0	0	30.66	0.9	1	0.3
4/13/2019 22:40	0	0	0	30.69	0.9	1	0.3
4/13/2019 22:50	0	0	0	30.69	0.9	1	0.3
4/13/2019 23:00	0	0	0	30.69	0.9	1	0.3
4/13/2019 23:10	0	0	0	30.69	0.9	1	0.3
4/13/2019 23:20	0	0	0	30.69	0.9	1	0.3
4/13/2019 23:30	0	0	0	30.69	0.9	1	0.3
4/13/2019 23:40	0	0	0	30.66	0.9	1	0.3
4/13/2019 23:50	0	0	0	30.69	0.9	1	0.3
4/14/2019 0:00	0	0	0	30.66	0.9	1	0.3
4/14/2019 0:10	0	0	0	30.69	0.9	1	0.3
4/14/2019 0:20	0	0	0	30.66	0.9	1	0.3
4/14/2019 0:30	0	0	0	30.69	0.9	1	0.3
4/14/2019 0:40	0	0	0	30.69	0.9	1	0.3
4/14/2019 0:50	0	0	0	30.69	0.9	1	0.3
4/14/2019 1:00	0	0	0	30.69	0.9	1	0.3
4/14/2019 1:10	0	0	0	30.66	0.9	1	0.3
4/14/2019 1:20	0	0	0	30.69	0.9	1	0.3
4/14/2019 1:30	0	0	0	30.69	0.9	1	0.3
4/14/2019 1:40	0	0	0	30.66	0.9	1	0.3
4/14/2019 1:50	0	0	0	30.69	0.9	1	0.3
4/14/2019 2:00	0	0	0	30.69	0.8	1	0.3
4/14/2019 2:10	0	0	0	30.69	0.8	1	0.3
4/14/2019 2:20	0	0	0	30.69	0.8	1	0.3

4/14/2019 2:30	0	0	0	30.69	0.8	1	0.3
4/14/2019 2:40	0	0	0	30.69	0.8	1	0.3
4/14/2019 2:50	0	0	0	30.69	0.8	1	0.3
4/14/2019 3:00	0	0	0	30.69	0.8	1	0.3
4/14/2019 3:10	0	0	0	30.66	0.8	1	0.3
4/14/2019 3:20	0	0	0	30.69	0.8	1	0.3
4/14/2019 3:30	0	0	0	30.66	0.9	1	0.3
4/14/2019 3:40	0	0	0	30.69	0.8	1	0.3
4/14/2019 3:50	0	0	0	30.69	0.8	1	0.3
4/14/2019 4:00	0	0	0	30.69	0.8	1	0.3
4/14/2019 4:10	0	0	0	30.69	0.8	1	0.3
4/14/2019 4:20	0	0	0	30.69	0.9	1	0.3
4/14/2019 4:30	0	0	0	30.69	0.8	1	0.3
4/14/2019 4:40	0	0	0	30.69	0.8	1	0.3
4/14/2019 4:50	0	0	0	30.69	0.8	1	0.3
4/14/2019 5:00	0	0	0	30.69	0.8	1	0.3
4/14/2019 5:10	0	0	0	30.69	0.8	1	0.3
4/14/2019 5:20	0	0	0	30.69	0.8	1	0.3
4/14/2019 5:30	0	0	0	30.69	0.8	1	0.3
4/14/2019 5:40	0	0	0	30.69	0.8	1	0.3
4/14/2019 5:50	0	0	0	30.69	0.8	1	0.3
4/14/2019 6:00	0	0	0	30.69	0.8	1	0.3
4/14/2019 6:10	0	0	0	30.69	0.9	1	0.3
4/14/2019 6:20	0	0	0	30.69	0.8	1	0.3
4/14/2019 6:30	0	0	0	30.69	0.9	1	0.3
4/14/2019 6:40	0	0	0	30.69	0.8	1	0.3
4/14/2019 6:50	0	0	0	30.69	0.8	1	0.3
4/14/2019 7:00	0	0	0	30.69	0.9	1	0.3
4/14/2019 7:10	0	0	0	30.72	0.9	1	0.3
4/14/2019 7:20	0	0	0	30.72	0.8	1	0.3
4/14/2019 7:30	0	0	0	30.69	0.8	1	0.3
4/14/2019 7:40	0	0	0	30.72	0.9	1	0.3
4/14/2019 7:50	0	0	0	30.72	0.8	1	0.3
4/14/2019 8:00	0	0	0	30.69	0.8	1	0.3
4/14/2019 8:10	0	0	0	30.72	0.9	1	0.3
4/14/2019 8:20	0	0	0	30.72	0.9	1	0.3
4/14/2019 8:30	0	0	0	30.72	0.9	1	0.3
4/14/2019 8:40	0	0	0	30.72	0.8	1	0.3
4/14/2019 8:50	0	0	0	30.72	0.8	1	0.3
4/14/2019 9:00	0	0	0	30.72	0.9	1	0.3
4/14/2019 9:10	0	0	0	30.69	0.8	1	0.3
4/14/2019 9:20	0	0	0	30.72	0.9	1	0.3
4/14/2019 9:30	0	0	0	30.72	0.8	1	0.3
4/14/2019 9:40	0	0	0	30.72	0.9	1	0.3
4/14/2019 9:50	0	0	0	30.72	0.8	1	0.3
4/14/2019 10:00	0	0	0	30.72	0.9	1	0.3
4/14/2019 10:10	0	0	0	30.69	0.9	1	0.3

4/14/2019 10:20	0	0	0	30.72	0.9	1	0.3
4/14/2019 10:30	0	0	0	30.72	0.8	1	0.3
4/14/2019 10:40	0	0	0	30.72	0.9	1	0.3
4/14/2019 10:50	0	0	0	30.72	0.8	1	0.3
4/14/2019 11:00	0	0	0	30.72	0.8	1	0.3
4/14/2019 11:10	0	0	0	30.72	0.9	1	0.3
4/14/2019 11:20	0	0	0	30.72	0.8	1	0.3
4/14/2019 11:30	0	0	0	30.72	0.8	1	0.3
4/14/2019 11:40	0	0	0	30.75	0.8	1	0.3
4/14/2019 11:50	0	0	0	30.72	0.8	1	0.3
4/14/2019 12:00	0	0	0	30.75	0.8	1	0.3
4/14/2019 12:10	0	0	0	30.72	0.8	1	0.3
4/14/2019 12:20	0	0	0	30.75	0.9	1	0.3
4/14/2019 12:30	0	0	0	30.75	0.9	1	0.3
4/14/2019 12:40	0	0	0	30.75	0.9	1	0.3
4/14/2019 12:50	0	0	0	30.75	0.9	1	0.3
4/14/2019 13:00	0	0	0	30.75	0.8	1	0.3
4/14/2019 13:10	0	0	0	30.75	0.8	1	0.3
4/14/2019 13:20	0	0	0	30.75	0.8	1	0.3
4/14/2019 13:30	0	0	0	30.75	0.8	1	0.3
4/14/2019 13:40	0	0	0	30.75	0.9	1	0.3
4/14/2019 13:50	0	0	0	30.75	0.9	1	0.3
4/14/2019 14:00	0	0	0	30.75	0.8	1	0.3
4/14/2019 14:10	0	0	0	30.75	0.8	1	0.3
4/14/2019 14:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 14:30	0	0	0	30.75	0.9	1	0.3
4/14/2019 14:40	0	0	0	30.75	0.8	1	0.3
4/14/2019 14:50	0	0	0	30.75	0.8	1	0.3
4/14/2019 15:00	0	0	0	30.75	0.8	1	0.3
4/14/2019 15:10	0	0	0	30.78	0.8	1	0.3
4/14/2019 15:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 15:30	0	0	0	30.78	0.8	1	0.3
4/14/2019 15:40	0	0	0	30.75	0.8	1	0.3
4/14/2019 15:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 16:00	0	0	0	30.78	0.8	1	0.3
4/14/2019 16:10	0	0	0	30.78	0.9	1	0.3
4/14/2019 16:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 16:30	0	0	0	30.75	0.8	1	0.3
4/14/2019 16:40	0	0	0	30.78	0.8	1	0.3
4/14/2019 16:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 17:00	0	0	0	30.78	0.8	1	0.3
4/14/2019 17:10	0	0	0	30.78	0.8	1	0.3
4/14/2019 17:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 17:30	0	0	0	30.75	0.8	1	0.3
4/14/2019 17:40	0	0	0	30.78	0.8	1	0.3
4/14/2019 17:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 18:00	0	0	0	30.78	0.8	1	0.3

4/14/2019 18:10	0	0	0	30.78	0.8	1	0.3
4/14/2019 18:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 18:30	0	0	0	30.78	0.8	1	0.3
4/14/2019 18:40	0	0	0	30.78	0.8	1	0.3
4/14/2019 18:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 19:00	0	0	0	30.78	0.8	1	0.3
4/14/2019 19:10	0	0	0	30.78	0.8	1	0.3
4/14/2019 19:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 19:30	0	0	0	30.81	0.8	1	0.3
4/14/2019 19:40	0	0	0	30.78	0.8	1	0.3
4/14/2019 19:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 20:00	0	0	0	30.78	0.8	1	0.3
4/14/2019 20:10	0	0	0	30.78	0.8	1	0.3
4/14/2019 20:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 20:30	0	0	0	30.78	0.8	1	0.3
4/14/2019 20:40	0	0	0	30.81	0.8	1	0.3
4/14/2019 20:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 21:00	0	0	0	30.78	0.8	1	0.3
4/14/2019 21:10	0	0	0	30.81	0.8	1	0.3
4/14/2019 21:20	0	0	0	30.81	0.8	1	0.3
4/14/2019 21:30	0	0	0	30.81	0.8	1	0.3
4/14/2019 21:40	0	0	0	30.81	0.8	1	0.3
4/14/2019 21:50	0	0	0	30.78	0.8	1	0.3
4/14/2019 22:00	0	0	0	30.78	0.8	1	0.3
4/14/2019 22:10	0	0	0	30.78	0.8	1	0.3
4/14/2019 22:20	0	0	0	30.78	0.8	1	0.3
4/14/2019 22:30	0	0	0	30.81	0.8	1	0.3
4/14/2019 22:40	0	0	0	30.78	0.8	1	0.3
4/14/2019 22:50	0	0	0	30.81	0.8	1	0.3
4/14/2019 23:00	0	0	0	30.81	0.8	1	0.3
4/14/2019 23:10	0	0	0	30.81	0.8	1	0.3
4/14/2019 23:20	0	0	0	30.81	0.8	1	0.3
4/14/2019 23:30	0	0	0	30.81	0.8	1	0.3
4/14/2019 23:40	0	0	0	30.81	0.8	1	0.3
4/14/2019 23:50	0	0	0	30.81	0.8	1	0.3
4/15/2019 0:00	0	0	0	30.81	0.8	1	0.3
4/15/2019 0:10	0	0	0	30.81	0.8	0.9	0.3
4/15/2019 0:20	0	0	0	30.81	0.8	1	0.3
4/15/2019 0:30	0	0	0	30.78	0.8	1	0.3
4/15/2019 0:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 0:50	0	0	0	30.81	0.8	1	0.3
4/15/2019 1:00	0	0	0	30.81	0.8	0.9	0.3
4/15/2019 1:10	0	0	0	30.81	0.8	1	0.3
4/15/2019 1:20	0	0	0	30.81	0.8	0.9	0.3
4/15/2019 1:30	0	0	0	30.81	0.8	1	0.3
4/15/2019 1:40	0	0	0	30.81	0.8	1	0.3
4/15/2019 1:50	0	0	0	30.81	0.8	1	0.3

4/15/2019 2:00	0	0	0	30.81	0.8	1	0.3
4/15/2019 2:10	0	0	0	30.81	0.8	1	0.3
4/15/2019 2:20	0	0	0	30.78	0.8	1	0.3
4/15/2019 2:30	0	0	0	30.81	0.8	1	0.3
4/15/2019 2:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 2:50	0	0	0	30.81	0.8	1	0.3
4/15/2019 3:00	0	0	0	30.81	0.8	1	0.3
4/15/2019 3:10	0	0	0	30.81	0.8	1	0.3
4/15/2019 3:20	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 3:30	0	0	0	30.81	0.8	1	0.3
4/15/2019 3:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 3:50	0	0	0	30.78	0.8	1	0.3
4/15/2019 4:00	0	0	0	30.78	0.8	1	0.3
4/15/2019 4:10	0	0	0	30.78	0.8	1	0.3
4/15/2019 4:20	0	0	0	30.78	0.8	1	0.3
4/15/2019 4:30	0	0	0	30.78	0.8	1	0.3
4/15/2019 4:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 4:50	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 5:00	0	0	0	30.78	0.8	1	0.3
4/15/2019 5:10	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 5:20	0	0	0	30.75	0.8	1	0.3
4/15/2019 5:30	0	0	0	30.78	0.8	1	0.3
4/15/2019 5:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 5:50	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 6:00	0	0	0	30.78	0.8	1	0.3
4/15/2019 6:10	0	0	0	30.75	0.8	1	0.3
4/15/2019 6:20	0	0	0	30.78	0.8	1	0.3
4/15/2019 6:30	0	0	0	30.75	0.8	1	0.3
4/15/2019 6:40	0	0	0	30.75	0.8	0.9	0.3
4/15/2019 6:50	0	0	0	30.78	0.8	1	0.3
4/15/2019 7:00	0	0	0	30.78	0.8	1	0.3
4/15/2019 7:10	0	0	0	30.78	0.8	1	0.3
4/15/2019 7:20	0	0	0	30.78	0.8	1	0.3
4/15/2019 7:30	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 7:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 7:50	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 8:00	0	0	0	30.75	0.8	1	0.3
4/15/2019 8:10	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 8:20	0	0	0	30.75	0.8	1	0.3
4/15/2019 8:30	0	0	0	30.75	0.8	0.9	0.3
4/15/2019 8:40	0	0	0	30.78	0.8	1	0.3
4/15/2019 8:50	0	0	0	30.75	0.8	0.9	0.3
4/15/2019 9:00	0	0	0	30.78	0.8	1	0.3
4/15/2019 9:10	0	0	0	30.78	0.8	1	0.3
4/15/2019 9:20	0	0	0	30.75	0.8	1	0.3
4/15/2019 9:30	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 9:40	0	0	0	30.75	0.8	1	0.3

4/15/2019 9:50	0	0	0	30.78	0.8	0.9	0.3
4/15/2019 10:00	0	0	0	30.75	0.8	1	0.3
4/15/2019 10:10	0	0	0	30.75	0.8	1	0.3
4/15/2019 10:20	0	0	0	32.46	0.8	1	0.1
4/15/2019 10:30	0	0	0	32.46	0.8	1	0.1
4/15/2019 10:40	0	0	0	32.49	0.8	0.9	0.1
4/15/2019 10:50	0	0	0	32.49	0.8	1	0.1
4/15/2019 11:00	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 11:10	0	0	0	32.49	0.8	0.9	0.1
4/15/2019 11:20	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 11:30	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 11:40	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 11:50	0	0	0	32.46	0.8	1	0.1
4/15/2019 12:00	0	0	0	32.49	0.8	1	0.1
4/15/2019 12:10	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 12:20	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 12:30	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 12:40	0	0	0	32.46	0.8	1	0.1
4/15/2019 12:50	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 13:00	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 13:10	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 13:20	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 13:30	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 13:40	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 13:50	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 14:00	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 14:10	0	0	0	32.43	0.8	1	0.1
4/15/2019 14:20	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 14:30	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 14:40	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 14:50	0	0	0	32.46	0.8	1	0.1
4/15/2019 15:00	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 15:10	0	0	0	32.46	0.8	1	0.1
4/15/2019 15:20	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 15:30	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 15:40	0	0	0	32.46	0.8	1	0.1
4/15/2019 15:50	0	0	0	32.43	0.9	0.9	0.1
4/15/2019 16:00	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 16:10	0	0	0	32.43	0.8	1	0.1
4/15/2019 16:20	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 16:30	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 16:40	0	0	0	32.46	0.9	0.9	0.1
4/15/2019 16:50	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 17:00	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 17:10	0	0	0	32.43	0.8	1	0.1
4/15/2019 17:20	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 17:30	0	0	0	32.43	0.8	0.9	0.1

4/15/2019 17:40	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 17:50	0	0	0	32.46	0.9	1	0.1
4/15/2019 18:00	0	0	0	32.43	0.8	1	0.1
4/15/2019 18:10	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 18:20	0	0	0	32.43	0.8	1	0.1
4/15/2019 18:30	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 18:40	0	0	0	32.46	0.8	1	0.1
4/15/2019 18:50	0	0	0	32.46	0.8	0.9	0.1
4/15/2019 19:00	0	0	0	32.43	0.8	1	0.1
4/15/2019 19:10	0	0	0	32.43	0.8	0.9	0.1
4/15/2019 19:20	0	0	0	32.46	0.9	1	0.1
4/15/2019 19:30	0	0	0	32.46	0.9	1	0.1
4/15/2019 19:40	0	0	0	32.46	0.9	0.9	0.1
4/15/2019 19:50	0	0	0	32.46	0.9	0.9	0.1
4/15/2019 20:00	0	0	0	32.46	0.8	1	0.1
4/15/2019 20:10	0	0	0	32.46	0.9	1	0.1
4/15/2019 20:20	0	0	0	32.46	0.9	1	0.1
4/15/2019 20:30	0	0	0	32.46	0.9	1	0.1
4/15/2019 20:40	0	0	0	32.46	0.8	1	0.1
4/15/2019 20:50	0	0	0	32.46	0.9	1	0.1
4/15/2019 21:00	0	0	0	32.46	0.9	1	0.1
4/15/2019 21:10	0	0	0	32.46	0.9	0.9	0.1
4/15/2019 21:20	0	0	0	32.46	0.8	1	0.1
4/15/2019 21:30	0	0	0	32.49	0.9	1	0.1
4/15/2019 21:40	0	0	0	32.46	0.9	1	0.1
4/15/2019 21:50	0	0	0	32.49	0.9	1	0.1
4/15/2019 22:00	0	0	0	32.46	0.9	1	0.1
4/15/2019 22:10	0	0	0	32.49	0.9	1	0.1
4/15/2019 22:20	0	0	0	32.46	0.9	1	0.1
4/15/2019 22:30	0	0	0	32.49	0.9	1	0.1
4/15/2019 22:40	0	0	0	32.46	0.9	1	0.1
4/15/2019 22:50	0	0	0	32.49	0.9	1	0.1
4/15/2019 23:00	0	0	0	32.49	0.9	1	0.1
4/15/2019 23:10	0	0	0	32.49	0.9	1	0.1
4/15/2019 23:20	0	0	0	32.52	0.9	0.9	0.1
4/15/2019 23:30	0	0	0	32.49	0.9	0.9	0.1
4/15/2019 23:40	0	0	0	32.49	0.9	0.9	0.1
4/15/2019 23:50	0	0	0	32.49	0.9	0.9	0.1
4/16/2019 0:00	0	0	0	32.49	0.9	0.9	0.1
4/16/2019 0:10	0	0	0	32.49	0.9	0.9	0.1
4/16/2019 0:20	0	0	0	32.49	0.9	1	0.1
4/16/2019 0:30	0	0	0	32.49	0.9	0.9	0.1
4/16/2019 0:40	0	0	0	32.52	0.9	1	0.1
4/16/2019 0:50	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 1:00	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 1:10	0	0	0	32.49	0.9	0.9	0.1
4/16/2019 1:20	0	0	0	32.49	0.9	0.9	0.1

4/16/2019 1:30	0	0	0	32.52	0.9	1	0.1
4/16/2019 1:40	0	0	0	32.49	0.9	0.9	0.1
4/16/2019 1:50	0	0	0	32.52	0.9	1	0.1
4/16/2019 2:00	0	0	0	32.49	0.9	1	0.1
4/16/2019 2:10	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 2:20	0	0	0	32.52	0.9	1	0.1
4/16/2019 2:30	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 2:40	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 2:50	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 3:00	0	0	0	32.52	0.9	1	0.1
4/16/2019 3:10	0	0	0	32.52	0.9	1	0.1
4/16/2019 3:20	0	0	0	32.52	0.9	1	0.1
4/16/2019 3:30	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 3:40	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 3:50	0	0	0	32.52	0.9	0.9	0.1
4/16/2019 4:00	0	0	0	32.52	0.9	1	0.1
4/16/2019 4:10	0	0	0	32.52	0.9	1	0.1
4/16/2019 4:20	0	0	0	32.52	0.9	1	0.1
4/16/2019 4:30	0	0	0	32.52	0.9	1	0.1
4/16/2019 4:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 4:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 5:00	0	0	0	32.52	0.9	1	0.1
4/16/2019 5:10	0	0	0	32.52	0.9	1	0.1
4/16/2019 5:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 5:30	0	0	0	32.52	0.9	1	0.1
4/16/2019 5:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 5:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 6:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 6:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 6:20	0	0	0	32.52	0.9	1	0.1
4/16/2019 6:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 6:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 6:50	0	0	0	32.52	0.9	1	0.1
4/16/2019 7:00	0	0	0	32.52	0.9	1	0.1
4/16/2019 7:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 7:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 7:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 7:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 7:50	0	0	0	32.52	0.9	1	0.1
4/16/2019 8:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 8:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 8:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 8:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 8:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 8:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 9:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 9:10	0	0	0	32.58	0.9	1	0.1

4/16/2019 9:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 9:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 9:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 9:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 10:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 10:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 10:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 10:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 10:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 10:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 11:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 11:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 11:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 11:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 11:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 11:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 12:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 12:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 12:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 12:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 12:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 12:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 13:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 13:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 13:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 13:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 13:40	0	0	0	32.58	0.9	1	0.1
4/16/2019 13:50	0	0	0	32.58	0.9	1	0.1
4/16/2019 14:00	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 14:10	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 14:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 14:30	0	0	0	32.58	0.9	1	0.1
4/16/2019 14:40	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 14:50	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 15:00	0	0	0	32.61	0.9	1	0.1
4/16/2019 15:10	0	0	0	32.58	0.9	1	0.1
4/16/2019 15:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 15:30	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 15:40	0	0	0	32.61	0.9	1	0.1
4/16/2019 15:50	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 16:00	0	0	0	32.58	0.9	1	0.1
4/16/2019 16:10	0	0	0	32.58	0.9	0.9	0.1
4/16/2019 16:20	0	0	0	32.58	0.9	1	0.1
4/16/2019 16:30	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 16:40	0	0	0	32.73	0.9	1	0.1
4/16/2019 16:50	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 17:00	0	0	0	32.7	0.9	1	0.1

4/16/2019 17:10	0	0	0	32.7	0.9	1	0.1
4/16/2019 17:20	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 17:30	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 17:40	0	0	0	32.73	0.9	1	0.1
4/16/2019 17:50	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 18:00	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 18:10	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 18:20	0	0	0	32.73	0.9	1	0.1
4/16/2019 18:30	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 18:40	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 18:50	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 19:00	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 19:10	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 19:20	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 19:30	0	0	0	32.7	0.9	1	0.1
4/16/2019 19:40	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 19:50	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 20:00	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 20:10	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 20:20	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 20:30	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 20:40	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 20:50	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 21:00	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 21:10	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 21:20	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 21:30	0	0	0	32.73	0.9	1	0.1
4/16/2019 21:40	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 21:50	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 22:00	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 22:10	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 22:20	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 22:30	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 22:40	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 22:50	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 23:00	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 23:10	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 23:20	0	0	0	32.73	0.9	1	0.1
4/16/2019 23:30	0	0	0	32.7	0.9	0.9	0.1
4/16/2019 23:40	0	0	0	32.73	0.9	0.9	0.1
4/16/2019 23:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 0:00	0	0	0	32.7	0.9	1	0.1
4/17/2019 0:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 0:20	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 0:30	0	0	0	32.7	0.9	1	0.1
4/17/2019 0:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 0:50	0	0	0	32.73	0.9	0.9	0.1

4/17/2019 1:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 1:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 1:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 1:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 1:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 1:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 2:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 2:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 2:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 2:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 2:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 2:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 3:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 3:10	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 3:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 3:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 3:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 3:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 4:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 4:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 4:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 4:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 4:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 4:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 5:00	0	0	0	32.73	0.9	1	0.1
4/17/2019 5:10	0	0	0	32.7	0.9	1	0.1
4/17/2019 5:20	0	0	0	32.7	0.9	1	0.1
4/17/2019 5:30	0	0	0	32.7	0.9	1	0.1
4/17/2019 5:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 5:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 6:00	0	0	0	32.73	0.9	1	0.1
4/17/2019 6:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 6:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 6:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 6:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 6:50	0	0	0	32.7	0.9	1	0.1
4/17/2019 7:00	0	0	0	32.7	0.9	1	0.1
4/17/2019 7:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 7:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 7:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 7:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 7:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 8:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 8:10	0	0	0	32.7	0.9	1	0.1
4/17/2019 8:20	0	0	0	32.7	0.9	1	0.1
4/17/2019 8:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 8:40	0	0	0	32.73	0.9	1	0.1

4/17/2019 8:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 9:00	0	0	0	32.73	0.9	1	0.1
4/17/2019 9:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 9:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 9:30	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 9:40	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 9:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 10:00	0	0	0	32.73	0.9	1	0.1
4/17/2019 10:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 10:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 10:30	0	0	0	32.7	0.9	1	0.1
4/17/2019 10:40	0	0	0	32.7	0.9	1	0.1
4/17/2019 10:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 11:00	0	0	0	32.73	0.9	1	0.1
4/17/2019 11:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 11:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 11:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 11:40	0	0	0	32.7	0.9	1	0.1
4/17/2019 11:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 12:00	0	0	0	32.7	0.9	1	0.1
4/17/2019 12:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 12:20	0	0	0	32.7	0.9	1	0.1
4/17/2019 12:30	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 12:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 12:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 13:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 13:10	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 13:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 13:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 13:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 13:50	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 14:00	0	0	0	32.7	0.9	1	0.1
4/17/2019 14:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 14:20	0	0	0	32.7	0.9	1	0.1
4/17/2019 14:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 14:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 14:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 15:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 15:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 15:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 15:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 15:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 15:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 16:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 16:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 16:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 16:30	0	0	0	32.73	0.9	0.9	0.1

4/17/2019 16:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 16:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 17:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 17:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 17:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 17:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 17:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 17:50	0	0	0	32.7	0.9	0.9	0.1
4/17/2019 18:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 18:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 18:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 18:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 18:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 18:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 19:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 19:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 19:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 19:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 19:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 19:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 20:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 20:10	0	0	0	32.76	0.9	1	0.1
4/17/2019 20:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 20:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 20:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 20:50	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 21:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 21:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 21:20	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 21:30	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 21:40	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 21:50	0	0	0	32.73	0.9	1	0.1
4/17/2019 22:00	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 22:10	0	0	0	32.73	0.9	0.9	0.1
4/17/2019 22:20	0	0	0	32.73	0.9	1	0.1
4/17/2019 22:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 22:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 22:50	0	0	0	32.76	0.9	0.9	0.1
4/17/2019 23:00	0	0	0	32.76	0.9	0.9	0.1
4/17/2019 23:10	0	0	0	32.73	0.9	1	0.1
4/17/2019 23:20	0	0	0	32.76	0.9	0.9	0.1
4/17/2019 23:30	0	0	0	32.73	0.9	1	0.1
4/17/2019 23:40	0	0	0	32.73	0.9	1	0.1
4/17/2019 23:50	0	0	0	32.73	0.9	1	0.1
4/18/2019 0:00	0	0	0	32.73	0.9	1	0.1
4/18/2019 0:10	0	0	0	32.76	0.9	1	0.1
4/18/2019 0:20	0	0	0	32.73	0.9	1	0.1

4/18/2019 0:30	0	0	0	32.76	0.9	1	0.1
4/18/2019 0:40	0	0	0	32.73	0.9	1	0.1
4/18/2019 0:50	0	0	0	32.76	0.9	1	0.1
4/18/2019 1:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 1:10	0	0	0	32.76	0.9	1	0.1
4/18/2019 1:20	0	0	0	32.76	0.9	1	0.1
4/18/2019 1:30	0	0	0	32.76	0.9	1	0.1
4/18/2019 1:40	0	0	0	32.76	0.9	1	0.1
4/18/2019 1:50	0	0	0	32.73	0.9	1	0.1
4/18/2019 2:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 2:10	0	0	0	32.76	0.9	1	0.1
4/18/2019 2:20	0	0	0	32.76	0.9	1	0.1
4/18/2019 2:30	0	0	0	32.73	0.9	1	0.1
4/18/2019 2:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 2:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 3:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 3:10	0	0	0	32.76	0.9	1	0.1
4/18/2019 3:20	0	0	0	32.76	0.9	1	0.1
4/18/2019 3:30	0	0	0	32.76	0.9	1	0.1
4/18/2019 3:40	0	0	0	32.76	0.9	1	0.1
4/18/2019 3:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 4:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 4:10	0	0	0	32.76	0.9	1	0.1
4/18/2019 4:20	0	0	0	32.73	0.9	1	0.1
4/18/2019 4:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 4:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 4:50	0	0	0	32.76	0.9	1	0.1
4/18/2019 5:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 5:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 5:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 5:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 5:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 5:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 6:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 6:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 6:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 6:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 6:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 6:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 7:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 7:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 7:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 7:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 7:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 7:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 8:00	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 8:10	0	0	0	32.76	0.9	0.9	0.1

4/18/2019 8:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 8:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 8:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 8:50	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 9:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 9:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 9:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 9:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 9:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 9:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 10:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 10:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 10:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 10:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 10:40	0	0	0	32.73	0.9	1	0.1
4/18/2019 10:50	0	0	0	32.73	0.9	1	0.1
4/18/2019 11:00	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 11:10	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 11:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 11:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 11:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 11:50	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 12:00	0	0	0	32.73	0.9	1	0.1
4/18/2019 12:10	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 12:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 12:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 12:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 12:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 13:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 13:10	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 13:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 13:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 13:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 13:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 14:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 14:10	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 14:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 14:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 14:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 14:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 15:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 15:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 15:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 15:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 15:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 15:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 16:00	0	0	0	32.73	0.9	0.9	0.1

4/18/2019 16:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 16:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 16:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 16:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 16:50	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 17:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 17:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 17:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 17:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 17:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 17:50	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 18:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 18:10	0	0	0	32.73	0.9	1	0.1
4/18/2019 18:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 18:30	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 18:40	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 18:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 19:00	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 19:10	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 19:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 19:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 19:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 19:50	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 20:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 20:10	0	0	0	32.73	0.9	1	0.1
4/18/2019 20:20	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 20:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 20:40	0	0	0	32.76	0.9	1	0.1
4/18/2019 20:50	0	0	0	32.73	0.9	1	0.1
4/18/2019 21:00	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 21:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 21:20	0	0	0	32.76	0.9	1	0.1
4/18/2019 21:30	0	0	0	32.76	0.9	1	0.1
4/18/2019 21:40	0	0	0	32.76	0.9	1	0.1
4/18/2019 21:50	0	0	0	32.76	0.9	1	0.1
4/18/2019 22:00	0	0	0	32.76	0.9	1	0.1
4/18/2019 22:10	0	0	0	32.73	0.9	1	0.1
4/18/2019 22:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 22:30	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 22:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 22:50	0	0	0	32.76	0.9	1	0.1
4/18/2019 23:00	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 23:10	0	0	0	32.76	0.9	0.9	0.1
4/18/2019 23:20	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 23:30	0	0	0	32.76	0.9	1	0.1
4/18/2019 23:40	0	0	0	32.73	0.9	0.9	0.1
4/18/2019 23:50	0	0	0	32.73	0.9	0.9	0.1

4/19/2019 0:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 0:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 0:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 0:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 0:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 0:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 1:00	0	0	0	32.73	0.9	1	0.1
4/19/2019 1:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 1:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 1:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 1:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 1:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 2:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 2:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 2:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 2:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 2:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 2:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 3:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 3:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 3:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 3:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 3:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 3:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 4:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 4:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 4:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 4:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 4:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 4:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 5:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 5:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 5:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 5:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 5:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 5:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 6:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 6:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 6:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 6:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 6:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 7:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 7:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 7:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 7:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 7:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 7:50	0	0	0	32.73	0.9	0.9	0.1

4/19/2019 8:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 8:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 8:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 8:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 8:40	0	0	0	32.76	0.9	0.9	0.1
4/19/2019 8:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 9:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 9:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 9:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 9:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 9:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 9:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 10:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 10:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 10:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 10:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 10:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 10:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 11:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 11:10	0	0	0	32.7	0.9	1	0.1
4/19/2019 11:20	0	0	0	32.73	0.9	1	0.1
4/19/2019 11:30	0	0	0	32.73	0.9	1	0.1
4/19/2019 11:40	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 11:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 12:00	0	0	0	32.73	0.9	1	0.1
4/19/2019 12:10	0	0	0	32.7	0.9	1	0.1
4/19/2019 12:20	0	0	0	32.73	0.9	1	0.1
4/19/2019 12:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 12:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 12:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 13:00	0	0	0	32.7	0.9	1	0.1
4/19/2019 13:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 13:20	0	0	0	32.73	0.9	1	0.1
4/19/2019 13:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 13:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 13:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 14:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 14:10	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 14:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 14:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 14:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 14:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 15:00	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 15:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 15:20	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 15:30	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 15:40	0	0	0	32.7	0.9	0.9	0.1

4/19/2019 15:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 16:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 16:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 16:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 16:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 16:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 16:50	0	0	0	32.73	0.9	0.9	0.1
4/19/2019 17:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 17:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 17:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 17:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 17:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 17:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 18:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 18:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 18:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 18:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 18:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 18:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 19:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 19:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 19:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 19:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 19:40	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 19:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 20:00	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 20:10	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 20:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 20:30	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 20:40	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 20:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 21:00	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 21:10	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 21:20	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 21:30	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 21:40	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 21:50	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 22:00	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 22:10	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 22:20	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 22:30	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 22:40	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 22:50	0	0	0	32.7	0.9	0.9	0.1
4/19/2019 23:00	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 23:10	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 23:20	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 23:30	0	0	0	32.67	0.9	0.9	0.1

4/19/2019 23:40	0	0	0	32.67	0.9	0.9	0.1
4/19/2019 23:50	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 0:00	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 0:10	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 0:20	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 0:30	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 0:40	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 0:50	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 1:00	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 1:10	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 1:20	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 1:30	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 1:40	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 1:50	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 2:00	0	0	0	32.67	0.9	0.9	0.1
4/20/2019 2:10	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 2:20	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 2:30	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 2:40	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 2:50	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 3:00	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 3:10	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 3:20	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 3:30	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 3:40	-7	-7	-7	-13.94	-25	-25	-7.5
4/20/2019 3:50	-7	-7	-7	-13.94	-25	-25	-7.5
4/20/2019 4:00	-7	-7	-7	-13.94	-25	-25	-7.5
4/20/2019 4:10	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 4:20	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 4:30	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 4:40	0	0	0	32.64	0.9	0.9	0.1
4/20/2019 4:50	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 5:00	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 5:10	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 5:20	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 5:30	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 5:40	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 5:50	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:00	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:10	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:20	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:30	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:40	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:40	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 6:50	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 7:00	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 7:10	0	0	0	32.58	0.9	0.9	0.1

4/20/2019 7:20	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 7:30	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 7:40	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 7:50	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 8:00	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 8:10	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 8:20	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 8:30	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 8:40	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 8:50	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 9:00	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 9:10	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 9:20	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 9:30	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 9:40	0	0	0	32.61	0.9	0.9	0.1
4/20/2019 9:50	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 10:00	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 10:10	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 10:20	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 10:30	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 10:40	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 10:50	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 11:00	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 11:10	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 11:20	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 11:30	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 11:40	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 11:50	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 12:00	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 12:10	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 12:20	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 12:30	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 12:40	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 12:50	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 13:00	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 13:10	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 13:20	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 13:30	0	0	0	32.58	0.9	0.9	0.1
4/20/2019 13:40	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 13:50	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 14:00	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 14:10	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 14:20	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 14:30	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 14:40	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 14:50	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 15:00	0	0	0	32.52	0.8	0.9	0.1

4/20/2019 15:10	0	0	0	32.58	0.8	0.9	0.1
4/20/2019 15:20	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 15:30	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 15:40	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 15:50	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 16:00	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 16:10	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 16:20	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 16:30	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 16:40	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 16:50	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 17:00	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 17:10	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 17:20	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 17:30	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 17:40	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 17:50	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 18:00	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 18:10	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 18:20	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 18:30	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 18:40	0	0	0	32.52	0.8	0.9	0.1
4/20/2019 18:50	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 19:00	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 19:10	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 19:20	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 19:30	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 19:40	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 19:50	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 20:00	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 20:10	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 20:20	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 20:30	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 20:40	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 20:50	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 21:00	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 21:10	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 21:20	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 21:30	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 21:40	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 21:50	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 22:00	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 22:10	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 22:20	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 22:30	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 22:40	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 22:50	0	0	0	32.49	0.8	0.9	0.1

4/20/2019 23:00	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 23:10	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 23:20	0	0	0	32.49	0.8	0.9	0.1
4/20/2019 23:30	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 23:40	0	0	0	32.46	0.8	0.9	0.1
4/20/2019 23:50	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 0:00	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 0:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 0:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 0:30	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 0:40	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 0:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 1:00	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 1:10	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 1:20	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 1:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 1:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 1:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 2:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 2:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 2:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 2:30	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 2:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 2:50	0	0	0	32.46	0.8	0.9	0.1
4/21/2019 3:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 3:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 3:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 3:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 3:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 3:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 4:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 4:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 4:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 4:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 4:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 4:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 5:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 5:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 5:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 5:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 5:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 5:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 6:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 6:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 6:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 6:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 6:40	0	0	0	32.52	0.8	0.9	0.1

4/21/2019 6:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 7:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 7:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 7:20	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 7:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 7:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 7:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 8:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 8:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 8:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 8:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 8:40	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 8:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 9:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 9:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 9:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 9:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 9:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 9:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 10:00	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 10:10	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 10:20	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 10:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 10:40	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 10:50	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 11:00	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 11:10	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 11:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 11:30	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 11:40	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 11:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 12:00	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 12:10	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 12:20	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 12:30	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 12:40	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 12:50	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 13:00	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 13:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 13:20	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 13:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 13:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 13:50	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 14:00	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 14:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 14:20	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 14:30	0	0	0	32.52	0.8	0.9	0.1

4/21/2019 14:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 14:50	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 15:00	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 15:10	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 15:20	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 15:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 15:40	0	0	0	32.58	0.8	0.9	0.1
4/21/2019 15:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 16:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 16:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 16:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 16:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 16:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 16:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 17:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 17:10	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 17:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 17:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 17:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 17:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 18:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 18:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 18:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 18:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 18:40	0	0	0	32.52	0.8	0.8	0.1
4/21/2019 18:50	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 19:00	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 19:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 19:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 19:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 19:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 19:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 20:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 20:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 20:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 20:30	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 20:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 20:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 21:00	0	0	0	32.49	0.8	0.8	0.1
4/21/2019 21:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 21:20	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 21:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 21:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 21:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 22:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 22:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 22:20	0	0	0	32.49	0.8	0.9	0.1

4/21/2019 22:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 22:40	0	0	0	32.52	0.8	0.9	0.1
4/21/2019 22:50	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 23:00	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 23:10	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 23:20	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 23:30	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 23:40	0	0	0	32.49	0.8	0.9	0.1
4/21/2019 23:50	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 0:00	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 0:10	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 0:20	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 0:30	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 0:40	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 0:50	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 1:00	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 1:10	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 1:20	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 1:30	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 1:40	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 1:50	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 2:00	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 2:10	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 2:20	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 2:30	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 2:40	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 2:50	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 3:00	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 3:10	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 3:20	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 3:30	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 3:40	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 3:50	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 4:00	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 4:10	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 4:20	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 4:30	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 4:40	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 4:50	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 5:00	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 5:10	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 5:20	0	0	0	32.49	0.7	0.9	0.1
4/22/2019 5:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 5:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 5:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 6:00	0	0	0	32.49	0.7	0.9	0.1
4/22/2019 6:10	0	0	0	32.52	0.7	0.9	0.1

4/22/2019 6:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 6:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 6:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 6:50	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 7:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 7:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 7:20	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 7:30	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 7:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 7:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 8:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 8:10	0	0	0	32.49	0.8	0.9	0.1
4/22/2019 8:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 8:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 8:40	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 8:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 9:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 9:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 9:20	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 9:30	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 9:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 9:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 10:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 10:10	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 10:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 10:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 10:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 10:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 11:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 11:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 11:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 11:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 11:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 11:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 12:00	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 12:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 12:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 12:30	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 12:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 12:50	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 13:00	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 13:10	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 13:20	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 13:30	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 13:40	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 13:50	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 14:00	0	0	0	32.52	0.8	0.9	0.1

4/22/2019 14:10	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 14:20	0	0	0	32.58	0.8	0.9	0.1
4/22/2019 14:30	0	0	0	32.58	0.8	0.9	0.1
4/22/2019 14:40	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 14:50	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 15:00	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 15:10	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 15:20	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 15:30	0	0	0	32.58	0.8	0.9	0.1
4/22/2019 15:40	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 15:50	0	0	0	32.52	0.8	0.9	0.1
4/22/2019 16:00	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 16:10	0	0	0	32.58	0.8	0.9	0.1
4/22/2019 16:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 16:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 16:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 16:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 17:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 17:10	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 17:20	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 17:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 17:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 17:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 18:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 18:10	0	0	0	32.52	0.7	0.8	0.1
4/22/2019 18:20	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 18:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 18:40	0	0	0	32.58	0.7	0.9	0.1
4/22/2019 18:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 19:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 19:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 19:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 19:30	0	0	0	32.52	0.7	0.8	0.1
4/22/2019 19:40	0	0	0	32.52	0.7	0.8	0.1
4/22/2019 19:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 20:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 20:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 20:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 20:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 20:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 20:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 21:00	0	0	0	32.49	0.7	0.9	0.1
4/22/2019 21:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 21:20	0	0	0	32.52	0.7	0.8	0.1
4/22/2019 21:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 21:40	0	0	0	32.49	0.7	0.8	0.1
4/22/2019 21:50	0	0	0	32.52	0.7	0.8	0.1

4/22/2019 22:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 22:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 22:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 22:30	0	0	0	32.49	0.7	0.9	0.1
4/22/2019 22:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 22:50	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 23:00	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 23:10	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 23:20	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 23:30	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 23:40	0	0	0	32.52	0.7	0.9	0.1
4/22/2019 23:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 0:00	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 0:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 0:20	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 0:30	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 0:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 0:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 1:00	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 1:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 1:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 1:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 1:40	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 1:50	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 2:00	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 2:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 2:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 2:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 2:40	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 2:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 3:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 3:10	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 3:20	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 3:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 3:40	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 3:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 4:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 4:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 4:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 4:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 4:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 4:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 5:00	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 5:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 5:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 5:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 5:40	0	0	0	32.52	0.7	0.8	0.1

4/23/2019 5:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 6:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 6:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 6:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 6:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 6:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 6:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 7:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 7:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 7:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 7:30	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 7:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 7:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 8:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 8:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 8:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 8:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 8:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 8:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 9:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 9:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 9:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 9:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 9:40	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 9:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 10:00	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 10:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 10:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 10:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 10:40	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 10:50	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 11:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 11:10	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 11:20	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 11:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 11:40	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 11:50	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 12:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 12:10	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 12:20	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 12:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 12:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 12:50	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 13:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 13:10	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 13:20	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 13:30	0	0	0	32.52	0.7	0.8	0.1

4/23/2019 13:40	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 13:50	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 14:00	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 14:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 14:20	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 14:30	0	0	0	32.58	0.7	0.8	0.1
4/23/2019 14:40	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 14:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 15:00	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 15:10	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 15:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 15:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 15:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 15:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 16:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 16:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 16:20	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 16:30	0	0	0	32.58	0.7	0.9	0.1
4/23/2019 16:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 16:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 17:00	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 17:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 17:20	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 17:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 17:40	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 17:50	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 18:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 18:10	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 18:20	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 18:30	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 18:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 18:50	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 19:00	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 19:10	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 19:20	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 19:30	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 19:40	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 19:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 20:00	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 20:10	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 20:20	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 20:30	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 20:40	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 20:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 21:00	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 21:10	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 21:20	0	0	0	32.49	0.7	0.9	0.1

4/23/2019 21:30	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 21:40	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 21:50	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 22:00	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 22:10	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 22:20	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 22:30	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 22:40	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 22:50	0	0	0	32.52	0.7	0.9	0.1
4/23/2019 23:00	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 23:10	0	0	0	32.52	0.7	0.8	0.1
4/23/2019 23:20	0	0	0	32.49	0.7	0.9	0.1
4/23/2019 23:30	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 23:40	0	0	0	32.49	0.7	0.8	0.1
4/23/2019 23:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 0:00	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 0:10	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 0:20	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 0:30	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 0:40	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 0:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 1:00	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 1:10	0	0	0	32.52	0.7	0.9	0.1
4/24/2019 1:20	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 1:30	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 1:40	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 1:50	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 2:00	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 2:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 2:20	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 2:30	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 2:40	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 2:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 3:00	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 3:10	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 3:20	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 3:30	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 3:40	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 3:50	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 4:00	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 4:10	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 4:20	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 4:30	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 4:40	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 4:50	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 5:00	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 5:10	0	0	0	32.49	0.7	0.9	0.1

4/24/2019 5:20	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 5:30	0	0	0	32.46	0.7	0.9	0.1
4/24/2019 5:40	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 5:50	0	0	0	32.46	0.7	0.9	0.1
4/24/2019 6:00	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 6:10	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 6:20	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 6:30	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 6:40	0	0	0	32.46	0.7	0.9	0.1
4/24/2019 6:50	0	0	0	32.46	0.7	0.9	0.1
4/24/2019 7:00	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 7:10	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 7:20	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 7:30	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 7:40	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 7:50	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 8:00	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 8:10	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 8:20	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 8:30	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 8:40	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 8:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 9:00	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 9:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 9:20	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 9:30	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 9:40	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 9:50	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 10:00	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 10:10	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 10:20	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 10:30	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 10:40	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 10:50	0	0	0	32.49	0.7	0.9	0.1
4/24/2019 11:00	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 11:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 11:20	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 11:30	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 11:40	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 11:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 12:00	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 12:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 12:20	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 12:30	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 12:40	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 12:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 13:00	0	0	0	32.49	0.7	0.8	0.1

4/24/2019 13:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 13:20	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 13:30	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 13:40	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 13:50	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 14:00	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 14:10	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 14:20	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 14:30	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 14:40	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 14:50	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 15:00	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 15:10	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 15:20	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 15:30	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 15:40	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 15:50	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 16:00	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 16:10	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 16:20	0	0	0	32.58	0.7	0.8	0.1
4/24/2019 16:30	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 16:40	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 16:50	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 17:00	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 17:10	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 17:20	0	0	0	32.4	0.7	0.8	0.1
4/24/2019 17:30	0	0	0	32.4	0.7	0.8	0.1
4/24/2019 17:40	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 17:50	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 18:00	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 18:10	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 18:20	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 18:30	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 18:40	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 18:50	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 19:00	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 19:10	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 19:20	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 19:30	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 19:40	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 19:50	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 20:00	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 20:10	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 20:20	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 20:30	0	0	0	32.43	0.7	0.8	0.1
4/24/2019 20:40	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 20:50	0	0	0	32.46	0.7	0.8	0.1

4/24/2019 21:00	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 21:10	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 21:20	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 21:30	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 21:40	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 21:50	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 22:00	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 22:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 22:20	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 22:30	0	0	0	32.46	0.7	0.8	0.1
4/24/2019 22:40	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 22:50	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 23:00	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 23:10	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 23:20	0	0	0	32.49	0.7	0.8	0.1
4/24/2019 23:30	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 23:40	0	0	0	32.52	0.7	0.8	0.1
4/24/2019 23:50	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 0:00	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 0:10	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 0:20	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 0:30	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 0:40	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 0:50	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 1:00	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 1:10	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 1:20	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 1:30	0	0	0	32.52	0.7	0.9	0.1
4/25/2019 1:40	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 1:50	0	0	0	32.52	0.7	0.9	0.1
4/25/2019 2:00	0	0	0	32.52	0.7	0.9	0.1
4/25/2019 2:10	0	0	0	32.52	0.7	0.8	0.1
4/25/2019 2:20	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 2:30	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 2:40	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 2:50	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 3:00	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 3:10	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 3:20	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 3:30	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 3:40	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 3:50	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 4:00	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 4:10	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 4:20	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 4:30	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 4:40	0	0	0	32.58	0.7	0.9	0.1

4/25/2019 4:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 5:00	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 5:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 5:20	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 5:30	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 5:40	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 5:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 6:00	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 6:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 6:20	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 6:30	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 6:40	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 6:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 7:00	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 7:10	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 7:20	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 7:30	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 7:40	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 7:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 8:00	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 8:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 8:20	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 8:30	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 8:40	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 8:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 9:00	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 9:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 9:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 9:30	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 9:40	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 9:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 10:00	0	0	0	32.64	0.7	0.8	0.1
4/25/2019 10:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 10:20	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 10:30	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 10:40	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 10:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 11:00	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 11:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 11:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 11:30	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 11:40	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 11:50	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 12:00	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 12:10	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 12:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 12:30	0	0	0	32.64	0.7	0.9	0.1

4/25/2019 12:40	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 12:50	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 13:00	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 13:10	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 13:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 13:30	0	0	0	32.64	0.7	0.8	0.1
4/25/2019 13:40	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 13:50	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 14:00	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 14:10	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 14:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 14:30	0	0	0	32.64	0.7	0.8	0.1
4/25/2019 14:40	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 14:50	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 15:00	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 15:10	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 15:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 15:30	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 15:40	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 15:50	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 16:00	0	0	0	32.64	0.7	0.8	0.1
4/25/2019 16:10	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 16:20	0	0	0	32.64	0.7	0.9	0.1
4/25/2019 16:30	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 16:40	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 16:50	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 17:00	0	0	0	32.58	0.7	0.9	0.1
4/25/2019 17:10	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 17:20	0	0	0	32.61	0.7	0.9	0.1
4/25/2019 17:30	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 17:40	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 17:50	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 18:00	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 18:10	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 18:20	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 18:30	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 18:40	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 18:50	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 19:00	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 19:10	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 19:20	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 19:30	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 19:40	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 19:50	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 20:00	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 20:10	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 20:20	0	0	0	32.61	0.7	0.8	0.1

4/25/2019 20:30	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 20:40	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 20:50	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 21:00	0	0	0	32.58	0.7	0.8	0.1
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4/25/2019 21:20	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 21:30	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 21:40	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 21:50	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 22:00	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 22:10	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 22:20	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 22:30	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 22:40	0	0	0	32.58	0.7	0.8	0.1
4/25/2019 22:50	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 23:00	0	0	0	32.58	0.7	0.8	0.1
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4/25/2019 23:20	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 23:30	0	0	0	32.61	0.7	0.8	0.1
4/25/2019 23:40	0	0	0	32.58	0.8	0.8	0.1
4/25/2019 23:50	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 0:00	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 0:10	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 0:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 0:30	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 0:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 0:50	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 1:00	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 1:10	0	0	0	32.58	0.7	0.8	0.1
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4/26/2019 1:30	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 1:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 1:50	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 2:00	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 2:10	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 2:20	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 2:30	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 2:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 2:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 3:00	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 3:10	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 3:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 3:30	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 3:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 3:50	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 4:00	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 4:10	0	0	0	32.58	0.7	0.8	0.1

4/26/2019 4:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 4:30	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 4:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 4:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 5:00	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 5:10	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 5:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 5:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 5:40	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 5:50	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 6:00	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 6:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 6:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 6:30	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 6:40	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 6:50	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 7:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 7:10	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 7:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 7:30	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 7:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 7:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 8:00	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 8:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 8:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 8:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 8:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 8:50	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 9:00	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 9:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 9:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 9:30	0	0	0	32.61	0.8	0.9	0.1
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4/26/2019 9:50	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 10:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 10:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 10:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 10:30	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 10:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 10:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 11:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 11:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 11:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 11:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 11:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 11:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 12:00	0	0	0	32.61	0.8	0.8	0.1

4/26/2019 12:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 12:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 12:30	0	0	0	32.61	0.8	0.8	0.1
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4/26/2019 13:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 13:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 13:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 13:30	0	0	0	32.61	0.8	0.8	0.1
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4/26/2019 13:50	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 14:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 14:10	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 14:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 14:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 14:40	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 14:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 15:00	0	0	0	32.61	0.8	0.9	0.1
4/26/2019 15:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 15:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 15:30	0	0	0	32.61	0.8	0.8	0.1
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4/26/2019 15:50	0	0	0	32.61	0.8	0.9	0.1
4/26/2019 16:00	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 16:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 16:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 16:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 16:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 16:50	0	0	0	32.61	0.8	0.9	0.1
4/26/2019 17:00	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 17:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 17:20	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 17:30	0	0	0	32.61	0.7	0.8	0.1
4/26/2019 17:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 17:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 18:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 18:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 18:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 18:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 18:40	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 18:50	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 19:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 19:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 19:20	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 19:30	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 19:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 19:50	0	0	0	32.58	0.8	0.8	0.1

4/26/2019 20:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 20:10	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 20:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 20:30	0	0	0	32.58	0.7	0.8	0.1
4/26/2019 20:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 20:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 21:00	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 21:10	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 21:20	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 21:30	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 21:40	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 21:50	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 22:00	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 22:10	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 22:20	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 22:30	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 22:40	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 22:50	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 23:00	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 23:10	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 23:20	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 23:30	0	0	0	32.58	0.8	0.8	0.1
4/26/2019 23:40	0	0	0	32.61	0.8	0.8	0.1
4/26/2019 23:50	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 0:00	0	0	0	32.58	0.8	0.8	0.1
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4/27/2019 0:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 0:30	0	0	0	32.58	0.8	0.8	0.1
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4/27/2019 1:00	0	0	0	32.58	0.8	0.8	0.1
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4/27/2019 1:20	0	0	0	32.58	0.8	0.8	0.1
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4/27/2019 1:40	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 1:50	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 2:00	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 2:10	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 2:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 2:30	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 2:40	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 2:50	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 3:00	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 3:10	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 3:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 3:30	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 3:40	0	0	0	32.58	0.8	0.8	0.1

4/27/2019 3:50	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 4:00	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 4:10	0	0	0	32.52	0.8	0.8	0.1
4/27/2019 4:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 4:30	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 4:40	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 4:50	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 5:00	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 5:10	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 5:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 5:30	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 5:40	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 5:50	0	0	0	32.58	0.7	0.9	0.1
4/27/2019 6:00	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 6:10	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 6:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 6:30	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 6:40	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 6:50	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 7:00	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 7:10	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 7:20	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 7:30	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 7:40	0	0	0	32.61	0.7	0.9	0.1
4/27/2019 7:50	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 8:00	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 8:10	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 8:20	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 8:30	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 8:40	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 8:50	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 9:00	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 9:10	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 9:20	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 9:30	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 9:40	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 9:50	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 10:00	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 10:10	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 10:20	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 10:30	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 10:40	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 10:50	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 11:00	0	0	0	32.58	0.8	0.9	0.1
4/27/2019 11:10	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 11:20	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 11:30	0	0	0	32.61	0.8	0.8	0.1

4/27/2019 11:40	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 11:50	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 12:00	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 12:10	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 12:20	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 12:30	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 12:40	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 12:50	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 13:00	0	0	0	32.58	0.8	0.8	0.1
4/27/2019 13:10	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 13:20	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 13:30	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 13:40	0	0	0	32.61	0.8	0.8	0.1
4/27/2019 13:50	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 14:00	0	0	0	32.61	0.8	0.9	0.1
4/27/2019 14:10	0	0	0	32.64	0.8	0.9	0.1
4/27/2019 14:20	0	0	0	32.64	0.8	0.9	0.1
4/27/2019 14:30	0	0	0	32.64	0.8	0.8	0.1
4/27/2019 14:40	0	0	0	32.64	0.8	0.9	0.1
4/27/2019 14:50	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 15:00	0	0	0	32.61	0.9	0.9	0.1
4/27/2019 15:10	0	0	0	32.61	0.9	0.8	0.1
4/27/2019 15:20	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 15:30	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 15:40	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 15:50	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 16:00	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 16:10	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 16:20	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 16:30	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 16:40	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 16:50	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 17:00	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 17:10	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 17:20	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 17:30	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 17:40	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 17:50	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 18:00	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 18:10	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 18:20	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 18:30	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 18:40	0	0	0	32.67	0.9	0.8	0.1
4/27/2019 18:50	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 19:00	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 19:10	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 19:20	0	0	0	32.64	0.9	0.9	0.1

4/27/2019 19:30	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 19:40	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 19:50	0	0	0	32.64	0.9	0.8	0.1
4/27/2019 20:00	0	0	0	32.67	0.9	0.8	0.1
4/27/2019 20:10	0	0	0	32.67	0.9	0.8	0.1
4/27/2019 20:20	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 20:30	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 20:40	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 20:50	0	0	0	32.64	0.9	0.8	0.1
4/27/2019 21:00	0	0	0	32.64	0.9	0.9	0.1
4/27/2019 21:10	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 21:20	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 21:30	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 21:40	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 21:50	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 22:00	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 22:10	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 22:20	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 22:30	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 22:40	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 22:50	0	0	0	32.7	0.9	0.9	0.1
4/27/2019 23:00	0	0	0	32.7	0.9	0.9	0.1
4/27/2019 23:10	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 23:20	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 23:30	0	0	0	32.67	0.9	0.9	0.1
4/27/2019 23:40	0	0	0	32.67	0.9	0.8	0.1
4/27/2019 23:50	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 0:00	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 0:10	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 0:20	0	0	0	32.7	0.9	0.8	0.1
4/28/2019 0:30	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 0:40	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 0:50	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 1:00	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 1:10	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 1:20	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 1:30	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 1:40	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 1:50	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 2:00	0	0	0	32.67	1	0.9	0.1
4/28/2019 2:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 2:20	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 2:30	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 2:40	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 2:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 3:00	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 3:10	0	0	0	32.7	0.9	0.9	0.1

4/28/2019 3:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 3:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 3:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 3:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 4:00	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 4:10	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 4:20	0	0	0	32.7	0.9	0.9	0.1
4/28/2019 4:30	0	0	0	32.67	0.9	0.9	0.1
4/28/2019 4:40	0	0	0	32.7	0.9	0.8	0.1
4/28/2019 4:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 5:00	0	0	0	32.7	1	0.9	0.1
4/28/2019 5:10	0	0	0	32.7	1	0.8	0.1
4/28/2019 5:20	0	0	0	32.7	1	0.8	0.1
4/28/2019 5:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 5:40	0	0	0	32.7	0.9	0.8	0.1
4/28/2019 5:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 6:00	0	0	0	32.67	1	0.9	0.1
4/28/2019 6:10	0	0	0	32.7	1	0.8	0.1
4/28/2019 6:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 6:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 6:40	0	0	0	32.7	1	0.8	0.1
4/28/2019 6:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 7:00	0	0	0	32.7	1	0.8	0.1
4/28/2019 7:10	0	0	0	32.73	1	0.8	0.1
4/28/2019 7:20	0	0	0	32.7	1	0.8	0.1
4/28/2019 7:30	0	0	0	32.7	1	0.8	0.1
4/28/2019 7:40	0	0	0	32.7	1	0.8	0.1
4/28/2019 7:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 8:00	0	0	0	32.7	1	0.8	0.1
4/28/2019 8:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 8:20	0	0	0	32.7	1	0.8	0.1
4/28/2019 8:30	0	0	0	32.7	1	0.8	0.1
4/28/2019 8:40	0	0	0	32.7	1	0.8	0.1
4/28/2019 8:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 9:00	0	0	0	32.7	1	0.8	0.1
4/28/2019 9:10	0	0	0	32.7	1	0.8	0.1
4/28/2019 9:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 9:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 9:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 9:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 10:00	0	0	0	32.7	1	0.9	0.1
4/28/2019 10:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 10:20	0	0	0	32.7	1	0.8	0.1
4/28/2019 10:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 10:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 10:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 11:00	0	0	0	32.7	1	0.9	0.1

4/28/2019 11:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 11:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 11:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 11:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 11:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 12:00	0	0	0	32.7	1	0.9	0.1
4/28/2019 12:10	0	0	0	32.67	1	0.9	0.1
4/28/2019 12:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 12:30	0	0	0	32.73	1	0.8	0.1
4/28/2019 12:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 12:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 13:00	0	0	0	32.7	1	0.8	0.1
4/28/2019 13:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 13:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 13:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 13:40	0	0	0	32.67	1	0.9	0.1
4/28/2019 13:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 14:00	0	0	0	32.7	1	0.8	0.1
4/28/2019 14:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 14:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 14:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 14:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 14:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 15:00	0	0	0	32.7	1	0.8	0.1
4/28/2019 15:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 15:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 15:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 15:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 15:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 16:00	0	0	0	32.7	1	0.9	0.1
4/28/2019 16:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 16:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 16:30	0	0	0	32.7	1	0.8	0.1
4/28/2019 16:40	0	0	0	32.7	1	0.8	0.1
4/28/2019 16:50	0	0	0	32.67	1	0.9	0.1
4/28/2019 17:00	0	0	0	32.7	1	0.9	0.1
4/28/2019 17:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 17:20	0	0	0	32.7	1	0.8	0.1
4/28/2019 17:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 17:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 17:50	0	0	0	32.67	1	0.9	0.1
4/28/2019 18:00	0	0	0	32.67	1	0.9	0.1
4/28/2019 18:10	0	0	0	32.67	1	0.9	0.1
4/28/2019 18:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 18:30	0	0	0	32.67	1	0.9	0.1
4/28/2019 18:40	0	0	0	32.67	1	0.9	0.1
4/28/2019 18:50	0	0	0	32.67	1	0.8	0.1

4/28/2019 19:00	0	0	0	32.7	1	0.9	0.1
4/28/2019 19:10	0	0	0	32.7	1	0.9	0.1
4/28/2019 19:20	0	0	0	32.7	1	0.9	0.1
4/28/2019 19:30	0	0	0	32.67	1	0.9	0.1
4/28/2019 19:40	0	0	0	32.67	1	0.9	0.1
4/28/2019 19:50	0	0	0	32.7	1	0.9	0.1
4/28/2019 20:00	0	0	0	32.67	1	0.9	0.1
4/28/2019 20:10	0	0	0	32.67	1	0.9	0.1
4/28/2019 20:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 20:30	0	0	0	32.67	1	0.9	0.1
4/28/2019 20:40	0	0	0	32.7	1	0.9	0.1
4/28/2019 20:50	0	0	0	32.67	1	0.9	0.1
4/28/2019 21:00	0	0	0	32.67	1	0.9	0.1
4/28/2019 21:10	0	0	0	32.67	1	0.9	0.1
4/28/2019 21:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 21:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 21:40	0	0	0	32.67	1	0.8	0.1
4/28/2019 21:50	0	0	0	32.7	1	0.8	0.1
4/28/2019 22:00	0	0	0	32.67	1	0.8	0.1
4/28/2019 22:10	0	0	0	32.67	1	0.8	0.1
4/28/2019 22:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 22:30	0	0	0	32.7	1	0.9	0.1
4/28/2019 22:40	0	0	0	32.7	1	0.8	0.1
4/28/2019 22:50	0	0	0	32.67	1	0.9	0.1
4/28/2019 23:00	0	0	0	32.67	1	0.9	0.1
4/28/2019 23:10	0	0	0	32.67	1	0.9	0.1
4/28/2019 23:20	0	0	0	32.67	1	0.9	0.1
4/28/2019 23:30	0	0	0	32.67	1	0.9	0.1
4/28/2019 23:40	0	0	0	32.67	1	0.9	0.1
4/28/2019 23:50	0	0	0	32.67	1	0.9	0.1
4/29/2019 0:00	0	0	0	32.7	1	0.9	0.1
4/29/2019 0:10	0	0	0	32.67	1	0.8	0.1
4/29/2019 0:20	0	0	0	32.7	1	0.9	0.1
4/29/2019 0:30	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 0:40	0	0	0	32.67	1	0.9	0.1
4/29/2019 0:50	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 1:00	0	0	0	32.67	1	0.9	0.1
4/29/2019 1:10	0	0	0	32.67	1	0.8	0.1
4/29/2019 1:20	0	0	0	32.67	1	0.9	0.1
4/29/2019 1:30	0	0	0	32.7	1	0.9	0.1
4/29/2019 1:40	0	0	0	32.67	1	0.9	0.1
4/29/2019 1:50	0	0	0	32.67	1	0.9	0.1
4/29/2019 2:00	0	0	0	32.67	1	0.9	0.1
4/29/2019 2:10	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 2:20	0	0	0	32.67	1	0.9	0.1
4/29/2019 2:30	0	0	0	32.7	1	0.9	0.1
4/29/2019 2:40	0	0	0	32.67	1.1	0.9	0.1

4/29/2019 2:50	0	0	0	32.7	1	0.9	0.1
4/29/2019 3:00	0	0	0	32.67	1	0.9	0.1
4/29/2019 3:10	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 3:20	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 3:30	0	0	0	32.67	1	0.9	0.1
4/29/2019 3:40	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 3:50	0	0	0	32.7	1	0.9	0.1
4/29/2019 4:00	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 4:10	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 4:20	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 4:30	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 4:40	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 4:50	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 5:00	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 5:10	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 5:20	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 5:30	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 5:40	0	0	0	32.67	1	0.9	0.1
4/29/2019 5:50	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 6:00	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 6:10	0	0	0	32.67	1	0.9	0.1
4/29/2019 6:20	0	0	0	32.67	1	0.9	0.1
4/29/2019 6:30	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 6:40	0	0	0	32.67	1	0.9	0.1
4/29/2019 6:50	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 7:00	0	0	0	32.67	1	0.9	0.1
4/29/2019 7:10	0	0	0	32.67	1	0.9	0.1
4/29/2019 7:20	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 7:30	0	0	0	32.7	1	0.9	0.1
4/29/2019 7:40	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 7:50	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 8:00	0	0	0	32.67	1	0.9	0.1
4/29/2019 8:10	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 8:20	0	0	0	32.7	1	0.9	0.1
4/29/2019 8:30	0	0	0	32.7	1	0.9	0.1
4/29/2019 8:40	0	0	0	32.7	1	0.9	0.1
4/29/2019 8:50	0	0	0	32.67	1	0.9	0.1
4/29/2019 9:00	0	0	0	32.7	1	0.9	0.1
4/29/2019 9:10	0	0	0	32.7	1	0.9	0.1
4/29/2019 9:20	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 9:30	0	0	0	32.7	1	0.9	0.1
4/29/2019 9:40	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 9:50	0	0	0	32.67	1	0.9	0.1
4/29/2019 10:00	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 10:10	0	0	0	32.7	1	0.9	0.1
4/29/2019 10:20	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 10:30	0	0	0	32.67	1	0.9	0.1

4/29/2019 10:40	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 10:50	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 11:00	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 11:10	0	0	0	32.67	1.1	0.9	0.1
4/29/2019 11:20	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 11:30	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 11:40	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 11:50	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 12:00	0	0	0	32.7	1	0.9	0.1
4/29/2019 12:10	0	0	0	32.7	1.1	0.9	0.1
4/29/2019 12:20	0	0	0	32.7	1.1	0.9	2.1
4/29/2019 12:30	10	10	10	31.02	4.8	4.1	24.7
4/29/2019 12:40	10	10	10	28.25	4.5	4	25.2
4/29/2019 12:50	10	10	10	30.78	1	0.9	0.6
4/29/2019 13:00	10	10	10	32.12	1.1	0.9	23.9
4/29/2019 13:10	10	10	10	29.56	4.8	4	25.2
4/29/2019 13:20	9	10	10	30.47	5.2	4.1	25.2
4/29/2019 13:30	10	10	10	31.6	0.8	0.9	25.1
4/29/2019 13:40	10	10	10	31.33	5.1	4.1	25
4/29/2019 13:50	10	10	10	30.75	3.3	3.1	25.4
4/29/2019 14:00	10	10	10	31.51	5	4.1	24.8
4/29/2019 14:10	10	10	10	30.44	5.3	4.1	25.3
4/29/2019 14:20	10	10	10	31.94	5	4.1	0.7
4/29/2019 14:30	10	10	10	31.12	5.1	4.1	25
4/29/2019 14:40	10	10	10	30.44	3.5	3.3	25.3
4/29/2019 14:50	10	10	10	31.73	5.2	4.2	0.7
4/29/2019 15:00	10	10	10	30.93	5	3.9	25.1
4/29/2019 15:10	9	10	10	30.87	2	1.9	25.2
4/29/2019 15:20	9	10	10	31.79	5.1	4.1	0.7
4/29/2019 15:30	10	10	10	30.9	4.9	4	25
4/29/2019 15:40	9	10	10	30.66	3.4	2.8	25.3
4/29/2019 15:50	10	10	10	31.97	5.2	4.1	0.6
4/29/2019 16:00	9	10	10	30.96	4.9	4.1	25.1
4/29/2019 16:10	9	10	10	30.23	5	4.1	25.3
4/29/2019 16:20	9	10	10	32.09	5.1	4.2	0.6
4/29/2019 16:30	10	10	10	31.42	5	4.1	24.9
4/29/2019 16:40	9	10	10	30.44	5	4.1	25.2
4/29/2019 16:50	9	10	10	31.85	1	0.8	3.1
4/29/2019 17:00	9	10	10	31.36	5.1	4	24.9
4/29/2019 17:10	9	10	10	30.38	5	4.1	25.2
4/29/2019 17:20	9	10	10	32.09	1.2	0.9	0.6
4/29/2019 17:30	9	10	10	31.27	5.3	4.1	24.9
4/29/2019 17:40	9	10	10	30.29	5.1	4.1	25.2
4/29/2019 17:50	9	10	10	31.85	1.1	0.9	3.7
4/29/2019 18:00	9	10	10	31.48	5	4	24.8
4/29/2019 18:10	9	10	10	30.54	5	3.9	25.2
4/29/2019 18:20	9	10	10	31.57	1.1	0.9	25.1

4/29/2019 18:30	9	10	10	31.51	5.1	4.1	24.8
4/29/2019 18:40	9	10	10	30.41	5.1	4	25.3
4/29/2019 18:50	9	10	10	32	0.9	0.9	1
4/29/2019 19:00	9	10	10	31.36	5.1	4	24.8
4/29/2019 19:10	9	10	10	30.47	5	4	25.2
4/29/2019 19:20	9	10	10	31.09	1.2	0.9	25.2
4/29/2019 19:30	9	10	10	31.6	5.2	4.1	24.3
4/29/2019 19:40	9	10	10	30.87	5	4.1	25.2
4/29/2019 19:50	9	10	10	30.63	3.1	2.9	25.3
4/29/2019 20:00	9	10	10	31.88	5.1	4.1	0.7
4/29/2019 20:10	9	10	10	31.15	5.3	4.1	25.1
4/29/2019 20:20	9	10	10	30.38	3.6	3.4	25.3
4/29/2019 20:30	9	10	10	31.76	5.1	4.1	0.7
4/29/2019 20:40	9	10	10	30.87	5.1	4	25.2
4/29/2019 20:50	9	10	10	31.05	1.2	0.9	25.3
4/29/2019 21:00	9	10	10	31.63	5.1	4	24
4/29/2019 21:10	9	10	10	30.63	4.9	4.2	25
4/29/2019 21:20	9	10	10	30.81	1.8	1.6	25.3
4/29/2019 21:30	9	10	10	31.7	5.1	4.1	23.9
4/29/2019 21:40	9	10	10	30.69	4.9	4	25.2
4/29/2019 21:50	9	10	10	31.54	1.1	0.9	25.2
4/29/2019 22:00	9	10	10	31.48	5.1	3.9	24.7
4/29/2019 22:10	9	10	10	30.63	5	4.1	25.3
4/29/2019 22:20	9	10	10	31.42	1	0.9	25.1
4/29/2019 22:30	9	10	10	31.45	5	4	24.6
4/29/2019 22:40	9	10	10	30.47	5	3.9	25.2
4/29/2019 22:50	9	10	10	31.57	1	0.9	25.1
4/29/2019 23:00	9	10	10	31.51	5.1	4.2	24.5
4/29/2019 23:10	9	10	10	30.75	5.2	4	25.2
4/29/2019 23:20	9	10	10	31.09	1.2	0.9	25.3
4/29/2019 23:30	9	10	10	31.73	5	4	24
4/29/2019 23:40	9	10	10	30.81	4.9	3.9	25.2
4/29/2019 23:50	9	10	10	30.38	3.4	3.1	25.3
4/30/2019 0:00	9	10	10	31.97	5	4	0.7
4/30/2019 0:10	9	10	10	30.99	4.9	4.1	25
4/30/2019 0:20	9	10	10	30.11	5	4	25.3
4/30/2019 0:30	9	10	10	32.06	4.7	4.1	0.6
4/30/2019 0:40	9	10	10	31.27	5.1	4.1	24.9
4/30/2019 0:50	9	10	10	30.23	5.2	4.1	25.3
4/30/2019 1:00	9	10	10	31.82	1	0.9	1.1
4/30/2019 1:10	9	10	10	31.42	4.9	4	24.8
4/30/2019 1:20	9	10	10	30.47	5.2	4	25.2
4/30/2019 1:30	9	10	10	31.3	1	0.8	25.1
4/30/2019 1:40	9	10	10	31.57	5.1	4.1	24.2
4/30/2019 1:50	9	10	10	30.72	5	4	25.2
4/30/2019 2:00	9	10	10	30.57	2.7	2.5	25.3
4/30/2019 2:10	9	10	10	31.88	5	4	0.7

4/30/2019 2:20	9	10	10	30.99	4.9	4.1	25
4/30/2019 2:30	9	9	10	30.17	4.7	4.1	25.2
4/30/2019 2:40	9	9	10	31.85	1	0.9	0.7
4/30/2019 2:50	9	10	10	31.39	5	4.1	24.9
4/30/2019 3:00	9	10	10	30.32	4.8	4.1	25.3
4/30/2019 3:10	9	10	10	31.45	0.9	0.9	25.1
4/30/2019 3:20	9	10	10	31.6	5.2	4.1	24.5
4/30/2019 3:30	9	10	10	30.63	5.3	4	25.2
4/30/2019 3:40	9	10	10	31.18	1.1	0.9	25.2
4/30/2019 3:50	9	10	10	31.7	4.7	4	24
4/30/2019 4:00	9	9	10	30.75	4.9	4.1	25.2
4/30/2019 4:10	9	9	10	30.66	2.4	2	25.3
4/30/2019 4:20	9	9	10	31.79	5.1	4	0.7
4/30/2019 4:30	9	10	10	30.9	5.1	4.1	25.1
4/30/2019 4:40	9	9	10	30.17	3.5	3.4	25.4
4/30/2019 4:50	9	9	10	32.03	4.9	4.1	0.6
4/30/2019 5:00	9	10	10	31.18	5.1	4.1	24.9
4/30/2019 5:10	9	9	10	30.11	4.9	4	25.4
4/30/2019 5:20	9	9	10	32.06	4.9	4.1	0.6
4/30/2019 5:30	9	9	10	31.18	4.9	4.1	24.8
4/30/2019 5:40	9	9	10	30.41	4.8	4	25.2
4/30/2019 5:50	9	9	10	30.87	1.1	0.9	25.2
4/30/2019 6:00	9	10	10	31.88	5	4.1	0.7
4/30/2019 6:10	9	9	10	31.02	5	3.8	25
4/30/2019 6:20	9	9	9	30.32	4.9	4	25.2
4/30/2019 6:30	9	10	10	30.38	2.8	2.7	25.3
4/30/2019 6:40	9	9	9	32.03	5.3	4.1	0.7
4/30/2019 6:50	9	9	9	31.21	4.9	4.1	24.9
4/30/2019 7:00	9	9	10	30.11	5.1	4.1	25.3
4/30/2019 7:10	9	9	9	31.88	0.9	0.9	0.7
4/30/2019 7:20	9	9	10	31.39	5	4.1	24.6
4/30/2019 7:30	9	9	10	30.66	5	4.1	25.1
4/30/2019 7:40	9	9	9	30.2	3.6	3.4	25.3
4/30/2019 7:50	9	9	9	32.12	0.9	0.9	0.6
4/30/2019 8:00	9	9	10	31.45	4.9	4	24.6
4/30/2019 8:10	9	9	10	30.78	5.1	4	25.2
4/30/2019 8:20	9	9	10	30.08	3.8	3.2	25.4
4/30/2019 8:30	9	9	9	31.85	1	0.8	0.6
4/30/2019 8:40	9	9	10	31.36	5.3	4	24.7
4/30/2019 8:50	9	9	10	30.57	5.2	4	25.2
4/30/2019 9:00	9	9	10	30.54	2.3	2.1	25.2
4/30/2019 9:10	9	9	9	32	5	4	0.6
4/30/2019 9:20	9	9	9	31.15	5	4.1	24.9
4/30/2019 9:30	9	9	10	30.26	5	4	25.2
4/30/2019 9:40	9	9	10	31.48	1.2	0.9	3.3
4/30/2019 9:50	9	9	9	31.6	5.1	4	24.2
4/30/2019 10:00	9	9	9	30.78	5.1	4.1	25.1

4/30/2019 10:10	9	9	9	30.14	3.5	3.4	25.3
4/30/2019 10:20	9	9	10	32.06	4.2	3.5	0.6
4/30/2019 10:30	9	9	10	31.36	5	4.1	24.9
4/30/2019 10:40	9	9	9	30.41	5	4.2	25.2
4/30/2019 10:50	9	9	9	31.3	1.1	0.8	25.2
4/30/2019 11:00	9	9	9	31.63	5.2	3.9	24
4/30/2019 11:10	9	9	9	30.75	5.1	4.1	25.1
4/30/2019 11:20	9	9	9	29.96	5	3.9	25.3
4/30/2019 11:30	9	9	10	31.67	1	0.9	1.3
4/30/2019 11:40	9	9	9	31.51	5.1	4	24.5
4/30/2019 11:50	9	9	9	30.69	5.1	4	25.1
4/30/2019 12:00	9	9	9	30.32	3.4	3.1	25.3
4/30/2019 12:10	9	9	9	31.97	5.3	4.1	0.6
4/30/2019 12:20	9	9	9	31.09	5	4.1	25
4/30/2019 12:30	9	9	9	30.29	4.9	4.1	25.3
4/30/2019 12:40	9	9	9	30.93	1.1	0.9	25.1
4/30/2019 12:50	9	9	9	31.82	4.9	4	0.6
4/30/2019 13:00	9	9	9	31.05	5.2	4	25
4/30/2019 13:10	9	9	10	30.29	5	3.9	25.3
4/30/2019 13:20	9	9	9	31.79	1	0.9	0.7
4/30/2019 13:30	9	9	9	31.42	5.1	3.9	24.7
4/30/2019 13:40	9	9	10	30.57	4.9	4.1	25.2
4/30/2019 13:50	9	9	9	30.78	1.5	1.4	25.2
4/30/2019 14:00	9	9	10	31.79	5.1	4.1	0.7
4/30/2019 14:10	9	9	9	30.87	4.9	4	24.9
4/30/2019 14:20	9	9	9	30.2	5	4	25.3
4/30/2019 14:30	9	9	9	31.36	0.9	0.8	4.8
4/30/2019 14:40	9	9	9	31.73	5.1	4	1.6
4/30/2019 14:50	9	9	10	30.87	4.9	4	25
4/30/2019 15:00	9	9	9	30.14	5.4	3.9	25.2
4/30/2019 15:10	9	9	9	31.21	1.1	0.9	25
4/30/2019 15:20	9	9	9	31.67	5.1	4.1	23.9
4/30/2019 15:30	9	9	10	30.81	5	4.1	25.1
4/30/2019 15:40	9	9	9	30.05	4.9	4	25.3
4/30/2019 15:50	9	9	9	32.09	1.1	0.9	0.6
4/30/2019 16:00	9	9	9	31.33	4.6	3.9	24.7
4/30/2019 16:10	9	9	9	30.47	4.9	4	25.1
4/30/2019 16:20	9	9	9	30.32	3.1	2.8	25.3
4/30/2019 16:30	9	9	10	31.88	1	0.9	0.6
4/30/2019 16:40	9	9	9	31.67	4.9	3.9	24
4/30/2019 16:50	9	9	9	31.02	5	4	25
4/30/2019 17:00	9	9	9	30.26	5	4	25.2
4/30/2019 17:10	9	9	9	30.84	1.2	0.9	25.2
4/30/2019 17:20	9	9	9	32	5.1	4	0.7
4/30/2019 17:30	9	9	9	31.3	5	3.9	24.8
4/30/2019 17:40	9	9	9	30.57	5	4	25.2
4/30/2019 17:50	9	9	9	30.32	3.3	3	25.3

4/30/2019 18:00	9	9	10	31.88	1	0.8	0.6
4/30/2019 18:10	9	9	9	31.54	4.8	4	24.2
4/30/2019 18:20	9	9	9	30.78	5.1	4	25.1
4/30/2019 18:30	9	9	9	30.08	4.9	4	25.2
4/30/2019 18:40	9	9	9	30.81	1.2	0.9	25.1
4/30/2019 18:50	9	9	9	32.03	5.1	4	0.6
4/30/2019 19:00	9	9	9	31.42	4.9	4	24.5
4/30/2019 19:10	9	9	9	30.78	5.1	4.1	25
4/30/2019 19:20	9	9	9	30.08	5.1	4	25.2
4/30/2019 19:30	9	9	9	30.72	1.3	1	25.2
4/30/2019 19:40	9	9	9	32.09	5.1	4.3	0.6
4/30/2019 19:50	9	9	9	31.51	4.9	4	24.4
4/30/2019 20:00	9	9	9	30.75	4.9	3.8	24.9
4/30/2019 20:10	9	9	9	30.26	4.9	4	25.2
4/30/2019 20:20	9	9	9	30.35	2.7	2.4	25.3
4/30/2019 20:30	9	9	9	32	1.1	0.9	0.6
4/30/2019 20:40	9	9	9	31.45	5.1	4	24.5
4/30/2019 20:50	9	9	9	30.63	5.1	3.9	25.1
4/30/2019 21:00	9	9	9	30.02	5	3.8	25.3
4/30/2019 21:10	9	9	9	31.27	0.9	0.9	24
4/30/2019 21:20	9	9	9	31.94	4.8	4.1	0.7
4/30/2019 21:30	9	9	9	31.27	5	4	24.9
4/30/2019 21:40	9	9	9	30.54	4.9	4	25.1
4/30/2019 21:50	9	9	9	30.11	3.5	3.4	25.3
4/30/2019 22:00	9	9	9	31.76	0.9	0.8	0.6
4/30/2019 22:10	9	9	9	31.57	4.9	4	24
4/30/2019 22:20	9	9	9	30.93	4.9	4.1	25
4/30/2019 22:30	9	9	9	30.23	5	4	25.3
4/30/2019 22:40	9	9	9	30.78	1	1	25.2
4/30/2019 22:50	9	9	9	32.12	4.5	3.8	0.7
4/30/2019 23:00	9	9	9	31.54	5.1	4	24.5
4/30/2019 23:10	9	9	9	30.87	5	4.1	25
4/30/2019 23:20	9	9	9	30.26	5	4.2	25.2
4/30/2019 23:30	9	9	9	30.41	2.3	1.9	25.3
4/30/2019 23:40	9	9	9	31.97	0.9	0.9	0.6
4/30/2019 23:50	9	9	9	31.54	5	4	24
5/1/2019 0:00	9	9	9	30.87	5	4	25
5/1/2019 0:10	9	9	9	30.38	5	4	25.2
5/1/2019 0:20	9	9	9	29.96	3.5	3.4	25.3
5/1/2019 0:30	9	9	9	31.21	1	0.9	3.6
5/1/2019 0:40	9	9	9	32.03	4.8	4.1	0.6
5/1/2019 0:50	9	9	9	31.48	5	3.9	24.5
5/1/2019 1:00	9	9	9	30.84	4.9	3.8	24.9
5/1/2019 1:10	9	9	9	30.35	4.9	3.9	25.1
5/1/2019 1:20	9	9	9	29.86	5	4	25.3
5/1/2019 1:30	9	9	9	30.57	1.2	0.8	25.1
5/1/2019 1:40	9	9	9	31.97	1	0.9	0.7

5/1/2019 1:50	9	9	9	31.76	4.9	4	0.7
5/1/2019 2:00	9	9	9	31.18	4.9	3.9	24.8
5/1/2019 2:10	9	9	9	30.66	5	4.1	25.1
5/1/2019 2:20	9	9	9	30.08	5	4.1	25.3
5/1/2019 2:30	9	9	9	30.32	2.4	2	25.2
5/1/2019 2:40	9	9	9	31.36	0.8	0.9	0.9
5/1/2019 2:50	9	9	9	32.03	5.1	4.1	0.6
5/1/2019 3:00	9	9	9	31.6	5.1	4.1	23.9
5/1/2019 3:10	9	9	9	31.12	4.9	4.1	24.9
5/1/2019 3:20	9	9	9	30.44	4.8	4	25.2
5/1/2019 3:30	9	9	9	29.86	5.3	3.9	25.3
5/1/2019 3:40	9	9	9	30.69	1.1	0.9	25.1
5/1/2019 3:50	9	9	9	31.76	0.9	0.9	0.6
5/1/2019 4:00	9	9	9	31.79	5	4	0.7
5/1/2019 4:10	9	9	9	31.27	4.9	4	24.7
5/1/2019 4:20	9	9	9	30.81	5.1	4	25
5/1/2019 4:30	9	9	9	30.17	5.2	4.1	25.2
5/1/2019 4:40	9	9	9	29.86	4.9	4.1	25.2
5/1/2019 4:50	9	9	9	30.2	2.4	2.2	25.2
5/1/2019 5:00	9	9	9	31.02	0.9	0.8	3.3
5/1/2019 5:10	9	9	9	31.79	1	0.9	0.6
5/1/2019 5:20	9	9	9	32.09	5	4.1	0.6
5/1/2019 5:30	9	9	9	31.85	5.1	4.1	0.7
5/1/2019 5:40	9	9	9	31.6	5	4	23.9
5/1/2019 5:50	9	9	9	31.33	4.9	4.1	24.4
5/1/2019 6:00	9	9	9	31.27	4.7	3.9	24.7
5/1/2019 6:10	9	9	9	31.05	4.9	4.1	24.8
5/1/2019 6:20	9	9	9	30.93	4.8	4	24.8
5/1/2019 6:30	9	9	9	30.93	5.1	4.1	24.8
5/1/2019 6:40	9	9	9	30.96	5	4.1	24.8
5/1/2019 6:50	9	9	9	31.02	5.3	3.9	24.8
5/1/2019 7:00	9	9	9	30.81	5	4	24.9
5/1/2019 7:10	9	9	9	30.47	4.9	3.9	25.1
5/1/2019 7:20	9	9	9	30.05	5.1	4	25.2
5/1/2019 7:30	9	9	9	29.8	5.1	4	25.2
5/1/2019 7:40	9	9	9	29.83	4.7	3.9	25.2
5/1/2019 7:50	9	9	9	29.83	5	4	25.2
5/1/2019 8:00	9	9	9	30.11	4.8	4.1	25.2
5/1/2019 8:10	9	9	9	29.86	5.2	4	25.2
5/1/2019 8:20	9	9	9	29.71	5	4.1	25.1
5/1/2019 8:30	9	9	9	29.53	4.9	4	25.2
5/1/2019 8:40	9	9	9	29.41	5.1	4	25.2
5/1/2019 8:50	9	9	9	29.35	4.9	4.1	25.3
5/1/2019 9:00	9	9	9	29.38	5.1	4	25.2
5/1/2019 9:10	9	9	9	29.41	4.9	4	25.2
5/1/2019 9:20	9	9	9	29.71	3.3	3.2	25.2
5/1/2019 9:30	9	9	9	30.11	2.1	1.9	25.1

5/1/2019 9:40	9	9	9	30.17	1.1	0.9	25.1
5/1/2019 9:50	9	9	9	30.05	1.6	1.4	25
5/1/2019 10:00	9	9	9	29.77	2.7	2.5	25.1
5/1/2019 10:10	9	9	9	30.17	1.7	1.4	25.1
5/1/2019 10:20	9	9	9	30.44	1.3	0.9	25
5/1/2019 10:30	9	9	9	30.93	0.9	0.9	2.8
5/1/2019 10:40	9	9	9	31.27	1	0.9	0.6
5/1/2019 10:50	9	9	9	30.75	0.9	0.9	2.7
5/1/2019 11:00	9	9	9	30.11	1.2	0.9	25
5/1/2019 11:10	9	9	9	29.68	2.6	2.6	25.2
5/1/2019 11:20	9	9	9	29.56	3.4	3.2	25.1
5/1/2019 11:30	9	9	9	29.8	3	2.9	25.2
5/1/2019 11:40	9	9	9	30.2	1.2	1	25.1
5/1/2019 11:50	9	9	9	30.41	1.2	0.9	24.9
5/1/2019 12:00	9	9	9	30.23	1.1	1	25
5/1/2019 12:10	9	9	9	29.77	2.2	1.9	25.1
5/1/2019 12:20	9	9	9	29.38	3.4	3.3	25.1
5/1/2019 12:30	9	9	9	29.35	4.7	4.1	25.2
5/1/2019 12:40	9	9	9	29.47	3.7	3.4	25.3
5/1/2019 12:50	9	9	9	29.83	3.1	3	25.2
5/1/2019 13:00	9	9	9	30.08	2	1.7	25.1
5/1/2019 13:10	9	9	9	29.86	2.1	1.9	25.1
5/1/2019 13:20	9	9	9	29.38	3.6	3.3	25.1
5/1/2019 13:30	9	9	9	29.38	3.7	3.4	25.2
5/1/2019 13:40	9	9	9	29.53	3.5	3.4	25.1
5/1/2019 13:50	9	9	9	29.62	3.5	3.4	25.2
5/1/2019 14:00	9	9	9	29.59	3.3	3	25.1
5/1/2019 14:10	9	9	9	29.62	3.5	3.2	25.1
5/1/2019 14:20	9	9	9	29.68	3.4	3.2	25.2
5/1/2019 14:30	9	9	9	29.65	3.2	3.1	25.2
5/1/2019 14:40	9	9	9	30.17	2	1.7	25.1
5/1/2019 14:50	9	9	9	30.69	1	0.9	25
5/1/2019 15:00	9	9	9	31.02	0.9	0.9	2.6
5/1/2019 15:10	9	9	9	31.21	1	0.9	0.6
5/1/2019 15:20	9	9	9	30.9	1	0.9	0.6
5/1/2019 15:30	9	9	9	30.47	0.9	1	24.9
5/1/2019 15:40	9	9	9	30.29	0.8	0.9	25
5/1/2019 15:50	9	9	9	30.69	1	0.9	25
5/1/2019 16:00	9	9	9	31.05	1.1	0.9	2.7
5/1/2019 16:10	9	9	9	31.39	1	0.9	0.6
5/1/2019 16:20	9	9	9	31.45	1.2	0.9	0.6
5/1/2019 16:30	9	9	9	31.27	0.8	0.9	0.6
5/1/2019 16:40	9	9	9	30.72	0.9	0.9	2.7
5/1/2019 16:50	9	9	9	30.26	1.1	0.8	25
5/1/2019 17:00	9	9	9	30.26	1.1	0.9	25.1
5/1/2019 17:10	9	9	9	30.72	1.2	0.9	24.9
5/1/2019 17:20	9	9	9	30.78	1	0.9	3.5

5/1/2019 17:30	9	9	9	30.96	1	0.9	2
5/1/2019 17:40	9	9	9	30.96	1	0.8	0.6
5/1/2019 17:50	9	9	9	30.78	1	0.9	2.7
5/1/2019 18:00	9	9	9	30.47	0.9	0.8	24.9
5/1/2019 18:10	9	9	9	30.29	1.1	0.9	25
5/1/2019 18:20	9	9	9	30.41	1.1	0.9	25.1
5/1/2019 18:30	9	9	9	30.78	1.1	0.8	24.9
5/1/2019 18:40	9	9	9	30.96	1	0.8	2.7
5/1/2019 18:50	9	9	9	30.69	0.9	0.8	3.6
5/1/2019 19:00	9	9	9	30.38	1.2	0.9	24.9
5/1/2019 19:10	9	9	9	29.83	1.7	1.3	25.1
5/1/2019 19:20	9	9	9	29.71	3	2.8	25.2
5/1/2019 19:30	9	9	9	29.71	3.3	3	25.2
5/1/2019 19:40	9	9	9	29.99	2	1.9	25.1
5/1/2019 19:50	9	9	9	30.35	1.3	0.9	25.1
5/1/2019 20:00	9	9	9	30.63	1	0.9	24.9
5/1/2019 20:10	9	9	9	30.69	0.9	0.9	3.4
5/1/2019 20:20	9	9	9	30.41	1	0.9	25
5/1/2019 20:30	9	9	9	29.74	1.9	1.6	25.1
5/1/2019 20:40	9	9	9	29.41	3.6	3.3	25.1
5/1/2019 20:50	9	9	9	29.35	3.5	3.2	25.2
5/1/2019 21:00	9	9	9	29.56	3.6	3.4	25.2
5/1/2019 21:10	9	9	9	29.44	3.4	3.3	25.2
5/1/2019 21:20	9	9	9	29.32	3.6	3.4	25.2
5/1/2019 21:30	9	9	9	29.19	4.9	4	25.1
5/1/2019 21:40	9	9	9	29.65	4.9	3.9	25
5/1/2019 21:50	9	9	9	30.14	5	3.9	25.1
5/1/2019 22:00	9	9	9	30.35	5.1	4	25
5/1/2019 22:10	9	9	9	30.57	4.9	3.9	24.9
5/1/2019 22:20	9	9	9	30.81	5	4	24.9
5/1/2019 22:30	9	9	9	30.84	5	4	24.8
5/1/2019 22:40	9	9	9	30.99	4.9	4	24.7
5/1/2019 22:50	9	9	9	31.05	5	4.1	24.6
5/1/2019 23:00	9	9	9	31.45	4.9	4	24
5/1/2019 23:10	9	9	9	31.94	4.9	4.1	0.6
5/1/2019 23:20	9	9	9	31.73	0.9	0.9	0.7
5/1/2019 23:30	9	9	9	31.05	0.9	0.8	0.6
5/1/2019 23:40	9	9	9	30.63	0.9	0.9	2.9
5/1/2019 23:50	9	9	9	30.08	1.2	0.9	25
5/2/2019 0:00	9	9	9	29.74	2.5	2.4	25.1
5/2/2019 0:10	9	9	9	29.19	4.9	4.1	25.2
5/2/2019 0:20	9	9	9	29.41	4.9	4	25.2
5/2/2019 0:30	9	9	9	29.59	4.8	4.1	25.1
5/2/2019 0:40	9	9	9	29.83	5	3.9	25.1
5/2/2019 0:50	9	9	9	30.11	5	4	25.1
5/2/2019 1:00	9	9	9	30.26	4.9	4	25
5/2/2019 1:10	9	9	9	30.81	4.9	4.1	24.8

5/2/2019 1:20	9	9	9	31.15	4.9	3.9	24.5
5/2/2019 1:30	9	9	9	31.57	5.3	4.1	23.9
5/2/2019 1:40	9	9	9	31.88	5.1	4.1	0.7
5/2/2019 1:50	9	9	9	32.09	5.4	4.4	0.6
5/2/2019 2:00	9	9	9	32.06	0.9	0.8	0.6
5/2/2019 2:10	9	9	9	31.73	1	0.9	0.6
5/2/2019 2:20	9	9	9	31.57	1	0.9	0.6
5/2/2019 2:30	9	9	9	31.39	0.9	0.9	0.6
5/2/2019 2:40	9	9	9	30.84	0.8	0.9	0.6
5/2/2019 2:50	9	9	9	29.96	1.1	0.9	25
5/2/2019 3:00	9	9	9	29.07	3.7	3.5	25.2
5/2/2019 3:10	9	9	9	29.41	4.9	4	25.1
5/2/2019 3:20	9	9	9	29.77	4.9	4	25.1
5/2/2019 3:30	9	9	9	30.02	4.9	4	25
5/2/2019 3:40	9	9	9	30.17	5.1	4	25
5/2/2019 3:50	9	9	9	30.51	4.7	4.1	24.9
5/2/2019 4:00	9	9	9	30.9	5	4.1	24.7
5/2/2019 4:10	9	9	9	31.27	5	4	24.3
5/2/2019 4:20	9	9	9	31.67	5.1	4.1	23.3
5/2/2019 4:30	9	9	9	31.85	4.9	4	0.6
5/2/2019 4:40	9	9	9	32.06	5.1	4.4	0.6
5/2/2019 4:50	9	9	9	31.48	1	0.9	0.6
5/2/2019 5:00	9	9	9	30.72	1	0.9	0.6
5/2/2019 5:10	9	9	9	29.62	1.6	1.6	25
5/2/2019 5:20	9	9	9	29.07	4.8	3.9	25.2
5/2/2019 5:30	9	9	9	29.53	4.9	3.9	25.1
5/2/2019 5:40	9	9	9	29.96	5	4.1	25
5/2/2019 5:50	9	9	9	30.23	4.8	4	25
5/2/2019 6:00	9	9	9	30.69	4.8	4.1	24.8
5/2/2019 6:10	9	9	9	30.99	5	4	24.7
5/2/2019 6:20	9	9	9	31.36	5.1	4	24.3
5/2/2019 6:30	9	9	9	31.6	4.9	4.1	23.4
5/2/2019 6:40	9	9	9	31.88	4.9	4	0.7
5/2/2019 6:50	9	9	9	31.97	0.9	0.9	0.6
5/2/2019 7:00	9	9	9	31.15	1	0.8	0.6
5/2/2019 7:10	9	9	9	30.29	0.8	0.9	24.9
5/2/2019 7:20	9	9	9	29.5	2.7	2.5	25.1
5/2/2019 7:30	9	9	9	29.13	4.9	3.9	25.2
5/2/2019 7:40	9	9	9	29.53	5	3.9	25.1
5/2/2019 7:50	9	9	9	29.8	4.8	4	25.1
5/2/2019 8:00	9	9	9	30.11	5	4	25.1
5/2/2019 8:10	9	9	9	30.35	5	4	25
5/2/2019 8:20	9	9	9	30.54	4.9	4	24.9
5/2/2019 8:30	9	9	9	30.87	4.9	3.9	24.7
5/2/2019 8:40	9	9	9	31.33	5.1	4.1	24.4
5/2/2019 8:50	9	9	9	31.48	4.9	4	24.1
5/2/2019 9:00	9	9	9	31.51	5	4.1	23.8

5/2/2019 9:10	9	9	9	31.45	4.9	4.1	24.2
5/2/2019 9:20	9	9	9	31.39	5.1	4	24.2
5/2/2019 9:30	9	9	9	31.57	4.7	4.1	23.7
5/2/2019 9:40	9	9	9	31.73	4.9	4	0.7
5/2/2019 9:50	9	9	9	32.06	4.9	4.1	0.6
5/2/2019 10:00	9	9	9	31.67	1	0.9	0.6
5/2/2019 10:10	9	9	9	31.18	0.9	0.9	0.6
5/2/2019 10:20	9	9	9	30.75	0.9	0.8	1.3
5/2/2019 10:30	9	9	9	30.57	1	0.9	3.3
5/2/2019 10:40	9	9	9	30.47	1	0.9	24.9
5/2/2019 10:50	9	9	9	30.69	1.1	0.9	24.9
5/2/2019 11:00	9	9	9	30.47	1	1	24.9
5/2/2019 11:10	9	9	9	29.89	1.4	1.1	25
5/2/2019 11:20	9	9	9	29.35	3.6	3.3	25.1
5/2/2019 11:30	9	9	9	29.25	5.1	3.8	25.1
5/2/2019 11:40	9	9	9	29.5	5	3.9	25.1
5/2/2019 11:50	9	9	9	29.65	4.9	4	25
5/2/2019 12:00	9	9	9	29.74	5	4.1	25.1
5/2/2019 12:10	9	9	9	29.8	5.1	4	25.1
5/2/2019 12:20	9	9	9	30.05	5.1	3.9	25.1
5/2/2019 12:30	9	9	9	30.2	5	4	25.1
5/2/2019 12:40	9	9	9	30.32	5	4.2	25
5/2/2019 12:50	9	9	9	30.63	4.9	4	24.9
5/2/2019 13:00	9	9	9	30.75	4.9	3.9	24.8
5/2/2019 13:10	9	9	9	30.84	4.9	4	24.8
5/2/2019 13:20	9	9	9	30.81	4.8	3.9	24.7
5/2/2019 13:30	9	9	9	30.87	4.9	3.9	24.8
5/2/2019 13:40	9	9	9	30.9	4.9	4.1	24.7
5/2/2019 13:50	9	9	9	31.3	4.9	3.9	24.6
5/2/2019 14:00	9	9	9	31.33	4.8	3.9	24.3
5/2/2019 14:10	9	9	9	31.54	4.9	4.1	24
5/2/2019 14:20	9	9	9	31.63	5	4	23.3
5/2/2019 14:30	9	9	9	31.82	5	4	0.6
5/2/2019 14:40	9	9	9	31.85	5	4	0.6
5/2/2019 14:50	9	9	9	32	4.9	4.1	0.6
5/2/2019 15:00	9	9	9	32.03	4.9	4	0.6
5/2/2019 15:10	9	9	9	32.03	5	4	0.6
5/2/2019 15:20	9	9	9	32.06	1.2	0.9	0.6
5/2/2019 15:30	9	9	9	31.82	1.1	0.9	0.6
5/2/2019 15:40	9	9	9	31.63	1	0.9	0.5
5/2/2019 15:50	9	9	9	31.76	0.9	0.8	0.5
5/2/2019 16:00	9	9	9	32.06	0.9	0.9	0.6
5/2/2019 16:10	9	9	9	31.94	1	0.9	0.6
5/2/2019 16:20	9	9	9	31.73	1	0.8	0.6
5/2/2019 16:30	9	9	9	31.33	0.9	0.9	0.6
5/2/2019 16:40	9	9	9	30.44	0.9	0.9	2.6
5/2/2019 16:50	9	9	9	29.96	1.3	0.9	25

5/2/2019 17:00	9	9	9	29.8	2.2	1.8	25.1
5/2/2019 17:10	9	9	9	30.02	1.6	1.4	25.1
5/2/2019 17:20	9	9	9	30.08	1.2	1	25.1
5/2/2019 17:30	9	9	9	29.68	2.5	2.1	25.1
5/2/2019 17:40	9	9	9	29.1	4.9	3.9	25
5/2/2019 17:50	9	9	9	29.68	4.8	4	25
5/2/2019 18:00	9	9	9	30.26	4.9	3.9	25
5/2/2019 18:10	9	9	9	30.69	5.2	4	24.9
5/2/2019 18:20	9	9	9	30.84	5	4	24.7
5/2/2019 18:30	9	9	9	30.78	4.9	3.9	24.8
5/2/2019 18:40	9	9	9	30.66	4.6	4	24.8
5/2/2019 18:50	9	9	9	30.66	5	4	24.8
5/2/2019 19:00	9	9	9	30.99	5	4	24.7
5/2/2019 19:10	9	9	9	31.45	5	4.1	24
5/2/2019 19:20	9	9	9	31.88	4.9	4	0.6
5/2/2019 19:30	9	9	9	32	1	0.8	0.6
5/2/2019 19:40	9	9	9	31.88	1	0.9	0.5
5/2/2019 19:50	9	9	9	31.51	1	0.9	0.6
5/2/2019 20:00	9	9	9	31.05	1	0.8	0.5
5/2/2019 20:10	9	9	9	30.54	0.9	0.9	2.7
5/2/2019 20:20	9	9	9	30.11	1.1	0.9	24.9
5/2/2019 20:30	9	9	9	29.56	2.9	2.6	25.1
5/2/2019 20:40	9	9	9	29.1	3.6	3.2	25.2
5/2/2019 20:50	9	9	9	29.22	5	4.1	25.3
5/2/2019 21:00	9	9	9	29.41	4.9	3.9	25.1
5/2/2019 21:10	9	9	9	29.5	5.1	4.1	25.1
5/2/2019 21:20	9	9	9	29.62	4.9	4	25.1
5/2/2019 21:30	9	9	9	29.53	4.8	4	25.1
5/2/2019 21:40	9	9	9	29.62	4.9	4	25.1
5/2/2019 21:50	9	9	9	29.86	5	3.9	25.1
5/2/2019 22:00	9	9	9	30.29	4.9	4.1	25
5/2/2019 22:10	9	9	9	30.47	4.9	4	24.9
5/2/2019 22:20	9	9	9	30.72	4.9	4	24.9
5/2/2019 22:30	9	9	9	30.69	4.9	4	24.9
5/2/2019 22:40	9	9	9	30.66	4.8	3.9	24.9
5/2/2019 22:50	9	9	9	30.75	5.1	3.9	24.9
5/2/2019 23:00	9	9	9	31.02	4.9	4	24.6
5/2/2019 23:10	9	9	9	31.7	4.9	4.1	23.3
5/2/2019 23:20	9	9	9	31.82	5.1	3.9	0.7
5/2/2019 23:30	9	9	9	31.97	5	4.1	0.6
5/2/2019 23:40	9	9	9	31.97	4.9	4	0.6
5/2/2019 23:50	9	9	9	32.09	3.6	3	0.6
5/3/2019 0:00	9	9	9	31.36	1.1	0.9	0.6
5/3/2019 0:10	9	9	9	30.66	1.1	0.9	1
5/3/2019 0:20	9	9	9	30.2	1.1	0.9	25.1
5/3/2019 0:30	9	9	9	30.08	1.2	1	25.1
5/3/2019 0:40	9	9	9	30.05	1.4	1.3	25.1

5/3/2019 0:50	9	9	9	29.86	1.8	1.6	25.1
5/3/2019 1:00	9	9	9	29.59	2.8	2.6	25.1
5/3/2019 1:10	9	9	9	29.1	4.9	3.9	25.1
5/3/2019 1:20	9	9	9	29.44	5	4.1	25.1
5/3/2019 1:30	9	9	9	29.86	4.8	3.9	25.1
5/3/2019 1:40	9	9	9	30.11	5	3.9	25.1
5/3/2019 1:50	9	9	9	30.29	4.9	3.9	25.1
5/3/2019 2:00	9	9	9	30.17	5	4	25
5/3/2019 2:10	9	9	9	30.05	4.8	4	25
5/3/2019 2:20	9	9	9	30.23	5	4	24.9
5/3/2019 2:30	9	9	9	30.99	5	4.1	24.7
5/3/2019 2:40	9	9	9	31.76	4.8	4	0.7
5/3/2019 2:50	9	9	9	31.73	0.9	0.9	0.6
5/3/2019 3:00	9	9	9	31.09	0.9	0.8	0.6
5/3/2019 3:10	9	9	9	30.69	0.9	0.9	2.6
5/3/2019 3:20	9	9	9	30.57	0.9	1	24.9
5/3/2019 3:30	9	9	9	30.47	1	0.9	25
5/3/2019 3:40	9	9	9	30.11	1.2	0.9	25
5/3/2019 3:50	9	9	9	29.56	2.7	2.4	25.1
5/3/2019 4:00	9	9	9	29.13	4.9	3.9	25.1
5/3/2019 4:10	9	9	9	29.44	4.9	4.1	25.1
5/3/2019 4:20	9	9	9	29.68	4.7	4	25
5/3/2019 4:30	9	9	9	29.86	5.1	4	25.1
5/3/2019 4:40	9	9	9	30.02	4.9	4	25.1
5/3/2019 4:50	9	9	9	30.2	5.1	3.9	25.1
5/3/2019 5:00	9	9	9	30.29	5	3.9	25
5/3/2019 5:10	9	9	9	30.38	5	4.1	25
5/3/2019 5:20	9	9	9	30.66	5.1	4	24.8
5/3/2019 5:30	9	9	9	30.93	4.8	3.9	24.6
5/3/2019 5:40	9	9	9	31.33	5	3.9	24.3
5/3/2019 5:50	9	9	9	31.51	5.1	4	23.7
5/3/2019 6:00	9	9	9	31.57	5.1	3.9	23.3
5/3/2019 6:10	9	9	9	31.79	4.9	4	0.7
5/3/2019 6:20	9	9	9	32.09	4.9	4.1	0.6
5/3/2019 6:30	9	9	9	31.54	1.1	0.9	0.6
5/3/2019 6:40	9	9	9	30.93	1	0.9	0.6
5/3/2019 6:50	9	9	9	30.35	0.9	0.9	24.9
5/3/2019 7:00	9	9	9	29.89	1.6	1.3	25.1
5/3/2019 7:10	9	9	9	29.77	2	1.9	25.1
5/3/2019 7:20	9	9	9	29.41	3.5	3.2	25.1
5/3/2019 7:30	9	9	9	29.13	4.7	4.1	25.2
5/3/2019 7:40	9	9	9	29.38	5.1	4.1	25.1
5/3/2019 7:50	9	9	9	29.74	4.9	3.9	25.1
5/3/2019 8:00	9	9	9	30.2	5	3.9	25
5/3/2019 8:10	9	9	9	30.47	5	3.9	25
5/3/2019 8:20	9	9	9	30.69	4.9	4	24.9
5/3/2019 8:30	9	9	9	30.72	5.1	4	24.8

5/3/2019 8:40	9	9	9	30.87	5	4	24.8
5/3/2019 8:50	9	9	9	30.93	4.7	4.1	24.7
5/3/2019 9:00	9	9	9	31.15	4.9	4.1	24.6
5/3/2019 9:10	9	9	9	31.51	4.9	4	23.7
5/3/2019 9:20	9	9	9	31.79	4.8	3.9	0.7
5/3/2019 9:30	9	9	9	32.03	1	0.9	0.6
5/3/2019 9:40	9	9	9	31.85	1	0.9	0.6
5/3/2019 9:50	9	9	9	31.57	1	0.9	0.6
5/3/2019 10:00	9	9	9	31.3	0.9	0.9	0.6
5/3/2019 10:10	9	9	9	30.63	0.9	0.9	1.4
5/3/2019 10:20	9	9	9	29.83	1.2	0.9	25
5/3/2019 10:30	9	9	9	29.16	3.7	3.3	25.2
5/3/2019 10:40	9	9	9	29.32	4.9	3.9	25.2
5/3/2019 10:50	9	9	9	29.32	5.1	4	25.2
5/3/2019 11:00	9	9	9	29.19	5.1	3.9	25.2
5/3/2019 11:10	9	9	9	29.44	5.1	4	25.1
5/3/2019 11:20	9	9	9	29.77	5.1	4	25.1
5/3/2019 11:30	9	9	9	30.32	5.3	4	24.9
5/3/2019 11:40	9	9	9	30.69	4.8	4	24.8
5/3/2019 11:50	9	9	9	30.81	5.2	4	24.7
5/3/2019 12:00	9	9	9	31.09	5.2	3.9	24.6
5/3/2019 12:10	9	9	9	31.48	5	4	24.1
5/3/2019 12:20	9	9	9	31.6	4.9	4	23.5
5/3/2019 12:30	9	9	9	31.76	5	4	0.6
5/3/2019 12:40	9	9	9	31.97	5	4	0.7
5/3/2019 12:50	9	9	9	31.57	1.1	0.9	0.6
5/3/2019 13:00	9	9	9	30.54	1.1	0.9	0.5
5/3/2019 13:10	9	9	9	29.68	1.5	1.1	25.1
5/3/2019 13:20	9	9	9	29.01	4.9	3.9	25.1
5/3/2019 13:30	9	9	9	29.44	5.2	4	25.1
5/3/2019 13:40	9	9	9	29.77	5.3	4	25.1
5/3/2019 13:50	9	9	9	30.11	4.9	4	25.1
5/3/2019 14:00	9	9	9	30.26	5	4	25.1
5/3/2019 14:10	9	9	9	30.38	5	4.2	25
5/3/2019 14:20	9	9	9	30.72	4.9	4.1	24.8
5/3/2019 14:30	9	9	9	31.09	5.1	4.2	24.5
5/3/2019 14:40	9	9	9	31.51	5.1	4.1	23.8
5/3/2019 14:50	9	9	9	31.76	5	4	0.7
5/3/2019 15:00	9	9	9	32	4.9	4	0.6
5/3/2019 15:10	9	9	9	32.03	4.9	4	0.6
5/3/2019 15:20	9	9	9	32.09	0.8	0.9	0.5
5/3/2019 15:30	9	9	9	31.09	0.9	0.9	0.6
5/3/2019 15:40	9	9	9	30.02	1.1	0.9	24.9
5/3/2019 15:50	9	9	9	29.1	3.6	3.4	25.2
5/3/2019 16:00	9	9	9	29.41	4.9	4.1	25.2
5/3/2019 16:10	9	9	9	29.41	5.1	4	25.1
5/3/2019 16:20	9	9	9	29.56	4.9	3.9	25.1

5/3/2019 16:30	9	9	9	29.83	5	4	25.1
5/3/2019 16:40	9	9	9	30.23	5.1	3.9	25
5/3/2019 16:50	9	9	9	30.75	4.9	4	24.6
5/3/2019 17:00	9	9	9	30.93	5	4	24.5
5/3/2019 17:10	9	9	9	31.57	5	4	23.3
5/3/2019 17:20	9	9	9	31.97	5	3.9	0.6
5/3/2019 17:30	9	9	9	31.76	1	0.9	0.5
5/3/2019 17:40	9	9	9	30.38	1	0.9	0.7
5/3/2019 17:50	9	9	9	29.01	3.5	3.2	25.1
5/3/2019 18:00	9	9	9	29.35	4.9	3.9	25
5/3/2019 18:10	9	9	9	29.77	4.7	4.1	25.1
5/3/2019 18:20	9	9	9	30.14	5.1	4	25
5/3/2019 18:30	9	9	9	30.38	5	4	24.9
5/3/2019 18:40	9	9	9	30.96	5	4.1	24.6
5/3/2019 18:50	9	9	9	31.57	4.7	3.9	23.4
5/3/2019 19:00	9	9	9	32.06	5.2	3.9	0.6
5/3/2019 19:10	9	9	9	31.73	1.1	0.9	0.6
5/3/2019 19:20	9	9	9	31.33	0.9	0.9	0.6
5/3/2019 19:30	9	9	9	30.87	1	0.9	0.5
5/3/2019 19:40	9	9	9	29.86	1.2	0.9	24.9
5/3/2019 19:50	9	9	9	28.92	5	4	25.2
5/3/2019 20:00	9	9	9	29.44	5	3.9	25.1
5/3/2019 20:10	9	9	9	30.02	5	3.9	25
5/3/2019 20:20	9	9	9	30.29	5	3.9	24.9
5/3/2019 20:30	9	9	9	30.51	5	4.1	24.9
5/3/2019 20:40	9	9	9	30.44	5	3.9	24.9
5/3/2019 20:50	9	9	9	30.87	5.1	4	24.8
5/3/2019 21:00	9	9	9	31.21	5	4	24.3
5/3/2019 21:10	9	9	9	31.94	4.7	4.1	0.6
5/3/2019 21:20	9	9	9	31.48	1	0.9	0.6
5/3/2019 21:30	9	9	9	30.78	1	0.9	0.6
5/3/2019 21:40	9	9	9	30.29	1.1	0.9	24.9
5/3/2019 21:50	9	9	9	29.74	1.8	1.5	25.1
5/3/2019 22:00	9	9	9	29.22	3.8	3.4	25.2
5/3/2019 22:10	9	9	9	29.19	5	3.9	25.1
5/3/2019 22:20	9	9	9	29.38	4.8	3.9	25.2
5/3/2019 22:30	9	9	9	29.68	4.9	4	25
5/3/2019 22:40	9	9	9	30.17	5.1	4	25
5/3/2019 22:50	9	9	9	30.66	5.1	3.9	24.9
5/3/2019 23:00	9	9	9	31.33	5.1	4	24.3
5/3/2019 23:10	9	9	9	31.82	5.1	4	0.7
5/3/2019 23:20	9	9	9	31.97	0.9	0.8	0.6
5/3/2019 23:30	9	9	9	31.18	1	0.9	0.6
5/3/2019 23:40	9	9	9	30.29	0.9	0.9	3.5
5/3/2019 23:50	9	9	9	29.38	3.1	2.8	25.1
5/4/2019 0:00	9	9	9	29.1	5.1	4	25.1
5/4/2019 0:10	9	9	9	29.68	5	3.9	25

5/4/2019 0:20	9	9	9	30.17	4.9	4.1	25
5/4/2019 0:30	9	9	9	30.66	4.9	3.9	24.7
5/4/2019 0:40	9	9	9	31.21	4.9	4	24.4
5/4/2019 0:50	9	9	9	31.7	5.1	3.9	9.9
5/4/2019 1:00	9	9	9	31.85	1	0.9	0.5
5/4/2019 1:10	9	9	9	30.9	0.9	0.9	0.6
5/4/2019 1:20	9	9	9	30.05	1.3	0.8	24.9
5/4/2019 1:30	9	9	9	29.19	3.4	3.4	25.1
5/4/2019 1:40	9	9	9	29.25	5	4	25.1
5/4/2019 1:50	9	9	9	29.62	4.9	4.1	25.1
5/4/2019 2:00	9	9	9	30.02	5	3.9	25
5/4/2019 2:10	9	9	9	30.51	5	4	24.8
5/4/2019 2:20	9	9	9	31.15	5.1	4	24.4
5/4/2019 2:30	9	9	9	31.73	5	4.1	11.7
5/4/2019 2:40	9	9	9	32.03	4.9	3.8	0.7
5/4/2019 2:50	9	9	9	31.67	1	0.9	0.6
5/4/2019 3:00	9	9	9	31.3	1	0.9	0.6
5/4/2019 3:10	9	9	9	30.81	1.1	0.9	0.5
5/4/2019 3:20	9	9	9	30.29	1.2	0.9	24.8
5/4/2019 3:30	9	9	9	29.8	1.2	0.9	25
5/4/2019 3:40	9	9	9	29.01	3.6	3.4	25.1
5/4/2019 3:50	9	9	9	29.22	4.7	4	25.1
5/4/2019 4:00	9	9	9	29.71	4.9	3.9	25
5/4/2019 4:10	9	9	9	30.32	5.1	4	24.9
5/4/2019 4:20	9	9	9	30.93	5	4	24.6
5/4/2019 4:30	9	9	9	31.45	5	3.9	23.7
5/4/2019 4:40	9	9	9	31.97	5.1	4	0.6
5/4/2019 4:50	9	9	9	31.48	1	0.9	0.6
5/4/2019 5:00	9	9	9	30.51	0.9	0.9	2
5/4/2019 5:10	9	9	9	29.47	2.3	1.9	25.1
5/4/2019 5:20	9	9	9	29.13	4.8	4	25.1
5/4/2019 5:30	9	9	9	29.5	4.9	3.9	25.1
5/4/2019 5:40	9	9	9	29.89	5	4	25
5/4/2019 5:50	9	9	9	30.32	5.1	4	24.9
5/4/2019 6:00	9	9	9	30.78	4.9	4	24.7
5/4/2019 6:10	9	9	9	31.18	4.9	4	24.4
5/4/2019 6:20	9	9	9	31.6	5.1	4	0.7
5/4/2019 6:30	9	9	9	32.06	3.1	2.6	0.5
5/4/2019 6:40	9	9	9	31.09	1	0.9	0.6
5/4/2019 6:50	9	9	9	30.08	1.2	0.9	24.8
5/4/2019 7:00	9	9	9	28.92	3.8	3.4	25.1
5/4/2019 7:10	9	9	9	29.35	5	3.9	25.1
5/4/2019 7:20	9	9	9	29.62	4.9	3.9	25.1
5/4/2019 7:30	9	9	9	29.99	4.9	4	24.9
5/4/2019 7:40	9	9	9	30.51	4.8	3.9	24.8
5/4/2019 7:50	9	9	9	31.09	5.1	3.9	24.5
5/4/2019 8:00	9	9	9	31.73	5	3.9	0.7

5/4/2019 8:10	9	9	9	32.09	4.9	4.1	0.5
5/4/2019 8:20	9	9	9	31.76	1	0.9	0.6
5/4/2019 8:30	9	9	9	31.3	0.9	0.9	0.6
5/4/2019 8:40	9	9	9	30.44	1	0.9	1.6
5/4/2019 8:50	9	9	9	29.56	2.1	1.8	25
5/4/2019 9:00	9	9	9	29.04	4.9	3.9	25.1
5/4/2019 9:10	9	9	9	29.44	4.9	4	25.1
5/4/2019 9:20	9	9	9	29.71	5	4	25
5/4/2019 9:30	9	9	9	30.08	4.9	3.9	25
5/4/2019 9:40	9	9	9	30.23	4.8	4	25
5/4/2019 9:50	9	9	9	30.47	4.9	4	24.9
5/4/2019 10:00	9	9	9	30.81	5	4	24.7
5/4/2019 10:10	9	9	9	31.27	4.8	4	24.4
5/4/2019 10:20	9	9	9	31.7	5.1	3.9	0.7
5/4/2019 10:30	9	9	9	32	1.1	0.9	0.6
5/4/2019 10:40	9	9	9	30.96	1	0.9	0.6
5/4/2019 10:50	9	9	9	29.99	1	0.9	24.9
5/4/2019 11:00	9	9	9	29.16	3.4	3.1	25.1
5/4/2019 11:10	9	9	9	29.19	4.9	4.1	25.1
5/4/2019 11:20	9	9	9	29.53	4.9	4	25
5/4/2019 11:30	9	9	9	30.14	4.9	3.9	24.9
5/4/2019 11:40	9	9	9	30.69	4.9	4	24.7
5/4/2019 11:50	9	9	9	31.18	5.2	4	24.4
5/4/2019 12:00	9	9	9	31.57	4.9	3.9	23.2
5/4/2019 12:10	9	9	9	32.12	1.1	0.9	0.6
5/4/2019 12:20	9	9	9	30.87	1.1	0.9	0.6
5/4/2019 12:30	9	9	9	29.5	1.5	1.2	25
5/4/2019 12:40	9	9	9	29.07	5	4.1	25.1
5/4/2019 12:50	9	9	9	29.5	4.9	4	25
5/4/2019 13:00	9	9	9	30.02	4.9	4	25
5/4/2019 13:10	9	9	9	30.47	4.9	3.9	24.8
5/4/2019 13:20	9	9	9	31.21	5.1	3.9	24.5
5/4/2019 13:30	9	9	9	31.67	5	4	0.7
5/4/2019 13:40	9	9	9	31.94	1.2	0.8	0.6
5/4/2019 13:50	9	9	9	30.63	1	0.9	0.6
5/4/2019 14:00	9	9	9	29.44	2	1.5	25
5/4/2019 14:10	9	9	9	29.07	4.9	4.1	25.1
5/4/2019 14:20	9	9	9	29.47	5.1	4.1	25.1
5/4/2019 14:30	9	9	9	29.8	4.9	4	25.1
5/4/2019 14:40	9	9	9	30.32	5	4	24.9
5/4/2019 14:50	9	9	9	30.9	4.9	3.9	24.6
5/4/2019 15:00	9	9	9	31.54	5.1	3.9	23.2
5/4/2019 15:10	9	9	9	32.12	3.8	3.4	0.6
5/4/2019 15:20	9	9	9	31.27	1.1	0.8	0.6
5/4/2019 15:30	9	9	9	30.44	1	0.8	1.4
5/4/2019 15:40	9	9	9	29.71	1.4	1.2	25
5/4/2019 15:50	9	9	9	29.01	3.6	3.3	25.1

5/4/2019 16:00	9	9	9	29.32	4.9	3.9	25.1
5/4/2019 16:10	9	9	9	29.68	4.9	4	25
5/4/2019 16:20	9	9	9	30.26	5	3.9	24.9
5/4/2019 16:30	9	9	9	30.9	4.9	3.8	24.7
5/4/2019 16:40	9	9	9	31.51	4.8	3.9	23.6
5/4/2019 16:50	9	9	9	31.82	5	4	0.6
5/4/2019 17:00	9	9	9	31.76	1.1	0.9	0.6
5/4/2019 17:10	9	9	9	31.09	1	0.8	0.5
5/4/2019 17:20	9	9	9	30.51	1	0.8	1.3
5/4/2019 17:30	9	9	9	30.26	1.1	0.9	24.9
5/4/2019 17:40	9	9	9	30.2	1.3	0.9	25.1
5/4/2019 17:50	9	9	9	30.05	1	1	25
5/4/2019 18:00	9	9	9	29.71	2.1	1.9	25.1
5/4/2019 18:10	9	9	9	28.98	5	4	25.2
5/4/2019 18:20	9	9	9	29.25	4.9	3.9	25.1
5/4/2019 18:30	9	9	9	29.74	4.9	3.9	25
5/4/2019 18:40	9	9	9	30.17	4.9	3.8	24.9
5/4/2019 18:50	9	9	9	30.41	5	3.9	24.9
5/4/2019 19:00	9	9	9	30.69	5	4	24.7
5/4/2019 19:10	9	9	9	31.3	4.9	3.9	24.4
5/4/2019 19:20	9	9	9	31.6	4.7	3.8	23.3
5/4/2019 19:30	9	9	9	32	5	3.9	0.6
5/4/2019 19:40	9	9	9	31.76	1	0.9	0.6
5/4/2019 19:50	9	9	9	31.02	1	0.9	0.5
5/4/2019 20:00	9	9	9	30.23	0.9	0.9	3.2
5/4/2019 20:10	9	9	9	29.38	3.1	2.8	25.1
5/4/2019 20:20	9	9	9	29.1	5.1	3.9	25.1
5/4/2019 20:30	9	9	9	29.62	4.9	3.9	25
5/4/2019 20:40	9	9	9	29.89	4.9	3.9	25
5/4/2019 20:50	9	9	9	30.32	5.1	4	24.9
5/4/2019 21:00	9	9	9	30.63	5.1	4	24.8
5/4/2019 21:10	9	9	9	31.12	5	4.1	24.5
5/4/2019 21:20	9	9	9	31.54	5	3.9	23.2
5/4/2019 21:30	9	9	9	32	4.9	4	0.6
5/4/2019 21:40	9	9	9	31.51	1.1	0.8	0.6
5/4/2019 21:50	9	9	9	30.54	0.9	0.9	0.5
5/4/2019 22:00	9	9	9	29.59	1.3	1.2	25
5/4/2019 22:10	9	9	9	28.98	4.8	3.9	25.2
5/4/2019 22:20	9	9	9	29.47	5	4	25.1
5/4/2019 22:30	9	9	9	29.86	5	4	25.1
5/4/2019 22:40	9	9	9	30.29	5	3.9	24.9
5/4/2019 22:50	9	9	9	30.96	5	3.9	24.6
5/4/2019 23:00	9	9	9	31.39	4.9	3.9	24.1
5/4/2019 23:10	9	9	9	31.7	4.9	3.9	0.7
5/4/2019 23:20	9	9	9	32.06	4.9	4	0.6
5/4/2019 23:30	9	9	9	31.6	1	0.9	0.6
5/4/2019 23:40	9	9	9	30.66	1	0.8	0.5

5/4/2019 23:50	9	9	9	29.74	1.1	1	24.9
5/5/2019 0:00	9	9	9	29.19	3.6	3.4	25.2
5/5/2019 0:10	9	9	9	29.25	4.9	4	25.1
5/5/2019 0:20	9	9	9	29.53	5.3	3.8	25
5/5/2019 0:30	9	9	9	29.99	4.9	3.9	25
5/5/2019 0:40	9	9	9	30.51	4.9	4	24.9
5/5/2019 0:50	9	9	9	31.27	5.1	3.9	24.4
5/5/2019 1:00	9	9	9	31.67	5.3	4	0.6
5/5/2019 1:10	9	9	9	31.97	1	0.9	0.5
5/5/2019 1:20	9	9	9	31.02	1	0.9	0.6
5/5/2019 1:30	9	9	9	30.23	1	0.8	3.3
5/5/2019 1:40	9	9	9	29.07	3.5	3.3	25.1
5/5/2019 1:50	9	9	9	29.22	4.9	3.8	25.1
5/5/2019 2:00	9	9	9	29.56	5.2	3.9	25
5/5/2019 2:10	9	9	9	30.14	4.9	4	25
5/5/2019 2:20	9	9	9	30.63	5	3.9	24.7
5/5/2019 2:30	9	9	9	31.12	4.9	3.9	24.5
5/5/2019 2:40	9	9	9	31.67	5.2	4	8
5/5/2019 2:50	9	9	9	32.06	4.3	3.5	0.6
5/5/2019 3:00	9	9	9	31.18	1.2	0.9	0.6
5/5/2019 3:10	9	9	9	30.35	0.9	0.9	2.6
5/5/2019 3:20	9	9	9	29.5	2.2	1.9	25.1
5/5/2019 3:30	9	9	9	29.07	5	4	25.1
5/5/2019 3:40	9	9	9	29.35	5	3.9	25.1
5/5/2019 3:50	9	9	9	29.65	4.9	4	25.1
5/5/2019 4:00	9	9	9	29.99	5	3.9	25.1
5/5/2019 4:10	9	9	9	30.32	5.3	4	24.9
5/5/2019 4:20	9	9	9	30.75	4.8	4	24.6
5/5/2019 4:30	9	9	9	31.33	5.1	4	24.1
5/5/2019 4:40	9	9	9	32.03	5	4	0.6
5/5/2019 4:50	9	9	9	31.39	0.9	0.8	0.6
5/5/2019 5:00	9	9	9	30.54	1	0.9	0.6
5/5/2019 5:10	9	9	9	29.59	1.9	1.6	25.1
5/5/2019 5:20	9	9	9	29.04	5	4	25.2
5/5/2019 5:30	9	9	9	29.41	5	4	25.1
5/5/2019 5:40	9	9	9	29.77	5	4.1	25.1
5/5/2019 5:50	9	9	9	30.08	4.9	4	25
5/5/2019 6:00	9	9	9	30.41	5	3.9	24.9
5/5/2019 6:10	9	9	9	30.72	4.8	4	24.7
5/5/2019 6:20	9	9	9	31.09	4.9	3.9	24.4
5/5/2019 6:30	9	9	9	31.57	4.9	4	23.2
5/5/2019 6:40	9	9	9	32.09	1.3	0.9	0.5
5/5/2019 6:50	9	9	9	30.84	1	0.9	0.6
5/5/2019 7:00	9	9	9	29.65	1.4	0.9	24.9
5/5/2019 7:10	9	9	9	29.01	5.1	3.8	25.1
5/5/2019 7:20	9	9	9	29.53	4.9	3.9	25.1
5/5/2019 7:30	9	9	9	29.89	4.8	4	25

5/5/2019 7:40	9	9	9	30.35	5.2	4	25
5/5/2019 7:50	9	9	9	30.75	5.1	4.1	24.7
5/5/2019 8:00	9	9	9	31.09	5	3.9	24.5
5/5/2019 8:10	9	9	9	31.48	4.9	3.9	23.7
5/5/2019 8:20	9	9	9	31.85	5.1	4	0.6
5/5/2019 8:30	9	9	9	31.67	1	0.9	0.6
5/5/2019 8:40	9	9	9	30.84	1	0.8	0.5
5/5/2019 8:50	9	9	9	30.17	0.9	0.8	24.9
5/5/2019 9:00	9	9	9	29.41	2.7	2.4	25.1
5/5/2019 9:10	9	9	9	29.13	4.6	4	25.1
5/5/2019 9:20	9	9	9	29.59	5.3	3.9	25
5/5/2019 9:30	9	9	9	30.2	4.9	4	25
5/5/2019 9:40	9	9	9	30.87	5.1	3.9	24.6
5/5/2019 9:50	9	9	9	31.51	5.1	4.1	23.5
5/5/2019 10:00	9	9	9	31.97	4.9	3.9	0.6
5/5/2019 10:10	9	9	9	31.15	0.9	0.9	0.5
5/5/2019 10:20	9	9	9	30.11	1.1	0.9	24.8
5/5/2019 10:30	9	9	9	28.74	4.9	3.8	25.1
5/5/2019 10:40	9	9	9	29.38	4.9	4	25.1
5/5/2019 10:50	9	9	9	30.08	5	3.9	25
5/5/2019 11:00	9	9	9	30.54	5	4	24.8
5/5/2019 11:10	9	9	9	30.96	5	3.9	24.7
5/5/2019 11:20	9	9	9	31.45	4.9	3.9	24
5/5/2019 11:30	9	9	9	31.88	5.2	4	0.6
5/5/2019 11:40	9	9	9	31.7	1.1	0.9	0.5
5/5/2019 11:50	9	9	9	30.44	1	0.8	0.6
5/5/2019 12:00	9	9	9	29.07	3.1	2.9	25.1
5/5/2019 12:10	9	9	9	29.19	4.9	3.9	25.1
5/5/2019 12:20	9	9	9	29.74	5	3.9	25
5/5/2019 12:30	9	9	9	30.2	4.9	3.9	25
5/5/2019 12:40	9	9	9	30.63	5	3.9	24.9
5/5/2019 12:50	9	9	9	31.09	4.9	3.9	24.5
5/5/2019 13:00	9	9	9	31.73	4.9	4	0.7
5/5/2019 13:10	9	9	9	31.51	1	0.9	0.6
5/5/2019 13:20	9	9	9	30.47	0.9	0.8	0.6
5/5/2019 13:30	9	9	9	29.96	1.2	0.9	25.1
5/5/2019 13:40	9	9	9	29.35	3.3	3.1	25.1
5/5/2019 13:50	9	9	9	29.13	4.7	4	25.1
5/5/2019 14:00	9	9	9	29.41	5.1	3.9	25.1
5/5/2019 14:10	9	9	9	29.59	4.9	3.9	25.1
5/5/2019 14:20	9	9	9	30.11	4.9	3.8	25
5/5/2019 14:30	9	9	9	30.47	5.1	3.9	24.9
5/5/2019 14:40	9	9	9	30.87	4.9	3.9	24.7
5/5/2019 14:50	9	9	9	31.48	4.9	3.9	23.8
5/5/2019 15:00	9	9	9	32	5.1	3.9	0.6
5/5/2019 15:10	9	9	9	31.15	1.1	0.8	0.6
5/5/2019 15:20	9	9	9	30.23	1.1	0.9	3.2

5/5/2019 15:30	9	9	9	29.25	3.3	2.9	25.1
5/5/2019 15:40	9	9	9	29.1	4.9	3.9	25.2
5/5/2019 15:50	9	9	9	29.65	4.9	3.9	25
5/5/2019 16:00	9	9	9	30.26	4.9	3.9	25
5/5/2019 16:10	9	9	9	30.9	5	4.1	24.6
5/5/2019 16:20	9	9	9	31.39	4.9	4	24
5/5/2019 16:30	9	9	9	32.03	5.1	4	0.6
5/5/2019 16:40	9	9	9	31.18	0.9	0.9	0.5
5/5/2019 16:50	9	9	9	29.77	1.2	0.8	24.9
5/5/2019 17:00	9	9	9	28.95	5	3.9	25.2
5/5/2019 17:10	9	9	9	29.59	5	3.9	25
5/5/2019 17:20	9	9	9	30.08	4.9	4	25
5/5/2019 17:30	9	9	9	30.54	5.1	3.9	24.9
5/5/2019 17:40	9	9	9	30.99	5	4	24.6
5/5/2019 17:50	9	9	9	31.42	4.9	3.9	23.8
5/5/2019 18:00	9	9	9	32	4.9	4	0.6
5/5/2019 18:10	9	9	9	30.96	1	0.9	0.5
5/5/2019 18:20	9	9	9	29.59	1.2	0.9	24.9
5/5/2019 18:30	9	9	9	29.04	4.9	3.9	25.1
5/5/2019 18:40	9	9	9	29.77	5	4	25
5/5/2019 18:50	9	9	9	30.51	5.2	3.9	24.8
5/5/2019 19:00	9	9	9	31.21	5.1	4	24.5
5/5/2019 19:10	9	9	9	31.67	5	4.1	16.8
5/5/2019 19:20	9	9	9	32.06	2.4	1.8	0.6
5/5/2019 19:30	9	9	9	31.09	1.1	0.9	0.5
5/5/2019 19:40	9	9	9	29.62	1.2	0.9	24.9
5/5/2019 19:50	9	9	9	29.1	4.9	3.9	25.1
5/5/2019 20:00	9	9	9	29.86	5.1	3.9	25
5/5/2019 20:10	9	9	9	30.75	5.1	4	24.8
5/5/2019 20:20	9	9	9	31.45	5	4	23.5
5/5/2019 20:30	9	9	9	32.12	3.1	2.6	0.5
5/5/2019 20:40	9	9	9	31.02	1	0.9	0.5
5/5/2019 20:50	9	9	9	30.14	1.1	0.9	24.9
5/5/2019 21:00	9	9	9	29.44	2.6	2.1	25.1
5/5/2019 21:10	9	9	9	28.95	4.9	4.1	25.1
5/5/2019 21:20	9	9	9	29.38	4.9	4	25.1
5/5/2019 21:30	9	9	9	29.74	4.9	4	25.1
5/5/2019 21:40	9	9	9	30.26	5	4.1	25
5/5/2019 21:50	9	9	9	30.66	4.9	3.9	24.7
5/5/2019 22:00	9	9	9	31.33	5.2	3.9	24.2
5/5/2019 22:10	9	9	9	32	5	3.9	0.6
5/5/2019 22:20	9	9	9	31.21	1	0.8	0.6
5/5/2019 22:30	9	9	9	29.99	0.8	0.9	24.8
5/5/2019 22:40	9	9	9	28.83	4.9	3.9	25.1
5/5/2019 22:50	9	9	9	29.53	4.8	3.9	25.1
5/5/2019 23:00	9	9	9	29.83	4.8	3.9	25
5/5/2019 23:10	9	9	9	30.14	4.8	4	25

5/5/2019 23:20	9	9	9	30.51	5	3.9	24.8
5/5/2019 23:30	9	9	9	31.02	5	3.9	24.6
5/5/2019 23:40	9	9	9	31.51	4.8	4	23.8
5/5/2019 23:50	9	9	9	31.88	4.9	3.9	0.6
5/6/2019 0:00	9	9	9	31.51	1	0.9	0.5
5/6/2019 0:10	9	9	9	30.63	1	0.9	0.5
5/6/2019 0:20	9	9	9	29.53	1.4	1.2	25
5/6/2019 0:30	9	9	9	29.01	5	3.9	25
5/6/2019 0:40	9	9	9	29.56	5	4.1	25
5/6/2019 0:50	9	9	9	30.23	5	4	25
5/6/2019 1:00	9	9	9	30.69	5	3.9	24.8
5/6/2019 1:10	9	9	9	31.39	5	3.9	24.2
5/6/2019 1:20	9	9	9	31.94	4.9	4	0.6
5/6/2019 1:30	9	9	9	31.48	1	0.9	0.6
5/6/2019 1:40	9	9	9	30.63	0.9	0.9	0.6
5/6/2019 1:50	9	9	9	29.86	1.3	0.9	24.9
5/6/2019 2:00	9	9	9	29.01	3.7	3.4	25.2
5/6/2019 2:10	9	9	9	29.35	4.9	3.9	25.1
5/6/2019 2:20	9	9	9	29.77	5	4	25
5/6/2019 2:30	9	9	9	30.26	5	3.9	24.9
5/6/2019 2:40	9	9	9	30.99	4.8	3.9	24.6
5/6/2019 2:50	9	9	9	31.6	5.1	3.9	23
5/6/2019 3:00	9	9	9	31.79	1	0.9	0.5
5/6/2019 3:10	9	9	9	30.66	1	0.8	0.5
5/6/2019 3:20	9	9	9	29.47	2	1.8	25
5/6/2019 3:30	9	9	9	29.01	4.9	3.8	25.1
5/6/2019 3:40	9	9	9	29.74	4.9	3.9	25
5/6/2019 3:50	9	9	9	30.57	4.8	3.9	24.8
5/6/2019 4:00	9	9	9	31.21	5.1	4	24.2
5/6/2019 4:10	9	9	9	31.76	5.1	4.1	0.7
5/6/2019 4:20	9	9	9	31.7	1.1	0.9	0.5
5/6/2019 4:30	9	9	9	30.99	1	0.9	0.6
5/6/2019 4:40	9	9	9	30.02	1.1	0.9	24.9
5/6/2019 4:50	9	9	9	28.83	3.4	3.4	25.1
5/6/2019 5:00	9	9	9	29.35	4.8	4	25.1
5/6/2019 5:10	9	9	9	30.05	4.8	4	25
5/6/2019 5:20	9	9	9	30.54	4.9	3.9	24.7
5/6/2019 5:30	9	9	9	31.12	5	4	24.5
5/6/2019 5:40	9	9	9	31.51	5	3.8	23.5
5/6/2019 5:50	9	9	9	31.88	4.8	4	0.6
5/6/2019 6:00	9	9	9	31.63	1	0.9	0.6
5/6/2019 6:10	9	9	9	30.47	0.9	0.8	0.6
5/6/2019 6:20	9	9	9	29.13	3.2	2.9	25.1
5/6/2019 6:30	9	9	9	29.19	5	3.9	25
5/6/2019 7:00	9	9	9	30.87	5.1	3.9	24.6
5/6/2019 7:10	9	9	9	31.42	4.9	4	23.9
5/6/2019 7:20	9	9	9	32.12	5	4	0.6

5/6/2019 7:30	9	9	9	31.09	1.1	0.9	0.5
5/6/2019 7:40	9	9	9	29.8	1.1	0.9	24.9
5/6/2019 7:50	9	9	9	28.86	4.9	3.9	25.2
5/6/2019 8:00	9	9	9	29.19	5	3.8	25.1
5/6/2019 8:10	9	9	9	29.86	4.7	4	25
5/6/2019 8:20	9	9	9	30.35	4.9	3.9	24.8
5/6/2019 8:30	9	9	9	31.09	5	4	24.5
5/6/2019 8:40	9	9	9	31.51	4.9	3.9	23.1
5/6/2019 8:50	8	9	9	32.06	5	4	0.6
5/6/2019 9:00	9	9	9	31.7	1	0.9	0.5
5/6/2019 9:10	9	9	9	30.72	1	0.8	0.6
5/6/2019 9:20	8	9	9	29.74	1	0.9	24.9
5/6/2019 9:30	9	9	9	28.92	5	3.9	25.1
5/6/2019 9:40	9	9	9	29.47	4.9	3.9	25.1
5/6/2019 9:50	9	9	9	30.05	5	3.8	24.9
5/6/2019 10:00	9	9	9	30.69	5	4	24.7
5/6/2019 10:10	9	9	9	31.21	4.8	4	24.5
5/6/2019 10:20	9	9	9	31.57	5.1	4	23.2
5/6/2019 10:30	9	9	9	32.09	1	0.9	0.6
5/6/2019 10:40	9	9	9	31.12	0.9	0.8	0.6
5/6/2019 10:50	9	9	9	29.74	1.2	0.9	24.9
5/6/2019 11:00	9	9	9	28.92	4.9	3.9	25.2
5/6/2019 11:10	9	9	9	29.35	4.9	3.9	25.1
5/6/2019 11:20	9	9	9	30.02	4.7	3.9	25
5/6/2019 11:30	9	9	9	30.29	5	3.9	25
5/6/2019 11:40	8	9	9	30.99	5.2	3.9	24.6
5/6/2019 11:50	8	9	9	31.6	5.1	4	23
5/6/2019 12:00	9	9	9	32.09	1.1	0.8	0.6
5/6/2019 12:10	9	9	9	31.12	0.9	0.9	0.5
5/6/2019 12:20	8	9	9	30.02	1	0.9	24.9
5/6/2019 12:30	9	9	9	29.22	3.4	3	25.2
5/6/2019 12:40	8	9	9	29.07	4.9	3.9	25.2
5/6/2019 12:50	9	9	9	29.41	4.8	4	25.1
5/6/2019 13:00	9	9	9	29.65	5.6	3.9	25.1
5/6/2019 13:10	9	9	9	30.11	4.9	4	25
5/6/2019 13:20	8	9	9	30.69	5	3.9	24.8
5/6/2019 13:30	9	9	9	31.05	4.8	3.9	24.4
5/6/2019 13:40	9	9	9	31.6	4.8	3.9	23.2
5/6/2019 13:50	9	9	9	32.06	4.9	4	0.5
5/6/2019 14:00	9	9	9	31.48	0.9	0.9	0.5
5/6/2019 14:10	9	9	9	30.54	1	0.9	0.5
5/6/2019 14:20	8	9	9	29.1	3	2.8	25.1
5/6/2019 14:30	9	9	9	29.19	4.9	4	25.1
5/6/2019 14:40	9	9	9	29.89	5.1	3.9	25
5/6/2019 14:50	9	9	9	30.57	4.8	3.8	24.8
5/6/2019 15:00	9	9	9	31.02	4.9	4	24.5
5/6/2019 15:10	9	9	9	31.54	5.3	3.9	23.5

5/6/2019 15:20	8	9	9	32	4.9	3.9	0.5
5/6/2019 15:30	9	9	9	31.45	1	0.8	0.6
5/6/2019 15:40	9	9	9	30.35	0.9	0.8	1.2
5/6/2019 15:50	9	9	9	29.59	1.8	1.5	25.1
5/6/2019 16:00	9	9	9	29.13	3.7	3.4	25.2
5/6/2019 16:10	9	9	9	29.13	4.8	4	25.2
5/6/2019 16:20	9	9	9	29.35	4.6	4	25.1
5/6/2019 16:30	9	9	9	29.71	5	3.9	25.1
5/6/2019 16:40	9	9	9	30.14	4.9	3.9	25
5/6/2019 16:50	8	9	9	30.87	4.9	3.9	24.6
5/6/2019 17:00	8	9	9	31.63	5	3.9	5
5/6/2019 17:10	8	9	9	31.51	1.1	0.8	0.6
5/6/2019 17:20	8	9	9	30.38	0.9	0.8	0.5
5/6/2019 17:30	9	9	9	29.07	3.4	3.1	25.1
5/6/2019 17:40	9	9	9	29.25	5.1	4	25.1
5/6/2019 17:50	9	9	9	29.71	4.9	3.9	25
5/6/2019 18:00	9	9	9	30.23	4.9	3.9	24.9
5/6/2019 18:10	9	9	9	30.66	5.1	3.8	24.8
5/6/2019 18:20	9	9	9	31.21	5.1	3.9	24.3
5/6/2019 18:30	9	9	9	32	4.8	3.8	0.6
5/6/2019 18:40	9	9	9	31.33	0.9	0.8	0.6
5/6/2019 18:50	9	9	9	30.38	1.1	0.8	2.2
5/6/2019 19:00	9	9	9	29.22	3.1	2.7	25.1
5/6/2019 19:10	8	9	9	29.13	4.9	3.9	25.1
5/6/2019 19:20	8	9	9	29.71	4.7	4.1	25.1
5/6/2019 19:30	8	9	9	30.23	4.9	4.1	24.9
5/6/2019 19:40	9	9	9	30.81	5	3.9	24.7
5/6/2019 19:50	8	9	9	31.57	5	3.9	23.4
5/6/2019 20:00	9	9	9	31.82	1	0.9	0.5
5/6/2019 20:10	9	9	9	30.63	1	0.8	0.5
5/6/2019 20:20	8	9	9	29.62	1	0.9	25
5/6/2019 20:30	9	9	9	28.92	5	3.9	25.2
5/6/2019 20:40	9	9	9	29.56	4.8	3.9	25.1
5/6/2019 20:50	9	9	9	30.11	4.7	3.9	25
5/6/2019 21:00	9	9	9	30.54	4.9	3.9	24.8
5/6/2019 21:10	9	9	9	31.21	4.9	4.1	24.3
5/6/2019 21:20	9	9	9	31.85	4.9	3.9	0.6
5/6/2019 21:30	9	9	9	31.57	0.9	0.9	0.6
5/6/2019 21:40	8	9	9	30.26	1	0.9	1.1
5/6/2019 21:50	8	9	9	28.92	3.5	3.3	25.1
5/6/2019 22:00	9	9	9	29.41	4.9	3.8	25
5/6/2019 22:10	9	9	9	30.02	4.9	3.9	25.1
5/6/2019 22:20	8	9	9	30.44	4.9	3.9	24.9
5/6/2019 22:30	9	9	9	30.69	4.9	3.9	24.7
5/6/2019 22:40	9	9	9	31.09	4.8	3.9	24.4
5/6/2019 22:50	9	9	9	31.94	4.8	3.9	0.6
5/6/2019 23:00	8	9	9	31.15	1	0.8	0.5

5/6/2019 23:10	9	9	9	29.83	1.1	0.9	24.9
5/6/2019 23:20	9	9	9	28.86	4.9	3.9	25.2
5/6/2019 23:30	9	9	9	29.53	4.9	3.9	25.1
5/6/2019 23:40	8	9	9	30.14	4.8	4	25
5/6/2019 23:50	8	9	9	30.54	4.9	4	24.8
5/7/2019 0:00	8	9	9	30.99	4.9	3.9	24.5
5/7/2019 0:10	8	9	9	31.79	5	3.9	0.7
5/7/2019 0:20	8	9	9	31.3	0.9	0.9	0.5
5/7/2019 0:30	9	9	9	29.99	1.1	0.8	24.9
5/7/2019 0:40	9	9	9	28.83	4.8	3.9	25.2
5/7/2019 0:50	9	9	9	29.47	5	3.8	25
5/7/2019 1:00	9	9	9	29.83	4.9	3.9	25
5/7/2019 1:10	8	9	9	30.2	5.1	3.9	24.9
5/7/2019 1:20	9	9	9	30.69	4.8	3.9	24.7
5/7/2019 1:30	9	9	9	31.42	4.9	3.9	23.8
5/7/2019 1:40	9	9	9	32.12	5.1	4.3	0.6
5/7/2019 1:50	9	9	9	31.33	1	0.9	0.6
5/7/2019 2:00	8	9	9	30.54	1.1	0.9	0.6
5/7/2019 2:10	8	9	9	29.74	1.1	0.9	25
5/7/2019 2:20	9	9	9	28.95	4.9	3.9	25.2
5/7/2019 2:30	9	9	9	29.44	4.8	3.9	25
5/7/2019 2:40	9	9	9	30.17	5	3.9	25
5/7/2019 2:50	9	9	9	31.05	4.9	4	24.5
5/7/2019 3:00	8	9	9	31.94	5	3.9	0.6
5/7/2019 3:10	8	9	9	30.75	0.9	0.9	0.6
5/7/2019 3:20	9	9	9	28.83	3.4	3.1	25.1
5/7/2019 3:30	9	9	9	29.38	5	3.9	25.1
5/7/2019 3:40	9	9	9	30.32	5.1	3.9	24.9
5/7/2019 3:50	9	9	9	31.33	4.8	3.9	24.2
5/7/2019 4:00	9	9	9	32.03	1.7	1.2	0.6
5/7/2019 4:10	9	9	9	30.66	1	0.9	0.6
5/7/2019 4:20	8	9	9	29.77	1.1	0.9	25
5/7/2019 4:30	9	9	9	28.92	4.9	3.9	25.1
5/7/2019 4:40	8	9	9	29.44	4.9	3.9	25.1
5/7/2019 4:50	9	9	9	30.26	4.9	3.9	24.9
5/7/2019 5:00	9	9	9	30.81	5	4.1	24.7
5/7/2019 5:10	8	9	9	31.54	4.9	3.9	23.4
5/7/2019 5:20	9	9	9	32.09	5	3.9	0.6
5/7/2019 5:30	9	9	9	31.48	1	0.8	0.6
5/7/2019 5:40	8	9	9	30.66	0.9	0.9	0.6
5/7/2019 5:50	8	9	9	29.8	1.1	0.8	25.1
5/7/2019 6:00	8	9	9	28.86	5	3.9	25.1
5/7/2019 6:10	9	9	9	29.68	5	3.9	25
5/7/2019 6:20	8	9	9	30.72	4.9	3.9	24.7
5/7/2019 6:30	9	9	9	31.67	4.9	3.9	0.7
5/7/2019 6:40	8	9	9	30.81	1	0.9	0.5
5/7/2019 6:40	8	9	9	30.81	1	0.9	0.5

5/7/2019 6:50	8	9	9	28.67	3.4	3.3	25
5/7/2019 6:50	8	9	9	28.67	3.4	3.3	25
5/7/2019 7:00	8	9	9	29.5	4.9	3.9	25
5/7/2019 7:10	8	9	9	30.54	5	3.9	24.8
5/7/2019 7:20	9	9	9	31.67	5	3.8	18.6
5/7/2019 7:30	8	9	9	31.3	1	0.8	0.6
5/7/2019 7:40	8	9	9	29.47	1.1	0.8	24.9
5/7/2019 7:50	9	9	9	29.04	4.9	3.9	25.1
5/7/2019 8:00	8	9	9	29.83	4.9	3.9	25
5/7/2019 8:10	8	9	9	30.51	4.8	3.8	24.9
5/7/2019 8:20	9	9	9	31.09	5	4.1	24.5
5/7/2019 8:30	8	9	9	31.54	4.8	4	23.2
5/7/2019 8:40	8	9	9	32	5.1	3.9	0.6
5/7/2019 8:50	8	9	9	31.67	1	0.8	0.6
5/7/2019 9:00	9	9	9	31.02	1	0.9	0.6
5/7/2019 9:10	8	9	9	30.17	0.9	0.8	3.2
5/7/2019 9:20	9	9	9	28.8	3.6	3.4	25.1
5/7/2019 9:30	8	9	9	29.38	4.9	3.8	25.1
5/7/2019 9:40	8	9	9	30.14	4.8	3.9	25
5/7/2019 9:50	9	9	9	30.75	4.9	4	24.7
5/7/2019 10:00	8	9	9	31.3	4.8	3.9	24
5/7/2019 10:10	8	9	9	31.97	4.9	3.9	0.6
5/7/2019 10:20	8	9	9	31.21	1	0.8	0.6
5/7/2019 10:30	8	9	9	30.17	0.9	0.9	3.5
5/7/2019 10:40	9	9	9	29.07	3.3	3.1	25.1
5/7/2019 10:50	8	9	9	29.16	5	3.8	25.1
5/7/2019 11:00	9	9	9	29.65	5	3.9	25.1
5/7/2019 11:10	8	9	9	30.08	4.9	3.9	25
5/7/2019 11:20	8	9	9	30.57	4.8	4	24.8
5/7/2019 11:30	8	9	9	31.45	4.8	3.8	23.7
5/7/2019 11:40	9	9	9	32.03	1.1	0.9	0.6
5/7/2019 11:50	8	9	9	30.78	0.9	0.9	0.5
5/7/2019 12:00	8	9	9	29.74	1.1	0.9	25
5/7/2019 12:10	9	9	9	29.38	3.1	2.9	25.2
5/7/2019 12:20	9	9	9	28.98	4.9	3.9	25.2
5/7/2019 12:30	8	9	9	29.32	4.9	4	25.1
5/7/2019 12:40	9	9	9	29.8	4.8	3.8	25
5/7/2019 12:50	8	9	9	30.41	5	4	24.9
5/7/2019 13:00	8	9	9	31.12	4.8	3.9	24.5
5/7/2019 13:10	8	9	9	31.67	4.9	3.9	21.4
5/7/2019 13:20	9	9	9	31.94	1	0.9	0.6
5/7/2019 13:30	8	9	9	31.18	0.9	0.8	0.5
5/7/2019 13:40	8	9	9	30.17	1	0.8	3.6
5/7/2019 13:50	9	9	9	28.95	3.5	3.3	25.1
5/7/2019 14:00	9	9	9	29.41	4.9	3.9	25.1
5/7/2019 14:10	8	9	9	29.89	4.6	4	25
5/7/2019 14:20	9	9	9	30.47	4.9	3.9	24.8

5/7/2019 14:30	8	9	9	31.02	5	4	24.6
5/7/2019 14:40	8	9	9	31.54	4.8	3.8	23.3
5/7/2019 14:50	8	9	9	32.15	2	1.5	0.6
5/7/2019 15:00	8	9	9	31.12	1	0.8	0.5
5/7/2019 15:10	8	9	9	30.05	0.9	0.8	24.8
5/7/2019 15:20	9	9	9	29.04	3.5	3.3	25.1
5/7/2019 15:30	9	9	9	29.22	4.9	3.9	25.2
5/7/2019 15:40	8	9	9	29.74	5.2	3.9	25
5/7/2019 15:50	8	9	9	30.26	4.9	3.9	24.9
5/7/2019 16:00	9	9	9	30.75	5.1	3.9	24.7
5/7/2019 16:10	9	9	9	31.27	5	3.9	24.3
5/7/2019 16:20	9	9	9	31.79	4.9	4.1	0.6
5/7/2019 16:30	8	9	9	31.63	1	0.8	0.5
5/7/2019 16:40	8	9	9	30.72	0.9	0.8	0.5
5/7/2019 16:50	8	9	9	29.96	1.3	0.8	24.9
5/7/2019 17:00	8	9	9	29.32	3.1	2.8	25.1
5/7/2019 17:10	8	9	9	29.1	4.8	3.9	25.1
5/7/2019 17:20	9	9	9	29.38	4.8	3.9	25
5/7/2019 17:30	8	9	9	29.86	4.8	3.9	25
5/7/2019 17:40	8	9	9	30.63	5	4	24.8
5/7/2019 17:50	9	9	9	31.27	4.9	4	24.2
5/7/2019 18:00	9	9	9	31.82	4.8	3.9	0.6
5/7/2019 18:10	9	9	9	31.6	0.9	0.8	0.5
5/7/2019 18:20	9	9	9	30.57	0.9	0.8	0.5
5/7/2019 18:30	8	9	9	29.53	1.6	1.2	25
5/7/2019 18:40	8	9	9	28.98	4.9	3.9	25.1
5/7/2019 18:50	8	9	9	29.59	5	3.9	25.1
5/7/2019 19:00	9	9	9	30.05	4.9	4	25
5/7/2019 19:10	8	9	9	30.35	4.9	3.8	24.8
5/7/2019 19:20	8	9	9	30.84	4.8	4	24.7
5/7/2019 19:30	9	9	9	31.33	4.9	3.9	24
5/7/2019 19:40	9	9	9	32.03	5.1	4	0.6
5/7/2019 19:50	9	9	9	31.45	1	0.8	0.5
5/7/2019 20:00	9	9	9	30.84	1	0.9	0.5
5/7/2019 20:10	8	9	9	30.41	0.9	0.8	2.6
5/7/2019 20:20	9	9	9	29.68	1	0.9	25
5/7/2019 20:30	8	9	9	28.86	4.9	3.9	25.1
5/7/2019 20:40	9	9	9	29.44	4.9	3.9	25.1
5/7/2019 20:50	9	9	9	30.11	5.2	3.9	25
5/7/2019 21:00	8	9	9	30.84	4.9	3.9	24.7
5/7/2019 21:10	8	9	9	31.18	5.1	3.9	24.5
5/7/2019 21:20	8	9	9	31.36	5	3.9	24.2
5/7/2019 21:30	8	9	9	31.63	4.9	3.9	23.2
5/7/2019 21:40	8	9	9	31.94	4.9	3.9	0.6
5/7/2019 21:50	8	9	9	31.05	0.9	0.8	0.5
5/7/2019 22:00	8	9	9	29.71	1.2	0.7	24.9
5/7/2019 22:10	8	9	9	28.77	4.8	3.9	25.2

5/7/2019 22:20	8	9	9	29.41	4.9	3.9	25.1
5/7/2019 22:30	8	9	9	29.83	4.8	3.9	25
5/7/2019 22:40	8	9	9	30.2	4.9	4.1	24.9
5/7/2019 22:50	8	9	9	30.87	4.9	3.9	24.7
5/7/2019 23:00	8	9	9	31.3	5	3.8	24.1
5/7/2019 23:10	8	9	9	31.79	5	3.9	0.6
5/7/2019 23:20	8	9	9	31.7	0.9	0.8	0.6
5/7/2019 23:30	8	9	9	30.69	1	0.8	0.5
5/7/2019 23:40	8	9	9	29.77	1.1	0.9	24.9
5/7/2019 23:50	8	9	9	28.8	4.9	3.8	25.1
5/8/2019 0:00	8	9	9	29.41	4.7	3.9	25.1
5/8/2019 0:10	8	9	9	30.17	4.8	3.9	25
5/8/2019 0:20	8	9	9	30.9	4.9	3.9	24.6
5/8/2019 0:30	8	9	9	31.67	5	4	22.8
5/8/2019 0:40	8	9	9	31.82	1	0.9	0.6
5/8/2019 0:50	9	9	9	30.66	0.9	0.8	0.6
5/8/2019 1:00	8	9	9	29.41	1.5	1.3	25
5/8/2019 1:10	8	9	9	28.98	4.8	3.8	25.1
5/8/2019 1:20	8	9	9	29.8	4.9	3.9	25
5/8/2019 1:30	8	9	9	30.41	4.9	3.9	24.9
5/8/2019 1:40	8	9	9	30.96	5	4	24.6
5/8/2019 1:50	9	9	9	31.48	4.8	3.8	23.7
5/8/2019 2:00	8	9	9	32.06	5.1	3.9	0.6
5/8/2019 2:10	9	9	9	31.33	1	0.9	0.5
5/8/2019 2:20	8	9	9	29.83	1.1	0.8	24.9
5/8/2019 2:30	8	9	9	28.8	4.8	3.9	25.1
5/8/2019 2:40	8	9	9	29.56	4.9	3.9	25
5/8/2019 2:50	8	9	9	30.35	4.9	3.8	24.8
5/8/2019 3:00	8	9	9	31.12	5	4	24.5
5/8/2019 3:10	8	9	9	31.67	4.7	3.9	16.7
5/8/2019 3:20	8	9	9	32.06	5.2	4.2	0.6
5/8/2019 3:30	8	9	9	31.48	0.9	0.8	0.5
5/8/2019 3:40	8	9	9	30.81	0.9	0.9	0.5
5/8/2019 3:50	8	9	9	29.83	1.2	0.9	25
5/8/2019 4:00	8	9	9	28.83	4.9	3.9	25.2
5/8/2019 4:10	8	9	9	29.47	4.9	3.9	25.1
5/8/2019 4:20	9	9	9	30.17	5	4	24.9
5/8/2019 4:30	8	9	9	30.57	4.8	3.9	24.8
5/8/2019 4:40	8	9	9	31.15	4.6	4	24.4
5/8/2019 4:50	8	9	9	31.7	4.9	3.9	0.7
5/8/2019 5:00	9	9	9	31.54	0.9	0.8	0.6
5/8/2019 5:10	8	9	9	30.44	0.9	0.9	0.6
5/8/2019 5:20	8	9	9	29.13	2.9	2.5	25.1
5/8/2019 5:30	8	9	9	29.07	5.1	3.9	25.1
5/8/2019 5:40	8	9	9	29.74	4.8	3.9	25
5/8/2019 5:50	8	9	9	30.41	4.7	3.9	24.8
5/8/2019 6:00	8	9	9	31.27	5.1	3.9	24.1

5/8/2019 6:10	8	9	9	31.85	4.8	4	0.6
5/8/2019 6:20	8	9	9	31.6	1	0.8	0.6
5/8/2019 6:30	8	9	9	30.72	1	0.8	0.5
5/8/2019 6:40	8	9	9	29.89	1.3	0.9	25
5/8/2019 6:50	8	9	9	28.77	4.9	3.9	25.2
5/8/2019 7:00	8	9	9	29.5	4.8	3.9	25
5/8/2019 7:10	8	9	9	30.11	4.9	4	25
5/8/2019 7:20	8	9	9	30.87	4.9	3.8	24.7
5/8/2019 7:30	8	9	9	31.33	4.8	3.9	24.2
5/8/2019 7:40	8	9	9	32.06	5	3.9	0.6
5/8/2019 7:50	8	9	9	31.18	1	0.9	0.5
5/8/2019 8:00	8	9	9	29.53	1.1	0.9	24.9
5/8/2019 8:10	8	9	9	28.89	4.6	3.9	25.1
5/8/2019 8:20	8	9	9	29.8	4.8	3.9	25
5/8/2019 8:30	8	9	9	30.9	4.9	4	24.7
5/8/2019 8:40	8	9	9	31.7	4.8	3.9	0.7
5/8/2019 8:50	8	9	9	31.36	1	0.9	0.6
5/8/2019 9:00	8	9	9	29.83	0.9	0.8	24.9
5/8/2019 9:10	8	9	9	28.83	4.7	3.9	25.2
5/8/2019 9:20	8	9	9	29.47	4.7	3.9	25.1
5/8/2019 9:30	8	9	9	30.08	4.8	3.8	25.1
5/8/2019 9:40	8	9	9	30.54	4.8	3.9	24.9
5/8/2019 9:50	8	9	9	31.12	4.8	3.9	24.5
5/8/2019 10:00	8	9	9	31.6	5	3.9	22.5
5/8/2019 10:10	8	9	9	32.09	5.1	4	0.5
5/8/2019 10:20	8	9	9	31.12	1	0.9	0.6
5/8/2019 10:30	8	9	9	29.99	1	0.8	24.9
5/8/2019 10:40	8	9	9	28.77	5	4	25.2
5/8/2019 10:50	8	9	9	29.41	4.9	3.9	25
5/8/2019 11:00	8	9	9	30.2	5.1	4	24.9
5/8/2019 11:10	8	9	9	30.96	5	4	24.6
5/8/2019 11:20	8	9	9	31.45	4.8	3.9	23.3
5/8/2019 11:30	8	9	9	32	4.8	4	0.5
5/8/2019 11:40	8	9	9	31.45	1	0.8	0.5
5/8/2019 11:50	8	9	9	29.86	0.9	0.8	24.8
5/8/2019 12:00	8	9	9	28.77	5	3.9	25.1
5/8/2019 12:10	8	9	9	29.47	4.9	3.8	24.9
5/8/2019 12:20	8	9	9	30.35	4.8	3.9	24.9
5/8/2019 12:30	9	9	9	31.12	5	3.9	24.3
5/8/2019 12:40	8	9	9	31.79	5	4	0.6
5/8/2019 12:50	8	9	9	31.67	1	0.8	0.5
5/8/2019 13:00	8	9	9	30.84	1	0.8	0.6
5/8/2019 13:10	8	9	9	29.8	1.2	0.7	24.9
5/8/2019 13:20	8	9	9	28.74	4.9	3.8	25.1
5/8/2019 13:30	9	9	9	29.32	4.7	3.9	25.1
5/8/2019 13:40	8	9	9	30.08	5	3.9	25
5/8/2019 13:50	8	9	9	30.54	4.9	3.9	24.8

5/8/2019 14:00	8	9	9	31.05	5	3.9	24.6
5/8/2019 14:10	8	9	9	31.48	5.1	3.9	23.5
5/8/2019 14:20	8	9	9	32.12	5.1	4.2	0.6
5/8/2019 14:30	8	9	9	30.87	0.9	0.8	0.5
5/8/2019 14:40	8	9	9	29.35	1.6	1.4	25
5/8/2019 14:50	8	9	9	29.04	4.9	3.8	25.1
5/8/2019 15:00	8	9	9	29.71	4.9	3.9	25
5/8/2019 15:10	8	9	9	30.38	4.9	3.9	24.9
5/8/2019 15:20	9	9	9	30.96	4.9	3.9	24.6
5/8/2019 15:30	8	9	9	31.67	4.8	3.9	0.7
5/8/2019 15:40	8	9	9	31.63	1	0.8	0.5
5/8/2019 15:50	8	9	9	30.26	0.9	0.8	0.5
5/8/2019 16:00	8	9	9	29.16	3	2.7	25.1
5/8/2019 16:10	8	9	9	29.1	4.9	3.9	25.1
5/8/2019 16:20	8	9	9	29.56	4.9	3.9	25
5/8/2019 16:30	8	9	9	29.96	4.9	3.9	25.1
5/8/2019 16:40	8	9	9	30.26	4.9	3.9	25
5/8/2019 16:50	8	9	9	30.54	5	3.9	24.8
5/8/2019 17:00	8	9	9	30.93	4.9	3.9	24.6
5/8/2019 17:10	9	9	9	31.57	5	3.8	23.5
5/8/2019 17:20	8	9	9	31.88	4.8	3.9	0.6
5/8/2019 17:30	8	9	9	31.79	1.1	0.8	0.5
5/8/2019 17:40	8	9	9	30.78	0.9	0.8	0.6
5/8/2019 17:50	8	9	9	29.5	1.3	1.1	25
5/8/2019 18:00	8	9	9	28.98	5	3.9	25.1
5/8/2019 18:10	8	9	9	29.71	4.9	4	25
5/8/2019 18:20	8	9	9	30.51	5	4	24.8
5/8/2019 18:30	8	9	9	31.09	4.9	3.8	24.4
5/8/2019 18:40	8	9	9	31.7	4.9	3.9	0.7
5/8/2019 18:50	8	9	9	31.97	0.9	0.8	0.5
5/8/2019 19:00	8	9	9	30.72	1	0.8	0.5
5/8/2019 19:10	8	9	9	29.38	1.5	1.2	25
5/8/2019 19:20	8	9	9	29.04	5	4	25.1
5/8/2019 19:30	8	9	9	29.65	4.9	3.9	25
5/8/2019 19:40	8	9	9	30.38	4.8	3.8	24.9
5/8/2019 19:50	8	9	9	30.9	5	3.9	24.6
5/8/2019 20:00	8	9	9	31.6	4.8	4	22.9
5/8/2019 20:10	8	9	9	31.67	1	0.8	0.6
5/8/2019 20:20	8	9	9	30.17	0.9	0.8	0.7
5/8/2019 20:30	8	9	9	28.74	3.5	3.3	25.1
5/8/2019 20:40	8	9	9	29.35	4.8	3.9	25.2
5/8/2019 20:50	9	9	9	30.05	4.9	3.9	24.9
5/8/2019 21:00	8	9	9	30.84	5	4	24.7
5/8/2019 21:10	8	9	9	31.63	4.9	4	0.7
5/8/2019 21:20	8	9	9	31.48	1	0.8	0.5
5/8/2019 21:30	8	9	9	30.02	0.9	0.8	2.5
5/8/2019 21:40	8	9	9	28.8	3.6	3.3	25.2

5/8/2019 21:50	8	9	9	29.35	4.7	4	25.1
5/8/2019 22:00	8	9	9	29.96	4.8	3.8	25
5/8/2019 22:10	8	9	9	30.72	4.9	3.9	24.7
5/8/2019 22:20	8	9	9	31.33	5.1	3.9	24.1
5/8/2019 22:30	8	9	9	31.94	4.9	3.9	0.6
5/8/2019 22:40	8	9	9	31.63	1	0.9	0.6
5/8/2019 22:50	8	9	9	30.75	1	0.8	0.6
5/8/2019 23:00	8	9	9	29.68	1	0.8	25
5/8/2019 23:10	8	9	9	28.74	4.9	3.9	25.2
5/8/2019 23:20	8	9	9	29.62	4.9	3.9	25
5/8/2019 23:30	8	9	9	30.26	5.2	3.9	25
5/8/2019 23:40	8	9	9	30.75	4.8	3.9	24.7
5/8/2019 23:50	8	9	9	31.27	5	4	24.3
5/9/2019 0:00	8	9	9	32.09	4.9	3.8	0.6
5/9/2019 0:10	8	9	9	30.84	0.9	0.9	0.5
5/9/2019 0:20	8	9	9	29.38	1.6	1.2	25
5/9/2019 0:30	8	9	9	29.01	4.5	3.9	25.2
5/9/2019 0:40	8	9	9	29.68	5.2	3.8	25.1
5/9/2019 0:50	8	9	9	30.11	5	3.9	25
5/9/2019 1:00	8	9	9	30.41	5.1	3.9	24.9
5/9/2019 1:10	8	9	9	30.87	4.8	3.9	24.7
5/9/2019 1:20	8	9	9	31.27	4.9	3.9	24
5/9/2019 1:30	8	9	9	32	5	3.9	0.6
5/9/2019 1:40	8	9	9	30.78	1	0.8	0.6
5/9/2019 1:50	8	9	9	29.22	1.9	1.7	25
5/9/2019 2:00	8	9	9	29.07	5	4	25.1
5/9/2019 2:10	8	9	9	29.74	5	4	25.1
5/9/2019 2:20	8	9	9	30.35	4.9	3.9	24.9
5/9/2019 2:30	8	9	9	30.87	4.9	3.9	24.7
5/9/2019 2:40	8	9	9	31.39	4.9	3.9	23.8
5/9/2019 2:50	8	9	9	31.94	4.9	3.9	0.6
5/9/2019 3:00	8	9	9	31.45	0.9	0.9	0.6
5/9/2019 3:10	8	9	9	30.84	1	0.9	0.6
5/9/2019 3:20	8	9	9	29.68	1.3	0.9	24.9
5/9/2019 3:30	8	9	9	28.83	5	3.9	25.2
5/9/2019 3:40	8	9	9	29.47	4.8	3.9	25.1
5/9/2019 3:50	8	9	9	30.08	5.1	3.9	24.9
5/9/2019 4:00	8	9	9	30.84	4.9	3.9	24.6
5/9/2019 4:10	8	9	9	31.76	5	3.9	5.1
5/9/2019 4:20	8	9	9	31.7	0.9	0.9	0.6
5/9/2019 4:30	8	9	9	30.14	1	0.9	1.5
5/9/2019 4:40	8	9	9	28.67	5	3.9	25.1
5/9/2019 4:50	8	9	9	29.5	5	3.8	25
5/9/2019 5:00	8	9	9	30.47	5	3.9	24.8
5/9/2019 5:10	8	9	9	31.36	4.9	3.9	23.9
5/9/2019 5:20	8	9	9	31.97	1.1	0.9	0.6
5/9/2019 5:30	8	9	9	30.69	0.9	0.9	0.5

5/9/2019 5:40	8	9	9	29.07	3	2.7	25.1
5/9/2019 5:50	8	9	9	29.19	5.1	3.9	25.1
5/9/2019 6:00	8	9	9	29.99	4.9	3.9	24.9
5/9/2019 6:10	8	9	9	30.9	4.8	3.9	24.6
5/9/2019 6:20	8	9	9	31.7	4.9	3.9	0.7
5/9/2019 6:30	8	9	9	31.45	1.1	0.9	0.6
5/9/2019 6:40	8	9	9	30.2	0.9	0.8	2.7
5/9/2019 6:50	8	9	9	28.8	3.6	3.4	25.1
5/9/2019 7:00	8	9	9	29.32	4.9	3.9	25.1
5/9/2019 7:10	8	9	9	29.96	5	3.9	25
5/9/2019 7:20	8	9	9	30.78	5	3.9	24.7
5/9/2019 7:30	8	9	9	31.57	4.9	3.9	23.4
5/9/2019 7:40	8	9	9	32.12	2.8	2.2	0.6
5/9/2019 7:50	8	9	9	30.81	1.1	0.9	0.6
5/9/2019 8:00	8	9	9	29.47	1.2	0.9	25
5/9/2019 8:10	8	9	9	28.92	4.9	3.8	25.1
5/9/2019 8:20	8	9	9	29.86	4.9	3.9	25
5/9/2019 8:30	8	9	9	30.96	5	3.8	24.5
5/9/2019 8:40	8	9	9	31.94	4.9	3.9	0.6
5/9/2019 8:50	8	9	9	30.29	0.9	0.9	0.5
5/9/2019 9:00	8	9	9	28.52	4.9	3.9	25
5/9/2019 9:10	8	9	9	29.8	5	3.9	24.9
5/9/2019 9:20	8	9	9	30.99	4.8	4	24.5
5/9/2019 9:30	8	9	9	31.63	1	0.9	0.6
5/9/2019 9:40	8	9	9	28.86	1.8	1.4	24.9
5/9/2019 9:50	8	9	9	29.22	5.1	4.1	25
5/9/2019 10:00	8	9	9	31.15	5	4	24.1
5/9/2019 10:10	8	9	9	29.35	0.9	0.9	0.5
5/9/2019 10:20	8	9	9	29.07	5	3.9	25
5/9/2019 10:30	8	9	9	31.67	4.9	3.9	9.4
5/9/2019 10:40	8	9	9	28.77	1	0.9	24.7
5/9/2019 10:50	8	9	9	29.35	4.8	3.9	25
5/9/2019 11:00	8	9	9	31.85	4.9	3.9	0.7
5/9/2019 11:10	8	9	9	28.28	2	1.6	24.9
5/9/2019 11:20	8	9	9	29.62	4.8	3.9	25
5/9/2019 11:30	8	9	9	31.6	5	4	0.9
5/9/2019 11:40	8	9	9	28.89	0.9	0.8	24.7
5/9/2019 11:50	8	9	9	29.19	5	3.9	24.9
5/9/2019 12:00	8	9	9	31.85	1	0.9	0.6
5/9/2019 12:10	8	9	9	27.61	5	3.9	24.9
5/9/2019 12:20	8	9	9	30.72	5	4	24.6
5/9/2019 12:30	8	9	9	30.17	0.9	0.9	0.6
5/9/2019 12:40	8	9	9	28.67	4.9	3.9	24.9
5/9/2019 12:50	8	9	9	31.48	4.9	3.9	22.9
5/9/2019 13:00	8	9	9	27.91	1.9	1.6	24.9
5/9/2019 13:10	8	9	9	29.83	4.9	3.9	24.9
5/9/2019 13:20	8	9	9	31.36	1	0.8	0.6

5/9/2019 13:30	8	9	9	27.94	4.9	3.9	24.9
5/9/2019 13:40	8	9	9	29.89	5	3.9	24.9
5/9/2019 13:50	8	9	9	31.97	4.9	3.9	0.6
5/9/2019 14:00	8	9	9	27.61	3.4	3.4	24.9
5/9/2019 14:10	8	9	9	30.02	4.9	3.9	24.9
5/9/2019 14:20	8	9	9	30.14	1	0.9	0.5
5/9/2019 14:30	8	9	9	28.61	4.7	3.9	25
5/9/2019 14:40	8	9	9	31.05	5	3.9	24.3
5/9/2019 14:50	8	9	9	30.69	1	0.8	0.5
5/9/2019 15:00	8	9	9	28.25	4.8	3.9	25.1
5/9/2019 15:10	8	9	9	29.65	4.9	3.8	25
5/9/2019 15:20	8	9	9	31.15	4.9	3.9	24.2
5/9/2019 15:30	8	9	9	30.2	1.1	0.9	0.6
5/9/2019 15:40	8	9	9	28.58	4.9	3.9	24.9
5/9/2019 15:50	9	9	9	31.7	4.8	4	0.7
5/9/2019 16:00	8	9	9	27.15	4.9	3.9	25
5/9/2019 16:10	8	9	9	30.23	5.1	4	24.9
5/9/2019 16:20	8	9	9	32.06	1.1	0.8	0.5
5/9/2019 16:30	8	9	9	28.28	3.2	2.9	24.9
5/9/2019 16:40	8	9	9	29.62	4.9	3.8	24.9
5/9/2019 16:50	8	9	9	31.42	0.9	0.8	0.6
5/9/2019 17:00	8	9	9	27.94	4.8	3.7	24.9
5/9/2019 17:10	8	9	9	31.57	5	3.9	22.4
5/9/2019 17:20	8	9	9	29.32	0.9	0.8	2.7
5/9/2019 17:30	8	9	9	29.13	4.9	3.8	25
5/9/2019 17:40	8	9	9	31.33	5	3.9	23.7
5/9/2019 17:50	8	9	9	28.77	0.9	0.9	3.2
5/9/2019 18:00	8	9	9	29.44	4.7	4	24.8
5/9/2019 18:10	8	9	9	31.09	1.2	0.9	0.6
5/9/2019 18:20	8	9	9	28	4.9	3.8	25
5/9/2019 18:30	8	9	9	30.78	4.9	4	24.6
5/9/2019 18:40	8	9	9	29.25	0.9	0.8	0.5
5/9/2019 18:50	8	9	9	29.1	4.9	3.9	24.9
5/9/2019 19:00	8	9	9	32.06	5	3.9	0.6
5/9/2019 19:10	8	9	9	27.94	3.4	3.2	25
5/9/2019 19:20	8	9	9	29.8	4.9	3.9	25
5/9/2019 19:30	8	9	9	31.67	1	0.9	0.6
5/9/2019 19:40	8	9	9	27.88	5.1	3.9	25
5/9/2019 19:50	8	9	9	30.72	4.7	4	24.6
5/9/2019 20:00	8	9	9	29.25	0.9	0.9	0.6
5/9/2019 20:10	8	9	9	29.1	4.9	3.9	24.9
5/9/2019 20:20	8	9	9	31.76	1	0.8	0.6
5/9/2019 20:30	8	9	9	27.79	4.9	4	25
5/9/2019 20:40	8	9	9	30.54	5	3.8	24.7
5/9/2019 20:50	8	9	9	30.66	0.9	0.9	0.6
5/9/2019 21:00	8	9	9	28.28	4.9	3.9	25
5/9/2019 21:10	8	9	9	31.39	5.1	3.9	23.3

5/9/2019 21:20	8	9	9	28.06	1.1	0.9	24.9
5/9/2019 21:30	8	9	9	29.62	5	4	25
5/9/2019 21:40	8	9	9	31.97	5	3.9	0.6
5/9/2019 21:50	8	9	9	27.45	5	3.9	24.9
5/9/2019 22:00	8	9	9	30.41	5.1	4	24.7
5/9/2019 22:10	8	9	9	29.38	0.9	0.8	0.6
5/9/2019 22:20	8	9	9	28.98	5	3.9	25
5/9/2019 22:30	8	9	9	31.33	4.9	4	23.9
5/9/2019 22:40	8	9	9	28.49	0.9	0.9	24.7
5/9/2019 22:50	8	9	9	29.53	4.9	4	24.9
5/9/2019 23:00	8	9	9	30.75	1.1	0.8	0.6
5/9/2019 23:10	8	9	9	28.34	4.9	3.9	25
5/9/2019 23:20	8	9	9	30.23	5.2	3.9	24.9
5/9/2019 23:30	8	9	9	31.88	5	4	0.6
5/9/2019 23:40	8	9	9	27.91	3.1	2.7	24.9
5/9/2019 23:50	8	9	9	29.8	5	3.9	24.9
5/10/2019 0:00	8	9	9	30.84	1	0.9	0.5
5/10/2019 0:10	8	9	9	28.19	5	3.8	25
5/10/2019 0:20	8	9	9	31.39	4.8	3.9	23.2
5/10/2019 0:30	8	9	9	28.43	1.1	0.9	24.9
5/10/2019 0:40	8	9	9	29.53	4.8	3.9	24.9
5/10/2019 0:50	8	9	9	31.63	0.9	0.9	0.5
5/10/2019 1:00	8	9	9	27.91	5	3.9	24.9
5/10/2019 1:10	8	9	9	30.9	4.8	3.9	24.5
5/10/2019 1:20	8	9	9	29.38	0.9	0.8	0.5
5/10/2019 1:30	8	9	9	29.1	4.9	3.9	25
5/10/2019 1:40	8	9	9	31.21	4.9	3.9	24.1
5/10/2019 1:50	8	9	9	29.62	1	0.8	0.5
5/10/2019 2:00	8	9	9	28.92	5.1	3.9	24.9
5/10/2019 2:10	8	9	9	32.12	5.1	4.2	0.6
5/10/2019 2:20	8	9	9	27.58	4.8	3.9	25
5/10/2019 2:30	8	9	9	30.66	5	3.9	24.6
5/10/2019 2:40	8	9	9	29.19	0.9	0.8	0.5
5/10/2019 2:50	8	9	9	29.1	4.9	3.9	24.9
5/10/2019 3:00	8	9	9	31.97	4.9	4	0.6
5/10/2019 3:10	8	9	9	27.91	3.1	3	25
5/10/2019 3:20	8	9	9	29.68	5	4.1	24.9
5/10/2019 3:30	8	9	9	30.81	1.1	0.8	0.6
5/10/2019 3:40	8	9	9	28.37	5	4	24.9
5/10/2019 3:50	8	9	9	31.54	4.9	3.9	22.4
5/10/2019 4:00	8	9	9	28.89	1	0.9	2.1
5/10/2019 4:10	8	9	9	29.32	4.9	4	25
5/10/2019 4:20	8	9	9	31.67	5.1	3.9	0.7
5/10/2019 4:30	8	9	9	29.32	0.9	0.8	2.6
5/10/2019 4:40	8	9	9	29.04	4.9	3.9	25
5/10/2019 4:50	8	9	9	31.12	5	4	24.1
5/10/2019 5:00	8	9	9	27.82	1.2	0.9	24.9

5/10/2019 5:10	8	9	9	29.96	4.9	3.9	24.8
5/10/2019 5:20	8	9	9	29.96	1	0.8	0.6
5/10/2019 5:30	8	9	9	28.77	5	3.8	25
5/10/2019 5:40	8	9	9	30.44	4.9	3.9	24.7
5/10/2019 5:50	8	9	9	31.67	1	0.9	0.5
5/10/2019 6:00	8	9	9	27.73	5	4	24.9
5/10/2019 6:10	8	9	9	30.35	4.9	3.9	24.7
5/10/2019 6:20	8	9	9	29.1	0.9	0.9	0.5
5/10/2019 6:30	8	9	9	29.1	4.8	4	24.9
5/10/2019 6:40	8	9	9	32.12	2.7	2.2	0.6
5/10/2019 6:50	8	9	9	29.25	1.1	0.9	24.7
5/10/2019 7:00	8	9	9	29.07	5.1	4	25.1
5/10/2019 7:10	8	9	9	30.51	5	3.9	24.7
5/10/2019 7:20	8	9	9	31.82	0.9	0.9	0.6
5/10/2019 7:30	8	9	9	27.79	3.7	3.4	24.9
5/10/2019 7:40	8	9	9	29.83	4.9	4	24.8
5/10/2019 7:50	8	9	9	29.71	0.9	0.9	0.5
5/10/2019 8:00	8	9	9	28.86	4.9	3.9	24.9
5/10/2019 8:10	8	9	9	31.82	1	0.9	0.6
5/10/2019 8:20	8	9	9	27.76	5	3.9	24.9
5/10/2019 8:30	8	9	9	30.05	5	3.9	24.9
5/10/2019 8:40	8	9	9	31.63	5	3.9	1.4
5/10/2019 8:50	8	9	9	29.41	1.1	0.9	0.6
5/10/2019 9:00	8	9	9	28.98	5	3.9	25
5/10/2019 9:10	8	9	9	30.99	4.9	3.9	24.3
5/10/2019 9:20	8	9	9	28.52	1	0.9	2.6
5/10/2019 9:30	8	9	9	29.53	4.8	3.9	24.7
5/10/2019 9:40	8	9	9	29.44	0.9	0.9	0.6
5/10/2019 9:50	8	9	9	28.98	5	3.9	25
5/10/2019 10:00	8	9	9	31.02	5.1	4	24.4
5/10/2019 10:10	8	9	9	30.66	0.9	0.9	0.6
5/10/2019 10:20	8	9	9	28.34	4.9	3.9	24.9
5/10/2019 10:30	8	9	9	31.02	4.9	4	24.2
5/10/2019 10:40	8	9	9	27.42	2.1	1.7	24.9
5/10/2019 10:50	8	9	9	30.11	4.9	3.9	24.8
5/10/2019 11:00	8	9	9	30.38	1	0.9	0.5
5/10/2019 11:10	8	9	9	28.49	4.9	3.9	25
5/10/2019 11:20	8	9	9	29.99	5.4	3.8	25
5/10/2019 11:30	8	9	9	31.21	4.9	3.9	24.1
5/10/2019 11:40	8	9	9	31.63	1.1	0.8	0.5
5/10/2019 11:50	8	9	9	29.8	0.9	0.9	3.5
5/10/2019 12:00	8	9	9	28.86	5	3.9	25.1
5/10/2019 12:10	8	9	9	29.83	4.8	3.9	25
5/10/2019 12:20	8	9	9	30.84	5.1	3.9	24.6
5/10/2019 12:30	8	9	9	31.63	5.1	4	0.7
5/10/2019 12:40	8	9	9	31.7	1	0.9	0.5
5/10/2019 12:50	8	9	9	30.38	1	0.9	0.5

5/10/2019 13:00	8	9	9	28.77	3.7	3.4	25.1
5/10/2019 13:10	8	9	9	29.41	4.9	3.9	25.1
5/10/2019 13:20	8	9	9	30.17	4.9	4	24.9
5/10/2019 13:30	8	9	9	31.02	5.1	3.9	24.5
5/10/2019 13:40	8	9	9	31.73	5	4	0.7
5/10/2019 13:50	8	9	9	31.7	1	0.9	0.5
5/10/2019 14:00	8	9	9	30.17	1	0.9	0.6
5/10/2019 14:10	8	9	9	28.58	5.1	3.9	25.1
5/10/2019 14:20	8	9	9	29.56	4.9	3.9	25
5/10/2019 14:30	8	9	9	30.51	4.9	3.8	24.8
5/10/2019 14:40	8	9	9	31.21	5.2	3.9	24.3
5/10/2019 14:50	8	9	9	32.09	4.9	4.1	0.6
5/10/2019 15:00	8	9	9	31.05	1.1	0.9	0.6
5/10/2019 15:10	8	9	9	29.47	1.1	0.9	24.9
5/10/2019 15:20	8	9	9	28.98	4.9	3.8	25.1
5/10/2019 15:30	8	9	9	29.89	4.9	3.9	24.9
5/10/2019 15:40	8	9	9	30.78	5	4	24.6
5/10/2019 15:50	8	9	9	31.48	4.8	4.1	23.7
5/10/2019 16:00	8	9	9	32.03	4.9	3.9	0.5
5/10/2019 16:10	8	9	9	31.45	0.9	0.9	0.5
5/10/2019 16:20	8	9	9	30.32	1	0.9	0.5
5/10/2019 16:30	8	9	9	28.92	3.6	3.2	25.2
5/10/2019 16:40	8	9	9	29.25	4.9	3.9	25.1
5/10/2019 16:50	8	9	9	30.11	5.1	4	24.9
5/10/2019 17:00	8	9	9	31.09	5.1	3.9	24.3
5/10/2019 17:10	8	9	9	31.94	4.9	4	0.6
5/10/2019 17:20	8	9	9	31.18	1	0.8	0.5
5/10/2019 17:30	8	9	9	30.14	0.9	0.8	2.5
5/10/2019 17:40	8	9	9	28.67	4.9	4	25.1
5/10/2019 17:50	8	9	9	29.35	5.1	3.9	25
5/10/2019 18:00	8	9	9	30.78	5	3.9	24.6
5/10/2019 18:10	8	9	9	30.99	1	0.8	0.5
5/10/2019 18:20	8	9	9	28.16	4.8	3.8	24.9
5/10/2019 18:30	8	9	9	31.33	5	3.9	23.6
5/10/2019 18:40	8	9	9	26.75	4.8	3.9	25
5/10/2019 18:50	8	9	9	30.63	4.9	3.9	24.7
5/10/2019 19:00	8	9	9	30.38	0.9	0.8	0.5
5/10/2019 19:10	8	9	9	28.46	4.9	3.9	24.9
5/10/2019 19:20	8	9	9	30.35	4.7	3.9	24.7
5/10/2019 19:30	8	9	9	32.03	1	0.9	0.5
5/10/2019 19:40	8	9	9	27.61	5	3.8	25
5/10/2019 19:50	8	9	9	30.05	4.8	4.1	24.8
5/10/2019 20:00	8	9	9	30.35	0.9	0.9	0.5
5/10/2019 20:10	8	9	9	28.52	5	3.8	24.9
5/10/2019 20:20	8	9	9	30.17	4.9	3.8	24.8
5/10/2019 20:30	8	9	9	31.39	5	3.9	23.7
5/10/2019 20:40	8	9	9	31.48	0.9	0.8	0.5

5/10/2019 20:50	8	9	9	29.89	0.9	0.9	3.4
5/10/2019 21:00	8	9	9	28.74	4.9	3.9	25.1
5/10/2019 21:10	8	9	9	29.96	5.1	3.8	24.9
5/10/2019 21:20	8	9	9	31.05	4.9	3.8	24.3
5/10/2019 21:30	8	9	9	31.48	1.1	0.9	0.5
5/10/2019 21:40	8	9	9	28	3.7	3.3	25
5/10/2019 21:50	8	9	9	29.74	5.2	3.8	24.9
5/10/2019 22:00	8	9	9	31.79	1	0.8	0.5
5/10/2019 22:10	8	9	9	27.73	4.9	3.9	25
5/10/2019 22:20	8	9	9	30.72	4.8	3.9	24.6
5/10/2019 22:30	8	9	9	30.9	1	0.9	0.5
5/10/2019 22:40	8	9	9	28.25	4.9	3.8	24.9
5/10/2019 22:50	8	9	9	30.75	5	3.9	24.6
5/10/2019 23:00	8	9	9	28.7	0.8	0.8	0.5
5/10/2019 23:10	8	9	9	29.47	4.9	4	24.9
5/10/2019 23:20	8	9	9	31.48	1	0.8	0.5
5/10/2019 23:30	8	9	9	27.91	5.1	3.9	25
5/10/2019 23:40	8	9	9	30.63	4.8	3.9	24.6
5/10/2019 23:50	8	9	9	29.44	0.9	0.8	0.5
5/11/2019 0:00	8	9	9	29.07	5	4	24.9
5/11/2019 0:10	8	9	9	32.09	2.3	1.8	0.5
5/11/2019 0:20	8	9	9	27.85	3.6	3.3	25
5/11/2019 0:30	8	9	9	29.86	4.9	3.9	25
5/11/2019 0:40	8	9	9	32	1.1	0.8	0.5
5/11/2019 0:50	8	9	9	27.64	5	3.8	24.9
5/11/2019 1:00	8	9	9	30.02	4.9	3.9	24.8
5/11/2019 1:10	8	9	9	30.41	1.1	0.9	0.6
5/11/2019 1:20	8	9	9	28.46	4.9	3.9	24.9
5/11/2019 1:30	8	9	9	31.82	5.1	3.9	0.6
5/11/2019 1:40	8	9	9	30.17	1	0.9	0.5
5/11/2019 1:50	8	9	9	28.7	4.8	3.8	25.1
5/11/2019 2:00	8	9	9	30.2	5	4	24.9
5/11/2019 2:10	8	9	9	32.06	5	3.9	0.6
5/11/2019 2:20	8	9	9	28.89	1.1	0.8	24.8
5/11/2019 2:30	8	9	9	29.35	4.8	4	24.9
5/11/2019 2:40	8	9	9	31.54	1.1	0.8	0.6
5/11/2019 2:50	8	9	9	27.94	4.8	3.9	24.9
5/11/2019 3:00	8	9	9	31.63	5.1	3.9	0.7
5/11/2019 3:10	8	9	9	27.58	3.4	3.1	25.1
5/11/2019 3:20	8	9	9	29.86	5	4	24.9
5/11/2019 3:30	8	9	9	31.54	0.9	0.8	0.5
5/11/2019 3:40	8	9	9	27.85	4.8	3.8	25
5/11/2019 3:50	8	9	9	30.69	4.8	4	24.6
5/11/2019 4:00	8	9	9	28.58	1	0.8	0.6
5/11/2019 4:10	8	9	9	29.56	5	3.9	24.8
5/11/2019 4:20	8	9	9	31.21	1.1	0.8	0.5
5/11/2019 4:30	8	9	9	28.03	4.9	4	25

5/11/2019 4:40	8	9	9	30.51	4.9	3.9	24.7
5/11/2019 4:50	8	9	9	30.26	1	0.9	0.6
5/11/2019 5:00	8	9	9	28.67	5	3.9	24.9
5/11/2019 5:10	8	9	9	31.6	4.8	3.9	18.3
5/11/2019 5:20	8	9	9	27.73	2.9	2.6	25
5/11/2019 5:30	8	9	9	29.99	4.9	4	24.9
5/11/2019 5:40	8	9	9	32.09	4.3	3.7	0.6
5/11/2019 5:50	8	9	9	28.95	1.1	0.9	24.7
5/11/2019 6:00	8	9	9	29.35	4.8	3.9	25
5/11/2019 6:10	8	9	9	32.12	5.1	4.1	0.6
5/11/2019 6:20	8	9	9	27.48	4.8	3.9	24.9
5/11/2019 6:30	8	9	9	31.33	4.9	3.9	23.5
5/11/2019 6:40	8	9	9	27.94	1.1	0.9	25
5/11/2019 6:50	8	9	9	29.8	5	3.8	25
5/11/2019 7:00	8	9	9	31.85	4.8	3.9	0.6
5/11/2019 7:10	8	9	9	29.68	0.9	0.8	0.5
5/11/2019 7:20	8	9	9	28.86	5	3.9	25.1
5/11/2019 7:30	8	9	9	30.66	5	3.9	24.7
5/11/2019 7:40	8	9	9	30.47	1	0.9	0.6
5/11/2019 7:50	8	9	9	28.4	5	3.9	24.8
5/11/2019 8:00	8	9	9	31.6	4.9	3.8	22.4
5/11/2019 8:10	8	9	9	27.36	3.4	3.3	25
5/11/2019 8:20	8	9	9	30.17	4.9	3.9	24.9
5/11/2019 8:30	8	9	9	31.33	1	0.8	0.5
5/11/2019 8:40	8	9	9	27.94	4.9	3.9	25
5/11/2019 8:50	8	9	9	30.05	5	4	24.9
5/11/2019 9:00	8	9	9	32.03	1	0.9	0.6
5/11/2019 9:10	8	9	9	27.58	4.8	3.9	25
5/11/2019 9:20	8	9	9	30.72	4.9	3.9	24.4
5/11/2019 9:30	8	9	9	27.48	1.2	0.9	24.9
5/11/2019 9:40	8	9	9	30.08	5.1	3.9	24.8
5/11/2019 9:50	8	9	9	30.57	1	0.9	0.5
5/11/2019 10:00	8	9	9	28.37	5.2	3.8	24.9
5/11/2019 10:10	8	9	9	30.54	4.9	3.8	24.6
5/11/2019 10:20	8	9	9	31.54	1.1	0.9	0.5
5/11/2019 10:30	8	9	9	27.91	3.8	3.4	25
5/11/2019 10:40	8	9	9	29.77	4.9	3.9	24.9
5/11/2019 10:50	8	9	9	32.09	5.1	4.2	0.6
5/11/2019 11:00	8	9	9	27.42	4.8	3.9	24.9
5/11/2019 11:10	8	9	9	30.51	4.8	3.9	24.6
5/11/2019 11:20	8	9	9	28.52	1	0.9	0.5
5/11/2019 11:30	8	9	9	29.5	4.9	3.8	24.8
5/11/2019 11:40	8	9	9	31.54	1.1	0.8	0.6
5/11/2019 11:50	8	9	9	27.76	4.9	4	25
5/11/2019 12:00	8	9	9	30.11	4.9	3.9	25
5/11/2019 12:10	8	9	9	31.76	5	3.9	0.6
5/11/2019 12:20	8	9	9	29.5	0.9	0.9	1

5/11/2019 12:30	8	9	9	28.98	4.9	3.9	25.1
5/11/2019 12:40	8	9	9	30.75	4.9	3.9	24.6
5/11/2019 12:50	8	9	9	29.99	0.9	0.9	0.5
5/11/2019 13:00	8	9	9	28.77	4.8	3.9	24.8
5/11/2019 13:10	8	9	9	32	5.1	3.9	0.6
5/11/2019 13:20	8	9	9	27.42	5	3.9	25
5/11/2019 13:30	8	9	9	30.17	4.9	3.9	24.9
5/11/2019 13:40	8	9	9	31.88	5	4	0.6
5/11/2019 13:50	8	9	9	30.23	0.9	0.8	0.5
5/11/2019 14:00	8	9	9	28.49	5	3.9	25.1
5/11/2019 14:10	8	9	9	30.02	5	3.9	25
5/11/2019 14:20	8	9	9	30.63	4.9	3.9	24.6
5/11/2019 14:30	8	9	9	31.76	5	4	0.7
5/11/2019 14:40	8	9	9	30.96	0.9	0.8	0.5
5/11/2019 14:50	8	9	9	29.38	1.1	0.9	25
5/11/2019 15:00	8	9	9	29.07	4.7	3.8	25.1
5/11/2019 15:10	8	9	9	29.99	4.9	3.9	24.9
5/11/2019 15:20	8	9	9	30.84	5	3.9	24.6
5/11/2019 15:30	8	9	9	31.57	5	3.9	23.1
5/11/2019 15:40	8	9	9	31.63	1.1	0.8	0.6
5/11/2019 15:50	8	9	9	29.86	1	0.8	3.6
5/11/2019 16:00	8	9	9	28.8	4.8	3.9	25.1
5/11/2019 16:10	8	9	9	29.89	5	3.9	24.9
5/11/2019 16:20	8	9	9	30.93	5	3.9	24.5
5/11/2019 16:30	8	9	9	31.82	4.8	3.9	0.6
5/11/2019 16:40	8	9	9	30.78	0.9	0.8	0.5
5/11/2019 16:50	8	9	9	28.28	4.9	3.8	25
5/11/2019 17:00	8	9	9	29.59	4.9	3.9	25
5/11/2019 17:10	8	9	9	30.75	5.1	3.9	24.6
5/11/2019 17:20	8	9	9	31.97	4.9	3.8	0.6
5/11/2019 17:30	8	9	9	30.72	1	0.8	0.5
5/11/2019 17:40	8	9	9	28.92	3.2	2.8	25.1
5/11/2019 17:50	8	9	9	29.22	4.9	3.9	25
5/11/2019 18:00	8	9	9	30.17	5.2	3.8	24.9
5/11/2019 18:10	8	9	9	31.18	5	4	24.2
5/11/2019 18:20	8	9	9	32.09	1.4	0.9	0.6
5/11/2019 18:30	8	9	9	30.66	1	0.8	0.5
5/11/2019 18:40	8	9	9	28.86	3.4	3.1	25.1
5/11/2019 18:50	8	9	9	29.32	5	3.9	25
5/11/2019 19:00	8	9	9	30.05	5	3.9	24.9
5/11/2019 19:10	8	9	9	31.02	4.8	3.9	24.5
5/11/2019 19:20	8	9	9	31.79	4.9	3.9	0.6
5/11/2019 19:30	8	9	9	30.51	0.8	0.9	0.6
5/11/2019 19:40	8	9	9	28.4	4.9	3.8	25.1
5/11/2019 19:50	8	9	9	29.68	4.9	3.9	25
5/11/2019 20:00	8	9	9	31.05	4.9	3.9	24.4
5/11/2019 20:10	8	9	9	30.2	0.9	0.9	0.6

5/11/2019 20:20	8	9	9	28.7	4.9	4	24.8
5/11/2019 20:30	8	9	9	31.67	5	3.9	0.7
5/11/2019 20:40	8	9	9	27.12	4.9	3.9	25
5/11/2019 20:50	8	9	9	30.66	4.9	4	24.6
5/11/2019 21:00	8	9	9	29.68	1	0.9	0.5
5/11/2019 21:10	8	9	9	28.92	5.3	3.9	24.9
5/11/2019 21:20	8	9	9	31.09	5.1	3.9	24.3
5/11/2019 21:30	8	9	9	31.42	1.1	0.8	0.5
5/11/2019 21:40	8	9	9	29.8	0.9	0.8	24.9
5/11/2019 21:50	8	9	9	28.89	4.9	4	25.1
5/11/2019 22:00	8	9	9	29.86	4.9	3.8	25
5/11/2019 22:10	8	9	9	30.57	4.8	3.9	24.7
5/11/2019 22:20	8	9	9	31.73	5	3.9	0.7
5/11/2019 22:30	8	9	9	30.84	1.1	0.9	0.6
5/11/2019 22:40	8	9	9	28.86	3.2	2.8	25
5/11/2019 22:50	8	9	9	29.22	5	4	25
5/11/2019 23:00	8	9	9	30.93	5.3	3.9	24.5
5/11/2019 23:10	8	9	9	30.81	1	0.9	0.6
5/11/2019 23:20	8	9	9	28.25	5	3.8	24.9
5/11/2019 23:30	8	9	9	30.11	5	3.9	24.9
5/11/2019 23:40	8	9	9	32.09	2.4	1.8	0.5
5/11/2019 23:50	8	9	9	27.54	5	3.9	25
5/12/2019 0:00	8	9	9	30.08	4.9	3.9	24.8
5/12/2019 0:10	8	9	9	29.86	0.9	0.8	0.5
5/12/2019 0:20	8	9	9	28.77	4.9	3.9	24.8
5/12/2019 0:30	8	9	9	32.09	4.7	3.7	0.6
5/12/2019 0:40	8	9	9	27.51	4.9	3.8	25
5/12/2019 0:50	8	9	9	30.17	5	3.9	24.9
5/12/2019 1:00	8	9	9	31.7	1.1	0.8	0.6
5/12/2019 1:10	8	9	9	27.73	3.5	3.4	24.9
5/12/2019 1:20	8	9	9	29.83	5	3.9	25
5/12/2019 1:30	8	9	9	31.45	1	0.8	0.5
5/12/2019 1:40	8	9	9	27.88	4.8	3.8	24.9
5/12/2019 1:50	8	9	9	31.12	5	3.9	23.9
5/12/2019 2:00	8	9	9	28.37	0.9	0.9	24.7
5/12/2019 2:10	8	9	9	29.62	5	4	24.8
5/12/2019 2:20	8	9	9	31.6	1	0.8	0.5
5/12/2019 2:30	8	9	9	27.85	5	3.9	25
5/12/2019 2:40	8	9	9	30.41	4.9	4	24.8
5/12/2019 2:50	8	9	9	31.6	1	0.9	0.5
5/12/2019 3:00	8	9	9	28.09	3.6	3.2	24.9
5/12/2019 3:10	8	9	9	29.71	4.7	3.9	24.9
5/12/2019 3:20	8	9	9	31.3	1.1	0.9	0.6
5/12/2019 3:30	8	9	9	27.94	5.1	3.9	25
5/12/2019 3:40	8	9	9	31.36	4.9	4.1	23.8
5/12/2019 3:50	8	9	9	28.89	1	0.8	2.7
5/12/2019 4:00	8	9	9	29.25	4.9	3.9	24.9

5/12/2019 4:10	8	9	9	31.54	5.1	3.9	22.7
5/12/2019 4:20	8	9	9	30.29	0.9	0.9	0.5
5/12/2019 4:30	8	9	9	28.55	4.9	3.9	25
5/12/2019 4:40	8	9	9	30.26	4.9	3.9	24.9
5/12/2019 4:50	8	9	9	31.82	5.1	3.9	0.7
5/12/2019 5:00	8	9	9	28.95	1.2	0.9	24.7
5/12/2019 5:10	8	9	9	29.35	5	3.9	24.9
5/12/2019 5:20	8	9	9	32	1.1	0.9	0.5
5/12/2019 5:30	8	9	9	27.61	4.9	3.9	25
5/12/2019 5:40	8	9	9	30.9	5	3.9	24.5
5/12/2019 5:50	8	9	9	30.11	0.9	0.8	0.5
5/12/2019 6:00	8	9	9	28.61	4.8	3.9	25
5/12/2019 6:10	8	9	9	30.44	5.1	4	24.7
5/12/2019 6:20	8	9	9	31.88	5.1	3.9	0.6
5/12/2019 6:30	8	9	9	30.47	0.9	0.8	0.5
5/12/2019 6:40	8	9	9	28.46	5	3.9	25.1
5/12/2019 6:50	8	9	9	29.62	4.9	4	25
5/12/2019 7:00	8	9	9	30.9	5	4	24.5
5/12/2019 7:10	8	9	9	32	1	0.8	0.5
5/12/2019 7:20	8	9	9	29.5	0.9	0.8	3
5/12/2019 7:30	8	9	9	28.89	5.1	3.9	25.1
5/12/2019 7:40	8	9	9	30.35	4.8	3.9	24.8
5/12/2019 7:50	8	9	9	31.76	4.9	3.9	0.7
5/12/2019 8:00	8	9	9	30.26	1	0.9	0.5
5/12/2019 8:10	8	9	9	28.46	4.9	3.9	25
5/12/2019 8:20	8	9	9	30.17	5	3.9	24.9
5/12/2019 8:30	8	9	9	32.03	1	0.8	0.5
5/12/2019 8:40	8	9	9	27.58	5	3.9	24.9
5/12/2019 8:50	8	9	9	30.41	5	4.2	24.6
5/12/2019 9:00	8	9	9	29.07	0.9	0.9	0.5
5/12/2019 9:10	8	9	9	29.16	4.8	3.9	24.9
5/12/2019 9:20	8	9	9	31.42	4.9	3.9	22.7
5/12/2019 9:30	8	9	9	29.65	1	0.9	0.5
5/12/2019 9:40	8	9	9	28.95	4.9	3.9	25.1
5/12/2019 9:50	8	9	9	30.63	5	3.9	24.7
5/12/2019 10:00	8	9	9	32.09	1	0.9	0.6
5/12/2019 10:10	8	9	9	29.56	0.9	0.9	3.3
5/12/2019 10:20	8	9	9	28.92	4.8	4	25
5/12/2019 10:30	8	9	9	30.81	4.9	3.9	24.6
5/12/2019 10:40	8	9	9	29.96	1.1	0.9	0.5
5/12/2019 10:50	8	9	9	28.67	4.8	3.8	24.9
5/12/2019 11:00	8	9	9	31.73	5	3.9	0.7
5/12/2019 11:10	8	9	9	27.61	3.3	3	25
5/12/2019 11:20	8	9	9	29.96	5	3.9	24.9
5/12/2019 11:30	8	9	9	30.78	0.9	0.9	0.6
5/12/2019 11:40	8	9	9	28.16	4.7	4.1	24.9
5/12/2019 11:50	8	9	9	30.75	5	3.9	24.6

5/12/2019 12:00	8	9	9	29.71	0.9	0.9	0.6
5/12/2019 12:10	8	9	9	28.83	5	3.9	24.9
5/12/2019 12:20	8	9	9	31.85	4.9	3.9	0.6
5/12/2019 12:30	8	9	9	27.24	4.8	3.9	25.1
5/12/2019 12:40	8	9	9	30.29	5	3.9	24.8
5/12/2019 12:50	8	9	9	30.2	0.9	0.9	0.5
5/12/2019 13:00	8	9	9	28.61	4.8	3.9	25
5/12/2019 13:10	8	9	9	30.93	4.9	3.9	24.5
5/12/2019 13:20	8	9	9	30.14	1	0.9	0.6
5/12/2019 13:30	8	9	9	28.55	4.8	3.9	25
5/12/2019 13:40	8	9	9	30.57	5.2	3.9	24.8
5/12/2019 13:50	8	9	9	31.18	1.1	0.8	0.6
5/12/2019 14:00	8	9	9	28.06	5.1	3.9	24.9
5/12/2019 14:10	8	9	9	30.87	4.9	3.9	24.5
5/12/2019 14:20	8	9	9	28.43	0.9	0.9	2.5
5/12/2019 14:30	8	9	9	29.59	5.2	3.9	24.8
5/12/2019 14:40	8	9	9	31.02	1	0.9	0.5
5/12/2019 14:50	8	9	9	28.22	4.8	3.9	25
5/12/2019 15:00	8	9	9	30.35	4.9	4.1	24.8
5/12/2019 15:10	8	9	9	30.51	1	0.9	0.5
5/12/2019 15:20	8	9	9	28.49	4.9	3.9	24.9
5/12/2019 15:30	8	9	9	31.51	4.9	4	22.7
5/12/2019 15:40	8	9	9	28.31	1.2	0.8	24.9
5/12/2019 15:50	8	9	9	29.62	4.8	3.9	24.9
5/12/2019 16:00	8	9	9	31.7	1.1	0.8	0.6
5/12/2019 16:10	8	9	9	27.73	4.9	3.9	24.9
5/12/2019 16:20	8	9	9	30.87	5	4	24.4
5/12/2019 16:30	8	9	9	28.43	0.9	0.9	2.7
5/12/2019 16:40	8	9	9	29.65	4.9	3.9	24.9
5/12/2019 16:50	8	9	9	32.03	5	3.9	0.6
5/12/2019 17:00	8	9	9	28.7	1.1	0.9	24.8
5/12/2019 17:10	8	9	9	29.44	4.9	4	25
5/12/2019 17:20	8	9	9	31.88	5	3.9	0.7
5/12/2019 17:30	8	9	9	27.7	3.5	3.2	25
5/12/2019 17:40	8	9	9	29.96	4.9	3.9	24.9
5/12/2019 17:50	8	9	9	30.66	1.1	0.9	0.6
5/12/2019 18:00	8	9	9	28.31	5	3.9	24.9
5/12/2019 18:10	8	9	9	31.82	4.9	3.9	0.7
5/12/2019 18:20	8	9	9	27.24	4.9	4	24.9
5/12/2019 18:30	8	9	9	31.02	5	4	24.3
5/12/2019 18:40	8	9	9	29.32	0.9	0.9	0.6
5/12/2019 18:50	8	9	9	29.1	4.9	3.9	25
5/12/2019 19:00	8	9	9	30.93	4.7	3.9	24.5
5/12/2019 19:10	8	9	9	31.94	1.2	0.9	0.6
5/12/2019 19:20	8	9	9	29.32	1	0.9	24.8
5/12/2019 19:30	8	9	9	29.07	5	3.9	25.2
5/12/2019 19:40	8	9	9	30.26	5	4.1	24.9

5/12/2019 19:50	8	9	9	31.36	5.3	3.9	23.9
5/12/2019 20:00	8	9	9	31.02	1	0.9	0.6
5/12/2019 20:10	8	9	9	28.19	5	3.9	25
5/12/2019 20:20	8	9	9	29.77	4.8	3.9	24.9
5/12/2019 20:30	8	9	9	31.82	1	0.9	0.6
5/12/2019 20:40	8	9	9	27.7	4.7	3.9	25
5/12/2019 20:50	8	9	9	30.72	5	4	24.6
5/12/2019 21:00	8	9	9	30.23	1.1	0.8	0.6
5/12/2019 21:10	8	9	9	28.7	4.9	3.9	25
5/12/2019 21:20	8	9	9	30.51	5.4	4	24.7
5/12/2019 21:30	8	9	9	31.36	0.9	0.9	0.6
5/12/2019 21:40	8	9	9	27.94	5	3.9	25
5/12/2019 21:50	8	9	9	30.96	4.8	4	24.2
5/12/2019 22:00	8	9	9	27.24	2.7	2.3	24.9
5/12/2019 22:10	8	9	9	30.23	5	4	24.9
5/12/2019 22:20	8	9	9	30.57	1	0.9	0.6
5/12/2019 22:30	8	9	9	28.46	4.9	3.9	25.1
5/12/2019 22:40	8	9	9	30.32	4.9	4	24.9
5/12/2019 22:50	8	9	9	31.42	4.9	3.9	23.8
5/12/2019 23:00	8	9	9	31.97	1	0.9	0.6
5/12/2019 23:10	8	9	9	30.2	0.9	0.9	0.5
5/12/2019 23:20	8	9	9	28.61	5	3.9	25.2
5/12/2019 23:30	8	9	9	29.5	4.8	4	25
5/12/2019 23:40	8	9	9	30.47	4.7	3.9	24.8
5/12/2019 23:50	8	9	9	31.73	5.1	3.9	0.7
5/13/2019 0:00	8	9	9	30.72	1	0.9	0.6
5/13/2019 0:10	8	9	9	28.31	5.2	3.8	25.1
5/13/2019 0:20	8	9	9	29.8	4.9	4	24.9
5/13/2019 0:30	8	9	9	31.3	5	3.9	23.6
5/13/2019 0:40	8	9	9	30.38	1.1	0.9	0.6
5/13/2019 0:50	8	9	9	28.46	5.2	3.9	25
5/13/2019 1:00	8	9	9	30.38	4.8	3.9	24.8
5/13/2019 1:10	8	9	9	32.12	5	3.9	0.6
5/13/2019 1:20	8	9	9	27.48	4.9	3.9	24.9
5/13/2019 1:30	8	9	9	30.41	5.1	3.9	24.7
5/13/2019 1:40	8	9	9	29.22	1	0.8	0.5
5/13/2019 1:50	8	9	9	29.01	4.9	3.8	25
5/13/2019 2:00	8	9	9	31.36	5.1	4	23.7
5/13/2019 2:10	8	9	9	30.05	0.9	0.8	0.6
5/13/2019 2:20	8	9	9	28.58	4.9	3.9	25
5/13/2019 2:30	8	9	9	31.36	5.1	4	23.4
5/13/2019 2:40	8	9	9	28.22	1.1	0.9	24.9
5/13/2019 2:50	8	9	9	29.74	5.1	4.1	24.9
5/13/2019 3:00	8	9	9	30.69	1	0.9	0.6
5/13/2019 3:10	8	9	9	28.31	4.9	3.9	24.9
5/13/2019 3:20	8	9	9	31.09	5	4	24
5/13/2019 3:30	8	9	9	28.46	0.8	0.8	24.8

5/13/2019 3:40	8	9	9	29.53	5	3.9	24.9
5/13/2019 3:50	8	9	9	30.87	1	0.9	0.6
5/13/2019 4:00	8	9	9	28.19	4.9	3.9	25
5/13/2019 4:10	8	9	9	31.6	5.1	3.9	9.3
5/13/2019 4:20	8	9	9	28.58	1.1	0.9	24.8
5/13/2019 4:30	8	9	9	29.38	4.7	3.9	24.9
5/13/2019 4:40	8	9	9	32.06	5.3	4.3	0.6
5/13/2019 4:50	8	9	9	27.54	5.2	3.9	25.1
5/13/2019 5:00	8	9	9	30.11	4.8	4	24.9
5/13/2019 5:10	8	9	9	31.27	0.9	0.8	0.6
5/13/2019 5:20	8	9	9	27.94	4.9	4	25
5/13/2019 5:30	8	9	9	30.38	5.3	3.9	24.7
5/13/2019 5:40	8	9	9	30.54	0.9	0.8	0.6
5/13/2019 5:50	8	9	9	28.4	4.9	4.1	24.9
5/13/2019 6:00	8	9	9	31.33	5.2	3.9	23.8
5/13/2019 6:10	8	9	9	30.2	0.9	0.9	0.6
5/13/2019 6:20	8	9	9	28.58	5	3.9	25.1
5/13/2019 6:30	8	9	9	29.86	4.9	3.9	24.8
5/13/2019 6:40	8	9	9	31.18	5.1	3.9	24.3
5/13/2019 6:50	8	9	9	31.54	1	0.9	0.6
5/13/2019 7:00	8	9	9	28.86	1.7	1.4	25
5/13/2019 7:10	8	9	9	29.22	4.9	4	25.1
5/13/2019 7:20	8	9	9	30.84	5.1	3.9	24.5
5/13/2019 7:30	8	9	9	31.57	1	0.9	0.6
5/13/2019 7:40	8	9	9	27.79	5	4	24.9
5/13/2019 7:50	8	9	9	30.75	4.9	3.8	24.5
5/13/2019 8:00	8	9	9	27.85	1.2	0.9	24.8
5/13/2019 8:10	8	9	9	29.86	5.1	3.9	24.9
5/13/2019 8:20	8	9	9	30.72	1	0.9	0.6
5/13/2019 8:30	8	9	9	28.31	4.9	3.9	25
5/13/2019 8:40	8	9	9	30.72	4.9	3.9	24.6
5/13/2019 8:50	8	9	9	31.02	1	0.9	0.6
5/13/2019 9:00	8	9	9	28.16	4.9	4	24.9
5/13/2019 9:10	8	9	9	30.23	5	4	24.9
5/13/2019 9:20	8	9	9	30.99	0.9	0.8	0.6
5/13/2019 9:30	8	9	9	28.09	4.9	3.9	25
5/13/2019 9:40	8	9	9	31.12	4.7	4	24.2
5/13/2019 9:50	8	9	9	27.73	1.3	0.9	24.9
5/13/2019 10:00	8	9	9	29.89	5.1	3.9	24.8
5/13/2019 10:10	8	9	9	30.81	0.9	0.9	0.5
5/13/2019 10:20	8	9	9	28.16	5	3.9	25
5/13/2019 10:30	8	9	9	30.38	4.8	4.1	24.8
5/13/2019 10:40	8	9	9	31.36	1.2	0.9	0.6
5/13/2019 10:50	8	9	9	27.85	4.9	3.9	25
5/13/2019 11:00	8	9	9	30.26	4.8	4.1	24.8
5/13/2019 11:10	8	9	9	30.57	1.1	0.9	0.6
5/13/2019 11:20	8	9	9	28.4	4.9	4	24.9

5/13/2019 11:30	8	9	9	31.18	5.1	3.9	24
5/13/2019 11:40	8	9	9	28.09	1.3	0.9	24.9
5/13/2019 11:50	8	9	9	29.71	5	3.9	24.8
5/13/2019 12:00	8	9	9	30.75	0.9	0.9	0.5
5/13/2019 12:10	8	9	9	28.34	4.8	4	24.9
5/13/2019 12:20	8	9	9	30.32	5	4	24.8
5/13/2019 12:30	8	9	9	31.97	4.8	3.9	0.6
5/13/2019 12:40	8	9	9	28.58	1.3	0.9	24.8
5/13/2019 12:50	8	9	9	29.5	5.1	3.9	25
5/13/2019 13:00	8	9	9	32.06	1.2	0.9	0.6
5/13/2019 13:10	8	9	9	27.58	4.9	4	25
5/13/2019 13:20	8	9	9	31.02	5.1	4	24.2
5/13/2019 13:30	8	9	9	28.86	1	0.9	0.5
5/13/2019 13:40	8	9	9	29.32	4.9	3.9	24.9
5/13/2019 13:50	8	9	9	30.75	1	0.9	0.6
5/13/2019 14:00	8	9	9	28.25	5	4	25
5/13/2019 14:10	8	9	9	31.36	5	3.9	23.6
5/13/2019 14:20	8	9	9	29.13	1	0.9	0.5
5/13/2019 14:30	8	9	9	29.1	4.9	3.9	24.8
5/13/2019 14:40	8	9	9	32.09	1.1	0.9	0.6
5/13/2019 14:50	8	9	9	27.58	4.8	4	25
5/13/2019 15:00	8	9	9	30.93	4.8	4	24.5
5/13/2019 15:10	8	9	9	29.38	0.9	0.9	0.6
5/13/2019 15:20	8	9	9	29.01	5	3.8	24.9
5/13/2019 15:30	8	9	9	31.57	4.8	3.9	23
5/13/2019 15:40	8	9	9	28.34	1.2	0.9	24.9
5/13/2019 15:50	8	9	9	29.59	5.1	4	24.8
5/13/2019 16:00	8	9	9	31.15	1.1	0.9	0.6
5/13/2019 16:10	8	9	9	28.09	5.1	3.9	24.9
5/13/2019 16:20	8	9	9	31.54	4.9	3.9	22.6
5/13/2019 16:30	8	9	9	27.54	2.7	2.5	25
5/13/2019 16:40	8	9	9	29.99	5.1	4	24.9
5/13/2019 16:50	8	9	9	30.63	1	0.8	0.5
5/13/2019 17:00	8	9	9	28.34	4.9	3.9	25
5/13/2019 17:10	8	9	9	30.9	5	4	24.3
5/13/2019 17:20	8	9	9	30.99	0.9	0.8	0.6
5/13/2019 17:30	8	9	9	28.12	5	3.9	25
5/13/2019 17:40	8	9	9	29.8	5.1	4	25
5/13/2019 17:50	8	9	9	31.54	4.7	3.9	22.7
5/13/2019 18:00	8	9	9	29.41	1	0.9	0.5
5/13/2019 18:10	8	9	9	29.01	4.7	4	25
5/13/2019 18:20	8	9	9	31.57	4.9	4	22.5
5/13/2019 18:30	8	9	9	26.96	4.9	4	25
5/13/2019 18:40	8	9	9	30.35	4.8	4	24.8
5/13/2019 18:50	8	9	9	29.74	0.9	0.9	0.6
5/13/2019 19:00	8	9	9	28.8	4.9	4.1	24.9
5/13/2019 19:10	8	9	9	32.06	0.9	0.8	0.5

5/13/2019 19:20	8	9	9	27.58	4.9	3.9	25
5/13/2019 19:30	8	9	9	30.99	5	4	24.2
5/13/2019 19:40	8	9	9	28.7	0.8	0.9	1.5
5/13/2019 19:50	8	9	9	29.41	4.9	4	24.9
5/13/2019 20:00	8	9	9	32.09	2.4	1.8	0.6
5/13/2019 20:10	8	9	9	27.54	5.1	3.9	25
5/13/2019 20:20	8	9	9	30.2	4.9	4	24.8
5/13/2019 20:30	8	9	9	31.48	1.2	0.8	0.6
5/13/2019 20:40	8	9	9	28.34	3.3	3.1	25
5/13/2019 20:50	8	9	9	29.56	5.1	4.1	25
5/13/2019 21:00	8	9	9	31.48	5	4	23
5/13/2019 21:10	8	9	9	28.83	1	0.9	3.6
5/13/2019 21:20	8	9	9	29.25	5	4.1	24.8
5/13/2019 21:30	8	9	9	31.3	1	0.8	0.6
5/13/2019 21:40	8	9	9	28	4.8	4	25
5/13/2019 21:50	8	9	9	31.51	4.9	4	22.6
5/13/2019 22:00	8	9	9	27.85	1.7	1.5	25
5/13/2019 22:10	8	9	9	29.74	4.8	3.9	24.9
5/13/2019 22:20	8	9	9	31.76	1	0.9	0.6
5/13/2019 22:30	8	9	9	27.76	4.7	4	24.8
5/13/2019 22:40	8	9	9	30.9	4.9	3.9	24.3
5/13/2019 22:50	8	9	9	28.19	1.1	0.9	24.8
5/13/2019 23:00	8	9	9	29.68	4.9	4	25
5/13/2019 23:10	8	9	9	31.63	5	3.9	0.7
5/13/2019 23:20	8	9	9	29.01	1	0.9	3.3
5/13/2019 23:30	8	9	9	29.19	4.8	4	24.9
5/13/2019 23:40	8	9	9	31.42	1	0.9	0.6
5/13/2019 23:50	8	9	9	27.91	5.1	3.9	25
5/14/2019 0:00	8	9	9	31.42	5.1	3.9	23.3
5/14/2019 0:10	8	9	9	30.72	1	0.9	0.6
5/14/2019 0:20	8	9	9	28.22	5	3.9	25.1
5/14/2019 0:30	8	9	9	29.53	4.9	3.9	25
5/14/2019 0:40	8	9	9	30.96	5	3.9	24.5
5/14/2019 0:50	8	9	9	32.09	5.1	4	0.5
5/14/2019 1:00	8	9	9	30.51	1	0.9	0.6
5/14/2019 1:10	8	9	9	28.86	3.4	3.1	25.1
5/14/2019 1:20	8	9	9	29.25	4.9	3.9	25.1
5/14/2019 1:30	8	9	9	29.99	4.9	3.9	25
5/14/2019 1:40	8	9	9	30.47	5	3.9	24.8
5/14/2019 1:50	8	9	9	30.9	5	3.9	24.7
5/14/2019 2:00	8	9	9	31.15	5.1	3.9	24.5
5/14/2019 2:10	8	9	9	31.12	4.9	4	24.4
5/14/2019 2:20	8	9	9	31.45	4.9	3.9	23.5
5/14/2019 2:30	8	9	9	31.94	4.9	4.1	0.6
5/14/2019 2:40	8	9	9	31.48	1.1	0.9	0.6
5/14/2019 2:50	8	9	9	30.47	1.2	0.9	0.5
5/14/2019 3:00	8	9	9	29.89	1.1	0.8	25

5/14/2019 3:10	8	9	9	29.53	2.4	1.9	25.1
5/14/2019 3:20	8	9	9	29.13	3.5	3.3	25.1
5/14/2019 3:30	8	9	9	29.1	5	3.9	25.1
5/14/2019 3:40	8	9	9	29.62	4.9	3.9	25
5/14/2019 3:50	8	9	9	30.41	4.9	4	24.8
5/14/2019 4:00	8	9	9	31.45	5	3.9	23.4
5/14/2019 4:10	8	9	9	32	1.1	0.9	0.6
5/14/2019 4:20	8	9	9	30.66	1	0.9	0.6
5/14/2019 4:30	8	9	9	29.68	1.2	0.9	25
5/14/2019 4:40	8	9	9	28.92	3.6	3.4	25.2
5/14/2019 4:50	8	9	9	29.22	4.7	3.9	25.1
5/14/2019 5:00	8	9	9	29.68	4.9	4.1	25
5/14/2019 5:10	8	9	9	30.41	4.9	3.9	24.8
5/14/2019 5:20	8	9	9	31.67	5.1	3.9	22.5
5/14/2019 5:30	8	9	9	30.29	1	0.8	0.5
5/14/2019 5:40	8	9	9	28.55	5.1	3.9	25
5/14/2019 5:50	8	9	9	30.38	4.9	3.9	24.8
5/14/2019 6:00	8	9	9	32.06	1	0.9	0.5
5/14/2019 6:10	8	9	9	27.88	3.6	3.2	24.9
5/14/2019 6:20	8	9	9	29.83	5	3.9	24.9
5/14/2019 6:30	8	9	9	30.9	1.1	0.8	0.5
5/14/2019 6:40	8	9	9	28.19	5	3.9	24.9
5/14/2019 6:50	8	9	9	30.9	4.8	3.9	24.3
5/14/2019 7:00	8	9	9	29.62	1	0.9	0.5
5/14/2019 7:10	8	9	9	28.98	5.1	3.9	24.9
5/14/2019 7:20	8	9	9	31.79	4.9	3.9	0.6
5/14/2019 7:30	8	9	9	27.21	5.1	3.9	25
5/14/2019 7:40	8	9	9	30.14	5	4	24.8
5/14/2019 7:50	8	9	9	31.6	1	0.8	0.6
5/14/2019 8:00	8	9	9	27.76	4.8	3.9	25
5/14/2019 8:10	8	9	9	30.02	4.9	4	24.9
5/14/2019 8:20	8	9	9	31.48	1.1	0.9	0.6
5/14/2019 8:30	8	9	9	27.82	5.4	3.9	25
5/14/2019 8:40	8	9	9	30.51	4.9	4	24.7
5/14/2019 8:50	8	9	9	30.41	1.1	0.9	0.6
5/14/2019 9:00	8	9	9	28.4	5.2	3.9	24.8
5/14/2019 9:10	8	9	9	31.21	5	3.9	23.8
5/14/2019 9:20	8	9	9	29.07	0.9	0.8	0.5
5/14/2019 9:30	8	9	9	29.19	5.1	3.9	25
5/14/2019 9:40	8	9	9	31.57	4.9	3.9	22.5
5/14/2019 9:50	8	9	9	29.22	1	0.9	0.8
5/14/2019 10:00	8	9	9	29.13	4.9	4	25
5/14/2019 10:10	8	9	9	31.67	5	3.9	0.7
5/14/2019 10:20	0	0	0	30.63	1	0.8	0.4
5/14/2019 10:30	0	0	0	30.63	1	0.8	0.4
5/14/2019 10:40	9	9	9	29.74	5	3.9	24.9
5/14/2019 10:50	9	9	9	31.02	5	4	24.8

5/14/2019 11:00	9	9	9	30.47	5.1	3.9	24.9
5/14/2019 11:10	9	9	9	30.14	5.1	3.9	25
5/14/2019 11:20	9	9	9	29.86	5	4	25.1
5/14/2019 11:30	9	9	9	30.08	4.9	3.9	25
5/14/2019 11:40	9	9	9	30.47	4.7	4	24.8
5/14/2019 11:50	9	9	9	30.9	5	4	24.7
5/14/2019 12:00	9	9	9	31.05	5	4.1	24.7
5/14/2019 12:10	9	9	9	31.12	5	4.1	24.6
5/14/2019 12:20	9	9	9	30.2	5.1	4	25
5/14/2019 12:30	9	9	9	30.02	4.8	3.9	25.1
5/14/2019 12:40	9	9	9	29.25	5	4	25
5/14/2019 12:50	9	9	9	30.47	5.1	3.9	24.9
5/14/2019 13:00	9	9	9	31.42	5	4	24
5/14/2019 13:10	9	9	9	32	4.9	3.9	0.6
5/14/2019 13:20	9	9	9	32.09	1.3	0.9	0.5
5/14/2019 13:30	9	9	9	32.12	4.9	4	0.5
5/14/2019 13:40	9	9	9	31.94	4.9	3.9	0.7
5/14/2019 13:50	9	9	9	31.85	4.7	4	0.6
5/14/2019 14:00	9	9	9	31.97	4.9	3.9	0.6
5/14/2019 14:10	9	9	9	31.76	1.1	0.9	0.5
5/14/2019 14:20	9	9	9	30.9	0.9	0.8	0.5
5/14/2019 14:30	9	9	9	30.32	1	0.8	3.8
5/14/2019 14:40	9	9	9	30.08	1.2	1	25
5/14/2019 14:50	9	9	9	30.08	1.3	1	25
5/14/2019 15:00	9	9	9	30.54	1.1	0.9	25
5/14/2019 15:10	9	9	9	30.66	0.9	0.9	3.5
5/14/2019 15:20	9	9	9	30.57	1	0.9	3.6
5/14/2019 15:30	9	9	9	30.2	1.1	0.9	24.9
5/14/2019 15:40	9	9	9	29.5	2.9	2.6	25.1
5/14/2019 15:50	9	9	9	29.13	3.7	3.4	25.2
5/14/2019 16:00	9	9	9	29.35	3.6	3.3	25.2
5/14/2019 16:10	9	9	9	29.86	2.8	2.5	25.1
5/14/2019 16:20	9	9	9	30.38	1.3	0.9	25
5/14/2019 16:30	9	9	9	30.23	1.2	0.9	24.9
5/14/2019 16:40	9	9	9	29.74	1.8	1.6	25.1
5/14/2019 16:50	9	9	9	29.04	5.1	3.9	25.1
5/14/2019 17:00	9	9	9	29.41	5.1	3.9	25.1
5/14/2019 17:10	9	9	9	29.53	4.9	3.9	25.2
5/14/2019 17:20	9	9	9	29.5	4.9	3.9	25.2
5/14/2019 17:30	9	9	9	29.68	3.4	3	25.1
5/14/2019 17:40	9	9	9	29.59	3.4	3	25
5/14/2019 17:50	9	9	9	29.1	4.7	4.1	25.2
5/14/2019 18:00	9	9	9	29.41	4.9	3.9	25.1
5/14/2019 18:10	9	9	9	29.65	4.9	3.9	25.1
5/14/2019 18:20	9	9	9	29.86	5	4	25.2
5/14/2019 18:30	9	9	9	29.77	5	3.9	25.2
5/14/2019 18:40	9	9	9	29.5	5	3.9	25.2

5/14/2019 18:50	9	9	9	29.22	4.9	3.9	25.2
5/14/2019 19:00	9	9	9	29.32	5.1	3.8	25.2
5/14/2019 19:10	9	9	9	29.59	5	3.9	25.1
5/14/2019 19:20	9	9	9	30.08	5.1	4	25
5/14/2019 19:30	9	9	9	30.54	5	4	24.8
5/14/2019 19:40	9	9	9	30.87	4.9	3.9	24.7
5/14/2019 19:50	9	9	9	30.84	5	4	24.8
5/14/2019 20:00	9	9	9	30.9	5	4	24.8
5/14/2019 20:10	9	9	9	30.72	5.3	4.1	24.8
5/14/2019 20:20	9	9	9	30.66	4.9	4	24.8
5/14/2019 20:30	9	9	9	30.84	5.1	4	24.7
5/14/2019 20:40	9	9	9	30.99	4.8	3.9	24.6
5/14/2019 20:50	9	9	9	31.45	5	3.9	23.5
5/14/2019 21:00	9	9	9	31.85	5.1	4	0.6
5/14/2019 21:10	9	9	9	31.7	4.9	3.9	0.7
5/14/2019 21:20	9	9	9	31.63	5	3.9	23.3
5/14/2019 21:30	9	9	9	31.45	5	3.9	24
5/14/2019 21:40	9	9	9	31.45	4.9	3.9	23.8
5/14/2019 21:50	9	9	9	31.79	4.8	4	0.7
5/14/2019 22:00	9	9	9	32.09	1.7	1.2	0.6
5/14/2019 22:10	9	9	9	31.63	1	0.9	0.5
5/14/2019 22:20	9	9	9	31.63	1.1	0.8	0.5
5/14/2019 22:30	9	9	9	31.76	1	0.9	0.6
5/14/2019 22:40	9	9	9	32.09	1.1	0.9	0.5
5/14/2019 22:50	9	9	9	32.03	1	0.9	0.5
5/14/2019 23:00	9	9	9	31.57	1.2	0.9	0.5
5/14/2019 23:10	9	9	9	30.96	0.9	0.8	0.5
5/14/2019 23:20	9	9	9	30.51	1.1	0.9	2.5
5/14/2019 23:30	9	9	9	30.41	1	0.9	24.9
5/14/2019 23:40	9	9	9	30.35	1.1	0.9	24.9
5/14/2019 23:50	9	9	9	30.26	1.1	0.9	24.9
5/15/2019 0:00	9	9	9	30.17	1.1	0.9	24.9
5/15/2019 0:10	9	9	9	29.8	1.6	1.4	25
5/15/2019 0:20	9	9	9	29.1	3.6	3.4	25.1
5/15/2019 0:30	9	9	9	29.25	5	4	25.1
5/15/2019 0:40	9	9	9	29.74	4.9	4	25
5/15/2019 0:50	9	9	9	30.17	4.9	4	25.1
5/15/2019 1:00	9	9	9	30.11	5	3.9	25.1
5/15/2019 1:10	9	9	9	30.05	5	4	25
5/15/2019 1:20	9	9	9	30.08	5.1	3.9	25
5/15/2019 1:30	9	9	9	30.26	5	3.9	25
5/15/2019 1:40	9	9	9	30.32	5.1	3.9	24.9
5/15/2019 1:50	9	9	9	30.35	5	4	24.8
5/15/2019 2:00	9	9	9	30.26	5	4	25
5/15/2019 2:10	9	9	9	30.17	4.8	4	25
5/15/2019 2:20	9	9	9	30.2	5	4	25
5/15/2019 2:30	9	9	9	30.17	5.1	4	25

5/15/2019 2:40	9	9	9	30.35	5.1	3.9	24.9
5/15/2019 2:50	9	9	9	30.75	4.7	4	24.9
5/15/2019 3:00	9	9	9	30.69	4.7	4	24.8
5/15/2019 3:10	9	9	9	30.44	4.7	4	25
5/15/2019 3:20	9	9	9	30.2	5.1	3.9	25
5/15/2019 3:30	9	9	9	30.02	4.9	3.9	25
5/15/2019 3:40	9	9	9	30.11	5	4	25
5/15/2019 3:50	9	9	9	30.38	4.8	3.9	24.9
5/15/2019 4:00	9	9	9	30.57	5.2	4	24.9
5/15/2019 4:10	9	9	9	30.66	4.9	3.9	24.9
5/15/2019 4:20	9	9	9	30.38	4.7	3.9	25
5/15/2019 4:30	9	9	9	30.29	4.9	3.9	25
5/15/2019 4:40	9	9	9	30.44	5	3.9	25
5/15/2019 4:50	9	9	9	30.75	4.9	3.9	24.8
5/15/2019 5:00	9	9	9	31.12	4.9	4	24.6
5/15/2019 5:10	9	9	9	31.27	4.9	3.9	24.5
5/15/2019 5:20	9	9	9	31.21	4.9	3.9	24.6
5/15/2019 5:30	9	9	9	31.09	5.1	3.9	24.7
5/15/2019 5:40	9	9	9	31.09	5.1	3.9	24.6
5/15/2019 5:50	9	9	9	31.27	5	4	24.2
5/15/2019 6:00	9	9	9	31.82	4.9	3.9	0.6
5/15/2019 6:10	9	9	9	31.63	1	0.9	0.6
5/15/2019 6:20	9	9	9	31.39	1	0.9	0.6
5/15/2019 6:30	9	9	9	31.18	1.1	0.9	0.6
5/15/2019 6:40	9	9	9	31.05	1	0.9	0.5
5/15/2019 6:50	9	9	9	30.93	1.1	0.9	0.6
5/15/2019 7:00	9	9	9	30.63	1	0.9	2.7
5/15/2019 7:10	9	9	9	29.99	1.2	0.9	25
5/15/2019 7:20	9	9	9	28.89	4.7	3.7	25.1
5/15/2019 7:30	9	9	9	29.41	5	4	25.1
5/15/2019 7:40	9	9	9	29.77	5.1	4.1	25.1
5/15/2019 7:50	9	9	9	30.26	5	4.1	25
5/15/2019 8:00	9	9	9	30.44	4.8	3.9	24.9
5/15/2019 8:10	9	9	9	30.54	4.9	4.1	24.8
5/15/2019 8:20	9	9	9	30.69	4.8	4	24.8
5/15/2019 8:30	9	9	9	30.75	4.9	3.9	24.9
5/15/2019 8:40	9	9	9	30.57	5	3.9	24.9
5/15/2019 8:50	9	9	9	30.9	4.8	3.9	24.7
5/15/2019 9:00	9	9	9	31.05	4.9	4	24.5
5/15/2019 9:10	9	9	9	31.39	4.9	3.9	24.1
5/15/2019 9:20	9	9	9	31.54	5	3.9	23.6
5/15/2019 9:30	9	9	9	31.54	5	3.9	24
5/15/2019 9:40	9	9	9	31.48	4.9	3.9	24.1
5/15/2019 9:50	9	9	9	31.48	4.9	4	23.8
5/15/2019 10:00	9	9	9	31.73	4.9	4	0.7
5/15/2019 10:10	9	9	9	32.09	5.3	4.3	0.6
5/15/2019 10:20	9	9	9	31.51	0.9	0.9	0.5

5/15/2019 10:30	9	9	9	31.36	1	0.9	0.5
5/15/2019 10:40	9	9	9	31.27	1.2	0.9	0.5
5/15/2019 10:50	9	9	9	31.12	1	0.8	0.5
5/15/2019 11:00	9	9	9	30.51	1	0.9	2.6
5/15/2019 11:10	9	9	9	29.19	3.2	2.9	25
5/15/2019 11:20	9	9	9	29.32	4.9	3.9	25.1
5/15/2019 11:30	9	9	9	29.8	5	3.9	25
5/15/2019 11:40	9	9	9	30.11	4.8	3.9	25
5/15/2019 11:50	9	9	9	30.2	5.1	4	25
5/15/2019 12:00	9	9	9	30.26	5.2	3.9	25
5/15/2019 12:10	9	9	9	30.35	4.9	3.8	24.9
5/15/2019 12:20	9	9	9	30.66	5.2	4	24.8
5/15/2019 12:30	9	9	9	31.36	4.9	3.9	24.2
5/15/2019 12:40	9	9	9	32	4.9	4	0.6
5/15/2019 12:50	9	9	9	31.33	1.1	0.9	0.5
5/15/2019 13:00	9	9	9	30.66	0.9	0.9	0.5
5/15/2019 13:10	9	9	9	30.38	1	0.8	24.8
5/15/2019 13:20	9	9	9	30.51	1.2	0.8	24.9
5/15/2019 13:30	9	9	9	30.63	1.1	0.9	3.5
5/15/2019 13:40	9	9	9	30.51	1.1	0.9	3.3
5/15/2019 13:50	9	9	9	29.74	1.4	1	25
5/15/2019 14:00	9	9	9	29.01	4.9	3.8	25.1
5/15/2019 14:10	9	9	9	29.41	5	4	25.1
5/15/2019 14:20	9	9	9	29.62	5.1	3.9	25.1
5/15/2019 14:30	9	9	9	29.65	4.9	3.9	25.1
5/15/2019 14:40	9	9	9	29.5	5.1	4	25.1
5/15/2019 14:50	9	9	9	29.65	4.9	4	25
5/15/2019 15:00	9	9	9	29.8	5	3.9	25
5/15/2019 15:10	9	9	9	30.2	4.7	3.9	25
5/15/2019 15:20	9	9	9	30.35	5.1	3.9	25
5/15/2019 15:30	9	9	9	30.29	4.9	3.9	25
5/15/2019 15:40	9	9	9	30.17	5.2	4	24.9
5/15/2019 15:50	9	9	9	30.35	5.1	3.9	24.9
5/15/2019 16:00	9	9	9	30.51	5	4	24.8
5/15/2019 16:10	9	9	9	30.81	5	3.9	24.8
5/15/2019 16:20	9	9	9	30.69	5	4	24.9
5/15/2019 16:30	9	9	9	30.44	5	3.9	24.9
5/15/2019 16:40	9	9	9	30.32	5	3.8	25
5/15/2019 16:50	9	9	9	30.38	5.1	3.9	25
5/15/2019 17:00	9	9	9	30.63	4.9	4	24.9
5/15/2019 17:10	9	9	9	30.81	5	3.9	24.7
5/15/2019 17:20	9	9	9	30.9	5	3.9	24.8
5/15/2019 17:30	9	9	9	30.81	4.7	3.9	24.8
5/15/2019 17:40	9	9	9	30.69	5	3.9	24.8
5/15/2019 17:50	9	9	9	30.69	4.9	4	24.8
5/15/2019 18:00	9	9	9	30.78	4.9	3.9	24.7
5/15/2019 18:10	9	9	9	31.15	5	3.8	24.5

5/15/2019 18:20	9	9	9	31.3	4.9	3.8	24.4
5/15/2019 18:30	9	9	9	31.15	4.9	4	24.6
5/15/2019 18:40	9	9	9	30.9	4.9	3.9	24.8
5/15/2019 18:50	9	9	9	30.66	5	3.9	24.9
5/15/2019 19:00	9	9	9	30.63	4.9	3.9	24.9
5/15/2019 19:10	9	9	9	30.66	5.2	3.9	24.8
5/15/2019 19:20	9	9	9	30.69	4.8	3.9	24.8
5/15/2019 19:30	9	9	9	30.57	4.9	3.9	24.9
5/15/2019 19:40	9	9	9	30.41	5.1	3.9	24.9
5/15/2019 19:50	9	9	9	30.32	4.7	3.9	25
5/15/2019 20:00	9	9	9	30.29	5	4	25
5/15/2019 20:10	9	9	9	30.14	5.1	3.9	25
5/15/2019 20:20	9	9	9	30.11	4.9	4	25
5/15/2019 20:30	9	9	9	30.17	4.8	3.8	25
5/15/2019 20:40	9	9	9	30.05	4.9	4	25
5/15/2019 20:50	9	9	9	29.77	4.9	3.9	25.2
5/15/2019 21:00	9	9	9	29.53	5	3.9	25.2
5/15/2019 21:10	9	9	9	30.23	1.8	1.5	25.1
5/15/2019 21:20	9	9	9	31.18	1	0.8	0.7
5/15/2019 21:30	9	9	9	32	1	0.8	0.5
5/15/2019 21:40	9	9	9	31.82	4.9	3.9	0.6
5/15/2019 21:50	9	9	9	31.39	4.8	3.9	24.4
5/15/2019 22:00	9	9	9	30.87	4.9	3.9	24.8
5/15/2019 22:10	9	9	9	30.63	4.9	4.1	24.8
5/15/2019 22:20	9	9	9	30.29	4.9	4	25
5/15/2019 22:30	9	9	9	29.89	5	3.9	25.1
5/15/2019 22:40	9	9	9	29.53	4.9	3.9	25.2
5/15/2019 22:50	9	9	9	30.23	1.3	0.9	25.1
5/15/2019 23:00	9	9	9	31.15	1	0.9	0.5
5/15/2019 23:10	9	9	9	31.94	1.1	0.9	0.5
5/15/2019 23:20	9	9	9	31.79	5	4	0.6
5/15/2019 23:30	9	9	9	31.42	5.2	4	24.4
5/15/2019 23:40	9	9	9	30.96	4.9	4	24.8
5/15/2019 23:50	9	9	9	30.57	4.9	4	25
5/16/2019 0:00	9	9	9	30.17	5	3.9	25
5/16/2019 0:10	9	9	9	29.53	4.9	4	25.2
5/16/2019 0:20	9	9	9	30.17	2.1	1.8	25.2
5/16/2019 0:30	9	9	9	31.12	1.1	0.8	0.9
5/16/2019 0:40	9	9	9	32	1.1	0.9	0.5
5/16/2019 0:50	9	9	9	31.73	5.1	3.9	0.7
5/16/2019 1:00	9	9	9	31.39	5	3.8	24.4
5/16/2019 1:10	9	9	9	31.02	5	3.9	24.8
5/16/2019 1:20	9	9	9	30.63	5	3.9	25
5/16/2019 1:30	9	9	9	30.14	4.9	3.9	25.1
5/16/2019 1:40	9	9	9	29.56	5.1	3.9	25.3
5/16/2019 1:50	9	9	9	30.54	1.2	0.9	25.1
5/16/2019 2:00	9	9	9	31.73	1	0.9	0.5

5/16/2019 2:10	9	9	9	31.85	4.9	3.9	0.7
5/16/2019 2:20	9	9	9	31.27	4.9	3.9	24.7
5/16/2019 2:30	9	9	9	30.72	5	4	24.9
5/16/2019 2:40	9	9	9	30.17	4.9	4	25.1
5/16/2019 2:50	9	9	9	29.62	5.1	4	25.3
5/16/2019 3:00	9	9	9	30.69	1.2	0.8	25.1
5/16/2019 3:10	9	9	9	31.73	1.1	0.9	0.5
5/16/2019 3:20	9	9	9	31.82	4.9	3.9	0.6
5/16/2019 3:30	9	9	9	31.27	4.9	3.9	24.6
5/16/2019 3:40	9	9	9	30.66	5	3.9	25
5/16/2019 3:50	9	9	9	30.08	4.9	4	25.2
5/16/2019 4:00	9	9	9	30.2	2.7	2.4	25.2
5/16/2019 4:10	9	9	9	31.51	1.2	0.8	0.5
5/16/2019 4:20	9	9	9	31.82	4.9	4	0.6
5/16/2019 4:30	9	9	9	31.12	4.9	3.9	24.8
5/16/2019 4:40	9	9	9	30.44	4.9	4	25
5/16/2019 4:50	9	9	9	29.86	4.9	3.9	25.2
5/16/2019 5:00	9	9	9	30.63	1.3	0.9	25.1
5/16/2019 5:10	9	9	9	31.82	1.1	0.9	0.6
5/16/2019 5:20	9	9	9	31.73	4.9	4.1	10.7
5/16/2019 5:30	9	9	9	31.09	4.8	3.9	24.8
5/16/2019 5:40	9	9	9	30.54	5	3.9	24.9
5/16/2019 5:50	9	9	9	30.02	4.9	3.9	25.1
5/16/2019 6:00	9	9	9	30.14	2.2	2	25.2
5/16/2019 6:10	9	9	9	31.39	1	0.8	0.5
5/16/2019 6:20	9	9	9	31.88	5.1	4	0.6
5/16/2019 6:30	9	9	9	31.3	5	4	24.5
5/16/2019 6:40	9	9	9	30.72	5	4	24.9
5/16/2019 6:50	9	9	9	30.14	5	3.9	25.1
5/16/2019 7:00	9	9	9	29.74	3.6	3.3	25.3
5/16/2019 7:10	9	9	9	30.87	1.1	0.9	3.3
5/16/2019 7:20	9	9	9	32.09	1.5	0.9	0.6
5/16/2019 7:30	9	9	9	31.6	5	3.9	23.6
5/16/2019 7:40	9	9	9	30.93	5.3	3.9	24.9
5/16/2019 7:50	9	9	9	30.26	5	3.9	25.1
5/16/2019 8:00	9	9	9	29.59	1.9	1.8	25.2
5/16/2019 8:10	9	9	9	31.02	1	0.9	4.4
5/16/2019 8:20	9	9	9	31.94	5.1	4	0.5
5/16/2019 8:30	9	9	9	31.39	4.9	4.1	24.5
5/16/2019 8:40	9	9	9	30.81	4.8	3.9	24.9
5/16/2019 8:50	9	9	9	30.23	5	3.9	25.1
5/16/2019 9:00	9	9	9	29.71	3.6	3.4	25.3
5/16/2019 9:10	9	9	9	31.15	1.1	0.9	2.7
5/16/2019 9:20	9	9	9	32	4.9	3.9	0.5
5/16/2019 9:30	9	9	9	31.39	4.9	4	24.5
5/16/2019 9:40	9	9	9	30.84	4.9	3.9	24.9
5/16/2019 9:50	9	9	9	30.32	4.9	3.9	25.1

5/16/2019 10:00	9	9	9	29.77	4.8	3.9	25.2
5/16/2019 10:10	9	9	9	30.47	1.2	0.9	25.1
5/16/2019 10:20	9	9	9	31.82	1.1	0.9	0.5
5/16/2019 10:30	9	9	9	31.7	5.1	3.9	0.7
5/16/2019 10:40	9	9	9	30.96	4.9	3.9	24.8
5/16/2019 10:50	9	9	9	30.29	5.1	3.9	25.1
5/16/2019 11:00	9	9	9	29.77	3.6	3.4	25.3
5/16/2019 11:10	9	9	9	31.21	1	0.9	2.4
5/16/2019 11:20	9	9	9	31.85	5.1	4	0.6
5/16/2019 11:30	9	9	9	31.21	5	3.9	24.7
5/16/2019 11:40	9	9	9	30.54	5	3.9	25
5/16/2019 11:50	9	9	9	29.83	4.9	3.9	25.2
5/16/2019 12:00	9	9	9	31.09	1.1	0.8	25
5/16/2019 12:10	9	9	9	31.82	5	3.9	0.6
5/16/2019 12:20	9	9	9	31.05	5.1	3.9	24.9
5/16/2019 12:30	9	9	9	30.26	5	4	25.2
5/16/2019 12:40	9	9	9	30.63	1.5	1.1	25.2
5/16/2019 12:50	9	9	9	31.97	5	3.9	0.6
5/16/2019 13:00	9	9	9	31.09	5	3.9	24.9
5/16/2019 13:10	9	9	9	30.08	5	3.9	25.3
5/16/2019 13:20	9	9	9	31.57	1	0.8	1.4
5/16/2019 13:30	9	9	9	31.48	5.1	3.9	24.2
5/16/2019 13:40	9	9	9	30.47	5.1	3.9	25.1
5/16/2019 13:50	9	9	9	30.11	3.5	3.1	25.2
5/16/2019 14:00	9	9	9	31.73	1.1	0.9	0.5
5/16/2019 14:10	9	9	9	31.54	5	4	23.9
5/16/2019 14:20	9	9	9	30.84	4.9	3.8	24.9
5/16/2019 14:30	9	9	9	30.05	5.1	3.9	25.2
5/16/2019 14:40	9	9	9	31.02	1.2	0.9	25
5/16/2019 14:50	9	9	9	31.88	5.1	3.9	0.6
5/16/2019 15:00	9	9	9	30.99	5	3.9	24.9
5/16/2019 15:10	9	9	9	30.05	5	3.9	25.2
5/16/2019 15:20	9	9	9	31.3	1.1	0.9	4.4
5/16/2019 15:30	9	9	9	31.73	5	3.9	0.6
5/16/2019 15:40	9	9	9	31.02	5	3.9	24.8
5/16/2019 15:50	9	9	9	30.26	4.9	3.9	25.1
5/16/2019 16:00	9	9	9	30.14	3.3	3	25.3
5/16/2019 16:10	9	9	9	31.79	1.1	0.8	0.5
5/16/2019 16:20	9	9	9	31.36	5	4	24.7
5/16/2019 16:30	9	9	9	30.44	5	3.9	25.1
5/16/2019 16:40	9	9	9	30.87	1.2	0.9	25.2
5/16/2019 16:50	9	9	9	31.85	4.9	3.9	0.6
5/16/2019 17:00	9	9	9	30.93	5.1	3.9	24.9
5/16/2019 17:10	9	9	9	29.89	4.9	3.9	25.3
5/16/2019 17:20	9	9	9	31.76	1	0.9	0.5
5/16/2019 17:30	9	9	9	31.27	4.9	3.8	24.7
5/16/2019 17:40	9	9	9	30.23	4.8	4.1	25.2

5/16/2019 17:50	9	9	9	31.42	1.1	0.8	3.7
5/16/2019 18:00	9	9	9	31.48	4.9	3.9	24.5
5/16/2019 18:10	9	9	9	30.38	5	3.9	25.2
5/16/2019 18:20	9	9	9	31.48	1	0.8	2.9
5/16/2019 18:30	9	9	9	31.33	5	3.9	24.6
5/16/2019 18:40	9	9	9	30.32	5.1	3.8	25.2
5/16/2019 18:50	9	9	9	31.21	1.1	0.9	25.1
5/16/2019 19:00	9	9	9	31.57	4.9	4	24
5/16/2019 19:10	9	9	9	30.54	4.9	3.9	25.2
5/16/2019 19:20	9	9	9	30.69	1.5	1.3	25.2
5/16/2019 19:30	9	9	9	31.76	5	3.9	0.6
5/16/2019 19:40	9	9	9	30.66	5.1	3.9	25.1
5/16/2019 19:50	9	9	9	31.09	1.1	0.9	25.2
5/16/2019 20:00	9	9	9	31.51	4.9	3.9	24.2
5/16/2019 20:10	9	9	9	30.41	5	3.9	25.2
5/16/2019 20:20	9	9	9	31.36	1.1	0.9	11.7
5/16/2019 20:30	9	9	9	31.39	5.1	3.8	24.4
5/16/2019 20:40	9	9	9	30.32	5	3.9	25.2
5/16/2019 20:50	9	9	9	31.73	1	0.8	0.7
5/16/2019 21:00	9	9	9	31.27	4.8	3.9	24.8
5/16/2019 21:10	9	9	9	30.02	5.1	3.9	25.3
5/16/2019 21:20	9	9	9	32.03	4.9	3.9	0.5
5/16/2019 21:30	9	9	9	30.81	4.8	3.8	25.1
5/16/2019 21:40	9	9	9	30.66	2.2	1.9	25.3
5/16/2019 21:50	9	9	9	31.73	5.3	3.9	0.6
5/16/2019 22:00	9	9	9	30.66	4.9	4.1	25.1
5/16/2019 22:10	9	9	9	30.99	1.1	0.8	25.2
5/16/2019 22:20	9	9	9	31.76	4.8	4	23.8
5/16/2019 22:30	9	9	9	30.51	4.8	4	25.1
5/16/2019 22:40	9	9	9	31.18	0.9	0.9	25.1
5/16/2019 22:50	9	9	9	31.45	5	3.9	24.5
5/16/2019 23:00	9	9	9	30.29	5	3.9	25.3
5/16/2019 23:10	9	9	9	31.76	1.1	0.8	0.5
5/16/2019 23:20	9	9	9	31.09	5.1	3.9	24.9
5/16/2019 23:30	9	9	9	30.08	5.1	3.9	25.3
5/16/2019 23:40	9	9	9	32	5	3.9	0.6
5/16/2019 23:50	9	9	9	30.72	4.8	4	25.1
5/17/2019 0:00	9	9	9	31.3	1.2	0.8	25.2
5/17/2019 0:10	9	9	9	31.33	4.9	3.9	24.8
5/17/2019 0:20	9	9	9	30.2	3.7	3.4	25.4
5/17/2019 0:30	9	9	9	31.88	4.9	3.9	0.6
5/17/2019 0:40	9	9	9	30.69	4.9	3.8	25.1
5/17/2019 0:50	9	9	9	30.93	1.1	0.9	25.3
5/17/2019 1:00	9	9	9	31.54	4.8	3.9	24.1
5/17/2019 1:10	9	9	9	30.38	5.1	4	25.2
5/17/2019 1:20	9	9	9	31.54	1.1	0.9	2.6
5/17/2019 1:30	9	9	9	31.33	5.3	3.9	24.8

5/17/2019 1:40	9	9	9	30.08	4.9	3.8	25.3
5/17/2019 1:50	9	9	9	32.15	4.2	3.7	0.5
5/17/2019 2:00	9	9	9	30.99	5.2	4.1	25
5/17/2019 2:10	9	9	9	30.2	3.6	3.3	25.4
5/17/2019 2:20	9	9	9	31.94	4.9	4	0.6
5/17/2019 2:30	9	9	9	30.78	5	3.9	25.1
5/17/2019 2:40	9	9	9	30.78	1.6	1.2	25.3
5/17/2019 2:50	9	9	9	31.63	5.1	3.9	23.9
5/17/2019 3:00	9	9	9	30.41	4.8	4	25.2
5/17/2019 3:10	9	9	9	31.67	1.1	0.9	1.3
5/17/2019 3:20	9	9	9	31.12	5.1	3.9	24.9
5/17/2019 3:30	9	9	9	29.96	4.9	3.9	25.3
5/17/2019 3:40	9	9	9	32.18	2.9	2.3	0.5
5/17/2019 3:50	9	9	9	31.05	5.3	3.9	24.9
5/17/2019 4:00	9	9	9	30.17	3.7	3.4	25.3
5/17/2019 4:10	9	9	9	31.94	5	3.9	0.6
5/17/2019 4:20	9	9	9	30.72	4.7	3.9	25.1
5/17/2019 4:30	9	9	9	31.02	1.2	0.9	25.3
5/17/2019 4:40	9	9	9	31.54	5	4	24.3
5/17/2019 4:50	9	9	9	30.14	5.1	3.9	25.3
5/17/2019 5:00	9	9	9	31.94	1	0.9	0.5
5/17/2019 5:10	9	9	9	30.99	5.1	3.8	25.1
5/17/2019 5:20	9	9	9	30.69	2	1.7	25.3
5/17/2019 5:30	9	9	9	31.57	5.1	3.9	24
5/17/2019 5:40	9	9	9	30.41	4.9	4.1	25.2
5/17/2019 5:50	9	9	9	31.97	1.1	0.8	0.5
5/17/2019 6:00	9	9	9	31.02	5.1	3.9	24.9
5/17/2019 6:10	9	9	9	30.57	2.4	2.2	25.3
5/17/2019 6:20	9	9	9	31.85	5.1	3.9	0.7
5/17/2019 6:30	9	9	9	30.66	4.9	3.9	25.1
5/17/2019 6:40	9	9	9	31.05	1.3	0.9	25.2
5/17/2019 6:50	9	9	9	31.51	5.1	3.9	24.2
5/17/2019 7:00	9	9	9	30.26	5	4	25.2
5/17/2019 7:10	9	9	9	31.88	1	0.8	0.5
5/17/2019 7:20	9	9	9	31.12	5	3.9	24.9
5/17/2019 7:30	9	9	9	30.02	3.5	3.2	25.3
5/17/2019 7:40	9	9	9	31.88	5	3.9	0.6
5/17/2019 7:50	9	9	9	30.66	5	3.9	25.1
5/17/2019 8:00	9	9	9	31.12	1.2	0.9	25.2
5/17/2019 8:10	9	9	9	31.45	5	3.9	24.7
5/17/2019 8:20	9	9	9	30.2	4.8	4	25.3
5/17/2019 8:30	9	9	9	31.97	4.9	3.9	0.6
5/17/2019 8:40	9	9	9	30.72	5	4	25.1
5/17/2019 8:50	9	9	9	31.33	1.2	0.8	25.2
5/17/2019 9:00	9	9	9	31.3	4.9	3.9	24.7
5/17/2019 9:10	9	9	9	30.11	4.8	3.9	25.3
5/17/2019 9:20	9	9	9	32.12	5.1	4.2	0.6

5/17/2019 9:30	9	9	9	30.93	4.8	4	25
5/17/2019 9:40	9	9	9	30.57	2.5	2.2	25.3
5/17/2019 9:50	9	9	9	31.79	5	4	0.6
5/17/2019 10:00	9	9	9	30.69	5	4	25.1
5/17/2019 10:10	9	9	9	30.78	1.5	1.2	25.2
5/17/2019 10:20	9	9	9	31.7	5	3.9	0.7
5/17/2019 10:30	9	9	9	30.54	4.8	3.9	25.2
5/17/2019 10:40	9	9	9	31.51	1.1	0.9	4
5/17/2019 10:50	9	9	9	31.3	5	4	24.9
5/17/2019 11:00	9	9	9	30.02	5.1	4	25.3
5/17/2019 11:10	9	9	9	32.03	5.2	4.2	0.5
5/17/2019 11:20	9	9	9	30.99	5.1	3.8	24.9
5/17/2019 11:30	9	9	9	29.96	4.9	4	25.2
5/17/2019 11:40	9	9	9	31.85	1.1	0.8	0.5
5/17/2019 11:50	9	9	9	31.18	5	3.9	24.9
5/17/2019 12:00	9	9	9	30.05	5.1	3.9	25.3
5/17/2019 12:10	9	9	9	31.97	4.9	3.9	0.5
5/17/2019 12:20	9	9	9	30.81	5	3.9	25.1
5/17/2019 12:30	9	9	9	31.42	1.1	0.9	3.2
5/17/2019 12:40	9	9	9	31.27	4.8	3.9	24.9
5/17/2019 12:50	9	9	9	30.44	3.4	3.1	25.4
5/17/2019 13:00	9	9	9	31.7	4.9	3.9	0.7
5/17/2019 13:10	9	9	9	30.47	5.1	3.9	25.2
5/17/2019 13:20	9	9	9	31.18	1.2	0.9	25.1
5/17/2019 13:30	9	9	9	31.54	4.9	3.9	24.2
5/17/2019 13:40	9	9	9	30.47	5.3	3.9	25.2
5/17/2019 13:50	9	9	9	31.3	1.1	0.9	3.1
5/17/2019 14:00	9	9	9	31.45	4.7	3.9	24.7
5/17/2019 14:10	9	9	9	30.29	5	3.9	25.2
5/17/2019 14:20	9	9	9	31.88	1.1	0.8	0.5
5/17/2019 14:30	9	9	9	31.02	4.7	4	25
5/17/2019 14:40	9	9	9	30.63	2.5	2.3	25.3
5/17/2019 14:50	9	9	9	31.67	4.9	3.9	0.7
5/17/2019 15:00	9	9	9	30.44	4.9	3.9	25.1
5/17/2019 15:10	9	9	9	31.85	1.1	0.8	0.5
5/17/2019 15:20	9	9	9	31.02	5	4	25
5/17/2019 15:30	9	9	9	30.41	3	2.7	25.3
5/17/2019 15:40	9	9	9	31.76	5	3.9	0.6
5/17/2019 15:50	9	9	9	30.63	4.9	4	25.1
5/17/2019 16:00	9	9	9	31.3	1.1	0.9	25.1
5/17/2019 16:10	9	9	9	31.39	5.1	3.9	24.5
5/17/2019 16:20	9	9	9	30.35	4.9	3.9	25.2
5/17/2019 16:30	9	9	9	31.94	1	0.9	0.5
5/17/2019 16:40	9	9	9	31.15	4.9	3.9	24.9
5/17/2019 16:50	9	9	9	30.17	3.6	3.3	25.3
5/17/2019 17:00	9	9	9	31.94	5	3.9	0.6
5/17/2019 17:10	9	9	9	30.72	4.8	3.8	25

5/17/2019 17:20	9	9	9	30.66	2	1.6	25.2
5/17/2019 17:30	9	9	9	31.7	5	3.9	20.2
5/17/2019 17:40	9	9	9	30.57	4.7	4	25.1
5/17/2019 17:50	9	9	9	31.15	1.1	0.9	25.1
5/17/2019 18:00	9	9	9	31.45	4.9	3.9	24.5
5/17/2019 18:10	9	9	9	30.2	4.9	4	25.3
5/17/2019 18:20	9	9	9	32.09	1.3	0.9	0.5
5/17/2019 18:30	9	9	9	30.81	5	3.9	25
5/17/2019 18:40	9	9	9	30.72	1.7	1.5	25.3
5/17/2019 18:50	9	9	9	31.6	5.2	3.9	23.9
5/17/2019 19:00	9	9	9	30.41	4.9	3.8	25.1
5/17/2019 19:10	9	9	9	31.76	1	0.9	0.5
5/17/2019 19:20	9	9	9	31.09	5.1	4	24.9
5/17/2019 19:30	9	9	9	30.44	3.1	2.9	25.3
5/17/2019 19:40	9	9	9	31.73	4.7	3.9	5.5
5/17/2019 19:50	9	9	9	30.51	4.9	3.9	25.1
5/17/2019 20:00	9	9	9	31.39	1	0.8	4.8
5/17/2019 20:10	9	9	9	31.18	4.9	3.9	24.9
5/17/2019 20:20	9	9	9	30.11	3.5	3.4	25.3
5/17/2019 20:30	9	9	9	31.79	4.9	3.9	0.6
5/17/2019 20:40	9	9	9	30.54	5	3.9	25.2
5/17/2019 20:50	9	9	9	31.88	1.1	0.8	0.5
5/17/2019 21:00	9	9	9	30.9	5	3.9	25
5/17/2019 21:10	9	9	9	30.9	1.2	0.9	25.2
5/17/2019 21:20	9	9	9	31.39	5	3.8	24.4
5/17/2019 21:30	9	9	9	30.29	5	3.8	25.3
5/17/2019 21:40	9	9	9	32.06	5	4	0.5
5/17/2019 21:50	9	9	9	30.81	5	3.9	25.1
5/17/2019 22:00	9	9	9	30.72	1.8	1.5	25.3
5/17/2019 22:10	9	9	9	31.63	4.9	4	24
5/17/2019 22:20	9	9	9	30.35	4.9	4	25.3
5/17/2019 22:30	9	9	9	31.82	1	0.8	0.5
5/17/2019 22:40	9	9	9	31.12	5	3.9	24.9
5/17/2019 22:50	9	9	9	30.32	3.4	3	25.3
5/17/2019 23:00	9	9	9	31.97	4.9	4	0.5
5/17/2019 23:10	9	9	9	30.72	4.9	4	25.1
5/17/2019 23:20	9	9	9	30.96	1.3	0.9	25.2
5/17/2019 23:30	9	9	9	31.6	5	3.9	23.9
5/17/2019 23:40	9	9	9	30.38	5	3.9	25.2
5/17/2019 23:50	9	9	9	31.54	1	0.8	2.6
5/18/2019 0:00	9	9	9	31.45	4.9	4	24.5
5/18/2019 0:10	9	9	9	30.29	5	3.9	25.2
5/18/2019 0:20	9	9	9	31.63	1	0.9	1.8
5/18/2019 0:30	9	9	9	31.21	5	3.9	24.8
5/18/2019 0:40	9	9	9	30.05	5.1	3.9	25.3
5/18/2019 0:50	9	9	9	32	0.9	0.9	0.5
5/18/2019 1:00	9	9	9	30.96	4.9	4	25

5/18/2019 1:10	9	9	9	30.47	2.9	2.5	25.3
5/18/2019 1:20	9	9	9	31.79	5	3.9	0.7
5/18/2019 1:30	9	9	9	30.66	4.9	3.9	25.1
5/18/2019 1:40	9	9	9	30.84	1.3	0.9	25.3
5/18/2019 1:50	9	9	9	31.7	5	3.8	0.7
5/18/2019 2:00	9	9	9	30.54	4.9	3.9	25.1
5/18/2019 2:10	9	9	9	31.09	1.1	0.9	25.1
5/18/2019 2:20	9	9	9	31.42	4.8	4	24.5
5/18/2019 2:30	9	9	9	30.17	4.9	3.9	25.3
5/18/2019 2:40	9	9	9	31.85	0.9	0.9	0.5
5/18/2019 2:50	9	9	9	31.12	4.8	3.9	24.9
5/18/2019 3:00	9	9	9	30.05	4.9	3.8	25.3
5/18/2019 3:10	9	9	9	31.85	1.1	0.9	0.5
5/18/2019 3:20	9	9	9	31.27	5.2	3.9	24.7
5/18/2019 3:30	9	9	9	30.35	5	3.9	25.2
5/18/2019 3:40	9	9	9	31.15	0.9	0.8	25.1
5/18/2019 3:50	9	9	9	31.54	4.9	4	23.9
5/18/2019 4:00	9	9	9	30.54	4.9	3.9	25.1
5/18/2019 4:10	9	9	9	30.9	1.2	0.9	25.2
5/18/2019 4:20	9	9	9	31.67	4.9	3.9	23.4
5/18/2019 4:30	9	9	9	30.44	5.1	3.9	25.2
5/18/2019 4:40	9	9	9	30.87	1.2	0.9	25.2
5/18/2019 4:50	9	9	9	31.76	4.9	3.9	0.6
5/18/2019 5:00	9	9	9	30.75	5	3.9	25.1
5/18/2019 5:10	9	9	9	30.57	2	1.6	25.1
5/18/2019 5:20	9	9	9	31.94	4.9	3.9	0.6
5/18/2019 5:30	9	9	9	30.78	5	3.9	25
5/18/2019 5:40	9	9	9	30.54	2.7	2.4	25.2
5/18/2019 5:50	9	9	9	31.73	5	3.9	0.6
5/18/2019 6:00	9	9	9	30.69	5	4	25.1
5/18/2019 6:10	9	9	9	31.02	1.2	0.8	25.2
5/18/2019 6:20	9	9	9	31.48	4.8	3.9	24.5
5/18/2019 6:30	9	9	9	30.38	4.9	3.9	25.2
5/18/2019 6:40	9	9	9	31.33	1	0.8	3.3
5/18/2019 6:50	9	9	9	31.39	5.1	3.9	24.5
5/18/2019 7:00	9	9	9	30.32	5	3.9	25.2
5/18/2019 7:10	9	9	9	31.36	1	0.9	4.4
5/18/2019 7:20	9	9	9	31.39	4.9	4	24.7
5/18/2019 7:30	9	9	9	30.14	5.1	3.9	25.3
5/18/2019 7:40	9	9	9	32	1.1	0.9	0.5
5/18/2019 7:50	9	9	9	31.02	4.9	3.9	25
5/18/2019 8:00	9	9	9	30.23	3.5	3.2	25.3
5/18/2019 8:10	9	9	9	31.94	4.9	3.9	0.6
5/18/2019 8:20	9	9	9	30.87	4.8	3.9	25
5/18/2019 8:30	9	9	9	30.41	3.1	2.7	25.3
5/18/2019 8:40	9	9	9	31.7	5	3.9	0.6
5/18/2019 8:50	9	9	9	30.63	5.1	4	25.1

5/18/2019 9:00	9	9	9	30.87	1.1	0.9	25.2
5/18/2019 9:10	9	9	9	31.6	5	3.9	23.9
5/18/2019 9:20	9	9	9	30.38	4.9	3.9	25.2
5/18/2019 9:30	9	9	9	31.63	1	0.9	1.9
5/18/2019 9:40	9	9	9	31.27	5	3.8	24.8
5/18/2019 9:50	9	9	9	30.14	4.9	3.9	25.3
5/18/2019 10:00	9	9	9	32.06	1.2	0.9	0.5
5/18/2019 10:10	9	9	9	30.99	5.1	4	25
5/18/2019 10:20	9	9	9	30.66	2.2	1.8	25.3
5/18/2019 10:30	9	9	9	31.57	5	3.9	23.9
5/18/2019 10:40	9	9	9	30.38	4.8	3.9	25.2
5/18/2019 10:50	9	9	9	31.63	1.1	0.9	2
5/18/2019 11:00	9	9	9	31.3	5.1	3.9	24.9
5/18/2019 11:10	9	9	9	30.11	5.2	3.9	25.3
5/18/2019 11:20	9	9	9	32.03	4.9	3.9	0.5
5/18/2019 11:30	9	9	9	30.93	5	4	25
5/18/2019 11:40	9	9	9	30.41	3	2.6	25.3
5/18/2019 11:50	9	9	9	31.76	4.9	3.9	0.6
5/18/2019 12:00	9	9	9	30.57	5	3.9	25.1
5/18/2019 12:10	9	9	9	31.33	0.9	0.8	25.2
5/18/2019 12:20	9	9	9	31.39	4.9	3.9	24.6
5/18/2019 12:30	9	9	9	30.23	4.9	3.9	25.2
5/18/2019 12:40	9	9	9	31.57	1	0.8	1.7
5/18/2019 12:50	9	9	9	31.12	5.1	3.9	24.8
5/18/2019 13:00	9	9	9	30.17	5	3.8	25.2
5/18/2019 13:10	9	9	9	31.85	1.1	0.8	0.5
5/18/2019 13:20	9	9	9	31.12	4.9	3.9	24.9
5/18/2019 13:30	9	9	9	30.11	3.5	3.3	25.3
5/18/2019 13:40	9	9	9	32.06	5	3.9	0.5
5/18/2019 13:50	9	9	9	30.75	4.9	3.9	25
5/18/2019 14:00	9	9	9	30.84	1.4	1	25.2
5/18/2019 14:10	9	9	9	31.48	4.9	3.9	24.3
5/18/2019 14:20	9	9	9	30.29	4.8	3.8	25.2
5/18/2019 14:30	9	9	9	31.82	1.1	0.9	0.5
5/18/2019 14:40	9	9	9	31.02	5	3.9	24.9
5/18/2019 14:50	9	9	9	30.38	3.5	3.2	25.2
5/18/2019 15:00	9	9	9	31.82	4.9	3.9	0.5
5/18/2019 15:10	9	9	9	30.72	4.9	3.9	25
5/18/2019 15:20	9	9	9	30.35	3	2.8	25.2
5/18/2019 15:30	9	9	9	31.94	4.9	3.9	0.5
5/18/2019 15:40	9	9	9	30.66	5.1	3.9	25.1
5/18/2019 15:50	9	9	9	31.21	1.2	0.9	25.1
5/18/2019 16:00	9	9	9	31.57	5	4	24.3
5/18/2019 16:10	9	9	9	30.32	4.9	3.9	25.2
5/18/2019 16:20	9	9	9	31.6	1	0.9	1
5/18/2019 16:30	9	9	9	31.33	4.9	3.9	24.8
5/18/2019 16:40	9	9	9	30.14	4.9	4	25.2

5/18/2019 16:50	9	9	9	31.79	0.9	0.8	0.5
5/18/2019 17:00	9	9	9	31.3	5	3.9	24.8
5/18/2019 17:10	9	9	9	30.08	5	3.9	25.3
5/18/2019 17:20	9	9	9	32.09	4.9	3.9	0.5
5/18/2019 17:30	9	9	9	30.84	4.9	3.8	25
5/18/2019 17:40	9	9	9	30.93	1.3	0.9	25.2
5/18/2019 17:50	9	9	9	31.57	4.7	3.9	24.2
5/18/2019 18:00	9	9	9	30.32	4.9	3.9	25.2
5/18/2019 18:10	9	9	9	32.06	1.1	0.9	0.5
5/18/2019 18:20	9	9	9	31.05	4.9	3.9	25
5/18/2019 18:30	9	9	9	29.99	5	3.9	25.2
5/18/2019 18:40	9	9	9	31.94	1.1	0.9	0.5
5/18/2019 18:50	9	9	9	31.18	4.9	3.9	24.8
5/18/2019 19:00	9	9	9	30.11	4.9	3.9	25.3
5/18/2019 19:10	9	9	9	31.97	5	4	0.6
5/18/2019 19:20	9	9	9	30.78	4.9	3.9	25
5/18/2019 19:30	9	9	9	30.87	1.1	0.9	25.2
5/18/2019 19:40	9	9	9	31.48	4.8	3.9	24.4
5/18/2019 19:50	9	9	9	30.14	4.9	3.9	25.3
5/18/2019 20:00	9	9	9	32.06	1.3	0.9	0.5
5/18/2019 20:10	9	9	9	30.9	4.8	4.1	25
5/18/2019 20:20	9	9	9	30.69	2	1.7	25.2
5/18/2019 20:30	9	9	9	31.6	5	3.8	23.9
5/18/2019 20:40	9	9	9	30.41	5.1	3.9	25.2
5/18/2019 20:50	9	9	9	31.79	1	0.9	0.5
5/18/2019 21:00	9	9	9	31.12	5	4	24.9
5/18/2019 21:10	9	9	9	30.63	2.7	2.4	25.2
5/18/2019 21:20	9	9	9	31.6	5	3.9	23.8
5/18/2019 21:30	9	9	9	30.35	4.9	3.9	25.2
5/18/2019 21:40	9	9	9	31.76	1	0.8	0.5
5/18/2019 21:50	9	9	9	31.12	5	3.9	24.9
5/18/2019 22:00	9	9	9	30.08	3.7	3.4	25.3
5/18/2019 22:10	9	9	9	32.03	5.1	4	0.5
5/18/2019 22:20	9	9	9	30.84	4.9	3.9	25.1
5/18/2019 22:30	9	9	9	30.81	1.6	1.1	25.2
5/18/2019 22:40	9	9	9	31.63	4.9	3.9	23.9
5/18/2019 22:50	9	9	9	30.38	4.9	3.8	25.3
5/18/2019 23:00	9	9	9	31.76	1	0.8	0.5
5/18/2019 23:10	9	9	9	31.05	4.9	3.9	25
5/18/2019 23:20	9	9	9	30.51	2.9	2.8	25.3
5/18/2019 23:30	9	9	9	31.57	5	3.9	24.2
5/18/2019 23:40	9	9	9	30.38	4.9	4	25.1
5/18/2019 23:50	9	9	9	31.51	1.1	0.8	2.6
5/19/2019 0:00	9	9	9	31.21	5	3.8	24.8
5/19/2019 0:10	9	9	9	30.08	4.9	4	25.3
5/19/2019 0:20	9	9	9	32.06	4.9	3.9	0.5
5/19/2019 0:30	9	9	9	30.72	5	3.9	25.1

5/19/2019 0:40	9	9	9	31.09	1.1	0.9	25.2
5/19/2019 0:50	9	9	9	31.48	4.9	4	24.5
5/19/2019 1:00	9	9	9	30.23	5	3.8	25.3
5/19/2019 1:10	9	9	9	31.97	0.9	0.9	0.5
5/19/2019 1:20	9	9	9	31.12	5	3.9	24.9
5/19/2019 1:30	9	9	9	30.08	3.7	3.3	25.3
5/19/2019 1:40	9	9	9	32	4.9	3.9	0.5
5/19/2019 1:50	9	9	9	30.81	4.9	3.9	25.1
5/19/2019 2:00	9	9	9	30.69	1.7	1.3	25.2
5/19/2019 2:10	9	9	9	31.6	4.9	3.9	23.9
5/19/2019 2:20	9	9	9	30.41	4.9	3.9	25.2
5/19/2019 2:30	9	9	9	31.97	1.1	0.8	0.5
5/19/2019 2:40	9	9	9	30.93	5	4	25
5/19/2019 2:50	9	9	9	30.81	2	1.7	25.2
5/19/2019 3:00	9	9	9	31.48	5	3.9	24.3
5/19/2019 3:10	9	9	9	30.26	4.9	3.9	25.3
5/19/2019 3:20	9	9	9	32.03	1	0.9	0.5
5/19/2019 3:30	9	9	9	30.96	5	4	25
5/19/2019 3:40	9	9	9	30.57	2.7	2.4	25.3
5/19/2019 3:50	9	9	9	31.85	4.9	3.9	0.6
5/19/2019 4:00	9	9	9	30.75	5.2	4	25
5/19/2019 4:10	9	9	9	30.35	2.8	2.5	25.3
5/19/2019 4:20	9	9	9	31.85	4.9	3.9	0.6
5/19/2019 4:30	9	9	9	30.78	4.9	3.9	25.1
5/19/2019 4:40	9	9	9	30.47	2.7	2.3	25.3
5/19/2019 4:50	9	9	9	31.79	4.9	3.9	0.6
5/19/2019 5:00	9	9	9	30.54	5	3.9	25.2
5/19/2019 5:10	9	9	9	31.27	1	0.8	25.1
5/19/2019 5:20	9	9	9	31.39	4.9	3.9	24.7
5/19/2019 5:30	9	9	9	30.23	5	3.9	25.3
5/19/2019 5:40	9	9	9	32	1.1	0.8	0.5
5/19/2019 5:50	9	9	9	30.93	4.9	3.9	25
5/19/2019 6:00	9	9	9	30.41	3.3	2.9	25.3
5/19/2019 6:10	9	9	9	31.76	4.9	3.8	0.6
5/19/2019 6:20	9	9	9	30.57	5	3.9	25.1
5/19/2019 6:30	9	9	9	31.39	0.9	0.9	4.5
5/19/2019 6:40	9	9	9	31.3	5	4	24.7
5/19/2019 6:50	9	9	9	30.2	5.1	4	25.3
5/19/2019 7:00	9	9	9	31.54	1	0.9	1.3
5/19/2019 7:10	9	9	9	31.39	4.9	3.9	24.7
5/19/2019 7:20	9	9	9	30.26	4.9	3.9	25.2
5/19/2019 7:30	9	9	9	31.6	1	0.9	1.8
5/19/2019 7:40	9	9	9	31.21	5.1	3.9	24.9
5/19/2019 7:50	9	9	9	30.2	4.7	3.8	25.3
5/19/2019 8:00	9	9	9	31.79	0.9	0.8	0.5
5/19/2019 8:10	9	9	9	31.3	5.1	3.9	24.7
5/19/2019 8:20	9	9	9	30.23	4.9	3.9	25.2

5/19/2019 8:30	9	9	9	31.51	1	0.9	1.8
5/19/2019 8:40	9	9	9	31.33	5	3.9	24.6
5/19/2019 8:50	9	9	9	30.29	4.9	3.9	25.2
5/19/2019 9:00	9	9	9	31.42	1.1	0.8	5.1
5/19/2019 9:10	9	9	9	31.33	4.8	3.9	24.8
5/19/2019 9:20	9	9	9	30.05	4.9	3.9	25.3
5/19/2019 9:30	9	9	9	31.97	4.9	3.9	0.5
5/19/2019 9:40	9	9	9	30.66	4.7	3.9	25.1
5/19/2019 9:50	9	9	9	31.33	1	0.9	4.8
5/19/2019 10:00	9	9	9	31.36	5.1	3.9	24.7
5/19/2019 10:10	9	9	9	30.11	5.1	3.9	25.3
5/19/2019 10:20	9	9	9	32.06	4.9	3.9	0.5
5/19/2019 10:30	9	9	9	30.78	5	3.9	25.1
5/19/2019 10:40	9	9	9	31.09	1	0.8	25.2
5/19/2019 10:50	9	9	9	31.33	4.9	3.9	24.8
5/19/2019 11:00	9	9	9	30.11	4.6	3.6	25.3
5/19/2019 11:10	9	9	9	31.97	4.9	4	0.5
5/19/2019 11:20	9	9	9	30.75	4.9	3.9	25.1
5/19/2019 11:30	9	9	9	30.93	1.2	0.9	25.1
5/19/2019 11:40	9	9	9	31.42	4.9	3.9	24.5
5/19/2019 11:50	9	9	9	30.26	4.9	3.9	25.2
5/19/2019 12:00	9	9	9	32.03	4.9	3.9	0.5
5/19/2019 12:10	9	9	9	30.75	4.9	4	25.1
5/19/2019 12:20	9	9	9	31.36	1	0.9	25.1
5/19/2019 12:30	9	9	9	31.36	4.9	4	24.7
5/19/2019 12:40	9	9	9	30.05	3.4	3	25.2
5/19/2019 12:50	9	9	9	31.85	4.9	4	0.5
5/19/2019 13:00	9	9	9	30.51	4.9	3.9	25.1
5/19/2019 13:10	9	9	9	31.73	1	0.9	0.5
5/19/2019 13:20	9	9	9	30.93	4.8	3.9	25
5/19/2019 13:30	9	9	9	30.96	1.4	0.9	25.2
5/19/2019 13:40	9	9	9	31.45	5	3.9	24.5
5/19/2019 13:50	9	9	9	30.14	5	4	25.3
5/19/2019 14:00	9	9	9	31.79	4.9	4	0.6
5/19/2019 14:10	9	9	9	30.51	5	3.9	25.1
5/19/2019 14:20	9	9	9	32.09	1.9	1.2	0.5
5/19/2019 14:30	9	9	9	30.72	4.9	3.9	25.1
5/19/2019 14:40	9	9	9	31.73	1.1	0.8	1
5/19/2019 14:50	9	9	9	31.02	5	4	24.9
5/19/2019 15:00	9	9	9	30.84	1.3	1.2	25.3
5/19/2019 15:10	9	9	9	31.51	5	3.9	24.2
5/19/2019 15:20	9	9	9	30.17	4.9	3.9	25.3
5/19/2019 15:30	9	9	9	31.82	4.9	3.9	0.5
5/19/2019 15:40	9	9	9	30.44	5	3.9	25.2
5/19/2019 15:50	9	9	9	32.09	3.6	3	0.5
5/19/2019 16:00	9	9	9	30.75	4.9	3.9	25.1
5/19/2019 16:10	9	9	9	31.33	1.1	0.9	25.1

5/19/2019 16:20	9	9	9	31.27	5	3.9	24.8
5/19/2019 16:30	9	9	9	30.14	5	3.9	25.2
5/19/2019 16:40	9	9	9	32	5.1	3.9	0.5
5/19/2019 16:50	9	9	9	30.63	4.9	3.8	25.1
5/19/2019 17:00	9	9	9	31.45	1.1	0.8	3.4
5/19/2019 17:10	9	9	9	31.27	4.9	3.9	24.8
5/19/2019 17:20	9	9	9	30.2	3.5	3.3	25.3
5/19/2019 17:30	9	9	9	31.79	5	3.9	0.6
5/19/2019 17:40	9	9	9	30.51	5.1	3.9	25
5/19/2019 17:50	9	9	9	31.42	1	0.8	3.8
5/19/2019 18:00	9	9	9	31.33	4.9	3.8	24.8
5/19/2019 18:10	9	9	9	30.2	3.8	3.4	25.3
5/19/2019 18:20	9	9	9	31.76	4.9	3.9	0.6
5/19/2019 18:30	9	9	9	30.54	4.9	3.9	25.1
5/19/2019 18:40	9	9	9	31.79	1.1	0.8	0.5
5/19/2019 18:50	9	9	9	31.02	4.9	3.9	24.9
5/19/2019 19:00	9	9	9	31.21	1.2	0.9	25.1
5/19/2019 19:10	9	9	9	31.21	5	3.9	24.9
5/19/2019 19:20	9	9	9	30.63	2.9	2.4	25.3
5/19/2019 19:30	9	9	9	31.57	4.7	3.9	24.1
5/19/2019 19:40	9	9	9	30.2	4.9	3.9	25.2
5/19/2019 19:50	9	9	9	31.88	5.2	4	0.5
5/19/2019 20:00	9	9	9	30.57	4.8	3.9	25.1
5/19/2019 20:10	9	9	9	31.7	1	0.9	1.1
5/19/2019 20:20	9	9	9	31.09	4.8	4	24.9
5/19/2019 20:30	9	9	9	30.57	2.8	2.6	25.3
5/19/2019 20:40	9	9	9	31.6	4.9	3.9	24.1
5/19/2019 20:50	9	9	9	30.17	5.1	3.9	25.2
5/19/2019 21:00	9	9	9	31.85	5	3.9	0.5
5/19/2019 21:10	9	9	9	30.63	4.9	3.9	25.1
5/19/2019 21:20	9	9	9	31.36	1.1	0.8	3.2
5/19/2019 21:30	9	9	9	31.18	4.9	3.9	24.9
5/19/2019 21:40	9	9	9	30.2	3.6	3.3	25.3
5/19/2019 21:50	9	9	9	31.88	5	3.9	0.5
5/19/2019 22:00	9	9	9	30.66	4.9	4	25
5/19/2019 22:10	9	9	9	30.87	1.2	0.9	25.2
5/19/2019 22:20	9	9	9	31.54	5	3.9	24.1
5/19/2019 22:30	9	9	9	30.32	4.9	3.9	25.2
5/19/2019 22:40	9	9	9	31.88	1	0.8	0.4
5/19/2019 22:50	9	9	9	30.99	4.9	3.9	25.1
5/19/2019 23:00	9	9	9	30.9	1.4	1	25.3
5/19/2019 23:10	9	9	9	31.45	5	3.9	24.5
5/19/2019 23:20	9	9	9	30.14	4.7	3.8	25.3
5/19/2019 23:30	9	9	9	32	4.9	3.9	0.5
5/19/2019 23:40	9	9	9	30.66	5.1	3.9	25.1
5/19/2019 23:50	9	9	9	31.45	1	0.9	3.6
5/20/2019 0:00	9	9	9	31.27	4.9	3.8	24.8

5/20/2019 0:10	9	9	9	30.38	3.3	2.9	25.3
5/20/2019 0:20	9	9	9	31.76	4.9	3.9	2.8
5/20/2019 0:30	9	9	9	30.41	4.9	4	25.2
5/20/2019 0:40	9	9	9	31.88	1	0.9	0.4
5/20/2019 0:50	9	9	9	30.96	4.9	4.1	25
5/20/2019 1:00	9	9	9	30.9	1.7	1.4	25.2
5/20/2019 1:10	9	9	9	31.42	5.2	4	24.6
5/20/2019 1:20	9	9	9	30.11	4.7	3.9	25.3
5/20/2019 1:30	9	9	9	31.85	5	3.9	0.5
5/20/2019 1:40	9	9	9	30.51	5	3.8	25.2
5/20/2019 1:50	9	9	9	32.06	1.3	0.9	0.5
5/20/2019 2:00	9	9	9	30.87	5.2	3.9	25
5/20/2019 2:10	9	9	9	31.18	1.2	0.9	25.1
5/20/2019 2:20	9	9	9	31.27	4.9	4	24.8
5/20/2019 2:30	9	9	9	30.08	4.9	3.9	25.3
5/20/2019 2:40	9	9	9	32.06	4.9	3.9	0.5
5/20/2019 2:50	9	9	9	30.66	4.9	3.9	25.1
5/20/2019 3:00	9	9	9	31.45	1	0.9	4.5
5/20/2019 3:10	9	9	9	31.18	5.3	4	24.8
5/20/2019 3:20	9	9	9	30.75	2.3	2	25.2
5/20/2019 3:30	9	9	9	31.51	5	3.9	24.3
5/20/2019 3:40	9	9	9	30.11	4.9	3.9	25.3
5/20/2019 3:50	9	9	9	31.85	4.9	3.9	0.5
5/20/2019 4:00	9	9	9	30.41	5	3.9	25.2
5/20/2019 4:10	9	9	9	31.85	1.1	0.8	0.4
5/20/2019 4:20	9	9	9	30.96	5	3.9	25
5/20/2019 4:30	9	9	9	30.96	1.2	1	25.2
5/20/2019 4:40	9	9	9	31.48	5.1	3.8	24.5
5/20/2019 4:50	9	9	9	30.11	5.1	3.9	25.3
5/20/2019 5:00	9	9	9	32.03	4.9	4	0.5
5/20/2019 5:10	9	9	9	30.75	5	3.9	25.1
5/20/2019 5:20	9	9	9	31.51	1	0.8	5.3
5/20/2019 5:30	9	9	9	31.02	4.9	4	24.9
5/20/2019 5:40	9	9	9	30.93	1.3	0.9	25.3
5/20/2019 5:50	9	9	9	31.42	5	3.9	24.6
5/20/2019 6:00	9	9	9	30.11	4.9	3.9	25.3
5/20/2019 6:10	9	9	9	31.79	5.1	3.9	0.5
5/20/2019 6:20	9	9	9	30.57	4.8	3.9	25.2
5/20/2019 6:30	9	9	9	31.7	1.1	0.8	0.5
5/20/2019 6:40	9	9	9	31.12	5.1	3.9	24.9
5/20/2019 6:50	9	9	9	30.69	2.4	2.1	25.2
5/20/2019 7:00	9	9	9	31.45	5	3.9	24.4
5/20/2019 7:10	9	9	9	30.14	5	3.9	25.2
5/20/2019 7:20	9	9	9	31.88	5.1	4	0.5
5/20/2019 7:30	9	9	9	30.44	4.9	3.9	25.2
5/20/2019 7:40	9	9	9	32.03	1	0.8	0.5
5/20/2019 7:50	9	9	9	30.81	5.1	4	25

5/20/2019 8:00	9	9	9	31.36	0.9	0.8	4.3
5/20/2019 8:10	9	9	9	31.21	4.8	3.9	24.8
5/20/2019 8:20	9	9	9	30.14	3.6	3.4	25.3
5/20/2019 8:30	9	9	9	31.82	4.8	3.9	0.5
5/20/2019 8:40	9	9	9	30.44	5	3.9	25.1
5/20/2019 8:50	9	9	9	31.85	1	0.8	0.4
5/20/2019 9:00	9	9	9	30.93	4.9	3.8	25
5/20/2019 9:10	9	9	9	31.39	1	0.9	25.1
5/20/2019 9:20	9	9	9	31.12	5	3.9	24.9
5/20/2019 9:30	9	9	9	30.63	2.6	2.3	25.3
5/20/2019 9:40	9	9	9	31.67	5.1	3.9	23.9
5/20/2019 9:50	9	9	9	30.29	4.8	3.9	25.2
5/20/2019 10:00	9	9	9	31.94	4.9	3.9	0.5
5/20/2019 10:10	9	9	9	30.57	5	3.9	25.1
5/20/2019 10:20	9	9	9	31.79	1.1	0.8	0.5
5/20/2019 10:30	9	9	9	30.9	4.9	3.9	25
5/20/2019 10:40	9	9	9	31.18	1.1	0.9	25.1
5/20/2019 10:50	9	9	9	31.27	5	3.9	24.8
5/20/2019 11:00	9	9	9	30.35	3.5	3.2	25.2
5/20/2019 11:10	9	9	9	31.63	5.1	3.9	23.8
5/20/2019 11:20	9	9	9	30.29	5	3.9	25.3
5/20/2019 11:30	9	9	9	32	5.1	4	0.5
5/20/2019 11:40	9	9	9	30.57	5	3.9	25.1
5/20/2019 11:50	9	9	9	31.76	1	0.8	0.5
5/20/2019 12:00	9	9	9	30.87	5.1	3.9	25
5/20/2019 12:10	9	9	9	30.96	1.1	0.9	25.2
5/20/2019 12:20	9	9	9	31.39	5	3.9	24.6
5/20/2019 12:30	9	9	9	30.14	4.9	3.9	25.3
5/20/2019 12:40	9	9	9	31.76	5.1	4	0.6
5/20/2019 12:50	9	9	9	30.41	5.3	4	25.2
5/20/2019 13:00	9	9	9	31.6	1.1	0.8	1.5
5/20/2019 13:10	9	9	9	31.18	4.9	3.8	24.9
5/20/2019 13:20	9	9	9	30.11	3.7	3.4	25.3
5/20/2019 13:30	9	9	9	31.79	4.9	3.9	0.6
5/20/2019 13:40	9	9	9	30.51	4.9	3.9	25.1
5/20/2019 13:50	9	9	9	31.73	1	0.9	0.5
5/20/2019 14:00	9	9	9	31.05	5	3.9	25
5/20/2019 14:10	9	9	9	30.96	1.2	0.9	25.2
5/20/2019 14:20	9	9	9	31.3	4.9	3.9	24.7
5/20/2019 14:30	9	9	9	30.14	1.6	1.8	25.3
5/20/2019 14:40	9	9	9	31.73	5.1	3.9	0.6
5/20/2019 14:50	9	9	9	30.41	5.1	3.9	25.2
5/20/2019 15:00	9	9	9	31.88	1.1	0.8	0.5
5/20/2019 15:10	9	9	9	30.99	4.9	3.8	24.9
5/20/2019 15:20	9	9	9	30.47	3	2.8	25.2
5/20/2019 15:30	9	9	9	31.76	4.8	4	1.4
5/20/2019 15:40	9	9	9	30.38	5	3.9	25.2

5/20/2019 15:50	9	9	9	32.12	5	3.9	0.5
5/20/2019 16:00	9	9	9	30.72	5	3.9	25.1
5/20/2019 16:10	9	9	9	31.79	1	0.8	1.1
5/20/2019 16:20	9	9	9	30.93	5.1	3.9	25
5/20/2019 16:30	9	9	9	31.18	1.2	0.9	25.1
5/20/2019 16:40	9	9	9	31.3	4.8	3.9	24.8
5/20/2019 16:50	9	9	9	30.44	3.6	3.2	25.3
5/20/2019 17:00	9	9	9	31.6	4.9	3.9	23.8
5/20/2019 17:10	9	9	9	30.29	4.9	3.9	25.2
5/20/2019 17:20	9	9	9	31.97	0.9	0.9	0.4
5/20/2019 17:30	9	9	9	30.9	4.9	4	25.1
5/20/2019 17:40	9	9	9	31.05	1.1	0.9	25.1
5/20/2019 17:50	9	9	9	31.33	4.8	3.9	24.8
5/20/2019 18:00	9	9	9	30.26	3.6	3.3	25.3
5/20/2019 18:10	9	9	9	31.7	4.9	3.9	0.6
5/20/2019 18:20	9	9	9	30.32	4.4	3.9	25.2
5/20/2019 18:30	9	9	9	32.09	5.1	4.2	0.4
5/20/2019 18:40	9	9	9	30.81	5	3.9	25.1
5/20/2019 18:50	9	9	9	31.33	1	0.9	25.1
5/20/2019 19:00	9	9	9	31.18	5.2	3.9	24.8
5/20/2019 19:10	9	9	9	30.54	3.3	2.9	25.3
5/20/2019 19:20	9	9	9	31.6	5	3.9	24
5/20/2019 19:30	9	9	9	30.23	4.9	3.9	25.3
5/20/2019 19:40	9	9	9	31.85	4.9	3.9	0.5
5/20/2019 19:50	9	9	9	30.44	4.9	3.9	25.2
5/20/2019 20:00	9	9	9	31.97	1	0.8	0.5
5/20/2019 20:10	9	9	9	30.93	5.3	3.9	25
5/20/2019 20:20	9	9	9	30.75	2.1	1.7	25.2
5/20/2019 20:30	9	9	9	31.6	4.9	3.9	24.2
5/20/2019 20:40	9	9	9	30.29	4.9	3.9	25.3
5/20/2019 20:50	9	9	9	31.88	5	3.9	0.5
5/20/2019 21:00	9	9	9	30.51	4.9	3.9	25.2
5/20/2019 21:10	9	9	9	32	1	0.9	0.5
5/20/2019 21:20	9	9	9	30.78	4.9	3.9	25
5/20/2019 21:30	9	9	9	31.42	1.1	0.8	4.9
5/20/2019 21:40	9	9	9	31.21	4.9	3.9	24.9
5/20/2019 21:50	9	9	9	30.84	2	1.7	25.2
5/20/2019 22:00	9	9	9	31.45	4.9	3.9	24.6
5/20/2019 22:10	9	9	9	30.11	4.9	3.8	25.3
5/20/2019 22:20	9	9	9	31.82	4.9	4	0.5
5/20/2019 22:30	9	9	9	30.51	4.9	3.9	25.1
5/20/2019 22:40	9	9	9	31.42	1.1	0.9	4.8
5/20/2019 22:50	9	9	9	31.3	4.9	3.9	24.8
5/20/2019 23:00	9	9	9	30.08	4.9	3.9	25.3
5/20/2019 23:10	9	9	9	31.97	5	4	0.5
5/20/2019 23:20	9	9	9	30.72	4.9	3.9	25.1
5/20/2019 23:30	9	9	9	31.05	1.2	0.9	25.2

5/20/2019 23:40	9	9	9	31.42	5.1	3.9	24.6
5/20/2019 23:50	9	9	9	30.14	4.9	3.9	25.3
5/21/2019 0:00	9	9	9	32	4.9	3.9	0.5
5/21/2019 0:10	9	9	9	30.69	4.9	3.9	25.1
5/21/2019 0:20	9	9	9	31.33	0.9	0.8	25.1
5/21/2019 0:30	9	9	9	31.27	4.8	3.9	24.8
5/21/2019 0:40	9	9	9	30.02	2.4	2.3	25.3
5/21/2019 0:50	9	9	9	32.09	5	3.9	0.5
5/21/2019 1:00	9	9	9	30.75	4.9	4	25.1
5/21/2019 1:10	9	9	9	30.96	1.2	1	25.2
5/21/2019 1:20	9	9	9	31.42	4.9	3.9	24.5
5/21/2019 1:30	9	9	9	30.2	4.9	3.9	25.3
5/21/2019 1:40	9	9	9	31.97	4.9	3.9	0.5
5/21/2019 1:50	9	9	9	30.87	4.8	3.9	25
5/21/2019 2:00	9	9	9	30.66	1.8	1.7	25.2
5/21/2019 2:10	9	9	9	31.79	4.9	3.9	0.6
5/21/2019 2:20	9	9	9	30.63	5	3.8	25
5/21/2019 2:30	9	9	9	30.96	1.1	0.9	25.2
5/21/2019 2:40	9	9	9	31.57	5	3.9	24.4
5/21/2019 2:50	9	9	9	30.41	4.9	3.9	25.2
5/21/2019 3:00	9	9	9	31.67	1	0.8	0.5
5/21/2019 3:10	9	9	9	31.27	4.9	3.9	24.8
5/21/2019 3:20	9	9	9	30.05	5	3.9	25.3
5/21/2019 3:30	9	9	9	32	1	0.8	0.5
5/21/2019 3:40	9	9	9	30.9	4.8	3.8	25
5/21/2019 3:50	9	9	9	30.78	1.8	1.5	25.2
5/21/2019 4:00	9	9	9	31.6	4.8	3.9	24.2
5/21/2019 4:10	9	9	9	30.32	4.9	3.9	25.2
5/21/2019 4:20	9	9	9	31.76	1.2	0.9	0.5
5/21/2019 4:30	9	9	9	31.09	5	3.8	24.9
5/21/2019 4:40	9	9	9	30.11	3.6	3.4	25.3
5/21/2019 4:50	9	9	9	31.76	4.9	3.9	0.6
5/21/2019 5:00	9	9	9	30.51	5	3.8	25.1
5/21/2019 5:10	9	9	9	31.79	0.9	0.8	0.5
5/21/2019 5:20	9	9	9	31.02	4.8	3.9	25
5/21/2019 5:30	9	9	9	30.54	2.8	2.4	25.3
5/21/2019 5:40	9	9	9	31.73	4.9	3.8	0.6
5/21/2019 5:50	9	9	9	30.54	4.8	3.9	25.1
5/21/2019 6:00	9	9	9	31.33	1	0.8	25.1
5/21/2019 6:10	9	9	9	31.42	4.8	3.9	24.5
5/21/2019 6:20	9	9	9	30.17	5	3.9	25.3
5/21/2019 6:30	9	9	9	31.67	1	0.9	0.5
5/21/2019 6:40	9	9	9	31.21	5	3.9	24.8
5/21/2019 6:50	9	9	9	30.05	3.6	3.2	25.3
5/21/2019 7:00	9	9	9	32.03	4.9	3.9	0.5
5/21/2019 7:10	9	9	9	30.84	4.8	3.9	25
5/21/2019 7:20	9	9	9	30.47	2.4	2.1	25.3

5/21/2019 7:30	9	9	9	31.76	4.8	3.9	0.6
5/21/2019 7:40	9	9	9	30.63	4.9	3.9	25
5/21/2019 7:50	9	9	9	30.63	2	1.6	25.3
5/21/2019 8:00	9	9	9	31.85	4.9	3.9	0.6
5/21/2019 8:10	9	9	9	30.84	5	3.9	25
5/21/2019 8:20	9	9	9	30.32	3.3	3	25.3
5/21/2019 8:30	9	9	9	31.85	5	3.9	0.6
5/21/2019 8:40	9	9	9	30.66	5	3.9	25.1
5/21/2019 8:50	9	9	9	31.09	1.2	0.8	25.1
5/21/2019 9:00	9	9	9	31.48	4.9	3.9	24.4
5/21/2019 9:10	9	9	9	30.23	4.9	3.9	25.3
5/21/2019 9:20	9	9	9	32.09	1.1	0.8	0.5
5/21/2019 9:30	9	9	9	30.99	4.9	3.9	24.9
5/21/2019 9:40	9	9	9	30.26	3.7	3.3	25.3
5/21/2019 9:50	9	9	9	31.94	4.9	3.9	0.5
5/21/2019 10:00	9	9	9	30.81	5	3.9	25.1
5/21/2019 10:10	9	9	9	30.66	1.9	1.6	25.3
5/21/2019 10:20	9	9	9	31.73	4.9	3.9	0.7
5/21/2019 10:30	9	9	9	30.38	4.9	3.9	25.2
5/21/2019 10:40	9	9	9	31.27	1	0.9	25
5/21/2019 10:50	9	9	9	31.36	5	3.9	24.5
5/21/2019 11:00	9	9	9	30.26	5	3.8	25.2
5/21/2019 11:10	9	9	9	31.63	1	0.8	0.5
5/21/2019 11:20	9	9	9	31.18	5	3.9	24.7
5/21/2019 11:30	9	9	9	30.17	5.2	3.9	25.2
5/21/2019 11:40	9	9	9	31.63	1	0.8	0.4
5/21/2019 11:50	9	9	9	31.15	5	3.9	24.8
5/21/2019 12:00	9	9	9	30.05	2.3	2.2	25.3
5/21/2019 12:10	9	9	9	32	5	3.9	0.5
5/21/2019 12:20	9	9	9	30.78	4.8	3.9	25.1
5/21/2019 12:30	9	9	9	30.84	1.1	0.8	25.2
5/21/2019 12:40	9	9	9	31.6	4.9	3.9	23.9
5/21/2019 12:50	9	9	9	30.26	4.9	3.9	25.2
5/21/2019 13:00	9	9	9	31.48	1	0.8	2.3
5/21/2019 13:10	9	9	9	31.33	5	4	24.7
5/21/2019 13:20	9	9	9	30.14	5	3.9	25.2
5/21/2019 13:30	9	9	9	31.73	1	0.8	0.5
5/21/2019 13:40	9	9	9	31.18	5	3.9	24.8
5/21/2019 13:50	9	9	9	30.17	4.9	3.8	25.3
5/21/2019 14:00	9	9	9	31.73	1.1	0.9	0.5
5/21/2019 14:10	9	9	9	31.15	5.1	3.9	24.8
5/21/2019 14:20	9	9	9	30.14	4.8	3.8	25.3
5/21/2019 14:30	9	9	9	32.06	5.3	4.2	0.5
5/21/2019 14:40	9	9	9	30.87	5	3.9	25.1
5/21/2019 14:50	9	9	9	30.99	1.2	0.9	25.2
5/21/2019 15:00	9	9	9	31.48	4.9	3.9	24.1
5/21/2019 15:10	9	9	9	30.26	5.1	3.8	25.2

5/21/2019 15:20	9	9	9	32.06	1.1	0.8	0.5
5/21/2019 15:30	9	9	9	30.93	5.1	3.9	25
5/21/2019 15:40	9	9	9	30.54	2.4	2.2	25.2
5/21/2019 15:50	9	9	9	31.79	4.9	3.9	0.6
5/21/2019 16:00	9	9	9	30.54	5	3.9	25.2
5/21/2019 16:10	9	9	9	31.36	1	0.8	4.5
5/21/2019 16:20	9	9	9	31.27	5.1	3.9	24.7
5/21/2019 16:30	9	9	9	30.05	3.6	3.4	25.3
5/21/2019 16:40	9	9	9	31.85	5.1	3.9	0.5
5/21/2019 16:50	9	9	9	30.51	5	3.9	25.1
5/21/2019 17:00	9	9	9	31.15	1.1	0.8	25.1
5/21/2019 17:10	9	9	9	31.42	4.9	3.8	24.5
5/21/2019 17:20	9	9	9	30.11	4.9	3.9	25.3
5/21/2019 17:30	9	9	9	32.12	5.2	4.1	0.5
5/21/2019 17:40	9	9	9	30.84	5	3.8	25
5/21/2019 17:50	9	9	9	30.69	1.9	1.6	25.3
5/21/2019 18:00	9	9	9	31.63	5.1	3.9	0.7
5/21/2019 18:10	9	9	9	30.54	5.1	3.9	25.2
5/21/2019 18:20	9	9	9	31.6	1	0.8	1.7
5/21/2019 18:30	9	9	9	31.27	5	3.9	24.8
5/21/2019 18:40	9	9	9	30.05	5	3.9	25.3
5/21/2019 18:50	9	9	9	31.97	1	0.8	0.5
5/21/2019 19:00	9	9	9	31.05	4.8	3.8	24.9
5/21/2019 19:10	9	9	9	30.05	3.5	3.4	25.3
5/21/2019 19:20	9	9	9	31.97	4.9	3.9	0.5
5/21/2019 19:30	9	9	9	30.84	5	3.9	25
5/21/2019 19:40	9	9	9	30.47	2.8	2.5	25.3
5/21/2019 19:50	9	9	9	31.76	4.9	3.9	0.6
5/21/2019 20:00	9	9	9	30.63	4.9	3.9	25.2
5/21/2019 20:10	9	9	9	31.33	1	0.7	25.1
5/21/2019 20:20	9	9	9	31.33	5.2	3.9	24.7
5/21/2019 20:30	9	9	9	30.17	4.7	3.8	25.3
5/21/2019 20:40	9	9	9	31.85	1	0.8	0.5
5/21/2019 20:50	9	9	9	31.09	4.8	3.9	24.9
5/21/2019 21:00	9	9	9	29.96	1.7	1.8	25.3
5/21/2019 21:10	9	9	9	32.09	5.1	4.2	0.5
5/21/2019 21:20	9	9	9	30.99	5.1	3.9	24.9
5/21/2019 21:30	9	9	9	29.89	4.8	3.9	25.3
5/21/2019 21:40	9	9	9	31.85	0.9	0.8	0.5
5/21/2019 21:50	9	9	9	31.05	4.9	3.9	24.9
5/21/2019 22:00	9	9	9	30.08	5	3.9	25.3
5/21/2019 22:10	9	9	9	31.76	1.1	0.8	0.5
5/21/2019 22:20	9	9	9	31.15	4.9	3.9	24.9
5/21/2019 22:30	9	9	9	30.14	4.9	4	25.3
5/21/2019 22:40	9	9	9	31.79	1.1	0.8	0.5
5/21/2019 22:50	9	9	9	31.15	5	3.9	24.8
5/21/2019 23:00	9	9	9	30.08	4.8	3.9	25.3

5/21/2019 23:10	9	9	9	31.85	1.1	0.8	0.5
5/21/2019 23:20	9	9	9	31.09	5.1	3.8	24.8
5/21/2019 23:30	9	9	9	30.14	4.9	4	25.3
5/21/2019 23:40	9	9	9	31.18	1.1	0.8	3.4
5/21/2019 23:50	9	9	9	31.76	5.1	3.8	0.6
5/22/2019 0:00	9	9	9	30.66	4.7	3.8	25
5/22/2019 0:10	9	9	9	30.54	2.4	2.2	25.3
5/22/2019 0:20	9	9	9	31.73	4.9	3.9	0.7
5/22/2019 0:30	9	9	9	30.54	4.9	3.8	25.2
5/22/2019 0:40	9	9	9	31.09	1.1	0.9	25.1
5/22/2019 0:50	9	9	9	31.57	4.9	3.9	24.2
5/22/2019 1:00	9	9	9	30.29	4.8	3.9	25.2
5/22/2019 1:10	9	9	9	31.33	1.1	0.9	3.1
5/22/2019 1:20	9	9	9	31.42	5.1	3.8	24.5
5/22/2019 1:30	9	9	9	30.32	5.1	3.9	25.2
5/22/2019 1:40	9	9	9	31.33	1.1	0.8	4.2
5/22/2019 1:50	9	9	9	31.39	4.9	3.8	24.6
5/22/2019 2:00	9	9	9	30.29	5.1	3.9	25.2
5/22/2019 2:10	9	9	9	31.7	1	0.8	0.6
5/22/2019 2:20	9	9	9	31.05	4.9	3.9	24.9
5/22/2019 2:30	9	9	9	30.11	3.6	3.4	25.3
5/22/2019 2:40	9	9	9	31.97	5	3.8	0.5
5/22/2019 2:50	9	9	9	30.87	5.1	4	25.1
5/22/2019 3:00	9	9	9	30.51	2.8	2.5	25.2
5/22/2019 3:10	9	9	9	31.82	5	3.9	0.6
5/22/2019 3:20	9	9	9	30.72	5.1	3.9	25.1
5/22/2019 3:30	9	9	9	30.69	1.7	1.3	25.3
5/22/2019 3:40	9	9	9	31.79	5	3.9	0.6
5/22/2019 3:50	9	9	9	30.63	4.9	3.9	25.1
5/22/2019 4:00	9	9	9	31.02	1.3	0.9	25.2
5/22/2019 4:10	9	9	9	31.51	5.1	3.8	24
5/22/2019 4:20	9	9	9	30.47	4.9	4	25.2
5/22/2019 4:30	9	9	9	30.99	1.1	0.8	25.2
5/22/2019 4:40	9	9	9	31.57	4.7	3.9	23
5/22/2019 4:50	9	9	9	30.69	5	3.9	25
5/22/2019 5:00	9	9	9	30.02	3.7	3.3	25.3
5/22/2019 5:10	9	9	9	32.06	5.1	4.2	0.5
5/22/2019 5:20	9	9	9	31.09	5	3.9	24.9
5/22/2019 5:30	9	9	9	29.89	5	3.9	25.3
5/22/2019 5:40	9	9	9	31.88	1	0.9	0.5
5/22/2019 5:50	9	9	9	31.27	5.1	3.9	24.7
5/22/2019 6:00	9	9	9	30.08	5.1	3.9	25.2
5/22/2019 6:10	9	9	9	31.73	1.1	0.8	0.5
5/22/2019 6:20	9	9	9	31.18	5	3.9	24.9
5/22/2019 6:30	9	9	9	30.23	3.6	3.4	25.4
5/22/2019 6:40	9	9	9	31.94	4.9	3.9	0.5
5/22/2019 6:50	9	9	9	30.78	5	4	25

5/22/2019 7:00	9	9	9	30.38	2.8	2.6	25.3
5/22/2019 7:10	9	9	9	32.03	4.9	3.9	0.5
5/22/2019 7:20	9	9	9	31.12	4.9	3.9	24.8
5/22/2019 7:30	9	9	9	29.99	5	4	25.3
5/22/2019 7:40	9	9	9	31.63	0.9	0.8	0.5
5/22/2019 7:50	9	9	9	31.33	4.8	4	24.7
5/22/2019 8:00	9	9	9	30.23	5	4	25.2
5/22/2019 8:10	9	9	9	31.02	1.2	0.9	25.1
5/22/2019 8:20	9	9	9	31.6	4.9	4	23.8
5/22/2019 8:30	9	9	9	30.44	4.9	3.9	25.1
5/22/2019 8:40	9	9	9	30.47	1.9	1.6	25.3
5/22/2019 8:50	9	9	9	32.06	5	3.9	0.5
5/22/2019 9:00	9	9	9	30.93	4.9	3.9	24.9
5/22/2019 9:10	9	9	9	29.96	4.9	3.8	25.3
5/22/2019 9:20	9	9	9	31.57	1	0.9	0.5
5/22/2019 9:30	9	9	9	31.27	5	3.9	24.8
5/22/2019 9:40	9	9	9	30.02	4.8	3.9	25.3
5/22/2019 9:50	9	9	9	31.63	0.9	0.9	0.5
5/22/2019 10:00	9	9	9	31.3	5	3.9	24.7
5/22/2019 10:10	9	9	9	30.2	5.1	3.9	25.2
5/22/2019 10:20	9	9	9	31.45	1	0.8	3.2
5/22/2019 10:30	9	9	9	31.33	4.9	3.8	24.6
5/22/2019 10:40	9	9	9	30.26	5	3.9	25.2
5/22/2019 10:50	9	9	9	31.79	1	0.8	0.5
5/22/2019 11:00	9	9	9	31.05	4.9	3.8	25
5/22/2019 11:10	9	9	9	30.26	3.4	3.2	25.3
5/22/2019 11:20	9	9	9	31.79	4.9	3.9	0.5
5/22/2019 11:30	9	9	9	30.75	5	3.8	25
5/22/2019 11:40	9	9	9	30.14	3.5	3.3	25.3
5/22/2019 11:50	9	9	9	32	0.9	0.8	0.4
5/22/2019 12:00	9	9	9	31.18	5	3.8	24.8
5/22/2019 12:10	9	9	9	30.17	5.1	3.9	25.2
5/22/2019 12:20	9	9	9	31.67	1.1	0.8	0.5
5/22/2019 12:30	9	9	9	31.27	4.9	3.9	24.7
5/22/2019 12:40	9	9	9	30.14	5	3.9	25.2
5/22/2019 12:50	9	9	9	32.06	4.8	3.9	0.5
5/22/2019 13:00	9	9	9	30.96	5.1	4	24.9
5/22/2019 13:10	9	9	9	29.86	4.9	3.8	25.3
5/22/2019 13:20	9	9	9	31.79	1.1	0.8	0.4
5/22/2019 13:30	9	9	9	31.33	5	3.9	24.7
5/22/2019 13:40	9	9	9	30.29	5	3.9	25.1
5/22/2019 13:50	9	9	9	31.18	1.2	0.8	3.1
5/22/2019 14:00	9	9	9	31.6	5.1	3.8	24
5/22/2019 14:10	9	9	9	30.44	5	3.9	25.2
5/22/2019 14:20	9	9	9	30.87	1.1	0.9	25.1
5/22/2019 14:30	9	9	9	31.76	5	3.9	0.6
5/22/2019 14:40	9	9	9	30.69	4.9	3.9	25

5/22/2019 14:50	9	9	9	30.66	1.9	1.6	25.2
5/22/2019 15:00	9	9	9	31.7	4.8	3.9	10.9
5/22/2019 15:10	9	9	9	30.44	5	3.9	25.2
5/22/2019 15:20	9	9	9	31.3	1	0.8	3.3
5/22/2019 15:30	9	9	9	31.48	4.4	3.9	24.1
5/22/2019 15:40	9	9	9	30.47	4.9	3.8	25.1
5/22/2019 15:50	9	9	9	30.69	1.4	1.1	25.1
5/22/2019 16:00	9	9	9	31.73	4.9	3.9	0.6
5/22/2019 16:10	9	9	9	30.54	4.7	3.9	25.1
5/22/2019 16:20	9	9	9	30.54	2.4	2.1	25.3
5/22/2019 16:30	9	9	9	32	4.9	3.9	0.5
5/22/2019 16:40	9	9	9	30.87	4.9	3.9	25
5/22/2019 16:50	9	9	9	30.32	3.4	3	25.3
5/22/2019 17:00	9	9	9	31.88	5	3.9	0.5
5/22/2019 17:10	9	9	9	30.66	5	3.8	25.1
5/22/2019 17:20	9	9	9	30.72	1.8	1.7	25.2
5/22/2019 17:30	9	9	9	31.67	4.9	3.9	17.9
5/22/2019 17:40	9	9	9	30.47	4.9	3.9	25.1
5/22/2019 17:50	9	9	9	30.78	1.1	0.9	25.2
5/22/2019 18:00	9	9	9	31.7	4.7	3.9	2.9
5/22/2019 18:10	9	9	9	30.57	4.8	3.9	25.1
5/22/2019 18:20	9	9	9	30.57	1.7	1.4	25.3
5/22/2019 18:30	9	9	9	31.79	4.8	3.8	0.5
5/22/2019 18:40	9	9	9	30.66	5.2	3.9	25.1
5/22/2019 18:50	9	9	9	30.96	1.3	0.9	25.2
5/22/2019 19:00	9	9	9	31.48	4.9	3.9	24.3
5/22/2019 19:10	9	9	9	30.2	4.9	3.9	25.1
5/22/2019 19:20	9	9	9	31.7	1.1	0.9	0.5
5/22/2019 19:30	9	9	9	31.27	4.8	3.9	24.8
5/22/2019 19:40	9	9	9	30.05	5	3.9	25.2
5/22/2019 19:50	9	9	9	32	1.1	0.9	0.4
5/22/2019 20:00	9	9	9	30.93	4.9	4.1	24.9
5/22/2019 20:10	9	9	9	30.17	3.6	3.4	25.2
5/22/2019 20:20	9	9	9	32	5.1	3.9	0.5
5/22/2019 20:30	9	9	9	30.93	4.9	3.9	24.9
5/22/2019 20:40	9	9	9	29.86	4.8	3.9	25.2
5/22/2019 20:50	9	9	9	31.76	1	0.8	0.5
5/22/2019 21:00	9	9	9	31.33	4.9	3.9	24.7
5/22/2019 21:10	9	9	9	30.2	4.9	3.8	25.2
5/22/2019 21:20	9	9	9	31.82	1.1	0.9	0.4
5/22/2019 21:30	9	9	9	31.05	5.1	4	24.9
5/22/2019 21:40	9	9	9	30.17	3.6	3.4	25.3
5/22/2019 21:50	9	9	9	31.85	4.9	3.9	0.5
5/22/2019 22:00	9	9	9	30.66	4.8	3.8	25.1
5/22/2019 22:10	9	9	9	30.11	3.6	3.2	25.3
5/22/2019 22:20	9	9	9	32	1	0.8	0.5
5/22/2019 22:30	9	9	9	31.15	4.9	3.9	24.8

5/22/2019 22:40	9	9	9	30.17	5.1	3.9	25.2
5/22/2019 22:50	9	9	9	31.63	1	0.8	0.5
5/22/2019 23:00	9	9	9	31.21	5	3.9	24.9
5/22/2019 23:10	9	9	9	30.08	3.6	3.4	25.3
5/22/2019 23:20	9	9	9	32	5	3.8	0.5
5/22/2019 23:30	9	9	9	30.69	4.9	3.9	25.1
5/22/2019 23:40	9	9	9	30.69	1.6	1.4	25.2
5/22/2019 23:50	9	9	9	31.76	4.9	3.9	0.6
5/23/2019 0:00	9	9	9	30.69	4.9	3.9	25.1
5/23/2019 0:10	9	9	9	30.99	1.1	0.8	25.2
5/23/2019 0:20	9	9	9	31.45	5	3.9	24.2
5/23/2019 0:30	9	9	9	30.29	4.9	3.9	25.2
5/23/2019 0:40	9	9	9	31.51	1	0.9	2.6
5/23/2019 0:50	9	9	9	31.39	5	3.9	24.6
5/23/2019 1:00	9	9	9	30.14	4.9	3.9	25.2
5/23/2019 1:10	9	9	9	31.88	0.9	0.8	0.5
5/23/2019 1:20	9	9	9	31.12	4.8	3.9	24.8
5/23/2019 1:30	9	9	9	30.08	4.8	3.8	25.3
5/23/2019 1:40	9	9	9	31.76	1	0.9	0.5
5/23/2019 1:50	9	9	9	31.3	4.9	3.9	24.7
5/23/2019 2:00	9	9	9	30.14	5	4	25.3
5/23/2019 2:10	9	9	9	31.21	1	0.8	3.3
5/23/2019 2:20	9	9	9	31.54	5	3.9	24
5/23/2019 2:30	9	9	9	30.38	4.9	3.9	25.1
5/23/2019 2:40	9	9	9	30.9	1.1	0.8	25.1
5/23/2019 2:50	9	9	9	31.57	4.9	3.9	23.9
5/23/2019 3:00	9	9	9	30.41	5	3.8	25.2
5/23/2019 3:10	9	9	9	30.96	1.2	0.8	25.1
5/23/2019 3:20	9	9	9	31.6	4.9	3.8	24
5/23/2019 3:30	9	9	9	30.66	5.2	3.9	25.1
5/23/2019 3:40	9	9	9	30.32	3	2.8	25.2
5/23/2019 3:50	9	9	9	31.94	5	3.9	0.5
5/23/2019 4:00	9	9	9	30.81	4.8	3.9	25.1
5/23/2019 4:10	9	9	9	30.23	3.4	3.1	25.3
5/23/2019 4:20	9	9	9	32.09	4.9	3.9	0.5
5/23/2019 4:30	9	9	9	30.93	4.9	4	24.9
5/23/2019 4:40	9	9	9	29.99	3.6	3.2	25.3
5/23/2019 4:50	9	9	9	32.06	5.1	4	0.5
5/23/2019 5:00	9	9	9	30.87	5.4	3.8	25
5/23/2019 5:10	9	9	9	30.23	3.5	3.2	25.2
5/23/2019 5:20	9	9	9	32	5	3.9	0.5
5/23/2019 5:30	9	9	9	30.84	4.9	3.9	25.1
5/23/2019 5:40	9	9	9	30.35	3.3	2.8	25.3
5/23/2019 5:50	9	9	9	31.94	4.9	3.9	0.5
5/23/2019 6:00	9	9	9	30.72	5.1	3.9	25
5/23/2019 6:10	9	9	9	30.51	2.3	2	25.3
5/23/2019 6:20	9	9	9	31.82	5	3.9	0.6

5/23/2019 6:30	9	9	9	30.75	5.1	3.8	25.1
5/23/2019 6:40	9	9	9	30.35	3.1	2.7	25.3
5/23/2019 6:50	9	9	9	31.85	5	3.9	0.5
5/23/2019 7:00	9	9	9	30.72	4.8	3.9	25.1
5/23/2019 7:10	9	9	9	30.66	1.9	1.6	25.3
5/23/2019 7:20	9	9	9	31.7	5.1	3.9	23.2
5/23/2019 7:30	9	9	9	30.38	5.1	3.9	25.2
5/23/2019 7:40	9	9	9	31.27	1	0.8	3.2
5/23/2019 7:50	9	9	9	31.51	5	3.9	24.3
5/23/2019 8:00	9	9	9	30.47	5	3.9	25.1
5/23/2019 8:10	9	9	9	31.33	1.1	0.8	4.4
5/23/2019 8:20	9	9	9	31.6	4.8	3.9	24.2
5/23/2019 8:30	9	9	9	30.26	5	3.9	25.2
5/23/2019 8:40	9	9	9	31.79	1	0.8	0.5
5/23/2019 8:50	9	9	9	30.96	5	3.8	25
5/23/2019 9:00	9	9	9	30.32	3.4	3.1	25.3
5/23/2019 9:10	9	9	9	31.82	5	3.9	0.5
5/23/2019 9:20	9	9	9	30.51	4.9	3.8	25.1
5/23/2019 9:30	9	9	9	31.36	1.2	0.8	25.1
5/23/2019 9:40	9	9	9	31.3	4.9	3.9	24.8
5/23/2019 9:50	9	9	9	30.11	3.7	3.3	25.3
5/23/2019 10:00	9	9	9	31.88	5	3.9	0.5
5/23/2019 10:10	9	9	9	30.57	5	4	25.1
5/23/2019 10:20	9	9	9	31.15	1.2	0.8	25.1
5/23/2019 10:30	9	9	9	31.42	4.9	3.9	24.5
5/23/2019 10:40	9	9	9	30.14	4.9	3.8	25.2
5/23/2019 10:50	9	9	9	31.42	1.1	0.8	2.5
5/23/2019 11:00	9	9	9	31.39	4.9	4	24.5
5/23/2019 11:10	9	9	9	30.35	4.9	3.8	25.2
5/23/2019 11:20	9	9	9	31.42	1	0.9	4.2
5/23/2019 11:30	9	9	9	31.33	5.1	3.9	24.7
5/23/2019 11:40	9	9	9	30.11	3.6	3.4	25.3
5/23/2019 11:50	9	9	9	31.85	4.9	3.9	0.6
5/23/2019 12:00	9	9	9	30.47	4.9	3.9	25.1
5/23/2019 12:10	9	9	9	31.45	0.9	0.8	3.9
5/23/2019 12:20	9	9	9	31.3	5.1	3.9	24.7
5/23/2019 12:30	9	9	9	30.2	4.9	3.9	25.2
5/23/2019 12:40	9	9	9	31.63	0.9	0.8	0.5
5/23/2019 12:50	9	9	9	31.12	4.9	4	24.8
5/23/2019 13:00	9	9	9	30.23	3.4	3.2	25.3
5/23/2019 13:10	9	9	9	31.82	5	3.9	0.5
5/23/2019 13:20	9	9	9	30.47	4.9	3.9	25
5/23/2019 13:30	9	9	9	30.93	1.2	0.9	25.1
5/23/2019 13:40	9	9	9	31.73	4.9	3.9	0.8
5/23/2019 13:50	9	9	9	30.63	4.9	3.9	25
5/23/2019 14:00	9	9	9	30.11	3.5	3.2	25.2
5/23/2019 14:10	9	9	9	32.12	4.9	3.9	0.5

5/23/2019 14:20	9	9	9	30.87	5	4	24.9
5/23/2019 14:30	9	9	9	30.66	1.8	1.6	25.2
5/23/2019 14:40	9	9	9	31.51	5	3.9	24.2
5/23/2019 14:50	9	9	9	30.08	4.7	4	25.3
5/23/2019 15:00	9	9	9	32	1	0.9	0.5
5/23/2019 15:10	9	9	9	31.18	5.2	3.8	24.8
5/23/2019 15:20	9	9	9	29.99	4.9	3.9	25.3
5/23/2019 15:30	9	9	9	32.09	4.9	3.9	0.5
5/23/2019 15:40	9	9	9	30.72	5	3.9	25
5/23/2019 15:50	9	9	9	30.93	1.1	0.9	25.2
5/23/2019 16:00	9	9	9	31.39	4.9	3.9	24.6
5/23/2019 16:10	9	9	9	30.08	4.9	3.8	25.3
5/23/2019 16:20	9	9	9	32	5	3.9	0.5
5/23/2019 16:30	9	9	9	30.63	5.1	3.9	25.1
5/23/2019 16:40	9	9	9	31.42	1	0.8	3.2
5/23/2019 16:50	9	9	9	31.27	5.1	3.8	24.8
5/23/2019 17:00	9	9	9	30.11	4.9	3.9	25.2
5/23/2019 17:10	9	9	9	32.09	2	1.6	0.5
5/23/2019 17:20	9	9	9	30.9	4.9	3.9	25
5/23/2019 17:30	9	9	9	30.47	3.1	2.8	25.2
5/23/2019 17:40	9	9	9	31.6	4.9	3.9	8.7
5/23/2019 17:50	9	9	9	30.38	4.9	4	25.2
5/23/2019 18:00	9	9	9	31.76	1.1	0.8	0.4
5/23/2019 18:10	9	9	9	30.99	5	3.8	25
5/23/2019 18:20	9	9	9	30.84	1.6	1.3	25.3
5/23/2019 18:30	9	9	9	31.48	4.9	3.9	24.2
5/23/2019 18:40	9	9	9	30.29	5	3.9	25.2
5/23/2019 18:50	9	9	9	31.88	1	0.8	0.4
5/23/2019 19:00	9	9	9	30.81	4.8	3.8	25
5/23/2019 19:10	9	9	9	30.93	1.2	0.9	25.2
5/23/2019 19:20	9	9	9	31.51	4.9	3.9	24.2
5/23/2019 19:30	9	9	9	30.2	4.9	3.8	25.2
5/23/2019 19:40	9	9	9	32.12	3.6	3.1	0.5
5/23/2019 19:50	9	9	9	30.75	4.8	3.9	25.1
5/23/2019 20:00	9	9	9	30.75	1.8	1.5	25.2
5/23/2019 20:10	9	9	9	31.54	4.9	3.9	24
5/23/2019 20:20	9	9	9	30.32	5.2	3.9	25.2
5/23/2019 20:30	9	9	9	31.6	1	0.9	1.2
5/23/2019 20:40	9	9	9	31.15	5.1	3.9	24.9
5/23/2019 20:50	9	9	9	30.38	3.2	2.8	25.3
5/23/2019 21:00	9	9	9	31.79	4.9	3.9	0.6
5/23/2019 21:10	9	9	9	30.63	4.9	3.9	25.1
5/23/2019 21:20	9	9	9	31.18	1.2	0.8	25.1
5/23/2019 21:30	9	9	9	31.42	4.8	3.8	24.6
5/23/2019 21:40	9	9	9	30.23	3.6	3.4	25.3
5/23/2019 21:50	9	9	9	31.79	5	3.9	0.6
5/23/2019 22:00	9	9	9	30.38	4.9	3.9	25.2

5/23/2019 22:10	9	9	9	31.6	1	0.8	1.6
5/23/2019 22:20	9	9	9	31.05	4.9	4.1	24.9
5/23/2019 22:30	9	9	9	30.44	3.2	2.9	25.3
5/23/2019 22:40	9	9	9	31.79	4.9	3.9	0.6
5/23/2019 22:50	9	9	9	30.51	4.9	3.8	25.1
5/23/2019 23:00	9	9	9	31.36	1	0.8	5.2
5/23/2019 23:10	9	9	9	31.27	4.9	3.9	24.8
5/23/2019 23:20	9	9	9	30.17	3.5	3.3	25.3
5/23/2019 23:30	9	9	9	31.79	5	3.9	0.5
5/23/2019 23:40	9	9	9	30.47	4.9	3.9	25.2
5/23/2019 23:50	9	9	9	31.63	1.1	0.9	2
5/24/2019 0:00	9	9	9	30.99	4.7	4.1	24.9
5/24/2019 0:10	9	9	9	30.51	3.1	2.7	25.3
5/24/2019 0:20	9	9	9	31.79	5	3.9	0.6
5/24/2019 0:30	9	9	9	30.51	4.8	3.9	25.1
5/24/2019 0:40	9	9	9	31.27	1	0.9	4.8
5/24/2019 0:50	9	9	9	31.48	4.8	3.9	24.4
5/24/2019 1:00	9	9	9	30.26	5	4	25.1
5/24/2019 1:10	9	9	9	30.96	1.2	0.9	25
5/24/2019 1:20	9	9	9	31.73	4.9	3.9	0.6
5/24/2019 1:30	9	9	9	30.69	4.5	3.9	25
5/24/2019 1:40	9	9	9	30.38	2.7	2.4	25.3
5/24/2019 1:50	9	9	9	31.7	4.9	3.9	0.6
5/24/2019 2:00	9	9	9	30.54	4.9	3.9	25
5/24/2019 2:10	9	9	9	30.87	1.2	0.9	25.1
5/24/2019 2:20	9	9	9	31.6	5	4	23.9
5/24/2019 2:30	9	9	9	30.44	5	4	25.1
5/24/2019 2:40	9	9	9	31.21	1.1	0.8	4.3
5/24/2019 2:50	9	9	9	31.45	4.9	3.9	24.2
5/24/2019 3:00	9	9	9	30.29	5.1	3.9	25.2
5/24/2019 3:10	9	9	9	31.36	1.1	0.9	3.5
5/24/2019 3:20	9	9	9	31.3	4.8	3.9	24.6
5/24/2019 3:30	9	9	9	30.17	4.9	3.9	25.3
5/24/2019 3:40	9	9	9	31.79	1	0.8	0.5
5/24/2019 3:50	9	9	9	31.15	5	3.9	24.8
5/24/2019 4:00	9	9	9	29.89	5	3.9	25.3
5/24/2019 4:10	9	9	9	31.88	1	0.8	0.5
5/24/2019 4:20	9	9	9	31.15	4.8	3.9	24.8
5/24/2019 4:30	9	9	9	30.02	4.9	3.9	25.3
5/24/2019 4:40	9	9	9	31.6	1	0.8	0.4
5/24/2019 4:50	9	9	9	31.33	4.9	3.9	24.7
5/24/2019 5:00	9	9	9	30.11	5.1	3.9	25.2
5/24/2019 5:10	9	9	9	31.7	1	0.8	0.5
5/24/2019 5:20	9	9	9	31.15	4.9	3.8	24.8
5/24/2019 5:30	9	9	9	30.02	5	3.8	25.3
5/24/2019 5:40	9	9	9	32.09	5.1	4.2	0.5
5/24/2019 5:50	9	9	9	31.05	5.1	3.9	24.9

5/24/2019 6:00	9	9	9	30.05	3.6	3.3	25.3
5/24/2019 6:10	9	9	9	32.09	1.4	0.8	0.5
5/24/2019 6:20	9	9	9	31.05	4.9	3.8	24.9
5/24/2019 6:30	9	9	9	29.96	5	3.9	25.3
5/24/2019 6:40	9	9	9	31.79	1.1	0.8	0.5
5/24/2019 6:50	9	9	9	31.15	4.9	3.9	24.7
5/24/2019 7:00	9	9	9	30.11	4.9	3.8	25.1
5/24/2019 7:10	9	9	9	31.15	1	0.8	4.1
5/24/2019 7:20	9	9	9	31.7	4.6	3.9	0.6
5/24/2019 7:30	9	9	9	30.63	4.9	3.9	25
5/24/2019 7:40	9	9	9	30.41	3.2	2.8	25.3
5/24/2019 7:50	9	9	9	31.94	4.9	3.9	0.5
5/24/2019 8:00	9	9	9	30.78	4.9	3.9	25
5/24/2019 8:10	9	9	9	29.89	3.7	3.3	25.3
5/24/2019 8:20	9	9	9	32	1	0.8	0.5
5/24/2019 8:30	9	9	9	31.15	5	3.9	24.7
5/24/2019 8:40	9	9	9	30.23	5	4	25.1
5/24/2019 8:50	9	9	9	30.81	1.1	0.9	25.1
5/24/2019 9:00	9	9	9	31.85	5.1	3.8	0.5
5/24/2019 9:10	9	9	9	30.93	4.9	3.8	24.9
5/24/2019 9:20	9	9	9	30.08	4.9	3.9	25.2
5/24/2019 9:30	9	9	9	31.21	1	0.8	2.5
5/24/2019 9:40	9	9	9	31.7	4.9	3.9	0.8
5/24/2019 9:50	9	9	9	30.99	5	3.9	24.8
5/24/2019 10:00	9	9	9	30.2	4.9	3.8	25.1
5/24/2019 10:10	9	9	9	30.05	3.4	3	25.2
5/24/2019 10:20	9	9	9	31.67	1.1	0.8	0.5
5/24/2019 10:30	9	9	9	31.45	4.9	3.9	24.4
5/24/2019 10:40	9	9	9	30.54	5	4	25.1
5/24/2019 10:50	9	9	9	30.26	3	2.7	25.2
5/24/2019 11:00	9	9	9	32.09	1.1	0.8	0.5
5/24/2019 11:10	9	9	9	31.18	4.8	3.8	24.7
5/24/2019 11:20	9	9	9	30.2	4.9	3.8	25.1
5/24/2019 11:30	9	9	9	30.35	2.1	1.7	25.1
5/24/2019 11:40	9	9	9	31.94	1	0.9	0.5
5/24/2019 11:50	9	9	9	31.42	4.9	3.8	24.3
5/24/2019 12:00	9	9	9	30.57	5.1	3.9	24.9
5/24/2019 12:10	9	9	9	29.77	4.9	3.9	25.1
5/24/2019 12:20	9	9	9	30.51	1.2	0.9	25
5/24/2019 12:30	9	9	9	31.76	1.1	0.9	0.4
5/24/2019 12:40	9	9	9	31.63	4.8	3.9	23.5
5/24/2019 12:50	9	9	9	30.81	4.9	3.9	24.9
5/24/2019 13:00	9	9	9	30.08	4.8	3.9	25.2
5/24/2019 13:10	9	9	9	29.86	3.4	3.2	25.2
5/24/2019 13:20	9	9	9	31.42	1.1	0.9	0.5
5/24/2019 13:30	9	9	9	31.63	5	3.9	12.8
5/24/2019 13:40	9	9	9	30.78	4.9	3.9	25

5/24/2019 13:50	9	9	9	29.96	4.9	3.9	25.2
5/24/2019 14:00	9	9	9	30.75	1.1	0.9	25
5/24/2019 14:10	9	9	9	32.09	5.2	4.2	0.5
5/24/2019 14:20	9	9	9	31.39	4.9	3.9	24.4
5/24/2019 14:30	9	9	9	30.66	4.9	3.9	25
5/24/2019 14:40	9	9	9	29.89	5	3.9	25.1
5/24/2019 14:50	9	9	9	29.59	3.5	3.4	25.2
5/24/2019 15:00	9	9	9	30.41	1.1	0.9	25
5/24/2019 15:10	9	9	9	31.33	1	0.9	0.4
5/24/2019 15:20	9	9	9	32.06	5.4	4.2	0.5
5/24/2019 15:30	9	9	9	31.67	4.9	3.9	22.8
5/24/2019 15:40	9	9	9	31.02	4.9	3.9	24.7
5/24/2019 15:50	9	9	9	30.63	4.9	3.9	24.9
5/24/2019 16:00	9	9	9	30.14	4.9	3.8	25.1
5/24/2019 16:10	9	9	9	30.57	1.2	1	25.1
5/24/2019 16:20	9	9	9	31.85	4.8	3.9	0.5
5/24/2019 16:30	9	9	9	30.81	4.8	3.9	25
5/24/2019 16:40	9	9	9	30.14	3.6	3.3	25.3
5/24/2019 16:50	9	9	9	32.06	4.8	3.9	0.5
5/24/2019 17:00	9	9	9	30.9	4.9	3.9	24.9
5/24/2019 17:10	9	9	9	29.86	4.9	3.9	25.2
5/24/2019 17:20	9	9	9	31.42	1.1	0.8	1.3
5/24/2019 17:30	9	9	9	31.6	5	3.9	24.1
5/24/2019 17:40	9	9	9	30.54	4.9	3.9	25
5/24/2019 17:50	9	9	9	30.57	1.7	1.4	25.2
5/24/2019 18:00	9	9	9	31.73	4.9	3.9	0.6
5/24/2019 18:10	9	9	9	30.72	4.9	3.8	25
5/24/2019 18:20	9	9	9	29.99	3.6	3.3	25.2
5/24/2019 18:30	9	9	9	31.7	1	0.9	0.5
5/24/2019 18:40	9	9	9	31.54	4.9	3.9	23.9
5/24/2019 18:50	9	9	9	30.57	4.9	3.9	25
5/24/2019 19:00	9	9	9	30.35	2.9	2.6	25.2
5/24/2019 19:10	9	9	9	31.88	4.9	3.9	0.5
5/24/2019 19:20	9	9	9	30.69	4.9	3.9	25
5/24/2019 19:30	9	9	9	30.08	3.4	3.2	25.3
5/24/2019 19:40	9	9	9	31.73	1	0.9	0.5
5/24/2019 19:50	9	9	9	31.51	4.9	3.9	23.9
5/24/2019 20:00	9	9	9	30.72	4.9	3.9	24.9
5/24/2019 20:10	9	9	9	29.8	4.8	3.9	25.2
5/24/2019 20:20	9	9	9	31.6	1	0.8	0.5
5/24/2019 20:30	9	9	9	31.3	5	3.9	24.5
5/24/2019 20:40	9	9	9	30.26	4.9	3.9	25.2
5/24/2019 20:50	9	9	9	31.12	1	0.9	25
5/24/2019 21:00	9	9	9	31.63	4.9	3.9	0.6
5/24/2019 21:10	9	9	9	30.69	4.9	3.9	25
5/24/2019 21:20	9	9	9	29.68	2.2	2.3	25.3
5/24/2019 21:30	9	9	9	31.57	1	0.8	0.4

5/24/2019 21:40	9	9	9	31.48	4.9	3.9	24.3
5/24/2019 21:50	9	9	9	30.38	4.9	3.9	25.1
5/24/2019 22:00	9	9	9	30.84	1.1	0.9	25.1
5/24/2019 22:10	9	9	9	31.7	4.9	3.9	0.6
5/24/2019 22:20	9	9	9	30.54	4.9	3.9	25.1
5/24/2019 22:30	9	9	9	30.69	1.4	1.2	25.2
5/24/2019 22:40	9	9	9	31.6	5	3.8	18
5/24/2019 22:50	9	9	9	30.41	5	3.9	25.1
5/24/2019 23:00	9	9	9	31.18	1	0.8	25.1
5/24/2019 23:10	9	9	9	31.48	5	3.9	24
5/24/2019 23:20	9	9	9	30.38	4.9	3.9	25.2
5/24/2019 23:30	9	9	9	30.51	1.7	1.3	25.2
5/24/2019 23:40	9	9	9	31.97	4.8	3.9	0.5
5/24/2019 23:50	9	9	9	30.99	4.8	3.9	24.9
5/25/2019 0:00	9	9	9	29.89	4.9	4	25.2
5/25/2019 0:10	9	9	9	31.7	1	0.8	0.5
5/25/2019 0:20	9	9	9	31.27	4.9	3.9	24.7
5/25/2019 0:30	9	9	9	30.02	4.7	3.9	25.2
5/25/2019 0:40	9	9	9	31.6	0.9	0.8	0.5
5/25/2019 0:50	9	9	9	31.45	4.9	3.9	24.5
5/25/2019 1:00	9	9	9	30.29	5.1	3.8	25.1
5/25/2019 1:10	9	9	9	30.78	1.4	1	25.2
5/25/2019 1:20	9	9	9	31.79	4.7	3.9	0.6
5/25/2019 1:30	9	9	9	30.75	5	3.8	25
5/25/2019 1:40	9	9	9	29.83	2.4	2.2	25.2
5/25/2019 1:50	9	9	9	31.88	1	0.8	0.5
5/25/2019 2:00	9	9	9	31.18	4.9	3.8	24.7
5/25/2019 2:10	9	9	9	30.2	5	3.8	25.1
5/25/2019 2:20	9	9	9	30.93	1.1	0.7	25.1
5/25/2019 2:30	9	9	9	31.57	4.7	3.9	20.1
5/25/2019 2:40	9	9	9	30.51	4.9	3.8	25.1
5/25/2019 2:50	9	9	9	30.87	1.2	0.8	25.1
5/25/2019 3:00	9	9	9	31.7	5	3.9	0.6
5/25/2019 3:10	9	9	9	30.63	4.4	3.8	25.1
5/25/2019 3:20	9	9	9	30.66	1.6	1.4	25.2
5/25/2019 3:30	9	9	9	31.79	4.9	3.8	0.6
5/25/2019 3:40	9	9	9	30.54	4.9	3.9	25.1
5/25/2019 3:50	9	9	9	31.12	1.1	0.8	25.1
5/25/2019 4:00	9	9	9	31.54	5	3.9	23.8
5/25/2019 4:10	9	9	9	30.26	5	3.9	25.2
5/25/2019 4:20	9	9	9	31.27	1	0.8	4.5
5/25/2019 4:30	9	9	9	31.48	5.1	3.8	24.2
5/25/2019 4:40	9	9	9	30.41	5	3.9	25.2
5/25/2019 4:50	9	9	9	31.15	1.2	0.8	25.1
5/25/2019 5:00	9	9	9	31.42	5	3.9	24.2
5/25/2019 5:10	9	9	9	30.38	4.7	3.8	25.2
5/25/2019 5:20	9	9	9	31.18	1	0.9	25

5/25/2019 5:30	9	9	9	31.51	4.9	3.9	24.2
5/25/2019 5:40	9	9	9	30.26	5	3.8	25.2
5/25/2019 5:50	9	9	9	31.33	1.1	0.8	3.4
5/25/2019 6:00	9	9	9	31.45	4.9	3.9	24.3
5/25/2019 6:10	9	9	9	30.35	4.9	3.8	25.2
5/25/2019 6:20	9	9	9	31.12	1.2	0.9	25.2
5/25/2019 6:30	9	9	9	31.51	4.9	4	24.1
5/25/2019 6:40	9	9	9	30.32	5	4	25.2
5/25/2019 6:50	9	9	9	31.42	1.1	0.8	2.7
5/25/2019 7:00	9	9	9	31.48	5.3	4	24.6
5/25/2019 7:10	9	9	9	30.11	5	3.8	25.3
5/25/2019 7:20	9	9	9	32.06	1.1	0.8	0.5
5/25/2019 7:30	9	9	9	30.84	4.7	3.9	25
5/25/2019 7:40	9	9	9	30.75	1.9	1.8	25.3
5/25/2019 7:50	9	9	9	31.51	4.7	3.9	23.7
5/25/2019 8:00	9	9	9	30.38	4.9	3.9	25.1
5/25/2019 8:10	9	9	9	30.87	1.1	0.9	25.1
5/25/2019 8:20	9	9	9	31.79	5	3.9	0.5
5/25/2019 8:30	9	9	9	30.81	5	3.9	24.9
5/25/2019 8:40	9	9	9	30.17	3.6	3.3	25.3
5/25/2019 8:50	9	9	9	31.94	5	3.9	0.5
5/25/2019 9:00	9	9	9	30.75	5	4	25.1
5/25/2019 9:10	9	9	9	30.44	2.1	1.9	25.2
5/25/2019 9:20	9	9	9	31.85	4.9	3.9	0.5
5/25/2019 9:30	9	9	9	30.63	4.8	3.9	25
5/25/2019 9:40	9	9	9	30.35	3	2.6	25.2
5/25/2019 9:50	9	9	9	31.88	5	3.9	0.5
5/25/2019 10:00	9	9	9	30.66	4.9	3.8	25.1
5/25/2019 10:10	9	9	9	30.96	1.2	0.9	25.2
5/25/2019 10:20	9	9	9	31.57	5	3.9	23.8
5/25/2019 10:30	9	9	9	30.44	4.9	3.8	25.1
5/25/2019 10:40	9	9	9	31.09	1.3	0.8	25.1
5/25/2019 10:50	9	9	9	31.42	4.9	3.9	24.5
5/25/2019 11:00	9	9	9	30.11	4.7	3.8	25.2
5/25/2019 11:10	9	9	9	32.03	4.9	3.9	0.5
5/25/2019 11:20	9	9	9	30.72	5.1	3.9	25
5/25/2019 11:30	9	9	9	30.84	1.1	0.9	25.2
5/25/2019 11:40	9	9	9	31.48	4.9	3.9	24
5/25/2019 11:50	9	9	9	30.29	4.9	3.9	25.2
5/25/2019 12:00	9	9	9	31.85	0.9	0.8	0.4
5/25/2019 12:10	9	9	9	30.87	4.9	3.9	25
5/25/2019 12:20	9	9	9	30.84	1.4	1.1	25.2
5/25/2019 12:30	9	9	9	31.39	4.8	4	24.1
5/25/2019 12:40	9	9	9	30.14	4.8	3.9	25.3
5/25/2019 12:50	9	9	9	31.97	4.9	3.9	0.5
5/25/2019 13:00	9	9	9	30.54	4.9	3.9	25.1
5/25/2019 13:10	9	9	9	31.05	1.1	0.9	25.1

5/25/2019 13:20	9	9	9	31.51	4.8	3.9	24.1
5/25/2019 13:30	9	9	9	30.38	4.9	3.9	25.1
5/25/2019 13:40	9	9	9	30.9	1.1	0.8	25.1
5/25/2019 13:50	9	9	9	31.73	4.9	3.9	10.8
5/25/2019 14:00	9	9	9	30.47	4.9	3.9	25.1
5/25/2019 14:10	9	9	9	30.87	1.3	0.9	25.1
5/25/2019 14:20	9	9	9	31.57	4.9	3.9	23.9
5/25/2019 14:30	9	9	9	30.32	4.8	3.9	25.1
5/25/2019 14:40	9	9	9	31.36	1	0.8	3.9
5/25/2019 14:50	9	9	9	31.36	5	3.9	24.6
5/25/2019 15:00	9	9	9	30.14	4.9	4	25.2
5/25/2019 15:10	9	9	9	31.82	1	0.8	0.4
5/25/2019 15:20	9	9	9	31.15	4.8	3.9	24.8
5/25/2019 15:30	9	9	9	30.02	4.6	3.9	25.3
5/25/2019 15:40	9	9	9	31.73	1.1	0.8	0.5
5/25/2019 15:50	9	9	9	31.05	5	3.9	24.9
5/25/2019 16:00	9	9	9	30.17	3.7	3.2	25.3
5/25/2019 16:10	9	9	9	31.76	4.7	3.8	0.5
5/25/2019 16:20	9	9	9	30.47	5.1	3.9	25.1
5/25/2019 16:30	9	9	9	31.36	0.9	0.9	5.1
5/25/2019 16:40	9	9	9	31.3	4.8	3.9	24.6
5/25/2019 16:50	9	9	9	30.17	4.8	3.9	25.2
5/25/2019 17:00	9	9	9	31.82	1	0.8	0.4
5/25/2019 17:10	9	9	9	31.02	4.9	3.9	24.9
5/25/2019 17:20	9	9	9	30.35	3.3	3.1	25.2
5/25/2019 17:30	9	9	9	31.76	4.9	3.9	0.5
5/25/2019 17:40	9	9	9	30.44	5	3.9	25.1
5/25/2019 17:50	9	9	9	31.48	1.1	0.9	2.6
5/25/2019 18:00	9	9	9	31.02	4.7	3.9	24.8
5/25/2019 18:10	9	9	9	30.47	3.2	2.9	25.2
5/25/2019 18:20	9	9	9	31.6	5	3.9	23.9
5/25/2019 18:30	9	9	9	30.23	4.8	3.8	25.2
5/25/2019 18:40	9	9	9	32	5	3.9	0.4
5/25/2019 18:50	9	9	9	30.57	4.9	3.9	25.1
5/25/2019 19:00	9	9	9	31.27	0.9	0.9	3.2
5/25/2019 19:10	9	9	9	31.36	4.9	3.9	24.4
5/25/2019 19:20	9	9	9	30.2	4.8	3.8	25.1
5/25/2019 19:30	9	9	9	31.6	0.9	0.8	0.5
5/25/2019 19:40	9	9	9	31.3	4.9	3.9	24.7
5/25/2019 19:50	9	9	9	30.05	4.9	3.9	25.2
5/25/2019 20:00	9	9	9	31.94	1	0.8	0.5
5/25/2019 20:10	9	9	9	31.09	4.9	3.9	24.8
5/25/2019 20:20	9	9	9	30.05	5	3.8	25.2
5/25/2019 20:30	9	9	9	31.3	1	0.8	2.5
5/25/2019 20:40	9	9	9	31.51	4.9	3.9	24.1
5/25/2019 20:50	9	9	9	30.35	4.9	3.8	25.2
5/25/2019 21:00	9	9	9	31.76	1	0.8	0.4

5/25/2019 21:10	9	9	9	30.96	5	3.9	25
5/25/2019 21:20	9	9	9	30.47	2.6	2.3	25.2
5/25/2019 21:30	9	9	9	31.76	4.7	3.9	0.5
5/25/2019 21:40	9	9	9	30.69	5	3.9	25
5/25/2019 21:50	9	9	9	30.47	2.2	1.8	25.3
5/25/2019 22:00	9	9	9	31.85	4.8	3.9	0.5
5/25/2019 22:10	9	9	9	30.69	5	3.9	25
5/25/2019 22:20	9	9	9	30.32	2.9	2.7	25.3
5/25/2019 22:30	9	9	9	31.88	4.9	4	0.5
5/25/2019 22:40	9	9	9	30.57	4.8	3.9	25.1
5/25/2019 22:50	9	9	9	31.42	0.9	0.8	5.3
5/25/2019 23:00	9	9	9	31.18	5	3.9	24.8
5/25/2019 23:10	9	9	9	30.14	3.5	3.2	25.2
5/25/2019 23:20	9	9	9	32.03	4.9	4.1	0.5
5/25/2019 23:30	9	9	9	30.93	4.8	3.9	25
5/25/2019 23:40	9	9	9	30.05	3.5	3.4	25.2
5/25/2019 23:50	9	9	9	32.12	4.9	3.9	0.4
5/26/2019 0:00	9	9	9	30.84	5	3.9	24.9
5/26/2019 0:10	9	9	9	29.83	1.7	1.8	25.3
5/26/2019 0:20	9	9	9	31.79	0.9	0.9	0.4
5/26/2019 0:30	9	9	9	31.12	4.7	4	24.8
5/26/2019 0:40	9	9	9	29.89	4.8	3.9	25.3
5/26/2019 0:50	9	9	9	32.06	0.9	0.9	0.5
5/26/2019 1:00	9	9	9	31.02	5	4	24.9
5/26/2019 1:10	9	9	9	29.83	3.1	3	25.2
5/26/2019 1:20	9	9	9	32.06	1.3	0.8	0.5
5/26/2019 1:30	9	9	9	30.9	4.9	3.9	25
5/26/2019 1:40	9	9	9	30.14	3.5	3.3	25.3
5/26/2019 1:50	9	9	9	31.94	5	3.9	0.5
5/26/2019 2:00	9	9	9	30.72	4.8	3.9	25.1
5/26/2019 2:10	9	9	9	30.63	1.9	1.7	25.2
5/26/2019 2:20	9	9	9	31.57	4.9	3.9	23.8
5/26/2019 2:30	9	9	9	30.23	4.8	3.9	25.2
5/26/2019 2:40	9	9	9	31.63	0.9	0.8	0.5
5/26/2019 2:50	9	9	9	31.15	5.1	3.9	24.8
5/26/2019 3:00	9	9	9	30.02	4.9	3.9	25.3
5/26/2019 3:10	9	9	9	31.88	0.9	0.8	0.5
5/26/2019 3:20	9	9	9	31.15	4.9	3.8	24.8
5/26/2019 3:30	9	9	9	30.11	4.6	3.8	25.2
5/26/2019 3:40	9	9	9	31.39	1	0.8	2.2
5/26/2019 3:50	9	9	9	31.36	4.9	3.9	24.5
5/26/2019 4:00	9	9	9	30.11	5	3.9	25.2
5/26/2019 4:10	9	9	9	32.06	1.3	0.8	0.5
5/26/2019 4:20	9	9	9	30.84	4.8	3.8	25
5/26/2019 4:30	9	9	9	30.84	1.1	0.8	25.2
5/26/2019 4:40	9	9	9	31.48	4.8	3.9	23.9
5/26/2019 4:50	9	9	9	30.41	4.9	3.9	25.2

5/26/2019 5:00	9	9	9	31.48	1	0.8	2.5
5/26/2019 5:10	9	9	9	31.33	4.9	3.9	24.7
5/26/2019 5:20	9	9	9	30.05	4.7	3.9	25.2
5/26/2019 5:30	9	9	9	31.88	1	0.8	0.4
5/26/2019 5:40	9	9	9	31.15	4.9	3.9	24.8
5/26/2019 5:50	9	9	9	30.05	5	3.8	25.2
5/26/2019 6:00	9	9	9	31.45	1.1	0.8	1.2
5/26/2019 6:10	9	9	9	31.33	4.9	3.8	24.5
5/26/2019 6:20	9	9	9	30.41	4.8	3.9	25.1
5/26/2019 6:30	9	9	9	30.93	1.2	0.9	25.2
5/26/2019 6:40	9	9	9	31.6	4.9	3.9	24
5/26/2019 6:50	9	9	9	30.44	4.8	3.9	25.2
5/26/2019 7:00	9	9	9	31.12	1.1	0.9	25.1
5/26/2019 7:10	9	9	9	31.3	4.9	3.9	24.5
5/26/2019 7:20	9	9	9	30.23	4.9	3.9	25.2
5/26/2019 7:30	9	9	9	31.15	1	0.9	3.2
5/26/2019 7:40	9	9	9	31.57	4.8	3.9	23.8
5/26/2019 7:50	9	9	9	30.29	4.9	3.8	25.1
5/26/2019 8:00	9	9	9	31.33	0.9	0.8	3.8
5/26/2019 8:10	9	9	9	31.33	5	3.9	24.7
5/26/2019 8:20	9	9	9	30.02	5	3.8	25.3
5/26/2019 8:30	9	9	9	32.03	4.9	3.9	0.4
5/26/2019 8:40	9	9	9	30.78	5	3.9	25.1
5/26/2019 8:50	9	9	9	30.9	1.2	0.9	25.1
5/26/2019 9:00	9	9	9	31.63	4.8	4	23.8
5/26/2019 9:10	9	9	9	30.32	4.9	3.9	25.1
5/26/2019 9:20	9	9	9	31.51	1	0.8	1.3
5/26/2019 9:30	9	9	9	31.15	4.9	3.9	24.8
5/26/2019 9:40	9	9	9	29.89	4.9	3.8	25.2
5/26/2019 9:50	9	9	9	31.7	1	0.8	0.4
5/26/2019 10:00	9	9	9	31.21	4.9	3.9	24.7
5/26/2019 10:10	9	9	9	30.11	4.9	4	25.2
5/26/2019 10:20	9	9	9	31.39	1	0.8	2.1
5/26/2019 10:30	9	9	9	31.39	4.9	3.8	24.5
5/26/2019 10:40	9	9	9	30.17	5	3.9	25.1
5/26/2019 10:50	9	9	9	31.36	0.9	0.8	2.9
5/26/2019 11:00	9	9	9	31.36	5	3.9	24.5
5/26/2019 11:10	9	9	9	30.17	4.8	3.9	25.2
5/26/2019 11:20	9	9	9	32.06	5.1	4.2	0.4
5/26/2019 11:30	9	9	9	30.69	4.7	3.9	25.1
5/26/2019 11:40	9	9	9	30.87	1.2	0.9	25.2
5/26/2019 11:50	9	9	9	31.51	4.9	3.9	24.2
5/26/2019 12:00	9	9	9	30.26	4.9	3.8	25.2
5/26/2019 12:10	9	9	9	31.42	1.1	0.8	3.4
5/26/2019 12:20	9	9	9	31.18	5.1	3.8	24.8
5/26/2019 12:30	9	9	9	29.96	4.9	4	25.3
5/26/2019 12:40	9	9	9	32.09	4	3.6	0.4

5/26/2019 12:50	9	9	9	30.93	5.1	3.9	24.9
5/26/2019 13:00	9	9	9	30.41	3	2.7	25.3
5/26/2019 13:10	9	9	9	31.7	5	3.9	0.5
5/26/2019 13:20	9	9	9	30.47	4.9	3.8	25.1
5/26/2019 13:30	9	9	9	31.42	1	0.8	3.8
5/26/2019 13:40	9	9	9	31.21	4.9	3.9	24.8
5/26/2019 13:50	9	9	9	29.83	5.1	3.8	25.3
5/26/2019 14:00	9	9	9	31.94	1	0.8	0.4
5/26/2019 14:10	9	9	9	31.21	4.9	3.8	24.7
5/26/2019 14:20	9	9	9	30.26	5	3.8	25.1
5/26/2019 14:30	9	9	9	30.99	1.1	0.8	25.1
5/26/2019 14:40	9	9	9	31.6	5.1	3.8	23.8
5/26/2019 14:50	9	9	9	30.38	4.9	3.9	25.1
5/26/2019 15:00	9	9	9	31.48	0.9	0.8	1.7
5/26/2019 15:10	9	9	9	31.21	4.8	3.9	24.8
5/26/2019 15:20	9	9	9	30.08	3.6	3.2	25.3
5/26/2019 15:30	9	9	9	31.94	4.9	3.9	0.5
5/26/2019 15:40	9	9	9	30.57	4.9	3.8	25.1
5/26/2019 15:50	9	9	9	30.96	1.1	0.8	25.1
5/26/2019 16:00	9	9	9	31.48	4.9	3.9	24.1
5/26/2019 16:10	9	9	9	30.29	5	3.8	25.1
5/26/2019 16:20	9	9	9	31.05	1	0.9	11.6
5/26/2019 16:30	9	9	9	31.73	4.9	3.9	12.8
5/26/2019 16:40	9	9	9	30.54	4.6	3.8	25.1
5/26/2019 16:50	9	9	9	31.18	1	0.8	25.1
5/26/2019 17:00	9	9	9	31.33	4.9	3.8	24.6
5/26/2019 17:10	9	9	9	30.05	4.8	3.8	25.3
5/26/2019 17:20	9	9	9	32.09	4.5	3.7	0.4
5/26/2019 17:30	9	9	9	30.87	4.9	3.9	25
5/26/2019 17:40	9	9	9	30.11	3.6	3.2	25.2
5/26/2019 17:50	9	9	9	32.06	1.1	0.8	0.4
5/26/2019 18:00	9	9	9	31.02	4.9	3.9	24.8
5/26/2019 18:10	9	9	9	29.96	5	3.9	25.2
5/26/2019 18:20	9	9	9	31.76	1	0.9	0.4
5/26/2019 18:30	9	9	9	31.18	4.9	3.8	24.7
5/26/2019 18:40	9	9	9	30.11	4.9	3.8	25.3
5/26/2019 18:50	9	9	9	31.94	1.1	0.8	0.4
5/26/2019 19:00	9	9	9	30.96	5	3.9	24.9
5/26/2019 19:10	9	9	9	29.96	3.6	3.4	25.3
5/26/2019 19:20	9	9	9	32	1	0.8	0.4
5/26/2019 19:30	9	9	9	31.09	5	3.9	24.9
5/26/2019 19:40	9	9	9	29.83	4.7	3.8	25.3
5/26/2019 19:50	9	9	9	31.63	0.9	0.8	0.4
5/26/2019 20:00	9	9	9	31.27	4.9	3.9	24.8
5/26/2019 20:10	9	9	9	30.11	4.7	3.9	25.3
5/26/2019 20:20	9	9	9	31.97	1	0.9	0.4
5/26/2019 20:30	9	9	9	30.81	4.9	3.8	25

5/26/2019 20:40	9	9	9	30.66	1.9	1.6	25.2
5/26/2019 20:50	9	9	9	31.6	4.9	3.9	23.9
5/26/2019 21:00	9	9	9	30.38	4.9	3.8	25.1
5/26/2019 21:10	9	9	9	30.84	1.1	0.9	25.1
5/26/2019 21:20	9	9	9	31.7	4.9	3.9	8.6
5/26/2019 21:30	9	9	9	30.41	4.8	3.9	25.1
5/26/2019 21:40	9	9	9	30.9	1.2	0.9	25.1
5/26/2019 21:50	9	9	9	31.57	4.9	3.9	23.9
5/26/2019 22:00	9	9	9	30.44	4.9	3.9	25.2
5/26/2019 22:10	9	9	9	31.42	1	0.8	2
5/26/2019 22:20	9	9	9	31.15	4.9	3.8	24.8
5/26/2019 22:30	9	9	9	30.11	3.5	3.4	25.3
5/26/2019 22:40	9	9	9	31.94	4.9	3.9	0.5
5/26/2019 22:50	9	9	9	30.66	4.9	4	25.1
5/26/2019 23:00	9	9	9	30.9	1.2	0.9	25.1
5/26/2019 23:10	9	9	9	31.48	4.8	3.8	24.1
5/26/2019 23:20	9	9	9	30.2	4.9	3.9	25.2
5/26/2019 23:30	9	9	9	31.85	1.1	0.8	0.4
5/26/2019 23:40	9	9	9	30.99	4.9	3.9	24.9
5/26/2019 23:50	9	9	9	30.26	3.5	3.1	25.3
5/27/2019 0:00	9	9	9	31.82	4.9	3.9	0.5
5/27/2019 0:10	9	9	9	30.66	4.9	3.9	25.1
5/27/2019 0:20	9	9	9	30.84	1.1	0.9	25.1
5/27/2019 0:30	9	9	9	31.76	4.9	4	0.5
5/27/2019 0:40	9	9	9	30.72	5.1	3.8	25.1
5/27/2019 0:50	9	9	9	30.23	3.3	3.1	25.3
5/27/2019 1:00	9	9	9	31.85	4.9	3.9	0.5
5/27/2019 1:10	9	9	9	30.57	4.9	3.9	25.1
5/27/2019 1:20	9	9	9	30.81	1.2	0.9	25.2
5/27/2019 1:30	9	9	9	31.48	4.9	3.9	24.1
5/27/2019 1:40	9	9	9	30.41	4.8	3.8	25.1
5/27/2019 1:50	9	9	9	31.48	1	0.9	2.6
5/27/2019 2:00	9	9	9	31.18	4.9	3.9	24.8
5/27/2019 2:10	9	9	9	30.02	4.9	3.8	25.2
5/27/2019 2:20	9	9	9	31.67	0.9	0.7	0.4
5/27/2019 2:30	9	9	9	31.36	4.8	3.9	24.6
5/27/2019 2:40	9	9	9	30.32	4.8	3.9	25.2
5/27/2019 2:50	9	9	9	30.87	1.1	0.8	25.1
5/27/2019 3:00	9	9	9	31.76	4.9	3.9	0.5
5/27/2019 3:10	9	9	8	30.66	5	3.9	25.1
5/27/2019 3:20	9	9	9	31.02	1.1	0.8	25.1
5/27/2019 3:30	9	9	9	31.36	4.8	3.9	24.5
5/27/2019 3:40	9	9	9	30.2	4.7	3.8	25.3
5/27/2019 3:50	9	9	9	31.76	1.1	0.8	0.4
5/27/2019 4:00	9	9	9	31.09	4.9	4	24.9
5/27/2019 4:10	9	9	9	29.99	2.3	2.3	25.3
5/27/2019 4:20	9	9	9	32.03	5	3.8	0.5

5/27/2019 4:30	9	9	9	30.81	4.8	3.8	25.1
5/27/2019 4:40	9	9	9	30.63	2.1	1.7	25.2
5/27/2019 4:50	9	9	9	31.63	4.9	4	23.3
5/27/2019 5:00	9	9	9	30.35	5	3.8	25.2
5/27/2019 5:10	9	9	9	31.45	0.9	0.8	2.2
5/27/2019 5:20	9	9	9	31.21	4.9	3.9	24.8
5/27/2019 5:30	9	9	9	30.11	4.9	3.9	25.2
5/27/2019 5:40	9	9	9	31.6	1	0.8	0.5
5/27/2019 5:50	9	9	9	31.3	5	3.9	24.8
5/27/2019 6:00	9	9	9	29.99	5	3.9	25.3
5/27/2019 6:10	9	9	9	32.09	5.2	4.3	0.5
5/27/2019 6:20	9	9	9	30.72	4.7	3.9	25
5/27/2019 6:30	9	9	9	30.99	1.2	0.9	25.1
5/27/2019 6:40	9	9	9	31.45	4.6	3.8	24.2
5/27/2019 6:50	9	9	9	30.32	5	3.9	25.2
5/27/2019 7:00	9	9	9	31.51	1	0.8	0.9
5/27/2019 7:10	9	9	9	31.18	4.8	3.9	24.8
5/27/2019 7:20	9	9	9	29.89	4.9	3.8	25.3
5/27/2019 7:30	9	9	9	31.79	0.9	0.8	0.4
5/27/2019 7:40	9	9	9	31.27	4.7	3.9	24.7
5/27/2019 7:50	9	9	9	30.2	4.9	3.8	25.2
5/27/2019 8:00	9	9	9	31.27	1	0.8	5
5/27/2019 8:10	9	9	9	31.45	4.9	3.9	24.3
5/27/2019 8:20	9	9	8	30.17	4.9	3.9	25.1
5/27/2019 8:30	9	9	9	31.79	1	0.8	0.5
5/27/2019 8:40	9	9	9	30.99	5	3.8	25
5/27/2019 8:50	9	9	9	30.47	2.6	2.4	25.2
5/27/2019 9:00	9	9	9	31.76	4.7	3.9	0.6
5/27/2019 9:10	9	9	9	30.63	4.8	3.9	25.1
5/27/2019 9:20	9	9	9	30.81	1.1	0.9	25.1
5/27/2019 9:30	9	9	9	31.67	4.9	3.8	23
5/27/2019 9:40	9	9	9	30.47	4.8	4	25.1
5/27/2019 9:50	9	9	9	31.33	0.9	0.8	3.2
5/27/2019 10:00	9	9	9	31.3	4.9	3.8	24.7
5/27/2019 10:10	9	9	9	30.08	5.1	3.8	25.3
5/27/2019 10:20	9	9	9	32.12	1.8	1.3	0.4
5/27/2019 10:30	9	9	9	30.84	4.7	3.8	25
5/27/2019 10:40	9	9	9	30.66	1.8	1.4	25.2
5/27/2019 10:50	9	9	9	31.73	5	3.9	0.6
5/27/2019 11:00	9	9	9	30.47	4.9	3.8	25.1
5/27/2019 11:10	9	9	9	30.72	1.2	0.9	25.2
5/27/2019 11:20	9	9	9	31.67	4.9	3.9	1.3
5/27/2019 11:30	9	9	8	30.54	4.9	3.9	25
5/27/2019 11:40	9	9	9	30.51	1.9	1.6	25.2
5/27/2019 11:50	9	9	9	31.82	4.9	3.9	0.5
5/27/2019 12:00	9	9	9	30.63	4.9	3.9	25
5/27/2019 12:10	9	9	9	30.84	1.2	0.9	25.2

5/27/2019 12:20	9	9	9	31.7	4.9	3.9	0.6
5/27/2019 12:30	9	9	9	30.54	5	3.9	25.1
5/27/2019 12:40	9	9	9	30.81	1.2	0.8	25.1
5/27/2019 12:50	9	9	9	31.7	5	3.9	0.6
5/27/2019 13:00	9	9	9	30.54	5.1	3.9	25.1
5/27/2019 13:10	9	9	9	31.48	1	0.8	3.8
5/27/2019 13:20	9	9	9	31.21	4.8	3.8	24.8
5/27/2019 13:30	9	9	9	29.86	4.9	3.9	25.3
5/27/2019 13:40	9	9	9	32.06	1.3	0.9	0.4
5/27/2019 13:50	9	9	9	30.84	4.9	3.9	25
5/27/2019 14:00	9	9	9	30.51	2.5	2.3	25.2
5/27/2019 14:10	9	9	9	31.85	4.9	3.9	0.5
5/27/2019 14:20	9	9	9	30.69	5	3.9	25.1
5/27/2019 14:30	9	9	9	30.57	1.5	1.3	25.1
5/27/2019 14:40	9	9	9	31.76	5	3.8	0.6
5/27/2019 14:50	9	9	9	30.47	4.9	4	25.1
5/27/2019 15:00	9	9	9	30.78	1.1	0.8	25.1
5/27/2019 15:10	9	9	9	31.63	5	3.8	23.1
5/27/2019 15:20	9	9	9	30.47	4.9	3.9	25.2
5/27/2019 15:30	9	9	9	31.12	1	0.7	25.1
5/27/2019 15:40	9	9	9	31.42	4.8	3.8	24.3
5/27/2019 15:50	9	9	9	30.26	5	3.8	25.2
5/27/2019 16:00	9	9	8	31.6	1	0.8	0.4
5/27/2019 16:10	9	9	9	31.33	4.9	3.7	24.6
5/27/2019 16:20	9	9	9	30.11	4.9	3.8	25.3
5/27/2019 16:30	9	9	8	31.48	1	0.8	0.4
5/27/2019 16:40	9	9	9	31.33	4.9	3.8	24.5
5/27/2019 16:50	9	9	9	30.29	4.7	3.9	25.1
5/27/2019 17:00	9	9	9	30.84	1.1	0.8	25.1
5/27/2019 17:10	9	9	9	31.63	4.9	3.9	23.3
5/27/2019 17:20	9	9	9	30.41	4.9	3.9	25.1
5/27/2019 17:30	9	9	9	31.27	1	0.8	3.5
5/27/2019 17:40	9	9	9	31.3	4.7	3.9	24.5
5/27/2019 17:50	9	9	9	30.17	4.9	3.9	25.2
5/27/2019 18:00	9	9	9	31.21	1	0.8	4.1
5/27/2019 18:10	9	9	9	31.82	5	3.9	0.5
5/27/2019 18:20	9	9	9	31.02	4.9	4	24.8
5/27/2019 18:30	9	9	9	30.32	4.9	4	25
5/27/2019 18:40	9	9	9	29.68	4.9	3.9	25.2
5/27/2019 18:50	9	9	9	30.9	1	0.8	3.4
5/27/2019 19:00	9	9	9	32	1	0.8	0.4
5/27/2019 19:10	9	9	8	31.88	4.9	3.9	0.5
5/27/2019 19:20	9	9	9	31.42	5.1	3.9	24.3
5/27/2019 19:30	9	9	9	30.69	4.9	3.8	25
5/27/2019 19:40	9	9	9	29.86	5	3.9	25.2
5/27/2019 19:50	9	9	9	30.9	1.1	0.9	25.1
5/27/2019 20:00	9	9	8	31.85	4.9	3.8	0.5

5/27/2019 20:10	9	9	9	30.84	4.9	3.9	24.8
5/27/2019 20:20	9	9	9	29.86	4.8	3.8	25.1
5/27/2019 20:30	9	9	9	30.41	1.3	1	25.1
5/27/2019 20:40	9	9	9	31.6	1.1	0.8	0.4
5/27/2019 20:50	9	9	9	32.03	4.9	3.9	0.5
5/27/2019 21:00	9	9	8	31.88	4.9	3.9	0.5
5/27/2019 21:10	9	9	9	31.88	4.9	3.9	0.5
5/27/2019 21:20	9	9	9	31.85	4.9	3.9	0.5
5/27/2019 21:30	9	9	9	31.33	5	3.9	24.2
5/27/2019 21:40	9	9	9	30.57	4.9	3.9	25
5/27/2019 21:50	9	9	9	30.11	3.4	3.2	25.2
5/27/2019 22:00	9	9	9	31.85	1	0.8	0.4
5/27/2019 22:10	9	9	9	31.39	5	3.9	24.2
5/27/2019 22:20	9	9	9	30.66	5	3.9	24.9
5/27/2019 22:30	9	9	9	29.83	4.8	3.9	25.1
5/27/2019 22:40	9	9	9	30.32	1.6	1.2	25.1
5/27/2019 22:50	9	9	9	31.67	1.1	0.8	0.4
5/27/2019 23:00	9	9	9	31.48	4.9	3.8	24
5/27/2019 23:10	9	9	9	30.38	4.8	3.9	25.1
5/27/2019 23:20	9	9	9	30.63	1.6	1.3	25.2
5/27/2019 23:30	9	9	9	31.97	4.9	3.9	0.5
5/27/2019 23:40	9	9	9	30.99	4.8	3.9	24.9
5/27/2019 23:50	9	9	8	29.99	4.8	3.9	25.1
5/28/2019 0:00	9	9	9	30.69	1.1	0.9	25
5/28/2019 0:10	9	9	9	32.09	4.9	3.9	0.5
5/28/2019 0:20	9	9	9	31.15	4.9	3.9	24.7
5/28/2019 0:30	9	9	9	30.11	5	3.9	25.2
5/28/2019 0:40	9	9	8	31.82	0.9	0.9	0.4
5/28/2019 0:50	9	9	9	31.27	4.8	4	24.7
5/28/2019 1:00	9	9	9	30.17	4.9	3.9	25.1
5/28/2019 1:10	9	9	8	30.54	1.6	1.3	25.2
5/28/2019 1:20	9	9	8	32.03	4.9	4	0.5
5/28/2019 1:30	9	9	8	31.09	4.9	3.8	24.8
5/28/2019 1:40	9	9	9	30.02	4.9	3.9	25.2
5/28/2019 1:50	9	9	8	31.48	1	0.8	0.5
5/28/2019 2:00	9	9	9	31.42	4.9	4	24.4
5/28/2019 2:10	9	9	9	30.23	4.9	3.8	25.1
5/28/2019 2:20	9	9	9	30.51	1.6	1.2	25.2
5/28/2019 2:30	9	9	8	31.94	4.9	3.9	0.5
5/28/2019 2:40	9	9	9	30.78	4.9	3.9	25
5/28/2019 2:50	9	9	9	30.38	2.7	2.5	25.2
5/28/2019 3:00	9	9	9	31.85	4.9	3.9	0.5
5/28/2019 3:10	9	9	9	30.63	4.8	4	25
5/28/2019 3:20	9	9	8	30.32	2.3	2	25.2
5/28/2019 3:30	9	9	8	31.85	4.9	3.9	0.5
5/28/2019 3:40	9	9	9	30.75	4.8	3.9	25
5/28/2019 3:50	9	9	8	29.71	5.1	3.8	25.3

5/28/2019 4:00	9	9	9	31.33	0.9	0.8	0.5
5/28/2019 4:10	9	9	8	31.54	5	3.9	23.8
5/28/2019 4:20	9	9	9	30.47	4.9	3.8	25.1
5/28/2019 4:30	9	9	8	30.66	1.7	1.4	25.2
5/28/2019 4:40	9	9	8	31.94	4.9	3.9	0.5
5/28/2019 4:50	9	9	9	30.96	4.8	3.9	24.8
5/28/2019 5:00	9	9	8	29.96	5.2	3.9	25.2
5/28/2019 5:10	9	9	8	30.78	1	0.8	25
5/28/2019 5:20	9	9	8	32	4.9	3.9	0.5
5/28/2019 5:30	9	9	9	31.12	4.9	3.8	24.8
5/28/2019 5:40	9	9	9	30.23	4.9	3.8	25.1
5/28/2019 5:50	9	9	8	30.81	1.2	0.8	25.2
5/28/2019 6:00	9	9	9	31.7	4.8	3.9	0.6
5/28/2019 6:10	9	9	9	30.51	4.9	3.9	25.1
5/28/2019 6:20	9	9	9	30.44	2	1.8	25.2
5/28/2019 6:30	9	9	9	31.88	5	3.8	0.5
5/28/2019 6:40	9	9	8	30.87	5	3.9	24.9
5/28/2019 6:50	9	9	8	30.08	5	3.9	25.2
5/28/2019 7:00	9	9	9	31.12	1	0.8	4.2
5/28/2019 7:10	9	9	9	31.85	4.9	3.9	0.5
5/28/2019 7:20	9	9	8	30.81	4.9	3.8	24.8
5/28/2019 7:30	9	9	8	29.74	4.9	3.8	25.2
5/28/2019 7:40	9	9	8	31.05	1	0.8	3.2
5/28/2019 7:50	9	9	8	31.54	4.9	3.9	23.8
5/28/2019 8:00	9	9	9	30.38	5.1	3.8	25.2
5/28/2019 8:10	9	9	9	31.21	0.9	0.7	3.2
5/28/2019 8:20	9	9	9	31.45	4.9	3.8	24.2
5/28/2019 8:30	9	9	8	30.32	4.9	3.8	25.1
5/28/2019 8:40	9	9	9	30.57	1.2	0.9	25.1
5/28/2019 8:50	9	9	9	32	4.9	3.9	0.5
5/28/2019 9:00	9	9	9	31.05	4.9	3.9	24.8
5/28/2019 9:10	9	9	9	30.08	4.9	3.8	25.2
5/28/2019 9:20	9	9	8	30.9	1.1	0.8	25
5/28/2019 9:30	9	9	8	31.76	4.9	3.9	0.5
5/28/2019 9:40	9	9	9	30.84	5	3.9	24.9
5/28/2019 9:50	9	9	9	29.89	5	3.9	25.2
5/28/2019 10:00	9	9	9	31.21	0.9	0.8	3.6
5/28/2019 10:10	9	9	9	31.6	4.8	3.8	23.9
5/28/2019 10:20	9	9	9	30.35	5	3.9	25.1
5/28/2019 10:30	9	9	9	30.41	1.7	1.6	25.2
5/28/2019 10:40	9	9	9	31.97	5.1	3.9	0.5
5/28/2019 10:50	9	9	9	30.99	4.8	3.8	24.9
5/28/2019 11:00	9	9	9	30.11	3.5	3.4	25.2
5/28/2019 11:10	9	9	8	32.12	4	3.4	0.4
5/28/2019 11:20	9	9	9	30.99	4.8	3.8	24.8
5/28/2019 11:30	9	9	8	29.99	4.9	3.9	25.2
5/28/2019 11:40	9	9	9	31.02	1	0.9	4.3

5/28/2019 11:50	9	9	8	31.94	4.9	3.9	0.5
5/28/2019 12:00	9	9	9	30.93	4.9	3.8	24.9
5/28/2019 12:10	9	9	9	30.02	4.9	3.8	25.2
5/28/2019 12:20	9	9	8	31.54	1	0.8	0.4
5/28/2019 12:30	9	9	9	31.27	5	3.9	24.7
5/28/2019 12:40	9	9	9	29.99	5	3.9	25.2
5/28/2019 12:50	9	9	9	31.15	0.9	0.7	3.6
5/28/2019 13:00	9	9	8	31.54	4.9	3.9	23.5
5/28/2019 13:10	9	9	9	30.57	4.7	3.9	25
5/28/2019 13:20	9	9	9	30.11	3.3	3	25.2
5/28/2019 13:30	9	9	9	31.97	1	0.8	0.4
5/28/2019 13:40	9	9	9	31.15	5	3.9	24.7
5/28/2019 13:50	9	9	9	29.89	4.8	3.9	25.2
5/28/2019 14:00	9	9	9	31.67	1	0.8	0.5
5/28/2019 14:10	9	9	9	31.48	4.9	3.8	24.4
5/28/2019 14:20	9	9	9	30.44	4.9	3.8	24.9
5/28/2019 14:30	9	9	9	30.35	2.2	1.8	25.1
5/28/2019 14:40	9	9	9	32.03	5	3.9	0.5
5/28/2019 14:50	9	9	9	30.9	5	3.9	24.9
5/28/2019 15:00	9	9	9	29.8	4.8	3.8	25.3
5/28/2019 15:10	9	9	9	31.85	1	0.8	0.5
5/28/2019 15:20	9	9	9	31.05	4.9	3.9	24.8
5/28/2019 15:30	9	9	8	29.96	4.9	3.8	25.3
5/28/2019 15:40	9	9	9	32	1	0.8	0.5
5/28/2019 15:50	9	9	8	31.02	4.9	3.9	24.9
5/28/2019 16:00	9	9	8	29.86	5	3.8	25.2
5/28/2019 16:10	9	9	9	31.45	1	0.8	0.4
5/28/2019 16:20	9	9	9	31.57	4.9	3.9	23.7
5/28/2019 16:30	9	9	9	30.57	4.9	4	25
5/28/2019 16:40	9	9	9	30.02	3.5	3.2	25.3
5/28/2019 16:50	9	9	9	31.94	1	0.8	0.4
5/28/2019 17:00	9	9	9	31.15	4.7	3.9	24.8
5/28/2019 17:10	9	9	9	30.05	4.9	3.8	25.2
5/28/2019 17:20	9	9	8	31.15	1	0.8	3.3
5/28/2019 17:30	9	9	9	31.6	4.9	3.8	1.3
5/28/2019 17:40	9	9	9	30.54	4.9	3.8	25
5/28/2019 17:50	9	9	8	29.71	4.7	3.9	25.3
5/28/2019 18:00	9	9	9	31.48	1	0.8	0.4
5/28/2019 18:10	9	9	9	31.39	4.8	3.9	24.3
5/28/2019 18:20	9	9	9	30.26	5	3.9	25.2
5/28/2019 18:30	9	9	9	31.27	0.9	0.8	2.5
5/28/2019 18:40	9	9	8	31.39	4.7	3.9	24.4
5/28/2019 18:50	9	9	9	30.29	4.8	3.8	25.1
5/28/2019 19:00	9	9	9	30.75	1	0.9	25.1
5/28/2019 19:10	9	9	9	32	4.8	3.9	0.5
5/28/2019 19:20	9	9	9	30.9	4.9	3.8	24.9
5/28/2019 19:30	9	9	9	29.86	3.4	3.2	25.3

5/28/2019 19:40	9	9	8	32.09	1.3	0.7	0.5
5/28/2019 19:50	9	9	8	30.87	4.9	3.9	25
5/28/2019 20:00	9	9	9	30.51	2.2	1.9	25.2
5/28/2019 20:10	9	9	9	31.97	5.1	3.9	0.5
5/28/2019 20:20	9	9	9	30.81	4.8	3.8	24.8
5/28/2019 20:30	9	9	9	29.99	4.9	3.8	25.2
5/28/2019 20:40	9	9	9	30.75	1.3	0.8	25
5/28/2019 20:50	9	9	9	32.06	5.1	4.2	0.5
5/28/2019 21:00	9	9	9	31.09	4.8	3.9	24.8
5/28/2019 21:10	9	9	8	29.96	4.8	3.9	25.2
5/28/2019 21:20	9	9	9	31.94	0.9	0.8	0.4
5/28/2019 21:30	9	9	9	30.96	5	3.8	24.9
5/28/2019 21:40	9	9	9	30.14	3.6	3.2	25.2
5/28/2019 21:50	9	9	9	32.03	1	0.8	0.4
5/28/2019 22:00	9	9	9	31.18	4.7	3.9	24.7
5/28/2019 22:10	9	9	9	30.11	4.8	3.9	25.1
5/28/2019 22:20	9	9	9	30.87	1	0.8	25
5/28/2019 22:30	9	9	9	31.7	4.7	3.9	0.6
5/28/2019 22:40	9	9	9	30.66	5	3.9	25
5/28/2019 22:50	9	9	9	30.54	1.7	1.3	25.2
5/28/2019 23:00	9	9	8	31.85	4.9	3.9	0.5
5/28/2019 23:10	9	9	9	30.75	5	3.9	24.9
5/28/2019 23:20	9	9	9	29.99	3.5	3.2	25.2
5/28/2019 23:30	9	9	9	31.97	1	0.8	0.4
5/28/2019 23:40	9	9	9	31.02	4.9	3.9	24.8
5/28/2019 23:50	9	9	9	30.14	3.5	3.3	25.3
5/29/2019 0:00	9	9	8	32	5	3.8	0.5
5/29/2019 0:10	9	9	8	30.87	4.7	3.9	24.9
5/29/2019 0:20	9	9	9	29.99	3.5	3.3	25.3
5/29/2019 0:30	9	9	8	32	1	0.8	0.4
5/29/2019 0:40	9	9	8	30.99	5	3.9	24.9
5/29/2019 0:50	9	9	8	30.05	3.5	3.2	25.3
5/29/2019 1:00	9	9	9	32.12	3.9	3.3	0.4
5/29/2019 1:10	9	9	9	30.93	4.9	3.9	24.9
5/29/2019 1:20	9	9	9	30.08	3.4	3.2	25.2
5/29/2019 1:30	9	9	9	31.85	1	0.9	0.4
5/29/2019 1:40	9	9	9	30.99	4.8	3.9	24.8
5/29/2019 1:50	9	9	9	29.99	4.8	3.8	25.2
5/29/2019 2:00	9	9	8	31.09	1	0.8	4.9
5/29/2019 2:10	9	9	9	31.76	4.9	3.8	0.6
5/29/2019 2:20	9	9	9	30.9	4.9	3.8	24.8
5/29/2019 2:30	9	9	9	30.11	4.9	3.8	25.1
5/29/2019 2:40	9	9	9	30.81	1.1	0.8	25.1
5/29/2019 2:50	9	9	9	31.82	4.9	3.9	0.5
5/29/2019 3:00	9	9	9	30.78	4.9	4	25
5/29/2019 3:10	9	9	9	30.2	3.2	2.9	25.2
5/29/2019 3:20	9	9	9	32	4.9	3.9	0.5

5/29/2019 3:30	9	9	9	30.93	4.9	3.8	24.9
5/29/2019 3:40	9	9	9	30.29	3.1	3	25.3
5/29/2019 3:50	9	9	9	32	4.8	3.9	0.5
5/29/2019 4:00	9	9	9	30.96	5.2	3.8	24.7
5/29/2019 4:10	9	9	9	30.11	4.7	3.9	25.1
5/29/2019 4:20	9	9	9	30.23	2.5	2.3	25.2
5/29/2019 4:30	9	9	9	32	1	0.8	0.5
5/29/2019 4:40	9	9	8	31.12	4.8	3.9	24.7
5/29/2019 4:50	9	9	8	30.14	4.9	3.8	25.2
5/29/2019 5:00	9	9	8	30.99	0.9	0.8	25
5/29/2019 5:10	9	9	8	31.54	4.9	3.8	23.8
5/29/2019 5:20	9	9	8	30.54	4.9	3.8	25.1
5/29/2019 5:30	9	9	9	30.57	1.6	1.5	25.3
5/29/2019 5:40	9	9	9	31.79	4.8	3.9	0.5
5/29/2019 5:50	9	9	8	30.87	4.8	3.8	24.9
5/29/2019 6:00	9	9	9	29.77	4.8	3.9	25.3
5/29/2019 6:10	9	9	9	31.51	0.9	0.8	0.5
5/29/2019 6:20	9	9	9	31.45	4.9	3.8	24
5/29/2019 6:30	9	9	8	30.41	4.9	3.8	25
5/29/2019 6:40	9	9	9	30.81	1.1	0.8	25.1
5/29/2019 6:50	9	9	9	31.7	4.8	3.8	0.6
5/29/2019 7:00	9	9	9	30.47	4.9	3.8	25.2
5/29/2019 7:10	9	9	9	31.02	1.2	0.8	25.1
5/29/2019 7:20	9	9	8	31.57	5.1	3.8	23.7
5/29/2019 7:30	9	9	8	30.54	5	3.9	25
5/29/2019 7:40	9	9	9	30.35	2.4	2.2	25.2
5/29/2019 7:50	9	9	8	32.03	4.8	3.9	0.5
5/29/2019 8:00	9	9	8	30.87	5.4	3.9	24.9
5/29/2019 8:10	9	9	9	29.86	3.5	3.4	25.3
5/29/2019 8:20	9	9	8	32.09	4.6	3.8	0.5
5/29/2019 8:30	9	9	8	30.87	5.3	3.9	24.9
5/29/2019 8:40	9	9	8	30.2	3.5	3.2	25.3
5/29/2019 8:50	9	9	8	32.06	4.8	3.8	0.5
5/29/2019 9:00	9	9	8	30.96	5.1	3.9	24.9
5/29/2019 9:10	9	9	8	29.89	3.5	3.3	25.3
5/29/2019 9:20	9	9	8	32.09	1.6	1.2	0.5
5/29/2019 9:30	9	9	9	30.84	4.9	3.9	24.9
5/29/2019 9:40	9	9	8	30.11	3.4	3.2	25.2
5/29/2019 9:50	9	9	8	32.09	1	0.8	0.5
5/29/2019 10:00	9	9	9	30.96	4.7	3.9	24.9
5/29/2019 10:10	9	9	9	29.77	4.8	3.9	25.3
5/29/2019 10:20	9	9	8	31.57	1	0.8	0.5
5/29/2019 10:30	9	9	9	31.48	5	3.9	24.3
5/29/2019 10:40	9	9	9	30.35	4.8	3.8	25.1
5/29/2019 10:50	9	9	9	30.78	1.2	0.9	25.1
5/29/2019 11:00	9	9	8	31.85	4.9	3.9	0.5
5/29/2019 11:10	9	9	8	30.72	5.1	3.8	25

5/29/2019 11:20	9	9	8	29.77	3.7	3.4	25.2
5/29/2019 11:30	9	9	9	31.67	1	0.8	0.4
5/29/2019 11:40	9	9	8	31.48	4.7	3.9	24.1
5/29/2019 11:50	9	9	8	30.57	4.9	3.8	24.9
5/29/2019 12:00	9	9	8	29.74	3.5	3.3	25.3
5/29/2019 12:10	9	9	8	31.63	1	0.8	0.4
5/29/2019 12:20	9	9	8	31.12	4.8	3.8	24.8
5/29/2019 12:30	9	9	8	30.05	4.9	3.8	25.3
5/29/2019 12:40	9	9	8	31.36	1	0.8	1.7
5/29/2019 12:50	9	9	8	31.6	5	3.8	17.5
5/29/2019 13:00	9	9	8	30.54	4.9	3.9	25
5/29/2019 13:10	9	9	8	29.86	3.6	3.4	25.3
5/29/2019 13:20	9	9	9	31.94	1.1	0.8	0.5
5/29/2019 13:30	9	9	8	31.09	4.7	3.9	24.9
5/29/2019 13:40	9	9	8	29.96	4.9	3.8	25.2
5/29/2019 13:50	9	9	9	32.09	2.8	2.3	0.5
5/29/2019 14:00	9	9	8	30.75	4.9	3.9	25
5/29/2019 14:10	9	9	9	30.9	1.2	0.8	25.2
5/29/2019 14:20	9	9	8	31.63	4.8	3.8	23.8
5/29/2019 14:30	9	9	9	30.75	4.9	4	24.9
5/29/2019 14:40	9	9	9	29.77	4.9	3.8	25.2
5/29/2019 14:50	9	9	8	31.42	0.9	0.8	0.5
5/29/2019 15:00	9	9	9	31.57	4.9	3.9	24
5/29/2019 15:10	9	9	8	30.44	5.1	3.9	25.1
5/29/2019 15:20	9	9	8	30.72	1.1	0.9	25.1
5/29/2019 15:30	9	9	8	31.82	5	3.8	0.5
5/29/2019 15:40	9	9	8	30.69	4.9	3.8	25
5/29/2019 15:50	9	9	8	30.29	2.9	2.6	25.2
5/29/2019 16:00	9	9	9	32.06	2.9	2.4	0.5
5/29/2019 16:10	9	9	8	31.27	4.9	3.8	24.6
5/29/2019 16:20	9	9	8	30.38	4.9	3.8	25.1
5/29/2019 16:30	9	9	8	30.47	1.6	1.3	25.2
5/29/2019 16:40	9	9	9	31.88	4.9	3.8	0.5
5/29/2019 16:50	9	9	8	30.78	5	3.9	25
5/29/2019 17:00	9	9	8	30.29	2.7	2.5	25.2
5/29/2019 17:10	9	9	9	32.03	4.9	3.9	0.5
5/29/2019 17:20	9	9	9	30.72	4.9	3.8	25.1
5/29/2019 17:30	9	9	9	30.29	2.9	2.5	25.2
5/29/2019 17:40	9	9	9	32.03	4.9	3.9	0.5
5/29/2019 17:50	9	9	8	30.81	5	3.9	24.9
5/29/2019 18:00	9	9	8	30.05	3.5	3.2	25.3
5/29/2019 18:10	9	9	8	32.09	1	0.7	0.4
5/29/2019 18:20	9	9	9	31.02	4.9	3.9	24.8
5/29/2019 18:30	9	9	8	30.02	4.9	3.8	25.2
5/29/2019 18:40	9	9	9	31.18	0.9	0.8	2.4
5/29/2019 18:50	9	9	9	31.67	5	3.9	0.6
5/29/2019 19:00	9	9	9	30.72	4.7	3.9	25

5/29/2019 19:10	9	9	9	29.77	4.8	3.8	25.2
5/29/2019 19:20	9	9	8	31.18	1	0.8	1.1
5/29/2019 19:30	9	9	8	31.76	4.8	3.8	0.5
5/29/2019 19:40	9	9	8	30.72	5.1	3.8	25
5/29/2019 19:50	9	9	8	29.77	3.5	3.3	25.2
5/29/2019 20:00	9	9	8	31.73	1	0.9	0.5
5/29/2019 20:10	9	9	8	31.27	4.9	3.8	24.7
5/29/2019 20:20	9	9	8	30.11	4.8	3.8	25.2
5/29/2019 20:30	9	9	9	31.39	1	0.8	1.2
5/29/2019 20:40	9	9	8	31.51	4.9	3.8	23.7
5/29/2019 20:50	9	9	8	30.57	4.9	3.9	24.9
5/29/2019 21:00	9	9	8	29.74	4.8	3.7	25.2
5/29/2019 21:10	9	9	9	31.15	1	0.9	1.2
5/29/2019 21:20	9	9	9	31.73	4.9	3.9	0.6
5/29/2019 21:30	9	9	8	30.66	4.8	3.9	25
5/29/2019 21:40	9	9	8	30.23	2.6	2.4	25.3
5/29/2019 21:50	9	9	8	31.97	5	3.9	0.5
5/29/2019 22:00	9	9	8	30.78	4.9	3.8	24.9
5/29/2019 22:10	9	9	8	29.96	3.5	3.2	25.3
5/29/2019 22:20	9	9	8	31.76	1	0.8	0.4
5/29/2019 22:30	9	9	8	31.27	4.8	3.8	24.6
5/29/2019 22:40	9	9	8	30.23	4.9	3.9	25.1
5/29/2019 22:50	9	9	9	30.84	1.1	0.8	25.1
5/29/2019 23:00	9	9	9	31.7	4.7	3.8	0.6
5/29/2019 23:10	9	9	9	30.47	5	4	25
5/29/2019 23:20	9	9	9	30.14	3.1	2.9	25.3
5/29/2019 23:30	9	9	8	31.97	1.1	0.8	0.4
5/29/2019 23:40	9	9	9	31.09	4.8	3.8	24.8
5/29/2019 23:50	9	9	9	29.99	4.8	3.9	25.3
5/30/2019 0:00	9	9	9	31.73	0.9	0.8	0.4
5/30/2019 0:10	9	9	9	31.15	4.8	3.8	24.7
5/30/2019 0:20	9	9	8	29.89	4.7	3.8	25.3
5/30/2019 0:30	9	9	9	31.67	1	0.8	0.4
5/30/2019 0:40	9	9	8	31.3	4.8	3.9	24.7
5/30/2019 0:50	9	9	9	30.2	5	3.9	25.1
5/30/2019 1:00	9	9	8	30.47	1.2	0.9	25.2
5/30/2019 1:10	9	9	9	32	1	0.8	0.4
5/30/2019 1:20	9	9	9	31.27	4.7	3.8	24.6
5/30/2019 1:30	9	9	9	30.35	4.8	3.9	25.1
5/30/2019 1:40	9	9	8	30.72	1.1	0.8	25.2
5/30/2019 1:50	9	9	9	31.76	4.8	3.9	0.6
5/30/2019 2:00	9	9	9	30.54	4.9	3.9	25.1
5/30/2019 2:10	9	9	9	31.12	1	0.8	25.1
5/30/2019 2:20	9	9	9	31.51	4.9	3.8	24
5/30/2019 2:30	9	9	9	30.32	4.9	3.8	25.1
5/30/2019 2:40	9	9	9	30.75	1.1	0.8	25.2
5/30/2019 2:50	9	9	8	31.7	5	3.9	0.5

5/30/2019 3:00	9	9	9	30.72	4.9	3.8	24.9
5/30/2019 3:10	9	9	9	29.99	3.5	3.3	25.2
5/30/2019 3:20	9	9	8	31.73	1	0.7	0.4
5/30/2019 3:30	9	9	9	31.21	4.9	3.9	24.7
5/30/2019 3:40	9	9	9	30.23	5.1	3.9	25.1
5/30/2019 3:50	9	9	8	30.84	1.1	0.9	25.2
5/30/2019 4:00	9	9	8	31.76	4.9	3.9	0.6
5/30/2019 4:10	9	9	9	30.81	4.9	3.8	24.9
5/30/2019 4:20	9	9	9	29.83	4.8	3.8	25.2
5/30/2019 4:30	9	9	9	31.57	1	0.8	0.4
5/30/2019 4:40	9	9	8	31.48	4.9	3.9	24.2
5/30/2019 4:50	9	9	8	30.29	4.9	3.8	25.1
5/30/2019 5:00	9	9	8	31.05	1	0.8	25.1
5/30/2019 5:10	9	9	8	31.63	4.9	3.9	23.7
5/30/2019 5:20	9	9	8	30.47	4.8	3.8	25.1
5/30/2019 5:30	9	9	8	30.14	2.7	2.6	25.2
5/30/2019 5:40	9	9	8	31.82	1	0.8	0.4
5/30/2019 5:50	9	9	8	31.39	4.7	3.8	24.5
5/30/2019 6:00	9	9	9	30.54	4.9	3.8	25
5/30/2019 6:10	9	9	8	29.8	3.6	3.2	25.3
5/30/2019 6:20	9	9	9	31.94	1	0.8	0.4
5/30/2019 6:30	9	9	9	31.05	4.8	3.9	24.8
5/30/2019 6:40	9	9	8	29.96	4.8	3.9	25.3
5/30/2019 6:50	9	9	9	32.09	4.9	3.8	0.4
5/30/2019 7:00	9	9	8	30.75	4.8	3.9	25
5/30/2019 7:10	9	9	8	30.02	3.4	3.2	25.3
5/30/2019 7:20	9	9	9	31.79	1	0.8	0.5
5/30/2019 7:30	9	9	8	31.33	4.9	3.8	24.4
5/30/2019 7:40	9	9	8	30.17	4.9	3.9	25.1
5/30/2019 7:50	9	9	8	30.87	1.1	0.8	25.1
5/30/2019 8:00	9	9	8	31.73	4.8	3.8	0.6
5/30/2019 8:10	9	9	8	30.72	4.9	3.8	25
5/30/2019 8:20	9	9	8	29.74	4.9	3.8	25.3
5/30/2019 8:30	9	9	8	31.39	1	0.8	0.4
5/30/2019 8:40	9	9	8	31.73	5	3.8	0.6
5/30/2019 8:50	9	9	8	30.84	4.6	3.9	24.9
5/30/2019 9:00	9	9	8	29.96	4.9	3.8	25.2
5/30/2019 9:10	9	9	8	31.33	1	0.8	1.6
5/30/2019 9:20	9	9	9	31.45	4.9	3.8	24.4
5/30/2019 9:30	9	9	9	30.17	4.8	3.8	25.2
5/30/2019 9:40	9	9	8	31.7	1	0.8	0.5
5/30/2019 9:50	9	9	8	31.05	4.9	3.9	24.9
5/30/2019 10:00	9	9	8	30.26	3.1	2.9	25.3
5/30/2019 10:10	9	9	9	31.79	4.9	3.8	0.5
5/30/2019 10:20	9	9	8	30.44	5	3.8	25.1
5/30/2019 10:30	9	9	8	31.21	0.9	0.8	25
5/30/2019 10:40	9	9	8	31.67	4.9	3.8	23.9

5/30/2019 10:50	9	9	8	30.47	4.7	3.9	25
5/30/2019 11:00	9	9	8	30.2	3	2.7	25.2
5/30/2019 11:10	9	9	8	32.03	4.9	3.9	0.5
5/30/2019 11:20	9	9	8	30.84	4.9	3.9	25
5/30/2019 11:30	9	9	8	30.11	3.5	3.1	25.3
5/30/2019 11:40	9	9	9	32.09	5.1	4.1	0.4
5/30/2019 11:50	9	9	8	30.96	4.8	3.9	24.9
5/30/2019 12:00	9	9	8	30.32	3.1	2.8	25.2
5/30/2019 12:10	9	9	8	31.85	5.1	3.9	0.5
5/30/2019 12:20	9	9	8	30.54	4.8	3.9	25
5/30/2019 12:30	9	9	8	30.57	1.4	1.1	25.2
5/30/2019 12:40	9	9	8	31.79	4.9	4	0.5
5/30/2019 12:50	9	9	8	30.75	4.8	3.9	25
5/30/2019 13:00	9	9	8	30.23	3.1	2.8	25.3
5/30/2019 13:10	9	9	9	32	4.9	3.9	0.5
5/30/2019 13:20	9	9	9	30.75	4.7	3.9	25
5/30/2019 13:30	9	9	9	30.54	2.2	2	25.2
5/30/2019 13:40	9	9	9	31.73	4.9	3.9	0.5
5/30/2019 13:50	9	9	8	30.66	4.8	3.9	25
5/30/2019 14:00	9	9	9	30.2	3	2.9	25.2
5/30/2019 14:10	9	9	8	32.03	5	3.8	0.4
5/30/2019 14:20	9	9	8	30.9	5	3.8	24.9
5/30/2019 14:30	9	9	8	30.41	2.5	2.4	25.2
5/30/2019 14:40	9	9	9	31.88	4.8	3.9	0.5
5/30/2019 14:50	9	9	9	30.57	4.7	3.8	25.1
5/30/2019 15:00	9	9	8	31.15	1	0.8	25.1
5/30/2019 15:10	9	9	8	31.42	4.9	3.8	24.3
5/30/2019 15:20	9	9	8	30.11	4.8	3.9	25.2
5/30/2019 15:30	9	9	8	31.36	1	0.7	1.6
5/30/2019 15:40	9	9	8	31.54	5	3.9	24
5/30/2019 15:50	9	9	8	30.17	4.8	3.8	25.2
5/30/2019 16:00	9	9	8	31.36	1	0.8	0.6
5/30/2019 16:10	9	9	8	31.21	5	3.8	24.7
5/30/2019 16:20	9	9	8	30.35	3.1	2.9	25.3
5/30/2019 16:30	9	9	8	31.73	4.9	3.9	0.5
5/30/2019 16:40	9	9	8	30.51	4.8	3.9	25.1
5/30/2019 16:50	9	9	8	31.02	1.1	0.8	25.1
5/30/2019 17:00	9	9	8	31.57	4.9	3.9	23.9
5/30/2019 17:10	9	9	8	30.26	5.1	3.8	25.2
5/30/2019 17:20	9	9	8	31.02	1	0.8	25
5/30/2019 17:30	9	9	8	31.63	4.9	3.8	23.3
5/30/2019 17:40	9	9	9	30.47	4.9	3.8	25.1
5/30/2019 17:50	9	9	8	30.57	1.2	0.9	25.1
5/30/2019 18:00	9	9	8	32.09	4.9	3.8	0.4
5/30/2019 18:10	9	9	8	30.96	5	3.9	24.8
5/30/2019 18:20	9	9	8	29.8	4.8	3.8	25.2
5/30/2019 18:30	9	9	8	32.12	2.7	2.3	0.4

5/30/2019 18:40	9	9	8	30.66	4.9	3.9	25
5/30/2019 18:50	9	9	8	30.66	1.3	1	25.1
5/30/2019 19:00	9	9	8	31.79	4.8	3.8	0.5
5/30/2019 19:10	9	9	8	30.57	4.8	3.8	25
5/30/2019 19:20	9	9	9	30.44	2.4	2.2	25.1
5/30/2019 19:30	9	9	8	31.82	5	3.8	0.5
5/30/2019 19:40	9	9	8	30.57	5	3.9	25
5/30/2019 19:50	9	9	8	30.9	1.1	0.8	25.1
5/30/2019 20:00	9	9	9	31.7	4.9	4	1.3
5/30/2019 20:10	9	9	8	30.35	4.8	3.9	25.1
5/30/2019 20:20	9	9	8	31.57	0.9	0.8	0.4
5/30/2019 20:30	9	9	8	31.18	5	3.9	24.8
5/30/2019 20:40	9	9	8	30.11	4.9	3.9	25.2
5/30/2019 20:50	9	9	9	31.18	1	0.8	3.6
5/30/2019 21:00	9	9	9	31.73	4.8	3.9	0.6
5/30/2019 21:10	9	9	9	30.75	4.8	3.9	25
5/30/2019 21:20	9	9	9	30.02	3.5	3.2	25.3
5/30/2019 21:30	9	9	9	32	1	0.8	0.4
5/30/2019 21:40	9	9	8	30.93	4.8	3.9	24.9
5/30/2019 21:50	9	9	9	29.68	4.8	3.9	25.2
5/30/2019 22:00	9	9	9	31.27	0.9	0.8	0.7
5/30/2019 22:10	9	9	9	31.73	4.9	3.9	0.6
5/30/2019 22:20	9	9	9	30.69	4.8	3.8	25
5/30/2019 22:30	9	9	9	30.2	3.4	3.1	25.2
5/30/2019 22:40	9	9	9	32.06	4.8	3.9	0.4
5/30/2019 22:50	9	9	9	30.81	4.9	3.9	24.9
5/30/2019 23:00	9	9	9	29.89	3.4	3.3	25.3
5/30/2019 23:10	9	9	8	31.97	1	0.8	0.4
5/30/2019 23:20	9	9	9	31.12	4.8	3.8	24.8
5/30/2019 23:30	9	9	9	29.96	4.8	4	25.2
5/30/2019 23:40	9	9	8	31.63	1	0.8	0.4
5/30/2019 23:50	9	9	9	31.27	5	3.8	24.7
5/31/2019 0:00	9	9	9	30.17	4.6	4	25.2
5/31/2019 0:10	9	9	8	31.63	0.9	0.8	0.4
5/31/2019 0:20	9	9	8	31.3	4.9	3.9	24.4
5/31/2019 0:30	9	9	8	30.54	4.8	3.8	24.9
5/31/2019 0:40	9	9	8	29.99	3.5	3.3	25.2
5/31/2019 0:50	9	9	9	31.85	0.9	0.8	0.4
5/31/2019 1:00	9	9	8	30.9	4.8	3.8	24.9
5/31/2019 1:10	9	9	8	30.17	3.4	3.1	25.3
5/31/2019 1:20	9	9	8	32.06	4.9	3.9	0.4
5/31/2019 1:30	9	9	8	30.96	4.7	3.8	24.8
5/31/2019 1:40	9	9	8	29.83	5.2	3.8	25.2
5/31/2019 1:50	9	9	8	31.18	1	0.8	1.7
5/31/2019 2:00	9	9	8	31.48	4.8	3.8	24
5/31/2019 2:10	9	9	8	30.32	4.8	3.9	25.1
5/31/2019 2:20	9	9	9	30.93	1	0.9	25.1

5/31/2019 2:30	9	9	8	31.54	4.7	3.9	23.7
5/31/2019 2:40	9	9	9	30.29	4.8	3.9	25.1
5/31/2019 2:50	9	9	8	30.84	1	0.9	25.1
5/31/2019 3:00	9	9	9	31.79	4.9	3.8	0.5
5/31/2019 3:10	9	9	8	30.81	5	3.9	24.9
5/31/2019 3:20	9	9	8	29.71	5	3.9	25.2
5/31/2019 3:30	9	8	9	31.76	1	0.8	0.4
5/31/2019 3:40	9	9	8	31.15	4.8	3.9	24.8
5/31/2019 3:50	9	9	9	29.83	4.5	3.8	25.3
5/31/2019 4:00	9	8	8	32.06	3.1	2.7	0.4
5/31/2019 4:10	9	9	9	30.72	4.9	3.8	25
5/31/2019 4:20	9	9	9	30.75	1.2	1	25.1
5/31/2019 4:30	9	9	9	31.6	4.9	3.8	23.6
5/31/2019 4:40	9	9	9	30.32	4.9	3.8	25.2
5/31/2019 4:50	9	9	9	31.42	0.9	0.8	2.1
5/31/2019 5:00	9	9	8	31.33	4.9	3.9	24.6
5/31/2019 5:10	9	9	9	30.14	4.9	3.8	25.2
5/31/2019 5:20	9	9	9	31.73	1	0.8	0.4
5/31/2019 5:30	9	9	8	30.99	4.7	4	24.9
5/31/2019 5:40	9	9	8	29.8	4.7	3.8	25.3
5/31/2019 5:50	9	9	9	31.97	1	0.8	0.4
5/31/2019 6:00	9	9	8	31.12	4.8	3.8	24.7
5/31/2019 6:10	9	9	8	30.14	4.9	3.8	25.2
5/31/2019 6:20	9	9	8	31.12	0.9	0.8	5.1
5/31/2019 6:30	9	9	8	31.51	4.9	3.8	24
5/31/2019 6:40	9	9	8	30.47	4.8	3.9	25
5/31/2019 6:50	9	9	8	29.71	4.9	3.8	25.2
5/31/2019 7:00	9	9	8	30.69	1	0.8	25
5/31/2019 7:10	9	9	8	32.06	4.9	3.9	0.4
5/31/2019 7:20	9	9	8	31.21	4.8	3.8	24.7
5/31/2019 7:30	9	9	8	30.23	4.7	3.8	25.1
5/31/2019 7:40	9	9	9	30.81	1.1	0.8	25.1
5/31/2019 7:50	9	9	9	31.67	4.9	3.8	0.6
5/31/2019 8:00	9	9	8	30.41	4.8	3.9	25.1
5/31/2019 8:10	9	9	8	31.3	1	0.8	3.4
5/31/2019 8:20	9	9	8	31.3	4.8	3.9	24.6
5/31/2019 8:30	9	9	8	30.11	4.8	3.9	25.2
5/31/2019 8:40	9	9	9	31.88	1	0.8	0.5
5/31/2019 8:50	9	9	9	30.9	5	3.9	24.9
5/31/2019 9:00	9	9	9	30.14	3.4	3.2	25.2
5/31/2019 9:10	9	9	9	32.03	4.9	3.9	0.5
5/31/2019 9:20	9	9	9	30.84	4.9	3.9	24.9
5/31/2019 9:30	9	8	8	30.41	2.4	2.2	25.2
5/31/2019 9:40	9	9	9	31.82	5	3.9	0.5
5/31/2019 9:50	9	8	8	30.51	4.8	3.9	25.1
5/31/2019 10:00	9	9	8	30.69	1.4	1.3	25.2
5/31/2019 10:10	9	8	8	31.85	4.8	3.9	0.5

5/31/2019 10:20	9	9	8	30.66	4.8	3.9	25.1
5/31/2019 10:30	9	8	8	30.63	1.2	1	25.1
5/31/2019 10:40	9	9	8	32	4.9	3.9	0.5
5/31/2019 10:50	9	9	9	30.93	4.8	3.8	24.9
5/31/2019 11:00	9	8	8	30.05	4.9	3.9	25.2
5/31/2019 11:10	9	8	8	31.57	1	0.8	0.4
5/31/2019 11:20	9	9	9	31.33	5	3.9	24.5
5/31/2019 11:30	9	9	8	30.11	4.8	3.9	25.2
5/31/2019 11:40	9	8	9	31.85	1	0.8	0.4
5/31/2019 11:50	9	9	8	31.09	4.8	3.8	24.9
5/31/2019 12:00	9	9	9	30.02	3.5	3.2	25.3
5/31/2019 12:10	9	8	9	32	4.9	3.9	0.4
5/31/2019 12:20	9	9	9	30.75	4.7	3.8	25
5/31/2019 12:30	9	8	9	30.66	1.4	1.2	25.2
5/31/2019 12:40	9	9	8	31.7	4.9	3.9	0.6
5/31/2019 12:50	9	9	8	30.35	4.9	3.8	25.1
5/31/2019 13:00	9	9	9	30.93	1.2	0.8	25.1
5/31/2019 13:10	9	9	8	31.6	4.8	3.8	21.4
5/31/2019 13:20	9	9	9	30.51	4.8	3.8	25
5/31/2019 13:30	9	9	9	30.29	2.3	2	25.2
5/31/2019 13:40	9	8	8	32.12	3.2	2.7	0.4
5/31/2019 13:50	9	9	8	30.99	4.9	3.9	24.8
5/31/2019 14:00	9	9	8	29.96	5	3.9	25.2
5/31/2019 14:10	9	9	8	31.82	1	0.8	0.4
5/31/2019 14:20	9	9	8	31.05	4.8	3.8	24.8
5/31/2019 14:30	9	9	8	29.86	4.7	3.8	25.3
5/31/2019 14:40	9	9	8	31.63	0.9	0.8	0.4
5/31/2019 14:50	9	9	8	31.12	4.9	3.9	24.8
5/31/2019 15:00	9	9	8	30.08	3.5	3.4	25.3
5/31/2019 15:10	9	9	9	31.88	4.7	3.9	0.5
5/31/2019 15:20	9	9	9	30.63	4.8	3.8	25.1
5/31/2019 15:30	9	8	9	30.41	2.4	2.1	25.3
5/31/2019 15:40	9	9	8	32	4.8	3.9	0.5
5/31/2019 15:50	9	9	8	30.75	4.8	3.9	25
5/31/2019 16:00	8	9	8	30.35	2.9	2.7	25.2
5/31/2019 16:10	9	9	9	31.94	4.7	3.9	0.5
5/31/2019 16:20	9	9	8	30.69	4.8	3.8	25.1
5/31/2019 16:30	9	9	8	30.17	3.3	3	25.2
5/31/2019 16:40	9	9	9	32.09	5	4.1	0.4
5/31/2019 16:50	9	9	8	30.99	4.8	3.8	24.9
5/31/2019 17:00	9	9	8	29.8	4.9	3.8	25.2
5/31/2019 17:10	9	9	8	31.3	0.9	0.8	0.7
5/31/2019 17:20	9	9	8	31.57	4.6	3.8	22.9
5/31/2019 17:30	9	9	9	30.51	4.8	3.8	25
5/31/2019 17:40	9	9	8	30.81	1.2	0.8	25.1
5/31/2019 17:50	9	9	8	31.51	4.9	3.9	23.9
5/31/2019 18:00	9	9	8	30.23	4.8	3.9	25.1

5/31/2019 18:10	9	9	8	31.76	0.9	0.8	0.4
5/31/2019 18:20	9	9	8	31.02	5	3.9	24.9
5/31/2019 18:30	9	9	9	30.11	3.3	3.1	25.2
5/31/2019 18:40	9	8	9	32.09	3.5	2.7	0.4
5/31/2019 18:50	9	9	9	30.93	4.8	3.8	24.8
5/31/2019 19:00	9	9	9	29.96	4.9	3.9	25.2
5/31/2019 19:10	9	9	8	31.21	0.9	0.8	2.5
5/31/2019 19:20	9	9	9	31.54	4.9	3.8	23.8
5/31/2019 19:30	9	9	9	30.38	4.8	3.9	25.1
5/31/2019 19:40	9	9	8	31.02	1	0.8	25.1
5/31/2019 19:50	9	9	9	31.76	4.9	3.8	0.6
5/31/2019 20:00	9	9	9	30.63	4.8	3.9	25
5/31/2019 20:10	9	9	8	30.26	2.7	2.3	25.3
5/31/2019 20:20	9	9	8	31.88	4.9	3.9	0.5
5/31/2019 20:30	9	8	8	30.54	4.9	3.9	25
5/31/2019 20:40	9	9	8	30.11	3.2	2.9	25.3
5/31/2019 20:50	9	8	9	31.82	0.9	0.8	0.4
5/31/2019 21:00	9	9	8	31.27	4.8	3.9	24.6
5/31/2019 21:10	9	9	8	30.26	4.8	3.9	25.1
5/31/2019 21:20	9	9	9	31.42	1	0.8	0.6
5/31/2019 21:30	9	9	9	31.33	4.8	3.9	24.6
5/31/2019 21:40	9	9	8	30.17	4.8	3.9	25.1
5/31/2019 21:50	9	9	8	31.02	1.1	0.8	25.1
5/31/2019 22:00	9	8	8	31.54	4.8	3.8	23.9
5/31/2019 22:10	8	8	8	30.32	4.8	3.9	25.1
5/31/2019 22:20	9	9	9	31.05	1	0.8	3.2
5/31/2019 22:30	9	9	9	31.57	4.9	3.8	23.7
5/31/2019 22:40	9	9	9	30.47	4.9	3.9	25
5/31/2019 22:50	9	9	9	30.41	2	1.6	25.2
5/31/2019 23:00	9	9	8	31.94	4.9	3.9	0.5
5/31/2019 23:10	9	9	8	30.78	4.9	3.8	24.9
5/31/2019 23:20	9	9	9	29.77	4.7	3.9	25.3
5/31/2019 23:30	9	9	9	31.36	0.9	0.8	0.4
5/31/2019 23:40	9	9	8	31.54	4.8	3.9	23.9
5/31/2019 23:50	9	9	8	30.47	4.8	3.9	25
6/1/2019 0:00	9	9	9	30.11	3	2.7	25.2
6/1/2019 0:10	9	9	8	31.85	1	0.8	0.4
6/1/2019 0:20	9	9	9	31.21	5.1	3.9	24.7
6/1/2019 0:30	9	9	8	30.11	4.8	3.9	25.1
6/1/2019 0:40	9	9	9	31.42	0.9	0.8	0.6
6/1/2019 0:50	9	9	9	31.39	4.8	3.9	24.1
6/1/2019 1:00	9	9	8	30.47	4.8	3.9	25.1
6/1/2019 1:10	9	9	8	30.57	1.6	1.2	25.2
6/1/2019 1:20	9	9	9	32	4.8	3.9	0.5
6/1/2019 1:30	9	9	9	31.12	4.8	3.9	24.7
6/1/2019 1:40	9	9	9	30.32	4.9	3.8	25.1
6/1/2019 1:50	9	9	8	29.71	3.6	3.3	25.3

6/1/2019 2:00	9	9	9	31.18	0.9	0.8	1.1
6/1/2019 2:10	9	9	8	31.76	4.7	3.9	0.6
6/1/2019 2:20	9	9	8	30.57	4.8	3.9	25.1
6/1/2019 2:30	9	9	8	30.11	3.1	2.9	25.2
6/1/2019 2:40	9	9	9	32.06	1.1	0.8	0.4
6/1/2019 2:50	8	9	8	31.15	4.8	3.8	24.7
6/1/2019 3:00	9	9	8	30.14	5.2	3.9	25.1
6/1/2019 3:10	9	8	8	30.87	1	0.8	25.1
6/1/2019 3:20	8	8	8	31.82	4.9	3.8	0.5
6/1/2019 3:30	9	9	8	30.69	4.7	3.9	24.9
6/1/2019 3:40	9	8	8	29.83	4.7	3.8	25.2
6/1/2019 3:50	9	9	8	30.93	1	0.8	3.3
6/1/2019 4:00	9	9	8	31.88	5	3.8	0.5
6/1/2019 4:10	9	8	8	30.72	4.8	3.9	25
6/1/2019 4:20	9	8	8	30.05	3.5	3.2	25.3
6/1/2019 4:30	8	9	8	32	4.9	3.9	0.5
6/1/2019 4:40	8	9	8	30.75	4.8	3.8	25
6/1/2019 4:50	9	9	8	30.23	3.2	2.8	25.2
6/1/2019 5:00	8	9	9	32.03	4.9	3.9	0.5
6/1/2019 5:10	9	9	8	30.96	4.9	3.8	24.8
6/1/2019 5:20	9	9	8	29.86	4.9	3.9	25.2
6/1/2019 5:30	9	9	9	30.96	0.9	0.8	3.9
6/1/2019 5:40	9	9	8	31.97	4.7	3.9	0.5
6/1/2019 5:50	9	9	9	30.93	4.7	3.9	24.8
6/1/2019 6:00	9	9	9	29.99	4.8	3.8	25.2
6/1/2019 6:10	9	8	8	30.69	1	0.7	25.1
6/1/2019 6:20	9	9	8	32	4.8	3.8	0.5
6/1/2019 6:30	9	9	8	30.96	4.8	3.9	24.9
6/1/2019 6:40	9	9	8	29.83	4.9	3.8	25.3
6/1/2019 6:50	9	9	8	31.79	1	0.7	0.4
6/1/2019 7:00	9	8	8	31.02	5	3.8	24.9
6/1/2019 7:10	9	8	8	29.86	4.8	3.8	25.2
6/1/2019 7:20	9	9	8	30.99	1	0.7	3.5
6/1/2019 7:30	8	8	8	32	4.9	3.9	0.5
6/1/2019 7:40	9	9	8	30.93	5	3.9	24.9
6/1/2019 7:50	9	9	8	29.77	4.8	3.8	25.3
6/1/2019 8:00	9	9	8	31.39	0.9	0.8	0.4
6/1/2019 8:10	9	8	8	31.51	4.8	3.8	24.2
6/1/2019 8:20	9	9	8	30.35	4.9	3.9	25.1
6/1/2019 8:30	9	8	8	30.41	1.7	1.5	25.2
6/1/2019 8:40	9	8	8	32	1.1	0.8	0.5
6/1/2019 8:50	9	9	8	31.05	4.8	3.8	24.8
6/1/2019 9:00	9	8	8	30.02	4.9	3.8	25.2
6/1/2019 9:10	9	9	8	31.27	0.9	0.8	1.7
6/1/2019 9:20	9	9	8	31.63	5	3.8	17.6
6/1/2019 9:30	9	9	8	30.66	5.1	3.9	25.1
6/1/2019 9:40	9	8	8	29.65	4.7	3.9	25.3

6/1/2019 9:50	9	8	8	31.42	0.9	0.8	0.4
6/1/2019 10:00	9	8	8	31.48	4.9	3.8	24
6/1/2019 10:10	9	9	8	30.41	4.9	3.9	25
6/1/2019 10:20	8	9	9	30.32	2.2	1.8	25.2
6/1/2019 10:30	9	8	8	32.09	4.2	3.5	0.4
6/1/2019 10:40	9	9	8	31.09	4.9	3.9	24.8
6/1/2019 10:50	9	9	9	29.89	4.5	4	25.3
6/1/2019 11:00	8	9	9	31.82	1.1	0.8	0.4
6/1/2019 11:10	9	8	9	31.02	4.8	3.9	24.9
6/1/2019 11:20	9	9	8	29.86	3.6	3.3	25.4
6/1/2019 11:30	8	8	8	31.85	0.9	0.8	0.4
6/1/2019 11:40	9	9	8	31.15	4.5	3.9	24.7
6/1/2019 11:50	9	9	8	30.14	4.8	4	25.1
6/1/2019 12:00	8	9	8	30.93	0.9	0.9	25
6/1/2019 12:10	9	8	8	31.7	4.8	3.9	0.6
6/1/2019 12:20	9	9	8	30.63	4.9	3.9	25
6/1/2019 12:30	9	9	8	30.57	1.6	1.3	25.1
6/1/2019 12:40	9	8	8	31.82	4.8	3.9	0.5
6/1/2019 12:50	9	9	8	30.63	4.8	3.8	25
6/1/2019 13:00	9	9	8	30.26	2.6	2.4	25.2
6/1/2019 13:10	8	8	8	32.06	4.9	3.9	0.4
6/1/2019 13:20	9	9	8	30.99	4.8	3.8	24.8
6/1/2019 13:30	9	9	8	29.68	4.9	3.9	25.3
6/1/2019 13:40	9	9	8	31.7	1	0.8	0.4
6/1/2019 13:50	9	8	9	31.21	4.9	3.9	24.8
6/1/2019 14:00	9	9	9	30.05	3.5	3.3	25.3
6/1/2019 14:10	9	8	8	32	4.9	3.9	0.4
6/1/2019 14:20	9	8	8	30.81	4.9	3.9	25
6/1/2019 14:30	9	9	8	30.26	3	2.8	25.2
6/1/2019 14:40	9	8	8	31.94	4.9	3.9	0.5
6/1/2019 14:50	9	9	8	30.78	4.9	3.9	24.9
6/1/2019 15:00	8	9	8	30.51	1.8	1.6	25.2
6/1/2019 15:10	9	9	8	31.63	4.8	3.9	22.2
6/1/2019 15:20	9	8	8	30.38	5	3.9	25.1
6/1/2019 15:30	9	9	8	30.84	1	0.8	25.1
6/1/2019 15:40	9	9	8	31.63	4.9	3.9	17.7
6/1/2019 15:50	9	9	9	30.44	5	3.8	25
6/1/2019 16:00	9	9	8	30.63	0.9	0.9	25.1
6/1/2019 16:10	9	9	9	31.85	4.7	3.8	0.5
6/1/2019 16:20	9	8	8	30.69	5	3.9	25
6/1/2019 16:30	9	9	9	30.32	2.8	2.4	25.2
6/1/2019 16:40	9	9	8	31.79	4.8	3.8	0.5
6/1/2019 16:50	9	8	8	30.57	4.9	3.8	25.1
6/1/2019 17:00	9	9	8	31.3	1	0.8	5.2
6/1/2019 17:10	9	9	8	31.15	4.8	3.9	24.8
6/1/2019 17:20	9	9	8	29.83	4.9	3.9	25.2
6/1/2019 17:30	9	9	8	30.99	0.9	0.8	3.7

6/1/2019 17:40	9	8	9	31.76	4.8	3.9	0.5
6/1/2019 17:50	8	9	8	30.75	4.9	3.9	24.9
6/1/2019 18:00	9	8	9	30.2	3.3	3	25.3
6/1/2019 18:10	9	9	8	32	4.8	3.8	0.4
6/1/2019 18:20	9	9	8	30.9	4.9	3.9	24.8
6/1/2019 18:30	9	8	8	29.86	4.8	3.8	25.2
6/1/2019 18:40	9	8	8	31.57	1	0.8	0.4
6/1/2019 18:50	9	9	8	31.21	4.9	3.9	24.7
6/1/2019 19:00	9	9	8	30.11	4.7	3.9	25.2
6/1/2019 19:10	9	9	8	31.6	1	0.8	0.4
6/1/2019 19:20	8	9	8	31.12	4.8	3.8	24.7
6/1/2019 19:30	9	9	8	29.86	4.9	3.8	25.2
6/1/2019 19:40	9	9	9	31.33	0.9	0.8	0.8
6/1/2019 19:50	9	8	8	31.51	4.9	3.8	24
6/1/2019 20:00	8	9	8	30.26	4.9	3.9	25.1
6/1/2019 20:10	9	9	8	31.27	0.9	0.8	3.7
6/1/2019 20:20	9	9	8	31.27	4.9	3.8	24.7
6/1/2019 20:30	9	9	8	29.86	4.9	3.8	25.2
6/1/2019 20:40	8	9	8	31.73	1	0.8	0.4
6/1/2019 20:50	9	9	8	31.05	4.9	3.8	24.8
6/1/2019 21:00	9	9	8	30.02	4.8	3.9	25.2
6/1/2019 21:10	9	9	8	31.36	1.1	0.8	1.1
6/1/2019 21:20	9	9	8	31.39	4.9	3.9	24.4
6/1/2019 21:30	9	9	8	30.26	4.6	3.8	25.2
6/1/2019 21:40	9	8	8	30.99	1	0.8	25
6/1/2019 21:50	9	8	8	31.76	5	3.9	0.5
6/1/2019 22:00	9	9	8	30.69	4.9	3.9	25
6/1/2019 22:10	9	8	8	30.08	3.3	3.1	25.2
6/1/2019 22:20	8	9	9	32.03	4.9	3.8	0.4
6/1/2019 22:30	9	9	8	30.69	4.8	3.9	25
6/1/2019 22:40	9	9	8	30.41	2.4	2	25.2
6/1/2019 22:50	9	9	9	31.97	4.8	3.8	0.5
6/1/2019 23:00	9	8	9	30.87	4.8	3.9	24.9
6/1/2019 23:10	9	9	8	29.86	4.8	3.9	25.2
6/1/2019 23:20	8	8	8	30.69	1	0.8	25
6/1/2019 23:30	9	8	9	31.82	5	3.9	0.5
6/1/2019 23:40	9	8	9	30.69	4.9	3.8	25
6/1/2019 23:50	9	8	8	30.66	1.6	1.1	25.2
6/2/2019 0:00	9	8	8	31.7	5	3.9	0.6
6/2/2019 0:10	8	9	9	30.54	4.9	3.8	25
6/2/2019 0:20	9	8	8	30.81	1	0.8	25.1
6/2/2019 0:30	9	8	8	31.63	4.9	3.9	12.8
6/2/2019 0:40	9	9	8	30.57	5.1	3.9	24.8
6/2/2019 0:50	9	9	8	29.77	4.8	3.9	25.2
6/2/2019 1:00	9	9	9	30.99	0.9	0.8	4.2
6/2/2019 1:10	8	9	8	31.67	4.8	3.9	8.4
6/2/2019 1:20	8	9	8	30.78	4.9	3.8	24.9

6/2/2019 1:30	9	9	8	29.89	4.8	3.9	25.2
6/2/2019 1:40	9	8	8	31.42	0.9	0.8	0.4
6/2/2019 1:50	9	8	8	31.42	5	3.9	24.3
6/2/2019 2:00	9	9	8	30.2	4.7	3.8	25.2
6/2/2019 2:10	8	9	8	31.33	0.9	0.8	1.8
6/2/2019 2:20	9	8	8	31.36	4.9	3.9	24.6
6/2/2019 2:30	9	9	8	30.14	4.8	3.9	25.2
6/2/2019 2:40	9	9	9	31.6	0.9	0.8	0.4
6/2/2019 2:50	8	9	8	31.09	4.7	3.9	24.7
6/2/2019 3:00	8	9	8	29.96	4.9	3.8	25.2
6/2/2019 3:10	9	8	8	31.6	1	0.8	0.4
6/2/2019 3:20	9	9	8	31.18	4.7	3.9	24.5
6/2/2019 3:30	8	9	8	30.35	4.9	3.9	25
6/2/2019 3:40	9	8	8	29.83	3.5	3.2	25.2
6/2/2019 3:50	8	9	8	31.51	0.9	0.8	0.4
6/2/2019 4:00	9	8	8	31.42	4.9	3.9	24.2
6/2/2019 4:10	9	8	8	30.32	4.8	3.8	25.1
6/2/2019 4:20	8	9	8	31.27	0.9	0.8	2.5
6/2/2019 4:30	9	9	8	31.63	4.9	4	0.6
6/2/2019 4:40	9	8	8	30.87	4.9	3.9	24.8
6/2/2019 4:50	9	8	8	29.99	4.7	4	25.2
6/2/2019 5:00	8	9	9	30.72	1.1	0.8	25
6/2/2019 5:10	9	9	8	31.97	4.9	3.9	0.5
6/2/2019 5:20	9	9	8	30.81	4.9	3.8	24.8
6/2/2019 5:30	9	8	8	29.71	4.8	3.9	25.2
6/2/2019 5:40	9	9	8	30.87	0.9	0.8	3.6
6/2/2019 5:50	9	8	8	32.12	5	4.2	0.4
6/2/2019 6:00	9	9	8	31.05	4.7	3.9	24.8
6/2/2019 6:10	9	9	8	29.96	4.8	3.9	25.3
6/2/2019 6:20	8	8	8	30.93	0.9	0.8	4.7
6/2/2019 6:30	9	9	8	32	4.9	3.9	0.5
6/2/2019 6:40	9	8	8	31.02	4.9	3.9	24.8
6/2/2019 6:50	9	8	8	30.14	4.9	3.8	25.1
6/2/2019 7:00	9	9	8	29.71	3.5	3.2	25.1
6/2/2019 7:10	9	9	8	31.12	0.9	0.8	0.9
6/2/2019 7:20	9	8	8	31.88	4.9	3.9	0.5
6/2/2019 7:30	9	9	8	30.84	4.7	3.8	24.8
6/2/2019 7:40	8	9	8	29.71	4.9	3.9	25.3
6/2/2019 7:50	8	8	8	31.76	0.9	0.8	0.4
6/2/2019 8:00	9	8	9	31.21	5	3.9	24.5
6/2/2019 8:10	9	8	8	30.23	4.6	3.9	25.1
6/2/2019 8:20	8	8	8	30.38	1.7	1.6	25.1
6/2/2019 8:30	9	8	8	32.03	1.1	0.8	0.4
6/2/2019 8:40	9	9	8	31.15	4.7	3.9	24.7
6/2/2019 8:50	9	9	8	29.83	4.8	3.9	25.2
6/2/2019 9:00	9	9	9	31.3	1	0.8	1.6
6/2/2019 9:10	8	8	8	31.54	4.9	3.9	23.8

6/2/2019 9:20	9	8	8	30.51	4.8	3.9	24.9
6/2/2019 9:30	9	8	8	29.65	4.9	3.8	25.2
6/2/2019 9:40	8	9	8	31.18	0.9	0.8	1.3
6/2/2019 9:50	9	8	8	31.67	5	3.9	23.8
6/2/2019 10:00	9	8	8	30.75	5	3.8	24.9
6/2/2019 10:10	9	8	8	29.83	4.7	3.9	25.2
6/2/2019 10:20	9	8	8	31.48	1	0.8	0.4
6/2/2019 10:30	9	8	8	31.33	4.8	3.9	24.3
6/2/2019 10:40	9	8	8	30.35	4.8	3.9	25
6/2/2019 10:50	9	9	8	29.86	3.4	3.1	25.2
6/2/2019 11:00	9	9	8	31.45	1	0.8	0.4
6/2/2019 11:10	8	8	8	31.51	4.9	3.9	23.8
6/2/2019 11:20	8	9	8	30.51	4.9	3.9	24.9
6/2/2019 11:30	9	8	8	30.32	2.4	2.1	25.2
6/2/2019 11:40	9	9	8	32	4.9	3.8	0.4
6/2/2019 11:50	8	8	8	30.72	4.8	3.9	25
6/2/2019 12:00	8	8	8	30.63	1.6	1.5	25.2
6/2/2019 12:10	8	8	8	31.85	4.9	3.8	0.5
6/2/2019 12:20	8	9	8	30.75	4.8	3.9	25
6/2/2019 12:30	9	8	8	30.57	1.7	1.6	25.2
6/2/2019 12:40	8	8	8	31.76	4.9	3.9	0.5
6/2/2019 12:50	9	8	8	30.75	4.9	3.8	25
6/2/2019 13:00	9	9	8	29.65	4.9	3.9	25.2
6/2/2019 13:10	9	8	8	31.02	0.9	0.8	3.1
6/2/2019 13:20	9	8	8	31.85	4.9	3.8	0.5
6/2/2019 13:30	8	9	8	30.84	4.8	3.8	24.8
6/2/2019 13:40	9	8	9	29.83	4.8	3.8	25.2
6/2/2019 13:50	9	9	8	30.72	1	0.8	25
6/2/2019 14:00	8	8	8	32.03	1.1	0.8	0.4
6/2/2019 14:10	8	8	8	31.36	5	3.9	24.4
6/2/2019 14:20	9	8	8	30.38	4.8	3.8	25
6/2/2019 14:30	9	9	8	30.17	3.1	2.9	25.2
6/2/2019 14:40	9	8	8	32	0.9	0.8	0.4
6/2/2019 14:50	8	8	8	31.18	4.8	3.9	24.6
6/2/2019 15:00	9	9	9	30.14	4.8	3.8	25.1
6/2/2019 15:10	8	9	9	30.38	1.4	1.3	25.2
6/2/2019 15:20	9	8	8	32.06	1.8	1.4	0.4
6/2/2019 15:30	9	8	8	30.99	4.9	3.8	24.8
6/2/2019 15:40	9	8	8	30.05	3.4	3.2	25.2
6/2/2019 15:50	8	8	8	31.94	4.7	3.9	0.5
6/2/2019 16:00	8	8	8	30.63	4.8	3.8	25
6/2/2019 16:10	9	8	8	30.11	3.3	3.1	25.2
6/2/2019 16:20	9	8	8	32.09	1.2	0.8	0.4
6/2/2019 16:30	8	8	8	31.18	4.9	3.9	24.7
6/2/2019 16:40	9	8	8	30.05	4.9	3.9	25.1
6/2/2019 16:50	9	8	8	30.44	1.4	1.1	25.1
6/2/2019 17:00	9	9	8	32	4.9	3.9	0.4

6/2/2019 17:10	8	8	8	30.99	4.8	3.9	24.8
6/2/2019 17:20	9	8	8	29.83	4.7	3.8	25.2
6/2/2019 17:30	8	8	8	31.73	0.9	0.8	0.4
6/2/2019 17:40	8	8	8	31.09	4.8	3.9	24.8
6/2/2019 17:50	9	9	8	29.83	4.8	3.9	25.2
6/2/2019 18:00	9	8	8	31.7	0.9	0.8	0.4
6/2/2019 18:10	9	8	8	31.39	5	3.9	24.3
6/2/2019 18:20	9	8	8	30.26	4.9	3.8	25.1
6/2/2019 18:30	9	9	8	30.29	1.9	1.6	25.2
6/2/2019 18:40	9	8	8	31.82	0.9	0.8	0.4
6/2/2019 18:50	8	8	8	31.33	4.8	3.8	24.5
6/2/2019 19:00	8	8	8	30.29	5	3.8	25.1
6/2/2019 19:10	9	9	8	29.89	3.4	3	25.2
6/2/2019 19:20	9	8	8	31.48	1	0.8	0.4
6/2/2019 19:30	9	8	8	31.76	4.9	3.8	0.6
6/2/2019 19:40	8	8	8	30.78	4.8	3.9	24.9
6/2/2019 19:50	9	8	8	29.77	3.6	3.3	25.3
6/2/2019 20:00	8	8	8	31.97	0.9	0.8	0.4
6/2/2019 20:10	8	8	8	31.12	4.7	3.8	24.9
6/2/2019 20:20	9	8	8	29.86	4.9	3.8	25.2
6/2/2019 20:30	9	8	8	31.36	1.1	0.8	0.4
6/2/2019 20:40	9	8	8	31.57	4.9	3.9	23.7
6/2/2019 20:50	8	9	8	30.66	5	3.9	24.9
6/2/2019 21:00	9	9	8	30.05	3.4	3.2	25.2
6/2/2019 21:10	8	8	9	31.88	1	0.8	0.4
6/2/2019 21:20	9	8	8	31.27	4.9	3.9	24.5
6/2/2019 21:30	8	9	8	30.44	4.7	3.9	25
6/2/2019 21:40	9	8	8	29.96	3.4	3.1	25.2
6/2/2019 21:50	8	8	8	31.88	0.9	0.8	0.4
6/2/2019 22:00	9	8	8	31.05	5	3.8	24.8
6/2/2019 22:10	8	8	8	30.08	4.9	3.8	25.2
6/2/2019 22:20	9	8	8	30.72	1	0.8	25
6/2/2019 22:30	9	8	8	31.88	4.9	3.9	0.4
6/2/2019 22:40	9	8	8	30.9	4.7	3.9	24.8
6/2/2019 22:50	9	8	8	29.8	4.9	3.8	25.3
6/2/2019 23:00	8	8	8	31.36	1	0.8	0.4
6/2/2019 23:10	8	8	8	31.48	4.8	3.9	24.1
6/2/2019 23:20	9	8	8	30.23	4.9	3.9	25.2
6/2/2019 23:30	9	8	8	31.21	0.9	0.8	3.8
6/2/2019 23:40	8	8	8	31.36	4.8	3.9	24.4
6/2/2019 23:50	9	8	8	30.2	4.8	3.8	25.1
6/3/2019 0:00	9	8	8	30.81	1.1	0.9	25.1
6/3/2019 0:10	9	8	8	31.85	4.8	3.9	0.5
6/3/2019 0:20	9	8	8	30.87	4.7	4	24.9
6/3/2019 0:30	8	8	8	29.83	4.9	3.9	25.2
6/3/2019 0:40	8	8	8	31.12	1	0.8	2.5
6/3/2019 0:50	9	8	8	31.73	4.9	3.9	0.6

6/3/2019 1:00	9	8	8	30.57	4.9	3.8	25
6/3/2019 1:10	9	8	8	30.14	3.1	2.9	25.2
6/3/2019 1:20	9	8	8	31.82	1	0.8	0.4
6/3/2019 1:30	8	8	8	31.36	4.9	3.9	24.5
6/3/2019 1:40	8	8	8	30.47	5.1	3.9	25
6/3/2019 1:50	9	8	8	29.77	4.9	3.8	25.2
6/3/2019 2:00	8	8	8	31.05	0.9	0.8	3.2
6/3/2019 2:10	8	9	8	31.82	4.9	3.8	0.5
6/3/2019 2:20	9	8	8	30.99	4.9	3.9	24.8
6/3/2019 2:30	8	8	8	30.11	4.9	3.8	25.1
6/3/2019 2:40	8	8	8	30.63	1.1	0.9	25.1
6/3/2019 2:50	8	8	8	31.88	4.8	3.9	0.5
6/3/2019 3:00	9	8	8	30.84	5	3.8	24.9
6/3/2019 3:10	9	8	8	29.83	4.8	3.8	25.2
6/3/2019 3:20	8	9	8	30.96	1	0.8	3.3
6/3/2019 3:30	8	8	8	31.97	4.9	3.8	0.5
6/3/2019 3:40	8	8	8	31.02	4.6	3.8	24.8
6/3/2019 3:50	8	8	8	30.14	4.9	3.9	25.1
6/3/2019 4:00	9	9	8	30.57	1.1	0.8	25.1
6/3/2019 4:10	9	8	8	32.18	1.2	0.8	0.4
6/3/2019 4:20	8	8	8	31.33	4.9	3.8	24.6
6/3/2019 4:30	8	8	8	30.29	4.9	4	25.1
6/3/2019 4:40	9	8	8	29.96	3.3	3	25.2
6/3/2019 4:50	8	8	8	31.33	1	0.8	0.4
6/3/2019 5:00	9	8	8	31.97	4.9	3.8	0.5
6/3/2019 5:10	9	8	8	31.18	4.7	3.8	24.6
6/3/2019 5:20	8	8	8	30.57	4.8	3.8	25
6/3/2019 5:30	9	8	8	29.62	4.9	3.8	25.3
6/3/2019 5:40	8	8	8	31.45	0.9	0.9	0.4
6/3/2019 5:50	9	8	8	31.57	4.7	3.8	23.7
6/3/2019 6:00	8	9	8	30.41	4.8	3.9	25.1
6/3/2019 6:10	8	8	8	30.44	1.7	1.4	25.2
6/3/2019 6:20	8	8	8	32.09	1.2	0.8	0.5
6/3/2019 6:30	9	8	8	31.27	4.8	3.8	24.7
6/3/2019 6:40	8	8	8	30.44	4.8	3.9	25
6/3/2019 6:50	9	8	8	29.56	4.9	3.8	25.2
6/3/2019 7:00	8	8	8	31.12	1	0.8	1.7
6/3/2019 7:10	9	8	8	31.82	4.7	3.8	0.5
6/3/2019 7:20	8	8	8	30.69	4.8	3.8	24.9
6/3/2019 7:30	9	8	8	29.71	4.9	3.8	25.2
6/3/2019 7:40	8	8	8	30.93	0.9	0.8	3.3
6/3/2019 7:50	9	8	8	32	4.8	3.9	0.5
6/3/2019 8:00	8	8	8	31.36	4.8	3.8	24.4
6/3/2019 8:10	9	8	8	30.75	5	3.9	24.8
6/3/2019 8:20	8	8	8	30.14	5	3.8	25.1
6/3/2019 8:30	9	8	8	30.08	2.9	2.7	25.3
6/3/2019 8:40	9	8	8	31.82	1	0.8	0.4

6/3/2019 8:50	8	8	8	31.39	5	3.9	24.3
6/3/2019 9:00	8	8	8	30.29	4.6	3.9	25.2
6/3/2019 9:10	9	8	8	30.87	1	0.8	25.1
6/3/2019 9:20	8	8	9	32.06	1.2	0.8	0.4
6/3/2019 9:30	8	8	8	31.48	5	3.9	23.5
6/3/2019 9:40	8	8	8	30.81	4.6	3.8	24.8
6/3/2019 9:50	8	8	8	30.2	4.9	3.8	25.1
6/3/2019 10:00	9	8	8	29.83	3.5	3.1	25.2
6/3/2019 10:10	9	8	8	31.73	0.9	0.8	0.4
6/3/2019 10:20	8	8	8	31.3	4.9	3.8	24.4
6/3/2019 10:30	8	8	8	30.29	4.4	3.8	25.1
6/3/2019 10:40	8	8	8	30.38	1.7	1.5	25.2
6/3/2019 10:50	8	8	8	32.03	2.2	1.5	0.4
6/3/2019 11:00	9	8	8	31.21	4.7	3.8	24.7
6/3/2019 11:10	9	8	8	30.08	4.7	3.9	25.2
6/3/2019 11:20	8	8	8	30.2	1.8	1.6	25.1
6/3/2019 11:30	9	8	8	31.67	0.9	0.8	0.4
6/3/2019 11:40	9	8	8	31.42	4.9	3.9	24.3
6/3/2019 11:50	8	8	8	30.29	5.1	3.8	25.1
6/3/2019 12:00	8	8	8	30.54	1	0.8	25.1
6/3/2019 12:10	9	8	8	32.09	0.8	0.8	0.4
6/3/2019 12:20	8	8	8	31.15	4.8	3.9	24.7
6/3/2019 12:30	8	8	8	30.11	4.8	3.8	25.1
6/3/2019 12:40	9	8	8	30.29	1.8	1.6	25.1
6/3/2019 12:50	8	8	8	31.6	0.9	0.8	0.4
6/3/2019 13:00	8	8	8	31.76	4.8	3.8	0.6
6/3/2019 13:10	8	8	8	31.09	4.9	3.8	24.8
6/3/2019 13:20	9	8	8	30.26	4.9	3.8	25
6/3/2019 13:30	9	8	8	30.17	2.8	2.5	25.2
6/3/2019 13:40	8	8	8	31.97	1	0.8	0.4
6/3/2019 13:50	8	8	8	31.18	4.8	3.8	24.7
6/3/2019 14:00	8	8	8	30.29	5	3.9	25
6/3/2019 14:10	8	9	8	29.56	3.4	3.1	25.2
6/3/2019 14:20	8	8	8	31.33	0.9	0.7	0.4
6/3/2019 14:30	9	8	8	31.51	4.8	3.9	24
6/3/2019 14:40	9	8	8	30.57	4.8	3.8	24.9
6/3/2019 14:50	8	9	8	29.83	4.7	3.8	25.1
6/3/2019 15:00	8	8	8	30.51	1.1	0.8	25.1
6/3/2019 15:10	9	8	8	32	2.1	1.6	0.4
6/3/2019 15:20	9	8	8	31.15	4.8	3.9	24.7
6/3/2019 15:30	8	8	8	30.08	4.9	3.9	25.1
6/3/2019 15:40	8	8	8	30.32	1.6	1.3	25.2
6/3/2019 15:50	8	8	8	31.82	1	0.8	0.4
6/3/2019 16:00	9	8	8	31.45	4.9	3.8	24.2
6/3/2019 16:10	9	8	8	30.44	4.9	3.8	24.9
6/3/2019 16:20	9	8	8	29.77	3.4	3.3	25.2
6/3/2019 16:30	8	8	8	31.39	1.1	0.8	0.4

6/3/2019 16:40	8	8	8	31.51	4.9	3.9	23.7
6/3/2019 16:50	9	8	8	30.63	4.7	3.8	24.9
6/3/2019 17:00	8	8	8	29.71	4.9	3.8	25.2
6/3/2019 17:10	8	8	8	31.33	0.9	0.8	0.9
6/3/2019 17:20	8	8	8	31.54	4.8	3.9	23.7
6/3/2019 17:30	9	8	8	30.66	4.8	3.9	24.9
6/3/2019 17:40	8	8	8	29.71	4.7	3.9	25.2
6/3/2019 17:50	8	8	8	31.21	0.9	0.8	1.8
6/3/2019 18:00	8	8	8	31.63	4.8	3.8	23.8
6/3/2019 18:10	8	8	8	30.66	4.8	3.9	25
6/3/2019 18:20	8	8	8	29.65	4.9	3.8	25.2
6/3/2019 18:30	8	8	8	31.09	0.9	0.8	2.1
6/3/2019 18:40	9	8	8	32	4.9	3.9	0.5
6/3/2019 18:50	9	8	8	31.27	4.8	3.8	24.4
6/3/2019 19:00	9	8	8	30.47	4.8	3.8	25
6/3/2019 19:10	8	8	8	29.8	4.8	3.8	25.2
6/3/2019 19:20	8	8	8	30.54	1	0.9	25.2
6/3/2019 19:30	8	8	8	32.09	2.3	1.9	0.4
6/3/2019 19:40	8	8	8	31.12	4.8	3.8	24.7
6/3/2019 19:50	8	8	8	30.08	4.8	3.8	25.1
6/3/2019 20:00	8	8	8	30.69	1.1	0.8	25.1
6/3/2019 20:10	8	8	8	32	4.8	3.8	0.5
6/3/2019 20:20	8	8	8	30.99	4.7	3.9	24.7
6/3/2019 20:30	8	8	8	30.2	4.8	3.8	25.1
6/3/2019 20:40	9	8	8	29.99	3.1	2.8	25.2
6/3/2019 20:50	8	8	8	31.09	1	0.8	0.4
6/3/2019 21:00	8	8	8	32.12	4.8	3.8	0.4
6/3/2019 21:10	8	8	8	31.18	4.8	3.8	24.6
6/3/2019 21:20	8	8	8	30.14	4.9	3.8	25.1
6/3/2019 21:30	8	8	8	30.54	1.1	0.8	25.2
6/3/2019 21:40	8	8	8	32	4.9	3.9	0.4
6/3/2019 21:50	8	8	8	31.05	4.9	3.8	24.8
6/3/2019 22:00	8	8	8	29.8	4.9	3.8	25.2
6/3/2019 22:10	8	8	8	31.18	0.9	0.8	2.5
6/3/2019 22:20	8	8	8	31.76	4.9	3.9	0.5
6/3/2019 22:30	8	8	8	30.69	5	3.9	24.9
6/3/2019 22:40	9	8	8	29.74	4.9	3.8	25.2
6/3/2019 22:50	8	8	8	31.27	0.9	0.8	0.8
6/3/2019 23:00	8	8	8	31.79	4.8	3.8	0.5
6/3/2019 23:10	9	8	8	31.09	4.7	3.9	24.7
6/3/2019 23:20	8	8	8	30.26	4.8	3.7	25.1
6/3/2019 23:30	8	8	8	30.29	2.2	1.9	25.2
6/3/2019 23:40	8	8	8	32.09	1	0.7	0.4
6/3/2019 23:50	8	8	8	31.09	4.5	3.9	24.7
6/4/2019 0:00	8	8	8	30.05	4.6	3.9	25.2
6/4/2019 0:10	8	8	8	30.99	1	0.8	25.1
6/4/2019 0:20	8	8	8	31.7	4.9	3.8	0.6

6/4/2019 0:30	8	8	8	30.9	4.9	3.8	24.9
6/4/2019 0:40	8	8	8	30.11	4.9	3.9	25.1
6/4/2019 0:50	8	8	8	30.2	2.3	2.1	25.2
6/4/2019 1:00	8	8	8	31.79	0.9	0.8	0.5
6/4/2019 1:10	8	8	8	31.39	4.7	3.9	24.3
6/4/2019 1:20	8	8	8	30.29	4.9	3.9	25.1
6/4/2019 1:30	8	8	8	30.9	1.1	0.8	25.1
6/4/2019 1:40	8	8	8	31.73	4.8	3.8	0.5
6/4/2019 1:50	8	8	8	30.47	4.7	3.9	25.1
6/4/2019 2:00	8	8	8	30.66	1.5	1.3	25.2
6/4/2019 2:10	8	8	8	31.97	4.8	3.9	0.5
6/4/2019 2:20	9	8	8	30.99	4.8	3.9	24.8
6/4/2019 2:30	8	8	8	30.05	4.9	3.9	25.2
6/4/2019 2:40	8	8	8	31.54	0.9	0.8	0.4
6/4/2019 2:50	8	8	8	31.45	5	3.8	23.9
6/4/2019 3:00	8	8	8	30.41	4.9	3.8	25.2
6/4/2019 3:10	8	8	8	30.32	2.4	2.4	25.3
6/4/2019 3:20	8	8	8	31.88	4.9	3.9	0.5
6/4/2019 3:30	8	8	8	30.93	4.8	3.8	24.9
6/4/2019 3:40	8	8	8	29.74	4.9	3.8	25.3
6/4/2019 3:50	8	8	8	31.51	1	0.8	0.4
6/4/2019 4:00	8	8	8	31.39	5	3.9	24.1
6/4/2019 4:10	8	8	8	30.41	4.8	3.8	25.1
6/4/2019 4:20	8	8	8	30.32	2.4	2.2	25.3
6/4/2019 4:30	8	8	8	32.12	0.6	0.9	0.4
6/4/2019 4:40	8	8	8	31.27	5	3.9	24.5
6/4/2019 4:50	8	8	8	30.47	4.9	3.9	25
6/4/2019 5:00	8	8	8	29.96	3.4	3.2	25.2
6/4/2019 5:10	8	8	8	31.63	0.8	0.8	0.4
6/4/2019 5:20	8	8	8	31.42	4.7	3.9	24.5
6/4/2019 5:30	8	8	8	30.11	4.8	3.8	25.2
6/4/2019 5:40	8	8	8	31.33	1	0.8	2.6
6/4/2019 5:50	8	8	8	31.39	5	3.9	24.1
6/4/2019 6:00	8	8	8	30.38	4.9	3.8	25.1
6/4/2019 6:10	8	8	8	30.32	1.7	1.4	25.2
6/4/2019 6:20	8	8	8	31.73	1	0.8	0.5
6/4/2019 6:30	9	8	8	31.7	5	3.9	0.5
6/4/2019 6:40	8	8	8	30.87	4.9	3.9	24.9
6/4/2019 6:50	8	8	8	29.83	4.9	3.9	25.3
6/4/2019 7:00	8	8	8	31.21	1	0.8	1.6
6/4/2019 7:10	8	8	8	31.54	4.9	3.8	23.8
6/4/2019 7:20	8	8	8	30.41	5	3.9	25.1
6/4/2019 7:30	8	8	8	30.41	1.7	1.5	25.2
6/4/2019 7:40	8	8	8	31.97	1	0.8	0.4
6/4/2019 7:50	8	8	8	31.42	4.9	3.9	24.1
6/4/2019 8:00	8	8	8	30.32	4.7	3.8	25.1
6/4/2019 8:10	8	8	8	30.08	2.7	2.7	25.2

6/4/2019 8:20	8	8	8	32.06	1	0.8	0.4
6/4/2019 8:30	8	8	8	30.99	4.9	3.9	24.8
6/4/2019 8:40	8	8	8	29.83	4.9	3.9	25.3
6/4/2019 8:50	8	8	8	31.79	1	0.8	0.5
6/4/2019 9:00	8	8	8	31.15	5	3.8	24.7
6/4/2019 9:10	8	8	8	30.2	4.9	3.8	25.1
6/4/2019 9:20	8	8	8	30.41	1.6	1.2	25.1
6/4/2019 9:30	8	8	8	32.06	0.8	0.8	0.4
6/4/2019 9:40	8	8	8	31.39	4.7	3.9	24.5
6/4/2019 9:50	8	8	8	30.47	4.9	3.8	24.9
6/4/2019 10:00	8	8	8	29.62	3.4	3.2	25.3
6/4/2019 10:10	8	8	8	31.39	0.9	0.8	0.4
6/4/2019 10:20	8	8	8	31.54	4.9	3.9	23.6
6/4/2019 10:30	8	8	8	30.41	4.8	3.8	25
6/4/2019 10:40	8	8	8	30.26	2.4	2.3	25.2
6/4/2019 10:50	8	8	8	32.06	5	4.1	0.4
6/4/2019 11:00	8	8	8	30.99	4.6	3.9	24.9
6/4/2019 11:10	8	8	8	29.99	5	3.8	25.2
6/4/2019 11:20	8	8	8	30.57	1.1	0.8	25
6/4/2019 11:30	9	8	8	32.06	1.8	1.3	0.5
6/4/2019 11:40	8	8	8	31.15	4.9	3.9	24.8
6/4/2019 11:50	8	8	8	30.08	4.8	3.9	25.2
6/4/2019 12:00	8	8	8	31.18	0.9	0.8	3.6
6/4/2019 12:10	8	8	8	31.76	4.9	3.9	0.5
6/4/2019 12:20	8	8	8	30.66	5.3	3.9	24.9
6/4/2019 12:30	8	8	8	29.71	3.5	3.4	25.2
6/4/2019 12:40	8	8	8	31.6	1	0.7	0.4
6/4/2019 12:50	8	8	8	31.54	5	3.9	24
6/4/2019 13:00	8	8	8	30.35	4.7	3.8	25.1
6/4/2019 13:10	8	8	8	30.32	2	1.8	25.2
6/4/2019 13:20	8	8	8	31.97	4.9	3.9	0.4
6/4/2019 13:30	8	8	8	30.81	4.9	3.9	24.9
6/4/2019 13:40	8	8	8	29.77	5	3.8	25.3
6/4/2019 13:50	8	8	8	31.42	0.9	0.8	0.4
6/4/2019 14:00	8	8	8	31.51	4.9	3.9	24
6/4/2019 14:10	8	8	8	30.38	4.9	3.8	24.9
6/4/2019 14:20	8	8	8	29.89	3.4	3.2	25.3
6/4/2019 14:30	8	8	8	31.6	1	0.8	0.4
6/4/2019 14:40	8	8	8	31.48	4.9	3.8	24
6/4/2019 14:50	8	8	8	30.66	5	3.9	24.9
6/4/2019 15:00	8	8	8	29.77	4.8	3.8	25.2
6/4/2019 15:10	8	8	8	30.84	1	0.8	11.6
6/4/2019 15:20	8	8	8	32	4.8	3.9	0.4
6/4/2019 15:30	9	8	8	31.09	4.7	3.8	24.7
6/4/2019 15:40	8	8	8	30.08	4.7	3.9	25.1
6/4/2019 15:50	8	8	8	30.96	1.1	0.8	25.1
6/4/2019 16:00	8	8	8	31.67	4.9	3.8	10.8

6/4/2019 16:10	8	8	8	30.44	5	3.9	25
6/4/2019 16:20	8	8	8	30.69	1	0.8	25.1
6/4/2019 16:30	8	8	8	31.79	4.9	3.9	0.5
6/4/2019 16:40	8	8	8	30.72	4.9	3.9	24.9
6/4/2019 16:50	8	8	8	29.65	4.9	3.9	25.2
6/4/2019 17:00	8	8	8	31.12	1	0.8	2.6
6/4/2019 17:10	8	8	8	31.76	4.9	3.9	0.5
6/4/2019 17:20	8	8	8	30.69	5	3.9	24.9
6/4/2019 17:30	8	8	8	29.65	5	3.9	25.3
6/4/2019 17:40	8	8	8	31.42	0.9	0.8	0.4
6/4/2019 17:50	8	8	8	31.54	4.8	3.9	23.7
6/4/2019 18:00	8	8	8	30.63	4.9	3.8	25.1
6/4/2019 18:10	9	8	8	29.99	3.4	3.1	25.3
6/4/2019 18:20	9	8	8	32.03	1	0.8	0.4
6/4/2019 18:30	8	8	8	30.84	4.9	3.8	24.9
6/4/2019 18:40	8	8	8	29.8	3.5	3.2	25.3
6/4/2019 18:50	8	8	8	31.54	1	0.9	0.4
6/4/2019 19:00	8	8	8	31.39	4.9	3.8	24.4
6/4/2019 19:10	8	8	8	30.41	4.9	3.8	25
6/4/2019 19:20	8	8	8	30.11	2.7	2.6	25.2
6/4/2019 19:30	8	8	8	31.85	1	0.8	0.4
6/4/2019 19:40	8	8	8	31.09	4.9	3.9	24.9
6/4/2019 19:50	8	8	8	30.11	3.5	3.3	25.3
6/4/2019 20:00	8	8	8	31.94	4.6	3.9	0.4
6/4/2019 20:10	8	8	8	30.75	4.9	3.9	25
6/4/2019 20:20	8	8	8	29.62	3	2.8	25.2
6/4/2019 20:30	8	8	8	31.36	0.9	0.8	0.4
6/4/2019 20:40	8	8	8	31.6	4.8	3.8	5.3
6/4/2019 20:50	8	8	8	30.69	4.8	3.9	24.8
6/4/2019 21:00	8	8	8	29.8	4.7	3.9	25.2
6/4/2019 21:10	8	8	8	30.51	1	0.8	25.1
6/4/2019 21:20	8	8	8	31.97	4.8	3.9	0.4
6/4/2019 21:30	8	8	8	30.9	4.9	3.9	24.9
6/4/2019 21:40	8	8	8	29.83	4.9	3.8	25.2
6/4/2019 21:50	8	8	8	31.45	0.9	0.8	0.4
6/4/2019 22:00	8	8	8	31.33	4.8	3.9	24.4
6/4/2019 22:10	8	8	8	30.41	4.9	3.8	25.1
6/4/2019 22:20	9	8	8	31.3	0.9	0.8	5.3
6/4/2019 22:30	8	8	8	31.36	4.9	3.9	24.5
6/4/2019 22:40	8	8	8	30.17	4.7	3.9	25.1
6/4/2019 22:50	8	8	8	30.38	2.1	1.7	25.2
6/4/2019 23:00	8	8	8	32	4.9	3.9	0.4
6/4/2019 23:10	8	8	8	30.87	4.9	3.9	24.9
6/4/2019 23:20	8	8	8	29.96	4.8	3.8	25.1
6/4/2019 23:30	8	8	8	30.75	1.2	0.8	25
6/4/2019 23:40	8	8	8	32	0.9	0.8	0.4
6/4/2019 23:50	8	8	8	31.33	4.9	3.9	24.2

6/5/2019 0:00	8	8	8	30.38	4.7	3.9	25
6/5/2019 0:10	8	8	8	30.14	2.5	2.4	25.2
6/5/2019 0:20	8	8	8	31.76	1	0.8	0.4
6/5/2019 0:30	8	8	8	31.3	4.9	3.8	24.6
6/5/2019 0:40	8	8	8	30.14	4.9	3.8	25.2
6/5/2019 0:50	8	8	8	30.66	1.1	0.8	25.1
6/5/2019 1:00	8	8	8	32.03	4.9	3.9	0.4
6/5/2019 1:10	8	8	8	31.02	4.9	3.8	24.8
6/5/2019 1:20	8	8	8	29.96	4.8	3.9	25.2
6/5/2019 1:30	8	8	8	31.48	1	0.8	0.4
6/5/2019 1:40	8	8	8	31.3	4.9	3.9	24.6
6/5/2019 1:50	8	8	8	30.02	4.8	3.9	25.3
6/5/2019 2:00	8	8	8	31.27	1	0.8	1.9
6/5/2019 2:10	8	8	8	31.6	4.9	3.8	23.8
6/5/2019 2:20	8	8	8	30.54	4.9	3.9	25.1
6/5/2019 2:30	8	8	8	30.02	3.4	3.1	25.3
6/5/2019 2:40	8	8	8	31.85	1	0.8	0.4
6/5/2019 2:50	8	8	8	31.27	4.8	3.8	24.6
6/5/2019 3:00	8	8	8	30.2	4.8	3.8	25.2
6/5/2019 3:10	8	8	8	31.02	0.9	0.8	4.3
6/5/2019 3:20	8	8	8	31.67	4.8	3.9	0.6
6/5/2019 3:30	8	8	8	30.44	4.8	3.8	25.2
6/5/2019 3:40	8	8	8	31.15	0.9	0.8	3.6
6/5/2019 3:50	8	8	8	31.54	4.7	3.8	24.1
6/5/2019 4:00	8	8	8	30.38	4.8	3.8	25.1
6/5/2019 4:10	8	8	8	29.99	3	2.8	25.2
6/5/2019 4:20	8	8	8	31.67	0.9	0.8	0.4
6/5/2019 4:30	8	8	8	31.39	4.9	3.8	24.3
6/5/2019 4:40	8	8	8	30.23	4.9	3.8	25.2
6/5/2019 4:50	8	8	8	31.18	0.9	0.8	3.2
6/5/2019 5:00	8	8	8	31.45	4.8	3.8	24.2
6/5/2019 5:10	8	8	8	30.23	4.9	3.9	25.2
6/5/2019 5:20	8	8	8	31.27	1	0.8	4
6/5/2019 5:30	8	8	8	31.42	4.8	3.9	24
6/5/2019 5:40	8	8	8	30.51	4.9	3.8	25
6/5/2019 5:50	8	8	8	29.65	4.8	3.8	25.3
6/5/2019 6:00	8	8	8	31.21	1	0.8	0.5
6/5/2019 6:10	8	8	8	31.7	4.9	3.8	23.8
6/5/2019 6:20	8	8	8	30.51	4.7	3.8	25
6/5/2019 6:30	8	8	8	30.35	2.3	2.1	25.3
6/5/2019 6:40	8	8	8	31.85	4.9	3.8	0.5
6/5/2019 6:50	8	8	8	30.72	4.9	3.9	24.9
6/5/2019 7:00	8	8	8	29.74	3.5	3.2	25.2
6/5/2019 7:10	8	8	8	31.57	1	0.8	0.4
6/5/2019 7:20	8	8	8	31.33	4.9	3.9	24.5
6/5/2019 7:30	8	8	8	30.26	4.8	3.8	25.1
6/5/2019 7:40	8	8	8	30.72	1.1	0.9	25.1

6/5/2019 7:50	8	8	8	31.88	4.7	3.8	0.5
6/5/2019 8:00	8	8	8	30.69	4.9	3.9	25.1
6/5/2019 8:10	8	8	8	30.23	3.4	3	25.3
6/5/2019 8:20	8	8	8	31.97	0.9	0.7	0.4
6/5/2019 8:30	8	8	8	31.3	4.9	3.8	24.5
6/5/2019 8:40	8	8	8	30.47	5	3.9	25.1
6/5/2019 8:50	8	8	8	30.32	2.2	1.9	25.2
6/5/2019 9:00	8	8	8	31.97	4.9	3.9	0.4
6/5/2019 9:10	8	8	8	30.75	5	3.9	24.9
6/5/2019 9:20	8	8	8	30.05	3.3	3	25.2
6/5/2019 9:30	8	8	8	32.03	1	0.7	0.3
6/5/2019 9:40	8	8	8	31.12	4.9	3.9	24.7
6/5/2019 9:50	8	8	8	30.08	4.8	3.8	25.1
6/5/2019 10:00	8	8	8	30.9	1	0.8	25
6/5/2019 10:10	8	8	8	32	4.8	3.8	0.4
6/5/2019 10:20	8	8	8	31.05	4.8	3.9	24.7
6/5/2019 10:30	8	8	8	30.2	4.9	3.9	25
6/5/2019 10:40	8	8	8	30.17	3.1	2.8	25.2
6/5/2019 10:50	8	8	8	31.97	1	0.7	0.4
6/5/2019 11:00	0	8	8	30.69	4.9	3.8	24.6
6/5/2019 11:10	0	8	8	31.88	4.9	3.8	0.4
6/5/2019 11:20	0	8	8	28.52	0.9	0.8	0.4
6/5/2019 11:30	0	9	8	29.38	4.9	3.8	24.8
6/5/2019 11:40	0	8	8	28.86	0.9	0.8	0.4
6/5/2019 11:50	0	8	8	29.22	4.8	3.8	24.9
6/5/2019 12:00	9	8	8	31.73	4.9	3.8	0.5
6/5/2019 12:10	8	8	8	31.63	4.9	3.8	23.1
6/5/2019 12:20	0	9	8	30.51	5	3.8	25.1
6/5/2019 12:30	0	9	8	29.19	4.9	3.8	25
6/5/2019 12:40	0	8	8	32	1	0.8	0.4
6/5/2019 12:50	0	0	0	27.88	0.8	0.7	0.1
6/5/2019 13:00	8	8	8	31.67	4.8	3.8	0.4
6/5/2019 13:10	9	8	8	31.15	4.7	3.8	24.9
6/5/2019 13:20	8	8	8	32.06	1.4	0.9	0.4
6/5/2019 13:30	8	8	8	31.21	1.2	0.9	25.2
6/5/2019 13:40	8	8	8	30.66	4.8	3.8	25.1
6/5/2019 13:50	8	8	8	32.06	1.2	0.7	0.4
6/5/2019 14:00	8	8	8	30.9	5	3.8	24.8
6/5/2019 14:10	8	8	8	30.02	4.8	3.8	25.1
6/5/2019 14:20	8	8	8	30.47	1.1	0.9	25.1
6/5/2019 14:30	8	8	8	32.03	4.9	3.8	0.4
6/5/2019 14:40	8	8	8	30.84	5.1	3.8	24.9
6/5/2019 14:50	8	8	8	29.83	3.6	3.3	25.3
6/5/2019 15:00	8	8	8	31.7	1	0.7	0.4
6/5/2019 15:10	8	8	8	31.36	5.1	3.8	24.4
6/5/2019 15:20	8	8	8	30.17	4.8	3.8	25.1
6/5/2019 15:30	8	8	8	30.29	2	1.6	25.1

6/5/2019 15:40	8	8	8	31.82	1	0.8	0.4
6/5/2019 15:50	8	8	8	31.3	4.9	3.8	24.6
6/5/2019 16:00	8	8	8	30.17	4.7	3.8	25.1
6/5/2019 16:10	8	8	8	31.12	0.9	0.7	5
6/5/2019 16:20	8	8	8	31.57	4.9	3.8	23.6
6/5/2019 16:30	8	8	8	30.35	4.9	3.9	25.1
6/5/2019 16:40	8	8	8	31.21	0.9	0.8	5.1
6/5/2019 16:50	8	8	8	31.42	4.9	3.8	24.6
6/5/2019 17:00	8	8	8	29.99	5	3.8	25.2
6/5/2019 17:10	8	8	8	31.33	0.9	0.8	0.4
6/5/2019 17:20	8	8	8	31.57	4.9	3.8	23.7
6/5/2019 17:30	8	8	8	30.57	4.7	3.9	25
6/5/2019 17:40	8	8	8	30.63	1.6	1.4	25.1
6/5/2019 17:50	8	8	8	31.82	4.9	3.8	0.5
6/5/2019 18:00	8	8	8	30.44	5	3.9	25.1
6/5/2019 18:10	8	8	8	30.96	1.1	0.7	25
6/5/2019 18:20	8	8	8	31.76	5	3.9	0.5
6/5/2019 18:30	8	8	8	30.69	4.8	3.9	24.9
6/5/2019 18:40	8	8	8	29.83	4.7	3.8	25.2
6/5/2019 18:50	8	8	8	31.33	0.9	0.7	0.4
6/5/2019 19:00	8	8	8	31.42	4.8	3.8	24.4
6/5/2019 19:10	8	8	8	30.11	4.8	3.9	25.2
6/5/2019 19:20	8	8	8	31.6	1	0.9	0.4
6/5/2019 19:30	8	8	8	31.18	4.9	3.9	24.9
6/5/2019 19:40	8	8	8	29.86	4.7	3.8	25.2
6/5/2019 19:50	8	8	8	31.76	1	0.8	0.3
6/5/2019 20:00	8	8	8	31.12	4.9	3.8	24.7
6/5/2019 20:10	8	8	8	30.11	4.8	3.9	25.1
6/5/2019 20:20	8	8	8	30.32	1.7	1.4	25.2
6/5/2019 20:30	8	8	8	31.79	0.9	0.8	0.4
6/5/2019 20:40	8	8	8	31.54	4.9	3.8	23.6
6/5/2019 20:50	8	8	8	30.75	4.9	3.8	24.9
6/5/2019 21:00	8	8	8	29.99	4.7	3.9	25.2
6/5/2019 21:10	8	8	8	30.63	1.1	0.8	25.1
6/5/2019 21:20	8	8	8	31.85	4.6	3.9	0.4
6/5/2019 21:30	8	8	8	30.66	4.8	3.9	25
6/5/2019 21:40	8	8	8	30.72	1.2	0.9	25.1
6/5/2019 21:50	8	8	8	31.76	4.8	3.8	0.5
6/5/2019 22:00	8	8	8	30.63	4.9	3.9	25
6/5/2019 22:10	8	8	8	30.14	3.3	3	25.2
6/5/2019 22:20	8	8	8	31.88	1	0.8	0.4
6/5/2019 22:30	8	8	8	31.42	4.9	3.9	24.2
6/5/2019 22:40	8	8	8	30.44	4.6	3.7	24.9
6/5/2019 22:50	8	8	8	29.53	4.9	3.9	25.1
6/5/2019 23:00	8	8	8	31.27	1.1	0.9	0.6
6/5/2019 23:10	8	8	8	31.51	5.1	3.8	23.8
6/5/2019 23:20	8	8	8	30.35	4.9	3.9	25.1

6/5/2019 23:30	8	8	8	30.63	0.9	0.8	25.1
6/5/2019 23:40	8	8	8	31.97	5	3.8	0.5
6/5/2019 23:50	8	8	8	30.87	4.8	3.8	24.9
6/6/2019 0:00	8	8	8	29.77	5	3.9	25.3
6/6/2019 0:10	8	8	8	31.3	0.9	0.8	0.4
6/6/2019 0:20	8	8	8	31.67	4.8	3.8	20.4
6/6/2019 0:30	8	8	8	30.51	4.9	3.9	25
6/6/2019 0:40	8	8	8	30.02	3.5	3.1	25.2
6/6/2019 0:50	8	8	8	32.03	0.9	0.8	0.4
6/6/2019 1:00	8	8	8	31.15	4.9	3.8	24.6
6/6/2019 1:10	8	8	8	30.26	4.9	3.9	25.1
6/6/2019 1:20	8	8	8	30.63	1	0.8	25.1
6/6/2019 1:30	8	8	8	32	4.9	3.9	0.4
6/6/2019 1:40	8	8	8	31.09	4.9	3.9	24.7
6/6/2019 1:50	8	8	8	30.11	4.8	3.8	25.1
6/6/2019 2:00	8	8	8	30.23	1.6	1.3	25.1
6/6/2019 2:10	8	8	8	31.6	0.9	0.8	0.4
6/6/2019 2:20	8	8	8	31.51	4.7	3.9	24.1
6/6/2019 2:30	8	8	8	30.26	4.9	3.9	25.1
6/6/2019 2:40	8	8	8	30.17	2.3	2.2	25.2
6/6/2019 2:50	8	8	8	31.85	0.9	0.8	0.4
6/6/2019 3:00	8	8	8	31.15	4.8	3.9	24.7
6/6/2019 3:10	8	8	8	30.11	5	3.8	25.1
6/6/2019 3:20	8	8	8	30.47	1	0.9	25.1
6/6/2019 3:30	8	8	8	32.09	1	0.8	0.4
6/6/2019 3:40	8	8	8	31.15	4.8	3.8	24.7
6/6/2019 3:50	8	8	8	30.17	4.9	3.8	25.1
6/6/2019 4:00	8	8	8	30.96	1	0.9	4.7
6/6/2019 4:10	8	8	8	31.63	4.9	3.8	21.4
6/6/2019 4:20	8	8	8	30.44	4.8	3.8	25
6/6/2019 4:30	8	8	8	30.66	1.1	0.9	25.1
6/6/2019 4:40	8	8	8	31.79	5	3.8	0.5
6/6/2019 4:50	8	8	8	30.41	5	3.8	25
6/6/2019 5:00	8	8	8	30.99	1	0.8	25
6/6/2019 5:10	8	8	8	31.63	4.9	3.8	6.4
6/6/2019 5:20	8	8	8	30.72	4.8	3.9	24.9
6/6/2019 5:30	8	8	8	30.05	4.9	3.8	25.1
6/6/2019 5:40	8	8	8	30.51	1.2	1.1	25.2
6/6/2019 5:50	8	8	8	32.03	4.9	3.9	0.4
6/6/2019 6:00	8	8	8	31.18	4.8	3.8	24.6
6/6/2019 6:10	8	8	8	30.2	4.9	3.8	25.1
6/6/2019 6:20	8	8	8	30.81	1	0.8	25
6/6/2019 6:30	8	8	8	32.06	5	3.9	0.4
6/6/2019 6:40	8	8	8	31.09	5	3.9	24.7
6/6/2019 6:50	8	8	8	30.02	4.8	3.8	25.2
6/6/2019 7:00	8	8	8	31.12	0.9	0.8	2.5
6/6/2019 7:10	8	8	8	31.7	5.2	3.8	0.5

6/6/2019 7:20	8	8	8	30.84	4.8	3.8	24.8
6/6/2019 7:30	8	8	8	30.05	4.5	3.8	25.1
6/6/2019 7:40	8	8	8	30.29	1.6	1.2	25.1
6/6/2019 7:50	8	8	8	32.06	4.9	4.2	0.4
6/6/2019 8:00	8	8	8	30.81	4.9	3.8	24.9
6/6/2019 8:10	8	8	8	29.77	3.5	3.3	25.2
6/6/2019 8:20	8	8	8	31.63	1	0.8	0.4
6/6/2019 8:30	8	8	8	31.39	4.8	3.8	24.4
6/6/2019 8:40	8	8	8	30.35	4.8	3.9	25
6/6/2019 8:50	8	8	8	30.63	1	0.8	25.1
6/6/2019 9:00	8	8	8	32.03	4.9	3.9	0.4
6/6/2019 9:10	8	8	8	30.96	4.8	3.8	24.8
6/6/2019 9:20	8	8	8	30.02	4.7	3.9	25.1
6/6/2019 9:30	8	8	8	30.57	1.1	0.9	25.1
6/6/2019 9:40	8	8	8	32.09	3.6	3.2	0.4
6/6/2019 9:50	8	8	8	31.18	4.9	3.9	24.7
6/6/2019 10:00	8	8	8	30.11	5	3.8	25.2
6/6/2019 10:10	8	8	8	30.66	1.1	0.8	25
6/6/2019 10:20	8	8	8	32	4.9	3.9	0.4
6/6/2019 10:30	8	8	8	30.9	4.9	3.9	24.8
6/6/2019 10:40	8	8	8	29.8	4.9	3.8	25.2
6/6/2019 10:50	8	8	8	31.48	0.9	0.8	0.4
6/6/2019 11:00	8	8	8	31.3	4.8	3.8	24.5
6/6/2019 11:10	8	8	8	30.02	4.9	3.8	25.2
6/6/2019 11:20	8	8	8	31.09	0.9	0.8	3.4
6/6/2019 11:30	8	8	8	31.6	4.9	3.7	21.4
6/6/2019 11:40	8	8	8	30.75	4.9	3.8	24.9
6/6/2019 11:50	8	8	8	29.68	4.8	3.8	25.2
6/6/2019 12:00	8	8	8	30.99	0.9	0.8	3
6/6/2019 12:10	8	8	8	31.88	4.9	3.8	0.4
6/6/2019 12:20	8	8	8	30.84	4.7	3.9	24.9
6/6/2019 12:30	8	8	8	29.77	4.8	3.9	25.2
6/6/2019 12:40	8	8	8	31.51	1	0.8	0.3
6/6/2019 12:50	8	8	8	31.57	5	3.9	23.7
6/6/2019 13:00	8	8	8	30.44	4.9	3.8	25
6/6/2019 13:10	8	8	8	30.2	2.4	2.2	25.1
6/6/2019 13:20	8	8	8	31.94	1	0.8	0.4
6/6/2019 13:30	8	8	8	31.21	4.8	3.8	24.5
6/6/2019 13:40	8	8	8	30.35	5	3.8	25
6/6/2019 13:50	8	8	8	30.93	0.9	0.8	25.1
6/6/2019 14:00	8	8	8	31.6	5	3.8	23.7
6/6/2019 14:10	8	8	8	30.35	4.9	3.8	25
6/6/2019 14:20	8	8	8	30.47	1.4	1.1	25.2
6/6/2019 14:30	8	8	8	31.85	4.9	3.8	0.4
6/6/2019 14:40	8	8	8	30.54	5.1	3.9	25
6/6/2019 14:50	8	8	8	30.57	1.1	0.9	25.1
6/6/2019 15:00	8	8	8	31.82	4.9	3.9	0.5

6/6/2019 15:10	8	8	8	30.54	4.7	3.8	25
6/6/2019 15:20	8	8	8	30.05	3.4	3.1	25.2
6/6/2019 15:30	8	8	8	31.73	0.9	0.7	0.4
6/6/2019 15:40	8	8	8	31.15	4.8	3.9	24.8
6/6/2019 15:50	8	8	8	30.05	3.7	3.3	25.2
6/6/2019 16:00	8	8	8	32.03	5.1	4.1	0.4
6/6/2019 16:10	8	8	8	30.84	4.8	3.8	24.9
6/6/2019 16:20	8	8	8	30.02	3.5	3.2	25.2
6/6/2019 16:30	8	8	8	31.88	1	0.8	0.3
6/6/2019 16:40	8	8	8	31.05	4.9	3.9	24.8
6/6/2019 16:50	8	8	8	29.83	4.8	3.9	25.2
6/6/2019 17:00	8	8	8	31.54	0.9	0.8	0.4
6/6/2019 17:10	8	8	8	31.48	4.9	3.8	24
6/6/2019 17:20	8	8	8	30.47	4.9	3.9	24.9
6/6/2019 17:30	8	8	8	29.65	4.9	3.9	25.2
6/6/2019 17:40	8	8	8	31.27	0.9	0.8	0.7
6/6/2019 17:50	8	8	8	31.57	4.8	3.8	23.8
6/6/2019 18:00	8	8	8	30.26	4.9	3.8	25.1
6/6/2019 18:10	8	8	8	30.96	1	0.8	25.1
6/6/2019 18:20	8	8	8	31.36	4.8	3.8	24.5
6/6/2019 18:30	8	8	8	29.96	4.8	3.8	25.2
6/6/2019 18:40	8	8	8	32.09	5.1	4.2	0.4
6/6/2019 18:50	8	8	8	30.93	4.8	3.8	24.8
6/6/2019 19:00	8	8	8	29.8	4.9	3.9	25.2
6/6/2019 19:10	8	8	8	31.45	1	0.8	0.4
6/6/2019 19:20	8	8	8	31.48	4.9	3.9	23.9
6/6/2019 19:30	8	8	8	30.32	5	3.8	25
6/6/2019 19:40	8	8	8	30.23	2.3	2	25.2
6/6/2019 19:50	8	8	8	31.94	1	0.8	0.4
6/6/2019 20:00	8	8	8	31.05	5	3.8	24.8
6/6/2019 20:10	8	8	8	29.89	4.9	3.8	25.2
6/6/2019 20:20	8	8	8	32.06	1	0.8	0.4
6/6/2019 20:30	8	8	8	30.81	4.8	3.8	25
6/6/2019 20:40	8	8	8	30.29	1.8	1.5	25.1
6/6/2019 20:50	8	8	8	32.06	2.3	1.7	0.4
6/6/2019 21:00	8	8	8	31.18	4.9	3.8	24.7
6/6/2019 21:10	8	8	8	30.11	4.9	3.8	25.1
6/6/2019 21:20	8	8	8	31.36	0.9	0.7	1.7
6/6/2019 21:30	8	8	8	31.42	4.8	3.9	24.2
6/6/2019 21:40	8	8	8	30.26	4.9	3.9	25.1
6/6/2019 21:50	8	8	8	30.78	1	0.8	25
6/6/2019 22:00	8	8	8	31.94	5	3.8	0.5
6/6/2019 22:10	8	8	8	30.78	4.8	3.8	24.9
6/6/2019 22:20	8	8	8	29.71	3.8	3.3	25.2
6/6/2019 22:30	8	8	8	31.6	1	0.8	0.4
6/6/2019 22:40	8	8	8	31.21	4.6	3.8	24.7
6/6/2019 22:50	8	8	8	30.05	4.9	3.8	25.2

6/6/2019 23:00	8	8	8	31.3	0.9	0.8	0.9
6/6/2019 23:10	8	8	8	31.54	4.9	3.9	23.9
6/6/2019 23:20	8	8	8	30.32	4.9	3.8	25
6/6/2019 23:30	8	8	8	30.44	1.3	1.1	25.2
6/6/2019 23:40	8	8	8	31.94	5	3.9	0.5
6/6/2019 23:50	8	8	8	30.63	4.8	3.9	25
6/7/2019 0:00	8	8	8	30.41	1.7	1.6	25.2
6/7/2019 0:10	8	8	8	32.03	4.8	3.8	0.4
6/7/2019 0:20	8	8	8	30.93	4.8	3.8	24.8
6/7/2019 0:30	8	8	8	30.02	4.9	3.9	25.1
6/7/2019 0:40	8	8	8	30.26	1.8	1.3	25.1
6/7/2019 0:50	8	8	8	31.97	0.9	0.8	0.4
6/7/2019 1:00	8	8	8	31.15	4.9	3.8	24.6
6/7/2019 1:10	8	8	8	30.23	5	3.9	25.1
6/7/2019 1:20	8	8	8	30.66	1.1	0.8	25.1
6/7/2019 1:30	8	8	8	31.97	4.9	3.8	0.4
6/7/2019 1:40	8	8	8	30.96	4.9	3.9	24.7
6/7/2019 1:50	8	8	8	30.11	4.8	3.8	25
6/7/2019 2:00	8	8	8	30.63	1.2	0.9	25.1
6/7/2019 2:10	8	8	8	31.97	4.8	3.9	0.4
6/7/2019 2:20	8	8	8	30.81	4.7	3.9	24.9
6/7/2019 2:30	8	8	8	29.8	4.9	3.8	25.1
6/7/2019 2:40	8	8	8	30.72	1	0.8	25
6/7/2019 2:50	8	8	8	32.12	2.2	1.6	0.4
6/7/2019 3:00	8	8	8	31.3	4.7	3.9	24.4
6/7/2019 3:10	8	8	8	30.44	4.8	3.9	25
6/7/2019 3:20	8	8	8	29.8	3.5	3.2	25.2
6/7/2019 3:30	8	8	8	31.48	1	0.8	0.4
6/7/2019 3:40	8	8	8	31.42	4.8	3.9	24.2
6/7/2019 3:50	8	8	8	30.29	4.8	3.8	25.1
6/7/2019 4:00	8	8	8	30.75	1.2	0.9	25.1
6/7/2019 4:10	8	8	8	31.85	4.7	3.9	0.4
6/7/2019 4:20	8	8	8	30.66	4.8	3.9	25
6/7/2019 4:30	8	8	8	30.26	2.4	2.2	25.2
6/7/2019 4:40	8	8	8	31.97	0.8	0.8	0.4
6/7/2019 4:50	8	8	8	30.99	4.9	3.9	24.8
6/7/2019 5:00	8	8	8	30.14	4.8	3.9	25.1
6/7/2019 5:10	8	8	8	30.29	1.6	1.3	25.1
6/7/2019 5:20	8	8	8	31.76	1	0.8	0.4
6/7/2019 5:30	8	8	8	31.57	4.7	3.8	23.5
6/7/2019 5:40	8	8	8	30.69	5	3.8	24.9
6/7/2019 5:50	8	8	8	29.83	4.6	3.9	25.2
6/7/2019 6:00	8	8	8	30.66	1	0.8	25
6/7/2019 6:10	8	8	8	32	1	0.8	0.4
6/7/2019 6:20	8	8	8	31.09	5.1	3.8	24.7
6/7/2019 6:30	8	8	8	29.89	4.8	3.9	25.3
6/7/2019 6:40	8	8	8	31.3	0.9	0.8	0.4

6/7/2019 6:50	8	8	8	31.54	4.9	3.9	23.7
6/7/2019 7:00	8	8	8	30.51	4.8	3.9	24.9
6/7/2019 7:10	8	8	8	29.62	3.4	3.3	25.1
6/7/2019 7:20	8	8	8	30.78	1	0.8	2.5
6/7/2019 7:30	8	8	8	32.12	4.9	3.9	0.4
6/7/2019 7:40	8	8	8	31.09	4.7	3.9	24.7
6/7/2019 7:50	8	8	8	30.08	4.7	3.8	25.1
6/7/2019 8:00	8	8	8	31.57	0.9	0.8	0.4
6/7/2019 8:10	8	8	8	31.21	4.8	3.9	24.8
6/7/2019 8:20	8	8	8	29.86	3.3	3.2	25.3
6/7/2019 8:30	8	8	8	32	1	0.8	0.4
6/7/2019 8:40	8	8	8	31.05	4.9	3.9	24.8
6/7/2019 8:50	8	8	8	29.83	3.4	3	25.2
6/7/2019 9:00	8	8	8	31.7	1	0.8	0.4
6/7/2019 9:10	8	8	8	31.42	5	3.9	24.1
6/7/2019 9:20	8	8	8	30.51	4.8	3.9	24.8
6/7/2019 9:30	8	8	8	29.65	5	3.9	25.3
6/7/2019 9:40	8	8	8	31.02	0.9	0.8	3.5
6/7/2019 9:50	8	8	8	31.73	4.9	3.9	0.5
6/7/2019 10:00	8	8	8	30.47	4.9	3.8	25
6/7/2019 10:10	8	8	8	30.38	2.1	1.7	25.2
6/7/2019 10:20	8	8	8	31.94	4.8	3.9	0.4
6/7/2019 10:30	8	8	8	30.9	5	3.9	24.8
6/7/2019 10:40	8	8	8	29.65	3.7	3.3	25.2
6/7/2019 10:50	8	8	8	31.42	1	0.8	0.3
6/7/2019 11:00	8	8	8	31.73	4.8	3.9	3.4
6/7/2019 11:10	8	8	8	30.51	4.9	3.9	24.9
6/7/2019 11:20	8	8	8	29.59	5	3.9	25.2
6/7/2019 11:30	8	8	8	30.96	0.9	0.8	3.2
6/7/2019 11:40	8	8	8	31.88	5	3.8	0.5
6/7/2019 11:50	8	8	8	31.02	4.9	3.8	24.7
6/7/2019 12:00	8	8	8	30.11	4.8	3.8	25.1
6/7/2019 12:10	8	8	8	31.18	0.9	0.8	3.5
6/7/2019 12:20	8	8	8	31.51	4.9	3.9	24.1
6/7/2019 12:30	8	8	8	30.17	4.9	3.8	25.1
6/7/2019 12:40	8	8	8	31.27	0.9	0.8	3.1
6/7/2019 12:50	8	8	8	31.39	5	3.8	24.5
6/7/2019 13:00	8	8	8	29.89	4.9	3.8	25.1
6/7/2019 13:10	8	8	8	31.05	0.9	0.8	3.6
6/7/2019 13:20	8	8	8	31.63	4.7	3.8	0.6
6/7/2019 13:30	8	8	8	30.47	4.9	3.9	24.9
6/7/2019 13:40	8	8	8	30.26	2.5	2.3	25.2
6/7/2019 13:50	8	8	8	32.09	1.2	0.8	0.4
6/7/2019 14:00	8	8	8	31.12	5.3	3.8	24.6
6/7/2019 14:10	8	8	8	30.29	5.1	3.8	25.1
6/7/2019 14:20	8	8	8	30.14	2.3	2.2	25.2
6/7/2019 14:30	8	8	8	31.76	0.8	0.8	0.4

6/7/2019 14:40	8	8	8	31.42	4.9	3.8	24.3
6/7/2019 14:50	8	8	8	30.29	4.9	3.8	25.1
6/7/2019 15:00	8	8	8	30.84	1	0.7	25.1
6/7/2019 15:10	8	8	8	31.85	4.9	3.8	0.5
6/7/2019 15:20	8	8	8	30.72	4.6	3.9	24.9
6/7/2019 15:30	8	8	8	29.83	3.5	3.2	25.2
6/7/2019 15:40	8	8	8	31.7	1.1	0.8	0.3
6/7/2019 15:50	8	8	8	30.93	4.9	3.8	24.8
6/7/2019 16:00	8	8	8	29.77	4.8	3.8	25.2
6/7/2019 16:10	8	8	8	31.42	0.9	0.7	0.4
6/7/2019 16:20	8	8	8	31.51	4.8	3.8	23.8
6/7/2019 16:30	8	8	8	30.57	4.9	3.8	24.9
6/7/2019 16:40	8	8	8	29.59	4.8	3.8	25.2
6/7/2019 16:50	8	8	8	31.15	0.9	0.8	0.5
6/7/2019 17:00	8	8	8	31.67	4.9	3.8	0.5
6/7/2019 17:10	8	8	8	30.66	4.8	3.9	25
6/7/2019 17:20	8	8	8	30.05	3.1	3	25.2
6/7/2019 17:30	8	8	8	32.06	4.5	3.8	0.4
6/7/2019 17:40	8	8	8	30.81	4.9	3.9	25
6/7/2019 17:50	8	8	8	30.35	2.2	1.9	25.2
6/7/2019 18:00	8	8	8	32.06	4.8	3.9	0.4
6/7/2019 18:10	8	8	8	30.81	4.8	3.9	24.9
6/7/2019 18:20	8	8	8	29.68	5	3.8	25.3
6/7/2019 18:30	8	8	8	31.39	1	0.8	0.4
6/7/2019 18:40	8	8	8	31.6	4.7	3.9	11.2
6/7/2019 18:50	8	8	8	30.75	4.8	3.9	24.8
6/7/2019 19:00	8	8	8	29.77	4.8	3.8	25.1
6/7/2019 19:10	8	8	8	30.47	1.1	0.8	25
6/7/2019 19:20	8	8	8	32.03	1	0.7	0.4
6/7/2019 19:30	8	8	8	31.02	4.7	3.8	24.7
6/7/2019 19:40	8	8	8	29.83	4.9	3.8	25.2
6/7/2019 19:50	8	8	8	31.54	0.9	0.8	0.4
6/7/2019 20:00	8	8	8	31.27	4.9	3.9	24.6
6/7/2019 20:10	8	8	8	29.89	4.9	3.9	25.2
6/7/2019 20:20	8	8	8	31.57	0.9	0.8	0.4
6/7/2019 20:30	8	8	8	31.48	4.9	3.8	24.1
6/7/2019 20:40	8	8	8	30.35	4.8	3.8	25
6/7/2019 20:50	8	8	8	29.59	3.4	3.2	25.2
6/7/2019 21:00	8	8	8	31.05	1	0.8	1
6/7/2019 21:10	8	8	8	31.82	4.8	3.9	0.4
6/7/2019 21:20	8	8	8	30.84	4.8	3.9	24.8
6/7/2019 21:30	8	8	8	29.77	4.9	3.9	25.2
6/7/2019 21:40	8	8	8	31.27	1	0.8	0.9
6/7/2019 21:50	8	8	8	31.57	5	3.8	23.7
6/7/2019 22:00	8	8	8	30.51	4.7	3.8	24.9
6/7/2019 22:10	8	8	8	29.59	4.8	3.8	25.2
6/7/2019 22:20	8	8	8	31.57	1	0.8	0.4

6/7/2019 22:30	8	8	8	31.27	4.9	3.8	24.7
6/7/2019 22:40	8	8	8	30.05	4.7	3.9	25.2
6/7/2019 22:50	8	8	8	31.36	0.9	0.8	0.4
6/7/2019 23:00	8	8	8	31.33	4.6	3.9	24.5
6/7/2019 23:10	8	8	8	30.14	4.8	3.9	25.1
6/7/2019 23:20	8	8	8	30.72	1.1	0.9	25.1
6/7/2019 23:30	8	8	8	31.85	5.1	3.9	0.5
6/7/2019 23:40	8	8	8	30.75	4.9	3.9	24.9
6/7/2019 23:50	8	8	8	29.86	3.6	3.2	25.2
6/8/2019 0:00	8	8	8	31.85	1	0.8	0.4
6/8/2019 0:10	8	8	8	31.09	4.9	3.9	24.8
6/8/2019 0:20	8	8	8	29.83	4.9	3.8	25.2
6/8/2019 0:30	8	8	8	30.84	1	0.8	4.1
6/8/2019 0:40	8	8	8	31.85	5	3.8	0.5
6/8/2019 0:50	8	8	8	30.9	4.8	3.9	24.7
6/8/2019 1:00	8	8	8	30.11	4.8	3.9	25
6/8/2019 1:10	8	8	8	30.75	0.9	0.8	25
6/8/2019 1:20	8	8	8	32	5	3.9	0.4
6/8/2019 1:30	8	8	8	31.05	4.8	3.8	24.7
6/8/2019 1:40	8	8	8	30.05	4.9	3.8	25.1
6/8/2019 1:50	8	8	8	30.54	1	0.8	25
6/8/2019 2:00	8	8	8	32.09	4.9	3.9	0.4
6/8/2019 2:10	8	8	8	30.96	4.9	3.8	24.8
6/8/2019 2:20	8	8	8	30.11	4.9	3.8	25.1
6/8/2019 2:30	8	8	8	30.81	1.1	0.8	25.1
6/8/2019 2:40	8	8	8	31.79	4.7	3.8	0.5
6/8/2019 2:50	8	8	8	30.63	4.8	3.9	25
6/8/2019 3:00	8	8	8	30.32	2.3	2	25.2
6/8/2019 3:10	8	8	8	32.12	1	0.8	0.4
6/8/2019 3:20	8	8	8	31.12	5	3.9	24.7
6/8/2019 3:30	8	8	8	30.02	4.7	3.8	25.2
6/8/2019 3:40	8	8	8	30.72	1	0.9	25
6/8/2019 3:50	8	8	8	32.18	4.4	3.8	0.4
6/8/2019 4:00	8	8	8	31.15	4.9	3.9	24.6
6/8/2019 4:10	8	8	8	30.26	4.9	3.9	25.1
6/8/2019 4:20	8	8	8	30.26	1.8	1.6	25.2
6/8/2019 4:30	8	8	8	32.03	1	0.8	0.4
6/8/2019 4:40	8	8	8	31.15	5	3.9	24.7
6/8/2019 4:50	8	8	8	30.17	4.8	3.8	25.1
6/8/2019 5:00	8	8	8	30.05	2.3	2.1	25.2
6/8/2019 5:10	8	8	8	31.42	0.8	0.8	0.4
6/8/2019 5:20	8	8	8	31.76	4.9	3.8	0.6
6/8/2019 5:30	8	8	8	30.72	4.9	3.9	24.9
6/8/2019 5:40	8	8	8	30.02	3.4	3.2	25.3
6/8/2019 5:50	8	8	8	32.03	1.3	1.1	0.4
6/8/2019 6:00	8	8	8	30.96	4.9	3.9	24.8
6/8/2019 6:10	8	8	8	30.05	5.1	3.9	25.2

6/8/2019 6:20	8	8	8	30.14	2.1	1.7	25.2
6/8/2019 6:30	8	8	8	31.63	0.9	0.8	0.4
6/8/2019 6:40	8	8	8	31.67	4.9	3.9	0.6
6/8/2019 6:50	8	8	8	30.9	5	3.9	24.8
6/8/2019 7:00	8	8	8	29.86	4.9	3.9	25.1
6/8/2019 7:10	8	8	8	30.54	1.1	0.8	25.1
6/8/2019 7:20	8	8	8	32.18	1.1	0.8	0.5
6/8/2019 7:30	8	8	8	31.27	5.2	3.9	24.6
6/8/2019 7:40	8	8	8	30.38	4.9	3.9	25
6/8/2019 7:50	8	8	8	29.74	3.5	3.2	25.2
6/8/2019 8:00	8	8	8	31.36	1	0.7	0.4
6/8/2019 8:10	8	8	8	31.63	4.9	3.9	23.6
6/8/2019 8:20	8	8	8	30.54	4.8	3.8	25
6/8/2019 8:30	8	8	8	29.68	4.7	3.8	25.3
6/8/2019 8:40	8	8	8	31.45	0.9	0.8	0.4
6/8/2019 8:50	8	8	8	31.45	4.5	3.8	23.9
6/8/2019 9:00	8	8	8	30.57	4.9	3.8	24.9
6/8/2019 9:10	8	8	8	29.74	4.7	3.8	25.2
6/8/2019 9:20	8	8	8	30.44	1.1	0.9	25.1
6/8/2019 9:30	8	8	8	31.79	1	0.8	0.4
6/8/2019 9:40	8	8	8	31.36	4.9	3.8	24.2
6/8/2019 9:50	8	8	8	30.35	4.9	3.8	25.1
6/8/2019 10:00	8	8	8	30.69	1.2	0.9	25.1
6/8/2019 10:10	8	8	8	31.73	4.9	3.9	0.5
6/8/2019 10:20	8	8	8	30.51	4.8	3.8	25
6/8/2019 10:30	8	8	8	30.17	2.9	2.8	25.3
6/8/2019 10:40	8	8	8	31.85	0.9	0.8	0.4
6/8/2019 10:50	8	8	8	31.18	5	3.9	24.7
6/8/2019 11:00	8	8	8	29.96	4.8	3.8	25.2
6/8/2019 11:10	8	8	8	31.18	1	0.8	1.7
6/8/2019 11:20	8	8	8	31.7	5	3.9	0.5
6/8/2019 11:30	8	8	8	30.69	5	3.8	24.9
6/8/2019 11:40	8	8	8	29.77	5	3.8	25.2
6/8/2019 11:50	8	8	8	30.54	1.1	0.8	25.1
6/8/2019 12:00	8	8	8	32.12	2	1.8	0.4
6/8/2019 12:10	8	8	8	31.09	4.8	3.8	24.7
6/8/2019 12:20	8	8	8	30.14	4.9	3.8	25.1
6/8/2019 12:30	8	8	8	30.44	1.1	0.8	25.2
6/8/2019 12:40	8	8	8	31.85	4.9	3.8	0.4
6/8/2019 12:50	8	8	8	30.51	4.8	3.8	25
6/8/2019 13:00	8	8	8	30.72	1.1	0.8	25.1
6/8/2019 13:10	8	8	8	31.85	4.9	3.8	0.5
6/8/2019 13:20	8	8	8	30.75	4.9	3.8	24.9
6/8/2019 13:30	8	8	8	29.65	4.8	3.8	25.2
6/8/2019 13:40	8	8	8	31.12	1	0.8	1.3
6/8/2019 13:50	8	8	8	31.79	4.9	3.9	0.5
6/8/2019 14:00	8	8	8	30.54	4.7	3.8	25

6/8/2019 14:10	8	8	8	30.32	2.2	1.7	25.2
6/8/2019 14:20	8	8	8	32.12	4.9	3.9	0.4
6/8/2019 14:30	8	8	8	30.99	4.8	3.8	24.8
6/8/2019 14:40	8	8	8	29.99	4.9	3.9	25.1
6/8/2019 14:50	8	8	8	29.74	3.3	3.1	25.2
6/8/2019 15:00	8	8	8	30.81	1	0.8	2.2
6/8/2019 15:10	8	8	8	32.03	1.1	0.7	0.4
6/8/2019 15:20	8	8	8	31.39	4.9	3.9	24.4
6/8/2019 15:30	8	8	8	30.23	4.8	3.8	25.1
6/8/2019 15:40	8	8	8	30.78	1	0.6	25
6/8/2019 15:50	8	8	8	31.73	4.9	3.8	0.5
6/8/2019 16:00	8	8	8	30.44	4.8	3.8	25
6/8/2019 16:10	8	8	8	30.14	2.5	2.2	25.2
6/8/2019 16:20	8	8	8	31.97	0.9	0.8	0.3
6/8/2019 16:30	8	8	8	31.21	4.7	3.9	24.5
6/8/2019 16:40	8	8	8	30.2	4.7	3.8	25
6/8/2019 16:50	8	8	8	29.86	3.1	2.9	25.2
6/8/2019 17:00	8	8	8	31.54	1	0.8	0.4
6/8/2019 17:10	8	8	8	31.7	4.9	3.8	0.6
6/8/2019 17:20	8	8	8	30.75	4.9	3.9	24.9
6/8/2019 17:30	8	8	8	29.71	4.7	3.9	25.2
6/8/2019 17:40	8	8	8	31.21	0.9	0.8	0.9
6/8/2019 17:50	8	8	8	31.67	4.9	3.8	11.2
6/8/2019 18:00	8	8	8	30.57	4.9	3.8	25
6/8/2019 18:10	8	8	8	29.89	3.5	3.1	25.2
6/8/2019 18:20	8	8	8	31.6	0.9	0.8	0.4
6/8/2019 18:30	8	8	8	31.51	4.8	3.8	24
6/8/2019 18:40	8	8	8	30.41	4.9	3.9	25
6/8/2019 18:50	8	8	8	29.96	3.3	3.2	25.3
6/8/2019 19:00	8	8	8	31.82	1.1	0.8	0.4
6/8/2019 19:10	8	8	8	31.09	4.7	3.8	24.7
6/8/2019 19:20	8	8	8	30.02	4.9	3.7	25.1
6/8/2019 19:30	8	8	8	30.87	1	0.8	25
6/8/2019 19:40	8	8	8	31.88	5	3.9	0.5
6/8/2019 19:50	8	8	8	30.84	4.7	3.8	24.8
6/8/2019 20:00	8	8	8	29.8	4.9	3.8	25.2
6/8/2019 20:10	8	8	8	31.33	1	0.7	0.4
6/8/2019 20:20	8	8	8	31.85	4.9	3.8	0.5
6/8/2019 20:30	8	8	8	30.84	4.7	3.9	24.9
6/8/2019 20:40	8	8	8	29.71	4.7	3.8	25.2
6/8/2019 20:50	8	8	8	31.09	1	0.8	1.5
6/8/2019 21:00	8	8	8	31.76	4.8	3.8	0.5
6/8/2019 21:10	8	8	8	30.72	4.9	3.8	24.9
6/8/2019 21:20	8	8	8	29.77	3.5	3.1	25.2
6/8/2019 21:30	8	8	8	31.73	1	0.8	0.4
6/8/2019 21:40	8	8	8	31.21	4.7	3.8	24.6
6/8/2019 21:50	8	8	8	30.2	4.9	3.9	25.1

6/8/2019 22:00	8	8	8	30.78	1.1	0.8	25.1
6/8/2019 22:10	8	8	8	31.76	4.7	3.9	0.5
6/8/2019 22:20	8	8	8	30.72	4.8	3.8	24.9
6/8/2019 22:30	8	8	8	29.71	4.9	3.8	25.3
6/8/2019 22:40	8	8	8	31.02	0.9	0.8	2.1
6/8/2019 22:50	8	8	8	31.88	4.9	3.9	0.4
6/8/2019 23:00	8	8	8	30.9	5.1	3.9	24.8
6/8/2019 23:10	8	8	8	29.96	4.8	3.8	25.1
6/8/2019 23:20	8	8	8	30.54	1	0.8	25.1
6/8/2019 23:30	8	8	8	32.03	4.9	3.8	0.4
6/8/2019 23:40	8	8	8	30.96	4.8	3.8	24.8
6/8/2019 23:50	8	8	8	29.86	5	3.8	25.2
6/9/2019 0:00	8	8	8	31.3	0.9	0.8	0.8
6/9/2019 0:10	8	8	8	31.54	4.8	3.8	24
6/9/2019 0:20	8	8	8	30.35	4.9	3.8	25
6/9/2019 0:30	8	8	8	30.17	2.8	2.5	25.2
6/9/2019 0:40	8	8	8	31.6	0.9	0.8	0.4
6/9/2019 0:50	8	8	8	31.48	5	3.8	24
6/9/2019 1:00	8	8	8	30.41	4.8	4	25.1
6/9/2019 1:10	8	8	8	30.29	1.8	1.7	25.2
6/9/2019 1:20	8	8	8	32.09	4.2	3.5	0.4
6/9/2019 1:30	8	8	8	30.93	4.9	3.8	24.8
6/9/2019 1:40	8	8	8	29.74	4.9	3.8	25.2
6/9/2019 1:50	8	8	8	30.9	1	0.8	3
6/9/2019 2:00	8	8	8	32	4.7	3.8	0.4
6/9/2019 2:10	8	8	8	30.99	4.9	3.9	24.7
6/9/2019 2:20	8	8	8	29.99	5	4	25.1
6/9/2019 2:30	8	8	8	30.44	1.1	0.8	25.2
6/9/2019 2:40	8	8	8	32.03	1	0.8	0.4
6/9/2019 2:50	8	8	8	31.15	5.3	3.9	24.7
6/9/2019 3:00	8	8	8	30.14	5	3.8	25.2
6/9/2019 3:10	8	8	8	30.51	1	0.9	25.1
6/9/2019 3:20	8	8	8	32.03	1	0.8	0.4
6/9/2019 3:30	8	8	8	31.15	4.9	3.9	24.7
6/9/2019 3:40	8	8	8	29.86	4.8	3.9	25.3
6/9/2019 3:50	8	8	8	31.18	0.9	0.8	0.8
6/9/2019 4:00	8	8	8	31.6	4.7	3.8	0.6
6/9/2019 4:10	8	8	8	30.66	4.8	3.8	24.9
6/9/2019 4:20	8	8	8	29.71	5.1	3.8	25.1
6/9/2019 4:30	8	8	8	29.74	3	2.7	25.2
6/9/2019 4:40	8	8	8	30.72	0.8	0.8	2.6
6/9/2019 4:50	8	8	8	31.79	0.9	0.7	0.4
6/9/2019 5:00	8	8	8	31.57	4.8	3.8	23.7
6/9/2019 5:10	8	8	8	30.47	4.8	3.8	25
6/9/2019 5:20	8	8	8	30.05	3.5	3.1	25.3
6/9/2019 5:30	8	8	8	31.82	1	0.7	0.4
6/9/2019 5:40	8	8	8	31.18	4.9	3.9	24.7

6/9/2019 5:50	8	8	8	30.17	4.9	3.9	25.1
6/9/2019 6:00	8	8	8	30.26	1.5	1.1	25.2
6/9/2019 6:10	8	8	8	31.67	0.9	0.7	0.4
6/9/2019 6:20	8	8	8	31.76	4.9	3.9	0.5
6/9/2019 6:30	8	8	8	31.27	4.9	3.8	24.4
6/9/2019 6:40	8	8	8	30.47	5	3.8	25
6/9/2019 6:50	8	8	8	29.62	4.8	3.8	25.2
6/9/2019 7:00	8	8	8	30.81	1.1	0.7	25
6/9/2019 7:10	8	8	8	31.88	5.1	3.9	0.5
6/9/2019 7:20	8	8	8	30.96	5	3.8	24.8
6/9/2019 7:30	8	8	8	29.99	4.8	3.8	25.1
6/9/2019 7:40	8	8	8	30.57	0.9	0.8	25
6/9/2019 7:50	8	8	8	31.88	0.9	0.8	0.4
6/9/2019 8:00	8	8	8	31.45	4.8	3.8	23.8
6/9/2019 8:10	8	8	8	30.66	4.9	3.8	24.9
6/9/2019 8:20	8	8	8	29.71	4.7	3.8	25.2
6/9/2019 8:30	8	8	8	30.69	1.1	0.8	25
6/9/2019 8:40	8	8	8	31.79	4.7	3.9	0.5
6/9/2019 8:50	8	8	8	30.75	4.8	3.8	25
6/9/2019 9:00	8	8	8	29.86	3.4	3.2	25.3
6/9/2019 9:10	8	8	8	31.54	0.9	0.8	0.4
6/9/2019 9:20	8	8	8	31.6	4.9	3.8	23.6
6/9/2019 9:30	8	8	8	30.66	4.9	3.9	24.9
6/9/2019 9:40	8	8	8	29.71	4.8	3.8	25.2
6/9/2019 9:50	8	8	8	30.57	1.2	0.8	25
6/9/2019 10:00	8	8	8	32.15	4.9	3.9	0.4
6/9/2019 10:10	8	8	8	30.99	4.9	3.8	24.8
6/9/2019 10:20	8	8	8	29.86	5	3.8	25.2
6/9/2019 10:30	8	8	8	30.96	0.9	0.8	4.4
6/9/2019 10:40	8	8	8	31.73	5.1	3.9	0.5
6/9/2019 10:50	8	8	8	30.63	4.8	3.9	24.9
6/9/2019 11:00	8	8	8	29.62	4.9	3.9	25.2
6/9/2019 11:10	8	8	8	30.78	1	0.8	7.9
6/9/2019 11:20	8	8	8	31.76	4.9	3.8	0.5
6/9/2019 11:30	8	8	8	30.63	4.8	3.8	25
6/9/2019 11:40	8	8	8	30.57	1.2	0.9	25.1
6/9/2019 11:50	8	8	8	31.94	4.8	3.8	0.5
6/9/2019 12:00	8	8	8	30.78	4.9	3.9	24.9
6/9/2019 12:10	8	8	8	29.71	4.8	3.9	25.3
6/9/2019 12:20	8	8	8	31.18	0.9	0.8	0.4
6/9/2019 12:30	8	8	8	31.88	4.8	3.8	0.5
6/9/2019 12:40	8	8	8	31.02	4.8	3.8	24.7
6/9/2019 12:50	8	8	8	30.23	4.9	3.8	25
6/9/2019 13:00	8	8	8	29.41	4.7	3.8	25.2
6/9/2019 13:10	8	8	8	30.57	1	0.8	25
6/9/2019 13:20	8	8	8	31.51	0.9	0.8	0.4
6/9/2019 13:30	8	8	8	31.63	4.9	3.9	23.6

6/9/2019 13:40	8	8	8	30.44	5	3.8	25
6/9/2019 13:50	8	8	8	30.02	3.1	2.9	25.2
6/9/2019 14:00	8	8	8	31.82	0.9	0.8	0.4
6/9/2019 14:10	8	8	8	31.21	4.9	3.8	24.3
6/9/2019 14:20	8	8	8	30.29	4.8	3.8	25
6/9/2019 14:30	8	8	8	30.23	1.8	1.4	25.2
6/9/2019 14:40	8	8	8	32.09	1.2	0.7	0.4
6/9/2019 14:50	8	8	8	30.99	4.9	3.9	24.7
6/9/2019 15:00	8	8	8	30.08	4.9	3.8	25
6/9/2019 15:10	8	8	8	30.08	2.4	2.2	25.2
6/9/2019 15:20	8	8	8	31.45	1.1	0.7	0.3
6/9/2019 15:30	8	8	8	32	4.9	3.8	0.4
6/9/2019 15:40	8	8	8	31.21	5	3.9	24.5
6/9/2019 15:50	8	8	8	30.14	4.9	3.8	25
6/9/2019 16:00	8	8	8	30.47	1.4	1.1	25.2
6/9/2019 16:10	8	8	8	32.03	4.9	3.8	0.4
6/9/2019 16:20	8	8	8	30.78	4.7	3.8	24.9
6/9/2019 16:30	8	8	8	29.59	4.8	3.8	25.3
6/9/2019 16:40	8	8	8	31.27	0.9	0.7	0.4
6/9/2019 16:50	8	8	8	31.97	4.9	3.9	0.4
6/9/2019 17:00	8	8	8	31.18	5	3.9	24.4
6/9/2019 17:10	8	8	8	30.57	4.7	3.8	24.9
6/9/2019 17:20	8	8	8	29.8	5	3.8	25.1
6/9/2019 17:30	8	8	8	30.93	1	0.7	3.6
6/9/2019 17:40	8	8	8	31.76	4.8	3.9	0.5
6/9/2019 17:50	8	8	8	30.44	4.8	3.8	25.1
6/9/2019 18:00	8	8	8	30.72	1.1	0.9	25.1
6/9/2019 18:10	8	8	8	32.06	5	3.9	0.4
6/9/2019 18:20	8	8	8	30.99	5.2	3.8	24.8
6/9/2019 18:30	8	8	8	30.08	4.9	3.8	25.1
6/9/2019 18:40	8	8	8	30.14	1.8	1.5	25.2
6/9/2019 18:50	8	8	8	31.48	0.9	0.8	0.3
6/9/2019 19:00	8	8	8	31.76	4.8	3.8	0.5
6/9/2019 19:10	8	8	8	30.81	5.1	3.8	24.8
6/9/2019 19:20	8	8	8	29.62	4.9	3.8	25.3
6/9/2019 19:30	8	8	8	31.42	0.9	0.8	0.4
6/9/2019 19:40	8	8	8	31.54	4.8	3.8	23.7
6/9/2019 19:50	8	8	8	30.38	4.8	3.9	25
6/9/2019 20:00	8	8	8	30.17	2.7	2.3	25.2
6/9/2019 20:10	8	8	8	31.48	1	0.7	0.3
6/9/2019 20:20	8	8	8	31.82	4.7	3.8	0.5
6/9/2019 20:30	8	8	8	30.93	4.8	3.8	24.7
6/9/2019 20:40	8	8	8	30.17	5	3.9	25.1
6/9/2019 20:50	8	8	8	29.62	3.5	3.3	25.3
6/9/2019 21:00	8	8	8	31.33	1.1	0.8	0.4
6/9/2019 21:10	8	8	8	31.42	4.9	3.9	23.9
6/9/2019 21:20	8	8	8	30.23	4.8	3.8	25.1

6/9/2019 21:30	8	8	8	30.23	2	1.6	25.2
6/9/2019 21:40	8	8	8	31.7	0.9	0.8	0.4
6/9/2019 21:50	8	8	8	31.7	4.8	3.9	0.6
6/9/2019 22:00	8	8	8	31.09	4.9	3.8	24.5
6/9/2019 22:10	8	8	8	30.51	4.7	3.9	24.8
6/9/2019 22:20	8	8	8	29.99	4.8	3.8	25
6/9/2019 22:30	8	8	8	29.86	3.1	2.9	25.2
6/9/2019 22:40	8	8	8	31.45	1	0.8	0.4
6/9/2019 22:50	8	8	8	31.73	4.9	3.8	15.9
6/9/2019 23:00	8	8	8	30.75	5.1	3.8	24.9
6/9/2019 23:10	8	8	8	29.74	4.9	3.8	25.2
6/9/2019 23:20	8	8	8	31.12	0.9	0.8	1.6
6/9/2019 23:30	8	8	8	31.79	4.8	3.9	0.5
6/9/2019 23:40	8	8	8	30.84	4.8	3.9	24.9
6/9/2019 23:50	8	8	8	29.86	4.7	3.8	25.1
6/10/2019 0:00	8	8	8	30.63	1.1	0.9	25.1
6/10/2019 0:10	8	8	8	32.06	5.1	4.2	0.4
6/10/2019 0:20	8	8	8	31.12	4.7	3.8	24.7
6/10/2019 0:30	8	8	8	30.11	5.1	3.9	25.1
6/10/2019 0:40	8	8	8	30.44	1.2	0.9	25.2
6/10/2019 0:50	8	8	8	31.94	1.1	0.8	0.4
6/10/2019 1:00	8	8	8	31.27	5	3.9	24.6
6/10/2019 1:10	8	8	8	30.11	4.9	3.8	25.1
6/10/2019 1:20	8	8	8	29.99	3.1	2.6	25.2
6/10/2019 1:30	8	8	8	31.54	0.8	0.8	0.4
6/10/2019 1:40	8	8	8	31.63	5	3.8	23.8
6/10/2019 1:50	8	8	8	30.66	4.8	3.8	24.9
6/10/2019 2:00	8	8	8	29.96	4.8	3.8	25.1
6/10/2019 2:10	8	8	8	29.86	2.8	2.5	25.2
6/10/2019 2:20	8	8	8	30.9	0.9	0.8	0.7
6/10/2019 2:30	8	8	8	31.79	1	0.8	0.4
6/10/2019 2:40	8	8	8	31.67	4.9	3.9	0.6
6/10/2019 2:50	8	8	8	30.75	4.8	3.9	24.9
6/10/2019 3:00	8	8	8	29.71	4.9	3.9	25.2
6/10/2019 3:10	8	8	8	31.42	0.9	0.8	0.4
6/10/2019 3:20	8	8	8	31.7	4.8	3.9	0.5
6/10/2019 3:30	8	8	8	30.93	5	4.1	24.7
6/10/2019 3:40	8	8	8	30.23	4.9	3.8	25
6/10/2019 3:50	8	8	8	29.47	3.4	3.3	25.3
6/10/2019 4:00	8	8	8	30.78	0.9	0.8	3.7
6/10/2019 4:10	8	8	8	32.03	3.9	3.4	0.4
6/10/2019 4:20	8	8	8	31.15	4.9	3.8	24.7
6/10/2019 4:30	8	8	8	30.14	5	3.8	25.1
6/10/2019 4:40	8	8	8	30.51	1	0.9	25.2
6/10/2019 4:50	8	8	8	32.12	4.6	3.8	0.4
6/10/2019 5:00	8	8	8	30.9	5	3.8	24.8
6/10/2019 5:10	8	8	8	29.65	4.8	3.8	25.2

6/10/2019 5:20	8	8	8	30.57	0.9	0.8	25
6/10/2019 5:30	8	8	8	31.73	1	0.8	0.5
6/10/2019 5:40	8	8	8	31.54	4.8	3.9	23.7
6/10/2019 5:50	8	8	8	30.84	4.7	3.8	24.9
6/10/2019 6:00	8	8	8	30.05	5	3.8	25
6/10/2019 6:10	8	8	8	30.05	2.7	2.3	25.2
6/10/2019 6:20	8	8	8	31.67	1	0.8	0.4
6/10/2019 6:30	8	8	8	31.45	4.8	3.9	24.1
6/10/2019 6:40	8	8	8	30.47	5.1	3.9	25
6/10/2019 6:50	8	8	8	29.77	3.5	3.2	25.3
6/10/2019 7:00	8	8	8	31.15	0.9	0.8	0.4
6/10/2019 7:10	8	8	8	32.09	5	4.2	0.4
6/10/2019 7:20	8	8	8	31.57	5	3.8	23.4
6/10/2019 7:30	8	8	8	30.93	5	3.9	24.7
6/10/2019 7:40	8	8	8	30.23	5	3.8	25
6/10/2019 7:50	8	8	8	30.23	2.6	2.3	25.2
6/10/2019 8:00	8	8	8	32.03	1	0.8	0.4
6/10/2019 8:10	8	8	8	30.9	4.8	3.8	24.8
6/10/2019 8:20	8	8	8	29.74	4.9	3.8	25.2
6/10/2019 8:30	8	8	8	31.09	0.9	0.8	1.8
6/10/2019 8:40	8	8	8	31.88	4.8	3.8	0.4
6/10/2019 8:50	8	8	8	31.18	4.9	3.9	24.4
6/10/2019 9:00	8	8	8	30.47	4.7	3.8	24.9
6/10/2019 9:10	8	8	8	29.77	4.8	3.8	25.2
6/10/2019 9:20	8	8	8	30.02	2.7	2.4	25.2
6/10/2019 9:30	8	8	8	31.7	1	0.8	0.4
6/10/2019 9:40	8	8	8	31.18	4.8	3.8	24.6
6/10/2019 9:50	8	8	8	30.11	5.1	3.7	25.1
6/10/2019 10:00	8	8	8	31.12	1	0.8	4.9
6/10/2019 10:10	8	8	8	31.7	4.9	3.9	0.5
6/10/2019 10:20	8	8	8	30.69	4.8	3.9	24.9
6/10/2019 10:30	8	8	8	29.8	4.9	3.9	25.2
6/10/2019 10:40	8	8	8	30.51	1.1	0.8	25
6/10/2019 10:50	8	8	8	31.7	1.1	0.7	0.4
6/10/2019 11:00	8	8	8	31.63	4.7	3.9	3.4
6/10/2019 11:10	8	8	8	30.69	4.9	3.9	24.8
6/10/2019 11:20	8	8	8	29.71	4.7	3.8	25.2
6/10/2019 11:30	8	8	8	31.09	0.9	0.8	3.5
6/10/2019 11:40	8	8	8	31.7	5	3.9	0.5
6/10/2019 11:50	8	8	8	30.69	4.8	3.9	24.9
6/10/2019 12:00	8	8	8	29.62	4.9	3.8	25.2
6/10/2019 12:10	8	8	8	31.09	0.9	0.8	1.4
6/10/2019 12:20	8	8	8	31.94	4.9	3.8	0.4
6/10/2019 12:30	8	8	8	31.18	4.8	3.8	24.6
6/10/2019 12:40	8	8	8	30.29	4.9	3.8	25
6/10/2019 12:50	8	8	8	29.56	4.9	3.8	25.2
6/10/2019 13:00	8	8	8	31.12	0.9	0.9	0.8

6/10/2019 13:10	8	8	8	31.6	4.9	3.9	0.5
6/10/2019 13:20	8	8	8	30.57	4.9	3.8	25
6/10/2019 13:30	8	8	8	30.29	2.2	1.9	25.1
6/10/2019 13:40	8	8	8	32.06	1	0.8	0.4
6/10/2019 13:50	8	8	8	30.96	5	3.8	24.9
6/10/2019 14:00	8	8	8	29.89	4.8	3.9	25.2
6/10/2019 14:10	8	8	8	30.54	1.1	0.8	25
6/10/2019 14:20	8	8	8	31.88	1	0.8	0.4
6/10/2019 14:30	8	8	8	31.33	4.9	4	24.3
6/10/2019 14:40	8	8	8	30.29	4.9	3.8	25.1
6/10/2019 14:50	8	8	8	30.32	2.1	1.9	25.1
6/10/2019 15:00	8	8	8	32.12	4.4	3.9	0.3
6/10/2019 15:10	8	8	8	30.84	4.8	3.9	24.8
6/10/2019 15:20	8	8	8	29.86	4.8	3.9	25.2
6/10/2019 15:30	8	8	8	30.51	1.1	0.8	25
6/10/2019 15:40	8	8	8	31.85	1	0.8	0.4
6/10/2019 15:50	8	8	8	31.48	4.7	3.9	23.7
6/10/2019 16:00	8	8	8	30.54	4.9	3.9	24.9
6/10/2019 16:10	8	8	8	29.96	3.5	3.2	25.2
6/10/2019 16:20	8	8	8	31.88	0.9	0.8	0.4
6/10/2019 16:30	8	8	8	30.84	5	3.9	24.9
6/10/2019 16:40	8	8	8	30.14	3.2	2.9	25.2
6/10/2019 16:50	8	8	8	32	4.9	3.8	0.4
6/10/2019 17:00	8	8	8	30.66	4.8	3.8	24.9
6/10/2019 17:10	8	8	8	29.53	4.9	3.9	25.2
6/10/2019 17:20	8	8	8	30.72	1	0.8	4.2
6/10/2019 17:30	8	8	8	31.79	0.9	0.8	0.4
6/10/2019 17:40	8	8	8	31.48	5	3.8	23.8
6/10/2019 17:50	8	8	8	30.51	4.9	3.8	25
6/10/2019 18:00	8	8	8	30.35	2.1	1.8	25.1
6/10/2019 18:10	8	8	8	32.03	4.6	3.9	0.4
6/10/2019 18:20	8	8	8	30.9	4.9	3.8	24.8
6/10/2019 18:30	8	8	8	29.71	4.9	3.8	25.2
6/10/2019 18:40	8	8	8	30.69	1.1	0.8	25
6/10/2019 18:50	8	8	8	31.97	1	0.7	0.3
6/10/2019 19:00	8	8	8	31.42	5	3.9	24.2
6/10/2019 19:10	8	8	8	30.41	4.6	3.8	24.9
6/10/2019 19:20	8	8	8	29.56	4.8	3.8	25.2
6/10/2019 19:30	8	8	8	31.18	0.9	0.8	0.7
6/10/2019 19:40	8	8	8	31.73	4.9	3.9	0.5
6/10/2019 19:50	8	8	8	30.66	4.7	3.9	25
6/10/2019 20:00	8	8	8	30.2	3.1	2.7	25.2
6/10/2019 20:10	8	8	8	32.18	4.5	3.8	0.4
6/10/2019 20:20	8	8	8	30.93	4.9	3.9	24.8
6/10/2019 20:30	8	8	8	29.77	4.8	3.8	25.2
6/10/2019 20:40	8	8	8	31.09	0.8	0.8	1.6
6/10/2019 20:50	8	8	8	31.76	4.9	3.9	0.5

6/10/2019 21:00	8	8	8	30.72	4.9	3.9	24.8
6/10/2019 21:10	8	8	8	29.74	4.9	3.7	25.2
6/10/2019 21:20	8	8	8	31.51	0.9	0.8	0.4
6/10/2019 21:30	8	8	8	31.27	4.9	3.9	24.5
6/10/2019 21:40	8	8	8	30.11	4.9	4	25.1
6/10/2019 21:50	8	8	8	30.69	1	0.8	25.1
6/10/2019 22:00	8	8	8	32.12	1.4	0.8	0.4
6/10/2019 22:10	8	8	8	31.09	5	3.8	24.7
6/10/2019 22:20	8	8	8	29.86	5	3.8	25.1
6/10/2019 22:30	8	8	8	30.63	1	0.7	25
6/10/2019 22:40	8	8	8	31.94	0.9	0.8	0.3
6/10/2019 22:50	8	8	8	31.3	4.9	3.8	24.6
6/10/2019 23:00	8	8	8	30.11	4.9	3.8	25.1
6/10/2019 23:10	8	8	8	30.17	1.8	1.6	25.2
6/10/2019 23:20	8	8	8	31.79	1.1	0.8	0.4
6/10/2019 23:30	8	8	8	31.3	4.9	3.9	24.5
6/10/2019 23:40	8	8	8	30.17	5	3.7	25
6/10/2019 23:50	8	8	8	29.71	3.6	3.2	25.3
6/11/2019 0:00	8	8	8	31.3	1	0.8	0.4
6/11/2019 0:10	8	8	8	31.54	4.9	3.9	23.7
6/11/2019 0:20	8	8	8	30.35	4.8	3.8	25
6/11/2019 0:30	8	8	8	30.38	1.6	1.3	25.1
6/11/2019 0:40	8	8	8	32.06	5	4.1	0.4
6/11/2019 0:50	8	8	8	31.09	4.9	3.8	24.7
6/11/2019 1:00	8	8	8	30.11	4.9	3.8	25
6/11/2019 1:10	8	8	8	30.02	2.8	2.5	25.2
6/11/2019 1:20	8	8	8	31.79	0.9	0.8	0.4
6/11/2019 1:30	8	8	8	31.45	4.8	3.9	24.3
6/11/2019 1:40	8	8	8	30.17	4.9	3.9	25.1
6/11/2019 1:50	8	8	8	30.66	1.2	0.8	25.1
6/11/2019 2:00	8	8	8	31.97	5	3.9	0.4
6/11/2019 2:10	8	8	8	30.78	4.8	3.9	24.8
6/11/2019 2:20	8	8	8	29.68	4.8	3.8	25.2
6/11/2019 2:30	8	8	8	31.42	1.1	0.6	0.3
6/11/2019 2:40	8	8	8	31.39	4.9	3.9	24.1
6/11/2019 2:50	8	8	8	30.32	4.9	3.9	25
6/11/2019 3:00	8	8	8	30.32	2.1	1.7	25.2
6/11/2019 3:10	8	8	8	32.06	1.1	0.8	0.3
6/11/2019 3:20	8	8	8	31.3	4.9	3.8	24.5
6/11/2019 3:30	8	8	8	30.23	4.7	3.9	25
6/11/2019 3:40	8	8	8	30.2	2.2	1.9	25.1
6/11/2019 3:50	8	8	8	31.79	0.9	0.8	0.4
6/11/2019 4:00	8	8	8	31.51	4.9	3.8	23.9
6/11/2019 4:10	8	8	8	30.47	5	3.9	25
6/11/2019 4:20	8	8	8	30.54	1.1	0.8	25.1
6/11/2019 4:30	8	8	8	31.79	4.8	3.9	0.5
6/11/2019 4:40	8	8	8	30.51	4.7	3.8	25

6/11/2019 4:50	8	8	8	30.38	1.9	1.6	25.1
6/11/2019 5:00	8	8	8	32.03	4.8	3.9	0.4
6/11/2019 5:10	8	8	8	30.87	4.9	4	24.8
6/11/2019 5:20	8	8	8	29.71	4.9	3.9	25.1
6/11/2019 5:30	8	8	8	30.81	1	0.8	3.1
6/11/2019 5:40	8	8	8	32.03	4.9	3.9	0.4
6/11/2019 5:50	8	8	8	30.87	4.8	3.8	24.8
6/11/2019 6:00	8	8	8	29.8	4.8	3.9	25.2
6/11/2019 6:10	8	8	8	31.09	1	0.8	2.6
6/11/2019 6:20	8	8	8	31.48	4.9	3.9	24
6/11/2019 6:30	8	8	8	30.23	4.5	3.7	25
6/11/2019 6:40	8	8	8	30.87	0.9	0.8	24.9
6/11/2019 6:50	8	8	8	31.85	4.9	3.8	0.5
6/11/2019 7:00	8	8	8	30.81	5	3.8	24.8
6/11/2019 7:10	8	8	8	29.86	4.8	3.9	25.1
6/11/2019 7:20	8	8	8	30.29	1.1	0.9	25
6/11/2019 7:30	8	8	8	31.42	0.9	0.8	0.4
6/11/2019 7:40	8	8	8	31.76	4.9	3.9	0.5
6/11/2019 7:50	8	8	8	30.84	4.8	3.9	24.8
6/11/2019 8:00	8	8	8	29.96	4.7	3.9	25.1
6/11/2019 8:10	8	8	8	30.78	0.9	0.8	25
6/11/2019 8:20	8	8	8	32	4.9	3.8	0.4
6/11/2019 8:30	8	8	8	30.84	4.8	3.8	24.8
6/11/2019 8:40	8	8	8	29.86	4.7	3.8	25
6/11/2019 8:50	8	8	8	29.59	3.5	3.2	25.2
6/11/2019 9:00	8	8	8	30.93	0.9	0.8	1.2
6/11/2019 9:10	8	8	8	31.94	4.7	3.9	0.4
6/11/2019 9:20	8	8	8	30.81	5	3.9	24.8
6/11/2019 9:30	8	8	8	29.77	4.9	3.9	25.2
6/11/2019 9:40	8	8	8	31.21	0.9	0.8	0.4
6/11/2019 9:50	8	8	8	31.63	4.8	3.9	23.5
6/11/2019 10:00	8	8	8	30.54	4.9	3.9	24.8
6/11/2019 10:10	8	8	8	29.71	4.9	3.8	25.2
6/11/2019 10:20	8	8	8	30.78	0.9	0.7	3.2
6/11/2019 10:30	8	8	8	31.97	4.8	3.8	0.4
6/11/2019 10:40	8	8	8	30.9	5	3.9	24.9
6/11/2019 10:50	8	8	8	29.8	3.5	3.3	25.3
6/11/2019 11:00	8	8	8	31.6	0.9	0.8	0.4
6/11/2019 11:10	8	8	8	31.21	4.8	3.9	24.6
6/11/2019 11:20	8	8	8	30.17	4.9	3.8	25
6/11/2019 11:30	8	8	8	30.47	1	0.8	25.1
6/11/2019 11:40	8	8	8	31.73	1	0.8	0.4
6/11/2019 11:50	8	8	8	31.67	4.8	3.9	0.6
6/11/2019 12:00	8	8	8	30.99	4.8	3.8	24.6
6/11/2019 12:10	8	8	8	30.17	4.9	3.8	25.1
6/11/2019 12:20	8	8	8	30.51	1.2	0.9	25.1
6/11/2019 12:30	8	8	8	31.94	4.8	3.8	0.4

6/11/2019 12:40	8	8	8	30.72	4.8	3.8	25
6/11/2019 12:50	8	8	8	29.89	3.5	3.1	25.2
6/11/2019 13:00	8	8	8	31.48	1.1	0.9	0.4
6/11/2019 13:10	8	8	8	31.42	4.9	3.8	24.1
6/11/2019 13:20	8	8	8	30.41	4.9	3.9	25
6/11/2019 13:30	8	8	8	29.74	3.4	3.2	25.2
6/11/2019 13:40	8	8	8	31.36	1	0.8	0.4
6/11/2019 13:50	8	8	8	31.57	5	3.9	23.6
6/11/2019 14:00	8	8	8	30.44	4.8	3.7	24.9
6/11/2019 14:10	8	8	8	29.59	3.3	3.1	25.2
6/11/2019 14:20	8	8	8	31.27	0.9	0.8	0.4
6/11/2019 14:30	8	8	8	31.7	4.9	3.8	6.3
6/11/2019 14:40	8	8	8	30.72	4.9	3.9	24.8
6/11/2019 14:50	8	8	8	29.68	3.6	3.4	25.2
6/11/2019 15:00	8	8	8	31.73	1	0.8	0.4
6/11/2019 15:10	8	8	8	31.21	4.8	3.8	24.5
6/11/2019 15:20	8	8	8	30.05	4.9	3.9	25.1
6/11/2019 15:30	8	8	8	30.93	1	0.8	3.2
6/11/2019 15:40	8	8	8	31.7	4.9	3.9	0.5
6/11/2019 15:50	8	8	8	30.69	4.7	3.9	24.9
6/11/2019 16:00	8	8	8	29.65	4.9	3.9	25.2
6/11/2019 16:10	8	8	8	30.35	1.2	0.8	25
6/11/2019 16:20	8	8	8	31.48	0.9	0.8	0.4
6/11/2019 16:30	8	8	8	31.6	4.9	3.9	0.5
6/11/2019 16:40	8	8	8	30.84	4.8	3.9	24.8
6/11/2019 16:50	8	8	8	29.71	4.8	3.8	25.1
6/11/2019 17:00	8	8	8	31.18	0.9	0.8	1.3
6/11/2019 17:10	8	8	8	31.51	4.7	3.9	23.7
6/11/2019 17:20	8	8	8	30.29	5	3.9	25
6/11/2019 17:30	8	8	8	30.51	1.1	0.9	25.1
6/11/2019 17:40	8	8	8	32.09	4.9	3.9	0.4
6/11/2019 17:50	8	8	8	31.15	4.9	3.8	24.5
6/11/2019 18:00	8	8	8	30.26	4.8	3.8	25
6/11/2019 18:10	8	8	8	30.11	2.7	2.4	25.2
6/11/2019 18:20	8	8	8	31.76	1	0.8	0.4
6/11/2019 18:30	8	8	8	31.27	4.9	3.8	24.6
6/11/2019 18:40	8	8	8	30.14	4.7	3.8	25.1
6/11/2019 18:50	8	8	8	30.72	1	0.9	25.1
6/11/2019 19:00	8	8	8	31.97	4.8	3.9	0.4
6/11/2019 19:10	8	8	8	30.78	4.9	3.8	24.9
6/11/2019 19:20	8	8	8	29.83	5	3.9	25.1
6/11/2019 19:30	8	8	8	30.54	1.1	0.8	25
6/11/2019 19:40	8	8	8	31.82	1.1	0.8	0.3
6/11/2019 19:50	8	8	8	31.54	4.8	3.9	23.6
6/11/2019 20:00	8	8	8	30.78	4.9	3.8	24.8
6/11/2019 20:10	8	8	8	29.89	4.8	3.8	25
6/11/2019 20:20	8	8	8	30.14	2.2	2.1	25.2

6/11/2019 20:30	8	8	8	31.54	1	0.8	0.4
6/11/2019 20:40	8	8	8	31.6	4.8	3.8	9.3
6/11/2019 20:50	8	8	8	30.75	4.9	3.9	24.8
6/11/2019 21:00	8	8	8	30.02	4.9	3.8	25.1
6/11/2019 21:10	8	8	8	30.14	2.2	1.8	25.1
6/11/2019 21:20	8	8	8	31.7	0.9	0.8	0.4
6/11/2019 21:30	8	8	8	31.27	4.9	3.8	24.5
6/11/2019 21:40	8	8	8	30.26	4.9	3.9	25.1
6/11/2019 21:50	8	8	8	30.14	2	1.7	25.2
6/11/2019 22:00	8	8	8	31.51	1	0.8	0.4
6/11/2019 22:10	8	8	8	31.76	5	3.9	0.5
6/11/2019 22:20	8	8	8	30.99	5	3.9	24.8
6/11/2019 22:30	8	8	8	30.14	4.4	3.8	25
6/11/2019 22:40	8	8	8	30.35	1.6	1.4	25.2
6/11/2019 22:50	8	8	8	32.09	0.7	0.7	0.4
6/11/2019 23:00	8	8	8	31.09	4.8	3.9	24.7
6/11/2019 23:10	8	8	8	29.99	4.9	3.9	25.2
6/11/2019 23:20	8	8	8	30.75	1.1	0.8	25
6/11/2019 23:30	8	8	8	31.94	1	0.8	0.4
6/11/2019 23:40	8	8	8	31.54	5	3.9	23.7
6/11/2019 23:50	8	8	8	30.72	4.7	3.9	24.8
6/12/2019 0:00	8	8	8	30.11	4.8	3.9	25.1
6/12/2019 0:10	8	8	8	29.62	3.4	3.2	25.2
6/12/2019 0:20	8	8	8	31.18	0.9	0.8	0.4
6/12/2019 0:30	8	8	8	31.73	4.8	3.8	0.5
6/12/2019 0:40	8	8	8	30.54	4.9	3.8	25
6/12/2019 0:50	8	8	8	29.68	3.5	3.3	25.3
6/12/2019 1:00	8	8	8	31.36	1	0.8	0.4
6/12/2019 1:10	8	8	8	31.76	4.8	3.9	0.5
6/12/2019 1:20	8	8	8	30.87	4.5	3.9	24.7
6/12/2019 1:30	8	8	8	30.29	4.7	3.8	25
6/12/2019 1:40	8	8	8	29.56	4.8	3.9	25.2
6/12/2019 1:50	8	8	8	30.69	1.1	0.8	25
6/12/2019 2:00	8	8	8	32.12	2.2	1.7	0.5
6/12/2019 2:10	8	8	8	31.12	4.9	3.8	24.7
6/12/2019 2:20	8	8	8	29.89	4.9	3.8	25.2
6/12/2019 2:30	8	8	8	31.02	0.9	0.8	3.8
6/12/2019 2:40	8	8	8	31.6	4.9	3.8	15.9
6/12/2019 2:50	8	8	8	30.51	4.8	3.8	25
6/12/2019 3:00	8	8	8	29.5	3.6	3.2	25.2
6/12/2019 3:10	8	8	8	30.87	1	0.8	3.1
6/12/2019 3:20	8	8	8	31.94	0.9	0.8	0.4
6/12/2019 3:30	8	8	8	31.6	4.7	3.9	23.6
6/12/2019 3:40	8	8	8	30.78	4.9	3.9	24.8
6/12/2019 3:50	8	8	8	30.23	4.8	3.9	25
6/12/2019 4:00	8	8	8	29.83	3.3	3	25.2
6/12/2019 4:10	8	8	8	31.54	0.9	0.8	0.4

6/12/2019 4:20	8	8	8	31.42	4.9	3.9	24.3
6/12/2019 4:30	8	8	8	30.14	4.7	3.8	25.1
6/12/2019 4:40	8	8	8	30.08	2.4	2	25.1
6/12/2019 4:50	8	8	8	31.63	1.1	0.8	0.4
6/12/2019 5:00	8	8	8	31.57	4.8	3.9	23.5
6/12/2019 5:10	8	8	8	30.69	4.8	3.8	24.9
6/12/2019 5:20	8	8	8	29.83	4.6	3.8	25.1
6/12/2019 5:30	8	8	8	30.11	1.6	1.4	25.1
6/12/2019 5:40	8	8	8	31.51	1	0.8	0.4
6/12/2019 5:50	8	8	8	31.6	4.8	3.8	1.7
6/12/2019 6:00	8	8	8	30.87	4.9	3.8	24.7
6/12/2019 6:10	8	8	8	30.08	5.1	3.9	25.1
6/12/2019 6:20	8	8	8	29.68	3.5	3.1	25.2
6/12/2019 6:30	8	8	8	31.15	0.9	0.8	0.4
6/12/2019 6:40	8	8	8	32.06	4.9	3.8	0.4
6/12/2019 6:50	8	8	8	31.45	4.7	3.9	24.3
6/12/2019 7:00	8	8	8	30.54	4.9	3.9	24.9
6/12/2019 7:10	8	8	8	29.71	4.7	3.8	25.2
6/12/2019 7:20	8	8	8	30.32	1.1	0.8	25.2
6/12/2019 7:30	8	8	8	32.09	0.9	0.8	0.4
6/12/2019 7:40	8	8	8	30.84	4.7	3.8	24.8
6/12/2019 7:50	8	8	8	29.74	4.8	3.8	25.2
6/12/2019 8:00	8	8	8	31.33	0.9	0.8	0.4
6/12/2019 8:10	8	8	8	31.73	4.9	3.8	0.6
6/12/2019 8:20	8	8	8	30.63	4.8	3.8	24.9
6/12/2019 8:30	8	8	8	29.8	4.7	3.8	25.1
6/12/2019 8:40	8	8	8	30.26	1.2	0.8	25
6/12/2019 8:50	8	8	8	31.42	1.1	0.8	0.4
6/12/2019 9:00	8	8	8	31.6	4.9	3.8	0.6
6/12/2019 9:10	8	8	8	30.57	4.7	3.8	25
6/12/2019 9:20	8	8	8	29.65	3.5	3.2	25.3
6/12/2019 9:30	8	8	8	31.3	1	0.8	0.4
6/12/2019 9:40	8	8	8	31.82	4.9	3.9	0.5
6/12/2019 9:50	8	8	8	30.9	4.9	3.8	24.7
6/12/2019 10:00	8	8	8	29.86	4.9	3.8	25.1
6/12/2019 10:10	8	8	8	30.66	1.1	0.8	25.1
6/12/2019 10:20	8	8	8	32.09	2.7	2.1	0.4
6/12/2019 10:30	8	8	8	31.12	5	3.9	24.6
6/12/2019 10:40	8	8	8	30.05	4.9	3.8	25
6/12/2019 10:50	8	8	8	29.71	3.4	3	25.2
6/12/2019 11:00	8	8	8	30.87	1.1	0.8	1.5
6/12/2019 11:10	8	8	8	32.03	4.8	3.8	0.4
6/12/2019 11:20	8	8	8	30.96	4.8	3.9	24.7
6/12/2019 11:30	8	8	8	29.77	4.9	3.8	25.2
6/12/2019 11:40	8	8	8	31.3	0.9	0.8	0.4
6/12/2019 11:50	8	8	8	31.48	4.9	3.8	23.9
6/12/2019 12:00	8	8	8	30.35	4.9	3.8	24.9

6/12/2019 12:10	8	8	8	29.53	3.7	3.3	25.2
6/12/2019 12:20	8	8	8	31.18	1	0.7	0.4
6/12/2019 12:30	8	8	8	31.7	5	3.9	0.5
6/12/2019 12:40	8	8	8	30.84	4.9	3.9	24.8
6/12/2019 12:50	8	8	8	29.8	5	3.8	25.1
6/12/2019 13:00	8	8	8	31.05	0.9	0.8	2
6/12/2019 13:10	8	8	8	31.63	4.8	3.9	0.5
6/12/2019 13:20	8	8	8	30.63	4.9	3.9	25
6/12/2019 13:30	8	8	8	29.56	4.9	3.8	25.2
6/12/2019 13:40	8	8	8	30.75	0.9	0.8	3.2
6/12/2019 13:50	8	8	8	32.12	4.9	3.9	0.4
6/12/2019 14:00	8	8	8	31.27	4.7	3.9	24.4
6/12/2019 14:10	8	8	8	30.23	4.8	3.8	25
6/12/2019 14:20	8	8	8	30.05	2.9	2.6	25.2
6/12/2019 14:30	8	8	8	31.73	1.1	0.8	0.4
6/12/2019 14:40	8	8	8	31.15	5	3.8	24.5
6/12/2019 14:50	8	8	8	30.17	4.9	3.8	25
6/12/2019 15:00	8	8	8	29.89	3	2.8	25.2
6/12/2019 15:10	8	8	8	31.02	1	0.7	0.3
6/12/2019 15:20	8	8	8	32	4.9	3.9	0.4
6/12/2019 15:30	8	8	8	31.09	4.7	3.9	24.7
6/12/2019 15:40	8	8	8	30.05	5.2	3.8	25.1
6/12/2019 15:50	8	8	8	30.54	1.2	0.8	25.1
6/12/2019 16:00	8	8	8	32.03	4.8	3.9	0.4
6/12/2019 16:10	8	8	8	30.96	4.9	3.9	24.8
6/12/2019 16:20	8	8	8	30.02	4.8	3.8	25.1
6/12/2019 16:30	8	8	8	30.26	1.6	1.2	25
6/12/2019 16:40	8	8	8	31.39	1	0.8	0.3
6/12/2019 16:50	8	8	8	31.88	4.6	3.9	0.5
6/12/2019 17:00	8	8	8	31.15	4.9	3.9	24.5
6/12/2019 17:10	8	8	8	30.32	4.9	3.9	25
6/12/2019 17:20	8	8	8	29.77	3.5	3	25.2
6/12/2019 17:30	8	8	8	31.27	0.9	0.8	0.3
6/12/2019 17:40	8	8	8	31.67	4.9	3.8	0.6
6/12/2019 17:50	8	8	8	30.63	4.9	3.9	24.9
6/12/2019 18:00	8	8	8	29.62	4.9	3.8	25.2
6/12/2019 18:10	8	8	8	31.02	1	0.8	1.3
6/12/2019 18:20	8	8	8	32.12	2.9	2.4	0.4
6/12/2019 18:30	8	8	8	31.33	4.8	3.8	24.5
6/12/2019 18:40	8	8	8	30.29	4.8	3.8	25
6/12/2019 18:50	8	8	8	30.17	2.4	2.2	25.2
6/12/2019 19:00	8	8	8	31.73	1	0.8	0.4
6/12/2019 19:10	8	8	8	31.27	4.9	3.9	24.4
6/12/2019 19:20	8	8	8	30.2	5	3.8	25.1
6/12/2019 19:30	8	8	8	30.02	2.7	2.5	25.2
6/12/2019 19:40	8	8	8	31.51	1	0.8	0.4
6/12/2019 19:50	8	8	8	31.67	4.9	3.9	0.5

6/12/2019 20:00	8	8	8	31.02	4.8	3.7	24.7
6/12/2019 20:10	8	8	8	30.26	4.7	3.8	25
6/12/2019 20:20	8	8	8	29.68	3.6	3.3	25.2
6/12/2019 20:30	8	8	8	31.12	1	0.8	0.3
6/12/2019 20:40	8	8	8	31.88	5.2	3.9	0.5
6/12/2019 20:50	8	8	8	31.02	4.9	3.8	24.7
6/12/2019 21:00	8	8	8	30.02	4.9	3.8	25.1
6/12/2019 21:10	8	8	8	29.38	3.4	3.3	25.2
6/12/2019 21:20	8	8	8	30.51	1.1	0.8	25
6/12/2019 21:30	8	8	8	31.7	1.2	0.8	0.4
6/12/2019 21:40	8	8	8	31.51	4.9	3.8	23.8
6/12/2019 21:50	8	8	8	30.54	4.7	3.8	24.9
6/12/2019 22:00	8	8	8	29.62	4.9	3.9	25.2
6/12/2019 22:10	8	8	8	30.78	0.9	0.7	3.8
6/12/2019 22:20	8	8	8	32.06	1.2	0.8	0.3
6/12/2019 22:30	8	8	8	31.33	5	3.8	24.2
6/12/2019 22:40	8	8	8	30.54	4.8	3.8	24.8
6/12/2019 22:50	8	8	8	29.65	4.9	3.8	25.2
6/12/2019 23:00	8	8	8	30.32	1.3	1	25.1
6/12/2019 23:10	8	8	8	31.67	0.9	0.8	0.4
6/12/2019 23:20	8	8	8	31.6	5.1	3.8	20
6/12/2019 23:30	8	8	8	30.81	5	3.9	24.9
6/12/2019 23:40	8	8	8	29.86	4.8	3.8	25.1
6/12/2019 23:50	8	8	8	30.47	1	0.9	25.1
6/13/2019 0:00	8	8	8	31.97	0.9	0.8	0.4
6/13/2019 0:10	8	8	8	31.21	4.9	3.8	24.5
6/13/2019 0:20	8	8	8	30.38	4.7	3.9	25
6/13/2019 0:30	8	8	8	29.5	4.9	3.9	25.2
6/13/2019 0:40	8	8	8	30.51	1.2	0.8	25
6/13/2019 0:50	8	8	8	31.57	1	0.8	0.4
6/13/2019 1:00	8	8	8	31.7	4.8	3.9	0.5
6/13/2019 1:10	8	8	8	30.9	4.8	3.9	24.8
6/13/2019 1:20	8	8	8	30.2	5	3.8	25
6/13/2019 1:30	8	8	8	30.23	1.9	1.6	25.1
6/13/2019 1:40	8	8	8	31.51	0.9	0.8	0.3
6/13/2019 1:50	8	8	8	31.85	4.7	3.8	0.5
6/13/2019 2:00	8	8	8	31.27	4.6	3.9	24.5
6/13/2019 2:10	8	8	8	30.66	5.1	3.8	24.9
6/13/2019 2:20	8	8	8	30.02	4.8	3.9	25.1
6/13/2019 2:30	8	8	8	29.68	3.5	3.2	25.2
6/13/2019 2:40	8	8	8	31.39	0.9	0.8	0.4
6/13/2019 2:50	8	8	8	31.63	4.9	3.8	0.6
6/13/2019 3:00	8	8	8	30.69	4.8	3.9	24.9
6/13/2019 3:10	8	8	8	29.71	4.9	3.9	25.2
6/13/2019 3:20	8	8	8	30.54	1.2	0.8	25
6/13/2019 3:30	8	8	8	32.03	1	0.7	0.4
6/13/2019 3:40	8	8	8	31.09	4.9	3.9	24.7

6/13/2019 3:50	8	8	8	29.99	4.9	3.8	25.1
6/13/2019 4:00	8	8	8	30.05	2.4	2.1	25.2
6/13/2019 4:10	8	8	8	31.12	1	0.8	0.4
6/13/2019 4:20	8	8	8	32.09	0.6	0.8	0.4
6/13/2019 4:30	8	8	8	31.42	4.9	3.9	23.9
6/13/2019 4:40	8	8	8	30.63	4.7	3.9	24.9
6/13/2019 4:50	8	8	8	29.74	4.8	3.8	25.2
6/13/2019 5:00	8	8	8	30.44	1.1	0.8	25
6/13/2019 5:10	8	8	8	31.88	1.1	0.8	0.4
6/13/2019 5:20	8	8	8	31.7	4.9	3.9	22.3
6/13/2019 5:30	8	8	8	30.9	4.9	3.8	24.7
6/13/2019 5:40	8	8	8	30.23	5.2	3.9	25
6/13/2019 5:50	8	8	8	29.53	1.8	1.8	25.3
6/13/2019 6:00	8	8	8	30.93	1	0.8	3.7
6/13/2019 6:10	8	8	8	32.03	4.7	3.9	0.4
6/13/2019 6:20	8	8	8	31.21	4.6	3.9	24.4
6/13/2019 6:30	8	8	8	30.29	4.8	3.8	25
6/13/2019 6:40	8	8	8	29.38	4.8	3.9	25.2
6/13/2019 6:50	8	8	8	30.51	1	0.7	25
6/13/2019 7:00	8	8	8	31.67	0.9	0.8	0.4
6/13/2019 7:10	8	8	8	31.57	4.9	3.9	23.7
6/13/2019 7:20	8	8	8	30.66	4.6	3.9	24.9
6/13/2019 7:30	8	8	8	29.77	4.8	3.9	25.1
6/13/2019 7:40	8	8	8	30.47	1.1	0.8	25
6/13/2019 7:50	8	8	8	31.82	1	0.8	0.4
6/13/2019 8:00	8	8	8	31.42	4.8	3.8	24
6/13/2019 8:10	8	8	8	30.54	4.9	3.8	24.9
6/13/2019 8:20	8	8	8	29.8	4.8	3.8	25.2
6/13/2019 8:30	8	8	8	30.47	1.1	0.8	25.1
6/13/2019 8:40	8	8	8	31.6	1	0.8	0.4
6/13/2019 8:50	8	8	8	31.76	4.8	3.8	0.5
6/13/2019 9:00	8	8	8	31.18	4.8	3.8	24.6
6/13/2019 9:10	8	8	8	30.32	4.9	3.9	24.9
6/13/2019 9:20	8	8	8	29.53	4.7	3.8	25.2
6/13/2019 9:30	8	8	8	31.02	0.9	0.8	1.8
6/13/2019 9:40	8	8	8	32	4.9	3.8	0.4
6/13/2019 9:50	8	8	8	30.84	4.8	3.8	24.8
6/13/2019 10:00	8	8	8	29.71	4.9	3.9	25.2
6/13/2019 10:10	8	8	8	30.51	1.2	0.9	25.1
6/13/2019 10:20	8	8	8	31.79	1	0.8	0.4
6/13/2019 10:30	8	8	8	31.57	4.8	3.8	15.6
6/13/2019 10:40	8	8	8	30.93	4.8	3.9	24.8
6/13/2019 10:50	8	8	8	30.08	4.9	3.8	25.1
6/13/2019 11:00	8	8	8	29.74	3.5	3.2	25.2
6/13/2019 11:10	8	8	8	31.27	0.9	0.8	0.4
6/13/2019 11:20	8	8	8	31.6	4.8	3.9	23.6
6/13/2019 11:30	8	8	8	30.47	4.8	3.9	24.9

6/13/2019 11:40	8	8	8	29.53	4.8	3.8	25.3
6/13/2019 11:50	8	8	8	30.69	1	0.8	3.4
6/13/2019 12:00	8	8	8	31.73	0.9	0.8	0.4
6/13/2019 12:10	8	8	8	31.51	5.2	3.8	23.8
6/13/2019 12:20	8	8	8	30.63	4.7	3.8	24.9
6/13/2019 12:30	8	8	8	29.65	5	3.9	25.2
6/13/2019 12:40	8	8	8	30.69	1	0.8	25
6/13/2019 12:50	8	8	8	32	1	0.8	0.3
6/13/2019 13:00	8	8	8	31.33	4.8	3.8	24.1
6/13/2019 13:10	8	8	8	30.57	4.9	3.9	25
6/13/2019 13:20	8	8	8	29.56	1.9	2.3	25.2
6/13/2019 13:30	8	8	8	30.84	1	0.8	2.9
6/13/2019 13:40	8	8	8	32.03	1	0.8	0.4
6/13/2019 13:50	8	8	8	31.39	5	3.8	23.8
6/13/2019 14:00	8	8	8	30.81	4.8	3.9	24.7
6/13/2019 14:10	8	8	8	30.23	4.7	3.8	24.9
6/13/2019 14:20	8	8	8	29.56	4.7	3.8	25.2
6/13/2019 14:30	8	8	8	30.38	1.2	0.9	25
6/13/2019 14:40	8	8	8	31.36	1	0.8	0.3
6/13/2019 14:50	8	8	8	31.97	4.9	3.9	0.5
6/13/2019 15:00	8	8	8	31.09	4.9	3.9	24.7
6/13/2019 15:10	8	8	8	30.23	4.9	3.9	25
6/13/2019 15:20	8	8	8	29.68	3.5	3.2	25.2
6/13/2019 15:30	8	8	8	31.05	1	0.8	0.5
6/13/2019 15:40	8	8	8	32.06	4.9	3.9	0.4
6/13/2019 15:50	8	8	8	31.3	4.8	3.9	24.3
6/13/2019 16:00	8	8	8	30.35	4.8	3.9	24.9
6/13/2019 16:10	8	8	8	29.62	4.9	3.9	25.2
6/13/2019 16:20	8	8	8	30.9	0.9	0.8	1.8
6/13/2019 16:30	8	8	8	31.85	4.8	3.9	0.5
6/13/2019 16:40	8	8	8	30.9	4.8	3.8	24.7
6/13/2019 16:50	8	8	8	30.11	5.3	3.9	25.1
6/13/2019 17:00	8	8	8	30.26	1.6	1.3	25.1
6/13/2019 17:10	8	8	8	31.54	0.9	0.8	0.4
6/13/2019 17:20	8	8	8	31.79	4.9	3.9	0.5
6/13/2019 17:30	8	8	8	31.09	4.9	3.9	24.5
6/13/2019 17:40	8	8	8	30.44	4.9	3.8	25
6/13/2019 17:50	8	8	8	29.68	5.1	3.8	25.1
6/13/2019 18:00	8	8	8	30.51	1	0.8	25
6/13/2019 18:10	8	8	8	31.85	0.9	0.8	0.4
6/13/2019 18:20	8	8	8	31.12	4.6	3.9	24.6
6/13/2019 18:30	8	8	8	30.2	4.9	3.8	25.1
6/13/2019 18:40	8	8	8	30.11	2.6	2.4	25.2
6/13/2019 18:50	8	8	8	31.54	0.9	0.8	0.4
6/13/2019 19:00	8	8	8	31.88	5	3.9	0.5
6/13/2019 19:10	8	8	8	31.15	4.8	3.8	24.6
6/13/2019 19:20	8	8	8	30.38	4.7	3.9	24.9

6/13/2019 19:30	8	8	8	29.65	4.9	3.8	25.1
6/13/2019 19:40	8	8	8	30.57	1	0.9	25
6/13/2019 19:50	8	8	8	31.7	0.9	0.9	0.4
6/13/2019 20:00	8	8	8	31.7	4.9	3.9	0.5
6/13/2019 20:10	8	8	8	30.84	4.9	4	24.7
6/13/2019 20:20	8	8	8	29.89	5.1	3.9	25.1
6/13/2019 20:30	8	8	8	30.84	1.1	0.8	24.9
6/13/2019 20:40	8	8	8	32.12	1.9	1.4	0.4
6/13/2019 20:50	8	8	8	31.45	4.8	3.9	23.7
6/13/2019 21:00	8	8	8	30.84	4.8	3.9	24.9
6/13/2019 21:10	8	8	8	30.05	5	3.9	25
6/13/2019 21:20	8	8	8	29.38	3.4	3.1	25.2
6/13/2019 21:30	8	8	8	30.78	1	0.8	3.6
6/13/2019 21:40	8	8	8	32	0.9	0.8	0.4
6/13/2019 21:50	8	8	8	31.33	5	3.9	24.3
6/13/2019 22:00	8	8	8	30.38	4.8	3.8	25
6/13/2019 22:10	8	8	8	30.11	2.4	2.3	25.2
6/13/2019 22:20	8	8	8	31.76	0.9	0.8	0.3
6/13/2019 22:30	8	8	8	31.33	4.9	3.9	24.4
6/13/2019 22:40	8	8	8	30.51	5	3.9	24.9
6/13/2019 22:50	8	8	8	29.53	4.9	3.8	25.1
6/13/2019 23:00	8	8	8	30.72	0.9	0.9	3.1
6/13/2019 23:10	8	8	8	31.97	0.9	0.8	0.4
6/13/2019 23:20	8	8	8	31.36	4.6	3.8	24.2
6/13/2019 23:30	8	8	8	30.32	4.8	3.8	25.1
6/13/2019 23:40	8	8	8	29.68	3.8	3.2	25.2
6/13/2019 23:50	8	8	8	31.12	1.1	0.8	0.4
6/14/2019 0:00	8	8	8	32.09	5.2	4.2	0.4
6/14/2019 0:10	8	8	8	31.33	4.9	3.9	24.2
6/14/2019 0:20	8	8	8	30.51	4.7	3.8	24.9
6/14/2019 0:30	8	8	8	29.62	4.7	3.8	25.2
6/14/2019 0:40	8	8	8	30.87	0.9	0.8	3.8
6/14/2019 0:50	8	8	8	31.85	4.8	3.8	0.4
6/14/2019 1:00	8	8	8	31.05	4.8	3.8	24.7
6/14/2019 1:10	8	8	8	30.2	4.8	3.9	25
6/14/2019 1:20	8	8	8	29.99	2.6	2.3	25.1
6/14/2019 1:30	8	8	8	31.27	0.9	0.8	0.4
6/14/2019 1:40	8	8	8	31.82	4.9	3.8	0.4
6/14/2019 1:50	8	8	8	31.12	4.9	3.8	24.7
6/14/2019 2:00	8	8	8	30.23	5	3.9	25.1
6/14/2019 2:10	8	8	8	29.89	3.4	3.1	25.2
6/14/2019 2:20	8	8	8	31.09	1	0.8	0.4
6/14/2019 2:30	8	8	8	31.97	5	3.8	0.4
6/14/2019 2:40	8	8	8	31.21	4.9	3.8	24.6
6/14/2019 2:50	8	8	8	30.23	5	3.9	25.1
6/14/2019 3:00	8	8	8	29.89	3.1	2.9	25.1
6/14/2019 3:10	8	8	8	31.05	1	0.8	0.4

6/14/2019 3:20	8	8	8	32	5	3.8	0.4
6/14/2019 3:30	8	8	8	31.02	4.9	3.8	24.5
6/14/2019 3:40	8	8	8	30.26	5	3.9	24.9
6/14/2019 3:50	8	8	8	29.68	5	3.9	25.1
6/14/2019 4:00	8	8	8	29.96	2.4	2.2	25.1
6/14/2019 4:10	8	8	8	31.18	0.9	0.7	0.4
6/14/2019 4:20	8	8	8	32.03	4.9	3.8	0.4
6/14/2019 4:30	8	8	8	31.21	5.1	3.9	24.5
6/14/2019 4:40	8	8	8	30.38	4.7	3.8	24.9
6/14/2019 4:50	8	8	8	29.68	4.8	3.8	25.1
6/14/2019 5:00	8	8	8	30.17	1.6	1.3	25
6/14/2019 5:10	8	8	8	31.15	1	0.7	0.4
6/14/2019 5:20	8	8	8	32	1	0.7	0.4
6/14/2019 5:30	8	8	8	31.51	4.9	3.8	23.6
6/14/2019 5:40	8	8	8	30.81	4.9	3.8	24.8
6/14/2019 5:50	8	8	8	29.99	4.9	3.8	25
6/14/2019 6:00	8	8	8	30.38	1.1	0.8	25.1
6/14/2019 6:10	8	8	8	31.76	1	0.8	0.4
6/14/2019 6:20	8	8	8	31.36	4.8	3.9	24
6/14/2019 6:30	8	8	8	30.29	4.9	3.8	25
6/14/2019 6:40	8	8	8	29.59	3.6	3.4	25.2
6/14/2019 6:50	8	8	8	30.87	1	0.7	1.3
6/14/2019 7:00	8	8	8	31.73	1	0.8	0.4
6/14/2019 7:10	8	8	8	31.7	4.9	3.8	0.5
6/14/2019 7:20	8	8	8	31.18	5	3.8	24.4
6/14/2019 7:30	8	8	8	30.51	5	3.9	24.9
6/14/2019 7:40	8	8	8	29.68	4.7	3.8	25.2
6/14/2019 7:50	8	8	8	31.05	1.1	0.8	2.6
6/14/2019 8:00	8	8	8	31.94	4.8	3.9	0.4
6/14/2019 8:10	8	8	8	30.87	4.6	3.8	24.9
6/14/2019 8:20	8	8	8	29.83	5	3.8	25.1
6/14/2019 8:30	8	8	8	30.26	1.3	1	25
6/14/2019 8:40	8	8	8	31.21	1	0.8	0.4
6/14/2019 8:50	8	8	8	31.82	5	3.8	0.5
6/14/2019 9:00	8	8	8	31.12	4.8	3.8	24.7
6/14/2019 9:10	8	8	8	30.26	4.7	3.9	25
6/14/2019 9:20	8	8	8	29.86	3.2	3	25.1
6/14/2019 9:30	8	8	8	31.27	0.9	0.8	0.4
6/14/2019 9:40	8	8	8	31.7	4.9	3.8	0.6
6/14/2019 9:50	8	8	8	30.84	4.8	3.8	24.7
6/14/2019 10:00	8	8	8	30.17	4.9	3.9	25
6/14/2019 10:10	8	8	8	29.47	4.8	3.9	25.2
6/14/2019 10:20	8	8	8	30.26	1.2	1.1	25.1
6/14/2019 10:30	8	8	8	31.39	1	0.8	0.4
6/14/2019 10:40	8	8	8	31.88	4.9	3.8	0.5
6/14/2019 10:50	8	8	8	31.05	5.1	3.8	24.7
6/14/2019 11:00	8	8	8	30.17	4.8	3.8	25

6/14/2019 11:10	8	8	8	30.11	2.3	1.9	25.1
6/14/2019 11:20	8	8	8	31.73	0.9	0.8	0.4
6/14/2019 11:30	8	8	8	31.3	4.9	3.9	24.4
6/14/2019 11:40	8	8	8	30.2	4.7	3.8	25.1
6/14/2019 11:50	8	8	8	30.14	2.5	2.2	25.2
6/14/2019 12:00	8	8	8	31.85	0.9	0.8	0.3
6/14/2019 12:10	8	8	8	31.6	4.9	3.8	23.8
6/14/2019 12:20	8	8	8	30.54	4.6	3.8	24.9
6/14/2019 12:30	8	8	8	29.77	4.9	3.9	25.1
6/14/2019 12:40	8	8	8	30.51	1.1	0.8	25
6/14/2019 12:50	8	8	8	32	1.1	0.8	0.4
6/14/2019 13:00	8	8	8	31.27	4.9	3.8	24.4
6/14/2019 13:10	8	8	8	30.35	4.8	3.8	25
6/14/2019 13:20	8	8	8	29.77	3.4	3.2	25.1
6/14/2019 13:30	8	8	8	31.21	0.9	0.8	0.4
6/14/2019 13:40	8	8	8	31.94	5	3.9	0.4
6/14/2019 13:50	8	8	8	31.18	4.9	3.8	24.4
6/14/2019 14:00	8	8	8	30.57	4.9	3.8	24.9
6/14/2019 14:10	8	8	8	29.99	4.9	3.8	25
6/14/2019 14:20	8	8	8	29.68	3.4	3.2	25.1
6/14/2019 14:30	8	8	8	31.21	1	0.8	0.4
6/14/2019 14:40	8	8	8	31.73	5	3.8	1.7
6/14/2019 14:50	8	8	8	30.54	4.7	3.9	24.8
6/14/2019 15:00	8	8	8	29.74	4.8	3.9	25.2
6/14/2019 15:10	8	8	8	30.57	0.9	0.9	25
6/14/2019 15:20	8	8	8	31.88	0.9	0.8	0.4
6/14/2019 15:30	8	8	8	31.3	4.9	3.9	24.4
6/14/2019 15:40	8	8	8	30.32	4.9	3.9	25
6/14/2019 15:50	8	8	8	29.96	3	2.8	25.2
6/14/2019 16:00	8	8	8	31.63	1	0.8	0.3
6/14/2019 16:10	8	8	8	31.48	4.9	3.8	23.8
6/14/2019 16:20	8	8	8	30.38	4.9	3.8	24.9
6/14/2019 16:30	8	8	8	29.56	5	3.9	25.2
6/14/2019 16:40	8	8	8	30.69	0.9	0.8	24.9
6/14/2019 16:50	8	8	8	31.88	0.9	0.8	0.4
6/14/2019 17:00	8	8	8	31.51	4.8	3.8	23.6
6/14/2019 17:10	8	8	8	30.69	4.9	3.9	24.8
6/14/2019 17:20	8	8	8	29.89	4.8	3.9	25.1
6/14/2019 17:30	8	8	8	30.23	1.4	1.1	25.1
6/14/2019 17:40	8	8	8	31.51	1	0.8	0.4
6/14/2019 17:50	8	8	8	31.79	4.9	3.9	0.5
6/14/2019 18:00	8	8	8	31.02	4.8	3.9	24.6
6/14/2019 18:10	8	8	8	30.26	4.9	3.9	24.9
6/14/2019 18:20	8	8	8	29.53	4.9	3.8	25.2
6/14/2019 18:30	8	8	8	30.17	1.5	0.9	25
6/14/2019 18:40	8	8	8	31.27	0.9	0.8	0.4
6/14/2019 18:50	8	8	8	31.85	4.9	3.8	0.5

6/14/2019 19:00	8	8	8	30.81	5.1	3.8	24.8
6/14/2019 19:10	8	8	8	29.77	4.9	3.9	25.1
6/14/2019 19:20	8	8	8	30.54	1.1	0.8	25
6/14/2019 19:30	8	8	8	31.88	0.9	0.8	0.4
6/14/2019 19:40	8	8	8	31.45	4.9	3.9	23.4
6/14/2019 19:50	8	8	8	30.84	4.9	3.8	24.7
6/14/2019 20:00	8	8	8	30.32	4.9	3.8	24.8
6/14/2019 20:10	8	8	8	29.74	4.9	3.8	25.1
6/14/2019 20:20	8	8	8	29.74	3.3	3.2	25.1
6/14/2019 20:30	8	8	8	31.21	1	0.8	0.4
6/14/2019 20:40	8	8	8	31.82	4.8	3.9	0.5
6/14/2019 20:50	8	8	8	30.81	4.9	3.9	24.8
6/14/2019 21:00	8	8	8	29.99	4.9	3.9	25
6/14/2019 21:10	8	8	8	30.2	1.8	1.5	25.1
6/14/2019 21:20	8	8	8	31.51	1.2	0.8	0.4
6/14/2019 21:30	8	8	8	31.85	4.7	3.9	0.5
6/14/2019 21:40	8	8	8	31.05	4.8	3.9	24.7
6/14/2019 21:50	8	8	8	30.23	4.8	3.9	25.1
6/14/2019 22:00	8	8	8	29.62	3.5	3.2	25.2
6/14/2019 22:10	8	8	8	31.05	1	0.8	0.5
6/14/2019 22:20	8	8	8	31.85	4.8	3.9	0.4
6/14/2019 22:30	8	8	8	31.12	4.9	3.9	24.6
6/14/2019 22:40	8	8	8	30.2	4.9	3.9	25
6/14/2019 22:50	8	8	8	29.74	3.4	3.3	25.3
6/14/2019 23:00	8	8	8	30.99	0.9	0.8	0.9
6/14/2019 23:10	8	8	8	32	4.9	3.9	0.4
6/14/2019 23:20	8	8	8	31.05	5.1	4	24.7
6/14/2019 23:30	8	8	8	30.17	4.9	3.9	25
6/14/2019 23:40	8	8	8	29.47	4.7	3.8	25.1
6/14/2019 23:50	8	8	8	30.26	1.2	0.9	25
6/15/2019 0:00	8	8	8	31.51	1	0.8	0.4
6/15/2019 0:10	8	8	8	31.73	4.8	3.9	0.5
6/15/2019 0:20	8	8	8	30.93	5.1	3.9	24.8
6/15/2019 0:30	8	8	8	30.26	4.9	3.8	25
6/15/2019 0:40	8	8	8	29.41	4.8	3.9	25.2
6/15/2019 0:50	8	8	8	30.05	1.4	1.1	25
6/15/2019 1:00	8	8	8	31.09	1.1	0.8	0.4
6/15/2019 1:10	8	8	8	32.09	1.4	0.9	0.4
6/15/2019 1:20	8	8	8	31.39	4.9	3.8	24.1
6/15/2019 1:30	8	8	8	30.44	4.9	3.8	25
6/15/2019 1:40	8	8	8	29.59	3.6	3.3	25.2
6/15/2019 1:50	8	8	8	30.99	1	0.8	1.3
6/15/2019 2:00	8	8	8	31.97	5	3.8	0.5
6/15/2019 2:10	8	8	8	31.05	4.9	3.8	24.5
6/15/2019 2:20	8	8	8	30.32	4.8	3.8	24.9
6/15/2019 2:30	8	8	8	29.68	4.8	3.8	25.1
6/15/2019 2:40	8	8	8	29.86	2.5	2	25.1

6/15/2019 2:50	8	8	8	30.84	0.9	0.8	0.4
6/15/2019 3:00	8	8	8	31.79	0.9	0.8	0.5
6/15/2019 3:10	8	8	8	31.67	5	3.8	0.5
6/15/2019 3:20	8	8	8	30.96	4.9	3.8	24.7
6/15/2019 3:30	8	8	8	30.08	4.8	3.9	25
6/15/2019 3:40	8	8	8	29.65	3.5	3.3	25.2
6/15/2019 3:50	8	8	8	30.87	0.9	0.8	1.1
6/15/2019 4:00	8	8	8	32.12	2.1	1.6	0.4
6/15/2019 4:10	8	8	8	31.27	4.9	3.8	24.4
6/15/2019 4:20	8	8	8	30.54	4.9	3.8	24.9
6/15/2019 4:30	8	8	8	30.02	4.9	3.8	25
6/15/2019 4:40	8	8	8	29.5	4.8	3.8	25.1
6/15/2019 4:50	8	8	8	30.26	1.4	1.1	25.1
6/15/2019 5:00	8	8	8	31.57	1	0.8	0.4
6/15/2019 5:10	8	8	8	31.7	4.9	3.9	1.7
6/15/2019 5:20	8	8	8	30.87	5	3.9	24.7
6/15/2019 5:30	8	8	8	30.17	4.8	3.8	25
6/15/2019 5:40	8	8	8	29.32	3.5	3.3	25.2
6/15/2019 5:50	8	8	8	30.69	0.9	0.8	3.2
6/15/2019 6:00	8	8	8	32	1	0.9	0.4
6/15/2019 6:10	8	8	8	31.57	4.8	3.8	23.5
6/15/2019 6:20	8	8	8	30.96	4.9	3.9	24.7
6/15/2019 6:30	8	8	8	30.11	4.8	3.8	25.1
6/15/2019 6:40	8	8	8	29.32	4.7	3.8	25.2
6/15/2019 6:50	8	8	8	30.14	1.1	0.9	25
6/15/2019 7:00	8	8	8	31.02	1	0.8	0.4
6/15/2019 7:10	8	8	8	32	1.4	0.8	0.4
6/15/2019 7:20	8	8	8	31.33	4.9	3.8	24.2
6/15/2019 7:30	8	8	8	30.32	4.9	3.9	25
6/15/2019 7:40	8	8	8	29.56	3.5	3.3	25.3
6/15/2019 7:50	8	8	8	30.96	1	0.7	1.2
6/15/2019 8:00	8	8	8	31.97	1.2	0.7	0.4
6/15/2019 8:10	8	8	8	31.63	4.9	3.9	22.4
6/15/2019 8:20	8	8	8	30.99	4.7	3.8	24.8
6/15/2019 8:30	8	8	8	30.2	4.7	3.9	25
6/15/2019 8:40	8	8	8	29.5	4.8	3.8	25.1
6/15/2019 8:50	8	8	8	31.02	1	0.7	1.5
6/15/2019 9:00	8	8	8	31.85	4.9	3.8	0.5
6/15/2019 9:10	8	8	8	31.3	4.8	3.8	24.5
6/15/2019 9:20	8	8	8	30.35	5	3.9	24.9
6/15/2019 9:30	8	8	8	29.59	4.4	3.7	25.1
6/15/2019 9:40	8	8	8	29.5	3.5	3.1	25.1
6/15/2019 9:50	8	8	8	30.54	1	0.8	24.9
6/15/2019 10:00	8	8	8	31.97	0.9	0.8	0.4
6/15/2019 10:10	8	8	8	31.27	5.1	3.8	24.4
6/15/2019 10:20	8	8	8	30.29	4.8	3.6	25
6/15/2019 10:30	8	8	8	29.8	3.6	3.1	25.2

6/15/2019 10:40	8	8	8	31.18	1.1	0.8	0.4
6/15/2019 10:50	8	8	8	31.94	4.9	3.9	0.4
6/15/2019 11:00	8	8	8	31.3	4.6	3.8	24.3
6/15/2019 11:10	8	8	8	30.51	4.8	3.8	24.9
6/15/2019 11:20	8	8	8	29.62	4.9	3.8	25.1
6/15/2019 11:30	8	8	8	30.41	1.1	0.9	25
6/15/2019 11:40	8	8	8	31.7	0.9	0.8	0.3
6/15/2019 11:50	8	8	8	31.42	5.1	3.8	24.2
6/15/2019 12:00	8	8	8	30.32	4.8	3.9	24.9
6/15/2019 12:10	8	8	8	29.5	4.8	3.9	25.2
6/15/2019 12:20	8	8	8	30.44	1.1	0.8	24.9
6/15/2019 12:30	8	8	8	31.67	1.2	0.8	0.4
6/15/2019 12:40	8	8	8	31.82	5.1	3.9	0.4
6/15/2019 12:50	8	8	8	31.12	5	4	24.6
6/15/2019 13:00	8	8	8	30.11	4.7	3.8	25
6/15/2019 13:10	8	8	8	30.41	1.3	1.2	25.1
6/15/2019 13:20	8	8	8	31.7	0.9	0.8	0.3
6/15/2019 13:30	8	8	8	31.42	4.9	3.9	24
6/15/2019 13:40	8	8	8	30.54	4.9	3.9	24.8
6/15/2019 13:50	8	8	8	29.8	4.8	3.8	25
6/15/2019 14:00	8	8	8	29.25	3.6	3.5	25.2
6/15/2019 14:10	8	8	8	30.14	1.3	1	25
6/15/2019 14:20	8	8	8	31.12	0.9	0.9	0.4
6/15/2019 14:30	8	8	8	32.09	5.2	4.1	0.3
6/15/2019 14:40	8	8	8	31.3	4.9	3.8	24.2
6/15/2019 14:50	8	8	8	30.35	4.9	3.9	24.9
6/15/2019 15:00	8	8	8	29.59	3.6	3.3	25.3
6/15/2019 15:10	8	8	8	31.45	1	0.8	0.4
6/15/2019 15:20	8	8	8	31.57	4.8	3.9	23.5
6/15/2019 15:30	8	8	8	30.47	4.9	3.8	24.9
6/15/2019 15:40	8	8	8	29.59	4.7	3.8	25.1
6/15/2019 15:50	8	8	8	30.38	0.9	0.8	24.9
6/15/2019 16:00	8	8	8	31.33	0.9	0.8	0.4
6/15/2019 16:10	8	8	8	32	1	0.8	0.4
6/15/2019 16:20	8	8	8	31.57	4.9	3.8	18
6/15/2019 16:30	8	8	8	30.78	5	3.8	24.9
6/15/2019 16:40	8	8	8	29.86	5	3.9	25.1
6/15/2019 16:50	8	8	8	30.05	2.7	2.3	25.1
6/15/2019 17:00	8	8	8	31.48	0.9	0.8	0.3
6/15/2019 17:10	8	8	8	31.7	4.8	3.8	0.5
6/15/2019 17:20	8	8	8	30.96	4.9	3.8	24.6
6/15/2019 17:30	8	8	8	30.47	4.9	3.9	24.8
6/15/2019 17:40	8	8	8	30.08	4.9	3.8	25
6/15/2019 17:50	8	8	8	29.41	4.9	3.8	25.2
6/15/2019 18:00	8	8	8	30.57	1	0.9	25
6/15/2019 18:10	8	8	8	31.76	1	0.8	0.4
6/15/2019 18:20	8	8	8	31.57	5.1	3.9	23.6

6/15/2019 18:30	8	8	8	30.66	4.9	3.8	24.9
6/15/2019 18:40	8	8	8	29.65	5.1	3.8	25.2
6/15/2019 18:50	8	8	8	31.12	0.9	0.8	0.6
6/15/2019 19:00	8	8	8	31.85	4.8	3.8	0.5
6/15/2019 19:10	8	8	8	31.12	5	3.8	24.6
6/15/2019 19:20	8	8	8	30.47	4.8	3.8	24.9
6/15/2019 19:30	8	8	8	29.74	4.9	3.8	25.1
6/15/2019 19:40	8	8	8	29.99	2.2	1.9	25.1
6/15/2019 19:50	8	8	8	30.96	1.1	0.8	0.4
6/15/2019 20:00	8	8	8	32.06	1	0.8	0.4
6/15/2019 20:10	8	8	8	31.27	4.9	3.9	24.4
6/15/2019 20:20	8	8	8	30.26	4.9	3.9	25.1
6/15/2019 20:30	8	8	8	29.47	2	1.9	25.2
6/15/2019 20:40	8	8	8	30.75	1	0.8	3.7
6/15/2019 20:50	8	8	8	32.06	4.9	3.8	0.3
6/15/2019 21:00	8	8	8	31.36	4.9	3.8	24.2
6/15/2019 21:10	8	8	8	30.63	4.9	3.8	24.8
6/15/2019 21:20	8	8	8	30.11	4.9	3.8	24.9
6/15/2019 21:30	8	8	8	29.44	4.9	3.9	25.1
6/15/2019 21:40	8	8	8	30.41	1.1	0.7	25
6/15/2019 21:50	8	8	8	31.6	0.9	0.8	0.3
6/15/2019 22:00	8	8	8	31.7	4.9	3.8	0.5
6/15/2019 22:10	8	8	8	30.81	4.9	3.9	24.8
6/15/2019 22:20	8	8	8	29.96	5	3.9	25.1
6/15/2019 22:30	8	8	8	29.96	2.7	2.3	25.1
6/15/2019 22:40	8	8	8	30.93	1	0.8	0.3
6/15/2019 22:50	8	8	8	31.63	0.9	0.8	0.3
6/15/2019 23:00	8	8	8	31.94	4.7	3.8	0.4
6/15/2019 23:10	8	8	8	31.36	4.8	3.8	24.3
6/15/2019 23:20	8	8	8	30.51	5	3.8	24.9
6/15/2019 23:30	8	8	8	29.65	3.5	3.4	25.2
6/15/2019 23:40	8	8	8	30.9	0.9	0.8	1.2
6/15/2019 23:50	8	8	8	32.06	4.8	3.8	0.4
6/16/2019 0:00	8	8	8	31.3	4.8	3.8	24.1
6/16/2019 0:10	8	8	8	30.81	4.9	3.9	24.7
6/16/2019 0:20	8	8	8	30.29	5.1	3.9	24.9
6/16/2019 0:30	8	8	8	29.56	4.9	3.8	25.2
6/16/2019 0:40	8	8	8	30.69	1	0.8	25
6/16/2019 0:50	8	8	8	32.09	1.2	0.8	0.4
6/16/2019 1:00	8	8	8	31.33	4.9	3.8	24.3
6/16/2019 1:10	8	8	8	30.26	4.7	3.8	25.1
6/16/2019 1:20	8	8	8	29.86	3	2.7	25.1
6/16/2019 1:30	8	8	8	30.75	1.1	0.8	0.5
6/16/2019 1:40	8	8	8	31.73	1	0.8	0.3
6/16/2019 1:50	8	8	8	31.7	4.9	3.8	0.5
6/16/2019 2:00	8	8	8	31.18	4.9	3.9	24.4
6/16/2019 2:10	8	8	8	30.47	4.9	3.9	24.9

6/16/2019 2:20	8	8	8	29.68	4.9	3.8	25.2
6/16/2019 2:30	8	8	8	31.02	1	0.8	2
6/16/2019 2:40	8	8	8	31.82	4.9	3.8	0.5
6/16/2019 2:50	8	8	8	30.9	4.9	3.9	24.8
6/16/2019 3:00	8	8	8	29.83	4.9	3.8	25.1
6/16/2019 3:10	8	8	8	30.14	1.6	1.3	25
6/16/2019 3:20	8	8	8	31.18	0.9	0.8	0.3
6/16/2019 3:30	8	8	8	32	4.7	3.9	0.4
6/16/2019 3:40	8	8	8	31.18	4.8	3.9	24.4
6/16/2019 3:50	8	8	8	30.26	5	3.9	24.9
6/16/2019 4:00	8	8	8	29.59	3.7	3.4	25.2
6/16/2019 4:10	8	8	8	30.87	1.1	0.8	1.8
6/16/2019 4:20	8	8	8	31.88	4.8	3.8	0.4
6/16/2019 4:30	8	8	8	30.9	4.9	3.8	24.7
6/16/2019 4:40	8	8	8	30.02	4.8	3.8	25
6/16/2019 4:50	8	8	8	29.83	3.1	2.9	25.2
6/16/2019 5:00	8	8	8	31.05	1	0.8	0.4
6/16/2019 5:10	8	8	8	31.94	4.8	3.9	0.4
6/16/2019 5:20	8	8	8	31.18	4.6	3.9	24.6
6/16/2019 5:30	8	8	8	30.32	4.6	3.9	24.9
6/16/2019 5:40	8	8	8	29.47	4.9	3.9	25.1
6/16/2019 5:50	8	8	8	30.29	1.2	0.9	24.9
6/16/2019 6:00	8	8	8	31.18	1	0.9	0.3
6/16/2019 6:10	8	8	8	32	4.9	3.8	0.4
6/16/2019 6:20	8	8	8	31.21	4.8	3.8	24.4
6/16/2019 6:30	8	8	8	30.54	4.9	3.8	24.8
6/16/2019 6:40	8	8	8	30.02	4.9	3.8	25
6/16/2019 6:50	8	8	8	29.41	4.8	3.9	25.2
6/16/2019 7:00	8	8	8	30.63	1.1	0.8	24.9
6/16/2019 7:10	8	8	8	31.73	1	0.8	0.3
6/16/2019 7:20	8	8	8	31.57	5	3.9	23.6
6/16/2019 7:30	8	8	8	30.93	4.9	3.8	24.6
6/16/2019 7:40	8	8	8	30.38	4.8	3.9	24.9
6/16/2019 7:50	8	8	8	29.59	3.5	3.3	25.2
6/16/2019 8:00	8	8	8	31.18	0.9	0.8	0.3
6/16/2019 8:10	8	8	8	31.73	4.9	3.9	0.5
6/16/2019 8:20	8	8	8	30.75	4.8	3.8	24.8
6/16/2019 8:30	8	8	8	29.86	4.8	3.9	25.1
6/16/2019 8:40	8	8	8	29.96	2.7	2.4	25.1
6/16/2019 8:50	8	8	8	30.93	1	0.8	0.3
6/16/2019 9:00	8	8	8	32.09	0.9	0.8	0.4
6/16/2019 9:10	8	8	8	31.27	4.9	3.9	24.4
6/16/2019 9:20	8	8	8	30.23	4.8	3.8	25
6/16/2019 9:30	8	8	8	29.99	3.4	3	25.2
6/16/2019 9:40	8	8	8	31.48	1	0.8	0.4
6/16/2019 9:50	8	8	8	31.76	5	3.8	0.5
6/16/2019 10:00	8	8	8	30.93	5.2	3.8	24.7

6/16/2019 10:10	8	8	8	30.11	4.8	3.9	24.9
6/16/2019 10:20	8	8	8	29.44	4.8	3.8	25.1
6/16/2019 10:30	8	8	8	29.77	2.7	2.3	25.1
6/16/2019 10:40	8	8	8	30.96	0.9	0.9	0.4
6/16/2019 10:50	8	8	8	32.09	1	0.8	0.4
6/16/2019 11:00	8	8	8	31.45	4.8	3.8	23.7
6/16/2019 11:10	8	8	8	30.57	5	3.9	24.9
6/16/2019 11:20	8	8	8	29.65	3.7	3.4	25.1
6/16/2019 11:30	8	8	8	31.12	0.9	0.8	0.3
6/16/2019 11:40	8	8	8	31.79	4.9	3.9	0.5
6/16/2019 11:50	8	8	8	30.78	4.8	3.9	24.8
6/16/2019 12:00	8	8	8	30.11	4.9	3.9	24.9
6/16/2019 12:10	8	8	8	29.68	4.9	3.8	25.1
6/16/2019 12:20	8	8	8	29.38	3.6	3.4	25.1
6/16/2019 12:30	8	8	8	30.75	1	0.8	2.7
6/16/2019 12:40	8	8	8	32.03	1	0.8	0.4
6/16/2019 12:50	8	8	8	31.12	4.9	3.9	24.6
6/16/2019 13:00	8	8	8	30.11	4.8	3.8	25
6/16/2019 13:10	8	8	8	30.81	1.1	0.8	25
6/16/2019 13:20	8	8	8	32.03	4.9	3.9	0.4
6/16/2019 13:30	8	8	8	31.02	5	3.8	24.7
6/16/2019 13:40	8	8	8	30.29	5	3.8	24.9
6/16/2019 13:50	8	8	8	29.56	4.8	3.8	25.1
6/16/2019 14:00	8	8	8	29.89	2.4	1.9	25
6/16/2019 14:10	8	8	8	31.02	0.9	0.8	0.3
6/16/2019 14:20	8	8	8	32.12	2.9	2.4	0.3
6/16/2019 14:30	8	8	8	31.02	4.9	3.9	24.6
6/16/2019 14:40	8	8	8	30.05	4.7	3.9	25
6/16/2019 14:50	8	8	8	30.47	1.1	0.9	25
6/16/2019 15:00	8	8	8	32	4.9	3.9	0.4
6/16/2019 15:10	8	8	8	31.05	4.9	3.8	24.6
6/16/2019 15:20	8	8	8	30.08	5.1	3.9	25
6/16/2019 15:30	8	8	8	29.71	3.1	3.1	25.1
6/16/2019 15:40	8	8	8	30.93	0.9	0.8	0.5
6/16/2019 15:50	8	8	8	32.03	1.1	0.8	0.4
6/16/2019 16:00	8	8	8	31.7	4.9	3.9	0.5
6/16/2019 16:10	8	8	8	31.15	4.8	3.8	24.5
6/16/2019 16:20	8	8	8	30.14	4.9	4.1	25
6/16/2019 16:30	8	8	8	29.99	3.1	2.8	25.1
6/16/2019 16:40	8	8	8	31.54	0.9	0.8	0.3
6/16/2019 16:50	8	8	8	31.39	4.9	3.8	24.2
6/16/2019 17:00	8	8	8	30.38	4.9	4	24.9
6/16/2019 17:10	8	8	8	29.5	4.8	3.9	25.2
6/16/2019 17:20	8	8	8	30.72	0.9	0.8	3.2
6/16/2019 17:30	8	8	8	31.79	1.1	0.8	0.3
6/16/2019 17:40	8	8	8	31.79	4.9	3.9	0.4
6/16/2019 17:50	8	8	8	31.05	5	3.8	24.6

6/16/2019 18:00	8	8	8	30.05	4.8	3.9	25
6/16/2019 18:10	8	8	8	29.89	3.1	2.7	25.1
6/16/2019 18:20	8	8	8	31.45	1	0.8	0.3
6/16/2019 18:30	8	8	8	31.7	5	3.9	0.5
6/16/2019 18:40	8	8	8	30.84	4.9	3.8	24.8
6/16/2019 18:50	8	8	8	30.02	4.9	3.9	25
6/16/2019 19:00	8	8	8	30.29	1.7	1.3	25.1
6/16/2019 19:10	8	8	8	31.76	1.1	0.8	0.3
6/16/2019 19:20	8	8	8	31.42	4.8	3.9	23.9
6/16/2019 19:30	8	8	8	30.47	4.9	3.9	24.9
6/16/2019 19:40	8	8	8	29.65	4.9	3.9	25.2
6/16/2019 19:50	8	8	8	30.81	0.9	0.8	3.6
6/16/2019 20:00	8	8	8	32.06	1.2	0.7	0.4
6/16/2019 20:10	8	8	8	31.39	4.8	3.9	24.1
6/16/2019 20:20	8	8	8	30.57	4.8	3.8	24.9
6/16/2019 20:30	8	8	8	29.71	4.9	3.8	25.2
6/16/2019 20:40	8	8	8	30.32	1.1	1.1	25
6/16/2019 20:50	8	8	8	31.79	1	0.9	0.3
6/16/2019 21:00	8	8	8	31.45	4.9	3.9	23.8
6/16/2019 21:10	8	8	8	30.54	4.7	3.9	24.9
6/16/2019 21:20	8	8	8	29.62	4.7	3.9	25.2
6/16/2019 21:30	8	8	8	30.78	1	0.8	3.2
6/16/2019 21:40	8	8	8	32.09	2.5	1.7	0.4
6/16/2019 21:50	8	8	8	31.27	4.7	3.8	24.5
6/16/2019 22:00	8	8	8	30.26	4.6	3.8	25
6/16/2019 22:10	8	8	8	30.32	1.8	1.3	25.1
6/16/2019 22:20	8	8	8	31.85	1	0.8	0.3
6/16/2019 22:30	8	8	8	31.3	4.9	3.9	24.4
6/16/2019 22:40	8	8	8	30.29	4.9	3.8	25
6/16/2019 22:50	8	8	8	29.68	3.5	3.3	25.2
6/16/2019 23:00	8	8	8	30.78	1	0.9	1.9
6/16/2019 23:10	8	8	8	31.85	1.1	0.8	0.3
6/16/2019 23:20	8	8	8	31.67	5	3.9	0.5
6/16/2019 23:30	8	8	8	31.21	4.9	3.9	24.3
6/16/2019 23:40	8	8	8	30.66	5	3.9	24.9
6/16/2019 23:50	8	8	8	29.83	4.8	3.8	25.1
6/17/2019 0:00	8	8	8	30.84	1	0.8	3.1
6/17/2019 0:10	8	8	8	31.85	5	3.8	0.5
6/17/2019 0:20	8	8	8	30.96	4.7	3.9	24.7
6/17/2019 0:30	8	8	8	30.05	4.7	3.8	25
6/17/2019 0:40	8	8	8	29.99	2.8	2.5	25.1
6/17/2019 0:50	8	8	8	30.99	1	0.8	0.3
6/17/2019 1:00	8	8	8	31.94	1.1	0.8	0.3
6/17/2019 1:10	8	8	8	31.54	4.8	3.8	23.6
6/17/2019 1:20	8	8	8	30.54	5	3.9	24.8
6/17/2019 1:30	8	8	8	29.83	5	3.9	25.1
6/17/2019 1:40	8	8	8	30.78	1.1	0.8	7.5

6/17/2019 1:50	8	8	8	32.06	5	3.9	0.4
6/17/2019 2:00	8	8	8	31.21	4.9	4	24.5
6/17/2019 2:10	8	8	8	30.2	4.9	3.9	24.9
6/17/2019 2:20	8	8	8	29.5	3.5	3.3	25.2
6/17/2019 2:30	8	8	8	31.09	0.9	0.8	0.3
6/17/2019 2:40	8	8	8	31.79	5	3.9	0.5
6/17/2019 2:50	8	8	8	30.72	4.7	3.9	24.9
6/17/2019 3:00	8	8	8	29.59	5	3.9	25.2
6/17/2019 3:10	8	8	8	30.9	0.9	0.8	2.4
6/17/2019 3:20	8	8	8	31.97	4.8	3.9	0.4
6/17/2019 3:30	8	8	8	31.05	4.7	3.9	24.6
6/17/2019 3:40	8	8	8	30.2	5	3.9	25
6/17/2019 3:50	8	8	8	29.86	3.2	3	25.1
6/17/2019 4:00	8	8	8	31.27	1	0.8	0.3
6/17/2019 4:10	8	8	8	31.73	5	3.9	0.4
6/17/2019 4:20	8	8	8	30.57	5	3.9	24.9
6/17/2019 4:30	8	8	8	29.62	4.8	3.8	25.2
6/17/2019 4:40	8	8	8	30.93	1	0.8	1.3
6/17/2019 4:50	8	8	8	32.12	3.1	2.8	0.4
6/17/2019 5:00	8	8	8	31.45	5.1	3.9	23.8
6/17/2019 5:10	8	8	8	30.63	5.3	3.9	24.9
6/17/2019 5:20	8	8	8	29.74	4.6	3.8	25.1
6/17/2019 5:30	8	8	8	31.02	1	0.8	2.1
6/17/2019 5:40	8	8	8	31.82	4.9	3.9	0.5
6/17/2019 5:50	8	8	8	30.87	5	3.8	24.7
6/17/2019 6:00	8	8	8	30.14	4.9	3.8	25
6/17/2019 6:10	8	8	8	29.99	2.9	2.7	25.1
6/17/2019 6:20	8	8	8	31.39	0.9	0.8	0.4
6/17/2019 6:30	8	8	8	31.79	4.9	4	0.5
6/17/2019 6:40	8	8	8	30.99	5	3.9	24.6
6/17/2019 6:50	8	8	8	30.41	4.8	3.9	24.9
6/17/2019 7:00	8	8	8	29.8	4.7	3.8	25.1
6/17/2019 7:10	8	8	8	30.35	1	0.8	25
6/17/2019 7:20	8	8	8	31.63	0.9	0.8	0.3
6/17/2019 7:30	8	8	8	31.45	4.9	3.9	23.8
6/17/2019 7:40	8	8	8	30.38	4.9	3.9	24.9
6/17/2019 7:50	8	8	8	29.44	3.5	3.2	25.3
6/17/2019 8:00	8	8	8	31.09	0.9	0.8	0.5
6/17/2019 8:10	8	8	8	31.82	4.9	3.8	0.5
6/17/2019 8:20	8	8	8	30.84	5	3.9	24.7
6/17/2019 8:30	8	8	8	30.26	5	3.8	24.9
6/17/2019 8:40	8	8	8	29.62	4.6	3.8	25.1
6/17/2019 8:50	8	8	8	30.17	1.7	1.5	25.1
6/17/2019 9:00	8	8	8	31.6	0.9	0.8	0.4
6/17/2019 9:10	8	8	8	31.45	4.9	3.8	23.9
6/17/2019 9:20	8	8	8	30.32	4.9	3.8	25
6/17/2019 9:30	8	8	8	30.11	2.7	2.3	25.1

6/17/2019 9:40	8	8	8	31.45	1	0.8	0.3
6/17/2019 9:50	8	8	8	31.7	4.8	3.9	0.5
6/17/2019 10:00	8	8	8	31.21	4.9	3.9	24.4
6/17/2019 10:10	8	8	8	30.72	4.8	3.9	24.8
6/17/2019 10:20	8	8	8	30.05	4.8	3.8	25
6/17/2019 10:30	8	8	8	30.17	2.3	2	25.1
6/17/2019 10:40	8	8	8	31.48	0.9	0.8	0.3
6/17/2019 10:50	8	8	8	31.39	4.9	3.9	24.1
6/17/2019 11:00	8	8	8	30.26	4.9	3.9	25
6/17/2019 11:10	8	8	8	29.68	3.6	3.2	25.2
6/17/2019 11:20	8	8	8	30.93	0.9	0.8	1.2
6/17/2019 11:30	8	8	8	32.12	1.2	0.9	0.4
6/17/2019 11:40	8	8	8	31.48	4.8	3.9	23.9
6/17/2019 11:50	8	8	8	30.69	4.8	3.9	24.8
6/17/2019 12:00	8	8	8	29.89	5	3.8	25.1
6/17/2019 12:10	8	8	8	30.35	1	0.8	25.1
6/17/2019 12:20	8	8	8	32.03	5.1	4.2	0.3
6/17/2019 12:30	8	8	8	30.87	4.9	3.9	24.7
6/17/2019 12:40	8	8	8	30.08	5	3.9	25
6/17/2019 12:50	8	8	8	29.77	3	2.7	25.1
6/17/2019 13:00	8	8	8	30.9	0.9	0.8	0.6
6/17/2019 13:10	8	8	8	31.79	1.1	0.8	0.4
6/17/2019 13:20	8	8	8	31.76	4.8	3.9	0.5
6/17/2019 13:30	8	8	8	31.02	4.9	3.8	24.6
6/17/2019 13:40	8	8	8	30.11	4.8	3.9	25.1
6/17/2019 13:50	8	8	8	30.2	2	1.7	25.1
6/17/2019 14:00	8	8	8	31.76	0.9	0.8	0.4
6/17/2019 14:10	8	8	8	31.39	5.1	3.8	24.1
6/17/2019 14:20	8	8	8	30.41	4.8	3.9	24.9
6/17/2019 14:30	8	8	8	29.56	3.7	3.4	25.2
6/17/2019 14:40	8	8	8	31.12	0.9	0.8	0.3
6/17/2019 14:50	8	8	8	31.79	4.8	3.8	0.5
6/17/2019 15:00	8	8	8	30.69	4.9	3.8	24.9
6/17/2019 15:10	8	8	8	29.71	4.7	3.8	25.1
6/17/2019 15:20	8	8	8	30.41	1.1	0.9	24.9
6/17/2019 15:30	8	8	8	31.51	1	0.8	0.3
6/17/2019 15:40	8	8	8	31.73	4.8	3.8	0.5
6/17/2019 15:50	8	8	8	30.78	5	3.8	24.8
6/17/2019 16:00	8	8	8	29.68	4.9	3.8	25.2
6/17/2019 16:10	8	8	8	31.39	1	0.8	0.3
6/17/2019 16:20	8	8	8	31.54	4.7	3.9	23.7
6/17/2019 16:30	8	8	8	30.47	4.8	3.9	24.9
6/17/2019 16:40	8	8	8	29.74	3.4	3.3	25.2
6/17/2019 16:50	8	8	8	31.39	0.9	0.8	0.3
6/17/2019 17:00	8	8	8	31.73	5	3.8	0.5
6/17/2019 17:10	8	8	8	30.99	4.8	3.8	24.6
6/17/2019 17:20	8	8	8	30.35	4.8	3.9	24.9

6/17/2019 17:30	8	8	8	29.65	4.8	3.8	25.2
6/17/2019 17:40	8	8	8	30.51	1.1	0.8	25
6/17/2019 17:50	8	8	8	32.06	1	0.8	0.4
6/17/2019 18:00	8	8	8	31.05	4.9	3.9	24.7
6/17/2019 18:10	8	8	8	29.83	4.8	3.8	25.1
6/17/2019 18:20	8	8	8	30.84	0.9	0.8	4.4
6/17/2019 18:30	8	8	8	32	5.1	3.9	0.4
6/17/2019 18:40	8	8	8	31.21	4.8	3.8	24.3
6/17/2019 18:50	8	8	8	30.44	5	3.9	24.9
6/17/2019 19:00	8	8	8	29.74	5	3.7	25.1
6/17/2019 19:10	8	8	8	30.05	2.2	2	25.1
6/17/2019 19:20	8	8	8	31.42	1	0.8	0.3
6/17/2019 19:30	8	8	8	31.57	5	3.8	23.2
6/17/2019 19:40	8	8	8	30.54	4.9	3.9	24.9
6/17/2019 19:50	8	8	8	29.77	3.5	3.3	25.2
6/17/2019 20:00	8	8	8	31.73	1.1	0.8	0.4
6/17/2019 20:10	8	8	8	31.33	4.9	3.8	24.2
6/17/2019 20:20	8	8	8	30.35	4.9	3.8	24.9
6/17/2019 20:30	8	8	8	29.53	4.7	3.8	25.1
6/17/2019 20:40	8	8	8	30.14	1.6	1.2	25
6/17/2019 20:50	8	8	8	31.18	0.9	0.8	0.3
6/17/2019 21:00	8	8	8	32	5	3.9	0.4
6/17/2019 21:10	8	8	8	31.18	4.8	3.9	24.5
6/17/2019 21:20	8	8	8	30.2	4.9	3.8	25.1
6/17/2019 21:30	8	8	8	30.11	2.4	2.3	25.2
6/17/2019 21:40	8	8	8	31.6	1	0.8	0.3
6/17/2019 21:50	8	8	8	31.45	4.9	3.9	23.9
6/17/2019 22:00	8	8	8	30.29	4.9	3.8	25
6/17/2019 22:10	8	8	8	29.53	3.5	3.2	25.1
6/17/2019 22:20	8	8	8	30.44	1	0.8	3.3
6/17/2019 22:30	8	8	8	31.45	1	0.8	0.3
6/17/2019 22:40	8	8	8	31.88	4.9	3.9	0.4
6/17/2019 22:50	8	8	8	31.09	4.8	3.8	24.6
6/17/2019 23:00	8	8	8	30.17	5.1	3.9	25
6/17/2019 23:10	8	8	8	30.35	1.2	0.9	25.1
6/17/2019 23:20	8	8	8	32	4.9	3.9	0.4
6/17/2019 23:30	8	8	8	30.72	4.8	3.8	24.9
6/17/2019 23:40	8	8	8	29.56	4.8	3.9	25.2
6/17/2019 23:50	8	8	8	30.75	0.9	0.8	3.3
6/18/2019 0:00	8	8	8	31.85	0.9	0.8	0.4
6/18/2019 0:10	8	8	8	31.79	4.9	3.8	0.5
6/18/2019 0:20	8	8	8	31.12	4.8	3.8	24.5
6/18/2019 0:30	8	8	8	30.38	4.9	3.9	24.9
6/18/2019 0:40	8	8	8	29.83	3.4	3.1	25.2
6/18/2019 0:50	8	8	8	31.6	0.9	0.8	0.3
6/18/2019 1:00	8	8	8	31.3	4.8	3.8	24.5
6/18/2019 1:10	8	8	8	29.96	4.7	3.8	25.1

6/18/2019 1:20	8	8	8	31.02	0.9	0.9	4.3
6/18/2019 1:30	8	8	8	31.82	5	3.9	0.5
6/18/2019 1:40	8	8	8	30.81	4.9	3.9	24.8
6/18/2019 1:50	8	8	8	29.86	4.9	3.8	25.1
6/18/2019 2:00	8	8	8	30.05	1.7	1.6	25.1
6/18/2019 2:10	8	8	8	31.33	1	0.8	0.3
6/18/2019 2:20	8	8	8	31.82	4.9	3.8	0.5
6/18/2019 2:30	8	8	8	30.9	4.9	3.9	24.7
6/18/2019 2:40	8	8	8	30.08	4.9	3.9	25.1
6/18/2019 2:50	8	8	8	29.83	3.3	3	25.2
6/18/2019 3:00	8	8	8	31.15	1	0.8	0.3
6/18/2019 3:10	8	8	8	31.94	4.8	3.8	0.4
6/18/2019 3:20	8	8	8	31.12	4.9	3.8	24.5
6/18/2019 3:30	8	8	8	30.26	4.8	3.9	25
6/18/2019 3:40	8	8	8	29.68	3.4	3.1	25.2
6/18/2019 3:50	8	8	8	31.12	0.9	0.8	0.3
6/18/2019 4:00	8	8	8	31.73	4.9	3.9	0.5
6/18/2019 4:10	8	8	8	30.69	4.7	3.8	24.9
6/18/2019 4:20	8	8	8	29.68	5.1	3.8	25.1
6/18/2019 4:30	8	8	8	30.57	1.3	0.9	25
6/18/2019 4:40	8	8	8	31.88	1	0.8	0.4
6/18/2019 4:50	8	8	8	31.45	4.9	3.8	24
6/18/2019 5:00	8	8	8	30.72	4.9	3.9	24.8
6/18/2019 5:10	8	8	8	29.8	4.8	3.8	25
6/18/2019 5:20	8	8	8	30.29	1.3	1	25.1
6/18/2019 5:30	8	8	8	31.57	0.9	0.8	0.3
6/18/2019 5:40	8	8	8	31.67	4.8	3.8	0.5
6/18/2019 5:50	8	8	8	30.78	4.9	3.8	24.8
6/18/2019 6:00	8	8	8	29.99	4.7	3.9	25
6/18/2019 6:10	8	8	8	30.51	1.2	0.8	25
6/18/2019 6:20	8	8	8	31.94	1	0.8	0.3
6/18/2019 6:30	8	8	8	31.48	5	3.9	23.7
6/18/2019 6:40	8	8	8	30.44	4.9	3.8	24.8
6/18/2019 6:50	8	8	8	29.44	4.8	3.9	25.2
6/18/2019 7:00	8	8	8	30.2	1.1	0.9	25
6/18/2019 7:10	8	8	8	31.36	0.9	0.8	0.3
6/18/2019 7:20	8	8	8	31.85	4.9	3.8	0.4
6/18/2019 7:30	8	8	8	31.05	4.9	3.8	24.7
6/18/2019 7:40	8	8	8	29.86	4.7	3.8	25.2
6/18/2019 7:50	8	8	8	30.99	0.7	0.8	1
6/18/2019 8:00	8	8	8	31.67	4.9	3.9	0.5
6/18/2019 8:10	8	8	8	30.75	4.9	3.8	24.9
6/18/2019 8:20	8	8	8	29.83	4.9	3.8	25.1
6/18/2019 8:30	8	8	8	30.08	1.6	1.3	25.1
6/18/2019 8:40	8	8	8	31.15	1	0.8	0.3
6/18/2019 8:50	8	8	8	32.06	4.8	4.1	0.3
6/18/2019 9:00	8	8	8	31.12	4.8	3.8	24.5

6/18/2019 9:10	8	8	8	30.08	4.8	3.9	25
6/18/2019 9:20	8	8	8	30.66	1.2	0.9	25
6/18/2019 9:30	8	8	8	32.03	5	3.9	0.4
6/18/2019 9:40	8	8	8	30.81	4.9	3.9	24.8
6/18/2019 9:50	0	0	0	29.99	3.4	3.3	2.7
6/18/2019 10:00	2	0	1	30.23	0.9	0.8	0.4
6/18/2019 10:10	1	0	2	30.23	0.9	0.8	0.4
6/18/2019 10:20	9	9	9	31.48	4.9	3.9	23.7
6/18/2019 10:30	9	9	9	30.93	5	3.9	25.2
6/18/2019 10:40	9	9	9	31.12	4.8	3.9	25.2
6/18/2019 10:50	9	9	9	30.96	5	3.8	25.2
6/18/2019 11:00	9	9	9	31.02	4.7	3.9	25.1
6/18/2019 11:10	9	9	9	31.48	4.7	3.8	24.4
6/18/2019 11:20	9	9	9	30.84	2.3	2	25.1
6/18/2019 11:30	9	9	9	31.39	4.9	3.8	24.6
6/18/2019 11:40	9	9	9	30.26	3.5	3.2	25.1
6/18/2019 11:50	9	9	9	31.6	4.6	3.9	23.8
6/18/2019 12:00	9	9	9	30.29	3.6	3.3	25.1
6/18/2019 12:10	9	9	9	31.57	4.8	3.8	24.3
6/18/2019 12:20	9	9	9	30.87	2.3	2	25.1
6/18/2019 12:30	9	9	9	31.15	4.8	3.8	24.8
6/18/2019 12:40	9	9	9	31.15	1.2	0.9	25.1
6/18/2019 12:50	9	9	9	31.05	4.9	3.8	24.9
6/18/2019 13:00	9	9	9	31.63	1.1	0.8	2.9
6/18/2019 13:10	9	9	9	30.69	4.7	3.8	25
6/18/2019 13:20	9	9	9	32	5	3.8	0.4
6/18/2019 13:30	9	9	9	30.35	4.9	3.8	25.1
6/18/2019 13:40	9	9	9	31.82	4.8	3.9	0.4
6/18/2019 13:50	9	9	9	30.23	4.9	3.8	25.2
6/18/2019 14:00	9	9	9	31.63	4.8	4	23.9
6/18/2019 14:10	9	9	9	30.23	3.8	3.4	25.2
6/18/2019 14:20	9	9	9	31.54	4.9	3.9	24.1
6/18/2019 14:30	9	9	9	30.51	3.4	3	25.1
6/18/2019 14:40	9	9	9	31.33	5.1	3.8	24.7
6/18/2019 14:50	9	9	9	31.21	0.9	0.8	25.1
6/18/2019 15:00	9	9	9	31.05	4.6	3.7	24.9
6/18/2019 15:10	9	9	9	31.54	1	0.8	3.3
6/18/2019 15:20	9	9	9	30.87	4.8	3.9	24.9
6/18/2019 15:30	9	9	9	32.15	3.8	3.4	0.3
6/18/2019 15:40	9	9	9	30.51	4.9	3.8	25.1
6/18/2019 15:50	9	9	9	31.73	4.8	3.9	0.5
6/18/2019 16:00	9	9	9	30.32	3.5	3.3	25.2
6/18/2019 16:10	9	9	9	31.51	4.9	3.8	24.3
6/18/2019 16:20	9	9	9	30.96	2.3	1.9	25.1
6/18/2019 16:30	9	9	9	31.15	5	3.9	24.9
6/18/2019 16:40	9	9	9	31.76	1	0.8	2.6
6/18/2019 16:50	9	9	9	30.57	4.6	3.8	25.1

6/18/2019 17:00	9	9	9	31.82	4.9	3.9	0.4
6/18/2019 17:10	9	9	9	30.29	4.9	3.8	25.2
6/18/2019 17:20	9	9	9	31.76	4.8	3.8	0.5
6/18/2019 17:30	9	9	9	30.23	5	3.9	25.1
6/18/2019 17:40	9	9	9	31.54	4.9	3.9	24.2
6/18/2019 17:50	9	9	9	30.47	3.5	3.2	25.1
6/18/2019 18:00	9	9	9	31.3	4.9	3.9	24.7
6/18/2019 18:10	9	9	9	31.45	1.1	0.9	25
6/18/2019 18:20	9	9	9	30.93	4.9	3.9	24.9
6/18/2019 18:30	9	9	9	32.09	4.9	4.1	0.3
6/18/2019 18:40	9	9	9	30.44	5	3.9	25.1
6/18/2019 18:50	9	9	9	31.88	4.9	3.8	0.5
6/18/2019 19:00	9	9	9	30.47	4.9	3.9	25.1
6/18/2019 19:10	9	9	9	32.06	4.9	3.8	0.4
6/18/2019 19:20	9	9	9	30.57	4.7	3.9	25
6/18/2019 19:30	9	9	9	32.09	4.9	3.9	0.3
6/18/2019 19:40	9	9	9	30.47	4.7	3.8	25.1
6/18/2019 19:50	9	9	9	32.03	4.9	3.8	0.4
6/18/2019 20:00	9	9	9	30.51	4.9	3.8	25.1
6/18/2019 20:10	9	9	9	31.97	4.8	3.9	0.4
6/18/2019 20:20	9	9	9	30.26	4.7	3.9	25.2
6/18/2019 20:30	9	9	9	31.67	4.9	3.9	3.5
6/18/2019 20:40	9	9	9	30.23	4.8	3.9	25.1
6/18/2019 20:50	9	9	9	31.79	4.8	3.9	0.5
6/18/2019 21:00	9	9	9	30.29	4.8	3.8	25.1
6/18/2019 21:10	9	9	9	31.57	4.8	3.8	23.2
6/18/2019 21:20	9	9	9	30.2	3.5	3.3	25.2
6/18/2019 21:30	9	9	9	31.54	4.9	3.9	24.2
6/18/2019 21:40	9	9	9	30.26	3.5	3.2	25.2
6/18/2019 21:50	9	9	9	31.51	4.8	3.9	24.3
6/18/2019 22:00	9	9	9	30.26	3.4	3.3	25.2
6/18/2019 22:10	9	9	9	31.6	4.8	3.8	24.1
6/18/2019 22:20	9	9	9	30.38	3.4	3.2	25.1
6/18/2019 22:30	9	9	9	31.48	4.8	3.8	24.4
6/18/2019 22:40	9	9	9	30.47	3.2	2.8	25.2
6/18/2019 22:50	9	9	9	31.36	5.1	4	24.6
6/18/2019 23:00	9	9	9	30.72	2.8	2.6	25.1
6/18/2019 23:10	9	9	9	31.33	4.9	3.9	24.7
6/18/2019 23:20	9	9	9	30.75	2.4	2.2	25.1
6/18/2019 23:30	9	9	9	31.45	4.7	3.8	24.5
6/18/2019 23:40	9	9	9	30.66	2.8	2.6	25.1
6/18/2019 23:50	9	9	9	31.39	4.9	3.8	24.6
6/19/2019 0:00	9	9	9	30.63	2.9	2.7	25.2
6/19/2019 0:10	9	9	9	31.51	4.6	3.9	24.6
6/19/2019 0:20	9	9	9	30.63	2.7	2.4	25.1
6/19/2019 0:30	9	9	9	31.27	4.8	3.8	24.7
6/19/2019 0:40	9	9	9	30.93	1.8	1.3	25.1

6/19/2019 0:50	9	9	9	31.21	4.9	3.8	24.7
6/19/2019 1:00	9	9	9	31.02	1.3	1	25.1
6/19/2019 1:10	9	9	9	31.27	4.8	3.8	24.8
6/19/2019 1:20	9	9	9	30.96	2	1.7	25.1
6/19/2019 1:30	9	9	9	31.33	4.8	3.8	24.8
6/19/2019 1:40	9	9	9	31.05	1.2	0.9	25
6/19/2019 1:50	9	9	9	31.21	4.8	3.9	24.8
6/19/2019 2:00	9	9	9	31.3	1	0.9	25
6/19/2019 2:10	9	9	9	31.09	4.8	3.9	24.9
6/19/2019 2:20	9	9	9	31.02	1.1	0.9	25.1
6/19/2019 2:30	9	9	9	31.33	4.8	3.8	24.7
6/19/2019 2:40	9	9	9	30.63	2.7	2.4	25.2
6/19/2019 2:50	9	9	9	31.39	4.9	3.9	24.6
6/19/2019 3:00	9	9	9	30.78	2.5	2.3	25.1
6/19/2019 3:10	9	9	9	31.21	5.1	4	24.7
6/19/2019 3:20	9	9	9	31.18	1	0.8	25
6/19/2019 3:30	9	9	9	31.05	4.8	3.9	24.9
6/19/2019 3:40	9	9	9	31.48	1.1	0.8	3.1
6/19/2019 3:50	9	9	9	30.9	4.7	3.9	24.9
6/19/2019 4:00	9	9	9	31.27	1	0.8	25
6/19/2019 4:10	9	9	9	31.21	4.7	3.9	24.8
6/19/2019 4:20	9	9	9	30.99	1.6	1.4	25
6/19/2019 4:30	9	9	9	31.33	4.9	3.9	24.8
6/19/2019 4:40	9	9	9	31.09	1.2	0.9	25.1
6/19/2019 4:50	9	9	9	31.12	4.8	3.8	24.8
6/19/2019 5:00	9	9	9	30.96	1.2	1.2	25.1
6/19/2019 5:10	9	9	9	31.33	5	3.9	24.7
6/19/2019 5:20	9	9	9	30.9	2	1.7	25.2
6/19/2019 5:30	9	9	9	31.3	4.9	3.8	24.8
6/19/2019 5:40	9	9	9	31.12	1.1	0.9	25.1
6/19/2019 5:50	9	9	9	31.27	4.6	3.8	24.8
6/19/2019 6:00	9	9	9	30.93	1.3	1.2	25
6/19/2019 6:10	9	9	9	31.42	4.8	3.8	24.5
6/19/2019 6:20	9	9	9	30.63	2.6	2.2	25.1
6/19/2019 6:30	9	9	9	31.39	4.9	3.8	24.6
6/19/2019 6:40	9	9	9	30.35	3.3	3.1	25.2
6/19/2019 6:50	9	9	9	31.57	4.9	3.8	24.1
6/19/2019 7:00	9	9	9	30.11	4.7	3.9	25.2
6/19/2019 7:10	9	9	9	31.85	5	3.9	0.5
6/19/2019 7:20	9	9	9	30.35	4.9	3.9	25.1
6/19/2019 7:30	9	9	9	31.88	4.7	3.8	0.4
6/19/2019 7:40	9	9	9	30.35	4.9	3.9	25
6/19/2019 7:50	9	9	9	31.97	4.8	3.8	0.4
6/19/2019 8:00	9	9	9	30.57	4.8	3.7	25.1
6/19/2019 8:10	9	9	9	31.76	0.9	0.8	0.4
6/19/2019 8:20	9	9	9	30.9	4.8	3.8	25
6/19/2019 8:30	9	9	9	31.39	1.1	0.9	3.1

6/19/2019 8:40	9	9	9	30.99	4.9	3.8	24.9
6/19/2019 8:50	9	9	9	31.42	0.9	0.8	25
6/19/2019 9:00	9	9	9	31.02	4.8	3.8	24.9
6/19/2019 9:10	9	9	9	31.27	1.1	0.8	25
6/19/2019 9:20	9	9	9	31.21	4.9	3.9	24.8
6/19/2019 9:30	9	9	9	30.96	1.4	1.2	25.1
6/19/2019 9:40	9	9	9	31.18	4.9	3.9	24.7
6/19/2019 9:50	9	9	9	30.81	1.5	1.4	25
6/19/2019 10:00	9	9	9	31.39	5	3.8	24.5
6/19/2019 10:10	9	9	9	30.41	3.3	3	25.1
6/19/2019 10:20	9	9	9	31.54	4.8	3.8	24.3
6/19/2019 10:30	9	9	9	30.14	3.5	3.3	25.1
6/19/2019 10:40	9	9	9	31.67	4.7	3.9	23.7
6/19/2019 10:50	9	9	9	30.23	3.4	3.2	25.1
6/19/2019 11:00	9	9	9	31.57	4.8	3.8	24.1
6/19/2019 11:10	9	9	9	30.23	3.6	3.3	25.2
6/19/2019 11:20	9	9	9	31.6	4.8	3.9	24.1
6/19/2019 11:30	9	9	9	30.17	4.8	3.8	25.1
6/19/2019 11:40	9	9	9	31.63	4.9	3.9	23.8
6/19/2019 11:50	9	9	9	30.08	4.6	3.9	25.1
6/19/2019 12:00	9	9	9	31.67	4.8	3.9	20.7
6/19/2019 12:10	9	9	9	30.23	4.8	3.9	25.2
6/19/2019 12:20	9	9	9	31.67	4.8	3.9	23.8
6/19/2019 12:30	9	9	9	30.2	1.7	2	25.2
6/19/2019 12:40	9	9	9	31.63	4.6	3.9	24
6/19/2019 12:50	9	9	9	30.26	3.4	3.2	25.2
6/19/2019 13:00	9	9	9	31.57	4.7	3.8	24.1
6/19/2019 13:10	9	9	9	30.38	3.4	3.2	25.1
6/19/2019 13:20	9	9	9	31.48	4.9	3.8	24.2
6/19/2019 13:30	9	9	9	30.35	3.4	3.2	25.1
6/19/2019 13:40	9	9	9	31.57	4.7	3.9	24.1
6/19/2019 13:50	9	9	9	30.57	3.1	2.7	25.1
6/19/2019 14:00	9	9	9	31.45	4.8	3.9	24.6
6/19/2019 14:10	9	9	9	30.81	2.4	2	25.1
6/19/2019 14:20	9	9	9	31.3	4.9	3.8	24.8
6/19/2019 14:30	9	9	9	30.93	1.7	1.4	25.1
6/19/2019 14:40	9	9	9	31.21	4.9	3.9	24.8
6/19/2019 14:50	9	9	9	30.81	1.6	1.3	25.1
6/19/2019 15:00	9	9	9	31.45	5	3.9	24.5
6/19/2019 15:10	9	9	9	30.41	3.5	3.1	25.2
6/19/2019 15:20	9	9	9	31.54	4.8	3.8	24.5
6/19/2019 15:30	9	9	9	30.54	3.3	2.9	25.1
6/19/2019 15:40	9	9	9	31.45	4.8	3.9	24.5
6/19/2019 15:50	9	9	9	30.44	3.1	3.1	25.1
6/19/2019 16:00	9	9	9	31.42	5	3.9	24.4
6/19/2019 16:10	9	9	9	30.51	3.3	3	25.2
6/19/2019 16:20	9	9	9	31.48	5	3.8	24.3

6/19/2019 16:30	9	9	9	30.32	3.4	3.2	25.1
6/19/2019 16:40	9	9	9	31.54	4.8	3.8	24.2
6/19/2019 16:50	9	9	9	30.26	3.5	3.3	25.2
6/19/2019 17:00	9	9	9	31.57	4.9	3.9	23.9
6/19/2019 17:10	9	9	9	30.17	3.5	3.3	25.2
6/19/2019 17:20	9	9	9	31.57	5	3.8	24.2
6/19/2019 17:30	9	9	9	30.57	3.1	2.8	25.2
6/19/2019 17:40	9	9	9	31.39	4.8	3.8	24.5
6/19/2019 17:50	9	9	9	31.02	1.2	0.9	25
6/19/2019 18:00	9	9	9	31.09	4.8	3.8	24.8
6/19/2019 18:10	9	9	9	31.63	1	0.8	2.8
6/19/2019 18:20	9	9	9	30.9	4.9	3.8	24.9
6/19/2019 18:30	9	9	9	31.48	1	0.8	5.1
6/19/2019 18:40	9	9	9	31.02	4.9	3.9	24.8
6/19/2019 18:50	9	9	9	31.39	1	0.8	24.9
6/19/2019 19:00	9	9	9	30.96	4.8	3.8	24.9
6/19/2019 19:10	9	9	9	31.45	1.1	0.8	3.1
6/19/2019 19:20	9	9	9	30.93	4.8	3.8	24.9
6/19/2019 19:30	9	9	9	31.54	1	0.8	5.1
6/19/2019 19:40	9	9	9	30.87	4.9	3.9	24.9
6/19/2019 19:50	9	9	9	31.51	0.9	0.8	3.8
6/19/2019 20:00	9	9	9	30.99	4.8	3.8	24.9
6/19/2019 20:10	9	9	9	31.18	1	0.9	25
6/19/2019 20:20	9	9	9	31.21	4.7	3.9	24.7
6/19/2019 20:30	9	9	9	30.63	2.5	2.3	25.1
6/19/2019 20:40	9	9	9	31.45	4.8	3.8	24.3
6/19/2019 20:50	9	9	9	30.11	4.9	3.8	25.2
6/19/2019 21:00	9	9	9	31.85	4.8	3.9	0.5
6/19/2019 21:10	9	9	9	30.44	4.9	4	25.1
6/19/2019 21:20	9	9	9	32.09	1.1	0.8	0.3
6/19/2019 21:30	9	9	9	30.78	4.9	3.9	24.9
6/19/2019 21:40	9	9	9	31.82	0.9	0.8	0.3
6/19/2019 21:50	9	9	9	30.84	5	3.9	25
6/19/2019 22:00	9	9	9	31.7	1	0.8	0.6
6/19/2019 22:10	9	9	9	30.9	4.9	3.9	24.9
6/19/2019 22:20	9	9	9	31.63	1.1	0.8	3.6
6/19/2019 22:30	9	9	9	30.81	4.8	3.9	24.9
6/19/2019 22:40	9	9	9	31.79	1	0.8	0.4
6/19/2019 22:50	9	9	9	30.75	4.9	3.9	25
6/19/2019 23:00	9	9	9	31.82	0.9	0.8	0.4
6/19/2019 23:10	9	9	9	30.81	4.7	3.8	25
6/19/2019 23:20	9	9	9	31.73	0.9	0.8	1.4
6/19/2019 23:30	9	9	9	30.84	4.9	3.8	24.9
6/19/2019 23:40	9	9	9	31.67	0.9	0.8	2.5
6/19/2019 23:50	9	9	9	30.87	4.9	3.8	24.9
6/20/2019 0:00	9	9	9	31.6	1	0.8	2.6
6/20/2019 0:10	9	9	9	30.9	4.8	3.8	24.9

6/20/2019 0:20	9	9	9	31.57	0.9	0.8	4.4
6/20/2019 0:30	9	9	9	30.93	4.9	3.9	24.9
6/20/2019 0:40	9	9	9	31.57	0.9	0.8	5
6/20/2019 0:50	9	9	9	30.96	4.9	3.9	24.9
6/20/2019 1:00	9	9	9	31.7	1	0.8	2.5
6/20/2019 1:10	9	9	9	30.9	4.9	3.8	25
6/20/2019 1:20	9	9	9	31.57	1.1	0.8	4.2
6/20/2019 1:30	9	9	9	30.93	4.7	3.9	24.9
6/20/2019 1:40	9	9	9	31.73	1	0.8	1.2
6/20/2019 1:50	9	9	9	30.81	4.7	3.8	25
6/20/2019 2:00	9	9	9	31.48	0.9	0.9	2.4
6/20/2019 2:10	9	9	9	31.02	4.8	3.9	24.9
6/20/2019 2:20	9	9	9	31.12	1	0.8	25
6/20/2019 2:30	9	9	9	31.15	4.8	3.8	24.8
6/20/2019 2:40	9	9	9	30.69	2.6	2.3	25.1
6/20/2019 2:50	9	9	9	31.57	4.7	3.9	23.9
6/20/2019 3:00	9	9	9	30.23	4.7	3.8	25.1
6/20/2019 3:10	9	9	9	31.85	4.7	3.8	0.5
6/20/2019 3:20	9	9	9	30.38	5	3.8	25.1
6/20/2019 3:30	9	9	9	32	4.8	3.9	0.4
6/20/2019 3:40	9	9	9	30.44	4.9	3.9	25.1
6/20/2019 3:50	9	9	9	32.09	4.8	3.9	0.4
6/20/2019 4:00	9	9	9	30.51	4.9	3.8	25
6/20/2019 4:10	9	9	9	32.06	0.9	0.8	0.3
6/20/2019 4:20	9	9	9	30.78	4.8	3.9	25
6/20/2019 4:30	9	9	9	31.54	1	0.8	2.5
6/20/2019 4:40	9	9	9	31.09	4.8	3.9	24.8
6/20/2019 4:50	9	9	9	31.05	0.9	0.8	25
6/20/2019 5:00	9	9	9	31.15	4.9	3.8	24.8
6/20/2019 5:10	9	9	9	30.84	1.6	1.5	25.1
6/20/2019 5:20	9	9	9	31.27	4.8	3.8	24.7
6/20/2019 5:30	9	9	9	30.63	2.8	2.4	25.1
6/20/2019 5:40	9	9	9	31.48	4.9	3.9	24.5
6/20/2019 5:50	9	9	9	30.72	2.3	1.9	25.1
6/20/2019 6:00	9	9	9	31.36	5	3.8	24.6
6/20/2019 6:10	9	9	9	30.81	1.9	1.7	25.1
6/20/2019 6:20	9	9	9	31.39	4.8	3.8	24.7
6/20/2019 6:30	9	9	9	30.44	3.1	2.8	25.2
6/20/2019 6:40	9	9	9	31.36	4.7	3.8	24.6
6/20/2019 6:50	9	9	9	30.51	2.8	2.6	25.2
6/20/2019 7:00	9	9	9	31.57	4.9	3.9	24.2
6/20/2019 7:10	9	9	9	30.26	3.5	3.2	25.1
6/20/2019 7:20	9	9	9	31.51	4.6	4	24.1
6/20/2019 7:30	9	9	9	30.47	3.3	3	25.1
6/20/2019 7:40	9	9	9	31.45	4.8	3.9	24.2
6/20/2019 7:50	9	9	9	30.51	3.4	3	25.1
6/20/2019 8:00	9	9	9	31.45	4.9	3.9	24.3

6/20/2019 8:10	9	9	9	30.32	3.4	3.2	25.1
6/20/2019 8:20	9	9	9	31.48	4.7	3.8	24.3
6/20/2019 8:30	9	9	9	30.41	3.3	3.1	25.2
6/20/2019 8:40	9	9	9	31.39	5	3.9	24.4
6/20/2019 8:50	9	9	9	30.29	3.6	3.3	25.2
6/20/2019 9:00	9	9	9	31.7	4.9	3.8	21.7
6/20/2019 9:10	9	9	9	30.14	1.6	1.8	25.1
6/20/2019 9:20	9	9	9	31.67	4.7	3.8	23.8
6/20/2019 9:30	9	9	9	30.14	4.8	3.8	25.2
6/20/2019 9:40	9	9	9	31.73	4.9	3.9	0.5
6/20/2019 9:50	9	9	9	30.14	4.8	3.8	25.2
6/20/2019 10:00	9	9	9	31.54	4.7	3.9	24.1
6/20/2019 10:10	9	9	9	30.54	3.1	2.8	25.1
6/20/2019 10:20	9	9	9	31.54	4.8	3.8	24.1
6/20/2019 10:30	9	9	9	30.23	3.4	3.3	25.1
6/20/2019 10:40	9	9	9	31.57	5.1	3.8	23.9
6/20/2019 10:50	9	9	9	30.35	3.4	3.3	25.2
6/20/2019 11:00	9	9	9	31.51	4.8	3.8	24.1
6/20/2019 11:10	9	9	9	30.35	3.4	3.1	25.1
6/20/2019 11:20	9	9	9	31.54	4.9	3.9	24.3
6/20/2019 11:30	9	9	9	30.41	3.4	3.1	25.2
6/20/2019 11:40	9	9	9	31.36	4.8	3.8	24.6
6/20/2019 11:50	9	9	9	30.84	1.7	1.5	25.1
6/20/2019 12:00	9	9	9	31.27	4.7	3.9	24.6
6/20/2019 12:10	9	9	9	31.05	1.5	1.3	25.1
6/20/2019 12:20	9	9	9	31.3	4.7	3.8	24.7
6/20/2019 12:30	9	9	9	31.09	1.2	1	25
6/20/2019 12:40	9	9	9	31.12	4.8	3.9	24.8
6/20/2019 12:50	9	9	9	31.39	1	0.8	25
6/20/2019 13:00	9	9	9	31.02	4.7	3.8	24.8
6/20/2019 13:10	9	9	9	31.27	1.2	0.8	25
6/20/2019 13:20	9	9	9	31.15	4.8	3.9	24.8
6/20/2019 13:30	9	9	9	31.21	1.1	0.9	25
6/20/2019 13:40	9	9	9	31.05	4.7	3.8	24.8
6/20/2019 13:50	9	9	9	31.21	0.9	0.8	24.9
6/20/2019 14:00	9	9	9	31.15	4.8	3.8	24.7
6/20/2019 14:10	9	9	9	31.09	1.1	0.9	24.9
6/20/2019 14:20	9	9	9	31.05	4.9	3.9	24.8
6/20/2019 14:30	9	9	9	31.18	1	0.9	24.9
6/20/2019 14:40	9	9	9	30.99	4.7	3.8	24.9
6/20/2019 14:50	9	9	9	31.57	1	0.8	5.1
6/20/2019 15:00	9	9	9	30.93	4.9	3.8	24.9
6/20/2019 15:10	9	9	9	31.94	0.9	0.8	0.3
6/20/2019 15:20	9	9	9	30.72	4.9	3.8	24.9
6/20/2019 15:30	9	9	9	32	1.1	0.8	0.3
6/20/2019 15:40	9	9	9	30.69	4.9	3.9	25
6/20/2019 15:50	9	9	9	32.09	1.1	0.8	0.3

6/20/2019 16:00	9	9	9	30.63	4.8	3.8	25
6/20/2019 16:10	9	9	9	31.97	4.9	3.8	0.3
6/20/2019 16:20	9	9	9	30.41	4.7	3.8	25.1
6/20/2019 16:30	9	9	9	32.09	4.8	3.8	0.3
6/20/2019 16:40	9	9	9	30.47	4.9	3.9	25.1
6/20/2019 16:50	9	9	9	31.85	4.9	3.8	0.4
6/20/2019 17:00	9	9	9	30.26	4.6	3.9	25.1
6/20/2019 17:10	9	9	9	31.67	4.7	3.9	23.7
6/20/2019 17:20	9	9	9	30.26	3.4	3.3	25.2
6/20/2019 17:30	9	9	9	31.48	4.7	3.9	24.2
6/20/2019 17:40	9	9	9	30.72	2.4	2.2	25.1
6/20/2019 17:50	9	9	9	31.3	4.9	3.9	24.6
6/20/2019 18:00	9	9	9	30.81	1.9	1.6	25.1
6/20/2019 18:10	9	9	9	31.27	4.7	3.8	24.7
6/20/2019 18:20	9	9	9	30.66	2.4	2.1	25.1
6/20/2019 18:30	9	9	9	31.36	4.7	3.8	24.6
6/20/2019 18:40	9	9	9	30.78	1.9	1.7	25.1
6/20/2019 18:50	9	9	9	31.21	4.9	3.8	24.7
6/20/2019 19:00	9	9	9	31.02	1.2	0.9	25.1
6/20/2019 19:10	9	9	9	31.18	4.6	3.9	24.8
6/20/2019 19:20	9	9	9	31.27	1	0.8	25
6/20/2019 19:30	9	9	9	30.99	4.5	3.9	24.9
6/20/2019 19:40	9	9	9	31.33	1.1	0.7	25
6/20/2019 19:50	9	9	9	31.02	4.8	3.9	24.9
6/20/2019 20:00	9	9	9	31.36	1	0.8	24.9
6/20/2019 20:10	9	9	9	31.15	4.9	3.8	24.8
6/20/2019 20:20	9	9	9	31.02	1.1	0.8	25
6/20/2019 20:30	9	9	9	31.15	4.9	3.9	24.7
6/20/2019 20:40	9	9	9	31.21	1	0.9	25
6/20/2019 20:50	9	9	9	30.99	4.9	3.8	24.8
6/20/2019 21:00	9	9	9	31.42	0.9	0.7	4.3
6/20/2019 21:10	9	9	9	30.93	5	3.9	24.9
6/20/2019 21:20	9	9	9	31.67	1.1	0.8	2.6
6/20/2019 21:30	9	9	9	30.81	4.9	3.8	24.9
6/20/2019 21:40	9	9	9	31.73	1	0.8	1.8
6/20/2019 21:50	9	9	9	30.84	4.8	3.8	24.9
6/20/2019 22:00	9	9	9	31.82	1	0.8	0.3
6/20/2019 22:10	9	9	9	30.69	4.9	3.9	25
6/20/2019 22:20	9	9	9	31.79	0.9	0.8	0.3
6/20/2019 22:30	9	9	9	30.57	4.9	3.8	25
6/20/2019 22:40	9	9	9	32	1	0.8	0.3
6/20/2019 22:50	9	9	9	30.69	4.7	3.8	24.9
6/20/2019 23:00	9	9	9	32.09	5	4.2	0.3
6/20/2019 23:10	9	9	9	30.51	4.8	3.9	25.1
6/20/2019 23:20	9	9	9	32.06	4.5	3.9	0.4
6/20/2019 23:30	9	9	9	30.41	4.9	3.9	25
6/20/2019 23:40	9	9	9	31.97	4.8	3.8	0.4

6/20/2019 23:50	9	9	9	30.47	5	3.8	25.1
6/21/2019 0:00	9	9	9	31.97	4.8	3.9	0.4
6/21/2019 0:10	9	9	9	30.38	4.8	3.8	25
6/21/2019 0:20	9	9	9	32.09	4.7	3.9	0.3
6/21/2019 0:30	9	9	9	30.54	4.8	3.9	25
6/21/2019 0:40	9	9	9	31.82	0.9	0.8	0.3
6/21/2019 0:50	9	9	9	30.84	5	3.9	24.9
6/21/2019 1:00	9	9	9	31.39	1.1	0.8	3.3
6/21/2019 1:10	9	9	9	31.09	4.9	3.8	24.8
6/21/2019 1:20	9	9	9	30.96	1.1	0.8	25
6/21/2019 1:30	9	9	9	31.27	4.7	3.9	24.7
6/21/2019 1:40	9	9	9	31.05	1.2	1	25
6/21/2019 1:50	9	9	9	31.21	5	3.8	24.7
6/21/2019 2:00	9	9	9	30.84	1.5	1.2	25.1
6/21/2019 2:10	9	9	9	31.15	4.8	3.9	24.8
6/21/2019 2:20	9	9	9	31.36	1	0.8	25
6/21/2019 2:30	9	9	9	31.18	4.8	3.9	24.8
6/21/2019 2:40	9	9	9	30.96	1.2	1	25
6/21/2019 2:50	9	9	9	31.33	4.9	3.9	24.6
6/21/2019 3:00	9	9	9	30.54	3	2.8	25.1
6/21/2019 3:10	9	9	9	31.51	4.8	3.9	24.1
6/21/2019 3:20	9	9	9	30.08	4.7	3.9	25.2
6/21/2019 3:30	9	9	9	31.63	4.8	3.9	0.5
6/21/2019 3:40	9	9	9	30.2	4.9	3.8	25.1
6/21/2019 3:50	9	9	9	31.85	4.8	3.8	0.5
6/21/2019 4:00	9	9	9	30.35	4.8	3.8	25.1
6/21/2019 4:10	9	9	9	32.03	4.8	3.8	0.4
6/21/2019 4:20	9	9	9	30.47	4.8	3.9	25
6/21/2019 4:30	9	9	9	31.97	4.8	3.9	0.4
6/21/2019 4:40	9	9	9	30.32	4.9	3.9	25
6/21/2019 4:50	9	9	9	32.03	4.9	3.9	0.4
6/21/2019 5:00	9	9	9	30.54	4.8	3.9	25
6/21/2019 5:10	9	9	9	32.09	1.3	0.8	0.3
6/21/2019 5:20	9	9	9	30.75	4.7	3.9	24.9
6/21/2019 5:30	9	9	9	32	1	0.8	0.3
6/21/2019 5:40	9	9	9	30.66	4.8	3.8	25
6/21/2019 5:50	9	9	9	31.54	0.9	0.8	2.6
6/21/2019 6:00	9	9	9	30.9	4.9	3.9	24.9
6/21/2019 6:10	9	9	9	31.51	0.9	0.8	5
6/21/2019 6:20	9	9	9	30.87	4.9	3.9	24.9
6/21/2019 6:30	9	9	9	31.51	0.9	0.8	4.1
6/21/2019 6:40	9	9	9	30.93	4.9	3.8	24.9
6/21/2019 6:50	9	9	9	31.27	1	0.8	25
6/21/2019 7:00	9	9	9	31.09	4.7	3.8	24.8
6/21/2019 7:10	9	9	9	30.66	2.1	2	25.1
6/21/2019 7:20	9	9	9	31.51	4.8	3.9	24.1
6/21/2019 7:30	9	9	9	30.11	4.7	3.9	25.1

6/21/2019 7:40	9	9	9	31.82	4.8	3.9	0.5
6/21/2019 7:50	9	9	9	30.26	4.9	3.8	25.1
6/21/2019 8:00	9	9	9	31.88	4.8	3.8	0.4
6/21/2019 8:10	9	9	9	30.41	4.8	3.9	25.1
6/21/2019 8:20	9	9	9	31.97	0.9	0.8	0.3
6/21/2019 8:30	9	9	9	30.69	4.8	3.9	25
6/21/2019 8:40	9	9	9	32.03	1	0.8	0.3
6/21/2019 8:50	9	9	9	30.66	4.8	3.9	25
6/21/2019 9:00	9	9	9	32.06	5	3.8	0.4
6/21/2019 9:10	9	9	9	30.54	4.8	3.8	25.1
6/21/2019 9:20	9	9	9	32.03	4.8	3.9	0.4
6/21/2019 9:30	9	9	9	30.38	4.8	3.8	25
6/21/2019 9:40	9	9	9	32.09	2.8	2.4	0.4
6/21/2019 9:50	9	9	9	30.69	4.8	3.9	25
6/21/2019 10:00	9	9	9	31.45	1	0.8	3.9
6/21/2019 10:10	9	9	9	31.02	4.9	3.8	24.9
6/21/2019 10:20	9	9	9	31.51	1	0.8	4.7
6/21/2019 10:30	9	9	9	31.02	4.7	3.9	24.9
6/21/2019 10:40	9	9	9	31.33	1	0.8	25
6/21/2019 10:50	9	9	9	31.02	4.9	3.9	24.8
6/21/2019 11:00	9	9	9	31.21	1	0.8	24.9
6/21/2019 11:10	9	9	9	31.09	4.9	3.9	24.9
6/21/2019 11:20	9	9	9	31.27	1	0.9	25
6/21/2019 11:30	9	9	9	31.02	4.7	3.8	24.8
6/21/2019 11:40	9	9	9	31.09	1	0.9	25
6/21/2019 11:50	9	9	9	31.18	4.9	3.8	24.7
6/21/2019 12:00	9	9	9	31.12	0.9	0.8	25
6/21/2019 12:10	9	9	9	31.09	4.9	3.9	24.9
6/21/2019 12:20	9	9	9	31.39	0.9	0.8	25
6/21/2019 12:30	9	9	9	30.93	4.7	3.8	24.9
6/21/2019 12:40	9	9	9	31.57	0.9	0.8	4.3
6/21/2019 12:50	9	9	9	30.78	4.6	3.8	24.9
6/21/2019 13:00	9	9	9	31.48	1	0.8	4.5
6/21/2019 13:10	9	9	9	30.93	4.9	3.9	24.9
6/21/2019 13:20	9	9	9	31.09	1	0.8	25
6/21/2019 13:30	9	9	9	31.3	5	3.8	24.7
6/21/2019 13:40	9	9	9	30.54	2.5	2.3	25.1
6/21/2019 13:50	9	9	9	31.39	4.7	3.9	24.4
6/21/2019 14:00	9	9	9	30.38	3.4	3.2	25.2
6/21/2019 14:10	9	9	9	31.57	5.2	3.9	24.1
6/21/2019 14:20	9	9	9	30.23	3.4	3.4	25.2
6/21/2019 14:30	9	9	9	31.48	4.9	3.9	24.1
6/21/2019 14:40	9	9	9	29.96	4.7	3.8	25.2
6/21/2019 14:50	9	9	9	31.76	4.9	3.9	0.5
6/21/2019 15:00	9	9	9	30.17	4.9	3.9	25.1
6/21/2019 15:10	9	9	9	31.73	4.8	3.9	0.5
6/21/2019 15:20	9	9	9	30.35	4.7	3.7	25.1

6/21/2019 15:30	9	9	9	31.85	4.9	3.9	0.5
6/21/2019 15:40	9	9	9	30.41	4.8	3.8	25.1
6/21/2019 15:50	9	9	9	31.85	4.9	3.8	0.5
6/21/2019 16:00	9	9	9	30.29	4.9	3.8	25
6/21/2019 16:10	9	9	9	32.09	4.9	3.9	0.4
6/21/2019 16:20	9	9	9	30.47	4.8	3.9	25.1
6/21/2019 16:30	9	9	9	32.06	1	0.8	0.3
6/21/2019 16:40	9	9	9	30.72	4.8	3.9	25
6/21/2019 16:50	9	9	9	31.88	0.9	0.8	0.3
6/21/2019 17:00	9	9	9	30.78	4.8	3.8	25
6/21/2019 17:10	9	9	9	31.7	0.9	0.8	2
6/21/2019 17:20	9	9	9	30.96	4.8	3.9	24.9
6/21/2019 17:30	9	9	9	31.18	1.1	0.9	25
6/21/2019 17:40	9	9	9	31.18	4.9	3.9	24.8
6/21/2019 17:50	9	9	9	30.87	1.5	1.4	25.1
6/21/2019 18:00	9	9	9	31.33	4.7	3.8	24.7
6/21/2019 18:10	9	9	9	30.63	2.6	2.4	25.1
6/21/2019 18:20	9	9	9	31.54	4.8	3.9	24.1
6/21/2019 18:30	9	9	9	30.23	3.5	3.3	25.1
6/21/2019 18:40	9	9	9	31.6	4.7	3.8	23.9
6/21/2019 18:50	9	9	9	30.08	3.5	3.4	25.2
6/21/2019 19:00	9	9	9	31.73	4.9	3.9	0.5
6/21/2019 19:10	9	9	9	30.26	4.9	3.8	25.1
6/21/2019 19:20	9	9	9	32	4.9	3.9	0.4
6/21/2019 19:30	9	9	9	30.69	4.8	3.9	25
6/21/2019 19:40	9	9	9	31.7	0.9	0.8	1.2
6/21/2019 19:50	9	9	9	30.81	4.8	3.9	24.9
6/21/2019 20:00	9	9	9	31.51	0.9	0.8	4.2
6/21/2019 20:10	9	9	9	30.96	4.9	3.9	24.9
6/21/2019 20:20	9	9	9	31.33	1	0.8	24.9
6/21/2019 20:30	9	9	9	31.05	4.9	3.8	24.9
6/21/2019 20:40	9	9	9	31.21	1	0.8	25
6/21/2019 20:50	9	9	9	31.12	4.8	3.9	24.8
6/21/2019 21:00	9	9	9	30.84	1.3	1.1	25.1
6/21/2019 21:10	9	9	9	31.45	4.6	3.9	24.5
6/21/2019 21:20	9	9	9	30.11	4.6	3.9	25.2
6/21/2019 21:30	9	9	9	31.94	5	3.8	0.4
6/21/2019 21:40	9	9	9	30.44	4.8	3.9	25.1
6/21/2019 21:50	9	9	9	32.09	4.8	3.9	0.4
6/21/2019 22:00	9	9	9	30.66	4.7	3.9	25
6/21/2019 22:10	9	9	9	32.12	1.4	0.8	0.4
6/21/2019 22:20	9	9	9	30.69	4.7	3.9	25.1
6/21/2019 22:30	9	9	9	31.73	1	0.8	0.3
6/21/2019 22:40	9	9	9	30.9	4.9	3.8	24.9
6/21/2019 22:50	9	9	9	31.21	0.8	0.8	25
6/21/2019 23:00	9	9	9	31.15	4.9	3.8	24.8
6/21/2019 23:10	9	9	9	30.41	3.1	2.8	25.1

6/21/2019 23:20	9	9	9	31.54	4.9	3.8	23.8
6/21/2019 23:30	9	9	9	30.23	4.8	3.8	25.2
6/21/2019 23:40	9	9	9	32.09	4.4	3.6	0.3
6/21/2019 23:50	9	9	9	30.75	5	3.8	25.1
6/22/2019 0:00	9	9	9	31.7	0.8	0.8	1.1
6/22/2019 0:10	9	9	9	30.93	4.9	3.9	24.9
6/22/2019 0:20	9	9	9	31.02	1	0.8	25.1
6/22/2019 0:30	9	9	9	31.39	4.9	3.9	24.5
6/22/2019 0:40	9	9	9	30.05	4.9	3.9	25.2
6/22/2019 0:50	9	9	9	31.97	4.9	3.9	0.4
6/22/2019 1:00	9	9	9	30.54	4.8	3.8	25.1
6/22/2019 1:10	9	9	9	31.54	0.9	0.8	2.3
6/22/2019 1:20	9	9	9	30.93	4.9	3.8	25
6/22/2019 1:30	9	9	9	31.02	1.1	0.9	25.1
6/22/2019 1:40	9	9	9	31.42	4.7	3.8	24.7
6/22/2019 1:50	9	9	9	30.02	3.4	3.2	25.2
6/22/2019 2:00	9	9	9	31.88	4.9	3.8	0.5
6/22/2019 2:10	9	9	9	30.44	4.8	3.9	25.1
6/22/2019 2:20	9	9	9	31.73	1	0.7	0.4
6/22/2019 2:30	9	9	9	30.81	4.8	3.8	25
6/22/2019 2:40	9	9	9	31.21	0.9	0.8	25.1
6/22/2019 2:50	9	9	9	31.27	4.8	3.8	24.8
6/22/2019 3:00	9	9	9	30.51	2.7	2.4	25.2
6/22/2019 3:10	9	9	9	31.6	4.9	3.8	23.9
6/22/2019 3:20	9	9	9	30.17	4.8	3.9	25.2
6/22/2019 3:30	9	9	9	32	4.8	3.8	0.4
6/22/2019 3:40	9	9	9	30.54	4.8	3.8	25.1
6/22/2019 3:50	9	9	9	32.03	1.2	0.7	0.4
6/22/2019 4:00	9	9	9	30.78	4.8	3.9	25
6/22/2019 4:10	9	9	9	31.15	1	0.8	25
6/22/2019 4:20	9	9	9	31.12	4.7	3.9	24.8
6/22/2019 4:30	9	9	9	30.69	1.9	1.7	25.2
6/22/2019 4:40	9	9	9	31.57	4.8	3.9	24.1
6/22/2019 4:50	9	9	9	30.2	4.8	3.8	25.2
6/22/2019 5:00	9	9	9	31.94	4.9	3.8	0.5
6/22/2019 5:10	9	9	9	30.47	4.9	3.9	25.1
6/22/2019 5:20	9	9	9	31.97	0.9	0.8	0.4
6/22/2019 5:30	9	9	9	30.84	4.7	3.9	25
6/22/2019 5:40	9	9	9	31.3	1	0.8	25
6/22/2019 5:50	9	9	9	31.18	4.9	3.8	24.8
6/22/2019 6:00	9	9	9	30.29	3.4	3.1	25.2
6/22/2019 6:10	9	9	9	31.73	4.7	3.8	0.5
6/22/2019 6:20	9	9	9	30.35	4.9	3.8	25.1
6/22/2019 6:30	9	9	9	32.03	0.9	0.8	0.3
6/22/2019 6:40	9	9	9	30.84	4.8	3.8	24.9
6/22/2019 6:50	9	9	9	31.12	1.1	0.9	25.1
6/22/2019 7:00	9	9	9	31.18	4.7	3.7	24.8

6/22/2019 7:10	9	9	9	30.69	2.1	1.7	25.2
6/22/2019 7:20	9	9	9	31.42	5	3.9	24.3
6/22/2019 7:30	9	9	9	30.08	4.7	3.9	25.2
6/22/2019 7:40	9	9	9	31.97	0.9	0.8	0.4
6/22/2019 7:50	9	9	9	30.96	4.7	3.9	24.9
6/22/2019 8:00	9	9	9	30.17	3.1	2.9	25.2
6/22/2019 8:10	9	9	9	32	4.7	3.8	0.4
6/22/2019 8:20	9	9	9	30.75	4.9	3.9	24.9
6/22/2019 8:30	9	9	9	30.72	1.5	1.2	25.2
6/22/2019 8:40	9	9	9	31.73	5	3.9	1
6/22/2019 8:50	9	9	9	30.41	4.9	3.9	25.1
6/22/2019 9:00	9	9	9	32.15	3	2.4	0.4
6/22/2019 9:10	9	9	9	30.66	4.9	3.8	25
6/22/2019 9:20	9	9	9	31.7	0.9	0.8	0.4
6/22/2019 9:30	9	9	9	31.09	4.7	3.8	24.9
6/22/2019 9:40	9	9	9	30.29	3.2	3.1	25.2
6/22/2019 9:50	9	9	9	31.67	4.9	3.9	0.5
6/22/2019 10:00	9	9	9	30.38	4.9	3.8	25.1
6/22/2019 10:10	9	9	9	32.03	0.9	0.8	0.4
6/22/2019 10:20	9	9	9	30.69	4.9	3.8	25.1
6/22/2019 10:30	9	9	9	31.73	0.9	0.8	0.4
6/22/2019 10:40	9	9	9	30.84	5	3.8	24.9
6/22/2019 10:50	9	9	9	30.93	0.9	0.9	25.1
6/22/2019 11:00	9	9	9	31.45	4.6	3.8	24.4
6/22/2019 11:10	9	9	9	30.11	4.8	3.8	25.2
6/22/2019 11:20	9	9	9	32.06	0.9	0.9	0.4
6/22/2019 11:30	9	9	9	30.87	4.7	3.8	24.8
6/22/2019 11:40	9	9	9	30.44	2.9	2.7	25.2
6/22/2019 11:50	9	9	9	31.7	4.5	3.8	0.5
6/22/2019 12:00	9	9	9	30.35	4.8	3.8	25.1
6/22/2019 12:10	9	9	9	31.57	0.8	0.8	0.6
6/22/2019 12:20	9	9	9	31.05	4.6	3.8	24.9
6/22/2019 12:30	9	9	9	30.72	1.6	1.5	25.1
6/22/2019 12:40	9	9	9	31.54	4.9	3.9	23.9
6/22/2019 12:50	9	9	9	30.26	4.8	3.8	25.2
6/22/2019 13:00	9	9	9	31.88	0.9	0.8	0.3
6/22/2019 13:10	9	9	9	30.81	4.8	3.9	24.9
6/22/2019 13:20	9	9	9	30.99	1.1	0.8	25.1
6/22/2019 13:30	9	9	9	31.3	4.7	3.8	24.6
6/22/2019 13:40	9	9	9	30.23	3.4	3.1	25.1
6/22/2019 13:50	9	9	9	31.73	4.8	3.8	0.5
6/22/2019 14:00	9	9	9	30.32	4.5	3.9	25.1
6/22/2019 14:10	9	9	9	32.09	5	4.2	0.3
6/22/2019 14:20	9	9	9	30.54	4.8	3.9	25
6/22/2019 14:30	9	9	9	31.88	0.9	0.8	0.4
6/22/2019 14:40	9	9	9	30.9	4.7	3.8	24.9
6/22/2019 14:50	9	9	9	31.15	1.1	0.9	25

6/22/2019 15:00	9	9	9	31.18	4.8	3.9	24.8
6/22/2019 15:10	9	9	9	30.38	3.3	3	25.2
6/22/2019 15:20	9	9	9	31.76	4.6	3.9	0.5
6/22/2019 15:30	9	9	9	30.32	4.7	3.9	25.1
6/22/2019 15:40	9	9	9	32.09	4.9	4.1	0.4
6/22/2019 15:50	9	9	9	30.72	4.8	3.8	24.9
6/22/2019 16:00	9	9	9	31.12	1.1	0.8	25
6/22/2019 16:10	9	9	9	31.15	4.8	3.9	24.7
6/22/2019 16:20	9	9	9	30.41	3.1	2.7	25.2
6/22/2019 16:30	9	9	9	31.6	4.9	3.8	23.7
6/22/2019 16:40	9	9	9	30.17	4.8	3.8	25.2
6/22/2019 16:50	9	9	9	32.09	4.4	3.7	0.3
6/22/2019 17:00	9	9	9	30.72	4.8	3.8	25
6/22/2019 17:10	9	9	9	31.48	0.9	0.8	2.6
6/22/2019 17:20	9	9	9	31.02	4.6	3.8	24.9
6/22/2019 17:30	9	9	9	30.81	1.7	1.4	25.1
6/22/2019 17:40	9	9	9	31.3	4.8	3.8	24.3
6/22/2019 17:50	9	9	9	30.14	4.8	3.8	25.1
6/22/2019 18:00	9	9	9	31.88	5	3.9	0.4
6/22/2019 18:10	9	9	9	30.44	5.1	3.8	25.1
6/22/2019 18:20	9	9	9	31.88	1	0.8	0.3
6/22/2019 18:30	9	9	9	30.75	4.8	3.8	25
6/22/2019 18:40	9	9	9	31.3	1	0.7	25
6/22/2019 18:50	9	9	9	30.96	4.8	3.9	24.9
6/22/2019 19:00	9	9	9	30.93	1.2	1.1	25.1
6/22/2019 19:10	9	9	9	31.39	4.9	3.8	24.5
6/22/2019 19:20	9	9	9	30.23	3.4	3.2	25.2
6/22/2019 19:30	9	9	9	31.6	4.8	3.9	23.9
6/22/2019 19:40	9	9	9	30.11	4.9	3.8	25.2
6/22/2019 19:50	9	9	9	31.85	4.7	3.8	0.5
6/22/2019 20:00	9	9	9	30.35	4.8	3.8	25.1
6/22/2019 20:10	9	9	9	32.12	1.2	0.8	0.3
6/22/2019 20:20	9	9	9	30.69	4.7	3.9	25
6/22/2019 20:30	9	9	9	31.33	1	0.8	3.1
6/22/2019 20:40	9	9	9	31.15	4.8	3.7	24.8
6/22/2019 20:50	9	9	9	30.11	3.5	3.3	25.2
6/22/2019 21:00	9	9	9	31.85	4.8	3.8	0.5
6/22/2019 21:10	9	9	9	30.44	4.8	3.9	25.1
6/22/2019 21:20	9	9	9	32	1	0.8	0.3
6/22/2019 21:30	9	9	9	30.78	4.9	3.9	24.9
6/22/2019 21:40	9	9	9	31.3	0.9	0.8	25
6/22/2019 21:50	9	9	9	31.3	4.7	3.8	24.7
6/22/2019 22:00	9	9	9	30.51	3.2	3.1	25.2
6/22/2019 22:10	9	9	9	31.67	4.7	3.8	22.2
6/22/2019 22:20	9	9	9	30.29	5	3.8	25.1
6/22/2019 22:30	9	9	9	32	0.9	0.8	0.3
6/22/2019 22:40	9	9	9	30.78	4.8	3.8	24.9

6/22/2019 22:50	9	9	9	30.75	1.1	1.1	25.1
6/22/2019 23:00	9	9	9	31.51	4.9	3.9	24.1
6/22/2019 23:10	9	9	9	30.11	4.7	3.8	25.1
6/22/2019 23:20	9	9	9	32.06	4.7	3.9	0.4
6/22/2019 23:30	9	9	9	30.69	4.8	3.8	25
6/22/2019 23:40	9	9	9	31.3	0.9	0.8	3.1
6/22/2019 23:50	9	9	9	31.18	4.8	3.9	24.7
6/23/2019 0:00	9	9	9	30.35	3	2.7	25.2
6/23/2019 0:10	9	9	9	31.94	4.7	3.9	0.4
6/23/2019 0:20	9	9	9	30.66	5	3.8	25.1
6/23/2019 0:30	9	9	9	31.36	0.9	0.8	5
6/23/2019 0:40	9	9	9	31.21	4.9	3.8	24.8
6/23/2019 0:50	9	9	9	30.02	3.5	3.2	25.3
6/23/2019 1:00	9	9	9	32.03	4.8	3.9	0.4
6/23/2019 1:10	9	9	9	30.72	4.8	3.8	25
6/23/2019 1:20	9	9	9	30.78	1.1	0.8	25.1
6/23/2019 1:30	9	9	9	31.6	4.7	3.9	24
6/23/2019 1:40	9	9	9	30.14	4.5	3.8	25.2
6/23/2019 1:50	9	9	9	32.09	0.9	0.8	0.4
6/23/2019 2:00	9	9	9	30.93	4.9	3.9	24.9
6/23/2019 2:10	9	9	9	30.75	1.5	1.3	25.1
6/23/2019 2:20	9	9	9	31.51	4.9	3.8	24.2
6/23/2019 2:30	9	9	9	30.11	4.8	3.9	25.1
6/23/2019 2:40	9	9	9	32.12	2.4	2.1	0.4
6/23/2019 2:50	9	9	9	30.75	4.7	3.8	25
6/23/2019 3:00	9	9	9	31.09	1	0.8	25
6/23/2019 3:10	9	9	9	31.27	4.9	3.8	24.7
6/23/2019 3:20	9	9	9	30.38	3.1	2.9	25.2
6/23/2019 3:30	9	9	9	31.7	4.8	3.8	20.5
6/23/2019 3:40	9	9	9	30.17	4.7	3.8	25.2
6/23/2019 3:50	9	9	9	32.06	2.1	1.7	0.3
6/23/2019 4:00	9	9	9	30.81	4.8	3.8	25
6/23/2019 4:10	9	9	9	30.81	1.1	0.8	25.1
6/23/2019 4:20	9	9	9	31.6	4.8	3.8	23.8
6/23/2019 4:30	9	9	9	30.11	4.8	3.8	25.1
6/23/2019 4:40	9	9	9	32.03	5.2	4.2	0.4
6/23/2019 4:50	9	9	9	30.69	4.6	3.9	25
6/23/2019 5:00	9	9	9	31.48	0.9	0.8	4.5
6/23/2019 5:10	9	9	9	31.27	4.7	3.9	24.8
6/23/2019 5:20	9	9	9	29.96	1.7	1.9	25.2
6/23/2019 5:30	9	9	9	32.06	4.8	3.8	0.4
6/23/2019 5:40	9	9	9	30.66	4.9	3.8	25
6/23/2019 5:50	9	9	9	31.18	1	0.8	25.1
6/23/2019 6:00	9	9	9	31.33	4.8	3.8	24.6
6/23/2019 6:10	9	9	9	30.08	3.4	3.2	25.2
6/23/2019 6:20	9	9	9	32	4.7	3.9	0.4
6/23/2019 6:30	9	9	9	30.66	4.7	3.8	25

6/24/2019 6:40	9	9	9	31.7	0.9	0.8	0.4
6/24/2019 6:50	9	9	9	30.99	4.9	3.9	24.8
6/24/2019 7:00	9	9	9	30.17	3.5	3.2	25.2
6/24/2019 7:10	9	9	9	31.85	4.8	3.8	0.5
6/24/2019 7:20	9	9	9	30.41	4.8	3.8	25.1
6/24/2019 7:30	9	9	9	31.7	0.9	0.8	0.4
6/24/2019 7:40	9	9	9	30.93	4.8	3.8	25
6/24/2019 7:50	9	9	9	30.69	1.6	1.1	25.1
6/24/2019 8:00	9	9	9	31.45	4.7	3.8	24.4
6/24/2019 8:10	9	9	9	30.02	4.9	3.8	25.2
6/24/2019 8:20	9	9	9	31.97	4.7	3.8	0.4
6/24/2019 8:30	9	9	9	30.38	4.7	3.8	25.1
6/24/2019 8:40	9	9	9	32.09	1	0.7	0.4
6/24/2019 8:50	9	9	9	30.66	4.9	3.8	25
6/24/2019 9:00	9	9	9	31.27	0.9	0.8	3.2
6/24/2019 9:10	9	9	9	31.21	4.7	3.8	24.6
6/24/2019 9:20	9	9	9	29.86	4.8	3.8	25.2
6/24/2019 9:30	9	9	9	32.06	4.9	3.9	0.4
6/24/2019 9:40	9	9	9	30.66	4.8	3.9	25
6/24/2019 9:50	9	9	9	31.48	0.9	0.8	2.5
6/24/2019 10:00	9	9	9	31.12	4.6	3.9	24.7
6/24/2019 10:10	9	9	9	30.72	1.7	1.5	25.1
6/24/2019 10:20	9	9	9	31.48	4.9	3.8	24.2
6/24/2019 10:30	9	9	9	30.2	5	3.9	25.1
6/24/2019 10:40	9	9	9	32.15	4.7	3.9	0.3
6/24/2019 10:50	9	9	9	30.78	5	3.8	25
6/24/2019 11:00	9	9	9	31.18	1	0.8	25
6/24/2019 11:10	9	9	9	31.3	4.7	3.9	24.7
6/24/2019 11:20	9	9	9	30.84	1.4	1.2	25.1
6/24/2019 11:30	9	9	9	31.33	4.9	3.9	24.5
6/24/2019 11:40	9	9	9	30.14	3.4	3.2	25.2
6/24/2019 11:50	9	9	9	31.82	4.9	3.8	0.4
6/24/2019 12:00	9	9	9	30.38	4.9	3.8	25.1
6/24/2019 12:10	9	9	9	31.94	0.9	0.8	0.3
6/24/2019 12:20	9	9	9	30.81	4.8	3.8	24.9
6/24/2019 12:30	9	9	9	31.05	1	0.8	25
6/24/2019 12:40	9	9	9	31.15	4.8	3.8	24.8
6/24/2019 12:50	9	9	9	30.41	2.9	2.6	25.2
6/24/2019 13:00	9	9	9	31.6	4.9	3.9	13.9
6/24/2019 13:10	9	9	9	30.32	4.9	3.8	25.1
6/24/2019 13:20	9	9	9	31.88	1	0.8	0.3
6/24/2019 13:30	9	9	9	30.81	4.7	3.8	24.9
6/24/2019 13:40	9	9	9	31.05	0.9	0.8	25.1
6/24/2019 13:50	9	9	9	31.39	4.8	3.8	24.4
6/24/2019 14:00	9	9	9	29.96	4.9	3.8	25.2
6/24/2019 14:10	9	9	9	32.09	4.9	3.8	0.4
6/24/2019 14:20	9	9	9	30.54	5.2	3.9	25

6/24/2019 14:30	9	9	9	32.06	0.9	0.8	0.4
6/24/2019 14:40	9	9	9	30.72	4.8	3.8	25
6/24/2019 14:50	9	9	9	31.51	0.9	0.8	2.5
6/24/2019 15:00	9	9	9	31.12	4.9	3.8	24.8
6/24/2019 15:10	9	9	9	30.32	3.1	2.8	25.1
6/24/2019 15:20	9	9	9	31.67	4.9	3.9	23.8
6/24/2019 15:30	9	9	9	30.32	4.8	3.9	25.1
6/24/2019 15:40	9	9	9	31.57	0.8	0.8	0.5
6/24/2019 15:50	9	9	9	31.15	4.9	3.8	24.8
6/24/2019 16:00	9	9	9	30.57	2.5	2.3	25.1
6/24/2019 16:10	9	9	9	31.67	4.8	3.8	23.1
6/24/2019 16:20	9	9	9	30.2	5	3.8	25.1
6/24/2019 16:30	9	9	9	32.12	4.7	3.8	0.3
6/24/2019 16:40	9	9	9	30.63	4.8	3.8	25
6/24/2019 16:50	9	9	9	31.67	1	0.8	0.5
6/24/2019 17:00	9	9	9	30.96	4.9	3.9	24.9
6/24/2019 17:10	9	9	9	30.93	1.1	0.8	25.1
6/24/2019 17:20	9	9	9	31.33	4.7	3.8	24.6
6/24/2019 17:30	9	9	9	30.23	3.3	3.2	25.2
6/24/2019 17:40	9	9	9	31.7	5	3.8	23.7
6/24/2019 17:50	9	9	9	30.26	4.8	3.8	25.2
6/24/2019 18:00	9	9	9	32.09	4.9	3.8	0.3
6/24/2019 18:10	9	9	9	30.63	4.9	3.8	25
6/24/2019 18:20	9	9	9	31.63	0.9	0.8	1.4
6/24/2019 18:30	9	9	9	31.05	5	3.8	24.9
6/24/2019 18:40	9	9	9	30.57	2.1	1.9	25.1
6/24/2019 18:50	9	9	9	31.67	4.7	3.9	23
6/24/2019 19:00	9	9	9	30.26	4.7	3.9	25.1
6/24/2019 19:10	9	9	9	31.82	1	0.8	0.3
6/24/2019 19:20	9	9	9	30.84	4.9	3.8	24.9
6/24/2019 19:30	9	9	9	30.87	1	0.8	25.1
6/24/2019 19:40	9	9	9	31.3	4.9	3.9	24.7
6/24/2019 19:50	9	9	9	30.69	2.3	1.9	25.2
6/24/2019 20:00	9	9	9	31.45	4.8	3.8	24.3
6/24/2019 20:10	9	9	9	30.14	4.9	3.8	25.2
6/24/2019 20:20	9	9	9	32.09	1.3	0.8	0.3
6/24/2019 20:30	9	9	9	30.81	4.9	3.8	24.8
6/24/2019 20:40	9	9	9	30.78	1.2	0.9	25.1
6/24/2019 20:50	9	9	9	31.39	4.8	3.8	24.6
6/24/2019 21:00	9	9	9	30.57	2.8	2.6	25.1
6/24/2019 21:10	9	9	9	31.6	4.8	3.8	23.9
6/24/2019 21:20	9	9	9	30.2	4.8	3.8	25.1
6/24/2019 21:30	9	9	9	32.06	4.8	3.9	0.4
6/24/2019 21:40	9	9	9	30.69	4.9	3.8	25
6/24/2019 21:50	9	9	9	31.12	1	0.8	25
6/24/2019 22:00	9	9	9	31.48	4.7	3.8	24.3
6/24/2019 22:10	9	9	9	30.17	4.8	3.8	25.2

6/24/2019 22:20	9	9	9	32.09	5.1	4.2	0.3
6/24/2019 22:30	9	9	9	30.63	4.8	3.8	25
6/24/2019 22:40	9	9	9	31.6	0.9	0.8	0.3
6/24/2019 22:50	9	9	9	30.81	4.8	3.8	24.9
6/24/2019 23:00	9	9	9	30.54	2.3	2	25.1
6/24/2019 23:10	9	9	9	31.76	4.9	3.8	0.5
6/24/2019 23:20	9	9	9	30.23	5	3.8	25.1
6/24/2019 23:30	9	9	9	32.12	1.1	0.9	0.4
6/24/2019 23:40	9	9	9	30.75	4.7	3.8	25
6/24/2019 23:50	9	9	9	31.51	1	0.9	2.7
6/25/2019 0:00	9	9	9	31.15	4.8	3.9	24.8
6/25/2019 0:10	9	9	9	30.35	3.1	3	25.2
6/25/2019 0:20	9	9	9	31.7	4.9	3.9	1.6
6/25/2019 0:30	9	9	9	30.26	4.9	3.9	25.1
6/25/2019 0:40	9	9	9	31.88	0.8	0.8	0.3
6/25/2019 0:50	9	9	9	30.84	4.8	3.8	24.9
6/25/2019 1:00	9	9	9	31.05	1	0.8	25
6/25/2019 1:10	9	9	9	31.18	4.9	3.9	24.7
6/25/2019 1:20	9	9	9	30.38	3.1	2.9	25.2
6/25/2019 1:30	9	9	9	31.67	4.8	3.9	22.7
6/25/2019 1:40	9	9	9	30.23	4.9	3.8	25.2
6/25/2019 1:50	9	9	9	32	0.9	0.8	0.3
6/25/2019 2:00	9	9	9	30.84	5	3.8	24.8
6/25/2019 2:10	9	9	9	31.18	1	0.8	25
6/25/2019 2:20	9	9	9	31.3	4.9	3.8	24.7
6/25/2019 2:30	9	9	9	30.29	3.4	3.1	25.2
6/25/2019 2:40	9	9	9	31.82	4.8	3.8	0.5
6/25/2019 2:50	9	9	9	30.35	4.8	3.8	25.1
6/25/2019 3:00	9	9	9	31.45	1	0.8	1.2
6/25/2019 3:10	9	9	9	31.33	4.8	3.8	24.5
6/25/2019 3:20	9	9	9	30.02	4.8	3.9	25.2
6/25/2019 3:30	9	9	9	32	0.9	0.8	0.3
6/25/2019 3:40	9	9	9	31.12	4.8	3.8	24.9
6/25/2019 3:50	9	9	9	30.54	2.4	2.3	25.1
6/25/2019 4:00	9	9	9	31.51	4.8	3.9	23.8
6/25/2019 4:10	9	9	9	30.26	4.7	3.9	25.1
6/25/2019 4:20	9	9	9	32	0.9	0.8	0.4
6/25/2019 4:30	9	9	9	30.87	4.6	3.9	24.9
6/25/2019 4:40	9	9	9	30.35	2.8	2.8	25.2
6/25/2019 4:50	9	9	9	31.79	4.9	3.9	0.5
6/25/2019 5:00	9	9	9	30.32	4.5	3.8	25.1
6/25/2019 5:10	9	9	9	32.09	4.5	3.8	0.3
6/25/2019 5:20	9	9	9	30.72	4.8	3.9	25
6/25/2019 5:30	9	9	9	31.15	1	0.8	25
6/25/2019 5:40	9	9	9	31.51	4.6	3.8	24
6/25/2019 5:50	9	9	9	30.35	4.8	3.8	25
6/25/2019 6:00	9	9	9	31.09	0.9	0.8	4.3

6/25/2019 6:10	9	9	9	31.51	4.8	3.8	23.7
6/25/2019 6:20	9	9	9	30.47	4.7	3.8	25
6/25/2019 6:30	9	9	9	30.84	0.9	0.8	24.9
6/25/2019 6:40	9	9	9	31.57	4.7	3.8	23.8
6/25/2019 6:50	9	9	9	30.32	4.7	3.8	25.1
6/25/2019 7:00	9	9	9	31.73	1	0.8	0.4
6/25/2019 7:10	9	9	9	31.09	4.8	3.9	24.9
6/25/2019 7:20	9	9	9	30.63	2.4	2	25.1
6/25/2019 7:30	9	9	9	31.67	4.8	3.9	24
6/25/2019 7:40	9	9	9	30.17	4.8	3.9	25.1
6/25/2019 7:50	9	9	9	32.09	1.8	1.7	0.3
6/25/2019 8:00	9	9	9	30.72	4.8	3.8	24.9
6/25/2019 8:10	9	9	9	31.02	1.1	0.7	25
6/25/2019 8:20	9	9	9	31.36	4.8	3.9	24.6
6/25/2019 8:30	9	9	9	30.05	3.7	3.4	25.2
6/25/2019 8:40	9	9	9	32	4.7	3.8	0.4
6/25/2019 8:50	9	9	9	30.54	4.7	3.9	25
6/25/2019 9:00	9	9	9	31.21	0.8	0.8	3.2
6/25/2019 9:10	9	9	9	31.42	4.7	3.9	24.3
6/25/2019 9:20	9	9	9	30.35	4.8	3.8	25
6/25/2019 9:30	9	9	9	31.63	0.9	0.8	0.3
6/25/2019 9:40	9	9	9	31.15	4.9	3.9	24.7
6/25/2019 9:50	9	9	9	30.35	3.1	3	25.2
6/25/2019 10:00	9	9	9	31.63	4.8	3.8	9.4
6/25/2019 10:10	9	9	9	30.2	4.9	3.8	25.1
6/25/2019 10:20	9	9	9	31.79	1	0.8	0.3
6/25/2019 10:30	9	9	9	30.87	4.8	3.9	24.9
6/25/2019 10:40	9	9	9	30.81	1.2	1	25.1
6/25/2019 10:50	9	9	9	31.45	4.8	3.9	24.3
6/25/2019 11:00	9	9	9	30.11	3.6	3.3	25.2
6/25/2019 11:10	9	9	9	31.82	4.8	3.8	0.5
6/25/2019 11:20	9	9	9	30.38	4.8	3.8	25.1
6/25/2019 11:30	9	9	9	31.82	1	0.8	0.3
6/25/2019 11:40	9	9	9	30.96	4.8	3.9	24.9
6/25/2019 11:50	9	9	9	30.81	1.3	1	25.1
6/25/2019 12:00	9	9	9	31.48	5	3.8	24.3
6/25/2019 12:10	9	9	9	30.29	3.4	3.2	25.2
6/25/2019 12:20	9	9	9	31.73	4.9	3.8	0.5
6/25/2019 12:30	9	9	9	30.32	4.5	3.8	25.1
6/25/2019 12:40	9	9	9	31.82	0.9	0.8	0.3
6/25/2019 12:50	9	9	9	30.72	5	3.8	24.8
6/25/2019 13:00	9	9	9	31.27	1	0.8	25
6/25/2019 13:10	9	9	9	31.12	4.9	3.8	24.7
6/25/2019 13:20	9	9	9	30.35	3	3	25.1
6/25/2019 13:30	9	9	9	31.73	4.8	3.9	3.4
6/25/2019 13:40	9	9	9	30.26	4.9	3.8	25.1
6/25/2019 13:50	9	9	9	31.97	0.9	0.8	0.3

6/25/2019 14:00	9	9	9	30.84	4.8	3.8	24.9
6/25/2019 14:10	9	9	9	30.75	1.3	1	25.1
6/25/2019 14:20	9	9	9	31.51	4.7	3.8	24
6/25/2019 14:30	9	9	9	30.26	4.7	3.9	25.1
6/25/2019 14:40	9	9	9	32.06	4.9	3.9	0.3
6/25/2019 14:50	9	9	9	30.57	5	3.9	25
6/25/2019 15:00	9	9	9	31.45	0.9	0.8	2.1
6/25/2019 15:10	9	9	9	31.15	4.7	3.8	24.8
6/25/2019 15:20	9	9	9	30.41	3.2	2.8	25.2
6/25/2019 15:30	9	9	9	31.7	4.9	3.8	0.5
6/25/2019 15:40	9	9	9	30.44	4.9	3.8	25.1
6/25/2019 15:50	9	9	9	31.7	0.9	0.8	0.4
6/25/2019 16:00	9	9	9	30.9	4.7	3.9	24.9
6/25/2019 16:10	9	9	9	30.66	1.6	1.3	25.1
6/25/2019 16:20	9	9	9	31.85	4.8	3.8	0.5
6/25/2019 16:30	9	9	9	30.69	4.7	3.9	24.9
6/25/2019 16:40	9	9	9	30.54	1.9	1.6	25.1
6/25/2019 16:50	9	9	9	31.88	4.9	3.8	0.4
6/25/2019 17:00	9	9	9	30.69	4.9	3.9	24.9
6/25/2019 17:10	9	9	9	29.68	5	3.8	25.1
6/25/2019 17:20	9	9	9	31.42	0.9	0.8	0.4
6/25/2019 17:30	9	9	9	31.54	4.8	3.8	23.9
6/25/2019 17:40	9	9	9	30.51	4.8	3.9	25
6/25/2019 17:50	9	9	9	30.44	2	1.6	25.1
6/25/2019 18:00	9	9	9	32.09	2.3	2	0.3
6/25/2019 18:10	9	9	9	31.12	4.9	3.9	24.7
6/25/2019 18:20	8	9	9	30.17	4.6	3.8	25
6/25/2019 18:30	9	9	9	31.05	1.1	0.7	2.9
6/25/2019 18:40	9	9	9	31.57	4.7	3.8	23.5
6/25/2019 18:50	9	9	9	30.35	4.9	3.9	25.1
6/25/2019 19:00	9	9	9	30.93	0.9	0.9	24.9
6/25/2019 19:10	9	9	9	31.79	4.7	3.9	0.5
6/25/2019 19:20	9	9	9	30.81	4.8	3.8	24.9
6/25/2019 19:30	9	9	9	29.83	4.6	3.8	25.1
6/25/2019 19:40	9	9	9	31.12	1	0.8	2.8
6/25/2019 19:50	9	9	9	31.7	4.8	3.9	23.7
6/25/2019 20:00	9	9	9	30.41	4.8	3.8	25
6/25/2019 20:10	9	9	9	31.12	1	0.8	4.8
6/25/2019 20:20	9	9	9	31.45	4.8	3.8	24.1
6/25/2019 20:30	9	9	9	30.29	4.8	3.9	25.1
6/25/2019 20:40	9	9	9	31.15	1	0.8	3.9
6/25/2019 20:50	9	9	9	31.42	4.6	3.8	24.4
6/25/2019 21:00	9	9	9	30.2	4.6	3.9	25.1
6/25/2019 21:10	9	9	9	31.33	0.9	0.7	1.3
6/25/2019 21:20	9	9	9	31.42	5	3.9	24.1
6/25/2019 21:30	9	9	9	30.44	4.8	3.7	24.9
6/25/2019 21:40	9	9	9	30.08	3.2	3	25.1

6/25/2019 21:50	9	9	9	32	0.9	0.8	0.4
6/25/2019 22:00	9	9	9	31.02	5	3.8	24.7
6/25/2019 22:10	9	9	9	30.02	4.9	3.8	25.1
6/25/2019 22:20	9	9	9	31.54	1	0.8	0.3
6/25/2019 22:30	9	9	9	31.42	4.9	3.9	24.3
6/25/2019 22:40	9	9	9	30.32	4.9	3.8	25
6/25/2019 22:50	9	9	9	30.41	1.6	1.4	25
6/25/2019 23:00	9	9	9	31.88	0.9	0.8	0.3
6/25/2019 23:10	9	9	9	31.3	4.8	3.8	24.5
6/25/2019 23:20	9	9	9	30.29	4.9	3.8	24.9
6/25/2019 23:30	9	9	9	30.81	1	0.9	24.9
6/25/2019 23:40	9	9	9	31.79	4.9	3.9	0.5
6/25/2019 23:50	9	9	9	30.66	4.8	3.8	24.9
6/26/2019 0:00	9	9	9	30.47	2	1.8	25.1
6/26/2019 0:10	9	9	9	31.85	4.9	3.8	0.4
6/26/2019 0:20	9	9	9	30.75	4.7	3.9	24.9
6/26/2019 0:30	9	9	9	29.74	4.7	3.8	25.2
6/26/2019 0:40	9	9	9	31.54	1	0.8	0.3
6/26/2019 0:50	9	9	9	31.57	4.8	3.9	23.5
6/26/2019 1:00	9	9	9	30.72	4.7	3.8	24.9
6/26/2019 1:10	9	9	9	29.83	3.4	3.3	25.1
6/26/2019 1:20	9	9	9	31.73	1	0.8	0.3
6/26/2019 1:30	9	9	9	31.12	4.8	3.9	24.7
6/26/2019 1:40	9	9	9	29.8	4.7	3.8	25.1
6/26/2019 1:50	9	9	9	31.51	1	0.8	0.3
6/26/2019 2:00	9	9	9	31.51	4.8	3.8	23.6
6/26/2019 2:10	9	9	9	30.44	4.8	3.8	25
6/26/2019 2:20	9	9	9	30.14	3.2	3	25.1
6/26/2019 2:30	9	9	9	31.88	1	0.8	0.3
6/26/2019 2:40	9	9	9	31.3	4.8	3.8	24.6
6/26/2019 2:50	9	9	9	30.11	4.9	3.9	25.1
6/26/2019 3:00	9	9	9	31.54	1	0.8	0.3
6/26/2019 3:10	9	9	9	31.3	4.7	3.9	24.6
6/26/2019 3:20	9	9	9	30.02	4.7	3.8	25.1
6/26/2019 3:30	9	9	9	31.7	0.9	0.8	0.3
6/26/2019 3:40	9	9	9	31.09	4.7	3.9	24.7
6/26/2019 3:50	9	9	9	29.77	4.8	3.8	25.1
6/26/2019 4:00	9	9	9	31.79	0.9	0.8	0.4
6/26/2019 4:10	9	9	9	31.36	4.8	3.9	24.4
6/26/2019 4:20	9	9	9	30.38	4.7	3.8	25
6/26/2019 4:30	9	9	9	30.41	1.6	1.5	25
6/26/2019 4:40	9	9	9	32.09	4.8	3.9	0.3
6/26/2019 4:50	9	9	9	30.9	4.9	3.9	24.8
6/26/2019 5:00	9	9	9	29.8	3.4	3.2	25.2
6/26/2019 5:10	9	9	9	32	1	0.8	0.4
6/26/2019 5:20	8	9	9	30.9	4.8	3.8	24.8
6/26/2019 5:30	9	9	9	29.74	3.6	3.4	25.1

6/26/2019 5:40	8	9	9	32	1	0.8	0.3
6/26/2019 5:50	9	9	9	31.12	4.7	3.9	24.7
6/26/2019 6:00	9	9	9	29.89	4.8	3.8	25.1
6/26/2019 6:10	8	9	9	31.7	1	0.8	0.4
6/26/2019 6:20	9	9	9	31.27	4.6	3.8	24.5
6/26/2019 6:30	9	9	9	30.29	4.8	3.9	25
6/26/2019 6:40	9	9	9	30.78	1	0.8	25
6/26/2019 6:50	9	9	9	32	4.7	3.9	0.4
6/26/2019 7:00	9	9	9	31.02	4.8	3.9	24.8
6/26/2019 7:10	9	9	9	29.86	4.8	3.9	25.2
6/26/2019 7:20	9	9	9	31.51	1	0.8	0.3
6/26/2019 7:30	9	9	9	31.48	4.7	3.8	24
6/26/2019 7:40	9	9	9	30.29	5	3.9	25.1
6/26/2019 7:50	9	9	9	30.78	1.1	0.8	24.9
6/26/2019 8:00	9	9	9	31.82	4.8	3.8	0.5
6/26/2019 8:10	9	9	9	30.75	4.9	3.7	24.9
6/26/2019 8:20	9	9	9	30.26	2.7	2.5	25.1
6/26/2019 8:30	8	9	9	32	1	0.9	0.4
6/26/2019 8:40	9	9	9	30.96	4.8	3.9	24.7
6/26/2019 8:50	9	9	9	29.86	4.8	3.8	25.2
6/26/2019 9:00	9	9	9	31.6	0.8	0.8	0.3
6/26/2019 9:10	9	9	9	31.51	4.9	3.9	24
6/26/2019 9:20	9	9	9	30.41	4.9	3.9	24.9
6/26/2019 9:30	9	9	9	29.99	3.4	3.1	25.1
6/26/2019 9:40	9	9	9	31.85	0.9	0.8	0.3
6/26/2019 9:50	9	9	9	31.02	4.9	3.9	24.7
6/26/2019 10:00	9	9	9	30.02	3.4	3.2	25.1
6/26/2019 10:10	8	9	9	32.12	4.8	3.9	0.3
6/26/2019 10:20	9	9	9	30.87	4.8	3.8	24.8
6/26/2019 10:30	9	9	9	30.02	3.6	3.2	25.1
6/26/2019 10:40	9	9	9	32	1	0.8	0.3
6/26/2019 10:50	9	9	9	31.02	4.7	3.8	24.8
6/26/2019 11:00	9	9	9	29.8	4.8	3.8	25.1
6/26/2019 11:10	9	9	9	31.36	0.8	0.8	0.6
6/26/2019 11:20	9	9	9	31.15	4.8	3.9	24.6
6/26/2019 11:30	9	9	9	30.08	4.8	3.8	25.1
6/26/2019 11:40	9	9	9	31.3	0.9	0.8	1.6
6/26/2019 11:50	9	9	9	31.54	4.9	3.9	23.8
6/26/2019 12:00	9	9	9	30.57	4.8	3.8	24.9
6/26/2019 12:10	9	9	9	29.59	4.9	3.8	25.1
6/26/2019 12:20	9	9	9	30.84	0.9	0.8	2.4
6/26/2019 12:30	9	9	9	31.97	4.8	3.9	0.4
6/26/2019 12:40	9	9	9	30.96	5.3	3.9	24.8
6/26/2019 12:50	8	9	9	29.74	5.1	4	25.1
6/26/2019 13:00	9	9	9	32.09	3.9	3.4	0.3
6/26/2019 13:10	9	9	9	30.84	4.9	3.8	24.8
6/26/2019 13:20	9	9	9	29.83	4.7	3.8	25.1

6/26/2019 13:30	8	9	9	31.48	0.9	0.8	0.3
6/26/2019 13:40	9	9	9	31.45	4.9	3.9	24.2
6/26/2019 13:50	9	9	9	30.47	4.7	3.8	24.9
6/26/2019 14:00	9	9	9	30.2	3	2.6	25.1
6/26/2019 14:10	9	9	9	32.09	5.2	4.2	0.4
6/26/2019 14:20	9	9	9	31.02	4.9	3.8	24.8
6/26/2019 14:30	9	9	9	29.8	4.9	3.8	25.1
6/26/2019 14:40	9	9	9	31.54	0.9	0.8	0.4
6/26/2019 14:50	9	9	9	31.48	4.8	3.9	24
6/26/2019 15:00	9	9	9	30.38	4.7	3.9	24.9
6/26/2019 15:10	9	9	9	30.41	2	1.7	25.1
6/26/2019 15:20	9	9	9	31.88	4.9	3.9	0.4
6/26/2019 15:30	9	9	9	30.72	4.9	3.8	24.8
6/26/2019 15:40	9	9	9	29.96	3.5	3.2	25.2
6/26/2019 15:50	9	9	9	31.88	0.9	0.8	0.4
6/26/2019 16:00	9	9	9	31.18	4.8	3.9	24.7
6/26/2019 16:10	9	9	9	29.96	4.8	3.8	25.2
6/26/2019 16:20	9	9	9	32.09	2.9	2.4	0.4
6/26/2019 16:30	9	9	9	30.9	4.8	3.9	24.8
6/26/2019 16:40	9	9	9	29.77	4.8	3.8	25.2
6/26/2019 16:50	9	9	9	31.51	0.9	0.8	0.4
6/26/2019 17:00	9	9	9	31.39	4.8	3.8	24.3
6/26/2019 17:10	9	9	9	30.32	4.8	3.9	24.9
6/26/2019 17:20	8	9	9	30.54	1.1	0.9	25
6/26/2019 17:30	9	9	9	31.88	4.7	3.9	0.4
6/26/2019 17:40	9	9	9	30.75	4.9	3.9	24.9
6/26/2019 17:50	9	9	9	30.23	2.7	2.7	25.1
6/26/2019 18:00	9	9	9	32.09	3.6	3.1	0.4
6/26/2019 18:10	8	9	9	31.12	5	3.8	24.7
6/26/2019 18:20	9	9	9	29.99	4.9	3.9	25.1
6/26/2019 18:30	9	9	8	31.42	0.8	0.8	0.4
6/26/2019 18:40	8	9	9	31.42	4.8	3.8	24.2
6/26/2019 18:50	8	9	9	30.23	4.9	3.9	25.1
6/26/2019 19:00	9	9	9	31.3	0.9	0.8	2.5
6/26/2019 19:10	9	9	9	31.42	5	3.8	24.4
6/26/2019 19:20	9	9	9	30.08	4.8	3.9	25.1
6/26/2019 19:30	9	9	9	31.45	0.9	0.8	0.6
6/26/2019 19:40	8	9	9	31.51	4.8	3.8	24.2
6/26/2019 19:50	9	9	9	30.11	4.8	3.8	25.1
6/26/2019 20:00	8	9	9	31.7	0.9	0.8	0.4
6/26/2019 20:10	9	9	9	31.21	4.8	3.8	24.4
6/26/2019 20:20	8	9	9	30.26	4.6	3.8	25.1
6/26/2019 20:30	9	9	9	30.51	1.1	0.9	25
6/26/2019 20:40	9	9	9	32.03	4.8	3.9	0.4
6/26/2019 20:50	9	9	9	30.78	4.9	3.9	24.9
6/26/2019 21:00	9	9	9	29.96	3.3	3.1	25.2
6/26/2019 21:10	8	9	9	32.12	4.8	3.9	0.4

6/26/2019 21:20	9	9	9	30.87	4.8	3.8	24.9
6/26/2019 21:30	9	9	9	30.72	1.2	0.9	25.1
6/26/2019 21:40	9	9	9	31.63	4.9	3.7	23.6
6/26/2019 21:50	9	9	9	30.47	4.9	3.9	25
6/26/2019 22:00	9	9	9	30.14	3	2.9	25.2
6/26/2019 22:10	9	9	9	32	1	0.8	0.4
6/26/2019 22:20	9	9	9	31.36	4.7	3.9	24.4
6/26/2019 22:30	8	9	9	30.38	4.7	3.8	25
6/26/2019 22:40	8	9	9	30.32	2.5	2.2	25
6/26/2019 22:50	9	9	9	32.06	4.8	3.9	0.4
6/26/2019 23:00	9	9	9	30.93	4.8	3.9	24.9
6/26/2019 23:10	9	9	9	30.72	1.5	1.3	25.1
6/26/2019 23:20	9	9	9	31.63	4.7	3.8	21.5
6/26/2019 23:30	8	9	9	30.54	4.9	3.8	24.9
6/26/2019 23:40	9	9	9	30.05	3.1	3	25.1
6/26/2019 23:50	8	9	9	31.7	0.9	0.8	0.3
6/27/2019 0:00	9	9	9	31.6	4.8	3.9	23.7
6/27/2019 0:10	9	9	9	30.63	4.7	3.8	24.9
6/27/2019 0:20	9	9	9	30.26	2.8	2.7	25.1
6/27/2019 0:30	9	9	9	32.03	5	3.9	0.3
6/27/2019 0:40	8	9	9	30.99	4.7	3.8	24.7
6/27/2019 0:50	9	9	9	29.77	4.6	3.8	25.1
6/27/2019 1:00	9	9	9	31.57	0.9	0.8	0.3
6/27/2019 1:10	8	9	9	31.48	5	3.9	24
6/27/2019 1:20	9	9	9	30.57	4.8	3.9	24.9
6/27/2019 1:30	8	9	9	30.54	1.9	1.7	25.1
6/27/2019 1:40	9	9	9	31.85	4.8	3.9	0.4
6/27/2019 1:50	9	9	9	30.75	4.8	3.9	24.9
6/27/2019 2:00	9	9	9	29.71	4.6	3.8	25.2
6/27/2019 2:10	9	9	9	31.57	0.9	0.8	0.3
6/27/2019 2:20	9	9	9	31.21	4.8	3.8	24.5
6/27/2019 2:30	9	9	9	30.2	4.8	3.8	25.1
6/27/2019 2:40	9	9	9	30.9	1	0.8	25
6/27/2019 2:50	8	9	9	31.73	4.8	3.9	3.5
6/27/2019 3:00	9	9	9	30.47	4.7	3.8	25
6/27/2019 3:10	9	9	9	30.29	2.2	2.3	25.1
6/27/2019 3:20	8	9	9	31.79	0.9	0.8	0.4
6/27/2019 3:30	9	9	9	31.33	4.7	3.8	24.4
6/27/2019 3:40	9	9	9	30.38	4.9	3.9	25
6/27/2019 3:50	8	9	9	30.35	2.2	1.8	25.2
6/27/2019 4:00	9	9	9	32.12	1.1	0.8	0.4
6/27/2019 4:10	9	9	9	31.21	4.8	3.9	24.5
6/27/2019 4:20	8	9	9	30.17	4.8	3.8	25.1
6/27/2019 4:30	9	9	9	31.21	0.9	0.8	1.8
6/27/2019 4:40	9	9	9	31.54	4.6	3.9	24
6/27/2019 4:50	8	9	9	30.35	4.8	3.8	25
6/27/2019 5:00	8	9	9	30.51	1.5	1.1	25.1

6/27/2019 5:10	9	9	9	32	4.7	3.9	0.4
6/27/2019 5:20	9	9	9	31.05	4.9	3.8	24.7
6/27/2019 5:30	9	9	8	30.11	4.6	3.8	25.1
6/27/2019 5:40	9	9	9	30.9	1	0.8	25
6/27/2019 5:50	9	9	9	31.85	4.9	3.9	0.5
6/27/2019 6:00	8	9	9	30.93	4.5	3.9	24.7
6/27/2019 6:10	8	9	9	30.08	4.7	3.9	25.2
6/27/2019 6:20	9	9	9	31.15	0.9	0.8	2.9
6/27/2019 6:30	9	9	9	31.7	4.8	3.9	0.9
6/27/2019 6:40	9	9	9	30.54	4.8	3.8	25
6/27/2019 6:50	9	9	9	30.47	1.5	1.3	25.1
6/27/2019 7:00	9	9	9	31.79	4.9	3.8	0.5
6/27/2019 7:10	9	9	9	30.69	4.6	3.8	24.9
6/27/2019 7:20	9	9	9	29.77	3.6	3.2	25.2
6/27/2019 7:30	8	9	9	31.48	0.9	0.8	0.3
6/27/2019 7:40	8	9	9	31.48	4.7	3.9	24
6/27/2019 7:50	8	9	9	30.57	4.6	3.8	25
6/27/2019 8:00	9	9	9	30.35	1.7	1.5	25
6/27/2019 8:10	9	9	8	32.03	0.9	0.8	0.4
6/27/2019 8:20	9	9	9	31.27	4.8	3.9	24.6
6/27/2019 8:30	9	9	9	30.14	4.7	3.8	25.1
6/27/2019 8:40	8	9	9	31.6	0.9	0.8	0.4
6/27/2019 8:50	9	9	9	31.18	4.8	3.9	24.6
6/27/2019 9:00	9	9	9	29.99	4.7	3.9	25.1
6/27/2019 9:10	9	9	9	31.42	0.9	0.8	0.3
6/27/2019 9:20	8	9	9	31.45	4.7	3.8	24.2
6/27/2019 9:30	8	9	9	30.32	4.9	3.8	25.1
6/27/2019 9:40	8	9	9	30.47	1	0.9	25
6/27/2019 9:50	8	9	9	32	4.8	3.8	0.4
6/27/2019 10:00	9	9	9	30.78	4.6	3.8	24.8
6/27/2019 10:10	9	9	9	29.86	3.4	3.2	25.1
6/27/2019 10:20	8	9	9	31.94	1	0.8	0.3
6/27/2019 10:30	9	9	9	30.99	4.9	3.8	24.7
6/27/2019 10:40	9	9	9	29.89	4.8	3.8	25.2
6/27/2019 10:50	9	9	9	31.15	0.9	0.8	1.6
6/27/2019 11:00	9	9	9	31.63	4.8	3.8	23.5
6/27/2019 11:10	9	9	8	30.44	4.9	3.8	25.1
6/27/2019 11:20	9	9	9	31.15	0.9	0.8	3.6
6/27/2019 11:30	9	9	9	31.42	4.8	3.8	24.3
6/27/2019 11:40	9	9	9	30.17	4.7	3.8	25.1
6/27/2019 11:50	8	9	9	31.73	0.9	0.8	0.3
6/27/2019 12:00	9	9	9	31.33	4.8	3.8	24.5
6/27/2019 12:10	8	9	9	30.32	4.8	3.9	25
6/27/2019 12:20	9	9	9	30.14	2.9	2.6	25.1
6/27/2019 12:30	9	9	9	31.85	1	0.8	0.3
6/27/2019 12:40	8	9	9	31.21	4.6	3.8	24.6
6/27/2019 12:50	9	9	9	30.2	4.8	3.8	25

6/27/2019 13:00	9	9	9	31.09	0.9	0.8	4.4
6/27/2019 13:10	9	9	9	31.42	4.8	3.8	24.1
6/27/2019 13:20	8	9	9	30.2	4.7	3.9	25.1
6/27/2019 13:30	8	9	9	31.36	0.9	0.8	1.7
6/27/2019 13:40	8	9	9	31.51	4.9	3.8	23.9
6/27/2019 13:50	9	9	9	30.35	4.8	3.8	25
6/27/2019 14:00	8	9	9	31.09	0.9	0.8	4
6/27/2019 14:10	9	9	9	31.45	4.7	3.8	23.8
6/27/2019 14:20	8	9	9	30.26	4.6	3.8	25
6/27/2019 14:30	9	9	9	31.12	0.9	0.8	3.2
6/27/2019 14:40	8	9	9	31.73	5	3.8	6.3
6/27/2019 14:50	9	9	9	30.66	4.8	4	25
6/27/2019 15:00	8	9	9	29.77	3.4	3.2	25.2
6/27/2019 15:10	9	9	8	31.79	0.9	0.8	0.4
6/27/2019 15:20	9	9	9	31.15	4.8	3.9	24.6
6/27/2019 15:30	8	9	9	29.99	5	3.8	25.1
6/27/2019 15:40	9	9	8	31.33	0.9	0.8	0.8
6/27/2019 15:50	9	9	9	31.51	4.6	3.9	23.7
6/27/2019 16:00	8	9	9	30.63	4.8	3.8	24.9
6/27/2019 16:10	9	9	9	29.89	3.3	3.2	25.1
6/27/2019 16:20	8	9	9	31.94	0.9	0.8	0.4
6/27/2019 16:30	9	9	9	31.15	5	3.8	24.6
6/27/2019 16:40	8	9	9	30.05	4.6	3.9	25.1
6/27/2019 16:50	9	9	9	31.27	0.9	0.8	1.4
6/27/2019 17:00	9	9	9	31.48	4.7	3.8	24
6/27/2019 17:10	9	9	9	30.29	4.7	3.9	25.1
6/27/2019 17:20	9	9	9	31.18	1	0.7	3.5
6/27/2019 17:30	8	9	9	31.51	4.9	3.8	24
6/27/2019 17:40	8	9	9	30.23	4.8	3.9	25
6/27/2019 17:50	8	9	9	31.12	0.9	0.8	3.2
6/27/2019 18:00	8	9	9	31.6	4.8	3.8	23.5
6/27/2019 18:10	9	9	9	30.35	4.8	3.9	25
6/27/2019 18:20	9	9	9	30.93	1.1	0.8	25
6/27/2019 18:30	9	9	9	31.79	4.7	3.9	0.4
6/27/2019 18:40	8	9	9	30.75	4.7	3.9	24.9
6/27/2019 18:50	9	9	9	30.2	2.9	2.9	25.1
6/27/2019 19:00	9	9	9	31.97	4.9	3.9	0.4
6/27/2019 19:10	9	9	9	30.66	4.9	3.8	24.9
6/27/2019 19:20	8	9	9	30.66	1	0.9	25.1
6/27/2019 19:30	8	9	9	31.82	4.7	3.8	0.4
6/27/2019 19:40	8	9	9	30.72	4.8	3.8	24.8
6/27/2019 19:50	9	9	9	29.68	4.9	3.8	25.2
6/27/2019 20:00	9	9	9	31.33	0.8	0.8	0.4
6/27/2019 20:10	8	9	9	31.6	4.7	3.8	23.5
6/27/2019 20:20	8	9	9	30.35	4.7	3.8	25
6/27/2019 20:30	8	9	9	31.18	1	0.9	4.2
6/27/2019 20:40	9	9	9	31.48	4.7	3.8	24.1

6/27/2019 20:50	8	9	9	30.23	4.8	3.8	25.1
6/27/2019 21:00	9	9	9	31.45	0.9	0.8	0.4
6/27/2019 21:10	9	9	8	31.12	5	3.9	24.7
6/27/2019 21:20	9	9	8	29.77	4.1	3.5	25.2
6/27/2019 21:30	9	9	9	31.51	0.9	0.8	0.4
6/27/2019 21:40	8	9	9	31.45	4.8	3.8	24.1
6/27/2019 21:50	9	9	9	30.44	4.8	3.8	25
6/27/2019 22:00	8	9	9	30.35	2.1	1.8	25.1
6/27/2019 22:10	9	9	8	32.15	4.7	3.9	0.3
6/27/2019 22:20	8	9	9	30.96	4.8	3.8	24.8
6/27/2019 22:30	9	9	9	29.99	3.5	3.3	25.2
6/27/2019 22:40	9	9	9	32.06	4.8	3.9	0.4
6/27/2019 22:50	8	9	9	30.75	4.9	3.8	24.9
6/27/2019 23:00	8	9	8	30.54	1.7	1.6	25.1
6/27/2019 23:10	8	9	8	31.94	4.8	3.9	0.4
6/27/2019 23:20	9	9	9	30.87	4.6	3.8	24.8
6/27/2019 23:30	9	9	8	29.89	4.8	3.8	25.2
6/27/2019 23:40	9	9	9	30.84	0.9	0.8	24.9
6/27/2019 23:50	8	9	9	31.79	4.8	3.8	0.5
6/28/2019 0:00	9	9	9	30.78	4.8	3.9	24.9
6/28/2019 0:10	9	9	9	30.2	3.1	3	25.2
6/28/2019 0:20	8	9	8	32.09	4.9	3.9	0.4
6/28/2019 0:30	9	9	9	30.93	4.7	3.9	24.8
6/28/2019 0:40	8	9	9	29.8	4.6	3.8	25.1
6/28/2019 0:50	8	9	9	30.96	0.9	0.8	2.5
6/28/2019 1:00	9	9	9	31.88	4.9	3.9	0.4
6/28/2019 1:10	9	9	8	31.02	4.7	3.9	24.7
6/28/2019 1:20	9	9	9	30.17	4.8	3.8	25
6/28/2019 1:30	8	9	9	30.38	1.4	1.2	25
6/28/2019 1:40	8	9	9	32.09	0.9	0.8	0.3
6/28/2019 1:50	8	9	9	31.05	4.7	3.8	24.8
6/28/2019 2:00	9	9	9	30.05	4.8	3.8	25.1
6/28/2019 2:10	8	9	9	30.87	1.1	0.7	24.9
6/28/2019 2:20	9	9	9	32.12	5	4.2	0.3
6/28/2019 2:30	8	9	9	31.18	5	3.9	24.5
6/28/2019 2:40	8	9	9	30.29	4.9	3.9	25
6/28/2019 2:50	8	9	9	30.81	1.1	0.9	25
6/28/2019 3:00	8	9	9	31.54	4.8	3.9	23.7
6/28/2019 3:10	9	9	9	30.44	4.8	3.9	25
6/28/2019 3:20	8	9	9	30.72	1	0.9	25
6/28/2019 3:30	8	9	9	32.03	4.8	3.9	0.4
6/28/2019 3:40	9	9	9	31.09	4.7	3.9	24.6
6/28/2019 3:50	9	9	8	30.29	4.7	3.9	24.9
6/28/2019 4:00	9	9	8	30.23	2.1	1.9	25.1
6/28/2019 4:10	8	9	9	32	0.9	0.8	0.3
6/28/2019 4:20	9	9	9	31.09	4.7	3.8	24.7
6/28/2019 4:30	8	9	8	29.96	4.8	3.9	25.2

6/28/2019 4:40	8	9	9	31.57	0.9	0.8	0.3
6/28/2019 4:50	8	9	8	31.33	4.8	3.9	24.4
6/28/2019 5:00	9	9	9	30.29	4.6	3.9	25
6/28/2019 5:10	9	9	8	30.35	1.9	1.8	25.1
6/28/2019 5:20	8	9	9	32.03	0.9	0.8	0.3
6/28/2019 5:30	8	9	8	31.27	4.9	3.8	24.6
6/28/2019 5:40	9	9	9	30.26	4.6	3.8	25
6/28/2019 5:50	8	9	9	30.08	2.9	2.7	25.1
6/28/2019 6:00	8	9	9	31.48	0.9	0.8	0.4
6/28/2019 6:10	8	9	9	31.57	4.9	3.9	23.6
6/28/2019 6:20	9	9	9	30.57	4.7	3.9	24.9
6/28/2019 6:30	8	9	9	30.08	3.3	3.2	25.1
6/28/2019 6:40	8	9	9	32.09	4.7	3.9	0.4
6/28/2019 6:50	9	9	9	30.9	4.9	3.9	24.8
6/28/2019 7:00	8	9	9	29.77	3.4	3.4	25.2
6/28/2019 7:10	8	9	8	31.88	1	0.8	0.4
6/28/2019 7:20	8	9	9	31.05	4.9	3.8	24.7
6/28/2019 7:30	8	9	9	29.89	4.8	3.9	25.1
6/28/2019 7:40	9	9	8	31.45	0.8	0.8	0.3
6/28/2019 7:50	8	9	9	31.57	4.9	3.9	23.8
6/28/2019 8:00	8	9	9	30.54	4.8	3.9	24.8
6/28/2019 8:10	8	9	9	29.77	4.8	3.8	25.1
6/28/2019 8:20	8	9	9	30.96	0.9	0.8	3.1
6/28/2019 8:30	8	9	9	31.76	4.8	3.9	0.5
6/28/2019 8:40	8	9	9	30.54	4.8	3.8	25
6/28/2019 8:50	9	9	9	30.63	1.1	0.9	25
6/28/2019 9:00	8	9	8	31.73	4.7	3.8	0.5
6/28/2019 9:10	8	9	9	30.44	4.7	3.9	25
6/28/2019 9:20	8	9	9	30.96	1	0.8	25
6/28/2019 9:30	8	9	9	31.6	4.8	3.8	23.5
6/28/2019 9:40	8	9	9	30.54	4.8	3.9	25
6/28/2019 9:50	8	9	9	30.32	2.7	2.5	25.1
6/28/2019 10:00	8	9	9	32.09	1.7	1.1	0.4
6/28/2019 10:10	9	9	9	31.36	5	3.9	24.4
6/28/2019 10:20	8	9	9	30.38	4.7	3.8	24.8
6/28/2019 10:30	8	9	9	29.86	3.5	3.3	25.1
6/28/2019 10:40	8	9	9	31.97	0.9	0.8	0.4
6/28/2019 10:50	9	9	8	31.12	4.8	3.8	24.7
6/28/2019 11:00	8	9	9	29.86	5	3.8	25.1
6/28/2019 11:10	8	9	9	31.94	1	0.8	0.3
6/28/2019 11:20	8	9	9	31.09	4.9	3.9	24.7
6/28/2019 11:30	8	9	9	29.89	4.8	3.9	25.1
6/28/2019 11:40	8	9	9	31.36	1	0.8	0.3
6/28/2019 11:50	8	8	9	31.51	5	3.9	23.3
6/28/2019 12:00	8	9	9	30.63	4.7	3.9	24.9
6/28/2019 12:10	8	9	9	29.99	3.4	3.1	25.1
6/28/2019 12:20	8	9	9	32.03	3.8	3.4	0.4

6/28/2019 12:30	8	9	9	30.87	4.8	3.8	24.8
6/28/2019 12:40	8	9	9	29.71	4.7	3.8	25.2
6/28/2019 12:50	8	9	9	31.85	0.9	0.8	0.4
6/28/2019 13:00	8	9	9	31.09	4.8	3.8	24.6
6/28/2019 13:10	8	9	9	30.08	4.7	4	25.1
6/28/2019 13:20	8	9	9	31.21	0.9	0.8	1.5
6/28/2019 13:30	8	9	9	31.7	4.9	3.9	0.6
6/28/2019 13:40	8	9	9	30.84	4.8	3.8	24.7
6/28/2019 13:50	8	9	9	29.77	4.9	3.8	25.1
6/28/2019 14:00	8	9	9	31.67	0.9	0.8	0.4
6/28/2019 14:10	8	9	9	31.09	4.8	3.8	24.7
6/28/2019 14:20	8	9	9	29.86	4.7	3.8	25.2
6/28/2019 14:30	9	9	9	32.09	1.1	0.8	0.3
6/28/2019 14:40	9	9	9	30.96	4.9	3.9	24.8
6/28/2019 14:50	8	9	9	30.17	3.3	3.1	25.2
6/28/2019 15:00	8	9	9	32.12	3.3	2.8	0.4
6/28/2019 15:10	8	9	9	31.02	4.7	3.8	24.7
6/28/2019 15:20	8	9	9	30.02	4.9	3.8	25.1
6/28/2019 15:30	9	9	8	30.72	1	0.8	24.9
6/28/2019 15:40	8	9	8	31.94	4.9	3.9	0.4
6/28/2019 15:50	8	9	8	30.93	4.9	3.9	24.8
6/28/2019 16:00	8	9	9	29.99	4.9	3.8	25.1
6/28/2019 16:10	8	9	8	31.09	0.9	0.7	3
6/28/2019 16:20	8	9	9	31.48	4.6	3.8	23.8
6/28/2019 16:30	8	9	9	30.35	4.9	3.8	24.9
6/28/2019 16:40	8	9	9	30.66	1.1	0.9	25
6/28/2019 16:50	9	9	8	31.97	4.8	3.8	0.4
6/28/2019 17:00	8	9	9	30.87	4.9	3.8	24.7
6/28/2019 17:10	9	9	8	29.89	4.7	3.9	25.1
6/28/2019 17:20	8	9	9	31.02	0.9	0.8	4.1
6/28/2019 17:30	9	9	9	31.67	4.9	3.8	6.3
6/28/2019 17:40	9	9	8	30.44	4.8	3.8	25
6/28/2019 17:50	9	9	9	30.81	0.9	0.8	24.9
6/28/2019 18:00	9	9	8	31.76	4.7	3.9	0.5
6/28/2019 18:10	9	9	9	30.51	4.8	3.8	24.9
6/28/2019 18:20	8	9	9	30.11	3	2.8	25.1
6/28/2019 18:30	9	9	8	31.76	1	0.7	0.4
6/28/2019 18:40	8	9	9	31.51	4.7	3.8	23.8
6/28/2019 18:50	8	9	8	30.51	4.8	3.9	24.9
6/28/2019 19:00	9	9	8	30.17	2.9	2.7	25.1
6/28/2019 19:10	8	9	9	32.18	2.9	2.4	0.4
6/28/2019 19:20	9	9	9	31.02	4.6	3.8	24.8
6/28/2019 19:30	8	9	9	29.86	4.8	3.9	25.2
6/28/2019 19:40	8	9	8	31.76	1	0.8	0.4
6/28/2019 19:50	8	9	9	31.18	4.7	3.9	24.7
6/28/2019 20:00	8	9	8	29.96	4.7	3.8	25.2
6/28/2019 20:10	9	9	8	31.39	0.9	0.8	0.4

6/28/2019 20:20	9	9	8	31.54	4.8	3.8	23.9
6/28/2019 20:30	8	9	9	30.57	4.7	3.8	24.8
6/28/2019 20:40	9	9	9	30.02	3.4	3.1	25.2
6/28/2019 20:50	9	9	9	31.88	0.9	0.8	0.4
6/28/2019 21:00	8	9	9	31.05	4.9	3.9	24.7
6/28/2019 21:10	8	9	9	29.96	4.7	3.8	25.1
6/28/2019 21:20	9	9	8	31.76	0.9	0.8	0.4
6/28/2019 21:30	8	9	8	31.09	4.9	3.8	24.7
6/28/2019 21:40	8	9	9	29.99	4.9	3.8	25.1
6/28/2019 21:50	8	9	9	31.15	0.9	0.8	2.4
6/28/2019 22:00	8	9	9	31.57	5	3.9	23.6
6/28/2019 22:10	8	9	9	30.54	4.7	3.9	24.9
6/28/2019 22:20	8	9	8	30.26	2.9	2.7	25.1
6/28/2019 22:30	8	9	9	32.09	4.9	3.9	0.4
6/28/2019 22:40	8	9	9	30.87	4.7	3.8	24.8
6/28/2019 22:50	8	9	9	30.05	3.4	3.2	25.1
6/28/2019 23:00	8	9	8	32.06	4.9	3.9	0.4
6/28/2019 23:10	8	9	9	30.75	4.9	3.9	24.9
6/28/2019 23:20	8	9	8	30.17	2.7	2.5	25.1
6/28/2019 23:30	8	9	9	32.06	4.8	3.9	0.4
6/28/2019 23:40	8	9	8	30.84	4.8	3.8	24.9
6/28/2019 23:50	8	9	8	29.77	3.4	3.3	25.2
6/29/2019 0:00	8	9	9	31.6	0.9	0.9	0.3
6/29/2019 0:10	8	9	9	31.51	4.8	3.9	24
6/29/2019 0:20	8	9	9	30.51	4.8	3.9	24.9
6/29/2019 0:30	8	9	8	30.26	2.4	2.2	25
6/29/2019 0:40	8	9	9	32.09	1	0.8	0.3
6/29/2019 0:50	8	9	8	31.27	4.9	3.8	24.4
6/29/2019 1:00	8	9	9	30.14	4.7	3.8	25.1
6/29/2019 1:10	8	9	9	31.18	0.9	0.8	3.9
6/29/2019 1:20	8	9	8	31.57	4.6	3.7	23.5
6/29/2019 1:30	8	9	8	30.35	4.6	3.8	25
6/29/2019 1:40	8	9	8	30.54	1.2	1	25.1
6/29/2019 1:50	8	9	8	31.97	4.6	3.9	0.4
6/29/2019 2:00	8	9	9	30.78	4.7	3.8	24.8
6/29/2019 2:10	8	9	9	29.65	4.9	3.9	25.2
6/29/2019 2:20	8	9	9	31.36	0.9	0.8	0.3
6/29/2019 2:30	8	9	9	31.63	5	3.9	23.4
6/29/2019 2:40	8	9	8	30.69	5	3.9	24.8
6/29/2019 2:50	8	9	8	29.71	5.1	3.8	25.1
6/29/2019 3:00	8	9	9	31.7	0.9	0.8	0.3
6/29/2019 3:10	8	9	8	31.33	4.8	3.8	24.5
6/29/2019 3:20	8	9	9	30.2	4.8	3.8	25
6/29/2019 3:30	9	9	8	30.75	1	0.8	25
6/29/2019 3:40	8	9	9	31.7	4.7	3.8	0.5
6/29/2019 3:50	8	9	9	30.57	4.8	3.8	24.9
6/29/2019 4:00	8	9	8	29.62	3.4	3.3	25.1

6/29/2019 4:10	8	9	9	31.05	0.9	0.8	0.9
6/29/2019 4:20	8	9	8	31.85	4.9	3.9	0.4
6/29/2019 4:30	8	9	8	30.93	4.6	3.7	24.7
6/29/2019 4:40	9	9	8	29.89	4.9	3.9	25.1
6/29/2019 4:50	8	9	9	31.82	0.9	0.8	0.3
6/29/2019 5:00	8	9	9	31.02	4.8	3.9	24.7
6/29/2019 5:10	8	9	8	29.74	3.6	3.3	25.2
6/29/2019 5:20	8	9	9	31.76	1	0.8	0.3
6/29/2019 5:30	8	9	8	31.18	4.9	3.8	24.6
6/29/2019 5:40	8	9	8	30.17	4.8	3.9	24.9
6/29/2019 5:50	9	9	8	30.78	1.1	0.8	24.9
6/29/2019 6:00	8	9	9	31.85	4.8	3.8	0.4
6/29/2019 6:10	8	9	9	30.69	4.8	3.9	24.8
6/29/2019 6:20	8	9	9	29.99	3.4	3.2	25.1
6/29/2019 6:30	9	9	8	32.03	0.9	0.7	0.3
6/29/2019 7:00	8	9	8	31.33	0.8	0.8	0.6
6/29/2019 7:10	8	9	9	31.57	4.9	3.9	23.5
6/29/2019 7:20	8	9	9	30.51	4.9	3.8	24.9
6/29/2019 7:30	8	9	9	30.29	2.4	2.3	25.1
6/29/2019 7:40	8	9	8	32.09	2.2	1.7	0.3
6/29/2019 7:50	8	9	9	31.02	4.7	3.9	24.7
6/29/2019 8:00	8	9	9	29.99	4.6	3.7	25.1
6/29/2019 8:10	8	9	9	31.3	0.9	0.8	0.4
6/29/2019 8:20	8	9	8	31.54	4.8	3.9	23.7
6/29/2019 8:30	8	9	9	30.51	4.9	3.9	24.9
6/29/2019 8:40	9	9	9	30.14	2.9	2.7	25.1
6/29/2019 8:50	8	9	9	32.03	0.9	0.8	0.3
6/29/2019 9:00	8	9	9	30.99	4.9	3.8	24.7
6/29/2019 9:10	8	9	9	30.11	3.5	3.2	25.1
6/29/2019 9:20	8	9	9	31.97	4.9	3.8	0.4
6/29/2019 9:30	8	9	9	30.72	4.7	3.8	24.9
6/29/2019 9:40	8	8	9	29.8	3.4	3.3	25.1
6/29/2019 9:50	8	9	8	31.85	0.9	0.8	0.4
6/29/2019 10:00	8	9	9	31.18	4.9	4	24.6
6/29/2019 10:10	8	9	9	30.23	4.9	3.8	25
6/29/2019 10:20	8	9	9	30.47	1.2	0.9	25
6/29/2019 10:30	8	9	9	32.09	1.9	1.4	0.3
6/29/2019 10:40	8	9	9	31.05	4.9	3.8	24.7
6/29/2019 10:50	8	9	9	30.11	4.8	3.9	25
6/29/2019 11:00	8	9	9	30.84	1	0.9	24.9
6/29/2019 11:10	8	9	9	31.67	4.7	3.9	11.2
6/29/2019 11:20	8	9	8	30.44	4.9	3.8	25
6/29/2019 11:30	8	9	8	30.32	2	1.7	25.1
6/29/2019 11:40	8	9	9	32.03	4.9	3.8	0.3
6/29/2019 11:50	8	9	9	31.18	4.8	3.8	24.7
6/29/2019 12:00	8	9	9	29.96	4.9	3.8	25.1
6/29/2019 12:10	8	9	9	30.84	1.1	0.8	24.9

6/29/2019 12:20	8	9	9	31.67	4.7	3.9	22.8
6/29/2019 12:30	8	9	9	30.57	5	3.8	24.8
6/29/2019 12:40	8	9	9	29.62	4.8	3.8	25.1
6/29/2019 12:50	8	9	9	30.99	0.8	0.8	3.2
6/29/2019 13:00	8	9	9	31.85	4.7	3.8	0.5
6/29/2019 13:10	8	9	9	30.75	4.9	3.8	24.8
6/29/2019 13:20	8	9	9	29.71	3.3	3	25.1
6/29/2019 13:30	8	9	9	31.73	0.9	0.7	0.4
6/29/2019 13:40	8	9	8	31.3	4.8	3.8	24.5
6/29/2019 13:50	8	9	8	30.14	4.8	3.8	25
6/29/2019 14:00	8	9	8	30.87	0.9	0.8	24.9
6/29/2019 14:10	8	9	8	32.09	4.9	4.2	0.4
6/29/2019 14:20	8	9	9	31.21	4.9	3.8	24.5
6/29/2019 14:30	8	9	8	30.29	4.9	3.9	24.9
6/29/2019 14:40	8	9	9	30.41	1.6	1.3	25
6/29/2019 14:50	8	9	9	32	4.7	3.9	0.4
6/29/2019 15:00	8	9	9	30.87	4.8	3.9	24.8
6/29/2019 15:10	8	9	9	29.68	1.6	1.8	25.1
6/29/2019 15:20	8	9	8	31.7	1	0.8	0.4
6/29/2019 15:30	8	9	9	31.57	4.6	3.8	23.5
6/29/2019 15:40	8	9	8	30.66	4.8	3.9	24.8
6/29/2019 15:50	8	9	9	29.83	4.9	3.9	25.1
6/29/2019 16:00	8	9	9	31.05	0.9	0.8	4.7
6/29/2019 16:10	8	9	9	31.57	4.8	3.8	23.7
6/29/2019 16:20	8	9	9	30.35	4.9	3.8	25
6/29/2019 16:30	8	9	9	30.69	1.1	0.8	25
6/29/2019 16:40	8	9	8	31.79	4.9	3.8	0.5
6/29/2019 16:50	8	9	9	30.54	4.7	3.8	24.9
6/29/2019 17:00	8	9	8	30.29	2.1	1.9	25.1
6/29/2019 17:10	8	9	8	32.12	4.6	4	0.3
6/29/2019 17:20	8	9	8	31.3	4.8	3.8	24.3
6/29/2019 17:30	8	9	8	30.47	4.8	3.8	24.8
6/29/2019 17:40	8	9	9	29.89	4.6	3.9	25
6/29/2019 17:50	8	9	9	30.47	1.1	0.9	24.9
6/29/2019 18:00	8	9	8	32.03	1	0.7	0.4
6/29/2019 18:10	8	9	9	31.18	4.9	3.9	24.5
6/29/2019 18:20	8	9	9	30.26	4.6	3.8	25
6/29/2019 18:30	8	9	9	30.51	1.1	0.9	25
6/29/2019 18:40	8	9	8	32.03	4.7	3.8	0.4
6/29/2019 18:50	8	9	8	30.96	4.8	3.8	24.7
6/29/2019 19:00	8	9	8	30.2	5	3.8	25
6/29/2019 19:10	8	9	9	30.29	1.7	1.7	25
6/29/2019 19:20	8	9	9	31.94	0.9	0.8	0.3
6/29/2019 19:30	9	9	9	31.51	4.7	3.9	23.8
6/29/2019 19:40	8	9	9	30.81	4.7	3.9	24.8
6/29/2019 19:50	8	9	9	29.8	4.7	3.9	25.1
6/29/2019 20:00	8	9	8	31.05	0.8	0.8	4.3

6/29/2019 20:10	8	9	8	31.7	4.8	3.8	3.4
6/29/2019 20:20	8	9	9	30.63	4.6	3.8	24.8
6/29/2019 20:30	8	8	9	29.86	3.5	3.3	25.1
6/29/2019 20:40	8	9	9	31.6	0.9	0.8	0.4
6/29/2019 20:50	8	9	9	31.39	4.8	3.8	24
6/29/2019 21:00	8	9	9	30.47	4.8	3.8	24.9
6/29/2019 21:10	8	9	9	30.14	2.7	2.6	25.1
6/29/2019 21:20	9	9	8	31.63	0.9	0.8	0.4
6/29/2019 21:30	8	9	9	31.63	4.8	3.9	22.5
6/29/2019 21:40	8	9	9	30.93	4.9	3.8	24.7
6/29/2019 21:50	8	9	9	30.08	4.6	3.8	24.9
6/29/2019 22:00	8	9	9	30.11	2.4	2.2	25
6/29/2019 22:10	8	9	8	31.48	0.8	0.8	0.4
6/29/2019 22:20	8	8	9	31.73	4.7	3.8	0.5
6/29/2019 22:30	8	9	9	31.02	4.9	3.9	24.7
6/29/2019 22:40	8	9	9	30.17	4.8	3.9	24.8
6/29/2019 22:50	8	9	9	29.65	4.7	3.9	25.1
6/29/2019 23:00	8	9	9	30.38	1	0.9	24.8
6/29/2019 23:10	8	9	8	31.54	0.9	0.8	0.3
6/29/2019 23:20	8	9	9	31.7	4.8	3.8	1.6
6/29/2019 23:30	8	9	8	30.96	4.9	3.9	24.6
6/29/2019 23:40	8	9	8	30.2	4.7	3.8	24.9
6/29/2019 23:50	8	9	8	29.47	4.8	3.9	25.1
6/30/2019 0:00	8	9	8	30.41	1.1	0.8	24.8
6/30/2019 0:10	8	9	8	31.54	1	0.8	0.3
6/30/2019 0:20	8	9	8	31.73	4.7	3.8	0.5
6/30/2019 0:30	8	9	8	30.84	4.9	3.8	24.7
6/30/2019 0:40	8	9	8	30.05	4.8	3.8	25
6/30/2019 0:50	8	8	9	29.74	3.2	3.1	25.1
6/30/2019 1:00	8	9	8	30.87	0.9	0.8	0.7
6/30/2019 1:10	8	9	9	31.85	0.9	0.8	0.3
6/30/2019 1:20	8	9	8	31.97	4.8	3.9	0.4
6/30/2019 1:30	8	9	9	31.45	4.7	3.9	23.8
6/30/2019 1:40	8	9	8	30.78	5	3.8	24.7
6/30/2019 1:50	8	9	8	30.23	4.9	3.9	24.9
6/30/2019 2:00	8	9	8	29.59	4.7	3.9	25.1
6/30/2019 2:10	8	9	8	30.63	1	0.8	24.8
6/30/2019 2:20	8	8	9	32.09	4.4	3.8	0.3
6/30/2019 2:30	8	9	8	31.05	4.9	3.8	24.6
6/30/2019 2:40	8	9	8	30.2	4.7	3.8	24.9
6/30/2019 2:50	8	9	9	29.83	3.3	3.1	25.1
6/30/2019 3:00	8	9	9	31.09	0.9	0.8	0.4
6/30/2019 3:10	8	9	9	32.12	1.8	1.4	0.3
6/30/2019 3:20	8	9	8	31.3	4.9	3.9	24.3
6/30/2019 3:30	8	9	8	30.51	4.9	3.8	24.9
6/30/2019 3:40	8	9	9	29.65	4.8	3.8	25.1
6/30/2019 3:50	8	9	9	30.14	1.7	1.6	25

6/30/2019 4:00	8	9	9	31.51	1	0.8	0.3
6/30/2019 4:10	8	9	9	31.73	4.7	3.9	0.5
6/30/2019 4:20	8	9	9	31.02	4.7	3.9	24.7
6/30/2019 4:30	8	9	8	30.32	4.8	4	24.9
6/30/2019 4:40	8	9	8	29.5	3.5	3.2	25.1
6/30/2019 4:50	8	9	9	30.72	1	0.8	3.2
6/30/2019 5:00	8	9	9	32.03	0.9	0.9	0.4
6/30/2019 5:10	8	8	8	31.45	4.7	3.9	23.8
6/30/2019 5:20	8	9	8	30.75	4.9	3.9	24.7
6/30/2019 5:30	8	9	9	30.05	4.9	3.8	25
6/30/2019 5:40	8	9	9	29.5	4.7	3.9	25.1
6/30/2019 5:50	8	9	9	30.38	1.1	0.9	24.8
6/30/2019 6:00	8	9	8	31.7	1	0.8	0.3
6/30/2019 6:10	8	9	9	31.7	4.5	3.9	15.4
6/30/2019 6:20	8	9	9	30.66	4.9	3.8	24.7
6/30/2019 6:30	8	9	9	29.74	4.8	3.9	25.1
6/30/2019 6:40	8	9	9	30.78	1	0.8	3.9
6/30/2019 6:50	8	9	8	32.06	4.9	3.9	0.4
6/30/2019 7:00	8	9	9	31.21	4.7	3.8	24.5
6/30/2019 7:10	8	9	9	30.47	5	3.9	24.8
6/30/2019 7:20	8	9	8	29.68	4.7	3.8	25.1
6/30/2019 7:30	8	9	8	29.53	3.3	3.2	25.1
6/30/2019 7:40	8	9	9	30.32	1	0.9	24.9
6/30/2019 7:50	8	9	8	31.45	0.9	0.8	0.3
6/30/2019 8:00	8	9	8	31.73	4.8	3.9	0.5
6/30/2019 8:10	8	9	9	30.87	4.9	3.8	24.7
6/30/2019 8:20	8	9	9	29.86	4.8	3.9	25.1
6/30/2019 8:30	8	9	8	30.81	0.9	0.8	4.2
6/30/2019 8:40	8	8	9	32.15	0.9	0.7	0.4
6/30/2019 8:50	8	9	8	31.39	4.7	3.9	24.3
6/30/2019 9:00	8	9	8	30.66	4.6	3.8	24.7
6/30/2019 9:10	8	9	9	30.05	4.5	3.9	25
6/30/2019 9:20	8	9	9	29.89	2.9	2.9	25.1
6/30/2019 9:30	8	8	9	31.36	0.8	0.8	0.4
6/30/2019 9:40	8	8	8	31.82	4.8	3.8	0.5
6/30/2019 9:50	8	9	9	30.9	4.9	3.8	24.8
6/30/2019 10:00	8	9	9	29.89	4.8	3.9	25.1
6/30/2019 10:10	8	9	8	30.93	1	0.8	3.6
6/30/2019 10:20	8	9	8	31.88	4.8	3.9	0.4
6/30/2019 10:30	8	9	9	31.12	4.8	3.9	24.4
6/30/2019 10:40	8	9	9	30.57	4.9	3.9	24.6
6/30/2019 10:50	8	9	9	29.96	4.7	3.9	25
6/30/2019 11:00	8	9	8	30.14	2.4	2.3	25.1
6/30/2019 11:10	8	9	8	31.3	0.9	0.8	0.3
6/30/2019 11:20	8	8	9	31.88	4.8	3.9	0.4
6/30/2019 11:30	8	9	9	31.18	4.6	3.9	24.5
6/30/2019 11:40	8	9	9	30.35	4.7	3.9	24.9

6/30/2019 11:50	8	9	9	29.68	3.5	3.3	25.1
6/30/2019 12:00	8	8	9	31.36	1	0.8	0.4
6/30/2019 12:10	8	9	9	31.7	4.9	3.8	0.6
6/30/2019 12:20	8	9	8	30.78	4.7	3.8	24.8
6/30/2019 12:30	8	9	8	29.86	4.6	3.9	25
6/30/2019 12:40	8	9	8	29.8	3.3	3.1	25.1
6/30/2019 12:50	8	9	9	31.09	0.9	0.8	0.4
6/30/2019 13:00	8	9	9	31.85	4.9	3.9	0.5
6/30/2019 13:10	8	9	9	31.02	4.9	3.8	24.5
6/30/2019 13:20	8	9	9	30.32	4.7	3.8	25
6/30/2019 13:30	8	8	9	29.74	3.5	3.4	25.2
6/30/2019 13:40	8	9	8	31.63	0.9	0.8	0.3
6/30/2019 13:50	8	9	8	31.51	4.8	3.9	23.4
6/30/2019 14:00	8	9	8	30.84	4.9	3.8	24.7
6/30/2019 14:10	8	9	8	30.26	4.7	4	24.9
6/30/2019 14:20	8	9	9	29.53	3.2	3	25.1
6/30/2019 14:30	8	9	9	31.09	0.9	0.9	0.8
6/30/2019 14:40	8	9	9	31.94	4.7	3.9	0.4
6/30/2019 14:50	8	8	9	31.05	4.8	3.9	24.7
6/30/2019 15:00	8	9	8	30.08	4.8	3.9	25.1
6/30/2019 15:10	8	9	9	30.9	0.9	0.8	2.9
6/30/2019 15:20	8	9	8	31.88	4.8	3.8	0.4
6/30/2019 15:30	8	9	8	31.12	4.7	3.9	24.5
6/30/2019 15:40	8	9	9	30.32	4.9	3.9	24.9
6/30/2019 15:50	8	9	9	29.65	4.7	3.9	25.1
6/30/2019 16:00	8	9	9	30.14	1.4	1.1	24.9
6/30/2019 16:10	8	9	8	31.36	0.9	0.9	0.4
6/30/2019 16:20	8	9	8	31.94	4.7	3.9	0.4
6/30/2019 16:30	8	9	9	31.18	4.7	3.9	24.4
6/30/2019 16:40	8	9	9	30.29	4.9	3.8	24.9
6/30/2019 16:50	8	9	9	29.65	3.5	3.3	25.1
6/30/2019 17:00	8	9	9	30.96	0.9	0.8	1
6/30/2019 17:10	8	8	9	31.94	4.6	3.9	0.4
6/30/2019 17:20	8	9	9	31.05	4.6	3.9	24.6
6/30/2019 17:30	8	9	8	30.14	5	3.9	25
6/30/2019 17:40	8	9	9	29.99	3	2.7	25.1
6/30/2019 17:50	8	8	9	31.39	0.9	0.8	0.3
6/30/2019 18:00	8	9	9	31.63	4.8	3.8	1.6
6/30/2019 18:10	8	9	8	30.66	5.4	4	24.8
6/30/2019 18:20	8	8	8	30.02	4.8	3.8	25
6/30/2019 18:30	8	8	8	29.68	3.3	3.1	25.1
6/30/2019 18:40	8	9	9	31.02	0.9	0.8	0.7
6/30/2019 18:50	8	9	8	31.88	4.9	3.9	0.4
6/30/2019 19:00	8	9	8	31.12	4.8	3.9	24.4
6/30/2019 19:10	8	8	8	30.44	4.8	3.8	24.8
6/30/2019 19:20	8	9	8	29.74	4.8	3.8	25.1
6/30/2019 19:30	8	9	8	30.26	1.3	1.2	25

6/30/2019 19:40	8	8	8	31.51	0.9	0.8	0.3
6/30/2019 19:50	8	9	8	31.6	4.8	3.8	23.4
6/30/2019 20:00	8	9	8	30.57	4.7	3.9	24.8
6/30/2019 20:10	8	9	8	29.77	4.6	3.9	25.1
6/30/2019 20:20	8	9	9	31.18	1	0.8	0.9
6/30/2019 20:30	8	9	8	31.85	4.9	3.9	0.5
6/30/2019 20:40	8	9	8	31.21	4.9	3.9	24.4
6/30/2019 20:50	8	9	8	30.57	4.4	3.8	24.8
6/30/2019 21:00	8	9	9	29.74	4.7	3.9	25
6/30/2019 21:10	8	9	9	30.26	1.6	1.3	25
6/30/2019 21:20	8	9	8	31.48	0.9	0.9	0.3
6/30/2019 21:30	8	9	8	31.7	4.8	3.9	3.4
6/30/2019 21:40	8	9	8	30.78	4.8	3.9	24.8
6/30/2019 21:50	8	8	8	29.83	4.9	3.8	25
6/30/2019 22:00	8	9	8	30.17	1.5	1.3	25
6/30/2019 22:10	8	9	8	31.33	1	0.8	0.3
6/30/2019 22:20	8	9	8	31.97	4.9	3.9	0.4
6/30/2019 22:30	8	9	8	31.39	4.9	3.9	24.3
6/30/2019 22:40	8	9	8	30.51	4.7	3.8	24.8
6/30/2019 22:50	8	9	8	30.05	4.9	4	24.9
6/30/2019 23:00	8	9	8	29.53	3.5	3.4	25.2
6/30/2019 23:10	8	9	8	30.87	0.9	0.8	2.6
6/30/2019 23:20	8	9	8	32.09	1.2	0.8	0.4
6/30/2019 23:30	8	8	9	31.36	4.4	3.8	24.2
6/30/2019 23:40	8	9	8	30.51	4.6	3.9	24.8
6/30/2019 23:50	8	9	8	29.77	4.9	3.9	25.1
7/1/2019 0:00	8	8	8	30.44	0.9	0.8	25
7/1/2019 0:10	8	8	9	31.76	0.9	0.9	0.3
7/1/2019 0:20	8	8	8	31.7	4.6	3.9	0.5
7/1/2019 0:30	8	9	8	31.18	4.9	3.8	24.4
7/1/2019 0:40	8	9	8	30.63	4.7	3.9	24.8
7/1/2019 0:50	8	9	8	29.99	4.5	3.9	25
7/1/2019 1:00	8	8	8	30.32	1.1	0.9	25
7/1/2019 1:10	8	9	8	31.94	0.9	0.9	0.4
7/1/2019 1:20	8	9	8	31.36	4.7	3.9	24.3
7/1/2019 1:30	8	9	9	30.47	4.8	3.9	24.8
7/1/2019 1:40	8	9	9	29.53	5	3.9	25.2
7/1/2019 1:50	8	9	8	30.75	1	0.8	3.3
7/1/2019 2:00	8	8	8	31.63	1	0.9	0.3
7/1/2019 2:10	8	9	8	32.06	4.6	3.9	0.4
7/1/2019 2:20	8	8	9	31.42	4.6	3.9	23.8
7/1/2019 2:30	8	9	8	30.75	5	3.9	24.7
7/1/2019 2:40	8	9	8	30.05	4.9	3.9	25
7/1/2019 2:50	8	9	8	30.08	2.6	2.4	25.1
7/1/2019 3:00	8	8	8	31.3	0.9	0.8	0.4
7/1/2019 3:10	8	9	8	31.79	4.9	3.9	0.5
7/1/2019 3:20	8	9	8	30.84	4.7	3.9	24.7

7/1/2019 3:30	8	9	8	30.11	4.9	3.8	25.1
7/1/2019 3:40	8	9	8	30.11	2.7	2.6	25.1
7/1/2019 3:50	8	8	8	31.7	1	0.8	0.4
7/1/2019 4:00	8	9	8	31.42	4.7	3.8	24.1
7/1/2019 4:10	8	9	8	30.54	4.8	3.8	24.9
7/1/2019 4:20	8	9	8	29.71	4.7	3.8	25.1
7/1/2019 4:30	8	9	8	30.63	0.9	0.8	24.8
7/1/2019 4:40	8	9	8	31.85	1	0.7	0.4
7/1/2019 4:50	8	9	8	31.6	4.9	3.8	23.5
7/1/2019 5:00	8	9	8	30.69	4.7	3.9	24.8
7/1/2019 5:10	8	8	8	29.86	4.6	3.9	25
7/1/2019 5:20	8	8	8	30.41	1.4	1.2	25
7/1/2019 5:30	8	9	8	31.76	0.9	0.8	0.4
7/1/2019 5:40	8	9	8	31.48	4.9	3.9	23.4
7/1/2019 5:50	8	9	9	30.9	4.8	3.8	24.7
7/1/2019 6:00	8	8	9	30.29	4.9	3.8	24.9
7/1/2019 6:10	8	9	9	29.68	4.7	3.8	25.1
7/1/2019 6:20	8	9	8	30.66	0.9	0.8	24.9
7/1/2019 6:30	8	8	9	31.79	1	0.8	0.4
7/1/2019 6:40	8	9	8	31.6	4.7	3.9	23.4
7/1/2019 6:40	8	9	8	31.6	4.7	3.9	23.4
7/1/2019 6:50	8	8	9	30.87	4.8	3.8	24.7
7/1/2019 6:50	8	8	9	30.87	4.8	3.8	24.7
7/1/2019 7:00	8	8	9	30.08	4.9	3.8	25.1
7/1/2019 7:10	8	9	8	30.11	2.4	2.4	25.1
7/1/2019 7:20	8	8	9	31.39	1	0.8	0.4
7/1/2019 7:30	8	8	8	31.76	4.8	3.8	0.5
7/1/2019 7:40	8	8	8	30.75	4.8	3.9	24.8
7/1/2019 7:50	8	8	8	29.83	4.8	3.9	25.1
7/1/2019 8:00	8	8	9	30.47	1.1	0.9	25
7/1/2019 8:10	8	8	8	31.94	0.9	0.8	0.4
7/1/2019 8:20	8	8	8	31.48	4.6	3.8	24
7/1/2019 8:30	8	9	9	30.51	4.7	3.8	24.8
7/1/2019 8:40	8	9	8	29.71	4.8	3.9	25.1
7/1/2019 8:50	8	9	9	30.96	1.1	0.8	3.2
7/1/2019 9:00	8	9	8	32	4.7	3.8	0.4
7/1/2019 9:10	8	9	8	30.93	4.7	3.9	24.7
7/1/2019 9:20	8	8	9	29.86	4.7	3.9	25.1
7/1/2019 9:30	8	8	8	30.78	1.1	0.8	24.9
7/1/2019 9:40	8	8	9	31.88	0.9	0.8	0.4
7/1/2019 9:50	8	8	9	31.3	4.7	3.9	24.4
7/1/2019 10:00	8	9	9	30.29	4.6	3.9	24.9
7/1/2019 10:10	8	9	9	29.71	3.3	3.3	25.1
7/1/2019 10:20	8	8	9	31.15	0.9	0.8	0.3
7/1/2019 10:30	8	8	9	31.85	4.9	3.9	0.4
7/1/2019 10:40	8	8	8	31.02	4.8	3.8	24.5
7/1/2019 10:50	8	8	8	30.23	4.6	3.8	25

7/1/2019 11:00	8	8	9	30.26	2.3	2.1	25.1
7/1/2019 11:10	8	9	9	32.09	2.2	1.6	0.4
7/1/2019 11:20	8	8	9	31.15	4.8	3.8	24.6
7/1/2019 11:30	8	9	9	30.2	4.9	3.8	25
7/1/2019 11:40	8	9	9	29.96	3	2.8	25
7/1/2019 11:50	8	8	9	31.33	1	0.8	0.4
7/1/2019 12:00	8	8	9	31.82	4.9	3.9	0.4
7/1/2019 12:10	8	8	9	31.02	4.8	3.9	24.7
7/1/2019 12:20	8	9	9	30.02	4.8	3.8	25
7/1/2019 12:30	8	8	9	31.02	0.9	0.8	3.2
7/1/2019 12:40	9	9	9	31.57	4.8	3.8	23.9
7/1/2019 12:50	9	9	9	30.29	4.9	3.9	25.1
7/1/2019 13:00	9	9	9	31.85	5	3.9	0.5
7/1/2019 13:10	9	9	9	30.44	4.7	3.8	25
7/1/2019 13:20	9	9	9	31.33	1	0.9	3.3
7/1/2019 13:30	9	9	9	31.39	4.7	3.8	24.4
7/1/2019 13:40	9	9	9	30.2	4.7	3.9	25
7/1/2019 13:50	9	9	9	31.18	0.9	0.8	3.1
7/1/2019 14:00	9	9	9	31.57	4.7	3.8	24
7/1/2019 14:10	9	9	9	30.38	4.8	3.9	25
7/1/2019 14:20	9	9	9	31.36	1	0.8	3.6
7/1/2019 14:30	9	9	9	31.39	4.9	3.9	24.5
7/1/2019 14:40	9	9	9	30.23	4.7	3.8	25.1
7/1/2019 14:50	9	9	9	31.33	1	0.9	3.1
7/1/2019 15:00	9	9	9	31.3	4.9	3.9	24.6
7/1/2019 15:10	9	9	9	30.11	4.8	3.8	25.1
7/1/2019 15:20	9	9	9	32.06	0.9	0.8	0.4
7/1/2019 15:30	9	9	9	31.02	4.8	3.8	24.8
7/1/2019 15:40	9	9	9	30.2	3.4	3.2	25.1
7/1/2019 15:50	9	9	9	32.03	4.8	3.9	0.4
7/1/2019 16:00	9	9	9	30.9	4.9	3.9	24.8
7/1/2019 16:10	9	9	9	30.17	3.3	3.2	25.1
7/1/2019 16:20	9	9	9	31.94	4.7	3.9	0.4
7/1/2019 16:30	9	9	9	30.51	4.8	3.8	25
7/1/2019 16:40	9	9	9	31.76	0.9	0.8	0.4
7/1/2019 16:50	9	9	9	31.18	4.9	3.9	24.7
7/1/2019 17:00	9	9	9	30.23	3.4	3.3	25.1
7/1/2019 17:10	9	9	9	32	4.9	3.8	0.4
7/1/2019 17:20	9	9	9	30.87	4.8	3.6	24.8
7/1/2019 17:30	9	9	9	30.32	3.1	2.9	25.1
7/1/2019 17:40	9	9	9	32	4.7	3.9	0.4
7/1/2019 17:50	9	9	9	30.96	4.9	3.8	24.8
7/1/2019 18:00	9	9	9	30.44	2.8	2.7	25.1
7/1/2019 18:10	9	9	9	31.82	4.9	3.9	0.5
7/1/2019 18:20	9	9	9	30.57	4.6	3.8	24.9
7/1/2019 18:30	9	9	9	30.63	1.4	1.2	25
7/1/2019 18:40	9	9	9	31.79	5	3.9	0.5

7/1/2019 18:50	9	9	9	30.66	4.7	3.8	24.9
7/1/2019 19:00	9	9	9	30.72	1.4	1.1	24.9
7/1/2019 19:10	9	9	9	31.63	4.7	3.9	23.5
7/1/2019 19:20	9	9	9	30.35	4.8	3.8	25.1
7/1/2019 19:30	9	9	9	31.54	0.9	0.8	0.4
7/1/2019 19:40	9	9	9	31.21	5	3.9	24.7
7/1/2019 19:50	9	9	9	30.14	3.5	3.3	25.1
7/1/2019 20:00	9	9	9	31.97	4.9	3.9	0.4
7/1/2019 20:10	9	9	9	30.75	4.7	3.8	24.9
7/1/2019 20:20	9	9	9	31.27	1	0.8	24.9
7/1/2019 20:30	9	9	9	31.45	5	3.9	24.4
7/1/2019 20:40	9	9	9	30.17	4.9	3.9	25.1
7/1/2019 20:50	9	9	9	32.03	5	4.1	0.4
7/1/2019 21:00	9	9	9	31.02	4.7	3.9	24.8
7/1/2019 21:10	9	9	9	30.08	3.4	3.4	25.2
7/1/2019 21:20	9	9	9	32.06	5.1	4.1	0.4
7/1/2019 21:30	9	9	9	31.05	4.8	3.8	24.9
7/1/2019 21:40	9	9	9	30.57	2.6	2.3	25.1
7/1/2019 21:50	9	9	9	31.63	4.8	4	23.7
7/1/2019 22:00	9	9	9	30.29	4.8	3.9	25
7/1/2019 22:10	9	9	9	31.79	0.9	0.8	0.4
7/1/2019 22:20	9	9	9	31.05	4.8	3.8	24.7
7/1/2019 22:30	9	9	9	29.99	4.7	3.8	25.1
7/1/2019 22:40	9	9	9	31.82	0.9	0.8	0.4
7/1/2019 22:50	9	9	9	31.27	4.8	3.8	24.7
7/1/2019 23:00	9	9	9	30.02	4.7	3.9	25.1
7/1/2019 23:10	9	9	9	32.12	1.3	0.9	0.3
7/1/2019 23:20	9	9	9	30.9	4.9	3.9	24.8
7/1/2019 23:30	9	9	9	30.08	3.5	3.3	25.1
7/1/2019 23:40	9	9	9	32.06	0.9	0.8	0.3
7/1/2019 23:50	9	9	9	31.27	4.9	3.9	24.7
7/2/2019 0:00	9	9	9	30.11	5	3.9	25.2
7/2/2019 0:10	9	9	9	31.97	4.7	3.9	0.5
7/2/2019 0:20	9	9	9	30.72	4.8	3.9	25
7/2/2019 0:30	9	9	9	31.33	1	0.8	4.2
7/2/2019 0:40	9	9	9	31.33	4.9	3.9	24.6
7/2/2019 0:50	9	9	9	30.08	4.8	3.8	25.1
7/2/2019 1:00	9	9	9	32.06	4.8	3.9	0.3
7/2/2019 1:10	9	9	9	30.78	4.8	3.9	24.8
7/2/2019 1:20	9	9	9	30.75	1.5	1.3	25.1
7/2/2019 1:30	9	9	9	31.6	4.9	3.9	23.9
7/2/2019 1:40	9	9	9	30.26	4.8	3.9	25.1
7/2/2019 1:50	9	9	9	31.88	0.9	0.9	0.3
7/2/2019 2:00	9	9	9	30.93	4.8	3.9	24.9
7/2/2019 2:10	9	9	9	30.66	2.2	2	25.1
7/2/2019 2:20	9	9	9	31.67	4.8	3.9	23.6
7/2/2019 2:30	9	9	9	30.47	4.9	3.8	24.9

7/2/2019 2:40	9	9	9	30.69	1.3	1.1	25
7/2/2019 2:50	9	9	9	31.82	4.8	3.9	0.5
7/2/2019 3:00	9	9	9	30.69	4.8	3.9	24.9
7/2/2019 3:10	9	9	9	30.93	1.1	0.9	25
7/2/2019 3:20	9	9	9	31.45	4.7	3.9	24.4
7/2/2019 3:30	9	9	9	30.14	4.8	3.9	25.1
7/2/2019 3:40	9	9	9	31.97	5	3.9	0.4
7/2/2019 3:50	9	9	9	30.66	4.8	3.9	24.9
7/2/2019 4:00	9	9	9	30.9	0.9	0.9	25
7/2/2019 4:10	9	9	9	31.57	4.8	3.9	23.7
7/2/2019 4:20	9	9	9	30.38	5	3.9	25
7/2/2019 4:30	9	9	9	31.45	0.9	0.8	2.5
7/2/2019 4:40	9	9	9	31.27	4.7	3.9	24.7
7/2/2019 4:50	9	9	9	30.08	4.7	3.9	25.1
7/2/2019 5:00	9	9	9	32.03	1	0.8	0.3
7/2/2019 5:10	9	9	9	31.12	4.9	3.9	24.8
7/2/2019 5:20	9	9	9	29.99	4.8	3.8	25.2
7/2/2019 5:30	9	9	9	32.09	2.9	2.5	0.4
7/2/2019 5:40	9	9	9	31.05	4.8	3.9	24.9
7/2/2019 5:50	9	9	9	30.14	3.3	3.3	25.2
7/2/2019 6:00	9	9	9	31.76	4.7	3.9	0.5
7/2/2019 6:10	9	9	9	30.44	4.9	3.9	25.1
7/2/2019 6:20	9	9	9	31.88	1	0.9	0.4
7/2/2019 6:30	9	9	9	30.9	4.7	3.9	24.8
7/2/2019 6:40	9	9	9	30.51	2	1.8	25.1
7/2/2019 6:50	9	9	9	31.79	4.7	3.8	0.5
7/2/2019 7:00	9	9	9	30.63	4.9	3.9	24.9
7/2/2019 7:10	9	9	9	30.78	1.6	1.2	25
7/2/2019 7:20	9	9	9	31.63	4.7	3.9	23.7
7/2/2019 7:30	9	9	9	30.41	4.9	3.9	25.1
7/2/2019 7:40	9	9	9	31.21	0.9	0.9	24.9
7/2/2019 7:50	9	9	9	31.45	4.9	3.9	24.5
7/2/2019 8:00	9	9	9	30.51	3.1	3	25.1
7/2/2019 8:10	9	9	9	31.54	4.8	3.9	24.2
7/2/2019 8:20	9	9	9	30.11	3.5	3.3	25.2
7/2/2019 8:30	9	9	9	31.79	4.9	3.9	0.5
7/2/2019 8:40	9	9	9	30.57	4.7	3.9	25
7/2/2019 8:50	9	9	9	30.66	1.5	1.3	24.9
7/2/2019 9:00	9	9	9	31.82	4.9	3.9	0.5
7/2/2019 9:10	9	9	9	30.81	4.8	3.9	24.9
7/2/2019 9:20	9	9	9	30.05	3.5	3.3	25.1
7/2/2019 9:30	9	9	9	31.97	4.7	3.8	0.4
7/2/2019 9:40	9	9	9	30.72	4.5	3.9	24.9
7/2/2019 9:50	9	9	9	30.51	2.2	2	25
7/2/2019 10:00	9	9	9	31.94	5	3.9	0.4
7/2/2019 10:10	9	9	9	30.72	4.9	3.9	24.9
7/2/2019 10:20	9	9	9	30.66	2	1.8	25.1

7/2/2019 10:30	9	9	9	31.6	4.9	4	23.7
7/2/2019 10:40	9	9	9	30.32	4.8	4.1	25
7/2/2019 10:50	9	9	9	32.03	0.9	0.8	0.3
7/2/2019 11:00	9	9	9	31.05	4.7	3.9	24.8
7/2/2019 11:10	9	9	9	30.02	3.4	3.3	25.2
7/2/2019 11:20	9	9	9	32.09	4.8	3.9	0.3
7/2/2019 11:30	9	9	9	30.87	4.9	3.9	24.8
7/2/2019 11:40	9	9	9	30.29	3.2	2.8	25.2
7/2/2019 11:50	9	9	9	31.79	4.9	3.9	0.5
7/2/2019 12:00	9	9	9	30.57	4.9	3.9	24.9
7/2/2019 12:10	9	9	9	31.12	1	0.8	24.9
7/2/2019 12:20	9	9	9	31.48	4.7	3.9	24.1
7/2/2019 12:30	9	9	9	30.2	4.9	3.9	25.1
7/2/2019 12:40	9	9	9	31.39	0.9	0.8	2.2
7/2/2019 12:50	9	9	9	31.33	4.7	3.9	24.5
7/2/2019 13:00	9	9	9	30.17	4.8	3.9	25.1
7/2/2019 13:10	9	9	9	32.03	2.5	2.1	0.3
7/2/2019 13:20	9	9	9	30.75	4.9	3.9	25
7/2/2019 13:30	9	9	9	31.73	1	0.8	0.5
7/2/2019 13:40	9	9	9	30.96	4.8	3.8	24.8
7/2/2019 13:50	9	9	9	30.75	1.7	1.6	25
7/2/2019 14:00	9	9	9	31.73	4.7	3.9	0.5
7/2/2019 14:10	9	9	9	30.81	5	3.9	24.9
7/2/2019 14:20	9	9	9	30.51	2.5	2.3	25.1
7/2/2019 14:30	9	9	9	31.94	4.8	3.9	0.4
7/2/2019 14:40	9	9	9	30.69	4.9	4	24.9
7/2/2019 14:50	9	9	9	30.84	1.2	0.9	25
7/2/2019 15:00	9	9	9	31.51	4.9	3.9	24.2
7/2/2019 15:10	9	9	9	30.17	4.8	3.8	25.1
7/2/2019 15:20	9	9	9	32.15	4.4	3.8	0.4
7/2/2019 15:30	9	9	9	30.78	4.7	4	24.9
7/2/2019 15:40	9	9	9	31.12	1	0.9	24.9
7/2/2019 15:50	9	9	9	31.21	4.9	3.9	24.7
7/2/2019 16:00	9	9	9	30.44	3.2	3	25.1
7/2/2019 16:10	9	9	9	31.73	5	3.9	20.3
7/2/2019 16:20	9	9	9	30.47	4.7	3.8	24.9
7/2/2019 16:30	9	9	9	31.09	1	0.9	24.9
7/2/2019 16:40	9	9	9	31.6	4.9	3.8	24
7/2/2019 16:50	9	9	9	30.26	4.8	3.9	25
7/2/2019 17:00	9	9	9	31.33	0.9	0.8	3.1
7/2/2019 17:10	9	9	9	31.33	4.8	3.9	24.5
7/2/2019 17:20	9	9	9	30.2	3.6	3.3	25.2
7/2/2019 17:30	9	9	9	31.85	4.8	4	0.5
7/2/2019 17:40	9	9	9	30.41	4.8	4	25.1
7/2/2019 17:50	9	9	9	31.7	0.9	0.8	0.4
7/2/2019 18:00	9	9	9	31.05	4.7	3.8	24.8
7/2/2019 18:10	9	9	9	30.29	3.3	3.1	25.1

7/2/2019 18:20	9	9	9	31.79	4.8	3.9	0.5
7/2/2019 18:30	9	9	9	30.44	4.7	3.9	25.1
7/2/2019 18:40	9	9	9	31.67	1	0.8	0.4
7/2/2019 18:50	9	9	9	30.99	4.8	4	24.8
7/2/2019 19:00	9	9	9	30.78	1.7	1.5	25.1
7/2/2019 19:10	9	9	9	31.48	4.9	3.8	24.3
7/2/2019 19:20	9	9	9	30.05	4.8	3.8	25.1
7/2/2019 19:30	9	9	9	32.03	4.9	3.9	0.4
7/2/2019 19:40	9	9	9	30.81	4.7	3.9	24.8
7/2/2019 19:50	9	9	9	30.14	3.4	3.2	25.1
7/2/2019 20:00	9	9	9	32	4.8	3.8	0.4
7/2/2019 20:10	9	9	9	30.75	4.8	3.9	24.9
7/2/2019 20:20	9	9	9	30.47	2.3	2.1	25
7/2/2019 20:30	9	9	9	31.63	4.5	3.9	9.4
7/2/2019 20:40	9	9	9	30.41	4.9	3.9	25
7/2/2019 20:50	9	9	9	31.3	1	0.9	3.3
7/2/2019 21:00	9	9	9	31.45	4.9	4	24.2
7/2/2019 21:10	9	9	9	30.35	4.8	3.8	25
7/2/2019 21:20	9	9	9	31.18	0.9	0.8	4.3
7/2/2019 21:30	9	9	9	31.42	4.7	3.9	24.3
7/2/2019 21:40	9	9	9	30.2	4.7	3.9	25.1
7/2/2019 21:50	9	9	9	32.03	4.8	3.9	0.3
7/2/2019 22:00	9	9	9	30.66	4.9	3.9	24.9
7/2/2019 22:10	9	9	9	30.84	1.2	0.9	25
7/2/2019 22:20	9	9	9	31.63	4.8	3.9	23.5
7/2/2019 22:30	9	9	9	30.47	4.8	3.8	25
7/2/2019 22:40	9	9	9	31.27	0.9	0.9	3.3
7/2/2019 22:50	9	9	9	31.42	4.9	3.9	24.4
7/2/2019 23:00	9	9	9	30.23	4.8	3.8	25
7/2/2019 23:10	9	9	9	32.03	0.9	0.8	0.4
7/2/2019 23:20	9	9	9	30.63	4.8	3.9	25
7/2/2019 23:30	9	9	9	31.33	0.9	0.9	3
7/2/2019 23:40	9	9	9	31.33	4.8	3.9	24.6
7/2/2019 23:50	9	9	9	30.11	3.7	3.4	25.1
7/3/2019 0:00	9	9	9	32.06	4.9	3.9	0.4
7/3/2019 0:10	9	9	9	30.87	4.8	3.9	24.8
7/3/2019 0:20	9	9	9	30.54	2.4	2.2	25.1
7/3/2019 0:30	9	9	9	31.57	4.8	3.9	23.9
7/3/2019 0:40	9	9	9	30.26	4.8	4	25.1
7/3/2019 0:50	9	9	9	31.94	4.9	3.8	0.4
7/3/2019 1:00	9	9	9	30.69	4.9	3.8	24.9
7/3/2019 1:10	9	9	9	30.66	1.6	1.5	25
7/3/2019 1:20	9	9	9	31.73	4.9	3.9	0.5
7/3/2019 1:30	9	9	9	30.51	4.9	3.9	25
7/3/2019 1:40	9	9	9	30.96	1	0.9	24.9
7/3/2019 1:50	9	9	9	31.63	4.9	3.9	23.7
7/3/2019 2:00	9	9	9	30.38	4.8	3.9	25

7/3/2019 2:10	9	9	9	31.02	1.2	0.9	24.9
7/3/2019 2:20	9	9	9	31.54	4.8	3.8	23.9
7/3/2019 2:30	9	9	9	30.44	4.7	3.9	25
7/3/2019 2:40	9	9	9	31.6	0.9	0.9	1.9
7/3/2019 2:50	9	9	9	31.12	5	3.9	24.7
7/3/2019 3:00	9	9	9	30.38	3	2.8	25.2
7/3/2019 3:10	9	9	9	31.79	4.9	3.9	0.5
7/3/2019 3:20	9	9	9	30.47	4.9	3.9	25
7/3/2019 3:30	9	9	9	31.73	1	0.9	0.3
7/3/2019 3:40	9	9	9	30.99	5.1	3.9	24.8
7/3/2019 3:50	9	9	9	30.44	2.7	2.4	25.1
7/3/2019 4:00	9	9	9	31.94	4.8	3.9	0.5
7/3/2019 4:10	9	9	9	30.78	4.7	3.9	25
7/3/2019 4:20	9	9	9	30.32	2.9	2.7	25.1
7/3/2019 4:30	9	9	9	31.94	4.7	3.9	0.4
7/3/2019 4:40	9	9	9	30.66	4.9	3.9	24.9
7/3/2019 4:50	9	9	9	31.15	1.1	0.9	24.8
7/3/2019 5:00	9	9	9	31.42	4.9	3.9	24.3
7/3/2019 5:10	9	9	9	30.32	4.9	3.9	25
7/3/2019 5:20	9	9	9	31.09	1	0.8	24.8
7/3/2019 5:30	9	9	9	31.6	4.9	3.9	23.6
7/3/2019 5:40	9	9	9	30.54	4.9	3.9	25
7/3/2019 5:50	9	9	9	31.21	1	0.9	4.1
7/3/2019 6:00	9	9	9	31.48	4.8	3.9	24.1
7/3/2019 6:10	9	9	9	30.38	4.9	3.9	25
7/3/2019 6:20	9	9	9	31.33	1	0.8	4.7
7/3/2019 6:30	9	9	9	31.27	5	3.9	24.5
7/3/2019 6:40	9	9	9	30.08	4.7	3.9	25
7/3/2019 6:50	9	9	9	32.03	4.8	3.9	0.4
7/3/2019 7:00	9	9	9	30.51	4.7	3.8	25.1
7/3/2019 7:10	9	9	9	31.88	0.9	0.8	0.3
7/3/2019 7:20	9	9	9	30.99	5	4	24.8
7/3/2019 7:30	9	9	9	30.87	1.2	1	25.1
7/3/2019 7:40	9	9	9	31.48	4.8	4	24.2
7/3/2019 7:50	9	9	9	30.17	5	3.9	25.1
7/3/2019 8:00	9	9	9	31.94	4.8	3.9	0.4
7/3/2019 8:10	9	9	9	30.51	4.6	3.9	25
7/3/2019 8:20	9	9	9	31.7	0.9	0.8	0.3
7/3/2019 8:30	9	9	9	31.05	4.8	3.8	24.8
7/3/2019 8:40	9	9	9	29.89	4.9	3.9	25.1
7/3/2019 8:50	9	9	9	32.12	1.2	0.8	0.4
7/3/2019 9:00	9	9	9	31.02	5	3.9	24.8
7/3/2019 9:10	9	9	9	30.54	2.3	2.2	25.1
7/3/2019 9:20	9	9	9	31.88	4.7	3.9	0.5
7/3/2019 9:30	9	9	9	30.47	4.8	3.8	25
7/3/2019 9:40	9	9	9	31.73	0.8	0.9	0.3
7/3/2019 9:50	9	9	9	30.84	4.9	3.8	25

7/3/2019 10:00	9	9	9	30.99	1.1	0.8	24.9
7/3/2019 10:10	9	9	9	31.33	4.6	3.9	24.6
7/3/2019 10:20	9	9	9	30.11	3.5	3.4	25.1
7/3/2019 10:30	9	9	9	31.94	4.9	3.9	0.5
7/3/2019 10:40	9	9	9	30.41	4.7	3.9	25.1
7/3/2019 10:50	9	9	9	32.03	0.9	0.9	0.3
7/3/2019 11:00	9	9	9	30.84	4.9	3.8	24.9
7/3/2019 11:10	9	9	9	31.15	1.2	0.9	25
7/3/2019 11:20	9	9	9	31.42	4.8	4.1	24.1
7/3/2019 11:30	9	9	9	30.29	4.9	3.9	25.1
7/3/2019 11:40	9	9	9	31.79	0.9	0.9	0.3
7/3/2019 11:50	9	9	9	30.87	4.9	3.9	24.8
7/3/2019 12:00	9	9	9	30.75	2	1.7	25.1
7/3/2019 12:10	9	9	9	31.63	4.8	3.9	23.7
7/3/2019 12:20	9	9	9	30.26	5	3.9	25.1
7/3/2019 12:30	9	9	9	32.06	4.5	3.9	0.4
7/3/2019 12:40	9	9	9	30.72	4.7	3.8	24.9
7/3/2019 12:50	9	9	9	31.33	1.1	0.8	4.1
7/3/2019 13:00	9	9	9	31.27	4.9	3.9	24.7
7/3/2019 13:10	9	9	9	30.26	3.5	3.2	25.1
7/3/2019 13:20	9	9	9	31.82	4.7	3.9	0.5
7/3/2019 13:30	9	9	9	30.38	4.9	3.8	25.1
7/3/2019 13:40	9	9	9	31.67	1	0.8	0.4
7/3/2019 13:50	9	9	9	30.99	4.8	3.9	24.8
7/3/2019 14:00	9	9	9	30.72	1.2	1.2	25
7/3/2019 14:10	9	9	9	31.51	4.9	4	24.1
7/3/2019 14:20	9	9	9	30.14	4.9	3.8	25.1
7/3/2019 14:30	9	9	9	31.85	4.8	3.9	0.5
7/3/2019 14:40	9	9	9	30.44	4.9	3.9	25
7/3/2019 14:50	9	9	9	31.48	0.9	0.9	1.6
7/3/2019 15:00	9	9	9	31.09	4.8	3.9	24.7
7/3/2019 15:10	9	9	9	30.38	3.4	3.1	25.1
7/3/2019 15:20	9	9	9	31.76	4.7	3.9	0.5
7/3/2019 15:30	9	9	9	30.47	4.9	3.9	25
7/3/2019 15:40	9	9	9	31.73	0.9	0.8	0.3
7/3/2019 15:50	9	9	9	30.93	4.9	3.9	24.8
7/3/2019 16:00	9	9	9	30.75	1.6	1.4	25
7/3/2019 16:10	9	9	9	31.45	4.8	3.9	24.3
7/3/2019 16:20	9	9	9	30.14	3.5	3.2	25.1
7/3/2019 16:30	9	9	9	31.76	4.8	3.9	0.5
7/3/2019 16:40	9	9	9	30.32	4.8	3.9	25
7/3/2019 16:50	9	9	9	31.85	1	0.9	0.3
7/3/2019 17:00	9	9	9	30.84	4.8	3.8	24.9
7/3/2019 17:10	9	9	9	30.9	1.3	1.2	25
7/3/2019 17:20	9	9	9	31.45	4.9	3.9	24.2
7/3/2019 17:30	9	9	9	30.2	4.6	4	25
7/3/2019 17:40	9	9	9	31.79	0.8	0.9	0.4

7/3/2019 17:50	9	9	9	31.15	4.8	3.9	24.7
7/3/2019 18:00	9	9	9	29.99	4.6	3.9	25.1
7/3/2019 18:10	9	9	9	32.12	4.3	3.7	0.4
7/3/2019 18:20	9	9	9	30.84	4.7	3.9	24.9
7/3/2019 18:30	9	9	9	31.3	1.1	0.8	24.9
7/3/2019 18:40	9	9	9	31.21	4.7	3.9	24.8
7/3/2019 18:50	9	9	9	30.41	3	2.8	25.1
7/3/2019 19:00	9	9	9	31.63	4.8	4	23.6
7/3/2019 19:10	9	9	9	30.23	4.7	3.9	25.1
7/3/2019 19:20	9	9	9	31.76	0.9	0.9	0.4
7/3/2019 19:30	9	9	9	31.12	4.7	3.9	24.7
7/3/2019 19:40	9	9	9	29.96	4.7	3.8	25.1
7/3/2019 19:50	9	9	9	32.06	3.9	3.7	0.4
7/3/2019 20:00	9	9	9	30.75	4.8	3.9	24.9
7/3/2019 20:10	9	9	9	30.96	1	0.9	25
7/3/2019 20:20	9	9	9	31.36	4.8	3.9	24.6
7/3/2019 20:30	9	9	9	30.23	3.5	3.3	25.1
7/3/2019 20:40	9	9	9	31.73	4.8	3.9	23.6
7/3/2019 20:50	9	9	9	30.17	4.8	3.9	24.9
7/3/2019 21:00	9	9	9	32.09	4.7	3.9	0.4
7/3/2019 21:10	9	9	9	30.78	4.7	3.9	25
7/3/2019 21:20	9	9	9	31.15	0.9	0.8	24.9
7/3/2019 21:30	9	9	9	31.36	4.6	3.9	24.6
7/3/2019 21:40	9	9	9	30.14	3.5	3.3	25.2
7/3/2019 21:50	9	9	9	31.82	4.8	3.9	0.5
7/3/2019 22:00	9	9	9	30.54	4.9	3.9	25
7/3/2019 22:10	9	9	9	31.3	1.1	0.8	3.1
7/3/2019 22:20	9	9	9	31.18	4.9	3.9	24.6
7/3/2019 22:30	9	9	9	30.11	3.5	3.4	25.1
7/3/2019 22:40	9	9	9	32	4.5	3.9	0.4
7/3/2019 22:50	9	9	9	30.69	4.8	3.8	25
7/3/2019 23:00	9	9	9	31.45	0.9	0.9	3.1
7/3/2019 23:10	9	9	9	31.05	4.7	3.9	24.8
7/3/2019 23:20	9	9	9	30.35	3.1	3.1	25.1
7/3/2019 23:30	9	9	9	31.7	4.9	3.9	0.5
7/3/2019 23:40	9	9	9	30.44	4.7	3.9	25
7/3/2019 23:50	9	9	9	31.39	0.9	0.8	3.3
7/4/2019 0:00	9	9	9	31.21	4.9	4	24.7
7/4/2019 0:10	9	9	9	30.17	3.5	3.3	25.1
7/4/2019 0:20	9	9	9	31.94	4.9	4	0.4
7/4/2019 0:30	9	9	9	30.75	5	3.9	24.9
7/4/2019 0:40	9	9	9	30.02	3.5	3.4	25.1
7/4/2019 0:50	9	9	9	32.06	0.9	0.9	0.3
7/4/2019 1:00	9	9	9	30.99	4.9	3.9	24.8
7/4/2019 1:10	9	9	9	30.78	1.6	1.4	25.1
7/4/2019 1:20	9	9	9	31.51	4.8	4.1	24.4
7/4/2019 1:30	9	9	9	30.05	4.8	3.9	25.1

7/4/2019 1:40	9	9	9	31.79	0.9	0.9	0.3
7/4/2019 1:50	9	9	9	31.09	4.8	3.9	24.7
7/4/2019 2:00	9	9	9	30.08	4.8	3.9	25.2
7/4/2019 2:10	9	9	9	31.85	1	0.9	0.3
7/4/2019 2:20	9	9	9	30.99	4.7	3.9	24.8
7/4/2019 2:30	9	9	9	30.75	1.8	1.6	25
7/4/2019 2:40	9	9	9	31.54	4.7	3.8	24.1
7/4/2019 2:50	9	9	9	30.14	4.9	3.9	25.2
7/4/2019 3:00	9	9	9	32.03	1	0.9	0.3
7/4/2019 3:10	9	9	9	31.02	4.8	3.8	24.8
7/4/2019 3:20	9	9	9	30.38	2.9	2.8	25.1
7/4/2019 3:30	9	9	9	31.7	4.7	3.9	0.5
7/4/2019 3:40	9	9	9	30.38	4.8	4	24.9
7/4/2019 3:50	9	9	9	30.84	1.1	0.9	25
7/4/2019 4:00	9	9	9	31.6	4.9	3.8	22.5
7/4/2019 4:10	9	9	9	30.54	4.6	4	24.9
7/4/2019 4:20	9	9	9	30.99	1.1	0.9	24.9
7/4/2019 4:30	9	9	9	31.51	5	3.8	23.9
7/4/2019 4:40	9	9	9	30.2	4.8	3.9	25
7/4/2019 4:50	9	9	9	31.63	0.8	0.8	0.3
7/4/2019 5:00	9	9	9	31.09	4.9	3.9	24.7
7/4/2019 5:10	9	9	9	30.02	3.5	3.4	25.1
7/4/2019 5:20	9	9	9	32.03	5	3.9	0.4
7/4/2019 5:30	9	9	9	30.63	4.8	3.9	24.9
7/4/2019 5:40	9	9	9	30.69	1.4	1.2	25
7/4/2019 5:50	9	9	9	31.73	4.8	3.9	0.5
7/4/2019 6:00	9	9	9	30.63	4.8	3.9	24.9
7/4/2019 6:10	9	9	9	30.63	1.6	1.5	25
7/4/2019 6:20	9	9	9	31.73	4.9	3.9	0.5
7/4/2019 6:30	9	9	9	30.51	4.7	3.9	25
7/5/2019 6:40	9	9	9	30.41	4.9	3.9	24.9
7/5/2019 6:50	9	9	9	30.38	2.3	2.1	25.1
7/5/2019 7:00	9	9	9	32.06	4.9	3.9	0.4
7/5/2019 7:10	9	9	9	30.9	4.9	3.8	24.8
7/5/2019 7:20	9	9	9	29.83	3.6	3.3	25.1
7/5/2019 7:30	9	9	9	31.82	1	0.8	0.3
7/5/2019 7:40	9	9	9	31.12	4.9	4	24.6
7/5/2019 7:50	9	9	9	30.17	4.8	3.9	25.1
7/5/2019 8:00	9	9	9	31.09	1	0.9	4.3
7/5/2019 8:10	9	9	9	31.73	4.9	3.9	0.5
7/5/2019 8:20	9	9	9	30.57	5	3.9	24.9
7/5/2019 8:30	9	9	9	30.66	1.5	1.4	24.9
7/5/2019 8:40	9	9	9	31.79	4.8	4	0.4
7/5/2019 8:50	9	9	9	30.81	4.9	3.9	24.9
7/5/2019 9:00	9	9	9	30.32	3.1	3	25.1
7/5/2019 9:10	9	9	9	31.85	4.8	3.9	0.5
7/5/2019 9:20	9	9	9	30.47	5	4	25

7/5/2019 9:30	9	9	9	31.51	0.9	0.9	2.4
7/5/2019 9:40	9	9	9	31.15	4.8	3.9	24.7
7/5/2019 9:50	9	9	9	30.11	4.8	4	25.1
7/5/2019 10:00	9	9	9	31.82	0.9	0.9	0.3
7/5/2019 10:10	9	9	9	31.18	4.8	3.8	24.6
7/5/2019 10:20	9	9	9	30.08	4.9	3.9	25.1
7/5/2019 10:30	9	9	9	31.3	0.9	0.8	2.5
7/5/2019 10:40	9	9	9	31.48	4.9	3.8	24.1
7/5/2019 10:50	9	9	9	30.2	4.9	3.9	25
7/5/2019 11:00	9	9	9	31.48	1	0.9	0.4
7/5/2019 11:10	9	9	9	31.45	4.9	3.8	24.2
7/5/2019 11:20	9	9	9	30.35	4.6	3.9	24.9
7/5/2019 11:30	9	9	9	30.69	1.4	1.2	24.9
7/5/2019 11:40	9	9	9	31.76	4.9	3.9	0.5
7/5/2019 11:50	9	9	9	30.57	4.9	3.9	24.9
7/5/2019 12:00	9	9	9	30.66	1.7	1.6	25.1
7/5/2019 12:10	9	9	9	31.94	4.8	3.9	0.4
7/5/2019 12:20	9	9	9	30.84	4.9	3.8	24.8
7/5/2019 12:30	9	9	9	30.32	3.1	2.8	25.1
7/5/2019 12:40	9	9	9	32.06	4.8	3.9	0.4
7/5/2019 12:50	9	9	9	30.99	4.9	3.9	24.7
7/5/2019 13:00	9	9	9	30.02	4.5	3.9	25.1
7/5/2019 13:10	9	9	9	31.67	0.9	0.8	0.4
7/5/2019 13:20	9	9	9	31.21	4.8	3.9	24.6
7/5/2019 13:30	9	9	9	29.86	4.6	4	25.1
7/5/2019 13:40	9	9	9	31.97	1	0.9	0.3
7/5/2019 13:50	9	9	9	30.99	4.9	3.9	24.8
7/5/2019 14:00	9	9	9	30.23	3.3	3.1	25.1
7/5/2019 14:10	9	9	9	31.82	4.8	3.9	0.4
7/5/2019 14:20	9	9	9	30.47	4.9	3.9	24.9
7/5/2019 14:30	9	9	9	31.3	0.9	0.9	3.3
7/5/2019 14:40	9	9	9	31.12	4.7	3.9	24.7
7/5/2019 14:50	9	9	9	30.29	3.3	3.2	25.1
7/5/2019 15:00	9	9	9	31.82	4.9	3.9	0.5
7/5/2019 15:10	9	9	9	30.44	4.9	3.8	25.1
7/5/2019 15:20	9	9	9	31.15	1	0.8	3.1
7/5/2019 15:30	9	9	9	31.51	4.8	3.9	24
7/5/2019 15:40	9	9	9	30.29	4.9	3.9	25
7/5/2019 15:50	9	9	9	30.93	0.9	0.9	24.9
7/5/2019 16:00	9	9	9	31.48	4.9	4	24
7/5/2019 16:10	9	9	9	30.23	5	3.9	25
7/5/2019 16:20	9	9	9	31.57	0.9	0.9	0.4
7/5/2019 16:30	9	9	9	31.3	4.8	3.9	24.5
7/5/2019 16:40	9	9	9	30.08	4.9	3.9	25
7/5/2019 16:50	9	9	9	30.87	1.1	0.9	24.9
7/5/2019 17:00	9	9	9	31.63	4.9	3.8	22.8
7/5/2019 17:10	9	9	9	30.35	5	3.9	25

7/5/2019 17:20	9	9	9	31.73	0.9	0.9	0.4
7/5/2019 17:30	9	9	9	31.15	4.9	3.8	24.7
7/5/2019 17:40	9	9	9	29.99	4.9	3.9	25.1
7/5/2019 17:50	9	9	9	31.57	1	0.9	0.4
7/5/2019 18:00	9	9	9	31.48	4.9	3.9	24.1
7/5/2019 18:10	9	9	9	30.41	4.8	3.8	25
7/5/2019 18:20	9	9	9	30.93	1	0.8	24.9
7/5/2019 18:30	9	9	9	31.63	4.9	3.9	23.6
7/5/2019 18:40	9	9	9	30.38	4.9	3.8	25
7/5/2019 18:50	9	9	9	30.78	1	1	24.9
7/5/2019 19:00	9	9	9	31.7	4.8	3.9	20.4
7/5/2019 19:10	9	9	9	30.41	4.9	4	25
7/5/2019 19:20	9	9	9	30.84	1	0.9	25
7/5/2019 19:30	9	9	9	31.6	4.8	3.9	22
7/5/2019 19:40	9	9	9	30.51	4.8	3.9	24.9
7/5/2019 19:50	9	9	9	30.72	0.9	0.9	25
7/5/2019 20:00	9	9	9	31.79	4.8	3.9	0.5
7/5/2019 20:10	9	9	9	30.57	5.1	3.9	24.9
7/5/2019 20:20	9	9	9	31.18	1	0.9	4.7
7/5/2019 20:30	9	9	9	31.51	4.7	3.8	24.1
7/5/2019 20:40	9	9	9	30.26	4.7	4	25
7/5/2019 20:50	9	9	9	31.15	0.9	0.8	3.7
7/5/2019 21:00	9	9	9	31.67	4.8	3.9	23.6
7/5/2019 21:10	9	9	9	30.38	4.9	3.9	24.9
7/5/2019 21:20	9	9	9	30.51	1.3	1.2	25
7/5/2019 21:30	9	9	9	31.76	4.9	3.9	0.4
7/5/2019 21:40	9	9	9	30.63	4.9	3.9	24.9
7/5/2019 21:50	9	9	9	30.51	2	1.7	25.1
7/5/2019 22:00	9	9	9	32	5	3.9	0.4
7/5/2019 22:10	9	9	9	30.81	4.7	3.9	24.8
7/5/2019 22:20	9	9	9	30.17	3.1	3.1	25.1
7/5/2019 22:30	9	9	9	32.03	4.8	4	0.4
7/5/2019 22:40	9	9	9	30.93	4.8	4	24.7
7/5/2019 22:50	9	9	9	29.83	3.3	3.4	25.1
7/5/2019 23:00	9	9	9	31.7	1	0.9	0.4
7/5/2019 23:10	9	9	9	31.21	4.8	3.9	24.4
7/5/2019 23:20	9	9	9	30.26	4.8	3.9	25
7/5/2019 23:30	9	9	9	30.44	1.6	1.3	25
7/5/2019 23:40	9	9	9	31.97	4.7	4	0.4
7/5/2019 23:50	9	9	9	30.9	4.9	3.9	24.9
7/6/2019 0:00	9	9	9	30.41	2.2	2	25
7/6/2019 0:10	9	9	9	31.85	4.8	4	0.4
7/6/2019 0:20	9	9	9	30.96	4.9	3.9	24.7
7/6/2019 0:30	9	9	9	29.77	4.8	4	25.1
7/6/2019 0:40	9	9	9	31.97	0.9	0.9	0.4
7/6/2019 0:50	9	9	9	31.18	4.8	3.9	24.6
7/6/2019 1:00	9	9	9	30.05	4.7	3.9	25.1

7/6/2019 1:10	9	9	9	31.7	1	0.9	0.4
7/6/2019 1:20	9	9	9	31.15	4.9	3.9	24.7
7/6/2019 1:30	9	9	9	30.26	3.4	3.2	25.2
7/6/2019 1:40	9	9	9	31.79	4.9	3.9	0.5
7/6/2019 1:50	9	9	9	30.44	4.7	4	25
7/6/2019 2:00	9	9	9	31.27	0.9	0.9	3.3
7/6/2019 2:10	9	9	9	31.54	4.8	4	23.9
7/6/2019 2:20	9	9	9	30.47	4.9	3.8	25
7/6/2019 2:30	9	9	9	30.66	1	0.9	25
7/6/2019 2:40	9	9	9	31.79	4.8	4	0.5
7/6/2019 2:50	9	9	9	30.54	4.8	3.9	24.9
7/6/2019 3:00	9	9	9	30.78	1.1	1	25
7/6/2019 3:10	9	9	9	31.48	4.8	3.9	24.1
7/6/2019 3:20	9	9	9	30.29	4.8	4	25
7/6/2019 3:30	9	9	9	31.76	0.9	0.9	0.4
7/6/2019 3:40	9	9	9	31.12	4.8	3.9	24.7
7/6/2019 3:50	9	9	9	29.99	3.5	3.3	25.1
7/6/2019 4:00	9	9	9	31.97	5	3.9	0.4
7/6/2019 4:10	9	9	9	30.72	4.7	3.9	24.9
7/6/2019 4:20	9	9	9	30.75	1.1	0.9	25
7/6/2019 4:30	9	9	9	31.76	4.9	4	0.5
7/6/2019 4:40	9	9	9	30.44	4.8	4	24.9
7/6/2019 4:50	9	9	9	30.84	1	0.9	24.9
7/6/2019 5:00	9	9	9	31.57	4.8	3.9	23.6
7/6/2019 5:10	9	9	9	30.47	4.8	3.9	25
7/6/2019 5:20	9	9	9	30.72	1.1	0.9	24.9
7/6/2019 5:30	9	9	9	31.82	4.8	3.9	0.4
7/6/2019 5:40	9	9	9	30.66	4.8	3.9	24.9
7/6/2019 5:50	9	9	9	30.66	1.5	1.2	25
7/6/2019 6:00	9	9	9	31.67	4.8	3.9	9.2
7/6/2019 6:10	9	9	9	30.57	4.9	3.9	24.9
7/6/2019 6:20	9	9	9	30.63	1.4	1.3	25.1
7/6/2019 6:30	9	9	9	31.73	4.8	3.9	0.5
7/6/2019 6:40	9	9	9	30.81	4.8	3.9	24.8
7/6/2019 6:50	9	9	9	29.8	4.8	4	25.1
7/6/2019 7:00	9	9	9	31.82	1	0.9	0.4
7/6/2019 7:10	9	9	9	31.15	4.7	4	24.7
7/6/2019 7:20	9	9	9	29.99	4.9	3.9	25.1
7/6/2019 7:30	9	9	9	32.03	4.9	3.9	0.4
7/6/2019 7:40	9	9	9	30.66	4.9	3.9	25
7/6/2019 7:50	9	9	9	31.3	1	0.9	3.2
7/6/2019 8:00	9	9	9	31.45	4.9	4	24.4
7/6/2019 8:10	9	9	9	30.2	4.8	4	25.1
7/6/2019 8:20	9	9	9	31.42	0.9	0.9	1
7/6/2019 8:30	9	9	9	31.39	4.9	4.2	24.4
7/6/2019 8:40	9	9	9	30.08	4.9	3.8	25.1
7/6/2019 8:50	9	9	9	31.63	0.9	0.9	0.4

7/6/2019 9:00	9	9	9	31.39	4.7	4	24.4
7/6/2019 9:10	9	9	9	30.26	4.9	3.9	25
7/6/2019 9:20	9	9	9	31.09	1	0.9	3.3
7/6/2019 9:30	9	9	9	31.48	5	3.9	23.8
7/6/2019 9:40	9	9	9	30.29	4.9	4	25
7/6/2019 9:50	9	9	8	31.6	1	0.9	0.4
7/6/2019 10:00	9	9	9	31.33	4.8	3.8	24.5
7/6/2019 10:10	9	9	9	30.14	4.8	4.1	25
7/6/2019 10:20	9	9	9	31.36	0.9	0.9	1.1
7/6/2019 10:30	9	9	9	31.42	4.9	3.9	24.1
7/6/2019 10:40	9	9	9	30.29	4.8	3.8	25
7/6/2019 10:50	9	9	9	31.51	1	0.9	0.3
7/6/2019 11:00	9	9	9	31.21	4.8	3.9	24.7
7/6/2019 11:10	9	9	9	29.96	4.6	4	25.1
7/6/2019 11:20	9	9	9	31.85	0.9	0.8	0.4
7/6/2019 11:30	9	9	9	31.33	4.7	4	24.5
7/6/2019 11:40	9	9	9	30.23	4.8	4	25
7/6/2019 11:50	9	9	9	31.02	0.9	0.9	4.3
7/6/2019 12:00	9	9	9	31.63	4.7	4	23.5
7/6/2019 12:10	9	9	9	30.47	4.9	3.9	24.9
7/6/2019 12:20	9	9	9	30.29	2.5	2.4	25.1
7/6/2019 12:30	9	9	9	32.06	4.9	3.9	0.4
7/6/2019 12:40	9	9	9	30.75	4.9	3.9	24.9
7/6/2019 12:50	9	9	9	30.29	2.9	2.8	25.1
7/6/2019 13:00	9	9	9	31.94	4.8	3.9	0.4
7/6/2019 13:10	9	9	8	30.78	4.9	4	24.8
7/6/2019 13:20	9	9	9	30.57	2.1	1.9	25
7/6/2019 13:30	9	9	8	31.76	4.9	3.9	0.5
7/6/2019 13:40	9	9	9	30.54	4.7	3.9	24.9
7/6/2019 13:50	9	9	9	30.96	1.1	0.9	25
7/6/2019 14:00	9	9	9	31.45	4.8	3.9	24.2
7/6/2019 14:10	9	9	9	30.14	4.9	4.1	25.1
7/6/2019 14:20	9	9	9	31.7	1	0.9	0.4
7/6/2019 14:30	9	9	9	31.12	4.8	3.9	24.6
7/6/2019 14:40	9	9	9	30.05	5	4	25.1
7/6/2019 14:50	9	9	8	31.54	0.8	0.9	0.4
7/6/2019 15:00	9	9	9	31.36	4.8	4	24.3
7/6/2019 15:10	9	9	9	30.2	4.7	4	25
7/6/2019 15:20	9	9	9	31.21	0.9	0.9	2.7
7/6/2019 15:30	9	9	9	31.6	4.8	4	23.4
7/6/2019 15:40	9	9	9	30.47	4.7	4	24.9
7/6/2019 15:50	23	23	24	28.95	3.1	3.1	2.3
7/6/2019 16:00	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 16:10	0	0	0	29.44	0.9	0.9	0.4
7/6/2019 16:20	0	0	0	29.44	0.9	0.9	0.4
7/6/2019 16:30	0	0	0	29.44	0.8	0.9	0.4
7/6/2019 16:40	0	0	0	29.44	0.8	0.9	0.4

7/6/2019 16:50	-7	-7	-7	-13.94	-24.9	-25	-7.5
7/6/2019 17:00	-7	-7	-7	-13.94	-25	-25	-7.5
7/6/2019 17:10	-7	-7	-7	-13.94	-24.9	-25	-7.5
7/6/2019 17:20	-7	-7	-7	-13.94	-25	-25	-7.5
7/6/2019 17:30	-7	-7	-7	-13.94	-24.9	-25	-7.5
7/6/2019 17:40	-7	-7	-7	-13.94	-25	-25	-7.5
7/6/2019 17:50	-7	-7	-7	-13.94	-24.9	-25	-7.5
7/6/2019 18:00	-7	-7	-7	-13.94	-24.9	-25	-7.5
7/6/2019 18:10	0	0	0	29.44	0.8	0.9	0.4
7/6/2019 18:20	0	0	0	29.44	0.8	0.9	0.4
7/6/2019 18:30	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 18:40	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 18:50	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 19:00	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 19:10	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 19:20	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 19:30	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 19:40	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 19:50	0	0	0	29.44	0.9	0.9	0.4
7/6/2019 20:00	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 20:10	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 20:20	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 20:30	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 20:40	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 20:50	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 21:00	0	0	0	29.41	0.9	0.8	0.4
7/6/2019 21:10	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 21:20	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 21:30	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 21:40	0	0	0	29.38	0.8	0.9	0.4
7/6/2019 21:50	0	0	0	29.41	0.9	0.8	0.4
7/6/2019 22:00	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 22:10	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 22:20	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 22:30	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 22:40	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 22:50	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 23:00	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 23:10	0	0	0	29.38	0.8	0.8	0.4
7/6/2019 23:20	0	0	0	29.41	0.9	0.9	0.4
7/6/2019 23:30	0	0	0	29.41	0.8	0.8	0.4
7/6/2019 23:40	0	0	0	29.41	0.8	0.9	0.4
7/6/2019 23:50	0	0	0	29.41	0.8	0.9	0.4
7/7/2019 0:00	0	0	0	29.41	0.8	0.9	0.4
7/7/2019 0:10	0	0	0	29.41	0.8	0.8	0.4
7/7/2019 0:20	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 0:30	0	0	0	29.38	0.8	0.9	0.4

7/7/2019 0:40	0	0	0	29.41	0.8	0.8	0.4
7/7/2019 0:50	0	0	0	29.41	0.9	0.8	0.4
7/7/2019 1:00	0	0	0	29.38	0.9	0.9	0.4
7/7/2019 1:10	0	0	0	29.38	0.8	0.9	0.4
7/7/2019 1:20	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 1:30	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 1:40	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 1:50	0	0	0	29.41	0.8	0.8	0.4
7/7/2019 2:00	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 2:10	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 2:20	0	0	0	29.38	0.9	0.8	0.4
7/7/2019 2:30	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 2:40	0	0	0	29.41	0.8	0.8	0.4
7/7/2019 2:50	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 3:00	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 3:10	0	0	0	29.38	0.9	0.9	0.4
7/7/2019 3:20	0	0	0	29.38	0.9	0.9	0.4
7/7/2019 3:30	0	0	0	29.38	0.9	0.8	0.4
7/7/2019 3:40	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 3:50	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 4:00	0	0	0	29.35	0.8	0.8	0.4
7/7/2019 4:10	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 4:20	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 4:30	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 4:40	0	0	0	29.35	0.8	0.8	0.4
7/7/2019 4:50	0	0	0	29.38	0.8	0.8	0.4
7/7/2019 5:00	0	0	0	29.35	0.9	0.8	0.4
7/7/2019 5:10	0	0	0	29.35	0.8	0.8	0.4
7/7/2019 5:20	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 5:30	0	0	0	29.35	0.8	0.8	0.4
7/7/2019 5:40	0	0	0	29.35	0.8	0.8	0.4
7/7/2019 5:50	0	0	0	29.35	0.8	0.8	0.4
7/7/2019 6:00	0	0	0	29.35	0.9	0.8	0.4
7/7/2019 6:10	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 6:20	0	0	0	29.35	0.9	0.8	0.4
7/7/2019 6:30	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 6:40	0	0	0	29.32	0.9	0.8	0.4
7/7/2019 6:50	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 7:00	0	0	0	29.32	0.9	0.8	0.4
7/7/2019 7:10	0	0	0	29.32	0.9	0.8	0.4
7/7/2019 7:20	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 7:30	0	0	0	29.32	0.9	0.8	0.4
7/7/2019 7:40	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 7:50	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 8:00	0	0	0	29.32	0.9	0.8	0.4
7/7/2019 8:10	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 8:20	0	0	0	29.32	0.8	0.8	0.4

7/7/2019 8:30	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 8:40	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 8:50	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 9:00	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 9:10	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 9:20	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 9:30	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 9:40	0	0	0	29.32	0.8	0.8	0.4
7/7/2019 9:50	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 10:00	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 10:10	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 10:20	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 10:30	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 10:40	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 10:50	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 11:00	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 11:10	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 11:20	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 11:30	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 11:40	0	0	0	29.25	0.9	0.8	0.4
7/7/2019 11:50	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 12:00	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 12:10	0	0	0	29.25	0.9	0.8	0.4
7/7/2019 12:20	0	0	0	29.25	0.9	0.8	0.4
7/7/2019 12:30	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 12:40	0	0	0	29.22	0.9	0.8	0.4
7/7/2019 12:50	0	0	0	29.25	0.9	0.8	0.4
7/7/2019 13:00	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 13:10	0	0	0	29.22	0.9	0.8	0.4
7/7/2019 13:20	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 13:30	0	0	0	29.25	0.8	0.8	0.4
7/7/2019 13:40	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 13:50	0	0	0	29.22	0.9	0.8	0.4
7/7/2019 14:00	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 14:10	0	0	0	29.22	0.9	0.8	0.4
7/7/2019 14:20	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 14:30	0	0	0	29.22	0.9	0.8	0.4
7/7/2019 14:40	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 14:50	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 15:00	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 15:10	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 15:20	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 15:30	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 15:40	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 15:50	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 16:00	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 16:10	0	0	0	29.19	0.8	0.8	0.4

7/7/2019 16:20	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 16:30	0	0	0	29.22	0.8	0.8	0.4
7/7/2019 16:40	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 16:50	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 17:00	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 17:10	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 17:20	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 17:30	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 17:40	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 17:50	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 18:00	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 18:10	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 18:20	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 18:30	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 18:40	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 18:50	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 19:00	0	0	0	29.19	0.9	0.8	0.4
7/7/2019 19:10	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 19:20	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 19:30	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 19:40	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 19:50	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 20:00	0	0	0	29.19	0.8	0.8	0.4
7/7/2019 20:10	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 20:20	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 20:30	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 20:40	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 20:50	0	0	0	29.16	0.9	0.8	0.4
7/7/2019 21:00	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 21:10	0	0	0	29.16	0.9	0.8	0.4
7/7/2019 21:20	0	0	0	29.13	0.8	0.8	0.4
7/7/2019 21:30	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 21:40	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 21:50	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 22:00	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 22:10	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 22:20	0	0	0	29.13	0.9	0.8	0.4
7/7/2019 22:30	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 22:40	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 22:50	0	0	0	29.16	0.8	0.8	0.4
7/7/2019 23:00	0	0	0	29.13	0.8	0.8	0.4
7/7/2019 23:10	0	0	0	29.13	0.8	0.8	0.4
7/7/2019 23:20	0	0	0	29.13	0.8	0.8	0.4
7/7/2019 23:30	0	0	0	29.13	0.9	0.8	0.4
7/7/2019 23:40	0	0	0	29.13	0.8	0.8	0.4
7/7/2019 23:50	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 0:00	0	0	0	29.13	0.9	0.8	0.4

7/8/2019 0:10	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 0:20	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 0:30	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 0:40	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 0:50	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 1:00	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 1:10	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 1:20	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 1:30	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 1:40	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 1:50	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 2:00	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 2:10	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 2:20	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 2:30	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 2:40	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 2:50	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 3:00	0	0	0	29.1	0.9	0.8	0.4
7/8/2019 3:10	0	0	0	29.1	0.9	0.8	0.4
7/8/2019 3:20	0	0	0	29.13	0.9	0.8	0.4
7/8/2019 3:30	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 3:40	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 3:50	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 4:00	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 4:10	0	0	0	29.1	0.9	0.8	0.4
7/8/2019 4:20	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 4:30	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 4:40	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 4:50	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 5:00	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 5:10	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 5:20	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 5:30	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 5:40	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 5:50	0	0	0	29.13	0.8	0.8	0.4
7/8/2019 6:00	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 6:10	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 6:20	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 6:30	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 6:40	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 6:50	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 7:00	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 7:10	0	0	0	29.07	0.9	0.8	0.4
7/8/2019 7:20	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 7:30	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 7:40	0	0	0	29.1	0.8	0.8	0.4
7/8/2019 7:50	0	0	0	29.07	0.8	0.8	0.4

7/8/2019 8:00	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 8:10	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 8:20	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 8:30	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 8:40	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 8:50	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 9:00	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 9:10	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 9:20	0	0	0	29.07	0.8	0.8	0.4
7/8/2019 9:30	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 9:40	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 9:50	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 10:00	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 10:10	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 10:20	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 10:30	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 10:40	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 10:50	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 11:00	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 11:10	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 11:20	0	0	0	29.04	0.8	0.8	0.4
7/8/2019 11:30	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 11:40	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 11:50	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 12:00	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 12:10	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 12:20	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 12:30	0	0	0	29.01	0.9	0.8	0.4
7/8/2019 12:40	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 12:50	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 13:00	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 13:10	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 13:20	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 13:30	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 13:40	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 13:50	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 14:00	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 14:10	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 14:20	0	0	0	29.01	0.9	0.8	0.4
7/8/2019 14:30	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 14:40	0	0	0	29.01	0.8	0.8	0.4
7/8/2019 14:50	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 15:00	0	0	0	29.01	0.9	0.8	0.4
7/8/2019 15:10	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 15:20	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 15:30	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 15:40	0	0	0	28.98	0.9	0.8	0.4

7/8/2019 15:50	0	0	0	29.01	0.9	0.8	0.4
7/8/2019 16:00	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 16:10	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 16:20	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 16:30	0	0	0	29.01	0.9	0.8	0.4
7/8/2019 16:40	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 16:50	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 17:00	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 17:10	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 17:20	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 17:30	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 17:40	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 17:50	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 18:00	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 18:10	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 18:20	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 18:30	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 18:40	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 18:50	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 19:00	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 19:10	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 19:20	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 19:30	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 19:40	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 19:50	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 20:00	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 20:10	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 20:20	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 20:30	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 20:40	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 20:50	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 21:00	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 21:10	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 21:20	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 21:30	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 21:40	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 21:50	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 22:00	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 22:10	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 22:20	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 22:30	0	0	0	28.98	0.8	0.8	0.4
7/8/2019 22:40	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 22:50	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 23:00	0	0	0	28.98	0.9	0.8	0.4
7/8/2019 23:10	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 23:20	0	0	0	28.95	0.9	0.8	0.4
7/8/2019 23:30	0	0	0	28.95	0.8	0.8	0.4

7/8/2019 23:40	0	0	0	28.95	0.8	0.8	0.4
7/8/2019 23:50	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 0:00	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 0:10	0	0	0	28.98	0.8	0.8	0.4
7/9/2019 0:20	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 0:30	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 0:40	0	0	0	28.98	0.8	0.8	0.4
7/9/2019 0:50	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 1:00	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 1:10	0	0	0	28.98	0.8	0.8	0.4
7/9/2019 1:20	0	0	0	28.98	0.9	0.8	0.4
7/9/2019 1:30	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 1:40	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 1:50	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 2:00	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 2:10	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 2:20	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 2:30	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 2:40	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 2:50	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 3:00	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 3:10	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 3:20	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 3:30	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 3:40	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 3:50	0	0	0	28.98	0.9	0.8	0.4
7/9/2019 4:00	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 4:10	0	0	0	28.95	0.8	0.7	0.4
7/9/2019 4:20	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 4:30	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 4:40	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 4:50	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 5:00	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 5:10	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 5:20	0	0	0	28.95	0.9	0.7	0.4
7/9/2019 5:30	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 5:40	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 5:50	0	0	0	28.95	0.9	0.7	0.4
7/9/2019 6:00	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 6:10	0	0	0	28.95	0.9	0.8	0.4
7/9/2019 6:20	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 6:30	0	0	0	28.95	0.8	0.8	0.4
7/9/2019 6:40	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 6:50	0	0	0	28.95	0.9	0.7	0.4
7/9/2019 7:00	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 7:10	0	0	0	28.92	0.8	0.8	0.4
7/9/2019 7:20	0	0	0	28.95	0.9	0.7	0.4

7/9/2019 7:30	0	0	0	28.92	0.8	0.8	0.4
7/9/2019 7:40	0	0	0	28.92	0.9	0.8	0.4
7/9/2019 7:50	0	0	0	28.92	0.8	0.8	0.4
7/9/2019 8:00	0	0	0	28.92	0.8	0.8	0.4
7/9/2019 8:10	0	0	0	28.92	0.8	0.8	0.4
7/9/2019 8:20	0	0	0	28.89	0.9	0.8	0.4
7/9/2019 8:30	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 8:40	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 8:50	0	0	0	28.89	0.8	0.7	0.4
7/9/2019 9:00	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 9:10	0	0	0	28.89	0.9	0.8	0.4
7/9/2019 9:20	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 9:30	0	0	0	28.89	0.9	0.8	0.4
7/9/2019 9:40	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 9:50	0	0	0	28.86	0.9	0.8	0.4
7/9/2019 10:00	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 10:10	0	0	0	28.89	0.9	0.8	0.4
7/9/2019 10:20	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 10:30	0	0	0	28.89	0.9	0.8	0.4
7/9/2019 10:40	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 10:50	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 11:00	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 11:10	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 11:20	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 11:30	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 11:40	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 11:50	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 12:00	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 12:10	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 12:20	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 12:30	0	0	0	28.89	0.8	0.8	0.4
7/9/2019 12:40	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 12:50	0	0	0	28.89	0.9	0.8	0.4
7/9/2019 13:00	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 13:10	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 13:20	0	0	0	28.86	0.8	0.7	0.4
7/9/2019 13:30	0	0	0	28.86	0.8	0.7	0.4
7/9/2019 13:40	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 13:50	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 14:00	0	0	0	28.83	0.8	0.7	0.4
7/9/2019 14:10	0	0	0	28.86	0.8	0.7	0.4
7/9/2019 14:20	0	0	0	28.86	0.8	0.8	0.4
7/9/2019 14:30	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 14:40	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 14:50	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 15:00	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 15:10	0	0	0	28.83	0.8	0.7	0.4

7/9/2019 15:20	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 15:30	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 15:40	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 15:50	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 16:00	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 16:10	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 16:20	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 16:30	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 16:40	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 16:50	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 17:00	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 17:10	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 17:20	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 17:30	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 17:40	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 17:50	0	0	0	28.83	0.8	0.7	0.4
7/9/2019 18:00	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 18:10	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 18:20	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 18:30	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 18:40	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 18:50	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 19:00	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 19:10	0	0	0	28.8	0.9	0.7	0.4
7/9/2019 19:20	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 19:30	0	0	0	28.83	0.9	0.7	0.4
7/9/2019 19:40	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 19:50	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 20:00	0	0	0	28.86	0.8	0.7	0.4
7/9/2019 20:10	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 20:20	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 20:30	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 20:40	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 20:50	0	0	0	28.89	0.8	0.7	0.4
7/9/2019 21:00	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 21:10	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 21:20	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 21:30	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 21:40	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 21:50	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 22:00	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 22:10	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 22:20	0	0	0	28.86	0.9	0.7	0.4
7/9/2019 22:30	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 22:40	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 22:50	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 23:00	0	0	0	28.89	0.9	0.7	0.4

7/9/2019 23:10	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 23:20	0	0	0	28.89	0.9	0.7	0.4
7/9/2019 23:30	0	0	0	28.89	0.8	0.7	0.4
7/9/2019 23:40	0	0	0	28.89	0.8	0.7	0.4
7/9/2019 23:50	0	0	0	28.89	0.8	0.7	0.4
7/10/2019 0:00	0	0	0	28.89	0.8	0.7	0.4
7/10/2019 0:10	0	0	0	28.89	0.8	0.7	0.4
7/10/2019 0:20	0	0	0	28.89	0.8	0.7	0.4
7/10/2019 0:30	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 0:40	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 0:50	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 1:00	0	0	0	28.92	0.8	0.7	0.4
7/10/2019 1:10	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 1:20	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 1:30	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 1:40	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 1:50	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 2:00	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 2:10	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 2:20	0	0	0	28.92	0.8	0.7	0.4
7/10/2019 2:30	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 2:40	0	0	0	28.95	0.8	0.7	0.4
7/10/2019 2:50	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 3:00	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 3:10	0	0	0	28.95	0.8	0.7	0.4
7/10/2019 3:20	0	0	0	28.95	0.8	0.7	0.4
7/10/2019 3:30	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 3:40	0	0	0	28.95	0.8	0.7	0.4
7/10/2019 3:50	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 4:00	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 4:10	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 4:20	0	0	0	28.98	0.9	0.7	0.4
7/10/2019 4:30	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 4:40	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 4:50	0	0	0	28.98	0.9	0.7	0.4
7/10/2019 5:00	0	0	0	28.89	0.9	0.7	0.4
7/10/2019 5:10	0	0	0	28.86	0.9	0.8	0.4
7/10/2019 5:20	0	0	0	28.89	0.9	0.7	0.4
7/10/2019 5:30	0	0	0	28.89	0.8	0.8	0.4
7/10/2019 5:40	0	0	0	28.89	0.9	0.7	0.4
7/10/2019 5:50	0	0	0	28.89	0.8	0.8	0.4
7/10/2019 6:00	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 6:10	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 6:20	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 6:30	0	0	0	28.89	0.8	0.8	0.4
7/10/2019 6:40	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 6:50	0	0	0	28.89	0.9	0.8	0.4

7/10/2019 7:00	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 7:10	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 7:20	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 7:30	0	0	0	28.89	0.9	0.7	0.4
7/10/2019 7:40	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 7:50	0	0	0	28.89	0.9	0.7	0.4
7/10/2019 8:00	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 8:10	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 8:20	0	0	0	28.89	0.9	0.8	0.4
7/10/2019 8:30	0	0	0	28.89	0.9	0.7	0.4
7/10/2019 8:40	0	0	0	28.89	0.8	0.8	0.4
7/10/2019 8:50	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 9:00	0	0	0	28.92	0.9	0.7	0.4
7/10/2019 9:10	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 9:20	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 9:30	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 9:40	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 9:50	0	0	0	28.95	0.8	0.8	0.4
7/10/2019 10:00	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 10:10	0	0	0	28.92	0.9	0.8	0.4
7/10/2019 10:20	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 10:30	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 10:40	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 10:50	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 11:00	0	0	0	28.95	0.9	0.7	0.4
7/10/2019 11:10	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 11:20	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 11:30	0	0	0	28.95	0.9	0.8	0.4
7/10/2019 11:40	0	0	0	28.95	0.9	0.8	0
7/10/2019 11:50	0	0	0	28.95	0.9	0.8	0
7/10/2019 12:00	0	0	0	28.98	0.9	0.8	0
7/10/2019 12:10	0	0	0	28.95	0.9	0.8	0.1
7/10/2019 12:20	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 12:30	0	0	0	28.98	0.9	0.8	0.1
7/10/2019 12:40	0	0	0	28.95	0.9	0.8	0.1
7/10/2019 12:50	0	0	0	28.95	0.9	0.8	0.1
7/10/2019 13:00	0	0	0	28.95	0.9	0.8	0.1
7/10/2019 13:10	0	0	0	28.95	0.9	0.8	0.1
7/10/2019 13:20	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 13:30	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 13:40	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 13:50	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 14:00	0	0	0	28.92	0.9	0.7	0.1
7/10/2019 14:10	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 14:20	0	0	0	28.92	0.8	0.7	0.1
7/10/2019 14:30	0	0	0	28.92	0.9	0.7	0.1
7/10/2019 14:40	0	0	0	28.92	0.9	0.7	0.1

7/10/2019 14:50	0	0	0	28.92	0.9	0.7	0.1
7/10/2019 15:00	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 15:10	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 15:20	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 15:30	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 15:40	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 15:50	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 16:00	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 16:10	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 16:20	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 16:30	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 16:40	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 16:50	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 17:00	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 17:10	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 17:20	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 17:30	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 17:40	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 17:50	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 18:00	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 18:10	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 18:20	0	0	0	28.95	0.9	0.7	0.1
7/10/2019 18:30	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 18:40	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 18:50	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 19:00	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 19:10	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 19:20	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 19:30	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 19:40	0	0	0	28.98	0.9	0.7	0.1
7/10/2019 19:50	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 20:00	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 20:10	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 20:20	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 20:30	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 20:40	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 20:50	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 21:00	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 21:10	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 21:20	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 21:30	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 21:40	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 21:50	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 22:00	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 22:10	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 22:20	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 22:30	0	0	0	29.04	0.9	0.7	0.1

7/10/2019 22:40	0	0	0	29.01	0.9	0.7	0.1
7/10/2019 22:50	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 23:00	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 23:10	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 23:20	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 23:30	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 23:40	0	0	0	29.04	0.9	0.7	0.1
7/10/2019 23:50	0	0	0	29.04	0.9	0.7	0.1
7/11/2019 0:00	0	0	0	29.04	0.9	0.7	0.1
7/11/2019 0:10	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 0:20	0	0	0	29.04	0.9	0.7	0.1
7/11/2019 0:30	0	0	0	29.04	0.9	0.7	0.1
7/11/2019 0:40	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 0:50	0	0	0	29.04	0.9	0.7	0.1
7/11/2019 1:00	0	0	0	29.04	0.9	0.7	0.1
7/11/2019 1:10	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 1:20	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 1:30	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 1:40	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 1:50	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 2:00	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 2:10	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 2:20	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 2:30	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 2:40	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 2:50	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 3:00	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 3:10	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 3:20	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 3:30	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 3:40	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 3:50	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 4:00	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 4:10	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 4:20	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 4:30	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 4:40	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 4:50	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 5:00	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 5:10	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 5:20	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 5:30	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 5:40	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 5:50	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 6:00	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 6:10	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 6:20	0	0	0	29.1	0.9	0.7	0.1

7/11/2019 6:30	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 6:40	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 6:50	0	0	0	29.1	0.9	0.8	0.1
7/11/2019 7:00	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 7:10	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 7:20	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 7:30	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 7:40	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 7:50	0	0	0	29.1	0.9	0.8	0.1
7/11/2019 8:00	0	0	0	29.07	0.9	0.7	0.1
7/11/2019 8:10	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 8:20	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 8:30	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 8:40	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 8:50	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 9:00	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 9:10	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 9:20	0	0	0	29.1	0.9	0.7	0.1
7/11/2019 9:30	0	0	0	29.35	0.9	0.7	0.1
7/11/2019 9:40	10	0	10	28.8	4.7	3.8	24.7
7/11/2019 9:50	10	0	10	29.13	0.9	0.8	0.4
7/11/2019 10:00	10	0	10	28.46	4.9	3.8	24.9
7/11/2019 10:10	10	0	10	31.36	4.7	3.8	23.3
7/11/2019 10:20	0	0	10	30.69	0.9	0.7	0.4
7/11/2019 10:30	0	0	10	26.45	4.9	3.8	25.1
7/11/2019 10:40	0	0	10	29.71	0.9	0.8	8.2
7/11/2019 10:50	0	0	10	29.35	4.8	3.8	24
7/11/2019 11:00	0	0	10	28.06	0.9	0.8	0.4
7/11/2019 11:10	0	0	10	31.33	1	0.8	0
7/11/2019 11:20	0	0	10	27.09	0.7	0.8	0.4
7/11/2019 11:30	0	0	10	30.32	1	0.8	0.4
7/11/2019 11:40	0	0	10	31.36	1	0.8	0.4
7/11/2019 11:50	0	0	10	25.71	1	0.8	25.1
7/11/2019 12:00	0	0	10	29.01	1	0.8	3
7/11/2019 12:10	6	0	0	31.63	1	0.8	0.6
7/11/2019 12:20	10	0	10	30.69	1.1	0.8	0.4
7/11/2019 12:30	0	0	0	29.13	0.9	0.8	0.4
7/11/2019 12:40	10	0	10	30.63	1	0.8	0
7/11/2019 12:50	10	0	10	30.02	0.9	0.8	0.3
7/11/2019 13:00	10	0	10	28.92	1.9	1.6	25
7/11/2019 13:10	10	0	10	28.74	4.9	3.8	25.1
7/11/2019 13:20	10	0	10	30.2	4.8	3.8	24.7
7/11/2019 13:30	10	0	10	31.79	4.9	3.9	0.4
7/11/2019 13:40	10	0	10	29.32	0.9	0.8	0.4
7/11/2019 13:50	10	0	10	28.25	4.9	3.8	24.9
7/11/2019 14:00	10	0	10	31.88	1.1	0.9	0.4
7/11/2019 14:10	10	0	10	29.65	0.9	0.8	0.4

7/11/2019 14:20	10	0	10	27.94	4.7	3.8	25.1
7/11/2019 14:30	10	0	10	29.83	4.7	3.8	24.7
7/11/2019 14:40	10	0	10	32.06	4.5	3.8	0.4
7/11/2019 14:50	10	0	10	29.44	0.9	0.8	0.4
7/11/2019 15:00	10	0	10	28.12	4.9	3.8	24.9
7/11/2019 15:10	10	0	10	31.51	4.9	3.9	0.5
7/11/2019 15:20	10	0	10	30.26	0.9	0.8	0.4
7/11/2019 15:30	10	0	10	28.77	1.3	1.1	24.9
7/11/2019 15:40	10	0	10	28.89	4.6	3.9	25
7/11/2019 15:50	10	0	10	30.66	4.9	3.8	24.4
7/11/2019 16:00	10	0	10	31.42	0.9	0.9	0.4
7/11/2019 16:10	10	0	10	28.31	0.9	0.8	0.4
7/11/2019 16:20	10	0	10	29.25	4.9	3.8	24.8
7/11/2019 16:30	10	0	10	31.42	1	0.8	0.4
7/11/2019 16:40	10	0	10	29.62	0.9	0.8	0.4
7/11/2019 16:50	10	0	10	28	4.8	3.9	25.1
7/11/2019 17:00	10	0	10	29.59	4.9	3.9	24.8
7/11/2019 17:10	10	0	10	32.09	4	3.5	0.4
7/11/2019 17:20	10	0	10	29.04	0.9	0.8	0.4
7/11/2019 17:30	10	0	10	28.58	4.9	3.9	25
7/11/2019 17:40	10	0	10	31.82	4.9	3.8	0.4
7/11/2019 17:50	10	0	10	30.57	0.9	0.8	0.4
7/11/2019 18:00	10	0	10	28.83	1	0.9	24.7
7/11/2019 18:10	10	0	10	28.83	4.8	3.8	24.9
7/11/2019 18:20	10	0	10	31.73	4.7	3.9	0.5
7/11/2019 18:30	10	0	10	28.89	0.9	0.8	0.4
7/11/2019 18:40	10	0	10	28.77	4.9	3.8	25
7/11/2019 18:50	10	0	10	31.18	4.8	3.9	23.6
7/11/2019 19:00	10	0	10	31.39	1	0.8	0.4
7/11/2019 19:10	10	0	10	29.25	0.9	0.7	0.4
7/11/2019 19:20	10	0	10	28.31	4.8	3.8	25
7/11/2019 19:30	10	0	10	30.84	4.9	3.8	24
7/11/2019 19:40	10	0	10	30.23	0.9	0.8	0.3
7/11/2019 19:50	10	0	10	27.3	4.8	3.8	25
7/11/2019 20:00	10	0	10	30.69	4.8	3.9	24.3
7/11/2019 20:10	10	0	10	31.57	1	0.8	0.3
7/11/2019 20:20	10	0	10	29.68	0.9	0.8	0.3
7/11/2019 20:30	10	0	10	27.82	4.6	3.8	25.1
7/11/2019 20:40	10	0	10	29.96	4.9	3.9	24.7
7/11/2019 20:50	10	0	10	31.63	1	0.8	0.4
7/11/2019 21:00	10	0	10	28.12	0.9	0.9	0.3
7/11/2019 21:10	10	0	10	29.68	4.7	3.8	24.9
7/11/2019 21:20	10	0	10	31.6	1	0.8	0.3
7/11/2019 21:30	10	0	10	29.47	0.9	0.8	0.4
7/11/2019 21:40	10	0	10	28.12	4.9	3.8	25
7/11/2019 21:50	10	0	10	30.38	4.7	3.9	24.6
7/11/2019 22:00	10	0	10	31.54	1	0.8	0.3

7/11/2019 22:10	10	0	10	28.16	0.9	0.8	0.4
7/11/2019 22:20	10	0	10	29.47	4.7	3.8	24.9
7/11/2019 22:30	10	0	10	31.12	1	0.8	0.3
7/11/2019 22:40	10	0	10	29.01	0.9	0.8	0.4
7/11/2019 22:50	10	0	10	28.55	4.9	3.8	25.1
7/11/2019 23:00	10	0	10	30.47	4.7	3.9	24.4
7/11/2019 23:10	10	0	10	31.48	1.1	0.8	0.3
7/11/2019 23:20	10	0	10	28.92	0.9	0.8	0.4
7/11/2019 23:30	10	0	10	28.67	4.7	3.9	24.9
7/11/2019 23:40	10	0	10	31.54	1	0.8	0.3
7/11/2019 23:50	10	0	10	28.37	1	0.8	0.3
7/12/2019 0:00	10	0	10	29.35	4.8	3.8	24.9
7/12/2019 0:10	10	0	10	31.82	5	3.8	0.4
7/12/2019 0:20	10	0	10	29.8	0.9	0.9	0.3
7/12/2019 0:30	10	0	10	27.67	4.7	3.8	25
7/12/2019 0:40	10	0	10	30.63	5	3.8	23.9
7/12/2019 0:50	10	0	10	30.02	1	0.8	0.3
7/12/2019 1:00	10	0	10	27.61	4.9	3.8	25.1
7/12/2019 1:10	10	0	10	30.23	4.9	3.8	24.6
7/12/2019 1:20	10	0	10	31.73	0.8	0.8	0.3
7/12/2019 1:30	10	0	10	29.35	1	0.9	0.3
7/12/2019 1:40	10	0	10	28.19	4.7	3.8	25
7/12/2019 1:50	10	0	10	30.87	4.9	3.8	24
7/12/2019 2:00	10	0	10	29.8	0.9	0.8	0.4
7/12/2019 2:10	10	0	10	27.82	4.6	3.9	25
7/12/2019 2:20	10	0	10	31.54	4.7	3.8	0.5
7/12/2019 2:30	10	0	10	29.77	0.9	0.8	0.3
7/12/2019 2:40	10	0	10	27.82	4.6	3.8	25.1
7/12/2019 2:50	10	0	10	30.41	4.9	3.8	24.4
7/12/2019 3:00	10	0	10	31.12	1.1	0.8	0.4
7/12/2019 3:10	10	0	10	27.48	2.1	1.9	24.7
7/12/2019 3:20	10	0	10	30.17	4.9	3.8	24.5
7/12/2019 3:30	10	0	10	29.56	0.9	0.8	0.3
7/12/2019 3:40	10	0	10	27.91	4.8	3.8	24.8
7/12/2019 3:50	10	0	10	30.72	1	0.8	0.4
7/12/2019 4:00	10	0	10	26.69	4.7	3.7	24.9
7/12/2019 4:10	10	0	10	32	4.7	3.9	0.4
7/12/2019 4:20	10	0	10	28.19	1	0.8	0.3
7/12/2019 4:30	10	0	10	29.38	4.9	3.9	24.7
7/12/2019 4:40	10	0	10	29.53	0.9	0.9	0.4
7/12/2019 4:50	10	0	10	27.91	4.9	3.8	24.8
7/12/2019 5:00	10	0	10	30.29	1	0.8	0.4
7/12/2019 5:10	10	0	10	27.24	4.9	3.8	24.9
7/12/2019 5:20	10	0	10	31.39	1	0.8	0.4
7/12/2019 5:30	10	0	10	27.39	1.6	1.3	24.8
7/12/2019 5:40	10	0	10	30.35	4.8	3.9	24.4
7/12/2019 5:50	10	0	10	29.53	1	0.8	0.3

7/12/2019 6:00	10	0	10	28.03	4.8	3.8	24.8
7/12/2019 6:10	10	0	10	30.23	0.8	0.8	0.3
7/12/2019 6:20	10	0	10	27.24	4.9	3.8	24.9
7/12/2019 6:30	10	0	10	30.32	0.9	0.8	0.4
7/12/2019 6:40	10	0	10	27.15	4.9	3.8	24.9
7/12/2019 6:50	10	0	10	31.51	0.9	0.8	0.4
7/12/2019 7:00	10	0	10	26.42	3.5	3.3	24.9
7/12/2019 7:10	10	0	10	31.42	4.7	3.9	22.3
7/12/2019 7:20	10	0	10	26.9	0.8	0.8	0.4
7/12/2019 7:30	10	0	10	30.96	4.8	3.9	23.6
7/12/2019 7:40	10	0	10	28.83	0.9	0.8	0.3
7/12/2019 7:50	10	0	10	28.86	4.8	3.8	24.8
7/12/2019 8:00	10	0	10	30.63	1	0.8	0.4
7/12/2019 8:10	10	0	10	26.9	4.8	3.9	24.9
7/12/2019 8:20	10	0	10	31.67	4.7	3.9	0.5
7/12/2019 8:30	10	0	10	27.39	0.8	0.8	0.4
7/12/2019 8:40	10	0	10	30.38	4.8	3.8	24.3
7/12/2019 8:50	10	0	10	28.4	0.9	0.8	0.3
7/12/2019 9:00	10	0	10	29.44	4.7	3.7	24.7
7/12/2019 9:10	10	0	10	30.2	1	0.8	0.3
7/12/2019 9:20	10	0	10	27.39	4.9	3.8	24.9
7/12/2019 9:30	10	0	10	31.7	4.9	3.9	0.5
7/12/2019 9:40	10	0	10	28.19	1	0.9	0.4
7/12/2019 9:50	10	0	10	29.5	4.8	3.8	24.7
7/12/2019 10:00	10	0	10	29.59	0.9	0.8	0.4
7/12/2019 10:10	10	0	10	27.94	4.8	3.8	24.9
7/12/2019 10:20	10	0	10	31.51	1	0.7	0.3
7/12/2019 10:30	10	0	10	28.03	1	0.8	2.6
7/12/2019 10:40	10	0	10	29.71	4.7	3.8	24.7
7/12/2019 10:50	10	0	10	29.86	0.9	0.9	0.4
7/12/2019 11:00	10	0	10	27.67	4.8	3.8	24.8
7/12/2019 11:10	10	0	10	30.35	0.9	0.8	0.4
7/12/2019 11:20	10	0	0	33.83	1.1	0.9	0
7/12/2019 11:30	0	0	0	36.92	1.1	1	0
7/12/2019 11:40	10	0	10	32.12	4.8	3.9	0.5
7/12/2019 11:50	10	0	10	29.99	1.2	1	25
7/12/2019 12:00	10	0	10	28.31	3.1	2.8	25
7/12/2019 12:10	10	0	10	29.32	4.7	3.8	24.8
7/12/2019 12:20	10	0	10	29.44	0.8	0.9	0.4
7/12/2019 12:30	10	0	10	28.19	4.8	3.9	24.6
7/12/2019 12:40	10	0	10	27.7	0.7	0.8	0.4
7/12/2019 12:50	10	0	10	30.26	4.7	3.8	24.3
7/12/2019 13:00	10	0	10	31.3	5	3.8	23.5
7/12/2019 13:10	10	0	10	30.78	0.9	0.9	0.4
7/12/2019 13:20	10	0	10	28.77	0.9	0.8	2.6
7/12/2019 13:30	10	0	10	28.98	4.7	3.8	24.8
7/12/2019 13:40	10	0	10	31.67	0.9	0.8	0.4

7/12/2019 13:50	10	0	10	26.72	2.7	2.4	24.8
7/12/2019 14:00	10	0	10	31.02	4.9	3.8	23.4
7/12/2019 14:10	10	0	10	28.46	0.8	0.9	0.4
7/12/2019 14:20	10	0	10	29.13	4.8	3.8	24.7
7/12/2019 14:30	10	0	10	29.56	0.7	0.8	0.4
7/12/2019 14:40	10	0	10	28.09	4.8	3.8	24.8
7/12/2019 14:50	10	0	10	30.2	0.9	0.8	0.4
7/12/2019 15:00	10	0	10	27.36	4.8	3.8	24.9
7/12/2019 15:10	10	0	10	31.94	1.1	0.8	0.4
7/12/2019 15:20	10	0	10	27.24	1.1	0.9	3
7/12/2019 15:30	10	0	10	30.51	4.7	3.8	24.2
7/12/2019 15:40	10	0	10	29.19	0.9	0.8	0.4
7/12/2019 15:50	10	0	10	28.34	4.8	3.8	24.8
7/12/2019 16:00	10	0	10	30.17	0.9	0.8	0.4
7/12/2019 16:10	10	0	10	27.3	4.8	3.8	24.8
7/12/2019 16:20	10	0	10	30.32	0.9	0.9	0.4
7/12/2019 16:30	10	0	10	27.12	4.6	3.8	24.9
7/12/2019 16:40	10	0	10	31.27	1	0.9	0.4
7/12/2019 16:50	10	0	10	26.26	3.3	3.2	25
7/12/2019 17:00	10	0	10	31.51	4.9	3.9	0.6
7/12/2019 17:10	10	0	10	28.92	0.9	0.8	0.4
7/12/2019 17:20	10	0	10	28.7	4.7	3.9	24.9
7/12/2019 17:30	10	0	10	30.99	0.9	0.9	0.4
7/12/2019 17:40	10	0	10	26.29	4.8	3.8	24.9
7/12/2019 17:50	10	0	10	32.09	5.3	4.2	0.4
7/12/2019 18:00	10	0	10	27	1.1	0.9	2
7/12/2019 18:10	10	0	10	30.84	4.8	3.9	23.8
7/12/2019 18:20	10	0	10	28.89	0.9	0.8	0.4
7/12/2019 18:30	10	0	10	28.77	4.9	3.8	24.9
7/12/2019 18:40	10	0	10	31.15	0.9	0.9	0.3
7/12/2019 18:50	10	0	10	27.15	2.7	2.4	24.9
7/12/2019 19:00	10	0	10	30.63	4.8	3.9	24.1
7/12/2019 19:10	10	0	10	28.74	0.9	0.9	0.4
7/12/2019 19:20	10	0	10	28.98	4.8	3.9	24.8
7/12/2019 19:30	10	0	10	30.02	0.9	0.8	0.3
7/12/2019 19:40	10	0	10	27.54	4.7	3.8	25
7/12/2019 19:50	10	0	10	31.85	1.1	0.8	0.4
7/12/2019 20:00	10	0	10	27.88	0.9	0.8	0.4
7/12/2019 20:10	10	0	10	29.8	4.8	3.9	24.7
7/12/2019 20:20	10	0	10	30.02	0.9	0.8	0.4
7/12/2019 20:30	10	0	10	27.42	4.8	3.9	24.8
7/12/2019 20:40	10	0	10	30.75	1	0.8	0.4
7/12/2019 20:50	10	0	10	26.57	4.9	3.8	25
7/12/2019 21:00	10	0	10	31.94	1.1	0.7	0.4
7/12/2019 21:10	10	0	10	28.37	0.9	0.8	0.4
7/12/2019 21:20	10	0	10	29.22	4.8	3.8	24.9
7/12/2019 21:30	10	0	10	31.27	0.9	0.8	0.4

7/12/2019 21:40	10	0	10	27	3	2.7	24.8
7/12/2019 21:50	10	0	10	30.75	4.9	3.8	24
7/12/2019 22:00	10	0	10	29.13	1	0.8	0.4
7/12/2019 22:10	10	0	10	28.43	4.8	3.9	24.9
7/12/2019 22:20	10	0	10	30.54	1.1	0.8	0.4
7/12/2019 22:30	10	0	10	26.87	4.9	3.9	25
7/12/2019 22:40	10	0	10	31.39	1	0.9	0.4
7/12/2019 22:50	10	0	10	26.87	3	2.6	24.9
7/12/2019 23:00	10	0	10	31.09	5	3.9	23.4
7/12/2019 23:10	10	0	10	29.38	0.9	0.8	0.4
7/12/2019 23:20	10	0	10	28.16	4.9	3.9	25
7/12/2019 23:30	10	0	10	32.03	1.1	0.8	0.3
7/12/2019 23:40	10	0	10	27.09	1	0.9	24.6
7/12/2019 23:50	10	0	10	30.69	4.6	3.9	23.8
7/13/2019 0:00	10	0	10	27.45	0.7	0.8	0.4
7/13/2019 0:10	10	0	10	30.29	4.9	3.9	24.4
7/13/2019 0:20	10	0	10	29.59	0.9	0.9	0.4
7/13/2019 0:30	10	0	10	27.85	4.9	3.8	25
7/13/2019 0:40	10	0	10	31.02	4.7	3.8	23.5
7/13/2019 0:50	10	0	10	29.77	0.8	0.9	0.4
7/13/2019 1:00	10	0	10	27.73	4.7	3.8	25
7/13/2019 1:10	10	0	10	32.03	4.4	3.6	0.4
7/13/2019 1:20	10	0	10	27.7	0.9	0.8	0.4
7/13/2019 1:30	10	0	10	30.02	4.9	3.9	24.6
7/13/2019 1:40	10	0	10	28.89	1	0.9	0.3
7/13/2019 1:50	10	0	10	28.74	4.8	3.8	24.9
7/13/2019 2:00	10	0	10	30.93	1	0.8	0.4
7/13/2019 2:10	10	0	10	27.61	2.5	2.1	24.8
7/13/2019 2:20	10	0	10	30.17	4.7	3.8	24.5
7/13/2019 2:30	10	0	10	30.66	0.9	0.8	0.4
7/13/2019 2:40	10	0	10	26.87	3.5	3.2	25
7/13/2019 2:50	10	0	10	30.99	4.9	3.9	23.5
7/13/2019 3:00	10	0	10	29.07	0.9	0.8	0.4
7/13/2019 3:10	10	0	10	28.52	4.8	3.9	24.9
7/13/2019 3:20	10	0	10	30.87	0.9	0.8	0.3
7/13/2019 3:30	10	0	10	26.54	5.2	3.8	25
7/13/2019 3:40	10	0	10	31.82	5	3.9	0.5
7/13/2019 3:50	10	0	10	27.39	0.8	0.8	0.3
7/13/2019 4:00	10	0	10	30.44	4.9	3.8	24.3
7/13/2019 4:10	10	0	10	28.74	0.9	0.9	0.4
7/13/2019 4:20	10	0	10	28.89	4.9	3.9	24.9
7/13/2019 4:30	10	0	10	30.47	1	0.8	0.4
7/13/2019 4:40	10	0	10	27	4.4	3.9	24.9
7/13/2019 4:50	10	0	10	31.73	4.8	3.9	0.5
7/13/2019 5:00	10	0	10	28.43	0.9	0.8	0.4
7/13/2019 5:10	10	0	10	29.32	4.9	3.9	24.7
7/13/2019 5:20	10	0	10	29.71	0.9	0.8	0.4

7/13/2019 5:30	10	0	10	27.91	4.9	3.9	24.8
7/13/2019 5:40	10	0	10	30.17	0.9	0.9	0.3
7/13/2019 5:50	10	0	10	27.45	4.8	3.9	25.1
7/13/2019 6:00	10	0	10	31.97	1	0.8	0.4
7/13/2019 6:10	10	0	10	28.58	0.9	0.8	0.3
7/13/2019 6:20	10	0	10	29.16	4.7	3.8	24.9
7/13/2019 6:30	10	0	10	31.54	0.9	0.8	0.4
7/13/2019 6:40	10	0	10	27.73	1	0.9	1.9
7/13/2019 6:50	10	0	10	30.02	5	3.9	24.5
7/13/2019 7:00	10	0	10	29.22	1	0.9	0.4
7/13/2019 7:10	10	0	10	28.37	4.7	3.9	24.8
7/13/2019 7:20	10	0	10	30.32	0.9	0.7	0.4
7/13/2019 7:30	10	0	10	27.15	4.7	3.8	24.9
7/13/2019 7:40	10	0	10	31.18	1	0.9	0.3
7/13/2019 7:50	10	0	10	27.36	2.1	1.9	24.8
7/13/2019 8:00	10	0	10	30.44	4.9	3.9	24.3
7/13/2019 8:10	10	0	10	30.38	1	0.8	0.4
7/13/2019 8:20	10	0	10	27.03	4.6	3.9	25
7/13/2019 8:30	10	0	10	31.88	1.1	0.8	0.4
7/13/2019 8:40	10	0	10	26.26	3.1	2.8	24.9
7/13/2019 8:50	10	0	10	31.67	4.9	3.9	0.4
7/13/2019 9:00	10	0	10	27.82	0.8	0.9	0.3
7/13/2019 9:10	10	0	10	29.89	4.3	3.8	24.6
7/13/2019 9:20	10	0	10	30.75	0.9	0.8	0.4
7/13/2019 9:30	10	0	10	26.63	4.9	3.9	24.9
7/13/2019 9:40	10	0	10	32.03	4.9	4	0.4
7/13/2019 9:50	10	0	10	25.59	3.4	3.2	25
7/13/2019 10:00	10	0	10	31.82	1.1	0.7	0.7
7/13/2019 10:10	10	0	10	28.86	0.9	0.8	0.4
7/13/2019 10:20	10	0	10	28.89	4.8	3.9	24.9
7/13/2019 10:30	10	0	10	31.94	4.8	3.9	0.4
7/13/2019 10:40	10	0	10	29.32	0.8	0.9	0.3
7/13/2019 10:50	10	0	10	28.34	4.9	3.9	25.1
7/13/2019 11:00	10	0	10	31.63	4.8	3.9	0.5
7/13/2019 11:10	10	0	10	29.41	0.9	0.9	0.4
7/13/2019 11:20	10	0	10	28.22	4.8	3.8	25
7/13/2019 11:30	10	0	10	32.03	5.1	4.2	0.4
7/13/2019 11:40	10	0	10	27.58	0.8	0.8	0.3
7/13/2019 11:50	10	0	10	30.26	4.8	3.8	24.3
7/13/2019 12:00	10	0	10	28.19	0.9	0.8	0.3
7/13/2019 12:10	10	0	10	29.62	4.8	3.8	24.7
7/13/2019 12:20	10	0	10	29.35	0.9	0.8	0.3
7/13/2019 12:30	10	0	10	28.28	4.9	3.8	25
7/13/2019 12:40	10	0	10	31.73	4.8	3.9	0.5
7/13/2019 12:50	10	0	10	29.56	0.9	0.8	0.4
7/13/2019 13:00	10	0	10	27.94	4.9	3.8	25
7/13/2019 13:10	10	0	10	31.88	4.8	3.9	0.4

7/13/2019 13:20	10	0	10	28.12	0.9	0.8	0.4
7/13/2019 13:30	10	0	10	29.62	4.9	3.8	24.7
7/13/2019 13:40	10	0	10	29.13	0.9	0.9	0.4
7/13/2019 13:50	10	0	10	28.49	4.7	3.8	24.8
7/13/2019 14:00	10	0	10	30.05	1	0.8	0.4
7/13/2019 14:10	10	0	10	27.48	4.7	3.8	24.9
7/13/2019 14:20	10	0	10	31.82	0.9	0.8	0.4
7/13/2019 14:30	10	0	10	27.85	0.9	0.8	0.4
7/13/2019 14:40	10	0	10	29.86	4.8	3.9	24.6
7/13/2019 14:50	10	0	10	29.22	0.9	0.8	0.4
7/13/2019 15:00	10	0	10	28.37	4.8	3.9	24.7
7/13/2019 15:10	10	0	10	29.41	0.9	0.8	0.4
7/13/2019 15:20	10	0	10	28.31	4.8	3.8	24.8
7/13/2019 15:30	10	0	10	31.57	1.1	0.8	0.4
7/13/2019 15:40	10	0	9	28.92	1	0.9	0.3
7/13/2019 15:50	10	0	10	28.7	4.9	3.9	24.9
7/13/2019 16:00	10	0	10	31.88	1	0.8	0.3
7/13/2019 16:10	10	0	10	27.21	1.1	0.9	2.5
7/13/2019 16:20	10	0	10	30.51	4.8	3.8	24.1
7/13/2019 16:30	10	0	10	28.09	0.9	0.9	0.4
7/13/2019 16:40	10	0	10	29.77	4.9	3.8	24.6
7/13/2019 16:50	10	0	9	28.67	0.9	0.9	0.4
7/13/2019 17:00	10	0	10	28.98	4.7	3.9	24.8
7/13/2019 17:10	10	0	10	30.17	0.9	0.8	0.4
7/13/2019 17:20	10	0	10	27.24	4.8	3.9	25
7/13/2019 17:30	10	0	10	31.51	4.9	3.9	0.5
7/13/2019 17:40	10	0	10	27.79	0.9	0.8	0.4
7/13/2019 17:50	10	0	10	30.02	4.7	3.8	24.5
7/13/2019 18:00	10	0	9	27.88	0.8	0.8	0.4
7/13/2019 18:10	10	0	10	30.08	4.7	3.9	24.5
7/13/2019 18:20	10	0	10	29.32	0.8	0.8	0.4
7/13/2019 18:30	10	0	10	28.37	4.6	3.9	25
7/13/2019 18:40	10	0	10	32.09	1.3	0.8	0.3
7/13/2019 18:50	10	0	10	29.13	1	0.8	0.4
7/13/2019 19:00	10	0	10	28.52	4.7	3.8	24.9
7/13/2019 19:10	10	0	10	31.85	0.9	0.8	0.3
7/13/2019 19:20	10	0	9	27.7	0.9	0.8	0.8
7/13/2019 19:30	10	0	9	30.11	4.8	3.9	24.5
7/13/2019 19:40	10	0	10	28.4	0.9	0.8	0.4
7/13/2019 19:50	10	0	9	29.35	4.8	3.9	24.7
7/13/2019 20:00	10	0	10	28.74	0.9	0.9	0.4
7/13/2019 20:10	10	0	10	28.89	4.9	3.8	24.9
7/13/2019 20:20	10	0	10	30.44	1	0.8	0.4
7/13/2019 20:30	10	0	10	27	4.8	3.9	25.1
7/13/2019 20:40	10	0	10	31.12	4.7	3.8	22.9
7/13/2019 20:50	10	0	10	27.7	0.9	0.8	0.4
7/13/2019 21:00	10	0	10	30.02	4.8	3.9	24.5

7/13/2019 21:10	10	0	10	27.91	0.9	0.9	0.4
7/13/2019 21:20	10	0	10	29.83	4.8	3.9	24.6
7/13/2019 21:30	10	0	10	28.8	0.8	0.8	0.4
7/13/2019 21:40	10	0	10	28.77	4.8	3.8	24.8
7/13/2019 21:50	10	0	9	29.65	0.9	0.9	0.4
7/13/2019 22:00	10	0	10	27.79	4.9	3.8	25
7/13/2019 22:10	10	0	10	32.09	4.4	3.7	0.4
7/13/2019 22:20	10	0	9	29.19	0.9	0.9	0.4
7/13/2019 22:30	10	0	10	28.43	4.8	3.8	24.9
7/13/2019 22:40	10	0	10	31.94	4.9	3.9	0.4
7/13/2019 22:50	10	0	10	29.04	0.9	0.9	0.3
7/13/2019 23:00	10	0	10	28.58	4.8	3.9	24.9
7/13/2019 23:10	10	0	10	30.9	1.1	0.9	0.4
7/13/2019 23:20	10	0	10	26.48	4.8	3.8	24.9
7/13/2019 23:30	10	0	10	31.6	0.9	0.8	0.4
7/13/2019 23:40	10	0	9	25.71	4.8	3.9	25
7/13/2019 23:50	10	0	10	31.54	1.1	0.9	0.4
7/14/2019 0:00	10	0	10	28.52	0.9	0.8	0.3
7/14/2019 0:10	10	0	9	29.13	4.8	3.9	24.9
7/14/2019 0:20	10	0	9	32	1.1	0.8	0.4
7/14/2019 0:30	10	0	10	29.16	0.8	0.8	0.3
7/14/2019 0:40	10	0	10	28.4	4.8	3.9	24.8
7/14/2019 0:50	10	0	10	30.9	1	0.9	0.4
7/14/2019 1:00	10	0	9	26.45	4.7	3.8	24.9
7/14/2019 1:10	10	0	10	30.66	0.9	0.9	0.4
7/14/2019 1:20	10	0	10	27.54	3.3	3.1	24.9
7/14/2019 1:30	10	0	10	30.26	4.5	3.9	24.5
7/14/2019 1:40	10	0	10	30.78	1	0.9	0.4
7/14/2019 1:50	10	0	9	27.27	3.3	3	24.9
7/14/2019 2:00	10	0	9	30.54	4.7	3.9	24.2
7/14/2019 2:10	10	0	10	29.1	0.9	0.8	0.3
7/14/2019 2:20	10	0	10	28.4	4.7	3.8	24.8
7/14/2019 2:30	10	0	10	29.74	0.9	0.8	0.4
7/14/2019 2:40	10	0	10	27.76	4.8	3.9	24.8
7/14/2019 2:50	10	0	10	29.59	0.9	0.9	0.3
7/14/2019 3:00	10	0	10	28.22	4.9	3.9	24.9
7/14/2019 3:10	10	0	10	31.73	4.9	3.9	0.5
7/14/2019 3:20	10	0	10	29.59	0.9	0.9	0.3
7/14/2019 3:30	10	0	9	28	4.8	3.9	25.1
7/14/2019 3:40	10	0	9	31.15	4.9	3.9	23
7/14/2019 3:50	10	0	10	29.22	0.9	0.8	0.3
7/14/2019 4:00	10	0	9	28.34	4.7	3.9	25
7/14/2019 4:10	10	0	10	30.87	0.9	0.8	0.3
7/14/2019 4:20	10	0	9	26.48	4.7	3.8	25
7/14/2019 4:30	10	0	10	30.99	0.9	0.8	0.4
7/14/2019 4:40	10	0	9	27.21	3.3	3	24.9
7/14/2019 4:50	10	0	10	30.63	4.9	3.8	24.3

7/14/2019 5:00	10	0	9	30.78	1	0.9	0.3
7/14/2019 5:10	10	0	9	28.06	1.3	1.2	24.9
7/14/2019 5:20	10	0	9	29.74	4.8	3.9	24.7
7/14/2019 5:30	10	0	10	30.84	0.9	0.9	0.4
7/14/2019 5:40	10	0	9	26.51	4.7	3.8	25
7/14/2019 5:50	10	0	10	31.6	4.8	3.9	0.5
7/14/2019 6:00	10	0	10	27.85	0.8	0.9	0.3
7/14/2019 6:10	10	0	9	29.96	4.7	3.8	24.5
7/14/2019 6:20	10	0	10	29.1	1	0.8	0.4
7/14/2019 6:30	10	0	9	28.46	4.6	3.8	24.8
7/14/2019 6:40	10	0	9	30.23	0.9	0.8	0.3
7/14/2019 6:50	10	0	10	27.3	4.8	3.9	24.9
7/14/2019 7:00	10	0	10	31.36	0.8	0.8	0.4
7/14/2019 7:10	10	0	10	27	2.4	2.3	24.9
7/14/2019 7:20	10	0	10	30.96	4.9	3.9	23.7
7/14/2019 7:30	10	0	10	29.41	0.9	0.9	0.3
7/14/2019 7:40	10	0	10	28.12	4.8	3.8	24.9
7/14/2019 7:50	10	0	10	32	1	0.8	0.4
7/14/2019 8:00	10	0	10	27.06	1	0.9	24.6
7/14/2019 8:10	10	0	10	30.84	4.7	3.9	23.6
7/14/2019 8:20	10	0	9	27.79	0.9	0.8	0.3
7/14/2019 8:30	10	0	9	29.96	4.8	3.8	24.5
7/14/2019 8:40	10	0	10	28.16	0.9	0.9	0.4
7/14/2019 8:50	10	0	9	29.47	4.7	3.8	24.7
7/14/2019 9:00	10	0	10	29.8	0.9	0.9	0.4
7/14/2019 9:10	10	0	10	27.79	4.8	3.9	24.9
7/14/2019 9:20	10	0	9	31.57	1	0.9	0.4
7/14/2019 9:30	10	0	10	26.2	3.5	3.2	24.9
7/14/2019 9:40	10	0	10	31.73	4.8	3.9	0.5
7/14/2019 9:50	10	0	10	26.96	1	0.8	1.6
7/14/2019 10:00	10	0	10	30.84	5	3.9	23.5
7/14/2019 10:10	10	0	10	28.25	0.9	0.8	0.4
7/14/2019 10:20	10	0	10	29.44	4.9	3.8	24.8
7/14/2019 10:30	10	0	9	29.83	0.9	0.8	0.4
7/14/2019 10:40	10	0	10	27.73	4.9	3.8	24.9
7/14/2019 10:50	10	0	10	31.12	0.9	0.9	0.5
7/14/2019 11:00	10	0	10	26.23	4.8	3.8	25
7/14/2019 11:10	10	0	10	32.03	1.3	0.8	0.4
7/14/2019 11:20	10	0	10	27.42	0.9	0.8	0.5
7/14/2019 11:30	10	0	10	30.35	4.8	3.9	24.4
7/14/2019 11:40	10	0	10	29.96	0.9	0.9	0.4
7/14/2019 11:50	10	0	9	27.54	4.8	3.8	24.9
7/14/2019 12:00	10	0	10	32	1	0.8	0.4
7/14/2019 12:10	10	0	9	26.84	1.1	0.9	24.8
7/14/2019 12:20	10	0	9	31.05	4.7	3.9	23
7/14/2019 12:30	10	0	10	26.96	0.8	0.8	0.3
7/14/2019 12:40	10	0	10	31.15	4.9	3.7	22.5

7/14/2019 12:50	10	0	9	29.86	1	0.8	0.4
7/14/2019 13:00	10	0	9	27.58	4.9	3.9	25.2
7/14/2019 13:10	10	0	9	30.57	4.6	3.8	24.4
7/14/2019 13:20	10	0	10	30.41	0.9	0.9	0.3
7/14/2019 13:30	10	0	10	27.03	4.7	3.8	24.8
7/14/2019 13:40	10	0	10	30.54	1	0.8	0.4
7/14/2019 13:50	10	0	10	27.06	4.7	3.8	24.9
7/14/2019 14:00	10	0	10	31.63	1	0.8	0.4
7/14/2019 14:10	10	0	10	28.34	0.9	0.8	0.4
7/14/2019 14:20	10	0	9	29.44	4.8	3.9	24.9
7/14/2019 14:30	10	0	9	31.48	0.9	0.8	0.4
7/14/2019 14:40	10	0	9	28.22	0.9	0.9	0.4
7/14/2019 14:50	10	0	9	29.47	4.8	3.9	24.7
7/14/2019 15:00	10	0	9	28.74	0.9	0.9	0.3
7/14/2019 15:10	10	0	9	28.98	4.8	3.8	24.7
7/14/2019 15:20	10	0	9	28.55	0.9	0.8	0.4
7/14/2019 15:30	10	0	9	29.41	5	3.8	24.9
7/14/2019 15:40	10	0	9	31.82	1	0.8	0.4
7/14/2019 15:50	10	0	10	29.19	0.9	0.8	0.4
7/14/2019 16:00	10	0	10	28.31	4.7	3.9	25
7/14/2019 16:10	10	0	10	31.94	4.9	3.9	0.4
7/14/2019 16:20	10	0	9	27.54	0.9	0.9	0.4
7/14/2019 16:30	10	0	9	30.35	4.9	3.9	24.3
7/14/2019 16:40	10	0	10	28.55	0.9	0.9	0.3
7/14/2019 16:50	10	0	9	29.01	4.9	3.9	24.8
7/14/2019 17:00	10	0	10	29.38	0.9	0.8	0.4
7/14/2019 17:10	10	0	9	28.12	4.8	3.9	24.8
7/14/2019 17:20	10	0	9	30.02	1	0.9	0.3
7/14/2019 17:30	10	0	9	27.51	4.7	3.9	25
7/14/2019 17:40	10	0	9	31.85	0.9	0.8	0.4
7/14/2019 17:50	10	0	9	28.12	1	0.9	0.4
7/14/2019 18:00	10	0	9	29.59	4.9	3.9	24.8
7/14/2019 18:10	10	0	9	30.32	0.9	0.8	0.4
7/14/2019 18:20	10	0	10	27.15	4.7	3.9	24.9
7/14/2019 18:30	10	0	10	31.67	1	0.8	0.4
7/14/2019 18:40	10	0	9	25.77	3.4	3.3	24.9
7/14/2019 18:50	10	0	9	32	0.9	0.8	0.1
7/14/2019 19:00	10	0	9	26.45	2.2	2	24.9
7/14/2019 19:10	10	0	9	31.48	4.9	3.9	0.5
7/14/2019 19:20	10	0	9	27.36	0.7	0.8	0.3
7/14/2019 19:30	10	0	9	30.47	4.9	3.8	24.1
7/14/2019 19:40	10	0	9	28.83	0.9	0.8	0.4
7/14/2019 19:50	10	0	10	28.86	4.8	3.9	24.9
7/14/2019 20:00	10	0	9	31.85	1	0.9	0.4
7/14/2019 20:10	10	0	10	28.92	1	0.8	0.4
7/14/2019 20:20	10	0	10	28.67	4.9	3.9	24.9
7/14/2019 20:30	10	0	9	31.36	1	0.9	0.4

7/14/2019 20:40	10	0	9	27.09	1.8	1.6	24.8
7/14/2019 20:50	10	0	9	30.75	4.9	3.9	23.9
7/14/2019 21:00	10	0	9	27.88	0.8	0.8	0.4
7/14/2019 21:10	10	0	9	29.86	4.8	3.9	24.5
7/14/2019 21:20	10	0	9	28.09	0.8	0.9	0.3
7/14/2019 21:30	10	0	9	29.83	4.8	3.8	24.7
7/14/2019 21:40	10	0	10	31.12	0.8	0.8	0.4
7/14/2019 21:50	10	0	10	27.45	1.7	1.6	24.8
7/14/2019 22:00	10	0	9	30.44	4.8	3.9	24.3
7/14/2019 22:10	10	0	9	29.01	0.9	0.8	0.4
7/14/2019 22:20	10	0	9	28.58	4.7	3.8	24.8
7/14/2019 22:30	10	0	10	28.89	1	0.8	0.4
7/14/2019 22:40	10	0	9	29.04	4.8	3.9	24.9
7/14/2019 22:50	10	0	9	31.54	1	0.9	0.4
7/14/2019 23:00	10	0	9	28.58	0.9	0.9	0.4
7/14/2019 23:10	10	0	9	29.07	4.9	3.8	24.9
7/14/2019 23:20	10	0	9	31.67	0.9	0.9	0.4
7/14/2019 23:30	10	0	9	27.51	1	0.9	2.5
7/14/2019 23:40	10	0	9	30.2	4.8	3.9	24.4
7/14/2019 23:50	10	0	9	28.55	0.9	0.8	0.4
7/15/2019 0:00	10	0	9	29.13	4.9	3.8	24.7
7/15/2019 0:10	10	0	9	28.61	0.9	0.8	0.4
7/15/2019 0:20	10	0	10	29.19	4.6	3.8	24.8
7/15/2019 0:30	10	0	9	30.96	1.1	0.9	0.4
7/15/2019 0:40	10	0	9	28.03	1.3	0.8	24.8
7/15/2019 0:50	10	0	9	29.68	4.7	3.9	24.7
7/15/2019 1:00	10	0	9	31.15	1	0.9	0.3
7/15/2019 1:10	10	0	9	27.58	1.1	0.9	24.7
7/15/2019 1:20	10	0	9	30.2	4.8	3.9	24.3
7/15/2019 1:30	10	0	9	28.67	0.9	0.9	0.3
7/15/2019 1:40	10	0	9	29.04	4.9	3.8	24.7
7/15/2019 1:50	10	0	9	29.01	1	0.9	0.4
7/15/2019 2:00	10	0	9	28.67	4.9	3.9	24.9
7/15/2019 2:10	10	0	10	30.72	1	0.8	0.4
7/15/2019 2:20	10	0	10	26.69	3	3.3	24.9
7/15/2019 2:30	10	0	9	31.27	4.8	3.9	22.2
7/15/2019 2:40	10	0	9	27.48	0.8	0.9	0.3
7/15/2019 2:50	10	0	9	30.35	4.8	4	24.3
7/15/2019 3:00	10	0	9	28.09	0.9	0.8	0.4
7/15/2019 3:10	10	0	9	29.65	4.9	3.9	24.7
7/15/2019 3:20	10	0	9	29.32	0.9	0.8	0.3
7/15/2019 3:30	10	0	9	28.25	4.8	3.8	24.9
7/15/2019 3:40	10	0	10	31.85	1	0.9	0.4
7/15/2019 3:50	10	0	10	28.09	0.8	0.8	0.3
7/15/2019 4:00	10	0	10	29.62	4.8	3.8	24.7
7/15/2019 4:10	10	0	9	28.86	0.9	0.7	0.4
7/15/2019 4:20	10	0	10	28.89	4.8	3.9	24.8

7/15/2019 4:30	10	0	9	28.4	0.9	0.9	0.3
7/15/2019 4:40	10	0	9	29.56	5	3.8	24.7
7/15/2019 4:50	10	0	9	31.12	1	0.9	0.4
7/15/2019 5:00	10	0	9	27.82	1.1	1	24.8
7/15/2019 5:10	10	0	9	30.05	4.9	3.9	24.5
7/15/2019 5:20	10	0	9	30.14	0.9	0.8	0.4
7/15/2019 5:30	10	0	9	27.24	4.8	3.8	24.9
7/15/2019 5:40	10	0	9	31.09	1	0.8	0.4
7/15/2019 5:50	10	0	9	26.29	4.7	3.8	24.8
7/15/2019 6:00	10	0	9	31.27	0.9	0.9	0.4
7/15/2019 6:10	10	0	9	27.18	2.3	2	24.9
7/15/2019 6:20	10	0	9	30.63	4.8	4	24.2
7/15/2019 6:30	10	0	10	30.38	1	0.8	0.4
7/15/2019 6:40	10	0	9	27.24	3.5	3.4	25.1
7/15/2019 6:50	10	0	9	30.54	4.9	3.8	24.1
7/15/2019 7:00	10	0	9	28.98	0.9	0.9	0.3
7/15/2019 7:10	10	0	9	28.58	4.8	3.8	24.9
7/15/2019 7:20	10	0	9	30.41	0.9	0.9	0.4
7/15/2019 7:30	10	0	10	27.09	4.8	3.8	24.9
7/15/2019 7:40	10	0	9	31.33	0.9	0.9	0.4
7/15/2019 7:50	10	0	10	26.05	4.8	3.9	24.9
7/15/2019 8:00	10	0	9	31.36	0.9	0.8	0.4
7/15/2019 8:10	9	0	9	27.85	1.1	0.8	24.7
7/15/2019 8:20	10	0	10	29.89	4.8	3.8	24.6
7/15/2019 8:30	9	0	9	30.17	1	0.8	0.4
7/15/2019 8:40	10	0	10	27.36	4.8	3.8	24.9
7/15/2019 8:50	9	0	9	31.27	0.9	0.8	0.3
7/15/2019 9:00	10	0	10	25.99	4.8	3.9	25
7/15/2019 9:10	10	0	10	31.3	0.9	0.8	0.4
7/15/2019 9:20	9	0	9	27.94	1.1	0.9	24.8
7/15/2019 9:30	10	0	9	29.77	4.7	3.8	24.6
7/15/2019 9:40	10	0	9	30.54	0.9	0.9	0.4
7/15/2019 9:50	10	0	9	26.87	5	3.8	25
7/15/2019 10:00	10	0	10	31.27	4.9	3.8	22.4
7/15/2019 10:10	10	0	9	27.73	0.9	0.9	0.4
7/15/2019 10:20	10	0	10	30.05	4.9	3.9	24.4
7/15/2019 10:30	10	0	9	26.87	0.9	0.9	0.3
7/15/2019 10:40	10	0	9	31.39	4.8	3.9	0.4
7/15/2019 10:50	10	0	9	29.01	1	0.9	0.4
7/15/2019 11:00	10	0	9	28.49	4.8	3.9	25
7/15/2019 11:10	10	0	9	32	4.8	3.9	0.4
7/15/2019 11:20	10	0	9	28.37	0.9	0.8	0.4
7/15/2019 11:30	10	0	9	29.22	4.9	3.8	24.8
7/15/2019 11:40	10	0	9	29.41	0.9	0.9	0.4
7/15/2019 11:50	10	0	9	28.16	4.7	3.9	24.7
7/15/2019 12:00	10	0	9	28.92	0.9	0.8	0.4
7/15/2019 12:10	10	0	10	29.01	4.7	3.9	24.8

7/15/2019 12:20	10	0	10	30.47	1	0.9	0.4
7/15/2019 12:30	9	0	9	27.67	3	2.7	25
7/15/2019 12:40	9	0	9	30.14	4.9	3.9	24.6
7/15/2019 12:50	10	0	9	30.9	0.9	0.8	0.4
7/15/2019 13:00	10	0	9	27.12	3.2	3	24.8
7/15/2019 13:10	10	0	9	30.75	4.5	3.9	23.8
7/15/2019 13:20	10	0	9	27.24	0.9	0.8	0.4
7/15/2019 13:30	10	0	9	30.81	4.8	3.9	23.1
7/15/2019 13:40	10	0	9	28.86	0.9	0.8	0.4
7/15/2019 13:50	10	0	10	28.83	4.7	3.8	25
7/15/2019 14:00	10	0	9	32	4.9	3.9	0.4
7/15/2019 14:10	10	0	9	29.32	0.9	0.9	0.4
7/15/2019 14:20	10	0	9	28.22	4.8	3.9	24.9
7/15/2019 14:30	10	0	10	30.81	0.9	0.8	0.4
7/15/2019 14:40	10	0	9	26.51	4.8	3.8	24.9
7/15/2019 14:50	10	0	10	30.08	1	0.8	0.3
7/15/2019 15:00	10	0	9	27.58	4.9	3.8	24.9
7/15/2019 15:10	10	0	9	31.54	4.9	3.9	0.6
7/15/2019 15:20	10	0	10	29.13	0.9	0.8	0.4
7/15/2019 15:30	10	0	9	28.43	4.7	3.8	25
7/15/2019 15:40	10	0	9	31.85	1	0.8	0.4
7/15/2019 15:50	10	0	9	27.24	1	0.8	24.6
7/15/2019 16:00	9	0	9	30.54	4.9	3.8	24
7/15/2019 16:10	10	0	9	28.55	0.9	0.8	0.4
7/15/2019 16:20	10	0	9	29.04	4.7	3.9	24.6
7/15/2019 16:30	10	0	9	28.52	0.9	0.9	0.4
7/15/2019 16:40	10	0	9	29.35	4.8	3.8	24.8
7/15/2019 16:50	9	0	10	30.99	0.9	0.9	0.4
7/15/2019 17:00	10	0	9	28.28	1	0.9	2.8
7/15/2019 17:10	9	0	9	29.41	4.9	3.8	24.8
7/15/2019 17:20	10	0	9	31.42	1	0.8	0.4
7/15/2019 17:30	10	0	9	27.18	1.3	1	24.7
7/15/2019 17:40	10	0	9	30.63	4.9	3.9	24
7/15/2019 17:50	9	0	9	26.96	0.9	0.8	0.4
7/15/2019 18:00	10	0	9	31.21	4.9	3.9	0.5
7/15/2019 18:10	10	0	9	29.38	0.9	0.9	0.4
7/15/2019 18:20	10	0	9	28.16	4.8	3.8	25
7/15/2019 18:30	10	0	9	31.7	4.8	3.9	0.5
7/15/2019 18:40	10	0	9	29.04	0.9	0.9	0.3
7/15/2019 18:50	10	0	9	28.43	4.8	3.8	24.8
7/15/2019 19:00	10	0	9	30.32	1	0.9	0.3
7/15/2019 19:10	10	0	10	27.15	4.8	3.8	24.9
7/15/2019 19:20	10	0	9	31.42	1.1	0.9	0.4
7/15/2019 19:30	10	0	9	25.8	4.8	3.9	24.9
7/15/2019 19:40	10	0	9	31.85	1	0.8	0.4
7/15/2019 19:50	9	0	9	26.87	1.2	0.9	24.8
7/15/2019 20:00	10	0	9	31.09	4.8	3.8	23.1

7/15/2019 20:10	10	0	9	28.92	0.9	0.9	0.4
7/15/2019 20:20	9	0	9	28.61	5.1	3.8	24.9
7/15/2019 20:30	10	0	9	30.75	0.9	0.8	0.4
7/15/2019 20:40	9	0	9	26.57	4.8	3.8	24.9
7/15/2019 20:50	10	0	9	31.76	1	0.9	0.4
7/15/2019 21:00	10	0	9	26.54	1.5	1.3	24.8
7/15/2019 21:10	10	0	9	31.33	4.8	3.9	21.5
7/15/2019 21:20	10	0	9	27.85	0.9	0.8	0.4
7/15/2019 21:30	10	0	9	29.89	4.8	3.8	24.6
7/15/2019 21:40	9	0	9	30.41	0.9	0.9	0.3
7/15/2019 21:50	10	0	9	27.42	3.4	3.2	25
7/15/2019 22:00	9	0	9	30.41	4.8	3.8	24.3
7/15/2019 22:10	10	0	9	30.14	0.9	0.8	0.4
7/15/2019 22:20	9	0	9	27.3	4.8	4	24.9
7/15/2019 22:30	9	0	9	31.88	5	3.9	0.4
7/15/2019 22:40	10	0	9	28.12	0.9	0.8	0.4
7/15/2019 22:50	10	0	9	29.62	4.8	3.9	24.7
7/15/2019 23:00	9	0	9	29.32	1	0.8	0.4
7/15/2019 23:10	10	0	9	28.28	4.8	3.8	24.9
7/15/2019 23:20	10	0	9	30.26	0.8	0.9	0.4
7/15/2019 23:30	9	0	9	27.12	4.8	3.9	25
7/15/2019 23:40	10	0	9	32.06	4.5	3.8	0.4
7/15/2019 23:50	9	0	9	28.95	0.9	0.8	0.3
7/16/2019 0:00	9	0	9	28.77	4.7	3.9	25
7/16/2019 0:10	9	0	9	31.76	1.1	0.9	0.4
7/16/2019 0:20	9	0	9	28.12	1	0.8	0.3
7/16/2019 0:30	10	0	9	29.74	4.7	3.9	24.6
7/16/2019 0:40	9	0	9	29.74	0.9	0.8	0.4
7/16/2019 0:50	9	0	9	27.76	4.9	3.8	24.8
7/16/2019 1:00	10	0	9	29.8	0.9	0.9	0.4
7/16/2019 1:10	9	0	9	27.79	4.6	3.9	24.9
7/16/2019 1:20	10	0	9	32	0.9	0.8	0.4
7/16/2019 1:30	10	0	9	29.04	0.8	0.9	0.4
7/16/2019 1:40	10	0	9	28.61	4.8	3.8	25
7/16/2019 1:50	9	0	9	31.94	1	0.8	0.3
7/16/2019 2:00	9	0	9	28.49	0.9	0.9	0.3
7/16/2019 2:10	10	0	9	29.19	4.7	3.8	24.8
7/16/2019 2:20	9	0	9	29.77	0.9	0.9	0.4
7/16/2019 2:30	10	0	9	27.7	4.8	3.8	24.8
7/16/2019 2:40	9	0	9	29.56	1	0.9	0.4
7/16/2019 2:50	9	0	9	28.22	4.7	3.8	24.9
7/16/2019 3:00	9	0	9	31.48	4.7	3.9	0.5
7/16/2019 3:10	9	0	9	30.2	1	0.8	0.4
7/16/2019 3:20	9	0	9	27.21	4.6	3.9	25
7/16/2019 3:30	10	0	9	31.02	4.9	3.9	23.3
7/16/2019 3:40	9	0	9	27.24	0.8	0.8	0.3
7/16/2019 3:50	9	0	9	30.84	4.8	3.9	23.3

7/16/2019 4:00	9	0	9	28.09	0.7	0.8	0.3
7/16/2019 4:10	9	0	9	29.62	4.7	3.8	24.8
7/16/2019 4:20	10	0	10	30.11	0.9	0.9	0.3
7/16/2019 4:30	9	0	9	27.36	4.8	3.9	25
7/16/2019 4:40	10	0	9	31.54	5	3.9	0.5
7/16/2019 4:50	10	0	9	29.04	0.9	0.8	0.3
7/16/2019 5:00	10	0	9	28.61	4.7	3.9	24.9
7/16/2019 5:10	9	0	9	30.54	1	0.9	0.4
7/16/2019 5:20	10	0	9	26.75	4.5	3.9	24.9
7/16/2019 5:30	9	0	9	31.36	0.8	0.9	0.4
7/16/2019 5:40	10	0	9	25.96	4.9	3.8	24.9
7/16/2019 5:50	9	0	9	31.67	0.9	0.8	0.4
7/16/2019 6:00	10	0	9	28.25	0.9	0.9	0.4
7/16/2019 6:10	9	0	9	29.53	4.9	3.9	24.8
7/16/2019 6:20	10	0	9	31.18	0.9	0.9	0.4
7/16/2019 6:30	9	0	9	27.61	1.1	0.9	24.8
7/16/2019 6:40	9	0	9	30.26	4.8	3.9	24.5
7/16/2019 6:50	9	0	9	30.08	0.9	0.8	0.4
7/16/2019 7:00	10	0	10	27.27	4.8	3.9	24.9
7/16/2019 7:10	9	0	9	31.7	0.9	0.8	0.3
7/16/2019 7:20	10	0	9	25.65	2.5	2.4	25
7/16/2019 7:30	10	0	9	31.73	0.9	0.8	0.3
7/16/2019 7:40	9	0	9	27.88	0.9	0.9	2.7
7/16/2019 7:50	10	0	10	30.05	4.8	3.9	24.6
7/16/2019 8:00	9	0	9	29.96	1	0.9	0.4
7/16/2019 8:10	10	0	9	27.61	4.7	3.8	24.9
7/16/2019 8:20	10	0	9	31.51	1	0.9	0.4
7/16/2019 8:30	9	0	9	26.45	3.1	2.9	24.8
7/16/2019 8:40	10	0	9	31.54	4.9	3.9	0.5
7/16/2019 8:50	9	0	9	26.11	1.1	0.9	24.7
7/16/2019 9:00	9	0	9	32.15	2	1.4	2.6
7/16/2019 9:10	10	0	10	28.77	0.8	0.8	0.3
7/16/2019 9:20	9	0	9	28.92	4.8	3.8	24.9
7/16/2019 9:30	10	0	10	31.85	1.1	0.8	0.4
7/16/2019 9:40	10	0	9	28.49	0.9	0.8	0.3
7/16/2019 9:50	9	0	9	29.25	4.9	3.9	24.7
7/16/2019 10:00	9	0	9	28.8	0.9	0.8	0.3
7/16/2019 10:10	9	0	9	29.1	4.7	3.9	24.8
7/16/2019 10:20	9	0	9	30.26	0.9	0.9	0.3
7/16/2019 10:30	9	0	9	27.18	5	3.8	25
7/16/2019 10:40	9	0	9	31.21	4.5	3.9	22.6
7/16/2019 10:50	9	0	9	28.95	0.9	0.8	0.4
7/16/2019 11:00	9	0	9	28.67	4.7	3.8	24.9
7/16/2019 11:10	9	0	9	29.71	0.9	0.8	0.3
7/16/2019 11:20	9	0	9	27.76	4.8	3.8	24.9
7/16/2019 11:30	10	0	9	29.83	1	0.8	0.4
7/16/2019 11:40	10	0	9	27.85	4.8	3.9	24.9

7/16/2019 11:50	9	0	9	31.09	4.7	3.9	23.5
7/16/2019 12:00	10	0	9	29.99	0.9	0.9	0.3
7/16/2019 12:10	9	0	9	27.51	4.9	3.8	24.9
7/16/2019 12:20	9	0	9	32	1.1	0.8	0.4
7/16/2019 12:30	10	0	9	26.38	1.8	1.6	24.8
7/16/2019 12:40	0	0	0	30.47	0.9	0.8	0
7/16/2019 12:50	10	10	9	30.57	4.7	3.8	24.6
7/16/2019 13:00	9	10	9	30.78	4.7	3.9	25
7/16/2019 13:10	9	10	9	31.7	4.9	3.9	24.2
7/16/2019 13:20	9	10	9	32.09	4.9	4	2.5
7/16/2019 13:30	9	10	9	30.75	3.5	3.3	25.1
7/16/2019 13:40	9	10	9	31.21	4.9	3.8	24.8
7/16/2019 13:50	9	10	9	31.7	1.2	0.8	3.3
7/16/2019 14:00	9	10	9	31.09	5	3.9	24.8
7/16/2019 14:10	9	10	9	30.87	2.7	2.6	24.9
7/16/2019 14:20	9	10	9	31.6	5.1	4	23.7
7/16/2019 14:30	9	10	9	30.57	4.7	3.8	24.9
7/16/2019 14:40	9	10	9	31.02	1.4	1.2	24.8
7/16/2019 14:50	9	10	9	31.67	5	3.9	23.3
7/16/2019 15:00	9	10	9	30.84	4.8	3.9	24.7
7/16/2019 15:10	9	10	9	30.23	3.4	3.4	25
7/16/2019 15:20	9	10	9	32.06	5.1	4.2	0.4
7/16/2019 15:30	9	10	9	31.18	4.8	3.9	24.6
7/16/2019 15:40	9	10	9	30.26	5	3.8	24.9
7/16/2019 15:50	9	10	9	30.93	1.2	0.9	24.8
7/16/2019 16:00	9	10	9	31.79	4.8	3.9	23
7/16/2019 16:10	9	10	9	30.84	4.8	3.9	24.8
7/16/2019 16:20	9	10	9	30.2	3.6	3.3	25.1
7/16/2019 16:30	9	10	9	32.06	4.9	3.9	0.4
7/16/2019 16:40	9	10	9	31.18	4.8	3.8	24.7
7/16/2019 16:50	9	10	9	30.26	4.6	3.9	25
7/16/2019 17:00	9	10	9	31.05	1	0.9	24.7
7/16/2019 17:10	9	10	9	31.73	4.8	4	0.5
7/16/2019 17:20	9	10	9	30.93	4.8	3.8	24.7
7/16/2019 17:30	9	10	9	30.02	4.9	3.9	25
7/16/2019 17:40	9	10	9	31.67	1	0.8	0.4
7/16/2019 17:50	9	10	9	31.6	4.9	3.9	23.9
7/16/2019 18:00	9	10	9	30.75	4.9	3.9	24.9
7/16/2019 18:10	9	10	9	30.41	3.3	3	25.1
7/16/2019 18:20	9	10	9	31.97	4.8	3.9	0.4
7/16/2019 18:30	9	10	9	31.12	4.9	3.9	24.7
7/16/2019 18:40	9	10	9	30.23	4.9	3.9	24.9
7/16/2019 18:50	9	10	9	31.21	1.1	0.9	3.3
7/16/2019 19:00	9	10	9	31.67	4.9	4	23.5
7/16/2019 19:10	9	10	9	30.69	4.9	3.9	24.8
7/16/2019 19:20	9	10	9	29.89	4.7	3.9	25
7/16/2019 19:30	9	10	9	31.6	1.1	0.8	0.4

7/16/2019 19:40	9	10	9	31.6	4.8	3.8	23.9
7/16/2019 19:50	9	10	9	30.57	4.8	3.9	24.8
7/16/2019 20:00	9	10	9	30.29	3.4	3.3	24.9
7/16/2019 20:10	9	10	9	32.15	1.2	0.9	0.4
7/16/2019 20:20	9	10	9	31.3	4.8	3.9	24.4
7/16/2019 20:30	9	10	9	30.75	4.6	3.9	24.7
7/16/2019 20:40	9	10	9	30.02	4.8	3.9	24.9
7/16/2019 20:50	9	10	9	30.69	1.4	1.2	24.8
7/16/2019 21:00	9	10	9	32.15	1.1	0.8	0.4
7/16/2019 21:10	9	10	9	31.48	4.8	3.8	24.1
7/16/2019 21:20	9	10	9	30.87	4.9	3.8	24.7
7/16/2019 21:30	9	10	9	30.05	4.8	3.9	25
7/16/2019 21:40	9	10	9	31.3	1	0.9	3.5
7/16/2019 21:50	9	10	9	31.85	4.6	3.9	0.5
7/16/2019 22:00	9	10	9	31.15	4.6	3.9	24.6
7/16/2019 22:10	9	10	9	30.44	4.8	3.8	24.9
7/16/2019 22:20	9	10	9	30.17	3.2	3.2	24.8
7/16/2019 22:30	9	10	9	31.36	0.9	0.8	0.3
7/16/2019 22:40	9	10	9	32.12	4.2	3.4	0.3
7/16/2019 22:50	9	10	9	31.76	4.9	3.9	0.5
7/16/2019 23:00	9	10	9	31.48	4.7	3.9	24
7/16/2019 23:10	9	10	9	30.99	5	3.9	24.6
7/16/2019 23:20	9	10	9	30.44	4.6	3.9	24.8
7/16/2019 23:30	9	10	9	30.02	3.4	3.3	24.9
7/16/2019 23:40	9	10	9	31.79	0.9	0.8	0.3
7/16/2019 23:50	9	10	9	31.63	5	3.8	23.8
7/17/2019 0:00	9	10	9	30.87	4.9	3.9	24.8
7/17/2019 0:10	9	10	9	30.02	4.9	3.9	25
7/17/2019 0:20	9	10	9	30.78	1.2	0.9	24.7
7/17/2019 0:30	9	10	9	32.06	0.9	0.9	0.4
7/17/2019 0:40	9	10	9	31.73	4.9	3.9	10.9
7/17/2019 0:50	9	10	9	31.45	4.9	4	24
7/17/2019 1:00	9	10	9	31.51	4.8	3.8	23.8
7/17/2019 1:10	9	10	9	31.63	4.8	3.9	22.8
7/17/2019 1:20	9	10	9	32.09	4.7	3.9	0.4
7/17/2019 1:30	9	10	9	31.51	1	0.9	0.4
7/17/2019 1:40	9	10	9	30.99	0.9	0.9	0.4
7/17/2019 1:50	9	10	9	31.15	1	0.8	0.4
7/17/2019 2:00	9	10	9	31.79	1	0.8	0.4
7/17/2019 2:10	9	10	9	32.06	5	3.9	0.4
7/17/2019 2:20	9	10	9	31.94	5.1	3.9	0.4
7/17/2019 2:30	9	10	9	32.12	5.3	4.2	0.4
7/17/2019 2:40	9	10	9	31.57	1.2	0.8	0.4
7/17/2019 2:50	9	10	9	30.87	0.9	0.7	0.4
7/17/2019 3:00	9	10	9	30.63	1	0.8	2.6
7/17/2019 3:10	9	10	9	30.87	1	0.8	2.7
7/17/2019 3:20	9	10	9	31.33	1	0.8	0.3

7/17/2019 3:30	9	10	9	31.36	1.1	0.8	0.4
7/17/2019 3:40	9	10	9	30.93	1	0.9	0.4
7/17/2019 3:50	9	10	9	30.57	1.1	0.9	2.8
7/17/2019 4:00	9	10	9	30.75	1	0.9	2.5
7/17/2019 4:10	9	10	9	31.02	1	0.9	0.4
7/17/2019 4:20	9	10	9	31.18	0.9	0.8	0.3
7/17/2019 4:30	9	10	9	30.96	0.9	0.9	0.3
7/17/2019 4:40	9	10	9	30.51	0.9	0.9	2.9
7/17/2019 4:50	9	10	9	30.11	1.8	1.5	24.7
7/17/2019 5:00	9	10	9	30.23	1.5	1.2	24.7
7/17/2019 5:10	9	10	9	30.51	1.1	0.9	24.7
7/17/2019 5:20	9	10	9	30.63	1.2	0.9	3.4
7/17/2019 5:30	9	10	9	30.32	1.2	0.9	24.6
7/17/2019 5:40	9	10	9	29.8	2.6	2.4	24.8
7/17/2019 5:50	9	10	9	29.19	3.5	3.3	24.9
7/17/2019 6:00	9	10	9	29.25	4.9	3.9	24.9
7/17/2019 6:10	9	10	9	29.47	5	3.9	25
7/17/2019 6:20	9	10	9	29.59	3.6	3.2	24.9
7/17/2019 6:30	9	10	9	30.11	2.2	2.1	24.8
7/17/2019 6:40	9	10	9	29.96	2.3	2.2	24.7
7/17/2019 6:50	9	10	9	29.35	3.3	3.2	24.9
7/17/2019 7:00	9	10	9	29.22	4.9	3.9	24.9
7/17/2019 7:10	9	10	9	29.71	4.8	3.9	24.8
7/17/2019 7:20	9	10	9	30.02	4.9	3.9	25
7/17/2019 7:30	9	10	9	29.83	4.7	3.9	24.9
7/17/2019 7:40	9	10	9	29.5	5	3.9	24.9
7/17/2019 7:50	9	10	9	29.19	4.9	3.8	24.9
7/17/2019 8:00	9	10	9	29.35	4.7	3.9	24.9
7/17/2019 8:10	9	10	9	29.56	4.7	3.9	25
7/17/2019 8:20	9	10	9	29.74	4.9	4	24.9
7/17/2019 8:30	9	10	9	29.65	4.8	3.8	24.8
7/17/2019 8:40	9	10	9	29.53	4.7	3.7	24.9
7/17/2019 8:50	9	10	9	29.44	4.9	3.9	24.9
7/17/2019 9:00	9	10	9	29.59	4.9	3.9	24.9
7/17/2019 9:10	9	10	9	29.77	4.8	3.9	24.8
7/17/2019 9:20	9	10	9	30.05	4.9	3.8	24.9
7/17/2019 9:30	9	10	9	30.26	4.9	3.9	24.8
7/17/2019 9:40	9	10	9	30.17	4.7	3.9	24.7
7/17/2019 9:50	9	10	9	30.2	4.9	3.9	24.7
7/17/2019 10:00	9	10	9	30.32	4.8	3.9	24.7
7/17/2019 10:10	9	10	9	30.23	4.9	3.8	24.8
7/17/2019 10:20	9	10	9	30.23	4.8	3.9	24.8
7/17/2019 10:30	9	10	9	30.17	4.8	3.9	24.7
7/17/2019 10:40	9	10	9	30.17	4.8	3.8	24.8
7/17/2019 10:50	9	10	9	29.99	4.7	3.8	24.8
7/17/2019 11:00	9	10	9	29.89	4.8	3.8	24.8
7/17/2019 11:10	9	10	9	29.96	4.7	3.8	24.8

7/17/2019 11:20	9	10	9	30.17	4.7	3.9	24.8
7/17/2019 11:30	9	10	9	30.35	4.9	3.9	24.8
7/17/2019 11:40	9	10	9	30.32	4.8	3.9	24.7
7/17/2019 11:50	9	10	9	30.29	4.9	4	24.7
7/17/2019 12:00	9	10	9	30.2	4.8	3.9	24.8
7/17/2019 12:10	9	10	9	30.17	4.8	3.9	24.8
7/17/2019 12:20	9	10	9	30.2	4.9	3.9	24.7
7/17/2019 12:30	9	10	9	30.41	4.8	3.9	24.7
7/17/2019 12:40	9	10	9	30.57	4.9	3.9	24.7
7/17/2019 12:50	9	10	9	30.47	5	3.8	24.7
7/17/2019 13:00	9	10	9	30.17	4.6	3.8	24.7
7/17/2019 13:10	9	10	9	30.02	4.9	3.9	24.7
7/17/2019 13:20	0	0	0	30.96	0.9	0.8	-0.1
7/17/2019 13:30	0	1	0	30.99	0.9	0.9	-0.1
7/17/2019 13:40	0	0	0	30.99	0.9	0.8	0
7/17/2019 13:50	0	0	0	30.99	0.9	0.8	0
7/17/2019 14:00	0	0	0	30.99	0.9	0.8	0.1
7/17/2019 14:10	0	0	0	30.99	0.9	0.8	0.1
7/17/2019 14:20	0	0	0	30.99	0.9	0.8	0.1
7/17/2019 14:30	0	0	0	30.99	0.9	0.9	0.1
7/17/2019 14:40	0	0	0	30.99	0.9	0.8	0.1
7/17/2019 14:50	0	0	0	30.99	0.9	0.8	0.1
7/17/2019 15:00	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 15:10	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 15:20	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 15:30	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 15:40	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 15:50	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 16:00	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 16:10	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 16:20	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 16:30	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 16:40	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 16:50	0	0	0	30.96	0.9	0.8	0.1
7/17/2019 17:00	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 17:10	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 17:20	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 17:30	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 17:40	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 17:50	0	0	0	30.93	0.9	0.9	0.1
7/17/2019 18:00	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 18:10	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 18:20	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 18:30	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 18:40	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 18:50	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 19:00	0	0	0	30.9	0.9	0.8	0.1

7/17/2019 19:10	0	0	0	30.93	0.9	0.8	0.1
7/17/2019 19:20	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 19:30	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 19:40	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 19:50	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 20:00	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 20:10	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 20:20	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 20:30	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 20:40	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 20:50	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 21:00	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 21:10	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 21:20	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 21:30	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 21:40	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 21:50	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 22:00	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 22:10	0	0	0	30.9	0.9	0.8	0.1
7/17/2019 22:20	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 22:30	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 22:40	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 22:50	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 23:00	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 23:10	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 23:20	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 23:30	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 23:40	0	0	0	30.87	0.9	0.8	0.1
7/17/2019 23:50	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 0:00	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 0:10	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 0:20	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 0:30	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 0:40	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 0:50	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 1:00	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 1:10	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 1:20	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 1:30	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 1:40	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 1:50	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 2:00	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 2:10	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 2:20	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 2:30	0	0	0	30.87	0.9	0.8	0.1
7/18/2019 2:40	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 2:50	0	0	0	30.87	0.9	0.8	0.1

7/18/2019 3:00	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 3:10	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 3:20	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 3:30	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 3:40	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 3:50	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 4:00	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 4:10	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 4:20	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 4:30	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 4:40	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 4:50	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 5:00	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 5:10	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 5:20	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 5:30	0	0	0	30.84	0.9	0.8	0.1
7/18/2019 5:40	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 5:50	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:00	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:10	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:20	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:30	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:40	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:50	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 6:50							
7/18/2019 7:00							
7/18/2019 7:00	0	0	0	30.78	0.9	0.8	0.1
7/18/2019 7:10	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 7:10							
7/18/2019 7:20							
7/18/2019 7:20	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 7:30							
7/18/2019 7:30	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 7:40	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 7:40							
7/18/2019 7:50							
7/18/2019 7:50	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 8:00							
7/18/2019 8:00	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 8:10							
7/18/2019 8:10	0	0	0	30.81	0.9	0.8	0.1
7/18/2019 8:20	0	0	0	30.78	0.9	0.8	0.1
7/18/2019 8:20							
7/18/2019 8:30	0	0	0	30.78	0.9	0.8	0.1
7/18/2019 8:30							
7/18/2019 8:40	0	0	0	30.78	0.9	0.8	0.1
7/18/2019 8:40							

7/18/2019 8:50							
7/18/2019 8:50	0	0	0	30.78	0.9	0.8	0.1
7/18/2019 9:00	0	0	0	30.75	0.9	0.8	0.1
7/18/2019 9:00							
7/18/2019 9:10	10	10	10	30.69	4.4	3.9	23.8
7/18/2019 9:10							
7/18/2019 9:20	0	0	0	30.08	0.9	0.8	-0.1
7/18/2019 9:20							
7/18/2019 9:30	10	10	10	29.89	4.9	3.8	24.8
7/18/2019 9:30							
7/18/2019 9:40							
7/18/2019 9:40	10	10	10	31.45	1.3	1.2	25
7/18/2019 9:50							
7/18/2019 9:50	10	10	10	30.72	4.8	3.8	25.2
7/18/2019 10:00							
7/18/2019 10:00	10	10	10	31.18	4.7	3.8	25
7/18/2019 10:10							
7/18/2019 10:10	10	10	10	31.85	5.1	3.9	0.5
7/18/2019 10:20	10	10	9	30.54	4.7	3.8	25
7/18/2019 10:20							
7/18/2019 10:30	10	10	10	32.12	2.1	1.5	0.4
7/18/2019 10:30							
7/18/2019 10:40							
7/18/2019 10:40	9	10	9	31.02	4.7	3.9	24.8
7/18/2019 10:50							
7/18/2019 10:50	10	10	9	30.11	4.8	3.8	25
7/18/2019 11:00							
7/18/2019 11:00	9	10	9	31.82	0.9	0.8	0.4
7/18/2019 11:10							
7/18/2019 11:10	10	10	9	31.76	4.7	3.9	21
7/18/2019 11:20	9	10	9	31.36	4.9	3.9	24.3
7/18/2019 11:20							
7/18/2019 11:30							
7/18/2019 11:30	9	10	9	31.15	4.9	3.8	24.5
7/18/2019 11:40	9	10	9	30.81	4.8	3.8	24.6
7/18/2019 11:40							
7/18/2019 11:50	9	10	9	30.9	4.9	3.9	24.5
7/18/2019 11:50							
7/18/2019 12:00							
7/18/2019 12:00	9	10	9	31.09	4.8	4	24.3
7/18/2019 12:10	9	10	9	31.48	4.9	3.9	23.8
7/18/2019 12:10							
7/18/2019 12:20							
7/18/2019 12:20	10	10	9	31.7	4.7	3.9	23.2
7/18/2019 12:30							
7/18/2019 12:30	10	10	9	31.57	4.8	3.9	23.6
7/18/2019 12:40	9	10	9	31.36	4.8	3.8	24.3

7/18/2019 12:40							
7/18/2019 12:50							
7/18/2019 12:50	9	10	9	31.02	4.7	3.8	24.6
7/18/2019 13:00	9	10	9	30.66	4.4	3.9	24.8
7/18/2019 13:00							
7/18/2019 13:10							
7/18/2019 13:10	9	10	9	30.66	4.8	3.8	24.6
7/18/2019 13:20							
7/18/2019 13:20	9	10	9	31.18	4.9	3.9	24.3
7/18/2019 13:30	9	10	9	31.57	4.8	3.9	23.7
7/18/2019 13:30							
7/18/2019 13:40	9	10	9	31.54	4.8	3.8	23.5
7/18/2019 13:40							
7/18/2019 13:50	9	10	9	31.36	4.9	3.9	24.4
7/18/2019 14:00	9	10	9	30.99	4.8	3.8	24.6
7/18/2019 14:10	9	10	9	30.69	4.7	3.9	24.8
7/18/2019 14:20							
7/18/2019 14:20	9	10	9	30.57	4.9	3.8	24.8
7/18/2019 14:30	9	10	9	30.9	4.9	3.9	24.6
7/18/2019 14:30							
7/18/2019 14:40	9	10	9	31.12	4.8	3.9	24.3
7/18/2019 14:40							
7/18/2019 14:50	9	10	9	31.3	4.8	3.8	24.4
7/18/2019 14:50							
7/18/2019 15:00							
7/18/2019 15:00	9	10	9	30.93	4.8	3.9	24.6
7/18/2019 15:10							
7/18/2019 15:10	0	0	0	30.57	1.4	1.2	0.8
7/18/2019 15:20							
7/18/2019 15:20	0	6	0	30.66	0.9	0.9	0
7/18/2019 15:30							
7/18/2019 15:30	0	0	0	30.69	0.9	0.9	-0.1
7/18/2019 15:40	0	0	0	30.69	0.9	0.8	-0.1
7/18/2019 15:40							
7/18/2019 15:50							
7/18/2019 15:50	0	0	0	30.69	0.9	0.8	0
7/18/2019 16:00							
7/18/2019 16:00	0	0	0	30.69	0.9	0.8	0.1
7/18/2019 16:10	0	0	0	30.66	0.9	0.8	0.1
7/18/2019 16:10							
7/18/2019 16:20							
7/18/2019 16:20	0	0	0	30.66	0.9	0.8	0.1
7/18/2019 16:30	0	0	0	30.66	0.9	0.8	0.1
7/18/2019 16:30							
7/18/2019 16:40							
7/18/2019 16:40	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 16:50	0	0	0	30.66	0.9	0.8	0.1

7/18/2019 16:50							
7/18/2019 17:00							
7/18/2019 17:00	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 17:10	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 17:10							
7/18/2019 17:20	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 17:20							
7/18/2019 17:30	0	0	0	30.63	0.9	0.9	0.1
7/18/2019 17:30							
7/18/2019 17:40	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 17:40							
7/18/2019 17:50	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 17:50							
7/18/2019 18:00	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 18:00							
7/18/2019 18:10	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 18:10							
7/18/2019 18:20							
7/18/2019 18:20	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 18:30							
7/18/2019 18:30	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 18:40	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 18:40							
7/18/2019 18:50	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 18:50							
7/18/2019 19:00	0	0	0	30.63	0.9	0.8	0.1
7/18/2019 19:00							
7/18/2019 19:10	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 19:10							
7/18/2019 19:20							
7/18/2019 19:20	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 19:30							
7/18/2019 19:30	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 19:40							
7/18/2019 19:40	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 19:50	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 19:50							
7/18/2019 20:00	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 20:00							
7/18/2019 20:10	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 20:10							
7/18/2019 20:20							
7/18/2019 20:20	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 20:30							
7/18/2019 20:30	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 20:40	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 20:40							

7/18/2019 20:50	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 20:50							
7/18/2019 21:00	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 21:00							
7/18/2019 21:10							
7/18/2019 21:10	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 21:20	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 21:20							
7/18/2019 21:30							
7/18/2019 21:30	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 21:40	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 21:40							
7/18/2019 21:50	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 21:50							
7/18/2019 22:00							
7/18/2019 22:00	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 22:10							
7/18/2019 22:10	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 22:20	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 22:20							
7/18/2019 22:30							
7/18/2019 22:30	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 22:40							
7/18/2019 22:40	0	0	0	30.57	0.9	0.8	0.1
7/18/2019 22:50							
7/18/2019 22:50	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 23:00	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 23:00							
7/18/2019 23:10							
7/18/2019 23:10	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 23:20	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 23:20							
7/18/2019 23:30							
7/18/2019 23:30	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 23:40	0	0	0	30.54	0.9	0.8	0.1
7/18/2019 23:40							
7/18/2019 23:50							
7/18/2019 23:50	0	0	0	30.54	0.9	0.8	0.1
7/19/2019 0:00	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 0:00							
7/19/2019 0:10							
7/19/2019 0:10	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 0:20	0	0	0	30.54	0.9	0.8	0.1
7/19/2019 0:20							
7/19/2019 0:30							
7/19/2019 0:30	0	0	0	30.54	0.9	0.8	0.1
7/19/2019 0:40							

7/19/2019 0:40	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 0:50	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 0:50							
7/19/2019 1:00	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 1:00							
7/19/2019 1:10	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 1:10							
7/19/2019 1:20	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 1:20							
7/19/2019 1:30							
7/19/2019 1:30	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 1:40							
7/19/2019 1:40	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 1:50	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 1:50							
7/19/2019 2:00	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 2:00							
7/19/2019 2:10							
7/19/2019 2:10	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 2:20							
7/19/2019 2:20	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 2:30	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 2:30							
7/19/2019 2:40							
7/19/2019 2:40	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 2:50	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 2:50							
7/19/2019 3:00	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 3:00							
7/19/2019 3:10	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 3:10							
7/19/2019 3:20	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 3:20							
7/19/2019 3:30							
7/19/2019 3:30	0	0	0	30.51	0.9	0.8	0.1
7/19/2019 3:40	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 3:40							
7/19/2019 3:50	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 3:50							
7/19/2019 4:00							
7/19/2019 4:00	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 4:10							
7/19/2019 4:10	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 4:20							
7/19/2019 4:20	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 4:30	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 4:30							

7/19/2019 4:40	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 4:40							
7/19/2019 4:50	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 4:50							
7/19/2019 5:00							
7/19/2019 5:00	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 5:10							
7/19/2019 5:10	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 5:20							
7/19/2019 5:20	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 5:30	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 5:30							
7/19/2019 5:40	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 5:40							
7/19/2019 5:50	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 5:50							
7/19/2019 6:00							
7/19/2019 6:00	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 6:10							
7/19/2019 6:10	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 6:20	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 6:20							
7/19/2019 6:30							
7/19/2019 6:30	0	0	0	30.47	0.9	0.8	0.1
7/19/2019 6:40	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 6:40							
7/19/2019 6:50	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 7:00	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 7:10	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 7:20	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 7:30	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 7:40	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 7:50	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 8:00	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 8:10	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 8:20	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 8:30	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 8:40	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 8:50	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 9:00	0	0	0	30.44	0.9	0.8	0.1
7/19/2019 9:10	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 9:20	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 9:30	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 9:40	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 9:50	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 10:00	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 10:10	0	0	0	30.41	0.9	0.8	0.1

7/19/2019 10:20	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 10:30	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 10:40	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 10:50	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 11:00	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 11:10	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 11:20	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 11:30	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 11:40	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 11:50	0	0	0	30.41	0.9	0.8	0.1
7/19/2019 12:00	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 12:10	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 12:20	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 12:30	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 12:40	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 12:50	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 13:00	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 13:10	0	0	0	30.38	0.9	0.8	0.1
7/19/2019 13:20	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 13:30	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 13:40	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 13:50	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 14:00	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 14:10	0	0	0	30.35	0.9	0.8	0.1
7/19/2019 14:20	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 14:30	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 14:40	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 14:50	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 15:00	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 15:10	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 15:20	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 15:30	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 15:40	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 15:50	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 16:00	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 16:10	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 16:20	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 16:30	0	0	0	30.32	0.9	0.8	0.1
7/19/2019 16:40	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 16:50	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 17:00	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 17:10	0	0	0	30.29	0.9	0.8	0.1
7/19/2019 17:20	0	0	0	30.26	0.9	0.8	0.1
7/19/2019 17:30	0	0	0	30.26	0.9	0.8	0.1
7/19/2019 17:40	0	0	0	30.2	0.9	0.8	0.1
7/19/2019 17:50	0	0	0	30.2	0.9	0.8	0.1
7/19/2019 18:00	0	0	0	30.17	0.9	0.8	0.1

7/19/2019 18:10	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 18:20	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 18:30	0	0	0	30.2	0.9	0.8	0.1
7/19/2019 18:40	0	0	0	30.2	0.9	0.8	0.1
7/19/2019 18:50	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 19:00	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 19:10	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 19:20	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 19:30	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 19:40	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 19:50	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 20:00	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 20:10	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 20:20	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 20:30	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 20:40	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 20:50	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 21:00	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 21:10	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 21:20	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 21:30	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 21:40	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 21:50	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 22:00	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 22:10	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 22:20	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 22:30	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 22:40	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 22:50	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 23:00	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 23:10	0	0	0	30.14	0.9	0.8	0.1
7/19/2019 23:20	0	0	0	30.17	0.9	0.8	0.1
7/19/2019 23:30	0	0	0	30.11	0.9	0.8	0.1
7/19/2019 23:40	0	0	0	30.11	0.9	0.8	0.1
7/19/2019 23:50	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 0:00	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 0:10	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 0:20	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 0:30	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 0:40	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 0:50	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 1:00	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 1:10	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 1:20	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 1:30	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 1:40	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 1:50	0	0	0	30.11	0.9	0.8	0.1

7/20/2019 2:00	0	0	0	30.14	0.9	0.8	0.1
7/20/2019 2:10	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 2:20	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 2:30	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 2:40	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 2:50	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 3:00	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 3:10	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 3:20	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 3:30	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 3:40	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 3:50	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 4:00	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 4:10	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 4:20	0	0	0	30.11	0.9	0.8	0.1
7/20/2019 4:30	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 4:40	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 4:50	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 5:00	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 5:10	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 5:20	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 5:30	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 5:40	0	0	0	30.08	0.8	0.8	0.1
7/20/2019 5:50	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 6:00	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 6:10	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 6:20	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 6:30	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 6:40	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 6:50	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 7:00	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 7:10	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 7:20	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 7:30	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 7:40	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 7:50	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 8:00	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 8:10	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 8:20	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 8:30	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 8:40	0	0	0	30.08	0.8	0.8	0.1
7/20/2019 8:50	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 9:00	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 9:10	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 9:20	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 9:30	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 9:40	0	0	0	30.05	0.9	0.8	0.1

7/20/2019 9:50	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 10:00	0	0	0	30.08	0.9	0.8	0.1
7/20/2019 10:10	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 10:20	0	0	0	30.05	0.9	0.8	0.1
7/20/2019 10:30	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 10:40	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 10:50	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 11:00	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 11:10	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 11:20	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 11:30	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 11:40	0	0	0	30.02	0.9	0.8	0.1
7/20/2019 11:50	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 12:00	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 12:10	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 12:20	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 12:30	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 12:40	0	0	0	29.96	0.9	0.8	0.1
7/20/2019 12:50	0	0	0	29.99	0.9	0.8	0.1
7/20/2019 13:00	0	0	0	29.96	0.9	0.8	0.1
7/20/2019 13:10	0	0	0	29.96	0.9	0.8	0.1
7/20/2019 13:20	0	0	0	29.96	0.9	0.8	0.1
7/20/2019 13:30	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 13:40	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 13:50	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 14:00	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 14:10	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 14:20	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 14:30	0	0	0	29.89	0.9	0.8	0.1
7/20/2019 14:40	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 14:50	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 15:00	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 15:10	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 15:20	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 15:30	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 15:40	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 15:50	0	0	0	29.86	0.9	0.8	0.1
7/20/2019 16:00	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 16:10	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 16:20	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 16:30	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 16:40	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 16:50	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 17:00	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 17:10	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 17:20	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 17:30	0	0	0	29.83	0.9	0.8	0.1

7/20/2019 17:40	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 17:50	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 18:00	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 18:10	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 18:20	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 18:30	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 18:40	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 18:50	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 19:00	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 19:10	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 19:20	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 19:30	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 19:40	0	0	0	29.83	0.9	0.8	0.1
7/20/2019 19:50	0	0	0	29.8	0.9	0.8	0.1
7/20/2019 20:00	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 20:10	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 20:20	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 20:30	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 20:40	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 20:50	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 21:00	0	0	0	29.71	0.9	0.8	0.1
7/20/2019 21:10	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 21:20	0	0	0	29.68	0.8	0.8	0.1
7/20/2019 21:30	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 21:40	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 21:50	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 22:00	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 22:10	0	0	0	29.65	0.9	0.8	0.1
7/20/2019 22:20	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 22:30	0	0	0	29.68	0.8	0.8	0.1
7/20/2019 22:40	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 22:50	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 23:00	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 23:10	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 23:20	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 23:30	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 23:40	0	0	0	29.68	0.9	0.8	0.1
7/20/2019 23:50	0	0	0	29.68	0.9	0.8	0.1
7/21/2019 0:00	0	0	0	29.68	0.9	0.8	0.1
7/21/2019 0:10	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 0:20	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 0:30	0	0	0	29.68	0.9	0.8	0.1
7/21/2019 0:40	0	0	0	29.65	0.8	0.8	0.1
7/21/2019 0:50	0	0	0	29.68	0.9	0.8	0.1
7/21/2019 1:00	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 1:10	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 1:20	0	0	0	29.65	0.9	0.8	0.1

7/21/2019 1:30	0	0	0	29.68	0.9	0.8	0.1
7/21/2019 1:40	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 1:50	0	0	0	29.68	0.9	0.8	0.1
7/21/2019 2:00	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 2:10	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 2:20	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 2:30	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 2:40	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 2:50	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 3:00	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 3:10	0	0	0	29.65	0.8	0.8	0.1
7/21/2019 3:20	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 3:30	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 3:40	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 3:50	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 4:00	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 4:10	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 4:20	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 4:30	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 4:40	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 4:50	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 5:00	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 5:10	0	0	0	29.65	0.9	0.8	0.1
7/21/2019 5:20	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 5:30	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 5:40	0	0	0	29.65	0.9	0.7	0.1
7/21/2019 5:50	0	0	0	29.59	0.9	0.7	0.1
7/21/2019 6:00	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 6:10	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 6:20	0	0	0	29.62	0.9	0.7	0.1
7/21/2019 6:30	0	0	0	29.62	0.9	0.8	0.1
7/21/2019 6:40	0	0	0	29.62	0.9	0.7	0.1
7/21/2019 6:50	0	0	0	29.59	0.9	0.7	0.1
7/21/2019 7:00	0	0	0	29.59	0.9	0.8	0.1
7/21/2019 7:10	0	0	0	29.59	0.9	0.8	0.1
7/21/2019 7:20	0	0	0	29.59	0.9	0.8	0.1
7/21/2019 7:30	0	0	0	29.59	0.8	0.7	0.1
7/21/2019 7:40	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 7:50	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 8:00	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 8:10	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 8:20	0	0	0	29.59	0.8	0.7	0.1
7/21/2019 8:30	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 8:40	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 8:50	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 9:00	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 9:10	0	0	0	29.59	0.8	0.8	0.1

7/21/2019 9:20	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 9:30	0	0	0	29.59	0.8	0.8	0.1
7/21/2019 9:40	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 9:50	0	0	0	29.56	0.9	0.8	0.1
7/21/2019 10:00	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 10:10	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 10:20	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 10:30	0	0	0	29.53	0.8	0.8	0.1
7/21/2019 10:40	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 10:50	0	0	0	29.53	0.8	0.8	0.1
7/21/2019 11:00	0	0	0	29.56	0.9	0.7	0.1
7/21/2019 11:10	0	0	0	29.53	0.8	0.8	0.1
7/21/2019 11:20	0	0	0	29.56	0.8	0.8	0.1
7/21/2019 11:30	0	0	0	29.56	0.9	0.7	0.1
7/21/2019 11:40	0	0	0	29.56	0.9	0.7	0.1
7/21/2019 11:50	0	0	0	29.56	0.9	0.8	0.1
7/21/2019 12:00	0	0	0	29.53	0.9	0.8	0.1
7/21/2019 12:10	0	0	0	29.53	0.9	0.7	0.1
7/21/2019 12:20	0	0	0	29.53	0.9	0.8	0.1
7/21/2019 12:30	0	0	0	29.53	0.9	0.8	0.1
7/21/2019 12:40	0	0	0	29.53	0.9	0.7	0.1
7/21/2019 12:50	0	0	0	29.5	0.9	0.8	0.1
7/21/2019 13:00	0	0	0	29.5	0.9	0.8	0.1
7/21/2019 13:10	0	0	0	29.5	0.9	0.8	0.1
7/21/2019 13:20	0	0	0	29.5	0.9	0.7	0.1
7/21/2019 13:30	0	0	0	29.5	0.9	0.7	0.1
7/21/2019 13:40	0	0	0	29.47	0.9	0.7	0.1
7/21/2019 13:50	0	0	0	29.47	0.9	0.8	0.1
7/21/2019 14:00	0	0	0	29.47	0.9	0.8	0.1
7/21/2019 14:10	0	0	0	29.47	0.9	0.8	0.1
7/21/2019 14:20	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 14:30	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 14:40	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 14:50	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 15:00	0	0	0	29.44	0.8	0.8	0.1
7/21/2019 15:10	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 15:20	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 15:30	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 15:40	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 15:50	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 16:00	0	0	0	29.44	0.8	0.8	0.1
7/21/2019 16:10	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 16:20	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 16:30	0	0	0	29.44	0.9	0.8	0.1
7/21/2019 16:40	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 16:50	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 17:00	0	0	0	29.41	0.9	0.8	0.1

7/21/2019 17:10	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 17:20	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 17:30	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 17:40	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 17:50	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 18:00	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 18:10	0	0	0	29.41	0.9	0.8	0.1
7/21/2019 18:20	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 18:30	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 18:40	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 18:50	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 19:00	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 19:10	0	0	0	29.38	0.9	0.8	0.1
7/21/2019 19:20	0	0	0	29.35	0.9	0.8	0.1
7/21/2019 19:30	0	0	0	29.35	0.9	0.8	0.1
7/21/2019 19:40	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 19:50	0	0	0	29.35	0.9	0.8	0.1
7/21/2019 20:00	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 20:10	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 20:20	0	0	0	29.35	0.8	0.8	0.1
7/21/2019 20:30	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 20:40	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 20:50	0	0	0	29.35	0.9	0.8	0.1
7/21/2019 21:00	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 21:10	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 21:20	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 21:30	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 21:40	0	0	0	29.35	0.9	0.8	0.1
7/21/2019 21:50	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 22:00	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 22:10	0	0	0	29.25	0.9	0.8	0.1
7/21/2019 22:20	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 22:30	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 22:40	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 22:50	0	0	0	29.32	0.8	0.8	0.1
7/21/2019 23:00	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 23:10	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 23:20	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 23:30	0	0	0	29.32	0.9	0.8	0.1
7/21/2019 23:40	0	0	0	29.25	0.9	0.8	0.1
7/21/2019 23:50	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 0:00	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 0:10	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 0:20	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 0:30	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 0:40	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 0:50	0	0	0	29.32	0.9	0.8	0.1

7/22/2019 1:00	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 1:10	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 1:20	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 1:30	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 1:40	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 1:50	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 2:00	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 2:10	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 2:20	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 2:30	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 2:40	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 2:50	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 3:00	0	0	0	29.32	0.9	0.8	0.1
7/22/2019 3:10	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 3:20	0	0	0	29.25	0.8	0.8	0.1
7/22/2019 3:30	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 3:40	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 3:50	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 4:00	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 4:10	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 4:20	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 4:30	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 4:40	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 4:50	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 5:00	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 5:10	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 5:20	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 5:30	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 5:40	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 5:50	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 6:00	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 6:10	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 6:20	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 6:30	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 6:40	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 6:50	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 7:00	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 7:10	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 7:20	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 7:30	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 7:40	0	0	0	29.25	0.9	0.8	0.1
7/22/2019 7:50	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 8:00	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 8:10	0	0	0	29.25	0.9	0.7	0.1
7/22/2019 8:20	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 8:30	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 8:40	0	0	0	29.22	0.9	0.7	0.1

7/22/2019 8:50	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 9:00	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 9:10	0	0	0	29.25	0.9	0.7	0.1
7/22/2019 9:20	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 9:30	0	0	0	29.19	0.9	0.8	0.1
7/22/2019 9:40	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 9:50	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 10:00	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 10:10	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 10:20	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 10:30	0	0	0	29.19	0.8	0.7	0.1
7/22/2019 10:40	0	0	0	29.19	0.8	0.7	0.1
7/22/2019 10:50	0	0	0	29.22	0.8	0.8	0.1
7/22/2019 11:00	0	0	0	29.22	0.8	0.7	0.1
7/22/2019 11:10	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 11:20	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 11:30	0	0	0	29.19	0.9	0.7	0.1
7/22/2019 11:40	0	0	0	29.19	0.8	0.7	0.1
7/22/2019 11:50	0	0	0	29.16	0.9	0.8	0.1
7/22/2019 12:00	0	0	0	29.19	0.8	0.7	0.1
7/22/2019 12:10	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 12:20	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 12:30	0	0	0	29.16	0.8	0.7	0.1
7/22/2019 12:40	0	0	0	29.16	0.8	0.7	0.1
7/22/2019 12:50	0	0	0	29.13	0.8	0.8	0.1
7/22/2019 13:00	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 13:10	0	0	0	29.13	0.8	0.8	0.1
7/22/2019 13:20	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 13:30	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 13:40	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 13:50	0	0	0	29.13	0.8	0.7	0.1
7/22/2019 14:00	0	0	0	29.16	0.9	0.8	0.1
7/22/2019 14:10	0	0	0	29.13	0.8	0.8	0.1
7/22/2019 14:20	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 14:30	0	0	0	29.13	0.8	0.7	0.1
7/22/2019 14:40	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 14:50	0	0	0	29.16	0.8	0.7	0.1
7/22/2019 15:00	0	0	0	29.16	0.8	0.7	0.1
7/22/2019 15:10	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 15:20	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 15:30	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 15:40	0	0	0	29.16	0.9	0.7	0.1
7/22/2019 15:50	0	0	0	29.16	0.9	0.8	0.1
7/22/2019 16:00	0	0	0	29.13	0.8	0.8	0.1
7/22/2019 16:10	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 16:20	0	0	0	29.13	0.8	0.8	0.1
7/22/2019 16:30	0	0	0	29.16	0.9	0.8	0.1

7/22/2019 16:40	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 16:50	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 17:00	0	0	0	29.16	0.8	0.7	0.1
7/22/2019 17:10	0	0	0	29.16	0.8	0.7	0.1
7/22/2019 17:20	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 17:30	0	0	0	29.16	0.9	0.8	0.1
7/22/2019 17:40	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 17:50	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 18:00	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 18:10	0	0	0	29.16	0.9	0.8	0.1
7/22/2019 18:20	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 18:30	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 18:40	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 18:50	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 19:00	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 19:10	0	0	0	29.16	0.9	0.8	0.1
7/22/2019 19:20	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 19:30	0	0	0	29.19	0.9	0.8	0.1
7/22/2019 19:40	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 19:50	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 20:00	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 20:10	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 20:20	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 20:30	0	0	0	29.22	0.8	0.8	0.1
7/22/2019 20:40	0	0	0	29.19	0.9	0.8	0.1
7/22/2019 20:50	0	0	0	29.16	0.8	0.8	0.1
7/22/2019 21:00	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 21:10	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 21:20	0	0	0	29.19	0.9	0.8	0.1
7/22/2019 21:30	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 21:40	0	0	0	29.22	0.8	0.8	0.1
7/22/2019 21:50	0	0	0	29.22	0.8	0.8	0.1
7/22/2019 22:00	0	0	0	29.19	0.9	0.7	0.1
7/22/2019 22:10	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 22:20	0	0	0	29.22	0.8	0.8	0.1
7/22/2019 22:30	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 22:40	0	0	0	29.22	0.8	0.8	0.1
7/22/2019 22:50	0	0	0	29.19	0.9	0.8	0.1
7/22/2019 23:00	0	0	0	29.19	0.8	0.8	0.1
7/22/2019 23:10	0	0	0	29.19	0.9	0.8	0.1
7/22/2019 23:20	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 23:30	0	0	0	29.22	0.9	0.7	0.1
7/22/2019 23:40	0	0	0	29.22	0.9	0.8	0.1
7/22/2019 23:50	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 0:00	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 0:10	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 0:20	0	0	0	29.22	0.8	0.8	0.1

7/23/2019 0:30	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 0:40	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 0:50	0	0	0	29.22	0.9	0.8	0.1
7/23/2019 1:00	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 1:10	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 1:20	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 1:30	0	0	0	29.22	0.9	0.8	0.1
7/23/2019 1:40	0	0	0	29.22	0.9	0.8	0.1
7/23/2019 1:50	0	0	0	29.22	0.8	0.8	0.1
7/23/2019 2:00	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 2:10	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 2:20	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 2:30	0	0	0	29.22	0.9	0.8	0.1
7/23/2019 2:40	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 2:50	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 3:00	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 3:10	0	0	0	29.22	0.9	0.8	0.1
7/23/2019 3:20	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 3:30	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 3:40	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 3:50	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 4:00	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 4:10	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 4:20	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 4:30	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 4:40	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 4:50	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 5:00	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 5:10	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 5:20	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 5:30	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 5:40	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 5:50	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 6:00	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 6:10	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 6:20	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 6:30	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 6:40	0	0	0	29.32	0.8	0.8	0.1
7/23/2019 6:50	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 7:00	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 7:10	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 7:20	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 7:30	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 7:40	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 7:50	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 8:00	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 8:10	0	0	0	29.32	0.9	0.8	0.1

7/23/2019 8:20	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 8:30	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 8:40	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 8:50	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 9:00	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 9:10	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 9:20	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 9:30	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 9:40	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 9:50	0	0	0	29.32	0.8	0.8	0.1
7/23/2019 10:00	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 10:10	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 10:20	0	0	0	29.32	0.8	0.8	0.1
7/23/2019 10:30	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 10:40	0	0	0	29.32	0.8	0.8	0.1
7/23/2019 10:50	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 11:00	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 11:10	0	0	0	29.32	0.8	0.8	0.1
7/23/2019 11:20	0	0	0	29.25	0.9	0.8	0.1
7/23/2019 11:30	0	0	0	29.25	0.8	0.8	0.1
7/23/2019 11:40	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 11:50	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 12:00	0	0	0	29.32	0.8	0.8	0.1
7/23/2019 12:10	0	0	0	29.32	0.9	0.8	0.1
7/23/2019 12:20	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 12:30	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 12:40	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 12:50	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 13:00	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 13:10	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 13:20	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 13:30	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 13:40	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 13:50	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 14:00	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 14:10	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 14:20	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 14:30	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 14:40	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 14:50	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 15:00	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 15:10	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 15:20	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 15:30	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 15:40	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 15:50	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 16:00	0	0	0	30.69	0.9	0.8	0.1

7/23/2019 16:10	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 16:20	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 16:30	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 16:40	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 16:50	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 17:00	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 17:10	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 17:20	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 17:30	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 17:40	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 17:50	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 18:00	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 18:10	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 18:20	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 18:30	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 18:40	0	0	0	30.69	0.9	0.8	0.1
7/23/2019 18:50	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 19:00	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 19:10	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 19:20	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 19:30	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 19:40	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 19:50	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 20:00	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 20:10	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 20:20	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 20:30	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 20:40	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 20:50	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 21:00	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 21:10	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 21:20	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 21:30	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 21:40	0	0	0	30.72	0.9	0.8	0.1
7/23/2019 21:50	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 22:00	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 22:10	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 22:20	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 22:30	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 22:40	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 22:50	0	0	0	30.75	0.9	0.8	0.1
7/23/2019 23:00	0	0	0	30.78	0.9	0.8	0.1
7/23/2019 23:10	0	0	0	30.78	0.9	0.8	0.1
7/23/2019 23:20	0	0	0	30.78	0.9	0.8	0.1
7/23/2019 23:30	0	0	0	30.78	0.9	0.8	0.1
7/23/2019 23:40	0	0	0	30.78	0.9	0.8	0.1
7/23/2019 23:50	0	0	0	30.78	0.9	0.8	0.1

7/24/2019 0:00	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 0:10	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 0:20	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 0:30	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 0:40	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 0:50	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 1:00	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 1:10	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 1:20	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 1:30	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 1:40	0	0	0	30.78	0.9	0.8	0.1
7/24/2019 1:50	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 2:00	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 2:10	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 2:20	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 2:30	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 2:40	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 2:50	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 3:00	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 3:10	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 3:20	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 3:30	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 3:40	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 3:50	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 4:00	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 4:10	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 4:20	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 4:30	0	0	0	30.81	0.9	0.8	0.1
7/24/2019 4:40	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 4:50	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 5:00	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 5:10	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 5:20	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 5:30	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 5:40	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 5:50	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 6:00	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 6:10	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 6:20	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 6:30	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 6:40	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 6:50	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 7:00	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 7:10	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 7:20	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 7:30	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 7:40	0	0	0	30.87	0.9	0.8	0.1

7/24/2019 7:50	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 8:00	0	0	0	30.84	0.9	0.8	0.1
7/24/2019 8:10	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 8:20	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 8:30	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 8:40	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 8:50	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 9:00	0	0	0	30.87	0.9	0.8	0.1
7/24/2019 9:10	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 9:20	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 9:30	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 9:40	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 9:50	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 10:00	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 10:10	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 10:20	0	0	0	30.9	0.9	0.8	0.1
7/24/2019 10:30	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 10:40	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 10:50	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 11:00	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 11:10	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 11:20	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 11:30	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 11:40	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 11:50	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 12:00	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 12:10	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 12:20	0	0	0	30.93	0.9	0.8	0.1
7/24/2019 12:30	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 12:40	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 12:50	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 13:00	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 13:10	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 13:20	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 13:30	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 13:40	0	0	0	30.96	0.9	0.8	0.1
7/24/2019 13:50	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 14:00	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 14:10	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 14:20	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 14:30	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 14:40	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 14:50	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 15:00	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 15:10	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 15:20	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 15:30	0	0	0	30.99	0.9	0.8	0.1

7/24/2019 15:40	0	0	0	30.99	0.9	0.8	0.1
7/24/2019 15:50	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 16:00	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 16:10	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 16:20	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 16:30	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 16:40	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 16:50	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 17:00	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 17:10	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 17:20	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 17:30	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 17:40	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 17:50	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 18:00	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 18:10	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 18:20	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 18:30	0	0	0	31.02	0.9	0.7	0.1
7/24/2019 18:40	0	0	0	31.02	0.9	0.8	0.1
7/24/2019 18:50	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 19:00	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 19:10	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 19:20	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 19:30	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 19:40	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 19:50	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 20:00	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 20:10	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 20:20	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 20:30	0	0	0	31.05	0.9	0.8	0.1
7/24/2019 20:40	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 20:50	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 21:00	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 21:10	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 21:20	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 21:30	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 21:40	0	0	0	31.09	0.9	0.8	0.1
7/24/2019 21:50	0	0	0	31.12	0.9	0.8	0.1
7/24/2019 22:00	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 22:10	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 22:20	0	0	0	31.12	0.9	0.8	0.1
7/24/2019 22:30	0	0	0	31.12	0.9	0.8	0.1
7/24/2019 22:40	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 22:50	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 23:00	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 23:10	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 23:20	0	0	0	31.15	0.9	0.8	0.1

7/24/2019 23:30	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 23:40	0	0	0	31.15	0.9	0.8	0.1
7/24/2019 23:50	0	0	0	31.15	0.9	0.8	0.1
7/25/2019 0:00	0	0	0	31.15	0.9	0.8	0.1
7/25/2019 0:10	0	0	0	31.15	0.9	0.8	0.1
7/25/2019 0:20	0	0	0	31.15	0.9	0.8	0.1
7/25/2019 0:30	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 0:40	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 0:50	0	0	0	31.15	0.9	0.8	0.1
7/25/2019 1:00	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 1:10	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 1:20	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 1:30	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 1:40	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 1:50	0	0	0	31.18	0.9	0.8	0.1
7/25/2019 2:00	0	0	0	31.21	0.9	0.8	0.1
7/25/2019 2:10	0	0	0	31.21	0.9	0.8	0.1
7/25/2019 2:20	0	0	0	31.21	0.9	0.8	0.1
7/25/2019 2:30	0	0	0	31.21	0.9	0.8	0.1
7/25/2019 2:40	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 2:50	0	0	0	31.21	0.9	0.8	0.1
7/25/2019 3:00	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 3:10	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 3:20	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 3:30	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 3:40	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 3:50	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 4:00	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 4:10	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 4:20	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 4:30	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 4:40	0	0	0	31.27	0.9	0.8	0.1
7/25/2019 4:50	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 5:00	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 5:10	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 5:20	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 5:30	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 5:40	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 5:50	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 6:00	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 6:10	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 6:20	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 6:30	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 6:40	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 6:50	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 7:00	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 7:10	0	0	0	31.3	0.9	0.8	0.1

7/25/2019 7:20	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 7:30	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 7:40	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 7:50	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 8:00	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 8:10	0	0	0	31.36	0.9	0.7	0.1
7/25/2019 8:20	0	0	0	31.33	0.9	0.7	0.1
7/25/2019 8:30	0	0	0	31.3	0.9	0.8	0.1
7/25/2019 8:40	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 8:50	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 9:00	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 9:10	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 9:20	0	0	0	31.33	0.9	0.8	0.1
7/25/2019 9:30	0	0	0	31.7	0.9	0.8	0.1
7/25/2019 9:40	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 9:50	0	0	0	31.7	0.9	0.8	0.1
7/25/2019 10:00	0	0	0	31.7	0.9	0.8	0.1
7/25/2019 10:10	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 10:20	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 10:30	0	0	0	31.7	0.9	0.8	0.1
7/25/2019 10:40	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 10:50	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 11:00							
7/25/2019 11:00	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 11:10							
7/25/2019 11:10	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 11:20							
7/25/2019 11:20	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 11:30	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 11:30							
7/25/2019 11:40	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 11:40							
7/25/2019 11:50							
7/25/2019 11:50	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 12:00							
7/25/2019 12:00	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 12:10	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 12:10							
7/25/2019 12:20	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 12:20							
7/25/2019 12:30	0	0	0	31.73	0.9	0.8	0.1
7/25/2019 12:30							
7/25/2019 12:40							
7/25/2019 12:40	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 12:50	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:00	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:10							

7/25/2019 13:10	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:20	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:20							
7/25/2019 13:30							
7/25/2019 13:30	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:40	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:40							
7/25/2019 13:50	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 13:50							
7/25/2019 14:00	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 14:10	0	0	0	31.76	0.9	0.8	0.1
7/25/2019 14:20	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 14:30	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 14:40	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 14:50	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 15:00	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 15:10	0	0	0	31.82	0.9	0.8	0.1
7/25/2019 15:20	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 15:30	0	0	0	31.79	0.9	0.8	0.1
7/25/2019 15:40	0	0	0	31.82	0.9	0.8	0.1
7/25/2019 15:50	0	0	0	31.82	0.9	0.8	0.1
7/25/2019 16:00	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 16:10	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 16:20	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 16:30	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 16:40	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 16:50	0	0	0	31.82	0.9	0.8	0.1
7/25/2019 17:00							
7/25/2019 17:00	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 17:10	0	0	0	31.85	0.9	0.8	0.1
7/25/2019 17:10							
7/25/2019 17:20							
7/25/2019 17:20	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 17:30							
7/25/2019 17:30	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 17:40							
7/25/2019 17:40	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 17:50	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 17:50							
7/25/2019 18:00							
7/25/2019 18:00	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 18:05							
7/25/2019 18:10	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 18:10							
7/25/2019 18:20	0	0	0	31.82	0.9	0.7	0.1
7/25/2019 18:30	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 18:40	0	0	0	31.85	0.9	0.7	0.1

7/25/2019 18:50	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 19:00	0	0	0	31.85	1	0.7	0.1
7/25/2019 19:10	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 19:20	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 19:30	0	0	0	31.88	0.9	0.7	0.1
7/25/2019 19:40	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 19:50	0	0	0	31.85	0.9	0.7	0.1
7/25/2019 20:00	0	0	0	31.88	0.9	0.7	0.1
7/25/2019 20:10	0	0	0	31.88	0.9	0.7	0.1
7/25/2019 20:20	0	0	0	31.88	0.9	0.7	0.1
7/25/2019 20:30	0	0	0	31.94	0.9	0.7	0.1
7/25/2019 20:40	0	0	0	31.94	0.9	0.7	0.1
7/25/2019 20:50	0	0	0	31.94	0.9	0.7	0.1
7/25/2019 21:00	0	0	0	31.97	1	0.7	0.1
7/25/2019 21:10	0	0	0	31.94	1	0.7	0.1
7/25/2019 21:20	0	0	0	31.94	1	0.7	0.1
7/25/2019 21:30	0	0	0	31.97	0.9	0.7	0.1
7/25/2019 21:40	0	0	0	31.97	0.9	0.7	0.1
7/25/2019 21:50	0	0	0	31.97	0.9	0.7	0.1
7/25/2019 22:00	0	0	0	32	0.9	0.7	0.1
7/25/2019 22:10	0	0	0	31.97	1	0.7	0.1
7/25/2019 22:20	0	0	0	32	0.9	0.7	0.1
7/25/2019 22:30	0	0	0	31.97	0.9	0.8	0.1
7/25/2019 22:40	0	0	0	32	0.9	0.7	0.1
7/25/2019 22:50	0	0	0	31.97	0.9	0.7	0.1
7/25/2019 23:00	0	0	0	32	0.9	0.7	0.1
7/25/2019 23:10	0	0	0	32	0.9	0.7	0.1
7/25/2019 23:20	0	0	0	32	0.9	0.7	0.1
7/25/2019 23:30	0	0	0	32	0.9	0.7	0.1
7/25/2019 23:40	0	0	0	32	0.9	0.7	0.1
7/25/2019 23:50	0	0	0	32	0.9	0.7	0.1
7/26/2019 0:00	0	0	0	32	0.9	0.7	0.1
7/26/2019 0:10	0	0	0	32	0.9	0.7	0.1
7/26/2019 0:20	0	0	0	32	0.9	0.7	0.1
7/26/2019 0:30	0	0	0	32.03	0.9	0.7	0.1
7/26/2019 0:40	0	0	0	32.03	0.9	0.7	0.1
7/26/2019 0:50	0	0	0	32.03	0.9	0.7	0.1
7/26/2019 1:00	0	0	0	32.03	0.9	0.7	0.1
7/26/2019 1:10	0	0	0	32.06	0.9	0.7	0.1
7/26/2019 1:20	0	0	0	32.03	0.9	0.8	0.1
7/26/2019 1:30	0	0	0	32.06	0.9	0.8	0.1
7/26/2019 1:40	0	0	0	32.06	0.9	0.8	0.1
7/26/2019 1:50	0	0	0	32.06	0.9	0.7	0.1
7/26/2019 2:00	0	0	0	32.06	0.9	0.7	0.1
7/26/2019 2:10	0	0	0	32.09	0.9	0.8	0.1
7/26/2019 2:20	0	0	0	32.09	0.9	0.8	0.1
7/26/2019 2:30	0	0	0	32.09	0.9	0.7	0.1

7/26/2019 2:40	0	0	0	32.09	0.9	0.7	0.1
7/26/2019 2:50	0	0	0	32.09	1	0.8	0.1
7/26/2019 3:00	0	0	0	32.09	0.9	0.7	0.1
7/26/2019 3:10	0	0	0	32.09	0.9	0.8	0.1
7/26/2019 3:20	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 3:30	0	0	0	32.09	1	0.8	0.1
7/26/2019 3:40	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 3:50	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 4:00	0	0	0	32.12	0.9	0.7	0.1
7/26/2019 4:10	0	0	0	32.12	0.9	0.7	0.1
7/26/2019 4:20	0	0	0	32.12	0.9	0.7	0.1
7/26/2019 4:30	0	0	0	32.09	0.9	0.8	0.1
7/26/2019 4:40	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 4:50	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 5:00	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 5:10	0	0	0	32.12	1	0.8	0.1
7/26/2019 5:20	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 5:30	0	0	0	32.12	0.9	0.7	0.1
7/26/2019 5:40	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 5:50	0	0	0	32.12	0.9	0.8	0.1
7/26/2019 6:00	0	0	0	32.15	0.9	0.8	0.1
7/26/2019 6:10	0	0	0	32.15	1	0.8	0.1
7/26/2019 6:20	0	0	0	32.15	0.9	0.8	0.1
7/26/2019 6:30	0	0	0	32.15	1	0.8	0.1
7/26/2019 6:40	0	0	0	32.15	1	0.8	0.1
7/26/2019 6:50	0	0	0	32.15	1	0.8	0.1
7/26/2019 7:00	0	0	0	32.15	0.9	0.8	0.1
7/26/2019 7:10	0	0	0	32.18	0.9	0.8	0.1
7/26/2019 7:20	0	0	0	32.15	0.9	0.8	0.1
7/26/2019 7:30	0	0	0	32.15	0.9	0.8	0.1
7/26/2019 7:40	0	0	0	32.18	0.9	0.8	0.1
7/26/2019 7:50	0	0	0	32.18	0.9	0.8	0.1
7/26/2019 7:55							
7/26/2019 8:00	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 8:00							
7/26/2019 8:05							
7/26/2019 8:10							
7/26/2019 8:10	0	0	0	32.18	0.9	0.8	0.1
7/26/2019 8:15							
7/26/2019 8:20	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 8:20							
7/26/2019 8:25							
7/26/2019 8:30	0	0	0	32.18	0.9	0.8	0.1
7/26/2019 8:30							
7/26/2019 8:35							
7/26/2019 8:40	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 8:40							

7/26/2019 8:45							
7/26/2019 8:50	0	0	0	32.18	0.9	0.8	0.1
7/26/2019 8:50							
7/26/2019 8:55							
7/26/2019 9:00	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 9:00							
7/26/2019 9:10	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 9:20	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 9:30	0	0	0	32.25	0.9	0.8	0.1
7/26/2019 9:40	0	0	0	32.25	0.9	0.8	0.1
7/26/2019 9:50	0	0	0	32.25	0.9	0.8	0.1
7/26/2019 10:00	0	0	0	32.21	0.9	0.8	0.1
7/26/2019 10:10	0	0	0	32.25	0.9	0.8	0.1
7/26/2019 10:20	0	0	0	32.25	0.9	0.8	0.1
7/26/2019 10:30	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 10:40	0	0	0	32.25	0.9	0.8	0.1
7/26/2019 10:50	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 11:00	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 11:10	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 11:20	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 11:30	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 11:40	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 11:50	0	0	0	32.28	0.9	0.7	0.1
7/26/2019 12:00	0	0	0	32.31	0.9	0.7	0.1
7/26/2019 12:10	0	0	0	32.28	0.9	0.8	0.1
7/26/2019 12:20	0	0	0	32.31	1	0.7	0.1
7/26/2019 12:30	0	0	0	32.31	0.9	0.8	0.1
7/26/2019 12:40	0	0	0	32.31	0.9	0.8	0.1
7/26/2019 12:50	0	0	0	32.34	1	0.7	0.1
7/26/2019 13:00	0	0	0	32.31	0.9	0.7	0.1
7/26/2019 13:10	0	0	0	32.34	1	0.8	0.1
7/26/2019 13:20	0	0	0	32.31	0.9	0.8	0.1
7/26/2019 13:30	0	0	0	32.34	0.9	0.8	0.1
7/26/2019 13:40	0	0	0	32.31	0.9	0.8	0.1
7/26/2019 13:50	0	0	0	32.31	0.9	0.7	0.1
7/26/2019 14:00	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 14:10	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 14:20	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 14:30	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 14:40	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 14:50	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 15:00	0	0	0	32.34	0.9	0.7	0.1
7/26/2019 15:10	0	0	0	32.37	0.9	0.7	0.1
7/26/2019 15:20	0	0	0	32.37	0.9	0.7	0.1
7/26/2019 15:30	0	0	0	32.37	0.9	0.7	0.1
7/26/2019 15:40	0	0	0	32.37	0.9	0.7	0.1
7/26/2019 15:50	0	0	0	32.4	0.9	0.7	0.1

7/26/2019 16:00	0	0	0	32.4	0.9	0.7	0.1
7/26/2019 16:10	0	0	0	32.4	0.9	0.8	0.1
7/26/2019 16:20	0	0	0	32.4	0.9	0.7	0.1
7/26/2019 16:30	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 16:40	0	0	0	32.4	0.9	0.7	0.1
7/26/2019 16:50	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 17:00	0	0	0	32.43	1	0.7	0.1
7/26/2019 17:10	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 17:20	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 17:30	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 17:40	0	0	0	32.43	1	0.7	0.1
7/26/2019 17:50	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 18:00	0	0	0	32.43	1	0.7	0.1
7/26/2019 18:10	0	0	0	32.43	1	0.7	0.1
7/26/2019 18:20	0	0	0	32.43	1	0.7	0.1
7/26/2019 18:30	0	0	0	32.46	1	0.7	0.1
7/26/2019 18:40	0	0	0	32.46	1	0.7	0.1
7/26/2019 18:50	0	0	0	32.46	1	0.7	0.1
7/26/2019 19:00	0	0	0	32.4	1	0.7	0.1
7/26/2019 19:10	0	0	0	32.37	1	0.7	0.1
7/26/2019 19:20	0	0	0	32.4	1	0.7	0.1
7/26/2019 19:30	0	0	0	32.37	1	0.7	0.1
7/26/2019 19:40	0	0	0	32.4	1	0.7	0.1
7/26/2019 19:50	0	0	0	32.4	1	0.7	0.1
7/26/2019 20:00	0	0	0	32.4	1	0.7	0.1
7/26/2019 20:10	0	0	0	32.4	1	0.7	0.1
7/26/2019 20:20	0	0	0	32.43	1	0.7	0.1
7/26/2019 20:30	0	0	0	32.4	1	0.7	0.1
7/26/2019 20:40	0	0	0	32.43	1	0.7	0.1
7/26/2019 20:50	0	0	0	32.43	1	0.7	0.1
7/26/2019 21:00	0	0	0	32.43	1	0.7	0.1
7/26/2019 21:10	0	0	0	32.43	1	0.7	0.1
7/26/2019 21:20	0	0	0	32.43	1	0.7	0.1
7/26/2019 21:30	0	0	0	32.43	1	0.7	0.1
7/26/2019 21:40	0	0	0	32.43	1	0.7	0.1
7/26/2019 21:50	0	0	0	32.43	1	0.7	0.1
7/26/2019 22:00	0	0	0	32.43	1	0.7	0.1
7/26/2019 22:10	0	0	0	32.43	1	0.7	0.1
7/26/2019 22:20	0	0	0	32.43	1	0.7	0.1
7/26/2019 22:30	0	0	0	32.46	1	0.7	0.1
7/26/2019 22:40	0	0	0	32.43	1	0.7	0.1
7/26/2019 22:50	0	0	0	32.46	0.9	0.7	0.1
7/26/2019 23:00	0	0	0	32.43	0.9	0.7	0.1
7/26/2019 23:10	0	0	0	32.46	1	0.7	0.1
7/26/2019 23:20	0	0	0	32.46	1	0.7	0.1
7/26/2019 23:30	0	0	0	32.46	0.9	0.7	0.1
7/26/2019 23:40	0	0	0	32.46	0.9	0.7	0.1

7/26/2019 23:50	0	0	0	32.49	0.9	0.7	0.1
7/27/2019 0:00	0	0	0	32.46	0.9	0.7	0.1
7/27/2019 0:10	0	0	0	32.46	1	0.7	0.1
7/27/2019 0:20	0	0	0	32.46	1	0.8	0.1
7/27/2019 0:30	0	0	0	32.49	0.9	0.7	0.1
7/27/2019 0:40	0	0	0	32.49	1	0.7	0.1
7/27/2019 0:50	0	0	0	32.49	0.9	0.7	0.1
7/27/2019 1:00	0	0	0	32.49	1	0.7	0.1
7/27/2019 1:10	0	0	0	32.49	0.9	0.7	0.1
7/27/2019 1:20	0	0	0	32.49	0.9	0.8	0.1
7/27/2019 1:30	0	0	0	32.52	0.9	0.7	0.1
7/27/2019 1:40	0	0	0	32.52	1	0.7	0.1
7/27/2019 1:50	0	0	0	32.52	0.9	0.7	0.1
7/27/2019 2:00	0	0	0	32.52	1	0.7	0.1
7/27/2019 2:10	0	0	0	32.58	1	0.8	0.1
7/27/2019 2:20	0	0	0	32.58	0.9	0.8	0.1
7/27/2019 2:30	0	0	0	32.58	1	0.7	0.1
7/27/2019 2:40	0	0	0	32.58	1	0.7	0.1
7/27/2019 2:50	0	0	0	32.52	0.9	0.7	0.1
7/27/2019 3:00	0	0	0	32.58	0.9	0.7	0.1
7/27/2019 3:10	0	0	0	32.58	0.9	0.7	0.1
7/27/2019 3:20	0	0	0	32.58	1	0.7	0.1
7/27/2019 3:30	0	0	0	32.58	1	0.7	0.1
7/27/2019 3:40	0	0	0	32.58	1	0.8	0.1
7/27/2019 3:50	0	0	0	32.58	1	0.7	0.1
7/27/2019 4:00	0	0	0	32.58	1	0.7	0.1
7/27/2019 4:10	0	0	0	32.58	0.9	0.7	0.1
7/27/2019 4:20	0	0	0	32.58	1	0.7	0.1
7/27/2019 4:30	0	0	0	32.61	1	0.8	0.1
7/27/2019 4:40	0	0	0	32.58	1	0.8	0.1
7/27/2019 4:50	0	0	0	32.58	1	0.8	0.1
7/27/2019 5:00	0	0	0	32.58	1	0.8	0.1
7/27/2019 5:10	0	0	0	32.61	1	0.8	0.1
7/27/2019 5:20	0	0	0	32.61	1	0.7	0.1
7/27/2019 5:30	0	0	0	32.61	1	0.7	0.1
7/27/2019 5:40	0	0	0	32.61	1	0.8	0.1
7/27/2019 5:50	0	0	0	32.61	1	0.8	0.1
7/27/2019 6:00	0	0	0	32.61	1	0.8	0.1
7/27/2019 6:10	0	0	0	32.61	1	0.7	0.1
7/27/2019 6:20	0	0	0	32.64	0.9	0.8	0.1
7/27/2019 6:30	0	0	0	32.64	1	0.8	0.1
7/27/2019 6:40	0	0	0	32.61	1	0.8	0.1
7/27/2019 6:50	0	0	0	32.64	1	0.7	0.1
7/27/2019 7:00	0	0	0	32.64	0.9	0.7	0.1
7/27/2019 7:10	0	0	0	32.64	1	0.8	0.1
7/27/2019 7:20	0	0	0	32.64	1	0.7	0.1
7/27/2019 7:30	0	0	0	32.64	1	0.8	0.1

7/27/2019 7:40	0	0	0	32.64	1	0.7	0.1
7/27/2019 7:50	0	0	0	32.64	1	0.8	0.1
7/27/2019 8:00	0	0	0	32.67	1	0.8	0.1
7/27/2019 8:10	0	0	0	32.67	1	0.8	0.1
7/27/2019 8:20	0	0	0	32.67	0.9	0.7	0.1
7/27/2019 8:30	0	0	0	32.67	1	0.8	0.1
7/27/2019 8:40	0	0	0	32.67	1	0.8	0.1
7/27/2019 8:50	0	0	0	32.7	1	0.8	0.1
7/27/2019 9:00	0	0	0	32.67	0.9	0.8	0.1
7/27/2019 9:10	0	0	0	32.7	1	0.8	0.1
7/27/2019 9:20	0	0	0	32.7	1	0.8	0.1
7/27/2019 9:30	0	0	0	32.7	1	0.8	0.1
7/27/2019 9:40	0	0	0	32.7	1	0.8	0.1
7/27/2019 9:50	0	0	0	32.7	1	0.8	0.1
7/27/2019 10:00	0	0	0	32.7	1	0.8	0.1
7/27/2019 10:10	0	0	0	32.7	1	0.8	0.1
7/27/2019 10:20	0	0	0	32.73	1	0.8	0.1
7/27/2019 10:30	0	0	0	32.73	1	0.8	0.1
7/27/2019 10:40	0	0	0	32.7	1	0.8	0.1
7/27/2019 10:50	0	0	0	32.7	0.9	0.8	0.1
7/27/2019 11:00	0	0	0	32.73	1	0.8	0.1
7/27/2019 11:10	0	0	0	32.73	1	0.8	0.1
7/27/2019 11:20	0	0	0	32.73	1	0.8	0.1
7/27/2019 11:30	0	0	0	32.73	0.9	0.8	0.1
7/27/2019 11:40	0	0	0	32.73	1	0.8	0.1
7/27/2019 11:50	0	0	0	32.73	1	0.7	0.1
7/27/2019 12:00	0	0	0	32.73	1	0.8	0.1
7/27/2019 12:10	0	0	0	32.73	1	0.8	0.1
7/27/2019 12:20	0	0	0	32.76	1	0.8	0.1
7/27/2019 12:30	0	0	0	32.76	1	0.8	0.1
7/27/2019 12:40	0	0	0	32.76	1	0.8	0.1
7/27/2019 12:50	0	0	0	32.76	1	0.8	0.1
7/27/2019 13:00	0	0	0	32.76	1	0.8	0.1
7/27/2019 13:10	0	0	0	32.76	1	0.8	0.1
7/27/2019 13:20	0	0	0	32.76	1	0.8	0.1
7/27/2019 13:30	0	0	0	32.76	1	0.8	0.1
7/27/2019 13:40	0	0	0	32.76	1	0.8	0.1
7/27/2019 13:50	0	0	0	32.76	1	0.8	0.1
7/27/2019 14:00	0	0	0	32.79	1	0.8	0.1
7/27/2019 14:10	0	0	0	32.79	1	0.8	0.1
7/27/2019 14:20	0	0	0	32.79	1	0.7	0.1
7/27/2019 14:30	0	0	0	32.79	1	0.8	0.1
7/27/2019 14:40	0	0	0	32.79	1	0.8	0.1
7/27/2019 14:50	0	0	0	32.79	1	0.8	0.1
7/27/2019 15:00	0	0	0	32.79	1	0.8	0.1
7/27/2019 15:10	0	0	0	32.79	1	0.8	0.1
7/27/2019 15:20	0	0	0	32.79	1	0.7	0.1

7/27/2019 15:30	0	0	0	32.83	1	0.8	0.1
7/27/2019 15:40	0	0	0	32.83	1	0.7	0.1
7/27/2019 15:50	0	0	0	32.83	0.9	0.7	0.1
7/27/2019 16:00	0	0	0	32.83	1	0.8	0.1
7/27/2019 16:10	0	0	0	32.83	1	0.8	0.1
7/27/2019 16:20	0	0	0	32.83	1	0.7	0.1
7/27/2019 16:30	0	0	0	32.83	1	0.7	0.1
7/27/2019 16:40	0	0	0	32.86	1	0.7	0.1
7/27/2019 16:50	0	0	0	32.83	1	0.8	0.1
7/27/2019 17:00	0	0	0	32.86	1	0.7	0.1
7/27/2019 17:10	0	0	0	32.86	1	0.7	0.1
7/27/2019 17:20	0	0	0	32.86	1	0.7	0.1
7/27/2019 17:30	0	0	0	32.83	1	0.7	0.1
7/27/2019 17:40	0	0	0	32.83	1	0.7	0.1
7/27/2019 17:50	0	0	0	32.86	1	0.7	0.1
7/27/2019 18:00	0	0	0	32.86	1	0.7	0.1
7/27/2019 18:10	0	0	0	32.86	1	0.7	0.1
7/27/2019 18:20	0	0	0	32.86	1	0.8	0.1
7/27/2019 18:30	0	0	0	32.86	1	0.7	0.1
7/27/2019 18:40	0	0	0	32.86	1	0.7	0.1
7/27/2019 18:50	0	0	0	32.86	1	0.7	0.1
7/27/2019 19:00	0	0	0	32.86	1	0.7	0.1
7/27/2019 19:10	0	0	0	32.86	1	0.7	0.1
7/27/2019 19:20	0	0	0	32.86	1	0.7	0.1
7/27/2019 19:30	0	0	0	32.89	1	0.7	0.1
7/27/2019 19:40	0	0	0	32.89	1	0.7	0.1
7/27/2019 19:50	0	0	0	32.86	1	0.7	0.1
7/27/2019 20:00	0	0	0	32.86	1	0.7	0.1
7/27/2019 20:10	0	0	0	32.86	1	0.7	0.1
7/27/2019 20:20	0	0	0	32.86	1	0.7	0.1
7/27/2019 20:30	0	0	0	32.86	1	0.8	0.1
7/27/2019 20:40	0	0	0	32.89	1	0.7	0.1
7/27/2019 20:50	0	0	0	32.86	1	0.7	0.1
7/27/2019 21:00	0	0	0	32.86	1	0.7	0.1
7/27/2019 21:10	0	0	0	32.86	1	0.7	0.1
7/27/2019 21:20	0	0	0	32.89	1	0.7	0.1
7/27/2019 21:30	0	0	0	32.89	1	0.7	0.1
7/27/2019 21:40	0	0	0	32.89	1	0.7	0.1
7/27/2019 21:50	0	0	0	32.89	1	0.7	0.1
7/27/2019 22:00	0	0	0	32.89	1	0.7	0.1
7/27/2019 22:10	0	0	0	32.89	1	0.7	0.1
7/27/2019 22:20	0	0	0	32.89	1	0.7	0.1
7/27/2019 22:30	0	0	0	32.89	1	0.7	0.1
7/27/2019 22:40	0	0	0	32.89	1	0.7	0.1
7/27/2019 22:50	0	0	0	32.89	1	0.7	0.1
7/27/2019 23:00	0	0	0	32.92	1	0.7	0.1
7/27/2019 23:10	0	0	0	32.89	1	0.7	0.1

7/27/2019 23:20	0	0	0	32.92	1	0.7	0.1
7/27/2019 23:30	0	0	0	32.92	1	0.7	0.1
7/27/2019 23:40	0	0	0	32.89	1	0.7	0.1
7/27/2019 23:50	0	0	0	32.89	1	0.7	0.1
7/28/2019 0:00	0	0	0	32.92	1	0.7	0.1
7/28/2019 0:10	0	0	0	32.92	1	0.7	0.1
7/28/2019 0:20	0	0	0	32.92	1	0.7	0.1
7/28/2019 0:30	0	0	0	32.92	1	0.7	0.1
7/28/2019 0:40	0	0	0	32.92	1	0.7	0.1
7/28/2019 0:50	0	0	0	32.92	1	0.8	0.1
7/28/2019 1:00	0	0	0	32.92	1	0.7	0.1
7/28/2019 1:10	0	0	0	32.92	1	0.7	0.1
7/28/2019 1:20	0	0	0	32.92	1	0.7	0.1
7/28/2019 1:30	0	0	0	32.92	1	0.7	0.1
7/28/2019 1:40	0	0	0	32.92	1	0.7	0.1
7/28/2019 1:50	0	0	0	32.92	1	0.7	0.1
7/28/2019 2:00	0	0	0	32.95	1	0.7	0.1
7/28/2019 2:10	0	0	0	32.92	1	0.7	0.1
7/28/2019 2:20	0	0	0	32.92	1	0.7	0.1
7/28/2019 2:30	0	0	0	32.95	1	0.7	0.1
7/28/2019 2:40	0	0	0	32.95	1	0.7	0.1
7/28/2019 2:50	0	0	0	32.95	1	0.8	0.1
7/28/2019 3:00	0	0	0	32.95	1	0.7	0.1
7/28/2019 3:10	0	0	0	32.95	1	0.7	0.1
7/28/2019 3:20	0	0	0	32.95	1	0.7	0.1
7/28/2019 3:30	0	0	0	32.95	1	0.8	0.1
7/28/2019 3:40	0	0	0	32.95	1	0.7	0.1
7/28/2019 3:50	0	0	0	32.95	1	0.8	0.1
7/28/2019 4:00	0	0	0	32.95	1	0.7	0.1
7/28/2019 4:10	0	0	0	32.95	1	0.7	0.1
7/28/2019 4:20	0	0	0	32.95	1	0.7	0.1
7/28/2019 4:30	0	0	0	32.98	1	0.7	0.1
7/28/2019 4:40	0	0	0	32.95	1	0.7	0.1
7/28/2019 4:50	0	0	0	32.95	1	0.7	0.1
7/28/2019 5:00	0	0	0	32.95	1	0.8	0.1
7/28/2019 5:10	0	0	0	32.95	1	0.7	0.1
7/28/2019 5:20	0	0	0	32.95	1	0.8	0.1
7/28/2019 5:30	0	0	0	32.95	1	0.8	0.1
7/28/2019 5:40	0	0	0	32.98	1	0.8	0.1
7/28/2019 5:50	0	0	0	32.98	1	0.7	0.1
7/28/2019 6:00	0	0	0	32.98	1	0.8	0.1
7/28/2019 6:10	0	0	0	32.98	1	0.8	0.1
7/28/2019 6:20	0	0	0	32.95	1	0.7	0.1
7/28/2019 6:30	0	0	0	32.98	1	0.8	0.1
7/28/2019 6:40	0	0	0	32.98	1	0.8	0.1
7/28/2019 6:50	0	0	0	32.98	1	0.7	0.1
7/28/2019 7:00	0	0	0	32.98	1	0.8	0.1

7/28/2019 7:10	0	0	0	32.98	1	0.8	0.1
7/28/2019 7:20	0	0	0	32.98	1	0.8	0.1
7/28/2019 7:30	0	0	0	32.98	1	0.7	0.1
7/28/2019 7:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 7:50	0	0	0	32.95	1	0.7	0.1
7/28/2019 8:00	0	0	0	32.98	1	0.8	0.1
7/28/2019 8:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 8:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 8:30	0	0	0	32.98	1	0.7	0.1
7/28/2019 8:40	0	0	0	32.98	1	0.7	0.1
7/28/2019 8:50	0	0	0	32.98	1	0.8	0.1
7/28/2019 9:00	0	0	0	32.98	1	0.7	0.1
7/28/2019 9:10	0	0	0	32.98	1	0.8	0.1
7/28/2019 9:20	0	0	0	32.98	1	0.7	0.1
7/28/2019 9:30	0	0	0	32.98	1	0.8	0.1
7/28/2019 9:40	0	0	0	32.98	1	0.8	0.1
7/28/2019 9:50	0	0	0	32.98	1	0.8	0.1
7/28/2019 10:00	0	0	0	32.98	1	0.8	0.1
7/28/2019 10:10	0	0	0	32.98	1	0.7	0.1
7/28/2019 10:20	0	0	0	32.98	1	0.7	0.1
7/28/2019 10:30	0	0	0	33.01	1	0.8	0.1
7/28/2019 10:40	0	0	0	32.98	1	0.8	0.1
7/28/2019 10:50	0	0	0	33.01	1	0.7	0.1
7/28/2019 11:00	0	0	0	32.98	1	0.7	0.1
7/28/2019 11:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 11:20	0	0	0	33.01	1	0.7	0.1
7/28/2019 11:30	0	0	0	33.01	1	0.7	0.1
7/28/2019 11:40	0	0	0	33.01	1	0.8	0.1
7/28/2019 11:50	0	0	0	33.01	1	0.8	0.1
7/28/2019 12:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 12:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 12:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 12:30	0	0	0	33.01	1	0.8	0.1
7/28/2019 12:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 12:50	0	0	0	33.01	1	0.8	0.1
7/28/2019 13:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 13:10	0	0	0	33.01	1	0.7	0.1
7/28/2019 13:20	0	0	0	33.01	1	0.7	0.1
7/28/2019 13:30	0	0	0	33.04	1	0.8	0.1
7/28/2019 13:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 13:50	0	0	0	33.01	1	0.7	0.1
7/28/2019 14:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 14:10	0	0	0	33.01	1	0.7	0.1
7/28/2019 14:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 14:30	0	0	0	33.01	1	0.7	0.1
7/28/2019 14:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 14:50	0	0	0	33.01	1	0.7	0.1

7/28/2019 15:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 15:10	0	0	0	33.01	1	0.7	0.1
7/28/2019 15:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 15:30	0	0	0	33.01	1	0.7	0.1
7/28/2019 15:40	0	0	0	33.04	1	0.7	0.1
7/28/2019 15:50	0	0	0	33.01	1	0.7	0.1
7/28/2019 16:00	0	0	0	33.04	1	0.7	0.1
7/28/2019 16:10	0	0	0	33.01	1	0.7	0.1
7/28/2019 16:20	0	0	0	33.01	1	0.7	0.1
7/28/2019 16:30	0	0	0	33.01	1	0.7	0.1
7/28/2019 16:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 16:50	0	0	0	33.01	1	0.7	0.1
7/28/2019 17:00	0	0	0	33.01	1	0.7	0.1
7/28/2019 17:10	0	0	0	33.01	1	0.7	0.1
7/28/2019 17:20	0	0	0	33.04	1	0.7	0.1
7/28/2019 17:30	0	0	0	33.01	1	0.7	0.1
7/28/2019 17:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 17:50	0	0	0	33.01	1	0.7	0.1
7/28/2019 18:00	0	0	0	33.04	1	0.7	0.1
7/28/2019 18:10	0	0	0	33.01	1	0.7	0.1
7/28/2019 18:20	0	0	0	33.01	1	0.7	0.1
7/28/2019 18:30	0	0	0	33.01	1	0.7	0.1
7/28/2019 18:40	0	0	0	33.01	1	0.8	0.1
7/28/2019 18:50	0	0	0	33.01	1	0.7	0.1
7/28/2019 19:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 19:10	0	0	0	33.04	1	0.8	0.1
7/28/2019 19:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 19:30	0	0	0	33.04	1	0.8	0.1
7/28/2019 19:40	0	0	0	33.01	1	0.7	0.1
7/28/2019 19:50	0	0	0	33.01	1	0.8	0.1
7/28/2019 20:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 20:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 20:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 20:30	0	0	0	33.01	1	0.8	0.1
7/28/2019 20:40	0	0	0	33.01	1	0.8	0.1
7/28/2019 20:50	0	0	0	33.01	1	0.8	0.1
7/28/2019 21:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 21:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 21:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 21:30	0	0	0	33.01	1	0.8	0.1
7/28/2019 21:40	0	0	0	33.01	1	0.8	0.1
7/28/2019 21:50	0	0	0	33.01	1	0.8	0.1
7/28/2019 22:00	0	0	0	33.01	1	0.7	0.1
7/28/2019 22:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 22:20	0	0	0	33.01	1	0.8	0.1
7/28/2019 22:30	0	0	0	33.01	1	0.8	0.1
7/28/2019 22:40	0	0	0	33.01	1	0.8	0.1

7/28/2019 22:50	0	0	0	33.01	1	0.8	0.1
7/28/2019 23:00	0	0	0	33.01	1	0.8	0.1
7/28/2019 23:10	0	0	0	33.01	1	0.8	0.1
7/28/2019 23:20	0	0	0	32.98	1	0.8	0.1
7/28/2019 23:30	0	0	0	33.01	1	0.8	0.1
7/28/2019 23:40	0	0	0	32.98	1	0.8	0.1
7/28/2019 23:50	0	0	0	33.01	1	0.8	0.1
7/29/2019 0:00	0	0	0	33.01	1	0.8	0.1
7/29/2019 0:10	0	0	0	32.98	1	0.7	0.1
7/29/2019 0:20	0	0	0	33.01	1	0.8	0.1
7/29/2019 0:30	0	0	0	33.01	1	0.8	0.1
7/29/2019 0:40	0	0	0	33.01	1	0.8	0.1
7/29/2019 0:50	0	0	0	33.01	1	0.8	0.1
7/29/2019 1:00	0	0	0	33.01	1	0.8	0.1
7/29/2019 1:10	0	0	0	33.01	1	0.8	0.1
7/29/2019 1:20	0	0	0	32.98	1	0.7	0.1
7/29/2019 1:30	0	0	0	33.01	1	0.8	0.1
7/29/2019 1:40	0	0	0	33.01	1	0.8	0.1
7/29/2019 1:50	0	0	0	33.01	1	0.8	0.1
7/29/2019 2:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 2:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 2:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 2:30	0	0	0	33.01	1	0.7	0.1
7/29/2019 2:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 2:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 3:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 3:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 3:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 3:30	0	2	0	33.01	1	0.7	0.1
7/29/2019 3:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 3:50	0	0	0	32.98	1	0.7	0.1
7/29/2019 4:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 4:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 4:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 4:30	0	0	0	32.98	1	0.7	0.1
7/29/2019 4:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 4:50	0	0	0	32.98	1	0.7	0.1
7/29/2019 5:00	0	0	0	32.98	1	0.7	0.1
7/29/2019 5:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 5:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 5:30	0	0	0	33.01	1	0.7	0.1
7/29/2019 5:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 5:50	0	0	0	32.98	1	0.7	0.1
7/29/2019 6:00	0	0	0	32.98	1	0.7	0.1
7/29/2019 6:10	0	0	0	32.98	1	0.7	0.1
7/29/2019 6:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 6:30	0	0	0	33.01	1	0.7	0.1

7/29/2019 6:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 6:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 7:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 7:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 7:20	0	0	0	32.98	1	0.7	0.1
7/29/2019 7:30	0	0	0	32.98	1	0.8	0.1
7/29/2019 7:40	0	0	0	32.98	1	0.7	0.1
7/29/2019 7:50	0	0	0	32.98	1	0.8	0.1
7/29/2019 8:00	0	0	0	32.98	1	0.7	0.1
7/29/2019 8:10	0	0	0	32.98	1	0.8	0.1
7/29/2019 8:20	0	0	0	32.98	1	0.8	0.1
7/29/2019 8:30	0	0	0	33.01	1	0.7	0.1
7/29/2019 8:40	0	0	0	32.98	1	0.7	0.1
7/29/2019 8:50	0	0	0	32.98	1	0.8	0.1
7/29/2019 9:00	0	0	0	32.98	1	0.7	0.1
7/29/2019 9:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 9:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 9:30	0	0	0	32.98	1	0.7	0.1
7/29/2019 9:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 9:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 10:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 10:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 10:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 10:30	0	0	0	33.01	1	0.7	0.1
7/29/2019 10:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 10:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 11:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 11:10	0	0	0	32.98	1	0.7	0.1
7/29/2019 11:20	0	0	0	33.01	1	0.8	0.1
7/29/2019 11:30	0	0	0	33.01	1	0.8	0.1
7/29/2019 11:40	0	0	0	33.01	1	0.8	0.1
7/29/2019 11:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 12:00	0	0	0	33.01	1	0.8	0.1
7/29/2019 12:10	0	0	0	32.98	1	0.7	0.1
7/29/2019 12:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 12:30	0	0	0	33.01	1	0.7	0.1
7/29/2019 12:40	0	0	0	33.01	1	0.7	0.1
7/29/2019 12:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 13:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 13:10	0	0	0	33.01	1	0.7	0.1
7/29/2019 13:20	0	0	0	33.01	1	0.7	0.1
7/29/2019 13:30	0	0	0	33.01	1	0.7	0.1
7/29/2019 13:40	0	0	0	32.98	1	0.7	0.1
7/29/2019 13:50	0	0	0	33.01	1	0.7	0.1
7/29/2019 14:00	0	0	0	33.01	1	0.7	0.1
7/29/2019 14:10	0	0	0	32.98	1	0.7	0.1
7/29/2019 14:20	0	0	0	33.01	1	0.8	0.1

7/29/2019 14:30	0	0	0	32.98	1	0.8	0.1
7/29/2019 14:40	0	0	0	33.01	1	0.8	0.1
7/29/2019 14:50	0	0	0	33.01	1	0.8	0.1
7/29/2019 15:00	0	0	0	32.98	1	0.8	0.1
7/29/2019 15:10	0	0	0	33.01	1	0.8	0.1
7/29/2019 15:20	0	0	0	33.01	1	0.8	0.1
7/29/2019 15:30	0	0	0	33.01	1	0.8	0.1
7/29/2019 15:40	0	0	0	33.01	1	0.8	0.1
7/29/2019 15:50	0	0	0	33.01	1	0.8	0.1
7/29/2019 16:00	0	0	0	33.01	1	0.8	0.1
7/29/2019 16:10	0	0	0	32.98	1	0.8	0.1
7/29/2019 16:20	0	0	0	32.98	1	0.8	0.1
7/29/2019 16:30	0	0	0	32.98	1	0.8	0.1
7/29/2019 16:40	0	0	0	32.98	1	0.8	0.1
7/29/2019 16:50	0	0	0	32.98	1	0.8	0.1
7/29/2019 17:00	0	0	0	32.98	1	0.8	0.1
7/29/2019 17:10	0	0	0	32.98	1	0.8	0.1
7/29/2019 17:20	0	0	0	32.98	1	0.7	0.1
7/29/2019 17:30	0	0	0	32.98	1	0.8	0.1
7/29/2019 17:40	0	0	0	32.98	1	0.8	0.1
7/29/2019 17:50	0	0	0	32.98	1	0.8	0.1
7/29/2019 18:00	0	0	0	32.98	1	0.7	0.1
7/29/2019 18:10	0	0	0	32.95	1	0.8	0.1
7/29/2019 18:20	0	0	0	32.95	1	0.8	0.1
7/29/2019 18:30	0	0	0	32.95	1	0.8	0.1
7/29/2019 18:40	0	0	0	32.98	1	0.7	0.1
7/29/2019 18:50	0	0	0	32.95	1	0.8	0.1
7/29/2019 19:00	0	0	0	32.95	1	0.7	0.1
7/29/2019 19:10	0	0	0	32.95	1	0.7	0.1
7/29/2019 19:20	0	0	0	32.95	1	0.7	0.1
7/29/2019 19:30	0	0	0	32.95	1	0.7	0.1
7/29/2019 19:40	0	0	0	32.95	1	0.7	0.1
7/29/2019 19:50	0	0	0	32.95	1	0.7	0.1
7/29/2019 20:00	0	0	0	32.95	1	0.7	0.1
7/29/2019 20:10	0	0	0	32.95	1	0.8	0.1
7/29/2019 20:20	0	0	0	32.95	1	0.7	0.1
7/29/2019 20:30	0	0	0	32.95	1	0.7	0.1
7/29/2019 20:40	0	0	0	32.95	1	0.7	0.1
7/29/2019 20:50	0	0	0	32.95	1	0.7	0.1
7/29/2019 21:00	0	0	0	32.95	1	0.7	0.1
7/29/2019 21:10	0	0	0	32.92	1	0.8	0.1
7/29/2019 21:20	0	0	0	32.95	1	0.7	0.1
7/29/2019 21:30	0	0	0	32.92	1	0.7	0.1
7/29/2019 21:40	0	0	0	32.92	1	0.7	0.1
7/29/2019 21:50	0	0	0	32.92	1	0.7	0.1
7/29/2019 22:00	0	0	0	32.92	1	0.7	0.1
7/29/2019 22:10	0	0	0	32.92	1	0.7	0.1

7/29/2019 22:20	0	0	0	32.92	1	0.7	0.1
7/29/2019 22:30	0	0	0	32.92	1	0.8	0.1
7/29/2019 22:40	0	0	0	32.92	1	0.7	0.1
7/29/2019 22:50	0	0	0	32.92	1	0.7	0.1
7/29/2019 23:00	0	0	0	32.89	1	0.7	0.1
7/29/2019 23:10	0	0	0	32.89	1	0.7	0.1
7/29/2019 23:20	0	0	0	32.92	1	0.8	0.1
7/29/2019 23:30	0	0	0	32.92	1	0.7	0.1
7/29/2019 23:40	0	0	0	32.92	1	0.8	0.1
7/29/2019 23:50	0	0	0	32.89	1	0.7	0.1
7/30/2019 0:00	0	0	0	32.92	1	0.7	0.1
7/30/2019 0:10	0	0	0	32.89	1	0.8	0.1
7/30/2019 0:20	0	0	0	32.89	1	0.8	0.1
7/30/2019 0:30	0	0	0	32.89	1	0.8	0.1
7/30/2019 0:40	0	0	0	32.89	1	0.8	0.1
7/30/2019 0:50	0	0	0	32.89	1	0.8	0.1
7/30/2019 1:00	0	0	0	32.89	1	0.7	0.1
7/30/2019 1:10	0	0	0	32.89	1	0.8	0.1
7/30/2019 1:20	0	0	0	32.89	1	0.8	0.1
7/30/2019 1:30	0	0	0	32.89	1	0.8	0.1
7/30/2019 1:40	0	0	0	32.89	1	0.8	0.1
7/30/2019 1:50	0	0	0	32.89	1	0.8	0.1
7/30/2019 2:00	0	0	0	32.89	1	0.8	0.1
7/30/2019 2:10	0	0	0	32.89	1	0.8	0.1
7/30/2019 2:20	0	0	0	32.89	1	0.8	0.1
7/30/2019 2:30	0	0	0	32.86	1	0.8	0.1
7/30/2019 2:40	0	0	0	32.89	1	0.8	0.1
7/30/2019 2:50	0	0	0	32.89	1	0.8	0.1
7/30/2019 3:00	0	0	0	32.89	1	0.8	0.1
7/30/2019 3:10	0	0	0	32.89	1	0.8	0.1
7/30/2019 3:20	0	0	0	32.89	1	0.8	0.1
7/30/2019 3:30	0	0	0	32.89	1	0.8	0.1
7/30/2019 3:40	0	0	0	32.86	1	0.8	0.1
7/30/2019 3:50	0	0	0	32.86	1	0.8	0.1
7/30/2019 4:00	0	0	0	32.89	1	0.8	0.1
7/30/2019 4:10	0	0	0	32.89	1	0.8	0.1
7/30/2019 4:20	0	0	0	32.89	1	0.8	0.1
7/30/2019 4:30	0	0	0	32.86	1	0.8	0.1
7/30/2019 4:40	0	0	0	32.86	1	0.8	0.1
7/30/2019 4:50	0	0	0	32.89	1	0.7	0.1
7/30/2019 5:00	0	0	0	32.89	1	0.7	0.1
7/30/2019 5:10	0	0	0	32.86	1	0.7	0.1
7/30/2019 5:20	0	0	0	32.86	1	0.7	0.1
7/30/2019 5:30	0	0	0	32.86	1	0.7	0.1
7/30/2019 5:40	0	0	0	32.86	1	0.7	0.1
7/30/2019 5:50	0	0	0	32.89	1	0.7	0.1
7/30/2019 6:00	0	0	0	32.86	1	0.7	0.1

7/30/2019 6:10	0	0	0	32.86	1	0.7	0.1
7/30/2019 6:20	0	0	0	32.89	1	0.7	0.1
7/30/2019 6:30	0	0	0	32.86	1	0.7	0.1
7/30/2019 6:40	0	0	0	32.86	1	0.7	0.1
7/30/2019 6:50	0	0	0	32.83	1	0.7	0.1
7/30/2019 7:00	0	0	0	32.86	1	0.7	0.1
7/30/2019 7:10	0	0	0	32.86	1	0.7	0.1
7/30/2019 7:20	0	0	0	32.86	1	0.7	0.1
7/30/2019 7:30	0	0	0	32.86	1	0.7	0.1
7/30/2019 7:40	0	0	0	32.86	1	0.7	0.1
7/30/2019 7:50	0	0	0	32.86	1	0.7	0.1
7/30/2019 8:00	0	0	0	32.86	1	0.7	0.1
7/30/2019 8:10	0	0	0	32.86	1	0.8	0.1
7/30/2019 8:20	0	0	0	32.86	1	0.8	0.1
7/30/2019 8:30	0	0	0	32.86	1	0.7	0.1
7/30/2019 8:40	0	0	0	32.86	1	0.7	0.1
7/30/2019 8:50	0	0	0	32.86	1	0.7	0.1
7/30/2019 9:00	0	0	0	32.86	1	0.7	0.1
7/30/2019 9:10	0	0	0	32.83	1	0.7	0.1
7/30/2019 9:20	0	0	0	32.83	1	0.7	0.1
7/30/2019 9:30	0	0	0	32.83	1	0.7	0.1
7/30/2019 9:40	0	0	0	32.83	1	0.7	0.1
7/30/2019 9:50	0	0	0	32.86	1	0.7	0.1
7/30/2019 10:00	0	0	0	32.86	1	0.7	0.1
7/30/2019 10:10	0	0	0	32.83	1	0.7	0.1
7/30/2019 10:20	0	0	0	32.86	1	0.7	0.1
7/30/2019 10:30	0	0	0	32.83	1	0.7	0.1
7/30/2019 10:40	0	0	0	32.86	1	0.7	0.1
7/30/2019 10:50	0	0	0	32.86	1	0.7	0.1
7/30/2019 11:00	0	0	0	32.83	1	0.7	0.1
7/30/2019 11:10	0	0	0	32.83	1	0.7	0.1
7/30/2019 11:20	0	0	0	32.83	1	0.7	0.1
7/30/2019 11:30	0	0	0	32.83	1	0.7	0.1
7/30/2019 11:40	0	0	0	32.83	1	0.7	0.1
7/30/2019 11:50	0	0	0	32.83	1	0.7	0.1
7/30/2019 12:00	0	0	0	32.83	1	0.8	0.1
7/30/2019 12:10	0	0	0	32.83	1	0.7	0.1
7/30/2019 12:20	0	0	0	32.83	1	0.8	0.1
7/30/2019 12:30	0	0	0	32.83	1	0.8	0.1
7/30/2019 12:40	0	0	0	32.83	1	0.8	0.1
7/30/2019 12:50	0	0	0	32.83	1	0.8	0.1
7/30/2019 13:00	0	0	0	32.83	1	0.8	0.1
7/30/2019 13:10	0	0	0	32.83	1	0.8	0.1
7/30/2019 13:20	0	0	0	32.83	1	0.8	0.1
7/30/2019 13:30	0	0	0	32.83	1	0.8	0.1
7/30/2019 13:40	0	0	0	32.83	1	0.8	0.1
7/30/2019 13:50	0	0	0	32.83	1	0.8	0.1

7/30/2019 14:00	0	0	0	32.79	1	0.8	0.1
7/30/2019 14:10	0	0	0	32.83	1	0.8	0.1
7/30/2019 14:20	0	0	0	32.83	1	0.8	0.1
7/30/2019 14:30	0	0	0	32.83	1	0.8	0.1
7/30/2019 14:40	0	0	0	32.83	1	0.7	0.1
7/30/2019 14:50	0	0	0	32.79	1	0.8	0.1
7/30/2019 15:00	0	0	0	32.79	1	0.8	0.1
7/30/2019 15:10	0	0	0	32.79	1	0.8	0.1
7/30/2019 15:20	0	0	0	32.79	1	0.8	0.1
7/30/2019 15:30	0	0	0	32.79	1	0.8	0.1
7/30/2019 15:40	0	0	0	32.79	1	0.8	0.1
7/30/2019 15:50	0	0	0	32.79	1	0.8	0.1
7/30/2019 16:00	0	0	0	32.76	1	0.8	0.1
7/30/2019 16:10	0	0	0	32.79	1	0.7	0.1
7/30/2019 16:20	0	0	0	32.76	1	0.8	0.1
7/30/2019 16:30	0	0	0	32.76	1	0.8	0.1
7/30/2019 16:40	0	0	0	32.79	1	0.8	0.1
7/30/2019 16:50	0	0	0	32.76	1	0.8	0.1
7/30/2019 17:00	0	0	0	32.76	1	0.8	0.1
7/30/2019 17:10	0	0	0	32.76	1	0.7	0.1
7/30/2019 17:20	0	0	0	32.76	1	0.7	0.1
7/30/2019 17:30	0	0	0	32.76	1	0.8	0.1
7/30/2019 17:40	0	0	0	32.76	1	0.8	0.1
7/30/2019 17:50	0	0	0	32.76	1	0.8	0.1
7/30/2019 18:00	0	0	0	32.76	1	0.8	0.1
7/30/2019 18:10	0	0	0	32.76	1	0.7	0.1
7/30/2019 18:20	0	0	0	32.76	1	0.8	0.1
7/30/2019 18:30	0	0	0	32.73	1	0.8	0.1
7/30/2019 18:40	0	0	0	32.73	1	0.7	0.1
7/30/2019 18:50	0	0	0	32.76	1	0.7	0.1
7/30/2019 19:00	0	0	0	32.76	1	0.8	0.1
7/30/2019 19:10	0	0	0	32.76	1	0.8	0.1
7/30/2019 19:20	0	0	0	32.73	1	0.8	0.1
7/30/2019 19:30	0	0	0	32.73	1	0.8	0.1
7/30/2019 19:40	0	0	0	32.73	1	0.7	0.1
7/30/2019 19:50	0	0	0	32.73	1	0.8	0.1
7/30/2019 20:00	0	0	0	32.73	1	0.8	0.1
7/30/2019 20:10	0	0	0	32.73	1	0.7	0.1
7/30/2019 20:20	0	0	0	32.73	1	0.7	0.1
7/30/2019 20:30	0	0	0	32.73	1	0.8	0.1
7/30/2019 20:40	0	0	0	32.76	1	0.8	0.1
7/30/2019 20:50	0	0	0	32.73	1	0.8	0.1
7/30/2019 21:00	0	0	0	32.73	1	0.8	0.1
7/30/2019 21:10	0	0	0	32.73	1	0.8	0.1
7/30/2019 21:20	0	0	0	32.73	1	0.8	0.1
7/30/2019 21:30	0	0	0	32.73	1	0.7	0.1
7/30/2019 21:40	0	0	0	32.7	1	0.7	0.1

7/30/2019 21:50	0	0	0	32.73	1	0.8	0.1
7/30/2019 22:00	0	0	0	32.7	1	0.7	0.1
7/30/2019 22:10	0	0	0	32.7	1	0.7	0.1
7/30/2019 22:20	0	0	0	32.7	1	0.7	0.1
7/30/2019 22:30	0	0	0	32.7	1	0.8	0.1
7/30/2019 22:40	0	0	0	32.73	1	0.8	0.1
7/30/2019 22:50	0	0	0	32.73	1	0.7	0.1
7/30/2019 23:00	0	0	0	32.7	1	0.7	0.1
7/30/2019 23:10	0	0	0	32.7	1	0.8	0.1
7/30/2019 23:20	0	0	0	32.7	1	0.8	0.1
7/30/2019 23:30	0	0	0	32.7	1	0.7	0.1
7/30/2019 23:40	0	0	0	32.7	1	0.8	0.1
7/30/2019 23:50	0	0	0	32.7	1	0.8	0.1
7/31/2019 0:00	0	0	0	32.7	1	0.8	0.1
7/31/2019 0:10	0	0	0	32.7	1	0.8	0.1
7/31/2019 0:20	0	0	0	32.7	1	0.8	0.1
7/31/2019 0:30	0	0	0	32.7	1	0.7	0.1
7/31/2019 0:40	0	0	0	32.7	1	0.8	0.1
7/31/2019 0:50	0	0	0	32.7	1	0.7	0.1
7/31/2019 1:00	0	0	0	32.67	1	0.8	0.1
7/31/2019 1:10	0	0	0	32.7	1	0.8	0.1
7/31/2019 1:20	0	0	0	32.7	1	0.8	0.1
7/31/2019 1:30	0	0	0	32.7	1	0.7	0.1
7/31/2019 1:40	0	0	0	32.7	1	0.8	0.1
7/31/2019 1:50	0	0	0	32.7	1	0.8	0.1
7/31/2019 2:00	0	0	0	32.67	1	0.8	0.1
7/31/2019 2:10	0	0	0	32.67	1	0.8	0.1
7/31/2019 2:20	0	0	0	32.67	1	0.7	0.1
7/31/2019 2:30	0	0	0	32.67	1	0.7	0.1
7/31/2019 2:40	0	0	0	32.67	1	0.7	0.1
7/31/2019 2:50	0	0	0	32.67	1	0.8	0.1
7/31/2019 3:00	0	0	0	32.67	1	0.8	0.1
7/31/2019 3:10	0	0	0	32.67	1	0.8	0.1
7/31/2019 3:20	0	0	0	32.67	1	0.8	0.1
7/31/2019 3:30	0	0	0	32.67	1	0.7	0.1
7/31/2019 3:40	0	0	0	32.67	1	0.8	0.1
7/31/2019 3:50	0	0	0	32.64	1	0.8	0.1
7/31/2019 4:00	0	0	0	32.64	1	0.7	0.1
7/31/2019 4:10	0	0	0	32.64	1	0.8	0.1
7/31/2019 4:20	0	0	0	32.67	1	0.8	0.1
7/31/2019 4:30	0	0	0	32.64	1	0.8	0.1
7/31/2019 4:40	0	0	0	32.64	1	0.8	0.1
7/31/2019 4:50	0	0	0	32.67	1	0.8	0.1
7/31/2019 5:00	0	0	0	32.67	1	0.8	0.1
7/31/2019 5:10	0	0	0	32.64	1	0.8	0.1
7/31/2019 5:20	0	0	0	32.64	1	0.8	0.1
7/31/2019 5:30	0	0	0	32.64	1	0.8	0.1

7/31/2019 5:40	0	0	0	32.64	1	0.8	0.1
7/31/2019 5:50	0	0	0	32.67	1	0.8	0.1
7/31/2019 6:00	0	0	0	32.64	1	0.8	0.1
7/31/2019 6:10	0	0	0	32.64	1	0.8	0.1
7/31/2019 6:20	0	0	0	32.67	1	0.8	0.1
7/31/2019 6:30	0	0	0	32.67	1	0.8	0.1
7/31/2019 6:40	0	0	0	32.64	1	0.8	0.1
7/31/2019 6:50	0	0	0	32.64	1	0.8	0.1
7/31/2019 7:00	0	0	0	32.64	1	0.8	0.1
7/31/2019 7:10	0	0	0	32.64	1	0.8	0.1
7/31/2019 7:20	0	0	0	33.31	1	0.8	0.1
7/31/2019 7:30	0	0	0	33.34	1.1	0.8	0.1
7/31/2019 7:40	0	0	0	33.44	1	0.8	0.1
7/31/2019 7:50	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 8:00	0	0	0	33.71	1	0.8	0.1
7/31/2019 8:10	0	0	0	33.71	1	0.8	0.1
7/31/2019 8:20	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 8:25							
7/31/2019 8:30	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 8:30							
7/31/2019 8:35							
7/31/2019 8:40	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 8:40							
7/31/2019 8:45							
7/31/2019 8:50	0	0	0	33.74	1	0.8	0.1
7/31/2019 8:50							
7/31/2019 8:55							
7/31/2019 9:00	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 9:00							
7/31/2019 9:10	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 9:20	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 9:30	0	0	0	33.68	1	0.8	0.1
7/31/2019 9:40	0	0	0	33.71	1	0.8	0.1
7/31/2019 9:50	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 10:00	0	0	0	33.71	1	0.8	0.1
7/31/2019 10:10	0	0	0	33.71	1	0.8	0.1
7/31/2019 10:20	0	0	0	33.71	1	0.8	0.1
7/31/2019 10:30	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 10:40	0	0	0	33.71	1	0.8	0.1
7/31/2019 10:50	0	0	0	33.71	1	0.8	0.1
7/31/2019 11:00	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 11:10	0	0	0	33.71	1	0.8	0.1
7/31/2019 11:20	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 11:30	0	0	0	33.71	1	0.8	0.1
7/31/2019 11:40	0	0	0	33.71	1	0.8	0.1
7/31/2019 11:50	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 12:00	0	0	0	33.71	1	0.8	0.1

7/31/2019 12:10	0	0	0	33.71	1	0.8	0.1
7/31/2019 12:20	0	0	0	33.71	1	0.8	0.1
7/31/2019 12:30	0	0	0	33.71	1	0.8	0.1
7/31/2019 12:40	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 12:50	0	0	0	33.74	1	0.8	0.1
7/31/2019 13:00	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 13:10	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 13:20	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 13:30	0	0	0	33.74	1	0.8	0.1
7/31/2019 13:40	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 13:50	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 14:00	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 14:10	0	0	0	33.74	1	0.8	0.1
7/31/2019 14:20	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 14:30	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 14:40	0	0	0	33.74	1	0.8	0.1
7/31/2019 14:50	0	0	0	33.71	1.1	0.8	0.1
7/31/2019 15:00	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 15:10	0	0	0	33.74	1	0.8	0.1
7/31/2019 15:20	0	0	0	33.74	1	0.8	0.1
7/31/2019 15:30	0	0	0	33.74	1	0.8	0.1
7/31/2019 15:40	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 15:50	0	0	0	33.74	1	0.8	0.1
7/31/2019 16:00	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 16:10	0	0	0	33.74	1	0.8	0.1
7/31/2019 16:20	0	0	0	33.74	1	0.8	0.1
7/31/2019 16:30	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 16:40	0	0	0	33.74	1	0.8	0.1
7/31/2019 16:50	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 17:00	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 17:10	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 17:20	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 17:30	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 17:40	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 17:50	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 18:00	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 18:10	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 18:20	0	0	0	33.74	1	0.8	0.1
7/31/2019 18:30	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 18:40	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 18:50	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 19:00	0	0	0	33.74	1	0.8	0.1
7/31/2019 19:10	0	0	0	33.74	1	0.8	0.1
7/31/2019 19:20	0	0	0	33.74	1	0.8	0.1
7/31/2019 19:30	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 19:40	0	0	0	33.77	1	0.8	0.1
7/31/2019 19:50	0	0	0	33.74	1	0.8	0.1

7/31/2019 20:00	0	0	0	33.77	1	0.8	0.1
7/31/2019 20:10	0	0	0	33.74	1	0.8	0.1
7/31/2019 20:20	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 20:30	0	0	0	33.77	1	0.8	0.1
7/31/2019 20:40	0	0	0	33.77	1	0.8	0.1
7/31/2019 20:50	0	0	0	33.74	1.1	0.8	0.1
7/31/2019 21:00	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 21:10	0	0	0	33.77	1	0.8	0.1
7/31/2019 21:20	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 21:30	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 21:40	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 21:50	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 22:00	0	0	0	33.8	1.1	0.8	0.1
7/31/2019 22:10	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 22:20	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 22:30	0	0	0	33.77	1	0.8	0.1
7/31/2019 22:40	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 22:50	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 23:00	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 23:10	0	0	0	33.77	1.1	0.8	0.1
7/31/2019 23:20	0	0	0	33.8	1.1	0.8	0.1
7/31/2019 23:30	0	0	0	33.8	1.1	0.8	0.1
7/31/2019 23:40	0	0	0	33.8	1.1	0.8	0.1
7/31/2019 23:50	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 0:00	0	0	0	33.77	1.1	0.8	0.1
8/1/2019 0:10	0	0	0	33.77	1.1	0.8	0.1
8/1/2019 0:20	0	0	0	33.77	1	0.8	0.1
8/1/2019 0:30	0	0	0	33.77	1	0.8	0.1
8/1/2019 0:40	0	0	0	33.77	1.1	0.8	0.1
8/1/2019 0:50	0	0	0	33.77	1	0.8	0.1
8/1/2019 1:00	0	0	0	33.8	1	0.8	0.1
8/1/2019 1:10	0	0	0	33.77	1	0.8	0.1
8/1/2019 1:20	0	0	0	33.8	1	0.8	0.1
8/1/2019 1:30	0	0	0	33.77	1.1	0.8	0.1
8/1/2019 1:40	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 1:50	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 2:00	0	0	0	33.77	1	0.8	0.1
8/1/2019 2:10	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 2:20	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 2:30	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 2:40	0	0	0	33.8	1	0.8	0.1
8/1/2019 2:50	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 3:00	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 3:10	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 3:20	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 3:30	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 3:40	0	0	0	33.8	1.1	0.8	0.1

8/1/2019 3:50	0	0	0	33.8	1	0.8	0.1
8/1/2019 4:00	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 4:10	0	0	0	33.8	1	0.8	0.1
8/1/2019 4:20	0	0	0	33.8	1	0.8	0.1
8/1/2019 4:30	0	0	0	33.8	1	0.8	0.1
8/1/2019 4:40	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 4:50	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 5:00	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 5:10	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 5:20	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 5:30	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 5:40	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 5:50	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 6:00	0	0	0	33.8	1.1	0.8	0.1
8/1/2019 6:10	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 6:20	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 6:30	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 6:40	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 6:50	0	0	0	33.83	1	0.8	0.1
8/1/2019 7:00	0	0	0	33.8	1	0.8	0.1
8/1/2019 7:10	0	0	0	33.83	1	0.8	0.1
8/1/2019 7:20	0	0	0	33.83	1	0.8	0.1
8/1/2019 7:30	0	0	0	33.83	1	0.8	0.1
8/1/2019 7:40	0	0	0	33.83	1	0.8	0.1
8/1/2019 7:50	0	0	0	33.83	1	0.8	0.1
8/1/2019 8:00	0	0	0	33.83	1	0.8	0.1
8/1/2019 8:10	0	0	0	33.83	1	0.8	0.1
8/1/2019 8:20	0	0	0	33.83	1	0.8	0.1
8/1/2019 8:30	0	0	0	33.83	1	0.8	0.1
8/1/2019 8:40	0	0	0	33.83	1	0.8	0.1
8/1/2019 8:50	0	0	0	33.83	1	0.8	0.1
8/1/2019 9:00	0	0	0	33.8	1	0.8	0.1
8/1/2019 9:10	0	0	0	33.83	1	0.8	0.1
8/1/2019 9:20	0	0	0	33.83	1	0.8	0.1
8/1/2019 9:30	0	0	0	33.83	1	0.8	0.1
8/1/2019 9:40	0	0	0	33.83	1	0.8	0.1
8/1/2019 9:50	0	0	0	33.83	1	0.8	0.1
8/1/2019 10:00	0	0	0	33.83	1	0.8	0.1
8/1/2019 10:10	0	0	0	33.83	1	0.8	0.1
8/1/2019 10:20	0	0	0	33.83	1	0.8	0.1
8/1/2019 10:30	0	0	0	33.83	1	0.8	0.1
8/1/2019 10:40	0	0	0	33.83	1	0.8	0.1
8/1/2019 10:50	0	0	0	33.83	1	0.8	0.1
8/1/2019 11:00	0	0	0	33.89	1	0.8	0.1
8/1/2019 11:10	0	0	0	33.89	1	0.8	0.1
8/1/2019 11:20	0	0	0	33.89	1	0.8	0.1
8/1/2019 11:30	0	0	0	33.89	1	0.8	0.1

8/1/2019 11:40	0	0	0	33.89	1	0.8	0.1
8/1/2019 11:50	0	0	0	33.89	1	0.8	0.1
8/1/2019 12:00	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 12:10	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 12:20	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 12:30	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 12:40	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 12:50	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 13:00	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 13:10	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 13:20	0	0	0	33.83	1.1	0.8	0.1
8/1/2019 13:30	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 13:40	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 13:50	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 14:00	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 14:10	0	0	0	33.89	1	0.8	0.1
8/1/2019 14:20	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 14:30	0	0	0	33.89	1	0.8	0.1
8/1/2019 14:40	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 14:50	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 15:00	0	0	0	33.89	1	0.8	0.1
8/1/2019 15:10	0	0	0	33.92	1	0.8	0.1
8/1/2019 15:20	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 15:30	0	0	0	33.89	1.1	0.8	0.1
8/1/2019 15:40	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 15:50	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 16:00	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 16:10	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 16:20	0	0	0	33.92	1.1	0.8	0.1
8/1/2019 16:30	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 16:40	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 16:50	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 17:00	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 17:10	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 17:20	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 17:30	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 17:40	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 17:50	0	0	0	33.95	1.1	0.8	0.1
8/1/2019 18:00	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 18:10	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 18:20	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 18:30	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 18:40	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 18:50	0	0	0	33.99	1	0.8	0.1
8/1/2019 19:00	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 19:10	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 19:20	0	0	0	33.99	1.1	0.8	0.1

8/1/2019 19:30	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 19:40	0	0	0	33.99	1	0.8	0.1
8/1/2019 19:50	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 20:00	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 20:10	0	0	0	33.99	1	0.8	0.1
8/1/2019 20:20	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 20:30	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 20:40	0	0	0	33.99	1.1	0.8	0.1
8/1/2019 20:50	0	0	0	34.02	1	0.8	0.1
8/1/2019 21:00	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 21:10	0	0	0	34.02	1	0.8	0.1
8/1/2019 21:20	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 21:30	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 21:40	0	0	0	34.02	1	0.8	0.1
8/1/2019 21:50	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 22:00	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 22:10	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 22:20	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 22:30	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 22:40	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 22:50	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 23:00	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 23:10	0	0	0	34.02	1	0.8	0.1
8/1/2019 23:20	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 23:30	0	0	0	34.02	1.1	0.8	0.1
8/1/2019 23:40	0	0	0	34.05	1.1	0.8	0.1
8/1/2019 23:50	0	0	0	34.02	1.1	0.8	0.1
8/2/2019 0:00	0	0	0	34.02	1.1	0.8	0.1
8/2/2019 0:10	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 0:20	0	0	0	34.02	1.1	0.8	0.1
8/2/2019 0:30	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 0:40	0	0	0	34.02	1.1	0.8	0.1
8/2/2019 0:50	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 1:00	0	0	0	34.02	1	0.8	0.1
8/2/2019 1:10	0	0	0	34.05	1	0.8	0.1
8/2/2019 1:20	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 1:30	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 1:40	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 1:50	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 2:00	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 2:10	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 2:20	0	0	0	34.05	1	0.8	0.1
8/2/2019 2:30	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 2:40	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 2:50	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 3:00	0	0	0	34.05	1.1	0.8	0.1
8/2/2019 3:10	0	0	0	34.08	1	0.8	0.1

8/2/2019 3:20	0	0	0	34.08	1	0.8	0.1
8/2/2019 3:30	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 3:40	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 3:50	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 4:00	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 4:10	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 4:20	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 4:30	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 4:40	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 4:50	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 5:00	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 5:10	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 5:20	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 5:30	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 5:40	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 5:50	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 6:00	0	0	0	34.08	1.1	0.8	0.1
8/2/2019 6:10	0	0	0	34.11	1	0.8	0.1
8/2/2019 6:20	0	0	0	34.11	1	0.8	0.1
8/2/2019 6:30	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 6:40	0	0	0	34.11	1	0.8	0.1
8/2/2019 6:50	0	0	0	34.11	1	0.8	0.1
8/2/2019 7:00	0	0	0	34.11	1	0.8	0.1
8/2/2019 7:10	0	0	0	34.11	1	0.8	0.1
8/2/2019 7:20	0	0	0	34.11	1	0.8	0.1
8/2/2019 7:30	0	0	0	34.11	1	0.8	0.1
8/2/2019 7:40	0	0	0	34.11	1	0.8	0.1
8/2/2019 7:50	0	0	0	34.11	1	0.8	0.1
8/2/2019 8:00	0	0	0	34.11	1	0.8	0.1
8/2/2019 8:10	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 8:20	0	0	0	34.11	1	0.8	0.1
8/2/2019 8:30	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 8:40	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 8:50	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 9:00	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 9:10	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 9:20	0	0	0	34.14	1	0.8	0.1
8/2/2019 9:30	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 9:40	0	0	0	34.11	1.1	0.8	0.1
8/2/2019 9:50	0	0	0	34.14	1	0.8	0.1
8/2/2019 10:00	0	0	0	34.14	1	0.8	0.1
8/2/2019 10:10	0	0	0	34.14	1	0.8	0.1
8/2/2019 10:20	0	0	0	34.11	1	0.8	0.1
8/2/2019 10:30	0	0	0	34.14	1	0.8	0.1
8/2/2019 10:40	0	0	0	34.14	1	0.8	0.1
8/2/2019 10:50	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 11:00	0	0	0	34.14	1	0.8	0.1

8/2/2019 11:10	0	0	0	34.14	1	0.8	0.1
8/2/2019 11:20	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 11:30	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 11:40	0	0	0	34.14	1	0.8	0.1
8/2/2019 11:50	0	0	0	34.17	1	0.8	0.1
8/2/2019 12:00	0	0	0	34.17	1	0.8	0.1
8/2/2019 12:10	0	0	0	34.14	1	0.8	0.1
8/2/2019 12:20	0	0	0	34.17	1	0.8	0.1
8/2/2019 12:30	0	0	0	34.17	1	0.8	0.1
8/2/2019 12:40	0	0	0	34.14	1	0.8	0.1
8/2/2019 12:50	0	0	0	34.14	1	0.8	0.1
8/2/2019 13:00	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 13:10	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 13:20	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 13:30	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 13:40	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 13:50	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 14:00	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 14:10	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 14:20	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 14:30	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 14:40	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 14:50	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 15:00	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 15:10	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 15:20	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 15:30	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 15:40	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 15:50	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 16:00	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 16:10	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 16:20	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 16:30	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 16:40	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 16:50	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 17:00	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 17:10	0	0	0	34.14	1.1	0.8	0.1
8/2/2019 17:20	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 17:30	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 17:40	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 17:50	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 18:00	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 18:10	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 18:20	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 18:30	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 18:40	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 18:50	0	0	0	34.17	1.1	0.8	0.1

8/2/2019 19:00	0	0	0	34.17	1.1	0.8	0.1
8/2/2019 19:10	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 19:20	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 19:30	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 19:40	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 19:50	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 20:00	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 20:10	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 20:20	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 20:30	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 20:40	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 20:50	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 21:00	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 21:10	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 21:20	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 21:30	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 21:40	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 21:50	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 22:00	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 22:10	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 22:20	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 22:30	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 22:40	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 22:50	0	0	0	34.23	1.1	0.8	0.1
8/2/2019 23:00	0	0	0	34.23	1.1	0.8	0.1
8/2/2019 23:10	0	0	0	34.2	1.1	0.8	0.1
8/2/2019 23:20	0	0	0	34.23	1.1	0.8	0.1
8/2/2019 23:30	0	0	0	34.23	1.1	0.8	0.1
8/2/2019 23:40	0	0	0	34.23	1.1	0.8	0.1
8/2/2019 23:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 0:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 0:10	0	0	0	34.2	1.1	0.8	0.1
8/3/2019 0:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 0:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 0:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 0:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 1:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 1:10	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 1:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 1:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 1:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 1:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 2:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 2:10	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 2:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 2:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 2:40	0	0	0	34.23	1.1	0.8	0.1

8/3/2019 2:50	0	0	0	34.26	1	0.8	0.1
8/3/2019 3:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 3:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 3:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 3:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 3:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 3:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 4:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 4:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 4:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 4:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 4:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 4:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 5:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 5:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 5:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 5:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 5:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 5:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 6:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 6:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 6:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 6:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 6:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 6:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 7:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 7:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 7:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 7:30	0	0	0	34.26	1	0.8	0.1
8/3/2019 7:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 7:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 8:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 8:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 8:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 8:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 8:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 8:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 9:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 9:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 9:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 9:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 9:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 9:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 10:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 10:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 10:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 10:30	0	0	0	34.26	1.1	0.8	0.1

8/3/2019 10:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 10:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 11:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 11:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 11:20	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 11:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 11:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 11:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 12:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 12:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 12:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 12:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 12:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 12:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 13:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 13:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 13:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 13:30	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 13:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 13:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 14:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 14:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 14:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 14:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 14:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 14:50	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 15:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 15:10	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 15:20	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 15:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 15:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 15:50	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 16:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 16:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 16:20	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 16:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 16:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 16:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 17:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 17:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 17:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 17:30	0	0	0	34.29	1.1	0.8	0.1
8/3/2019 17:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 17:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 18:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 18:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 18:20	0	0	0	34.26	1.1	0.8	0.1

8/3/2019 18:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 18:40	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 18:50	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 19:00	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 19:10	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 19:20	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 19:30	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 19:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 19:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 20:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 20:10	0	0	0	34.26	1.1	0.8	0.1
8/3/2019 20:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 20:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 20:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 20:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 21:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 21:10	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 21:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 21:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 21:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 21:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 22:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 22:10	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 22:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 22:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 22:40	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 22:50	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 23:00	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 23:10	0	0	0	34.2	1.1	0.8	0.1
8/3/2019 23:20	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 23:30	0	0	0	34.23	1.1	0.8	0.1
8/3/2019 23:40	0	0	0	34.2	1.1	0.8	0.1
8/3/2019 23:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 0:00	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 0:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 0:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 0:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 0:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 0:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 1:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 1:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 1:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 1:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 1:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 1:50	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 2:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 2:10	0	0	0	34.23	1.1	0.8	0.1

8/4/2019 2:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 2:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 2:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 2:50	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 3:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 3:10	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 3:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 3:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 3:40	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 3:50	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 4:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 4:10	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 4:20	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 4:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 4:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 4:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 5:00	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 5:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 5:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 5:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 5:40	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 5:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 6:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 6:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 6:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 6:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 6:40	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 6:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 7:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 7:10	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 7:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 7:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 7:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 7:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 8:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 8:10	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 8:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 8:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 8:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 8:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 9:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 9:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 9:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 9:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 9:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 9:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 10:00	0	0	0	34.23	1	0.8	0.1

8/4/2019 10:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 10:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 10:30	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 10:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 10:50	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 11:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 11:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 11:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 11:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 11:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 11:50	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 12:00	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 12:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 12:20	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 12:30	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 12:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 12:50	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 13:00	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 13:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 13:20	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 13:30	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 13:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 13:50	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 14:00	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 14:10	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 14:20	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 14:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 14:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 14:50	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 15:00	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 15:10	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 15:20	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 15:30	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 15:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 15:50	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 16:00	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 16:10	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 16:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 16:30	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 16:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 16:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 17:00	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 17:10	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 17:20	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 17:30	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 17:40	0	0	0	34.26	1.1	0.8	0.1
8/4/2019 17:50	0	0	0	34.23	1.1	0.8	0.1

8/4/2019 18:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 18:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 18:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 18:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 18:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 18:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 19:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 19:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 19:20	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 19:30	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 19:40	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 19:50	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 20:00	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 20:10	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 20:20	0	0	0	34.23	1.1	0.8	0.1
8/4/2019 20:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 20:40	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 20:50	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 21:00	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 21:10	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 21:20	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 21:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 21:40	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 21:50	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 22:00	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 22:10	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 22:20	0	0	0	34.17	1.1	0.8	0.1
8/4/2019 22:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 22:40	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 22:50	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 23:00	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 23:10	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 23:20	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 23:30	0	0	0	34.2	1.1	0.8	0.1
8/4/2019 23:40	0	0	0	34.17	1.1	0.8	0.1
8/4/2019 23:50	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 0:00	0	0	0	34.2	1.1	0.8	0.1
8/5/2019 0:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 0:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 0:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 0:40	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 0:50	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 1:00	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 1:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 1:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 1:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 1:40	0	0	0	34.17	1.1	0.8	0.1

8/5/2019 1:50	0	0	0	34.14	1.1	0.8	0.1
8/5/2019 2:00	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 2:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 2:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 2:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 2:40	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 2:50	0	0	0	34.14	1.1	0.8	0.1
8/5/2019 3:00	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 3:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 3:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 3:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 3:40	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 3:50	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 4:00	0	0	0	34.14	1.1	0.8	0.1
8/5/2019 4:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 4:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 4:30	0	0	0	34.14	1.1	0.8	0.1
8/5/2019 4:40	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 4:50	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 5:00	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 5:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 5:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 5:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 5:40	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 5:50	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 6:00	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 6:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 6:20	0	0	0	34.14	1.1	0.8	0.1
8/5/2019 6:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 6:40	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 6:50	0	0	0	34.17	1	0.8	0.1
8/5/2019 7:00	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 7:10	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 7:20	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 7:30	0	0	0	34.17	1.1	0.8	0.1
8/5/2019 7:40	0	0	0	34.2	1	0.8	0.1
8/5/2019 7:50	0	0	0	34.2	1	0.8	0.1
8/5/2019 8:00	0	0	0	34.2	1.1	0.8	0.1
8/5/2019 8:10	0	0	0	34.2	1	0.8	0.1
8/5/2019 8:20	0	0	0	34.17	1	0.8	0.1
8/5/2019 8:30	0	0	0	34.2	1	0.8	0.1
8/5/2019 8:40	0	0	0	34.2	1.1	0.8	0.1
8/5/2019 8:50	0	0	0	34.2	1.1	0.8	0.1
8/5/2019 9:00	0	0	0	34.2	1	0.8	0.1
8/5/2019 9:10	0	0	0	34.2	1	0.8	0.1
8/5/2019 9:20	0	0	0	34.2	1.1	0.8	0.1
8/5/2019 9:30	0	0	0	34.2	1	0.8	0.1

8/5/2019 9:40	0	0	0	34.23	1	0.8	0.1
8/5/2019 9:50	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 10:00	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 10:10	0	0	0	34.2	1	0.8	0.1
8/5/2019 10:20	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 10:30	0	0	0	34.23	1	0.8	0.1
8/5/2019 10:40	0	0	0	34.23	1	0.8	0.1
8/5/2019 10:50	0	0	0	34.2	1	0.8	0.1
8/5/2019 11:00	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 11:10	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 11:20	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 11:30	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 11:40	0	0	0	34.23	1	0.8	0.1
8/5/2019 11:50	0	0	0	34.23	1	0.8	0.1
8/5/2019 12:00	0	0	0	34.23	1	0.8	0.1
8/5/2019 12:10	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 12:20	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 12:30	0	0	0	34.26	1	0.8	0.1
8/5/2019 12:40	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 12:50	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 13:00	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 13:10	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 13:20	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 13:30	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 13:40	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 13:50	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 14:00	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 14:10	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 14:20	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 14:30	0	0	0	34.23	1.1	0.8	0.1
8/5/2019 14:40	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 14:50	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 15:00	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 15:10	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 15:20	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 15:30	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 15:40	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 15:50	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 16:00	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 16:10	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 16:20	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 16:30	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 16:40	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 16:50	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 17:00	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 17:10	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 17:20	0	0	0	34.26	1.1	0.8	0.1

8/5/2019 17:30	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 17:40	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 17:50	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 18:00	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 18:10	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 18:20	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 18:30	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 18:40	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 18:50	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 19:00	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 19:10	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 19:20	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 19:30	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 19:40	0	0	0	34.26	1.1	0.8	0.1
8/5/2019 19:50	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 20:00	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 20:10	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 20:20	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 20:30	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 20:40	0	0	0	34.32	1.1	0.8	0.1
8/5/2019 20:50	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 21:00	0	0	0	34.32	1.1	0.8	0.1
8/5/2019 21:10	0	0	0	34.29	1.1	0.8	0.1
8/5/2019 21:20	0	0	0	34.32	1.1	0.8	0.1
8/5/2019 21:30	0	0	0	34.32	1.1	0.8	0.1
8/5/2019 21:40	0	0	0	34.32	1.1	0.8	0.1
8/5/2019 21:50	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 22:00	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 22:10	0	0	0	34.32	1.1	0.8	0.1
8/5/2019 22:20	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 22:30	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 22:40	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 22:50	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 23:00	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 23:10	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 23:20	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 23:30	0	0	0	34.35	1.1	0.8	0.1
8/5/2019 23:40	0	0	0	34.38	1.1	0.8	0.1
8/5/2019 23:50	0	0	0	34.35	1.1	0.8	0.1
8/6/2019 0:00	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 0:10	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 0:20	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 0:30	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 0:40	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 0:50	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 1:00	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 1:10	0	0	0	34.41	1.1	0.8	0.1

8/6/2019 1:20	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 1:30	0	0	0	34.38	1.1	0.8	0.1
8/6/2019 1:40	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 1:50	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 2:00	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 2:10	0	0	0	34.41	1	0.8	0.1
8/6/2019 2:20	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 2:30	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 2:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 2:50	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 3:00	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 3:10	0	0	0	34.44	1	0.8	0.1
8/6/2019 3:20	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 3:30	0	0	0	34.44	1	0.8	0.1
8/6/2019 3:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 3:50	0	0	0	34.44	1	0.8	0.1
8/6/2019 4:00	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 4:10	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 4:20	0	0	0	34.47	1	0.8	0.1
8/6/2019 4:30	0	0	0	34.44	1	0.8	0.1
8/6/2019 4:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 4:50	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 5:00	0	0	0	34.44	1	0.8	0.1
8/6/2019 5:10	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 5:20	0	0	0	34.47	1	0.8	0.1
8/6/2019 5:30	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 5:40	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 5:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 6:00	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 6:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 6:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 6:30	0	0	0	34.47	1	0.8	0.1
8/6/2019 6:40	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 6:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 7:00	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 7:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 7:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 7:30	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 7:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 7:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 8:00	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 8:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 8:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 8:30	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 8:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 8:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 9:00	0	0	0	34.47	1.1	0.8	0.1

8/6/2019 9:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 9:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 9:30	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 9:40	0	0	0	34.53	1	0.8	0.1
8/6/2019 9:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 10:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 10:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 10:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 10:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 10:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 10:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 11:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 11:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 11:20	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 11:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 11:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 11:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 12:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 12:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 12:20	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 12:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 12:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 12:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 13:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 13:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 13:20	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 13:30	0	0	0	34.57	1	0.8	0.1
8/6/2019 13:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 13:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 14:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 14:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 14:20	0	0	0	34.57	1.1	0.8	0.1
8/6/2019 14:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 14:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 14:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 15:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 15:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 15:20	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 15:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 15:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 15:50	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 16:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 16:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 16:20	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 16:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 16:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 16:50	0	0	0	34.53	1.1	0.8	0.1

8/6/2019 17:00	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 17:10	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 17:20	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 17:30	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 17:40	0	0	0	34.53	1.1	0.8	0.1
8/6/2019 17:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 18:00	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 18:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 18:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 18:30	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 18:40	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 18:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 19:00	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 19:10	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 19:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 19:30	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 19:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 19:50	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 20:00	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 20:10	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 20:20	0	0	0	34.47	1.1	0.8	0.1
8/6/2019 20:30	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 20:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 20:50	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 21:00	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 21:10	0	0	0	34.41	1.1	0.8	0.1
8/6/2019 21:20	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 21:30	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 21:40	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 21:50	0	0	0	34.44	1.1	0.8	0.1
8/6/2019 22:00	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 22:10	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 22:20	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 22:30	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 22:40	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 22:50	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 23:00	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 23:10	0	0	0	34.23	1.1	0.8	0.1
8/6/2019 23:20	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 23:30	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 23:40	0	0	0	34.26	1.1	0.8	0.1
8/6/2019 23:50	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 0:00	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 0:10	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 0:20	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 0:30	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 0:40	0	0	0	34.26	1.1	0.8	0.1

8/7/2019 0:50	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 1:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 1:10	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 1:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 1:30	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 1:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 1:50	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 2:00	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 2:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 2:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 2:30	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 2:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 2:50	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 3:00	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 3:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 3:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 3:30	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 3:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 3:50	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 4:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 4:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 4:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 4:30	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 4:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 4:50	0	0	0	34.26	1.1	0.8	0.1
8/7/2019 5:00	0	0	0	34.23	1	0.8	0.1
8/7/2019 5:10	0	0	0	34.23	1	0.8	0.1
8/7/2019 5:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 5:30	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 5:40	0	0	0	34.23	1	0.8	0.1
8/7/2019 5:50	0	0	0	34.23	1	0.8	0.1
8/7/2019 6:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 6:10	0	0	0	34.2	1	0.8	0.1
8/7/2019 6:20	0	0	0	34.23	1	0.8	0.1
8/7/2019 6:30	0	0	0	34.23	1	0.8	0.1
8/7/2019 6:40	0	0	0	34.23	1	0.8	0.1
8/7/2019 6:50	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 7:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 7:10	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 7:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 7:30	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 7:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 7:50	0	0	0	34.23	1	0.8	0.1
8/7/2019 7:55							
8/7/2019 8:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 8:00							
8/7/2019 8:05							

8/7/2019 8:10	0	0	0	34.2	1	0.8	0.1
8/7/2019 8:10							
8/7/2019 8:15							
8/7/2019 8:20	0	0	0	34.23	1	0.8	0.1
8/7/2019 8:20							
8/7/2019 8:25							
8/7/2019 8:30	0	0	0	34.2	1	0.8	0.1
8/7/2019 8:30							
8/7/2019 8:35							
8/7/2019 8:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 8:40							
8/7/2019 8:45							
8/7/2019 8:50	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 8:50							
8/7/2019 8:55							
8/7/2019 9:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 9:00							
8/7/2019 9:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 9:20	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 9:30	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 9:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 9:50	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 10:00	0	0	0	34.2	1	0.8	0.1
8/7/2019 10:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 10:20	0	0	0	34.23	1	0.8	0.1
8/7/2019 10:30	0	0	0	34.23	1	0.8	0.1
8/7/2019 10:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 10:50	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 11:00	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 11:10	0	0	0	34.23	1	0.8	0.1
8/7/2019 11:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 11:30	0	0	0	34.23	1	0.8	0.1
8/7/2019 11:40	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 11:50	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 12:00	0	0	0	34.23	1	0.8	0.1
8/7/2019 12:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 12:20	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 12:30	0	0	0	34.2	1	0.8	0.1
8/7/2019 12:40	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 12:50	0	0	0	34.23	1	0.8	0.1
8/7/2019 13:00	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 13:10	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 13:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 13:30	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 13:40	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 13:50	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 14:00	0	0	0	34.23	1.1	0.8	0.1

8/7/2019 14:10	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 14:20	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 14:30	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 14:40	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 14:50	0	0	0	34.23	1.1	0.8	0.1
8/7/2019 15:00	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 15:10	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 15:20	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 15:30	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 15:40	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 15:50	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 16:00	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 16:10	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 16:20	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 16:30	0	0	0	34.2	1.1	0.8	0.1
8/7/2019 16:40	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 16:50	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 17:00	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 17:10	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 17:20	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 17:30	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 17:40	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 17:50	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 18:00	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 18:10	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 18:20	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 18:30	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 18:40	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 18:50	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 19:00	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 19:10	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 19:20	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 19:30	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 19:40	0	0	0	34.17	1.1	0.8	0.1
8/7/2019 19:50	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 20:00	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 20:10	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 20:20	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 20:30	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 20:40	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 20:50	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 21:00	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 21:10	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 21:20	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 21:30	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 21:40	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 21:50	0	0	0	34.14	1.1	0.8	0.1

8/7/2019 22:00	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 22:10	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 22:20	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 22:30	0	0	0	34.14	1.1	0.8	0.1
8/7/2019 22:40	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 22:50	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 23:00	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 23:10	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 23:20	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 23:30	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 23:40	0	0	0	34.11	1.1	0.8	0.1
8/7/2019 23:50	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 0:00	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 0:10	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 0:20	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 0:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 0:40	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 0:50	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 1:00	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 1:10	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 1:20	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 1:30	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 1:40	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 1:50	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 2:00	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 2:10	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 2:20	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 2:30	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 2:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 2:50	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 3:00	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 3:10	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 3:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 3:30	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 3:40	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 3:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 4:00	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 4:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 4:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 4:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 4:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 4:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 5:00	0	0	0	34.11	1.1	0.8	0.1
8/8/2019 5:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 5:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 5:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 5:40	0	0	0	34.08	1.1	0.8	0.1

8/8/2019 5:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 6:00	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 6:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 6:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 6:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 6:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 6:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 7:00	0	0	0	34.08	1	0.8	0.1
8/8/2019 7:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 7:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 7:30	0	0	0	34.08	1	0.8	0.1
8/8/2019 7:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 7:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 8:00	0	0	0	34.08	1	0.8	0.1
8/8/2019 8:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 8:20	0	0	0	34.08	1	0.8	0.1
8/8/2019 8:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 8:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 8:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 9:00	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 9:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 9:20	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 9:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 9:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 9:50	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 10:00	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 10:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 10:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 10:30	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 10:40	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 10:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 11:00	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 11:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 11:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 11:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 11:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 11:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 12:00	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 12:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 12:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 12:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 12:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 12:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 13:00	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 13:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 13:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 13:30	0	0	0	34.08	1.1	0.8	0.1

8/8/2019 13:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 13:50	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 14:00	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 14:10	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 14:20	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 14:30	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 14:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 14:50	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 15:00	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 15:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 15:20	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 15:30	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 15:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 15:50	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 16:00	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 16:10	0	0	0	34.02	1.1	0.8	0.1
8/8/2019 16:20	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 16:30	0	0	0	34.02	1.1	0.8	0.1
8/8/2019 16:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 16:50	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 17:00	0	0	0	34.02	1.1	0.8	0.1
8/8/2019 17:10	0	0	0	34.08	1.1	0.8	0.1
8/8/2019 17:20	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 17:30	0	0	0	34.05	1	0.8	0.1
8/8/2019 17:40	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 17:50	0	0	0	34.05	1.1	0.8	0.1
8/8/2019 18:00	0	0	0	34.02	1.1	0.8	0.1
8/8/2019 18:10	0	0	0	34.02	1.1	0.8	0.1
8/8/2019 18:20	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 18:30	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 18:40	0	0	0	33.95	1.1	0.8	0.1
8/8/2019 18:50	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 19:00	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 19:10	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 19:20	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 19:30	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 19:40	0	0	0	33.95	1.1	0.8	0.1
8/8/2019 19:50	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 20:00	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 20:10	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 20:20	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 20:30	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 20:40	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 20:50	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 21:00	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 21:10	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 21:20	0	0	0	33.99	1.1	0.8	0.1

8/8/2019 21:30	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 21:40	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 21:50	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 22:00	0	0	0	33.95	1.1	0.8	0.1
8/8/2019 22:10	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 22:20	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 22:30	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 22:40	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 22:50	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 23:00	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 23:10	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 23:20	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 23:30	0	0	0	34.02	1.1	0.8	0.1
8/8/2019 23:40	0	0	0	33.99	1.1	0.8	0.1
8/8/2019 23:50	0	0	0	33.99	1.1	0.8	0.1
8/9/2019 0:00	0	0	0	33.99	1.1	0.8	0.1
8/9/2019 0:10	0	0	0	33.99	1.1	0.8	0.1
8/9/2019 0:20	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 0:30	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 0:40	0	0	0	33.99	1.1	0.8	0.1
8/9/2019 0:50	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 1:00	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 1:10	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 1:20	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 1:30	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 1:40	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 1:50	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 2:00	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 2:10	0	0	0	33.99	1.1	0.8	0.1
8/9/2019 2:20	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 2:30	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 2:40	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 2:50	0	0	0	34.02	1	0.8	0.1
8/9/2019 3:00	0	0	0	34.05	1.1	0.8	0.1
8/9/2019 3:10	0	0	0	34.05	1.1	0.8	0.1
8/9/2019 3:20	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 3:30	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 3:40	0	0	0	34.05	1	0.8	0.1
8/9/2019 3:50	0	0	0	34.05	1	0.8	0.1
8/9/2019 4:00	0	0	0	34.02	1.1	0.8	0.1
8/9/2019 4:10	0	0	0	34.02	1	0.8	0.1
8/9/2019 4:20	0	0	0	34.05	1	0.8	0.1
8/9/2019 4:30	0	0	0	34.05	1	0.8	0.1
8/9/2019 4:40	0	0	0	34.05	1	0.8	0.1
8/9/2019 4:50	0	0	0	34.05	1	0.8	0.1
8/9/2019 5:00	0	0	0	34.05	1	0.8	0.1
8/9/2019 5:10	0	0	0	34.05	1	0.8	0.1

8/9/2019 5:20	0	0	0	34.05	1	0.8	0.1
8/9/2019 5:30	0	0	0	34.05	1.1	0.8	0.1
8/9/2019 5:40	0	0	0	34.05	1	0.8	0.1
8/9/2019 5:50	0	0	0	34.05	1.1	0.8	0.1
8/9/2019 6:00	0	0	0	34.05	1	0.8	0.1
8/9/2019 6:10	0	0	0	34.05	1	0.8	0.1
8/9/2019 6:20	0	0	0	34.05	1	0.8	0.1
8/9/2019 6:30	0	0	0	34.08	1	0.8	0.1
8/9/2019 6:40	0	0	0	34.08	1	0.8	0.1
8/9/2019 6:50	0	0	0	34.08	1	0.8	0.1
8/9/2019 7:00	0	0	0	34.08	1	0.8	0.1
8/9/2019 7:10	0	0	0	34.08	1	0.8	0.1
8/9/2019 7:20	0	0	0	34.08	1	0.8	0.1
8/9/2019 7:30	0	0	0	34.08	1.1	0.8	0.1
8/9/2019 7:40	0	0	0	34.08	1	0.8	0.1
8/9/2019 7:50	0	0	0	34.08	1	0.8	0.1
8/9/2019 8:00	0	0	0	34.08	1	0.8	0.1
8/9/2019 8:10	0	0	0	34.11	1	0.8	0.1
8/9/2019 8:20	0	0	0	34.08	1.1	0.8	0.1
8/9/2019 8:30	0	0	0	34.11	1	0.8	0.1
8/9/2019 8:40	0	0	0	34.11	1	0.8	0.1
8/9/2019 8:50	0	0	0	34.11	1.1	0.8	0.1
8/9/2019 9:00	0	0	0	34.11	1.1	0.8	0.1
8/9/2019 9:10	0	0	0	34.11	1	0.8	0.1
8/9/2019 9:20	0	0	0	34.11	1	0.8	0.1
8/9/2019 9:30	0	0	0	34.11	1	0.8	0.1
8/9/2019 9:40	0	0	0	34.11	1	0.8	0.1
8/9/2019 9:50	0	0	0	34.11	1	0.8	0.1
8/9/2019 10:00	0	0	0	34.11	1	0.8	0.1
8/9/2019 10:10	0	0	0	34.11	1.1	0.8	0.1
8/9/2019 10:20	0	0	0	34.14	1	0.8	0.1
8/9/2019 10:30	0	0	0	34.11	1.1	0.8	0.1
8/9/2019 10:40	0	0	0	34.11	1	0.8	0.1
8/9/2019 10:50	0	0	0	34.11	1.1	0.8	0.1
8/9/2019 11:00	0	0	0	34.11	1	0.8	0.1
8/9/2019 11:10	0	0	0	34.11	1	0.8	0.1
8/9/2019 11:20	0	0	0	34.14	1	0.8	0.1
8/9/2019 11:30	0	0	0	34.14	1	0.8	0.1
8/9/2019 11:40	0	0	0	34.11	1	0.8	0.1
8/9/2019 11:50	0	0	0	34.11	1	0.8	0.1
8/9/2019 12:00	0	0	0	34.11	1	0.8	0.1
8/9/2019 12:10	0	0	0	34.14	1	0.8	0.1
8/9/2019 12:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 12:30	0	0	0	34.11	1	0.8	0.1
8/9/2019 12:40	0	0	0	34.14	1	0.8	0.1
8/9/2019 12:50	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 13:00	0	0	0	34.14	1	0.8	0.1

8/9/2019 13:10	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 13:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 13:30	0	0	0	34.14	1	0.8	0.1
8/9/2019 13:40	0	0	0	34.14	1	0.8	0.1
8/9/2019 13:50	0	0	0	34.14	1	0.8	0.1
8/9/2019 14:00	0	0	0	34.14	1	0.8	0.1
8/9/2019 14:10	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 14:20	0	0	0	34.14	1	0.8	0.1
8/9/2019 14:30	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 14:40	0	0	0	34.14	1	0.8	0.1
8/9/2019 14:50	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 15:00	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 15:10	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 15:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 15:30	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 15:40	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 15:50	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 16:00	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 16:10	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 16:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 16:30	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 16:40	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 16:50	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 17:00	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 17:10	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 17:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 17:30	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 17:40	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 17:50	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 18:00	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 18:10	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 18:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 18:30	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 18:40	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 18:50	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 19:00	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 19:10	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 19:20	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 19:30	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 19:40	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 19:50	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 20:00	0	0	0	34.17	1	0.8	0.1
8/9/2019 20:10	0	0	0	34.14	1.1	0.8	0.1
8/9/2019 20:20	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 20:30	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 20:40	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 20:50	0	0	0	34.17	1.1	0.8	0.1

8/9/2019 21:00	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 21:10	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 21:20	0	0	0	34.17	1.1	0.8	0.1
8/9/2019 21:30	0	0	0	34.2	1.1	0.8	0.1
8/9/2019 21:40	0	0	0	34.2	1.1	0.8	0.1
8/9/2019 21:50	0	0	0	34.2	1.1	0.8	0.1
8/9/2019 22:00	0	0	0	34.2	1.1	0.8	0.1
8/9/2019 22:10	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 22:20	0	0	0	34.2	1.1	0.8	0.1
8/9/2019 22:30	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 22:40	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 22:50	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 23:00	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 23:10	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 23:20	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 23:30	0	0	0	34.23	1.1	0.8	0.1
8/9/2019 23:40	0	0	0	34.26	1.1	0.8	0.1
8/9/2019 23:50	0	0	0	34.23	1.1	0.8	0.1
8/10/2019 0:00	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 0:10	0	0	0	34.26	1	0.8	0.1
8/10/2019 0:20	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 0:30	0	0	0	34.26	1	0.8	0.1
8/10/2019 0:40	0	0	0	34.26	1	0.8	0.1
8/10/2019 0:50	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 1:00	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 1:10	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 1:20	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 1:30	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 1:40	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 1:50	0	0	0	34.29	1	0.8	0.1
8/10/2019 2:00	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 2:10	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 2:20	0	0	0	34.26	1.1	0.8	0.1
8/10/2019 2:30	0	0	0	34.26	1	0.8	0.1
8/10/2019 2:40	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 2:50	0	0	0	34.29	1	0.8	0.1
8/10/2019 3:00	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 3:10	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 3:20	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 3:30	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 3:40	0	0	0	34.29	1	0.8	0.1
8/10/2019 3:50	0	0	0	34.29	1	0.8	0.1
8/10/2019 4:00	0	0	0	34.32	1	0.8	0.1
8/10/2019 4:10	0	0	0	34.29	1.1	0.8	0.1
8/10/2019 4:20	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 4:30	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 4:40	0	0	0	34.32	1.1	0.8	0.1

8/10/2019 4:50	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 5:00	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 5:10	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 5:20	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 5:30	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 5:40	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 5:50	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 6:00	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 6:10	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 6:20	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 6:30	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 6:40	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 6:50	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 7:00	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 7:10	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 7:20	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 7:30	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 7:40	0	0	0	34.35	1	0.8	0.1
8/10/2019 7:50	0	0	0	34.38	1	0.8	0.1
8/10/2019 8:00	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 8:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 8:20	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 8:30	0	0	0	34.38	1	0.8	0.1
8/10/2019 8:40	0	0	0	34.35	1	0.8	0.1
8/10/2019 8:50	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 9:00	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 9:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 9:20	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 9:30	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 9:40	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 9:50	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 10:00	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 10:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 10:20	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 10:30	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 10:40	0	0	0	34.41	1	0.8	0.1
8/10/2019 10:50	0	0	0	34.41	1	0.8	0.1
8/10/2019 11:00	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 11:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 11:20	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 11:30	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 11:40	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 11:50	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 12:00	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 12:10	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 12:20	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 12:30	0	0	0	34.41	1.1	0.8	0.1

8/10/2019 12:40	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 12:50	0	0	0	34.41	1	0.8	0.1
8/10/2019 13:00	0	0	0	34.41	1	0.8	0.1
8/10/2019 13:10	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 13:20	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 13:30	0	0	0	34.44	1.1	0.8	0.1
8/10/2019 13:40	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 13:50	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 14:00	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 14:10	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 14:20	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 14:30	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 14:40	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 14:50	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 15:00	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 15:10	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 15:20	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 15:30	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 15:40	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 15:50	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 16:00	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 16:10	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 16:20	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 16:30	0	0	0	34.32	1.1	0.8	0.1
8/10/2019 16:40	0	0	0	34.35	1	0.8	0.1
8/10/2019 16:50	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 17:00	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 17:10	0	0	0	34.35	1	0.8	0.1
8/10/2019 17:20	0	0	0	34.35	1	0.8	0.1
8/10/2019 17:30	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 17:40	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 17:50	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 18:00	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 18:10	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 18:20	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 18:30	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 18:40	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 18:50	0	0	0	34.38	1	0.8	0.1
8/10/2019 19:00	0	0	0	34.35	1.1	0.8	0.1
8/10/2019 19:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 19:20	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 19:30	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 19:40	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 19:50	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 20:00	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 20:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 20:20	0	0	0	34.38	1.1	0.8	0.1

8/10/2019 20:30	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 20:40	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 20:50	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 21:00	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 21:10	0	0	0	34.38	1.1	0.8	0.1
8/10/2019 21:20	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 21:30	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 21:40	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 21:50	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 22:00	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 22:10	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 22:20	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 22:30	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 22:40	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 22:50	0	0	0	34.44	1.1	0.8	0.1
8/10/2019 23:00	0	0	0	34.41	1.1	0.8	0.1
8/10/2019 23:10	0	0	0	34.44	1.1	0.8	0.1
8/10/2019 23:20	0	0	0	34.44	1.1	0.8	0.1
8/10/2019 23:30	0	0	0	34.44	1.1	0.8	0.1
8/10/2019 23:40	0	0	0	34.44	1.1	0.8	0.1
8/10/2019 23:50	0	0	0	34.44	1.1	0.8	0.1
8/11/2019 0:00	0	0	0	34.44	1	0.8	0.1
8/11/2019 0:10	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 0:20	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 0:30	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 0:40	0	0	0	34.44	1	0.8	0.1
8/11/2019 0:50	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 1:00	0	0	0	34.44	1	0.8	0.1
8/11/2019 1:10	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 1:20	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 1:30	0	0	0	34.44	1.1	0.8	0.1
8/11/2019 1:40	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 1:50	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 2:00	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 2:10	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 2:20	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 2:30	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 2:40	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 2:50	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 3:00	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 3:10	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 3:20	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 3:30	0	0	0	34.47	1.1	0.8	0.1
8/11/2019 3:40	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 3:50	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 4:00	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 4:10	0	0	0	34.53	1.1	0.8	0.1

8/11/2019 4:20	0	0	0	34.57	1	0.8	0.1
8/11/2019 4:30	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 4:40	0	0	0	34.53	1	0.8	0.1
8/11/2019 4:50	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 5:00	0	0	0	34.53	1.1	0.8	0.1
8/11/2019 5:10	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 5:20	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 5:30	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 5:40	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 5:50	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 6:00	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 6:10	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 6:20	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 6:30	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 6:40	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 6:50	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 7:00	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 7:10	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 7:20	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 7:30	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 7:40	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 7:50	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 8:00	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 8:10	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 8:20	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 8:30	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 8:40	0	0	0	34.57	1.1	0.8	0.1
8/11/2019 8:50	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 9:00	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 9:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 9:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 9:30	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 9:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 9:50	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 10:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 10:10	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 10:20	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 10:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 10:40	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 10:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 11:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 11:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 11:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 11:30	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 11:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 11:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 12:00	0	0	0	34.63	1.1	0.8	0.1

8/11/2019 12:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 12:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 12:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 12:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 12:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 13:00	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 13:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 13:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 13:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 13:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 13:50	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 14:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 14:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 14:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 14:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 14:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 14:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 15:00	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 15:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 15:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 15:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 15:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 15:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 16:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 16:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 16:20	0	0	0	34.6	1.1	0.8	0.1
8/11/2019 16:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 16:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 16:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 17:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 17:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 17:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 17:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 17:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 17:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 18:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 18:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 18:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 18:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 18:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 18:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 19:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 19:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 19:20	0	0	0	34.66	1.1	0.8	0.1
8/11/2019 19:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 19:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 19:50	0	0	0	34.63	1.1	0.8	0.1

8/11/2019 20:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 20:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 20:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 20:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 20:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 20:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 21:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 21:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 21:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 21:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 21:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 21:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 22:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 22:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 22:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 22:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 22:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 22:50	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 23:00	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 23:10	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 23:20	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 23:30	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 23:40	0	0	0	34.63	1.1	0.8	0.1
8/11/2019 23:50	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 0:00	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 0:10	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 0:20	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 0:30	0	0	0	34.66	1	0.8	0.1
8/12/2019 0:40	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 0:50	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 1:00	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 1:10	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 1:20	0	0	0	34.66	1	0.8	0.1
8/12/2019 1:30	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 1:40	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 1:50	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 2:00	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 2:10	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 2:20	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 2:30	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 2:40	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 2:50	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 3:00	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 3:10	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 3:20	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 3:30	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 3:40	0	0	0	34.66	1	0.8	0.1

8/12/2019 3:50	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 4:00	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 4:10	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 4:20	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 4:30	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 4:40	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 4:50	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 5:00	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 5:10	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 5:20	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 5:30	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 5:40	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 5:50	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 6:00	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 6:10	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 6:20	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 6:30	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 6:40	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 6:50	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 7:00	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 7:10	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 7:20	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 7:30	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 7:40	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 7:50	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 8:00	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 8:10	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 8:20	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 8:30	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 8:40	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 8:50	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 9:00	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 9:10	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 9:20	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 9:30	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 9:40	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 9:50	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 10:00	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 10:10	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 10:20	0	0	0	34.72	1.1	0.8	0.1
8/12/2019 10:30	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 10:40	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 10:50	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 11:00	0	0	0	34.69	1.1	0.8	0.1
8/12/2019 11:10	0	0	0	34.66	1.1	0.8	0.1
8/12/2019 11:20	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 11:30	0	0	0	34.63	1.1	0.8	0.1

8/12/2019 11:40	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 11:50	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 12:00	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 12:10	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 12:20	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 12:30	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 12:40	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 12:50	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 13:00	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 13:10	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 13:20	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 13:30	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 13:40	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 13:50	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 14:00	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 14:10	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 14:20	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 14:30	0	0	0	34.63	1.1	0.8	0.1
8/12/2019 14:40	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 14:50	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 15:00	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 15:10	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 15:20	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 15:30	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 15:40	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 15:50	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 16:00	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 16:10	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 16:20	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 16:30	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 16:40	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 16:50	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 17:00	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 17:10	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 17:20	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 17:30	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 17:40	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 17:50	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 18:00	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 18:10	0	0	0	34.6	1.1	0.8	0.1
8/12/2019 18:20	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 18:30	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 18:40	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 18:50	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 19:00	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 19:10	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 19:20	0	0	0	34.57	1.1	0.8	0.1

8/12/2019 19:30	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 19:40	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 19:50	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 20:00	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 20:10	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 20:20	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 20:30	0	0	0	34.57	1.1	0.8	0.1
8/12/2019 20:40	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 20:50	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 21:00	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 21:10	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 21:20	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 21:30	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 21:40	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 21:50	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 22:00	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 22:10	0	0	0	34.47	1.1	0.8	0.1
8/12/2019 22:20	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 22:30	0	0	0	34.47	1.1	0.8	0.1
8/12/2019 22:40	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 22:50	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 23:00	0	0	0	34.47	1.1	0.8	0.1
8/12/2019 23:10	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 23:20	0	0	0	34.47	1.1	0.8	0.1
8/12/2019 23:30	0	0	0	34.53	1.1	0.8	0.1
8/12/2019 23:40	0	0	0	34.47	1.1	0.8	0.1
8/12/2019 23:50	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 0:00	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 0:10	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 0:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 0:30	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 0:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 0:50	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 1:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 1:10	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 1:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 1:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 1:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 1:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 2:00	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 2:10	0	0	0	34.53	1.1	0.8	0.1
8/13/2019 2:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 2:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 2:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 2:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 3:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 3:10	0	0	0	34.47	1.1	0.8	0.1

8/13/2019 3:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 3:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 3:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 3:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 4:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 4:10	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 4:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 4:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 4:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 4:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 5:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 5:10	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 5:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 5:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 5:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 5:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 6:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 6:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 6:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 6:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 6:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 6:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 7:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 7:10	0	0	0	34.47	1	0.8	0.1
8/13/2019 7:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 7:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 7:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 7:50	0	0	0	34.47	1	0.8	0.1
8/13/2019 8:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 8:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 8:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 8:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 8:40	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 8:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 9:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 9:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 9:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 9:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 9:40	0	0	0	34.47	1	0.8	0.1
8/13/2019 9:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 10:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 10:10	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 10:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 10:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 10:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 10:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 11:00	0	0	0	34.47	1	0.8	0.1

8/13/2019 11:10	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 11:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 11:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 11:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 11:50	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 12:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 12:10	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 12:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 12:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 12:40	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 12:50	0	0	0	34.47	1	0.8	0.1
8/13/2019 13:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 13:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 13:20	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 13:30	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 13:40	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 13:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 14:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 14:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 14:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 14:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 14:40	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 14:50	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 15:00	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 15:10	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 15:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 15:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 15:40	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 15:50	0	0	0	34.47	1.1	0.8	0.1
8/13/2019 16:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 16:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 16:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 16:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 16:40	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 16:50	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 17:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 17:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 17:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 17:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 17:40	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 17:50	0	0	0	34.44	1	0.8	0.1
8/13/2019 18:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 18:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 18:20	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 18:30	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 18:40	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 18:50	0	0	0	34.44	1.1	0.8	0.1

8/13/2019 19:00	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 19:10	0	0	0	34.44	1.1	0.8	0.1
8/13/2019 19:20	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 19:30	0	0	0	34.44	1	0.8	0.1
8/13/2019 19:40	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 19:50	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 20:00	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 20:10	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 20:20	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 20:30	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 20:40	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 20:50	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 21:00	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 21:10	0	0	0	34.41	1.1	0.8	0.1
8/13/2019 21:20	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 21:30	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 21:40	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 21:50	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 22:00	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 22:10	0	0	0	34.35	1.1	0.8	0.1
8/13/2019 22:20	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 22:30	0	0	0	34.35	1.1	0.8	0.1
8/13/2019 22:40	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 22:50	0	0	0	34.35	1.1	0.8	0.1
8/13/2019 23:00	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 23:10	0	0	0	34.35	1.1	0.8	0.1
8/13/2019 23:20	0	0	0	34.35	1.1	0.8	0.1
8/13/2019 23:30	0	0	0	34.38	1.1	0.8	0.1
8/13/2019 23:40	0	0	0	34.35	1.1	0.8	0.1
8/13/2019 23:50	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 0:00	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 0:10	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 0:20	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 0:30	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 0:40	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 0:50	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 1:00	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 1:10	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 1:20	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 1:30	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 1:40	0	0	0	34.35	1	0.8	0.1
8/14/2019 1:50	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 2:00	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 2:10	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 2:20	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 2:30	0	0	0	34.35	1.1	0.8	0.1
8/14/2019 2:40	0	0	0	34.32	1.1	0.8	0.1

8/14/2019 2:50	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 3:00	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 3:10	0	0	0	34.32	1	0.8	0.1
8/14/2019 3:20	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 3:30	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 3:40	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 3:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 4:00	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 4:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 4:20	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 4:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 4:40	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 4:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 5:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 5:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 5:20	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 5:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 5:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 5:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 6:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 6:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 6:20	0	0	0	34.32	1.1	0.8	0.1
8/14/2019 6:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 6:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 6:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 7:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 7:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 7:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 7:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 7:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 7:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 8:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 8:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 8:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 8:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 8:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 8:50	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 9:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 9:10	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 9:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 9:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 9:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 9:50	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 10:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 10:10	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 10:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 10:30	0	0	0	34.26	1.1	0.8	0.1

8/14/2019 10:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 10:50	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 11:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 11:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 11:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 11:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 11:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 11:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 12:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 12:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 12:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 12:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 12:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 12:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 13:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 13:10	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 13:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 13:30	0	0	0	34.29	1	0.8	0.1
8/14/2019 13:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 13:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 14:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 14:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 14:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 14:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 14:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 14:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 15:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 15:10	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 15:20	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 15:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 15:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 15:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 16:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 16:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 16:20	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 16:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 16:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 16:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 17:00	0	0	0	34.29	1	0.8	0.1
8/14/2019 17:10	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 17:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 17:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 17:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 17:50	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 18:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 18:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 18:20	0	0	0	34.26	1.1	0.8	0.1

8/14/2019 18:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 18:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 18:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 19:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 19:10	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 19:20	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 19:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 19:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 19:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 20:00	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 20:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 20:20	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 20:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 20:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 20:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 21:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 21:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 21:20	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 21:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 21:40	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 21:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 22:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 22:10	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 22:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 22:30	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 22:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 22:50	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 23:00	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 23:10	0	0	0	34.29	1	0.8	0.1
8/14/2019 23:20	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 23:30	0	0	0	34.29	1.1	0.8	0.1
8/14/2019 23:40	0	0	0	34.26	1.1	0.8	0.1
8/14/2019 23:50	0	0	0	34.26	1.1	0.8	0.1
8/15/2019 0:00	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 0:10	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 0:20	0	0	0	34.26	1.1	0.8	0.1
8/15/2019 0:30	0	0	0	34.26	1	0.8	0.1
8/15/2019 0:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 0:50	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 1:00	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 1:10	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 1:20	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 1:30	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 1:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 1:50	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 2:00	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 2:10	0	0	0	34.29	1.1	0.8	0.1

8/15/2019 2:20	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 2:30	0	0	0	34.29	1	0.8	0.1
8/15/2019 2:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 2:50	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 3:00	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 3:10	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 3:20	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 3:30	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 3:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 3:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 4:00	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 4:10	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 4:20	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 4:30	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 4:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 4:50	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 5:00	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 5:10	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 5:20	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 5:30	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 5:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 5:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 6:00	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 6:10	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 6:20	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 6:30	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 6:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 6:50	0	0	0	34.32	1	0.8	0.1
8/15/2019 7:00	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 7:10	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 7:20	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 7:30	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 7:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 7:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 8:00	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 8:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 8:20	0	0	0	34.32	1	0.8	0.1
8/15/2019 8:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 8:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 8:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 9:00	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 9:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 9:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 9:30	0	0	0	34.32	1	0.8	0.1
8/15/2019 9:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 9:50	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 10:00	0	0	0	34.35	1	0.8	0.1

8/15/2019 10:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 10:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 10:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 10:40	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 10:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 11:00	0	0	0	34.32	1	0.8	0.1
8/15/2019 11:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 11:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 11:30	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 11:40	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 11:50	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 12:00	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 12:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 12:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 12:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 12:40	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 12:50	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 13:00	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 13:10	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 13:20	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 13:30	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 13:40	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 13:50	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 14:00	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 14:10	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 14:20	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 14:30	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 14:40	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 14:50	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 15:00	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 15:10	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 15:20	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 15:30	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 15:40	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 15:50	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 16:00	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 16:10	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 16:20	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 16:30	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 16:40	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 16:50	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 17:00	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 17:10	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 17:20	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 17:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 17:40	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 17:50	0	0	0	34.38	1.1	0.8	0.1

8/15/2019 18:00	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 18:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 18:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 18:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 18:40	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 18:50	0	0	0	34.38	1.1	0.8	0.1
8/15/2019 19:00	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 19:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 19:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 19:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 19:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 19:50	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 20:00	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 20:10	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 20:20	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 20:30	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 20:40	0	0	0	34.35	1.1	0.8	0.1
8/15/2019 20:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 21:00	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 21:10	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 21:20	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 21:30	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 21:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 21:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 22:00	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 22:10	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 22:20	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 22:30	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 22:40	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 22:50	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 23:00	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 23:10	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 23:20	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 23:30	0	0	0	34.32	1.1	0.8	0.1
8/15/2019 23:40	0	0	0	34.29	1.1	0.8	0.1
8/15/2019 23:50	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 0:00	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 0:10	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 0:20	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 0:30	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 0:40	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 0:50	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 1:00	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 1:10	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 1:20	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 1:30	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 1:40	0	0	0	34.29	1.1	0.8	0.1

8/16/2019 1:50	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 2:00	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 2:10	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 2:20	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 2:30	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 2:40	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 2:50	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 3:00	0	0	0	34.32	1.1	0.8	0.1
8/16/2019 3:10	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 3:20	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 3:30	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 3:40	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 3:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 4:00	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 4:10	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 4:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 4:30	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 4:40	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 4:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 5:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 5:10	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 5:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 5:30	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 5:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 5:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 6:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 6:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 6:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 6:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 6:40	0	0	0	34.26	1	0.8	0.1
8/16/2019 6:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 7:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 7:10	0	0	0	34.26	1	0.8	0.1
8/16/2019 7:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 7:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 7:40	0	0	0	34.26	1	0.8	0.1
8/16/2019 7:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 8:00	0	0	0	34.26	1	0.8	0.1
8/16/2019 8:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 8:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 8:30	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 8:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 8:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 9:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 9:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 9:20	0	0	0	34.26	1	0.8	0.1
8/16/2019 9:30	0	0	0	34.26	1.1	0.8	0.1

8/16/2019 9:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 9:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 10:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 10:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 10:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 10:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 10:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 10:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 11:00	0	0	0	34.26	1	0.8	0.1
8/16/2019 11:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 11:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 11:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 11:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 11:50	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 12:00	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 12:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 12:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 12:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 12:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 12:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 13:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 13:10	0	0	0	34.26	1	0.8	0.1
8/16/2019 13:20	0	0	0	34.26	1	0.8	0.1
8/16/2019 13:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 13:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 13:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 14:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 14:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 14:20	0	0	0	34.29	1	0.8	0.1
8/16/2019 14:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 14:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 14:50	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 15:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 15:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 15:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 15:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 15:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 15:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 16:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 16:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 16:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 16:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 16:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 16:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 17:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 17:10	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 17:20	0	0	0	34.26	1.1	0.8	0.1

8/16/2019 17:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 17:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 17:50	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 18:00	0	0	0	34.29	1.1	0.8	0.1
8/16/2019 18:10	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 18:20	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 18:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 18:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 18:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 19:00	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 19:10	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 19:20	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 19:30	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 19:40	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 19:50	0	0	0	34.26	1.1	0.8	0.1
8/16/2019 20:00	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 20:10	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 20:20	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 20:30	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 20:40	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 20:50	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 21:00	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 21:10	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 21:20	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 21:30	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 21:40	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 21:50	0	0	0	34.2	1.1	0.8	0.1
8/16/2019 22:00	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 22:10	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 22:20	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 22:30	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 22:40	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 22:50	0	0	0	34.23	1.1	0.8	0.1
8/16/2019 23:00	0	0	0	34.2	1.1	0.8	0.1
8/16/2019 23:10	0	0	0	34.2	1.1	0.8	0.1
8/16/2019 23:20	0	0	0	34.2	1.1	0.8	0.1
8/16/2019 23:30	0	0	0	34.2	1.1	0.8	0.1
8/16/2019 23:40	0	0	0	34.2	1.1	0.8	0.1
8/16/2019 23:50	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 0:00	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 0:10	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 0:20	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 0:30	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 0:40	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 0:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 1:00	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 1:10	0	0	0	34.2	1.1	0.8	0.1

8/17/2019 1:20	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 1:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 1:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 1:50	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 2:00	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 2:10	0	0	0	34.2	1.1	0.8	0.1
8/17/2019 2:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 2:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 2:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 2:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 3:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 3:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 3:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 3:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 3:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 3:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 4:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 4:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 4:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 4:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 4:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 4:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 5:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 5:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 5:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 5:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 5:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 5:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 6:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 6:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 6:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 6:30	0	0	0	34.17	1.1	0.7	0.1
8/17/2019 6:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 6:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 7:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 7:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 7:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 7:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 7:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 7:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 8:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 8:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 8:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 8:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 8:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 8:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 9:00	0	0	0	34.14	1.1	0.8	0.1

8/17/2019 9:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 9:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 9:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 9:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 9:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 10:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 10:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 10:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 10:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 10:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 10:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 11:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 11:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 11:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 11:30	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 11:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 11:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 12:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 12:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 12:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 12:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 12:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 12:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 13:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 13:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 13:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 13:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 13:40	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 13:50	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 14:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 14:10	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 14:20	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 14:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 14:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 14:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 15:00	0	0	0	34.17	1.1	0.8	0.1
8/17/2019 15:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 15:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 15:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 15:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 15:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 16:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 16:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 16:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 16:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 16:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 16:50	0	0	0	34.14	1.1	0.8	0.1

8/17/2019 17:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 17:10	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 17:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 17:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 17:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 17:50	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 18:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 18:10	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 18:20	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 18:30	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 18:40	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 18:50	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 19:00	0	0	0	34.14	1.1	0.8	0.1
8/17/2019 19:10	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 19:20	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 19:30	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 19:40	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 19:50	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 20:00	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 20:10	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 20:20	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 20:30	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 20:40	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 20:50	0	0	0	34.11	1.1	0.8	0.1
8/17/2019 21:00	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 21:10	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 21:20	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 21:30	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 21:40	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 21:50	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 22:00	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 22:10	0	0	0	34.08	1.1	0.8	0.1
8/17/2019 22:20	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 22:30	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 22:40	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 22:50	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 23:00	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 23:10	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 23:20	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 23:30	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 23:40	0	0	0	34.05	1.1	0.8	0.1
8/17/2019 23:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 0:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 0:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 0:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 0:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 0:40	0	0	0	34.05	1.1	0.8	0.1

8/18/2019 0:50	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 1:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 1:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 1:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 1:30	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 1:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 1:50	0	0	0	34.05	1	0.8	0.1
8/18/2019 2:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 2:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 2:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 2:30	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 2:40	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 2:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 3:00	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 3:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 3:20	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 3:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 3:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 3:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 4:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 4:10	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 4:20	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 4:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 4:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 4:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 5:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 5:10	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 5:20	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 5:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 5:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 5:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 6:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 6:10	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 6:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 6:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 6:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 6:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 7:00	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 7:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 7:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 7:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 7:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 7:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 8:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 8:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 8:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 8:30	0	0	0	34.05	1.1	0.8	0.1

8/18/2019 8:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 8:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 9:00	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 9:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 9:20	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 9:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 9:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 9:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 10:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 10:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 10:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 10:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 10:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 10:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 11:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 11:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 11:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 11:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 11:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 11:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 12:00	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 12:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 12:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 12:30	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 12:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 12:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 13:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 13:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 13:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 13:30	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 13:40	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 13:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 14:00	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 14:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 14:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 14:30	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 14:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 14:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 15:00	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 15:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 15:20	0	0	0	34.08	1.1	0.8	0.1
8/18/2019 15:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 15:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 15:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 16:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 16:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 16:20	0	0	0	34.05	1.1	0.8	0.1

8/18/2019 16:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 16:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 16:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 17:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 17:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 17:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 17:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 17:40	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 17:50	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 18:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 18:10	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 18:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 18:30	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 18:40	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 18:50	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 19:00	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 19:10	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 19:20	0	0	0	34.05	1.1	0.8	0.1
8/18/2019 19:30	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 19:40	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 19:50	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 20:00	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 20:10	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 20:20	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 20:30	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 20:40	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 20:50	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 21:00	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 21:10	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 21:20	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 21:30	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 21:40	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 21:50	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 22:00	0	0	0	33.99	1.1	0.8	0.1
8/18/2019 22:10	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 22:20	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 22:30	0	0	0	33.99	1.1	0.8	0.1
8/18/2019 22:40	0	0	0	33.99	1.1	0.8	0.1
8/18/2019 22:50	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 23:00	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 23:10	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 23:20	0	0	0	34.02	1.1	0.8	0.1
8/18/2019 23:30	0	0	0	33.99	1.1	0.8	0.1
8/18/2019 23:40	0	0	0	33.99	1.1	0.8	0.1
8/18/2019 23:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 0:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 0:10	0	0	0	34.02	1.1	0.8	0.1

8/19/2019 0:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 0:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 0:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 0:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 1:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 1:10	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 1:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 1:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 1:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 1:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 2:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 2:10	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 2:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 2:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 2:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 2:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 3:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 3:10	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 3:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 3:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 3:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 3:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 4:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 4:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 4:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 4:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 4:40	0	0	0	33.99	1	0.8	0.1
8/19/2019 4:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 5:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 5:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 5:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 5:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 5:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 5:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 6:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 6:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 6:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 6:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 6:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 6:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 7:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 7:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 7:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 7:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 7:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 7:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 8:00	0	0	0	33.99	1.1	0.8	0.1

8/19/2019 8:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 8:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 8:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 8:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 8:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 9:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 9:10	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 9:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 9:30	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 9:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 9:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 10:00	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 10:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 10:20	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 10:30	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 10:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 10:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 11:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 11:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 11:20	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 11:30	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 11:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 11:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 12:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 12:10	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 12:20	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 12:30	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 12:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 12:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 13:00	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 13:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 13:20	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 13:30	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 13:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 13:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 14:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 14:10	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 14:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 14:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 14:40	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 14:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 15:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 15:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 15:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 15:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 15:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 15:50	0	0	0	33.99	1.1	0.8	0.1

8/19/2019 16:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 16:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 16:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 16:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 16:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 16:50	0	0	0	34.02	1.1	0.8	0.1
8/19/2019 17:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 17:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 17:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 17:30	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 17:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 17:50	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 18:00	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 18:10	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 18:20	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 18:30	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 18:40	0	0	0	33.99	1.1	0.8	0.1
8/19/2019 18:50	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 19:00	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 19:10	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 19:20	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 19:30	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 19:40	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 19:50	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 20:00	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 20:10	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 20:20	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 20:30	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 20:40	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 20:50	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 21:00	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 21:10	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 21:20	0	0	0	33.95	1	0.8	0.1
8/19/2019 21:30	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 21:40	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 21:50	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 22:00	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 22:10	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 22:20	0	0	0	33.92	1.1	0.8	0.1
8/19/2019 22:30	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 22:40	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 22:50	0	0	0	33.95	1.1	0.8	0.1
8/19/2019 23:00	0	0	0	33.92	1.1	0.8	0.1
8/19/2019 23:10	0	0	0	33.92	1.1	0.8	0.1
8/19/2019 23:20	0	0	0	33.92	1.1	0.8	0.1
8/19/2019 23:30	0	0	0	33.92	1.1	0.8	0.1
8/19/2019 23:40	0	0	0	33.92	1.1	0.8	0.1

8/19/2019 23:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 0:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 0:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 0:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 0:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 0:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 0:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 1:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 1:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 1:20	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 1:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 1:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 1:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 2:00	0	0	0	33.89	1	0.8	0.1
8/20/2019 2:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 2:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 2:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 2:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 2:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 3:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 3:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 3:20	0	0	0	33.89	1	0.8	0.1
8/20/2019 3:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 3:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 3:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 4:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 4:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 4:20	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 4:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 4:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 4:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 5:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 5:10	0	0	0	33.89	1	0.8	0.1
8/20/2019 5:20	0	0	0	33.83	1.1	0.8	0.1
8/20/2019 5:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 5:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 5:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 6:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 6:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 6:20	0	0	0	33.89	1	0.8	0.1
8/20/2019 6:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 6:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 6:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 7:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 7:10	0	0	0	33.83	1.1	0.8	0.1
8/20/2019 7:20	0	0	0	33.83	1.1	0.8	0.1
8/20/2019 7:30	0	0	0	33.83	1.1	0.8	0.1

8/20/2019 7:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 7:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 8:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 8:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 8:20	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 8:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 8:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 8:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 9:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 9:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 9:20	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 9:30	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 9:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 9:50	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 10:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 10:10	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 10:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 10:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 10:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 10:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 11:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 11:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 11:20	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 11:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 11:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 11:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 12:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 12:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 12:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 12:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 12:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 12:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 13:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 13:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 13:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 13:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 13:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 13:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 14:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 14:10	0	0	0	33.95	1.1	0.8	0.1
8/20/2019 14:20	0	0	0	33.95	1.1	0.8	0.1
8/20/2019 14:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 14:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 14:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 15:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 15:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 15:20	0	0	0	33.92	1.1	0.8	0.1

8/20/2019 15:30	0	0	0	33.95	1	0.8	0.1
8/20/2019 15:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 15:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 16:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 16:10	0	0	0	33.95	1.1	0.8	0.1
8/20/2019 16:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 16:30	0	0	0	33.95	1.1	0.8	0.1
8/20/2019 16:40	0	0	0	33.95	1	0.8	0.1
8/20/2019 16:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 17:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 17:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 17:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 17:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 17:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 17:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 18:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 18:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 18:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 18:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 18:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 18:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 19:00	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 19:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 19:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 19:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 19:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 19:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 20:00	0	0	0	33.92	1	0.8	0.1
8/20/2019 20:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 20:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 20:30	0	0	0	33.92	1	0.8	0.1
8/20/2019 20:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 20:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 21:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 21:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 21:20	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 21:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 21:40	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 21:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 22:00	0	0	0	33.92	1	0.8	0.1
8/20/2019 22:10	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 22:20	0	0	0	33.92	1	0.8	0.1
8/20/2019 22:30	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 22:40	0	0	0	33.92	1	0.8	0.1
8/20/2019 22:50	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 23:00	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 23:10	0	0	0	33.92	1	0.8	0.1

8/20/2019 23:20	0	0	0	33.89	1.1	0.8	0.1
8/20/2019 23:30	0	0	0	33.92	1	0.8	0.1
8/20/2019 23:40	0	0	0	33.92	1.1	0.8	0.1
8/20/2019 23:50	0	0	0	33.92	1	0.8	0.1
8/21/2019 0:00	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 0:10	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 0:20	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 0:30	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 0:40	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 0:50	0	0	0	33.92	1	0.8	0.1
8/21/2019 1:00	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 1:10	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 1:20	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 1:30	0	0	0	33.92	1	0.8	0.1
8/21/2019 1:40	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 1:50	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 2:00	0	0	0	33.92	1	0.8	0.1
8/21/2019 2:10	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 2:20	0	0	0	33.92	1	0.8	0.1
8/21/2019 2:30	0	0	0	33.92	1	0.8	0.1
8/21/2019 2:40	0	0	0	33.92	1	0.8	0.1
8/21/2019 2:50	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 3:00	0	0	0	33.92	1	0.8	0.1
8/21/2019 3:10	0	0	0	33.92	1	0.8	0.1
8/21/2019 3:20	0	0	0	33.92	1	0.8	0.1
8/21/2019 3:30	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 3:40	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 3:50	0	0	0	33.92	1	0.8	0.1
8/21/2019 4:00	0	0	0	33.92	1	0.8	0.1
8/21/2019 4:10	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 4:20	0	0	0	33.95	1	0.8	0.1
8/21/2019 4:30	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 4:40	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 4:50	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 5:00	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 5:10	0	0	0	33.95	1	0.8	0.1
8/21/2019 5:20	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 5:30	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 5:40	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 5:50	0	0	0	33.95	1	0.8	0.1
8/21/2019 6:00	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 6:10	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 6:20	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 6:30	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 6:40	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 6:50	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 7:00	0	0	0	33.95	1.1	0.8	0.1

8/21/2019 7:10	0	0	0	33.95	1	0.8	0.1
8/21/2019 7:20	0	0	0	33.95	1	0.8	0.1
8/21/2019 7:30	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 7:40	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 7:50	0	0	0	33.95	1	0.8	0.1
8/21/2019 8:00	0	0	0	33.95	1	0.8	0.1
8/21/2019 8:10	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 8:20	0	0	0	33.95	1	0.8	0.1
8/21/2019 8:30	0	0	0	33.99	1.1	0.8	0.1
8/21/2019 8:40	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 8:50	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 9:00	0	0	0	33.95	1	0.8	0.1
8/21/2019 9:10	0	0	0	33.99	1.1	0.8	0.1
8/21/2019 9:20	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 9:30	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 9:40	0	0	0	33.99	1.1	0.8	0.1
8/21/2019 9:50	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 10:00	0	0	0	33.95	1	0.8	0.1
8/21/2019 10:10	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 10:20	0	0	0	33.99	1.1	0.8	0.1
8/21/2019 10:30	0	0	0	33.95	1	0.8	0.1
8/21/2019 10:40	0	0	0	33.99	1	0.8	0.1
8/21/2019 10:50	0	0	0	33.95	1	0.8	0.1
8/21/2019 11:00	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 11:10	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 11:20	0	0	0	33.99	1	0.8	0.1
8/21/2019 11:30	0	0	0	33.99	1.1	0.8	0.1
8/21/2019 11:40	0	0	0	33.99	1	0.8	0.1
8/21/2019 11:50	0	0	0	33.95	1.1	0.8	0.1
8/21/2019 12:00	0	0	0	33.99	1	0.8	0.1
8/21/2019 12:10	0	0	0	33.99	1.1	0.8	0.1
8/21/2019 12:20	0	0	0	33.83	1.1	0.8	0.1
8/21/2019 12:30	0	0	0	33.89	1	0.8	0.1
8/21/2019 12:40	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 12:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 13:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 13:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 13:20	0	0	0	33.89	1	0.8	0.1
8/21/2019 13:30	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 13:40	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 13:50	0	0	0	33.83	1.1	0.8	0.1
8/21/2019 14:00	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 14:10	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 14:20	0	0	0	33.92	1	0.8	0.1
8/21/2019 14:30	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 14:40	0	0	0	33.92	1	0.8	0.1
8/21/2019 14:50	0	0	0	33.89	1.1	0.8	0.1

8/21/2019 15:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 15:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 15:20	0	0	0	33.92	1	0.8	0.1
8/21/2019 15:30	0	0	0	33.89	1	0.8	0.2
8/21/2019 15:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 15:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 16:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 16:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 16:20	0	0	0	33.92	1	0.8	0.1
8/21/2019 16:30	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 16:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 16:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 17:00	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 17:10	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 17:20	0	0	0	33.92	1	0.8	0.1
8/21/2019 17:30	0	0	0	33.89	1	0.8	0.1
8/21/2019 17:40	0	0	0	33.92	1.1	0.8	0.1
8/21/2019 17:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 18:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 18:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 18:20	0	0	0	33.89	1	0.8	0.1
8/21/2019 18:30	0	0	0	33.89	1	0.8	0.1
8/21/2019 18:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 18:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 19:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 19:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 19:20	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 19:30	0	0	0	33.89	1	0.8	0.1
8/21/2019 19:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 19:50	0	0	0	33.92	1	0.8	0.1
8/21/2019 20:00	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 20:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 20:20	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 20:30	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 20:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 20:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 21:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 21:10	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 21:20	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 21:30	0	0	0	33.89	1	0.8	0.1
8/21/2019 21:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 21:50	0	0	0	33.89	1	0.8	0.1
8/21/2019 22:00	0	0	0	33.89	1	0.8	0.1
8/21/2019 22:10	0	0	0	33.83	1	0.8	0.1
8/21/2019 22:20	0	0	0	33.89	1	0.8	0.1
8/21/2019 22:30	0	0	0	33.89	1	0.8	0.1
8/21/2019 22:40	0	0	0	33.89	1	0.8	0.1

8/21/2019 22:50	0	0	0	33.89	1.1	0.8	0.1
8/21/2019 23:00	0	0	0	33.83	1	0.8	0.1
8/21/2019 23:10	0	0	0	33.89	1	0.8	0.1
8/21/2019 23:20	0	0	0	33.89	1	0.8	0.1
8/21/2019 23:30	0	0	0	33.83	1	0.8	0.1
8/21/2019 23:40	0	0	0	33.89	1	0.8	0.1
8/21/2019 23:50	0	0	0	33.89	1	0.8	0.1
8/22/2019 0:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 0:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 0:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 0:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 0:40	0	0	0	33.83	1	0.8	0.2
8/22/2019 0:50	0	0	0	33.89	1	0.8	0.1
8/22/2019 1:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 1:10	0	0	0	33.89	1	0.8	0.1
8/22/2019 1:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 1:30	0	0	0	33.89	1	0.8	0.1
8/22/2019 1:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 1:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 2:00	0	0	0	33.89	1	0.8	0.1
8/22/2019 2:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 2:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 2:30	0	0	0	33.89	1	0.8	0.1
8/22/2019 2:40	0	0	0	33.89	1	0.8	0.1
8/22/2019 2:50	0	0	0	33.89	1	0.8	0.1
8/22/2019 3:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 3:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 3:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 3:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 3:40	0	0	0	33.89	1	0.8	0.1
8/22/2019 3:50	0	0	0	33.83	1	0.8	0.2
8/22/2019 4:00	0	0	0	33.83	1	0.8	0.2
8/22/2019 4:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 4:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 4:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 4:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 4:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 5:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 5:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 5:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 5:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 5:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 5:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 6:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 6:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 6:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 6:30	0	0	0	33.83	1	0.8	0.1

8/22/2019 6:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 6:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 7:00	0	0	0	33.89	1	0.8	0.1
8/22/2019 7:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 7:20	0	0	0	33.89	1	0.8	0.1
8/22/2019 7:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 7:40	0	0	0	33.89	1	0.8	0.1
8/22/2019 7:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 8:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 8:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 8:20	0	0	0	33.89	1	0.8	0.1
8/22/2019 8:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 8:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 8:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 9:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 9:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 9:20	0	0	0	33.89	1	0.8	0.1
8/22/2019 9:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 9:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 9:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 10:00	0	0	0	33.83	1	0.8	0.2
8/22/2019 10:10	0	0	0	33.89	1	0.8	0.1
8/22/2019 10:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 10:30	0	0	0	33.83	1	0.8	0.2
8/22/2019 10:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 10:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 11:00	0	0	0	33.89	1	0.8	0.2
8/22/2019 11:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 11:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 11:30	0	0	0	33.83	1	0.8	0.2
8/22/2019 11:40	0	0	0	33.83	1	0.8	0.2
8/22/2019 11:50	0	0	0	33.89	1	0.8	0.2
8/22/2019 12:00	0	0	0	33.89	1	0.8	0.2
8/22/2019 12:10	0	0	0	33.89	1	0.8	0.2
8/22/2019 12:20	0	0	0	33.89	1	0.8	0.2
8/22/2019 12:30	0	0	0	33.89	1	0.8	0.2
8/22/2019 12:40	0	0	0	33.83	1	0.8	0.2
8/22/2019 12:50	0	0	0	33.89	1	0.8	0.2
8/22/2019 13:00	0	0	0	33.83	1	0.8	0.2
8/22/2019 13:10	0	0	0	33.89	1	0.8	0.2
8/22/2019 13:20	0	0	0	33.89	1	0.8	0.2
8/22/2019 13:30	0	0	0	33.89	1	0.8	0.2
8/22/2019 13:40	0	0	0	33.89	1	0.8	0.2
8/22/2019 13:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 14:00	0	0	0	33.89	1	0.8	0.2
8/22/2019 14:10	0	0	0	33.83	1	0.8	0.2
8/22/2019 14:20	0	0	0	33.89	1	0.8	0.2

8/22/2019 14:30	0	0	0	33.89	1	0.8	0.2
8/22/2019 14:40	0	0	0	33.89	1	0.8	0.2
8/22/2019 14:50	0	0	0	33.89	1	0.8	0.1
8/22/2019 15:00	0	0	0	33.89	1	0.8	0.2
8/22/2019 15:10	0	0	0	33.83	1	0.8	0.2
8/22/2019 15:20	0	0	0	33.89	1	0.8	0.1
8/22/2019 15:30	0	0	0	33.83	1	0.8	0.2
8/22/2019 15:40	0	0	0	33.89	1	0.8	0.1
8/22/2019 15:50	0	0	0	33.83	1	0.8	0.2
8/22/2019 16:00	0	0	0	33.89	1	0.8	0.1
8/22/2019 16:10	0	0	0	33.89	1	0.8	0.2
8/22/2019 16:20	0	0	0	33.89	1	0.8	0.2
8/22/2019 16:30	0	0	0	33.83	1	0.8	0.2
8/22/2019 16:40	0	0	0	33.89	1	0.8	0.2
8/22/2019 16:50	0	0	0	33.89	1	0.8	0.1
8/22/2019 17:00	0	0	0	33.83	1	0.8	0.2
8/22/2019 17:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 17:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 17:30	0	0	0	33.83	1	0.8	0.2
8/22/2019 17:40	0	0	0	33.89	1	0.8	0.1
8/22/2019 17:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 18:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 18:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 18:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 18:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 18:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 18:50	0	0	0	33.83	1	0.8	0.2
8/22/2019 19:00	0	0	0	33.83	1	0.8	0.2
8/22/2019 19:10	0	0	0	33.89	1	0.8	0.1
8/22/2019 19:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 19:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 19:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 19:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 20:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 20:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 20:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 20:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 20:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 20:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 21:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 21:10	0	0	0	33.83	1	0.8	0.1
8/22/2019 21:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 21:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 21:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 21:50	0	0	0	33.83	1	0.8	0.1
8/22/2019 22:00	0	0	0	33.83	1	0.8	0.1
8/22/2019 22:10	0	0	0	33.83	1	0.8	0.2

8/22/2019 22:20	0	0	0	33.83	1	0.8	0.2
8/22/2019 22:30	0	0	0	33.83	1	0.8	0.1
8/22/2019 22:40	0	0	0	33.83	1	0.8	0.1
8/22/2019 22:50	0	0	0	33.83	1	0.8	0.2
8/22/2019 23:00	0	0	0	33.8	1	0.8	0.1
8/22/2019 23:10	0	0	0	33.83	1	0.8	0.2
8/22/2019 23:20	0	0	0	33.83	1	0.8	0.1
8/22/2019 23:30	0	0	0	33.83	1	0.8	0.2
8/22/2019 23:40	0	0	0	33.8	1	0.8	0.1
8/22/2019 23:50	0	0	0	33.83	1	0.8	0.2
8/23/2019 0:00	0	0	0	33.83	1	0.8	0.2
8/23/2019 0:10	0	0	0	33.8	1	0.8	0.2
8/23/2019 0:20	0	0	0	33.83	1	0.8	0.2
8/23/2019 0:30	0	0	0	33.83	1	0.8	0.1
8/23/2019 0:40	0	0	0	33.8	1	0.8	0.2
8/23/2019 0:50	0	0	0	33.8	1	0.8	0.1
8/23/2019 1:00	0	0	0	33.8	1	0.8	0.2
8/23/2019 1:10	0	0	0	33.8	1	0.8	0.2
8/23/2019 1:20	0	0	0	33.8	1	0.8	0.2
8/23/2019 1:30	0	0	0	33.83	1	0.8	0.1
8/23/2019 1:40	0	0	0	33.8	1	0.8	0.1
8/23/2019 1:50	0	0	0	33.8	1	0.8	0.2
8/23/2019 2:00	0	0	0	33.8	1	0.8	0.1
8/23/2019 2:10	0	0	0	33.8	1	0.8	0.1
8/23/2019 2:20	0	0	0	33.83	1	0.8	0.1
8/23/2019 2:30	0	0	0	33.8	1	0.8	0.2
8/23/2019 2:40	0	0	0	33.8	1	0.8	0.2
8/23/2019 2:50	0	0	0	33.8	1	0.8	0.1
8/23/2019 3:00	0	0	0	33.8	1	0.8	0.1
8/23/2019 3:10	0	0	0	33.77	1	0.8	0.1
8/23/2019 3:20	0	0	0	33.8	1	0.8	0.1
8/23/2019 3:30	0	0	0	33.8	1	0.8	0.2
8/23/2019 3:40	0	0	0	33.8	1	0.8	0.2
8/23/2019 3:50	0	0	0	33.8	1	0.8	0.1
8/23/2019 4:00	0	0	0	33.8	1	0.8	0.1
8/23/2019 4:10	0	0	0	33.8	1	0.8	0.2
8/23/2019 4:20	0	0	0	33.8	1	0.8	0.1
8/23/2019 4:30	0	0	0	33.8	1	0.8	0.1
8/23/2019 4:40	0	0	0	33.8	0.9	0.8	0.1
8/23/2019 4:50	0	0	0	33.8	1	0.8	0.2
8/23/2019 5:00	0	0	0	33.83	1	0.8	0.1
8/23/2019 5:10	0	0	0	33.8	1	0.8	0.1
8/23/2019 5:20	0	0	0	33.8	1	0.8	0.1
8/23/2019 5:30	0	0	0	33.8	1	0.8	0.1
8/23/2019 5:40	0	0	0	33.8	1	0.8	0.1
8/23/2019 5:50	0	0	0	33.8	1	0.8	0.1
8/23/2019 6:00	0	0	0	33.83	1	0.8	0.1

8/23/2019 6:10	0	0	0	33.83	1	0.8	0.1
8/23/2019 6:20	0	0	0	33.8	1	0.8	0.1
8/23/2019 6:30	0	0	0	33.83	1	0.8	0.2
8/23/2019 6:40	0	0	0	33.83	1	0.8	0.1
8/23/2019 6:50	0	0	0	33.83	1	0.8	0.2
8/23/2019 7:00	0	0	0	33.8	1	0.8	0.1
8/23/2019 7:10	0	0	0	33.8	1	0.8	0.2
8/23/2019 7:20	0	0	0	33.83	1	0.8	0.2
8/23/2019 7:30	0	0	0	33.83	1	0.8	0.1
8/23/2019 7:40	0	0	0	33.83	1	0.8	0.2
8/23/2019 7:50	0	0	0	33.83	1	0.8	0.1
8/23/2019 8:00	0	0	0	33.83	1	0.8	0.2
8/23/2019 8:10	0	0	0	33.83	1	0.8	0.2
8/23/2019 8:20	0	0	0	33.83	1	0.8	0.2
8/23/2019 8:30	0	0	0	33.83	1	0.8	0.2
8/23/2019 8:40	0	0	0	33.83	1	0.8	0.2
8/23/2019 8:50	0	0	0	33.89	1	0.8	0.2
8/23/2019 9:00	0	0	0	33.83	1	0.8	0.2
8/23/2019 9:10	0	0	0	33.83	1	0.8	0.2
8/23/2019 9:20	0	0	0	33.83	1	0.8	0.2
8/23/2019 9:30	0	0	0	33.83	1	0.8	0.2
8/23/2019 9:40	0	0	0	33.89	1	0.8	0.2
8/23/2019 9:50	0	0	0	33.83	1	0.8	0.2
8/23/2019 10:00	0	0	0	33.89	1	0.8	0.2
8/23/2019 10:10	0	0	0	33.89	1	0.8	0.2
8/23/2019 10:20	0	0	0	33.83	1	0.8	0.2
8/23/2019 10:30	0	0	0	33.89	1	0.8	0.2
8/23/2019 10:40	0	0	0	33.89	1	0.8	0.2
8/23/2019 10:50	0	0	0	33.89	1	0.8	0.2
8/23/2019 11:00	0	0	0	33.89	1	0.8	0.2
8/23/2019 11:10	0	0	0	33.89	1	0.8	0.2
8/23/2019 11:20	0	0	0	33.89	1	0.8	0.2
8/23/2019 11:30	0	0	0	33.89	1	0.8	0.2
8/23/2019 11:40	0	0	0	33.92	1	0.8	0.2
8/23/2019 11:50	0	0	0	33.92	1	0.8	0.2
8/23/2019 12:00	0	0	0	33.92	1	0.8	0.2
8/23/2019 12:10	0	0	0	33.89	1	0.8	0.2
8/23/2019 12:20	0	0	0	33.89	1	0.8	0.2
8/23/2019 12:30	0	0	0	33.92	1	0.8	0.2
8/23/2019 12:40	0	0	0	33.89	1	0.8	0.2
8/23/2019 12:50	0	0	0	33.92	1	0.8	0.2
8/23/2019 13:00	0	0	0	33.92	1	0.8	0.2
8/23/2019 13:10	0	0	0	33.92	1	0.8	0.2
8/23/2019 13:20	0	0	0	33.95	0.9	0.8	0.2
8/23/2019 13:30	0	0	0	33.92	0.9	0.8	0.2
8/23/2019 13:40	0	0	0	33.92	1	0.8	0.2
8/23/2019 13:50	0	0	0	33.92	1	0.8	0.2

8/23/2019 14:00	0	0	0	33.95	1	0.8	0.2
8/23/2019 14:10	0	0	0	33.95	1	0.8	0.2
8/23/2019 14:20	0	0	0	33.92	1	0.8	0.2
8/23/2019 14:30	0	0	0	33.95	1	0.8	0.2
8/23/2019 14:40	0	0	0	33.95	1	0.8	0.2
8/23/2019 14:50	0	0	0	33.92	0.9	0.8	0.2
8/23/2019 15:00	0	0	0	33.95	1	0.8	0.2
8/23/2019 15:10	0	0	0	33.95	1	0.8	0.2
8/23/2019 15:20	0	0	0	33.95	1	0.8	0.2
8/23/2019 15:30	0	0	0	33.95	1	0.8	0.2
8/23/2019 15:40	0	0	0	33.95	1	0.8	0.2
8/23/2019 15:50	0	0	0	33.95	1	0.8	0.2
8/23/2019 16:00	0	0	0	33.95	1	0.8	0.2
8/23/2019 16:10	0	0	0	33.95	0.9	0.8	0.2
8/23/2019 16:20	0	0	0	33.95	1	0.8	0.2
8/23/2019 16:30	0	0	0	33.95	1	0.8	0.2
8/23/2019 16:40	0	0	0	33.99	1	0.8	0.1
8/23/2019 16:50	0	0	0	33.99	1	0.8	0.2
8/23/2019 17:00	0	0	0	33.99	1	0.8	0.1
8/23/2019 17:10	0	0	0	33.99	1	0.8	0.2
8/23/2019 17:20	0	0	0	33.99	1	0.8	0.2
8/23/2019 17:30	0	0	0	33.99	1	0.8	0.2
8/23/2019 17:40	0	0	0	33.99	1	0.8	0.2
8/23/2019 17:50	0	0	0	33.99	1	0.8	0.2
8/23/2019 18:00	0	0	0	33.99	1	0.8	0.2
8/23/2019 18:10	0	0	0	33.99	1	0.8	0.1
8/23/2019 18:20	0	0	0	33.99	1	0.8	0.2
8/23/2019 18:30	0	0	0	33.99	1	0.8	0.2
8/23/2019 18:40	0	0	0	34.02	1	0.8	0.2
8/23/2019 18:50	0	0	0	33.99	1	0.8	0.2
8/23/2019 19:00	0	0	0	33.99	1	0.8	0.1
8/23/2019 19:10	0	0	0	33.99	1	0.8	0.2
8/23/2019 19:20	0	0	0	33.99	1	0.8	0.2
8/23/2019 19:30	0	0	0	34.02	1	0.8	0.2
8/23/2019 19:40	0	0	0	33.99	1	0.8	0.1
8/23/2019 19:50	0	0	0	34.02	1	0.8	0.1
8/23/2019 20:00	0	0	0	34.02	1	0.8	0.2
8/23/2019 20:10	0	0	0	34.02	0.9	0.8	0.2
8/23/2019 20:20	0	0	0	34.02	1	0.8	0.1
8/23/2019 20:30	0	0	0	34.02	1	0.8	0.2
8/23/2019 20:40	0	0	0	34.02	1	0.8	0.2
8/23/2019 20:50	0	0	0	34.02	1	0.8	0.1
8/23/2019 21:00	0	0	0	34.02	1	0.8	0.2
8/23/2019 21:10	0	0	0	34.02	1	0.8	0.2
8/23/2019 21:20	0	0	0	34.02	1	0.8	0.2
8/23/2019 21:30	0	0	0	34.02	0.9	0.8	0.1
8/23/2019 21:40	0	0	0	34.02	1	0.8	0.2

8/23/2019 21:50	0	0	0	34.02	1	0.8	0.1
8/23/2019 22:00	0	0	0	34.02	1	0.8	0.1
8/23/2019 22:10	0	0	0	34.05	1	0.8	0.2
8/23/2019 22:20	0	0	0	34.05	1	0.8	0.1
8/23/2019 22:30	0	0	0	34.05	1	0.8	0.2
8/23/2019 22:40	0	0	0	34.02	1	0.8	0.2
8/23/2019 22:50	0	0	0	34.05	1	0.8	0.1
8/23/2019 23:00	0	0	0	34.05	1	0.8	0.2
8/23/2019 23:10	0	0	0	34.05	1	0.8	0.1
8/23/2019 23:20	0	0	0	34.02	1	0.8	0.1
8/23/2019 23:30	0	0	0	34.05	1	0.8	0.1
8/23/2019 23:40	0	0	0	34.05	0.9	0.8	0.1
8/23/2019 23:50	0	0	0	34.05	0.9	0.8	0.1
8/24/2019 0:00	0	0	0	34.05	0.9	0.8	0.1
8/24/2019 0:10	0	0	0	34.08	0.9	0.8	0.1
8/24/2019 0:20	0	0	0	34.08	0.9	0.8	0.1
8/24/2019 0:30	0	0	0	34.08	0.9	0.8	0.1
8/24/2019 0:40	0	0	0	34.08	0.9	0.8	0.1
8/24/2019 0:50	0	0	0	34.08	1	0.8	0.1
8/24/2019 1:00	0	0	0	34.08	0.9	0.8	0.1
8/24/2019 1:10	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 1:20	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 1:30	0	0	0	34.11	1	0.8	0.1
8/24/2019 1:40	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 1:50	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 2:00	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 2:10	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 2:20	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 2:30	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 2:40	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 2:50	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 3:00	0	0	0	34.11	0.9	0.8	0.1
8/24/2019 3:10	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 3:20	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 3:30	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 3:40	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 3:50	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 4:00	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 4:10	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 4:20	0	0	0	34.17	1	0.8	0.1
8/24/2019 4:30	0	0	0	34.14	0.9	0.8	0.1
8/24/2019 4:40	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 4:50	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 5:00	0	0	0	34.17	1	0.8	0.1
8/24/2019 5:10	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 5:20	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 5:30	0	0	0	34.17	0.9	0.8	0.1

8/24/2019 5:40	0	0	0	34.2	0.9	0.8	0.1
8/24/2019 5:50	0	0	0	34.17	0.9	0.8	0.1
8/24/2019 6:00	0	0	0	34.2	0.9	0.8	0.1
8/24/2019 6:10	0	0	0	34.2	0.9	0.8	0.1
8/24/2019 6:20	0	0	0	34.2	0.9	0.8	0.1
8/24/2019 6:30	0	0	0	34.2	0.9	0.8	0.1
8/24/2019 6:40	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 6:50	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 7:00	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 7:10	0	0	0	34.23	1	0.8	0.1
8/24/2019 7:20	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 7:30	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 7:40	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 7:50	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 8:00	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 8:10	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 8:20	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 8:30	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 8:40	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 8:50	0	0	0	34.23	1	0.8	0.1
8/24/2019 9:00	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 9:10	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 9:20	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 9:30	0	0	0	34.23	0.9	0.8	0.1
8/24/2019 9:40	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 9:50	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 10:00	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 10:10	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 10:20	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 10:30	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 10:40	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 10:50	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 11:00	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 11:10	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 11:20	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 11:30	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 11:40	0	0	0	34.26	0.9	0.8	0.1
8/24/2019 11:50	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 12:00	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 12:10	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 12:20	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 12:30	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 12:40	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 12:50	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 13:00	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 13:10	0	0	0	34.29	0.9	0.8	0.1
8/24/2019 13:20	0	0	0	34.32	0.9	0.8	0.1

8/24/2019 13:30	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 13:40	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 13:50	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 14:00	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 14:10	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 14:20	0	0	0	34.32	0.9	0.8	0.1
8/24/2019 14:30	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 14:40	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 14:50	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 15:00	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 15:10	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 15:20	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 15:30	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 15:40	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 15:50	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 16:00	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 16:10	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 16:20	0	0	0	34.35	0.9	0.8	0.1
8/24/2019 16:30	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 16:40	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 16:50	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 17:00	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 17:10	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 17:20	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 17:30	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 17:40	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 17:50	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 18:00	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 18:10	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 18:20	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 18:30	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 18:40	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 18:50	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 19:00	0	0	0	34.38	0.9	0.8	0.1
8/24/2019 19:10	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 19:20	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 19:30	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 19:40	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 19:50	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 20:00	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 20:10	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 20:20	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 20:30	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 20:40	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 20:50	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 21:00	0	0	0	34.41	0.9	0.8	0.1
8/24/2019 21:10	0	0	0	34.41	0.9	0.8	0.1

8/24/2019 21:20	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 21:30	0	0	0	34.44	1	0.8	0.1
8/24/2019 21:40	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 21:50	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 22:00	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 22:10	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 22:20	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 22:30	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 22:40	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 22:50	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 23:00	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 23:10	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 23:20	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 23:30	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 23:40	0	0	0	34.44	0.9	0.8	0.1
8/24/2019 23:50	0	0	0	34.44	0.9	0.8	0.1
8/25/2019 0:00	0	0	0	34.47	1	0.8	0.1
8/25/2019 0:10	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 0:20	0	0	0	34.44	0.9	0.8	0.1
8/25/2019 0:30	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 0:40	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 0:50	0	0	0	34.44	0.9	0.8	0.1
8/25/2019 1:00	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 1:10	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 1:20	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 1:30	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 1:40	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 1:50	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 2:00	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 2:10	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 2:20	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 2:30	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 2:40	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 2:50	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 3:00	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 3:10	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 3:20	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 3:30	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 3:40	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 3:50	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 4:00	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 4:10	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 4:20	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 4:30	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 4:40	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 4:50	0	0	0	34.47	0.9	0.8	0.1
8/25/2019 5:00	0	0	0	34.53	0.9	0.8	0.1

8/25/2019 5:10	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 5:20	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 5:30	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 5:40	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 5:50	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 6:00	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 6:10	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 6:20	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 6:30	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 6:40	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 6:50	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 7:00	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 7:10	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 7:20	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 7:30	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 7:40	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 7:50	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 8:00	0	0	0	34.53	0.9	0.8	0.1
8/25/2019 8:10	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 8:20	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 8:30	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 8:40	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 8:50	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 9:00	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 9:10	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 9:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 9:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 9:40	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 9:50	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 10:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 10:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 10:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 10:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 10:40	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 10:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 11:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 11:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 11:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 11:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 11:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 11:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 12:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 12:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 12:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 12:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 12:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 12:50	0	0	0	34.6	0.9	0.8	0.1

8/25/2019 13:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 13:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 13:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 13:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 13:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 13:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 14:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 14:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 14:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 14:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 14:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 14:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 15:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 15:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 15:20	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 15:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 15:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 15:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 16:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 16:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 16:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 16:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 16:40	0	0	0	34.57	0.9	0.8	0.1
8/25/2019 16:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 17:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 17:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 17:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 17:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 17:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 17:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 18:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 18:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 18:20	0	0	0	34.6	1	0.8	0.1
8/25/2019 18:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 18:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 18:50	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 19:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 19:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 19:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 19:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 19:40	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 19:50	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 20:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 20:10	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 20:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 20:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 20:40	0	0	0	34.6	0.9	0.8	0.1

8/25/2019 20:50	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 21:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 21:10	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 21:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 21:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 21:40	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 21:50	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 22:00	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 22:10	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 22:20	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 22:30	0	0	0	34.6	0.9	0.8	0.1
8/25/2019 22:40	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 22:50	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 23:00	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 23:10	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 23:20	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 23:30	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 23:40	0	0	0	34.63	0.9	0.8	0.1
8/25/2019 23:50	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 0:00	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 0:10	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 0:20	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 0:30	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 0:40	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 0:50	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 1:00	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 1:10	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 1:20	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 1:30	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 1:40	0	0	0	34.63	0.9	0.8	0.1
8/26/2019 1:50	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 2:00	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 2:10	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 2:20	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 2:30	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 2:40	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 2:50	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 3:00	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 3:10	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 3:20	0	0	0	34.66	0.9	0.8	0.1
8/26/2019 3:30	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 3:40	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 3:50	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 4:00	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 4:10	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 4:20	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 4:30	0	0	0	34.72	0.9	0.8	0.1

8/26/2019 4:40	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 4:50	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 5:00	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 5:10	0	0	0	34.69	0.9	0.8	0.1
8/26/2019 5:20	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 5:30	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 5:40	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 5:50	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 6:00	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 6:10	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 6:20	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 6:30	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 6:40	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 6:50	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 7:00	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 7:10	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 7:20	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 7:30	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 7:40	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 7:50	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 8:00	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 8:10	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 8:20	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 8:30	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 8:40	0	0	0	34.72	0.9	0.8	0.1
8/26/2019 8:50	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 9:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 9:10	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 9:20	0	0	0	34.81	0.9	0.8	0.1
8/26/2019 9:30	0	0	0	34.81	0.9	0.8	0.1
8/26/2019 9:40	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 9:50	0	0	0	34.78	1	0.8	0.1
8/26/2019 10:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 10:10	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 10:20	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 10:30	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 10:40	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 10:50	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 11:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 11:10	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 11:20	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 11:30	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 11:40	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 11:50	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 12:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 12:10	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 12:20	0	0	0	34.78	1	0.8	0.1

8/26/2019 12:30	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 12:40	0	0	0	34.75	0.9	0.8	0.1
8/26/2019 12:50	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 13:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 13:10	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 13:20	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 13:30	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 13:40	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 13:50	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 14:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 14:10	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 14:20	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 14:30	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 14:40	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 14:50	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 15:00	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 15:10	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 15:20	0	0	0	34.78	0.9	0.8	0.1
8/26/2019 15:30	0	0	0	32.49	4.8	3.8	22.4
8/26/2019 15:40	0	10	0	21.32	4.6	3.8	24.7
8/26/2019 15:50	0	10	0	22.69	0.7	0.8	0.4
8/26/2019 16:00	0	10	0	25.93	0.6	0.8	0.1
8/26/2019 16:10	0	10	0	29.1	0.8	0.7	0.1
8/26/2019 16:20	0	10	0	31.67	4.8	3.8	0.3
8/26/2019 16:30	0	10	0	22.81	2.3	2.1	25
8/26/2019 16:40	0	10	0	26.08	0.7	0.7	23
8/26/2019 16:50	0	10	0	29.22	0.8	0.7	0
8/26/2019 17:00	0	10	0	31.18	4.2	3.8	0.4
8/26/2019 17:10	0	10	0	27.09	0.6	0.8	0.4
8/26/2019 17:20	0	10	0	30.26	0.7	0.8	0
8/26/2019 17:30	0	10	0	28.16	4.9	3.7	24.8
8/26/2019 17:40	0	10	0	29.68	0.8	0.8	0.5
8/26/2019 17:50	0	10	0	30.63	3	2.9	23.7
8/26/2019 18:00	0	10	0	27.06	3.4	3.2	25.2
8/26/2019 18:10	0	10	0	30.29	0.9	0.7	23
8/26/2019 18:20	0	10	0	31.18	0.9	0.8	0.4
8/26/2019 18:30	0	10	0	27.24	0.8	0.8	0.4
8/26/2019 18:40	0	10	0	30.35	0.9	0.8	0.3
8/26/2019 18:50	0	10	0	31.3	0.8	0.9	0.4
8/26/2019 19:00	0	10	0	24.89	3.5	3.3	25.2
8/26/2019 19:10	0	10	0	28.09	0.7	0.8	0.1
8/26/2019 19:20	0	10	0	31.21	0.9	0.8	0
8/26/2019 19:30	0	10	0	25.93	2.4	2.3	25
8/26/2019 19:40	0	10	0	29.13	0.9	0.8	23
8/26/2019 19:50	0	10	0	31.79	4.7	3.8	0.3
8/26/2019 20:00	0	10	0	28.22	0.8	0.8	0.4
8/26/2019 20:10	0	10	0	31.33	0.8	0.8	0.1

8/26/2019 20:20	0	10	0	31.97	4.8	3.8	0.5
8/26/2019 20:30	0	10	0	28.12	0.8	0.8	0.4
8/26/2019 20:40	0	10	0	31.18	0.9	0.8	0
8/26/2019 20:50	0	10	0	31.48	4.6	3.8	0.5
8/26/2019 21:00	0	10	0	27.36	0.7	0.8	0.4
8/26/2019 21:10	0	10	0	30.47	0.9	0.8	0.1
8/26/2019 21:20	0	10	0	27.51	4.8	3.8	25
8/26/2019 21:30	0	10	0	30.2	0.9	0.8	0.4
8/26/2019 21:40	0	10	0	28.34	4.8	3.8	24.6
8/26/2019 21:50	0	10	0	29.56	0.9	0.8	0.5
8/26/2019 22:00	0	10	0	30.47	3.6	3.3	4.5
8/26/2019 22:10	0	10	0	26.9	4.7	3.8	25.2
8/26/2019 22:20	0	10	0	28.43	0.7	0.8	0.4
8/26/2019 22:30	0	10	0	31.57	0.9	0.8	0
8/26/2019 22:40	0	10	0	26.57	0.7	0.8	0.4
8/26/2019 22:50	0	10	0	29.68	0.7	0.8	0.2
8/26/2019 23:00	0	10	0	30.02	4.7	3.9	23.2
8/26/2019 23:10	0	10	0	27.67	0.8	0.8	0.4
8/26/2019 23:20	0	10	0	30.78	0.8	0.8	0
8/26/2019 23:30	0	10	0	26.57	3.4	3.2	25.1
8/26/2019 23:40	0	10	0	29.83	0.8	0.8	0.1
8/26/2019 23:50	0	10	0	29.41	4.7	3.9	24
8/27/2019 0:00	0	10	0	28.83	0.8	0.8	0.4
8/27/2019 0:10	0	10	0	31.85	0.9	0.8	0.1
8/27/2019 0:20	0	10	0	30.29	4.7	3.9	23.9
8/27/2019 0:30	0	10	0	28.25	0.8	0.9	0.4
8/27/2019 0:40	0	10	0	31.33	0.9	0.8	0.1
8/27/2019 0:50	0	10	0	31.57	4.4	3.8	0.4
8/27/2019 1:00	0	10	0	28.09	0.7	0.9	0.4
8/27/2019 1:10	0	10	0	31.15	0.9	0.8	0.1
8/27/2019 1:20	0	10	0	27.48	1	0.8	2.2
8/27/2019 1:30	0	10	0	30.54	0.9	0.8	0.3
8/27/2019 1:40	0	10	0	27.18	4.5	3.8	25
8/27/2019 1:50	0	10	0	29.47	0.9	0.8	0.4
8/27/2019 2:00	0	10	0	30.78	4.8	3.9	0.5
8/27/2019 2:10	0	10	0	28	4.9	3.8	25.1
8/27/2019 2:20	0	10	0	29.04	0.9	0.9	0.4
8/27/2019 2:30	0	10	0	32.12	1.4	0.9	0.3
8/27/2019 2:40	0	10	0	28.77	4.7	3.8	24.9
8/27/2019 2:50	0	10	0	27.36	0.6	0.8	0.4
8/27/2019 3:00	0	10	0	30.41	0.8	0.8	0
8/27/2019 3:10	0	10	0	27.58	4.7	3.8	24.9
8/27/2019 3:20	0	10	0	27.94	0.5	0.9	0.4
8/27/2019 3:30	0	10	0	31.05	0.9	0.8	0.1
8/27/2019 3:40	0	10	0	25.74	4.6	3.8	25.1
8/27/2019 3:50	0	10	0	28.67	0.8	0.9	0.4
8/27/2019 4:00	0	10	0	31.7	0.9	0.8	0

8/27/2019 4:10	0	10	0	28	0.9	0.9	0.4
8/27/2019 4:20	0	10	0	31.09	0.9	0.8	0
8/27/2019 4:30	0	10	0	31.85	0.8	0.9	0.5
8/27/2019 4:40	0	10	0	25.35	0.7	0.9	0.4
8/27/2019 4:50	0	10	0	28.46	0.8	0.8	0.1
8/27/2019 5:00	0	10	0	31.48	0.9	0.9	0
8/27/2019 5:10	0	10	0	31.54	4.8	3.9	0.4
8/27/2019 5:20	0	10	0	27.39	0.7	0.9	0.4
8/27/2019 5:30	0	10	0	30.44	0.9	0.8	0
8/27/2019 5:40	0	10	0	27.64	4.9	3.8	24.9
8/27/2019 5:50	0	10	0	27.39	0.8	0.9	0.4
8/27/2019 6:00	0	10	0	30.47	0.8	0.8	0.1
8/27/2019 6:10	0	10	0	27.42	4.7	3.9	24.7
8/27/2019 6:20	0	10	0	24.46	0.7	0.8	0.4
8/27/2019 6:30	0	10	0	27.58	0.8	0.9	0
8/27/2019 6:40	0	10	0	30.69	0.8	0.8	0
8/27/2019 6:50	0	9	0	26.63	4.9	3.8	24.8
8/27/2019 7:00	0	10	0	25.65	0.7	0.8	0.4
8/27/2019 7:10	0	10	0	28.77	0.7	0.8	0
8/27/2019 7:20	0	10	0	31.79	0.8	0.8	0
8/27/2019 7:30	0	10	0	23.21	3.5	3.4	25.1
8/27/2019 7:40	0	10	0	26.48	0.9	0.9	0.1
8/27/2019 7:50	0	10	0	29.44	0.8	0.8	0
8/27/2019 8:00	0	10	0	30.93	4.8	3.9	0.5
8/27/2019 8:10	0	12	0	24.28	0.7	0.9	0.4
8/27/2019 8:20	0	12	0	28.12	0.8	0.9	0.1
8/27/2019 8:30	0	12	0	32.03	0.8	0.8	0.1
8/27/2019 8:40	0	18	0	26.17	0.9	0.8	0.4
8/27/2019 8:50	0	18	0	31.97	0.9	0.9	0.3
8/27/2019 9:00	0	18	0	31.79	1	0.8	0.5
8/27/2019 9:10	0	18	0	29.71	0.8	0.9	0.4
8/27/2019 9:20	0	18	0	27.7	4.8	3.9	25.1
8/27/2019 9:30	0	18	0	31.94	4.8	3.9	0.4
8/27/2019 9:40	0	18	0	26.08	0.9	0.9	24.8
8/27/2019 9:50	0	23	0	32.25	4.8	3.9	2.5
8/27/2019 10:00	0	23	0	30.57	0.9	0.8	0.4
8/27/2019 10:10	0	26	0	31.36	0.9	0.9	0.4
8/27/2019 10:20	0	26	0	31.18	4.7	3.9	25.1
8/27/2019 10:30	0	26	0	31.67	3.4	3.2	25.1
8/27/2019 10:40	0	5	0	29.25	0.7	0.8	0.5
8/27/2019 10:50	0	23	0	31.27	4.7	3.9	22
8/27/2019 11:00	0	23	0	31.51	0.9	0.9	0.4
8/27/2019 11:10	0	23	0	31.3	0.9	0.9	0.4
8/27/2019 11:20	0	23	0	31.76	0.9	0.8	0.4
8/27/2019 11:30	0	23	0	31.54	0.9	0.8	0.4
8/27/2019 11:40	0	23	0	30.63	0.9	0.9	0.4
8/27/2019 11:50	0	23	0	28.86	2.2	2.1	24.8

8/27/2019 12:00	0	23	0	28.89	4.4	3.8	24.9
8/27/2019 12:10	0	23	0	30.72	4.6	3.9	24.4
8/27/2019 12:20	0	23	0	32.06	1.1	0.8	0.4
8/27/2019 12:30	0	23	0	30.84	0.9	0.8	0.4
8/27/2019 12:40	0	23	0	29.59	1	0.9	2.6
8/27/2019 12:50	0	23	0	28.67	3.3	3.4	25
8/27/2019 13:00	0	23	0	29.07	4.6	3.9	25
8/27/2019 13:10	0	23	0	29.99	4.8	3.8	24.7
8/27/2019 13:20	0	23	0	31.12	4.7	3.9	23.8
8/27/2019 13:30	0	23	0	31.6	0.8	0.9	0.4
8/27/2019 13:40	0	23	0	30.05	0.8	0.9	0.4
8/27/2019 13:50	0	23	0	28.61	3.4	3.2	25
8/27/2019 14:00	0	23	0	29.01	4.5	3.9	25
8/27/2019 14:10	0	23	0	29.83	4.6	3.8	24.8
8/27/2019 14:20	0	23	0	30.63	4.9	3.9	24.5
8/27/2019 14:30	0	23	0	31.3	4.7	3.9	23.5
8/27/2019 14:40	0	23	0	31.76	0.9	0.8	0.4
8/27/2019 14:50	0	23	0	30.14	0.8	0.8	0.4
8/27/2019 15:00	0	23	0	28.16	3.6	3.3	25
8/27/2019 15:10	0	23	0	29.44	4.7	3.8	24.9
8/27/2019 15:20	0	23	0	30.63	4.6	3.9	24.4
8/27/2019 15:30	0	23	0	31.6	4.8	3.8	0.6
8/27/2019 15:40	0	23	0	31.3	0.9	0.8	0.5
8/27/2019 15:50	0	23	0	29.74	0.8	0.8	0.4
8/27/2019 16:00	0	23	0	28.28	4.6	3.8	25
8/27/2019 16:10	0	23	0	29.53	4.8	3.8	24.9
8/27/2019 16:20	0	23	0	30.72	4.8	3.9	24.5
8/27/2019 16:30	0	23	0	31.94	4.9	3.9	0.5
8/27/2019 16:40	0	23	0	30.93	0.8	0.8	0.4
8/27/2019 16:50	0	23	0	29.5	1	0.9	2.7
8/27/2019 17:00	0	23	0	28.4	4.8	3.9	24.9
8/27/2019 17:10	0	23	0	29.68	4.9	3.8	24.9
8/27/2019 17:20	0	23	0	31.12	4.8	3.8	23.9
8/27/2019 17:30	0	23	0	31.82	0.9	0.8	0.4
8/27/2019 17:40	0	23	0	30.29	0.9	0.8	0.4
8/27/2019 17:50	0	23	0	29.01	2	1.7	24.8
8/27/2019 18:00	0	23	0	28.8	4.7	3.8	25
8/27/2019 18:10	0	23	0	29.77	4.6	3.9	24.7
8/27/2019 18:20	0	23	0	31.05	4.7	3.8	24.1
8/27/2019 18:30	0	23	0	31.18	0.9	0.9	0.5
8/27/2019 18:40	0	23	0	28.92	1	0.8	24.6
8/27/2019 18:50	0	23	0	28.86	4.8	3.8	25
8/27/2019 19:00	0	23	0	30.35	4.8	3.9	24.6
8/27/2019 19:10	0	23	0	31.33	4.6	3.8	23.7
8/27/2019 19:20	0	23	0	32.15	4.5	3.5	0.4
8/27/2019 19:30	0	23	0	31.73	0.8	0.8	0.4
8/27/2019 19:40	0	23	0	31.18	0.8	0.9	0.5

8/27/2019 19:50	0	23	0	30.54	0.8	0.9	0.4
8/27/2019 20:00	0	23	0	29.77	1	0.9	2.6
8/27/2019 20:10	0	23	0	28.77	3.2	3.1	25
8/27/2019 20:20	0	23	0	28.89	4.9	3.8	25
8/27/2019 20:30	0	23	0	29.71	4.8	3.8	24.9
8/27/2019 20:40	0	23	0	30.47	4.8	3.8	24.6
8/27/2019 20:50	0	23	0	31.45	4.7	3.8	23
8/27/2019 21:00	0	23	0	31.7	0.9	0.9	0.4
8/27/2019 21:10	0	23	0	30.08	0.9	0.8	0.4
8/27/2019 21:20	0	23	0	28.55	3.3	3.2	24.9
8/27/2019 21:30	0	23	0	29.07	4.7	3.9	25
8/27/2019 21:40	0	23	0	30.08	4.6	3.9	24.7
8/27/2019 21:50	0	23	0	30.87	4.7	3.9	24.4
8/27/2019 22:00	0	23	0	31.73	4.8	3.8	0.5
8/27/2019 22:10	0	23	0	31.51	0.9	0.9	0.4
8/27/2019 22:20	0	23	0	29.77	0.9	0.8	0.4
8/27/2019 22:30	0	23	0	28.25	4.6	3.8	25
8/27/2019 22:40	0	23	0	29.68	4.7	3.8	24.9
8/27/2019 22:50	0	23	0	30.87	4.7	3.9	24.2
8/27/2019 23:00	0	23	0	32.06	1.2	0.9	0.4
8/27/2019 23:10	0	23	0	31.12	0.8	0.9	0.4
8/27/2019 23:20	0	23	0	29.56	0.9	0.8	0.5
8/27/2019 23:30	0	23	0	28.37	4.7	3.9	24.9
8/27/2019 23:40	0	23	0	30.14	4.8	3.8	24.7
8/27/2019 23:50	0	23	0	31.67	4.8	3.8	0.6
8/28/2019 0:00	0	23	0	31.27	1	0.9	0.4
8/28/2019 0:10	0	23	0	29.65	0.8	0.8	0.5
8/28/2019 0:20	0	23	0	28.22	4.6	3.8	25
8/28/2019 0:30	0	23	0	29.32	4.5	3.9	25
8/28/2019 0:40	0	23	0	30.78	4.8	3.8	24.3
8/28/2019 0:50	0	23	0	31.94	4.7	3.9	0.5
8/28/2019 1:00	0	23	0	30.75	0.9	0.8	0.4
8/28/2019 1:10	0	23	0	29.44	0.9	0.9	3.6
8/28/2019 1:20	0	23	0	28.49	4.9	3.8	24.9
8/28/2019 1:30	0	23	0	29.8	4.5	3.9	24.9
8/28/2019 1:40	0	23	0	30.75	4.7	3.9	24.4
8/28/2019 1:50	0	23	0	31.73	4.6	3.9	0.5
8/28/2019 2:00	0	23	0	31.05	0.8	0.8	0.5
8/28/2019 2:10	0	23	0	29.89	0.9	0.9	0.4
8/28/2019 2:20	0	23	0	28.52	3.4	3.3	25
8/28/2019 2:30	0	23	0	29.01	4.6	3.8	25
8/28/2019 2:40	0	23	0	29.83	4.8	3.9	24.8
8/28/2019 2:50	0	23	0	30.84	4.7	3.8	24.4
8/28/2019 3:00	0	23	0	31.85	4.8	3.9	0.5
8/28/2019 3:10	0	23	0	30.51	0.7	0.9	0.4
8/28/2019 3:20	0	23	0	27.64	4.6	3.9	24.8
8/28/2019 3:30	0	23	0	29.99	4.8	3.9	24.7

8/28/2019 3:40	0	23	0	30.47	0.9	0.8	0.4
8/28/2019 3:50	0	23	0	27.7	4.5	3.9	24.9
8/28/2019 4:00	0	23	0	30.81	4.7	3.9	24.2
8/28/2019 4:10	0	23	0	31.09	0.9	0.9	0.4
8/28/2019 4:20	0	23	0	29.44	0.9	0.8	1.5
8/28/2019 4:30	0	23	0	28.43	4.8	3.8	25
8/28/2019 4:40	0	23	0	29.38	4.8	3.8	25
8/28/2019 4:50	0	23	0	29.74	4.6	3.9	24.9
8/28/2019 5:00	0	23	0	30.44	4.8	3.8	24.7
8/28/2019 5:10	0	23	0	30.9	4.8	3.9	24.4
8/28/2019 5:20	0	23	0	31.63	4.7	3.9	0.6
8/28/2019 5:30	0	23	0	31.67	0.9	0.8	0.4
8/28/2019 5:40	0	23	0	29.74	0.8	0.8	0.4
8/28/2019 5:50	0	23	0	28.28	4.7	3.9	24.9
8/28/2019 6:00	0	23	0	30.05	4.8	3.8	24.6
8/28/2019 6:10	0	23	0	31.94	4.8	3.8	0.5
8/28/2019 6:20	0	23	0	30.66	0.9	0.8	0.4
8/28/2019 6:30	0	23	0	29.59	0.9	0.8	2.9
8/28/2019 6:40	0	23	0	28.4	4.9	3.8	25
8/28/2019 6:50	0	23	0	29.19	4.7	3.8	25
8/28/2019 7:00	0	23	0	30.05	4.8	3.8	24.6
8/28/2019 7:10	0	23	0	31.3	4.8	3.9	23.4
8/28/2019 7:20	0	23	0	31.57	0.8	0.9	0.4
8/28/2019 7:30	0	23	0	29.96	0.8	0.9	0.4
8/28/2019 7:40	0	23	0	28.46	3.5	3.3	25
8/28/2019 7:50	0	23	0	29.16	4.5	3.9	24.9
8/28/2019 8:00	0	23	0	30.17	4.5	3.9	24.6
8/28/2019 8:10	0	23	0	31.6	4.7	3.9	0.6
8/28/2019 8:20	0	23	0	30.9	0.8	0.8	0.4
8/28/2019 8:30	0	23	0	29.19	1	0.9	2.3
8/28/2019 8:40	0	23	0	28.67	4.7	3.8	25
8/28/2019 8:50	0	23	0	29.74	4.8	3.9	24.9
8/28/2019 9:00	0	23	0	30.29	4.7	3.8	24.7
8/28/2019 9:10	0	23	0	31.02	4.7	3.9	24.2
8/28/2019 9:20	0	23	0	31.97	4.6	3.9	0.5
8/28/2019 9:30	0	23	0	30.44	0.8	0.9	0.4
8/28/2019 9:40	0	23	0	28.61	2.4	2.3	24.9
8/28/2019 9:50	0	23	0	28.92	4.7	3.8	25
8/28/2019 10:00	0	23	0	30.29	4.7	3.8	24.6
8/28/2019 10:10	0	23	0	31.15	4.7	3.8	24
8/28/2019 10:20	0	23	0	31.85	4.8	3.8	0.5
8/28/2019 10:30	0	23	0	31.79	0.9	0.8	0.4
8/28/2019 10:40	0	23	0	31.02	0.7	0.8	0.4
8/28/2019 10:50	0	23	0	29.8	0.9	0.8	0.4
8/28/2019 11:00	0	23	0	28.37	3.4	3.3	25
8/28/2019 11:10	0	23	0	29.19	4.6	3.8	24.9
8/28/2019 11:20	0	23	0	30.44	4.8	3.8	24.5

8/28/2019 11:30	0	23	0	31.88	4.7	3.9	0.5
8/28/2019 11:40	0	23	0	30.57	0.9	0.8	0.4
8/28/2019 11:50	0	23	0	29.19	1	0.9	24.8
8/28/2019 12:00	0	23	0	28.58	4.8	3.8	25
8/28/2019 12:10	0	23	0	29.5	4.8	3.9	24.8
8/28/2019 12:20	0	23	0	30.51	4.7	3.8	24.6
8/28/2019 12:30	0	23	0	31.67	4.8	3.8	0.6
8/28/2019 12:40	0	23	0	31.12	0.9	0.8	0.4
8/28/2019 12:50	0	23	0	29.19	0.9	0.9	2.5
8/28/2019 13:00	0	23	0	28.61	4.7	3.8	25
8/28/2019 13:10	0	23	0	30.02	4.8	3.8	24.6
8/28/2019 13:20	0	23	0	30.96	4.8	3.9	24.2
8/28/2019 13:30	0	23	0	32.03	2.6	1.9	0.4
8/28/2019 13:40	0	23	0	30.99	0.9	0.9	0.4
8/28/2019 13:50	0	23	0	29.62	0.9	0.8	0.4
8/28/2019 14:00	0	23	0	28.31	4.7	3.8	25
8/28/2019 14:10	0	23	0	29.25	4.7	3.8	24.9
8/28/2019 14:20	0	23	0	30.38	4.6	3.9	24.6
8/28/2019 14:30	0	23	0	31.67	4.7	3.8	0.6
8/28/2019 14:40	0	23	0	31.39	0.8	0.8	0.4
8/28/2019 14:50	0	23	0	30.51	0.9	0.8	0.4
8/28/2019 15:00	0	23	0	29.32	0.9	0.9	24.8
8/28/2019 15:10	0	23	0	28.58	4.7	3.8	25
8/28/2019 15:20	0	23	0	29.1	4.8	3.8	25
8/28/2019 15:30	0	12	0	29.8	4.7	3.9	24.8
8/28/2019 15:40	0	10	0	29.38	0.8	0.8	0.4
8/28/2019 15:50	0	10	0	30.54	4.5	3.9	9.8
8/28/2019 16:00	0	10	0	22.14	1.5	1.4	24.8
8/28/2019 16:10	0	10	0	25.5	0.7	0.8	3.3
8/28/2019 16:20	0	10	0	28.8	0.8	0.8	0
8/28/2019 16:30	0	10	0	32.06	2.4	1.6	0.2
8/28/2019 16:40	0	10	0	22.54	3.4	3.2	25
8/28/2019 16:50	0	10	0	25.99	0.7	0.8	0.1
8/28/2019 17:00	0	10	0	29.25	0.9	0.8	0
8/28/2019 17:10	0	10	0	30.69	4.6	3.8	0.6
8/28/2019 17:20	0	10	0	25.01	0.7	0.8	0.4
8/28/2019 17:30	0	10	0	28.37	0.8	0.8	0
8/28/2019 17:40	0	10	0	31.67	0.9	0.8	0.1
8/28/2019 17:50	0	10	0	30.17	4.6	3.8	24.1
8/28/2019 18:00	0	10	0	28.46	0.7	0.8	0.4
8/28/2019 18:10	0	10	0	31.82	0.9	0.8	0.1
8/28/2019 18:20	0	10	0	29.53	4.7	3.8	24.6
8/28/2019 18:30	0	10	0	29.38	0.8	0.8	0.4
8/28/2019 18:40	0	10	0	30.41	4.7	3.9	3.2
8/28/2019 18:50	0	10	0	27.06	4.7	3.8	25.1
8/28/2019 19:00	0	10	0	29.07	0.7	0.8	0.4
8/28/2019 19:10	0	10	0	31.21	4.7	3.8	0.4

8/28/2019 19:20	0	10	0	27.91	4.9	3.8	24.9
8/28/2019 19:30	0	10	0	29.01	0.8	0.9	0.4
8/28/2019 19:40	0	10	0	31.6	4.7	3.8	0.3
8/28/2019 19:50	0	10	0	26.78	0.8	0.8	0.4
8/28/2019 20:00	0	10	0	30.11	0.9	0.8	0.1
8/28/2019 20:10	0	10	0	28.22	4.6	3.7	24.7
8/28/2019 20:20	0	10	0	27.58	0.8	0.8	0.4
8/28/2019 20:30	0	10	0	30.93	0.9	0.8	0.1
8/28/2019 20:40	0	10	0	25.77	4.7	3.8	24.8
8/28/2019 20:50	0	10	0	27.27	0.8	0.8	0.4
8/28/2019 21:00	0	10	0	30.72	0.9	0.8	0.1
8/28/2019 21:10	0	10	0	26.35	4.6	3.8	24.9
8/28/2019 21:20	0	10	0	26.6	0.6	0.8	0.4
8/28/2019 21:30	0	10	0	30.02	0.9	0.8	0
8/28/2019 21:40	0	10	0	28.49	4.8	3.8	24.6
8/28/2019 21:50	0	10	0	26.42	0.6	0.8	0.4
8/28/2019 22:00	0	10	0	29.77	0.8	0.8	0.1
8/28/2019 22:10	0	10	0	29.04	4.7	3.8	24.3
8/28/2019 22:20	0	10	0	26.75	0.8	0.8	0.4
8/28/2019 22:30	0	10	0	30.14	0.7	0.8	0.1
8/28/2019 22:40	0	10	0	28.22	4.6	3.8	24.6
8/28/2019 22:50	0	10	0	26.26	0.6	0.8	0.5
8/28/2019 23:00	0	10	0	29.62	0.8	0.8	0.1
8/28/2019 23:10	0	10	0	29.65	4.7	3.9	23.7
8/28/2019 23:20	0	10	0	26.48	0.7	0.8	0.4
8/28/2019 23:30	0	10	0	29.83	0.8	0.8	0.1
8/28/2019 23:40	0	10	0	28.89	4.7	3.9	24.4
8/28/2019 23:50	0	10	0	26.69	0.7	0.8	0.4
8/29/2019 0:00	0	10	0	30.11	0.8	0.8	0.1
8/29/2019 0:10	0	10	0	28.31	4.7	3.9	24.6
8/29/2019 0:20	0	10	0	26.48	0.7	0.9	0.4
8/29/2019 0:30	0	10	0	29.83	0.8	0.8	0.1
8/29/2019 0:40	0	10	0	28.95	4.7	3.8	24.5
8/29/2019 0:50	0	10	0	27.09	0.7	0.8	0.4
8/29/2019 1:00	0	10	0	30.47	0.8	0.8	0.1
8/29/2019 1:10	0	10	0	27.21	4.7	3.9	24.9
8/29/2019 1:20	0	10	0	27.82	0.9	0.8	0.4
8/29/2019 1:30	0	10	0	31.15	0.7	0.8	0.1
8/29/2019 1:40	0	10	0	31.45	4.8	3.9	2.7
8/29/2019 1:50	0	10	0	27.67	0.7	0.8	0.4
8/29/2019 2:00	0	10	0	31.02	0.8	0.8	0
8/29/2019 2:10	0	10	0	32.03	3.7	2.9	23
8/29/2019 2:20	0	10	0	27.94	0.7	0.8	0.5
8/29/2019 2:30	0	10	0	31.33	0.9	0.8	0.1
8/29/2019 2:40	0	10	0	30.38	4.7	3.8	24
8/29/2019 2:50	0	10	0	26.48	0.8	0.8	0.4
8/29/2019 3:00	0	10	0	29.77	0.8	0.8	0.1

8/29/2019 3:10	0	10	0	28.98	4.8	3.9	24.3
8/29/2019 3:20	0	10	0	26.54	0.7	0.8	0.4
8/29/2019 3:30	0	10	0	29.89	0.9	0.8	0.1
8/29/2019 3:40	0	10	0	28.77	4.8	3.8	24.5
8/29/2019 3:50	0	10	0	26.87	0.8	0.8	0.4
8/29/2019 4:00	0	10	0	30.29	0.9	0.9	0.1
8/29/2019 4:10	0	10	0	27.73	4.5	3.8	24.7
8/29/2019 4:20	0	10	0	26.42	0.7	0.9	0.4
8/29/2019 4:30	0	10	0	29.8	0.8	0.8	0.1
8/29/2019 4:40	0	10	0	30.81	1	0.9	0.4
8/29/2019 4:50	0	10	0	26.14	3.5	3.3	25.2
8/29/2019 5:00	0	10	0	29.59	0.7	0.8	0.1
8/29/2019 5:10	0	10	0	30.66	2.3	2.2	23.8
8/29/2019 5:20	0	10	0	26.2	4.8	3.8	25
8/29/2019 5:30	0	10	0	28.55	0.8	0.8	0.4
8/29/2019 5:40	0	10	0	31.88	0.9	0.9	0
8/29/2019 5:50	0	10	0	26.96	0.8	0.8	0.4
8/29/2019 6:00	0	10	0	30.32	0.9	0.8	0
8/29/2019 6:10	0	10	0	27.61	4.7	3.8	24.8
8/29/2019 6:20	0	10	0	29.8	0.9	0.8	0.4
8/29/2019 6:30	0	10	0	30.9	0.9	0.9	3.2
8/29/2019 6:40	0	10	0	25.59	1.6	2.1	25
8/29/2019 6:50	0	10	0	29.04	0.9	0.9	0.4
8/29/2019 7:00	0	10	0	31.42	4.7	3.9	0.4
8/29/2019 7:10	0	10	0	26.23	0.8	0.8	0.4
8/29/2019 7:20	0	10	0	29.59	0.7	0.9	0
8/29/2019 7:30	0	10	0	29.32	4.7	3.9	24
8/29/2019 7:40	0	10	0	26.35	0.8	0.8	0.4
8/29/2019 7:50	0	10	0	29.68	0.9	0.8	0
8/29/2019 8:00	0	10	0	29.25	5.1	3.8	24.1
8/29/2019 8:10	0	10	0	26.32	0.7	0.9	0.4
8/29/2019 8:20	0	10	0	29.71	0.8	0.8	0
8/29/2019 8:30	0	10	0	29.25	4.6	3.8	24
8/29/2019 8:40	0	10	0	25.29	0.6	0.8	0.4
8/29/2019 8:50	0	10	0	28.7	0.9	0.8	0.1
8/29/2019 9:00	0	10	0	32.03	0.9	0.9	0
8/29/2019 9:10	0	10	0	25.35	0.7	0.8	0.4
8/29/2019 9:20	0	10	0	28.86	0.8	0.8	0
8/29/2019 9:30	0	10	0	31.85	4.7	3.8	0.2
8/29/2019 9:40	0	10	0	26.17	0.6	0.9	0.4
8/29/2019 9:50	0	10	0	29.5	0.8	0.8	0.1
8/29/2019 10:00	0	10	0	29.8	4.6	3.8	23.4
8/29/2019 10:10	0	10	0	25.5	0.8	0.8	0.4
8/29/2019 10:20	0	10	0	28.86	0.8	0.8	0.1
8/29/2019 10:30	0	10	0	31.76	4.5	3.9	0.3
8/29/2019 10:40	0	10	0	25.35	0.7	0.8	0.4
8/29/2019 10:50	0	10	0	28.77	0.7	0.8	0

8/29/2019 11:00	0	10	0	32.09	1.2	0.9	0.2
8/29/2019 11:10	0	10	0	25.96	0.7	0.8	0.4
8/29/2019 11:20	0	10	0	29.41	0.7	0.8	0
8/29/2019 11:30	0	10	0	30.26	4.8	3.8	22.7
8/29/2019 11:40	0	10	0	26.63	0.7	0.8	0.4
8/29/2019 11:50	0	10	0	30.05	0.8	0.8	0.1
8/29/2019 12:00	0	10	0	31.05	0.9	0.8	0.4
8/29/2019 12:10	0	10	0	26.2	2.4	2.5	25
8/29/2019 12:20	0	10	0	29.53	0.8	0.7	2.5
8/29/2019 12:30	0	10	0	30.84	2	1.9	23.9
8/29/2019 12:40	0	10	0	27.85	0.9	0.8	3.4
8/29/2019 12:50	0	10	0	31.27	0.9	0.8	0.3
8/29/2019 13:00	0	10	0	31.09	4.7	3.8	17.9
8/29/2019 13:10	0	10	0	26.96	0.6	0.8	0.4
8/29/2019 13:20	0	10	0	30.29	0.7	0.8	0.1
8/29/2019 13:30	0	10	0	27.39	4.6	3.9	24.7
8/29/2019 13:40	0	10	0	27.42	0.8	0.9	0.4
8/29/2019 13:50	0	10	0	30.81	0.8	0.8	0.1
8/29/2019 14:00	0	10	0	26.17	4.7	3.9	24.7
8/29/2019 14:10	0	10	0	28.86	0.8	0.9	0.4
8/29/2019 14:20	0	10	0	31.94	4.8	3.9	0.2
8/29/2019 14:30	0	10	0	26.17	0.7	0.8	0.4
8/29/2019 14:40	0	10	0	29.56	0.7	0.8	0
8/29/2019 14:50	0	10	0	29.71	4.6	3.9	23.2
8/29/2019 15:00	0	10	0	26.96	0.7	0.8	0.4
8/29/2019 15:10	0	10	0	30.29	0.8	0.8	0.1
8/29/2019 15:20	0	10	0	27.58	4.5	3.8	24.9
8/29/2019 15:30	0	10	0	27.67	0.8	0.8	0.4
8/29/2019 15:40	0	5	0	28.7	0.7	0.8	0
8/29/2019 15:50	0	6	0	28.74	0.7	0.8	0
8/29/2019 16:00	0	0	0	28.7	0.7	0.8	0
8/29/2019 16:10	0	0	0	28.7	0.7	0.8	0
8/29/2019 16:20	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 16:30	0	0	0	28.7	0.8	0.8	0.1
8/29/2019 16:40	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 16:50	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 17:00	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 17:10	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 17:20	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 17:30	0	0	0	28.7	0.8	0.8	0.1
8/29/2019 17:40	0	0	0	28.7	0.7	0.8	0.1
8/29/2019 17:50	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 18:00	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 18:10	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 18:20	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 18:30	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 18:40	0	0	0	28.67	0.7	0.8	0.1

8/29/2019 18:50	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 19:00	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 19:10	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 19:20	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 19:30	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 19:40	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 19:50	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 20:00	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 20:10	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 20:20	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 20:30	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 20:40	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 20:50	0	0	0	28.67	0.7	0.8	0.1
8/29/2019 21:00	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 21:10	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 21:20	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 21:30	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 21:40	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 21:50	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 22:00	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 22:10	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 22:20	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 22:30	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 22:40	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 22:50	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 23:00	0	0	0	28.58	0.7	0.8	0.1
8/29/2019 23:10	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 23:20	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 23:30	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 23:40	0	0	0	28.61	0.7	0.8	0.1
8/29/2019 23:50	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 0:00	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 0:10	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 0:20	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 0:30	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 0:40	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 0:50	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 1:00	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 1:10	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 1:20	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 1:30	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 1:40	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 1:50	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 2:00	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 2:10	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 2:20	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 2:30	0	0	0	28.58	0.7	0.8	0.1

8/30/2019 2:40	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 2:50	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 3:00	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 3:10	0	0	0	28.61	0.7	0.8	0.1
8/30/2019 3:20	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 3:30	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 3:40	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 3:50	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 4:00	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 4:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 4:20	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 4:30	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 4:40	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 4:50	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 5:00	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 5:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 5:20	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 5:30	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 5:40	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 5:50	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 6:00	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 6:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 6:20	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 6:30	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 6:40	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 6:50	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 7:00	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 7:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 7:20	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 7:30	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 7:40	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 7:50	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 8:00	0	0	0	28.58	0.7	0.8	0.1
8/30/2019 8:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 8:20	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 8:30	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 8:40	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 8:50	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 9:00	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 9:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 9:20	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 9:30	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 9:40	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 9:50	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 10:00	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 10:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 10:20	0	0	0	28.55	0.7	0.8	0.1

8/30/2019 10:30	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 10:40	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 10:50	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 11:00	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 11:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 11:20	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 11:30	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 11:40	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 11:50	0	0	0	28.52	0.7	0.7	0.1
8/30/2019 12:00	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 12:10	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 12:20	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 12:30	0	0	0	28.55	0.7	0.8	0.1
8/30/2019 12:40	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 12:50	0	0	0	28.52	0.7	0.7	0.1
8/30/2019 13:00	0	0	0	28.52	0.7	0.7	0.1
8/30/2019 13:10	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 13:20	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 13:30	0	0	0	28.52	0.8	0.8	0.1
8/30/2019 13:40	0	0	0	28.52	0.8	0.8	0.1
8/30/2019 13:50	0	0	0	28.52	0.7	0.7	0.1
8/30/2019 14:00	0	0	0	28.52	0.7	0.7	0.1
8/30/2019 14:10	0	0	0	28.52	0.8	0.8	0.1
8/30/2019 14:20	0	0	0	28.52	0.8	0.8	0.1
8/30/2019 14:30	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 14:40	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 14:50	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 15:00	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 15:10	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 15:20	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 15:30	0	0	0	28.52	0.7	0.8	0
8/30/2019 15:40	0	0	0	28.52	0.7	0.8	0
8/30/2019 15:50	0	0	0	28.52	0.7	0.8	0
8/30/2019 16:00	0	0	0	28.52	0.7	0.8	0
8/30/2019 16:10	0	0	0	28.52	0.7	0.8	0
8/30/2019 16:20	0	0	0	28.52	0.7	0.8	0
8/30/2019 16:30	0	0	0	28.52	0.7	0.8	0
8/30/2019 16:40	0	0	0	28.52	0.7	0.8	0
8/30/2019 16:50	0	0	0	28.52	0.7	0.8	0
8/30/2019 17:00	0	0	0	28.52	0.7	0.8	0
8/30/2019 17:10	0	0	0	28.52	0.7	0.8	0
8/30/2019 17:20	0	0	0	28.52	0.8	0.8	0
8/30/2019 17:30	0	0	0	28.52	0.7	0.8	0
8/30/2019 17:40	0	0	0	28.52	0.7	0.8	0
8/30/2019 17:50	0	0	0	28.52	0.7	0.8	0
8/30/2019 18:00	0	0	0	28.52	0.7	0.8	0
8/30/2019 18:10	0	0	0	28.52	0.7	0.8	0

8/30/2019 18:20	0	0	0	28.52	0.7	0.8	0
8/30/2019 18:30	0	0	0	28.52	0.7	0.8	0
8/30/2019 18:40	0	0	0	28.52	0.7	0.8	0
8/30/2019 18:50	0	0	0	28.52	0.7	0.8	0
8/30/2019 19:00	0	0	0	28.52	0.7	0.8	0
8/30/2019 19:10	0	0	0	28.52	0.7	0.8	0
8/30/2019 19:20	0	0	0	28.52	0.7	0.8	0
8/30/2019 19:30	0	0	0	28.49	0.7	0.8	0
8/30/2019 19:40	0	0	0	28.52	0.7	0.8	0
8/30/2019 19:50	0	0	0	28.49	0.7	0.8	0
8/30/2019 20:00	0	0	0	28.52	0.7	0.8	0
8/30/2019 20:10	0	0	0	28.49	0.7	0.8	0
8/30/2019 20:20	0	0	0	28.52	0.7	0.8	0
8/30/2019 20:30	0	0	0	28.49	0.7	0.8	0
8/30/2019 20:40	0	0	0	28.52	0.7	0.8	0
8/30/2019 20:50	0	0	0	28.49	0.7	0.8	0
8/30/2019 21:00	0	0	0	28.49	0.7	0.8	0
8/30/2019 21:10	0	0	0	28.49	0.7	0.8	0
8/30/2019 21:20	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 21:30	0	0	0	28.52	0.7	0.8	0.1
8/30/2019 21:40	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 21:50	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 22:00	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 22:10	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 22:20	0	0	0	28.49	0.7	0.7	0.1
8/30/2019 22:30	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 22:40	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 22:50	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 23:00	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 23:10	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 23:20	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 23:30	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 23:40	0	0	0	28.49	0.7	0.8	0.1
8/30/2019 23:50	0	0	0	28.49	0.7	0.8	0.1
8/31/2019 0:00	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 0:10	0	0	0	28.49	0.7	0.8	0.1
8/31/2019 0:20	0	0	0	28.49	0.7	0.8	0.1
8/31/2019 0:30	0	0	0	28.49	0.7	0.8	0.1
8/31/2019 0:40	0	0	0	28.49	0.7	0.8	0.1
8/31/2019 0:50	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 1:00	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 1:10	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 1:20	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 1:30	0	0	0	28.49	0.7	0.8	0.1
8/31/2019 1:40	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 1:50	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 2:00	0	0	0	28.46	0.7	0.8	0.1

8/31/2019 2:10	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 2:20	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 2:30	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 2:40	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 2:50	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 3:00	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 3:10	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 3:20	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 3:30	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 3:40	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 3:50	0	0	0	28.46	0.7	0.8	0.1
8/31/2019 4:00	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 4:10	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 4:20	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 4:30	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 4:40	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 4:50	0	0	0	28.43	0.7	0.7	0.1
8/31/2019 5:00	0	0	0	28.43	0.7	0.7	0.1
8/31/2019 5:10	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 5:20	0	0	0	28.43	0.7	0.7	0.1
8/31/2019 5:30	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 5:40	0	0	0	28.43	0.7	0.7	0.1
8/31/2019 5:50	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 6:00	0	0	0	28.43	0.7	0.7	0.1
8/31/2019 6:10	0	0	0	28.43	0.8	0.7	0.1
8/31/2019 6:20	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 6:30	0	0	0	28.43	0.7	0.8	0.1
8/31/2019 6:40	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 6:50	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 7:00	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 7:10	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 7:20	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 7:30	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 7:40	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 7:50	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 8:00	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 8:10	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 8:20	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 8:30	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 8:40	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 8:50	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 9:00	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 9:10	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 9:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 9:30	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 9:40	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 9:50	0	0	0	28.4	0.7	0.8	0.1

8/31/2019 10:00	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 10:10	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 10:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 10:30	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 10:40	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 10:50	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 11:00	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 11:10	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 11:20	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 11:30	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 11:40	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 11:50	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 12:00	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 12:10	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 12:20	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 12:30	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 12:40	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 12:50	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 13:00	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 13:10	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 13:20	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 13:30	0	0	0	28.4	0.7	0.7	0.1
8/31/2019 13:40	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 13:50	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 14:00	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 14:10	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 14:20	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 14:30	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 14:40	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 14:50	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 15:00	0	0	0	28.4	0.7	0.8	0.1
8/31/2019 15:10	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 15:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 15:30	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 15:40	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 15:50	0	0	0	28.37	0.8	0.8	0.1
8/31/2019 16:00	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 16:10	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 16:20	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 16:30	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 16:40	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 16:50	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 17:00	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 17:10	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 17:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 17:30	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 17:40	0	0	0	28.37	0.7	0.7	0.1

8/31/2019 17:50	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 18:00	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 18:10	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 18:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 18:30	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 18:40	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 18:50	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 19:00	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 19:10	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 19:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 19:30	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 19:40	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 19:50	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 20:00	0	0	0	28.34	0.7	0.8	0.1
8/31/2019 20:10	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 20:20	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 20:30	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 20:40	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 20:50	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 21:00	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 21:10	0	0	0	28.37	0.7	0.8	0.1
8/31/2019 21:20	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 21:30	0	0	0	28.34	0.7	0.8	0.1
8/31/2019 21:40	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 21:50	0	0	0	28.34	0.7	0.8	0.1
8/31/2019 22:00	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 22:10	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 22:20	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 22:30	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 22:40	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 22:50	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 23:00	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 23:10	0	0	0	28.37	0.7	0.7	0.1
8/31/2019 23:20	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 23:30	0	0	0	28.34	0.7	0.7	0.1
8/31/2019 23:40	0	0	0	28.34	0.8	0.7	0.1
8/31/2019 23:50	0	0	0	28.34	0.7	0.7	0.1
9/1/2019 0:00	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 0:10	0	0	0	28.37	0.8	0.7	0.1
9/1/2019 0:20	0	0	0	28.34	0.7	0.7	0.1
9/1/2019 0:30	0	0	0	28.34	0.7	0.7	0.1
9/1/2019 0:40	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 0:50	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 1:00	0	0	0	28.37	0.8	0.7	0.1
9/1/2019 1:10	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 1:20	0	0	0	28.34	0.7	0.7	0.1
9/1/2019 1:30	0	0	0	28.37	0.7	0.8	0.1

9/1/2019 1:40	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 1:50	0	0	0	28.34	0.7	0.7	0.1
9/1/2019 2:00	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 2:10	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 2:20	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 2:30	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 2:40	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 2:50	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 3:00	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 3:10	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 3:20	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 3:30	0	0	0	28.37	0.7	0.7	0.1
9/1/2019 3:40	0	0	0	28.4	0.7	0.7	0.1
9/1/2019 3:50	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 4:00	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 4:10	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 4:20	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 4:30	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 4:40	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 4:50	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 5:00	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 5:10	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 5:20	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 5:30	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 5:40	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 5:50	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 6:00	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 6:10	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 6:20	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 6:30	0	0	0	28.37	0.7	0.8	0.1
9/1/2019 6:40	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 6:50	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 7:00	0	0	0	28.4	0.7	0.7	0.1
9/1/2019 7:10	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 7:20	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 7:30	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 7:40	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 7:50	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 8:00	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 8:10	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 8:20	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 8:30	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 8:40	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 8:50	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 9:00	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 9:10	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 9:20	0	0	0	28.43	0.7	0.8	0.1

9/1/2019 9:30	0	0	0	28.4	0.7	0.8	0.1
9/1/2019 9:40	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 9:50	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 10:00	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 10:10	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 10:20	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 10:30	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 10:40	0	0	0	28.43	0.7	0.8	0.1
9/1/2019 10:50	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 11:00	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 11:10	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 11:20	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 11:30	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 11:40	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 11:50	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 12:00	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 12:10	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 12:20	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 12:30	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 12:40	0	0	0	28.46	0.7	0.8	0.1
9/1/2019 12:50	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 13:00	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 13:10	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 13:20	0	0	0	28.49	0.7	0.7	0.1
9/1/2019 13:30	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 13:40	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 13:50	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 14:00	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 14:10	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 14:20	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 14:30	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 14:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 14:50	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 15:00	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 15:10	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 15:20	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 15:30	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 15:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 15:50	0	0	0	28.49	0.7	0.8	0.1
9/1/2019 16:00	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 16:10	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 16:20	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 16:30	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 16:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 16:50	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 17:00	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 17:10	0	0	0	28.52	0.7	0.8	0.1

9/1/2019 17:20	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 17:30	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 17:40	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 17:50	0	0	0	28.55	0.7	0.8	0.1
9/1/2019 18:00	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 18:10	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 18:20	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 18:30	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 18:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 18:50	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 19:00	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 19:10	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 19:20	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 19:30	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 19:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 19:50	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 20:00	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 20:10	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 20:20	0	0	0	28.52	0.8	0.8	0.1
9/1/2019 20:30	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 20:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 20:50	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 21:00	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 21:10	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 21:20	0	0	0	28.52	0.7	0.7	0.1
9/1/2019 21:30	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 21:40	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 21:50	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 22:00	0	0	0	28.55	0.7	0.8	0.1
9/1/2019 22:10	0	0	0	28.55	0.8	0.8	0.1
9/1/2019 22:20	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 22:30	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 22:40	0	0	0	28.52	0.7	0.8	0.1
9/1/2019 22:50	0	0	0	28.55	0.7	0.8	0.1
9/1/2019 23:00	0	0	0	28.55	0.7	0.8	0.1
9/1/2019 23:10	0	0	0	28.55	0.7	0.8	0.1
9/1/2019 23:20	0	0	0	28.55	0.7	0.8	0.1
9/1/2019 23:30	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 23:40	0	0	0	28.55	0.7	0.7	0.1
9/1/2019 23:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 0:00	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 0:10	0	0	0	28.55	0.8	0.7	0.1
9/2/2019 0:20	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 0:30	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 0:40	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 0:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 1:00	0	0	0	28.55	0.7	0.8	0.1

9/2/2019 1:10	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 1:20	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 1:30	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 1:40	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 1:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 2:00	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 2:10	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 2:20	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 2:30	0	0	0	28.55	0.8	0.8	0.1
9/2/2019 2:40	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 2:50	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 3:00	0	0	0	28.55	0.8	0.8	0.1
9/2/2019 3:10	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 3:20	0	0	0	28.58	0.8	0.7	0.1
9/2/2019 3:30	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 3:40	0	0	0	28.55	0.8	0.8	0.1
9/2/2019 3:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 4:00	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 4:10	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 4:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 4:30	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 4:40	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 4:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 5:00	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 5:10	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 5:20	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 5:30	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 5:40	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 5:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 6:00	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 6:10	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 6:20	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 6:30	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 6:40	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 6:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 7:00	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 7:10	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 7:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 7:30	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 7:40	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 7:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 8:00	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 8:10	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 8:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 8:30	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 8:40	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 8:50	0	0	0	28.58	0.7	0.7	0.1

9/2/2019 9:00	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 9:10	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 9:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 9:30	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 9:40	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 9:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 10:00	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 10:10	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 10:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 10:30	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 10:40	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 10:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 11:00	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 11:10	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 11:20	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 11:30	0	0	0	28.61	0.7	0.8	0.1
9/2/2019 11:40	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 11:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 12:00	0	0	0	28.61	0.7	0.8	0.1
9/2/2019 12:10	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 12:20	0	0	0	28.61	0.7	0.8	0.1
9/2/2019 12:30	0	0	0	28.61	0.7	0.7	0.1
9/2/2019 12:40	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 12:50	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 13:00	0	0	0	28.58	0.8	0.7	0.1
9/2/2019 13:10	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 13:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 13:30	0	0	0	28.58	0.8	0.7	0.1
9/2/2019 13:40	0	0	0	28.61	0.7	0.8	0.1
9/2/2019 13:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 14:00	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 14:10	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 14:20	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 14:30	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 14:40	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 14:50	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 15:00	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 15:10	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 15:20	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 15:30	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 15:40	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 15:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 16:00	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 16:10	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 16:20	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 16:30	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 16:40	0	0	0	28.58	0.7	0.7	0.1

9/2/2019 16:50	0	0	0	28.58	0.7	0.8	0.1
9/2/2019 17:00	0	0	0	28.58	0.7	0.7	0.1
9/2/2019 17:10	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 17:20	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 17:30	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 17:40	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 17:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 18:00	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 18:10	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 18:20	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 18:30	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 18:40	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 18:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 19:00	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 19:10	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 19:20	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 19:30	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 19:40	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 19:50	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 20:00	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 20:10	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 20:20	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 20:30	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 20:40	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 20:50	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 21:00	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 21:10	0	0	0	28.55	0.7	0.7	0.1
9/2/2019 21:20	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 21:30	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 21:40	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 21:50	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 22:00	0	0	0	28.55	0.7	0.8	0.1
9/2/2019 22:10	0	0	0	28.52	0.7	0.8	0.1
9/2/2019 22:20	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 22:30	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 22:40	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 22:50	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 23:00	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 23:10	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 23:20	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 23:30	0	0	0	28.52	0.7	0.8	0.1
9/2/2019 23:40	0	0	0	28.52	0.7	0.7	0.1
9/2/2019 23:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 0:00	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 0:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 0:20	0	0	0	28.55	0.7	0.7	0.1
9/3/2019 0:30	0	0	0	28.55	0.7	0.7	0.1

9/3/2019 0:40	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 0:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 1:00	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 1:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 1:20	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 1:30	0	0	0	28.55	0.7	0.8	0.1
9/3/2019 1:40	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 1:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 2:00	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 2:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 2:20	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 2:30	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 2:40	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 2:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 3:00	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 3:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 3:20	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 3:30	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 3:40	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 3:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 4:00	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 4:10	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 4:20	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 4:30	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 4:40	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 4:50	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 5:00	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 5:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 5:20	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 5:30	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 5:40	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 5:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 6:00	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 6:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 6:20	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 6:30	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 6:40	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 6:50	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 7:00	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 7:10	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 7:20	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 7:30	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 7:40	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 7:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 8:00	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 8:10	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 8:20	0	0	0	28.52	0.7	0.7	0.1

9/3/2019 8:30	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 8:40	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 8:50	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 9:00	0	0	0	28.52	0.7	0.7	0.1
9/3/2019 9:10	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 9:20	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 9:30	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 9:40	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 9:50	0	0	0	28.52	0.7	0.8	0.1
9/3/2019 10:00	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 10:10	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 10:20	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 10:30	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 10:40	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 10:50	0	0	0	28.46	0.7	0.8	0.1
9/3/2019 11:00	0	0	0	28.49	0.7	0.7	0.1
9/3/2019 11:10	0	0	0	28.46	0.7	0.7	0.1
9/3/2019 11:20	0	0	0	28.49	0.7	0.8	0.1
9/3/2019 11:30	0	0	0	28.46	0.7	0.8	0.1
9/3/2019 11:40	0	0	0	28.46	0.7	0.8	0.1
9/3/2019 11:50	0	0	0	28.43	0.7	0.8	0.1
9/3/2019 12:00	0	0	0	28.4	0.7	0.8	0.1
9/3/2019 12:10	0	0	0	28.4	0.7	0.7	0
9/3/2019 12:20	0	0	12	28.46	0.7	0.8	0
9/3/2019 12:30	0	0	12	32.06	0.9	0.8	0.2
9/3/2019 12:40	0	0	12	29.16	4.8	3.7	24.7
9/3/2019 12:50	0	0	12	30.05	0.8	0.8	0.4
9/3/2019 13:00	0	0	12	31.63	0.8	0.8	0.4
9/3/2019 13:10	0	0	12	27.88	0.7	0.8	0.4
9/3/2019 13:20	0	0	12	31.67	0.8	0.8	0
9/3/2019 13:30	0	0	12	28.95	0.7	0.8	0.4
9/3/2019 13:40	0	0	12	30.63	3.4	3.3	8.2
9/3/2019 13:50	0	0	12	26.96	3	2.7	25.1
9/3/2019 14:00	0	0	12	30.84	0.7	0.8	3
9/3/2019 14:10	0	0	12	26.57	3.4	3.2	25.1
9/3/2019 14:20	0	0	12	30.44	0.9	0.8	22.6
9/3/2019 14:30	0	0	12	28.28	1.4	1.4	24.8
9/3/2019 14:40	0	0	12	32	0.8	0.8	22.7
9/3/2019 14:50	0	0	12	28.25	0.7	0.8	0.4
9/3/2019 15:00	0	0	12	32.03	0.9	0.8	0.2
9/3/2019 15:10	0	0	12	28.25	4.8	3.8	24.9
9/3/2019 15:20	0	0	12	28.95	0.8	0.8	0.4
9/3/2019 15:30	0	0	12	30.51	4.8	3.8	3
9/3/2019 15:40	0	0	12	26.54	4.6	3.8	25
9/3/2019 15:50	0	0	12	27.73	0.7	0.8	0.4
9/3/2019 16:00	0	0	12	31.57	0.9	0.8	0
9/3/2019 16:10	0	0	12	25.1	2.7	2.6	24.8

9/3/2019 16:20	0	0	12	28.98	0.7	0.7	22.5
9/3/2019 16:30	0	0	12	30.47	1.6	2.3	21
9/3/2019 16:40	0	0	12	27.09	3.3	3.1	25.1
9/3/2019 16:50	0	0	12	30.96	0.9	0.7	0
9/3/2019 17:00	0	0	12	30.96	4.7	3.8	23.3
9/3/2019 17:10	0	0	12	28.46	0.8	0.8	0.4
9/3/2019 17:20	0	0	12	31.73	4.5	3.9	0.3
9/3/2019 17:30	0	0	12	27	4.6	3.8	25
9/3/2019 17:40	0	0	12	29.71	0.8	0.8	0.4
9/3/2019 17:50	0	0	12	31.33	0.8	0.9	0.4
9/3/2019 18:00	0	0	12	26.42	1	0.9	2.9
9/3/2019 18:10	0	0	12	30.26	0.7	0.7	0.3
9/3/2019 18:20	0	0	12	27.42	4.7	3.8	24.9
9/3/2019 18:30	0	0	12	30.08	0.8	0.8	0.4
9/3/2019 18:40	0	0	12	31.67	0.8	0.8	0.4
9/3/2019 18:50	0	0	12	27.18	0.7	0.8	0.4
9/3/2019 19:00	0	0	12	31.02	0.9	0.8	0
9/3/2019 19:10	0	0	12	31.02	4.6	3.8	23.4
9/3/2019 19:20	0	0	12	26.42	0.7	0.8	0.4
9/3/2019 19:30	0	0	12	30.26	0.8	0.8	0
9/3/2019 19:40	0	0	12	27.64	4.7	3.8	24.8
9/3/2019 19:50	0	0	12	29.56	0.8	0.8	0.4
9/3/2019 20:00	0	0	12	31.02	0.9	0.9	1
9/3/2019 20:10	0	0	12	26.23	2.4	2.3	25
9/3/2019 20:20	0	0	12	30.17	0.8	0.8	22.6
9/3/2019 20:30	0	0	12	27.91	4.6	3.8	25
9/3/2019 20:40	0	0	12	30.05	0.7	0.8	0.4
9/3/2019 20:50	0	0	12	31.57	0.9	0.8	0.4
9/3/2019 21:00	0	0	12	26.11	0.9	0.8	2.7
9/3/2019 21:10	0	0	12	29.89	0.8	0.8	0.3
9/3/2019 21:20	0	0	12	31.48	0.8	0.7	0.4
9/3/2019 21:30	0	0	12	26.42	0.9	0.8	2.6
9/3/2019 21:40	0	0	12	30.23	0.7	0.8	0.3
9/3/2019 21:50	0	0	12	31.67	0.9	0.8	0.4
9/3/2019 22:00	0	0	12	27.64	0.7	0.8	0.4
9/3/2019 22:10	0	0	12	31.45	0.9	0.8	0
9/3/2019 22:20	0	0	12	29.96	4.7	3.8	24.4
9/3/2019 22:30	0	0	12	28.31	0.8	0.8	0.4
9/3/2019 22:40	0	0	12	32.12	0.9	0.8	0.2
9/3/2019 22:50	0	0	12	28.25	0.8	0.8	0.4
9/3/2019 23:00	0	0	12	31.97	0.8	0.8	0
9/3/2019 23:10	0	0	12	28.37	4.6	3.8	24.8
9/3/2019 23:20	0	0	12	28.46	0.7	0.8	0.4
9/3/2019 23:30	0	0	12	31.67	4.6	3.8	0.4
9/3/2019 23:40	0	0	12	27.64	4.7	3.8	25
9/3/2019 23:50	0	0	12	28.83	0.7	0.8	0.4
9/4/2019 0:00	0	0	12	30.72	4.7	3.8	0.6

9/4/2019 0:10	0	0	12	28.22	0.7	0.8	0.4
9/4/2019 0:20	0	0	12	31.97	1	0.8	0
9/4/2019 0:30	0	0	12	27.94	0.5	0.8	0.4
9/4/2019 0:40	0	0	12	31.79	0.8	0.7	0
9/4/2019 0:50	0	0	12	29.07	4.8	3.8	24.8
9/4/2019 1:00	0	0	12	29.01	0.7	0.8	0.5
9/4/2019 1:10	0	0	12	30.44	4.8	3.8	21.7
9/4/2019 1:20	0	0	12	29.56	0.7	0.8	0.4
9/4/2019 1:30	0	0	12	31.05	1	0.9	24
9/4/2019 1:40	0	0	12	26.78	0.9	0.9	24.8
9/4/2019 1:50	0	0	12	30.54	0.8	0.8	2.1
9/4/2019 2:00	0	0	12	26.69	3.5	3.2	24.9
9/4/2019 2:10	0	0	12	30.57	0.8	0.8	0.3
9/4/2019 2:20	0	0	12	31.94	4.6	3.8	0.4
9/4/2019 2:30	0	0	12	26.9	0.7	0.9	0.4
9/4/2019 2:40	0	0	12	30.72	0.8	0.8	0
9/4/2019 2:50	0	0	12	26.35	4.6	3.9	24.9
9/4/2019 3:00	0	0	12	29.59	0.8	0.8	0.4
9/4/2019 3:10	0	0	12	28.95	4.8	3.8	24.4
9/4/2019 3:20	0	0	12	28.03	0.8	0.8	0.4
9/4/2019 3:30	0	0	12	31.85	0.8	0.8	0
9/4/2019 3:40	0	0	12	27.24	0.6	0.9	0.4
9/4/2019 3:50	0	0	12	31.05	0.9	0.8	0
9/4/2019 4:00	0	0	12	28.4	0.7	0.8	0.4
9/4/2019 4:10	0	0	12	32.03	4.7	3.9	0.2
9/4/2019 4:20	0	0	12	28	4.7	3.8	25
9/4/2019 4:30	0	0	12	29.89	0.5	0.8	0.4
9/4/2019 4:40	0	0	12	31.51	0.7	0.8	0.4
9/4/2019 4:50	0	0	12	26.69	0.5	0.9	0.4
9/4/2019 5:00	0	0	12	30.51	0.8	0.8	0
9/4/2019 5:10	0	0	12	26.9	4.8	3.9	24.8
9/4/2019 5:20	0	0	12	28.8	0.7	0.8	0.4
9/4/2019 5:30	0	0	12	31.02	4.5	3.9	0.5
9/4/2019 5:40	0	0	12	26.54	0.6	0.8	0.4
9/4/2019 5:50	0	0	12	30.29	0.8	0.8	0
9/4/2019 6:00	0	0	12	27.39	4.5	3.8	24.7
9/4/2019 6:10	0	0	12	27.73	0.7	0.9	0.4
9/4/2019 6:20	0	0	12	31.51	0.7	0.9	0
9/4/2019 6:30	0	0	12	29.65	4.6	3.9	24.6
9/4/2019 6:40	0	0	12	28.34	0.8	0.8	0.4
9/4/2019 6:50	0	0	12	32.12	4.2	3.4	0.2
9/4/2019 7:00	0	0	12	28.03	4.8	3.8	25
9/4/2019 7:10	0	0	12	29.32	0.7	0.9	0.4
9/4/2019 7:20	0	0	12	29.8	4.5	3.9	23.5
9/4/2019 7:30	0	0	12	30.23	0.8	0.9	0.4
9/4/2019 7:40	0	0	12	27.48	4.7	3.8	24.9
9/4/2019 7:50	0	0	12	31.15	0.8	0.8	0.4

9/4/2019 8:00	0	0	12	28.52	0.8	0.8	0.4
9/4/2019 8:10	0	0	12	31.63	4.8	3.9	0.5
9/4/2019 8:20	0	0	12	27.73	4.8	3.8	25
9/4/2019 8:30	0	0	12	30.29	0.8	0.8	0.4
9/4/2019 8:40	0	0	12	31.79	0.9	0.8	0.4
9/4/2019 8:50	0	0	12	27.7	0.6	0.9	0.4
9/4/2019 9:00	0	0	12	31.42	0.9	0.8	0.1
9/4/2019 9:10	0	0	12	29.99	4.6	3.9	24.5
9/4/2019 9:20	0	0	12	27.67	0.7	0.8	0.4
9/4/2019 9:30	0	0	12	31.42	0.8	0.8	0
9/4/2019 9:40	0	0	12	26.23	0.9	0.9	24.7
9/4/2019 9:50	0	0	12	30.08	0.8	0.8	0.7
9/4/2019 10:00	0	0	12	31.54	0.8	0.8	0.4
9/4/2019 10:10	0	0	12	27.76	0.7	0.8	0.4
9/4/2019 10:20	0	0	12	31.45	0.7	0.8	0.2
9/4/2019 10:30	0	0	12	29.8	4.7	3.8	24.6
9/4/2019 10:40	0	0	12	28.58	0.5	0.9	0.4
9/4/2019 10:50	0	0	12	31.67	4.6	3.8	0.3
9/4/2019 11:00	0	0	12	27.94	0.7	0.8	0.4
9/4/2019 11:10	0	0	12	31.73	0.8	0.8	0
9/4/2019 11:20	0	0	12	29.01	4.4	3.9	24.5
9/4/2019 11:30	0	0	12	28.03	0.6	0.8	0.4
9/4/2019 11:40	0	0	12	31.79	0.8	0.8	0
9/4/2019 11:50	0	0	12	26.9	0.6	0.8	0.4
9/4/2019 12:00	0	0	12	30.69	0.8	0.8	0
9/4/2019 12:10	0	0	23	28.89	3.2	3.2	24.8
9/4/2019 12:20	0	0	23	28.89	3.3	3.2	25.2
9/4/2019 12:30	0	0	23	29.44	3.3	3.2	25.1
9/4/2019 12:40	0	0	23	30.17	1	0.9	24.8
9/4/2019 12:50	0	0	23	30.17	0.9	0.8	1.2
9/4/2019 13:00	0	0	23	29.5	0.9	0.9	24.7
9/4/2019 13:10	0	0	23	28.37	4.5	3.8	25
9/4/2019 13:20	0	0	23	29.44	4.7	3.8	24.8
9/4/2019 13:30	0	0	23	31.12	4.7	3.8	23.7
9/4/2019 13:40	0	0	23	31.18	0.8	0.8	0.4
9/4/2019 13:50	0	0	23	29.44	0.7	0.8	0.4
9/4/2019 14:00	0	0	23	28.46	4.7	3.8	24.9
9/4/2019 14:10	0	0	23	29.25	4.7	3.8	25
9/4/2019 14:20	0	0	23	29.8	4.6	3.8	24.8
9/4/2019 14:30	0	0	23	30.2	4.6	3.9	24.7
9/4/2019 14:40	0	0	23	30.63	4.6	3.8	24.5
9/4/2019 14:50	0	0	23	31.02	4.7	3.8	24.3
9/4/2019 15:00	0	0	23	31.48	4.7	3.9	23
9/4/2019 15:10	0	0	23	31.94	4.7	3.8	0.4
9/4/2019 15:20	0	0	23	31.79	0.8	0.8	0.4
9/4/2019 15:30	0	0	23	31.27	0.8	0.8	0.4
9/4/2019 15:40	0	0	23	30.54	0.7	0.8	0.4

9/4/2019 15:50	0	0	23	29.96	0.7	0.8	0.4
9/4/2019 16:00	0	0	23	28.92	2.8	2.7	24.9
9/4/2019 16:10	0	0	23	28.77	4.7	3.8	24.9
9/4/2019 16:20	0	0	23	29.65	4.7	3.8	24.8
9/4/2019 16:30	0	0	23	30.84	4.6	3.8	24.3
9/4/2019 16:40	0	0	23	31.79	4.7	3.9	0.5
9/4/2019 16:50	0	0	23	31.02	0.8	0.8	0.4
9/4/2019 17:00	0	0	23	29.53	0.8	0.8	0.6
9/4/2019 17:10	0	0	23	28.34	4.6	3.8	25
9/4/2019 17:20	0	0	23	29.74	4.6	3.8	24.7
9/4/2019 17:30	0	0	23	30.81	4.9	3.9	24.3
9/4/2019 17:40	0	0	23	31.88	4.8	3.9	0.5
9/4/2019 17:50	0	0	23	31.45	0.8	0.8	0.4
9/4/2019 18:00	0	0	23	30.29	0.9	0.8	0.4
9/4/2019 18:10	0	0	23	28.89	2.1	2	24.8
9/4/2019 18:20	0	0	23	28.83	4.6	3.8	24.9
9/4/2019 18:30	0	0	23	30.54	4.6	3.9	24.5
9/4/2019 18:40	0	0	23	32.03	0.8	0.8	0.4
9/4/2019 18:50	0	0	23	30.81	0.8	0.8	0.4
9/4/2019 19:00	0	0	23	30.08	0.8	0.8	0.4
9/4/2019 19:10	0	0	23	29.47	1.3	1.3	24.8
9/4/2019 19:20	0	0	23	28.95	3.1	3	24.9
9/4/2019 19:30	0	0	23	28.77	4.4	3.8	25
9/4/2019 19:40	0	0	23	29.32	4.4	3.8	24.9
9/4/2019 19:50	0	0	23	30.2	4.7	3.9	24.7
9/4/2019 20:00	0	0	23	31.36	4.7	3.9	23.2
9/4/2019 20:10	0	0	23	31.88	0.8	0.8	0.4
9/4/2019 20:20	0	0	23	30.57	0.8	0.8	0.4
9/4/2019 20:30	0	0	23	29.53	0.9	0.9	2.5
9/4/2019 20:40	0	0	23	28.37	4.7	3.8	24.9
9/4/2019 20:50	0	0	23	29.71	4.7	3.8	24.9
9/4/2019 21:00	0	0	23	30.87	4.7	3.8	24.2
9/4/2019 21:10	0	0	23	32.09	1	0.9	0.4
9/4/2019 21:20	0	0	23	30.44	0.7	0.9	0.4
9/4/2019 21:30	0	0	23	29.01	1.4	1.4	24.8
9/4/2019 21:40	0	0	23	28.8	4.6	3.8	25
9/4/2019 21:50	0	0	23	29.89	4.8	3.8	24.8
9/4/2019 22:00	0	0	23	30.81	4.7	3.9	24.4
9/4/2019 22:10	0	0	23	31.88	4.6	3.8	0.5
9/4/2019 22:20	0	0	23	30.84	0.7	0.9	0.4
9/4/2019 22:30	0	0	23	29.47	0.9	0.8	2.7
9/4/2019 22:40	0	0	23	28.34	4.6	3.8	24.9
9/4/2019 22:50	0	0	23	29.8	4.6	3.8	24.8
9/4/2019 23:00	0	0	23	31.15	4.7	3.8	23.7
9/4/2019 23:10	0	0	23	32.12	0.8	0.8	0.4
9/4/2019 23:20	0	0	23	30.69	0.9	0.8	0.4
9/4/2019 23:30	0	0	23	29.53	0.9	0.9	2.9

9/4/2019 23:40	0	0	23	28.37	3.5	3.3	25
9/4/2019 23:50	0	0	23	29.22	4.3	3.9	24.9
9/5/2019 0:00	0	0	23	30.41	4.7	3.8	24.4
9/5/2019 0:10	0	0	23	31.88	4.8	3.9	0.5
9/5/2019 0:20	0	0	23	30.63	0.7	0.9	0.4
9/5/2019 0:30	0	0	23	29.16	1	0.9	24.8
9/5/2019 0:40	0	0	23	28.74	4.8	3.8	25
9/5/2019 0:50	0	0	23	29.65	4.7	3.8	24.7
9/5/2019 1:00	0	0	23	30.69	4.6	3.9	24.5
9/5/2019 1:10	0	0	23	31.45	4.7	3.9	21.7
9/5/2019 1:20	0	0	23	30.96	0.8	0.8	0.4
9/5/2019 1:30	0	0	23	28.37	2.1	2.2	24.7
9/5/2019 1:40	0	0	23	29.19	4.6	3.8	24.8
9/5/2019 1:50	0	0	23	31.33	4.6	3.9	22.9
9/5/2019 2:00	0	0	23	31.54	0.8	0.8	0.4
9/5/2019 2:10	0	0	23	30.99	0.8	0.9	0.4
9/5/2019 2:20	0	0	23	30.51	0.7	0.8	0.4
9/5/2019 2:30	0	0	23	29.83	0.9	0.9	2.7
9/5/2019 2:40	0	0	23	28.52	3.3	3.3	24.9
9/5/2019 2:50	0	0	23	29.01	4.7	3.8	24.9
9/5/2019 3:00	0	0	23	30.41	4.7	3.9	24.5
9/5/2019 3:10	0	0	23	31.82	4.8	3.9	0.5
9/5/2019 3:20	0	0	23	31.18	0.9	0.8	0.4
9/5/2019 3:30	0	0	23	30.05	0.8	0.8	0.4
9/5/2019 3:40	0	0	23	28.98	2.2	2.3	24.9
9/5/2019 3:50	0	0	23	28.74	4.6	3.8	25
9/5/2019 4:00	0	0	23	29.59	4.7	3.8	24.8
9/5/2019 4:10	0	0	23	30.84	4.7	3.9	24.3
9/5/2019 4:20	0	0	23	32	0.9	0.8	0.4
9/5/2019 4:30	0	0	23	30.32	0.8	0.9	0.4
9/5/2019 4:40	0	0	23	28.86	2	1.8	24.9
9/5/2019 4:50	0	0	23	28.83	4.6	3.8	24.9
9/5/2019 5:00	0	0	23	29.86	4.6	3.8	24.9
9/5/2019 5:10	0	0	23	30.78	4.6	3.9	24.3
9/5/2019 5:20	0	0	23	32.06	4.6	3.9	0.4
9/5/2019 5:30	0	0	23	30.75	0.8	0.9	0.4
9/5/2019 5:40	0	0	23	28.98	1	1.2	24.8
9/5/2019 5:50	0	0	23	28.86	4.7	3.8	24.9
9/5/2019 6:00	0	0	23	30.08	4.6	4	24.7
9/5/2019 6:10	0	0	23	31.36	4.7	3.9	23.1
9/5/2019 6:20	0	0	23	31.73	0.8	0.8	0.4
9/5/2019 6:30	0	0	23	30.51	0.7	0.8	0.4
9/5/2019 6:40	0	0	23	29.5	0.7	0.9	3.3
9/5/2019 6:50	0	0	23	28.34	3.3	3.3	25
9/5/2019 7:00	0	0	23	29.19	4.6	3.9	24.8
9/5/2019 7:10	0	0	23	30.47	4.6	3.9	24.5
9/5/2019 7:20	0	0	23	31.94	0.8	0.8	0.4

9/5/2019 7:30	0	0	23	28.55	0.9	0.9	2.7
9/5/2019 7:40	0	0	23	29.07	4.7	3.9	24.8
9/5/2019 7:50	0	0	23	32	4.8	3.9	0.5
9/5/2019 8:00	0	0	23	28.98	0.7	0.9	0.4
9/5/2019 8:10	0	0	23	28.83	4.7	3.8	24.9
9/5/2019 8:20	0	0	23	30.87	4.7	3.8	24.2
9/5/2019 8:30	0	0	23	32.09	3.1	2.4	0.5
9/5/2019 8:40	0	0	23	31.05	0.8	0.9	0.4
9/5/2019 8:50	0	0	23	30.26	0.7	0.8	0.4
9/5/2019 9:00	0	0	23	29.32	1.2	1.2	24.8
9/5/2019 9:10	0	0	23	28.52	4.7	3.8	25
9/5/2019 9:20	0	0	23	29.41	4.5	3.9	24.9
9/5/2019 9:30	0	0	23	30.69	4.7	3.9	24.4
9/5/2019 9:40	0	0	23	32.03	4.5	3.9	0.5
9/5/2019 9:50	0	0	23	30.26	0.7	0.9	0.4
9/5/2019 10:00	0	0	23	28.49	2.9	3	24.9
9/5/2019 10:10	0	0	23	29.07	4.4	3.8	25
9/5/2019 10:20	0	0	23	30.17	4.5	3.8	24.6
9/5/2019 10:30	0	0	23	31.21	4.8	3.8	23.7
9/5/2019 10:40	0	0	23	32.06	4.6	4.1	0.4
9/5/2019 10:50	0	0	23	30.69	0.8	0.8	0.4
9/5/2019 11:00	0	0	23	28.95	1.1	1	24.7
9/5/2019 11:10	0	0	23	28.83	4.6	3.9	24.9
9/5/2019 11:20	0	0	23	30.32	4.6	3.9	24.5
9/5/2019 11:30	0	0	23	31.54	4.6	3.8	0.6
9/5/2019 11:40	0	0	23	31.94	0.9	0.9	0.4
9/5/2019 11:50	0	0	23	31.15	0.8	0.8	0.4
9/5/2019 12:00	0	0	23	29.86	0.8	0.8	0.4
9/5/2019 12:10	0	0	23	28.25	3.4	3.4	24.9
9/5/2019 12:20	0	0	11	29.07	4.8	3.8	24.5
9/5/2019 12:30	0	0	11	24.28	0.5	0.8	0.4
9/5/2019 12:40	0	0	11	27.67	0.7	0.8	0
9/5/2019 12:50	0	0	11	31.15	0.8	0.8	0
9/5/2019 13:00	0	0	11	25.16	4.5	3.8	24.7
9/5/2019 13:10	0	0	11	23	0.5	0.8	0.4
9/5/2019 13:20	0	0	11	26.48	0.7	0.8	0
9/5/2019 13:30	0	0	11	30.02	0.7	0.9	0
9/5/2019 13:40	0	0	11	28.46	4.8	3.8	24.5
9/5/2019 13:50	0	0	11	24.37	0.5	0.8	0.4
9/5/2019 14:00	0	0	11	27.88	0.7	0.8	0
9/5/2019 14:10	0	0	11	31.42	0.8	0.9	0
9/5/2019 14:20	0	0	11	24.49	4.7	3.8	25.1
9/5/2019 14:30	0	0	11	27.85	0.8	0.8	0.4
9/5/2019 14:40	0	0	11	31.36	0.9	0.8	0
9/5/2019 14:50	0	0	11	26.29	1	0.9	24.7
9/5/2019 15:00	0	0	11	29.8	0.8	0.8	0.1
9/5/2019 15:10	0	0	11	28.7	4.7	3.8	24.6

9/5/2019 15:20	0	0	11	28.09	0.6	0.8	0.4
9/5/2019 15:30	0	0	11	31.57	0.8	0.8	0
9/5/2019 15:40	0	0	11	25.77	0.9	0.8	24.6
9/5/2019 15:50	0	0	11	29.25	0.7	0.8	0.2
9/5/2019 16:00	0	0	11	30.26	4.6	3.8	22.5
9/5/2019 16:10	0	0	11	26.51	0.7	0.8	0.5
9/5/2019 16:20	0	0	11	30.05	0.8	0.8	0
9/5/2019 16:30	0	0	11	31.27	0.8	0.8	0.4
9/5/2019 16:40	0	0	11	27.21	0.7	0.8	0.4
9/5/2019 16:50	0	0	11	30.81	0.7	0.8	0.4
9/5/2019 17:00	0	0	11	32.03	2.9	2.4	0.4
9/5/2019 17:10	0	0	11	27.15	0.7	0.8	0.4
9/5/2019 17:20	0	0	11	30.69	0.8	0.8	0
9/5/2019 17:30	0	0	11	26.45	4.6	3.8	24.9
9/5/2019 17:40	0	0	11	29.16	0.8	0.8	0.5
9/5/2019 17:50	0	0	11	30.41	4.8	3.9	2.6
9/5/2019 18:00	0	0	11	26.81	4.7	3.8	24.9
9/5/2019 18:10	0	0	11	28.28	0.6	0.8	0.4
9/5/2019 18:20	0	0	11	31.82	0.9	0.8	0
9/5/2019 18:30	0	0	11	29.38	4.6	3.8	24.6
9/5/2019 18:40	0	0	11	29.1	0.7	0.8	0.4
9/5/2019 18:50	0	0	11	30.69	4.6	3.8	2.6
9/5/2019 19:00	0	0	11	26.35	4.7	3.8	25
9/5/2019 19:10	0	0	11	29.32	0.7	0.8	0.4
9/5/2019 19:20	0	0	11	30.35	4.7	3.8	22.5
9/5/2019 19:30	0	0	11	28.77	0.7	0.8	0.4
9/5/2019 19:40	0	0	11	31.54	4.9	3.8	0.3
9/5/2019 19:50	0	0	11	27.91	4.6	3.8	24.8
9/5/2019 20:00	0	0	11	28.31	0.7	0.8	0.4
9/5/2019 20:10	0	0	11	31.82	0.9	0.8	0
9/5/2019 20:20	0	0	11	28.83	0.8	0.8	0.4
9/5/2019 20:30	0	0	11	31.73	4.6	3.8	0.3
9/5/2019 20:40	0	0	11	28.09	4.6	3.9	24.8
9/5/2019 20:50	0	0	11	28.74	0.7	0.8	0.4
9/5/2019 21:00	0	0	11	31.88	4.7	3.8	0.2
9/5/2019 21:10	0	0	11	28.19	4.8	3.8	24.9
9/5/2019 21:20	0	0	11	28.4	0.7	0.8	0.4
9/5/2019 21:30	0	0	11	31.97	0.8	0.8	0
9/5/2019 21:40	0	0	11	27.85	0.7	0.8	0.4
9/5/2019 21:50	0	0	11	31.36	0.8	0.8	0
9/5/2019 22:00	0	0	11	30.51	4.7	3.8	23.9
9/5/2019 22:10	0	0	11	27.15	0.6	0.7	0.4
9/5/2019 22:20	0	0	11	30.69	0.9	0.8	0
9/5/2019 22:30	0	0	11	26.81	3.4	3.3	24.8
9/5/2019 22:40	0	0	11	30.41	0.8	0.8	0.8
9/5/2019 22:50	0	0	11	31.73	0.7	0.8	0.4
9/5/2019 23:00	0	0	11	27.85	0.7	0.8	0.4

9/5/2019 23:10	0	0	11	31.42	0.7	0.8	0
9/5/2019 23:20	0	0	11	29.89	4.7	3.9	24.5
9/5/2019 23:30	0	0	11	27.82	0.7	0.8	0.4
9/5/2019 23:40	0	0	11	31.36	0.9	0.8	0
9/5/2019 23:50	0	0	11	25.68	2.4	2.3	24.7
9/6/2019 0:00	0	0	11	29.25	0.7	0.8	22.4
9/6/2019 0:10	0	0	11	30.14	4.7	3.8	22.7
9/6/2019 0:20	0	0	11	25.87	0.6	0.8	0.4
9/6/2019 0:30	0	0	11	29.41	0.7	0.8	0
9/6/2019 0:40	0	0	11	29.96	4.5	3.9	23.3
9/6/2019 0:50	0	0	11	26.54	0.5	0.9	0.4
9/6/2019 1:00	0	0	11	30.14	0.7	0.8	0.1
9/6/2019 1:10	0	0	11	28.03	4.7	3.8	24.7
9/6/2019 1:20	0	0	11	26.87	0.7	0.8	0.4
9/6/2019 1:30	0	0	11	30.41	0.7	0.8	0
9/6/2019 1:40	0	0	11	27.21	4.8	3.8	24.8
9/6/2019 1:50	0	0	11	26.05	0.5	0.8	0.4
9/6/2019 2:00	0	0	11	29.62	0.7	0.8	0
9/6/2019 2:10	0	0	11	29.35	4.7	3.8	24.1
9/6/2019 2:20	0	0	11	26.6	0.6	0.9	0.4
9/6/2019 2:30	0	0	11	30.17	0.7	0.8	0
9/6/2019 2:40	0	0	11	27.91	4.8	3.8	24.8
9/6/2019 2:50	0	0	11	27.48	0.7	0.8	0.4
9/6/2019 3:00	0	0	11	31.02	0.8	0.8	0
9/6/2019 3:10	0	0	11	25.32	4.7	3.8	24.9
9/6/2019 3:20	0	0	11	26.48	0.6	0.8	0.4
9/6/2019 3:30	0	0	11	30.02	0.8	0.8	0
9/6/2019 3:40	0	0	11	28.37	4.7	3.9	24.6
9/6/2019 3:50	0	0	11	26.42	0.5	0.8	0.4
9/6/2019 4:00	0	0	11	29.99	0.7	0.8	0
9/6/2019 4:10	0	0	11	28.43	4.5	3.8	24.7
9/6/2019 4:20	0	0	11	27.54	0.6	0.8	0.4
9/6/2019 4:30	0	0	11	31.02	0.8	0.8	0
9/6/2019 4:40	0	0	11	25.47	4.7	3.8	24.9
9/6/2019 4:50	0	0	11	27.88	0.8	0.8	0.4
9/6/2019 5:00	0	0	11	31.39	0.8	0.8	0
9/6/2019 5:10	0	0	11	24.52	3.4	3.4	25
9/6/2019 5:20	0	0	11	28.19	0.8	0.8	0.1
9/6/2019 5:30	0	0	11	31.79	0.8	0.8	0
9/6/2019 5:40	0	0	11	25.47	0.9	0.8	2.4
9/6/2019 5:50	0	0	11	29.07	0.7	0.8	0.2
9/6/2019 6:00	0	0	11	30.81	4.7	3.8	0.5
9/6/2019 6:10	0	0	11	26.69	0.7	0.9	0.4
9/6/2019 6:20	0	0	11	30.29	0.7	0.8	0
9/6/2019 6:30	0	0	11	27.54	4.5	3.8	24.7
9/6/2019 6:40	0	0	11	27.48	0.8	0.8	0.4
9/6/2019 6:50	0	0	11	31.02	0.8	0.8	0

9/6/2019 7:00	0	0	11	25.5	4.6	3.8	24.9
9/6/2019 7:10	0	0	11	28.58	0.7	0.9	0.4
9/6/2019 7:20	0	0	11	32.06	4.7	3.7	0.2
9/6/2019 7:30	0	0	11	25.41	0.5	0.8	0.4
9/6/2019 7:40	0	0	11	28.98	0.7	0.8	0
9/6/2019 7:50	0	0	11	31.09	4.8	3.8	0.5
9/6/2019 8:00	0	0	11	26.72	0.7	0.8	0.4
9/6/2019 8:10	0	0	11	30.26	0.7	0.8	0
9/6/2019 8:20	0	0	11	27.54	4.6	3.8	24.8
9/6/2019 8:30	0	0	11	28.06	0.7	0.8	0.4
9/6/2019 8:40	0	0	11	31.63	0.8	0.8	0
9/6/2019 8:50	0	0	11	25.35	0.9	0.9	24.6
9/6/2019 9:00	0	0	11	28.95	0.7	0.8	1.2
9/6/2019 9:10	0	0	11	31.12	4.5	3.8	0.5
9/6/2019 9:20	0	0	11	27.67	0.9	0.9	0.4
9/6/2019 9:30	0	0	11	31.18	0.7	0.8	0
9/6/2019 9:40	0	0	11	30.96	4.6	3.8	23.3
9/6/2019 9:50	0	0	11	26.45	0.6	0.8	0.4
9/6/2019 10:00	0	0	11	30.02	0.7	0.8	0
9/6/2019 10:10	0	0	11	28.28	4.5	3.9	24.8
9/6/2019 10:20	0	0	11	28.43	0.8	0.9	0.4
9/6/2019 10:30	0	0	11	31.97	0.8	0.8	0
9/6/2019 10:40	0	0	11	27.88	0.6	0.8	0.4
9/6/2019 10:50	0	0	11	31.42	0.7	0.8	0
9/6/2019 11:00	0	0	11	30.29	4.7	3.8	24.1
9/6/2019 11:10	0	0	11	27.3	0.5	0.8	0.4
9/6/2019 11:20	0	0	11	30.81	0.8	0.8	0
9/6/2019 11:30	0	0	11	26.05	4.6	3.8	24.8
9/6/2019 11:40	0	0	11	28.98	0.7	0.8	0.4
9/6/2019 11:50	0	0	11	31.18	4.7	3.9	0.4
9/6/2019 12:00	0	0	11	27.39	4.7	3.8	24.9
9/6/2019 12:10	0	0	11	27.76	0.8	0.8	0.4
9/6/2019 12:20	0	0	11	31.39	0.7	0.8	0
9/6/2019 12:30	0	0	11	25.87	1.8	1.8	24.7
9/6/2019 12:40	0	0	0	28.92	0.7	0.8	0
9/6/2019 12:50	0	0	5	28.98	0.7	0.8	0
9/6/2019 13:00	0	0	1	29.01	0.7	0.8	0
9/6/2019 13:10	0	0	1	29.01	0.7	0.8	0.1
9/6/2019 13:20	0	0	1	29.01	0.7	0.8	0.1
9/6/2019 13:30	0	0	2	29.04	0.7	0.8	0.1
9/6/2019 13:40	0	0	2	29.01	0.7	0.8	0.1
9/6/2019 13:50	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 14:00	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 14:10	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 14:20	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 14:30	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 14:40	0	0	0	29.01	0.7	0.8	0.1

9/6/2019 14:50	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 15:00	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 15:10	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 15:20	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 15:30	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 15:40	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 15:50	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 16:00	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 16:10	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 16:20	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 16:30	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 16:40	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 16:50	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 17:00	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 17:10	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 17:20	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 17:30	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 17:40	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 17:50	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 18:00	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 18:10	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 18:20	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 18:30	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 18:40	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 18:50	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 19:00	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 19:10	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 19:20	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 19:30	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 19:40	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 19:50	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 20:00	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 20:10	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 20:20	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 20:30	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 20:40	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 20:50	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 21:00	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 21:10	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 21:20	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 21:30	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 21:40	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 21:50	0	0	0	29.04	0.7	0.7	0.1
9/6/2019 22:00	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 22:10	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 22:20	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 22:30	0	0	0	29.01	0.7	0.7	0.1

9/6/2019 22:40	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 22:50	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 23:00	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 23:10	0	0	0	29.04	0.7	0.8	0.1
9/6/2019 23:20	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 23:30	0	0	0	29.01	0.7	0.8	0.1
9/6/2019 23:40	0	0	0	29.01	0.7	0.7	0.1
9/6/2019 23:50	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 0:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 0:10	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 0:20	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 0:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 0:40	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 0:50	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 1:00	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 1:10	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 1:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 1:30	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 1:40	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 1:50	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 2:00	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 2:10	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 2:20	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 2:30	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 2:40	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 2:50	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 3:00	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 3:10	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 3:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 3:30	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 3:40	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 3:50	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 4:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 4:10	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 4:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 4:30	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 4:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 4:50	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 5:00	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 5:10	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 5:20	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 5:30	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 5:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 5:50	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 6:00	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 6:10	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 6:20	0	0	0	29.01	0.7	0.8	0.1

9/7/2019 6:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 6:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 6:50	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 7:00	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 7:10	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 7:20	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 7:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 7:40	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 7:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 8:00	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 8:10	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 8:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 8:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 8:40	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 8:50	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 9:00	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 9:10	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 9:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 9:30	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 9:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 9:50	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 10:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 10:10	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 10:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 10:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 10:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 10:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 11:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 11:10	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 11:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 11:30	0	0	0	29.01	0.7	0.7	0.1
9/7/2019 11:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 11:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 12:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 12:10	0	0	0	29.07	0.7	0.8	0.1
9/7/2019 12:20	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 12:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 12:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 12:50	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 13:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 13:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 13:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 13:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 13:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 13:50	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 14:00	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 14:10	0	0	0	29.01	0.7	0.8	0.1

9/7/2019 14:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 14:30	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 14:40	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 14:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 15:00	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 15:10	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 15:20	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 15:30	0	0	0	29.07	0.7	0.7	0.1
9/7/2019 15:40	0	0	0	29.07	0.7	0.7	0.1
9/7/2019 15:50	0	0	0	29.07	0.7	0.7	0.1
9/7/2019 16:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 16:10	0	0	0	29.07	0.7	0.8	0.1
9/7/2019 16:20	0	0	0	29.07	0.7	0.8	0.1
9/7/2019 16:30	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 16:40	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 16:50	0	0	0	29.07	0.7	0.7	0.1
9/7/2019 17:00	0	0	0	29.07	0.7	0.7	0.1
9/7/2019 17:10	0	0	0	29.07	0.7	0.8	0.1
9/7/2019 17:20	0	0	0	29.07	0.7	0.7	0.1
9/7/2019 17:30	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 17:40	0	0	0	29.04	0.7	0.7	0.1
9/7/2019 17:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 18:00	0	0	0	29.07	0.7	0.8	0.1
9/7/2019 18:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 18:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 18:30	0	0	0	29.04	0.7	0.8	0.1
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9/7/2019 18:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 19:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 19:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 19:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 19:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 19:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 19:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 20:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 20:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 20:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 20:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 20:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 20:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 21:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 21:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 21:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 21:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 21:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 21:50	0	0	0	29.01	0.7	0.8	0.1
9/7/2019 22:00	0	0	0	29.04	0.7	0.8	0.1

9/7/2019 22:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 22:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 22:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 22:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 22:50	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 23:00	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 23:10	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 23:20	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 23:30	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 23:40	0	0	0	29.04	0.7	0.8	0.1
9/7/2019 23:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 0:00	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 0:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 0:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 0:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 0:40	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 0:50	0	0	0	29.01	0.7	0.8	0.1
9/8/2019 1:00	0	0	0	29.01	0.7	0.8	0.1
9/8/2019 1:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 1:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 1:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 1:40	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 1:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 2:00	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 2:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 2:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 2:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 2:40	0	0	0	29.01	0.7	0.8	0.1
9/8/2019 2:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 3:00	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 3:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 3:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 3:30	0	0	0	29.01	0.7	0.8	0.1
9/8/2019 3:40	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 3:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 4:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 4:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 4:20	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 4:30	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 4:40	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 4:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 5:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 5:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 5:20	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 5:30	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 5:40	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 5:50	0	0	0	29.04	0.7	0.7	0.1

9/8/2019 6:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 6:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 6:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 6:30	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 6:40	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 6:50	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 7:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 7:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 7:20	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 7:30	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 7:40	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 7:50	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 8:00	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 8:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 8:20	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 8:30	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 8:40	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 8:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 9:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 9:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 9:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 9:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 9:40	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 9:50	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 10:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 10:10	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 10:20	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 10:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 10:40	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 10:50	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 11:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 11:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 11:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 11:30	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 11:40	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 11:50	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 12:00	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 12:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 12:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 12:30	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 12:40	0	0	0	29.07	0.7	0.7	0.1
9/8/2019 12:50	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 13:00	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 13:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 13:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 13:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 13:40	0	0	0	29.07	0.7	0.8	0.1

9/8/2019 13:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 14:00	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 14:10	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 14:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 14:30	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 14:40	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 14:50	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 15:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 15:10	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 15:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 15:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 15:40	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 15:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 16:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 16:10	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 16:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 16:30	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 16:40	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 16:50	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 17:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 17:10	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 17:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 17:30	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 17:40	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 17:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 18:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 18:10	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 18:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 18:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 18:40	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 18:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 19:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 19:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 19:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 19:30	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 19:40	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 19:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 20:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 20:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 20:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 20:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 20:40	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 20:50	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 21:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 21:10	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 21:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 21:30	0	0	0	29.04	0.7	0.8	0.1

9/8/2019 21:40	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 21:50	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 22:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 22:10	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 22:20	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 22:30	0	0	0	29.04	0.7	0.8	0.1
9/8/2019 22:40	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 22:50	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 23:00	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 23:10	0	0	0	29.04	0.7	0.7	0.1
9/8/2019 23:20	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 23:30	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 23:40	0	0	0	29.07	0.7	0.8	0.1
9/8/2019 23:50	0	0	0	29.04	0.7	0.8	0.1
9/9/2019 0:00	0	0	0	29.04	0.7	0.8	0.1
9/9/2019 0:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 0:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 0:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 0:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 0:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 1:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 1:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 1:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 1:30	0	0	0	29.04	0.7	0.8	0.1
9/9/2019 1:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 1:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 2:00	0	0	0	29.04	0.7	0.8	0.1
9/9/2019 2:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 2:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 2:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 2:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 2:50	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 3:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 3:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 3:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 3:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 3:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 3:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 4:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 4:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 4:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 4:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 4:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 4:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 5:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 5:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 5:20	0	0	0	29.07	0.7	0.8	0.1

9/9/2019 5:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 5:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 5:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 6:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 6:10	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 6:20	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 6:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 6:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 6:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 7:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 7:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 7:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 7:30	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 7:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 7:50	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 8:00	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 8:10	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 8:20	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 8:30	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 8:40	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 8:50	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 9:00	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 9:10	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 9:20	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 9:30	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 9:40	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 9:50	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 10:00	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 10:10	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 10:20	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 10:30	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 10:40	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 10:50	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 11:00	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 11:10	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 11:20	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 11:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 11:40	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 11:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 12:00	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 12:10	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 12:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 12:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 12:40	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 12:50	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 13:00	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 13:10	0	0	0	29.1	0.7	0.8	0.1

9/9/2019 13:20	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 13:30	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 13:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 13:50	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 14:00	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 14:10	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 14:20	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 14:30	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 14:40	0	0	0	29.07	0.7	0.8	0.1
9/9/2019 14:50	0	0	0	29.1	0.7	0.8	0.1
9/9/2019 15:00	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 15:10	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 15:20	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 15:30	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 15:40	0	0	0	29.07	0.7	0.7	0.1
9/9/2019 15:50	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 16:00	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 16:10	0	0	0	29.1	0.7	0.7	0.1
9/9/2019 16:20	11	0	0	30.84	0.8	0.7	0
9/9/2019 16:30	10	0	0	32.03	0.8	0.7	7
9/9/2019 16:40	10	0	0	27.58	0.6	0.8	0.4
9/9/2019 16:50	10	0	0	30.81	0.8	0.7	0
9/9/2019 17:00	10	0	0	27.42	1.3	1.4	24.8
9/9/2019 17:10	10	0	0	30.57	0.7	0.8	3.1
9/9/2019 17:20	10	0	0	31.54	0.8	0.8	0.4
9/9/2019 17:30	9	0	0	25.9	0.9	0.9	2.4
9/9/2019 17:40	9	0	0	28.95	0.8	0.8	0.2
9/9/2019 17:50	12	0	0	32.09	4.1	3.1	0.2
9/9/2019 18:00	0	0	0	29.44	4.6	3.8	24.6
9/9/2019 18:10	12	0	0	25.71	0.6	0.8	0.4
9/9/2019 18:20	0	0	0	28.52	0.7	0.8	0
9/9/2019 18:30	11	0	0	31.36	0.8	0.8	0
9/9/2019 18:40	12	0	0	25.62	4.6	3.8	24.9
9/9/2019 18:50	11	0	0	26.84	0.6	0.8	0.4
9/9/2019 19:00	0	0	0	29.65	0.7	0.8	0
9/9/2019 19:10	11	0	0	31.67	4.7	3.8	0.3
9/9/2019 19:20	12	0	0	30.87	4.6	3.8	23.4
9/9/2019 19:30	12	0	0	26.63	0.6	0.8	0.4
9/9/2019 19:40	12	0	0	29.1	0.7	0.8	0
9/9/2019 19:50	0	0	0	31.67	0.8	0.8	0
9/9/2019 20:00	0	0	0	30.87	4.7	3.8	23.2
9/9/2019 20:10	0	0	0	25.62	0.6	0.8	0.4
9/9/2019 20:20	11	0	0	28.16	0.7	0.8	0
9/9/2019 20:30	11	0	0	30.54	0.8	0.8	0
9/9/2019 20:40	11	0	0	27.76	4.5	3.8	24.7
9/9/2019 20:50	12	0	0	25.71	0.6	0.8	0.4
9/9/2019 21:00	12	0	0	28.06	0.7	0.8	0

9/9/2019 21:10	12	0	0	30.41	0.8	0.8	0
9/9/2019 21:20	11	0	0	28.28	4.6	3.8	24.5
9/9/2019 21:30	12	0	0	25.26	0.5	0.8	0.4
9/9/2019 21:40	12	0	0	27.61	0.7	0.8	0
9/9/2019 21:50	12	0	0	29.96	0.7	0.8	0
9/9/2019 22:00	12	0	0	29.99	4.8	3.9	21.1
9/9/2019 22:10	0	0	0	23.73	0.5	0.8	0.4
9/9/2019 22:20	0	0	0	26.05	0.6	0.8	0
9/9/2019 22:30	0	0	0	28.31	0.7	0.8	0
9/9/2019 22:40	0	0	0	30.57	0.7	0.8	0
9/9/2019 22:50	0	0	0	28.43	4.6	3.8	24.5
9/9/2019 23:00	0	0	0	23.76	0.5	0.8	0.4
9/9/2019 23:10	0	0	0	26.08	0.5	0.8	0
9/9/2019 23:20	0	0	0	28.31	0.7	0.8	0
9/9/2019 23:30	0	0	0	30.51	0.7	0.8	0
9/9/2019 23:40	2	0	0	28.55	4.5	3.8	24.1
9/9/2019 23:50	0	0	0	23.61	0.5	0.8	0.4
9/10/2019 0:00	12	0	0	25.74	0.5	0.8	0
9/10/2019 0:10	12	0	0	28	0.6	0.8	0
9/10/2019 0:20	12	0	0	30.26	0.7	0.8	0
9/10/2019 0:30	12	0	0	29.07	4.6	3.8	23.8
9/10/2019 0:40	11	0	0	22.78	0.5	0.8	0.4
9/10/2019 0:50	11	0	0	24.92	0.6	0.8	0
9/10/2019 1:00	11	0	0	27.15	0.6	0.8	0
9/10/2019 1:10	12	0	0	29.41	0.7	0.8	0
9/10/2019 1:20	12	0	0	31.6	0.8	0.8	0.1
9/10/2019 1:30	12	0	0	31.57	0.8	0.8	0.4
9/10/2019 1:40	12	0	0	23.61	2	1.9	25
9/10/2019 1:50	12	0	0	25.96	0.5	0.8	23.1
9/10/2019 2:00	11	0	0	28.16	0.6	0.8	0
9/10/2019 2:10	11	0	0	30.35	0.7	0.8	0
9/10/2019 2:20	11	0	0	30.93	4.5	3.9	0.5
9/10/2019 2:30	11	0	0	22.72	0.5	0.8	0.4
9/10/2019 2:40	0	0	0	24.92	0.5	0.8	0
9/10/2019 2:50	0	0	0	27.03	0.6	0.8	0
9/10/2019 3:00	0	0	0	29.13	0.7	0.8	0
9/10/2019 3:10	0	0	0	31.27	0.8	0.8	0.1
9/10/2019 3:20	0	0	0	25.35	4.5	3.9	24.8
9/10/2019 3:30	0	0	0	23.97	0.5	0.8	0.4
9/10/2019 3:40	0	0	0	26.08	0.5	0.8	0
9/10/2019 3:50	0	0	0	28.25	0.6	0.8	0
9/10/2019 4:00	0	0	0	30.29	0.7	0.8	0
9/10/2019 4:10	12	0	0	29.35	4.6	3.9	23.3
9/10/2019 4:20	11	0	0	22.42	0.5	0.9	0.4
9/10/2019 4:30	11	0	0	24.58	0.5	0.8	0
9/10/2019 4:40	12	0	0	26.72	0.6	0.8	0
9/10/2019 4:50	12	0	0	28.86	0.6	0.8	0

9/10/2019 5:00	12	0	0	31.05	0.8	0.8	0.1
9/10/2019 5:10	11	0	0	26.72	4.6	3.8	24.6
9/10/2019 5:20	11	0	0	23.97	0.5	0.9	0.4
9/10/2019 5:30	0	0	0	26.08	0.5	0.8	0
9/10/2019 5:40	0	0	0	28.09	0.7	0.8	0
9/10/2019 5:50	0	0	0	30.17	0.7	0.8	0
9/10/2019 6:00	0	0	0	30.47	4.6	3.9	0.5
9/10/2019 6:10	0	0	0	22.11	0.4	0.8	0.4
9/10/2019 6:20	12	0	0	24.13	0.5	0.8	0
9/10/2019 6:30	11	0	0	26.2	0.5	0.8	0
9/10/2019 6:40	11	0	0	28.28	0.6	0.8	0
9/10/2019 6:50	12	0	0	30.38	0.8	0.8	0.1
9/10/2019 7:00	12	0	0	28.4	4.7	3.9	24.2
9/10/2019 7:10	12	0	0	22.36	0.5	0.8	0.4
9/10/2019 7:20	11	0	0	24.49	0.5	0.8	0
9/10/2019 7:30	11	0	0	26.63	0.5	0.8	0
9/10/2019 7:40	0	0	0	28.7	0.7	0.8	0
9/10/2019 7:50	0	0	0	30.72	0.7	0.8	0.1
9/10/2019 8:00	0	0	0	29.56	4.4	3.8	23.4
9/10/2019 8:10	0	0	0	21.35	0.5	0.8	0.4
9/10/2019 8:20	0	0	0	23.36	0.5	0.8	0
9/10/2019 8:30	0	0	0	25.47	0.5	0.8	0
9/10/2019 8:40	0	0	0	27.39	0.6	0.8	0
9/10/2019 8:50	12	0	0	29.38	0.7	0.8	0.1
9/10/2019 9:00	11	0	0	31.42	0.8	0.8	0.1
9/10/2019 9:10	11	0	0	23.03	4.3	3.8	24.9
9/10/2019 9:20	12	0	0	23.18	0.5	0.8	0.4
9/10/2019 9:30	12	0	0	25.26	0.5	0.8	0
9/10/2019 9:40	11	0	0	27.36	0.7	0.8	0
9/10/2019 9:50	0	0	0	29.44	0.7	0.8	0.1
9/10/2019 10:00	0	0	0	31.45	0.8	0.8	0.1
9/10/2019 10:10	0	0	0	31.15	0.8	0.8	0.4
9/10/2019 10:20	0	0	0	25.26	4.5	3.8	25
9/10/2019 10:30	0	0	0	25.16	0.5	0.8	0.4
9/10/2019 10:40	12	0	0	27.09	0.6	0.8	0
9/10/2019 10:50	12	0	0	29.1	0.7	0.8	0
9/10/2019 11:00	11	0	0	31.15	0.8	0.8	0
9/10/2019 11:10	12	0	0	26.35	4.5	3.8	24.6
9/10/2019 11:20	11	0	0	23.3	0.5	0.8	0.4
9/10/2019 11:30	11	0	0	25.41	0.5	0.8	0
9/10/2019 11:40	11	0	0	27.45	0.7	0.8	0
9/10/2019 11:50	0	0	0	29.5	0.7	0.8	0
9/10/2019 12:00	0	0	0	31.45	0.8	0.8	0.1
9/10/2019 12:10	0	0	0	25.04	4.7	3.8	24.7
9/10/2019 12:20	0	0	0	22.11	0.5	0.8	0.4
9/10/2019 12:30	0	0	0	23.97	0.5	0.8	0
9/10/2019 12:40	11	0	0	25.93	0.6	0.8	0

9/10/2019 12:50	11	0	0	28	0.7	0.8	0.1
9/10/2019 13:00	11	0	0	30.05	0.7	0.8	0.1
9/10/2019 13:10	11	0	0	32.09	0.8	0.8	0.2
9/10/2019 13:20	11	0	0	21.16	4.4	3.8	25.1
9/10/2019 13:30	0	0	0	23.15	0.5	0.8	0.4
9/10/2019 13:40	0	0	0	25.1	0.5	0.8	0
9/10/2019 13:50	0	0	0	27.09	0.5	0.8	0
9/10/2019 14:00	0	0	0	29.07	0.7	0.8	0.1
9/10/2019 14:10	0	0	0	30.99	0.8	0.8	0.1
9/10/2019 14:20	0	0	0	27.85	4.6	3.8	24.5
9/10/2019 14:30	12	0	0	23.88	0.5	0.8	0.4
9/10/2019 14:40	11	0	0	25.84	0.6	0.8	0
9/10/2019 14:50	12	0	0	27.91	0.7	0.8	0
9/10/2019 15:00	11	0	0	29.99	0.7	0.8	0
9/10/2019 15:10	11	0	0	32	0.8	0.8	0
9/10/2019 15:20	2	0	0	24.28	0.5	0.8	0.4
9/10/2019 15:30	0	0	0	26.2	0.6	0.8	0
9/10/2019 15:40	0	0	0	28.12	0.7	0.8	0
9/10/2019 15:50	0	0	0	30.08	0.7	0.8	0
9/10/2019 16:00	0	0	0	31.97	0.8	0.8	0
9/10/2019 16:10	12	0	0	31.54	0.7	0.8	0.3
9/10/2019 16:20	11	0	0	25.01	0.6	0.8	0.5
9/10/2019 16:30	12	0	0	27.03	0.6	0.8	0.3
9/10/2019 16:40	11	0	0	29.07	0.7	0.8	0
9/10/2019 16:50	11	0	0	31.09	0.8	0.8	0
9/10/2019 17:00	11	0	0	30.84	0.8	0.8	0.4
9/10/2019 17:10	0	0	0	29.86	4.7	3.8	24
9/10/2019 17:20	0	0	0	26.69	0.6	0.8	0.4
9/10/2019 17:30	0	0	0	28.55	0.7	0.8	0
9/10/2019 17:40	0	0	0	30.51	0.7	0.8	0
9/10/2019 17:50	12	0	0	30.14	2.1	2.1	23.7
9/10/2019 18:00	11	0	0	31.85	4.7	3.8	0.4
9/10/2019 18:10	12	0	0	25.13	0.5	0.8	0.4
9/10/2019 18:20	12	0	0	27.12	0.7	0.8	0
9/10/2019 18:30	11	0	0	29.19	0.7	0.8	0
9/10/2019 18:40	0	0	0	31.21	0.8	0.8	0
9/10/2019 18:50	0	0	0	30.84	0.8	0.8	0.4
9/10/2019 19:00	0	0	0	29.5	4.6	3.8	24.2
9/10/2019 19:10	0	0	0	26.2	0.6	0.8	0.4
9/10/2019 19:20	0	0	0	28.12	0.7	0.8	0
9/10/2019 19:30	0	0	0	30.05	0.7	0.8	0
9/10/2019 19:40	12	0	0	31.79	0.8	0.8	0
9/10/2019 19:50	11	0	0	31.54	0.6	0.8	0.3
9/10/2019 20:00	12	0	0	25.32	0.6	0.8	0.4
9/10/2019 20:10	11	0	0	27.39	0.6	0.8	0
9/10/2019 20:20	11	0	0	29.41	0.7	0.8	0
9/10/2019 20:30	0	0	0	31.33	0.8	0.8	0

9/10/2019 20:40	0	0	0	25.96	3.4	3.3	24.8
9/10/2019 20:50	0	0	0	27.94	0.7	0.8	13.6
9/10/2019 21:00	0	0	0	29.86	0.7	0.8	0
9/10/2019 21:10	0	0	0	31.73	0.8	0.8	0
9/10/2019 21:20	0	0	0	31.33	0.8	0.8	2.9
9/10/2019 21:30	12	0	0	24.74	1.2	1.2	25
9/10/2019 21:40	11	0	0	26.69	0.5	0.8	0.1
9/10/2019 21:50	11	0	0	28.67	0.7	0.8	0
9/10/2019 22:00	12	0	0	30.63	0.8	0.8	0
9/10/2019 22:10	11	0	0	28.25	4.5	3.8	24.5
9/10/2019 22:20	12	0	0	24.13	0.5	0.8	0.5
9/10/2019 22:30	11	0	0	26.11	0.6	0.8	0
9/10/2019 22:40	0	0	0	28.09	0.7	0.8	0
9/10/2019 22:50	0	0	0	30.05	0.7	0.8	0
9/10/2019 23:00	0	0	0	31.88	0.8	0.8	0.1
9/10/2019 23:10	0	0	0	23.52	4.6	3.8	24.9
9/10/2019 23:20	0	0	0	24.13	0.5	0.8	0.4
9/10/2019 23:30	0	0	0	25.93	0.6	0.8	0
9/10/2019 23:40	12	0	0	27.76	0.6	0.8	0
9/10/2019 23:50	11	0	0	29.65	0.7	0.8	0
9/11/2019 0:00	12	0	0	31.54	0.8	0.8	0.1
9/11/2019 0:10	12	0	0	22.69	4.5	3.8	25
9/11/2019 0:20	11	0	0	23.03	0.5	0.8	0.4
9/11/2019 0:30	11	0	0	25.07	0.6	0.8	0
9/11/2019 0:40	11	0	0	27.03	0.6	0.8	0
9/11/2019 0:50	11	0	0	29.01	0.7	0.8	0
9/11/2019 1:00	0	0	0	30.87	0.8	0.8	0.1
9/11/2019 1:10	0	0	0	29.5	4.6	3.8	23.6
9/11/2019 1:20	0	0	0	21.99	0.5	0.8	0.4
9/11/2019 1:30	0	0	0	23.88	0.5	0.8	0
9/11/2019 1:40	12	0	0	25.68	0.5	0.8	0
9/11/2019 1:50	11	0	0	27.64	0.7	0.8	0
9/11/2019 2:00	12	0	0	29.53	0.7	0.8	0.1
9/11/2019 2:10	11	0	0	31.51	0.8	0.8	0.1
9/11/2019 2:20	11	0	0	23.91	4.5	3.8	24.9
9/11/2019 2:30	0	0	0	22.63	0.4	0.8	0.4
9/11/2019 2:40	0	0	0	24.58	0.5	0.8	0
9/11/2019 2:50	0	0	0	26.42	0.6	0.8	0
9/11/2019 3:00	0	0	0	28.31	0.7	0.8	0
9/11/2019 3:10	0	0	0	30.17	0.7	0.8	0.1
9/11/2019 3:20	0	0	0	31.97	1	0.8	0.2
9/11/2019 3:30	12	0	0	21.56	2.8	2.9	25
9/11/2019 3:40	11	0	0	23.52	0.5	0.8	22.3
9/11/2019 3:50	11	0	0	25.5	0.6	0.8	0
9/11/2019 4:00	11	0	0	27.48	0.6	0.8	0
9/11/2019 4:10	11	0	0	29.41	0.7	0.8	0.1
9/11/2019 4:20	11	0	0	31.39	0.8	0.8	0.1

9/11/2019 4:30	0	0	0	25.84	4.6	3.8	24.6
9/11/2019 4:40	0	0	0	23.06	0.5	0.8	0.4
9/11/2019 4:50	0	0	0	24.95	0.5	0.8	0
9/11/2019 5:00	0	0	0	26.84	0.6	0.8	0
9/11/2019 5:10	0	0	0	28.7	0.6	0.8	0
9/11/2019 5:20	0	0	0	30.54	0.7	0.8	0.1
9/11/2019 5:30	0	0	0	29.62	4.6	3.8	22.8
9/11/2019 5:40	12	0	0	21.87	0.5	0.8	0.4
9/11/2019 5:50	11	0	0	23.73	0.5	0.8	0
9/11/2019 6:00	11	0	0	25.71	0.6	0.8	0
9/11/2019 6:10	11	0	0	27.73	0.6	0.8	0
9/11/2019 6:20	11	0	0	29.65	0.7	0.8	0
9/11/2019 6:30	11	0	0	31.54	0.8	0.8	0.1
9/11/2019 6:40	0	0	0	25.19	4.6	3.8	24.7
9/11/2019 6:50	0	0	0	23.15	0.4	0.8	0.4
9/11/2019 7:00	0	0	0	24.95	0.5	0.8	0
9/11/2019 7:10	11	0	0	26.75	0.6	0.8	0
9/11/2019 7:20	11	0	0	28.55	0.7	0.8	0
9/11/2019 7:30	12	0	0	30.54	0.7	0.8	0
9/11/2019 7:40	11	0	0	28.95	4.6	3.8	23.9
9/11/2019 7:50	11	0	0	22.2	0.5	0.8	0.4
9/11/2019 8:00	0	0	0	24.22	0.5	0.8	0
9/11/2019 8:10	0	0	0	26.05	0.6	0.8	0
9/11/2019 8:20	0	0	0	27.91	0.6	0.8	0
9/11/2019 8:30	0	0	0	29.68	0.7	0.8	0.1
9/11/2019 8:40	0	0	0	31.54	0.8	0.8	0.1
9/11/2019 8:50	12	0	0	23.45	4.5	3.8	24.9
9/11/2019 9:00	11	0	0	22.84	0.5	0.8	0.4
9/11/2019 9:10	12	0	0	24.86	0.5	0.8	0
9/11/2019 9:20	11	0	0	26.87	0.6	0.8	0
9/11/2019 9:30	11	0	0	28.83	0.7	0.8	0
9/11/2019 9:40	0	0	0	30.69	0.8	0.8	0.1
9/11/2019 9:50	0	0	0	30.63	4.7	3.9	0.6
9/11/2019 10:00	0	0	0	21.56	0.7	0.8	2.7
9/11/2019 10:10	0	0	0	23.36	0.5	0.8	0.2
9/11/2019 10:20	0	0	0	25.13	0.5	0.8	0
9/11/2019 10:30	11	0	0	26.96	0.7	0.8	0
9/11/2019 10:40	12	0	0	28.92	0.7	0.8	0.1
9/11/2019 10:50	11	0	0	30.87	0.8	0.8	0.1
9/11/2019 11:00	11	0	0	27.24	4.6	3.8	24.5
9/11/2019 11:10	0	0	0	21.53	0.5	0.8	0.4
9/11/2019 11:20	0	0	0	23.3	0.5	0.8	0
9/11/2019 11:30	0	0	0	25.13	0.5	0.8	0
9/11/2019 11:40	0	0	0	26.96	0.6	0.8	0
9/11/2019 11:50	12	0	0	28.74	0.7	0.8	0.1
9/11/2019 12:00	12	0	0	30.63	0.7	0.8	0.1
9/11/2019 12:10	12	0	0	28.03	4.6	3.8	24.3

9/11/2019 12:20	11	0	0	20.68	0.5	0.8	0.4
9/11/2019 12:30	2	0	0	22.57	0.5	0.8	0
9/11/2019 12:40	0	0	0	24.43	0.5	0.8	0
9/11/2019 12:50	0	0	0	26.29	0.6	0.8	0
9/11/2019 13:00	0	0	0	28.12	0.7	0.8	0.1
9/11/2019 13:10	0	0	0	29.89	0.7	0.8	0.1
9/11/2019 13:20	12	0	0	31.63	0.8	0.8	0.1
9/11/2019 13:30	11	0	0	22.54	4.5	3.7	25
9/11/2019 13:40	12	0	0	23.12	0.5	0.8	0.4
9/11/2019 13:50	12	0	0	25.07	0.5	0.8	0
9/11/2019 14:00	11	0	0	27	0.6	0.8	0
9/11/2019 14:10	0	0	0	28.92	0.7	0.8	0.1
9/11/2019 14:20	0	0	0	30.72	0.7	0.8	0.1
9/11/2019 14:30	0	0	0	30.29	3.2	3.1	22.6
9/11/2019 14:40	0	0	0	31.05	4.7	3.8	0.5
9/11/2019 14:50	11	0	0	25.07	0.5	0.8	0.4
9/11/2019 15:00	11	0	0	27.03	0.6	0.8	0
9/11/2019 15:10	11	0	0	28.92	0.7	0.8	0
9/11/2019 15:20	11	0	0	30.84	0.8	0.8	0
9/11/2019 15:30	11	0	0	30.69	0.7	0.8	0.4
9/11/2019 15:40	0	0	0	30.63	4.6	3.8	23.6
9/11/2019 15:50	0	0	0	25.84	0.6	0.8	0.4
9/11/2019 16:00	0	0	0	27.64	0.6	0.8	0
9/11/2019 16:10	0	0	0	29.44	0.7	0.8	0
9/11/2019 16:20	0	0	0	31.27	0.8	0.8	0
9/11/2019 16:30	0	0	0	30.96	0.7	0.8	0.4
9/11/2019 16:40	0	0	0	30.41	0.9	0.9	3.4
9/11/2019 16:50	0	0	0	29.25	4.5	3.9	24.3
9/11/2019 17:00	11	0	0	26.23	0.6	0.8	0.4
9/11/2019 17:10	11	0	0	28.19	0.7	0.8	0
9/11/2019 17:20	11	0	0	30.17	0.8	0.8	0
9/11/2019 17:30	11	0	0	32.12	0.9	0.9	0.2
9/11/2019 17:40	0	0	0	26.96	0.7	0.8	0.4
9/11/2019 17:50	0	0	0	28.77	0.7	0.8	0
9/11/2019 18:00	0	0	0	30.54	0.7	0.8	0
9/11/2019 18:10	0	0	0	30.11	3.3	3.3	22.6
9/11/2019 18:20	0	0	0	31.82	0.8	0.8	0
9/11/2019 18:30	11	0	0	31.42	0.8	0.8	0.4
9/11/2019 18:40	11	0	0	26.42	0.6	0.8	0.4
9/11/2019 18:50	12	0	0	28.25	0.7	0.8	0
9/11/2019 19:00	11	0	0	30.17	0.7	0.8	0
9/11/2019 19:10	11	0	0	32.03	2.7	1.8	0.2
9/11/2019 19:20	0	0	0	31.76	0.8	0.8	0.3
9/11/2019 19:30	0	0	0	25.47	2	2.1	24.9
9/11/2019 19:40	0	0	0	27.24	0.7	0.8	22.8
9/11/2019 19:50	0	0	0	29.07	0.7	0.8	0
9/11/2019 20:00	12	0	0	30.81	0.8	0.8	0

9/11/2019 20:10	11	0	0	27.73	4.6	3.8	24.7
9/11/2019 20:20	11	0	0	26.72	0.6	0.8	0.4
9/11/2019 20:30	11	0	0	28.67	0.7	0.8	0.1
9/11/2019 20:40	11	0	0	30.54	0.7	0.8	0
9/11/2019 20:50	0	0	0	31.15	4.6	3.9	0.4
9/11/2019 21:00	0	0	0	31.67	4.6	3.8	0.4
9/11/2019 21:10	0	0	0	25.84	0.5	0.8	0.4
9/11/2019 21:20	0	0	0	27.64	0.7	0.8	0
9/11/2019 21:30	0	0	0	29.5	0.7	0.8	0
9/11/2019 21:40	0	0	0	31.3	0.8	0.8	0
9/11/2019 21:50	0	0	0	25.32	3.3	3.3	24.9
9/11/2019 22:00	11	0	0	27.12	0.6	0.8	0.1
9/11/2019 22:10	11	0	0	28.95	0.7	0.8	0
9/11/2019 22:20	11	0	0	30.72	0.7	0.8	0
9/11/2019 22:30	12	0	0	30.44	0.8	0.8	0.4
9/11/2019 22:40	11	0	0	31.42	4.7	3.9	0.6
9/11/2019 22:50	2	0	0	32.03	3	2.3	0.4
9/11/2019 23:00	0	0	0	26.57	0.5	0.8	0.4
9/11/2019 23:10	0	0	0	28.4	0.7	0.8	0
9/11/2019 23:20	0	0	0	30.2	0.8	0.8	0
9/11/2019 23:30	0	0	0	31.94	0.8	0.8	0
9/11/2019 23:40	0	0	0	31.48	0.8	0.8	0.4
9/11/2019 23:50	11	0	0	25.56	0.6	0.8	0.7
9/12/2019 0:00	11	0	0	27.39	0.6	0.8	0.3
9/12/2019 0:10	11	0	0	29.32	0.7	0.8	0
9/12/2019 0:20	11	0	0	31.27	0.8	0.8	0
9/12/2019 0:30	0	0	0	30.87	0.7	0.8	0.4
9/12/2019 0:40	0	0	0	30.08	4.5	3.8	23.8
9/12/2019 0:50	0	0	0	26.9	0.6	0.8	0.4
9/12/2019 1:00	0	0	0	28.74	0.7	0.8	0
9/12/2019 1:10	0	0	0	30.41	0.8	0.8	0
9/12/2019 1:20	11	0	0	29.89	2.9	3	23.5
9/12/2019 1:30	12	0	0	31.82	0.7	0.8	0
9/12/2019 1:40	11	0	0	25.96	0.6	0.8	0.4
9/12/2019 1:50	11	0	0	27.85	0.7	0.8	0
9/12/2019 2:00	0	0	0	29.74	0.7	0.8	0
9/12/2019 2:10	0	0	0	31.54	0.8	0.8	0
9/12/2019 2:20	0	0	0	31.05	0.8	0.8	0.4
9/12/2019 2:30	0	0	0	28.09	4.7	3.8	24.8
9/12/2019 2:40	0	0	0	26.96	0.6	0.8	0.4
9/12/2019 2:50	11	0	0	28.77	0.7	0.8	0
9/12/2019 3:00	11	0	0	30.57	0.8	0.8	0
9/12/2019 3:10	11	0	0	28.12	4.7	3.8	24.6
9/12/2019 3:20	11	0	0	24.28	0.5	0.8	0.4
9/12/2019 3:30	0	0	0	26.14	0.6	0.8	0
9/12/2019 3:40	0	0	0	27.94	0.7	0.8	0
9/12/2019 3:50	0	0	0	29.77	0.7	0.8	0

9/12/2019 4:00	0	0	0	31.57	0.8	0.8	0.1
9/12/2019 4:10	0	0	0	24.49	4.6	3.8	24.7
9/12/2019 4:20	0	0	0	21.74	0.5	0.8	0.4
9/12/2019 4:30	0	0	0	23.52	0.5	0.8	0
9/12/2019 4:40	12	0	0	25.22	0.5	0.8	0
9/12/2019 4:50	11	0	0	27.06	0.6	0.8	0
9/12/2019 5:00	12	0	0	28.98	0.7	0.8	0.1
9/12/2019 5:10	11	0	0	30.81	0.7	0.8	0.1
9/12/2019 5:20	11	0	0	27.64	4.4	3.8	24.4
9/12/2019 5:30	11	0	0	22.2	0.5	0.7	0.4
9/12/2019 5:40	0	0	0	24.13	0.5	0.8	0
9/12/2019 5:50	0	0	0	25.9	0.6	0.8	0
9/12/2019 6:00	0	0	0	27.67	0.7	0.8	0
9/12/2019 6:10	0	0	0	29.38	0.7	0.8	0.1
9/12/2019 6:20	11	0	0	31.05	0.7	0.8	0.1
9/12/2019 6:30	12	0	0	26.69	4.6	3.8	24.6
9/12/2019 6:40	11	0	0	22.72	0.4	0.8	0.4
9/12/2019 6:50	11	0	0	24.55	0.5	0.8	0
9/12/2019 7:00	0	0	0	26.45	0.6	0.8	0
9/12/2019 7:10	0	0	0	28.19	0.7	0.8	0
9/12/2019 7:20	0	0	0	29.99	0.7	0.8	0.1
9/12/2019 7:30	0	0	0	31.7	0.8	0.8	0.1
9/12/2019 7:40	0	0	0	23.27	4.6	3.8	24.9
9/12/2019 7:50	0	0	0	21.81	0.5	0.8	0.4
9/12/2019 8:00	11	0	0	23.52	0.4	0.8	0
9/12/2019 8:10	11	0	0	25.41	0.6	0.8	0
9/12/2019 8:20	11	0	0	27.27	0.6	0.8	0.1
9/12/2019 8:30	11	0	0	29.16	0.7	0.8	0.1
9/12/2019 8:40	0	0	0	31.02	0.8	0.8	0.1
9/12/2019 8:50	0	0	0	27.51	4.6	3.8	24.5
9/12/2019 9:00	0	0	0	23.21	0.4	0.9	0.4
9/12/2019 9:10	0	0	0	24.95	0.5	0.8	0
9/12/2019 9:20	0	0	0	26.69	0.6	0.8	0
9/12/2019 9:30	11	0	0	28.4	0.7	0.8	0
9/12/2019 9:40	11	0	0	30.23	0.7	0.8	0.1
9/12/2019 9:50	12	0	0	32.06	4.2	3.2	0.2
9/12/2019 10:00	11	0	0	20.83	4.6	3.8	25.1
9/12/2019 10:10	11	0	0	21.59	0.4	0.9	0.4
9/12/2019 10:20	0	0	0	23.42	0.5	0.8	0
9/12/2019 10:30	0	0	0	25.22	0.5	0.8	0
9/12/2019 10:40	0	0	0	27	0.6	0.8	0.1
9/12/2019 10:50	0	0	0	28.83	0.7	0.8	0.1
9/12/2019 11:00	0	0	0	30.51	0.7	0.8	0.1
9/12/2019 11:10	0	0	0	30.08	4.6	3.8	21.4
9/12/2019 11:20	0	0	0	20.07	1.4	1.4	25
9/12/2019 11:30	10	0	0	21.84	0.5	0.8	3.1
9/12/2019 11:40	11	0	0	23.61	0.5	0.8	0

9/12/2019 11:50	11	0	0	25.47	0.5	0.8	0
9/12/2019 12:00	11	0	0	27.36	0.7	0.8	0.1
9/12/2019 12:10	11	0	0	29.22	0.7	0.8	0.1
9/12/2019 12:20	0	0	0	31.02	0.8	0.8	0.1
9/12/2019 12:30	0	0	0	27.03	4.6	3.8	24.5
9/12/2019 12:40	0	0	0	20.83	0.5	0.8	0.4
9/12/2019 12:50	0	0	0	22.69	0.4	0.8	0
9/12/2019 13:00	0	0	0	24.4	0.5	0.8	0
9/12/2019 13:10	0	0	0	26.17	0.6	0.8	0.1
9/12/2019 13:20	0	0	0	27.85	0.7	0.8	0.1
9/12/2019 13:30	12	0	0	29.53	0.7	0.8	0.1
9/12/2019 13:40	11	0	0	31.33	0.8	0.8	0.1
9/12/2019 13:50	12	0	0	23.64	4.6	3.8	24.6
9/12/2019 14:00	11	0	0	21.23	0.5	0.8	0.4
9/12/2019 14:10	11	0	0	23.09	0.5	0.7	0
9/12/2019 14:20	11	0	0	24.83	0.5	0.8	0
9/12/2019 14:30	0	0	0	26.72	0.6	0.8	0
9/12/2019 14:40	0	0	0	28.46	0.7	0.8	0
9/12/2019 14:50	0	0	0	30.2	0.8	0.8	0.1
9/12/2019 15:00	0	0	0	31.97	0.8	0.8	0.1
9/12/2019 15:10	0	0	0	31.42	0.8	0.8	0.4
9/12/2019 15:20	0	0	0	24.68	2.2	2.2	25
9/12/2019 15:30	12	0	0	26.45	0.6	0.8	2.5
9/12/2019 15:40	11	0	0	28.28	0.7	0.8	5.6
9/12/2019 15:50	11	0	0	30.17	0.8	0.8	0
9/12/2019 16:00	11	0	0	31.97	0.8	0.8	0.1
9/12/2019 16:10	0	0	0	23.09	0.9	0.8	2.7
9/12/2019 16:20	0	0	0	24.83	0.5	0.8	0.3
9/12/2019 16:30	0	0	0	24.92	0.5	0.8	0
9/12/2019 16:40	0	0	0	24.95	0.5	0.8	0
9/12/2019 16:50	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 17:00	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 17:10	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 17:20	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 17:30	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 17:40	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 17:50	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 18:00	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 18:10	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 18:20	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 18:30	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 18:40	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 18:50	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 19:00	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 19:10	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 19:20	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 19:30	0	0	0	24.92	0.5	0.8	0.1

9/12/2019 19:40	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 19:50	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 20:00	0	0	0	24.92	0.5	0.7	0.1
9/12/2019 20:10	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 20:20	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 20:30	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 20:40	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 20:50	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 21:00	0	0	0	24.92	0.5	0.7	0.1
9/12/2019 21:10	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 21:20	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 21:30	0	0	0	24.89	0.5	0.8	0.1
9/12/2019 21:40	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 21:50	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 22:00	0	0	0	24.95	0.5	0.8	0.1
9/12/2019 22:10	0	0	0	24.92	0.5	0.7	0.1
9/12/2019 22:20	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 22:30	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 22:40	0	0	0	24.92	0.5	0.7	0.1
9/12/2019 22:50	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 23:00	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 23:10	0	0	0	24.89	0.5	0.8	0.1
9/12/2019 23:20	0	0	0	24.89	0.5	0.8	0.1
9/12/2019 23:30	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 23:40	0	0	0	24.92	0.5	0.8	0.1
9/12/2019 23:50	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 0:00	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 0:10	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 0:20	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 0:30	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 0:40	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 0:50	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 1:00	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 1:10	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 1:20	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 1:30	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 1:40	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 1:50	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 2:00	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 2:10	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 2:20	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 2:30	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 2:40	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 2:50	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 3:00	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 3:10	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 3:20	0	0	0	24.86	0.5	0.8	0.1

9/13/2019 3:30	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 3:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 3:50	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 4:00	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 4:10	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 4:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 4:30	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 4:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 4:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 5:00	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 5:10	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 5:20	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 5:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 5:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 5:50	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 6:00	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 6:10	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 6:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 6:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 6:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 6:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 7:00	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 7:10	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 7:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 7:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 7:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 7:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 8:00	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 8:10	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 8:20	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 8:30	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 8:40	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 8:50	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 9:00	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 9:10	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 9:20	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 9:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 9:40	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 9:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 10:00	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 10:10	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 10:20	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 10:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 10:40	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 10:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 11:00	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 11:10	0	0	0	24.83	0.5	0.8	0.1

9/13/2019 11:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 11:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 11:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 11:50	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 12:00	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 12:10	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 12:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 12:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 12:40	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 12:50	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 13:00	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 13:10	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 13:20	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 13:30	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 13:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 13:50	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 14:00	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 14:10	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 14:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 14:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 14:40	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 14:50	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 15:00	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 15:10	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 15:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 15:30	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 15:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 15:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 16:00	0	0	0	24.83	0.5	0.8	0.1
9/13/2019 16:10	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 16:20	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 16:30	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 16:40	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 16:50	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 17:00	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 17:10	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 17:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 17:30	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 17:40	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 17:50	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 18:00	0	0	0	24.83	0.5	0.7	0.1
9/13/2019 18:10	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 18:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 18:30	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 18:40	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 18:50	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 19:00	0	0	0	24.86	0.5	0.7	0.1

9/13/2019 19:10	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 19:20	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 19:30	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 19:40	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 19:50	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 20:00	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 20:10	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 20:20	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 20:30	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 20:40	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 20:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 21:00	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 21:10	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 21:20	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 21:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 21:40	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 21:50	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 22:00	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 22:10	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 22:20	0	0	0	24.86	0.5	0.7	0.1
9/13/2019 22:30	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 22:40	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 22:50	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 23:00	0	0	0	24.86	0.5	0.8	0.1
9/13/2019 23:10	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 23:20	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 23:30	0	0	0	24.89	0.5	0.7	0.1
9/13/2019 23:40	0	0	0	24.89	0.5	0.8	0.1
9/13/2019 23:50	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 0:00	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 0:10	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 0:20	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 0:30	0	0	0	24.89	0.5	0.8	0.1
9/14/2019 0:40	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 0:50	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 1:00	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 1:10	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 1:20	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 1:30	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 1:40	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 1:50	0	0	0	24.92	0.5	0.8	0.1
9/14/2019 2:00	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 2:10	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 2:20	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 2:30	0	0	0	24.92	0.5	0.8	0.1
9/14/2019 2:40	0	0	0	24.89	0.5	0.7	0.1
9/14/2019 2:50	0	0	0	24.89	0.5	0.7	0.1

9/14/2019 3:00	0	0	0	24.89	0.5	0.8	0.1
9/14/2019 3:10	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 3:20	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 3:30	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 3:40	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 3:50	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 4:00	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 4:10	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 4:20	0	0	0	24.92	0.5	0.8	0.1
9/14/2019 4:30	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 4:40	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 4:50	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 5:00	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 5:10	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 5:20	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 5:30	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 5:40	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 5:50	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 6:00	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 6:10	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 6:20	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 6:30	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 6:40	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 6:50	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 7:00	0	0	0	24.92	0.5	0.8	0.1
9/14/2019 7:10	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 7:20	0	0	0	24.92	0.5	0.8	0.1
9/14/2019 7:30	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 7:40	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 7:50	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 8:00	0	0	0	24.92	0.5	0.7	0.1
9/14/2019 8:10	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 8:20	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 8:30	0	0	0	24.92	0.5	0.8	0.1
9/14/2019 8:40	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 8:50	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 9:00	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 9:10	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 9:20	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 9:30	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 9:40	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 9:50	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 10:00	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 10:10	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 10:20	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 10:30	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 10:40	0	0	0	24.95	0.5	0.7	0.1

9/14/2019 10:50	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 11:00	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 11:10	0	0	0	24.98	0.5	0.8	0.1
9/14/2019 11:20	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 11:30	0	0	0	24.95	0.5	0.7	0.1
9/14/2019 11:40	0	0	0	24.95	0.5	0.8	0.1
9/14/2019 11:50	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 12:00	0	0	0	24.98	0.6	0.7	0.1
9/14/2019 12:10	0	0	0	24.98	0.6	0.8	0.1
9/14/2019 12:20	0	0	0	24.98	0.6	0.7	0.1
9/14/2019 12:30	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 12:40	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 12:50	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 13:00	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 13:10	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 13:20	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 13:30	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 13:40	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 13:50	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 14:00	0	0	0	24.98	0.5	0.8	0.1
9/14/2019 14:10	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 14:20	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 14:30	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 14:40	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 14:50	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 15:00	0	0	0	24.98	0.5	0.7	0.1
9/14/2019 15:10	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 15:20	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 15:30	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 15:40	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 15:50	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 16:00	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 16:10	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 16:20	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 16:30	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 16:40	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 16:50	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 17:00	0	0	0	25.04	0.5	0.7	0.1
9/14/2019 17:10	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 17:20	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 17:30	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 17:40	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 17:50	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 18:00	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 18:10	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 18:20	0	0	0	25.01	0.5	0.7	0.1
9/14/2019 18:30	0	0	0	25.04	0.5	0.8	0.1

9/14/2019 18:40	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 18:50	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 19:00	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 19:10	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 19:20	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 19:30	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 19:40	0	0	0	25.01	0.5	0.8	0.1
9/14/2019 19:50	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 20:00	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 20:10	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 20:20	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 20:30	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 20:40	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 20:50	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 21:00	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 21:10	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 21:20	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 21:30	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 21:40	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 21:50	0	0	0	25.07	0.5	0.8	0.1
9/14/2019 22:00	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 22:10	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 22:20	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 22:30	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 22:40	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 22:50	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 23:00	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 23:10	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 23:20	0	0	0	25.07	0.5	0.8	0.1
9/14/2019 23:30	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 23:40	0	0	0	25.04	0.5	0.8	0.1
9/14/2019 23:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 0:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 0:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 0:20	0	0	0	25.07	0.5	0.8	0.1
9/15/2019 0:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 0:40	0	0	0	25.07	0.5	0.8	0.1
9/15/2019 0:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 1:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 1:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 1:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 1:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 1:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 1:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 2:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 2:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 2:20	0	0	0	25.04	0.5	0.8	0.1

9/15/2019 2:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 2:40	0	0	0	25.07	0.5	0.8	0.1
9/15/2019 2:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 3:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 3:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 3:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 3:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 3:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 3:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 4:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 4:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 4:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 4:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 4:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 4:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 5:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 5:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 5:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 5:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 5:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 5:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 6:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 6:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 6:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 6:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 6:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 6:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 7:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 7:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 7:20	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 7:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 7:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 7:50	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 8:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 8:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 8:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 8:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 8:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 8:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 9:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 9:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 9:20	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 9:30	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 9:40	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 9:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 10:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 10:10	0	0	0	25.01	0.5	0.8	0.1

9/15/2019 10:20	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 10:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 10:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 10:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 11:00	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 11:10	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 11:20	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 11:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 11:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 11:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 12:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 12:10	0	0	0	25.04	0.5	0.8	0.1
9/15/2019 12:20	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 12:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 12:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 12:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 13:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 13:10	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 13:20	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 13:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 13:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 13:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 14:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 14:10	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 14:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 14:30	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 14:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 14:50	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 15:00	0	0	0	25.01	0.5	0.7	0.1
9/15/2019 15:10	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 15:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 15:30	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 15:40	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 15:50	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 16:00	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 16:10	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 16:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 16:30	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 16:40	0	0	0	25.01	0.5	0.8	0.1
9/15/2019 16:50	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 17:00	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 17:10	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 17:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 17:30	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 17:40	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 17:50	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 18:00	0	0	0	24.98	0.5	0.8	0.1

9/15/2019 18:10	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 18:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 18:30	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 18:40	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 18:50	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 19:00	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 19:10	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 19:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 19:30	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 19:40	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 19:50	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 20:00	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 20:10	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 20:20	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 20:30	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 20:40	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 20:50	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 21:00	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 21:10	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 21:20	0	0	0	24.98	0.5	0.8	0.1
9/15/2019 21:30	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 21:40	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 21:50	0	0	0	24.98	0.5	0.7	0.1
9/15/2019 22:00	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 22:10	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 22:20	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 22:30	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 22:40	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 22:50	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 23:00	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 23:10	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 23:20	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 23:30	0	0	0	24.95	0.5	0.7	0.1
9/15/2019 23:40	0	0	0	24.95	0.5	0.8	0.1
9/15/2019 23:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 0:00	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 0:10	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 0:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 0:30	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 0:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 0:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 1:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 1:10	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 1:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 1:30	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 1:40	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 1:50	0	0	0	24.95	0.5	0.7	0.1

9/16/2019 2:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 2:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 2:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 2:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 2:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 2:50	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 3:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 3:10	0	0	0	24.92	0.5	0.7	0.1
9/16/2019 3:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 3:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 3:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 3:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 4:00	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 4:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 4:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 4:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 4:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 4:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 5:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 5:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 5:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 5:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 5:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 5:50	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 6:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 6:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 6:20	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 6:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 6:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 6:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 7:00	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 7:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 7:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 7:30	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 7:40	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 7:50	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 8:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 8:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 8:20	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 8:30	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 8:40	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 8:50	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 9:00	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 9:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 9:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 9:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 9:40	0	0	0	24.95	0.5	0.8	0.1

9/16/2019 9:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 10:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 10:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 10:20	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 10:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 10:40	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 10:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 11:00	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 11:10	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 11:20	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 11:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 11:40	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 11:50	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 12:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 12:10	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 12:20	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 12:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 12:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 12:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 13:00	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 13:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 13:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 13:30	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 13:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 13:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 14:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 14:10	0	0	0	24.95	0.5	0.7	0.1
9/16/2019 14:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 14:30	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 14:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 14:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 15:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 15:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 15:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 15:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 15:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 15:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 16:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 16:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 16:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 16:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 16:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 16:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 17:00	0	0	0	24.92	0.5	0.8	0.1
9/16/2019 17:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 17:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 17:30	0	0	0	24.95	0.5	0.8	0.1

9/16/2019 17:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 17:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 18:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 18:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 18:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 18:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 18:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 18:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 19:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 19:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 19:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 19:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 19:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 19:50	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 20:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 20:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 20:20	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 20:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 20:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 20:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 21:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 21:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 21:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 21:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 21:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 21:50	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 22:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 22:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 22:20	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 22:30	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 22:40	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 22:50	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 23:00	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 23:10	0	0	0	24.95	0.5	0.8	0.1
9/16/2019 23:20	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 23:30	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 23:40	0	0	0	24.98	0.5	0.8	0.1
9/16/2019 23:50	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 0:00	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 0:10	0	0	0	24.95	0.5	0.8	0.1
9/17/2019 0:20	0	0	0	24.95	0.5	0.8	0.1
9/17/2019 0:30	0	0	0	24.95	0.5	0.8	0.1
9/17/2019 0:40	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 0:50	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 1:00	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 1:10	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 1:20	0	0	0	24.98	0.5	0.8	0.1

9/17/2019 1:30	0	0	0	24.95	0.5	0.8	0.1
9/17/2019 1:40	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 1:50	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 2:00	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 2:10	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 2:20	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 2:30	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 2:40	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 2:50	0	0	0	24.98	0.5	0.8	0.1
9/17/2019 3:00	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 3:10	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 3:20	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 3:30	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 3:40	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 3:50	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 4:00	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 4:10	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 4:20	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 4:30	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 4:40	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 4:50	0	0	0	25.04	0.5	0.8	0.1
9/17/2019 5:00	0	0	0	25.01	0.5	0.8	0.1
9/17/2019 5:10	0	0	0	25.04	0.6	0.7	0.1
9/17/2019 5:20	0	0	0	25.04	0.5	0.8	0.1
9/17/2019 5:30	0	0	0	25.01	0.5	0.7	0.1
9/17/2019 5:40	0	0	0	25.01	0.5	0.7	0.1
9/17/2019 5:50	0	0	0	25.01	0.5	0.7	0.1
9/17/2019 6:00	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 6:10	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 6:20	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 6:30	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 6:40	0	0	0	25.01	0.6	0.7	0.1
9/17/2019 6:50	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 7:00	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 7:10	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 7:20	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 7:30	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 7:40	0	0	0	25.04	0.5	0.7	0.1
9/17/2019 7:50	0	0	0	25.04	0.5	0.8	0.1
9/17/2019 8:00	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 8:10	0	0	0	25.07	0.5	0.8	0.1
9/17/2019 8:20	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 8:30	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 8:40	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 8:50	0	0	0	25.07	0.5	0.8	0.1
9/17/2019 9:00	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 9:10	0	0	0	25.07	0.5	0.8	0.1

9/17/2019 9:20	0	0	0	25.07	0.5	0.8	0.1
9/17/2019 9:30	0	0	0	25.07	0.5	0.8	0.1
9/17/2019 9:40	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 9:50	0	0	0	25.07	0.5	0.8	0.1
9/17/2019 10:00	0	0	0	25.07	0.5	0.8	0.1
9/17/2019 10:10	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 10:20	0	0	0	25.07	0.5	0.7	0.1
9/17/2019 10:30	0	0	0	25.1	0.6	0.7	0.1
9/17/2019 10:40	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 10:50	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 11:00	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 11:10	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 11:20	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 11:30	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 11:40	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 11:50	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 12:00	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 12:10	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 12:20	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 12:30	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 12:40	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 12:50	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 13:00	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 13:10	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 13:20	0	0	0	25.13	0.5	0.7	0.1
9/17/2019 13:30	0	0	0	25.13	0.5	0.7	0.1
9/17/2019 13:40	0	0	0	25.13	0.5	0.7	0.1
9/17/2019 13:50	0	0	0	25.13	0.5	0.7	0.1
9/17/2019 14:00	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 14:10	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 14:20	0	0	0	25.1	0.5	0.7	0.1
9/17/2019 14:30	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 14:40	0	0	0	25.13	0.5	0.7	0.1
9/17/2019 14:50	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 15:00	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 15:10	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 15:20	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 15:30	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 15:40	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 15:50	0	2	0	25.13	0.5	0.8	0.1
9/17/2019 16:00	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 16:10	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 16:20	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 16:30	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 16:40	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 16:50	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 17:00	0	0	0	25.13	0.5	0.8	0.1

9/17/2019 17:10	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 17:20	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 17:30	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 17:40	0	0	0	25.13	0.5	0.7	0.1
9/17/2019 17:50	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 18:00	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 18:10	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 18:20	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 18:30	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 18:40	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 18:50	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 19:00	0	0	0	25.1	0.5	0.8	0.1
9/17/2019 19:10	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 19:20	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 19:30	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 19:40	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 19:50	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 20:00	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 20:10	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 20:20	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 20:30	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 20:40	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 20:50	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 21:00	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 21:10	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 21:20	0	0	0	25.13	0.5	0.8	0.1
9/17/2019 21:30	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 21:40	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 21:50	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 22:00	0	0	0	25.16	0.5	0.8	0.1
9/17/2019 22:10	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 22:20	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 22:30	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 22:40	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 22:50	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 23:00	0	0	0	25.22	0.5	0.8	0.1
9/17/2019 23:10	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 23:20	0	0	0	25.22	0.6	0.8	0.1
9/17/2019 23:30	0	0	0	25.19	0.5	0.8	0.1
9/17/2019 23:40	0	0	0	25.22	0.5	0.8	0.1
9/17/2019 23:50	0	0	0	25.22	0.5	0.8	0.1
9/18/2019 0:00	0	0	0	25.19	0.5	0.8	0.1
9/18/2019 0:10	0	0	0	25.22	0.5	0.8	0.1
9/18/2019 0:20	0	0	0	25.22	0.5	0.8	0.1
9/18/2019 0:30	0	0	0	25.22	0.5	0.8	0.1
9/18/2019 0:40	0	0	0	25.26	0.5	0.8	0.1
9/18/2019 0:50	0	0	0	25.22	0.5	0.7	0.1

9/18/2019 1:00	0	0	0	25.26	0.5	0.8	0.1
9/18/2019 1:10	0	0	0	25.22	0.5	0.8	0.1
9/18/2019 1:20	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 1:30	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 1:40	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 1:50	0	0	0	25.26	0.5	0.8	0.1
9/18/2019 2:00	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 2:10	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 2:20	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 2:30	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 2:40	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 2:50	0	2	0	25.26	0.5	0.8	0.1
9/18/2019 3:00	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 3:10	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 3:20	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 3:30	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 3:40	0	0	0	25.29	0.5	0.8	0.1
9/18/2019 3:50	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 4:00	0	0	0	25.26	0.5	0.7	0.1
9/18/2019 4:10	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 4:20	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 4:30	0	0	0	25.29	0.5	0.8	0.1
9/18/2019 4:40	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 4:50	0	0	0	25.29	0.5	0.8	0.1
9/18/2019 5:00	0	0	0	25.29	0.6	0.7	0.1
9/18/2019 5:10	0	0	0	25.26	0.5	0.8	0.1
9/18/2019 5:20	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 5:30	0	0	0	25.29	0.5	0.7	0.1
9/18/2019 5:40	0	0	0	25.32	0.5	0.8	0.1
9/18/2019 5:50	0	0	0	25.32	0.5	0.7	0.1
9/18/2019 6:00	0	0	0	25.32	0.5	0.8	0.1
9/18/2019 6:10	0	0	0	25.32	0.5	0.8	0.1
9/18/2019 6:20	0	0	0	25.32	0.5	0.7	0.1
9/18/2019 6:30	0	0	0	25.35	0.5	0.7	0.1
9/18/2019 6:40	0	0	0	25.32	0.5	0.7	0.1
9/18/2019 6:50	0	0	0	25.32	0.5	0.8	0.1
9/18/2019 7:00	0	0	0	25.35	0.5	0.7	0.1
9/18/2019 7:10	0	0	0	25.35	0.5	0.7	0.1
9/18/2019 7:20	0	0	0	25.35	0.5	0.7	0.1
9/18/2019 7:30	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 7:40	0	0	0	25.35	0.5	0.7	0.1
9/18/2019 7:50	0	0	0	25.35	0.5	0.8	0.1
9/18/2019 8:00	0	0	0	25.35	0.5	0.8	0.1
9/18/2019 8:10	0	0	0	25.35	0.5	0.7	0.1
9/18/2019 8:20	0	0	0	25.41	0.6	0.8	0.1
9/18/2019 8:30	0	0	0	25.35	0.5	0.8	0.1
9/18/2019 8:40	0	0	0	25.41	0.6	0.8	0.1

9/18/2019 8:50	0	0	0	25.41	0.5	0.8	0.1
9/18/2019 9:00	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 9:10	0	0	0	25.41	0.5	0.8	0.1
9/18/2019 9:20	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 9:30	0	0	0	25.41	0.6	0.8	0.1
9/18/2019 9:40	0	0	0	25.41	0.5	0.8	0.1
9/18/2019 9:50	0	0	0	25.41	0.6	0.8	0.1
9/18/2019 10:00	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 10:10	0	0	0	25.41	0.5	0.8	0.1
9/18/2019 10:20	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 10:30	0	0	0	25.44	0.6	0.8	0.1
9/18/2019 10:40	0	0	2	25.44	0.5	0.8	0.1
9/18/2019 10:50	0	0	2	25.41	0.5	0.7	0.1
9/18/2019 11:00	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 11:10	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 11:20	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 11:30	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 11:40	0	0	0	25.41	0.5	0.8	0.1
9/18/2019 11:50	0	0	0	25.41	0.6	0.7	0.1
9/18/2019 12:00	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 12:10	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 12:20	0	0	0	25.41	0.6	0.7	0.1
9/18/2019 12:30	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 12:40	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 12:50	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 13:00	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 13:10	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 13:20	0	0	0	25.41	0.5	0.7	0.1
9/18/2019 13:30	0	0	0	25.44	0.5	0.7	0.1
9/18/2019 13:40	0	0	0	25.44	0.5	0.7	0.1
9/18/2019 13:50	0	0	0	25.44	0.5	0.7	0.1
9/18/2019 14:00	0	0	1	25.44	0.5	0.7	0.1
9/18/2019 14:10	0	0	0	25.44	0.6	0.8	0.1
9/18/2019 14:20	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 14:30	0	0	0	25.44	0.5	0.8	0.1
9/18/2019 14:40	0	0	0	29.22	0.7	0.8	0.1
9/18/2019 14:50	0	0	0	29.53	0.6	0.7	0.1
9/18/2019 15:00	10	9	9	31.45	4.6	3.8	24.6
9/18/2019 15:10	9	9	9	30.93	4.6	3.8	24.9
9/18/2019 15:20	9	9	9	31.18	1.2	1.2	25
9/18/2019 15:30	9	9	9	30.96	4.5	3.8	24.9
9/18/2019 15:40	9	9	9	31.73	0.9	0.8	2.6
9/18/2019 15:50	9	9	9	30.93	4.5	3.8	24.8
9/18/2019 16:00	9	9	9	29.96	3.4	3.2	25.1
9/18/2019 16:10	9	9	9	32	1	0.8	0.4
9/18/2019 16:20	9	9	9	31.33	4.7	3.8	24.3
9/18/2019 16:30	9	9	9	30.54	4.7	3.9	24.8

9/18/2019 16:40	9	9	9	29.96	4.8	3.8	24.9
9/18/2019 16:50	9	9	9	30.41	1.9	1.8	24.9
9/18/2019 17:00	9	9	9	31.39	0.9	0.9	0.4
9/18/2019 17:10	9	9	9	32.06	4.7	3.8	0.4
9/18/2019 17:20	9	9	9	31.88	4.6	3.9	0.5
9/18/2019 17:30	9	9	9	31.76	4.8	3.9	0.5
9/18/2019 17:40	9	9	9	31.7	4.5	3.8	23
9/18/2019 17:50	9	9	9	31.3	4.5	3.8	24.3
9/18/2019 18:00	9	9	9	30.72	4.8	3.7	24.7
9/18/2019 18:10	9	9	9	30.08	4.6	3.8	24.9
9/18/2019 18:20	9	9	9	29.65	3.5	3.2	25
9/18/2019 18:30	9	9	9	30.72	0.9	0.9	24.6
9/18/2019 18:40	9	9	9	31.36	0.8	0.8	0.4
9/18/2019 18:50	9	9	9	31.97	0.9	0.8	0.4
9/18/2019 19:00	9	9	9	31.85	4.7	3.9	0.5
9/18/2019 19:10	9	9	9	31.21	4.6	3.9	24.3
9/18/2019 19:20	9	9	9	30.81	4.4	3.8	24.6
9/18/2019 19:30	9	9	9	30.26	4.7	3.8	24.9
9/18/2019 19:40	9	9	9	29.59	4.8	3.8	25
9/18/2019 19:50	9	9	9	30.29	1.5	1.5	24.9
9/18/2019 20:00	9	9	9	31.09	0.9	0.7	0.4
9/18/2019 20:10	9	9	9	31.79	0.8	0.8	0.4
9/18/2019 20:20	9	9	9	31.97	4.6	3.9	0.4
9/18/2019 20:30	9	9	9	31.7	4.7	3.9	0.5
9/18/2019 20:40	9	9	9	31.42	4.6	3.9	23.9
9/18/2019 20:50	9	9	9	30.96	4.8	3.9	24.5
9/18/2019 21:00	9	9	9	30.54	4.6	3.8	24.7
9/18/2019 21:10	9	9	9	30.08	4.6	3.8	24.8
9/18/2019 21:20	9	9	9	29.86	4.8	3.9	24.9
9/18/2019 21:30	9	9	9	29.53	4.7	4	24.9
9/18/2019 21:40	9	9	9	29.65	4.7	3.8	24.9
9/18/2019 21:50	9	9	9	29.65	4.7	3.8	24.9
9/18/2019 22:00	9	9	9	29.44	4.6	3.8	25
9/18/2019 22:10	9	9	9	29.83	3.1	3	24.9
9/18/2019 22:20	9	9	9	30.44	0.8	0.8	24.7
9/18/2019 22:30	9	9	9	30.84	0.9	0.8	0.9
9/18/2019 22:40	9	9	9	31.51	0.9	0.8	0.4
9/18/2019 22:50	9	9	9	32.06	0.6	0.8	0.4
9/18/2019 23:00	9	9	9	31.76	4.8	3.8	0.5
9/18/2019 23:10	9	9	9	31.33	4.7	3.9	24.3
9/18/2019 23:20	9	9	9	30.75	4.7	3.8	24.7
9/18/2019 23:30	9	9	9	30.44	4.8	3.9	24.6
9/18/2019 23:40	9	9	9	30.2	4.6	3.9	24.7
9/18/2019 23:50	9	9	9	30.05	4.6	3.7	24.8
9/19/2019 0:00	9	9	9	29.86	4.4	3.8	24.9
9/19/2019 0:10	9	9	9	29.56	4.8	3.8	25
9/19/2019 0:20	9	9	9	29.47	4.8	3.9	25

9/19/2019 0:30	9	9	9	30.14	1.9	2	24.9
9/19/2019 0:40	9	9	9	30.93	0.8	0.8	0.4
9/19/2019 0:50	9	9	9	31.76	0.9	0.8	0.5
9/19/2019 1:00	9	9	9	32.06	4.8	3.8	0.5
9/19/2019 1:10	9	9	9	31.76	4.7	3.8	0.6
9/19/2019 1:20	9	9	9	31.67	4.8	3.8	23.1
9/19/2019 1:30	9	9	9	31.42	4.7	3.8	23.6
9/19/2019 1:40	9	9	9	31.27	4.7	3.7	24.2
9/19/2019 1:50	9	9	9	30.9	4.5	3.8	24.5
9/19/2019 2:00	9	9	9	30.57	4.5	3.8	24.6
9/19/2019 2:10	9	9	9	30.2	4.7	3.8	24.8
9/19/2019 2:20	9	9	9	29.89	4.5	3.8	24.9
9/19/2019 2:30	9	9	9	29.56	4.8	3.8	24.9
9/19/2019 2:40	9	9	9	29.13	3	3.2	25
9/19/2019 2:50	9	9	9	29.44	3.3	3.1	24.9
9/19/2019 3:00	9	9	9	29.53	3.1	3.2	24.9
9/19/2019 3:10	9	9	9	29.71	2.4	2.3	24.8
9/19/2019 3:20	9	9	9	29.62	2.9	2.8	24.8
9/19/2019 3:30	9	9	9	29.25	3.4	3.3	24.9
9/19/2019 3:40	9	9	9	29.13	3.4	3.2	25
9/19/2019 3:50	9	9	9	29.25	3.5	3.2	25
9/19/2019 4:00	9	9	9	29.96	2.4	2.5	24.9
9/19/2019 4:10	9	9	9	30.57	1	0.8	3.1
9/19/2019 4:20	9	9	9	31.15	0.7	0.9	0.4
9/19/2019 4:30	9	9	9	31.67	0.9	0.8	0.4
9/19/2019 4:40	9	9	9	32	0.8	0.8	0.4
9/19/2019 4:50	9	9	9	32	0.8	0.8	0.4
9/19/2019 5:00	9	9	9	32.03	0.8	0.8	0.4
9/19/2019 5:10	9	9	9	32.06	1.3	0.9	0.5
9/19/2019 5:20	9	9	9	31.94	4.6	3.8	0.5
9/19/2019 5:30	9	9	9	31.63	4.9	3.8	18.3
9/19/2019 5:40	9	9	9	31.6	4.8	3.9	23.2
9/19/2019 5:50	9	9	9	31.39	4.6	3.8	24
9/19/2019 6:00	9	9	9	31.09	4.6	3.9	24.3
9/19/2019 6:10	9	9	9	30.9	4.6	3.8	24.5
9/19/2019 6:20	9	9	9	30.75	4.6	3.8	24.6
9/19/2019 6:30	9	9	9	30.69	4.9	3.8	24.5
9/19/2019 6:40	9	9	9	30.84	4.6	3.8	24.6
9/19/2019 6:50	9	9	9	30.78	4.6	3.7	24.5
9/19/2019 7:00	9	9	9	30.78	4.8	3.8	24.5
9/19/2019 7:10	8	9	9	30.78	4.8	3.8	24.6
9/19/2019 7:20	9	9	9	30.66	4.7	3.8	24.6
9/19/2019 7:30	9	9	9	30.51	4.3	3.8	24.7
9/19/2019 7:40	8	9	9	30.2	4.7	3.9	24.8
9/19/2019 7:50	9	9	9	29.8	4.8	3.8	25
9/19/2019 8:00	8	9	9	29.35	4.9	3.8	25
9/19/2019 8:10	9	9	9	29.89	2.4	2.4	24.9

9/19/2019 8:20	9	9	9	30.41	0.9	0.9	24.7
9/19/2019 8:30	9	9	9	31.02	0.8	0.8	0.4
9/19/2019 8:40	8	9	9	31.12	0.8	0.8	0.4
9/19/2019 8:50	9	9	9	31.27	0.8	0.8	0.4
9/19/2019 9:00	8	9	9	31.6	0.9	0.8	0.4
9/19/2019 9:10	8	9	9	32.09	0.9	0.8	0.4
9/19/2019 9:20	9	9	9	31.79	4.7	3.8	0.5
9/19/2019 9:30	9	9	9	31.63	4.8	3.8	22.8
9/19/2019 9:40	8	9	9	31.45	4.8	3.8	23.7
9/19/2019 9:50	8	9	9	31.36	4.9	3.8	24
9/19/2019 10:00	8	9	9	31.51	4.6	3.8	23.4
9/19/2019 10:10	8	9	9	31.57	4.7	3.9	23.2
9/19/2019 10:20	8	9	9	31.39	4.6	3.9	23.9
9/19/2019 10:30	8	9	9	31.02	4.5	4	24.4
9/19/2019 10:40	8	9	9	30.9	4.7	3.6	24.5
9/19/2019 10:50	8	9	9	30.84	5	3.9	24.5
9/19/2019 11:00	8	9	9	30.72	4.6	3.9	24.6
9/19/2019 11:10	8	9	9	30.51	4.6	3.8	24.6
9/19/2019 11:20	8	9	9	30.44	4.6	3.8	24.7
9/19/2019 11:30	8	9	9	30.32	4.7	3.8	24.7
9/19/2019 11:40	8	9	9	30.08	4.5	3.8	24.8
9/19/2019 11:50	8	9	9	29.96	4.6	3.8	24.9
9/19/2019 12:00	8	9	9	30.05	4.5	3.8	24.8
9/19/2019 12:10	8	9	9	30.17	4.8	3.8	24.8
9/19/2019 12:20	8	9	9	30.17	4.6	3.9	24.8
9/19/2019 12:30	8	9	9	29.89	4.6	3.9	24.8
9/19/2019 12:40	9	9	9	30.02	4.7	3.8	24.8
9/19/2019 12:50	8	9	9	30.26	4.6	3.8	24.7
9/19/2019 13:00	8	9	9	30.35	4.5	3.8	24.7
9/19/2019 13:10	8	9	9	30.69	4.5	3.8	24.5
9/19/2019 13:20	8	9	9	30.9	4.9	3.8	24.4
9/19/2019 13:30	8	9	9	31.45	4.6	3.8	23.5
9/19/2019 13:40	8	9	9	31.82	4.6	3.9	0.5
9/19/2019 13:50	8	9	9	32.03	1.1	0.8	0.4
9/19/2019 14:00	8	9	9	31.48	1	0.8	0.4
9/19/2019 14:10	8	9	9	31.27	0.8	0.8	0.4
9/19/2019 14:20	8	9	9	30.87	0.9	0.8	0.4
9/19/2019 14:30	8	9	9	30.35	0.9	0.8	0.6
9/19/2019 14:40	8	9	9	29.71	1	1	24.7
9/19/2019 14:50	8	9	9	28.92	3.4	3.3	25
9/19/2019 15:00	8	9	9	29.07	4.7	3.9	24.8
9/19/2019 15:10	8	9	9	29.56	4.6	3.8	24.9
9/19/2019 15:20	8	9	9	29.74	4.7	3.9	24.8
9/19/2019 15:30	8	9	9	29.89	4.7	3.9	24.8
9/19/2019 15:40	8	9	9	30.08	4.7	3.9	24.7
9/19/2019 15:50	8	9	9	30.26	4.9	3.8	24.7
9/19/2019 16:00	8	9	9	30.63	4.8	3.9	24.5

9/19/2019 16:10	8	9	9	31.05	4.6	3.8	24.3
9/19/2019 16:20	8	9	9	31.42	4.5	3.8	23.2
9/19/2019 16:30	8	9	9	31.79	4.9	3.8	0.5
9/19/2019 16:40	8	9	9	31.85	4.8	3.9	0.5
9/19/2019 16:50	8	9	9	31.57	4.5	3.8	23.2
9/19/2019 17:00	8	9	9	31.45	4.6	3.8	23.5
9/19/2019 17:10	8	9	9	31.09	4.8	4	24.3
9/19/2019 17:20	8	9	9	30.9	4.6	3.8	24.4
9/19/2019 17:30	8	9	9	30.87	4.7	3.9	24.5
9/19/2019 17:40	8	9	9	30.9	4.7	3.8	24.4
9/19/2019 17:50	8	9	9	30.87	4.6	3.8	24.5
9/19/2019 18:00	8	9	9	30.87	4.6	3.8	24.5
9/19/2019 18:10	8	9	9	31.05	4.4	3.8	24.4
9/19/2019 18:20	8	9	9	30.93	4.7	4	24.4
9/19/2019 18:30	8	9	9	31.02	4.7	3.8	24.3
9/19/2019 18:40	8	9	9	31.54	4.7	3.9	23
9/19/2019 18:50	8	9	9	32.09	0.8	0.7	0.4
9/19/2019 19:00	8	9	9	30.54	0.9	0.8	0.4
9/19/2019 19:10	8	9	9	29.01	3	2.9	24.8
9/19/2019 19:20	8	9	9	29.01	4.7	3.8	24.9
9/19/2019 19:30	8	9	9	29.59	4.7	3.9	24.9
9/19/2019 19:40	8	9	9	29.89	4.4	3.8	24.9
9/19/2019 19:50	8	9	9	29.89	4.5	3.9	24.9
9/19/2019 20:00	8	9	9	29.83	4.6	3.8	24.9
9/19/2019 20:10	8	9	9	29.74	4.6	3.8	24.9
9/19/2019 20:20	8	9	9	29.74	4.6	3.8	25
9/19/2019 20:30	8	9	9	29.74	4.8	3.9	25
9/19/2019 20:40	8	9	9	29.56	4.6	3.8	24.9
9/19/2019 20:50	8	9	9	29.59	4.9	3.8	25
9/19/2019 21:00	8	9	9	29.47	4.7	3.9	24.9
9/19/2019 21:10	8	9	9	29.41	4.5	3.9	24.9
9/19/2019 21:20	8	9	9	29.5	4.7	3.8	24.9
9/19/2019 21:30	8	9	9	29.65	4.8	3.8	24.9
9/19/2019 21:40	8	9	9	29.68	4.5	3.9	24.9
9/19/2019 21:50	8	9	9	30.08	4.7	3.8	24.8
9/19/2019 22:00	8	9	9	29.96	4.7	4	24.8
9/19/2019 22:10	8	9	9	29.96	4.6	3.8	24.9
9/19/2019 22:20	8	9	9	29.65	4.5	3.8	24.9
9/19/2019 22:30	8	9	9	29.74	4.7	3.8	24.9
9/19/2019 22:40	8	9	9	29.62	4.7	3.8	24.9
9/19/2019 22:50	8	9	9	29.86	4.6	3.9	24.9
9/19/2019 23:00	8	9	9	30.23	4.8	3.8	24.7
9/19/2019 23:10	8	9	9	30.66	4.9	3.9	24.6
9/19/2019 23:20	8	9	9	30.9	4.6	3.8	24.5
9/19/2019 23:30	8	9	9	31.42	4.6	3.8	23
9/19/2019 23:40	8	9	9	31.88	4.8	3.8	0.5
9/19/2019 23:50	8	9	9	32	0.8	0.9	0.4

9/20/2019 0:00	8	9	9	31.36	0.8	0.8	0.4
9/20/2019 0:10	8	9	9	30.69	0.9	0.8	0.4
9/20/2019 0:20	8	9	9	30.05	1	0.9	3.3
9/20/2019 0:30	8	9	9	29.96	1.1	1.1	24.8
9/20/2019 0:40	8	9	9	29.8	1.3	1.2	24.8
9/20/2019 0:50	8	9	9	29.56	2.2	2.1	24.9
9/20/2019 1:00	8	9	8	29.16	3.1	3.1	24.9
9/20/2019 1:10	8	9	9	28.92	4.5	3.7	25
9/20/2019 1:20	8	9	8	29.16	4.7	3.8	24.9
9/20/2019 1:30	8	9	8	29.8	4.5	3.8	24.8
9/20/2019 1:40	8	9	9	30.41	4.4	3.8	24.7
9/20/2019 1:50	8	9	9	31.12	4.7	3.9	24.1
9/20/2019 2:00	8	9	8	31.76	4.5	3.8	0.6
9/20/2019 2:10	8	9	9	31.94	4.5	3.8	0.5
9/20/2019 2:20	8	9	9	31.73	4.9	3.8	0.6
9/20/2019 2:30	8	9	8	31.54	4.6	3.8	23.1
9/20/2019 2:40	8	9	8	31.36	4.9	3.9	23.7
9/20/2019 2:50	8	9	8	31.42	4.8	3.9	23.7
9/20/2019 3:00	8	9	9	31.45	4.6	3.8	23.5
9/20/2019 3:10	8	9	8	31.42	4.7	3.8	23.8
9/20/2019 3:20	8	9	8	31.36	4.8	3.8	23.7
9/20/2019 3:30	8	9	8	31.42	4.8	3.9	23.3
9/20/2019 3:40	8	9	9	31.79	5	3.8	0.5
9/20/2019 3:50	8	9	9	32.12	4.2	3.3	0.4
9/20/2019 4:00	8	9	9	31.54	0.8	0.8	0.4
9/20/2019 4:10	8	9	9	30.84	0.9	0.8	0.4
9/20/2019 4:20	8	9	8	29.89	0.9	0.8	24.7
9/20/2019 4:30	8	9	8	28.89	3.4	3.2	24.9
9/20/2019 4:40	8	9	8	29.16	4.7	3.8	25
9/20/2019 4:50	8	9	8	29.47	4.8	3.8	24.9
9/20/2019 5:00	8	9	8	29.77	4.6	3.8	24.8
9/20/2019 5:10	8	9	8	30.32	4.5	3.9	24.6
9/20/2019 5:20	8	9	9	30.81	4.8	3.9	24.4
9/20/2019 5:30	8	9	9	31.45	4.7	3.9	23.5
9/20/2019 5:40	8	9	9	31.88	4.6	3.8	0.6
9/20/2019 5:50	8	9	9	32.03	4.8	3.8	0.4
9/20/2019 6:00	8	9	9	31.97	4.7	3.9	0.5
9/20/2019 6:10	8	9	8	32.06	4.8	3.9	0.4
9/20/2019 6:20	8	9	8	31.94	0.8	0.8	0.4
9/20/2019 6:30	8	9	8	31.3	0.6	0.8	0.4
9/20/2019 6:40	8	9	9	30.47	0.6	0.8	0.4
9/20/2019 6:50	8	9	9	29.86	0.9	0.8	24.7
9/20/2019 7:00	8	9	8	29.56	2.1	2	24.9
9/20/2019 7:10	8	9	8	29.04	3.5	3.4	25
9/20/2019 7:20	8	9	8	29.04	4.6	3.8	25
9/20/2019 7:30	8	9	8	29.41	4.6	3.8	24.9
9/20/2019 7:40	8	9	8	29.8	4.8	3.9	24.9

9/20/2019 7:50	8	9	8	30.32	4.7	3.8	24.7
9/20/2019 8:00	8	9	8	30.47	4.7	3.8	24.6
9/20/2019 8:10	8	9	8	30.84	4.4	3.9	24.4
9/20/2019 8:20	8	9	8	31.12	4.7	3.9	24.3
9/20/2019 8:30	8	9	8	31.39	4.6	3.9	23.7
9/20/2019 8:40	8	9	8	31.63	4.3	3.9	0.5
9/20/2019 8:50	8	9	8	32.09	4.7	3.9	0.4
9/20/2019 9:00	8	9	8	31.63	1	0.9	0.4
9/20/2019 9:10	8	9	8	31.05	0.8	0.7	0.4
9/20/2019 9:20	8	9	8	30.63	0.8	0.8	0.4
9/20/2019 9:30	8	9	8	30.41	0.8	0.8	1.1
9/20/2019 9:40	8	9	8	29.96	0.9	0.9	24.7
9/20/2019 9:50	8	9	8	29.62	1.8	1.7	24.9
9/20/2019 10:00	8	9	8	29.07	3.4	3.1	25
9/20/2019 10:10	8	9	8	28.89	4.8	3.9	25
9/20/2019 10:20	8	9	9	29.19	4.8	3.9	24.9
9/20/2019 10:30	8	9	8	29.53	4.5	3.8	24.9
9/20/2019 10:40	8	9	8	30.08	4.5	3.8	24.8
9/20/2019 10:50	8	9	8	30.51	4.7	3.9	24.6
9/20/2019 11:00	8	9	8	31.05	4.6	3.8	24.2
9/20/2019 11:10	8	9	8	31.39	4.5	3.9	23.5
9/20/2019 11:20	8	9	8	31.48	4.6	3.8	23.6
9/20/2019 11:30	8	9	8	31.3	4.9	3.8	24
9/20/2019 11:40	8	9	8	31.36	4.7	3.8	23.8
9/20/2019 11:50	8	9	8	31.42	4.8	3.8	23.8
9/20/2019 12:00	8	9	8	31.18	4.6	3.8	24.3
9/20/2019 12:10	8	9	8	31.02	4.8	3.9	24.5
9/20/2019 12:20	8	9	8	30.69	4.6	3.8	24.6
9/20/2019 12:30	8	9	8	30.38	4.9	3.8	24.7
9/20/2019 12:40	8	9	8	30.23	4.6	3.8	24.7
9/20/2019 12:50	8	9	8	30.26	4.8	3.8	24.7
9/20/2019 13:00	8	9	8	30.47	4.7	3.8	24.6
9/20/2019 13:10	8	9	8	30.54	5	3.9	24.6
9/20/2019 13:20	8	9	8	30.72	4.8	3.9	24.5
9/20/2019 13:30	8	9	8	31.02	4.8	3.8	24.4
9/20/2019 13:40	8	9	9	31.02	4.3	3.9	24.4
9/20/2019 13:50	8	9	8	30.93	4.7	3.9	24.4
9/20/2019 14:00	8	9	8	30.87	4.6	3.8	24.5
9/20/2019 14:10	8	9	8	30.81	4.6	3.9	24.5
9/20/2019 14:20	8	9	8	31.02	4.7	3.8	24.4
9/20/2019 14:30	8	9	8	31.09	4.7	3.8	24.3
9/20/2019 14:40	8	9	8	30.96	4.6	3.8	24.4
9/20/2019 14:50	8	9	8	30.93	4.7	3.8	24.4
9/20/2019 15:00	8	8	9	30.78	4.6	3.9	24.5
9/20/2019 15:10	8	9	9	30.69	4.6	3.9	24.6
9/20/2019 15:20	8	9	9	30.66	4.7	4.1	24.6
9/20/2019 15:30	8	9	9	30.41	4.8	3.8	24.7

9/20/2019 15:40	8	8	8	30.14	4.7	3.8	24.8
9/20/2019 15:50	8	8	8	29.86	4.6	3.8	24.9
9/20/2019 16:00	8	9	8	29.56	4.8	3.9	25
9/20/2019 16:10	8	9	8	29.35	5	3.9	25
9/20/2019 16:20	8	8	8	29.25	4.6	3.8	25
9/20/2019 16:30	8	8	8	29.25	4.5	3.9	24.9
9/20/2019 16:40	8	8	8	29.38	4.7	3.9	24.9
9/20/2019 16:50	8	9	8	29.53	4.6	3.8	24.9
9/20/2019 17:00	8	9	8	29.83	4.7	3.9	24.8
9/20/2019 17:10	8	9	8	29.8	4.5	3.9	24.8
9/20/2019 17:20	8	9	8	30.02	4.6	3.9	24.8
9/20/2019 17:30	8	8	9	30.29	4.6	3.8	24.7
9/20/2019 17:40	8	8	8	30.72	4.7	3.8	24.5
9/20/2019 17:50	8	9	8	30.96	4.8	3.7	24.3
9/20/2019 18:00	8	9	8	31.57	4.7	3.9	22.7
9/20/2019 18:10	8	8	8	32	0.9	0.8	0.4
9/20/2019 18:20	8	8	8	30.54	0.8	0.8	0.3
9/20/2019 18:30	8	8	8	29.44	1.1	1	24.8
9/20/2019 18:40	8	8	8	29.25	3.1	3.1	25
9/20/2019 18:50	8	9	8	29.53	2.9	2.7	25
9/20/2019 19:00	8	8	8	29.89	1.4	1.4	24.9
9/20/2019 19:10	8	8	8	30.47	1.1	0.9	3.3
9/20/2019 19:20	8	8	8	30.44	0.8	0.8	1.3
9/20/2019 19:30	8	8	8	30.35	0.9	0.8	2.7
9/20/2019 19:40	8	8	8	30.14	0.9	0.9	2.2
9/20/2019 19:50	8	8	8	29.74	1.2	1.1	24.8
9/20/2019 20:00	8	8	8	29.47	2.5	2.5	24.9
9/20/2019 20:10	8	8	8	29.38	3.2	3	24.9
9/20/2019 20:20	8	8	8	29.25	3.4	3.2	25
9/20/2019 20:30	8	8	8	28.86	3.4	3.3	24.9
9/20/2019 20:40	8	9	8	29.04	4.8	3.8	25
9/20/2019 20:50	8	8	8	29.47	4.6	3.8	24.9
9/20/2019 21:00	8	8	8	29.8	4.7	3.8	24.8
9/20/2019 21:10	8	8	8	30.29	4.6	3.9	24.6
9/20/2019 21:20	8	8	8	30.54	4.7	3.9	24.6
9/20/2019 21:30	8	8	8	30.57	4.7	3.8	24.6
9/20/2019 21:40	8	8	8	30.51	4.9	3.8	24.6
9/20/2019 21:50	8	8	8	30.54	4.8	3.8	24.6
9/20/2019 22:00	8	8	8	30.72	4.8	3.9	24.5
9/20/2019 22:10	8	8	8	30.99	5	3.8	24.3
9/20/2019 22:20	8	8	8	31.33	4.8	3.9	23.7
9/20/2019 22:30	8	8	8	31.76	4.9	3.9	0.5
9/20/2019 22:40	8	8	8	31.94	4.3	3.9	0.5
9/20/2019 22:50	8	8	8	31.88	1	0.8	0.4
9/20/2019 23:00	8	8	8	31.3	0.9	0.9	0.4
9/20/2019 23:10	8	8	8	30.63	0.9	0.8	0.3
9/20/2019 23:20	8	8	8	29.86	0.9	0.9	24.7

9/20/2019 23:30	8	8	8	29.1	3.3	3.1	24.9
9/20/2019 23:40	8	8	8	28.86	4.8	3.9	25
9/20/2019 23:50	8	8	8	29.19	4.8	3.8	25
9/21/2019 0:00	8	8	8	29.44	4.6	3.9	24.9
9/21/2019 0:10	8	8	8	29.71	4.8	3.8	25
9/21/2019 0:20	8	8	8	29.59	4.9	3.8	24.9
9/21/2019 0:30	8	8	8	29.56	4.5	3.8	25
9/21/2019 0:40	8	8	8	29.5	4.4	3.8	25
9/21/2019 0:50	8	8	8	29.53	4.9	3.9	25
9/21/2019 1:00	8	9	8	29.62	4.7	3.8	25
9/21/2019 1:10	8	8	8	29.68	4.7	3.9	24.9
9/21/2019 1:20	8	8	8	29.89	4.5	3.9	24.8
9/21/2019 1:30	8	8	8	30.02	4.7	3.9	24.9
9/21/2019 1:40	8	8	8	30.17	4.5	3.8	24.7
9/21/2019 1:50	8	8	8	30.35	4.7	3.8	24.6
9/21/2019 2:00	8	8	8	30.47	4.7	3.9	24.7
9/21/2019 2:10	8	8	8	30.72	4.9	3.9	24.6
9/21/2019 2:20	8	8	8	30.63	4.8	3.9	24.5
9/21/2019 2:30	8	8	8	30.66	4.7	3.9	24.6
9/21/2019 2:40	8	8	8	30.57	4.8	3.8	24.6
9/21/2019 2:50	8	8	8	30.66	4.8	3.8	24.6
9/21/2019 3:00	8	8	8	30.69	5	3.8	24.6
9/21/2019 3:10	8	8	8	30.75	4.8	3.8	24.6
9/21/2019 3:20	8	8	8	30.93	4.5	3.8	24.5
9/21/2019 3:30	8	8	8	31.27	4.7	3.8	24
9/21/2019 3:40	8	8	8	31.6	4.6	3.9	17.8
9/21/2019 3:50	8	8	8	31.63	0.9	0.8	0.4
9/21/2019 4:00	8	8	8	30.2	0.7	0.8	0.4
9/21/2019 4:10	8	8	8	28.74	3.4	3.2	24.9
9/21/2019 4:20	8	8	8	29.1	4.8	3.8	25
9/21/2019 4:30	8	8	8	29.74	4.6	3.8	24.9
9/21/2019 4:40	8	8	8	30.02	4.7	3.8	24.8
9/21/2019 4:50	8	8	8	29.83	4.8	3.8	24.9
9/21/2019 5:00	8	8	8	29.71	5	3.8	25
9/21/2019 5:10	8	8	8	29.53	5	3.8	24.9
9/21/2019 5:20	8	8	8	29.19	4.7	3.8	25
9/21/2019 5:30	8	8	8	29.25	4.8	4.1	25
9/21/2019 5:40	8	8	8	29.35	4.6	3.8	25
9/21/2019 5:50	8	8	8	29.38	4.9	3.8	25
9/21/2019 6:00	8	8	8	29.59	4.7	3.8	24.9
9/21/2019 6:10	8	8	8	30.11	5	3.8	24.7
9/21/2019 6:20	8	8	8	30.57	4.9	3.9	24.6
9/21/2019 6:30	8	8	8	31.33	5	3.8	23.8
9/21/2019 6:40	8	8	8	31.82	4.8	4	0.5
9/21/2019 6:50	8	8	8	31.6	0.7	0.8	0.4
9/21/2019 7:00	8	8	8	30.75	0.9	0.8	0.4
9/21/2019 7:10	8	8	8	30.29	0.5	0.8	0.7

9/21/2019 7:20	8	8	8	29.5	1.2	1.1	24.8
9/21/2019 7:30	8	8	8	28.83	3.4	3.3	24.9
9/21/2019 7:40	8	8	8	29.01	4.5	3.8	24.9
9/21/2019 7:50	8	8	8	29.62	4.8	3.8	24.8
9/21/2019 8:00	8	8	8	30.11	4.8	3.8	24.7
9/21/2019 8:10	8	8	8	30.84	4.9	3.8	24.4
9/21/2019 8:20	8	8	8	31.45	4.5	3.9	23
9/21/2019 8:30	8	8	8	31.7	4.7	3.9	0.5
9/21/2019 8:40	8	8	8	31.79	4.7	3.9	0.5
9/21/2019 8:50	8	8	8	31.73	4.3	3.9	0.5
9/21/2019 9:00	8	8	8	31.67	4.8	3.9	0.5
9/21/2019 9:10	8	8	8	31.67	4.5	3.8	0.5
9/21/2019 9:20	8	8	8	31.85	4.6	3.8	0.5
9/21/2019 9:30	8	8	8	31.97	4.7	3.8	0.4
9/21/2019 9:40	8	8	8	32.09	1	0.9	0.4
9/21/2019 9:50	8	8	8	31.97	0.9	0.8	0.4
9/21/2019 10:00	8	8	8	31.51	1	0.8	0.4
9/21/2019 10:10	8	8	8	30.84	0.7	0.8	0.4
9/21/2019 10:20	8	8	8	29.8	0.9	0.9	3.2
9/21/2019 10:30	8	8	8	28.77	3.3	3.3	24.9
9/21/2019 10:40	8	8	8	29.13	4.5	3.9	25
9/21/2019 10:50	8	8	8	29.83	4.7	3.9	25
9/21/2019 11:00	8	8	8	29.65	4.8	3.8	24.9
9/21/2019 11:10	8	8	8	29.47	4.7	3.9	25.1
9/21/2019 11:20	8	8	8	29.32	4.7	3.8	24.9
9/21/2019 11:30	8	8	8	29.38	5.4	3.8	25
9/21/2019 11:40	8	8	8	29.35	4.8	3.9	25
9/21/2019 11:50	8	8	8	29.41	4.7	3.9	24.9
9/21/2019 12:00	8	8	8	29.59	4.6	3.8	24.9
9/21/2019 12:10	8	8	8	29.68	4.6	3.8	24.8
9/21/2019 12:20	8	8	8	29.8	4.7	3.8	24.9
9/21/2019 12:30	8	8	8	29.77	4.8	3.9	24.9
9/21/2019 12:40	8	8	8	29.71	4.8	3.9	24.9
9/21/2019 12:50	8	8	8	29.53	4.6	3.8	25
9/21/2019 13:00	8	8	8	29.56	4.6	3.8	25
9/21/2019 13:10	8	8	8	29.5	4.7	3.8	25
9/21/2019 13:20	8	8	8	29.19	4.7	3.8	25
9/21/2019 13:30	8	8	8	29.38	3.4	3.3	24.9
9/21/2019 13:40	8	8	8	29.71	2.2	2.1	24.9
9/21/2019 13:50	8	8	8	29.77	1.2	1.2	24.8
9/21/2019 14:00	8	8	8	30.02	1.2	0.9	24.7
9/21/2019 14:10	8	8	8	29.86	1	0.9	24.8
9/21/2019 14:20	8	8	8	29.56	1.9	1.8	24.8
9/21/2019 14:30	8	8	8	28.95	3.5	3.3	24.9
9/21/2019 14:40	8	8	8	29.01	4.7	3.9	24.9
9/21/2019 14:50	8	8	8	29.1	4.6	3.7	24.9
9/21/2019 15:00	8	8	8	29.38	4.6	3.9	24.9

9/21/2019 15:10	8	8	8	29.8	4.9	3.9	24.9
9/21/2019 15:20	8	8	8	29.77	4.7	3.8	24.8
9/21/2019 15:30	8	8	8	29.99	4.8	3.9	24.8
9/21/2019 15:40	8	8	8	29.96	4.5	3.9	24.9
9/21/2019 15:50	8	8	8	29.99	4.5	3.8	24.8
9/21/2019 16:00	8	8	8	29.74	4.7	3.8	24.8
9/21/2019 16:10	8	8	8	29.62	4.9	3.9	24.9
9/21/2019 16:20	8	8	8	29.47	4.8	3.8	25
9/21/2019 16:30	8	8	8	29.38	4.7	3.9	24.9
9/21/2019 16:40	8	8	8	29.32	4.8	3.9	25
9/21/2019 16:50	8	8	8	29.35	4.7	3.9	25
9/21/2019 17:00	8	8	8	29.38	5	3.9	25
9/21/2019 17:10	8	8	8	29.44	4.6	3.8	25
9/21/2019 17:20	8	8	8	29.19	4.6	3.9	25
9/21/2019 17:30	8	8	8	29.1	5	3.8	24.9
9/21/2019 17:40	8	8	8	29.22	4.8	3.9	25
9/21/2019 17:50	8	8	8	29.19	4.7	3.9	25
9/21/2019 18:00	8	8	8	29.25	4.6	3.8	24.9
9/21/2019 18:10	8	8	8	29.41	4.8	3.9	24.9
9/21/2019 18:20	8	8	8	29.41	4.7	3.9	25
9/21/2019 18:30	8	8	8	29.19	4.7	3.8	25
9/21/2019 18:40	8	8	8	29.35	4.8	3.8	25.1
9/21/2019 18:50	8	8	8	29.22	4.6	3.8	25
9/21/2019 19:00	8	8	8	29.22	4.7	3.8	25
9/21/2019 19:10	8	8	8	29.41	4.7	3.8	25
9/21/2019 19:20	8	8	8	29.47	4.8	3.8	25
9/21/2019 19:30	8	8	8	29.47	5	3.9	25
9/21/2019 19:40	8	8	8	29.38	4.8	3.9	25
9/21/2019 19:50	8	8	8	29.13	3.5	3.3	25
9/21/2019 20:00	8	8	8	29.71	2.7	2.7	24.9
9/21/2019 20:10	8	8	8	30.05	1	0.9	24.8
9/21/2019 20:20	8	8	8	30.41	1	0.8	2.6
9/21/2019 20:30	8	8	8	30.23	0.8	0.8	2.3
9/21/2019 20:40	8	8	8	29.99	1	0.9	24.7
9/21/2019 20:50	8	8	8	29.07	2.5	2.5	24.9
9/21/2019 21:00	8	8	8	28.86	4.9	3.8	25
9/21/2019 21:10	8	8	8	29.19	4.9	3.8	24.9
9/21/2019 21:20	8	8	8	29.71	4.7	3.8	24.8
9/21/2019 21:30	8	8	8	30.08	4.5	3.8	24.7
9/21/2019 21:40	8	8	8	30.44	4.8	3.8	24.7
9/21/2019 21:50	8	8	8	30.66	4.8	3.8	24.6
9/21/2019 22:00	8	8	8	30.57	4.8	3.8	24.6
9/21/2019 22:10	8	8	8	30.47	4.6	3.9	24.6
9/21/2019 22:20	8	8	8	30.44	4.4	3.8	24.7
9/21/2019 22:30	8	8	8	30.26	4.6	3.9	24.8
9/21/2019 22:40	8	8	8	30.17	5.2	3.9	24.7
9/21/2019 22:50	8	8	8	30.2	4.5	4	24.7

9/21/2019 23:00	8	8	8	30.35	4.9	3.8	24.7
9/21/2019 23:10	8	8	8	30.66	4.8	3.8	24.6
9/21/2019 23:20	8	8	8	31.09	4.9	3.9	24.1
9/21/2019 23:30	8	8	8	31.76	4.6	3.9	0.5
9/21/2019 23:40	8	8	8	31.45	0.8	0.8	0.4
9/21/2019 23:50	8	8	8	30.17	0.9	0.8	0.4
9/22/2019 0:00	8	8	8	29.35	2.1	2.1	24.9
9/22/2019 0:10	8	8	8	28.8	4.9	3.8	25
9/22/2019 0:20	8	8	8	29.19	4.7	3.8	25
9/22/2019 0:30	8	8	8	29.16	4.6	3.8	24.9
9/22/2019 0:40	8	8	8	29.25	4.8	3.8	25.1
9/22/2019 0:50	8	8	8	29.13	4.7	3.8	25
9/22/2019 1:00	8	8	8	29.19	3.4	3.4	25
9/22/2019 1:10	8	8	8	29.62	2.7	2.6	25
9/22/2019 1:20	8	8	8	29.96	1.1	1.3	24.8
9/22/2019 1:30	8	8	8	29.62	1.5	1.4	24.8
9/22/2019 1:40	8	8	8	29.38	2.6	2.6	24.9
9/22/2019 1:50	8	8	8	28.7	3.4	3.1	25
9/22/2019 2:00	8	8	8	29.07	4.7	3.9	24.9
9/22/2019 2:10	8	8	8	29.53	4.6	3.9	25
9/22/2019 2:20	8	8	8	29.8	4.7	3.8	24.8
9/22/2019 2:30	8	8	8	30.08	4.9	4	24.7
9/22/2019 2:40	8	8	8	30.41	4.8	3.8	24.7
9/22/2019 2:50	8	8	8	30.84	4.7	3.9	24.5
9/22/2019 3:00	8	8	8	31.21	4.8	3.8	24.1
9/22/2019 3:10	8	8	8	31.63	4.9	3.9	0.5
9/22/2019 3:20	8	8	8	32	0.8	0.9	0.4
9/22/2019 3:30	8	8	8	31.09	0.8	0.9	0.4
9/22/2019 3:40	8	8	8	30.26	0.9	0.8	0.4
9/22/2019 3:50	8	8	8	29.47	1.4	1.4	24.9
9/22/2019 4:00	8	8	8	29.04	3.4	3.3	25
9/22/2019 4:10	8	8	8	29.25	3.5	3.3	25
9/22/2019 4:20	8	8	8	29.38	3.1	3.2	25
9/22/2019 4:30	8	8	8	29.13	3.3	3.2	25
9/22/2019 4:40	8	8	8	29.01	3.4	3.4	25
9/22/2019 4:50	8	8	8	28.92	3.5	3.3	25.1
9/22/2019 5:00	8	8	8	28.92	4.7	3.8	25
9/22/2019 5:10	8	8	8	29.16	4.7	3.9	25
9/22/2019 5:20	8	8	8	29.1	4.4	3.8	24.9
9/22/2019 5:30	8	8	8	29.07	4.8	3.9	25
9/22/2019 5:40	8	8	8	29.19	4.9	3.9	25
9/22/2019 5:50	8	8	8	29.25	4.5	3.8	25
9/22/2019 6:00	8	8	8	29.19	4.5	3.7	25
9/22/2019 6:10	8	8	8	29.19	4.7	3.8	25
9/22/2019 6:20	8	8	8	29.38	4.6	3.8	25
9/22/2019 6:30	8	8	8	29.35	4.6	3.8	24.9
9/22/2019 6:40	8	8	8	29.53	4.5	3.8	25

9/22/2019 6:50	8	8	8	29.74	4.8	3.8	24.9
9/22/2019 7:00	8	8	8	29.68	4.8	3.8	24.9
9/22/2019 7:10	8	8	8	29.68	4.8	3.8	24.9
9/22/2019 7:20	8	8	8	29.74	4.7	3.8	24.9
9/22/2019 7:30	8	8	8	29.89	4.6	3.9	24.9
9/22/2019 7:40	8	8	8	30.08	4.8	3.8	24.8
9/22/2019 7:50	8	8	8	30.08	4.8	3.9	24.7
9/22/2019 8:00	8	8	8	30.11	4.6	3.8	24.8
9/22/2019 8:10	8	8	8	30.26	4.8	3.8	24.8
9/22/2019 8:20	8	8	8	30.11	4.7	3.9	24.7
9/22/2019 8:30	8	8	8	30.17	4.7	3.9	24.8
9/22/2019 8:40	8	8	8	30.14	4.6	3.8	24.8
9/22/2019 8:50	8	8	8	30.11	4.6	3.7	24.8
9/22/2019 9:00	8	8	8	30.17	4.6	3.8	24.8
9/22/2019 9:10	8	8	8	30.23	4.8	3.8	24.8
9/22/2019 9:20	8	8	8	30.26	4.5	3.8	24.7
9/22/2019 9:30	8	8	8	30.2	4.8	3.7	24.8
9/22/2019 9:40	8	8	8	29.89	4.9	3.8	24.8
9/22/2019 9:50	8	8	8	29.71	4.7	3.8	24.9
9/22/2019 10:00	8	8	8	29.56	4.6	3.8	25
9/22/2019 10:10	8	8	8	29.53	4.7	3.9	25
9/22/2019 10:20	8	8	8	29.41	4.6	3.8	25
9/22/2019 10:30	8	8	8	29.44	4.6	3.9	25
9/22/2019 10:40	8	8	8	29.44	4.8	3.9	25
9/22/2019 10:50	8	8	8	29.68	4.6	3.9	24.9
9/22/2019 11:00	8	8	8	29.68	4.6	3.9	24.9
9/22/2019 11:10	8	8	8	29.77	4.6	3.9	24.9
9/22/2019 11:20	8	8	8	29.56	4.7	3.9	25
9/22/2019 11:30	8	8	8	29.19	4.6	3.8	25.1
9/22/2019 11:40	8	8	8	29.16	3.5	3.3	25
9/22/2019 11:50	8	8	8	29.35	3	3.1	25
9/22/2019 12:00	8	8	8	29.13	3.3	3.2	25
9/22/2019 12:10	8	8	8	29.1	3.4	3.3	25
9/22/2019 12:20	8	8	8	28.83	3.1	3.2	25
9/22/2019 12:30	8	8	8	29.04	4.7	3.8	25
9/22/2019 12:40	8	8	8	28.95	4.5	3.8	25
9/22/2019 12:50	8	8	8	28.98	5	3.9	25
9/22/2019 13:00	8	8	8	29.35	4.8	3.8	25
9/22/2019 13:10	8	8	8	29.41	4.7	3.9	25
9/22/2019 13:20	8	8	8	29.35	4.8	3.8	25
9/22/2019 13:30	8	8	8	29.32	4.7	3.8	25
9/22/2019 13:40	8	8	8	29.1	3.4	3.1	25.1
9/22/2019 13:50	8	8	8	29.32	3.3	3.2	24.9
9/22/2019 14:00	8	8	8	29.38	3	2.8	24.9
9/22/2019 14:10	8	8	8	29.32	3.1	3	24.9
9/22/2019 14:20	8	8	8	29.1	3.4	3.3	25
9/22/2019 14:30	8	8	8	28.8	4.6	3.8	25

9/22/2019 14:40	8	8	8	29.1	4.6	3.8	24.9
9/22/2019 14:50	8	8	8	29.25	4.9	3.9	24.9
9/22/2019 15:00	8	8	8	29.5	4.6	3.8	24.9
9/22/2019 15:10	8	8	8	29.65	4.7	3.9	24.9
9/22/2019 15:20	8	8	8	29.8	4.6	3.8	24.8
9/22/2019 15:30	8	8	8	30.08	4.6	3.8	24.7
9/22/2019 15:40	8	8	8	30.32	4.5	3.8	24.5
9/22/2019 15:50	8	8	8	30.78	4.9	4	24.5
9/22/2019 16:00	8	8	8	31.09	4.6	3.8	24.2
9/22/2019 16:10	8	8	8	31.48	4.6	3.9	22.9
9/22/2019 16:20	8	8	8	31.94	4.6	3.9	0.5
9/22/2019 16:30	8	8	8	32.12	1.2	1	0.4
9/22/2019 16:40	8	8	8	31.82	0.8	0.8	0.4
9/22/2019 16:50	8	8	8	31.79	1	0.9	0.4
9/22/2019 17:00	8	8	8	31.76	0.8	0.8	0.4
9/22/2019 17:10	8	8	8	31.54	0.8	0.8	0.4
9/22/2019 17:20	8	8	8	31.3	0.7	0.8	0.4
9/22/2019 17:30	8	8	8	30.87	0.7	0.8	0.4
9/22/2019 17:40	8	8	8	30.72	0.8	0.8	0.4
9/22/2019 17:50	8	8	8	30.84	0.7	0.8	0.3
9/22/2019 18:00	8	8	8	30.93	0.7	0.8	0.4
9/22/2019 18:10	8	8	8	30.81	0.9	0.8	0.4
9/22/2019 18:20	8	8	8	30.69	0.8	0.8	0.3
9/22/2019 18:30	8	8	8	30.69	0.8	0.8	0.4
9/22/2019 18:40	8	8	8	30.66	0.8	0.7	0.4
9/22/2019 18:50	8	8	8	30.84	0.9	0.8	0.4
9/22/2019 19:00	8	8	8	31.05	0.7	0.8	0.4
9/22/2019 19:10	8	8	8	31.39	0.8	0.8	0.4
9/22/2019 19:20	8	8	8	31.76	0.8	0.8	0.4
9/22/2019 19:30	8	8	8	31.79	0.8	0.8	0.4
9/22/2019 19:40	8	8	8	31.97	0.9	0.8	0.3
9/22/2019 19:50	8	8	8	31.51	0.8	0.8	0.4
9/22/2019 20:00	8	8	8	31.09	0.8	0.8	0.4
9/22/2019 20:10	8	8	8	30.63	0.9	0.8	0.4
9/22/2019 20:20	8	8	8	29.71	1	0.8	3.3
9/22/2019 20:30	8	8	8	28.58	3.4	3.2	25
9/22/2019 20:40	8	8	8	29.19	4.8	3.8	24.9
9/22/2019 20:50	8	8	8	29.8	4.6	3.8	24.8
9/22/2019 21:00	8	8	8	30.35	4.5	3.8	24.7
9/22/2019 21:10	8	8	8	30.78	4.7	3.9	24.5
9/22/2019 21:20	8	8	8	30.93	4.7	3.8	24.4
9/22/2019 21:30	8	8	8	31.27	4.6	3.8	24.2
9/22/2019 21:40	8	8	8	31.45	4.7	3.8	23.2
9/22/2019 21:50	8	8	8	31.51	4.5	3.9	22.9
9/22/2019 22:00	8	8	8	31.54	4.7	3.8	10.8
9/22/2019 22:10	8	8	8	31.67	4.7	3.9	0.5
9/22/2019 22:20	8	8	8	31.73	4.7	3.9	0.6

9/22/2019 22:30	8	8	8	31.67	4.8	3.8	20.1
9/22/2019 22:40	8	8	8	31.36	4.8	3.8	23.4
9/22/2019 22:50	8	8	8	31.18	4.8	3.8	24.2
9/22/2019 23:00	8	8	8	31.09	4.8	3.8	24.3
9/22/2019 23:10	8	8	8	30.93	4.6	3.8	24.5
9/22/2019 23:20	8	8	8	30.84	4.7	3.7	24.5
9/22/2019 23:30	8	8	8	30.75	4.7	3.9	24.5
9/22/2019 23:40	8	8	8	30.99	4.6	3.9	24.4
9/22/2019 23:50	8	8	8	31.09	4.6	3.8	24.4
9/23/2019 0:00	8	8	8	31.05	4.6	3.8	24.3
9/23/2019 0:10	8	8	8	30.78	4.7	3.8	24.6
9/23/2019 0:20	8	8	8	30.78	4.8	3.8	24.7
9/23/2019 0:30	8	8	8	30.44	4.6	3.8	24.7
9/23/2019 0:40	8	8	8	30.26	4.9	3.8	24.8
9/23/2019 0:50	8	8	8	30.11	4.9	3.8	24.7
9/23/2019 1:00	8	8	8	29.83	4.7	3.9	24.9
9/23/2019 1:10	8	8	8	29.68	4.7	3.8	24.9
9/23/2019 1:20	8	8	8	29.59	4.6	3.8	24.9
9/23/2019 1:30	8	8	8	29.74	4.7	3.8	24.9
9/23/2019 1:40	8	8	8	29.89	4.7	3.8	24.8
9/23/2019 1:50	8	8	8	30.26	4.5	3.8	24.7
9/23/2019 2:00	8	8	8	30.51	4.8	3.8	24.6
9/23/2019 2:10	8	8	8	30.54	4.7	3.9	24.6
9/23/2019 2:20	8	8	8	30.75	4.7	3.8	24.5
9/23/2019 2:30	8	8	8	30.99	4.5	3.9	24.4
9/23/2019 2:40	8	8	8	31.05	5	3.8	24.3
9/23/2019 2:50	8	8	8	31.15	4.8	3.9	24.2
9/23/2019 3:00	8	8	8	31.18	4.7	3.9	24
9/23/2019 3:10	8	8	8	31.27	4.6	3.8	23.9
9/23/2019 3:20	8	8	8	31.3	4.5	3.9	24
9/23/2019 3:30	8	8	8	31.27	4.8	3.8	24.1
9/23/2019 3:40	8	8	8	31.21	4.7	3.8	24.2
9/23/2019 3:50	8	8	8	31.12	4.6	3.8	24.2
9/23/2019 4:00	8	8	8	31.21	4.7	3.8	23.9
9/23/2019 4:10	8	8	8	31.6	4.8	3.9	22.9
9/23/2019 4:20	8	8	8	31.6	4.6	3.9	0.5
9/23/2019 4:30	8	8	8	32.03	1.1	0.8	0.4
9/23/2019 4:40	8	8	8	31.6	0.9	0.9	0.4
9/23/2019 4:50	8	8	8	30.69	0.8	0.8	0.4
9/23/2019 5:00	8	8	8	30.17	0.7	0.9	0.4
9/23/2019 5:10	8	8	8	29.68	0.9	0.9	24.8
9/23/2019 5:20	8	8	8	29.13	2.7	2.8	24.9
9/23/2019 5:30	8	8	8	28.86	3.4	3.3	24.9
9/23/2019 5:40	8	8	8	28.92	4.7	3.8	24.9
9/23/2019 5:50	8	8	8	29.38	4.7	3.9	24.9
9/23/2019 6:00	8	8	8	30.29	4.6	3.9	24.6
9/23/2019 6:10	8	8	8	31.09	4.6	3.8	24

9/23/2019 6:20	8	8	8	31.88	4.8	3.9	0.4
9/23/2019 6:30	8	8	8	31.42	0.9	0.8	0.4
9/23/2019 6:40	8	8	8	30.99	0.9	0.8	0.4
9/23/2019 6:50	8	8	8	31.09	0.7	0.8	0.3
9/23/2019 7:00	8	8	8	31.27	0.8	0.8	0.4
9/23/2019 7:10	8	8	8	30.99	0.8	0.9	0.3
9/23/2019 7:20	8	8	8	30.51	0.9	0.8	0.3
9/23/2019 7:30	8	8	8	30.02	0.9	0.8	2.7
9/23/2019 7:40	8	8	8	29.62	1.1	0.9	24.8
9/23/2019 7:50	8	8	8	29.32	2.5	2.5	25
9/23/2019 8:00	8	8	8	28.86	3.4	3.3	25
9/23/2019 8:10	8	8	8	28.98	4.7	3.8	24.9
9/23/2019 8:20	8	8	8	29.25	4.6	3.8	25
9/23/2019 8:30	8	8	8	29.5	4.7	3.8	24.9
9/23/2019 8:40	8	8	8	29.56	4.8	3.8	24.9
9/23/2019 8:50	8	8	8	29.62	4.6	3.8	24.9
9/23/2019 9:00	8	8	8	29.77	4.7	3.9	24.9
9/23/2019 9:10	8	8	8	29.96	4.6	3.8	24.9
9/23/2019 9:20	8	8	8	29.89	4.6	3.9	24.9
9/23/2019 9:30	8	8	8	29.74	4.6	3.8	24.9
9/23/2019 9:40	8	8	8	29.44	4.9	3.8	25
9/23/2019 9:50	8	8	8	29.1	4.7	3.8	25
9/23/2019 10:00	8	8	8	29.1	4.7	3.8	25
9/23/2019 10:10	8	8	8	28.98	5	3.8	25.1
9/23/2019 10:20	8	8	8	28.89	4.4	3.8	25
9/23/2019 10:30	8	8	8	29.07	5	3.8	25
9/23/2019 10:40	8	8	8	29.07	4.7	3.8	25
9/23/2019 10:50	8	8	8	29.1	4.8	3.9	24.9
9/23/2019 11:00	8	8	8	29.41	4.5	3.9	25
9/23/2019 11:10	8	8	8	29.59	4.9	3.9	24.9
9/23/2019 11:20	8	8	8	29.86	4.3	3.8	24.8
9/23/2019 11:30	8	8	8	30.05	4.6	3.8	24.7
9/23/2019 11:40	8	8	8	30.47	4.7	3.8	24.6
9/23/2019 11:50	8	8	8	30.84	4.6	3.8	24.4
9/23/2019 12:00	8	8	8	31.27	4.7	3.8	23.8
9/23/2019 12:10	8	8	8	31.82	4.6	3.8	0.5
9/23/2019 12:20	8	8	8	31.54	0.8	0.8	0.4
9/23/2019 12:30	8	8	8	30.47	0.7	0.8	0.3
9/23/2019 12:40	8	8	8	29.74	0.9	0.8	3.2
9/23/2019 12:50	8	8	8	29.44	1.7	1.9	24.9
9/23/2019 13:00	8	8	8	29.47	2.2	2.1	24.9
9/23/2019 13:10	8	8	8	29.59	1.8	1.8	24.9
9/23/2019 13:20	8	8	8	29.19	2.8	2.8	24.9
9/23/2019 13:30	8	8	8	28.92	3.4	3.3	25
9/23/2019 13:40	8	8	8	28.86	4.6	3.9	25
9/23/2019 13:50	8	8	8	29.22	4.3	3.8	24.9
9/23/2019 14:00	8	8	8	29.62	4.4	3.9	24.9

9/23/2019 14:10	8	8	8	30.02	4.3	3.8	24.8
9/23/2019 14:20	8	8	8	30.38	4.7	3.9	24.6
9/23/2019 14:30	8	8	8	30.47	4.6	3.8	24.7
9/23/2019 14:40	8	8	8	30.78	4.7	3.9	24.4
9/23/2019 14:50	8	8	8	31.09	4.7	3.9	24.3
9/23/2019 15:00	8	8	8	31.27	4.6	3.8	23.8
9/23/2019 15:10	8	8	8	31.33	4.7	3.9	23.6
9/23/2019 15:20	8	8	8	31.42	4.6	3.8	23.2
9/23/2019 15:30	8	8	8	31.67	4.8	3.8	0.6
9/23/2019 15:40	8	8	8	31.94	4.8	3.8	0.4
9/23/2019 15:50	8	8	8	31.7	0.9	0.8	0.4
9/23/2019 16:00	8	8	8	30.99	0.8	0.8	0.4
9/23/2019 16:10	8	8	8	30.38	0.9	0.8	0.4
9/23/2019 16:20	8	8	8	29.22	1.4	1.3	24.8
9/23/2019 16:30	8	8	8	28.7	4.6	3.8	25
9/23/2019 16:40	8	8	8	29.59	4.7	3.9	24.8
9/23/2019 16:50	8	8	8	30.35	4.6	3.9	24.6
9/23/2019 17:00	8	8	8	30.84	4.8	3.8	24.4
9/23/2019 17:10	8	8	8	31.21	5.2	3.9	24
9/23/2019 17:20	8	8	8	31.33	4.5	3.9	23.9
9/23/2019 17:30	8	8	8	31.48	4.7	3.9	23.2
9/23/2019 17:40	8	8	8	31.63	4.7	3.9	0.6
9/23/2019 17:50	8	8	8	32.09	4	2.8	0.3
9/23/2019 18:00	8	8	8	31.42	0.9	0.8	0.4
9/23/2019 18:10	8	8	8	30.57	0.8	0.8	0.4
9/23/2019 18:20	8	8	8	29.74	0.9	0.8	3.5
9/23/2019 18:30	8	8	8	29.07	2.8	2.8	24.9
9/23/2019 18:40	8	8	8	28.8	4.7	3.8	25
9/23/2019 18:50	8	8	8	29.22	4.6	3.8	24.9
9/23/2019 19:00	8	8	8	29.62	4.7	3.8	24.9
9/23/2019 19:10	8	8	8	30.05	4.7	3.8	24.7
9/23/2019 19:20	8	8	8	30.26	4.7	3.8	24.6
9/23/2019 19:30	8	8	8	31.09	4.6	3.8	24.1
9/23/2019 19:40	8	8	8	31.67	4.8	3.9	0.5
9/23/2019 19:50	8	8	8	31.97	0.9	0.8	0.4
9/23/2019 20:00	8	8	8	31.21	0.8	0.9	0.4
9/23/2019 20:10	8	8	8	30.26	0.8	0.8	0.4
9/23/2019 20:20	8	8	8	29.56	0.9	0.9	24.7
9/23/2019 20:30	8	8	8	28.55	3.4	3.3	25
9/23/2019 20:40	8	8	8	29.13	5.1	3.8	24.9
9/23/2019 20:50	8	8	8	29.47	4.7	3.8	24.9
9/23/2019 21:00	8	8	8	30.08	4.6	3.8	24.7
9/23/2019 21:10	8	8	8	30.29	4.6	3.8	24.6
9/23/2019 21:20	8	8	8	30.57	5	3.9	24.6
9/23/2019 21:30	8	8	8	30.99	4.6	3.8	24.2
9/23/2019 21:40	8	8	8	31.48	4.7	3.9	23
9/23/2019 21:50	8	8	8	31.94	4.6	3.8	0.4

9/23/2019 22:00	8	8	8	31.6	0.9	0.8	0.3
9/23/2019 22:10	8	8	8	31.02	0.9	0.8	0.4
9/23/2019 22:20	8	8	8	30.9	0.9	0.8	0.4
9/23/2019 22:30	8	8	8	30.9	0.8	0.9	0.4
9/23/2019 22:40	8	8	8	30.9	0.8	0.8	0.4
9/23/2019 22:50	8	8	8	30.87	0.7	0.8	0.4
9/23/2019 23:00	8	8	8	30.99	0.7	0.8	0.4
9/23/2019 23:10	8	8	8	31.09	0.8	0.8	0.4
9/23/2019 23:20	8	8	8	31.18	0.8	0.8	0.4
9/23/2019 23:30	8	8	8	31.33	0.8	0.8	0.4
9/23/2019 23:40	8	8	8	31.54	0.9	0.8	0.4
9/23/2019 23:50	8	8	8	31.73	0.8	0.8	0.4
9/24/2019 0:00	8	8	8	32	0.8	0.7	0.4
9/24/2019 0:10	8	8	8	32	0.9	0.8	0.4
9/24/2019 0:20	8	8	8	32.03	0.8	0.9	0.4
9/24/2019 0:30	8	8	8	32.09	0.9	0.9	0.4
9/24/2019 0:40	8	8	8	31.97	0.9	0.8	0.4
9/24/2019 0:50	8	8	8	31.79	0.9	0.8	0.4
9/24/2019 1:00	8	8	8	31.51	0.8	0.8	0.4
9/24/2019 1:10	8	8	8	31.48	0.9	0.8	0.4
9/24/2019 1:20	8	8	8	31.76	0.9	0.8	0.3
9/24/2019 1:30	8	8	8	32.03	0.8	0.8	0.3
9/24/2019 1:40	8	8	8	31.82	4.7	3.9	0.4
9/24/2019 1:50	8	8	8	31.51	4.9	3.8	23.1
9/24/2019 2:00	8	8	8	31.3	4.6	3.9	23.9
9/24/2019 2:10	8	8	8	31.33	4.5	3.8	23.9
9/24/2019 2:20	8	8	8	31.3	4.8	3.8	23.9
9/24/2019 2:30	8	8	8	31.36	4.8	3.8	23.7
9/24/2019 2:40	8	8	8	31.39	4.7	3.8	23.5
9/24/2019 2:50	8	8	8	31.48	4.8	3.9	23
9/24/2019 3:00	8	8	8	31.57	4.5	3.8	0.6
9/24/2019 3:10	8	8	8	31.67	4.6	3.8	4
9/24/2019 3:20	8	8	8	31.57	4.9	3.8	23.1
9/24/2019 3:30	8	8	8	31.51	4.6	3.8	23
9/24/2019 3:40	8	8	8	31.54	4.7	3.9	20.6
9/24/2019 3:50	8	8	8	31.63	4.7	3.8	0.6
9/24/2019 4:00	8	8	8	31.79	4.8	3.9	0.5
9/24/2019 4:10	8	8	8	31.7	4.7	3.8	0.5
9/24/2019 4:20	8	8	8	31.67	5	3.8	0.5
9/24/2019 4:30	8	8	8	31.79	4.6	3.8	0.5
9/24/2019 4:40	8	8	8	31.85	4.7	3.8	0.5
9/24/2019 4:50	8	8	8	31.85	4.6	3.9	0.5
9/24/2019 5:00	8	8	8	31.79	4.8	3.9	0.5
9/24/2019 5:10	8	8	8	31.82	4.6	3.9	0.5
9/24/2019 5:20	8	8	8	32	4.8	3.9	0.4
9/24/2019 5:30	8	8	8	32.03	4.8	3.8	0.4
9/24/2019 5:40	8	8	8	32	4.8	3.8	0.4

9/24/2019 5:50	8	8	8	32.03	0.9	0.8	0.4
9/24/2019 6:00	8	8	8	32.09	2.3	1.4	0.4
9/24/2019 6:10	8	8	8	31.94	0.9	0.8	0.4
9/24/2019 6:20	8	8	8	31.73	0.8	0.9	0.4
9/24/2019 6:30	8	8	8	31.48	0.8	0.8	0.4
9/24/2019 6:40	8	8	8	31.05	0.8	0.8	0.4
9/24/2019 6:50	8	8	8	30.32	0.8	0.9	0.4
9/24/2019 7:00	8	8	8	29.59	1	0.8	24.8
9/24/2019 7:10	8	8	8	29.04	3.2	3.1	25
9/24/2019 7:20	8	8	8	28.89	4.7	3.8	25
9/24/2019 7:30	8	8	8	29.19	4.8	3.9	24.9
9/24/2019 7:40	8	8	8	29.77	4.4	3.8	24.8
9/24/2019 7:50	8	8	8	30.29	4.7	3.9	24.7
9/24/2019 8:00	8	8	8	30.66	4.8	3.8	24.6
9/24/2019 8:10	8	8	8	30.93	4.7	3.9	24.3
9/24/2019 8:20	8	8	8	31.51	4.8	4	23
9/24/2019 8:30	8	8	8	31.94	4.6	3.8	0.5
9/24/2019 8:40	8	8	8	31.42	0.9	0.8	0.4
9/24/2019 8:50	8	8	8	30.32	0.7	0.8	0.4
9/24/2019 9:00	8	8	8	29.35	1	1	24.8
9/24/2019 9:10	8	8	8	28.7	3.4	3.3	25
9/24/2019 9:20	8	8	8	29.01	4.8	3.8	25
9/24/2019 9:30	8	8	8	29.19	4.8	3.8	25
9/24/2019 9:40	8	8	8	29.35	4.6	3.8	25
9/24/2019 9:50	8	8	8	29.62	4.9	3.9	24.9
9/24/2019 10:00	8	8	8	30.14	4.6	3.8	24.8
9/24/2019 10:10	8	8	8	30.44	4.7	3.9	24.7
9/24/2019 10:20	8	8	8	30.93	4.8	3.9	24.3
9/24/2019 10:30	8	8	8	31.18	4.8	3.8	24
9/24/2019 10:40	8	8	8	31.57	4.3	3.9	22.9
9/24/2019 10:50	8	8	8	31.76	4.7	3.9	0.5
9/24/2019 11:00	8	8	8	32	0.9	0.8	0.4
9/24/2019 11:10	8	8	8	31.63	0.8	0.8	0.4
9/24/2019 11:20	8	8	8	31.12	0.8	0.8	0.4
9/24/2019 11:30	8	8	8	30.66	0.7	0.8	0.4
9/24/2019 11:40	8	8	8	30.11	0.7	0.8	0.4
9/24/2019 11:50	8	8	8	29.25	1.7	1.6	24.9
9/24/2019 12:00	8	8	8	28.74	2.5	2.9	25
9/24/2019 12:10	8	8	8	29.04	4.7	3.8	24.9
9/24/2019 12:20	8	8	8	29.41	4.5	3.8	25
9/24/2019 12:30	8	8	8	29.8	4.8	3.8	24.9
9/24/2019 12:40	8	8	8	30.14	4.8	3.8	24.7
9/24/2019 12:50	8	8	8	30.2	4.7	3.8	24.7
9/24/2019 13:00	8	8	8	30.26	4.6	3.9	24.7
9/24/2019 13:10	8	8	8	30.23	4.6	3.8	24.7
9/24/2019 13:20	8	8	8	30.11	4.5	3.8	24.8
9/24/2019 13:30	8	8	8	29.77	4.7	3.9	24.9

9/24/2019 13:40	8	8	8	29.65	4.7	3.8	25
9/24/2019 13:50	8	8	8	29.25	4.6	3.8	25.1
9/24/2019 14:00	8	8	8	29.1	4.7	3.8	25
9/24/2019 14:10	8	8	8	29.19	4.5	3.8	25.1
9/24/2019 14:20	8	8	8	29.13	4.6	3.8	25
9/24/2019 14:30	8	8	8	29.22	4.7	3.8	25
9/24/2019 14:40	8	8	8	29.32	4.7	3.9	25
9/24/2019 14:50	8	8	8	29.41	4.7	3.8	25
9/24/2019 15:00	8	8	8	29.59	4.7	3.9	25
9/24/2019 15:10	8	8	8	29.38	5.2	3.9	25
9/24/2019 15:20	8	8	8	29.44	4.6	3.8	25
9/24/2019 15:30	8	8	8	29.47	5	3.8	25
9/24/2019 15:40	8	8	8	29.56	4.7	3.9	24.9
9/24/2019 15:50	8	8	8	29.62	4.9	3.8	25
9/24/2019 16:00	8	8	8	29.74	4.7	3.8	24.9
9/24/2019 16:10	8	8	8	29.59	4.5	3.8	24.9
9/24/2019 16:20	8	8	8	29.68	4.5	3.9	24.9
9/24/2019 16:30	8	8	8	29.65	4.9	3.8	24.9
9/24/2019 16:40	8	8	8	29.62	4.8	3.9	25
9/24/2019 16:50	8	8	8	29.53	4.6	3.8	25
9/24/2019 17:00	8	8	8	29.47	4.9	3.8	25.1
9/24/2019 17:10	8	8	8	29.38	4.6	3.8	25
9/24/2019 17:20	8	8	8	29.35	4.6	3.8	25
9/24/2019 17:30	8	8	8	29.38	4.8	3.9	25
9/24/2019 17:40	8	8	8	29.16	4.9	3.8	25.1
9/24/2019 17:50	8	8	8	29.16	4.8	3.8	25
9/24/2019 18:00	8	8	8	29.47	4.7	3.9	25
9/24/2019 18:10	8	8	8	29.62	4.6	3.9	25
9/24/2019 18:20	8	8	8	29.71	4.7	3.8	25
9/24/2019 18:30	8	8	8	29.5	4.5	3.9	24.9
9/24/2019 18:40	8	8	8	29.53	4.6	3.9	25
9/24/2019 18:50	8	8	8	29.62	4.7	3.9	25
9/24/2019 19:00	8	8	8	29.53	4.7	3.9	25
9/24/2019 19:10	8	8	8	29.22	4.7	3.8	25.1
9/24/2019 19:20	8	8	8	29.04	4.6	3.8	25.1
9/24/2019 19:30	8	8	8	28.89	4.8	3.8	25.1
9/24/2019 19:40	8	8	8	28.8	4.6	3.9	25.1
9/24/2019 19:50	8	8	8	28.92	4.7	3.9	25.1
9/24/2019 20:00	8	8	8	29.07	4.6	3.9	25
9/24/2019 20:10	8	8	8	29.41	4.4	3.8	25
9/24/2019 20:20	8	8	8	29.56	4.8	3.8	25
9/24/2019 20:30	8	8	8	29.53	4.8	3.9	24.9
9/24/2019 20:40	8	8	8	29.8	4.6	3.8	24.9
9/24/2019 20:50	8	8	8	29.83	4.7	3.8	24.8
9/24/2019 21:00	8	8	8	29.86	4.8	3.9	24.9
9/24/2019 21:10	8	8	8	29.8	4.7	3.9	24.9
9/24/2019 21:20	8	8	8	29.77	4.3	3.8	24.9

9/24/2019 21:30	8	8	8	29.59	4.7	3.8	25
9/24/2019 21:40	8	8	8	29.5	4.7	3.9	24.9
9/24/2019 21:50	8	8	8	29.56	4.7	3.9	24.9
9/24/2019 22:00	8	8	8	29.56	4.6	3.9	25
9/24/2019 22:10	8	8	8	29.68	4.8	3.8	24.9
9/24/2019 22:20	8	8	8	29.68	4.7	3.8	25
9/24/2019 22:30	8	8	8	29.96	4.6	3.8	24.8
9/24/2019 22:40	8	8	8	29.86	4.7	3.9	24.8
9/24/2019 22:50	8	8	8	30.2	4.5	3.8	24.8
9/24/2019 23:00	8	8	8	30.29	4.8	3.8	24.7
9/24/2019 23:10	8	8	8	30.23	4.5	3.9	24.8
9/24/2019 23:20	8	8	8	30.23	4.6	3.8	24.8
9/24/2019 23:30	8	8	8	30.02	4.8	3.9	24.9
9/24/2019 23:40	8	8	8	29.59	4.8	3.8	25
9/24/2019 23:50	8	8	8	29.65	4.6	3.8	24.9
9/25/2019 0:00	8	8	8	29.8	4.8	3.8	24.9
9/25/2019 0:10	8	8	8	29.96	4.9	3.8	25
9/25/2019 0:20	8	8	8	29.99	4.5	3.9	24.8
9/25/2019 0:30	8	8	8	30.02	4.8	3.8	24.9
9/25/2019 0:40	8	8	8	30.08	4.7	3.8	24.8
9/25/2019 0:50	8	8	8	30.2	5	3.9	24.7
9/25/2019 1:00	8	8	8	30.35	4.7	3.8	24.7
9/25/2019 1:10	8	8	8	30.69	4.6	3.8	24.6
9/25/2019 1:20	8	8	8	30.72	4.7	3.9	24.6
9/25/2019 1:30	8	8	8	30.78	4.8	3.9	24.6
9/25/2019 1:40	8	8	8	30.72	4.6	3.9	24.6
9/25/2019 1:50	8	8	8	30.66	4.6	3.8	24.6
9/25/2019 2:00	8	8	8	30.66	4.6	3.8	24.5
9/25/2019 2:10	8	8	8	30.84	4.5	3.8	24.5
9/25/2019 2:20	8	8	8	31.21	4.8	3.8	24.1
9/25/2019 2:30	8	8	8	31.33	4.5	3.7	23.3
9/25/2019 2:40	8	8	8	31.45	4.7	3.8	23.3
9/25/2019 2:50	8	8	8	31.45	4.6	3.8	23.5
9/25/2019 3:00	8	8	8	31.3	4.7	3.8	23.7
9/25/2019 3:10	8	8	8	31.15	4.6	3.9	24.2
9/25/2019 3:20	8	8	8	31.27	5.1	4	24
9/25/2019 3:30	8	8	8	31.27	4.8	3.9	24.1
9/25/2019 3:40	8	8	8	31.33	4.7	3.8	23.8
9/25/2019 3:50	8	8	8	31.42	4.6	3.8	23.3
9/25/2019 4:00	8	8	8	31.51	4.6	3.8	23.2
9/25/2019 4:10	8	8	8	31.57	4.5	3.8	22.3
9/25/2019 4:20	8	8	8	31.57	4.9	3.8	0.5
9/25/2019 4:30	8	8	8	31.67	4.9	3.8	0.6
9/25/2019 4:40	8	8	8	31.85	4.6	3.8	0.5
9/25/2019 4:50	8	8	8	32	0.8	0.8	0.4
9/25/2019 5:00	8	8	8	31.73	0.8	0.8	0.4
9/25/2019 5:10	8	8	8	31.45	0.9	0.8	0.4

9/25/2019 5:20	8	8	8	31.39	0.9	0.8	0.4
9/25/2019 5:30	8	8	8	31.54	0.9	0.8	0.4
9/25/2019 5:40	8	8	8	31.76	0.8	0.8	0.4
9/25/2019 5:50	8	8	8	31.7	0.9	0.8	0.4
9/25/2019 6:00	8	8	8	31.88	0.8	0.9	0.4
9/25/2019 6:10	8	8	8	31.67	0.8	0.8	0.4
9/25/2019 6:20	8	8	8	31.33	0.9	0.7	0.5
9/25/2019 6:30	8	8	8	30.99	0.8	0.8	0.4
9/25/2019 6:40	8	8	8	30.84	0.9	0.8	0.4
9/25/2019 6:50	8	8	8	30.84	0.8	0.8	0.4
9/25/2019 7:00	8	8	8	30.57	1	0.8	0.4
9/25/2019 7:10	8	8	8	30.54	0.7	0.8	0.4
9/25/2019 7:20	8	8	8	30.47	0.9	0.8	0.4
9/25/2019 7:30	8	8	8	30.23	0.7	0.8	0.4
9/25/2019 7:40	8	8	8	30.05	0.7	0.8	2.5
9/25/2019 7:50	8	8	8	30.02	0.9	0.8	24.8
9/25/2019 8:00	8	8	8	30.02	0.9	0.8	24.8
9/25/2019 8:10	8	8	8	29.8	1	0.9	24.8
9/25/2019 8:20	8	8	8	29.74	0.9	0.9	24.9
9/25/2019 8:30	8	8	8	29.59	1.1	1	24.9
9/25/2019 8:40	8	8	8	29.65	1.3	1.3	25
9/25/2019 8:50	8	8	8	29.53	1.3	1.6	24.9
9/25/2019 9:00	8	8	8	29.22	2.8	3	25
9/25/2019 9:10	8	8	8	28.89	3.4	3.3	25.1
9/25/2019 9:20	8	8	8	28.86	4.6	3.8	25.1
9/25/2019 9:30	8	8	8	28.95	4.7	3.8	25.1
9/25/2019 9:40	8	8	8	28.98	2.9	2.9	25.1
9/25/2019 9:50	8	8	8	29.1	3.4	3.2	25.1
9/25/2019 10:00	8	8	8	29.16	3.2	3.2	25.1
9/25/2019 10:10	8	8	8	29.32	3.3	3.1	25.1
9/25/2019 10:20	8	8	8	29.22	3	3	25
9/25/2019 10:30	8	8	8	29.16	3	3.1	25
9/25/2019 10:40	8	8	8	29.32	3	3	25
9/25/2019 10:50	8	8	8	29.04	3.2	3.2	25
9/25/2019 11:00	8	8	8	28.8	4.4	3.7	25.2
9/25/2019 11:10	8	8	8	28.98	4.6	3.8	25.1
9/25/2019 11:20	8	8	8	28.92	5	3.8	25.1
9/25/2019 11:30	8	8	8	29.1	4.7	3.8	25.1
9/25/2019 11:40	8	8	8	29.07	4.6	3.9	25.1
9/25/2019 11:50	8	8	8	29.01	3.5	3.4	25.1
9/25/2019 12:00	8	8	8	28.86	3	3.1	25.1
9/25/2019 12:10	8	8	8	28.92	4.5	3.8	25
9/25/2019 12:20	8	8	8	28.89	4.6	3.8	25.1
9/25/2019 12:30	8	8	8	29.1	4.6	3.8	25.1
9/25/2019 12:40	8	8	8	29.16	4.8	3.8	25.1
9/25/2019 12:50	8	8	8	29.1	4.7	3.8	25
9/25/2019 13:00	8	8	8	29.07	4.6	3.8	25.1

9/25/2019 13:10	8	8	8	29.16	4.7	3.8	25
9/25/2019 13:20	8	8	8	29.44	4.8	3.8	25
9/25/2019 13:30	8	8	8	29.41	4.6	3.8	24.9
9/25/2019 13:40	8	8	8	29.71	4.5	3.8	24.9
9/25/2019 13:50	8	8	8	29.86	4.7	3.9	24.9
9/25/2019 14:00	8	8	8	30.32	4.6	3.8	24.6
9/25/2019 14:10	8	8	8	30.9	4.6	3.9	24.4
9/25/2019 14:20	8	8	8	31.27	4.9	3.9	23.7
9/25/2019 14:30	8	8	8	31.42	4.7	3.9	23.1
9/25/2019 14:40	8	8	8	31.73	4.8	3.8	0.5
9/25/2019 14:50	8	8	8	31.79	4.7	3.8	0.5
9/25/2019 15:00	8	8	8	31.7	4.9	3.8	0.5
9/25/2019 15:10	8	8	8	31.57	4.7	3.8	0.6
9/25/2019 15:20	8	8	8	31.6	4.8	3.8	0.6
9/25/2019 15:30	8	8	8	31.79	4.7	3.9	0.5
9/25/2019 15:40	8	8	8	32	4.7	3.8	0.4
9/25/2019 15:50	8	8	8	32.09	1.2	0.8	0.5
9/25/2019 16:00	8	8	8	31.63	0.8	0.8	0.3
9/25/2019 16:10	8	8	8	31.33	0.8	0.8	0.4
9/25/2019 16:20	8	8	8	31.33	0.9	0.9	0.4
9/25/2019 16:30	8	8	8	31.18	0.8	0.8	0.4
9/25/2019 16:40	8	8	8	31.42	0.8	0.8	0.4
9/25/2019 16:50	8	8	8	31.51	0.8	0.9	0.4
9/25/2019 17:00	8	8	8	31.42	0.9	0.8	0.4
9/25/2019 17:10	8	8	8	31.12	0.8	0.8	0.4
9/25/2019 17:20	8	8	8	30.72	0.8	0.8	0.4
9/25/2019 17:30	8	8	8	30.38	0.8	0.8	0.4
9/25/2019 17:40	8	8	8	30.14	0.8	0.8	0.7
9/25/2019 17:50	8	8	8	29.96	0.7	0.8	3.3
9/25/2019 18:00	8	8	8	29.62	1.1	0.9	24.8
9/25/2019 18:10	8	8	8	29.65	1	1	24.9
9/25/2019 18:20	8	8	8	29.41	1.8	1.6	24.9
9/25/2019 18:30	8	8	8	29.19	2.8	2.7	25
9/25/2019 18:40	8	8	8	29.13	3	3	25
9/25/2019 18:50	8	8	8	28.92	3.4	3.3	25
9/25/2019 19:00	8	8	8	28.83	3.5	3.3	25
9/25/2019 19:10	8	8	8	28.89	4.7	3.8	25.2
9/25/2019 19:20	8	8	8	28.92	4.8	3.8	25.1
9/25/2019 19:30	8	8	8	28.92	4.7	3.8	25
9/25/2019 19:40	8	8	8	29.01	4.7	3.8	25.1
9/25/2019 19:50	8	8	8	29.1	4.5	3.8	25.1
9/25/2019 20:00	8	8	8	29.19	4.8	3.8	25
9/25/2019 20:10	8	8	8	29.41	4.8	3.9	25
9/25/2019 20:20	8	8	8	29.47	4.9	3.9	25
9/25/2019 20:30	8	8	8	29.59	4.9	3.8	24.9
9/25/2019 20:40	8	8	8	29.5	4.8	3.9	24.9
9/25/2019 20:50	8	8	8	29.59	4.5	3.8	25

9/25/2019 21:00	8	8	8	29.5	4.6	3.8	24.9
9/25/2019 21:10	8	8	8	29.71	4.7	3.8	24.9
9/25/2019 21:20	8	8	8	30.02	4.7	3.8	24.8
9/25/2019 21:30	8	8	8	30.38	4.8	3.8	24.6
9/25/2019 21:40	8	8	8	30.69	4.6	3.8	24.5
9/25/2019 21:50	8	8	8	31.09	4.8	3.8	24.2
9/25/2019 22:00	8	8	8	31.42	4.5	3.9	23.2
9/25/2019 22:10	8	8	8	31.6	4.8	3.9	0.6
9/25/2019 22:20	8	8	8	31.67	4.7	3.9	0.5
9/25/2019 22:30	8	8	8	31.82	4.9	3.9	0.5
9/25/2019 22:40	8	8	8	31.94	4.7	3.9	0.4
9/25/2019 22:50	8	8	8	32	4.8	3.9	0.5
9/25/2019 23:00	8	8	8	32	4.7	3.8	0.4
9/25/2019 23:10	8	8	8	32.09	5	3.6	0.4
9/25/2019 23:20	8	8	8	31.94	0.9	0.7	0.4
9/25/2019 23:30	8	8	8	31.67	0.7	0.8	0.4
9/25/2019 23:40	8	8	8	31.3	0.9	0.8	0.4
9/25/2019 23:50	8	8	8	30.81	0.7	0.9	0.3
9/26/2019 0:00	8	8	8	30.35	0.6	0.9	0.3
9/26/2019 0:10	8	8	8	30.17	0.8	0.9	0.4
9/26/2019 0:20	8	8	8	30.08	0.8	0.9	3.5
9/26/2019 0:30	8	8	8	29.96	0.8	0.9	24.8
9/26/2019 0:40	8	8	8	29.96	0.9	0.9	24.8
9/26/2019 0:50	8	8	8	29.83	0.9	0.9	24.9
9/26/2019 1:00	8	8	8	29.59	1	0.9	24.9
9/26/2019 1:10	8	8	8	29.53	1.6	1.6	24.9
9/26/2019 1:20	8	8	8	29.19	2.7	2.7	25
9/26/2019 1:30	8	8	8	28.92	3.4	3.3	25.1
9/26/2019 1:40	8	8	8	28.83	4.6	3.9	25
9/26/2019 1:50	8	8	8	29.04	4.6	3.8	25.1
9/26/2019 2:00	8	8	8	29.16	4.8	3.9	25
9/26/2019 2:10	8	8	8	29.25	4.6	3.9	25.1
9/26/2019 2:20	8	8	8	29.16	4.6	3.9	25.1
9/26/2019 2:30	8	8	8	29.07	4.4	3.9	25.1
9/26/2019 2:40	8	8	8	28.92	4.6	3.9	25.1
9/26/2019 2:50	8	8	8	28.98	4.7	3.8	25.1
9/26/2019 3:00	8	8	8	29.07	4.7	3.8	25
9/26/2019 3:10	8	8	8	29.41	4.6	3.8	25
9/26/2019 3:20	8	8	8	29.86	4.7	3.8	24.7
9/26/2019 3:30	8	8	8	30.41	4.5	3.9	24.7
9/26/2019 3:40	8	8	8	30.81	4.8	4	24.5
9/26/2019 3:50	8	8	8	30.93	4.7	3.8	24.4
9/26/2019 4:00	8	8	8	31.05	4.6	3.8	24.2
9/26/2019 4:10	8	8	8	31.42	4.8	3.9	22.9
9/26/2019 4:20	8	8	8	31.67	4.9	3.8	0.6
9/26/2019 4:30	8	8	8	31.88	4.6	3.9	0.5
9/26/2019 4:40	8	8	8	32.03	4.7	3.8	0.4

9/26/2019 4:50	8	8	8	32.09	0.8	0.8	0.4
9/26/2019 5:00	8	8	8	31.54	0.9	0.7	0.4
9/26/2019 5:10	8	8	8	31.45	0.7	0.7	0.4
9/26/2019 5:20	8	8	8	31.45	0.9	0.7	0.4
9/26/2019 5:30	8	8	8	31.45	0.7	0.8	0.4
9/26/2019 5:40	8	8	8	31.48	0.7	0.8	0.4
9/26/2019 5:50	8	8	8	31.39	0.8	0.8	0.4
9/26/2019 6:00	8	8	8	31.3	0.7	0.8	0.4
9/26/2019 6:10	8	8	8	31.27	0.8	0.8	0.4
9/26/2019 6:20	8	8	8	30.99	0.8	0.8	0.4
9/26/2019 6:30	8	8	8	30.72	0.8	0.8	0.4
9/26/2019 6:40	8	8	8	30.38	0.7	0.9	0.4
9/26/2019 6:50	8	8	8	30.14	0.8	0.8	0.7
9/26/2019 7:00	8	8	8	30.05	0.9	0.8	3.5
9/26/2019 7:10	8	8	8	29.83	1	0.8	24.8
9/26/2019 7:20	8	8	8	29.65	0.9	0.8	24.8
9/26/2019 7:30	8	8	8	29.25	2.2	2.3	25
9/26/2019 7:40	8	8	8	29.01	3.3	3.2	25
9/26/2019 7:50	8	8	8	28.77	4.6	3.8	25.1
9/26/2019 8:00	8	8	8	29.25	4.6	3.8	24.9
9/26/2019 8:10	8	8	8	29.59	4.6	3.8	24.9
9/26/2019 8:20	8	8	8	30.05	4.9	3.8	24.7
9/26/2019 8:30	8	8	8	30.66	4.7	3.8	24.5
9/26/2019 8:40	8	8	8	30.87	4.8	3.8	24.3
9/26/2019 8:50	8	8	8	31.36	4.9	3.9	23.2
9/26/2019 9:00	8	8	8	32.06	4.7	3.8	0.4
9/26/2019 9:10	8	8	8	31.73	0.8	0.8	0.4
9/26/2019 9:20	8	8	8	31.36	0.9	0.8	0.4
9/26/2019 9:30	8	8	8	31.09	0.8	0.8	0.4
9/26/2019 9:40	8	8	8	30.78	0.6	0.8	0.4
9/26/2019 9:50	8	8	8	30.69	0.8	0.8	0.4
9/26/2019 10:00	8	8	8	30.44	0.8	0.8	0.4
9/26/2019 10:10	8	8	8	30.38	0.8	0.9	0.4
9/26/2019 10:20	8	8	8	30.08	0.8	0.9	1.9
9/26/2019 10:30	8	8	8	29.68	1	0.9	24.8
9/26/2019 10:40	8	8	8	29.62	1	1	24.9
9/26/2019 10:50	8	8	8	29.62	1	1.1	25
9/26/2019 11:00	8	8	8	29.35	1.6	1.6	24.9
9/26/2019 11:10	8	8	8	29.13	2.9	3	25
9/26/2019 11:20	8	8	8	28.83	3.4	3.3	25.1
9/26/2019 11:30	8	8	8	28.83	4.6	3.9	25.1
9/26/2019 11:40	8	8	8	28.98	4.4	3.9	25.1
9/26/2019 11:50	8	8	8	29.19	4.6	3.9	25
9/26/2019 12:00	8	8	8	29.41	4.4	3.8	25
9/26/2019 12:10	8	8	8	29.53	4.8	3.9	25
9/26/2019 12:20	8	8	8	29.62	4.7	3.8	25
9/26/2019 12:30	8	8	8	29.47	4.7	3.9	25

9/26/2019 12:40	8	8	8	29.44	4.5	3.8	25
9/26/2019 12:50	8	8	8	29.53	4.6	3.8	25
9/26/2019 13:00	8	8	8	29.53	4.7	3.9	25
9/26/2019 13:10	8	8	8	29.56	4.6	3.8	24.9
9/26/2019 13:20	8	8	8	29.65	4.5	3.8	24.9
9/26/2019 13:30	8	8	8	29.68	4.4	3.8	24.9
9/26/2019 13:40	8	8	8	29.99	4.7	3.8	24.8
9/26/2019 13:50	8	8	8	30.29	4.5	3.8	24.6
9/26/2019 14:00	8	8	8	30.57	4.8	3.8	24.5
9/26/2019 14:10	8	8	8	30.93	4.7	3.8	24.4
9/26/2019 14:20	8	8	8	31.12	4.8	3.8	24
9/26/2019 14:30	8	8	8	31.3	4.7	3.8	23.8
9/26/2019 14:40	8	8	8	31.39	4.7	3.8	23.2
9/26/2019 14:50	8	8	8	31.54	4.6	3.9	13.1
9/26/2019 15:00	8	8	8	31.73	4.9	4	0.5
9/26/2019 15:10	8	8	8	31.88	4.8	3.9	0.4
9/26/2019 15:20	8	8	8	32.06	1.9	1.2	0.4
9/26/2019 15:30	8	8	8	31.94	0.7	0.8	0.3
9/26/2019 15:40	8	8	8	31.73	0.8	0.8	0.4
9/26/2019 15:50	8	8	8	31.7	0.8	0.8	0.4
9/26/2019 16:00	8	8	8	31.18	0.9	0.8	0.4
9/26/2019 16:10	8	8	8	30.9	0.8	0.8	0.4
9/26/2019 16:20	8	8	8	30.75	0.9	0.9	0.3
9/26/2019 16:30	8	8	8	30.54	0.8	0.8	0.4
9/26/2019 16:40	8	8	8	30.47	0.8	0.8	0.4
9/26/2019 16:50	8	8	8	30.44	0.8	0.8	0.4
9/26/2019 17:00	8	8	8	30.44	0.7	0.8	0.3
9/26/2019 17:10	8	8	8	30.05	0.8	0.8	2
9/26/2019 17:20	8	8	8	29.8	1.1	0.8	24.8
9/26/2019 17:30	8	8	8	29.19	2.2	2.2	24.9
9/26/2019 17:40	8	8	8	28.55	4.7	3.8	25.1
9/26/2019 17:50	8	8	8	29.1	4.8	3.9	25
9/26/2019 18:00	8	8	8	29.77	4.7	3.9	24.8
9/26/2019 18:10	8	8	8	30.17	4.6	3.8	24.8
9/26/2019 18:20	8	8	8	30.38	4.3	3.9	24.6
9/26/2019 18:30	8	8	8	30.47	4.7	3.9	24.6
9/26/2019 18:40	8	8	8	30.51	4.9	3.9	24.6
9/26/2019 18:50	8	8	8	30.47	4.6	3.9	24.6
9/26/2019 19:00	8	8	8	30.66	4.7	3.8	24.6
9/26/2019 19:10	8	8	8	30.75	4.7	3.8	24.5
9/26/2019 19:20	8	8	8	30.72	4.8	3.9	24.5
9/26/2019 19:30	8	8	8	30.93	4.3	3.8	24.5
9/26/2019 19:40	8	8	8	31.09	4.6	3.8	24.3
9/26/2019 19:50	8	8	8	31.21	4.5	3.9	24
9/26/2019 20:00	8	8	8	31.3	4.5	3.8	23.9
9/26/2019 20:10	8	8	8	31.36	4.7	3.8	23.4
9/26/2019 20:20	8	8	8	31.63	4.7	3.8	0.6

9/26/2019 20:30	8	8	8	31.85	4.6	3.8	0.4
9/26/2019 20:40	8	8	8	32.12	2.1	1.4	0.4
9/26/2019 20:50	8	8	8	31.97	0.9	0.8	0.4
9/26/2019 21:00	8	8	8	32.06	0.9	0.8	0.4
9/26/2019 21:10	8	8	8	32.09	1.3	0.8	0.4
9/26/2019 21:20	8	8	8	32	4.9	3.8	0.4
9/26/2019 21:30	8	8	8	31.88	4.8	3.9	0.5
9/26/2019 21:40	8	8	8	31.79	4.9	3.8	0.4
9/26/2019 21:50	8	8	8	32.03	4.7	3.9	0.5
9/26/2019 22:00	8	8	8	31.73	0.9	0.8	0.4
9/26/2019 22:10	8	8	8	31.39	0.8	0.8	0.4
9/26/2019 22:20	8	8	8	30.78	0.8	0.8	0.4
9/26/2019 22:30	8	8	8	30.63	0.8	0.9	0.4
9/26/2019 22:40	8	8	8	30.41	0.5	0.8	0.4
9/26/2019 22:50	8	8	8	30.26	0.8	0.8	0.4
9/26/2019 23:00	8	8	8	30.17	0.7	0.8	0.6
9/26/2019 23:10	8	8	8	30.05	0.9	0.8	2.6
9/26/2019 23:20	8	8	8	29.83	0.8	0.9	24.8
9/26/2019 23:30	8	8	8	29.62	1.3	1.3	24.9
9/26/2019 23:40	8	8	8	29.5	2	1.8	24.9
9/26/2019 23:50	8	8	8	29.16	2.8	2.8	25
9/27/2019 0:00	8	8	8	28.77	3.4	3.2	25.1
9/27/2019 0:10	8	8	8	28.89	4.4	3.8	25.1
9/27/2019 0:20	8	8	8	29.01	4.8	3.9	25.1
9/27/2019 0:30	8	8	8	29.38	4.7	3.9	25
9/27/2019 0:40	8	8	8	29.62	4.8	3.8	25
9/27/2019 0:50	8	8	8	29.59	4.7	3.8	25
9/27/2019 1:00	8	8	8	29.74	4.5	3.9	25
9/27/2019 1:10	8	8	8	29.83	4.6	3.8	24.9
9/27/2019 1:20	8	8	8	29.68	4.7	3.8	24.9
9/27/2019 1:30	8	8	8	29.86	4.9	3.8	24.9
9/27/2019 1:40	8	8	8	29.77	4.6	3.8	24.9
9/27/2019 1:50	8	8	8	29.99	4.7	3.8	24.9
9/27/2019 2:00	8	8	8	29.96	4.6	3.8	24.9
9/27/2019 2:10	8	8	8	29.99	4.5	3.8	24.7
9/27/2019 2:20	8	8	8	30.32	4.6	3.9	24.6
9/27/2019 2:30	8	8	8	30.84	4.3	3.8	24.4
9/27/2019 2:40	8	8	8	31.27	4.8	3.8	23.4
9/27/2019 2:50	8	8	8	31.85	4.5	3.8	0.5
9/27/2019 3:00	8	8	8	31.94	0.7	0.8	0.4
9/27/2019 3:10	8	8	8	31.7	0.8	0.8	0.5
9/27/2019 3:20	8	8	8	31.42	0.7	0.8	0.4
9/27/2019 3:30	8	8	8	31.36	0.7	0.8	0.4
9/27/2019 3:40	8	8	8	30.96	0.7	0.8	0.4
9/27/2019 3:50	8	8	8	30.72	0.7	0.8	0.4
9/27/2019 4:00	8	8	8	30.9	0.9	0.8	0.4
9/27/2019 4:10	8	8	8	30.72	0.8	0.8	0.4

9/27/2019 4:20	8	8	8	30.63	0.8	0.8	0.4
9/27/2019 4:30	7	8	8	30.63	0.7	0.9	0.4
9/27/2019 4:40	8	8	8	30.41	0.8	0.8	0.4
9/27/2019 4:50	8	8	8	30.35	0.9	0.8	0.4
9/27/2019 5:00	8	8	8	30.05	0.9	0.8	2.7
9/27/2019 5:10	8	8	8	29.68	0.8	0.9	24.9
9/27/2019 5:20	8	8	8	29.38	2.1	2.2	25
9/27/2019 5:30	8	8	8	29.22	3	2.9	25.1
9/27/2019 5:40	8	8	8	29.25	3.2	3.1	25.1
9/27/2019 5:50	8	8	8	29.25	3.1	3	25.1
9/27/2019 6:00	8	8	8	29.22	3.1	3	25.1
9/27/2019 6:10	8	8	8	28.95	3.4	3.3	25.1
9/27/2019 6:20	8	8	8	28.86	4.9	3.9	25.1
9/27/2019 6:30	8	8	8	28.98	4.9	3.7	25.1
9/27/2019 6:40	8	8	8	29.35	4.5	3.8	25
9/27/2019 6:50	8	8	8	29.65	4.6	3.9	24.8
9/27/2019 7:00	8	8	8	30.11	4.7	3.9	24.7
9/27/2019 7:10	8	8	8	30.51	4.7	3.8	24.5
9/27/2019 7:20	8	8	8	31.12	4.8	3.8	24.1
9/27/2019 7:30	8	8	8	31.36	4.7	3.8	23.5
9/27/2019 7:40	8	8	8	31.54	4.6	3.9	15.7
9/27/2019 7:50	8	8	8	31.76	5	3.9	0.5
9/27/2019 8:00	8	8	8	31.85	4.8	3.9	0.5
9/27/2019 8:10	8	8	8	31.82	4.8	3.8	0.5
9/27/2019 8:20	8	8	8	31.82	4.8	3.8	0.5
9/27/2019 8:30	8	8	8	31.97	4.7	3.8	0.4
9/27/2019 8:40	8	8	8	32.06	4.6	3.1	0.4
9/27/2019 8:50	8	8	8	32.09	0.8	0.7	0.4
9/27/2019 9:00	8	8	8	31.67	0.9	0.8	0.4
9/27/2019 9:10	8	8	8	31.48	0.9	0.7	0.4
9/27/2019 9:20	8	8	8	31.05	0.8	0.8	0.4
9/27/2019 9:30	8	8	8	30.41	0.7	0.8	0.4
9/27/2019 9:40	8	8	8	30.11	0.8	0.8	0.4
9/27/2019 9:50	8	8	8	30.11	0.8	0.9	2.5
9/27/2019 10:00	8	8	8	30.29	0.9	0.8	1.3
9/27/2019 10:10	8	8	8	30.47	0.7	0.8	0.4
9/27/2019 10:20	8	8	8	30.72	0.7	0.7	0.4
9/27/2019 10:30	7	8	8	30.72	0.9	0.8	0.3
9/27/2019 10:40	7	8	8	30.66	0.7	0.8	0.4
9/27/2019 10:50	8	8	8	30.32	0.7	0.8	0.4
9/27/2019 11:00	8	8	8	30.26	0.8	0.8	0.4
9/27/2019 11:10	8	8	8	30.05	0.8	0.8	2.6
9/27/2019 11:20	8	8	8	29.53	1	0.9	24.8
9/27/2019 11:30	7	8	8	28.83	3.2	3.3	25
9/27/2019 11:40	8	8	8	28.89	4.6	3.8	25.1
9/27/2019 11:50	8	8	8	29.59	4.6	3.8	24.9
9/27/2019 12:00	8	8	8	30.26	4.6	3.8	24.7

9/27/2019 12:10	8	8	8	30.84	4.5	3.8	24.3
9/27/2019 12:20	8	8	8	31.6	4.8	3.9	4
9/27/2019 12:30	8	8	8	31.94	4.7	3.9	0.4
9/27/2019 12:40	7	8	8	31.97	0.9	0.8	0.4
9/27/2019 12:50	8	8	8	31.73	0.8	0.8	0.4
9/27/2019 13:00	8	8	8	31.42	0.7	0.9	0.4
9/27/2019 13:10	8	8	8	31.27	0.9	0.9	0.4
9/27/2019 13:20	8	8	8	31.09	0.8	0.8	0.4
9/27/2019 13:30	7	8	8	31.15	0.8	0.9	0.4
9/27/2019 13:40	7	8	8	31.3	0.9	0.8	0.4
9/27/2019 13:50	8	8	8	31.51	0.9	0.8	0.4
9/27/2019 14:00	8	8	8	31.45	0.8	0.8	0.4
9/27/2019 14:10	7	8	8	31.36	0.9	0.8	0.4
9/27/2019 14:20	8	8	8	31.02	0.9	0.8	0.4
9/27/2019 14:30	8	8	8	30.72	0.7	0.8	0.4
9/27/2019 14:40	7	8	8	30.57	0.8	0.8	0.4
9/27/2019 14:50	8	8	8	30.54	0.7	0.8	0.4
9/27/2019 15:00	7	8	8	30.41	0.7	0.9	0.4
9/27/2019 15:10	8	8	8	30.47	0.8	0.8	0.4
9/27/2019 15:20	7	8	8	30.32	0.8	0.9	0.4
9/27/2019 15:30	8	8	8	30.08	0.9	0.8	0.5
9/27/2019 15:40	8	8	8	29.56	0.9	0.8	24.8
9/27/2019 15:50	7	8	8	28.92	3	3.1	25
9/27/2019 16:00	7	8	8	28.8	4.7	3.8	25.1
9/27/2019 16:10	8	8	8	29.04	4.8	3.9	25.1
9/27/2019 16:20	8	8	8	28.98	4.4	3.8	25.1
9/27/2019 16:30	8	8	8	29.07	3.4	3.3	25.1
9/27/2019 16:40	7	8	8	29.41	2.8	2.7	25
9/27/2019 16:50	7	8	8	29.68	1.7	1.9	24.9
9/27/2019 17:00	8	8	8	29.35	2.1	2.1	25
9/27/2019 17:10	7	8	8	29.1	3	3.1	25
9/27/2019 17:20	7	8	8	28.7	4.6	3.8	25.1
9/27/2019 17:30	7	8	8	29.04	4.3	3.8	25
9/27/2019 17:40	7	8	8	29.53	4.7	3.9	24.8
9/27/2019 17:50	7	8	8	30.32	4.7	3.9	24.6
9/27/2019 18:00	8	8	8	31.02	4.7	3.9	24.2
9/27/2019 18:10	7	8	8	31.33	4.8	3.8	23.6
9/27/2019 18:20	7	8	8	31.48	4.6	3.8	23
9/27/2019 18:30	7	8	8	31.76	4.8	3.9	0.5
9/27/2019 18:40	7	8	8	31.94	4.6	3.8	0.4
9/27/2019 18:50	8	8	8	31.94	0.8	0.8	0.4
9/27/2019 19:00	7	8	8	31.76	0.8	0.8	0.4
9/27/2019 19:10	7	8	8	31.63	0.8	0.8	0.4
9/27/2019 19:20	8	8	8	31.88	0.8	0.8	0.4
9/27/2019 19:30	7	8	8	31.85	0.9	0.9	0.4
9/27/2019 19:40	7	8	8	31.88	0.7	0.8	0.4
9/27/2019 19:50	7	8	8	31.73	0.8	0.9	0.4

9/27/2019 20:00	7	8	8	31.63	0.7	0.8	0.4
9/27/2019 20:10	7	8	8	31.45	0.9	0.8	0.4
9/27/2019 20:20	8	8	8	30.93	0.8	0.8	0.4
9/27/2019 20:30	8	8	8	30.44	0.7	0.8	0.4
9/27/2019 20:40	7	8	8	30.47	0.7	0.8	0.4
9/27/2019 20:50	7	8	8	30.23	0.9	0.9	0.4
9/27/2019 21:00	8	8	8	30.29	0.9	0.8	0.4
9/27/2019 21:10	7	8	8	30.14	0.8	0.8	2
9/27/2019 21:20	7	8	8	29.89	0.8	0.9	3.6
9/27/2019 21:30	7	8	8	29.5	0.8	0.9	24.9
9/27/2019 21:40	7	8	8	29.1	3.1	3.1	25.1
9/27/2019 21:50	7	8	8	29.04	3.2	3.1	25.1
9/27/2019 22:00	7	8	8	29.32	2.9	2.9	25.2
9/27/2019 22:10	7	8	8	29.1	3	3	25.1
9/27/2019 22:20	7	8	8	28.89	3.4	3.4	25.1
9/27/2019 22:30	7	8	8	28.74	2.8	3.1	25.1
9/27/2019 22:40	7	8	8	28.92	4.6	3.9	25.1
9/27/2019 22:50	8	8	8	29.35	4.9	3.9	25
9/27/2019 23:00	8	8	8	29.86	4.6	3.8	24.8
9/27/2019 23:10	7	8	8	30.51	4.6	3.8	24.7
9/27/2019 23:20	7	8	8	30.63	4.7	3.8	24.6
9/27/2019 23:30	7	8	8	30.81	5	3.8	24.6
9/27/2019 23:40	7	8	8	30.99	4.7	3.8	24.3
9/27/2019 23:50	8	8	8	31.05	4.7	3.8	24.4
9/28/2019 0:00	8	8	8	30.9	4.5	3.8	24.4
9/28/2019 0:10	7	8	8	31.05	4.5	3.8	24.2
9/28/2019 0:20	7	8	8	31.3	4.7	3.8	23.7
9/28/2019 0:30	7	8	8	31.36	4.6	3.9	23.1
9/28/2019 0:40	7	8	8	31.79	4.6	3.9	0.5
9/28/2019 0:50	7	8	8	31.73	0.9	0.8	0.4
9/28/2019 1:00	7	8	8	31.05	0.8	0.8	0.4
9/28/2019 1:10	7	8	8	30.57	0.7	0.8	0.4
9/28/2019 1:20	7	8	8	30.32	0.9	0.7	0.4
9/28/2019 1:30	7	8	8	30.29	0.7	0.8	0.4
9/28/2019 1:40	7	8	8	30.14	0.6	0.8	0.9
9/28/2019 1:50	7	8	8	30.14	0.6	0.8	2.5
9/28/2019 2:00	7	8	8	30.11	1	0.8	2.5
9/28/2019 2:10	7	8	8	30.2	0.9	0.8	0.9
9/28/2019 2:20	7	8	8	29.86	0.9	0.7	3.2
9/28/2019 2:30	7	8	8	29.59	1	1	24.9
9/28/2019 2:40	7	8	8	29.19	2.2	2.3	25
9/28/2019 2:50	7	8	8	28.67	3.4	3.3	25
9/28/2019 3:00	7	8	8	29.01	4.4	3.9	25.1
9/28/2019 3:10	7	8	8	29.25	4.7	3.8	25
9/28/2019 3:20	7	8	8	29.56	4.7	3.8	24.9
9/28/2019 3:30	7	8	8	29.99	4.7	3.8	24.8
9/28/2019 3:40	7	8	8	30.38	4.5	3.8	24.7

9/28/2019 3:50	7	8	8	30.47	4.7	3.8	24.7
9/28/2019 4:00	7	8	8	30.63	4.6	3.8	24.7
9/28/2019 4:10	7	8	8	30.66	4.9	3.8	24.6
9/28/2019 4:20	7	8	8	30.69	4.9	3.9	24.5
9/28/2019 4:30	7	8	8	30.99	4.9	3.7	24.3
9/28/2019 4:40	7	8	8	31.18	4.9	3.7	24
9/28/2019 4:50	7	8	8	31.54	4.9	3.9	17.9
9/28/2019 5:00	7	8	8	31.73	4.7	3.8	0.5
9/28/2019 5:10	7	8	8	31.88	4.9	3.8	0.5
9/28/2019 5:20	7	8	8	32	0.8	0.8	0.4
9/28/2019 5:30	7	8	8	31.63	0.8	0.8	0.3
9/28/2019 5:40	7	8	8	31.54	0.8	0.8	0.4
9/28/2019 5:50	7	8	8	31.57	0.7	0.8	0.4
9/28/2019 6:00	7	8	8	31.54	0.9	0.7	0.4
9/28/2019 6:10	7	8	8	31.02	0.8	0.8	0.4
9/28/2019 6:20	7	8	8	30.44	0.7	0.8	0.4
9/28/2019 6:30	7	8	8	29.96	0.7	0.8	0.6
9/28/2019 6:40	7	8	8	29.38	1.4	1.6	24.9
9/28/2019 6:50	7	8	8	28.89	3.3	3.1	25.1
9/28/2019 7:00	7	8	8	28.8	4.7	3.8	25.1
9/28/2019 7:10	7	8	8	28.98	4.5	3.8	25.2
9/28/2019 7:20	7	8	8	28.92	4.7	3.8	25.1
9/28/2019 7:30	7	8	8	29.1	3.4	3.2	25.2
9/28/2019 7:40	7	8	8	28.89	3.1	3.4	25.1
9/28/2019 7:50	7	8	8	28.89	3.4	3.3	25.1
9/28/2019 8:00	7	8	8	28.86	2.3	3	25.1
9/28/2019 8:10	7	8	8	28.95	4.8	3.8	25.1
9/28/2019 8:20	7	8	8	29.19	4.7	3.8	25
9/28/2019 8:30	7	8	8	29.44	4.8	3.8	25.1
9/28/2019 8:40	7	8	8	29.74	4.9	3.8	24.9
9/28/2019 8:50	7	8	8	30.08	4.8	3.8	24.8
9/28/2019 9:00	7	8	8	30.11	4.8	3.8	24.9
9/28/2019 9:10	7	8	8	30.02	4.9	3.8	24.9
9/28/2019 9:20	7	8	8	30.11	4.5	3.8	24.7
9/28/2019 9:30	7	8	8	30.47	4.5	3.8	24.6
9/28/2019 9:40	7	8	8	30.93	4.5	3.8	24.3
9/28/2019 9:50	7	8	8	31.79	4.6	3.8	0.5
9/28/2019 10:00	7	8	8	31.7	0.8	0.8	0.4
9/28/2019 10:10	7	8	8	30.75	0.8	0.8	0.4
9/28/2019 10:20	7	8	8	30.23	0.6	0.9	0.4
9/28/2019 10:30	7	8	8	29.47	0.8	0.9	24.8
9/28/2019 10:40	7	8	8	29.13	3	3	25.1
9/28/2019 10:50	7	8	8	29.01	3.3	3.1	25.1
9/28/2019 11:00	7	8	8	28.92	3.3	3.4	25.1
9/28/2019 11:10	7	8	8	28.83	4.5	3.8	25.1
9/28/2019 11:20	7	8	8	28.92	4.7	3.9	25.1
9/28/2019 11:30	7	8	8	29.01	4.6	3.9	25

9/28/2019 11:40	7	8	8	29.38	4.6	3.9	25.1
9/28/2019 11:50	7	8	8	29.68	4.6	3.9	24.8
9/28/2019 12:00	7	8	8	29.96	4.7	3.8	24.9
9/28/2019 12:10	7	8	8	29.8	4.9	3.9	24.9
9/28/2019 12:20	7	8	8	29.71	4.7	3.8	25
9/28/2019 12:30	7	8	8	29.47	4.7	3.8	25.1
9/28/2019 12:40	7	8	8	29.38	4.7	3.9	25.1
9/28/2019 12:50	7	8	8	29.25	4.8	3.8	25
9/28/2019 13:00	7	8	8	29.5	4.7	3.8	24.9
9/28/2019 13:10	7	8	8	29.59	4.6	3.8	25
9/28/2019 13:20	7	8	8	30.02	4.2	3.8	24.8
9/28/2019 13:30	7	8	8	30.32	4.8	3.9	24.6
9/28/2019 13:40	7	8	8	30.66	4.7	3.8	24.6
9/28/2019 13:50	7	8	8	30.66	4.9	3.9	24.6
9/28/2019 14:00	7	8	8	30.51	4.9	3.9	24.6
9/28/2019 14:10	7	8	8	30.63	4.6	3.8	24.6
9/28/2019 14:20	7	8	8	30.69	4.8	3.9	24.5
9/28/2019 14:30	7	8	8	30.96	4.7	3.8	24.4
9/28/2019 14:40	7	8	8	31.05	4.8	3.8	24.2
9/28/2019 14:50	7	8	8	31.39	4.6	3.8	23.2
9/28/2019 15:00	7	8	8	31.51	4.6	3.9	4.1
9/28/2019 15:10	7	8	8	31.85	4.5	3.8	0.5
9/28/2019 15:20	7	8	8	32.09	3.6	2.4	0.5
9/28/2019 15:30	7	8	8	31.7	0.9	0.8	0.3
9/28/2019 15:40	7	8	8	31.63	0.8	0.8	0.4
9/28/2019 15:50	7	8	8	31.21	0.8	0.8	0.4
9/28/2019 16:00	7	8	8	30.63	0.9	0.8	0.4
9/28/2019 16:10	7	8	8	30.23	0.7	0.8	0.3
9/28/2019 16:20	7	8	8	29.65	0.9	0.9	5.3
9/28/2019 16:30	7	8	8	29.04	2.4	2.5	25
9/28/2019 16:40	7	8	8	28.83	3.4	3.3	25
9/28/2019 16:50	7	8	8	28.86	4.6	3.8	25.1
9/28/2019 17:00	7	8	8	29.01	4.6	3.8	25.1
9/28/2019 17:10	7	8	8	28.89	4.7	3.8	25.1
9/28/2019 17:20	7	8	8	28.83	2.2	3	25.1
9/28/2019 17:30	7	8	8	28.86	4.8	3.7	25.1
9/28/2019 17:40	7	8	8	28.92	4.8	3.8	25.1
9/28/2019 17:50	7	8	8	29.13	4.7	3.8	25
9/28/2019 18:00	7	8	8	29.53	4.7	3.7	24.9
9/28/2019 18:10	7	8	8	29.62	4.6	3.8	24.9
9/28/2019 18:20	7	8	8	29.96	4.8	3.8	24.8
9/28/2019 18:30	7	8	8	30.2	4.6	3.8	24.7
9/28/2019 18:40	7	8	8	30.51	4.8	3.9	24.6
9/28/2019 18:50	7	8	8	31.05	4.8	3.8	24.2
9/28/2019 19:00	7	8	8	31.54	4.7	3.8	0.5
9/28/2019 19:10	7	8	8	32	5	3.6	0.4
9/28/2019 19:20	7	8	8	31.57	0.8	0.8	0.4

9/28/2019 19:30	7	8	8	31.12	0.8	0.9	0.3
9/28/2019 19:40	7	8	8	30.84	0.9	0.8	0.4
9/28/2019 19:50	7	8	8	30.57	0.7	0.7	0.4
9/28/2019 20:00	7	8	8	30.44	0.8	0.8	0.3
9/28/2019 20:10	7	8	8	30.47	0.7	0.8	0.3
9/28/2019 20:20	7	8	8	30.57	0.9	0.8	0.4
9/28/2019 20:30	7	8	8	30.38	0.9	0.8	0.4
9/28/2019 20:40	7	8	8	30.32	0.8	0.8	0.3
9/28/2019 20:50	7	8	8	30.35	0.8	0.8	0.4
9/28/2019 21:00	7	8	8	30.02	0.7	0.8	0.7
9/28/2019 21:10	7	8	8	29.77	0.9	0.9	24.9
9/28/2019 21:20	7	8	8	29.59	0.9	1	24.9
9/28/2019 21:30	7	8	8	28.95	3.1	3	25
9/28/2019 21:40	7	8	8	28.77	4.8	3.8	25.1
9/28/2019 21:50	7	8	8	29.38	4.9	3.9	24.9
9/28/2019 22:00	7	8	8	30.11	4.8	3.7	24.7
9/28/2019 22:10	7	8	8	31.12	4.4	3.9	24.1
9/28/2019 22:20	7	8	8	31.94	4.6	3.9	0.4
9/28/2019 22:30	7	8	8	31.57	0.8	0.8	0.4
9/28/2019 22:40	7	8	8	30.87	0.7	0.8	0.3
9/28/2019 22:50	7	8	8	30.35	0.8	0.8	0.3
9/28/2019 23:00	7	8	8	30.02	0.7	0.8	0.5
9/28/2019 23:10	7	8	8	29.62	0.9	0.9	24.8
9/28/2019 23:20	7	8	8	28.98	3.1	3	25.1
9/28/2019 23:30	7	8	8	28.67	4.4	3.8	25
9/28/2019 23:40	7	8	8	29.41	5	3.8	25
9/28/2019 23:50	7	8	8	29.99	4.7	3.8	24.7
9/29/2019 0:00	7	8	8	30.9	4.6	3.9	24.3
9/29/2019 0:10	7	8	8	32.03	4.7	3.8	0.4
9/29/2019 0:20	7	8	8	30.66	0.8	0.8	0.4
9/29/2019 0:30	7	8	8	29.53	0.9	0.9	2.5
9/29/2019 0:40	7	8	8	29.07	3	3	25.1
9/29/2019 0:50	7	8	8	29.04	3.2	3.1	25.1
9/29/2019 1:00	7	8	8	29.1	3.2	3.2	25.1
9/29/2019 1:10	7	8	8	29.04	3.3	3.2	25.1
9/29/2019 1:20	7	8	8	29.04	3.3	3.3	25.1
9/29/2019 1:30	7	8	8	28.83	3.4	3.3	25.1
9/29/2019 1:40	7	8	8	28.83	4.7	3.8	25.1
9/29/2019 1:50	7	8	8	29.04	4.3	3.9	25
9/29/2019 2:00	7	8	8	29.25	4.7	3.8	25
9/29/2019 2:10	7	8	8	29.83	4.8	3.8	24.8
9/29/2019 2:20	7	8	8	30.41	4.4	3.8	24.5
9/29/2019 2:30	7	8	8	31.45	4.5	3.8	22.4
9/29/2019 2:40	7	8	8	31.27	0.9	0.8	0.4
9/29/2019 2:50	7	8	8	29.68	0.8	0.8	0.4
9/29/2019 3:00	7	8	8	28.34	3.4	3.4	25
9/29/2019 3:10	7	8	8	29.32	4.7	3.9	25.1

9/29/2019 3:20	7	8	8	29.99	4.8	3.8	24.9
9/29/2019 3:30	7	8	8	30.29	4.8	3.8	24.6
9/29/2019 3:40	7	8	8	30.78	4.6	3.9	24.3
9/29/2019 3:50	7	8	8	31.67	4.6	3.9	0.5
9/29/2019 4:00	7	8	8	31.09	0.8	0.8	0.4
9/29/2019 4:10	7	8	8	29.68	0.8	0.8	0.4
9/29/2019 4:20	7	8	8	28.34	3.4	3.3	25
9/29/2019 4:30	7	8	8	29.25	4.9	3.8	25
9/29/2019 4:40	7	8	8	30.11	4.7	3.8	24.7
9/29/2019 4:50	7	8	8	30.63	4.8	3.8	24.6
9/29/2019 5:00	7	8	8	30.69	4.7	3.7	24.6
9/29/2019 5:10	7	8	8	30.84	4.7	3.9	24.5
9/29/2019 5:20	7	8	8	30.84	4.7	3.9	24.5
9/29/2019 5:30	7	8	8	30.9	4.8	3.8	24.3
9/29/2019 5:40	7	8	8	31.15	4.7	3.9	24
9/29/2019 5:50	7	8	8	31.7	4.8	3.8	0.5
9/29/2019 6:00	7	8	8	31.97	0.8	0.8	0.4
9/29/2019 6:10	7	8	8	31.12	0.6	0.8	0.3
9/29/2019 6:20	7	8	8	30.57	0.8	0.8	0.4
9/29/2019 6:30	7	8	8	29.89	0.8	0.8	0.4
9/29/2019 6:40	7	8	8	29.25	1.4	1.3	24.9
9/29/2019 6:50	7	8	8	28.8	3.4	3.4	25
9/29/2019 7:00	7	8	8	28.89	4.6	3.8	25
9/29/2019 7:10	7	8	8	29.22	4.9	3.9	25
9/29/2019 7:20	7	8	8	29.65	4.4	3.9	24.9
9/29/2019 7:30	7	8	8	30.05	4.8	3.9	24.7
9/29/2019 7:40	7	8	8	30.41	4.9	3.8	24.7
9/29/2019 7:50	7	8	8	30.66	4.4	3.8	24.6
9/29/2019 8:00	7	8	8	30.81	4.8	3.8	24.5
9/29/2019 8:10	7	8	8	31.15	4.3	3.9	24.1
9/29/2019 8:20	7	8	8	31.45	4.6	3.9	22.9
9/29/2019 8:30	7	8	8	31.76	4.6	3.9	0.5
9/29/2019 8:40	7	8	8	32.03	0.7	0.8	0.4
9/29/2019 8:50	7	8	8	31.76	0.8	0.8	0.4
9/29/2019 9:00	7	8	8	31.42	0.8	0.8	0.4
9/29/2019 9:10	7	8	8	31.39	0.8	0.8	0.4
9/29/2019 9:20	7	8	8	31.42	0.9	0.8	0.4
9/29/2019 9:30	7	8	8	31.21	0.8	0.8	0.4
9/29/2019 9:40	7	8	8	30.69	0.9	0.8	0.4
9/29/2019 9:50	7	8	8	30.41	0.7	0.8	0.4
9/29/2019 10:00	7	8	8	29.74	0.8	0.8	2.6
9/29/2019 10:10	7	8	8	29.16	1.8	1.8	25
9/29/2019 10:20	7	8	8	28.58	4.7	3.8	25
9/29/2019 10:30	7	8	8	29.1	4.6	3.8	25
9/29/2019 10:40	7	8	8	29.47	4.8	3.8	24.9
9/29/2019 10:50	7	8	8	29.86	4.7	3.9	24.8
9/29/2019 11:00	7	8	8	30.32	4.8	3.8	24.7

9/29/2019 11:10	7	8	8	30.78	4.7	3.8	24.4
9/29/2019 11:20	7	8	8	31.15	4.3	3.9	23.7
9/29/2019 11:30	7	8	8	31.67	4.5	3.9	0.5
9/29/2019 11:40	7	8	8	32.12	1	0.8	0.4
9/29/2019 11:50	7	8	8	31.63	0.7	0.9	0.4
9/29/2019 12:00	7	8	8	31.36	0.9	0.8	0.4
9/29/2019 12:10	7	8	8	31.15	0.9	0.9	0.4
9/29/2019 12:20	7	8	8	30.9	0.7	0.8	0.4
9/29/2019 12:30	7	8	8	30.81	0.7	0.9	0.3
9/29/2019 12:40	7	8	8	30.44	0.8	0.8	0.4
9/29/2019 12:50	7	8	8	29.96	0.8	0.7	0.5
9/29/2019 13:00	7	8	8	29.16	1.7	1.7	24.9
9/29/2019 13:10	7	8	8	28.55	4.7	3.8	25.1
9/29/2019 13:20	7	8	8	29.41	4.8	3.8	24.9
9/29/2019 13:30	7	8	8	30.02	4.6	3.8	24.7
9/29/2019 13:40	7	8	8	30.66	4.6	3.8	24.5
9/29/2019 13:50	7	8	8	30.96	4.7	3.8	24.3
9/29/2019 14:00	7	8	8	31.27	4.7	3.9	23.6
9/29/2019 14:10	7	8	8	31.85	4.8	3.8	0.4
9/29/2019 14:20	7	8	8	31.48	0.9	0.8	0.4
9/29/2019 14:30	7	8	8	30.44	0.8	0.8	0.4
9/29/2019 14:40	7	8	8	29.35	1	0.9	24.8
9/29/2019 14:50	7	8	8	28.34	4.6	3.8	25
9/29/2019 15:00	7	8	8	29.5	4.7	3.8	24.9
9/29/2019 15:10	7	8	8	30.35	4.6	3.9	24.6
9/29/2019 15:20	7	8	8	31.18	4.7	3.8	23.9
9/29/2019 15:30	7	8	8	31.79	4.9	3.9	0.5
9/29/2019 15:40	7	8	8	31.63	0.8	0.8	0.4
9/29/2019 15:50	7	8	8	30.47	0.9	0.8	0.4
9/29/2019 16:00	7	8	8	29.32	0.9	0.9	24.8
9/29/2019 16:10	7	8	8	28.46	4.6	3.8	25
9/29/2019 16:20	7	8	8	29.74	4.8	3.8	24.8
9/29/2019 16:30	7	7	8	31.12	4.7	3.9	23.8
9/29/2019 16:40	7	8	8	31.88	4.7	3.8	0.5
9/29/2019 16:50	7	8	8	31.42	0.8	0.8	0.4
9/29/2019 17:00	7	8	8	31.33	0.7	0.8	0.4
9/29/2019 17:10	7	8	8	31.21	0.8	0.8	0.4
9/29/2019 17:20	7	8	8	30.87	0.7	0.8	0.4
9/29/2019 17:30	7	8	8	30.51	0.9	0.8	0.4
9/29/2019 17:40	7	8	8	30.14	0.5	0.8	0.4
9/29/2019 17:50	7	8	8	29.71	1	0.8	5.4
9/29/2019 18:00	7	8	8	29.32	1.3	1.5	24.9
9/29/2019 18:10	7	8	8	28.77	3.4	3.2	25.1
9/29/2019 18:20	7	8	8	28.98	4.8	3.8	25.1
9/29/2019 18:30	7	8	8	29.32	4.8	3.8	25
9/29/2019 18:40	7	8	8	29.68	4.7	3.9	24.9
9/29/2019 18:50	7	8	8	29.96	4.7	3.8	24.7

9/29/2019 19:00	7	8	8	30.29	4.8	3.9	24.7
9/29/2019 19:10	7	8	8	30.69	4.9	3.9	24.5
9/29/2019 19:20	7	8	8	31.42	4.6	3.8	22.7
9/29/2019 19:30	7	8	8	32.09	3	1.9	0.4
9/29/2019 19:40	7	8	8	31.21	0.8	0.8	0.4
9/29/2019 19:50	7	8	8	30.38	0.8	0.8	0.4
9/29/2019 20:00	7	8	8	29.44	0.9	0.9	24.8
9/29/2019 20:10	7	8	8	28.37	4.6	3.9	25.1
9/29/2019 20:20	7	8	8	29.25	4.6	3.9	24.9
9/29/2019 20:30	7	7	8	30.32	4.6	3.8	24.6
9/29/2019 20:40	7	8	8	31.54	4.6	3.9	22.4
9/29/2019 20:50	7	8	8	31.73	0.8	0.8	0.4
9/29/2019 21:00	7	8	8	30.81	0.8	0.8	0.4
9/29/2019 21:10	7	8	8	30.08	0.6	0.8	0.4
9/29/2019 21:20	7	8	8	29.44	0.9	1	24.8
9/29/2019 21:30	7	8	8	29.01	3.1	3.1	25.1
9/29/2019 21:40	7	8	8	28.74	4.6	3.8	25.1
9/29/2019 21:50	7	8	8	28.92	4.6	3.9	25.1
9/29/2019 22:00	7	8	8	29.25	4.4	3.8	25
9/29/2019 22:10	7	8	8	29.96	4.7	3.8	24.8
9/29/2019 22:20	7	8	8	30.35	4.7	3.9	24.6
9/29/2019 22:30	7	8	8	31.05	4.9	3.8	24.3
9/29/2019 22:40	7	8	8	31.54	4.8	3.8	20.1
9/29/2019 22:50	7	8	8	31.97	4.6	3.8	0.5
9/29/2019 23:00	7	8	8	31.97	0.8	0.8	0.4
9/29/2019 23:10	7	8	8	31.79	0.8	0.8	0.4
9/29/2019 23:20	7	8	8	31.21	0.9	0.8	0.4
9/29/2019 23:30	7	8	8	30.35	0.8	0.7	0.4
9/29/2019 23:40	7	8	8	29.13	1.1	1.1	24.9
9/29/2019 23:50	7	8	8	28.58	4.5	3.8	25
9/30/2019 0:00	7	8	8	29.47	4.7	3.9	24.9
9/30/2019 0:10	7	8	8	30.23	4.7	3.8	24.7
9/30/2019 0:20	7	8	8	30.41	4.5	3.8	24.6
9/30/2019 0:30	7	8	8	30.78	4.8	3.8	24.4
9/30/2019 0:40	7	8	8	31.27	4.7	3.8	23.6
9/30/2019 0:50	7	7	8	31.97	4.8	3.8	0.5
9/30/2019 1:00	7	7	8	31.73	0.8	0.7	0.4
9/30/2019 1:10	7	8	8	30.84	0.7	0.8	0.5
9/30/2019 1:20	7	8	8	29.83	0.5	0.8	0.4
9/30/2019 1:30	7	8	8	28.86	2.7	2.7	25
9/30/2019 1:40	7	8	8	28.8	4.9	3.9	25
9/30/2019 1:50	7	8	8	29.5	4.5	3.8	25
9/30/2019 2:00	7	8	8	30.02	4.8	3.8	24.9
9/30/2019 2:10	7	8	8	30.29	4.8	3.8	24.8
9/30/2019 2:20	7	8	8	30.63	4.4	3.8	24.7
9/30/2019 2:30	7	8	8	30.84	4.7	3.8	24.5
9/30/2019 2:40	7	8	8	30.96	4.7	3.9	24.3

9/30/2019 2:50	7	8	8	31.33	4.6	3.8	23.2
9/30/2019 3:00	7	8	8	31.88	4.7	3.8	0.5
9/30/2019 3:10	7	8	8	31.54	0.9	0.8	0.4
9/30/2019 3:20	7	8	8	30.54	0.8	0.8	0.4
9/30/2019 3:30	7	7	8	29.74	0.8	0.8	2
9/30/2019 3:40	7	7	8	28.74	3.3	3.1	25.1
9/30/2019 3:50	7	8	8	28.98	4.7	3.8	25
9/30/2019 4:00	7	8	8	29.96	4.7	3.8	24.8
9/30/2019 4:10	7	8	8	30.87	4.6	3.8	24.4
9/30/2019 4:20	7	8	8	31.94	4.6	3.8	0.5
9/30/2019 4:30	7	8	8	31.36	0.9	0.8	0.4
9/30/2019 4:40	7	8	8	30.35	0.7	0.8	0.4
9/30/2019 4:50	7	8	8	29.86	0.9	0.9	2.7
9/30/2019 5:00	7	8	8	29.71	1	0.8	24.9
9/30/2019 5:10	7	8	8	29.25	1.9	1.9	25
9/30/2019 5:20	7	8	8	28.77	3.3	3.2	25.1
9/30/2019 5:30	7	8	8	28.92	4.4	3.9	25.1
9/30/2019 5:40	7	8	8	29.32	4.7	3.8	25
9/30/2019 5:50	7	8	8	29.56	4.8	3.8	24.9
9/30/2019 6:00	7	8	8	29.77	4.9	3.8	24.9
9/30/2019 6:10	7	7	8	30.08	4.6	3.9	24.8
9/30/2019 6:20	7	7	8	30.17	4.5	3.8	24.8
9/30/2019 6:30	7	8	8	30.29	4.6	3.8	24.7
9/30/2019 6:40	7	7	8	30.54	4.6	3.8	24.7
9/30/2019 6:50	7	7	8	30.87	4.7	3.8	24.3
9/30/2019 7:00	7	8	8	31.6	4.6	3.8	0.6
9/30/2019 7:10	7	8	8	31.73	0.8	0.8	0.4
9/30/2019 7:20	7	8	8	30.57	0.7	0.8	0.4
9/30/2019 7:30	7	7	8	29.35	1	0.9	24.8
9/30/2019 7:40	7	7	8	28.49	4.8	3.7	25
9/30/2019 7:50	7	8	8	29.68	4.5	3.8	24.8
9/30/2019 8:00	7	8	8	31.02	4.5	3.9	23.8
9/30/2019 8:10	7	7	8	31.39	0.9	0.8	0.4
9/30/2019 8:20	7	8	8	30.2	0.8	0.8	0.4
9/30/2019 8:30	7	7	8	28.98	1.4	1.6	24.9
9/30/2019 8:40	7	7	8	28.58	4.4	3.8	25.2
9/30/2019 8:50	7	8	8	29.04	4.8	3.8	25.1
9/30/2019 9:00	7	7	8	29.32	4.6	3.8	25
9/30/2019 9:10	7	7	8	29.77	4.8	3.8	24.9
9/30/2019 9:20	7	7	8	30.2	4.6	3.8	24.7
9/30/2019 9:30	7	7	8	30.63	4.8	3.8	24.7
9/30/2019 9:40	7	7	8	30.96	4.7	3.8	24.3
9/30/2019 9:50	7	7	8	31.27	4.7	3.9	23.6
9/30/2019 10:00	7	7	8	31.94	4.9	3.8	0.5
9/30/2019 10:10	7	7	8	31.57	0.8	0.8	0.4
9/30/2019 10:20	7	7	8	30.84	0.8	0.8	0.4
9/30/2019 10:30	7	7	8	30.26	0.8	0.8	0.4

9/30/2019 10:40	7	8	8	29.65	0.9	0.8	5.6
9/30/2019 10:50	7	7	8	29.35	1.9	1.7	25
9/30/2019 11:00	7	7	8	29.07	2.8	2.9	25
9/30/2019 11:10	7	7	8	28.55	4.6	3.7	25.1
9/30/2019 11:20	7	7	8	29.16	4.6	3.8	25
9/30/2019 11:30	7	7	8	29.59	4.6	3.8	24.9
9/30/2019 11:40	7	8	8	29.86	4.8	3.8	24.8
9/30/2019 11:50	7	7	8	30.2	4.8	3.8	24.8
9/30/2019 12:00	7	7	8	30.32	4.7	3.8	24.7
9/30/2019 12:10	7	7	8	30.44	5	3.9	24.6
9/30/2019 12:20	7	7	8	30.78	4.7	3.8	24.5
9/30/2019 12:30	7	8	8	31.12	4.6	3.8	24.1
9/30/2019 12:40	7	8	8	31.57	4.6	3.9	9.2
9/30/2019 12:50	7	8	8	31.88	5	3.8	0.5
9/30/2019 13:00	7	8	8	32.09	1.1	0.8	0.4
9/30/2019 13:10	7	8	8	31.94	0.8	0.8	0.4
9/30/2019 13:20	7	8	8	31.7	0.8	0.8	0.4
9/30/2019 13:30	7	8	8	31.57	0.9	0.8	0.4
9/30/2019 13:40	7	7	8	31.09	0.9	0.8	0.4
9/30/2019 13:50	7	8	8	30.66	0.8	0.7	0.4
9/30/2019 14:00	7	7	8	30.2	0.8	0.8	0.4
9/30/2019 14:10	7	8	8	29.65	0.9	0.8	2.4
9/30/2019 14:20	7	7	8	29.13	2.2	2.3	25
9/30/2019 14:30	7	8	8	28.61	3.4	3.3	25.1
9/30/2019 14:40	7	7	8	28.95	4.7	3.8	25.1
9/30/2019 14:50	7	7	8	29.35	4.6	3.8	25.1
9/30/2019 15:00	7	7	8	29.44	4.6	3.9	25
9/30/2019 15:10	7	7	8	29.65	4.6	3.9	24.9
9/30/2019 15:20	7	7	8	30.02	4.4	3.9	24.8
9/30/2019 15:30	7	7	8	30.41	4.5	3.8	24.7
9/30/2019 15:40	7	7	8	30.66	4.9	3.9	24.6
9/30/2019 15:50	7	7	8	30.81	4.6	3.8	24.5
9/30/2019 16:00	7	7	8	30.99	4.6	3.9	24.3
9/30/2019 16:10	7	8	8	31.39	4.5	3.8	23.1
9/30/2019 16:20	7	8	8	31.88	4.4	3.8	0.4
9/30/2019 16:30	7	7	8	31.57	0.7	0.8	0.4
9/30/2019 16:40	7	7	8	30.9	0.8	0.8	0.4
9/30/2019 16:50	7	7	8	30.2	0.9	0.8	0.4
9/30/2019 17:00	7	7	8	29.8	1	0.8	3.3
9/30/2019 17:10	7	8	8	29.77	0.9	0.9	24.9
9/30/2019 17:20	7	8	8	29.56	0.9	1	24.9
9/30/2019 17:30	7	8	8	29.04	2.9	2.8	25
9/30/2019 17:40	7	7	8	28.52	4.8	3.8	25.1
9/30/2019 17:50	7	7	8	29.1	4.7	3.8	25.1
9/30/2019 18:00	7	8	8	29.8	4.7	3.8	24.9
9/30/2019 18:10	7	7	8	30.63	4.7	3.8	24.5
9/30/2019 18:20	7	8	8	31.3	4.6	3.8	23.3

9/30/2019 18:30	7	8	8	31.67	4.8	3.9	0.5
9/30/2019 18:40	7	8	8	32.03	4.6	3.7	0.4
9/30/2019 18:50	7	7	8	31.79	0.8	0.8	0.4
9/30/2019 19:00	7	8	8	31.51	0.8	0.7	0.4
9/30/2019 19:10	7	8	8	31.36	0.8	0.8	0.4
9/30/2019 19:20	7	8	8	30.96	0.7	0.7	0.4
9/30/2019 19:30	7	7	8	30.23	0.8	0.8	0.4
9/30/2019 19:40	7	7	8	29.44	0.9	0.9	24.8
9/30/2019 19:50	7	8	8	28.58	3.5	3.2	25.2
9/30/2019 20:00	7	8	8	28.89	4.7	3.9	25.1
9/30/2019 20:10	7	8	8	29.53	4.8	3.9	25
9/30/2019 20:20	7	7	8	29.83	4.8	3.9	24.9
9/30/2019 20:30	7	8	8	30.05	4.5	3.8	24.9
9/30/2019 20:40	7	8	8	30.02	4.6	3.8	24.9
9/30/2019 20:50	7	8	8	30.26	4.6	3.9	24.7
9/30/2019 21:00	7	7	8	30.51	4.9	3.8	24.6
9/30/2019 21:10	7	7	8	30.93	4.8	3.8	24.3
9/30/2019 21:20	7	7	8	31.48	4.8	3.8	22.9
9/30/2019 21:30	7	8	8	32.09	4.9	3.7	0.4
9/30/2019 21:40	7	8	8	31.39	0.7	0.8	0.4
9/30/2019 21:50	7	8	8	30.66	0.7	0.8	0.4
9/30/2019 22:00	7	8	8	29.89	0.8	0.8	0.4
9/30/2019 22:10	7	8	8	29.07	2.4	2.4	24.9
9/30/2019 22:20	7	7	8	28.7	4.7	3.8	25.1
9/30/2019 22:30	7	8	8	29.07	4.7	3.8	25.1
9/30/2019 22:40	7	7	8	29.16	4.6	3.8	25
9/30/2019 22:50	7	7	8	29.5	4.7	3.8	25
9/30/2019 23:00	7	7	8	29.56	4.5	3.8	24.9
9/30/2019 23:10	7	8	8	29.77	4.7	3.8	24.9
9/30/2019 23:20	7	8	8	30.08	4.4	3.8	24.8
9/30/2019 23:30	7	7	8	30.51	4.5	3.8	24.6
9/30/2019 23:40	7	8	8	30.78	4.5	3.8	24.4
9/30/2019 23:50	7	7	8	31.33	4.8	3.8	23.3
10/1/2019 0:00	7	7	8	31.67	4.5	3.8	0.5
10/1/2019 0:10	7	7	8	31.76	4.6	3.8	0.5
10/1/2019 0:20	7	7	8	31.97	4.7	3.8	0.4
10/1/2019 0:30	7	7	8	32.03	1	0.8	0.4
10/1/2019 0:40	7	8	8	31.51	1	0.8	0.4
10/1/2019 0:50	7	8	8	30.78	0.8	0.8	0.4
10/1/2019 1:00	7	7	8	29.8	0.7	0.8	0.3
10/1/2019 1:10	7	7	8	29.01	2.4	2.4	25
10/1/2019 1:20	7	7	8	28.58	4.7	3.8	25
10/1/2019 1:30	7	7	8	29.47	4.8	3.8	25
10/1/2019 1:40	7	7	8	30.44	4.7	3.7	24.5
10/1/2019 1:50	7	8	8	31.27	4.6	3.8	23.5
10/1/2019 2:00	7	7	8	31.97	0.8	0.8	0.4
10/1/2019 2:10	7	7	8	31.27	0.7	0.8	0.4

10/1/2019 2:20	7	7	8	30.17	0.8	0.8	0.4
10/1/2019 2:30	7	8	8	29.38	0.9	0.9	24.9
10/1/2019 2:40	7	7	8	28.4	3.3	3.2	25
10/1/2019 2:50	7	7	8	29.13	4.7	3.8	25.1
10/1/2019 3:00	7	8	8	29.25	4.6	3.8	25.1
10/1/2019 3:10	7	8	8	29.5	4.8	3.8	25
10/1/2019 3:20	7	8	8	29.59	4.6	3.7	25
10/1/2019 3:30	7	8	8	29.59	4.5	3.8	24.9
10/1/2019 3:40	7	8	8	29.8	4.7	3.7	24.9
10/1/2019 3:50	7	7	8	30.23	4.9	3.8	24.7
10/1/2019 4:00	7	8	8	30.75	4.5	3.8	24.5
10/1/2019 4:10	7	7	8	31.21	4.7	3.7	23.7
10/1/2019 4:20	7	7	8	31.48	5	3.8	2.2
10/1/2019 4:30	7	7	8	31.76	4.9	3.8	0.5
10/1/2019 4:40	7	7	8	32.09	4.2	2.7	0.4
10/1/2019 4:50	7	7	8	31.85	0.7	0.8	0.4
10/1/2019 5:00	7	8	8	31.45	0.7	0.8	0.4
10/1/2019 5:10	7	8	8	30.78	0.9	0.8	0.4
10/1/2019 5:20	7	8	8	30.2	0.8	0.8	0.4
10/1/2019 5:30	7	7	8	29.44	0.9	0.9	24.8
10/1/2019 5:40	7	7	8	29.07	2.7	2.8	25
10/1/2019 5:50	7	7	8	28.7	3.6	3.3	25.1
10/1/2019 6:00	7	7	8	28.92	4.6	3.7	25.1
10/1/2019 6:10	7	8	8	29.32	4.7	3.8	25
10/1/2019 6:20	7	8	8	29.53	4.6	3.8	25
10/1/2019 6:30	7	7	8	30.05	4.8	3.8	24.8
10/1/2019 6:40	7	7	8	30.23	4.5	3.8	24.7
10/1/2019 6:50	7	7	8	30.51	4.7	3.8	24.7
10/1/2019 7:00	7	8	8	30.78	4.5	3.8	24.5
10/1/2019 7:10	7	7	8	30.78	4.7	3.8	24.3
10/1/2019 7:20	7	7	8	31.27	4.9	3.8	23.9
10/1/2019 7:30	7	7	8	31.54	4.7	3.8	0.7
10/1/2019 7:40	7	7	8	32.03	4.6	3.7	0.4
10/1/2019 7:50	7	7	8	31.36	0.7	0.8	0.4
10/1/2019 8:00	7	7	8	30.57	0.8	0.7	0.4
10/1/2019 8:10	7	7	8	29.41	0.9	0.8	3.2
10/1/2019 8:20	7	7	8	28.4	3.4	3.4	25
10/1/2019 8:30	7	7	8	29.1	4.5	3.8	25
10/1/2019 8:40	7	7	8	30.11	4.5	3.8	24.7
10/1/2019 8:50	7	7	8	31.02	4.8	3.8	24.1
10/1/2019 9:00	7	7	8	31.85	4.6	3.9	0.5
10/1/2019 9:10	7	7	8	31.63	0.9	0.8	0.4
10/1/2019 9:20	7	7	8	30.81	0.8	0.9	0.4
10/1/2019 9:30	7	7	8	30.11	0.8	0.8	0.4
10/1/2019 9:40	7	7	8	29.59	0.9	0.9	24.8
10/1/2019 9:50	7	7	8	29.01	2.8	2.8	25
10/1/2019 10:00	7	7	8	28.67	4.5	3.8	25.1

10/1/2019 10:10	7	7	8	29.07	4.4	3.8	25
10/1/2019 10:20	7	8	8	29.44	4.6	3.8	24.9
10/1/2019 10:30	7	7	8	30.05	4.6	3.8	24.7
10/1/2019 10:40	7	7	8	30.63	4.6	3.9	24.5
10/1/2019 10:50	7	7	8	31.42	4.9	3.8	22.8
10/1/2019 11:00	7	7	8	32.09	2.4	1.5	0.4
10/1/2019 11:10	7	7	8	31.6	0.9	0.8	0.4
10/1/2019 11:20	7	7	8	31.15	0.8	0.7	0.4
10/1/2019 11:30	7	7	8	30.54	0.5	0.8	0.4
10/1/2019 11:40	7	7	8	29.89	0.6	0.8	0.3
10/1/2019 11:50	7	7	8	29.01	2.2	2.2	24.9
10/1/2019 12:00	7	7	8	28.61	4.7	3.9	25
10/1/2019 12:10	7	8	8	29.19	4.8	3.9	24.9
10/1/2019 12:20	7	8	8	29.77	4.8	3.8	24.9
10/1/2019 12:30	7	7	8	29.96	4.5	3.9	24.8
10/1/2019 12:40	7	7	8	30.14	4.8	3.8	24.8
10/1/2019 12:50	7	7	8	30.11	4.9	3.8	24.8
10/1/2019 13:00	7	7	8	30.26	4.7	3.8	24.7
10/1/2019 13:10	7	7	8	30.57	4.7	3.9	24.6
10/1/2019 13:20	7	7	8	31.02	4.7	3.8	24.2
10/1/2019 13:30	7	7	8	31.57	4.9	3.8	1
10/1/2019 13:40	7	7	8	31.94	0.8	0.8	0.4
10/1/2019 13:50	7	8	8	30.87	0.8	0.8	0.4
10/1/2019 14:00	7	7	8	30.08	0.7	0.8	0.3
10/1/2019 14:10	7	7	8	29.89	0.9	0.8	2.5
10/1/2019 14:20	7	7	8	29.62	1	0.9	24.8
10/1/2019 14:30	7	7	8	29.59	1.1	1.2	24.9
10/1/2019 14:40	7	7	8	29.56	1.2	1.3	24.9
10/1/2019 14:50	7	7	8	29.22	2.5	2.5	25
10/1/2019 15:00	7	7	8	29.13	3	3	25
10/1/2019 15:10	7	7	8	28.89	3.4	3.3	25.1
10/1/2019 15:20	7	7	8	28.83	4.5	3.8	25.1
10/1/2019 15:30	7	7	8	29.04	4.7	3.8	25.1
10/1/2019 15:40	7	7	8	29.38	4.7	3.9	25
10/1/2019 15:50	7	7	8	29.62	4.6	3.8	24.9
10/1/2019 16:00	7	7	8	29.71	4.7	3.8	24.8
10/1/2019 16:10	7	7	8	30.08	4.4	3.8	24.8
10/1/2019 16:20	7	7	8	30.26	4.8	3.8	24.7
10/1/2019 16:30	7	7	8	30.54	4.7	3.7	24.6
10/1/2019 16:40	7	7	8	30.96	4.5	3.8	24.3
10/1/2019 16:50	7	7	8	31.57	4.7	3.8	0.5
10/1/2019 17:00	7	7	8	32.03	0.8	0.8	0.4
10/1/2019 17:10	7	7	8	31.3	0.8	0.8	0.4
10/1/2019 17:20	7	7	8	30.35	0.7	0.8	0.4
10/1/2019 17:30	7	7	8	29.56	0.9	0.8	3.5
10/1/2019 17:40	7	7	8	28.89	3	2.9	25
10/1/2019 17:50	7	7	8	28.77	4.7	3.9	25.1

10/1/2019 18:00	7	7	8	29.13	4.6	3.8	25
10/1/2019 18:10	7	7	8	29.59	4.7	3.9	24.9
10/1/2019 18:20	7	7	8	29.89	4.7	3.8	24.9
10/1/2019 18:30	7	7	8	30.02	4.6	3.8	24.9
10/1/2019 18:40	7	7	8	30.2	4.8	3.8	24.7
10/1/2019 18:50	7	7	8	30.23	4.8	3.8	24.7
10/1/2019 19:00	7	7	8	30.35	4.8	3.8	24.7
10/1/2019 19:10	7	7	8	30.47	4.6	3.8	24.6
10/1/2019 19:20	7	7	8	30.75	4.6	3.9	24.4
10/1/2019 19:30	7	7	8	31.21	4.9	3.8	23.6
10/1/2019 19:40	7	7	8	31.67	4.5	3.9	0.5
10/1/2019 19:50	7	7	8	31.97	4.9	3.8	0.4
10/1/2019 20:00	7	7	8	31.82	0.8	0.8	0.4
10/1/2019 20:10	7	7	8	31.63	0.8	0.8	0.4
10/1/2019 20:20	7	7	8	31.33	0.8	0.8	0.3
10/1/2019 20:30	7	7	8	31.36	0.7	0.8	0.4
10/1/2019 20:40	7	7	8	30.99	0.9	0.8	0.4
10/1/2019 20:50	7	7	8	30.54	0.8	0.8	0.3
10/1/2019 21:00	7	7	8	29.96	0.7	0.8	0.3
10/1/2019 21:10	7	7	8	29.5	0.9	1	24.9
10/1/2019 21:20	7	7	8	29.16	2.4	2.3	25
10/1/2019 21:30	7	7	8	28.95	3.2	3.3	25.1
10/1/2019 21:40	7	7	8	28.74	4.6	3.8	25.1
10/1/2019 21:50	7	7	8	28.95	4.7	3.8	25.1
10/1/2019 22:00	7	7	8	29.38	4.5	3.8	24.9
10/1/2019 22:10	7	7	8	29.68	4.6	3.8	24.9
10/1/2019 22:20	7	7	8	30.05	4.7	3.8	24.8
10/1/2019 22:30	7	7	8	30.69	4.7	3.8	24.5
10/1/2019 22:40	7	7	8	31.45	4.4	3.8	22.9
10/1/2019 22:50	7	7	8	31.97	0.8	0.8	0.4
10/1/2019 23:00	7	7	8	30.99	0.7	0.8	0.4
10/1/2019 23:10	7	7	8	29.59	0.6	0.7	0.3
10/1/2019 23:20	7	7	8	28.22	3.5	3.3	25
10/1/2019 23:30	7	7	8	29.19	4.7	3.8	24.9
10/1/2019 23:40	7	7	8	30.26	4.9	3.8	24.7
10/1/2019 23:50	7	7	8	31.3	4.8	3.8	23.3
10/2/2019 0:00	7	7	8	31.76	0.9	0.8	0.4
10/2/2019 0:10	7	7	8	30.78	0.9	0.8	0.4
10/2/2019 0:20	7	7	8	30.02	0.8	0.8	0.3
10/2/2019 0:30	7	7	8	29.5	0.9	0.9	24.8
10/2/2019 0:40	7	7	8	28.83	3.2	3.2	25
10/2/2019 0:50	7	7	8	28.74	4.8	3.8	25.1
10/2/2019 1:00	7	7	8	29.32	4.8	3.8	25
10/2/2019 1:10	7	7	8	30.05	4.7	3.9	24.8
10/2/2019 1:20	7	7	8	30.72	4.5	3.8	24.4
10/2/2019 1:30	7	7	8	31.48	4.6	3.9	22.8
10/2/2019 1:40	7	7	8	31.63	0.8	0.8	0.3

10/2/2019 1:50	7	7	8	30.17	0.9	0.8	0.4
10/2/2019 2:00	7	7	8	28.77	2.1	2.2	24.9
10/2/2019 2:10	7	7	8	28.92	4.6	3.8	25
10/2/2019 2:20	7	7	8	29.89	4.7	3.9	24.9
10/2/2019 2:30	7	7	8	30.29	4.7	3.8	24.7
10/2/2019 2:40	7	7	8	30.75	4.8	3.8	24.5
10/2/2019 2:50	7	7	8	31.3	4.5	3.8	23.4
10/2/2019 3:00	7	7	8	31.63	4.8	3.8	0.5
10/2/2019 3:10	7	7	8	31.76	4.9	3.8	0.5
10/2/2019 3:20	7	7	8	31.82	4.8	3.9	0.5
10/2/2019 3:30	7	7	8	32.03	4.7	3.7	0.4
10/2/2019 3:40	7	7	8	31.88	0.9	0.8	0.4
10/2/2019 3:50	7	7	8	31.33	0.9	0.8	0.4
10/2/2019 4:00	7	7	8	30.35	0.7	0.8	0.3
10/2/2019 4:10	7	7	8	29.56	0.8	0.9	2.5
10/2/2019 4:20	7	7	8	28.67	3.2	3.2	25.1
10/2/2019 4:30	7	7	8	28.92	4.5	3.8	25
10/2/2019 4:40	7	7	8	29.53	4.6	3.8	24.9
10/2/2019 4:50	7	7	8	30.05	4.6	3.8	24.7
10/2/2019 5:00	7	7	8	30.51	4.6	3.8	24.6
10/2/2019 5:10	7	7	8	30.93	4.8	3.9	24.3
10/2/2019 5:20	7	7	8	31.18	4.9	3.8	23.5
10/2/2019 5:30	7	7	8	31.54	4.8	3.8	22.9
10/2/2019 5:40	7	7	8	31.79	4.7	3.8	0.4
10/2/2019 5:50	7	7	8	32.06	0.8	0.8	0.4
10/2/2019 6:00	7	7	8	31.42	0.8	0.8	0.3
10/2/2019 6:10	7	7	8	30.87	0.7	0.8	0.4
10/2/2019 6:20	7	7	8	30.32	0.7	0.8	0.4
10/2/2019 6:30	7	7	8	29.74	0.8	0.8	2.6
10/2/2019 6:40	7	7	8	29.56	0.8	0.9	24.9
10/2/2019 6:50	7	7	8	29.41	1.6	1.7	25
10/2/2019 7:00	7	7	8	29.32	2.7	2.6	25
10/2/2019 7:10	7	7	8	28.74	3.4	3.2	25.1
10/2/2019 7:20	7	7	8	28.92	4.6	3.9	25.1
10/2/2019 7:30	7	7	8	29.41	4.6	3.8	24.9
10/2/2019 7:40	7	7	8	30.05	4.5	4	24.7
10/2/2019 7:50	7	7	8	30.69	4.6	3.8	24.6
10/2/2019 8:00	7	7	8	31.02	4.6	3.8	24.2
10/2/2019 8:10	7	7	8	31.42	4.7	3.9	23.4
10/2/2019 8:20	7	7	8	31.82	4.8	3.8	0.5
10/2/2019 8:30	7	7	8	32.03	0.9	0.8	0.4
10/2/2019 8:40	7	7	8	31.57	0.8	0.8	0.4
10/2/2019 8:50	7	7	8	30.93	0.8	0.8	0.4
10/2/2019 9:00	7	7	8	30.38	0.9	0.8	0.4
10/2/2019 9:10	7	7	8	29.96	0.7	0.8	0.4
10/2/2019 9:20	7	7	8	29.25	1.5	1.5	24.9
10/2/2019 9:30	7	7	8	28.61	3.3	3.3	25.1

10/2/2019 9:40	7	7	8	28.92	4.8	3.8	25.1
10/2/2019 9:50	7	7	8	29.25	4.3	3.9	25
10/2/2019 10:00	7	7	8	29.65	4.7	3.8	24.9
10/2/2019 10:10	7	7	8	29.99	4.6	3.8	24.8
10/2/2019 10:20	7	7	8	30.2	4.7	3.8	24.7
10/2/2019 10:30	7	7	8	30.41	4.8	3.8	24.7
10/2/2019 10:40	7	7	8	30.63	4.7	3.8	24.6
10/2/2019 10:50	7	7	8	30.9	4.8	3.9	24.4
10/2/2019 11:00	7	7	8	31.33	4.8	3.8	23.6
10/2/2019 11:10	7	7	8	31.85	4.7	3.8	0.5
10/2/2019 11:20	7	7	8	31.45	0.7	0.8	0.4
10/2/2019 11:30	7	7	8	30.41	0.7	0.8	0.4
10/2/2019 11:40	7	7	8	29.53	0.9	0.9	3.4
10/2/2019 11:50	7	7	8	28.37	3.4	3.3	25
10/2/2019 12:00	7	7	8	29.19	4.9	3.9	24.9
10/2/2019 12:10	7	7	8	29.99	4.5	3.8	24.7
10/2/2019 12:20	7	7	8	30.93	4.7	3.8	24.3
10/2/2019 12:30	7	7	8	31.79	4.6	3.8	0.5
10/2/2019 12:40	7	7	8	31.39	0.8	0.8	0.4
10/2/2019 12:50	7	7	8	30.26	0.9	0.8	0.3
10/2/2019 13:00	7	7	8	29.59	0.9	0.9	3.6
10/2/2019 13:10	7	7	8	29.35	1.7	1.8	24.9
10/2/2019 13:20	7	7	8	29.1	2.8	2.8	25
10/2/2019 13:30	7	7	8	28.55	2.8	3.1	25.1
10/2/2019 13:40	7	7	8	28.98	4.6	3.8	25
10/2/2019 13:50	7	7	8	29.5	4.6	3.8	25
10/2/2019 14:00	7	7	8	30.02	4.8	3.8	24.8
10/2/2019 14:10	7	7	8	30.23	4.7	3.8	24.8
10/2/2019 14:20	7	7	8	30.41	4.7	3.8	24.6
10/2/2019 14:30	7	7	8	30.66	4.6	3.9	24.6
10/2/2019 14:40	7	7	8	30.75	4.6	3.8	24.5
10/2/2019 14:50	7	7	8	31.3	4.8	3.8	23.4
10/2/2019 15:00	7	7	8	31.94	4.7	3.8	0.4
10/2/2019 15:10	7	7	8	30.96	0.8	0.8	0.4
10/2/2019 15:20	7	7	8	29.68	0.7	0.8	0.4
10/2/2019 15:30	7	7	8	28.55	3.4	3.2	25
10/2/2019 15:40	7	7	8	29.07	4.6	3.8	24.9
10/2/2019 15:50	7	7	8	29.74	4.5	3.8	24.8
10/2/2019 16:00	7	7	8	30.41	4.8	3.9	24.6
10/2/2019 16:10	7	7	8	31.02	4.5	3.8	24.1
10/2/2019 16:20	7	7	8	31.85	4.5	3.8	0.5
10/2/2019 16:30	7	7	8	31.45	0.8	0.8	0.4
10/2/2019 16:40	7	7	8	30.63	1	0.7	0.4
10/2/2019 16:50	7	7	8	29.89	0.8	0.8	0.4
10/2/2019 17:00	7	7	8	29.04	1.6	1.8	24.8
10/2/2019 17:10	7	7	8	28.58	4.7	3.8	25.1
10/2/2019 17:20	7	7	8	29.5	4.9	3.8	24.9

10/2/2019 17:30	7	7	8	30.17	4.7	3.8	24.7
10/2/2019 17:40	7	7	8	30.84	4.7	3.8	24.4
10/2/2019 17:50	7	7	8	31.27	4.5	3.8	23.5
10/2/2019 18:00	7	7	8	31.67	4.7	3.8	0.5
10/2/2019 18:10	7	7	8	32.06	4.6	3.8	0.4
10/2/2019 18:20	7	7	8	32.03	0.7	0.8	0.4
10/2/2019 18:30	7	7	8	31.79	0.8	0.9	0.4
10/2/2019 18:40	7	7	8	31.21	0.8	0.7	0.4
10/2/2019 18:50	7	7	8	30.2	0.8	0.8	0.4
10/2/2019 19:00	7	7	8	29.13	0.9	0.9	24.8
10/2/2019 19:10	7	7	8	28.52	4.8	3.8	25
10/2/2019 19:20	7	7	8	29.56	4.7	3.8	24.8
10/2/2019 19:30	7	7	8	31.09	4.7	3.8	23.7
10/2/2019 19:40	7	7	8	31.85	0.8	0.8	0.4
10/2/2019 19:50	7	7	8	30.78	0.8	0.8	0.4
10/2/2019 20:00	7	7	8	30.23	0.7	0.8	0.4
10/2/2019 20:10	7	7	8	30.41	0.8	0.8	0.4
10/2/2019 20:20	7	7	8	30.11	0.7	0.8	0.4
10/2/2019 20:30	7	7	8	29.59	0.8	0.8	5.5
10/2/2019 20:40	7	7	8	29.07	2.7	2.6	25
10/2/2019 20:50	7	7	8	28.58	4.8	3.8	25.1
10/2/2019 21:00	7	7	8	29.04	4.6	3.8	25
10/2/2019 21:10	7	7	8	29.8	4.6	3.9	24.8
10/2/2019 21:20	7	7	8	30.41	4.8	3.9	24.5
10/2/2019 21:30	7	7	8	31.6	4.5	3.9	0.5
10/2/2019 21:40	7	7	8	31.79	0.8	0.9	0.4
10/2/2019 21:50	7	7	8	30.32	0.7	0.8	0.4
10/2/2019 22:00	7	7	8	28.92	1.2	1.2	24.9
10/2/2019 22:10	7	7	8	28.77	4.6	3.8	24.9
10/2/2019 22:20	7	7	8	29.83	4.8	3.8	24.7
10/2/2019 22:30	7	7	8	31.12	4.5	3.8	23.9
10/2/2019 22:40	7	7	8	32	4.9	3.5	0.4
10/2/2019 22:50	7	7	8	30.99	0.6	0.9	0.4
10/2/2019 23:00	7	7	8	30.17	0.6	0.8	0.4
10/2/2019 23:10	7	7	8	28.98	1.1	1.1	24.9
10/2/2019 23:20	7	7	8	28.58	4.8	3.9	25.1
10/2/2019 23:30	7	7	8	29.47	4.6	3.8	25
10/2/2019 23:40	7	7	8	30.05	4.7	3.9	24.7
10/2/2019 23:50	7	7	8	30.41	4.6	3.8	24.7
10/3/2019 0:00	7	7	8	30.72	4.7	3.9	24.5
10/3/2019 0:10	7	7	8	31.05	4.5	3.8	24
10/3/2019 0:20	7	7	8	31.54	4.5	3.8	0.6
10/3/2019 0:30	7	7	8	32.03	4.9	3.8	0.5
10/3/2019 0:40	7	7	8	31.6	1	0.8	0.4
10/3/2019 0:50	7	7	8	30.96	0.8	0.9	0.4
10/3/2019 1:00	7	7	8	30.17	0.5	0.8	0.4
10/3/2019 1:10	7	7	8	29.25	0.8	0.9	24.9

10/3/2019 1:20	7	7	8	28.46	1.5	2.5	25.2
10/3/2019 1:30	7	7	8	29.13	4.7	3.8	25
10/3/2019 1:40	7	7	8	29.68	4.6	3.7	24.9
10/3/2019 1:50	7	7	8	30.17	4.5	3.8	24.8
10/3/2019 2:00	7	7	8	30.54	4.5	3.8	24.6
10/3/2019 2:10	7	7	8	30.93	4.8	3.8	24.4
10/3/2019 2:20	7	7	8	31.79	4.7	3.9	0.5
10/3/2019 2:30	7	7	8	31.42	0.9	0.8	0.4
10/3/2019 2:40	7	7	8	29.89	0.6	0.8	0.4
10/3/2019 2:50	7	7	8	28.89	2.5	2.5	25.1
10/3/2019 3:00	7	7	8	28.83	4.6	3.8	25
10/3/2019 3:10	7	7	8	29.59	4.9	3.8	24.9
10/3/2019 3:20	7	7	8	30.32	4.8	3.8	24.7
10/3/2019 3:30	7	7	8	31.18	4.8	3.8	23.5
10/3/2019 3:40	7	7	8	31.94	4.7	3.8	0.5
10/3/2019 3:50	7	7	8	31.15	0.8	0.8	0.4
10/3/2019 4:00	7	7	8	29.32	0.5	0.8	0.4
10/3/2019 4:10	7	7	8	28.43	4.9	3.8	25.1
10/3/2019 4:20	7	7	8	29.62	4.8	3.9	24.8
10/3/2019 4:30	7	7	8	30.63	4.8	3.8	24.6
10/3/2019 4:40	7	7	8	31.39	4.7	3.8	23
10/3/2019 4:50	7	7	8	31.82	4.7	3.8	0.5
10/3/2019 5:00	7	7	8	31.85	0.7	0.7	0.4
10/3/2019 5:10	7	7	8	31.05	0.8	0.8	0.4
10/3/2019 5:20	7	7	8	29.68	0.7	0.8	0.4
10/3/2019 5:30	7	7	8	28.89	2.7	2.8	25
10/3/2019 5:40	7	7	8	28.77	4.6	3.8	25.1
10/3/2019 5:50	7	7	8	29.59	4.9	3.8	25
10/3/2019 6:00	7	7	8	29.89	4.7	3.8	24.7
10/3/2019 6:10	7	7	8	30.72	4.5	3.9	24.5
10/3/2019 6:20	7	7	8	31.42	4.5	3.9	23.1
10/3/2019 6:30	7	7	8	31.76	0.6	0.7	0.4
10/3/2019 6:40	7	7	8	30.99	0.8	0.8	0.4
10/3/2019 6:50	7	7	8	30.47	0.8	0.8	0.4
10/3/2019 7:00	7	7	8	29.99	0.7	0.8	0.5
10/3/2019 7:10	7	7	8	29.44	0.9	1	24.9
10/3/2019 7:20	7	7	8	28.86	3.3	3.2	25.1
10/3/2019 7:30	7	7	8	28.83	4.5	3.8	25.1
10/3/2019 7:40	7	7	8	29.22	4.8	3.8	25
10/3/2019 7:50	7	7	8	29.99	4.7	3.8	24.8
10/3/2019 8:00	7	7	8	30.35	4.6	3.8	24.7
10/3/2019 8:10	7	7	8	30.99	4.5	3.8	24.1
10/3/2019 8:20	7	7	8	31.45	4.8	3.8	13.1
10/3/2019 8:30	7	7	8	31.88	4.8	3.8	0.5
10/3/2019 8:40	7	7	8	32	0.9	0.8	0.4
10/3/2019 8:50	7	7	8	31.54	0.9	0.8	0.4
10/3/2019 9:00	7	7	8	31.36	0.7	0.8	0.4

10/3/2019 9:10	7	7	8	30.26	0.6	0.9	0.4
10/3/2019 9:20	7	7	8	29.22	0.9	0.8	24.8
10/3/2019 9:30	7	7	8	28.4	4.7	3.8	25.1
10/3/2019 9:40	7	7	8	29.74	4.8	3.8	24.8
10/3/2019 9:50	7	7	8	30.93	4.6	3.8	24.2
10/3/2019 10:00	7	7	7	31.82	0.8	0.8	0.5
10/3/2019 10:10	7	7	8	29.13	0.7	0.7	0.4
10/3/2019 10:20	0	0	0	30.54	0.7	0.8	0
10/3/2019 10:30	0	8	0	31.3	0.9	0.8	0
10/3/2019 10:40	0	7	0	24.74	4.7	3.8	24.9
10/3/2019 10:50	0	7	0	24.98	0.6	0.8	0.4
10/3/2019 11:00	7	8	0	28.37	0.8	0.8	0
10/3/2019 11:10	7	8	0	30.75	4.7	3.8	9.2
10/3/2019 11:20	7	8	0	27.88	0.5	0.8	0.4
10/3/2019 11:30	7	8	0	31.54	4.5	3.8	0.3
10/3/2019 11:40	8	8	0	28	2.7	2.7	25.2
10/3/2019 11:50	8	8	0	30.84	4.7	3.8	23.7
10/3/2019 12:00	8	8	0	28.83	0.7	0.7	0.4
10/3/2019 12:10	7	8	0	29.65	4.6	3.8	24.5
10/3/2019 12:20	7	8	0	31.3	4.6	3.8	23.2
10/3/2019 12:30	8	8	0	28.49	0.7	0.8	0.4
10/3/2019 12:40	7	8	0	30.14	4.7	3.8	23.8
10/3/2019 12:50	8	8	0	32.06	1.1	0.8	0.4
10/3/2019 13:00	7	8	0	28.46	0.7	0.8	0.4
10/3/2019 13:10	7	8	0	30.23	4.6	3.8	24.1
10/3/2019 13:20	8	8	0	30.72	0.8	0.8	0.4
10/3/2019 13:30	7	8	0	26.23	4.5	3.8	25.1
10/3/2019 13:40	7	8	0	30.81	0.8	0.8	0.4
10/3/2019 13:50	7	8	0	26.35	3.4	3.3	25.1
10/3/2019 14:00	7	8	0	31.33	0.8	0.7	0.1
10/3/2019 14:10	7	8	0	29.1	0.7	0.8	0.4
10/3/2019 14:20	7	8	0	28.86	4.6	3.9	24.7
10/3/2019 14:30	8	8	0	29.8	0.8	0.8	0.4
10/3/2019 14:40	7	8	0	28.34	3.3	3.3	25
10/3/2019 14:50	7	8	0	30.14	4.7	3.9	24.6
10/3/2019 15:00	8	8	0	29.22	0.8	0.8	0.4
10/3/2019 15:10	8	8	0	31.76	0.7	0.8	0.4
10/3/2019 15:20	8	8	0	29.71	0.8	0.8	0.4
10/3/2019 15:30	8	8	0	27.79	4.5	3.6	25
10/3/2019 15:40	7	8	0	30.26	0.8	0.8	0.4
10/3/2019 15:50	7	8	0	27.48	3.3	3.3	24.9
10/3/2019 16:00	7	8	0	31.54	4.7	3.8	0.5
10/3/2019 16:10	7	8	0	28.46	0.6	0.9	0.4
10/3/2019 16:20	7	8	0	30.08	4.5	3.8	24.1
10/3/2019 16:30	7	8	0	29.25	0.7	0.8	0.4
10/3/2019 16:40	7	8	0	28.92	4.6	3.7	24.9
10/3/2019 16:50	8	8	0	31.85	0.9	0.8	0.4

10/3/2019 17:00	7	8	0	27.73	0.7	0.8	0.4
10/3/2019 17:10	7	8	0	31.63	4.7	3.8	0.3
10/3/2019 17:20	7	8	0	29.99	0.8	0.8	0.4
10/3/2019 17:30	7	8	0	27.21	4.7	3.8	25.1
10/3/2019 17:40	8	8	0	30.81	0.8	0.8	0.4
10/3/2019 17:50	7	8	0	29.96	4.6	3.8	24.8
10/3/2019 18:00	8	8	0	30.84	0.9	0.8	0.4
10/3/2019 18:10	8	8	0	26.05	3.2	3.2	25.1
10/3/2019 18:20	8	8	0	30.93	0.7	0.8	0.3
10/3/2019 18:30	8	8	0	28.06	0.8	0.8	2.4
10/3/2019 18:40	8	8	0	30.69	4.7	3.8	23.9
10/3/2019 18:50	7	8	0	29.35	0.8	0.8	0.4
10/3/2019 19:00	7	8	0	28.89	4.5	3.9	24.9
10/3/2019 19:10	8	8	0	31.33	0.8	0.7	0.4
10/3/2019 19:20	7	8	0	26.72	0.9	0.9	24.8
10/3/2019 19:30	8	8	0	31.6	0.8	0.8	1
10/3/2019 19:40	7	8	0	27.73	0.6	0.8	0.4
10/3/2019 19:50	7	8	0	31.36	4.6	3.9	0.4
10/3/2019 20:00	7	8	0	29.71	0.7	0.8	0.4
10/3/2019 20:10	7	8	0	27.88	4.5	3.7	25
10/3/2019 20:20	7	8	0	29.65	0.7	0.8	0.4
10/3/2019 20:30	7	8	0	28.12	4.5	3.8	24.8
10/3/2019 20:40	7	8	0	28.89	0.7	0.7	0.4
10/3/2019 20:50	7	8	0	31.39	0.9	0.9	2.6
10/3/2019 21:00	7	8	0	28.89	0.7	0.8	0.4
10/3/2019 21:10	7	8	0	29.1	4.6	3.8	24.7
10/3/2019 21:20	7	8	0	29.62	0.7	0.8	0.4
10/3/2019 21:30	7	8	0	28.19	4.8	3.8	25
10/3/2019 21:40	7	8	0	31.79	0.7	0.8	0.4
10/3/2019 21:50	7	8	0	27.61	0.8	0.8	0.4
10/3/2019 22:00	8	8	0	31.63	4.8	3.9	0.3
10/3/2019 22:10	7	8	0	29.77	0.8	0.8	0.4
10/3/2019 22:20	8	8	0	27.82	4.6	3.8	25
10/3/2019 22:30	8	8	0	30.51	0.8	0.9	0.4
10/3/2019 22:40	7	8	0	27.91	2	2	24.9
10/3/2019 22:50	7	8	0	30.87	4.6	3.8	23.6
10/3/2019 23:00	7	8	0	28.31	0.7	0.8	0.4
10/3/2019 23:10	8	8	0	30.54	4.6	3.8	22.9
10/3/2019 23:20	8	8	0	31.6	0.8	0.8	0.4
10/3/2019 23:30	7	8	0	28.12	0.7	0.8	0.4
10/3/2019 23:40	7	8	0	30.75	4.2	3.9	23.1
10/3/2019 23:50	8	8	0	30.35	0.8	0.8	0.5
10/4/2019 0:00	8	8	0	26.81	4.6	3.8	25
10/4/2019 0:10	7	8	0	30.51	0.9	0.8	0.4
10/4/2019 0:20	7	8	0	26.69	4.5	3.8	25
10/4/2019 0:30	7	8	0	30.29	0.7	0.8	0.4
10/4/2019 0:40	7	8	0	27.91	2.7	2.8	25.1

10/4/2019 0:50	8	8	0	30.78	4.8	3.8	24
10/4/2019 1:00	8	8	0	28.74	0.6	0.8	0.4
10/4/2019 1:10	8	8	0	29.86	4.6	3.8	24.3
10/4/2019 1:20	8	8	0	30.9	0.7	0.8	0.4
10/4/2019 1:30	7	8	0	26.38	3.3	3.1	25.1
10/4/2019 1:40	8	8	0	31.36	0.8	0.8	22
10/4/2019 1:50	7	8	0	26.48	1.7	1.6	24.9
10/4/2019 2:00	8	8	0	31.39	0.6	0.8	22.8
10/4/2019 2:10	7	8	0	28.83	4.5	3.9	25.1
10/4/2019 2:20	8	8	0	31.82	0.9	0.8	0.4
10/4/2019 2:30	8	8	0	27.45	0.6	0.8	0.4
10/4/2019 2:40	7	8	0	32.12	4.4	3.7	0.2
10/4/2019 2:50	8	8	0	30.2	0.8	0.8	0.4
10/4/2019 3:00	7	8	0	27.03	4.4	3.8	25.1
10/4/2019 3:10	8	8	0	30.75	0.8	0.8	0.4
10/4/2019 3:20	7	8	0	30.02	4.7	3.8	24.7
10/4/2019 3:30	8	8	0	30.93	0.8	0.8	0.4
10/4/2019 3:40	7	8	0	26.48	2.7	2.8	25.1
10/4/2019 3:50	7	8	0	31.42	0.8	0.8	22
10/4/2019 4:00	7	8	0	29.99	0.9	0.7	0.4
10/4/2019 4:10	7	8	0	27.58	4.5	3.8	25
10/4/2019 4:20	8	8	0	31.02	0.7	0.8	0.4
10/4/2019 4:30	7	8	0	27.94	0.9	0.9	3.4
10/4/2019 4:40	8	8	0	30.87	4.6	3.8	23.5
10/4/2019 4:50	7	8	0	28.4	0.8	0.8	0.4
10/4/2019 5:00	7	8	0	30.38	4.5	3.8	23.5
10/4/2019 5:10	8	8	0	28.52	0.6	0.8	0.4
10/4/2019 5:20	7	8	0	31.15	2.3	2	23.9
10/4/2019 5:30	7	8	0	28.83	0.6	0.8	0.4
10/4/2019 5:40	7	8	0	29.38	4.7	3.8	24.7
10/4/2019 5:50	7	8	0	29.07	0.7	0.8	0.4
10/4/2019 6:00	7	8	0	29.13	4.8	3.8	24.6
10/4/2019 6:10	7	8	0	29.01	0.8	0.8	0.4
10/4/2019 6:20	7	8	0	31.51	0.8	0.8	0.5
10/4/2019 6:30	7	8	0	29.07	0.7	0.8	0.4
10/4/2019 6:40	8	8	0	28.89	4.6	3.8	24.8
10/4/2019 6:50	7	8	0	29.04	0.8	0.8	0.4
10/4/2019 7:00	8	8	0	29.19	4.4	3.7	24.6
10/4/2019 7:10	8	8	0	32.03	0.9	0.7	0.4
10/4/2019 7:20	7	8	0	27.91	0.6	0.8	0.4
10/4/2019 7:30	7	8	0	31.18	4.6	3.8	0.5
10/4/2019 7:40	7	8	0	29.56	0.7	0.8	0.4
10/4/2019 7:50	7	8	0	28.09	4.5	3.9	25
10/4/2019 8:00	7	8	0	30.02	0.8	0.7	0.4
10/4/2019 8:10	7	8	0	31.33	4.3	3.8	17.1
10/4/2019 8:20	7	8	0	30.17	0.8	0.8	0.4
10/4/2019 8:30	7	8	0	27.12	4.4	3.7	25.1

10/4/2019 8:40	8	8	0	30.84	0.8	0.8	0.4
10/4/2019 8:50	7	8	0	28.06	0.9	0.9	24.8
10/4/2019 9:00	8	8	0	30.72	4.7	3.8	23.9
10/4/2019 9:10	7	8	0	28.86	0.5	0.8	0.4
10/4/2019 9:20	8	8	0	29.62	4.7	3.8	24.4
10/4/2019 9:30	7	8	0	30.29	0.7	0.8	0.4
10/4/2019 9:40	8	8	0	26.96	4.7	3.8	25.2
10/4/2019 9:50	7	8	0	30.93	0.9	0.8	0.4
10/4/2019 10:00	7	8	0	28.37	0.7	0.8	0.6
10/4/2019 10:10	7	8	0	30.11	4.7	3.9	24.5
10/4/2019 10:20	8	8	0	28.83	0.7	0.8	0.4
10/4/2019 10:30	7	8	0	31.42	0.9	0.9	2.8
10/4/2019 10:40	7	8	0	28.31	0.7	0.8	0.4
10/4/2019 10:50	8	8	0	30.17	4.6	3.8	24.3
10/4/2019 11:00	7	8	0	28.86	0.7	0.8	0.4
10/4/2019 11:10	8	8	0	29.53	4.5	3.8	24.6
10/4/2019 11:20	7	8	0	31.42	0.9	0.8	0.4
10/4/2019 11:30	7	8	0	27.39	0.7	0.8	0.4
10/4/2019 11:40	8	8	0	32.09	4.8	3.7	0.3
10/4/2019 11:50	7	8	0	30.26	0.7	0.8	0.4
10/4/2019 12:00	8	8	0	26.93	4.5	3.8	25
10/4/2019 12:10	8	8	0	30.69	0.8	0.8	0.4
10/4/2019 12:20	7	8	0	30.08	4.7	3.9	24.7
10/4/2019 12:30	7	8	0	30.11	0.7	0.8	0.4
10/4/2019 12:40	7	8	0	27.15	4.5	3.8	25
10/4/2019 12:50	8	8	0	30.57	0.8	0.9	0.4
10/4/2019 13:00	8	8	0	30.38	4.6	3.8	24.4
10/4/2019 13:10	7	8	0	29.83	0.7	0.8	0.4
10/4/2019 13:20	8	8	0	27.73	4.8	3.8	25.2
10/4/2019 13:30	7	8	0	31.94	0.7	0.8	0.4
10/4/2019 13:40	8	8	0	27.85	0.7	0.8	0.4
10/4/2019 13:50	7	8	0	31.27	4.8	3.8	0.4
10/4/2019 14:00	8	8	0	29.47	0.7	0.8	0.4
10/4/2019 14:10	7	8	0	28.19	4.5	3.8	25
10/4/2019 14:20	7	8	0	30.26	0.8	0.8	0.4
10/4/2019 14:30	8	8	0	27.24	4.5	3.8	25
10/4/2019 14:40	7	8	0	31.97	0.7	0.8	0.4
10/4/2019 14:50	8	8	0	28.09	0.5	0.8	0.4
10/4/2019 15:00	8	8	0	30.96	4.7	3.8	0.6
10/4/2019 15:10	7	8	0	29.99	0.6	0.8	0.4
10/4/2019 15:20	7	8	0	27.45	4.7	3.8	25.1
10/4/2019 15:30	8	8	0	30.78	0.7	0.8	0.4
10/4/2019 15:40	7	8	0	28.46	0.9	0.9	2.6
10/4/2019 15:50	7	8	0	29.99	4.9	3.8	24.5
10/4/2019 16:00	8	8	0	28.92	0.6	0.8	0.4
10/4/2019 16:10	7	8	0	29.44	4.5	3.8	24.6
10/4/2019 16:20	7	8	0	31.88	4.5	3.8	0.5

10/4/2019 16:30	7	8	0	28.46	0.7	0.8	0.4
10/4/2019 16:40	8	8	0	30.23	4.7	3.8	23.9
10/4/2019 16:50	7	8	0	30.41	0.7	0.7	0.4
10/4/2019 17:00	8	8	0	26.63	4.4	3.8	25
10/4/2019 17:10	7	8	0	30.81	0.7	0.8	0.4
10/4/2019 17:20	7	8	0	26.32	4.7	3.8	25
10/4/2019 17:30	8	8	0	29.74	0.6	0.7	0.4
10/4/2019 17:40	8	8	0	28	4.7	3.8	25.1
10/4/2019 17:50	7	8	0	30.72	4.6	3.8	23.9
10/4/2019 18:00	8	8	0	28.8	0.7	0.8	0.4
10/4/2019 18:10	8	8	0	29.68	4.6	3.8	24.4
10/4/2019 18:20	7	8	0	31.7	0.9	0.7	0.4
10/4/2019 18:30	8	8	0	27.42	0.7	0.8	0.4
10/4/2019 18:40	7	8	0	32.06	4.8	3.8	0.2
10/4/2019 18:50	7	8	0	30.17	0.7	0.7	0.4
10/4/2019 19:00	8	8	0	27.15	4.5	3.8	25.1
10/4/2019 19:10	7	8	0	30.87	0.8	0.8	0.4
10/4/2019 19:20	7	8	0	28.49	0.6	0.8	0.5
10/4/2019 19:30	7	8	0	29.86	4.7	3.8	24.5
10/4/2019 19:40	8	8	0	29.22	0.7	0.8	0.4
10/4/2019 19:50	7	8	0	28.98	4.9	3.8	24.8
10/4/2019 20:00	8	8	0	30.81	0.9	0.8	0.4
10/4/2019 20:10	7	8	0	26.42	3.4	3.3	25.1
10/4/2019 20:20	8	8	0	31.39	0.8	0.8	0
10/4/2019 20:30	7	8	0	28.61	0.6	0.9	0.4
10/4/2019 20:40	8	8	0	29.74	4.7	3.8	24.6
10/4/2019 20:50	8	8	0	29.13	0.8	0.8	0.4
10/4/2019 21:00	8	8	0	29.19	4.7	3.8	24.5
10/4/2019 21:10	7	8	0	30.11	0.7	0.8	0.4
10/4/2019 21:20	7	8	0	27.45	4.6	3.8	25.2
10/4/2019 21:30	8	8	0	32.03	0.9	0.8	0.5
10/4/2019 21:40	7	8	0	27.39	0.5	0.8	0.4
10/4/2019 21:50	7	8	0	32.12	5.2	3.6	0.2
10/4/2019 22:00	8	8	0	27.45	4.5	3.8	25.2
10/4/2019 22:10	7	8	0	31.73	0.9	0.8	0.4
10/4/2019 22:20	7	8	0	27.76	0.7	0.8	0.4
10/4/2019 22:30	7	8	0	31.45	4.5	3.8	0.5
10/4/2019 22:40	7	8	0	29.71	0.8	0.8	0.4
10/4/2019 22:50	7	8	0	27.82	4.6	3.7	25
10/4/2019 23:00	8	8	0	30.57	0.7	0.8	0.4
10/4/2019 23:10	8	8	0	26.72	4.5	3.8	25.2
10/4/2019 23:20	8	8	0	31.09	0.8	0.9	0.4
10/4/2019 23:30	7	8	0	28.86	0.9	0.8	0.5
10/4/2019 23:40	7	8	0	29.25	4.5	3.8	24.8
10/4/2019 23:50	7	8	0	29.32	0.8	0.8	0.4
10/5/2019 0:00	7	8	0	31.82	0.8	0.8	0.4
10/5/2019 0:10	7	8	0	28.95	0.7	0.8	0.4

10/5/2019 0:20	7	8	0	29.13	4.6	3.8	24.8
10/5/2019 0:30	7	8	0	29.47	0.8	0.8	0.4
10/5/2019 0:40	7	8	0	31.94	0.7	0.8	0.5
10/5/2019 0:50	8	8	0	29.25	0.8	0.7	0.5
10/5/2019 1:00	8	8	0	28.46	4.6	3.8	25
10/5/2019 1:10	8	8	0	30.08	0.8	0.8	0.4
10/5/2019 1:20	7	8	0	27.39	4.7	3.9	25.2
10/5/2019 1:30	7	8	0	31.76	0.7	0.8	0.4
10/5/2019 1:40	8	8	0	27.76	0.7	0.7	0.4
10/5/2019 1:50	8	8	0	31.45	4.6	3.8	0.4
10/5/2019 2:00	7	8	0	30.87	0.8	0.8	0.4
10/5/2019 2:10	7	8	0	26.96	2.3	2.3	25
10/5/2019 2:20	8	8	0	31.85	0.9	0.8	22.2
10/5/2019 2:30	8	8	0	28.34	0.8	0.8	0.5
10/5/2019 2:40	8	8	0	30.29	4.6	3.8	24.2
10/5/2019 2:50	7	8	0	30.26	0.8	0.8	0.5
10/5/2019 3:00	7	8	0	26.9	4.7	3.8	25.2
10/5/2019 3:10	7	8	0	31.39	0.8	0.8	0.5
10/5/2019 3:20	8	8	0	28	0.7	0.8	0.4
10/5/2019 3:30	8	8	0	30.99	4.7	3.8	23
10/5/2019 3:40	7	8	0	29.83	0.8	0.8	0.5
10/5/2019 3:50	8	8	0	27.58	4.6	3.8	25
10/5/2019 4:00	7	8	0	30.66	0.7	0.8	0.5
10/5/2019 4:10	8	8	0	28	0.9	1.1	24.9
10/5/2019 4:20	7	8	0	30.75	4.3	3.8	23.9
10/5/2019 4:30	7	8	0	29.13	0.7	0.9	0.5
10/5/2019 4:40	8	8	0	29.16	4.4	3.8	24.9
10/5/2019 4:50	7	8	0	30.75	0.8	0.8	0.5
10/5/2019 5:00	8	8	0	26.63	3.2	3.3	25.1
10/5/2019 5:10	8	8	0	31.67	0.7	0.8	0
10/5/2019 5:20	8	8	0	27.58	0.6	0.8	0.4
10/5/2019 5:30	8	8	0	31.63	4.6	3.8	0.3
10/5/2019 5:40	8	8	0	29.25	0.8	0.7	0.4
10/5/2019 5:50	7	8	0	28.43	4.7	3.8	24.9
10/5/2019 6:00	7	8	0	29.59	0.7	0.8	0.4
10/5/2019 6:10	7	8	0	28.34	4.6	3.9	24.9
10/5/2019 6:20	7	8	0	29.38	0.8	0.9	0.4
10/5/2019 6:30	7	8	0	31.88	0.9	0.9	0.4
10/5/2019 6:40	8	8	0	29.56	0.7	0.8	0.4
10/5/2019 6:50	7	8	0	28.19	4.8	3.9	25
10/5/2019 7:00	7	8	0	30.23	0.6	0.8	0.4
10/5/2019 7:10	7	8	0	28.43	2	2	24.8
10/5/2019 7:20	8	8	0	30.05	4.7	3.8	24.5
10/5/2019 7:30	7	8	0	29.59	0.7	0.9	0.5
10/5/2019 7:40	8	8	0	28.37	4.8	3.8	25.1
10/5/2019 7:50	8	8	0	31.48	0.9	0.8	0.4
10/5/2019 8:00	8	8	0	27	0.7	0.9	2.5

10/5/2019 8:10	7	8	0	31.94	0.8	0.8	0.2
10/5/2019 8:20	8	8	0	28.83	0.5	0.8	0.4
10/5/2019 8:30	8	8	0	29.47	4.6	3.8	24.8
10/5/2019 8:40	8	8	0	30.08	0.7	0.8	0.4
10/5/2019 8:50	8	8	0	27.61	4.7	3.8	25.3
10/5/2019 9:00	7	8	0	31.7	4.7	3.8	0.5
10/5/2019 9:10	8	8	0	28.34	0.6	0.7	0.4
10/5/2019 9:20	7	8	0	30.41	4.7	3.9	23.6
10/5/2019 9:30	7	8	0	30.02	0.7	0.9	0.4
10/5/2019 9:40	8	8	0	27.27	4.4	3.9	25.1
10/5/2019 9:50	7	8	0	30.78	0.9	0.9	0.4
10/5/2019 10:00	7	8	0	27.73	1.2	1.5	25
10/5/2019 10:10	8	8	0	31.18	4.7	3.9	22.9
10/5/2019 10:20	7	8	0	28.03	0.8	0.8	0.4
10/5/2019 10:30	7	8	0	30.99	4.7	3.8	0.6
10/5/2019 10:40	8	8	0	27.79	1.5	1.5	25
10/5/2019 10:50	8	8	0	31.05	4.7	3.8	23.3
10/5/2019 11:00	8	8	0	28.77	0.7	0.8	0.4
10/5/2019 11:10	7	8	0	29.83	4.6	3.9	24.3
10/5/2019 11:20	7	8	0	31.21	0.8	0.8	0.4
10/5/2019 11:30	7	8	0	27.12	0.8	0.8	24.9
10/5/2019 11:40	7	8	0	32	0.8	0.8	0.2
10/5/2019 11:50	7	8	0	28.83	0.6	0.8	0.4
10/5/2019 12:00	7	8	0	29.41	4.8	3.8	24.5
10/5/2019 12:10	7	8	0	29.38	0.8	0.8	0.4
10/5/2019 12:20	8	8	0	31.82	0.8	0.8	0.4
10/5/2019 12:30	7	8	0	28.86	0.7	0.8	0.4
10/5/2019 12:40	7	8	0	29.47	4.7	3.9	24.6
10/5/2019 12:50	7	8	0	29.19	0.7	0.8	0.4
10/5/2019 13:00	8	8	0	29.07	4.7	3.8	24.8
10/5/2019 13:10	7	8	0	30.84	0.9	0.9	0.4
10/5/2019 13:20	7	8	0	26.84	2.6	2.8	25.1
10/5/2019 13:30	8	8	0	31.79	0.8	0.8	21.9
10/5/2019 13:40	7	8	0	28.37	0.7	0.8	0.4
10/5/2019 13:50	8	8	0	30.26	4.6	3.8	24.4
10/5/2019 14:00	7	8	0	28.67	0.7	0.8	0.4
10/5/2019 14:10	8	8	0	29.86	4.6	3.8	24.1
10/5/2019 14:20	7	8	0	31.6	4.6	3.8	0.5
10/5/2019 14:30	7	8	0	28.89	0.7	0.8	0.4
10/5/2019 14:40	8	8	0	29.53	4.6	3.8	24.7
10/5/2019 14:50	8	8	0	30.99	0.7	0.8	0.5
10/5/2019 15:00	7	8	0	26.26	3.3	3.2	25.1
10/5/2019 15:10	8	8	0	31.15	0.8	0.7	21
10/5/2019 15:20	7	8	0	28.89	0.7	0.8	0.4
10/5/2019 15:30	8	8	0	29.16	4.5	3.8	24.8
10/5/2019 15:40	7	8	0	30.02	0.6	0.8	0.4
10/5/2019 15:50	8	8	0	27.58	4.4	3.8	25.1

10/5/2019 16:00	7	8	0	32	0.8	0.8	0.5
10/5/2019 16:10	8	8	0	27.09	0.6	0.8	0.4
10/5/2019 16:20	8	8	0	31.94	1	0.7	0
10/5/2019 16:30	8	8	0	26.32	0.9	0.9	3.4
10/5/2019 16:40	7	8	0	31.21	0.9	0.8	0.2
10/5/2019 16:50	8	8	0	27.94	0.6	0.7	0.5
10/5/2019 17:00	8	8	0	30.78	4.6	3.8	23.8
10/5/2019 17:10	8	8	0	28.58	0.7	0.8	0.4
10/5/2019 17:20	8	8	0	30.05	4.6	3.9	23.9
10/5/2019 17:30	8	8	0	30.14	0.7	0.8	0.4
10/5/2019 17:40	7	8	0	27.09	4.6	3.9	25.1
10/5/2019 17:50	7	8	0	30.93	0.8	0.8	0.4
10/5/2019 18:00	7	8	0	29.83	0.7	0.8	0.4
10/5/2019 18:10	8	8	0	27.76	4.7	3.8	25
10/5/2019 18:20	8	8	0	31.05	0.7	0.8	0.4
10/5/2019 18:30	7	8	0	28.34	0.7	0.8	0.7
10/5/2019 18:40	8	8	0	30.23	4.6	3.8	24.5
10/5/2019 18:50	8	8	0	28.67	0.6	0.8	0.4
10/5/2019 19:00	8	8	0	29.89	4.6	3.7	24.1
10/5/2019 19:10	7	8	0	29.89	0.7	0.8	0.4
10/5/2019 19:20	7	8	0	27.67	4.6	3.8	25.1
10/5/2019 19:30	7	8	0	31.76	0.8	0.8	0.4
10/5/2019 19:40	8	8	0	27.27	0.5	0.8	0.4
10/5/2019 19:50	8	8	0	32.03	4.5	3.6	0.2
10/5/2019 20:00	8	8	0	27.64	0.7	0.8	0.4
10/5/2019 20:10	7	8	0	31.57	4.7	3.8	0.4
10/5/2019 20:20	7	8	0	28.12	2	2	25.1
10/5/2019 20:30	8	8	0	30.44	4.7	3.9	24.4
10/5/2019 20:40	8	8	0	29.22	0.8	0.8	0.4
10/5/2019 20:50	8	8	0	28.92	4.7	3.9	24.9
10/5/2019 21:00	8	8	0	30.63	0.8	0.8	0.4
10/5/2019 21:10	7	8	0	28	1.2	1.3	25
10/5/2019 21:20	7	8	0	30.87	4.5	3.9	23.8
10/5/2019 21:30	7	8	0	28.83	0.6	0.8	0.4
10/5/2019 21:40	7	8	0	29.65	4.7	3.9	24.6
10/5/2019 21:50	8	8	0	30.57	0.8	0.8	0.4
10/5/2019 22:00	7	8	0	26.42	4.5	3.9	25.1
10/5/2019 22:10	8	8	0	30.99	0.8	0.7	0.4
10/5/2019 22:20	7	8	0	26.17	4.8	3.9	25.2
10/5/2019 22:30	8	8	0	30.81	0.9	0.8	0.4
10/5/2019 22:40	7	8	0	28.98	0.7	0.9	0.4
10/5/2019 22:50	7	8	0	29.1	4.7	3.8	24.7
10/5/2019 23:00	7	8	0	29.99	0.7	0.8	0.4
10/5/2019 23:10	8	8	0	27.61	4.6	3.8	25.2
10/5/2019 23:20	7	8	0	31.67	0.9	0.8	0.4
10/5/2019 23:30	7	8	0	27.42	0.6	0.8	0.4
10/5/2019 23:40	8	8	0	32.03	4.6	3.8	0.2

10/5/2019 23:50	8	8	0	29.47	0.7	0.8	0.4
10/6/2019 0:00	7	8	0	28.34	4.6	3.8	25
10/6/2019 0:10	8	8	0	30.54	0.7	0.9	0.4
10/6/2019 0:20	8	8	0	27.39	3.2	3.1	25.2
10/6/2019 0:30	7	8	0	31.67	4.7	3.8	0.5
10/6/2019 0:40	7	8	0	27.94	0.6	0.8	0.4
10/6/2019 0:50	8	8	0	31.18	4.7	3.8	0.5
10/6/2019 1:00	8	8	0	28.12	0.7	0.9	0.5
10/6/2019 1:10	8	8	0	30.9	4.6	3.8	1.2
10/6/2019 1:20	7	8	0	28.58	0.8	0.8	3.6
10/6/2019 1:30	7	8	0	29.71	4.6	3.8	24.7
10/6/2019 1:40	7	8	0	29.41	0.7	0.8	0.4
10/6/2019 1:50	8	8	0	28.58	4.5	3.8	24.9
10/6/2019 2:00	7	8	0	31.09	4.6	3.9	23.1
10/6/2019 2:10	7	8	0	28.83	0.7	0.8	0.4
10/6/2019 2:20	8	8	0	29.53	4.6	3.9	24.7
10/6/2019 2:30	7	8	0	30.69	0.9	0.8	0.5
10/6/2019 2:40	8	8	0	26.23	4.7	3.8	25
10/6/2019 2:50	8	8	0	31.09	0.8	0.8	0.4
10/6/2019 3:00	8	8	0	25.93	4.3	3.8	25
10/6/2019 3:10	7	8	0	30.69	0.7	0.8	0.4
10/6/2019 3:20	8	8	0	30.14	4.8	3.8	24.7
10/6/2019 3:30	7	8	0	30.75	0.8	0.9	0.5
10/6/2019 3:40	8	8	0	26.57	3.4	3.3	25.2
10/6/2019 3:50	7	8	0	31.51	0.7	0.9	0
10/6/2019 4:00	7	8	0	28.28	0.6	0.8	0.4
10/6/2019 4:10	8	8	0	30.23	4.6	3.9	24.3
10/6/2019 4:20	7	8	0	29.19	0.7	0.8	0.4
10/6/2019 4:30	8	8	0	28.89	4.4	3.8	24.9
10/6/2019 4:40	7	8	0	30.93	0.7	0.7	0.4
10/6/2019 4:50	8	8	0	27.06	1.3	1.4	25
10/6/2019 5:00	8	8	0	31.97	0.7	0.8	2.9
10/6/2019 5:10	8	8	0	28.7	0.7	0.7	0.4
10/6/2019 5:20	7	8	0	29.8	4.9	3.8	24.6
10/6/2019 5:30	7	8	0	28.19	0.5	0.9	0.4
10/6/2019 5:40	7	8	0	30.66	4.7	3.8	22.6
10/6/2019 5:50	8	8	0	27.18	0.6	0.8	0.5
10/6/2019 6:00	7	8	0	32.09	0.6	0.9	0
10/6/2019 6:10	7	8	0	29.8	0.7	0.8	0.4
10/6/2019 6:20	8	8	0	27.73	4.5	3.8	25
10/6/2019 6:30	7	8	0	30.57	0.5	0.8	0.5
10/6/2019 6:40	7	8	0	29.22	0.7	0.9	0.4
10/6/2019 6:50	8	8	0	28.61	4.6	3.7	24.8
10/6/2019 7:00	7	8	0	30.35	0.7	0.9	0.4
10/6/2019 7:10	7	8	0	27.27	3.2	3.4	25.2
10/6/2019 7:20	7	8	0	31.85	4.6	3.8	0.5
10/6/2019 7:30	7	8	0	27.82	0.7	0.9	0.4

10/6/2019 7:40	8	8	0	31.33	4.7	3.9	0.4
10/6/2019 7:50	8	8	0	27.82	0.6	0.8	0.4
10/6/2019 8:00	8	8	0	31.21	4.4	3.9	0.5
10/6/2019 8:10	7	8	0	28.46	1.1	0.9	24.9
10/6/2019 8:20	8	8	0	30.02	4.6	3.8	24.5
10/6/2019 8:30	8	8	0	29.22	0.8	0.8	0.4
10/6/2019 8:40	8	8	0	28.98	4.7	3.9	24.8
10/6/2019 8:50	7	8	0	31.02	0.8	0.8	0.4
10/6/2019 9:00	8	8	0	27.21	0.9	1.1	24.9
10/6/2019 9:10	8	8	0	32.15	0.8	0.9	2.7
10/6/2019 9:20	8	8	0	28.77	0.8	0.8	0.4
10/6/2019 9:30	7	8	0	29.53	4.8	3.8	24.6
10/6/2019 9:40	7	8	0	29.1	0.8	0.8	0.4
10/6/2019 9:50	7	8	0	29.16	4.4	3.9	24.7
10/6/2019 10:00	7	8	0	32.03	0.9	0.8	0.4
10/6/2019 10:10	7	8	0	28.06	0.7	0.8	0.4
10/6/2019 10:20	7	8	0	30.9	4.8	3.8	14.3
10/6/2019 10:30	7	8	0	30.05	0.7	0.8	0.4
10/6/2019 10:40	8	8	0	27.39	4.6	3.8	25
10/6/2019 10:50	7	8	0	30.38	0.7	0.8	0.4
10/6/2019 11:00	8	8	0	30.57	4.7	3.8	24.1
10/6/2019 11:10	7	8	0	29.77	0.7	0.8	0.4
10/6/2019 11:20	7	8	0	27.73	4.5	3.9	25
10/6/2019 11:30	7	8	0	30.29	0.7	0.8	0.4
10/6/2019 11:40	8	8	0	30.84	4.8	3.9	24
10/6/2019 11:50	7	8	0	29.62	0.7	0.8	0.4
10/6/2019 12:00	7	8	0	28.34	4.6	3.8	25.1
10/6/2019 12:10	8	8	0	31.73	0.7	0.9	0.4
10/6/2019 12:20	8	8	0	27.24	0.7	0.8	0.3
10/6/2019 12:30	7	8	0	32.15	0.8	0.8	0.2
10/6/2019 12:40	7	8	0	29.68	0.8	0.8	0.4
10/6/2019 12:50	7	8	0	27.79	4.7	3.8	24.9
10/6/2019 13:00	8	8	0	30.17	0.7	0.8	0.4
10/6/2019 13:10	7	8	0	31.15	4.7	3.9	23.6
10/6/2019 13:20	8	8	0	29.5	0.8	0.8	0.4
10/6/2019 13:30	7	8	0	28.31	4.8	3.9	25.1
10/6/2019 13:40	7	8	0	31.54	0.8	0.8	0.4
10/6/2019 13:50	7	8	0	27.09	1	0.8	2.3
10/6/2019 14:00	7	8	0	31.97	0.9	0.8	0.2
10/6/2019 14:10	8	8	0	27.27	0.7	0.8	0.4
10/6/2019 14:20	8	8	0	32.15	1.6	0.9	0.2
10/6/2019 14:30	8	8	0	27.7	3.3	3.4	25.2
10/6/2019 14:40	7	8	0	30.99	5.1	3.8	23.3
10/6/2019 14:50	7	8	0	28.4	0.6	0.8	0.4
10/6/2019 15:00	8	8	0	30.87	3.2	3.3	23
10/6/2019 15:10	8	8	0	27.79	0.9	0.9	3.5
10/6/2019 15:20	7	8	0	31.05	4.7	3.8	22.8

10/6/2019 15:30	7	8	0	28.74	0.7	0.8	0.4
10/6/2019 15:40	8	8	0	29.86	4.6	3.8	24.3
10/6/2019 15:50	8	8	0	31.45	4.7	3.8	0.5
10/6/2019 16:00	7	8	0	28.58	0.8	0.8	0.4
10/6/2019 16:10	7	8	0	30.05	4.8	3.8	24.2
10/6/2019 16:20	8	8	0	30.41	0.7	0.9	0.4
10/6/2019 16:30	7	8	0	26.6	4.6	3.8	25.1
10/6/2019 16:40	7	8	0	30.72	0.7	0.9	0.4
10/6/2019 16:50	8	8	0	30.08	4.7	3.9	24.7
10/6/2019 17:00	8	8	0	30.44	0.8	0.8	0.4
10/6/2019 17:10	8	8	0	26.72	4.6	3.8	25.1
10/6/2019 17:20	7	8	0	30.75	0.8	0.9	0.4
10/6/2019 17:30	7	8	0	28	0.9	0.9	24.8
10/6/2019 17:40	7	8	0	30.84	4.6	4	23.8
10/6/2019 17:50	8	8	0	28.98	0.7	0.8	0.4
10/6/2019 18:00	8	8	0	29.38	4.7	3.8	24.7
10/6/2019 18:10	7	8	0	30.87	0.8	0.8	0.4
10/6/2019 18:20	7	8	0	26.14	3.2	3.3	25.1
10/6/2019 18:30	7	8	0	31.09	0.7	0.8	0
10/6/2019 18:40	8	8	0	28.95	0.7	0.8	0.4
10/6/2019 18:50	7	8	0	29.16	4.7	3.8	24.7
10/6/2019 19:00	7	8	0	30.05	0.8	0.8	0.4
10/6/2019 19:10	7	8	0	27.64	4.7	3.9	25.2
10/6/2019 19:20	8	8	0	32.03	3.5	2.2	0.4
10/6/2019 19:30	8	8	0	25.77	0.9	0.8	14.3
10/6/2019 19:40	7	8	0	30.69	0.9	0.8	0.2
10/6/2019 19:50	8	8	0	26.57	4.7	3.8	24.9
10/6/2019 20:00	8	8	0	31.02	0.8	0.8	0.4
10/6/2019 20:10	8	8	0	30.29	0.7	0.8	0.4
10/6/2019 20:20	8	8	0	26.87	4.7	3.8	25.2
10/6/2019 20:30	7	8	0	31.67	0.8	0.8	0.4
10/6/2019 20:40	7	8	0	28.28	0.8	0.8	0.4
10/6/2019 20:50	7	8	0	30.47	4.6	3.8	23.9
10/6/2019 21:00	8	8	0	30.23	0.7	0.8	0.4
10/6/2019 21:10	8	8	0	27	4.5	3.8	25
10/6/2019 21:20	7	8	0	31.15	0.7	0.8	0.4
10/6/2019 21:30	8	8	0	29.35	4.6	4	24.7
10/6/2019 21:40	7	8	0	31.63	0.9	0.8	0.4
10/6/2019 21:50	7	8	0	27.36	0.7	0.9	0.4
10/6/2019 22:00	7	8	0	32.12	4.9	3.1	0.2
10/6/2019 22:10	7	8	0	29.65	0.7	0.8	0.4
10/6/2019 22:20	7	8	0	27.94	4.6	3.8	24.9
10/6/2019 22:30	7	8	0	30.41	0.6	0.8	0.4
10/6/2019 22:40	7	8	0	27.24	3.3	3.3	25.1
10/6/2019 22:50	8	8	0	31.97	5	3.6	0.4
10/6/2019 23:00	8	8	0	27.54	0.6	0.8	0.4
10/6/2019 23:10	8	8	0	31.82	4.6	3.9	0.3

10/6/2019 23:20	7	8	0	27.18	0.6	0.8	0.4
10/6/2019 23:30	7	8	0	32.06	0.9	0.7	0
10/6/2019 23:40	7	8	0	29.19	0.9	0.8	0.4
10/6/2019 23:50	7	8	0	28.77	4.7	3.8	24.8
10/7/2019 0:00	8	8	0	27.67	0.5	0.8	0.4
10/7/2019 0:10	7	8	0	31.6	4.7	3.8	0.3
10/7/2019 0:20	7	8	0	30.17	0.8	0.8	0.4
10/7/2019 0:30	7	8	0	27.12	4.6	3.8	25.1
10/7/2019 0:40	7	8	0	31.27	0.8	0.8	0.4
10/7/2019 0:50	7	8	0	28.49	0.5	0.8	0.4
10/7/2019 1:00	8	8	0	29.96	4.7	3.8	24.4
10/7/2019 1:10	7	8	0	28.7	0.7	0.8	0.4
10/7/2019 1:20	7	8	0	31.21	1.9	2	23.9
10/7/2019 1:30	7	8	0	28.55	0.7	0.8	0.4
10/7/2019 1:40	7	8	0	29.96	4.4	3.9	24.6
10/7/2019 1:50	8	8	0	31.45	0.8	0.8	0.4
10/7/2019 2:00	8	8	0	28.95	0.7	0.9	0.4
10/7/2019 2:10	7	8	0	29.1	4.5	3.9	25
10/7/2019 2:20	8	8	0	31.54	0.7	0.8	0.4
10/7/2019 2:30	7	8	0	26.87	0.9	0.8	3.2
10/7/2019 2:40	7	8	0	31.7	0.8	0.8	0.2
10/7/2019 2:50	8	8	0	28.31	4.6	3.8	25
10/7/2019 3:00	7	8	0	31.6	0.8	0.8	0.4
10/7/2019 3:10	7	8	0	26.93	0.6	0.8	0.9
10/7/2019 3:20	7	8	0	31.82	0.8	0.8	0.2
10/7/2019 3:30	7	8	0	29.71	0.7	0.8	0.4
10/7/2019 3:40	8	8	0	27.85	4.5	3.8	25
10/7/2019 3:50	7	8	0	30.23	0.8	0.8	0.4
10/7/2019 4:00	7	8	0	30.81	4.3	3.8	24
10/7/2019 4:10	7	8	0	30.78	0.7	0.8	0.4
10/7/2019 4:20	8	8	0	26.08	4.5	3.8	25.2
10/7/2019 4:30	8	8	0	29.25	0.7	0.8	0.5
10/7/2019 4:40	7	8	0	28.86	4.9	3.9	24.6
10/7/2019 4:50	8	8	0	28.03	0.7	0.8	0.4
10/7/2019 5:00	7	8	0	31.09	4.7	3.8	0.5
10/7/2019 5:10	8	8	0	28.22	0.9	1	24.9
10/7/2019 5:20	7	8	0	30.41	4.7	3.8	24.4
10/7/2019 5:30	8	8	0	28.03	0.7	0.8	0.4
10/7/2019 5:40	8	8	0	30.93	4.8	3.9	0.6
10/7/2019 5:50	7	8	0	27.51	2.2	2.2	25
10/7/2019 6:00	7	8	0	31.57	4.7	3.8	0.5
10/7/2019 6:10	7	8	0	28.28	0.6	0.8	0.4
10/7/2019 6:20	8	8	0	30.57	4.6	3.8	23
10/7/2019 6:30	8	8	0	30.75	0.7	0.8	0.4
10/7/2019 6:40	7	8	0	25.96	4.6	3.8	25.1
10/7/2019 6:50	8	8	0	29.56	0.7	0.8	0.4
10/7/2019 7:00	7	8	0	28.28	4.6	3.8	24.9

10/7/2019 7:10	8	8	0	30.47	0.7	0.8	0.4
10/7/2019 7:20	7	8	0	27.7	2.4	2.6	25.1
10/7/2019 7:30	7	8	0	31.15	4.6	3.8	0.7
10/7/2019 7:40	7	8	0	30.11	0.8	0.8	0.4
10/7/2019 7:50	7	8	0	27.85	3.1	3.1	25.2
10/7/2019 8:00	8	8	0	30.99	4.6	3.8	23.1
10/7/2019 8:10	7	8	0	30.05	0.8	0.8	0.4
10/7/2019 8:20	8	8	0	27.36	4.7	3.9	25
10/7/2019 8:30	7	8	0	30.08	0.8	0.8	0.4
10/7/2019 8:40	8	8	0	27.54	4.5	3.8	24.9
10/7/2019 8:50	8	8	0	31.54	4.6	3.9	0.5
10/7/2019 9:00	7	8	0	28.58	0.5	0.8	0.4
10/7/2019 9:10	7	8	0	29.96	4.8	3.8	24.3
10/7/2019 9:20	7	8	0	30.44	0.9	0.8	0.4
10/7/2019 9:30	8	8	0	26.72	4.6	3.8	25.1
10/7/2019 9:40	8	8	0	29.5	0.7	0.8	0.4
10/7/2019 9:50	7	8	0	28.4	4.6	3.9	24.9
10/7/2019 10:00	7	8	0	30.93	0.7	0.8	0.4
10/7/2019 10:10	7	8	0	28.25	0.8	0.8	2.5
10/7/2019 10:20	8	8	0	30.38	4.6	3.8	24.4
10/7/2019 10:30	8	8	0	28.19	0.6	0.8	0.4
10/7/2019 10:40	7	8	0	30.72	1.5	2.6	6.2
10/7/2019 10:50	7	8	0	28.22	0.8	0.8	2.4
10/7/2019 11:00	8	8	0	30.29	4.6	3.8	24.3
10/7/2019 11:10	7	8	0	28.43	0.5	0.8	0.4
10/7/2019 11:20	8	8	0	30.87	3.3	3.2	22.8
10/7/2019 11:30	7	8	0	28.83	0.7	0.8	0.4
10/7/2019 11:40	8	8	0	29.53	4.7	3.8	24.7
10/7/2019 11:50	8	8	0	29.5	0.7	0.8	0.4
10/7/2019 12:00	8	8	0	28.37	4.4	3.8	25
10/7/2019 12:10	7	8	0	31.82	4.8	3.8	0.4
10/7/2019 12:20	7	8	0	27.27	0.8	0.8	0.4
10/7/2019 12:30	8	8	0	32.09	0.8	0.8	0.2
10/7/2019 12:40	8	8	0	30.75	0.7	0.8	0.4
10/7/2019 12:50	7	8	0	26.87	3.4	3.1	25.1
10/7/2019 13:00	7	8	0	31.82	0.9	0.8	22.1
10/7/2019 13:10	8	8	0	29.07	0.8	0.8	0.4
10/7/2019 13:20	7	8	0	28.86	4.6	3.9	24.8
10/7/2019 13:30	8	8	0	28.77	0.8	0.7	0.4
10/7/2019 13:40	8	8	0	29.71	4.5	3.8	24.1
10/7/2019 13:50	7	8	0	28.09	0.8	0.8	0.4
10/7/2019 14:00	7	8	0	30.84	4.7	3.8	2.6
10/7/2019 14:10	8	8	0	28.31	1	0.9	2.4
10/7/2019 14:20	7	8	0	30.2	4.8	3.8	24.5
10/7/2019 14:30	7	8	0	28.77	0.7	0.8	0.4
10/7/2019 14:40	8	8	0	31.3	1.4	1.4	4.3
10/7/2019 14:50	7	8	0	28.83	0.7	0.8	0.4

10/7/2019 15:00	7	8	0	29.38	4.8	3.9	24.7
10/7/2019 15:10	8	8	0	29.1	0.6	0.8	0.4
10/7/2019 15:20	7	8	0	31.73	0.9	0.8	0.4
10/7/2019 15:30	8	8	0	29.25	0.7	0.8	0.4
10/7/2019 15:40	7	8	0	28.49	4.6	3.8	25
10/7/2019 15:50	8	8	0	31.85	0.8	0.8	0.4
10/7/2019 16:00	8	8	0	25.9	0.9	0.9	24.9
10/7/2019 16:10	7	8	0	30.84	0.7	0.8	0.3
10/7/2019 16:20	8	8	0	28.98	0.7	0.8	0.4
10/7/2019 16:30	7	8	0	29.04	4.6	3.8	24.8
10/7/2019 16:40	7	8	0	30.2	0.8	0.8	0.4
10/7/2019 16:50	7	8	0	27.58	3.3	3.3	25.2
10/7/2019 17:00	7	8	0	31.42	4.8	3.9	6.7
10/7/2019 17:10	7	8	0	27.67	0.7	0.8	0.4
10/7/2019 17:20	8	8	0	31.6	4.8	3.8	0.4
10/7/2019 17:30	7	8	0	30.96	0.8	0.8	0.4
10/7/2019 17:40	7	8	0	27.18	1.4	1.5	25
10/7/2019 17:50	8	8	0	32.09	0.9	0.8	2.6
10/7/2019 18:00	7	8	0	29.1	0.7	0.8	0.4
10/7/2019 18:10	7	8	0	28.8	4.5	3.8	24.8
10/7/2019 18:20	7	8	0	28.95	0.7	0.8	0.4
10/7/2019 18:30	8	8	0	29.38	4.6	3.8	24.4
10/7/2019 18:40	7	8	0	30.93	0.9	0.8	0.4
10/7/2019 18:50	8	8	0	27.06	1.8	1.8	25
10/7/2019 19:00	7	8	0	32.03	0.8	0.8	23
10/7/2019 19:10	8	8	0	29.04	0.8	0.8	0.4
10/7/2019 19:20	8	8	0	28.92	4.7	3.8	24.7
10/7/2019 19:30	7	8	0	29.04	0.8	0.8	0.4
10/7/2019 19:40	7	8	0	29.32	4.7	3.8	24.6
10/7/2019 19:50	7	8	0	31.27	0.8	0.8	0.4
10/7/2019 20:00	7	8	0	27.45	0.8	0.8	2.7
10/7/2019 20:10	7	8	0	31.88	4.7	3.8	0.6
10/7/2019 20:20	8	8	0	29.65	0.7	0.8	0.4
10/7/2019 20:30	8	8	0	27.85	4.6	3.8	25
10/7/2019 20:40	7	8	0	29.77	0.8	0.8	0.4
10/7/2019 20:50	7	8	0	28.03	4.6	3.8	24.8
10/7/2019 21:00	7	8	0	29.04	0.7	0.8	0.4
10/7/2019 21:10	7	8	0	31.63	0.9	0.8	0.4
10/7/2019 21:20	7	8	0	29.35	0.8	0.8	0.4
10/7/2019 21:30	8	8	0	28.34	4.6	3.8	24.9
10/7/2019 21:40	7	8	0	29.74	0.7	0.8	0.4
10/7/2019 21:50	7	8	0	31.7	4.8	3.8	0.5
10/7/2019 22:00	8	8	0	28.89	0.8	0.9	0.4
10/7/2019 22:10	8	8	0	29.35	4.6	3.8	24.7
10/7/2019 22:20	7	8	0	31.09	0.8	0.8	0.4
10/7/2019 22:30	7	8	0	26.54	2.5	2.5	25
10/7/2019 22:40	7	8	0	31.48	0.9	0.8	22.3

10/7/2019 22:50	7	8	0	28.74	4.9	3.8	25
10/7/2019 23:00	7	8	0	31.54	0.8	0.8	0.4
10/7/2019 23:10	7	8	0	27.24	0.8	0.8	0.4
10/7/2019 23:20	7	8	0	32.12	3.9	2.5	0.2
10/7/2019 23:30	8	8	0	27.51	4.5	3.8	25.1
10/7/2019 23:40	7	8	0	31.85	4.7	3.8	0.4
10/7/2019 23:50	7	8	0	27.58	0.7	0.9	0.4
10/8/2019 0:00	8	8	0	31.82	4.7	3.8	0.3
10/8/2019 0:10	8	8	0	27.58	3.2	3.2	25.1
10/8/2019 0:20	8	8	0	31.39	4.7	3.8	21.5
10/8/2019 0:30	7	8	0	28.09	0.7	0.8	0.4
10/8/2019 0:40	7	8	0	30.66	4.7	3.9	3.3
10/8/2019 0:50	7	8	0	28.43	0.7	0.8	0.7
10/8/2019 1:00	7	8	0	29.96	4.6	3.8	24.5
10/8/2019 1:10	8	8	0	28.58	0.8	0.8	0.4
10/8/2019 1:20	8	8	0	30.05	4.7	3.8	24
10/8/2019 1:30	7	8	0	31.57	0.8	0.8	0.4
10/8/2019 1:40	8	8	0	27.76	0.6	0.7	0.4
10/8/2019 1:50	7	8	0	31.39	4.6	3.9	0.4
10/8/2019 2:00	7	8	0	29.89	0.8	0.8	0.4
10/8/2019 2:10	7	8	0	27.51	4.6	3.8	25
10/8/2019 2:20	7	8	0	30.35	0.7	0.8	0.4
10/8/2019 2:30	8	8	0	27.7	3.1	3.1	25
10/8/2019 2:40	8	8	0	31.12	4.5	3.8	23
10/8/2019 2:50	7	8	0	28.52	0.8	0.8	0.4
10/8/2019 3:00	7	8	0	30.08	4.8	3.8	24.1
10/8/2019 3:10	8	8	0	29.89	0.7	0.8	0.4
10/8/2019 3:20	7	8	0	27.82	4.7	3.9	25.2
10/8/2019 3:30	7	8	0	31.79	0.8	0.8	0.4
10/8/2019 3:40	8	8	0	27.42	0.7	0.8	0.4
10/8/2019 3:50	7	8	0	31.88	4.7	3.8	0.2
10/8/2019 4:00	8	8	0	27.61	3.3	3.3	25.2
10/8/2019 4:10	7	8	0	31.18	4.5	3.8	23
10/8/2019 4:20	7	8	0	27.39	0.7	0.8	0.4
10/8/2019 4:30	8	8	0	32	4.6	3.7	0.2
10/8/2019 4:40	7	8	0	30.41	0.7	0.8	0.4
10/8/2019 4:50	7	8	0	26.63	3	3.3	25.2
10/8/2019 5:00	8	8	0	31.57	0.9	0.8	0.4
10/8/2019 5:10	7	8	0	29.01	0.6	0.8	0.4
10/8/2019 5:20	7	8	0	29.07	4.8	3.8	24.7
10/8/2019 5:30	7	8	0	29.22	0.8	0.7	0.4
10/8/2019 5:40	7	8	0	31.85	0.7	0.8	0.4
10/8/2019 5:50	8	8	0	28.61	0.7	0.8	0.4
10/8/2019 6:00	7	8	0	29.77	4.6	3.9	24.5
10/8/2019 6:10	7	8	0	30.41	0.9	0.8	0.4
10/8/2019 6:20	7	8	0	26.75	4.5	3.8	25
10/8/2019 6:30	7	8	0	30.63	0.8	0.8	0.4

10/8/2019 6:40	8	8	0	26.6	4.6	3.8	24.9
10/8/2019 6:50	8	8	0	29.5	0.9	0.8	0.4
10/8/2019 7:00	7	8	0	32	4.5	3.6	0.4
10/8/2019 7:10	8	8	0	29.83	0.7	0.8	0.4
10/8/2019 7:20	8	8	0	27.7	4.6	3.8	25.1
10/8/2019 7:30	7	8	0	30.41	0.8	0.8	0.4
10/8/2019 7:40	7	8	0	30.47	4.6	3.8	24.4
10/8/2019 7:50	7	8	0	30.47	0.9	0.8	0.4
10/8/2019 8:00	7	8	0	26.57	4.7	3.8	25.2
10/8/2019 8:10	7	8	0	31.42	0.8	0.9	0.4
10/8/2019 8:20	7	8	0	28.25	0.6	0.8	0.4
10/8/2019 8:30	7	8	0	30.26	4.5	3.7	24.4
10/8/2019 8:40	7	8	0	29.25	0.8	0.7	0.4
10/8/2019 8:50	7	8	0	28.89	4.7	3.8	24.9
10/8/2019 9:00	7	8	0	31.12	0.8	0.8	0.4
10/8/2019 9:10	7	8	0	26.38	2.9	3	25.1
10/8/2019 9:20	8	8	0	31.3	0.8	0.8	21.7
10/8/2019 9:30	7	8	0	29.59	0.7	0.8	0.4
10/8/2019 9:40	7	8	8	28.12	4.6	3.9	25
10/8/2019 9:50	7	8	7	31.33	4.6	3.8	23.8
10/8/2019 10:00	7	8	7	31.6	4.7	3.8	22.2
10/8/2019 10:10	7	8	7	31.3	4.9	3.9	23.8
10/8/2019 10:20	8	8	7	31.36	4.7	3.8	23.5
10/8/2019 10:30	7	8	7	31.76	4.7	3.8	0.5
10/8/2019 10:40	7	8	7	31.88	0.7	0.8	0.4
10/8/2019 10:50	7	8	7	30.96	0.6	0.8	0.4
10/8/2019 11:00	7	8	7	29.77	0.8	0.9	0.4
10/8/2019 11:10	7	8	7	28.7	3.4	3.2	25.1
10/8/2019 11:20	7	8	7	29.01	4.4	3.9	25
10/8/2019 11:30	7	8	7	29.89	4.6	3.8	24.9
10/8/2019 11:40	7	8	7	30.47	4.9	3.8	24.7
10/8/2019 11:50	7	8	7	30.75	4.6	3.9	24.4
10/8/2019 12:00	7	8	7	31.3	4.8	3.8	23.4
10/8/2019 12:10	7	8	7	31.7	4.7	3.8	0.5
10/8/2019 12:20	7	8	7	31.94	4.7	3.9	0.5
10/8/2019 12:30	7	8	7	32.03	0.8	0.8	0.4
10/8/2019 12:40	7	8	7	31.42	0.6	0.8	0.4
10/8/2019 12:50	7	8	7	30.63	0.8	0.8	0.4
10/8/2019 13:00	7	8	7	29.74	0.8	0.8	1.3
10/8/2019 13:10	7	8	7	29.07	2.8	2.8	25
10/8/2019 13:20	7	8	7	28.52	4.7	3.9	25.2
10/8/2019 13:30	7	8	7	29.07	4.4	3.9	25.1
10/8/2019 13:40	7	8	7	29.47	4.6	3.9	25
10/8/2019 13:50	7	8	7	29.86	4.4	3.9	24.8
10/8/2019 14:00	7	8	7	30.38	4.5	3.8	24.7
10/8/2019 14:10	7	8	7	30.99	4.7	3.8	24.2
10/8/2019 14:20	7	8	7	31.67	4.8	3.8	0.5

10/8/2019 14:30	7	8	7	31.42	0.7	0.8	0.4
10/8/2019 14:40	7	8	7	30.47	0.8	0.8	0.4
10/8/2019 14:50	7	8	7	29.59	0.9	0.8	3.2
10/8/2019 15:00	7	8	7	28.46	3.3	3.3	25.1
10/8/2019 15:10	7	8	7	29.07	4.8	3.8	25.1
10/8/2019 15:20	7	8	7	30.02	4.8	3.9	24.7
10/8/2019 15:30	7	8	7	30.93	4.6	3.9	24.3
10/8/2019 15:40	7	8	7	31.63	4.9	3.8	0.6
10/8/2019 15:50	7	8	7	31.97	0.7	0.8	0.4
10/8/2019 16:00	7	8	7	31.51	0.9	0.8	0.4
10/8/2019 16:10	7	8	7	30.84	0.7	0.7	0.4
10/8/2019 16:20	7	8	7	30.29	0.8	0.8	0.4
10/8/2019 16:30	7	8	7	29.71	0.9	0.8	3.6
10/8/2019 16:40	7	8	7	28.95	3.1	3.1	25.1
10/8/2019 16:50	7	8	7	28.83	4.8	3.8	25
10/8/2019 17:00	7	8	7	29.56	4.5	3.6	24.8
10/8/2019 17:10	7	8	7	30.44	4.6	3.8	24.6
10/8/2019 17:20	7	8	7	31.51	4.5	3.8	22.9
10/8/2019 17:30	7	8	7	31.76	0.7	0.8	0.4
10/8/2019 17:40	7	8	7	30.75	0.7	0.8	0.4
10/8/2019 17:50	7	8	7	29.53	0.9	0.9	2.7
10/8/2019 18:00	7	8	7	28.4	3.4	3.3	25
10/8/2019 18:10	7	8	7	29.19	4.7	3.8	24.9
10/8/2019 18:20	7	8	7	30.23	4.7	3.8	24.7
10/8/2019 18:30	7	8	7	31.12	4.7	3.8	24.1
10/8/2019 18:40	7	8	7	32	0.7	0.8	0.3
10/8/2019 18:50	7	8	7	31.02	0.8	0.8	0.4
10/8/2019 19:00	7	8	7	29.99	0.6	0.7	0.4
10/8/2019 19:10	7	8	7	29.53	1.3	1.2	24.9
10/8/2019 19:20	7	8	7	28.89	3.3	3.2	25.1
10/8/2019 19:30	7	8	7	28.7	4.6	3.8	25.1
10/8/2019 19:40	7	8	7	29.35	4.7	3.8	25
10/8/2019 19:50	7	8	7	30.02	4.6	3.8	24.8
10/8/2019 20:00	7	8	7	30.66	4.8	3.8	24.6
10/8/2019 20:10	7	8	7	31.09	4.7	3.9	24.1
10/8/2019 20:20	7	8	7	31.63	4.8	3.8	0.6
10/8/2019 20:30	7	8	7	31.85	0.9	0.8	0.4
10/8/2019 20:40	7	8	7	31.15	0.7	0.8	0.4
10/8/2019 20:50	7	8	7	30.35	0.8	0.8	0.4
10/8/2019 21:00	7	8	7	29.68	0.9	0.8	3.3
10/8/2019 21:10	7	8	7	29.13	2.8	2.7	25
10/8/2019 21:20	7	8	7	28.55	4.4	3.8	25.2
10/8/2019 21:30	7	8	7	29.04	4.6	3.8	25.1
10/8/2019 21:40	7	8	7	29.59	4.5	3.9	24.9
10/8/2019 21:50	7	8	7	30.38	4.7	3.8	24.7
10/8/2019 22:00	7	8	7	31.15	5	3.7	23.7
10/8/2019 22:10	7	7	7	32.09	4.3	2.7	0.4

10/8/2019 22:20	7	8	7	31.48	0.6	0.9	0.4
10/8/2019 22:30	7	8	7	30.72	0.6	0.7	0.4
10/8/2019 22:40	7	8	7	29.96	0.8	0.7	0.4
10/8/2019 22:50	7	8	7	29.38	1.4	1.4	25
10/8/2019 23:00	7	8	7	28.89	3.4	3.4	25.2
10/8/2019 23:10	7	8	7	28.74	4.7	3.8	25.2
10/8/2019 23:20	7	8	7	29.19	4.7	3.8	25.1
10/8/2019 23:30	7	8	7	29.74	4.8	3.8	25
10/8/2019 23:40	7	8	7	30.17	4.7	3.8	24.8
10/8/2019 23:50	7	8	7	30.54	4.5	3.9	24.6
10/9/2019 0:00	7	8	7	31.09	4.7	3.9	24
10/9/2019 0:10	7	8	7	31.85	4.7	3.8	0.5
10/9/2019 0:20	7	8	7	31.18	0.9	0.8	0.4
10/9/2019 0:30	7	7	7	30.32	1	0.8	0.4
10/9/2019 0:40	7	8	7	29.16	1.1	1.3	25
10/9/2019 0:50	7	8	7	28.58	4.8	3.8	25.2
10/9/2019 1:00	7	8	7	29.22	4.6	3.8	25
10/9/2019 1:10	7	8	7	29.77	4.6	3.8	25
10/9/2019 1:20	7	8	7	30.41	4.7	3.8	24.6
10/9/2019 1:30	7	8	7	31.27	4.5	3.8	23.4
10/9/2019 1:40	7	7	7	32	0.9	0.8	0.4
10/9/2019 1:50	7	8	7	30.78	0.8	0.8	0.4
10/9/2019 2:00	7	8	7	29.53	0.8	0.8	2.8
10/9/2019 2:10	7	8	7	28.34	3.5	3.4	25
10/9/2019 2:20	7	8	7	29.19	4.4	3.9	25
10/9/2019 2:30	7	8	7	30.23	4.8	3.8	24.7
10/9/2019 2:40	7	8	7	31.15	4.7	3.8	23.9
10/9/2019 2:50	7	8	7	31.76	4.5	3.8	0.5
10/9/2019 3:00	7	8	7	31.67	0.9	0.8	0.4
10/9/2019 3:10	7	7	7	30.96	0.9	0.8	0.4
10/9/2019 3:20	7	7	7	30.44	0.9	0.9	0.4
10/9/2019 3:30	7	7	7	29.65	0.9	0.8	3.3
10/9/2019 3:40	7	8	7	28.43	3.4	3.4	25.1
10/9/2019 3:50	7	8	7	29.07	4.7	3.8	25
10/9/2019 4:00	7	8	7	30.14	4.6	3.9	24.8
10/9/2019 4:10	7	8	7	30.93	4.5	3.8	24.3
10/9/2019 4:20	7	8	7	31.51	4.8	3.8	0.6
10/9/2019 4:30	7	8	7	31.76	0.7	0.8	0.4
10/9/2019 4:40	7	8	7	31.05	0.8	0.8	0.4
10/9/2019 4:50	7	8	7	30.05	0.8	0.8	0.3
10/9/2019 5:00	7	8	7	29.07	2.2	2.4	25
10/9/2019 5:10	7	8	7	28.8	4.6	3.9	25.1
10/9/2019 5:20	7	8	7	29.53	5	3.8	25
10/9/2019 5:30	7	8	7	30.2	4.4	3.9	24.8
10/9/2019 5:40	7	7	7	30.51	4.8	3.8	24.6
10/9/2019 5:50	7	7	7	31.18	4.6	3.9	23.9
10/9/2019 6:00	7	7	7	31.82	4.6	3.8	0.5

10/9/2019 6:10	7	7	7	31.63	0.7	0.8	0.4
10/9/2019 6:20	7	8	7	30.9	0.8	0.7	0.4
10/9/2019 6:30	7	7	7	30.32	0.8	0.8	0.4
10/9/2019 6:40	7	8	7	29.68	0.9	0.9	3.3
10/9/2019 6:50	7	7	7	28.77	3.3	3.2	25.1
10/9/2019 7:00	7	7	7	28.83	4.8	3.8	25.1
10/9/2019 7:10	7	7	7	29.59	4.4	3.8	24.9
10/9/2019 7:20	7	7	7	30.23	4.5	3.9	24.7
10/9/2019 7:30	7	7	7	30.75	4.7	3.9	24.6
10/9/2019 7:40	7	8	7	31.18	4.8	3.8	23.8
10/9/2019 7:50	7	7	7	31.7	4.7	3.9	0.5
10/9/2019 8:00	7	8	7	32.09	4.2	2.5	0.4
10/9/2019 8:10	7	7	7	31.39	0.9	0.7	0.5
10/9/2019 8:20	7	7	7	30.57	0.7	0.8	0.4
10/9/2019 8:30	7	8	7	29.56	0.9	0.9	2.5
10/9/2019 8:40	7	8	7	28.37	3.4	3.3	25.1
10/9/2019 8:50	7	8	7	29.32	4.6	3.8	25
10/9/2019 9:00	7	8	7	30.05	4.6	3.9	24.7
10/9/2019 9:10	7	7	7	30.78	4.8	3.8	24.4
10/9/2019 9:20	7	8	7	31.76	4.6	3.9	0.5
10/9/2019 9:30	7	8	7	31.67	0.9	0.8	0.4
10/9/2019 9:40	7	8	7	30.84	0.8	0.8	0.4
10/9/2019 9:50	7	7	7	30.17	0.6	0.7	0.4
10/9/2019 10:00	7	8	7	29.59	0.9	0.9	24.8
10/9/2019 10:10	7	7	7	28.89	3.3	3.2	25.1
10/9/2019 10:20	7	8	7	28.86	4.8	3.8	25.1
10/9/2019 10:30	7	7	7	29.5	4.7	3.9	24.9
10/9/2019 10:40	7	8	7	30.32	4.7	3.8	24.7
10/9/2019 10:50	7	8	7	30.99	4.8	3.9	24.2
10/9/2019 11:00	7	8	7	31.67	4.8	3.8	0.5
10/9/2019 11:10	7	8	7	32.03	0.8	0.8	0.4
10/9/2019 11:20	7	7	7	31.33	0.9	0.8	0.4
10/9/2019 11:30	7	8	7	30.51	0.9	0.7	0.4
10/9/2019 11:40	7	8	7	29.59	0.9	0.9	2.5
10/9/2019 11:50	7	7	7	28.74	3.4	3.3	25.1
10/9/2019 12:00	7	7	7	29.01	4.7	3.8	25.1
10/9/2019 12:10	7	7	7	29.65	4.7	3.8	24.9
10/9/2019 12:20	7	7	7	30.51	4.7	3.8	24.6
10/9/2019 12:30	7	7	7	31.33	4.9	3.8	22.9
10/9/2019 12:40	7	8	7	31.79	0.9	0.8	0.4
10/9/2019 12:50	7	7	7	30.26	0.7	0.7	0.4
10/9/2019 13:00	7	7	7	28.7	2.5	2.5	24.9
10/9/2019 13:10	7	7	7	28.95	4.7	3.7	25.1
10/9/2019 13:20	7	7	7	30.35	4.4	3.9	24.6
10/9/2019 13:30	7	8	7	31.67	4.7	3.8	0.5
10/9/2019 13:40	7	8	7	31.15	0.9	0.8	0.4
10/9/2019 13:50	7	7	7	29.25	0.8	0.9	0.8

10/9/2019 14:00	7	7	7	28.43	4.5	3.8	25.1
10/9/2019 14:10	7	7	7	29.71	4.8	3.8	24.7
10/9/2019 14:20	7	7	7	30.96	4.6	3.9	24.3
10/9/2019 14:30	7	7	7	31.73	4.8	3.8	0.6
10/9/2019 14:40	7	7	7	31.97	0.8	0.9	0.4
10/9/2019 14:50	7	8	7	31.27	0.8	0.8	0.4
10/9/2019 15:00	7	8	7	30.57	0.9	0.8	0.4
10/9/2019 15:10	7	7	7	29.65	1	0.9	2.7
10/9/2019 15:20	7	7	7	28.55	3.4	3.2	25.1
10/9/2019 15:30	7	8	7	29.04	4.7	3.8	25
10/9/2019 15:40	7	8	7	30.02	4.5	3.9	24.8
10/9/2019 15:50	7	8	7	30.72	4.6	3.8	24.4
10/9/2019 16:00	7	8	7	31.79	4.6	3.8	0.5
10/9/2019 16:10	7	8	7	31.21	0.8	0.8	0.4
10/9/2019 16:20	7	8	7	29.56	0.8	0.8	0.4
10/9/2019 16:30	7	7	7	28.25	2.2	3	25.1
10/9/2019 16:40	7	7	7	29.35	4.8	3.8	24.9
10/9/2019 16:50	7	7	7	30.32	4.6	3.8	24.7
10/9/2019 17:00	7	7	7	31.45	4.6	3.8	22.7
10/9/2019 17:10	7	7	7	31.36	0.6	0.8	0.4
10/9/2019 17:20	7	7	7	29.47	0.6	0.8	0.4
10/9/2019 17:30	7	7	7	28.37	4.5	3.9	25.1
10/9/2019 17:40	7	8	7	30.11	4.5	3.8	24.7
10/9/2019 17:50	7	7	7	31.15	4.7	3.9	24
10/9/2019 18:00	7	8	7	31.79	4.7	3.8	0.4
10/9/2019 18:10	7	7	7	32.09	2	1.2	0.5
10/9/2019 18:20	7	7	7	31.39	0.8	0.8	0.4
10/9/2019 18:30	7	8	7	30.23	0.9	0.8	0.4
10/9/2019 18:40	7	7	7	28.95	2.1	2	24.9
10/9/2019 18:50	7	7	7	28.8	4.3	3.9	25
10/9/2019 19:00	7	7	7	29.99	4.7	3.8	24.8
10/9/2019 19:10	7	7	7	31.12	4.9	3.7	24
10/9/2019 19:20	7	8	7	31.94	0.7	0.9	0.4
10/9/2019 19:30	7	8	7	30.38	0.8	0.8	0.4
10/9/2019 19:40	7	7	7	28.4	3.1	2.8	25
10/9/2019 19:50	7	7	7	29.22	4.5	3.8	25
10/9/2019 20:00	7	8	7	31.05	4.8	3.8	23.7
10/9/2019 20:10	7	7	7	31.12	0.9	0.8	0.4
10/9/2019 20:20	7	7	7	29.32	0.7	0.9	1.6
10/9/2019 20:30	7	8	7	28.52	4.5	3.8	25.1
10/9/2019 20:40	7	8	7	29.13	4.7	3.8	25.1
10/9/2019 20:50	7	8	7	29.47	4.8	3.8	24.9
10/9/2019 21:00	7	8	7	30.26	4.5	3.8	24.8
10/9/2019 21:10	7	8	7	30.96	4.7	3.8	24.1
10/9/2019 21:20	7	7	7	31.88	0.8	0.8	0.5
10/9/2019 21:30	7	7	7	30.32	0.7	0.8	0.4
10/9/2019 21:40	7	7	7	28.37	3.3	3.1	25

10/9/2019 21:50	7	7	7	29.35	4.5	3.8	25.1
10/9/2019 22:00	7	7	7	30.38	4.8	3.8	24.7
10/9/2019 22:10	7	8	7	31.33	4.7	3.8	22.9
10/9/2019 22:20	7	7	7	31.97	4.7	3.7	0.5
10/9/2019 22:30	7	8	7	31.33	0.9	0.8	0.4
10/9/2019 22:40	7	7	7	30.51	0.9	0.9	0.4
10/9/2019 22:50	7	7	7	29.32	1	0.9	14.5
10/9/2019 23:00	7	7	7	28.4	4.7	3.8	25.1
10/9/2019 23:10	7	7	7	29.38	4.6	3.8	24.9
10/9/2019 23:20	7	7	7	30.81	4.7	3.8	24.3
10/9/2019 23:30	7	7	7	31.82	0.9	0.8	0.4
10/9/2019 23:40	7	7	7	30.29	0.8	0.8	0.4
10/9/2019 23:50	7	7	7	28.61	2.9	2.8	24.8
10/10/2019 0:00	7	7	7	29.1	4.6	3.8	24.9
10/10/2019 0:10	7	8	7	30.35	4.8	3.8	24.5
10/10/2019 0:20	7	7	7	31.7	4.6	3.8	0.5
10/10/2019 0:30	7	7	7	31.15	0.9	0.8	0.4
10/10/2019 0:40	7	7	7	29.83	0.8	0.8	0.4
10/10/2019 0:50	7	7	7	28.7	3.4	3.2	25.1
10/10/2019 1:00	7	7	7	28.95	4.6	3.8	25.1
10/10/2019 1:10	7	7	7	30.17	4.6	3.8	24.7
10/10/2019 1:20	7	7	7	31.18	4.5	3.9	24.1
10/10/2019 1:30	7	7	7	32	0.9	0.8	0.4
10/10/2019 1:40	7	7	7	30.93	0.8	0.7	0.4
10/10/2019 1:50	7	8	7	29.89	0.7	0.8	0.4
10/10/2019 2:00	7	7	7	28.74	3	3.1	25.1
10/10/2019 2:10	7	7	7	28.92	4.6	3.7	25.1
10/10/2019 2:20	7	7	7	29.89	4.7	3.8	24.9
10/10/2019 2:30	7	7	7	30.72	4.6	3.8	24.4
10/10/2019 2:40	7	8	7	31.73	4.7	3.8	0.5
10/10/2019 2:50	7	7	7	31.79	0.6	0.8	0.4
10/10/2019 3:00	7	7	7	30.69	0.8	0.8	0.4
10/10/2019 3:10	7	7	7	29.5	0.9	0.8	2.5
10/10/2019 3:20	7	7	7	28.22	4.5	3.8	25
10/10/2019 3:30	7	7	7	29.59	4.5	3.8	24.8
10/10/2019 3:40	7	7	7	30.99	4.5	3.9	24.1
10/10/2019 3:50	7	7	7	31.57	0.8	0.8	0.4
10/10/2019 4:00	7	7	7	29.74	0.6	0.9	0.4
10/10/2019 4:10	7	7	7	28.31	3.4	3.5	25.1
10/10/2019 4:20	7	7	7	29.25	4.5	3.8	25
10/10/2019 4:30	7	7	7	30.11	4.7	3.8	24.8
10/10/2019 4:40	7	7	7	30.54	4.6	3.9	24.6
10/10/2019 4:50	7	7	7	31.48	4.5	3.9	22.7
10/10/2019 5:00	7	7	7	31.45	0.9	0.8	0.4
10/10/2019 5:10	7	7	7	29.86	0.9	0.8	0.4
10/10/2019 5:20	7	7	7	28.37	3.4	3.3	25.1
10/10/2019 5:30	7	7	7	29.35	4.7	3.8	25

10/10/2019 5:40	7	7	7	29.89	4.6	3.8	24.7
10/10/2019 5:50	7	7	7	30.63	4.6	3.8	24.6
10/10/2019 6:00	7	7	7	31.51	4.8	3.8	23.1
10/10/2019 6:10	7	7	7	32	0.9	0.8	0.4
10/10/2019 6:20	7	7	7	31.18	0.9	0.7	0.4
10/10/2019 6:30	7	7	7	30.2	0.8	0.9	0.4
10/10/2019 6:40	7	7	7	29.19	1.2	1.2	24.9
10/10/2019 6:50	7	7	7	28.46	4.9	3.9	25.2
10/10/2019 7:00	7	7	7	29.41	4.6	3.8	25
10/10/2019 7:10	7	7	7	30.11	4.5	3.9	24.8
10/10/2019 7:20	7	7	7	30.78	4.5	3.8	24.4
10/10/2019 7:30	7	7	7	31.76	4.5	3.9	0.5
10/10/2019 7:40	7	7	7	31.33	0.7	0.8	0.4
10/10/2019 7:50	7	7	7	30.14	0.9	0.8	0.4
10/10/2019 8:00	7	7	7	29.04	2	2.1	25
10/10/2019 8:10	7	7	7	28.55	4.9	3.8	25.1
10/10/2019 8:20	7	7	7	29.68	4.6	3.8	24.9
10/10/2019 8:30	7	7	7	30.54	4.8	3.8	24.5
10/10/2019 8:40	7	7	7	31.85	4.8	3.8	0.5
10/10/2019 8:50	7	7	7	31.57	0.9	0.8	0.4
10/10/2019 9:00	7	7	7	30.63	0.9	0.8	0.5
10/10/2019 9:10	7	7	7	30.02	0.7	0.7	0.4
10/10/2019 9:20	7	7	7	29.16	2.1	2.1	25
10/10/2019 9:30	7	7	7	28.58	4.6	3.8	25.2
10/10/2019 9:40	7	7	7	29.5	4.8	3.8	24.8
10/10/2019 9:50	7	7	7	31.02	4.8	3.8	24
10/10/2019 10:00	7	7	7	32.06	0.9	0.8	0.5
10/10/2019 10:10	7	7	7	30.63	0.7	0.8	0.4
10/10/2019 10:20	7	7	7	29.01	1	1	24.9
10/10/2019 10:30	7	7	7	28.77	4.5	3.8	25.1
10/10/2019 10:40	7	7	7	30.05	4.8	3.8	24.7
10/10/2019 10:50	7	7	7	31.33	4.8	3.8	22.7
10/10/2019 11:00	7	7	7	31.57	0.8	0.8	0.4
10/10/2019 11:10	7	7	7	30.05	0.7	0.8	0.4
10/10/2019 11:20	7	7	7	28.98	2.4	2.3	25.1
10/10/2019 11:30	7	7	7	28.67	4.7	3.8	25.1
10/10/2019 11:40	7	7	7	29.86	4.6	3.9	24.9
10/10/2019 11:50	7	7	7	30.63	4.7	3.8	24.6
10/10/2019 12:00	7	8	7	31.73	4.6	3.9	0.5
10/10/2019 12:10	7	7	7	31.18	0.8	0.8	0.4
10/10/2019 12:20	7	7	7	29.56	0.7	0.9	0.4
10/10/2019 12:30	7	7	7	28.34	4.7	3.9	25.1
10/10/2019 12:40	7	7	7	29.83	4.7	3.8	24.8
10/10/2019 12:50	7	7	7	31.3	4.3	3.8	22.9
10/10/2019 13:00	7	7	7	31.54	0.8	0.9	0.4
10/10/2019 13:10	7	7	7	30.72	0.7	0.7	0.5
10/10/2019 13:20	7	7	7	30.02	0.7	0.8	0.4

10/10/2019 13:30	7	7	7	29.25	1.6	1.6	25
10/10/2019 13:40	7	7	7	28.74	3.4	3.4	25.3
10/10/2019 13:50	7	7	7	28.89	4.8	3.9	25.1
10/10/2019 14:00	7	7	7	29.44	4.4	3.8	25
10/10/2019 14:10	7	7	7	30.2	4.5	3.8	24.7
10/10/2019 14:20	7	7	7	30.96	4.7	3.9	24.3
10/10/2019 14:30	7	7	7	31.85	4.7	3.8	0.4
10/10/2019 14:40	7	7	7	31.39	0.7	0.8	0.4
10/10/2019 14:50	7	7	7	30.44	0.8	0.8	0.4
10/10/2019 15:00	7	7	7	29.59	1	0.8	2.4
10/10/2019 15:10	7	7	7	28.77	3.4	3.2	25.1
10/10/2019 15:20	7	7	7	28.95	4.7	3.8	25.1
10/10/2019 15:30	7	7	7	29.56	4.6	3.8	24.9
10/10/2019 15:40	7	7	7	30.29	4.7	3.8	24.7
10/10/2019 15:50	7	7	7	30.9	4.7	3.8	24.3
10/10/2019 16:00	7	7	7	31.7	4.6	3.8	0.5
10/10/2019 16:10	7	7	7	31.39	0.8	0.9	0.4
10/10/2019 16:20	7	7	7	30.35	0.8	0.8	0.4
10/10/2019 16:30	7	7	7	29.53	0.9	0.9	3.4
10/10/2019 16:40	7	7	7	28.61	3.3	3.3	25.1
10/10/2019 16:50	7	7	7	29.04	4.7	3.8	25.1
10/10/2019 17:00	7	7	7	29.68	4.9	3.8	25
10/10/2019 17:10	7	7	7	30.26	4.5	3.8	24.7
10/10/2019 17:20	7	7	7	31.12	4.8	3.8	23.9
10/10/2019 17:30	7	7	7	32.03	4.8	3.4	0.4
10/10/2019 17:40	7	7	7	31.12	0.8	0.8	0.4
10/10/2019 17:50	7	7	7	30.02	0.7	0.8	0.4
10/10/2019 18:00	7	7	7	28.89	2.3	2.4	25.1
10/10/2019 18:10	7	7	7	28.74	4.6	3.8	25.1
10/10/2019 18:20	7	7	7	29.22	4.6	3.9	25.1
10/10/2019 18:30	7	7	7	29.83	4.8	3.8	24.8
10/10/2019 18:40	7	7	7	30.51	4.7	3.8	24.6
10/10/2019 18:50	7	7	7	31.33	4.7	3.7	23.2
10/10/2019 19:00	7	7	7	31.88	0.7	0.8	0.4
10/10/2019 19:10	7	7	7	30.63	0.9	0.8	0.4
10/10/2019 19:20	7	7	7	29.13	1	0.9	24.8
10/10/2019 19:30	7	7	7	28.58	5	3.8	25.1
10/10/2019 19:40	7	7	7	29.89	4.8	3.8	24.7
10/10/2019 19:50	7	7	7	31.33	4.6	3.8	23.1
10/10/2019 20:00	7	7	7	31.21	0.9	0.9	0.4
10/10/2019 20:10	7	7	7	29.41	0.8	0.8	0.4
10/10/2019 20:20	7	7	7	28.34	4.6	3.8	24.9
10/10/2019 20:30	7	7	7	30.17	4.7	3.8	24.6
10/10/2019 20:40	7	7	7	32	4.6	3.7	0.4
10/10/2019 20:50	7	7	7	30.78	0.9	0.8	0.4
10/10/2019 21:00	7	7	7	29.65	0.7	0.9	0.4
10/10/2019 21:10	7	7	7	28.92	3.1	3.2	25.1

10/10/2019 21:20	7	7	7	28.8	5	3.8	25.1
10/10/2019 21:30	7	7	7	29.53	4.7	3.9	25
10/10/2019 21:40	7	7	7	30.32	4.8	3.8	24.6
10/10/2019 21:50	7	7	7	31.36	4.6	3.8	22.7
10/10/2019 22:00	7	7	7	31.63	0.9	0.8	0.4
10/10/2019 22:10	7	7	7	30.26	0.7	0.8	0.4
10/10/2019 22:20	7	7	7	28.74	2.5	2.5	25.1
10/10/2019 22:30	7	7	7	28.89	4.5	3.8	25
10/10/2019 22:40	7	7	7	30.29	4.7	4	24.7
10/10/2019 22:50	7	7	7	31.79	4.6	3.8	0.5
10/10/2019 23:00	7	7	7	30.93	0.8	0.8	0.4
10/10/2019 23:10	7	7	7	29.32	0.8	0.8	2.7
10/10/2019 23:20	7	7	7	28.43	4.5	3.8	25.1
10/10/2019 23:30	7	7	7	29.99	4.6	3.8	24.6
10/10/2019 23:40	7	7	7	31.73	4.6	3.8	0.5
10/10/2019 23:50	7	7	7	30.96	0.7	0.8	0.4
10/11/2019 0:00	7	7	7	29.19	0.9	0.9	1
10/11/2019 0:10	7	7	7	28.46	4.5	3.8	25.1
10/11/2019 0:20	7	7	7	29.44	4.7	3.9	25
10/11/2019 0:30	7	7	7	30.54	4.5	3.8	24.5
10/11/2019 0:40	7	7	7	31.48	4.8	3.9	17.9
10/11/2019 0:50	7	7	7	31.7	0.9	0.8	0.4
10/11/2019 1:00	7	7	7	30.51	0.8	0.8	0.4
10/11/2019 1:10	7	7	7	28.86	1.7	1.8	24.9
10/11/2019 1:20	7	7	7	28.86	4.7	3.8	25.1
10/11/2019 1:30	7	7	7	30.08	4.7	3.8	24.7
10/11/2019 1:40	7	7	7	31.21	4.7	3.9	23.2
10/11/2019 1:50	7	7	7	31.88	0.9	0.8	0.4
10/11/2019 2:00	7	7	7	30.69	0.8	0.8	0.4
10/11/2019 2:10	7	7	7	29.83	0.8	0.9	0.4
10/11/2019 2:20	7	7	7	28.8	3.1	3.2	25
10/11/2019 2:30	7	7	7	28.95	4.8	3.8	25.1
10/11/2019 2:40	7	7	7	29.59	4.6	3.8	24.9
10/11/2019 2:50	7	7	7	30.23	5.1	3.8	24.8
10/11/2019 3:00	7	7	7	31.21	4.7	3.8	23.3
10/11/2019 3:10	7	7	7	31.57	0.8	0.9	0.4
10/11/2019 3:20	7	7	7	30.08	0.9	0.8	0.4
10/11/2019 3:30	7	7	7	28.31	3.3	3.4	25.1
10/11/2019 3:40	7	7	7	29.35	4.8	3.8	25
10/11/2019 3:50	7	7	7	30.75	4.6	3.8	24.3
10/11/2019 4:00	7	7	7	31.73	4.7	3.8	0.5
10/11/2019 4:10	7	7	7	31.3	0.9	0.9	0.4
10/11/2019 4:20	7	7	7	29.99	0.7	0.8	0.4
10/11/2019 4:30	7	7	7	28.4	3.3	3.3	25.1
10/11/2019 4:40	7	7	7	29.22	4.8	3.8	25
10/11/2019 4:50	7	7	7	30.47	4.9	3.9	24.5
10/11/2019 5:00	7	7	7	32	4.7	3.7	0.5

10/11/2019 5:10	7	7	7	30.38	0.8	0.8	0.4
10/11/2019 5:20	7	7	7	28.46	2.6	2.6	24.9
10/11/2019 5:30	7	7	7	29.1	4.8	3.8	25
10/11/2019 5:40	7	7	7	30.47	4.8	3.9	24.5
10/11/2019 5:50	7	7	7	31.88	4.6	3.8	0.5
10/11/2019 6:00	7	7	7	30.99	0.9	0.8	0.4
10/11/2019 6:10	7	7	7	29.19	0.8	0.9	2.6
10/11/2019 6:20	7	7	7	28.43	4.6	3.8	25
10/11/2019 6:30	7	7	7	30.26	4.6	3.8	24.7
10/11/2019 6:40	7	7	7	31.7	4.9	3.8	0.5
10/11/2019 6:50	7	7	7	31.12	0.7	0.9	0.4
10/11/2019 7:00	7	7	7	29.38	0.7	0.8	0.4
10/11/2019 7:10	7	7	7	28.43	4.7	3.8	25
10/11/2019 7:20	7	7	7	29.89	4.7	3.8	24.7
10/11/2019 7:30	7	7	7	31.94	4.5	3.8	0.5
10/11/2019 7:40	7	7	7	30.69	0.9	0.8	0.4
10/11/2019 7:50	7	7	7	28.61	1.7	1.9	25
10/11/2019 8:00	7	7	7	29.07	4.7	3.8	25
10/11/2019 8:10	7	7	7	30.38	4.8	3.8	24.5
10/11/2019 8:20	7	7	7	31.6	4.7	3.8	0.5
10/11/2019 8:30	7	7	7	31.36	0.8	0.8	0.4
10/11/2019 8:40	7	7	7	29.56	0.9	0.8	0.4
10/11/2019 8:50	7	7	7	28.28	4.8	3.8	25.2
10/11/2019 9:00	7	7	7	29.59	4.7	3.8	24.8
10/11/2019 9:10	7	7	7	31.36	4.7	3.8	22.7
10/11/2019 9:20	7	7	7	31.42	0.8	0.7	0.4
10/11/2019 9:30	7	7	7	29.8	1	0.9	0.4
10/11/2019 9:40	7	7	7	28.06	3.3	3.1	25.1
10/11/2019 9:50	7	7	7	29.47	4.5	3.8	24.9
10/11/2019 10:00	7	7	7	31.12	4.7	3.8	23.8
10/11/2019 10:10	7	7	7	31.63	1	0.7	0.4
10/11/2019 10:20	7	7	7	30.08	0.8	0.9	0.4
10/11/2019 10:30	7	7	7	28.37	3.3	3.3	25
10/11/2019 10:40	7	7	7	29.19	4.8	3.8	25
10/11/2019 10:50	7	7	7	30.57	4.4	3.9	24.5
10/11/2019 11:00	7	7	7	31.88	4.7	3.8	0.5
10/11/2019 11:10	7	7	7	30.99	0.8	0.8	0.4
10/11/2019 11:20	7	7	7	29.86	0.7	0.9	0.5
10/11/2019 11:30	7	7	7	28.34	3.4	3.3	25.1
10/11/2019 11:40	7	7	7	29.19	4.1	3.9	25.1
10/11/2019 11:50	7	7	7	30.29	4.8	4	24.6
10/11/2019 12:00	7	7	7	31.76	4.8	3.9	0.5
10/11/2019 12:10	7	7	7	30.72	0.8	0.9	0.4
10/11/2019 12:20	7	7	7	28.86	1.3	1.2	24.9
10/11/2019 12:30	7	7	7	28.83	4.6	3.8	25.1
10/11/2019 12:40	7	7	7	30.47	4.6	3.8	24.5
10/11/2019 12:50	7	7	7	31.85	4.7	3.8	0.5

10/11/2019 13:00	7	7	7	31.45	0.9	0.8	0.4
10/11/2019 13:10	7	7	7	30.23	0.8	0.9	0.4
10/11/2019 13:20	7	7	7	29.01	1.9	1.8	25
10/11/2019 13:30	7	7	7	28.74	4.9	3.8	25
10/11/2019 13:40	7	7	7	30.14	4.6	3.8	24.7
10/11/2019 13:50	7	7	7	31.51	4.7	3.8	15.1
10/11/2019 14:00	7	7	7	31.18	0.8	0.8	0.4
10/11/2019 14:10	7	7	7	29.8	0.8	0.8	0.4
10/11/2019 14:20	7	7	7	28.25	3.3	3.2	25.1
10/11/2019 14:30	7	7	7	29.25	4.6	3.9	25
10/11/2019 14:40	7	7	7	30.57	4.8	3.8	24.5
10/11/2019 14:50	7	7	7	31.88	4.7	3.8	0.4
10/11/2019 15:00	7	7	7	31.09	0.8	0.8	0.4
10/11/2019 15:10	7	7	7	29.44	0.7	0.8	0.3
10/11/2019 15:20	7	7	7	28.37	4.9	3.8	25.1
10/11/2019 15:30	7	7	7	29.71	4.6	3.9	24.7
10/11/2019 15:40	7	7	7	31.42	4.5	3.8	22.7
10/11/2019 15:50	7	7	7	31.18	0.8	0.8	0.4
10/11/2019 16:00	7	7	7	29.53	0.8	0.9	0.4
10/11/2019 16:10	7	7	7	28.4	3.5	3.4	25.1
10/11/2019 16:20	7	7	7	29.01	4.5	3.8	25
10/11/2019 16:30	7	7	7	30.14	4.7	3.8	24.8
10/11/2019 16:40	7	7	7	31.12	4.7	3.8	23.9
10/11/2019 16:50	7	7	7	32.03	4.9	3.4	0.4
10/11/2019 17:00	7	7	7	31.05	0.6	0.8	0.4
10/11/2019 17:10	7	7	7	29.77	0.7	0.8	0.4
10/11/2019 17:20	7	7	7	28.61	3.4	3.3	25.1
10/11/2019 17:30	7	7	7	29.01	4.9	3.9	25
10/11/2019 17:40	7	7	7	30.2	4.7	3.8	24.7
10/11/2019 17:50	7	7	7	31.27	4.7	3.9	23.4
10/11/2019 18:00	7	7	7	31.85	0.9	0.8	0.4
10/11/2019 18:10	7	7	7	30.51	0.8	0.8	0.4
10/11/2019 18:20	7	7	7	29.35	0.9	0.8	2.8
10/11/2019 18:30	7	7	7	28.34	4.8	3.8	25.1
10/11/2019 18:40	7	7	7	29.83	4.6	3.8	24.7
10/11/2019 18:50	7	7	7	31.18	4.7	3.8	23.4
10/11/2019 19:00	7	7	7	31.67	0.9	0.9	0.4
10/11/2019 19:10	7	7	7	30.35	0.9	0.8	0.4
10/11/2019 19:20	7	7	7	29.16	1.3	1.3	24.9
10/11/2019 19:30	7	7	7	28.55	4.8	3.7	25.1
10/11/2019 19:40	7	7	7	29.59	4.9	3.8	24.9
10/11/2019 19:50	7	7	7	30.66	4.7	3.8	24.5
10/11/2019 20:00	7	7	7	31.45	4.6	3.8	20.9
10/11/2019 20:10	7	7	7	32.03	0.7	0.7	0.4
10/11/2019 20:20	7	7	7	31.12	0.7	0.8	0.4
10/11/2019 20:30	7	7	7	29.89	0.8	0.9	0.4
10/11/2019 20:40	7	7	7	28.25	3.4	3.3	25.1

10/11/2019 20:50	7	7	7	29.22	5.1	3.8	25
10/11/2019 21:00	7	7	7	30.66	4.6	3.8	24.4
10/11/2019 21:10	7	7	7	31.79	0.7	0.8	0.4
10/11/2019 21:20	7	7	7	29.13	0.7	0.8	0.4
10/11/2019 21:30	7	7	7	28.61	4.6	3.8	25
10/11/2019 21:40	7	7	7	30.99	4.6	3.8	24.1
10/11/2019 21:50	7	7	7	32	0.8	0.9	0.4
10/11/2019 22:00	7	7	7	31.05	0.7	0.9	0.4
10/11/2019 22:10	7	7	7	30.51	0.7	0.8	0.4
10/11/2019 22:20	7	7	7	29.13	1.1	1.1	24.9
10/11/2019 22:30	7	7	7	28.67	4.8	3.8	25.1
10/11/2019 22:40	7	7	7	29.99	4.6	3.8	24.8
10/11/2019 22:50	7	7	7	31.7	4.6	3.8	0.5
10/11/2019 23:00	7	7	7	30.78	0.8	0.8	0.4
10/11/2019 23:10	7	7	7	29.35	1.1	0.9	2.6
10/11/2019 23:20	7	7	7	28.4	4.7	3.8	25.1
10/11/2019 23:30	7	7	7	29.65	4.9	3.8	24.9
10/11/2019 23:40	7	7	7	30.47	4.7	3.9	24.6
10/11/2019 23:50	7	7	7	31.45	4.7	3.9	23
10/12/2019 0:00	7	7	7	31.6	0.9	0.8	0.4
10/12/2019 0:10	7	7	7	30.32	0.8	0.8	0.4
10/12/2019 0:20	7	7	7	28.4	2.9	3	25
10/12/2019 0:30	7	7	7	29.19	4.4	3.8	25
10/12/2019 0:40	7	7	7	30.78	4.6	3.8	24.3
10/12/2019 0:50	7	7	7	31.97	0.8	0.8	0.4
10/12/2019 1:00	7	7	7	30.41	0.7	0.8	0.4
10/12/2019 1:10	7	7	7	28.8	2.3	2.4	25
10/12/2019 1:20	7	7	7	29.01	4.8	3.8	25
10/12/2019 1:30	7	7	7	30.44	4.6	3.8	24.6
10/12/2019 1:40	7	7	7	31.94	4.7	3.7	0.4
10/12/2019 1:50	7	7	7	30.23	0.7	0.8	0.4
10/12/2019 2:00	7	7	7	28.25	3.3	3.2	25.1
10/12/2019 2:10	7	7	7	29.32	4.7	3.8	25
10/12/2019 2:20	7	7	7	30.78	4.8	3.9	24.4
10/12/2019 2:30	7	7	7	31.97	4.8	3.6	0.4
10/12/2019 2:40	7	7	7	31.12	0.8	0.8	0.4
10/12/2019 2:50	7	7	7	30.08	0.6	0.8	0.4
10/12/2019 3:00	7	7	7	28.49	3.2	3.1	25.1
10/12/2019 3:10	7	7	7	29.07	4.6	3.8	25.1
10/12/2019 3:20	7	7	7	30.14	4.7	3.9	24.7
10/12/2019 3:30	7	7	7	31.45	4.7	3.8	22.8
10/12/2019 3:40	7	7	7	31.67	0.8	0.8	0.4
10/12/2019 3:50	7	7	7	30.2	0.7	0.8	0.4
10/12/2019 4:00	7	7	7	28.49	3.1	3	25.1
10/12/2019 4:10	7	7	7	29.13	4.7	3.8	25
10/12/2019 4:20	7	7	7	30.57	4.6	3.9	24.4
10/12/2019 4:30	7	7	7	31.88	0.9	0.8	0.4

10/12/2019 4:40	7	7	7	30.54	0.7	0.8	0.4
10/12/2019 4:50	7	7	7	29.53	0.9	0.8	2.6
10/12/2019 5:00	7	7	7	28.4	3.4	3.4	25.1
10/12/2019 5:10	7	7	7	29.25	4.8	3.8	25.1
10/12/2019 5:20	7	7	7	30.41	4.7	3.9	24.6
10/12/2019 5:30	7	7	7	31.42	4.5	3.8	22.9
10/12/2019 5:40	7	7	7	31.79	0.9	0.9	0.4
10/12/2019 5:50	7	7	7	30.81	0.9	0.8	0.4
10/12/2019 6:00	7	7	7	29.71	0.7	0.9	0.3
10/12/2019 6:10	7	7	7	28.25	3.5	3.4	25.1
10/12/2019 6:20	7	7	7	29.38	4.7	3.8	25
10/12/2019 6:30	7	7	7	30.51	4.6	3.8	24.5
10/12/2019 6:40	7	7	7	31.6	4.5	3.9	0.6
10/12/2019 6:50	7	7	7	31.97	0.9	0.8	0.4
10/12/2019 7:00	7	7	7	31.05	0.8	0.8	0.4
10/12/2019 7:10	7	7	7	30.11	0.8	0.8	0.4
10/12/2019 7:20	7	7	7	28.92	2.2	2.5	25
10/12/2019 7:30	7	7	7	28.86	4.8	3.8	25.1
10/12/2019 7:40	7	7	7	29.65	4.8	3.9	24.9
10/12/2019 7:50	7	7	7	30.63	4.6	3.8	24.5
10/12/2019 8:00	7	7	7	31.54	4.9	3.8	0.5
10/12/2019 8:10	7	7	7	31.51	0.9	0.8	0.4
10/12/2019 8:20	7	7	7	30.41	0.7	0.8	0.4
10/12/2019 8:30	7	7	7	28.92	1.5	1.4	24.9
10/12/2019 8:40	7	7	7	28.95	4.7	3.8	25
10/12/2019 8:50	7	7	7	30.26	4.7	3.8	24.6
10/12/2019 9:00	7	7	7	31.6	4.8	3.9	0.5
10/12/2019 9:10	7	7	7	31.12	0.9	0.8	0.4
10/12/2019 9:20	7	7	7	29.62	0.7	0.8	0.4
10/12/2019 9:30	7	7	7	28.28	4.8	3.8	25.1
10/12/2019 9:40	7	7	7	29.68	4.8	3.9	24.8
10/12/2019 9:50	7	7	7	31.33	4.9	3.8	22.8
10/12/2019 10:00	7	7	7	31.42	0.9	0.8	0.4
10/12/2019 10:10	7	7	7	29.74	0.8	0.8	0.4
10/12/2019 10:20	7	7	7	28.25	3.4	3.4	25.1
10/12/2019 10:30	7	7	7	29.22	4.4	3.8	25
10/12/2019 10:40	7	7	7	30.78	4.9	3.9	24.4
10/12/2019 10:50	7	7	7	31.94	0.7	0.8	0.4
10/12/2019 11:00	7	7	7	30.32	0.8	0.8	0.4
10/12/2019 11:10	7	7	7	28.4	3.1	3	25
10/12/2019 11:20	7	7	7	29.25	4.6	3.9	25
10/12/2019 11:30	7	7	7	30.66	4.7	3.9	24.5
10/12/2019 11:40	7	7	7	32.09	0.9	0.8	0.4
10/12/2019 11:50	7	7	7	30.96	0.8	0.8	0.4
10/12/2019 12:00	7	7	7	29.62	0.7	0.9	0.4
10/12/2019 12:10	7	7	7	28.25	3.3	3.3	25.1
10/12/2019 12:20	7	7	7	29.32	4.9	3.9	25

10/12/2019 12:30	7	7	7	30.66	4.6	3.8	24.4
10/12/2019 12:40	7	7	7	32.15	0.7	0.8	0.4
10/12/2019 12:50	7	7	7	30.26	0.8	0.8	0.4
10/12/2019 13:00	7	7	7	28.19	3.4	3.2	25.1
10/12/2019 13:10	7	7	7	29.41	4.6	3.8	24.9
10/12/2019 13:20	7	7	7	31.05	4.8	3.8	24
10/12/2019 13:30	7	7	7	31.42	0.8	0.8	0.4
10/12/2019 13:40	7	7	7	29.86	0.8	0.8	0.4
10/12/2019 13:50	7	7	7	28.06	3.5	3.4	25.1
10/12/2019 14:00	7	7	7	29.5	4.6	3.8	24.9
10/12/2019 14:10	7	7	7	30.99	4.8	3.8	24.2
10/12/2019 14:20	7	7	7	32.06	0.7	0.8	0.5
10/12/2019 14:30	7	7	7	30.93	0.7	0.7	0.4
10/12/2019 14:40	7	7	7	29.35	0.9	0.9	0.5
10/12/2019 14:50	7	7	7	28.34	4.6	3.7	25.1
10/12/2019 15:00	7	7	7	30.11	4.5	3.8	24.7
10/12/2019 15:10	7	7	7	32.06	5.1	3.1	0.4
10/12/2019 15:20	7	7	7	30.35	0.9	0.8	0.4
10/12/2019 15:30	7	7	7	28.61	2.4	2.4	24.9
10/12/2019 15:40	7	7	7	29.07	4.6	3.8	25
10/12/2019 15:50	7	7	7	30.47	4.7	3.9	24.6
10/12/2019 16:00	7	7	7	31.85	4.9	3.8	0.5
10/12/2019 16:10	7	7	7	30.75	1	0.8	0.4
10/12/2019 16:20	7	7	7	28.86	1.1	1	24.8
10/12/2019 16:30	7	7	7	28.77	4.5	3.9	25
10/12/2019 16:40	7	7	7	30.47	4.7	3.8	24.5
10/12/2019 16:50	7	7	7	31.73	4.8	3.9	0.5
10/12/2019 17:00	7	7	7	31.21	0.9	0.8	0.4
10/12/2019 17:10	7	7	7	30.26	0.9	0.8	0.4
10/12/2019 17:20	7	7	7	29.07	1.5	1.5	24.9
10/12/2019 17:30	7	7	7	28.55	4.6	3.8	25.1
10/12/2019 17:40	7	7	7	29.86	4.8	3.8	24.7
10/12/2019 17:50	7	7	7	31.6	4.8	3.8	0.5
10/12/2019 18:00	7	7	7	30.54	0.8	0.8	0.4
10/12/2019 18:10	7	7	7	28.74	1.5	1.5	24.9
10/12/2019 18:20	7	7	7	28.95	4.7	3.8	25
10/12/2019 18:30	7	7	7	30.32	4.5	3.8	24.7
10/12/2019 18:40	7	7	7	31.15	4.8	3.8	23.6
10/12/2019 18:50	7	7	7	32	4.6	3.6	0.4
10/12/2019 19:00	7	7	7	31.33	0.9	0.8	0.4
10/12/2019 19:10	7	7	7	30.32	0.8	0.8	0.4
10/12/2019 19:20	7	7	7	29.04	1.3	1.4	24.9
10/12/2019 19:30	7	7	7	28.49	4.7	3.8	25.1
10/12/2019 19:40	7	7	7	30.02	4.6	3.8	24.7
10/12/2019 19:50	7	7	7	31.51	4.9	3.9	22.9
10/12/2019 20:00	7	7	7	30.93	0.8	0.8	0.4
10/12/2019 20:10	7	7	7	29.22	0.9	0.8	2.1

10/12/2019 20:20	7	7	7	28.43	4.7	3.8	25.1
10/12/2019 20:30	7	7	7	30.11	4.9	3.9	24.7
10/12/2019 20:40	7	7	7	31.21	4.6	3.8	23.8
10/12/2019 20:50	7	7	7	31.97	0.9	0.8	0.4
10/12/2019 21:00	7	7	7	30.9	0.8	0.9	0.4
10/12/2019 21:10	7	7	7	29.47	1	0.9	0.4
10/12/2019 21:20	7	7	7	28.37	4.5	3.8	25.1
10/12/2019 21:30	7	7	7	29.62	4.9	3.8	24.8
10/12/2019 21:40	7	7	7	30.99	4.8	4.1	24
10/12/2019 21:50	7	7	7	32.09	1.9	1.2	0.4
10/12/2019 22:00	7	7	7	30.57	0.9	0.9	0.4
10/12/2019 22:10	7	7	7	29.13	1	1	24.9
10/12/2019 22:20	7	7	7	28.52	4.7	3.9	25.1
10/12/2019 22:30	7	7	7	30.08	4.8	3.8	24.7
10/12/2019 22:40	7	7	7	31.45	4.8	3.8	10.5
10/12/2019 22:50	7	7	7	31.21	0.9	0.8	0.4
10/12/2019 23:00	7	7	7	29.99	0.7	0.8	0.4
10/12/2019 23:10	7	7	7	28.8	2.7	2.8	25.1
10/12/2019 23:20	7	7	7	28.83	4.6	3.8	25.1
10/12/2019 23:30	7	7	7	29.74	4.6	3.8	24.8
10/12/2019 23:40	7	7	7	30.75	4.5	3.8	24.4
10/12/2019 23:50	7	7	7	31.97	4.9	3.7	0.4
10/13/2019 0:00	7	7	7	30.75	0.9	0.8	0.4
10/13/2019 0:10	7	7	7	29.35	1.1	0.9	2.3
10/13/2019 0:20	7	7	7	28.49	4.6	3.8	25.1
10/13/2019 0:30	7	7	7	30.11	4.7	3.9	24.7
10/13/2019 0:40	7	7	7	32	4.9	3.7	0.4
10/13/2019 0:50	7	7	7	30.41	0.7	0.8	0.4
10/13/2019 1:00	7	7	7	28.98	1.3	1.3	24.9
10/13/2019 1:10	7	7	7	28.67	4.8	3.8	25.1
10/13/2019 1:20	7	7	7	29.96	4.8	3.8	24.8
10/13/2019 1:30	7	7	7	31.02	4.6	3.9	24.2
10/13/2019 1:40	7	7	7	32.06	4.6	2.7	0.4
10/13/2019 1:50	7	7	7	30.87	0.9	0.9	0.4
10/13/2019 2:00	7	7	7	29.38	0.9	0.8	1.6
10/13/2019 2:10	7	7	7	28.34	4.9	3.8	25.2
10/13/2019 2:20	7	7	7	29.41	4.6	3.8	24.9
10/13/2019 2:30	7	7	7	30.23	4.7	3.8	24.6
10/13/2019 2:40	7	7	7	31.36	4.7	3.8	22.9
10/13/2019 2:50	7	7	7	31.94	0.9	0.8	0.4
10/13/2019 3:00	7	7	7	30.54	0.8	0.8	0.4
10/13/2019 3:10	7	7	7	29.19	0.9	1	24.8
10/13/2019 3:20	7	7	7	28.49	4.7	3.8	25.1
10/13/2019 3:30	7	7	7	29.65	4.9	3.8	24.9
10/13/2019 3:40	7	7	7	30.63	4.9	3.9	24.5
10/13/2019 3:50	7	7	7	31.57	4.7	3.8	0.5
10/13/2019 4:00	7	7	7	31.57	0.9	0.9	0.4

10/13/2019 4:10	7	7	7	30.54	0.8	0.8	0.4
10/13/2019 4:20	7	7	7	29.5	1.1	0.9	2.6
10/13/2019 4:30	7	7	7	28.31	4.5	3.8	25
10/13/2019 4:40	7	7	7	29.5	4.9	4	25
10/13/2019 4:50	7	7	7	30.81	4.7	3.8	24.5
10/13/2019 5:00	7	7	7	32.06	5.2	3.1	0.4
10/13/2019 5:10	7	7	7	30.54	0.9	0.8	0.4
10/13/2019 5:20	7	7	7	28.83	1.6	1.7	24.9
10/13/2019 5:30	7	7	7	28.92	4.7	3.8	25
10/13/2019 5:40	7	7	7	30.29	4.7	3.8	24.6
10/13/2019 5:50	7	7	7	31.79	4.7	3.8	0.5
10/13/2019 6:00	7	7	7	30.75	0.8	0.8	0.4
10/13/2019 6:10	7	7	7	28.95	0.9	0.9	24.8
10/13/2019 6:20	7	7	7	28.74	4.8	3.9	25.1
10/13/2019 6:30	7	7	7	30.08	4.8	3.9	24.6
10/13/2019 6:40	7	7	7	31.18	4.6	3.8	23.5
10/13/2019 6:50	7	7	7	31.97	0.9	0.9	0.4
10/13/2019 7:00	7	7	7	30.87	0.8	0.8	0.4
10/13/2019 7:10	7	7	7	29.71	0.6	0.8	0.4
10/13/2019 7:20	7	7	7	28.46	3.4	3.2	25.2
10/13/2019 7:30	7	7	7	29.04	4.7	3.8	25.1
10/13/2019 7:40	7	7	7	30.05	4.5	3.8	24.8
10/13/2019 7:50	7	7	7	30.99	5	3.8	24.2
10/13/2019 8:00	7	7	7	31.94	4.9	3.8	0.5
10/13/2019 8:10	7	7	7	31.48	1	0.9	0.4
10/13/2019 8:20	7	7	7	30.35	0.9	0.9	0.4
10/13/2019 8:30	7	7	7	29.25	1.1	1	24.9
10/13/2019 8:40	7	7	7	28.34	4.9	3.8	25.1
10/13/2019 8:50	7	7	7	29.56	4.9	3.8	24.9
10/13/2019 9:00	7	7	7	30.72	4.9	3.9	24.4
10/13/2019 9:10	7	7	7	31.94	4.8	3.8	0.5
10/13/2019 9:20	7	7	7	30.99	0.7	0.9	0.4
10/13/2019 9:30	7	7	7	29.44	0.9	0.8	0.4
10/13/2019 9:40	7	7	7	28.34	4.9	3.8	25.1
10/13/2019 9:50	7	7	7	29.74	4.8	3.8	24.8
10/13/2019 10:00	7	7	7	30.99	4.6	3.9	24.1
10/13/2019 10:10	7	7	7	31.88	0.9	0.9	0.5
10/13/2019 10:20	7	7	7	30.66	0.9	0.9	0.5
10/13/2019 10:30	7	7	7	29.38	0.9	0.9	3.6
10/13/2019 10:40	7	7	7	28.34	4.8	3.8	25
10/13/2019 10:50	7	7	7	30.05	4.6	3.8	24.7
10/13/2019 11:00	7	7	7	31.63	4.7	3.8	0.5
10/13/2019 11:10	7	7	7	30.78	0.8	0.8	0.4
10/13/2019 11:20	7	7	7	28.92	1.1	1	24.8
10/13/2019 11:30	7	7	7	28.8	4.9	3.9	25.1
10/13/2019 11:40	7	7	7	30.29	4.8	3.8	24.6
10/13/2019 11:50	7	7	7	31.73	4.6	3.8	0.5

10/13/2019 12:00	7	7	7	31.21	0.8	0.8	0.4
10/13/2019 12:10	7	7	7	30.17	0.8	0.9	0.4
10/13/2019 12:20	7	7	7	28.83	2.2	2.2	25
10/13/2019 12:30	7	7	7	28.89	4.7	3.8	25.1
10/13/2019 12:40	7	7	7	30.2	4.7	3.9	24.7
10/13/2019 12:50	7	7	7	31.6	4.7	3.8	0.6
10/13/2019 13:00	7	7	7	31.02	1	0.8	0.4
10/13/2019 13:10	7	7	7	29.53	0.9	0.8	0.4
10/13/2019 13:20	7	7	7	28.28	4.6	3.8	25.1
10/13/2019 13:30	7	7	7	29.65	4.7	3.8	24.8
10/13/2019 13:40	7	7	7	30.99	4.8	3.9	24.1
10/13/2019 13:50	7	7	7	31.76	0.8	0.8	0.4
10/13/2019 14:00	7	7	7	30.78	0.9	0.8	0.5
10/13/2019 14:10	7	7	7	29.35	1	0.9	1.8
10/13/2019 14:20	7	7	7	28.43	4.9	3.8	25.1
10/13/2019 14:30	7	7	7	29.68	4.9	3.8	24.8
10/13/2019 14:40	7	7	7	31.21	4.2	3.9	23.6
10/13/2019 14:50	7	7	7	31.73	1	0.8	0.4
10/13/2019 15:00	7	7	7	30.08	0.8	0.9	0.4
10/13/2019 15:10	7	7	7	28.16	3.3	3.3	25.1
10/13/2019 15:20	7	7	7	29.41	4.9	3.8	24.9
10/13/2019 15:30	7	7	7	31.21	4.7	3.8	23.4
10/13/2019 15:40	7	7	7	31.15	0.9	0.8	0.4
10/13/2019 15:50	7	7	7	29.59	0.8	0.8	0.4
10/13/2019 16:00	7	7	7	28.12	4.6	3.8	25.1
10/13/2019 16:10	7	7	7	29.74	4.8	3.8	24.8
10/13/2019 16:20	7	7	7	31.12	4.7	3.8	23.8
10/13/2019 16:30	7	7	7	31.36	0.8	0.8	0.4
10/13/2019 16:40	7	7	7	29.35	0.7	0.8	0.4
10/13/2019 16:50	7	7	7	28.37	5	3.8	25.1
10/13/2019 17:00	7	7	7	30.11	4.8	3.8	24.6
10/13/2019 17:10	7	7	7	31.79	4.8	3.9	0.5
10/13/2019 17:20	7	7	7	30.84	0.8	0.8	0.4
10/13/2019 17:30	7	7	7	29.77	0.8	0.9	0.4
10/13/2019 17:40	7	7	7	28.67	3.3	3.2	25.1
10/13/2019 17:50	7	7	7	29.1	4.7	3.8	25.1
10/13/2019 18:00	7	7	7	30.02	4.7	3.9	24.7
10/13/2019 18:10	7	7	7	31.18	4.7	3.9	23.6
10/13/2019 18:20	7	7	7	32	0.9	0.8	0.4
10/13/2019 18:30	7	7	7	30.72	0.9	0.8	0.4
10/13/2019 18:40	7	7	7	29.65	0.8	0.8	0.4
10/13/2019 18:50	7	7	7	28.43	3.4	3.4	25.1
10/13/2019 19:00	7	7	7	29.13	4.7	3.8	25
10/13/2019 19:10	7	7	7	30.32	4.9	3.9	24.6
10/13/2019 19:20	7	7	7	31.6	5	3.8	0.5
10/13/2019 19:30	7	7	7	30.99	1.1	0.8	0.4
10/13/2019 19:40	7	7	7	28.83	1	0.9	3.3

10/13/2019 19:50	7	7	7	28.8	4.5	3.8	25
10/13/2019 20:00	7	7	7	30.41	4.7	3.9	24.5
10/13/2019 20:10	7	7	7	31.94	5	3.7	0.4
10/13/2019 20:20	7	7	7	31.36	0.9	0.8	0.4
10/13/2019 20:30	7	7	7	30.78	0.9	0.8	0.4
10/13/2019 20:40	7	7	7	29.44	0.7	0.8	0.4
10/13/2019 20:50	7	7	7	28.34	4.5	3.7	25.1
10/13/2019 21:00	7	7	7	29.99	4.9	3.8	24.7
10/13/2019 21:10	7	7	7	31.76	4.6	3.8	0.5
10/13/2019 21:20	7	7	7	30.35	0.8	0.8	0.4
10/13/2019 21:30	7	7	7	28.74	1.8	1.9	25
10/13/2019 21:40	7	7	7	29.04	4.6	3.9	25
10/13/2019 21:50	7	7	7	30.32	4.6	3.8	24.6
10/13/2019 22:00	7	7	7	31.54	4.5	3.8	0.6
10/13/2019 22:10	7	7	7	31.27	0.8	0.9	0.4
10/13/2019 22:20	7	7	7	29.74	0.9	0.8	0.4
10/13/2019 22:30	7	7	7	28.31	3.3	3.4	25.1
10/13/2019 22:40	7	7	7	29.25	5	3.8	24.9
10/13/2019 22:50	7	7	7	30.9	4.8	3.8	24.1
10/13/2019 23:00	7	7	7	31.27	0.9	0.8	0.5
10/13/2019 23:10	7	7	7	29.07	0.9	0.8	0.5
10/13/2019 23:20	7	7	7	28.55	4.7	3.8	25.1
10/13/2019 23:30	7	7	7	30.35	4.9	3.8	24.6
10/13/2019 23:40	7	7	7	31.73	4.8	3.8	0.5
10/13/2019 23:50	7	7	7	31.21	0.9	0.9	0.4
10/14/2019 0:00	7	7	7	29.89	0.8	0.9	0.3
10/14/2019 0:10	7	7	7	28.74	3	3	25.1
10/14/2019 0:20	7	7	7	29.04	4.7	3.8	25
10/14/2019 0:30	7	7	7	30.08	4.6	3.8	24.8
10/14/2019 0:40	7	7	7	30.96	5.1	3.9	24.2
10/14/2019 0:50	7	7	7	32.09	3.6	2.1	0.4
10/14/2019 1:00	7	7	7	30.72	0.8	0.9	0.4
10/14/2019 1:10	7	7	7	28.7	1.3	1.4	24.9
10/14/2019 1:20	7	7	7	28.92	4.5	3.8	25.1
10/14/2019 1:30	7	7	7	30.41	4.9	3.8	24.6
10/14/2019 1:40	7	7	7	31.88	4.8	3.8	0.4
10/14/2019 1:50	7	7	7	30.84	0.9	0.9	0.4
10/14/2019 2:00	7	7	7	29.32	0.9	0.9	2.5
10/14/2019 2:10	7	7	7	28.28	4.8	3.8	25.1
10/14/2019 2:20	7	7	7	29.68	4.5	3.9	24.8
10/14/2019 2:30	7	7	7	30.9	4.5	3.8	24.1
10/14/2019 2:40	7	7	7	31.63	0.8	0.8	0.4
10/14/2019 2:50	7	7	7	29.56	0.9	0.8	0.4
10/14/2019 3:00	7	7	7	28.06	4.6	3.8	25.1
10/14/2019 3:10	7	7	7	30.14	4.8	3.8	24.6
10/14/2019 3:20	7	7	7	31.82	4.6	3.8	0.5
10/14/2019 3:30	7	7	7	31.18	0.9	0.8	0.4

10/14/2019 3:40	7	7	7	30.26	0.9	0.8	0.4
10/14/2019 3:50	7	7	7	28.95	1.6	1.8	24.9
10/14/2019 4:00	7	7	7	28.8	4.9	3.8	25.1
10/14/2019 4:10	7	7	7	30.2	4.6	3.8	24.6
10/14/2019 4:20	7	7	7	32	0.8	0.9	0.4
10/14/2019 4:30	7	7	7	29.77	0.8	0.8	0.4
10/14/2019 4:40	7	7	7	28.16	5	3.7	25
10/14/2019 4:50	7	7	7	30.02	4.8	3.9	24.7
10/14/2019 5:00	7	7	7	31.6	4.7	3.8	0.5
10/14/2019 5:10	7	7	7	31.15	0.9	0.8	0.5
10/14/2019 5:20	7	7	7	30.32	0.9	0.9	0.4
10/14/2019 5:30	7	7	7	29.5	1	0.9	3.1
10/14/2019 5:40	7	7	7	28.43	3.4	3.4	25.2
10/14/2019 5:50	7	7	7	29.1	4.7	3.9	25
10/14/2019 6:00	7	7	7	30.51	4.7	3.8	24.5
10/14/2019 6:10	7	7	7	31.7	4.9	3.8	0.5
10/14/2019 6:20	7	7	7	30.96	0.8	0.8	0.4
10/14/2019 6:30	7	7	7	29.13	1.2	0.9	2.7
10/14/2019 6:40	7	7	7	28.52	4.7	3.8	25
10/14/2019 6:50	7	7	7	30.47	4.8	3.9	24.5
10/14/2019 7:00	7	7	7	32	4.8	3.5	0.4
10/14/2019 7:10	7	7	7	30.63	0.9	0.9	0.4
10/14/2019 7:20	7	7	7	29.38	0.9	0.9	3.5
10/14/2019 7:30	7	7	7	28.37	4.6	3.9	25.1
10/14/2019 7:40	7	7	7	29.22	4.4	3.8	25
10/14/2019 7:50	7	7	7	30.51	4.7	3.8	24.7
10/14/2019 8:00	7	7	7	31.88	4.7	3.8	0.5
10/14/2019 8:10	7	7	7	30.9	0.8	0.8	0.4
10/14/2019 8:20	7	7	7	29.38	0.9	0.9	0.5
10/14/2019 8:30	7	7	7	28.43	4.6	3.8	25.1
10/14/2019 8:40	7	7	7	30.08	4.7	3.9	24.7
10/14/2019 8:50	7	7	7	31.6	4.5	3.8	0.5
10/14/2019 9:00	7	7	7	30.75	0.7	0.9	0.4
10/14/2019 9:10	7	7	7	28.52	2.2	2.2	24.9
10/14/2019 9:20	7	7	7	29.13	4.7	3.8	25
10/14/2019 9:30	7	7	7	30.87	4.7	3.8	24.3
10/14/2019 9:40	7	7	7	31.94	1	0.9	0.4
10/14/2019 9:50	7	7	7	30.84	0.9	0.8	0.4
10/14/2019 10:00	7	7	7	29.86	0.8	0.9	0.4
10/14/2019 10:10	7	7	7	28.34	3.4	3.3	25.1
10/14/2019 10:20	7	7	7	29.35	4.7	3.8	25
10/14/2019 10:30	7	7	7	30.69	4.6	3.9	24.4
10/14/2019 10:40	7	7	7	31.73	0.9	0.9	0.4
10/14/2019 10:50	7	7	7	30.05	0.7	0.8	0.4
10/14/2019 11:00	7	7	7	28.4	3.4	3.1	25.1
10/14/2019 11:10	7	7	7	29.22	4.7	3.9	25
10/14/2019 11:20	7	7	7	30.44	4.7	3.9	24.6

10/14/2019 11:30	7	7	7	31.33	4.9	3.9	23.5
10/14/2019 11:40	7	7	7	31.94	0.9	0.8	0.4
10/14/2019 11:50	7	7	7	30.41	0.8	0.9	0.4
10/14/2019 12:00	7	7	7	28.25	3.1	3.1	25
10/14/2019 12:10	7	7	7	29.38	4.9	3.8	24.9
10/14/2019 12:20	7	7	7	31.57	4.7	3.8	0.6
10/14/2019 12:30	7	7	7	30.66	0.8	0.9	0.4
10/14/2019 12:40	7	7	7	29.13	1	1	3.4
10/14/2019 12:50	7	7	7	28.58	4.7	3.9	25.1
10/14/2019 13:00	7	7	7	29.38	4.7	3.9	25
10/14/2019 13:10	7	7	7	30.29	4.9	3.9	24.6
10/14/2019 13:20	7	7	7	31.42	4.4	3.9	22.7
10/14/2019 13:30	7	7	7	30.96	0.9	0.8	0.4
10/14/2019 13:40	7	7	7	28.83	1	0.9	3.1
10/14/2019 13:50	7	7	7	28.92	4.7	3.8	25
10/14/2019 14:00	7	7	7	30.63	4.4	3.9	24.5
10/14/2019 14:10	7	7	7	32	4.8	3.6	0.5
10/14/2019 14:20	7	7	7	31.45	0.9	0.8	0.4
10/14/2019 14:30	7	7	7	30.78	0.8	0.8	0.4
10/14/2019 14:40	7	7	7	29.56	0.7	0.9	0.4
10/14/2019 14:50	7	7	7	28.22	4.5	3.8	25.1
10/14/2019 15:00	7	7	7	29.53	4.6	3.9	24.9
10/14/2019 15:10	7	7	7	31.21	4.3	3.8	23.4
10/14/2019 15:20	7	7	7	31.45	0.9	0.9	0.4
10/14/2019 15:30	7	7	7	29.77	0.8	0.8	0.4
10/14/2019 15:40	7	7	7	28.34	3.3	3.3	25.1
10/14/2019 15:50	7	7	7	29.13	4.7	3.8	25
10/14/2019 16:00	7	7	7	30.17	4.7	3.9	24.7
10/14/2019 16:10	7	7	7	31.27	4.6	3.8	23.8
10/14/2019 16:20	7	7	7	32	0.8	0.8	0.4
10/14/2019 16:30	7	7	7	30.87	0.8	0.9	0.4
10/14/2019 16:40	7	7	7	29.83	0.7	0.8	0.4
10/14/2019 16:50	7	7	7	28.89	2.9	2.9	25
10/14/2019 17:00	7	7	7	28.89	4.9	3.6	25
10/14/2019 17:10	7	7	7	29.99	4.6	3.8	24.8
10/14/2019 17:20	7	7	7	31.21	5	3.8	23.5
10/14/2019 17:30	7	7	7	31.67	0.7	0.8	0.4
10/14/2019 17:40	7	7	7	30.35	0.8	0.8	0.4
10/14/2019 17:50	7	7	7	28.98	1.7	1.7	24.9
10/14/2019 18:00	7	7	7	28.74	4.8	3.8	25
10/14/2019 18:10	7	7	7	30.29	4.6	3.9	24.6
10/14/2019 18:20	7	7	7	31.82	4.9	3.8	0.5
10/14/2019 18:30	7	7	7	30.35	0.7	0.8	0.4
10/14/2019 18:40	7	7	7	28.8	1.6	1.8	24.9
10/14/2019 18:50	7	7	7	28.86	4.7	3.8	25
10/14/2019 19:00	7	7	7	30.29	4.9	3.9	24.7
10/14/2019 19:10	7	7	7	31.27	4.8	3.9	23.5

10/14/2019 19:20	7	7	7	31.82	0.9	0.9	0.4
10/14/2019 19:30	7	7	7	30.69	0.8	0.9	0.4
10/14/2019 19:40	7	7	7	29.38	0.9	0.9	2.7
10/14/2019 19:50	7	7	7	28.31	4.6	3.8	25.1
10/14/2019 20:00	7	7	7	29.38	4.8	3.9	25
10/14/2019 20:10	7	7	7	30.66	4.6	3.8	24.5
10/14/2019 20:20	7	7	7	31.85	4.9	3.8	0.4
10/14/2019 20:30	7	7	7	30.72	0.8	0.8	0.4
10/14/2019 20:40	7	7	7	29.1	0.9	1	3.4
10/14/2019 20:50	7	7	7	28.61	4.5	3.9	25.1
10/14/2019 21:00	7	7	7	29.99	4.5	3.9	24.7
10/14/2019 21:10	7	7	7	31.48	4.8	4	23
10/14/2019 21:20	7	7	7	31.21	0.8	0.9	0.4
10/14/2019 21:30	7	7	7	29.44	0.7	0.7	0.4
10/14/2019 21:40	7	7	7	28.22	4.6	3.8	25
10/14/2019 21:50	7	7	7	29.89	4.8	4	24.7
10/14/2019 22:00	7	7	7	31.57	4.8	3.8	0.6
10/14/2019 22:10	7	7	7	30.51	0.8	0.8	0.4
10/14/2019 22:20	7	7	7	28.55	2.2	2.2	24.9
10/14/2019 22:30	7	7	7	29.19	4.7	3.7	25
10/14/2019 22:40	7	7	7	30.84	4.7	3.8	24.3
10/14/2019 22:50	7	7	7	31.94	4.7	3.6	0.5
10/14/2019 23:00	7	7	7	31.48	0.9	0.8	0.4
10/14/2019 23:10	7	7	7	30.14	0.9	0.9	0.4
10/14/2019 23:20	7	7	7	28.28	3.5	3.2	25.1
10/14/2019 23:30	7	7	7	29.35	4	3.8	24.9
10/14/2019 23:40	7	7	7	30.9	4.7	3.8	24.2
10/14/2019 23:50	7	7	7	31.7	0.7	0.8	0.4
10/15/2019 0:00	7	7	7	30.57	0.7	0.8	0.4
10/15/2019 0:10	7	7	7	29.19	0.9	1	3.5
10/15/2019 0:20	7	7	7	28.49	4.5	3.8	25.1
10/15/2019 0:30	7	7	7	29.65	4.7	3.9	24.8
10/15/2019 0:40	7	7	7	31.27	4.9	3.9	23.3
10/15/2019 0:50	7	7	7	31.39	0.9	0.8	0.4
10/15/2019 1:00	7	7	7	29.41	0.7	0.9	0.4
10/15/2019 1:10	7	7	7	28.34	4.6	3.8	25.1
10/15/2019 1:20	7	7	7	29.89	4.6	3.8	24.7
10/15/2019 1:30	7	7	7	31.21	4.8	3.9	23.4
10/15/2019 1:40	7	7	7	31.7	0.8	0.9	0.4
10/15/2019 1:50	7	7	7	30.26	0.8	0.9	0.4
10/15/2019 2:00	7	7	7	28.52	2.9	2.8	25.1
10/15/2019 2:10	7	7	7	29.1	4.7	3.9	25
10/15/2019 2:20	7	7	7	30.44	4.5	3.8	24.5
10/15/2019 2:30	7	7	7	32	4.9	3.7	0.4
10/15/2019 2:40	7	7	7	30.78	0.9	0.8	0.4
10/15/2019 2:50	7	7	7	29.13	1	0.9	3.6
10/15/2019 3:00	7	7	7	28.43	4.7	3.9	25.1

10/15/2019 3:10	7	7	7	30.17	4.8	3.9	24.6
10/15/2019 3:20	7	7	7	31.88	4.8	3.7	0.4
10/15/2019 3:30	7	7	7	30.63	0.7	0.8	0.4
10/15/2019 3:40	7	7	7	28.55	1.9	1.9	24.9
10/15/2019 3:50	7	7	7	29.13	4.7	3.9	25
10/15/2019 4:00	7	7	7	30.69	4.7	3.9	24.3
10/15/2019 4:10	7	7	7	32.03	4.7	3.3	0.5
10/15/2019 4:20	7	7	7	31.02	0.7	0.8	0.5
10/15/2019 4:30	7	7	7	30.17	0.9	0.9	0.4
10/15/2019 4:40	7	7	7	28.95	2	2.2	25
10/15/2019 4:50	7	7	7	28.77	4.6	4	25.1
10/15/2019 5:00	7	7	7	29.71	5	4	24.8
10/15/2019 5:10	7	7	7	31.48	4.6	3.8	10.3
10/15/2019 5:20	7	7	7	30.93	0.8	0.8	0.4
10/15/2019 5:30	7	7	7	28.8	1	1	24.8
10/15/2019 5:40	7	7	7	28.95	4.9	3.8	25
10/15/2019 5:50	7	7	7	30.75	4.5	3.8	24.2
10/15/2019 6:00	7	7	7	31.85	0.9	0.8	0.5
10/15/2019 6:10	7	7	7	30.66	0.7	0.9	0.4
10/15/2019 6:20	7	7	7	29.77	0.8	0.9	0.4
10/15/2019 6:30	7	7	7	28.46	3.4	3.3	25.1
10/15/2019 6:40	7	7	7	29.1	4.7	3.9	25
10/15/2019 6:50	7	7	7	30.51	4.8	3.9	24.5
10/15/2019 7:00	7	7	7	32.09	5	3.1	0.4
10/15/2019 7:10	7	7	7	30.69	0.9	0.9	0.4
10/15/2019 7:20	7	7	7	28.89	1.2	1.2	24.9
10/15/2019 7:30	7	7	7	28.83	4.9	3.9	25.1
10/15/2019 7:40	7	7	7	30.41	4.5	3.9	24.6
10/15/2019 7:50	7	7	7	32.03	4.6	3.1	0.4
10/15/2019 8:00	7	7	7	30.57	0.7	0.9	0.4
10/15/2019 8:10	7	7	7	28.83	1.5	1.5	24.9
10/15/2019 8:20	7	7	7	28.92	4.6	3.9	25
10/15/2019 8:30	7	7	7	30.51	4.8	4	24.4
10/15/2019 8:40	7	7	7	31.48	0.9	0.8	0.4
10/15/2019 8:50	7	7	7	29.38	1	0.8	0.4
10/15/2019 9:00	7	7	7	28.31	4.6	3.8	25.1
10/15/2019 9:10	7	7	7	29.86	4.4	4	24.7
10/15/2019 9:20	7	7	7	31.73	4.6	3.8	0.5
10/15/2019 9:30	7	7	7	31.09	0.9	0.9	0.4
10/15/2019 9:40	7	7	7	29.38	0.8	0.9	0.4
10/15/2019 9:50	7	7	7	28.37	4.8	3.9	25.1
10/15/2019 10:00	7	7	7	29.77	4.6	3.9	24.7
10/15/2019 10:10	7	7	7	31.36	4.5	3.9	23.2
10/15/2019 10:20	7	7	7	31.27	0.9	0.8	0.4
10/15/2019 10:30	7	7	7	29.38	0.9	0.9	0.4
10/15/2019 10:40	7	7	7	28.34	4.7	3.9	25.1
10/15/2019 10:50	7	7	7	30.17	4.8	3.9	24.7

10/15/2019 11:00	7	7	7	31.85	5.1	3.8	0.4
10/15/2019 11:10	7	7	7	30.9	0.8	0.9	0.4
10/15/2019 11:20	7	7	7	29.56	1	0.9	0.4
10/15/2019 11:30	7	7	7	28.25	4.5	3.8	25.1
10/15/2019 11:40	7	7	7	29.44	4.6	3.8	24.9
10/15/2019 11:50	7	7	7	30.72	4.5	3.9	24.4
10/15/2019 12:00	7	7	7	31.57	0.9	0.9	0.4
10/15/2019 12:10	7	7	7	29.74	0.8	0.9	0.4
10/15/2019 12:20	7	7	7	28.12	3.7	3.4	25.2
10/15/2019 12:30	7	7	7	29.38	4.6	3.8	24.8
10/15/2019 12:40	7	7	7	30.72	4.7	3.8	24.5
10/15/2019 12:50	7	7	7	31.54	5	3.9	0.7
10/15/2019 13:00	7	7	7	31.54	0.6	0.8	0.4
10/15/2019 13:10	7	7	7	30.14	0.8	0.8	0.4
10/15/2019 13:20	7	7	7	28.37	3	3.1	25
10/15/2019 13:30	7	7	7	29.16	4.7	3.9	25
10/15/2019 13:40	7	7	7	30.63	4.6	3.9	24.4
10/15/2019 13:50	7	7	7	32.03	4.8	3.6	0.5
10/15/2019 14:00	7	7	7	30.96	0.9	0.8	0.4
10/15/2019 14:10	7	7	7	29.22	0.8	0.9	0.5
10/15/2019 14:20	7	7	7	28.55	4.8	3.9	25.1
10/15/2019 14:30	7	7	7	30.32	4.7	3.9	24.5
10/15/2019 14:40	7	7	7	31.88	0.7	0.9	0.4
10/15/2019 14:50	7	7	7	30.17	0.9	0.9	0.5
10/15/2019 15:00	7	7	7	28.37	3.1	3.1	25.1
10/15/2019 15:10	7	7	7	29.19	4.9	3.9	25.1
10/15/2019 15:20	7	7	7	30.26	4.9	3.9	24.6
10/15/2019 15:30	7	7	7	31.88	4.8	3.8	0.5
10/15/2019 15:40	7	7	7	30.78	0.9	0.9	0.4
10/15/2019 15:50	7	7	7	29.16	1	0.9	3.5
10/15/2019 16:00	7	7	7	28.55	4.5	3.8	25.1
10/15/2019 16:10	7	7	7	29.77	4.8	3.8	25
10/15/2019 16:20	7	7	7	30.47	4.8	3.9	24.5
10/15/2019 16:30	7	7	7	31.85	4.8	3.8	0.5
10/15/2019 16:40	7	7	7	30.69	0.8	0.9	0.5
10/15/2019 16:50	7	7	7	28.77	1.6	1.6	24.9
10/15/2019 17:00	7	7	7	28.86	4.5	3.8	25
10/15/2019 17:10	7	7	7	30.72	4.7	3.8	24.3
10/15/2019 17:20	7	7	7	31.73	1	0.8	0.4
10/15/2019 17:30	7	7	7	29.99	0.7	0.8	0.4
10/15/2019 17:40	7	7	7	28.58	3	3.1	25.1
10/15/2019 17:50	7	7	7	28.92	4.9	3.8	25
10/15/2019 18:00	7	7	7	30.72	4.7	3.8	24.4
10/15/2019 18:10	7	7	7	31.42	0.9	0.9	0.4
10/15/2019 18:20	7	7	7	29.74	0.8	0.8	0.4
10/15/2019 18:30	7	7	7	28.06	4.9	3.8	25.2
10/15/2019 18:40	7	7	7	29.74	4.7	3.9	24.8

10/15/2019 18:50	7	7	7	31.33	4.8	3.8	23.2
10/15/2019 19:00	7	7	7	31.54	0.9	0.8	0.4
10/15/2019 19:10	7	7	7	30.29	0.8	0.9	0.5
10/15/2019 19:20	7	7	7	28.4	3	3	25
10/15/2019 19:30	7	7	7	29.32	5.1	3.8	24.9
10/15/2019 19:40	7	7	7	31.45	4.8	3.8	0.6
10/15/2019 19:50	7	7	7	30.44	0.8	0.9	0.4
10/15/2019 20:00	7	7	7	28.4	2.2	2.3	25
10/15/2019 20:10	7	7	7	29.16	4.7	3.9	25
10/15/2019 20:20	7	7	7	30.38	4.9	3.9	24.5
10/15/2019 20:30	7	7	7	31.67	4.9	3.9	0.5
10/15/2019 20:40	7	7	7	31.33	0.9	0.8	0.5
10/15/2019 20:50	7	7	7	30.14	0.9	0.9	0.4
10/15/2019 21:00	7	7	7	28.8	2.3	2.3	25
10/15/2019 21:10	7	7	7	28.89	4.9	3.8	25
10/15/2019 21:20	7	7	7	30.14	4.7	3.9	24.6
10/15/2019 21:30	7	7	7	31.67	4.8	3.8	0.6
10/15/2019 21:40	7	7	7	31.18	0.7	0.8	0.4
10/15/2019 21:50	7	7	7	29.35	0.8	0.9	0.4
10/15/2019 22:00	7	7	7	28.4	4.6	3.8	25
10/15/2019 22:10	7	7	7	29.83	4.5	3.9	24.7
10/15/2019 22:20	7	7	7	31.6	4.7	3.9	0.6
10/15/2019 22:30	7	7	7	31.02	0.9	0.8	0.4
10/15/2019 22:40	7	7	7	29.38	0.9	0.9	0.4
10/15/2019 22:50	7	7	7	28.43	4.8	3.9	25.2
10/15/2019 23:00	7	7	7	29.53	4.9	3.9	24.9
10/15/2019 23:10	7	7	7	30.81	4.9	3.9	24.3
10/15/2019 23:20	7	7	7	31.97	0.9	0.8	0.4
10/15/2019 23:30	7	7	7	30.11	0.9	0.8	0.4
10/15/2019 23:40	7	7	7	28.06	3.6	3.3	25.1
10/15/2019 23:50	7	7	7	29.59	4.5	3.9	24.8
10/16/2019 0:00	7	7	7	31.3	4.8	3.8	23
10/16/2019 0:10	7	7	7	31.12	0.8	0.8	0.5
10/16/2019 0:20	7	7	7	29.22	0.8	0.9	0.4
10/16/2019 0:30	7	7	7	28.52	4.9	3.9	25.1
10/16/2019 0:40	7	7	7	30.11	4.7	3.9	24.6
10/16/2019 0:50	7	7	7	31.94	4.8	3.7	0.5
10/16/2019 1:00	7	7	7	30.63	0.8	0.8	0.4
10/16/2019 1:10	7	7	7	28.8	1.6	1.5	24.9
10/16/2019 1:20	7	7	7	28.89	4.9	3.8	25.1
10/16/2019 1:30	7	7	7	30.57	4.6	3.8	24.5
10/16/2019 1:40	7	7	7	31.94	0.9	0.9	0.4
10/16/2019 1:50	7	7	7	30.29	0.8	0.9	0.5
10/16/2019 2:00	7	7	7	28.52	2.5	2.4	25
10/16/2019 2:10	7	7	7	29.13	4.6	3.8	25
10/16/2019 2:20	7	7	7	30.57	4.7	3.9	24.5
10/16/2019 2:30	7	7	7	31.82	4.8	3.8	0.5

10/16/2019 2:40	7	7	7	31.18	0.7	0.9	0.4
10/16/2019 2:50	7	7	7	29.65	0.9	0.9	0.4
10/16/2019 3:00	7	7	7	28.12	3.1	3.3	25.1
10/16/2019 3:10	7	7	7	29.53	4.7	3.9	24.9
10/16/2019 3:20	7	7	7	31.15	4.6	3.8	23.7
10/16/2019 3:30	7	7	7	31.42	0.8	0.8	0.5
10/16/2019 3:40	7	7	7	29.38	0.7	0.9	0.4
10/16/2019 3:50	7	7	7	28.4	4.9	3.8	25.1
10/16/2019 4:00	7	7	7	30.11	4.7	3.8	24.6
10/16/2019 4:10	7	7	7	31.94	4.7	3.5	0.4
10/16/2019 4:20	7	7	7	30.51	0.8	0.9	0.4
10/16/2019 4:30	7	7	7	28.83	1.5	1.6	24.9
10/16/2019 4:40	7	7	7	28.83	4.8	3.9	25.1
10/16/2019 4:50	7	7	7	30.29	4.7	4	24.6
10/16/2019 5:00	7	7	7	31.18	5	3.8	23
10/16/2019 5:10	7	7	7	31.48	0.9	0.9	0.4
10/16/2019 5:20	7	7	7	29.89	0.7	0.8	0.4
10/16/2019 5:30	7	7	7	28.12	3.6	3.4	25.2
10/16/2019 5:40	7	7	7	29.44	4.8	3.9	25
10/16/2019 5:50	7	7	7	30.75	4.7	4	24.3
10/16/2019 6:00	7	7	7	31.88	0.9	0.8	0.4
10/16/2019 6:10	7	7	7	30.29	0.8	0.9	0.4
10/16/2019 6:20	7	7	7	28.22	3.4	3.2	25.1
10/16/2019 6:30	7	7	7	29.25	4.8	3.8	25
10/16/2019 6:40	7	7	7	31.12	4.9	3.8	23.7
10/16/2019 6:50	7	7	7	31.18	0.9	0.8	0.4
10/16/2019 7:00	7	7	7	29.32	0.6	0.9	0.4
10/16/2019 7:10	7	7	7	28.4	4.8	4	25.2
10/16/2019 7:20	7	7	7	30.05	4.9	3.8	24.8
10/16/2019 7:30	7	7	7	31.54	4.5	3.8	9
10/16/2019 7:40	7	7	7	31.63	0.9	0.9	0.5
10/16/2019 7:50	7	7	7	29.86	0.9	0.9	0.4
10/16/2019 8:00	7	7	7	28.31	3.6	3.4	25.1
10/16/2019 8:10	7	7	7	29.25	4.6	3.8	24.9
10/16/2019 8:20	7	7	7	30.96	4.8	3.8	24
10/16/2019 8:30	7	7	7	31.6	0.9	0.9	0.4
10/16/2019 8:40	7	7	7	29.83	0.8	0.8	0.4
10/16/2019 8:50	7	7	7	27.88	3.5	3.6	25.2
10/16/2019 9:00	7	7	7	29.56	4.9	3.8	24.8
10/16/2019 9:10	7	7	7	31.79	4.8	3.8	0.5
10/16/2019 9:20	7	7	7	30.44	0.9	0.9	0.4
10/16/2019 9:30	7	7	7	28.43	2.7	2.6	25
10/16/2019 9:40	7	7	7	29.16	4.5	3.8	24.9
10/16/2019 9:50	7	7	7	31.02	4.5	3.9	23.8
10/16/2019 10:00	7	7	7	31.73	0.8	0.8	0.4
10/16/2019 10:10	7	7	7	29.83	0.8	0.9	0.4
10/16/2019 10:20	7	7	7	28.09	3.5	3.4	25.2

10/16/2019 10:30	7	7	7	29.5	4.7	3.8	24.9
10/16/2019 10:40	7	7	7	31.15	4.7	3.9	23.8
10/16/2019 10:50	7	7	7	31.54	0.9	0.9	0.4
10/16/2019 11:00	7	7	7	29.65	0.9	0.9	0.4
10/16/2019 11:10	7	7	7	28.22	4.5	3.8	25
10/16/2019 11:20	7	7	7	30.23	4.7	3.9	24.6
10/16/2019 11:30	7	7	7	32.03	0.9	0.8	0.4
10/16/2019 11:40	7	7	7	30.35	0.9	0.8	0.4
10/16/2019 11:50	7	7	7	28.92	1.5	1.7	24.9
10/16/2019 12:00	7	7	7	28.8	4.6	3.9	25.1
10/16/2019 12:10	7	7	7	29.62	4.9	3.8	24.9
10/16/2019 12:20	7	7	7	30.96	5	3.9	24.1
10/16/2019 12:30	7	7	7	31.79	0.9	0.9	0.4
10/16/2019 12:40	7	7	7	30.02	1	0.8	0.4
10/16/2019 12:50	7	7	7	27.85	3.6	3.5	25.1
10/16/2019 13:00	7	7	7	29.74	4.7	3.8	24.8
10/16/2019 13:10	7	7	7	31.51	4.9	3.8	0.6
10/16/2019 13:20	7	7	7	30.72	0.9	0.9	0.4
10/16/2019 13:30	7	7	7	29.01	1	0.9	3.3
10/16/2019 13:40	7	7	7	28.74	4.7	3.8	25
10/16/2019 13:50	7	7	7	30.02	4.8	3.9	24.7
10/16/2019 14:00	7	7	7	31.54	4.8	3.9	9.1
10/16/2019 14:10	7	7	7	30.99	0.9	0.9	0.4
10/16/2019 14:20	7	7	7	29.22	0.8	0.8	1.2
10/16/2019 14:30	7	7	7	28.52	5	3.8	25
10/16/2019 14:40	7	7	7	30.14	4.6	3.9	24.5
10/16/2019 14:50	7	7	7	31.85	0.8	0.9	0.4
10/16/2019 15:00	7	7	7	29.83	0.9	0.8	0.4
10/16/2019 15:10	7	7	7	27.94	4.8	3.9	25.1
10/16/2019 15:20	7	7	7	29.74	5	3.9	24.9
10/16/2019 15:30	7	7	7	30.99	4.7	3.9	24.1
10/16/2019 15:40	7	7	7	31.7	0.9	0.9	0.4
10/16/2019 15:50	7	7	7	29.96	0.6	0.8	0.4
10/16/2019 16:00	7	7	7	28.19	3.4	3.4	25
10/16/2019 16:10	7	7	7	29.44	4.8	3.9	24.8
10/16/2019 16:20	7	7	7	31.09	4.7	3.9	23.9
10/16/2019 16:30	7	7	7	31.18	1.1	0.9	0.4
10/16/2019 16:40	7	7	7	28.86	1	0.9	2.7
10/16/2019 16:50	7	7	7	28.86	4.8	3.9	25
10/16/2019 17:00	7	7	7	30.69	4.7	3.9	24.4
10/16/2019 17:10	7	7	7	32.12	3.7	2	0.4
10/16/2019 17:20	7	7	7	31.45	0.9	0.9	0.4
10/16/2019 17:30	7	7	7	30.9	0.8	0.8	0.4
10/16/2019 17:40	7	7	7	29.89	0.8	0.9	0.4
10/16/2019 17:50	7	7	7	28.77	3.1	3	25
10/16/2019 18:00	7	7	7	28.89	4.4	3.8	25
10/16/2019 18:10	7	7	7	30.35	4.7	3.8	24.6

10/16/2019 18:20	7	7	7	31.85	4.8	3.8	0.4
10/16/2019 18:30	7	7	7	30.26	0.9	0.9	0.4
10/16/2019 18:40	7	7	7	28.46	2.9	2.9	25
10/16/2019 18:50	7	7	7	29.13	4.8	3.9	25
10/16/2019 19:00	7	7	7	31.02	4.8	3.9	24.2
10/16/2019 19:10	7	7	7	31.97	0.9	0.8	0.4
10/16/2019 19:20	7	7	7	30.78	0.9	0.8	0.4
10/16/2019 19:30	7	7	7	29.71	0.8	0.9	0.4
10/16/2019 19:40	7	7	7	28.31	3.5	3.4	25.1
10/16/2019 19:50	7	7	7	29.22	4.6	3.8	25
10/16/2019 20:00	7	7	7	30.99	4.6	3.8	23.9
10/16/2019 20:10	7	7	7	31.3	0.8	0.9	0.4
10/16/2019 20:20	7	7	7	29.35	0.9	0.8	0.4
10/16/2019 20:30	7	7	7	28.28	4.6	3.9	25.1
10/16/2019 20:40	7	7	7	29.77	4.6	3.8	24.7
10/16/2019 20:50	7	7	7	31.54	4.8	3.8	22.9
10/16/2019 21:00	7	7	7	31.54	0.9	0.8	0.4
10/16/2019 21:10	7	7	7	30.35	0.9	0.9	0.4
10/16/2019 21:20	7	7	7	29.01	1.3	1.5	24.9
10/16/2019 21:30	7	7	7	28.61	4.8	3.9	25
10/16/2019 21:40	7	7	7	30.02	4.9	3.8	24.7
10/16/2019 21:50	7	7	7	31.39	4.8	3.8	23
10/16/2019 22:00	7	7	7	31.12	0.9	0.9	0.4
10/16/2019 22:10	7	7	7	29.38	0.9	0.9	0.4
10/16/2019 22:20	7	7	7	28.31	4.5	3.8	25
10/16/2019 22:30	7	7	7	30.02	4.6	3.9	24.6
10/16/2019 22:40	7	7	7	32.06	4.5	2.5	0.4
10/16/2019 22:50	7	7	7	30.35	0.9	0.9	0.3
10/16/2019 23:00	7	7	7	28.28	2.9	2.9	24.9
10/16/2019 23:10	7	7	7	29.22	4.7	3.8	24.9
10/16/2019 23:20	7	7	7	30.81	4.7	3.8	24.3
10/16/2019 23:30	7	7	7	32.09	3.1	1.5	0.4
10/16/2019 23:40	7	7	7	30.69	0.8	0.9	0.4
10/16/2019 23:50	7	7	7	28.98	1.1	0.9	24.8
10/17/2019 0:00	7	7	7	28.7	4.7	3.8	25.1
10/17/2019 0:10	7	7	7	30.38	5	3.8	24.6
10/17/2019 0:20	7	7	7	32.03	4.8	3.4	0.4
10/17/2019 0:30	7	7	7	30.51	1	0.8	0.4
10/17/2019 0:40	7	7	7	28.86	1.4	1.5	24.9
10/17/2019 0:50	7	7	7	28.77	4.8	3.8	25
10/17/2019 1:00	7	7	7	30.69	4.7	3.7	24.2
10/17/2019 1:10	7	7	7	31.51	0.8	0.9	0.4
10/17/2019 1:20	7	7	7	29.77	0.9	0.8	0.4
10/17/2019 1:30	7	7	7	28.16	3.6	3.5	25.1
10/17/2019 1:40	7	7	7	29.35	4.8	3.9	24.9
10/17/2019 1:50	7	7	7	30.63	4.7	3.8	24.5
10/17/2019 2:00	7	7	7	31.85	4.5	3.7	0.5

10/17/2019 2:10	7	7	7	31.09	0.8	0.9	0.4
10/17/2019 2:20	7	7	7	29.5	0.9	0.9	0.4
10/17/2019 2:30	7	7	7	28.25	4.6	3.8	25
10/17/2019 2:40	7	7	7	29.77	4.8	3.8	24.8
10/17/2019 2:50	7	7	7	31.36	4.9	3.8	23.1
10/17/2019 3:00	7	7	7	31.63	0.8	0.9	0.4
10/17/2019 3:10	7	7	7	29.71	0.8	0.9	0.4
10/17/2019 3:20	7	7	7	28.19	3.6	3.5	25.1
10/17/2019 3:30	7	7	7	29.35	4.8	3.8	24.8
10/17/2019 3:40	7	7	7	31.09	4.9	3.9	23.7
10/17/2019 3:50	7	7	7	31.45	0.9	0.9	0.4
10/17/2019 4:00	7	7	7	29.86	0.9	0.8	0.4
10/17/2019 4:10	7	7	7	28.4	3.2	3.3	25.1
10/17/2019 4:20	7	7	7	29.19	4.9	3.9	24.9
10/17/2019 4:30	7	7	7	30.78	4.6	3.8	24.3
10/17/2019 4:40	7	7	7	32.12	0.8	0.9	0.4
10/17/2019 4:50	7	7	7	30.05	0.8	0.8	0.4
10/17/2019 5:00	7	7	7	28.03	3.5	3.4	25
10/17/2019 5:10	7	7	7	29.5	4.8	3.8	24.8
10/17/2019 5:20	7	7	7	31.27	4.8	3.8	23.3
10/17/2019 5:30	7	7	7	31.33	0.9	0.9	0.4
10/17/2019 5:40	7	7	7	29.62	0.9	0.8	0.3
10/17/2019 5:50	7	7	7	28.09	4.7	3.9	25
10/17/2019 6:00	7	7	7	30.05	4.6	3.9	24.5
10/17/2019 6:10	7	7	7	31.6	0.9	0.8	0.4
10/17/2019 6:20	7	7	7	28.95	0.8	0.9	0.3
10/17/2019 6:30	7	7	7	28.74	4.8	3.8	25
10/17/2019 6:40	7	7	7	30.51	4.8	3.8	24.5
10/17/2019 6:50	7	7	7	32	0.9	0.9	0.4
10/17/2019 7:00	7	7	7	30.51	0.9	0.9	0.4
10/17/2019 7:10	7	7	7	28.4	2.5	2.6	24.9
10/17/2019 7:20	7	7	7	29.13	4.9	3.9	24.9
10/17/2019 7:30	7	7	7	31.12	5.1	3.9	23.9
10/17/2019 7:40	7	7	7	31.33	0.8	0.9	0.4
10/17/2019 7:50	7	7	7	29.62	0.9	0.8	0.4
10/17/2019 8:00	7	7	7	28.34	3.4	3.4	25.1
10/17/2019 8:10	7	7	7	29.25	4.7	3.9	24.9
10/17/2019 8:20	7	7	7	30.81	4.9	3.8	24.2
10/17/2019 8:30	7	7	7	31.88	0.9	0.8	0.4
10/17/2019 8:40	7	7	7	30.35	0.8	0.9	0.4
10/17/2019 8:50	7	7	7	28.61	2	2.2	24.9
10/17/2019 9:00	7	7	7	28.98	4.4	3.9	25
10/17/2019 9:10	7	7	7	30.63	4.9	3.9	24.4
10/17/2019 9:20	7	7	7	31.94	0.7	0.9	0.4
10/17/2019 9:30	7	7	7	30.44	0.7	0.9	0.4
10/17/2019 9:40	7	7	7	29.16	0.7	1	24.8
10/17/2019 9:50	7	7	7	28.46	4.7	3.9	25.1

10/17/2019 10:00	7	7	7	29.68	4.9	3.7	24.8
10/17/2019 10:10	7	7	7	31.27	4.7	3.8	23.1
10/17/2019 10:20	7	7	7	31.36	0.8	0.9	0.4
10/17/2019 10:30	7	7	7	29.62	0.7	0.8	0.4
10/17/2019 10:40	7	7	7	28.12	4.5	3.8	25.1
10/17/2019 10:50	7	7	7	29.8	4.9	3.9	24.6
10/17/2019 11:00	7	7	7	31.82	4.7	3.8	0.5
10/17/2019 11:10	7	7	7	30.05	0.9	0.9	0.4
10/17/2019 11:20	7	7	7	27.61	4.4	3.9	25.1
10/17/2019 11:30	7	7	7	29.8	4.6	3.9	24.7
10/17/2019 11:40	7	7	7	31.67	4.7	3.9	0.5
10/17/2019 11:50	7	7	7	31.39	0.8	0.9	0.4
10/17/2019 12:00	7	7	7	30.47	0.8	0.8	0.4
10/17/2019 12:10	7	7	7	29.19	0.9	1.1	24.8
10/17/2019 12:20	7	7	7	28.37	4.7	3.9	25
10/17/2019 12:30	0	0	0	30.23	3.1	3.2	0.4
10/17/2019 12:40	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 12:50	0	0	0	30.41	0.8	0.9	0.4
10/17/2019 13:00	0	0	0	30.41	0.7	0.9	0.4
10/17/2019 13:10	-7	-7	-7	-13.94	-25	-25	-7.5
10/17/2019 13:20	-7	-7	-7	-13.94	-25	-25	-7.5
10/17/2019 13:30	-7	-7	-7	-13.94	-24.9	-25	-7.5
10/17/2019 13:40	-7	-7	-7	-13.94	-25	-25	-7.5
10/17/2019 13:50	0	0	0	30.41	0.7	0.9	0.4
10/17/2019 14:00	0	0	0	30.41	0.7	0.9	0.4
10/17/2019 14:10	0	0	0	30.41	0.7	0.9	0.4
10/17/2019 14:20	0	0	0	30.38	0.7	0.9	0.4
10/17/2019 14:30	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 14:40	0	0	0	30.38	0.7	0.8	0.4
10/17/2019 14:50	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 15:00	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 15:10	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 15:20	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 15:30	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 15:40	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 15:50	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 16:00	0	0	0	30.38	0.7	0.8	0.4
10/17/2019 16:10	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 16:20	0	0	0	30.41	0.8	0.8	0.4
10/17/2019 16:30	0	0	0	30.41	0.7	0.8	0.4
10/17/2019 16:40	7	7	7	30.63	4.9	4	24.1
10/17/2019 16:50	7	7	7	31.85	0.9	0.8	0.4
10/17/2019 17:00	7	7	7	30.99	0.9	0.8	0.4
10/17/2019 17:10	7	7	7	30.38	0.6	0.9	0.4
10/17/2019 17:20	7	7	7	29.16	1	1.4	24.7
10/17/2019 17:30	7	7	7	28.43	4.9	3.9	25
10/17/2019 17:40	7	7	7	29.77	4.7	3.8	24.6

10/17/2019 17:50	7	7	7	31.97	4.7	3.6	0.4
10/17/2019 18:00	7	7	7	30.02	0.5	0.9	0.4
10/17/2019 18:10	7	7	7	28.25	3.3	3.3	25.1
10/17/2019 18:20	7	7	7	29.35	4.5	3.9	24.9
10/17/2019 18:30	7	7	7	30.63	4.8	3.9	24.5
10/17/2019 18:40	7	7	7	31.54	4.7	3.9	0.6
10/17/2019 18:50	7	7	7	31.18	0.9	0.8	0.4
10/17/2019 19:00	7	7	7	29.19	0.7	0.9	0.4
10/17/2019 19:10	7	7	7	28.52	4.5	3.9	25.1
10/17/2019 19:20	7	7	7	30.17	4.3	3.9	24.6
10/17/2019 19:30	7	7	7	31.67	4.9	3.9	0.5
10/17/2019 19:40	7	7	7	31.3	0.8	0.9	0.4
10/17/2019 19:50	7	7	7	29.96	0.7	0.9	0.4
10/17/2019 20:00	7	7	7	28.37	3.2	3.3	25
10/17/2019 20:10	7	7	7	29.19	4.4	3.9	24.9
10/17/2019 20:20	7	7	7	30.78	4.5	3.8	24.3
10/17/2019 20:30	7	7	7	31.73	0.8	0.9	0.4
10/17/2019 20:40	7	7	7	29.8	0.8	0.8	0.3
10/17/2019 20:50	0	7	0	25.99	4.7	3.8	25
10/17/2019 21:00	0	7	0	27.79	0.7	0.9	0.4
10/17/2019 21:10	0	7	0	30.14	0.6	0.9	0
10/17/2019 21:20	0	7	0	30.51	4.6	3.9	0.5
10/17/2019 21:30	0	7	0	19.88	1.5	2.8	25.2
10/17/2019 21:40	0	7	0	22.32	0.5	0.9	0.4
10/17/2019 21:50	0	7	0	24.61	0.5	0.8	0
10/17/2019 22:00	0	7	0	27	0.6	0.8	0
10/17/2019 22:10	0	7	0	29.25	0.6	0.8	0
10/17/2019 22:20	0	7	0	31.54	0.8	0.8	0.1
10/17/2019 22:30	0	7	0	23.64	4.6	3.8	25
10/17/2019 22:40	0	7	0	23.21	0.4	0.8	0.4
10/17/2019 22:50	0	7	0	25.53	0.5	0.9	-0.1
10/17/2019 23:00	0	7	0	27.85	0.6	0.8	0
10/17/2019 23:10	0	7	0	30.17	0.6	0.8	0
10/17/2019 23:20	0	7	0	30.08	4.5	3.8	22.3
10/17/2019 23:30	0	7	0	21.41	0.8	1.1	3.1
10/17/2019 23:40	0	7	0	23.76	0.5	0.9	0.1
10/17/2019 23:50	0	7	0	26.08	0.7	0.8	0
10/18/2019 0:00	0	7	0	28.43	0.8	0.8	0
10/18/2019 0:10	0	7	0	30.81	0.8	0.8	0.1
10/18/2019 0:20	0	7	0	27.36	4.7	3.8	24.7
10/18/2019 0:30	0	7	0	24.4	0.5	0.8	0.4
10/18/2019 0:40	0	7	0	26.78	0.6	0.8	0
10/18/2019 0:50	0	7	0	29.04	0.8	0.8	0
10/18/2019 1:00	0	7	0	31.33	0.7	0.9	0
10/18/2019 1:10	0	7	0	24.74	4.7	3.8	24.9
10/18/2019 1:20	0	7	0	23.79	0.5	0.9	0.4
10/18/2019 1:30	0	7	0	26.11	0.5	0.9	0

10/18/2019 1:40	0	7	0	28.43	0.7	0.9	0
10/18/2019 1:50	0	7	0	30.72	0.8	0.8	0.1
10/18/2019 2:00	0	7	0	27.54	4.6	3.9	24.6
10/18/2019 2:10	0	7	0	23.3	0.5	0.8	0.4
10/18/2019 2:20	0	7	0	25.65	0.6	0.8	0
10/18/2019 2:30	0	7	0	28.03	0.6	0.8	0
10/18/2019 2:40	0	7	0	30.35	0.7	0.9	0
10/18/2019 2:50	0	7	0	29.41	4.9	3.9	23.6
10/18/2019 3:00	0	7	0	22.36	0.5	0.8	0.4
10/18/2019 3:10	0	7	0	24.64	0.6	0.8	-0.1
10/18/2019 3:20	0	7	0	26.87	0.5	0.9	0
10/18/2019 3:30	0	7	0	29.13	0.7	0.8	0
10/18/2019 3:40	0	7	0	31.39	0.6	0.8	0
10/18/2019 3:50	0	7	0	24.55	4.8	3.8	24.8
10/18/2019 4:00	0	7	0	22.72	0.5	0.8	0.4
10/18/2019 4:10	0	7	0	24.89	0.6	0.8	0
10/18/2019 4:20	0	7	0	27.12	0.7	0.9	0
10/18/2019 4:30	0	7	0	29.32	0.7	0.9	0
10/18/2019 4:40	0	7	0	31.51	0.7	0.9	0.1
10/18/2019 4:50	0	7	0	24.22	4.5	3.9	24.9
10/18/2019 5:00	0	7	0	23.61	0.5	0.9	0.4
10/18/2019 5:10	0	7	0	25.8	0.4	0.8	0
10/18/2019 5:20	0	7	0	28.06	0.7	0.8	0
10/18/2019 5:30	0	7	0	30.23	0.7	0.9	0
10/18/2019 5:40	0	7	0	30.41	4.8	3.8	4
10/18/2019 5:50	0	7	0	22.39	0.6	0.9	0.4
10/18/2019 6:00	0	7	0	24.52	0.5	0.8	0
10/18/2019 6:10	0	7	0	26.78	0.6	0.9	0
10/18/2019 6:20	0	7	0	28.92	0.6	0.8	0
10/18/2019 6:30	0	7	0	31.15	0.8	0.9	0
10/18/2019 6:40	0	7	0	25.71	4.5	3.8	24.7
10/18/2019 6:50	0	7	0	22.54	0.5	0.9	0.4
10/18/2019 7:00	0	7	0	24.68	0.5	0.9	0
10/18/2019 7:10	0	7	0	27	0.5	0.8	0
10/18/2019 7:20	0	7	0	29.16	0.7	0.8	0
10/18/2019 7:30	0	7	0	31.42	0.8	0.9	0.1
10/18/2019 7:40	0	7	0	24.64	4.6	3.9	24.8
10/18/2019 7:50	0	7	0	23.06	0.5	0.8	0.4
10/18/2019 8:00	0	7	0	25.26	0.4	0.9	0
10/18/2019 8:10	0	7	0	27.58	0.6	0.8	0
10/18/2019 8:20	0	7	0	29.71	0.7	0.9	0
10/18/2019 8:30	0	7	0	31.97	0.8	0.8	0.1
10/18/2019 8:40	0	7	0	22.05	4.5	3.9	25.1
10/18/2019 8:50	0	7	0	23.21	0.5	0.9	0.4
10/18/2019 9:00	0	7	0	25.41	0.5	0.8	0
10/18/2019 9:10	0	7	0	27.67	0.7	0.9	0
10/18/2019 9:20	0	7	0	29.89	0.7	0.8	0

10/18/2019 9:30	0	7	0	31.85	4.6	3.4	0.2
10/18/2019 9:40	0	7	0	21.1	4.6	3.8	25.2
10/18/2019 9:50	0	7	0	23.21	0.5	0.8	0.4
10/18/2019 10:00	0	7	0	25.44	0.5	0.9	0
10/18/2019 10:10	0	7	0	27.67	0.6	0.9	0
10/18/2019 10:20	0	7	0	29.83	0.7	0.8	0
10/18/2019 10:30	0	7	0	32.03	4.7	2.6	0.3
10/18/2019 10:40	0	7	0	22.45	2.4	2.7	25.1
10/18/2019 10:50	0	7	0	24.64	0.5	0.8	23.2
10/18/2019 11:00	0	7	0	26.96	0.5	0.8	0
10/18/2019 11:10	0	7	0	29.13	0.7	0.9	0
10/18/2019 11:20	0	7	0	31.42	0.7	0.8	0
10/18/2019 11:30	0	7	0	24.46	4.6	4	24.8
10/18/2019 11:40	0	7	0	22.94	0.5	0.9	0.4
10/18/2019 11:50	0	7	0	25.16	0.5	0.8	0
10/18/2019 12:00	0	7	0	27.39	0.5	0.9	0
10/18/2019 12:10	0	7	0	29.65	0.7	0.9	0
10/18/2019 12:20	0	7	0	31.88	0.8	0.8	0
10/18/2019 12:30	0	7	0	23.79	1.6	1.8	24.9
10/18/2019 12:40	0	7	0	26.08	0.6	0.8	2.3
10/18/2019 12:50	0	7	0	28.31	0.7	0.9	0
10/18/2019 13:00	0	7	0	30.63	0.8	0.8	0
10/18/2019 13:10	0	7	0	28.46	4.6	3.8	24.4
10/18/2019 13:20	0	7	0	23	0.5	0.9	0.4
10/18/2019 13:30	0	7	0	25.22	0.6	0.9	-0.1
10/18/2019 13:40	0	7	0	27.48	0.5	0.8	0
10/18/2019 13:50	0	7	0	29.68	0.8	0.8	0
10/18/2019 14:00	0	7	0	31.97	0.8	0.9	0.1
10/18/2019 14:10	0	7	0	21.81	4.5	3.8	25.2
10/18/2019 14:20	0	7	0	23.24	0.5	0.9	0.5
10/18/2019 14:30	0	7	0	25.5	0.6	0.9	-0.1
10/18/2019 14:40	0	7	0	27.73	0.6	0.9	0
10/18/2019 14:50	0	7	0	30.02	0.7	0.9	0
10/18/2019 15:00	0	7	0	31.3	4.8	3.8	0.4
10/18/2019 15:10	0	7	0	21.2	3.3	3.4	25.2
10/18/2019 15:20	0	7	0	23.42	0.5	0.9	21.9
10/18/2019 15:30	0	7	0	25.77	0.6	0.8	0
10/18/2019 15:40	0	7	0	28.03	0.6	0.9	0
10/18/2019 15:50	0	7	0	30.32	0.8	0.9	0
10/18/2019 16:00	0	7	0	29.89	4.6	3.9	22.8
10/18/2019 16:10	0	7	0	21.78	0.6	0.9	0.4
10/18/2019 16:20	0	7	0	24	0.5	0.9	0
10/18/2019 16:30	0	7	0	26.23	0.5	0.9	0
10/18/2019 16:40	0	7	0	28.52	0.6	0.9	0
10/18/2019 16:50	0	7	0	30.75	0.8	0.8	0
10/18/2019 17:00	0	7	0	27.58	4.5	3.8	24.6
10/18/2019 17:10	0	7	0	23.3	0.5	0.8	0.4

10/18/2019 17:20	0	7	0	25.65	0.5	0.9	0
10/18/2019 17:30	0	7	0	27.88	0.7	0.9	0
10/18/2019 17:40	0	7	0	30.14	0.7	0.8	0
10/18/2019 17:50	0	7	0	30.44	4.6	3.9	0.6
10/18/2019 18:00	0	7	0	21.71	1	1.1	3.3
10/18/2019 18:10	0	7	0	23.94	0.5	0.9	0.1
10/18/2019 18:20	0	7	0	26.2	0.5	0.9	0
10/18/2019 18:30	0	7	0	28.49	0.8	0.9	0
10/18/2019 18:40	0	7	0	30.72	0.7	0.9	0
10/18/2019 18:50	0	7	0	27.76	4.9	3.9	24.5
10/18/2019 19:00	0	7	0	23.12	0.4	0.8	0.4
10/18/2019 19:10	0	7	0	25.41	0.5	0.9	-0.1
10/18/2019 19:20	0	7	0	27.64	0.7	0.9	0
10/18/2019 19:30	0	7	0	30.02	0.7	0.9	0
10/18/2019 19:40	0	7	0	31.63	4.6	3.7	0.3
10/18/2019 19:50	0	7	0	21.32	3.3	3.4	25.2
10/18/2019 20:00	0	7	0	23.64	0.4	0.9	0
10/18/2019 20:10	0	7	0	25.93	0.4	0.8	0
10/18/2019 20:20	0	7	0	28.16	0.7	0.9	0
10/18/2019 20:30	0	7	0	30.41	0.7	0.8	0
10/18/2019 20:40	0	7	0	29.16	4.6	3.9	23.6
10/18/2019 20:50	0	7	0	22.69	0.4	0.9	0.4
10/18/2019 21:00	0	7	0	24.92	0.5	0.8	0
10/18/2019 21:10	0	7	0	27.18	0.5	0.9	0
10/18/2019 21:20	0	7	0	29.47	0.6	0.8	0
10/18/2019 21:30	0	7	0	31.76	0.6	0.9	0
10/18/2019 21:40	0	7	0	22.9	4.5	3.8	25.1
10/18/2019 21:50	0	7	0	23.21	0.3	0.9	0.4
10/18/2019 22:00	0	7	0	25.5	0.5	0.9	0
10/18/2019 22:10	0	7	0	27.76	0.6	0.9	0
10/18/2019 22:20	0	7	0	30.11	0.7	0.9	0
10/18/2019 22:30	0	7	0	31.02	4.6	3.9	0.5
10/18/2019 22:40	0	7	0	22.57	0.7	1	0.4
10/18/2019 22:50	0	7	0	24.86	0.4	0.9	0
10/18/2019 23:00	0	7	0	27.18	0.5	0.9	0
10/18/2019 23:10	0	7	0	29.44	0.7	0.9	0
10/18/2019 23:20	0	7	0	31.67	0.7	0.9	0
10/18/2019 23:30	0	7	0	23	4.8	3.8	25.1
10/18/2019 23:40	0	7	0	23.52	0.5	0.9	0.4
10/18/2019 23:50	0	7	0	25.77	0.5	0.9	0
10/19/2019 0:00	0	7	0	28.09	0.7	0.9	0
10/19/2019 0:10	0	7	0	30.35	0.9	0.8	0
10/19/2019 0:20	0	7	0	29.5	4.7	3.9	23.4
10/19/2019 0:30	0	7	0	21.99	0.4	0.9	0.4
10/19/2019 0:40	0	7	0	24.28	0.5	0.9	0
10/19/2019 0:50	0	7	0	26.54	0.5	0.9	0
10/19/2019 1:00	0	7	0	28.86	0.7	0.9	0

10/19/2019 1:10	0	7	0	31.12	0.7	0.9	0
10/19/2019 1:20	0	7	0	25.9	4.6	3.9	24.7
10/19/2019 1:30	0	7	0	23.91	0.5	0.9	0.4
10/19/2019 1:40	0	7	0	26.23	0.4	0.9	0
10/19/2019 1:50	0	7	0	28.46	0.7	0.9	0
10/19/2019 2:00	0	7	0	30.81	0.7	0.9	0
10/19/2019 2:10	0	7	0	27.39	4.4	3.9	24.7
10/19/2019 2:20	0	7	0	22.54	0.5	0.9	0.4
10/19/2019 2:30	0	7	0	24.83	0.5	0.8	0
10/19/2019 2:40	0	7	0	27.15	0.7	0.9	0
10/19/2019 2:50	0	7	0	29.44	0.7	0.9	0
10/19/2019 3:00	0	7	0	31.73	0.7	0.9	0.1
10/19/2019 3:10	0	7	0	23.12	4.3	3.9	25.1
10/19/2019 3:20	0	7	0	23.94	0.4	0.9	0.4
10/19/2019 3:30	0	7	0	26.23	0.6	0.9	0
10/19/2019 3:40	0	7	0	28.49	0.5	0.9	0
10/19/2019 3:50	0	7	0	30.81	0.7	0.9	0
10/19/2019 4:00	0	7	0	27.27	4.7	3.9	24.7
10/19/2019 4:10	0	7	0	22.63	0.5	0.9	0.4
10/19/2019 4:20	0	7	0	24.89	0.5	0.8	0
10/19/2019 4:30	0	7	0	27.21	0.6	0.8	0
10/19/2019 4:40	0	7	0	29.5	0.7	0.9	0
10/19/2019 4:50	0	7	0	31.73	0.6	0.8	0
10/19/2019 5:00	0	7	0	22.9	4.4	3.8	25.1
10/19/2019 5:10	0	7	0	23.67	0.5	0.9	0.4
10/19/2019 5:20	0	7	0	25.96	0.5	0.8	0
10/19/2019 5:30	0	7	0	28.25	0.8	0.8	0
10/19/2019 5:40	0	7	0	30.54	0.7	0.9	0
10/19/2019 5:50	0	7	0	28.52	4.7	3.8	24.3
10/19/2019 6:00	0	7	0	22.6	0.5	0.9	0.4
10/19/2019 6:10	0	7	0	24.86	0.4	0.9	0
10/19/2019 6:20	0	7	0	27.18	0.5	0.8	0
10/19/2019 6:30	0	7	0	29.41	0.7	0.8	0
10/19/2019 6:40	0	7	0	31.73	0.8	0.9	0.1
10/19/2019 6:50	0	7	0	23	4.4	3.8	25.2
10/19/2019 7:00	0	7	0	24.03	0.5	0.9	0.4
10/19/2019 7:10	0	7	0	26.35	0.6	0.9	0
10/19/2019 7:20	0	7	0	28.67	0.7	0.8	0
10/19/2019 7:30	0	7	0	30.87	0.7	0.9	0
10/19/2019 7:40	0	7	0	26.78	4.4	3.9	24.8
10/19/2019 7:50	0	7	0	22.84	0.5	0.8	0.4
10/19/2019 8:00	0	7	0	25.1	0.5	0.8	0
10/19/2019 8:10	0	7	0	27.45	0.5	0.8	0
10/19/2019 8:20	0	7	0	29.74	0.8	0.9	0
10/19/2019 8:30	0	7	0	32.03	0.8	0.8	0.1
10/19/2019 8:40	0	7	0	21.59	4.5	3.8	25.2
10/19/2019 8:50	0	7	0	23.61	0.5	0.9	0.4

10/19/2019 9:00	0	7	0	25.9	0.5	0.8	0
10/19/2019 9:10	0	7	0	28.28	0.6	0.9	0
10/19/2019 9:20	0	7	0	30.54	0.8	0.9	0
10/19/2019 9:30	0	7	0	28.77	4.6	3.8	24.1
10/19/2019 9:40	0	7	0	23.48	0.5	0.9	0.4
10/19/2019 9:50	0	7	0	25.87	0.5	0.9	0
10/19/2019 10:00	0	7	0	28.19	0.7	0.9	0
10/19/2019 10:10	0	7	0	30.51	0.8	0.8	0
10/19/2019 10:20	0	7	0	28.61	4.6	3.8	24.3
10/19/2019 10:30	0	7	0	23	0.6	0.9	0.4
10/19/2019 10:40	0	7	0	25.29	0.5	0.9	0
10/19/2019 10:50	0	7	0	27.64	0.5	0.9	0
10/19/2019 11:00	0	7	0	29.96	0.7	0.8	0
10/19/2019 11:10	0	7	0	31.33	4.7	3.8	0.4
10/19/2019 11:20	0	7	0	21.99	2.1	2.4	25.1
10/19/2019 11:30	0	7	0	24.31	0.5	0.9	4.1
10/19/2019 11:40	0	7	0	26.63	0.5	0.9	0
10/19/2019 11:50	0	7	0	28.95	0.7	0.9	0
10/19/2019 12:00	0	7	0	31.27	0.8	0.8	0
10/19/2019 12:10	0	7	0	25.32	4.6	3.9	24.8
10/19/2019 12:20	0	7	0	22.97	0.4	0.9	0.4
10/19/2019 12:30	0	7	0	25.29	0.5	0.8	0
10/19/2019 12:40	0	7	0	27.61	0.5	0.8	0
10/19/2019 12:50	0	7	0	29.86	0.8	0.8	0
10/19/2019 13:00	0	7	0	31.45	4.6	3.8	0.3
10/19/2019 13:10	0	7	0	22.29	1.2	1.7	25
10/19/2019 13:20	0	7	0	24.68	0.5	0.9	2.4
10/19/2019 13:30	0	7	0	27	0.6	0.9	0
10/19/2019 13:40	0	7	0	29.32	0.7	0.9	0
10/19/2019 13:50	0	7	0	31.57	0.8	0.9	0
10/19/2019 14:00	0	7	0	23.48	4.6	3.9	25.1
10/19/2019 14:10	0	7	0	23.45	0.5	0.9	0.4
10/19/2019 14:20	0	7	0	25.77	0.5	0.8	0
10/19/2019 14:30	0	7	0	28.09	0.6	0.9	0
10/19/2019 14:40	0	7	0	30.35	0.8	0.9	0
10/19/2019 14:50	0	7	0	29.1	4.6	3.8	23.9
10/19/2019 15:00	0	7	0	22.11	0.5	0.9	0.4
10/19/2019 15:10	0	7	0	24.43	0.4	0.9	0
10/19/2019 15:20	0	7	0	26.81	0.7	0.9	0
10/19/2019 15:30	0	7	0	29.1	0.6	0.9	0
10/19/2019 15:40	0	7	0	31.42	0.8	0.9	0
10/19/2019 15:50	0	7	0	24.34	4.7	3.9	24.9
10/19/2019 16:00	0	7	0	23.24	0.5	0.9	0.4
10/19/2019 16:10	0	7	0	25.59	0.7	0.8	-0.1
10/19/2019 16:20	0	7	0	27.91	0.7	0.9	0
10/19/2019 16:30	0	7	0	30.26	0.9	0.9	0
10/19/2019 16:40	0	7	0	29.86	4.7	3.9	22.5

10/19/2019 16:50	0	7	0	23.97	0.7	0.9	0.4
10/19/2019 17:00	0	7	0	26.23	0.6	0.9	0
10/19/2019 17:10	0	7	0	28.52	0.7	0.9	0
10/19/2019 17:20	0	7	0	30.9	0.9	0.9	0
10/19/2019 17:30	0	7	0	26.81	4.6	4	24.7
10/19/2019 17:40	0	7	0	23.27	0.5	0.9	0.4
10/19/2019 17:50	0	7	0	25.59	0.6	0.9	0
10/19/2019 18:00	0	7	0	27.88	0.8	0.9	0
10/19/2019 18:10	0	7	0	30.23	0.8	0.8	0
10/19/2019 18:20	0	7	0	30.08	4.8	3.9	22.4
10/19/2019 18:30	0	7	0	22.48	0.5	0.9	0.4
10/19/2019 18:40	0	7	0	24.8	0.5	0.9	0
10/19/2019 18:50	0	7	0	27.12	0.5	0.9	-0.1
10/19/2019 19:00	0	7	0	29.47	0.8	0.9	0
10/19/2019 19:10	0	7	0	31.79	0.9	0.9	0
10/19/2019 19:20	0	7	0	22.84	4.5	3.8	25.1
10/19/2019 19:30	0	7	0	23.82	0.6	0.9	0.4
10/19/2019 19:40	0	7	0	26.14	0.7	0.9	0
10/19/2019 19:50	0	7	0	28.49	0.7	0.8	0
10/19/2019 20:00	0	7	0	30.84	0.8	0.9	0
10/19/2019 20:10	0	7	0	27.24	4.5	3.9	24.6
10/19/2019 20:20	0	7	0	22.32	0.4	0.9	0.4
10/19/2019 20:30	0	7	0	24.64	0.5	0.8	0
10/19/2019 20:40	0	7	0	27.03	0.6	0.9	0
10/19/2019 20:50	0	7	0	29.38	0.7	0.8	0
10/19/2019 21:00	0	7	0	31.67	0.8	0.9	0
10/19/2019 21:10	0	7	0	23.21	4.5	3.9	25.2
10/19/2019 21:20	0	7	0	23.33	0.6	0.9	0.4
10/19/2019 21:30	0	7	0	25.68	0.5	0.9	0
10/19/2019 21:40	0	7	0	28.03	0.6	0.8	0
10/19/2019 21:50	0	7	0	30.38	0.6	0.9	0
10/19/2019 22:00	0	7	0	29.22	4.6	3.9	23.7
10/19/2019 22:10	0	7	0	21.9	0.5	0.9	0.4
10/19/2019 22:20	0	7	0	24.22	0.5	0.9	0
10/19/2019 22:30	0	7	0	26.54	0.5	0.9	-0.1
10/19/2019 22:40	0	7	0	28.98	0.7	0.9	0
10/19/2019 22:50	0	7	0	31.3	0.7	0.9	0
10/19/2019 23:00	0	7	0	24.95	4.5	3.8	24.9
10/19/2019 23:10	0	7	0	23.3	0.5	0.9	0.4
10/19/2019 23:20	0	7	0	25.65	0.5	0.9	0
10/19/2019 23:30	0	7	0	27.94	0.6	0.8	0
10/19/2019 23:40	0	7	0	30.32	0.7	0.8	0
10/19/2019 23:50	0	7	0	29.25	4.6	3.9	23.6
10/20/2019 0:00	0	7	0	22.45	0.5	0.9	0.4
10/20/2019 0:10	0	7	0	24.8	0.4	0.8	0
10/20/2019 0:20	0	7	0	27.15	0.7	0.9	0
10/20/2019 0:30	0	7	0	29.47	0.5	0.8	0

10/20/2019 0:40	0	7	0	31.79	0.7	0.9	0
10/20/2019 0:50	0	7	0	22.69	4.6	3.9	25.2
10/20/2019 1:00	0	7	0	25.01	0.7	0.9	0.4
10/20/2019 1:10	0	7	0	27.27	0.5	0.9	0
10/20/2019 1:20	0	7	0	29.65	0.6	0.9	0
10/20/2019 1:30	0	7	0	31.88	0.7	0.9	0
10/20/2019 1:40	0	7	0	21.93	4.8	3.8	25.2
10/20/2019 1:50	0	7	0	24.1	0.5	0.9	0.4
10/20/2019 2:00	0	7	0	26.48	0.5	0.8	0
10/20/2019 2:10	0	7	0	28.83	0.7	0.9	0
10/20/2019 2:20	0	7	0	31.12	0.7	0.8	0
10/20/2019 2:30	0	7	0	25.77	4.5	3.8	24.7
10/20/2019 2:40	0	7	0	23.15	0.5	0.8	0.4
10/20/2019 2:50	0	7	0	25.5	0.6	0.9	0
10/20/2019 3:00	0	7	0	27.88	0.5	0.9	0
10/20/2019 3:10	0	7	0	30.23	0.7	0.9	0
10/20/2019 3:20	0	7	0	29.86	4.7	3.8	22.7
10/20/2019 3:30	0	7	0	22.81	0.5	0.9	0.4
10/20/2019 3:40	0	7	0	25.1	0.5	0.9	0
10/20/2019 3:50	0	7	0	27.45	0.5	0.9	0
10/20/2019 4:00	0	7	0	29.8	0.7	0.9	0
10/20/2019 4:10	0	7	0	31.63	4.7	3.4	0.3
10/20/2019 4:20	0	7	0	22.05	2.6	2.9	25.1
10/20/2019 4:30	0	7	0	24.46	0.5	0.8	22.8
10/20/2019 4:40	0	7	0	26.87	0.7	0.9	0
10/20/2019 4:50	0	7	0	29.19	0.7	0.8	0
10/20/2019 5:00	0	7	0	31.63	0.8	0.9	0
10/20/2019 5:10	0	7	0	23.61	4.3	3.9	24.9
10/20/2019 5:20	0	7	0	22.66	0.5	0.9	0.4
10/20/2019 5:30	0	7	0	24.95	0.5	0.9	-0.1
10/20/2019 5:40	0	7	0	27.27	0.7	0.8	0
10/20/2019 5:50	0	7	0	29.65	0.8	0.8	0
10/20/2019 6:00	0	7	0	32	0.9	0.9	0.1
10/20/2019 6:10	0	7	0	22.05	3.4	3.5	25.2
10/20/2019 6:20	0	7	0	24.49	0.5	0.8	0
10/20/2019 6:30	0	7	0	26.87	0.5	0.9	0
10/20/2019 6:40	0	7	0	29.19	0.7	0.9	0
10/20/2019 6:50	0	7	0	31.54	0.8	0.8	0
10/20/2019 7:00	0	7	0	24.19	4.7	3.8	25
10/20/2019 7:10	0	7	0	24.13	0.5	0.9	0.5
10/20/2019 7:20	0	7	0	26.45	0.5	0.8	-0.1
10/20/2019 7:30	0	7	0	28.77	0.5	0.9	0
10/20/2019 7:40	0	7	0	31.15	0.7	0.8	0
10/20/2019 7:50	0	7	0	25.87	4.6	3.8	24.7
10/20/2019 8:00	0	7	0	23.76	0.5	0.8	0.4
10/20/2019 8:10	0	7	0	26.08	0.5	0.9	0
10/20/2019 8:20	0	7	0	28.4	0.6	0.8	0

10/20/2019 8:30	0	7	0	30.75	0.7	0.8	0
10/20/2019 8:40	0	7	0	27.42	4.4	3.9	24.7
10/20/2019 8:50	0	7	0	23	0.5	0.8	0.4
10/20/2019 9:00	0	7	0	25.29	0.5	0.9	0
10/20/2019 9:10	0	7	0	27.67	0.5	0.8	0
10/20/2019 9:20	0	7	0	30.02	0.7	0.8	0
10/20/2019 9:30	0	7	0	30.9	4.6	3.9	0.5
10/20/2019 9:40	0	7	0	22.78	0.7	1	0.4
10/20/2019 9:50	0	7	0	25.1	0.5	0.8	0
10/20/2019 10:00	0	7	0	27.42	0.7	0.9	0
10/20/2019 10:10	0	7	0	29.77	0.8	0.9	0
10/20/2019 10:20	0	7	0	31.79	4.8	3.2	0.3
10/20/2019 10:30	0	7	0	22.36	2.3	2.5	25
10/20/2019 10:40	0	7	0	24.86	0.5	0.8	23
10/20/2019 10:50	0	7	0	27.09	0.5	0.9	0
10/20/2019 11:00	0	7	0	29.5	0.7	0.9	0
10/20/2019 11:10	0	7	0	31.79	0.9	0.8	0
10/20/2019 11:20	0	7	0	23.97	2.2	2.5	25
10/20/2019 11:30	0	7	0	26.32	0.8	0.9	23.3
10/20/2019 11:40	0	7	0	28.74	0.7	0.9	0
10/20/2019 11:50	0	7	0	31.09	0.7	0.9	0
10/20/2019 12:00	0	7	0	25.96	4.5	3.6	24.8
10/20/2019 12:10	0	7	0	23.94	0.5	0.9	0.4
10/20/2019 12:20	0	7	0	26.35	0.5	0.8	0
10/20/2019 12:30	0	7	0	28.74	0.6	0.9	0
10/20/2019 12:40	0	7	0	31.02	0.7	0.9	0
10/20/2019 12:50	0	7	0	26.11	4.5	3.9	24.7
10/20/2019 13:00	0	7	0	22.97	0.5	0.8	0.4
10/20/2019 13:10	0	7	0	25.35	0.6	0.9	0
10/20/2019 13:20	0	7	0	27.73	0.5	0.9	0
10/20/2019 13:30	0	7	0	30.11	0.6	0.9	0
10/20/2019 13:40	0	7	0	30.63	4.7	3.9	0.6
10/20/2019 13:50	0	7	0	23.52	0.8	0.9	0.4
10/20/2019 14:00	0	7	0	25.84	0.5	0.9	0
10/20/2019 14:10	0	7	0	28.25	0.6	0.8	0
10/20/2019 14:20	0	7	0	30.54	0.7	0.9	0
10/20/2019 14:30	0	7	0	28.12	4.8	3.9	24.6
10/20/2019 14:40	0	7	0	23.45	0.5	0.9	0.4
10/20/2019 14:50	0	7	0	25.87	0.6	0.9	0
10/20/2019 15:00	0	7	0	28.25	0.6	0.9	0
10/20/2019 15:10	0	7	0	30.57	0.7	0.9	0
10/20/2019 15:20	0	7	0	27.94	4.6	3.9	24.6
10/20/2019 15:30	0	7	0	23.3	0.5	0.9	0.4
10/20/2019 15:40	0	7	0	25.65	0.5	0.8	0
10/20/2019 15:50	0	7	0	28.06	0.7	0.9	0
10/20/2019 16:00	0	7	0	30.38	0.8	0.9	0
10/20/2019 16:10	0	7	0	28.95	4.7	4	24.1

10/20/2019 16:20	0	7	0	23	0.4	0.9	0.4
10/20/2019 16:30	0	7	0	25.35	0.5	0.8	0
10/20/2019 16:40	0	7	0	27.73	0.6	0.9	0
10/20/2019 16:50	0	7	0	30.11	0.7	0.9	0
10/20/2019 17:00	0	7	0	30.35	4.8	3.9	9.5
10/20/2019 17:10	0	7	0	22.78	0.5	0.9	0.4
10/20/2019 17:20	0	7	0	25.13	0.5	0.9	0
10/20/2019 17:30	0	7	0	27.54	0.7	0.9	0
10/20/2019 17:40	0	7	0	29.89	0.5	0.9	0
10/20/2019 17:50	0	7	0	31.42	4.8	3.7	0.3
10/20/2019 18:00	0	7	0	22.87	0.9	1.2	3.6
10/20/2019 18:10	0	7	0	25.19	0.6	0.9	0.1
10/20/2019 18:20	0	7	0	27.64	0.7	0.9	0
10/20/2019 18:30	0	7	0	29.99	0.7	0.9	0
10/20/2019 18:40	0	7	0	31.15	4.6	3.8	0.4
10/20/2019 18:50	0	7	0	22.42	0.9	1.4	3.2
10/20/2019 19:00	0	7	0	24.77	0.5	0.9	0.1
10/20/2019 19:10	0	7	0	27.18	0.5	0.9	0
10/20/2019 19:20	0	7	0	29.56	0.7	0.9	0
10/20/2019 19:30	0	7	0	31.97	0.7	0.9	0
10/20/2019 19:40	0	7	0	22.2	4.4	3.8	25.2
10/20/2019 19:50	0	7	0	24.49	0.4	0.9	0.4
10/20/2019 20:00	0	7	0	26.84	0.5	0.9	0
10/20/2019 20:10	0	7	0	29.22	0.6	0.9	0
10/20/2019 20:20	0	7	0	31.6	0.9	0.9	0
10/20/2019 20:30	0	7	0	23.58	4.5	3.9	25
10/20/2019 20:40	0	7	0	23.73	0.6	0.9	0.4
10/20/2019 20:50	0	7	0	26.14	0.7	0.9	0
10/20/2019 21:00	0	7	0	28.46	0.5	0.9	0
10/20/2019 21:10	0	7	0	30.84	0.7	0.9	0
10/20/2019 21:20	0	7	0	26.69	4.8	3.8	24.7
10/20/2019 21:30	0	7	0	23.85	0.4	0.8	0.4
10/20/2019 21:40	0	7	0	26.26	0.6	0.8	0
10/20/2019 21:50	0	7	0	28.67	0.7	0.9	0
10/20/2019 22:00	0	7	0	31.05	0.6	0.9	0
10/20/2019 22:10	0	7	0	26.14	4.5	3.8	24.6
10/20/2019 22:20	0	7	0	22.39	0.5	0.9	0.4
10/20/2019 22:30	0	7	0	24.8	0.6	0.9	0
10/20/2019 22:40	0	7	0	27.18	0.6	0.9	0
10/20/2019 22:50	0	7	0	29.53	0.8	0.8	0
10/20/2019 23:00	0	7	0	31.97	0.8	0.9	0
10/20/2019 23:10	0	7	0	22.29	1.5	2.8	25.2
10/20/2019 23:20	0	7	0	24.58	0.4	0.9	0.4
10/20/2019 23:30	0	7	0	27.06	0.8	0.9	0
10/20/2019 23:40	0	7	0	29.44	0.7	0.9	0
10/20/2019 23:50	0	7	0	31.85	0.9	0.9	0
10/21/2019 0:00	0	7	0	22.54	4.4	3.8	25.1

10/21/2019 0:10	0	7	0	24.03	0.6	0.9	0.4
10/21/2019 0:20	0	7	0	26.42	0.5	0.9	0
10/21/2019 0:30	0	7	0	28.8	0.7	0.9	0
10/21/2019 0:40	0	7	0	31.15	0.7	0.8	0
10/21/2019 0:50	0	7	0	25.56	4.7	3.9	24.7
10/21/2019 1:00	0	7	0	24	0.6	0.9	0.4
10/21/2019 1:10	0	7	0	26.38	0.5	0.9	0
10/21/2019 1:20	0	7	0	28.8	0.7	0.8	0
10/21/2019 1:30	0	8	0	31.15	0.7	0.8	0
10/21/2019 1:40	0	7	0	25.41	4.8	3.9	24.7
10/21/2019 1:50	0	7	0	22.94	0.3	0.9	0.4
10/21/2019 2:00	0	7	0	25.35	0.5	0.8	0
10/21/2019 2:10	0	7	0	27.73	0.6	0.9	0
10/21/2019 2:20	0	7	0	30.11	0.6	0.8	0
10/21/2019 2:30	0	7	0	30.23	4.6	3.9	6.9
10/21/2019 2:40	0	7	0	23.15	0.5	0.9	0.4
10/21/2019 2:50	0	7	0	25.53	0.5	0.8	0
10/21/2019 3:00	0	7	0	27.94	0.6	0.9	0
10/21/2019 3:10	0	7	0	30.29	0.8	0.9	0
10/21/2019 3:20	0	7	0	29.32	4.7	3.9	23.7
10/21/2019 3:30	0	7	0	22.54	0.5	0.9	0.4
10/21/2019 3:40	0	7	0	24.95	0.6	0.8	0
10/21/2019 3:50	0	7	0	27.36	0.6	0.9	0
10/21/2019 4:00	0	7	0	29.74	0.8	0.9	0
10/21/2019 4:10	0	7	0	31.76	4.8	3.1	0.2
10/21/2019 4:20	0	7	0	22.51	1.9	2.4	25
10/21/2019 4:30	0	7	0	24.92	0.5	0.9	23
10/21/2019 4:40	0	7	0	27.24	0.7	0.9	0
10/21/2019 4:50	0	7	0	29.71	0.7	0.9	0
10/21/2019 5:00	0	8	0	32.06	0.8	0.9	0
10/21/2019 5:10	0	7	0	21.78	3.4	3.6	25.2
10/21/2019 5:20	0	7	0	24.22	0.5	0.9	0.3
10/21/2019 5:30	0	7	0	26.57	0.5	0.9	0
10/21/2019 5:40	0	7	0	28.98	0.5	0.9	0
10/21/2019 5:50	0	7	0	31.39	0.8	0.9	0
10/21/2019 6:00	0	7	0	24.55	4.6	3.8	25
10/21/2019 6:10	0	7	0	24.55	0.6	0.9	0.4
10/21/2019 6:20	0	7	0	27.03	0.6	0.9	0
10/21/2019 6:30	0	7	0	29.38	0.8	0.9	0
10/21/2019 6:40	0	7	0	31.79	0.7	0.9	0
10/21/2019 6:50	0	7	0	22.9	4.7	3.8	25.1
10/21/2019 7:00	0	7	0	24.22	0.4	0.8	0.4
10/21/2019 7:10	0	7	0	26.57	0.7	0.9	0
10/21/2019 7:20	0	7	0	28.98	0.8	0.9	0
10/21/2019 7:30	0	7	0	31.36	0.7	0.9	0
10/21/2019 7:40	0	7	0	24.83	4.7	3.9	24.9
10/21/2019 7:50	0	8	0	24.95	0.5	0.9	0.4

10/21/2019 8:00	0	7	0	27.36	0.7	0.9	0
10/21/2019 8:10	0	7	0	29.71	0.7	0.8	0
10/21/2019 8:20	0	7	0	31.82	4.8	3.1	0.3
10/21/2019 8:30	0	7	0	23.52	0.9	1.1	1
10/21/2019 8:40	0	7	0	25.9	0.5	0.9	0.2
10/21/2019 8:50	0	8	0	28.28	0.8	0.9	0
10/21/2019 9:00	0	7	0	30.72	0.8	0.8	0
10/21/2019 9:10	0	8	0	27.76	4.4	3.8	24.6
10/21/2019 9:20	0	7	0	23.15	0.5	0.9	0.4
10/21/2019 9:30	8	8	8	28.7	0.7	0.9	-0.1
10/21/2019 9:40	8	8	8	29.35	4.6	3.9	25
10/21/2019 9:50	8	8	8	31.02	4.3	3.8	24.3
10/21/2019 10:00	8	8	8	31.15	4.5	3.8	24.4
10/21/2019 10:10	8	8	8	30.9	4.5	3.9	24.5
10/21/2019 10:20	8	8	8	31.15	4.8	3.8	23.7
10/21/2019 10:30	8	8	8	32.03	4.6	2.7	0.4
10/21/2019 10:40	8	8	8	30.38	0.6	0.8	0.4
10/21/2019 10:50	8	8	7	28.28	3.3	3.5	24.9
10/21/2019 11:00	8	8	8	29.32	4.9	3.9	25
10/21/2019 11:10	8	8	8	30.57	4.7	3.9	24.5
10/21/2019 11:20	8	8	7	31.6	4.7	3.8	12.8
10/21/2019 11:30	8	8	7	32	0.8	0.9	0.4
10/21/2019 11:40	8	8	7	31.33	0.6	0.9	0.4
10/21/2019 11:50	8	8	8	30.78	0.8	0.9	0.4
10/21/2019 12:00	8	8	7	30.2	0.8	0.9	0.4
10/21/2019 12:10	8	8	7	29.47	1.3	1.8	24.9
10/21/2019 12:20	8	8	7	28.98	3.4	3.5	25.1
10/21/2019 12:30	8	8	7	28.86	4.6	3.8	25.1
10/21/2019 12:40	8	8	7	29.07	4.7	4	25.1
10/21/2019 12:50	8	8	7	29.62	4.6	3.8	25
10/21/2019 13:00	8	8	7	30.02	4.4	4	24.7
10/21/2019 13:10	8	8	7	30.35	4.9	3.9	24.6
10/21/2019 13:20	8	8	8	30.9	4.7	3.9	24.3
10/21/2019 13:30	8	8	7	31.48	4.6	3.8	23
10/21/2019 13:40	8	8	7	32.09	4.8	3	0.4
10/21/2019 13:50	8	8	8	31.54	0.7	0.9	0.4
10/21/2019 14:00	8	8	7	30.93	0.8	0.8	0.4
10/21/2019 14:10	8	8	7	30.35	0.7	0.9	0.4
10/21/2019 14:20	8	8	7	29.68	0.8	1.2	3.3
10/21/2019 14:30	8	8	7	29.04	3	3.2	25
10/21/2019 14:40	8	8	7	28.8	4.6	3.8	25
10/21/2019 14:50	8	8	7	29.22	4.7	3.9	25
10/21/2019 15:00	8	8	7	29.62	4.6	3.9	25
10/21/2019 15:10	8	8	7	29.89	4.6	3.9	24.8
10/21/2019 15:20	8	8	7	30.57	4.6	3.8	24.6
10/21/2019 15:30	8	8	7	31.21	4.8	3.8	23.7
10/21/2019 15:40	8	8	7	32.03	4.6	2.9	0.4

10/21/2019 15:50	8	8	7	31.3	0.9	0.9	0.4
10/21/2019 16:00	8	8	7	30.54	0.8	0.9	0.4
10/21/2019 16:10	8	8	7	29.89	0.9	1	0.4
10/21/2019 16:20	8	8	7	29.35	2	2.4	24.9
10/21/2019 16:30	8	8	7	28.86	3.4	3.4	25.1
10/21/2019 16:40	8	8	7	28.7	4.8	3.9	25.1
10/21/2019 16:50	8	8	7	29.25	4.9	3.8	25
10/21/2019 17:00	8	8	7	29.65	4.7	3.9	24.8
10/21/2019 17:10	8	8	7	30.29	4.8	3.8	24.7
10/21/2019 17:20	8	8	7	30.81	4.8	3.8	24.4
10/21/2019 17:30	8	8	7	31.67	4.7	3.7	0.5
10/21/2019 17:40	8	8	7	31.97	1	0.8	0.4
10/21/2019 17:50	8	8	7	31.27	0.7	0.8	0.4
10/21/2019 18:00	8	8	7	30.38	0.8	1	0.4
10/21/2019 18:10	8	8	8	29.53	0.9	1.4	24.8
10/21/2019 18:20	8	8	7	28.83	3.3	3.4	25.1
10/21/2019 18:30	8	8	7	28.89	4.6	3.9	25.1
10/21/2019 18:40	8	8	7	29.35	4.9	3.8	25
10/21/2019 18:50	8	8	7	29.99	4.8	3.9	24.8
10/21/2019 19:00	8	8	7	30.72	4.7	3.8	24.5
10/21/2019 19:10	8	8	7	31.33	4.7	3.8	23.4
10/21/2019 19:20	8	8	7	31.82	4.6	3.5	0.4
10/21/2019 19:30	8	8	7	31.76	0.8	0.7	0.4
10/21/2019 19:40	8	8	7	31.12	0.8	0.9	0.4
10/21/2019 19:50	8	8	7	30.47	0.9	0.9	0.4
10/21/2019 20:00	8	8	7	29.44	0.9	1.5	24.8
10/21/2019 20:10	8	8	7	28.52	4.6	3.8	25.1
10/21/2019 20:20	8	8	7	29.25	4.4	3.8	25
10/21/2019 20:30	8	8	7	30.02	4.8	3.9	24.7
10/21/2019 20:40	8	8	7	30.87	4.6	3.8	24.5
10/21/2019 20:50	8	8	7	31.48	4.7	3.8	22.9
10/21/2019 21:00	8	8	7	32.09	4.4	2.2	0.3
10/21/2019 21:10	8	8	7	31.39	0.9	0.9	0.4
10/21/2019 21:20	8	8	7	30.9	0.8	0.9	0.4
10/21/2019 21:30	8	8	7	30.2	0.6	0.9	0.4
10/21/2019 21:40	8	8	7	29.65	0.9	1.4	24.8
10/21/2019 21:50	8	8	7	28.92	3.1	3.4	25
10/21/2019 22:00	8	8	7	28.92	4.6	3.9	25
10/21/2019 22:10	8	8	7	29.44	4.5	3.8	25
10/21/2019 22:20	8	8	7	30.26	4.2	3.9	24.7
10/21/2019 22:30	8	8	7	30.81	4.5	3.9	24.4
10/21/2019 22:40	8	8	7	31.79	4.8	3.7	0.5
10/21/2019 22:50	8	8	7	31.42	0.9	0.9	0.4
10/21/2019 23:00	8	8	7	30.63	0.5	0.9	0.3
10/21/2019 23:10	7	8	7	29.65	1	1.1	2.8
10/21/2019 23:20	8	8	7	28.8	3.3	3.4	25
10/21/2019 23:30	8	8	7	28.86	4.8	4	25.2

10/21/2019 23:40	8	8	7	29.44	4.6	3.8	25
10/21/2019 23:50	8	8	7	30.02	4.8	3.9	24.8
10/22/2019 0:00	8	8	7	30.51	4.5	3.9	24.5
10/22/2019 0:10	8	8	7	31.15	4.6	3.9	24
10/22/2019 0:20	8	8	7	31.63	4.7	3.7	0.6
10/22/2019 0:30	8	8	7	31.79	0.9	0.8	0.4
10/22/2019 0:40	8	8	7	30.75	0.9	0.9	0.4
10/22/2019 0:50	8	8	7	29.47	1	1.2	2.6
10/22/2019 1:00	8	8	7	28.34	4.7	4	25
10/22/2019 1:10	8	8	7	29.44	4.7	3.9	24.9
10/22/2019 1:20	8	8	7	30.38	4.9	3.9	24.5
10/22/2019 1:30	8	8	7	31.51	4.8	3.8	22.7
10/22/2019 1:40	8	8	7	31.73	0.9	0.9	0.4
10/22/2019 1:50	8	8	7	30.63	0.7	0.9	0.4
10/22/2019 2:00	8	8	7	29.41	1	1.3	14.4
10/22/2019 2:10	8	8	7	28.46	4.9	3.9	25
10/22/2019 2:20	8	8	7	29.68	4.7	3.9	25
10/22/2019 2:30	8	8	7	30.72	4.6	3.9	24.3
10/22/2019 2:40	8	8	7	32.06	4.7	2.1	0.4
10/22/2019 2:50	8	8	7	30.57	0.8	0.9	0.4
10/22/2019 3:00	8	8	7	29.07	1	1.5	24.8
10/22/2019 3:10	8	8	7	28.49	4.9	3.9	25
10/22/2019 3:20	8	8	7	29.5	4.6	3.9	25
10/22/2019 3:30	8	8	7	30.32	4.7	3.9	24.7
10/22/2019 3:40	8	8	7	30.99	4.7	3.9	24.1
10/22/2019 3:50	8	8	7	31.76	4.6	3.7	0.5
10/22/2019 4:00	8	8	7	31.63	0.9	0.9	0.5
10/22/2019 4:10	8	8	7	30.75	0.7	0.9	0.4
10/22/2019 4:20	8	8	7	29.77	0.8	1	0.5
10/22/2019 4:30	7	8	7	28.55	3.3	3.5	25.1
10/22/2019 4:40	7	8	7	29.07	4.6	4	25
10/22/2019 4:50	7	8	7	30.17	4.8	3.9	24.7
10/22/2019 5:00	7	8	7	31.05	4.9	4	24.1
10/22/2019 5:10	8	8	7	31.97	4.5	3.1	0.4
10/22/2019 5:20	8	8	7	31.42	0.9	0.9	0.4
10/22/2019 5:30	7	8	7	30.38	0.7	0.9	0.4
10/22/2019 5:40	8	8	7	29.13	2	2.2	24.8
10/22/2019 5:50	8	8	7	28.7	4.4	3.9	25
10/22/2019 6:00	8	8	7	29.8	4.6	3.9	24.9
10/22/2019 6:10	8	8	7	30.57	4.4	3.8	24.4
10/22/2019 6:20	7	8	7	31.97	4.9	3	0.4
10/22/2019 6:30	8	8	7	30.9	0.7	0.9	0.4
10/22/2019 6:40	7	8	7	29.44	1	1	0.5
10/22/2019 6:50	7	8	7	28.31	4.8	3.8	25
10/22/2019 7:00	7	8	7	29.65	4.5	3.9	24.9
10/22/2019 7:10	8	8	7	30.87	4.7	3.8	24.2
10/22/2019 7:20	7	8	7	32	0.8	0.9	0.5

10/22/2019 7:30	8	8	7	31.27	0.8	0.8	0.4
10/22/2019 7:40	8	8	7	30.23	0.8	0.9	0.4
10/22/2019 7:50	7	8	7	29.07	2.1	2.5	24.8
10/22/2019 8:00	8	8	7	28.77	4.6	3.9	25.1
10/22/2019 8:10	8	8	7	29.59	4.5	3.9	24.9
10/22/2019 8:20	8	8	7	30.54	4.5	3.9	24.6
10/22/2019 8:30	8	8	7	31.33	4.6	3.9	23.5
10/22/2019 8:40	7	8	7	32.09	4.7	2.7	0.5
10/22/2019 8:50	8	8	7	31.33	0.8	0.9	0.4
10/22/2019 9:00	7	8	7	30.66	0.8	0.9	0.4
10/22/2019 9:10	7	8	7	29.71	1	1.1	1.1
10/22/2019 9:20	7	8	7	28.77	3.4	3.4	25
10/22/2019 9:30	8	8	7	28.92	4.5	3.8	25.1
10/22/2019 9:40	7	8	7	29.83	4.5	3.9	24.9
10/22/2019 9:50	7	8	7	30.78	5.2	3.9	24.3
10/22/2019 10:00	7	8	7	32	0.8	0.9	0.4
10/22/2019 10:10	7	8	7	30.57	0.8	0.9	0.4
10/22/2019 10:20	7	8	7	29.1	1.3	1.8	24.8
10/22/2019 10:30	8	8	7	28.67	4.6	3.8	25.1
10/22/2019 10:40	8	8	7	29.35	4.6	3.9	25
10/22/2019 10:50	7	8	7	30.05	4.5	4	24.9
10/22/2019 11:00	7	8	7	30.66	4.7	3.9	24.5
10/22/2019 11:10	8	8	7	31.51	4.6	3.8	19.7
10/22/2019 11:20	7	8	7	31.82	0.8	0.9	0.4
10/22/2019 11:30	7	8	7	30.2	0.8	0.9	0.4
10/22/2019 11:40	7	8	7	28.28	3.2	3.4	25
10/22/2019 11:50	7	8	7	28.77	4.7	3.9	25
10/22/2019 12:00	8	0	7	31.27	0.9	0.9	0.4
10/22/2019 12:10	8	0	7	25.16	4.7	3.8	24.9
10/22/2019 12:20	8	0	7	28.95	0.5	0.9	0.4
10/22/2019 12:30	0	0	0	30.78	0.7	0.9	0
10/22/2019 12:40	0	0	0	30.78	0.7	0.9	0
10/22/2019 12:50	0	0	0	30.75	0.7	0.9	0
10/22/2019 13:00	0	0	0	30.81	0.7	0.9	0
10/22/2019 13:10	0	0	0	30.78	0.7	0.9	0
10/22/2019 13:20	0	0	0	30.78	0.7	0.9	0.1
10/22/2019 13:30	0	0	0	30.78	0.7	0.9	0.1
10/22/2019 13:40	0	0	0	30.78	0.7	0.9	0.1
10/22/2019 13:50	0	0	0	30.78	0.7	0.9	0.1
10/22/2019 14:00	0	0	0	30.78	0.7	0.9	0.1
10/22/2019 14:10	0	0	0	31.12	0.8	0.9	0.1
10/22/2019 14:20	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 14:30	0	0	0	31.15	0.8	0.8	0.1
10/22/2019 14:40	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 14:50	0	0	0	31.15	0.8	0.9	0.1
10/22/2019 15:00	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 15:10	0	0	0	31.15	0.8	0.9	0.1

10/22/2019 15:20	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 15:30	0	0	0	31.15	0.8	0.9	0.1
10/22/2019 15:40	0	0	0	31.15	0.7	0.8	0.1
10/22/2019 15:50	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 16:00	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 16:10	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 16:20	0	0	0	31.15	0.7	0.9	0.1
10/22/2019 16:30	0	0	0	31.12	0.8	0.8	0.1
10/22/2019 16:40	8	8	8	30.9	4.3	4	23.7
10/22/2019 16:50	8	8	7	27.15	0.9	1.3	3.2
10/22/2019 17:00	8	8	7	30.23	4.9	4	24.8
10/22/2019 17:10	8	8	7	30.54	4.4	3.8	24.7
10/22/2019 17:20	8	8	7	30.84	4.7	3.8	24.5
10/22/2019 17:30	8	8	7	31.05	4.7	3.9	24.3
10/22/2019 17:40	8	8	7	31.36	4.6	3.9	23.3
10/22/2019 17:50	8	8	7	31.88	4.7	3.3	0.4
10/22/2019 18:00	8	8	7	31.79	0.9	0.9	0.4
10/22/2019 18:10	8	8	7	31.27	0.8	0.8	0.3
10/22/2019 18:20	8	8	7	30.51	0.7	0.9	0.3
10/22/2019 18:30	8	8	7	29.59	0.8	1.4	24.8
10/22/2019 18:40	8	8	8	28.55	3.4	3.6	25.1
10/22/2019 18:50	8	8	7	29.19	4.8	3.9	25
10/22/2019 19:00	8	8	7	29.96	4.4	3.8	24.7
10/22/2019 19:10	8	8	7	30.57	4.8	3.9	24.5
10/22/2019 19:20	8	8	7	31.39	4.8	3.8	23
10/22/2019 19:30	8	8	7	32.06	4.6	2.8	0.4
10/22/2019 19:40	8	8	7	31.7	0.8	0.9	0.4
10/22/2019 19:50	8	8	7	31.05	0.9	0.9	0.4
10/22/2019 20:00	8	8	7	30.23	0.7	0.9	0.3
10/22/2019 20:10	8	8	7	29.62	1	1.3	24.8
10/22/2019 20:20	8	8	7	28.83	3.4	3.4	25
10/22/2019 20:30	8	8	7	28.89	4.7	3.9	25.1
10/22/2019 20:40	7	8	7	29.53	4.7	4	25
10/22/2019 20:50	8	8	7	30.32	4.9	3.9	24.7
10/22/2019 21:00	8	8	7	30.93	4.5	3.9	24.4
10/22/2019 21:10	8	8	7	31.39	4.7	3.8	23.1
10/22/2019 21:20	8	8	7	32.12	3.4	1.6	0.4
10/22/2019 21:30	8	8	7	31.39	0.8	0.9	0.4
10/22/2019 21:40	8	8	7	30.93	0.7	0.9	0.3
10/22/2019 21:50	8	8	7	30.23	0.9	0.9	0.4
10/22/2019 22:00	7	8	7	29.22	1.4	2	24.8
10/22/2019 22:10	8	8	7	28.49	4.6	3.9	25
10/22/2019 22:20	8	8	7	29.38	4.8	3.9	24.9
10/22/2019 22:30	8	8	7	30.26	4.5	3.8	24.6
10/22/2019 22:40	8	8	7	31.18	4.4	3.9	23.9
10/22/2019 22:50	8	8	7	31.88	4.9	3.4	0.4
10/22/2019 23:00	8	8	7	31.76	0.9	0.9	0.4

10/22/2019 23:10	8	8	7	31.3	0.7	0.8	0.4
10/22/2019 23:20	8	8	7	30.81	0.9	0.8	0.4
10/22/2019 23:30	7	8	7	30.2	0.8	1	0.3
10/22/2019 23:40	8	8	7	29.71	0.7	1.4	24.8
10/22/2019 23:50	8	8	7	29.04	3	3.3	24.9
10/23/2019 0:00	8	8	7	28.74	4.6	3.9	25.1
10/23/2019 0:10	8	8	7	29.32	4.8	3.9	25
10/23/2019 0:20	7	8	7	30.11	5.1	3.7	24.7
10/23/2019 0:30	7	8	7	30.81	4.7	3.9	24.3
10/23/2019 0:40	8	8	7	31.54	4.6	3.8	22.9
10/23/2019 0:50	7	8	7	32	0.7	0.8	0.4
10/23/2019 1:00	8	8	7	31.15	0.7	0.8	0.4
10/23/2019 1:10	8	8	7	30.14	0.9	0.9	0.4
10/23/2019 1:20	7	8	7	29.04	2.4	2.7	24.9
10/23/2019 1:30	8	8	7	28.83	4.7	3.9	25.1
10/23/2019 1:40	7	8	7	29.62	4.5	3.8	24.9
10/23/2019 1:50	7	8	7	30.47	4.7	3.8	24.5
10/23/2019 2:00	8	8	7	31.18	4.4	3.8	23.9
10/23/2019 2:10	8	8	7	32	4.8	3.1	0.4
10/23/2019 2:20	8	8	7	31.42	0.8	0.8	0.4
10/23/2019 2:30	8	8	7	30.69	0.7	0.9	0.4
10/23/2019 2:40	8	8	7	29.89	0.8	1	0.4
10/23/2019 2:50	7	8	7	29.13	2.6	2.9	24.9
10/23/2019 3:00	7	8	7	28.61	4.4	3.8	25
10/23/2019 3:10	8	8	7	29.5	4.4	3.9	24.9
10/23/2019 3:20	8	8	7	30.41	4.9	3.9	24.6
10/23/2019 3:30	8	8	7	31.57	5	3.8	22.7
10/23/2019 3:40	7	8	7	32	1	0.8	0.4
10/23/2019 3:50	8	8	7	30.96	0.8	0.9	0.4
10/23/2019 4:00	8	8	7	30.14	0.8	0.9	0.4
10/23/2019 4:10	7	8	7	29.56	0.8	1.4	24.7
10/23/2019 4:20	7	8	7	28.98	3.3	3.4	25
10/23/2019 4:30	7	8	7	28.86	4.5	3.8	25
10/23/2019 4:40	7	8	7	29.5	4.8	3.8	24.9
10/23/2019 4:50	7	8	7	30.26	4.8	3.9	24.6
10/23/2019 5:00	8	8	7	31.02	4.6	3.9	24.3
10/23/2019 5:10	7	8	7	31.76	4.6	3.6	0.5
10/23/2019 5:20	7	8	7	31.79	0.8	0.9	0.4
10/23/2019 5:30	7	8	7	30.9	0.9	0.9	0.4
10/23/2019 5:40	7	8	7	30.02	0.9	1	0.4
10/23/2019 5:50	7	8	7	28.7	3.3	3.4	25
10/23/2019 6:00	8	8	7	28.98	4.7	3.8	25
10/23/2019 6:10	8	8	7	29.99	4.5	3.8	24.7
10/23/2019 6:20	7	8	7	30.87	4.7	3.9	24.3
10/23/2019 6:30	7	8	7	31.57	4.9	3.7	0.6
10/23/2019 6:40	7	8	7	31.6	0.9	0.8	0.4
10/23/2019 6:50	7	8	7	30.2	0.8	0.9	0.4

10/23/2019 7:00	8	8	7	28.92	2.7	3	24.9
10/23/2019 7:10	7	8	7	28.86	4.6	3.9	24.9
10/23/2019 7:20	7	8	7	29.96	5	3.9	24.8
10/23/2019 7:30	7	8	7	30.96	4.4	3.8	24.2
10/23/2019 7:40	7	8	7	32.09	2	1.2	0.4
10/23/2019 7:50	7	8	7	30.54	0.9	0.9	0.4
10/23/2019 8:00	8	8	7	29.13	1.4	1.9	24.9
10/23/2019 8:10	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 8:20	0	0	0	30.23	0.7	0.8	0.4
10/23/2019 8:30	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 8:40	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 8:50	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 9:00	0	0	0	30.2	0.7	0.9	0.4
10/23/2019 9:10	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 9:20	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 9:30	0	0	0	30.23	0.7	0.8	0.4
10/23/2019 9:40	0	0	0	30.23	0.7	0.9	0.4
10/23/2019 9:50	0	0	0	30.23	0.7	0.8	0.4
10/23/2019 10:00	0	0	0	30.2	0.7	0.9	0.4
10/23/2019 10:10	0	0	0	30.2	0.7	0.9	0.4
10/23/2019 10:20	0	0	0	30.2	0.7	0.9	0.4
10/23/2019 10:30	0	0	0	30.23	0.7	0.8	0.4
10/23/2019 10:40	0	0	0	30.2	0.7	0.9	0.4
10/23/2019 10:50	0	0	0	30.2	0.7	0.8	0.4
10/23/2019 11:00	0	0	0	30.2	0.7	0.8	0.4
10/23/2019 11:10	0	0	0	30.23	0.6	0.8	0.4
10/23/2019 11:20	0	0	6	30.54	0.7	0.8	0.4
10/23/2019 11:30	0	0	0	30.69	0.7	0.8	0.4
10/23/2019 11:40	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 11:50	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 12:00	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 12:10	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 12:20	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 12:30	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 12:40	0	0	0	30.63	0.7	0.8	0.4
10/23/2019 12:50	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 13:00	0	0	0	30.69	0.7	0.8	0.4
10/23/2019 13:10	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 13:20	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 13:30	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 13:40	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 13:50	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 14:00	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 14:10	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 14:20	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 14:30	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 14:40	0	0	0	30.66	0.7	0.8	0.4

10/23/2019 14:50	0	0	0	30.69	0.7	0.8	0.4
10/23/2019 15:00	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 15:10	0	0	0	30.66	0.7	0.8	0.4
10/23/2019 15:20	0	0	0	30.75	0.7	0.8	0.4
10/23/2019 15:30	8	8	8	29.01	4.7	3.8	24.9
10/23/2019 15:40	8	8	8	30.44	4.9	3.8	24.8
10/23/2019 15:50	8	8	8	30.38	4.7	3.8	24.9
10/23/2019 16:00	9	9	9	30.23	4.9	3.8	25
10/23/2019 16:10	9	9	9	31.02	1.6	2.1	25
10/23/2019 16:20	9	9	9	31.48	4.5	3.8	24.2
10/23/2019 16:30	9	9	9	30.23	4.7	3.8	25.1
10/23/2019 16:40	9	9	9	31.36	0.9	1.2	1.3
10/23/2019 16:50	9	9	9	31.6	4.6	3.8	23.6
10/23/2019 17:00	9	9	9	30.54	4.5	3.8	24.8
10/23/2019 17:10	9	9	9	29.89	4.6	3.9	25
10/23/2019 17:20	9	9	9	30.17	3.1	3.2	24.9
10/23/2019 17:30	9	9	9	31.21	0.8	1.1	0.4
10/23/2019 17:40	9	9	9	32.06	4.7	2.5	0.4
10/23/2019 17:50	9	9	9	31.48	4.7	3.9	23.6
10/23/2019 18:00	9	9	9	31.12	4.7	3.8	24.5
10/23/2019 18:10	9	9	9	30.72	4.7	3.9	24.6
10/23/2019 18:20	9	9	9	30.51	4.7	3.9	24.7
10/23/2019 18:30	9	9	9	30.17	4.8	3.9	24.9
10/23/2019 18:40	9	9	9	29.96	4.8	3.8	24.9
10/23/2019 18:50	9	9	9	29.8	4.4	3.8	24.9
10/23/2019 19:00	9	9	9	29.56	4.5	3.9	25
10/23/2019 19:10	9	9	9	29.41	4.5	3.9	25.1
10/23/2019 19:20	9	9	9	29.25	4.6	3.8	25.1
10/23/2019 19:30	9	9	9	29.47	3.4	3.4	25
10/23/2019 19:40	9	9	9	30.02	2.7	3	24.9
10/23/2019 19:50	9	9	9	30.47	0.9	1.5	24.7
10/23/2019 20:00	9	9	9	31.3	0.8	1	0.4
10/23/2019 20:10	9	9	9	31.94	0.8	0.9	0.4
10/23/2019 20:20	9	9	9	31.88	4.7	3.4	0.5
10/23/2019 20:30	9	9	9	31.57	4.5	3.7	23.2
10/23/2019 20:40	9	9	9	31.45	4.8	3.9	24
10/23/2019 20:50	9	9	9	31.3	4.8	3.9	24.2
10/23/2019 21:00	9	9	9	31.15	4.7	3.9	24.2
10/23/2019 21:10	9	9	9	31.21	4.6	3.9	24
10/23/2019 21:20	9	9	9	30.9	4.8	3.9	24.5
10/23/2019 21:30	9	9	9	30.66	4.8	3.9	24.6
10/23/2019 21:40	9	9	9	30.41	4.6	3.9	24.7
10/23/2019 21:50	9	9	9	30.2	4.7	3.8	24.8
10/23/2019 22:00	9	9	9	29.99	4.7	3.9	24.9
10/23/2019 22:10	9	9	9	29.65	4.7	3.9	25
10/23/2019 22:20	9	9	9	29.38	4.8	4	25
10/23/2019 22:30	9	9	9	29.22	3.6	3.6	25

10/23/2019 22:40	9	9	9	29.77	3.1	3.1	24.9
10/23/2019 22:50	9	9	9	30.57	0.9	1.6	24.8
10/23/2019 23:00	9	9	9	31.36	0.7	0.9	0.4
10/23/2019 23:10	9	9	9	31.79	0.9	0.9	0.4
10/23/2019 23:20	9	9	9	32.09	4.1	1.8	0.4
10/23/2019 23:30	9	9	9	31.97	0.9	0.9	0.4
10/23/2019 23:40	9	9	9	31.97	0.7	0.9	0.4
10/23/2019 23:50	9	9	9	32.06	4.7	2.6	0.4
10/24/2019 0:00	9	9	9	31.79	4.6	3.6	0.6
10/24/2019 0:10	9	9	9	31.33	4.7	3.8	24.2
10/24/2019 0:20	9	9	9	30.81	4.8	3.9	24.6
10/24/2019 0:30	9	9	9	30.51	4.7	3.9	24.7
10/24/2019 0:40	9	9	9	30.11	4.9	3.9	24.9
10/24/2019 0:50	8	9	9	29.89	4.7	3.8	24.9
10/24/2019 1:00	9	9	9	29.99	4.8	3.9	24.9
10/24/2019 1:10	9	9	9	29.86	4.9	3.8	24.9
10/24/2019 1:20	9	9	9	29.68	4.7	3.8	24.9
10/24/2019 1:30	8	9	9	29.74	4.8	3.9	25
10/24/2019 1:40	9	9	9	29.47	4.8	3.9	25
10/24/2019 1:50	9	9	9	29.35	4.4	3.9	25
10/24/2019 2:00	9	9	9	29.47	3.4	3.5	25
10/24/2019 2:10	9	9	9	30.08	2.4	3	24.9
10/24/2019 2:20	9	9	9	30.69	1	1.3	3.1
10/24/2019 2:30	9	9	9	31.51	0.7	0.9	0.4
10/24/2019 2:40	9	9	9	32.15	2.2	1.3	0.4
10/24/2019 2:50	9	9	9	31.88	4.4	3.5	0.5
10/24/2019 3:00	9	9	9	31.6	4.7	3.7	22.1
10/24/2019 3:10	9	9	9	31.21	4.7	3.9	24.1
10/24/2019 3:20	9	9	9	30.81	4.9	3.8	24.6
10/24/2019 3:30	9	9	9	30.75	4.8	3.8	24.6
10/24/2019 3:40	8	9	9	30.66	4.9	3.9	24.6
10/24/2019 3:50	9	9	9	30.57	4.8	3.9	24.7
10/24/2019 4:00	9	9	9	30.35	4.6	3.8	24.7
10/24/2019 4:10	9	9	9	30.44	4.7	4	24.8
10/24/2019 4:20	9	9	9	30.29	4.9	3.9	24.9
10/24/2019 4:30	9	9	9	29.96	4.6	3.9	25
10/24/2019 4:40	9	9	9	29.68	4.7	3.9	25
10/24/2019 4:50	9	9	9	29.41	4.4	3.9	25.1
10/24/2019 5:00	9	9	9	29.44	3.3	3.5	25
10/24/2019 5:10	9	9	9	29.77	3.1	3.3	24.9
10/24/2019 5:20	9	9	9	29.86	2.6	2.8	24.9
10/24/2019 5:30	9	9	9	30.17	1.2	1.9	24.8
10/24/2019 5:40	9	9	9	30.57	1	1.5	3.4
10/24/2019 5:50	9	9	9	30.87	0.8	1.1	0.4
10/24/2019 6:00	9	9	9	31.33	0.6	1	0.4
10/24/2019 6:10	8	9	9	31.85	0.8	0.9	0.4
10/24/2019 6:20	9	9	9	31.97	4.5	3	0.5

10/24/2019 6:30	8	9	9	31.73	4.5	3.6	0.5
10/24/2019 6:40	9	9	9	31.63	4.6	3.7	23.4
10/24/2019 6:50	9	9	9	31.79	4.6	3.6	0.5
10/24/2019 7:00	8	9	9	31.67	4.8	3.6	0.6
10/24/2019 7:10	8	9	9	31.51	4.8	3.8	23.4
10/24/2019 7:20	9	9	9	31.27	4.9	3.8	24.3
10/24/2019 7:30	9	9	9	30.84	4.7	3.9	24.6
10/24/2019 7:40	8	9	9	30.35	4.6	3.9	24.9
10/24/2019 7:50	9	9	9	29.89	4.7	3.8	25
10/24/2019 8:00	8	9	9	29.56	4.4	3.9	25
10/24/2019 8:10	8	9	9	29.35	4.8	4	25
10/24/2019 8:20	9	9	9	29.19	4.5	3.9	25
10/24/2019 8:30	9	9	9	29.13	5.3	3.8	25
10/24/2019 8:40	8	9	9	29.19	3.4	3.5	25
10/24/2019 8:50	9	9	9	29.8	3.2	3.3	25
10/24/2019 9:00	9	9	9	30.14	1.8	2.4	24.8
10/24/2019 9:10	8	9	9	30.54	0.9	1.4	3.3
10/24/2019 9:20	8	9	9	31.21	0.9	1	0.4
10/24/2019 9:30	9	9	9	31.6	0.8	0.9	0.4
10/24/2019 9:40	8	9	9	31.73	0.8	0.9	0.4
10/24/2019 9:50	8	9	9	31.67	0.8	0.9	0.4
10/24/2019 10:00	8	9	9	31.76	0.7	0.9	0.4
10/24/2019 10:10	8	9	9	32.03	0.8	0.9	0.4
10/24/2019 10:20	9	9	9	32	4.5	2.9	0.5
10/24/2019 10:30	8	9	9	31.73	4.7	3.6	0.5
10/24/2019 10:40	8	9	9	31.54	4.8	3.8	23.3
10/24/2019 10:50	9	9	9	31.21	4.8	3.9	24.2
10/24/2019 11:00	8	9	9	30.99	4.6	3.9	24.5
10/24/2019 11:10	9	9	9	30.69	4.8	3.9	24.7
10/24/2019 11:20	8	9	9	30.41	4.7	4	24.7
10/24/2019 11:30	8	9	9	30.2	4.7	4	24.8
10/24/2019 11:40	9	9	9	30.2	4.7	3.9	24.9
10/24/2019 11:50	8	9	9	29.99	4.3	3.9	24.8
10/24/2019 12:00	9	9	9	29.65	4.7	3.9	24.9
10/24/2019 12:10	8	9	9	29.41	4.5	3.9	25.1
10/24/2019 12:20	8	9	9	30.11	2.5	2.8	24.9
10/24/2019 12:30	8	9	9	30.78	1	1.3	2.7
10/24/2019 12:40	8	9	9	31.33	0.8	1	0.4
10/24/2019 12:50	8	9	9	31.76	0.8	0.9	0.4
10/24/2019 13:00	8	9	9	32.03	4.3	1.9	0.4
10/24/2019 13:10	9	9	9	32	4.9	2.9	0.5
10/24/2019 13:20	9	9	9	31.85	4.9	3.2	0.5
10/24/2019 13:30	9	9	9	31.85	4.6	3.4	0.5
10/24/2019 13:40	9	9	9	31.6	4.7	3.7	21.3
10/24/2019 13:50	8	9	9	31.27	4.6	3.8	24.1
10/24/2019 14:00	8	9	9	30.96	4.5	3.8	24.6
10/24/2019 14:10	8	9	9	30.66	4.5	3.8	24.6

10/24/2019 14:20	8	9	9	30.47	4.8	3.9	24.7
10/24/2019 14:30	8	9	9	30.38	5	3.9	24.8
10/24/2019 14:40	9	9	9	30.38	4.7	3.9	24.8
10/24/2019 14:50	8	9	9	30.29	4.5	3.9	24.9
10/24/2019 15:00	8	9	9	30.11	4.5	3.8	24.9
10/24/2019 15:10	8	9	9	29.71	4.6	3.9	24.9
10/24/2019 15:20	9	9	9	29.38	4.6	3.9	25
10/24/2019 15:30	8	9	9	29.59	3.3	3.5	24.9
10/24/2019 15:40	8	9	9	30.02	2.3	2.7	24.9
10/24/2019 15:50	9	9	9	30.32	1.1	1.5	24.7
10/24/2019 16:00	8	9	9	30.66	0.9	1.2	2.7
10/24/2019 16:10	8	9	9	30.96	0.8	1.1	0.4
10/24/2019 16:20	8	9	9	31.36	0.8	0.9	0.4
10/24/2019 16:30	8	9	9	31.88	0.9	0.9	0.4
10/24/2019 16:40	8	9	9	31.94	4.7	3	0.4
10/24/2019 16:50	8	9	9	31.7	4.8	3.5	0.5
10/24/2019 17:00	8	9	9	31.63	4.6	3.6	22.9
10/24/2019 17:10	8	9	9	31.54	4.9	3.7	23.1
10/24/2019 17:20	8	9	9	31.42	4.3	3.7	23.2
10/24/2019 17:30	8	9	9	31.51	4.6	3.7	23.3
10/24/2019 17:40	8	9	9	31.48	4.6	3.7	23.3
10/24/2019 17:50	8	9	9	31.39	4.6	3.7	23.9
10/24/2019 18:00	8	9	9	31.27	4.7	3.8	24.3
10/24/2019 18:10	8	9	9	30.75	4.6	3.8	24.6
10/24/2019 18:20	8	9	9	30.47	4.8	3.9	24.7
10/24/2019 18:30	8	9	9	30.2	4.8	3.8	24.8
10/24/2019 18:40	8	9	9	29.83	4.7	3.9	24.9
10/24/2019 18:50	8	9	9	29.68	4.6	3.8	25
10/24/2019 19:00	8	9	9	29.65	4.9	3.9	25
10/24/2019 19:10	8	9	9	29.62	4.7	3.8	25
10/24/2019 19:20	8	9	9	29.22	4.7	3.8	25
10/24/2019 19:30	8	9	9	29.25	4.6	3.9	25
10/24/2019 19:40	8	9	9	29.07	4.9	3.9	25.1
10/24/2019 19:50	8	9	9	29.25	3.4	3.6	25
10/24/2019 20:00	8	9	9	29.22	3.3	3.5	25.1
10/24/2019 20:10	8	9	9	29.62	3.4	3.4	24.9
10/24/2019 20:20	8	9	9	30.08	2	2.5	24.9
10/24/2019 20:30	8	9	9	30.84	1.1	1.3	1.8
10/24/2019 20:40	8	9	9	31.57	0.8	1	0.4
10/24/2019 20:50	8	9	9	32.06	4.6	2.4	0.4
10/24/2019 21:00	8	9	9	31.73	4.8	3.5	0.5
10/24/2019 21:10	8	9	9	31.42	4.6	3.7	23.2
10/24/2019 21:20	8	9	9	31.54	4.7	3.5	23.6
10/24/2019 21:30	8	9	9	31.33	4.6	3.8	24.2
10/24/2019 21:40	8	9	9	30.93	4.7	3.9	24.5
10/24/2019 21:50	8	9	9	30.81	4.9	3.9	24.6
10/24/2019 22:00	8	9	9	30.54	4.6	3.8	24.6

10/24/2019 22:10	8	9	9	30.35	4.5	3.7	24.8
10/24/2019 22:20	8	9	9	30.17	4.7	3.8	24.8
10/24/2019 22:30	8	9	9	29.89	4.8	3.9	24.9
10/24/2019 22:40	8	9	9	29.62	4.6	3.8	25
10/24/2019 22:50	8	9	9	29.47	4.7	3.8	25
10/24/2019 23:00	8	9	9	29.41	4.9	3.8	25
10/24/2019 23:10	8	9	9	29.19	4.7	3.8	25.1
10/24/2019 23:20	8	9	9	29.22	3.6	3.5	25
10/24/2019 23:30	8	9	9	29.47	3.4	3.4	25
10/24/2019 23:40	8	9	9	29.77	2.9	3.1	24.9
10/24/2019 23:50	8	9	9	30.14	1.8	2.3	24.9
10/25/2019 0:00	8	9	9	30.44	1	1.5	3.2
10/25/2019 0:10	8	9	9	31.3	0.8	1	0.4
10/25/2019 0:20	8	9	9	31.94	0.9	0.9	0.4
10/25/2019 0:30	8	9	9	31.88	4.7	3.2	0.5
10/25/2019 0:40	8	9	9	31.67	4.7	3.6	23.2
10/25/2019 0:50	8	9	9	31.42	4.4	3.8	24
10/25/2019 1:00	8	9	9	31.09	4.6	3.9	24.3
10/25/2019 1:10	8	9	9	31.02	4.7	3.8	24.4
10/25/2019 1:20	8	9	9	30.96	4.9	3.9	24.5
10/25/2019 1:30	8	9	9	31.05	4.7	3.8	24.4
10/25/2019 1:40	8	9	9	31.05	4.8	3.8	24.5
10/25/2019 1:50	8	9	9	30.9	4.8	3.8	24.5
10/25/2019 2:00	8	9	9	30.78	4.5	3.9	24.6
10/25/2019 2:10	8	9	9	30.41	4.9	3.9	24.7
10/25/2019 2:20	8	9	9	30.26	4.5	3.9	24.8
10/25/2019 2:30	8	9	9	30.02	4.7	3.8	24.9
10/25/2019 2:40	8	9	9	29.96	4.5	3.9	24.9
10/25/2019 2:50	8	9	9	29.86	4.8	3.9	24.9
10/25/2019 3:00	8	9	9	29.86	4.7	3.8	24.9
10/25/2019 3:10	8	9	9	29.89	4.8	4	24.9
10/25/2019 3:20	8	9	9	30.02	4.8	3.8	24.8
10/25/2019 3:30	8	9	9	29.86	4.9	3.9	24.8
10/25/2019 3:40	8	9	9	30.17	4.8	3.8	24.8
10/25/2019 3:50	8	9	9	30.17	4.8	3.9	24.7
10/25/2019 4:00	8	9	9	29.99	4.6	3.9	24.9
10/25/2019 4:10	8	9	9	29.77	4.7	3.8	24.9
10/25/2019 4:20	8	9	9	29.56	4.7	3.9	25.1
10/25/2019 4:30	8	9	9	29.13	4.8	3.9	25.1
10/25/2019 4:40	8	9	9	29.13	3.4	3.5	25
10/25/2019 4:50	8	9	9	29.32	3.1	3.5	25
10/25/2019 5:00	8	9	9	29.13	3.5	3.6	25
10/25/2019 5:10	8	9	9	29.07	3.4	3.5	25
10/25/2019 5:20	8	9	9	29.56	3.4	3.5	25
10/25/2019 5:30	8	9	9	30.11	1.4	2.2	24.8
10/25/2019 5:40	8	9	9	30.96	0.9	1.1	0.4
10/25/2019 5:50	8	9	9	31.94	0.7	0.9	0.4

10/25/2019 6:00	8	9	9	31.82	4.7	3.5	0.5
10/25/2019 6:10	8	9	9	31.39	4.8	3.7	23.8
10/25/2019 6:20	8	9	9	31.09	4.5	3.9	24.4
10/25/2019 6:30	8	9	9	30.96	4.7	3.8	24.5
10/25/2019 6:40	8	9	9	30.9	4.8	4	24.5
10/25/2019 6:50	8	9	9	30.93	4.8	3.9	24.5
10/25/2019 7:00	8	9	9	31.09	4.7	3.8	24.5
10/25/2019 7:10	8	9	9	31.33	4.8	3.8	24.1
10/25/2019 7:20	8	9	9	31.33	4.7	3.8	23.8
10/25/2019 7:30	8	9	9	31.42	4.9	3.8	24
10/25/2019 7:40	8	9	9	31.09	4.6	3.8	24.4
10/25/2019 7:50	8	9	9	30.9	4.9	3.9	24.6
10/25/2019 8:00	8	9	9	30.38	4.8	3.9	24.8
10/25/2019 8:10	8	9	9	29.83	4.5	3.8	25
10/25/2019 8:20	8	9	9	29.38	4.6	3.9	25.1
10/25/2019 8:30	8	9	9	29.41	3.4	3.5	25
10/25/2019 8:40	8	9	9	29.59	3.3	3.4	25
10/25/2019 8:50	8	9	9	29.44	3.4	3.5	25
10/25/2019 9:00	8	9	9	29.1	3.1	3.6	25
10/25/2019 9:10	8	9	9	28.98	4.9	3.8	25.1
10/25/2019 9:20	8	9	9	29.07	4.9	3.8	25
10/25/2019 9:30	8	9	9	29.32	4.9	3.9	25
10/25/2019 9:40	8	9	9	29.22	4.5	3.9	25
10/25/2019 9:50	8	9	9	29.16	2	3.1	25
10/25/2019 10:00	8	9	9	29.8	3.1	3.2	25
10/25/2019 10:10	8	9	9	30.69	0.9	1.5	3.4
10/25/2019 10:20	8	9	9	31.39	0.8	1	0.4
10/25/2019 10:30	8	9	9	31.88	0.7	0.9	0.4
10/25/2019 10:40	8	9	9	31.85	4.5	3.4	0.5
10/25/2019 10:50	8	9	9	31.51	4.7	3.6	23.1
10/25/2019 11:00	8	9	9	31.39	4.5	3.8	23.6
10/25/2019 11:10	8	9	9	31.48	4.4	3.7	23.5
10/25/2019 11:20	8	9	9	31.42	4.9	3.8	23.9
10/25/2019 11:30	8	9	9	31.3	4.6	3.8	24.2
10/25/2019 11:40	8	9	9	31.15	4.9	3.8	24.2
10/25/2019 11:50	8	9	9	31.09	4.7	3.9	24.4
10/25/2019 12:00	8	9	9	30.99	4.6	3.9	24.4
10/25/2019 12:10	8	9	9	30.93	4.6	3.8	24.6
10/25/2019 12:20	8	9	9	30.75	4.8	3.9	24.5
10/25/2019 12:30	8	9	9	30.66	4.7	3.9	24.6
10/25/2019 12:40	8	9	9	30.17	4.6	3.8	24.8
10/25/2019 12:50	8	9	9	29.89	4.7	3.9	24.9
10/25/2019 13:00	8	9	9	29.62	4.8	3.9	25
10/25/2019 13:10	8	9	9	29.25	4.4	3.8	25
10/25/2019 13:20	8	9	9	29.65	3.4	3.5	25
10/25/2019 13:30	8	9	9	29.86	2.4	2.9	24.9
10/25/2019 13:40	8	9	9	30.05	1.5	2.1	24.7

10/25/2019 13:50	8	9	9	30.14	1.1	1.9	24.7
10/25/2019 14:00	8	9	9	30.17	0.9	1.7	24.7
10/25/2019 14:10	8	9	9	30.47	0.9	1.5	3.4
10/25/2019 14:20	8	9	9	30.66	1	1.2	0.4
10/25/2019 14:30	8	9	9	31.27	0.9	1.1	0.4
10/25/2019 14:40	8	9	9	31.88	0.9	0.9	0.4
10/25/2019 14:50	8	9	9	32.06	4.7	2.8	0.4
10/25/2019 15:00	8	9	9	31.67	4.7	3.5	14.2
10/25/2019 15:10	8	9	9	31.36	4.8	3.7	23.9
10/25/2019 15:20	8	9	9	31.3	4.4	3.8	24.2
10/25/2019 15:30	8	9	9	31.18	4.6	3.8	24.3
10/25/2019 15:40	8	9	9	31.09	4.7	3.8	24.3
10/25/2019 15:50	8	9	9	31.18	4.7	3.9	24.4
10/25/2019 16:00	8	9	9	30.96	4.8	3.8	24.5
10/25/2019 16:10	8	9	9	30.72	4.6	3.9	24.6
10/25/2019 16:20	8	9	9	30.57	4.7	3.9	24.6
10/25/2019 16:30	8	9	9	30.66	4.7	3.8	24.5
10/25/2019 16:40	8	9	9	30.63	4.5	3.8	24.6
10/25/2019 16:50	8	9	9	30.72	4.9	3.8	24.7
10/25/2019 17:00	8	9	9	30.44	4.7	3.8	24.7
10/25/2019 17:10	8	9	9	30.02	4.7	3.9	24.9
10/25/2019 17:20	8	9	9	29.71	4.7	3.8	25
10/25/2019 17:30	8	9	9	29.38	4.7	3.8	25
10/25/2019 17:40	8	9	9	29.1	4.6	3.9	25
10/25/2019 17:50	8	9	9	29.07	4.6	4	25
10/25/2019 18:00	8	9	9	29.38	4.5	3.8	25
10/25/2019 18:10	8	9	9	29.32	4.8	3.9	25
10/25/2019 18:20	8	9	9	29.41	3.4	3.5	25
10/25/2019 18:30	8	9	9	30.32	1.3	2.2	24.8
10/25/2019 18:40	8	9	9	31.12	0.9	1.1	0.4
10/25/2019 18:50	8	9	9	31.7	0.9	0.9	0.4
10/25/2019 19:00	8	9	9	32.09	4.9	2.3	0.5
10/25/2019 19:10	8	9	9	31.82	4.6	3.4	0.5
10/25/2019 19:20	8	9	9	31.48	4.6	3.7	23.3
10/25/2019 19:30	8	9	9	31.33	4.8	3.7	24
10/25/2019 19:40	8	9	9	31.21	4.8	3.8	24.2
10/25/2019 19:50	8	9	9	31.3	4.6	3.8	24
10/25/2019 20:00	8	9	9	31.3	4.7	3.7	24.2
10/25/2019 20:10	8	9	9	31.12	4.7	3.8	24.3
10/25/2019 20:20	8	9	9	31.05	4.9	3.9	24.4
10/25/2019 20:30	8	9	9	30.81	4.9	3.9	24.5
10/25/2019 20:40	8	9	9	30.41	4.6	3.9	24.7
10/25/2019 20:50	8	9	9	30.26	4.4	3.9	24.7
10/25/2019 21:00	8	9	9	30.14	4.6	3.8	24.9
10/25/2019 21:10	8	9	9	30.05	4.8	3.9	24.8
10/25/2019 21:20	8	9	9	29.89	4.7	3.9	24.9
10/25/2019 21:30	8	9	9	29.86	4.6	3.9	24.9

10/25/2019 21:40	8	9	9	29.62	4.7	3.9	25
10/25/2019 21:50	8	9	9	29.38	4.8	3.9	25
10/25/2019 22:00	8	9	9	30.26	1.9	2.5	24.9
10/25/2019 22:10	8	9	9	31.39	0.9	1.1	0.4
10/25/2019 22:20	8	9	9	32.03	4.6	2.7	0.4
10/25/2019 22:30	8	9	9	31.57	4.7	3.6	23.4
10/25/2019 22:40	8	9	9	31.15	4.6	3.8	24.4
10/25/2019 22:50	8	9	9	30.87	4.6	3.7	24.5
10/25/2019 23:00	8	9	9	30.69	4.5	3.9	24.6
10/25/2019 23:10	8	9	9	30.47	4.6	3.9	24.6
10/25/2019 23:20	8	9	9	30.26	4.7	3.8	24.7
10/25/2019 23:30	8	9	9	30.17	5	3.9	24.7
10/25/2019 23:40	8	9	9	30.2	4.6	3.9	24.8
10/25/2019 23:50	8	9	9	30.14	4.7	3.9	24.8
10/26/2019 0:00	8	9	9	30.17	4.8	3.8	24.8
10/26/2019 0:10	8	9	9	30.26	4.6	3.9	24.7
10/26/2019 0:20	8	9	9	30.26	4.7	3.9	24.7
10/26/2019 0:30	8	9	9	29.89	4.8	3.9	24.9
10/26/2019 0:40	8	9	9	29.74	4.6	3.9	25
10/26/2019 0:50	8	9	9	29.47	4.9	3.8	25
10/26/2019 1:00	8	9	9	29.38	3.6	3.6	25.1
10/26/2019 1:10	8	9	9	29.8	2.6	3.1	25
10/26/2019 1:20	8	9	9	29.96	1.7	2.4	24.8
10/26/2019 1:30	8	9	9	29.99	1.8	2.4	24.8
10/26/2019 1:40	8	9	9	29.56	2.6	2.9	24.9
10/26/2019 1:50	8	9	9	29.35	3.4	3.4	24.9
10/26/2019 2:00	8	9	9	29.25	3.5	3.5	25
10/26/2019 2:10	8	9	9	29.68	3.1	3.2	24.9
10/26/2019 2:20	8	9	9	29.96	2.2	2.6	24.8
10/26/2019 2:30	8	9	9	30.41	1	1.6	24.7
10/26/2019 2:40	8	9	9	30.57	0.9	1.3	0.5
10/26/2019 2:50	8	9	9	30.87	0.8	1.1	0.4
10/26/2019 3:00	8	9	9	30.84	0.7	1.1	0.4
10/26/2019 3:10	8	9	9	30.9	0.8	1.1	0.4
10/26/2019 3:20	8	9	9	30.96	0.9	1.2	0.4
10/26/2019 3:30	8	9	9	30.93	0.9	1.1	0.4
10/26/2019 3:40	8	9	9	31.05	0.9	1	0.4
10/26/2019 3:50	8	9	9	31.7	0.8	0.9	0.4
10/26/2019 4:00	8	9	9	32.12	4	1.9	0.4
10/26/2019 4:10	8	9	9	31.82	4.7	3.1	0.5
10/26/2019 4:20	8	9	9	31.45	4.5	3.5	23.4
10/26/2019 4:30	8	9	9	31.15	4.6	3.7	24.3
10/26/2019 4:40	8	9	9	30.78	4.6	3.9	24.5
10/26/2019 4:50	8	9	9	30.69	4.5	4.1	24.6
10/26/2019 5:00	8	9	9	30.35	4.8	3.8	24.7
10/26/2019 5:10	8	9	9	30.51	4.7	3.8	24.6
10/26/2019 5:20	8	9	9	30.69	4.5	3.9	24.6

10/26/2019 5:30	8	9	9	30.69	4.7	3.8	24.7
10/26/2019 5:40	8	9	9	30.51	4.7	3.8	24.7
10/26/2019 5:50	8	9	9	30.29	4.6	3.9	24.8
10/26/2019 6:00	8	9	9	29.8	4.8	3.9	25.1
10/26/2019 6:10	8	9	9	29.32	4.8	3.9	25.1
10/26/2019 6:20	8	9	9	29.59	3.4	3.4	25
10/26/2019 6:30	8	9	9	30.08	1.9	2.7	24.9
10/26/2019 6:40	8	9	9	30.14	1.1	1.9	24.8
10/26/2019 6:50	8	9	9	30.38	0.9	1.6	3.2
10/26/2019 7:00	8	9	9	30.75	0.8	1.2	0.4
10/26/2019 7:10	8	9	9	30.78	0.9	1.2	0.4
10/26/2019 7:20	8	9	9	30.87	0.8	1.1	0.4
10/26/2019 7:30	8	9	8	31.09	0.8	1.1	0.4
10/26/2019 7:40	8	9	9	31.18	0.7	1.2	0.4
10/26/2019 7:50	8	9	9	31.6	0.7	1	0.4
10/26/2019 8:00	8	9	9	32.12	0.9	0.9	0.4
10/26/2019 8:10	8	9	9	32	4.6	2.5	0.5
10/26/2019 8:20	8	9	9	31.6	4.8	3.5	16.9
10/26/2019 8:30	8	9	9	31.3	4.6	3.8	24.1
10/26/2019 8:40	8	9	9	31.18	4.9	3.9	24.2
10/26/2019 8:50	8	9	9	31.21	4.7	3.8	24.2
10/26/2019 9:00	8	9	9	31.36	4.7	3.7	23.8
10/26/2019 9:10	8	9	9	31.39	4.7	3.7	23.5
10/26/2019 9:20	8	9	9	31.57	4.7	3.7	23.2
10/26/2019 9:30	8	9	9	31.45	4.9	3.7	23.4
10/26/2019 9:40	8	9	9	31.33	4.7	3.7	24.1
10/26/2019 9:50	8	9	9	31.09	4.9	3.9	24.4
10/26/2019 10:00	8	9	9	30.93	4.7	3.9	24.5
10/26/2019 10:10	8	9	9	30.57	4.9	3.8	24.6
10/26/2019 10:20	8	9	9	30.57	4.7	3.9	24.6
10/26/2019 10:30	8	9	9	30.57	4.7	3.9	24.6
10/26/2019 10:40	8	9	9	30.47	4.9	3.9	24.7
10/26/2019 10:50	8	9	8	30.2	4.6	3.9	24.8
10/26/2019 11:00	8	9	9	29.99	4.7	3.9	25
10/26/2019 11:10	8	9	9	29.5	4.7	3.9	25
10/26/2019 11:20	8	9	9	29.19	3.5	3.7	25
10/26/2019 11:30	8	9	9	29.5	3.4	3.5	25
10/26/2019 11:40	8	9	9	29.56	3.3	3.3	25
10/26/2019 11:50	8	9	9	29.44	3.1	3.4	25
10/26/2019 12:00	8	9	9	29.5	3.2	3.3	25
10/26/2019 12:10	8	9	9	29.62	3	3.1	24.9
10/26/2019 12:20	8	9	9	29.89	2.5	2.9	24.9
10/26/2019 12:30	8	9	9	30.2	1.3	2	24.8
10/26/2019 12:40	8	9	9	30.66	0.9	1.4	2.7
10/26/2019 12:50	8	9	9	31.3	0.9	1.1	0.4
10/26/2019 13:00	8	9	9	31.57	0.9	0.9	0.4
10/26/2019 13:10	8	9	9	32.12	0.9	0.9	0.4

10/26/2019 13:20	8	9	9	31.94	4.7	2.9	0.5
10/26/2019 13:30	8	9	9	31.76	4.6	3.2	0.6
10/26/2019 13:40	8	9	9	31.63	4.9	3.6	23.2
10/26/2019 13:50	8	9	9	31.51	4.7	3.7	23.3
10/26/2019 14:00	8	9	9	31.21	4.7	3.7	24.2
10/26/2019 14:10	8	9	9	30.96	4.7	3.8	24.5
10/26/2019 14:20	8	9	9	31.09	4.8	3.8	24.4
10/26/2019 14:30	8	9	9	31.05	4.7	3.8	24.4
10/26/2019 14:40	8	9	9	31.12	4.7	3.8	24.4
10/26/2019 14:50	8	9	9	31.12	4.7	3.8	24.4
10/26/2019 15:00	8	9	9	30.87	4.7	3.8	24.5
10/26/2019 15:10	8	9	9	30.69	4.6	3.8	24.6
10/26/2019 15:20	8	9	9	30.35	4.7	3.9	24.7
10/26/2019 15:30	8	9	9	30.23	5	3.9	24.8
10/26/2019 15:40	8	9	9	29.99	4.8	3.8	24.9
10/26/2019 15:50	8	9	9	29.65	4.5	3.9	25
10/26/2019 16:00	8	9	9	29.35	5	3.9	25.1
10/26/2019 16:10	8	9	9	29.19	3.2	3.6	25.1
10/26/2019 16:20	8	9	9	29.5	3.4	3.5	25
10/26/2019 16:30	8	9	9	29.71	2.8	3.2	24.9
10/26/2019 16:40	8	9	9	29.96	1.6	2.5	24.9
10/26/2019 16:50	8	9	8	30.14	0.9	1.9	24.8
10/26/2019 17:00	8	9	9	29.71	2	2.5	24.8
10/26/2019 17:10	8	9	9	29.44	3.1	3.4	24.9
10/26/2019 17:20	8	9	9	29.41	3.6	3.5	25
10/26/2019 17:30	8	9	9	29.53	3	3.4	25
10/26/2019 17:40	8	9	9	30.08	2	2.6	24.9
10/26/2019 17:50	8	9	9	30.26	1	1.8	24.8
10/26/2019 18:00	8	9	9	30.51	1.1	1.3	2.5
10/26/2019 18:10	8	9	9	30.63	0.9	1.3	1.4
10/26/2019 18:20	8	9	9	30.96	0.8	1.2	0.4
10/26/2019 18:30	8	9	9	31.39	0.8	1.1	0.4
10/26/2019 18:40	8	9	9	31.63	0.9	1	0.4
10/26/2019 18:50	8	9	9	31.85	0.9	1	0.4
10/26/2019 19:00	8	9	9	32	0.8	1	0.4
10/26/2019 19:10	8	9	9	32.09	1.1	1	0.4
10/26/2019 19:20	8	9	9	32.09	4.5	2.5	0.4
10/26/2019 19:30	8	9	9	31.82	4.6	3	0.5
10/26/2019 19:40	8	9	9	31.63	4.7	3.5	22.9
10/26/2019 19:50	8	9	9	31.33	4.7	3.8	24.2
10/26/2019 20:00	8	9	9	31.09	4.6	3.8	24.3
10/26/2019 20:10	8	9	9	30.78	4.4	3.8	24.5
10/26/2019 20:20	8	9	9	30.66	4.9	3.9	24.6
10/26/2019 20:30	8	9	9	30.66	4.8	3.9	24.6
10/26/2019 20:40	8	9	9	30.51	4.8	3.8	24.6
10/26/2019 20:50	8	9	9	30.32	4.7	3.9	24.8
10/26/2019 21:00	8	9	9	30.14	4.7	3.8	24.8

10/26/2019 21:10	8	9	9	30.02	4.9	3.9	24.9
10/26/2019 21:20	8	9	9	29.8	4.9	3.8	25
10/26/2019 21:30	8	9	9	29.65	4.6	3.9	25
10/26/2019 21:40	8	9	9	29.53	4.7	3.8	25.1
10/26/2019 21:50	8	9	9	29.32	4.7	3.9	25
10/26/2019 22:00	8	9	9	29.19	4.7	3.9	25.1
10/26/2019 22:10	8	9	9	29.04	4.7	3.9	25.1
10/26/2019 22:20	8	9	8	29.44	3.4	3.5	25
10/26/2019 22:30	8	9	9	30.08	2.1	2.7	24.9
10/26/2019 22:40	8	9	8	30.72	1	1.3	2.7
10/26/2019 22:50	8	9	9	31.51	0.9	1	0.4
10/26/2019 23:00	8	9	8	32.06	1.8	1.2	0.4
10/26/2019 23:10	8	9	9	31.82	4.5	3.1	0.5
10/26/2019 23:20	8	9	8	31.63	4.7	3.4	4.9
10/26/2019 23:30	8	9	9	31.42	4.9	3.6	23.4
10/26/2019 23:40	8	9	8	31.27	4.6	3.8	24.2
10/26/2019 23:50	8	9	9	31.12	4.8	3.8	24.3
10/27/2019 0:00	8	9	9	31.15	4.7	3.8	24.4
10/27/2019 0:10	8	9	8	31.27	4.6	3.7	24.2
10/27/2019 0:20	8	9	9	31.33	4.7	3.7	24.2
10/27/2019 0:30	8	9	9	31.21	4.8	3.7	24.2
10/27/2019 0:40	8	9	8	31.09	4.8	3.7	24.4
10/27/2019 0:50	8	9	9	30.9	4.5	3.9	24.5
10/27/2019 1:00	8	9	9	30.63	4.9	3.9	24.6
10/27/2019 1:10	8	9	9	30.69	4.9	3.9	24.6
10/27/2019 1:20	8	9	9	30.69	4.7	3.9	24.6
10/27/2019 1:30	8	9	9	30.69	4.8	4	24.6
10/27/2019 1:40	8	9	9	30.9	5	3.8	24.5
10/27/2019 1:50	8	9	9	31.09	4.8	3.8	24.4
10/27/2019 2:00	8	9	9	31.3	4.7	3.7	24
10/27/2019 2:10	8	9	9	31.15	4.4	3.8	24.2
10/27/2019 2:20	8	9	9	31.21	4.5	3.7	24.3
10/27/2019 2:30	8	9	9	31.02	4.8	3.8	24.5
10/27/2019 2:40	8	9	9	30.69	4.5	3.9	24.6
10/27/2019 2:50	8	9	9	30.57	4.4	3.9	24.6
10/27/2019 3:00	8	9	9	30.41	4.7	3.9	24.6
10/27/2019 3:10	8	9	9	30.44	4.6	3.8	24.7
10/27/2019 3:20	8	9	9	30.44	4.7	4	24.7
10/27/2019 3:30	8	9	9	30.63	4.5	3.8	24.6
10/27/2019 3:40	8	9	9	30.72	4.8	3.8	24.5
10/27/2019 3:50	8	9	9	30.84	4.8	3.8	24.5
10/27/2019 4:00	8	9	9	31.39	4.8	3.6	24.1
10/27/2019 4:10	8	9	9	31.7	4.5	3.4	0.6
10/27/2019 4:20	8	9	9	32.12	2.6	1.5	0.4
10/27/2019 4:30	8	9	9	31.36	0.7	0.9	0.4
10/27/2019 4:40	8	9	9	30.66	0.9	1.2	0.4
10/27/2019 4:50	8	9	9	30.02	1	1.7	24.6

10/27/2019 5:00	8	9	9	29.53	2.7	3.1	24.8
10/27/2019 5:10	8	9	8	28.83	3.4	3.6	24.9
10/27/2019 5:20	8	9	9	29.16	4.4	3.9	25
10/27/2019 5:30	8	9	9	29.86	4.8	3.9	24.8
10/27/2019 5:40	8	9	9	30.54	4.6	3.9	24.6
10/27/2019 5:50	8	9	8	31.09	4.9	3.8	24.4
10/27/2019 6:00	8	9	9	31.21	4.7	3.7	24.3
10/27/2019 6:10	8	9	9	31.27	4.8	3.8	24.2
10/27/2019 6:20	8	9	9	31.21	4.8	3.7	24.1
10/27/2019 6:30	8	9	9	31.27	4.7	3.8	24
10/27/2019 6:40	8	9	9	31.45	4.3	3.6	23.2
10/27/2019 6:50	8	9	9	31.57	5.1	3.2	7.8
10/27/2019 7:00	8	9	9	32.09	4.1	1.9	0.4
10/27/2019 7:10	8	9	8	31.63	0.8	0.9	0.3
10/27/2019 7:20	8	9	9	31.05	0.7	1	0.3
10/27/2019 7:30	8	9	8	30.2	0.9	1.4	1.2
10/27/2019 7:40	8	9	9	28.89	3.4	3.4	25
10/27/2019 7:50	8	9	9	29.13	4.7	3.9	24.9
10/27/2019 8:00	8	9	9	29.77	4.6	3.8	24.8
10/27/2019 8:10	8	9	9	30.44	4.4	3.8	24.7
10/27/2019 8:20	8	9	9	30.51	4.8	3.8	24.6
10/27/2019 8:30	8	9	9	30.69	4.7	3.9	24.5
10/27/2019 8:40	8	9	8	30.93	4.6	3.7	24.4
10/27/2019 8:50	8	9	8	31.51	4.7	3.4	22.7
10/27/2019 9:00	8	9	9	32.06	0.9	0.9	0.4
10/27/2019 9:10	8	9	9	31.36	0.9	0.9	0.4
10/27/2019 9:20	8	9	9	30.08	0.9	1.4	0.9
10/27/2019 9:30	8	9	9	29.04	3.4	3.5	24.9
10/27/2019 9:40	8	9	9	29.07	4.4	3.9	24.9
10/27/2019 9:50	8	9	9	29.47	4.8	3.9	24.9
10/27/2019 10:00	8	9	9	29.83	4.9	3.8	24.9
10/27/2019 10:10	8	9	8	30.2	4.3	3.8	24.7
10/27/2019 10:20	8	9	8	30.32	4.6	3.8	24.7
10/27/2019 10:30	8	9	8	30.54	5	3.9	24.6
10/27/2019 10:40	8	9	9	31.15	4.8	3.7	24.2
10/27/2019 10:50	8	9	9	31.85	4.7	3.1	0.5
10/27/2019 11:00	8	9	9	31.45	0.8	0.9	0.4
10/27/2019 11:10	8	9	9	30.84	0.7	1.1	0.3
10/27/2019 11:20	8	9	9	30.81	0.7	1.3	0.4
10/27/2019 11:30	8	9	9	30.47	0.8	1.4	0.3
10/27/2019 11:40	8	9	8	29.8	1.1	2	24.7
10/27/2019 11:50	8	9	9	28.92	3.3	3.5	24.9
10/27/2019 12:00	8	9	9	29.19	4.6	3.8	24.9
10/27/2019 12:10	8	9	9	29.71	4.6	4	24.9
10/27/2019 12:20	8	9	9	30.14	4.7	3.9	24.7
10/27/2019 12:30	8	9	9	30.26	4.6	3.9	24.7
10/27/2019 12:40	8	9	9	30.63	4.8	3.9	24.5

10/27/2019 12:50	8	9	9	30.96	4.8	3.8	24.4
10/27/2019 13:00	8	9	9	31.21	4.6	3.7	23.8
10/27/2019 13:10	8	9	9	31.76	4.6	3.2	0.4
10/27/2019 13:20	8	9	9	31.7	0.9	0.9	0.4
10/27/2019 13:30	8	9	9	30.69	0.8	1.1	0.4
10/27/2019 13:40	8	9	9	30.08	1.1	1.5	3.5
10/27/2019 13:50	8	9	9	29.32	2.9	3.1	24.9
10/27/2019 14:00	8	9	9	29.01	3.4	3.5	24.9
10/27/2019 14:10	8	9	9	29.07	4.7	3.9	25
10/27/2019 14:20	8	9	9	29.19	4.8	3.9	24.9
10/27/2019 14:30	8	9	9	29.65	4.8	3.9	24.8
10/27/2019 14:40	8	9	9	30.38	4.8	3.8	24.6
10/27/2019 14:50	8	9	9	30.87	4.6	3.8	24.4
10/27/2019 15:00	8	9	9	31.27	4.7	3.8	24.2
10/27/2019 15:10	8	9	8	31.3	4.6	4.2	24.1
10/27/2019 15:20	8	9	9	31.12	4.7	3.8	24.3
10/27/2019 15:30	8	9	9	31.21	4.8	3.8	24.1
10/27/2019 15:40	8	9	9	31.51	4.6	3.6	23.4
10/27/2019 15:50	8	9	9	31.7	4.6	3.2	0.5
10/27/2019 16:00	8	9	8	32.03	3.5	1.8	0.4
10/27/2019 16:10	8	9	9	32	0.9	0.9	0.4
10/27/2019 16:20	8	9	9	31.82	0.7	0.9	0.4
10/27/2019 16:30	8	9	9	31.33	0.9	1	0.4
10/27/2019 16:40	8	9	9	30.41	0.7	1.2	0.4
10/27/2019 16:50	8	9	9	29.41	2.3	2.8	24.8
10/27/2019 17:00	8	9	8	28.83	4.6	3.8	25
10/27/2019 17:10	8	9	9	29.25	4.7	3.9	25
10/27/2019 17:20	8	9	9	29.68	4.6	3.8	25
10/27/2019 17:30	8	9	9	29.68	4.8	3.8	24.9
10/27/2019 17:40	8	9	9	29.44	4.7	3.8	24.9
10/27/2019 17:50	8	9	9	29.1	4.8	3.8	25
10/27/2019 18:00	8	9	9	29.07	4.6	3.9	25
10/27/2019 18:10	8	9	9	29.1	4.6	3.8	25
10/27/2019 18:20	8	9	9	29.25	4.7	3.8	24.9
10/27/2019 18:30	8	9	9	29.68	4.7	3.8	24.9
10/27/2019 18:40	8	9	9	30.02	4.7	3.9	24.8
10/27/2019 18:50	8	9	9	30.63	4.8	3.9	24.6
10/27/2019 19:00	8	9	8	31.33	4.8	3.7	23.8
10/27/2019 19:10	8	9	9	32.12	3.9	1.8	0.4
10/27/2019 19:20	8	9	9	31.63	0.9	1	0.4
10/27/2019 19:30	8	9	9	31.36	0.7	1	0.4
10/27/2019 19:40	8	9	9	31.39	0.9	1	0.4
10/27/2019 19:50	8	9	8	31.45	0.8	1	0.4
10/27/2019 20:00	8	9	9	31.51	0.8	1	0.4
10/27/2019 20:10	8	9	9	31.15	0.6	1	0.4
10/27/2019 20:20	8	9	9	30.99	0.8	1.1	0.4
10/27/2019 20:30	8	9	9	30.51	0.8	1.3	0.4

10/27/2019 20:40	8	9	9	30.11	0.9	1.6	2.9
10/27/2019 20:50	8	9	9	29.86	1.4	2.2	24.8
10/27/2019 21:00	8	9	9	29.35	3.3	3.3	24.9
10/27/2019 21:10	8	9	9	28.89	4.6	3.8	24.9
10/27/2019 21:20	8	9	9	29.13	4.2	3.9	24.9
10/27/2019 21:30	8	9	9	29.56	4.8	3.8	24.8
10/27/2019 21:40	8	9	9	30.2	4.6	3.8	24.7
10/27/2019 21:50	8	9	9	30.69	5	3.9	24.6
10/27/2019 22:00	8	9	9	30.99	4.8	3.8	24.4
10/27/2019 22:10	8	9	9	31.02	4.9	3.8	24.4
10/27/2019 22:20	8	9	9	31.09	4.9	3.7	24.3
10/27/2019 22:30	8	9	9	31.21	4.7	3.7	23.8
10/27/2019 22:40	8	9	9	31.7	4.7	3.3	0.6
10/27/2019 22:50	8	9	9	31.88	0.8	0.9	0.3
10/27/2019 23:00	8	9	9	31.02	0.8	1.1	0.4
10/27/2019 23:10	8	9	8	30.32	0.9	1.4	0.4
10/27/2019 23:20	8	9	9	30.05	1	1.8	24.7
10/27/2019 23:30	8	9	9	29.89	2	2.4	24.8
10/27/2019 23:40	8	9	9	29.86	2.1	2.5	24.9
10/27/2019 23:50	8	9	9	29.8	2.4	2.7	24.8
10/28/2019 0:00	8	9	9	29.5	2.9	3.2	24.8
10/28/2019 0:10	8	9	9	29.16	3.4	3.5	25
10/28/2019 0:20	8	9	9	28.95	4.7	3.9	25
10/28/2019 0:30	8	9	9	29.1	4.9	4	24.9
10/28/2019 0:40	8	9	9	29.53	4.6	3.9	24.9
10/28/2019 0:50	8	9	9	29.86	4.7	3.8	24.8
10/28/2019 1:00	8	9	9	30.57	4.9	3.8	24.5
10/28/2019 1:10	8	9	9	31.15	4.6	3.7	24.2
10/28/2019 1:20	8	9	9	31.36	4.8	3.6	23.6
10/28/2019 1:30	8	9	9	31.51	4.9	3.6	23.1
10/28/2019 1:40	8	9	9	31.57	4.7	3.5	22.3
10/28/2019 1:50	8	9	9	31.76	4.6	3.2	0.5
10/28/2019 2:00	8	9	9	32.03	4.8	2.3	0.4
10/28/2019 2:10	8	9	9	31.57	0.9	0.9	0.4
10/28/2019 2:20	8	9	9	30.81	0.9	1.1	0.4
10/28/2019 2:30	8	9	9	30.02	1.1	1.7	3.2
10/28/2019 2:40	8	9	9	29.38	3.1	3.3	24.9
10/28/2019 2:50	8	9	9	29.07	3.4	3.6	25
10/28/2019 3:00	8	9	9	29.47	3.3	3.5	25
10/28/2019 3:10	8	9	9	30.08	1.8	2.5	24.8
10/28/2019 3:20	8	9	9	30.17	1	1.7	24.7
10/28/2019 3:30	8	9	9	30.2	0.9	1.9	24.7
10/28/2019 3:40	8	9	9	30.14	1.1	1.9	24.7
10/28/2019 3:50	8	9	9	29.62	2.4	2.9	24.8
10/28/2019 4:00	8	9	9	28.92	3.4	3.6	24.9
10/28/2019 4:10	8	9	9	28.98	4.6	3.9	25
10/28/2019 4:20	8	9	9	29.5	4.6	3.9	24.9

10/28/2019 4:30	8	9	9	29.56	4.8	3.9	24.8
10/28/2019 4:40	8	9	9	30.26	4.8	3.8	24.6
10/28/2019 4:50	8	9	9	30.99	4.7	3.8	24.3
10/28/2019 5:00	8	9	9	31.48	4.6	3.5	23.2
10/28/2019 5:10	8	9	9	31.85	4.7	2.9	0.5
10/28/2019 5:20	8	9	9	31.97	0.7	1	0.4
10/28/2019 5:30	8	9	9	31.48	0.9	1	0.4
10/28/2019 5:40	8	9	9	30.81	1.1	1.1	0.4
10/28/2019 5:50	8	9	9	30.05	0.9	1.6	3.5
10/28/2019 6:00	8	9	9	28.89	3.4	3.5	24.9
10/28/2019 6:10	8	9	9	29.1	4.8	3.8	24.9
10/28/2019 6:20	8	9	9	29.56	4.8	3.9	24.9
10/28/2019 6:30	8	9	9	29.99	4.6	3.8	24.9
10/28/2019 6:40	8	9	9	30.44	4.7	3.9	24.7
10/28/2019 6:50	8	9	9	30.69	4.9	3.9	24.6
10/28/2019 7:00	8	9	9	31.27	4.7	3.7	23.9
10/28/2019 7:10	8	9	9	31.73	4.7	3.1	0.6
10/28/2019 7:20	8	9	9	32.03	0.9	1	0.4
10/28/2019 7:30	8	9	9	31.79	0.7	1	0.4
10/28/2019 7:40	8	9	9	31.82	0.9	0.9	0.4
10/28/2019 7:50	8	9	9	31.97	0.9	1	0.4
10/28/2019 8:00	8	9	9	31.73	0.9	1	0.4
10/28/2019 8:10	8	9	9	31.48	0.9	1	0.4
10/28/2019 8:20	8	9	9	31.27	0.9	1.1	0.4
10/28/2019 8:30	8	9	9	31.09	0.9	1.1	0.4
10/28/2019 8:40	8	9	9	31.18	0.9	1.1	0.4
10/28/2019 8:50	8	9	9	30.75	0.6	1.2	0.4
10/28/2019 9:00	8	9	9	30.51	0.9	1.4	0.4
10/28/2019 9:10	8	9	9	30.05	0.9	1.8	24.7
10/28/2019 9:20	8	9	9	29.59	2.4	3	24.8
10/28/2019 9:30	8	9	9	29.16	3.4	3.6	24.9
10/28/2019 9:40	8	9	9	28.92	4.4	3.8	25
10/28/2019 9:50	8	9	9	29.41	4.6	3.8	24.8
10/28/2019 10:00	8	9	9	29.62	4.7	3.8	25
10/28/2019 10:10	8	9	9	29.68	4.5	3.9	24.9
10/28/2019 10:20	8	9	9	29.77	4.9	3.8	24.9
10/28/2019 10:30	8	9	9	29.89	4.7	3.8	24.9
10/28/2019 10:40	8	9	9	29.77	4.7	3.8	24.9
10/28/2019 10:50	8	9	9	29.89	4.7	3.9	24.9
10/28/2019 11:00	8	9	9	30.11	4.6	3.9	24.8
10/28/2019 11:10	8	9	9	30.32	4.7	3.8	24.7
10/28/2019 11:20	8	9	9	30.78	4.7	3.8	24.4
10/28/2019 11:30	8	9	9	31.21	4.9	3.7	24
10/28/2019 11:40	8	9	9	31.51	4.6	3.4	23.1
10/28/2019 11:50	8	9	9	31.73	4.8	3.3	0.6
10/28/2019 12:00	8	9	9	31.67	4.8	3.2	0.6
10/28/2019 12:10	8	9	9	31.7	4.9	3.3	0.6

10/28/2019 12:20	8	9	9	31.76	5	3.2	0.5
10/28/2019 12:30	8	9	9	32.03	4.5	2.2	0.4
10/28/2019 12:40	8	9	9	31.73	0.8	1	0.4
10/28/2019 12:50	8	9	9	30.87	0.9	1.1	0.3
10/28/2019 13:00	8	9	9	30.14	0.9	1.6	2.6
10/28/2019 13:10	8	9	9	29.19	3.2	3.4	24.9
10/28/2019 13:20	8	9	9	28.98	4.7	3.9	24.9
10/28/2019 13:30	8	9	9	29.22	4.8	3.8	24.9
10/28/2019 13:40	8	9	9	29.44	4.7	3.8	24.9
10/28/2019 13:50	8	9	9	29.5	4.8	3.9	24.9
10/28/2019 14:00	8	9	9	29.19	4.8	3.9	24.9
10/28/2019 14:10	8	9	9	29.13	4.8	3.8	24.9
10/28/2019 14:20	8	9	9	29.38	4.6	3.8	24.9
10/28/2019 14:30	8	9	9	29.53	4.7	3.8	24.9
10/28/2019 14:40	8	9	9	29.83	4.8	3.8	24.8
10/28/2019 14:50	8	9	9	30.26	4.5	3.9	24.7
10/28/2019 15:00	8	9	9	30.72	4.9	3.8	24.5
10/28/2019 15:10	8	9	9	30.96	4.7	3.7	24.4
10/28/2019 15:20	8	9	9	31.12	4.6	3.7	24.3
10/28/2019 15:30	8	9	9	31.27	4.6	3.6	23.8
10/28/2019 15:40	8	9	9	31.51	4.7	3.5	23.1
10/28/2019 15:50	8	9	9	31.73	4.7	3.1	0.5
10/28/2019 16:00	8	9	9	32.06	4.9	2.3	0.4
10/28/2019 16:10	8	9	9	31.79	0.9	0.9	0.4
10/28/2019 16:20	8	9	9	31.54	0.8	1	0.4
10/28/2019 16:30	8	9	9	31.54	0.8	1.1	0.4
10/28/2019 16:40	8	9	9	31.63	0.9	1.1	0.4
10/28/2019 16:50	8	9	9	31.51	0.8	1	0.4
10/28/2019 17:00	8	9	9	31.63	1	1	0.4
10/28/2019 17:10	8	9	9	31.6	0.9	1	0.5
10/28/2019 17:20	8	9	9	31.63	0.8	1	0.4
10/28/2019 17:30	8	9	9	31.7	0.9	1	0.4
10/28/2019 17:40	8	9	9	31.51	0.8	1	0.4
10/28/2019 17:50	8	9	9	31.3	0.8	1	0.4
10/28/2019 18:00	8	9	9	31.12	0.9	1.2	0.4
10/28/2019 18:10	8	9	9	30.96	0.8	1.2	0.4
10/28/2019 18:20	8	9	9	30.63	0.8	1.4	0.4
10/28/2019 18:30	8	9	9	30.69	0.8	1.3	0.4
10/28/2019 18:40	8	9	9	30.54	0.8	1.4	0.4
10/28/2019 18:50	8	9	9	30.57	0.9	1.4	0.4
10/28/2019 19:00	8	9	9	30.38	1	1.6	2.1
10/28/2019 19:10	8	9	9	29.89	1.2	2	24.7
10/28/2019 19:20	8	9	9	29.35	3.2	3.4	24.9
10/28/2019 19:30	8	9	9	28.83	4.8	4	24.9
10/28/2019 19:40	8	9	9	29.22	4.7	3.8	24.9
10/28/2019 19:50	8	9	9	29.35	4.5	3.8	24.9
10/28/2019 20:00	8	9	9	29.56	4.6	3.8	24.9

10/28/2019 20:10	8	9	9	29.62	4.6	3.9	24.9
10/28/2019 20:20	8	9	9	29.68	4.8	3.8	24.9
10/28/2019 20:30	8	9	9	30.17	4.8	3.9	24.7
10/28/2019 20:40	8	9	9	30.47	4.8	3.8	24.7
10/28/2019 20:50	8	9	9	30.81	4.8	3.8	24.5
10/28/2019 21:00	8	9	9	30.96	4.9	3.6	24.4
10/28/2019 21:10	8	9	9	31.12	4.6	3.6	24.1
10/28/2019 21:20	8	9	9	31.48	4.6	3.5	23.2
10/28/2019 21:30	8	9	9	31.67	4.6	3.1	0.5
10/28/2019 21:40	8	9	9	32.12	4.7	2.2	0.4
10/28/2019 21:50	8	9	9	31.48	0.9	1.1	0.5
10/28/2019 22:00	8	9	9	31.09	0.8	1.1	0.4
10/28/2019 22:10	8	9	9	30.96	0.9	1.2	0.3
10/28/2019 22:20	8	9	9	31.39	0.8	1.2	0.4
10/28/2019 22:30	8	9	9	31.88	0.9	1.1	0.4
10/28/2019 22:40	8	9	9	32.09	4.7	2.2	0.4
10/28/2019 22:50	8	9	9	32.09	5.2	2.2	0.4
10/28/2019 23:00	8	9	9	32.06	0.8	1	0.4
10/28/2019 23:10	8	9	9	31.6	0.9	0.9	0.4
10/28/2019 23:20	8	9	9	31.15	0.7	1.1	0.4
10/28/2019 23:30	8	9	9	30.29	0.9	1.4	0.5
10/28/2019 23:40	8	9	9	29.83	1.5	2.2	24.8
10/28/2019 23:50	8	9	9	29.65	2.4	3	24.7
10/29/2019 0:00	8	9	9	29.62	2.5	3	24.8
10/29/2019 0:10	8	9	9	29.53	2.9	3.1	24.8
10/29/2019 0:20	8	9	9	29.22	3.4	3.5	24.9
10/29/2019 0:30	8	9	9	28.89	4.4	3.9	24.9
10/29/2019 0:40	8	9	9	29.13	4.6	3.9	24.9
10/29/2019 0:50	8	9	9	29.5	4.8	3.8	24.9
10/29/2019 1:00	8	9	9	29.47	4.7	3.8	24.9
10/29/2019 1:10	8	9	9	29.44	4.8	3.8	24.9
10/29/2019 1:20	8	9	9	29.47	4.6	3.9	24.9
10/29/2019 1:30	8	9	9	29.65	5	3.8	24.9
10/29/2019 1:40	8	9	9	29.59	4.6	3.9	24.9
10/29/2019 1:50	8	9	9	29.74	5	3.9	24.9
10/29/2019 2:00	8	9	9	29.83	4.7	3.8	24.8
10/29/2019 2:10	8	9	9	29.83	4.7	3.9	24.8
10/29/2019 2:20	8	9	9	30.26	4.5	3.8	24.7
10/29/2019 2:30	8	9	9	30.57	4.4	3.9	24.6
10/29/2019 2:40	8	9	9	30.81	4.8	3.8	24.5
10/29/2019 2:50	8	9	9	31.09	4.7	3.8	24.1
10/29/2019 3:00	8	9	9	31.42	4.9	3.5	23.2
10/29/2019 3:10	8	9	9	31.73	4.7	3.1	0.5
10/29/2019 3:20	8	9	9	32.03	4.5	2.4	0.4
10/29/2019 3:30	8	9	9	31.67	0.8	1	0.4
10/29/2019 3:40	8	9	9	30.81	0.9	1.2	0.4
10/29/2019 3:50	8	9	9	30.08	0.8	1.7	2.7

10/29/2019 4:00	8	9	9	29.56	2.6	3.1	24.8
10/29/2019 4:10	8	9	9	29.13	3.4	3.5	24.9
10/29/2019 4:20	8	9	9	29.1	3.4	3.5	24.9
10/29/2019 4:30	8	9	9	29.53	3.3	3.4	24.9
10/29/2019 4:40	8	9	9	29.74	2.7	3.1	24.8
10/29/2019 4:50	8	9	9	29.68	2.4	3	24.8
10/29/2019 5:00	8	9	9	29.47	3.1	3.4	24.8
10/29/2019 5:10	8	9	9	29.32	3.4	3.5	24.9
10/29/2019 5:20	8	9	9	29.25	3.4	3.5	24.9
10/29/2019 5:30	8	9	9	29.13	3.5	3.4	24.9
10/29/2019 5:40	8	9	9	29.04	3.5	3.6	24.9
10/29/2019 5:50	8	9	9	28.95	4.6	3.9	24.9
10/29/2019 6:00	8	9	9	29.71	4.7	3.9	24.9
10/29/2019 6:10	8	9	9	30.08	4.7	3.8	24.8
10/29/2019 6:20	8	9	9	30.26	4.8	3.7	24.8
10/29/2019 6:30	8	9	9	30.41	4.9	3.8	24.6
10/29/2019 6:40	8	9	9	30.32	4.6	3.8	24.6
10/29/2019 6:50	8	9	9	30.35	4.6	3.9	24.7
10/29/2019 7:00	8	9	9	30.26	4.5	3.9	24.7
10/29/2019 7:10	8	9	9	30.29	4.8	3.9	24.7
10/29/2019 7:20	8	9	9	30.35	4.7	3.9	24.7
10/29/2019 7:30	8	9	9	30.41	5	3.8	24.6
10/29/2019 7:40	8	9	9	30.72	4.7	3.8	24.5
10/29/2019 7:50	8	9	9	31.09	4.7	3.8	24.3
10/29/2019 8:00	8	9	9	31.45	5.1	3.5	23.2
10/29/2019 8:10	8	9	9	31.88	4.8	2.9	0.5
10/29/2019 8:20	8	9	9	32.03	3.1	1.6	0.4
10/29/2019 8:30	8	9	9	31.6	0.9	1	0.4
10/29/2019 8:40	8	9	9	31.39	0.7	1.1	0.4
10/29/2019 8:50	8	9	9	30.9	0.9	1.2	0.4
10/29/2019 9:00	8	9	9	30.05	1	1.7	3.5
10/29/2019 9:10	8	9	9	29.25	2.9	3.3	24.9
10/29/2019 9:20	8	9	9	28.89	4.6	3.9	25
10/29/2019 9:30	8	9	9	29.16	4.8	3.9	24.9
10/29/2019 9:40	8	9	9	29.13	4.5	3.9	25
10/29/2019 9:50	8	9	9	29.16	4.6	4	25
10/29/2019 10:00	8	9	9	29.1	4.9	3.9	25
10/29/2019 10:10	8	9	9	29.5	4.7	3.8	24.9
10/29/2019 10:20	8	9	9	29.86	4.7	3.8	24.8
10/29/2019 10:30	8	9	9	30.57	4.7	3.8	24.5
10/29/2019 10:40	8	9	9	31.51	4.8	3.3	4.8
10/29/2019 10:50	8	9	9	31.82	4.7	3	0.5
10/29/2019 11:00	8	9	9	31.85	4.8	3.1	0.5
10/29/2019 11:10	8	9	9	31.57	4.6	3.3	23.1
10/29/2019 11:20	8	9	9	31.18	4.5	3.6	24.3
10/29/2019 11:30	8	9	9	30.84	4.7	3.8	24.6
10/29/2019 11:40	8	9	9	30.57	4.8	3.8	24.7

10/29/2019 11:50	8	9	9	30.32	4.6	3.8	24.9
10/29/2019 12:00	8	9	9	30.08	4.8	3.8	24.8
10/29/2019 12:10	8	9	9	29.86	4.6	3.8	25
10/29/2019 12:20	8	9	9	29.83	4.7	3.8	24.9
10/29/2019 12:30	8	9	9	29.96	4.8	3.9	24.9
10/29/2019 12:40	8	9	9	30.2	4.7	3.8	24.8
10/29/2019 12:50	8	9	9	30.38	4.6	3.8	24.6
10/29/2019 13:00	8	9	9	30.63	4.7	3.8	24.7
10/29/2019 13:10	8	9	9	30.75	4.8	3.9	24.6
10/29/2019 13:20	8	9	9	30.87	4.8	3.8	24.6
10/29/2019 13:30	8	9	9	31.05	4.8	3.7	24.3
10/29/2019 13:40	8	9	9	31.36	4.9	3.5	23.8
10/29/2019 13:50	8	9	9	31.63	4.7	3.3	22.8
10/29/2019 14:00	8	9	9	31.94	4.6	2.8	0.5
10/29/2019 14:10	8	9	9	31.85	0.8	1	0.4
10/29/2019 14:20	8	9	9	31.15	0.9	1.1	0.4
10/29/2019 14:30	8	9	9	30.54	0.8	1.4	0.4
10/29/2019 14:40	8	9	9	30.26	0.9	1.6	2.6
10/29/2019 14:50	8	9	9	30.54	0.9	1.6	2.6
10/29/2019 15:00	8	9	9	30.81	0.8	1.4	0.4
10/29/2019 15:10	8	9	9	30.66	0.9	1.4	0.4
10/29/2019 15:20	8	9	9	30.63	0.7	1.4	0.4
10/29/2019 15:30	8	9	9	30.72	0.6	1.4	0.4
10/29/2019 15:40	8	9	9	30.35	1.1	1.5	0.5
10/29/2019 15:50	8	9	9	30.44	1	1.6	2.7
10/29/2019 16:00	8	9	9	30.2	0.9	1.8	2.4
10/29/2019 16:10	8	9	9	29.74	2	2.7	24.8
10/29/2019 16:20	8	9	9	29.41	3.1	3.4	24.9
10/29/2019 16:30	8	9	9	29.16	3.2	3.5	24.9
10/29/2019 16:40	8	9	9	28.98	4.6	3.8	24.9
10/29/2019 16:50	8	9	9	29.25	4.7	3.8	24.9
10/29/2019 17:00	8	9	9	29.53	4.5	3.8	24.9
10/29/2019 17:10	8	9	9	30.11	4.7	3.8	24.8
10/29/2019 17:20	8	9	9	30.29	4.9	3.8	24.8
10/29/2019 17:30	8	9	9	30.35	4.3	3.7	24.8
10/29/2019 17:40	8	9	9	30.38	4.7	3.8	24.7
10/29/2019 17:50	8	9	9	30.63	4.8	3.8	24.6
10/29/2019 18:00	8	9	9	30.87	4.5	3.7	24.5
10/29/2019 18:10	8	9	9	31.27	4.8	3.6	23.9
10/29/2019 18:20	8	9	9	31.76	4.9	3.1	0.5
10/29/2019 18:30	8	9	9	32.06	4.8	2.2	0.4
10/29/2019 18:40	8	9	9	31.88	0.7	1	0.4
10/29/2019 18:50	8	9	9	32.09	0.8	1	0.4
10/29/2019 19:00	8	9	9	31.94	4.8	2.5	0.4
10/29/2019 19:10	8	9	9	31.88	4.5	2.8	0.4
10/29/2019 19:20	8	9	9	31.88	4.8	2.8	0.5
10/29/2019 19:30	8	9	9	32.15	4.7	2.2	0.4

10/29/2019 19:40	8	9	9	32	0.9	1	0.4
10/29/2019 19:50	8	9	9	32.09	5	2.2	0.4
10/29/2019 20:00	8	9	9	31.94	0.7	1	0.4
10/29/2019 20:10	8	9	9	31.76	0.8	1	0.4
10/29/2019 20:20	8	9	9	31.12	0.8	1.1	0.4
10/29/2019 20:30	8	9	9	30.29	0.8	1.4	0.4
10/29/2019 20:40	8	9	9	29.53	2.3	2.8	24.9
10/29/2019 20:50	8	9	9	29.22	3.4	3.5	25
10/29/2019 21:00	8	9	9	29.16	3.4	3.5	25
10/29/2019 21:10	8	9	9	29.59	3.3	3.4	24.9
10/29/2019 21:20	8	9	9	29.8	2.4	2.9	24.9
10/29/2019 21:30	8	9	9	29.74	2.3	2.8	24.8
10/29/2019 21:40	8	9	9	29.74	2.4	2.9	24.8
10/29/2019 21:50	8	9	9	29.35	3.3	3.5	24.9
10/29/2019 22:00	8	9	9	29.1	3.4	3.5	24.9
10/29/2019 22:10	8	9	9	28.98	4.6	3.9	25
10/29/2019 22:20	8	9	9	29.19	4.7	3.9	24.9
10/29/2019 22:30	8	9	9	29.62	4.9	3.8	24.9
10/29/2019 22:40	8	9	9	29.74	4.9	3.9	25
10/29/2019 22:50	8	9	9	30.11	4.7	3.9	24.8
10/29/2019 23:00	8	9	9	30.44	4.9	3.8	24.7
10/29/2019 23:10	8	9	9	30.66	4.7	3.7	24.5
10/29/2019 23:20	8	9	9	31.05	4.7	3.6	24.4
10/29/2019 23:30	8	9	9	31.3	4.5	3.5	24
10/29/2019 23:40	8	9	9	31.73	4.6	3.1	0.5
10/29/2019 23:50	8	9	9	31.79	4.7	3	0.5
10/30/2019 0:00	8	9	9	32.12	5	2.2	0.4
10/30/2019 0:10	8	9	9	31.45	0.8	1	0.4
10/30/2019 0:20	8	9	9	30.99	0.8	1.2	0.4
10/30/2019 0:30	8	9	9	30.38	0.8	1.6	0.4
10/30/2019 0:40	8	9	9	30.23	0.9	1.7	3.4
10/30/2019 0:50	8	9	9	29.89	1.8	2.4	24.7
10/30/2019 1:00	8	9	9	30.05	1.6	2.4	24.7
10/30/2019 1:10	8	9	9	29.5	2.8	3.2	24.8
10/30/2019 1:20	8	9	9	28.83	3.1	3.5	25
10/30/2019 1:30	8	9	9	29.22	4.8	3.8	24.9
10/30/2019 1:40	8	9	9	29.65	4.9	3.8	24.9
10/30/2019 1:50	8	9	9	30.08	4.8	3.8	25
10/30/2019 2:00	8	9	9	30.32	4.5	3.8	24.8
10/30/2019 2:10	8	9	9	30.14	4.6	3.8	24.8
10/30/2019 2:20	8	9	9	29.83	4.7	3.9	25
10/30/2019 2:30	8	9	9	29.38	4.5	3.9	25
10/30/2019 2:40	8	9	9	29.13	4.7	3.9	25
10/30/2019 2:50	8	9	9	29.01	3.1	3.5	25
10/30/2019 3:00	8	9	9	29.01	4.6	3.8	25
10/30/2019 3:10	8	9	9	29.04	4.6	3.9	24.9
10/30/2019 3:20	8	9	9	29.19	4.7	3.9	24.9

10/30/2019 3:30	8	9	9	29.35	4.7	3.8	24.8
10/30/2019 3:40	8	9	9	29.68	4.8	3.8	24.8
10/30/2019 3:50	8	9	9	30.35	4.9	3.8	24.7
10/30/2019 4:00	8	9	9	30.96	4.6	3.7	24.4
10/30/2019 4:10	8	9	9	31.12	4.6	3.5	24.4
10/30/2019 4:20	8	9	9	30.96	4.5	3.6	24.5
10/30/2019 4:30	8	9	9	30.78	4.5	3.6	24.6
10/30/2019 4:40	8	9	9	30.66	4.4	3.8	24.6
10/30/2019 4:50	8	9	9	30.66	4.9	3.7	24.6
10/30/2019 5:00	8	9	9	30.78	4.6	3.7	24.6
10/30/2019 5:10	8	9	9	30.9	4.7	3.8	24.5
10/30/2019 5:20	8	9	9	31.02	4.5	3.7	24.4
10/30/2019 5:30	8	9	9	31.27	4.5	3.7	24.1
10/30/2019 5:40	8	9	9	31.57	4.6	3.4	22.6
10/30/2019 5:50	8	9	9	32	4.6	2.7	0.5
10/30/2019 6:00	8	9	9	31.85	0.8	1	0.4
10/30/2019 6:10	8	9	9	31.18	0.8	1.2	0.4
10/30/2019 6:20	8	9	9	30.41	0.9	1.5	0.4
10/30/2019 6:30	8	9	9	30.08	1.1	1.9	24.7
10/30/2019 6:40	8	9	9	29.62	2.6	3	24.9
10/30/2019 6:50	8	9	9	29.41	3.2	3.3	24.9
10/30/2019 7:00	8	9	9	29.19	3.3	3.5	25
10/30/2019 7:10	8	9	9	28.92	4.6	3.8	25
10/30/2019 7:20	8	9	9	29.13	4.6	3.8	24.9
10/30/2019 7:30	8	9	9	29.25	4.8	3.9	24.9
10/30/2019 7:40	8	9	9	29.5	4.7	3.9	24.9
10/30/2019 7:50	8	9	9	29.96	4.8	3.8	24.9
10/30/2019 8:00	8	9	9	30.23	4.7	3.7	24.7
10/30/2019 8:10	8	9	9	30.69	4.8	3.7	24.6
10/30/2019 8:20	8	9	9	31.12	4.8	3.6	24.1
10/30/2019 8:30	8	9	9	31.54	4.6	3.4	22.9
10/30/2019 8:40	8	9	9	31.79	4.7	2.9	0.5
10/30/2019 8:50	8	9	9	31.76	4.5	2.9	0.5
10/30/2019 9:00	8	9	9	31.97	4.7	2.7	0.5
10/30/2019 9:10	8	9	9	31.76	4.5	2.9	0.5
10/30/2019 9:20	8	9	9	31.82	4.7	2.9	0.5
10/30/2019 9:30	8	9	9	32	4.8	2.7	0.5
10/30/2019 9:40	8	9	9	31.97	4.7	2.5	0.4
10/30/2019 9:50	8	9	9	32.03	4.7	2.3	0.4
10/30/2019 10:00	8	9	9	32.09	4.8	2.2	0.4
10/30/2019 10:10	8	9	9	32.15	4.6	2.2	0.4
10/30/2019 10:20	8	9	9	32.03	4.8	2.4	0.4
10/30/2019 10:30	8	9	9	32.12	0.8	0.9	0.4
10/30/2019 10:40	8	9	9	31.57	0.9	1	0.4
10/30/2019 10:50	8	9	9	31.09	0.9	1.1	0.4
10/30/2019 11:00	8	9	9	31.36	0.8	1.1	0.4
10/30/2019 11:10	8	9	9	30.23	0.8	1.5	0.3

10/30/2019 11:20	8	9	9	29.5	2.1	2.8	24.8
10/30/2019 11:30	8	9	9	29.04	3.3	3.5	24.9
10/30/2019 11:40	8	9	9	29.01	4.8	3.9	25
10/30/2019 11:50	8	9	9	29.25	4.5	3.9	24.9
10/30/2019 12:00	8	9	9	29.25	4.7	3.9	25
10/30/2019 12:10	8	9	9	29.32	4.6	3.8	24.9
10/30/2019 12:20	8	9	9	29.38	4.7	3.9	25
10/30/2019 12:30	8	9	9	29.19	4.5	3.8	25
10/30/2019 12:40	8	9	9	29.16	3.5	3.6	25
10/30/2019 12:50	8	9	9	29.44	3.3	3.4	24.9
10/30/2019 13:00	8	9	9	29.74	2.8	3.1	24.8
10/30/2019 13:10	8	9	9	30.11	1.8	2.5	24.7
10/30/2019 13:20	8	9	9	30.75	0.9	1.6	0.9
10/30/2019 13:30	8	9	9	31.42	0.9	1.2	0.4
10/30/2019 13:40	8	9	9	31.88	0.9	1	0.4
10/30/2019 13:50	8	9	9	31.94	4.8	2.7	0.5
10/30/2019 14:00	8	9	9	31.48	4.9	3.3	23.4
10/30/2019 14:10	8	9	9	31.09	4.6	3.6	24.4
10/30/2019 14:20	8	9	9	30.81	4.8	3.7	24.6
10/30/2019 14:30	8	9	9	30.54	4.8	3.7	24.7
10/30/2019 14:40	8	9	9	30.08	4.7	3.8	24.9
10/30/2019 14:50	8	9	9	29.59	4.6	3.8	25
10/30/2019 15:00	8	9	9	29.65	3.3	3.4	25
10/30/2019 15:10	8	9	9	30.38	1.5	2.3	24.8
10/30/2019 15:20	8	9	9	31.15	0.8	1.3	0.4
10/30/2019 15:30	8	9	9	32.06	2	1.4	0.4
10/30/2019 15:40	8	9	9	31.57	4.6	3.3	23.1
10/30/2019 15:50	8	9	9	31.18	4.8	3.6	24.4
10/30/2019 16:00	8	9	9	30.78	4.6	3.7	24.7
10/30/2019 16:10	8	9	9	30.29	4.6	3.7	24.9
10/30/2019 16:20	8	9	9	29.86	4.5	3.8	25
10/30/2019 16:30	8	9	9	29.53	4.9	3.8	25
10/30/2019 16:40	8	9	9	29.59	3.3	3.5	25
10/30/2019 16:50	8	9	9	30.51	1	1.7	24.8
10/30/2019 17:00	8	9	9	31.39	0.9	1.1	0.4
10/30/2019 17:10	8	9	9	32.09	4.5	2.1	0.4
10/30/2019 17:20	8	9	9	31.54	4.5	3.4	23.1
10/30/2019 17:30	8	9	9	30.99	4.7	3.7	24.5
10/30/2019 17:40	8	9	9	30.35	4.7	3.7	24.8
10/30/2019 17:50	8	9	9	29.8	4.7	3.8	25
10/30/2019 18:00	8	9	9	29.44	3.4	3.5	25
10/30/2019 18:10	8	9	9	30.32	1.5	2.4	24.8
10/30/2019 18:20	8	9	9	31.12	0.7	1.4	0.4
10/30/2019 18:30	8	9	9	31.88	0.9	1	0.4
10/30/2019 18:40	8	9	9	31.76	4.9	3	0.5
10/30/2019 18:50	8	9	9	31.21	4.7	3.6	24.4
10/30/2019 19:00	8	9	9	30.57	4.7	3.8	24.7

10/30/2019 19:10	8	9	9	30.08	4.4	3.8	25
10/30/2019 19:20	8	9	9	29.53	4.7	3.8	25
10/30/2019 19:30	8	9	9	29.77	3	3.2	24.9
10/30/2019 19:40	8	9	9	30.63	1	1.6	2.7
10/30/2019 19:50	8	9	9	31.51	0.9	1.2	0.4
10/30/2019 20:00	8	9	9	32.12	4.9	2.3	0.4
10/30/2019 20:10	8	9	9	31.57	4.9	3.3	23.2
10/30/2019 20:20	8	9	9	31.12	4.7	3.6	24.5
10/30/2019 20:30	8	9	9	30.72	4.6	3.8	24.7
10/30/2019 20:40	8	9	9	30.32	4.6	3.8	24.8
10/30/2019 20:50	8	9	9	29.99	4.7	3.8	25
10/30/2019 21:00	8	9	9	29.53	4.7	3.8	25
10/30/2019 21:10	8	9	9	29.8	3.3	3.4	24.9
10/30/2019 21:20	8	9	9	30.57	1	1.8	4.2
10/30/2019 21:30	8	9	9	31.27	0.9	1.3	0.4
10/30/2019 21:40	8	9	9	32.06	0.8	1	0.4
10/30/2019 21:50	8	9	9	31.7	4.6	3.1	0.6
10/30/2019 22:00	8	9	9	31.12	4.9	3.7	24.5
10/30/2019 22:10	8	9	9	30.69	4.8	3.8	24.7
10/30/2019 22:20	8	9	9	30.38	4.9	3.8	24.9
10/30/2019 22:30	8	9	9	29.89	4.7	3.8	24.9
10/30/2019 22:40	8	9	9	29.62	4.8	3.8	25
10/30/2019 22:50	8	9	9	29.41	4.5	3.8	24.9
10/30/2019 23:00	8	9	9	29.59	3.4	3.5	24.9
10/30/2019 23:10	8	9	9	30.14	1.6	2.4	24.8
10/30/2019 23:20	8	9	9	30.57	1.1	1.6	2.7
10/30/2019 23:30	8	9	9	31.15	0.9	1.3	0.4
10/30/2019 23:40	8	9	9	31.48	0.9	1.2	0.4
10/30/2019 23:50	8	9	9	31.67	0.8	1.1	0.4
10/31/2019 0:00	8	9	9	32.09	1.6	1.2	0.4
10/31/2019 0:10	8	9	9	31.88	4.8	2.7	0.5
10/31/2019 0:20	8	9	9	31.73	4.6	3	0.5
10/31/2019 0:30	8	9	9	31.48	4.5	3.4	22.9
10/31/2019 0:40	8	9	9	31.33	4.9	3.6	23.9
10/31/2019 0:50	8	9	9	31.18	4.5	3.5	24.3
10/31/2019 1:00	8	9	9	31.02	4.6	3.7	24.5
10/31/2019 1:10	8	9	9	30.78	4.7	3.7	24.6
10/31/2019 1:20	8	9	9	30.63	4.4	3.8	24.7
10/31/2019 1:30	8	9	9	30.51	4.7	3.8	24.7
10/31/2019 1:40	8	9	9	30.26	4.6	3.8	24.7
10/31/2019 1:50	8	9	9	30.14	4.7	3.8	24.9
10/31/2019 2:00	8	9	9	29.99	4.6	3.8	24.9
10/31/2019 2:10	8	9	9	29.89	4.5	3.9	24.9
10/31/2019 2:20	8	9	9	30.05	4.4	3.8	24.9
10/31/2019 2:30	8	9	9	30.05	4.9	3.8	24.9
10/31/2019 2:40	8	9	9	29.77	4.9	3.8	24.9
10/31/2019 2:50	8	9	9	29.56	4.6	3.9	25

10/31/2019 3:00	8	9	9	29.53	4.8	3.9	24.9
10/31/2019 3:10	8	9	9	29.59	4.6	3.8	24.9
10/31/2019 3:20	8	9	9	29.68	4.8	3.8	25
10/31/2019 3:30	8	9	9	29.8	4.8	3.8	24.9
10/31/2019 3:40	8	9	9	30.11	4.7	3.8	24.8
10/31/2019 3:50	8	9	9	30.32	4.9	3.7	24.6
10/31/2019 4:00	8	9	9	30.69	4.6	3.8	24.6
10/31/2019 4:10	8	9	9	30.93	4.6	3.7	24.4
10/31/2019 4:20	8	9	9	31.02	4.7	3.6	24.4
10/31/2019 4:30	8	9	9	31.12	4.7	3.6	24.4
10/31/2019 4:40	8	9	9	31.09	4.9	3.5	24.3
10/31/2019 4:50	8	9	9	31.21	4.8	3.4	24.3
10/31/2019 5:00	8	9	9	31.15	4.5	3.6	24.2
10/31/2019 5:10	8	9	9	31.02	4.6	3.7	24.5
10/31/2019 5:20	8	9	9	30.93	4.7	3.6	24.4
10/31/2019 5:30	8	9	9	30.93	4.6	3.6	24.4
10/31/2019 5:40	8	9	9	31.3	4.9	3.5	24
10/31/2019 5:50	8	9	9	31.48	4.8	3.4	23.3
10/31/2019 6:00	8	9	9	31.73	4.7	3	0.5
10/31/2019 6:10	8	9	9	31.94	4.7	2.4	0.4
10/31/2019 6:20	8	9	9	31.76	0.9	1	0.4
10/31/2019 6:30	8	9	9	31.15	0.9	1.1	0.4
11/1/2019 14:50	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 15:00	0	1	0	25.68	0.5	0.9	0.1
11/1/2019 15:10	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 15:20	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 15:30	0	0	0	25.65	0.6	0.8	0.1
11/1/2019 15:40	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 15:50	0	0	0	25.62	0.5	0.8	0.1
11/1/2019 16:00	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 16:10	0	0	0	25.62	0.6	0.8	0.1
11/1/2019 16:20	0	0	0	25.65	0.6	0.8	0.1
11/1/2019 16:30	0	0	0	25.62	0.6	0.8	0.1
11/1/2019 16:40	0	0	0	25.65	0.6	0.8	0.1
11/1/2019 16:50	0	0	0	25.65	0.6	0.8	0.1
11/1/2019 17:00	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 17:10	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 17:20	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 17:30	0	0	0	25.68	0.5	0.8	0.1
11/1/2019 17:40	0	0	0	25.68	0.5	0.8	0.1
11/1/2019 17:50	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 18:00	0	0	0	25.65	0.6	0.8	0.1
11/1/2019 18:10	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 18:20	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 18:30	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 18:40	0	0	0	25.65	0.5	0.8	0.1
11/1/2019 18:50	0	0	0	25.68	0.6	0.8	0.1

11/1/2019 19:00	0	0	0	25.68	0.5	0.8	0.1
11/1/2019 19:10	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 19:20	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 19:30	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 19:40	0	0	0	25.65	0.6	0.8	0.1
11/1/2019 19:50	0	0	0	25.68	0.5	0.8	0.1
11/1/2019 20:00	0	0	0	25.71	0.6	0.8	0.1
11/1/2019 20:10	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 20:20	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 20:30	0	0	0	25.68	0.5	0.8	0.1
11/1/2019 20:40	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 20:50	0	0	0	25.68	0.6	0.8	0.1
11/1/2019 21:00	0	0	0	25.71	0.5	0.8	0.1
11/1/2019 21:10	0	0	0	25.71	0.5	0.8	0.1
11/1/2019 21:20	0	0	0	25.71	0.5	0.8	0.1
11/1/2019 21:30	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 21:40	0	0	0	25.71	0.5	0.8	0.1
11/1/2019 21:50	0	0	0	25.71	0.5	0.8	0.1
11/1/2019 22:00	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 22:10	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 22:20	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 22:30	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 22:40	0	0	0	25.71	0.5	0.8	0.1
11/1/2019 22:50	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 23:00	0	0	0	25.77	0.5	0.8	0.1
11/1/2019 23:10	0	0	0	25.74	0.5	0.8	0.1
11/1/2019 23:20	0	0	0	25.77	0.5	0.8	0.1
11/1/2019 23:30	0	0	0	25.77	0.5	0.8	0.1
11/1/2019 23:40	0	0	0	25.77	0.5	0.8	0.1
11/1/2019 23:50	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 0:00	0	0	0	25.8	0.6	0.8	0.1
11/2/2019 0:10	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 0:20	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 0:30	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 0:40	0	0	0	25.8	0.6	0.8	0.1
11/2/2019 0:50	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 1:00	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 1:10	0	0	0	25.84	0.6	0.8	0.1
11/2/2019 1:20	0	0	0	25.84	0.5	0.8	0.1
11/2/2019 1:30	0	0	0	25.8	0.5	0.8	0.1
11/2/2019 1:40	0	0	0	25.8	0.6	0.8	0.1
11/2/2019 1:50	0	0	0	25.84	0.5	0.8	0.1
11/2/2019 2:00	0	0	0	25.84	0.5	0.8	0.1
11/2/2019 2:10	0	0	0	25.84	0.5	0.8	0.1
11/2/2019 2:20	0	0	0	25.84	0.5	0.8	0.1
11/2/2019 2:30	0	0	0	25.87	0.5	0.8	0.1
11/2/2019 2:40	0	0	0	25.87	0.6	0.8	0.1

11/2/2019 2:50	0	0	0	25.84	0.6	0.8	0.1
11/2/2019 3:00	0	0	0	25.87	0.6	0.8	0.1
11/2/2019 3:10	0	0	0	25.87	0.6	0.8	0.1
11/2/2019 3:20	0	0	0	25.87	0.5	0.9	0.1
11/2/2019 3:30	0	0	0	25.87	0.6	0.8	0.1
11/2/2019 3:40	0	0	0	25.87	0.6	0.9	0.1
11/2/2019 3:50	0	0	0	25.87	0.6	0.8	0.1
11/2/2019 4:00	0	0	0	25.9	0.6	0.8	0.1
11/2/2019 4:10	0	0	0	25.9	0.6	0.9	0.1
11/2/2019 4:20	0	0	0	25.9	0.6	0.8	0.1
11/2/2019 4:30	0	0	0	25.9	0.6	0.8	0.1
11/2/2019 4:40	0	0	0	25.9	0.6	0.8	0.1
11/2/2019 4:50	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 5:00	0	0	0	25.93	0.5	0.8	0.1
11/2/2019 5:10	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 5:20	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 5:30	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 5:40	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 5:50	0	0	0	25.93	0.5	0.8	0.1
11/2/2019 6:00	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 6:10	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 6:20	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 6:30	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 6:40	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 6:50	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 7:00	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 7:10	0	0	0	25.96	0.5	0.8	0.1
11/2/2019 7:20	0	0	0	25.93	0.6	0.8	0.1
11/2/2019 7:30	0	0	0	25.96	0.6	0.8	0.1
11/2/2019 7:40	0	0	0	25.93	0.5	0.8	0.1
11/2/2019 7:50	0	0	0	25.96	0.6	0.8	0.1
11/2/2019 8:00	0	0	0	25.96	0.6	0.9	0.1
11/2/2019 8:10	0	0	0	25.96	0.5	0.8	0.1
11/2/2019 8:20	0	0	0	25.96	0.6	0.8	0.1
11/2/2019 8:30	0	0	0	25.96	0.5	0.8	0.1
11/2/2019 8:40	0	0	0	25.96	0.6	0.8	0.1
11/2/2019 8:50	0	0	0	25.99	0.6	0.8	0.1
11/2/2019 9:00	0	0	0	25.96	0.5	0.8	0.1
11/2/2019 9:10	0	0	0	25.96	0.6	0.8	0.1
11/2/2019 9:20	0	0	0	25.99	0.6	0.8	0.1
11/2/2019 9:30	0	0	0	25.99	0.6	0.8	0.1
11/2/2019 9:40	0	0	0	25.99	0.6	0.8	0.1
11/2/2019 9:50	0	0	0	25.99	0.6	0.8	0.1
11/2/2019 10:00	0	0	0	25.99	0.6	0.8	0.1
11/2/2019 10:10	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 10:20	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 10:30	0	0	0	25.99	0.6	0.8	0.1

11/2/2019 10:40	0	0	0	25.99	0.6	0.9	0.1
11/2/2019 10:50	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 11:00	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 11:10	0	0	0	26.05	0.5	0.8	0.1
11/2/2019 11:20	0	0	0	26.05	0.6	0.9	0.1
11/2/2019 11:30	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 11:40	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 11:50	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 12:00	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 12:10	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 12:20	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 12:30	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 12:40	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 12:50	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 13:00	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 13:10	0	0	0	26.05	0.6	0.8	0.1
11/2/2019 13:20	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 13:30	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 13:40	0	0	0	26.08	0.5	0.8	0.1
11/2/2019 13:50	0	0	0	26.08	0.5	0.8	0.1
11/2/2019 14:00	0	0	0	26.05	0.5	0.8	0.1
11/2/2019 14:10	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 14:20	0	0	0	26.08	0.5	0.8	0.1
11/2/2019 14:30	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 14:40	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 14:50	0	0	0	26.08	0.5	0.8	0.1
11/2/2019 15:00	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 15:10	0	0	0	26.08	0.5	0.8	0.1
11/2/2019 15:20	0	0	0	26.08	0.5	0.8	0.1
11/2/2019 15:30	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 15:40	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 15:50	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 16:00	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 16:10	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 16:20	0	0	0	26.08	0.5	0.9	0.1
11/2/2019 16:30	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 16:40	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 16:50	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 17:00	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 17:10	0	0	0	26.08	0.5	0.9	0.1
11/2/2019 17:20	0	0	0	26.08	0.5	0.9	0.1
11/2/2019 17:30	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 17:40	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 17:50	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 18:00	0	0	0	26.11	0.5	0.9	0.1
11/2/2019 18:10	0	0	0	26.08	0.6	0.9	0.1
11/2/2019 18:20	0	0	0	26.08	0.5	0.8	0.1

11/2/2019 18:30	0	0	0	26.08	0.6	0.8	0.1
11/2/2019 18:40	0	0	0	26.11	0.5	0.8	0.1
11/2/2019 18:50	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 19:00	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 19:10	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 19:20	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 19:30	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 19:40	0	0	0	26.11	0.5	0.9	0.1
11/2/2019 19:50	0	0	0	26.11	0.6	0.9	0.1
11/2/2019 20:00	0	0	0	26.11	0.6	0.8	0.1
11/2/2019 20:10	0	0	0	26.11	0.5	0.9	0.1
11/2/2019 20:20	0	0	0	26.11	0.6	0.8	0.1
11/2/2019 20:30	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 20:40	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 20:50	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 21:00	0	0	0	26.11	0.6	0.8	0.1
11/2/2019 21:10	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 21:20	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 21:30	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 21:40	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 21:50	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 22:00	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 22:10	0	0	0	26.14	0.6	0.9	0.1
11/2/2019 22:20	0	0	0	26.17	0.6	0.8	0.1
11/2/2019 22:30	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 22:40	0	0	0	26.17	0.6	0.8	0.1
11/2/2019 22:50	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 23:00	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 23:10	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 23:20	0	0	0	26.17	0.6	0.8	0.1
11/2/2019 23:30	0	0	0	26.14	0.6	0.8	0.1
11/2/2019 23:40	0	0	0	26.17	0.6	0.8	0.1
11/2/2019 23:50	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 0:00	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 0:10	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 0:20	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 0:30	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 0:40	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 0:50	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 1:00	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 1:10	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 1:20	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 1:30	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 1:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 1:50	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 2:00	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 2:10	0	0	0	26.2	0.6	0.8	0.1

11/3/2019 2:20	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 2:30	0	0	0	26.17	0.6	0.8	0.1
11/3/2019 2:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 2:50	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 3:00	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 3:10	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 3:20	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 3:30	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 3:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 3:50	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 4:00	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 4:10	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 4:20	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 4:30	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 4:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 4:50	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 5:00	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 5:10	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 5:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 5:30	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 5:40	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 5:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 6:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 6:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 6:20	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 6:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 6:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 6:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 7:00	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 7:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 7:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 7:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 7:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 7:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 8:00	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 8:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 8:20	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 8:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 8:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 8:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 9:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 9:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 9:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 9:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 9:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 9:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 10:00	0	0	0	26.23	0.6	0.9	0.1

11/3/2019 10:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 10:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 10:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 10:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 10:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 11:00	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 11:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 11:20	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 11:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 11:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 11:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 12:00	0	0	0	26.26	0.6	0.9	0.1
11/3/2019 12:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 12:20	0	0	0	26.26	0.6	0.9	0.1
11/3/2019 12:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 12:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 12:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 13:00	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 13:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 13:20	0	0	0	26.26	0.6	0.8	0.1
11/3/2019 13:30	0	0	0	26.26	0.6	0.9	0.1
11/3/2019 13:40	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 13:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 14:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 14:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 14:20	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 14:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 14:40	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 14:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 15:00	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 15:10	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 15:20	0	0	0	26.2	0.6	0.9	0.1
11/3/2019 15:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 15:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 15:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 16:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 16:10	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 16:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 16:30	0	0	0	26.23	0.5	0.8	0.1
11/3/2019 16:40	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 16:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 17:00	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 17:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 17:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 17:30	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 17:40	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 17:50	0	0	0	26.23	0.6	0.8	0.1

11/3/2019 18:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 18:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 18:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 18:30	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 18:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 18:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 19:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 19:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 19:20	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 19:30	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 19:40	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 19:50	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 20:00	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 20:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 20:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 20:30	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 20:40	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 20:50	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 21:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 21:10	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 21:20	0	0	0	26.2	0.6	0.8	0.1
11/3/2019 21:30	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 21:40	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 21:50	0	0	0	26.23	0.5	0.8	0.1
11/3/2019 22:00	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 22:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 22:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 22:30	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 22:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 22:50	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 23:00	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 23:10	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 23:20	0	0	0	26.23	0.6	0.8	0.1
11/3/2019 23:30	0	0	0	26.26	0.6	0.9	0.1
11/3/2019 23:40	0	0	0	26.23	0.6	0.9	0.1
11/3/2019 23:50	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 0:00	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 0:10	0	0	0	26.23	0.6	0.8	0.1
11/4/2019 0:20	0	0	0	26.23	0.6	0.8	0.1
11/4/2019 0:30	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 0:40	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 0:50	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 1:00	0	0	0	26.23	0.6	0.8	0.1
11/4/2019 1:10	0	0	0	26.23	0.6	0.8	0.1
11/4/2019 1:20	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 1:30	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 1:40	0	0	0	26.23	0.6	0.8	0.1

11/4/2019 1:50	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 2:00	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 2:10	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 2:20	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 2:30	0	0	0	26.26	0.6	0.8	0.1
11/4/2019 2:40	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 2:50	0	0	0	26.23	0.6	0.8	0.1
11/4/2019 3:00	0	0	0	26.26	0.6	0.8	0.1
11/4/2019 3:10	0	0	0	26.23	0.6	0.8	0.1
11/4/2019 3:20	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 3:30	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 3:40	0	0	0	26.26	0.6	0.8	0.1
11/4/2019 3:50	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 4:00	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 4:10	0	0	0	26.26	0.7	0.8	0.1
11/4/2019 4:20	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 4:30	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 4:40	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 4:50	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 5:00	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 5:10	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 5:20	0	0	0	26.23	0.6	0.9	0.1
11/4/2019 5:30	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 5:40	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 5:50	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 6:00	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 6:10	0	0	0	26.26	0.6	0.8	0.1
11/4/2019 6:20	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 6:30	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 6:40	0	0	0	26.26	0.6	0.8	0.1
11/4/2019 6:50	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 7:00	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 7:10	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 7:20	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 7:30	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 7:40	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 7:50	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 8:00	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 8:10	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 8:20	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 8:30	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 8:40	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 8:50	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 9:00	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 9:10	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 9:20	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 9:30	0	0	0	26.26	0.7	0.8	0.1

11/4/2019 9:40	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 9:50	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 10:00	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 10:10	0	0	0	26.29	0.7	0.9	0.1
11/4/2019 10:20	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 10:30	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 10:40	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 10:50	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 11:00	0	0	0	26.29	0.7	0.9	0.1
11/4/2019 11:10	0	0	0	26.29	0.7	0.9	0.1
11/4/2019 11:20	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 11:30	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 11:40	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 11:50	0	0	0	26.29	0.7	0.9	0.1
11/4/2019 12:00	0	0	0	26.26	0.7	0.9	0.1
11/4/2019 12:10	0	0	0	26.29	0.6	0.9	0.1
11/4/2019 12:20	0	0	0	26.29	0.7	0.9	0.1
11/4/2019 12:30	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 12:40	0	0	0	26.29	0.7	0.9	0.1
11/4/2019 12:50	0	0	0	26.26	0.6	0.9	0.1
11/4/2019 13:00	10	10	10	30.84	0.8	0.9	0.1
11/4/2019 13:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 13:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 13:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 13:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 13:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 14:00	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 14:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 14:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 14:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 14:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 14:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 15:00	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 15:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 15:20	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 15:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 15:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 15:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 16:00	0	0	0	32.7	0.9	0.9	0.1
11/4/2019 16:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 16:20	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 16:30	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 16:40	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 16:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 17:00	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 17:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 17:20	0	0	0	32.73	0.9	0.9	0.1

11/4/2019 17:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 17:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 17:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 18:00	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 18:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 18:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 18:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 18:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 18:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 19:00	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 19:10	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 19:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 19:30	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 19:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 19:50	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 20:00	0	0	0	32.7	0.9	0.9	0.1
11/4/2019 20:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 20:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 20:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 20:40	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 20:50	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 21:00	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 21:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 21:20	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 21:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 21:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 21:50	0	0	0	32.73	0.8	0.9	0.1
11/4/2019 22:00	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 22:10	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 22:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 22:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 22:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 22:50	0	0	0	32.73	0.9	0.8	0.1
11/4/2019 23:00	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 23:10	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 23:20	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 23:30	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 23:40	0	0	0	32.73	0.9	0.9	0.1
11/4/2019 23:50	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 0:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 0:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 0:20	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 0:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 0:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 0:50	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 1:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 1:10	0	0	0	32.73	0.9	0.8	0.1

11/5/2019 1:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 1:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 1:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 1:50	0	0	0	32.73	0.8	0.8	0.1
11/5/2019 2:00	0	0	0	32.73	0.8	0.8	0.1
11/5/2019 2:10	0	0	0	32.76	0.8	0.9	0.1
11/5/2019 2:20	0	0	0	32.76	0.9	0.9	0.1
11/5/2019 2:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 2:40	0	0	0	32.76	0.9	0.9	0.1
11/5/2019 2:50	0	0	0	32.76	0.9	0.9	0.1
11/5/2019 3:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 3:10	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 3:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 3:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 3:40	0	0	0	32.76	0.9	0.8	0.1
11/5/2019 3:50	0	0	0	32.76	0.9	0.9	0.1
11/5/2019 4:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 4:10	0	0	0	32.7	0.9	0.9	0.1
11/5/2019 4:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 4:30	0	0	0	32.76	0.9	0.8	0.1
11/5/2019 4:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 4:50	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 5:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 5:10	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 5:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 5:30	0	0	0	32.76	0.9	0.9	0.1
11/5/2019 5:40	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 5:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 6:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 6:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 6:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 6:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 6:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 6:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 7:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 7:10	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 7:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 7:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 7:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 7:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 8:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 8:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 8:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 8:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 8:40	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 8:50	0	0	0	32.7	0.9	0.9	0.1
11/5/2019 9:00	0	0	0	32.73	0.9	0.9	0.1

11/5/2019 9:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 9:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 9:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 9:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 9:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 10:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 10:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 10:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 10:30	0	0	0	32.76	0.9	0.9	0.1
11/5/2019 10:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 10:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 11:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 11:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 11:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 11:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 11:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 11:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 12:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 12:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 12:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 12:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 12:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 12:50	0	0	0	32.73	0.9	0.8	0.1
11/5/2019 13:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 13:10	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 13:20	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 13:30	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 13:40	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 13:50	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 14:00	0	0	0	32.73	0.9	0.9	0.1
11/5/2019 14:10	10	10	10	32.12	4.8	2.8	2.5
11/5/2019 14:20	10	10	10	32.12	1.7	2	0.4
11/5/2019 14:30	10	10	10	30.87	3.4	3.4	25.3
11/5/2019 14:40	10	10	10	31.02	4.7	3.8	25.1
11/5/2019 14:50	10	10	10	31.48	4.6	3.5	24.7
11/5/2019 15:00	10	10	10	31.54	1.7	2.6	24.9
11/5/2019 15:10	10	10	10	31.02	4.8	3.7	24.9
11/5/2019 15:20	10	10	10	32	4.7	3.4	0.5
11/5/2019 15:30	10	10	10	30.9	4.9	3.7	24.8
11/5/2019 15:40	10	10	10	30.84	2.7	2.9	24.9
11/5/2019 15:50	10	10	10	31.76	4.8	3.5	23.3
11/5/2019 16:00	10	10	10	30.81	5	3.6	24.7
11/5/2019 16:10	10	10	10	30.44	4.6	3.8	24.9
11/5/2019 16:20	10	10	10	29.83	4.9	3.7	25
11/5/2019 16:30	10	10	10	29.62	3.4	3.5	24.9
11/5/2019 16:40	10	10	10	30.23	3.1	3.4	24.8
11/5/2019 16:50	10	10	10	29.22	1.5	2.9	24.8

11/5/2019 17:00	10	10	10	29.53	4.5	3.8	24.8
11/5/2019 17:10	10	10	10	29.83	4.6	3.8	24.8
11/5/2019 17:20	10	10	10	29.89	4.7	3.8	24.8
11/5/2019 17:30	10	10	10	29.71	4.8	3.8	25
11/5/2019 17:40	10	10	10	30.78	1.6	2.5	24.7
11/5/2019 17:50	10	10	10	32.06	0.9	1.8	0.4
11/5/2019 18:00	10	10	10	31.79	4.9	3.3	8
11/5/2019 18:10	10	10	10	31.48	4.7	3.3	23.9
11/5/2019 18:20	10	10	10	31.27	4.7	3.5	24.4
11/5/2019 18:30	10	10	10	30.9	4.5	3.6	24.6
11/5/2019 18:40	10	10	10	30.66	4.6	3.6	24.7
11/5/2019 18:50	10	10	10	30.54	4.8	3.7	24.7
11/5/2019 19:00	10	10	10	30.44	4.7	3.7	24.7
11/5/2019 19:10	10	10	10	30.51	4.7	3.7	24.7
11/5/2019 19:20	10	10	9	30.66	4.7	3.6	24.7
11/5/2019 19:30	10	10	10	30.63	4.7	3.8	24.7
11/5/2019 19:40	10	10	9	30.54	4.2	3.6	24.8
11/5/2019 19:50	10	10	9	30.63	4.5	3.6	24.6
11/5/2019 20:00	10	10	10	30.66	4.7	3.7	24.7
11/5/2019 20:10	10	10	10	30.44	4.8	3.7	24.8
11/5/2019 20:20	10	10	10	30.26	4.7	3.7	24.9
11/5/2019 20:30	10	10	10	30.11	5	3.7	24.9
11/5/2019 20:40	10	10	9	29.99	4.6	3.8	24.9
11/5/2019 20:50	10	10	9	29.83	4.8	3.8	24.8
11/5/2019 21:00	10	10	10	29.89	4.7	3.7	24.8
11/5/2019 21:10	10	10	10	30.23	4.6	3.7	24.8
11/5/2019 21:20	10	10	10	30.38	4.7	3.6	24.9
11/5/2019 21:30	10	10	9	30.23	4.5	3.7	24.9
11/5/2019 21:40	10	10	9	29.8	4.6	3.8	24.9
11/5/2019 21:50	10	10	9	29.56	4.5	3.8	24.9
11/5/2019 22:00	10	10	9	29.56	3.4	3.5	24.9
11/5/2019 22:10	10	10	9	29.32	4.9	3.8	24.8
11/5/2019 22:20	10	10	9	29.19	4.8	3.7	24.9
11/5/2019 22:30	10	10	9	29.65	4.6	3.8	24.8
11/5/2019 22:40	10	10	9	30.2	4.7	3.8	24.8
11/5/2019 22:50	10	10	9	30.44	4.7	3.7	24.8
11/5/2019 23:00	10	10	9	30.41	4.7	3.7	24.8
11/5/2019 23:10	10	10	10	30.05	4.8	3.7	25
11/5/2019 23:20	10	10	9	30.29	3	3.4	24.9
11/5/2019 23:30	10	10	9	31.02	0.9	2.3	3.2
11/5/2019 23:40	9	10	9	31.6	0.8	1.9	0.4
11/5/2019 23:50	10	10	9	31.6	0.9	1.9	0.4
11/6/2019 0:00	10	10	9	31.27	0.9	2	0.4
11/6/2019 0:10	10	10	9	30.75	1.1	2.2	3.6
11/6/2019 0:20	10	10	9	30.87	1.1	2.2	3.6
11/6/2019 0:30	10	10	9	31.54	0.9	1.9	0.4
11/6/2019 0:40	10	10	9	32.03	4.6	3	0.5

11/6/2019 0:50	10	10	9	31.57	4.8	3.4	23.4
11/6/2019 1:00	10	10	9	31.45	4.9	3.4	24.1
11/6/2019 1:10	10	10	10	31.39	4.8	3.4	24.1
11/6/2019 1:20	10	10	9	31.45	4.6	3.4	24
11/6/2019 1:30	10	10	9	31.57	4.8	3.2	23.5
11/6/2019 1:40	10	10	9	31.67	4.8	3.2	22.8
11/6/2019 1:50	9	10	9	31.79	5	3.1	0.6
11/6/2019 2:00	9	10	9	31.67	4.7	3.3	23.1
11/6/2019 2:10	9	10	9	31.42	5	3.4	24.2
11/6/2019 2:20	9	10	9	31.18	4.9	3.6	24.4
11/6/2019 2:30	10	10	9	31.05	4.8	3.5	24.5
11/6/2019 2:40	10	10	9	30.75	4.8	3.6	24.6
11/6/2019 2:50	9	10	9	30.78	4.6	3.6	24.6
11/6/2019 3:00	10	10	9	30.69	4.8	3.6	24.7
11/6/2019 3:10	9	10	9	30.57	4.6	3.7	24.7
11/6/2019 3:20	9	10	9	30.75	4.8	3.5	24.6
11/6/2019 3:30	10	10	9	30.99	4.7	3.6	24.6
11/6/2019 3:40	9	10	9	30.87	4.8	3.5	24.6
11/6/2019 3:50	9	10	9	30.72	5	3.6	24.7
11/6/2019 4:00	9	10	9	30.51	5	3.7	24.8
11/6/2019 4:10	9	10	9	30.23	5	3.7	24.8
11/6/2019 4:20	10	10	9	30.05	4.9	3.7	24.9
11/6/2019 4:30	9	10	10	30.05	4.9	3.8	24.9
11/6/2019 4:40	9	10	9	29.99	4.7	3.7	24.9
11/6/2019 4:50	9	10	9	29.83	4.5	3.8	25
11/6/2019 5:00	9	10	9	29.99	4.7	3.8	24.9
11/6/2019 5:10	9	10	9	29.89	4.7	3.7	24.9
11/6/2019 5:20	9	10	9	29.99	4.7	3.7	24.9
11/6/2019 5:30	9	10	9	30.05	4.4	3.7	24.9
11/6/2019 5:40	9	10	9	30.11	4.9	3.8	24.8
11/6/2019 5:50	9	10	9	30.29	4.8	3.6	24.9
11/6/2019 6:00	9	10	9	30.17	4.6	3.8	24.8
11/6/2019 6:10	9	10	9	29.96	4.7	3.8	24.9
11/6/2019 6:20	9	10	9	29.83	4.7	3.7	24.9
11/6/2019 6:30	9	10	9	29.71	4.9	3.8	24.9
11/6/2019 6:40	9	10	9	29.65	5	3.7	24.9
11/6/2019 6:50	9	10	9	29.62	4.4	3.6	24.9
11/6/2019 7:00	9	10	9	29.59	5	3.8	24.9
11/6/2019 7:10	9	10	9	29.47	3.4	3.4	24.9
11/6/2019 7:20	9	10	9	29.74	3.4	3.4	24.9
11/6/2019 7:30	9	10	9	29.65	3.5	3.5	25
11/6/2019 7:40	9	10	9	29.56	3.5	3.5	24.9
11/6/2019 7:50	9	10	9	29.74	3.2	3.5	24.9
11/6/2019 8:00	9	10	9	29.96	3.1	3.4	24.8
11/6/2019 8:10	9	10	9	29.1	4.5	3.8	24.9
11/6/2019 8:20	9	10	9	29.47	4.8	3.7	24.9
11/6/2019 8:30	9	10	9	29.83	4.9	3.7	24.8

11/6/2019 8:40	9	10	9	30.11	4.7	3.7	24.8
11/6/2019 8:50	9	10	9	30.11	4.9	3.8	25
11/6/2019 9:00	9	10	9	29.99	3.1	3.5	25
11/6/2019 9:10	9	10	9	30.99	0.9	2.2	24.7
11/6/2019 9:20	9	10	9	31.85	0.9	1.9	0.4
11/6/2019 9:30	9	10	9	32.15	4.9	3.1	0.4
11/6/2019 9:40	9	10	9	32	4.8	3.1	0.4
11/6/2019 9:50	9	10	9	31.45	0.8	1.8	0.4
11/6/2019 10:00	9	10	9	30.02	1.6	2.5	24.5
11/6/2019 10:10	9	10	9	29.1	3.4	3.5	24.9
11/6/2019 10:20	9	10	9	29.38	4.8	3.8	25
11/6/2019 10:30	9	10	9	30.02	3.5	3.4	24.9
11/6/2019 10:40	9	10	9	31.15	1.1	2.2	3.6
11/6/2019 10:50	9	10	9	31.88	1	1.8	0.4
11/6/2019 11:00	9	10	9	32.06	4.8	3	0.4
11/6/2019 11:10	9	10	9	31.97	4.9	3.1	0.5
11/6/2019 11:20	9	10	9	32	4.8	3	0.5
11/6/2019 11:30	9	10	9	31.97	0.8	1.7	0.4
11/6/2019 11:40	9	10	9	31.09	0.8	1.9	0.4
11/6/2019 11:50	9	10	9	30.69	1.1	2.1	2.6
11/6/2019 12:00	9	10	9	30.78	1	2.3	3.5
11/6/2019 12:10	9	10	9	31.45	0.8	1.9	0.4
11/6/2019 12:20	9	10	9	32.06	4.8	3.1	0.4
11/6/2019 12:30	9	10	9	31.76	4.8	3.3	0.6
11/6/2019 12:40	9	10	9	31.63	4.9	3.3	22.9
11/6/2019 12:50	9	10	9	31.76	4.6	3.2	0.6
11/6/2019 13:00	9	10	9	31.79	4.7	3.1	0.6
11/6/2019 13:10	9	10	9	31.94	4.8	3.1	0.5
11/6/2019 13:20	9	10	9	32.06	4.6	3	0.5
11/6/2019 13:30	9	10	9	31.94	4.8	3.1	0.5
11/6/2019 13:40	9	10	9	31.85	4.7	3.1	0.6
11/6/2019 13:50	9	10	9	31.63	4.9	3.1	22.9
11/6/2019 14:00	9	10	9	31.6	4.8	3.2	22.9
11/6/2019 14:10	9	10	9	31.57	4.8	3.4	23.2
11/6/2019 14:20	9	10	9	31.6	4.6	3.3	23.1
11/6/2019 14:30	9	10	9	31.73	4.8	3.1	16.4
11/6/2019 14:40	9	10	9	31.85	4.9	3.1	0.5
11/6/2019 14:50	9	10	9	31.88	4.8	3.1	0.5
11/6/2019 15:00	9	10	9	31.85	4.8	3.1	0.5
11/6/2019 15:10	9	10	9	31.6	4.8	3.2	23.5
11/6/2019 15:20	9	10	9	31.33	4.9	3.5	24.1
11/6/2019 15:30	9	10	9	31.45	4.9	3.4	24
11/6/2019 15:40	9	10	9	31.63	4.8	3.2	22.8
11/6/2019 15:50	9	10	9	31.94	4.7	3	0.5
11/6/2019 16:00	9	10	9	31.6	0.9	1.8	0.4
11/6/2019 16:10	9	10	9	30.9	0.9	2.1	0.4
11/6/2019 16:20	9	10	9	30.66	0.9	2.2	3.4

11/6/2019 16:30	9	10	9	31.15	1	2.1	0.4
11/6/2019 16:40	9	10	9	31.85	0.8	1.8	0.4
11/6/2019 16:50	9	10	9	32.06	5	3.1	0.4
11/6/2019 17:00	9	10	9	32.03	4.8	3.1	0.4
11/6/2019 17:10	9	10	9	31.45	0.9	1.8	0.4
11/6/2019 17:20	9	10	9	30.2	1.1	2.4	3.3
11/6/2019 17:30	9	10	9	29.5	3.5	3.5	24.9
11/6/2019 17:40	9	10	9	29.71	3.4	3.5	24.9
11/6/2019 17:50	9	10	9	30.02	3	3.3	24.9
11/6/2019 18:00	9	10	9	30.81	0.9	2.3	24.7
11/6/2019 18:10	9	10	9	31.45	0.9	2	0.4
11/6/2019 18:20	9	10	9	31.48	0.8	1.9	0.4
11/6/2019 18:30	9	10	9	31.48	0.8	1.9	0.5
11/6/2019 18:40	9	10	9	31.18	0.9	2	0.4
11/6/2019 18:50	9	10	9	30.69	1	2.2	2.7
11/6/2019 19:00	9	10	9	30.2	1.4	2.4	24.7
11/6/2019 19:10	9	10	9	30.02	2.7	3.1	24.9
11/6/2019 19:20	9	10	9	30.35	1.9	2.8	24.8
11/6/2019 19:30	9	10	9	30.44	1.4	2.4	24.7
11/6/2019 19:40	9	10	9	30.81	1	2.3	2.5
11/6/2019 19:50	9	10	9	30.78	1.1	2.2	2.5
11/6/2019 20:00	9	10	9	30.51	1.1	2.4	24.6
11/6/2019 20:10	9	10	9	30.32	1.6	2.4	24.7
11/6/2019 20:20	9	10	9	30.2	1.7	2.6	24.8
11/6/2019 20:30	9	10	9	30.17	2.5	2.9	24.8
11/6/2019 20:40	9	10	9	30.38	1.3	2.5	24.7
11/6/2019 20:50	9	10	9	30.57	0.9	2.2	24.5
11/6/2019 21:00	9	10	9	30.66	1.1	2.3	2.1
11/6/2019 21:10	9	10	9	30.38	1	2.3	24.6
11/6/2019 21:20	9	10	9	29.65	3	3.3	24.8
11/6/2019 21:30	9	10	9	29.22	4.6	3.8	24.9
11/6/2019 21:40	9	10	9	29.83	4.8	3.7	24.9
11/6/2019 21:50	9	10	9	30.2	4.7	3.7	24.9
11/6/2019 22:00	9	10	9	30.14	4.5	3.6	24.9
11/6/2019 22:10	9	10	9	30.35	5	3.6	24.9
11/6/2019 22:20	9	10	9	30.23	4.9	3.8	24.9
11/6/2019 22:30	9	10	9	30.26	5.2	3.6	24.9
11/6/2019 22:40	9	10	9	30.32	4.5	3.6	24.8
11/6/2019 22:50	9	10	9	30.54	4.7	3.6	24.8
11/6/2019 23:00	9	10	9	30.38	4.8	3.6	24.8
11/6/2019 23:10	9	10	9	30.47	4.9	3.7	24.8
11/6/2019 23:20	9	10	9	30.29	5.1	3.6	24.9
11/6/2019 23:30	9	10	9	30.29	4.8	3.6	24.7
11/6/2019 23:40	9	10	9	30.51	4.6	3.6	24.8
11/6/2019 23:50	9	10	9	30.99	4.6	3.5	24.5
11/7/2019 0:00	9	10	9	31.18	4.7	3.5	24.3
11/7/2019 0:10	9	10	9	31.21	4.4	3.4	24.4

11/7/2019 0:20	9	10	9	31.05	4.6	3.6	24.5
11/7/2019 0:30	9	10	9	30.96	4.9	3.5	24.6
11/7/2019 0:40	9	10	9	30.96	4.7	3.5	24.6
11/7/2019 0:50	9	10	9	31.09	4.9	3.4	24.5
11/7/2019 1:00	9	10	9	31.36	4.5	3.4	24.1
11/7/2019 1:10	9	10	9	31.54	4.8	3.3	23.7
11/7/2019 1:20	9	10	9	31.6	4.9	3.3	23.3
11/7/2019 1:30	9	10	9	31.57	4.8	3.3	23.7
11/7/2019 1:40	9	10	9	31.67	4.8	3.2	22.8
11/7/2019 1:50	9	10	9	32.03	4.8	3	0.5
11/7/2019 2:00	9	10	9	31.15	0.9	1.9	0.4
11/7/2019 2:10	9	10	9	30.51	0.9	2.2	3.6
11/7/2019 2:20	9	10	9	30.23	1.5	2.5	24.6
11/7/2019 2:30	9	10	9	30.63	1.2	2.3	24.7
11/7/2019 2:40	9	10	9	30.66	1	2.2	2.2
11/7/2019 2:50	9	10	9	30.69	0.9	2.2	3.5
11/7/2019 3:00	9	10	9	29.74	2.9	3.2	24.7
11/7/2019 3:10	9	10	9	29.04	4.8	3.6	24.8
11/7/2019 3:20	9	10	9	29.59	4.9	3.7	24.9
11/7/2019 3:30	9	10	9	29.89	4.9	3.7	24.9
11/7/2019 3:40	9	10	9	29.8	4.8	3.7	25
11/7/2019 3:50	9	10	9	29.8	4.7	3.8	25
11/7/2019 4:00	9	10	9	29.53	4.8	3.7	25
11/7/2019 4:10	9	10	9	29.65	4.6	3.8	24.9
11/7/2019 4:20	9	10	9	29.83	4.9	3.7	24.9
11/7/2019 4:30	9	10	9	30.02	4.7	3.7	24.9
11/7/2019 4:40	9	10	9	30.11	4.7	3.6	24.9
11/7/2019 4:50	9	10	9	30.05	4.9	3.8	24.9
11/7/2019 5:00	9	10	9	30.02	4.8	3.8	24.9
11/7/2019 5:10	9	10	9	30.11	4.6	3.6	24.9
11/7/2019 5:20	9	10	9	30.17	4.7	3.8	24.8
11/7/2019 5:30	9	10	9	30.44	4.8	3.8	24.8
11/7/2019 5:40	9	10	9	30.72	4.8	3.5	24.7
11/7/2019 5:50	9	10	9	30.69	4.8	3.5	24.7
11/7/2019 6:00	9	10	9	30.72	4.6	3.6	24.7
11/7/2019 6:10	9	10	9	30.26	4.7	3.7	24.8
11/7/2019 6:20	9	10	9	30.2	4.9	3.7	24.9
11/7/2019 6:30	9	10	9	30.05	4.8	3.7	24.8
11/7/2019 6:40	9	10	9	30.11	4.7	3.7	24.9
11/7/2019 6:50	9	10	9	30.29	4.8	3.6	24.8
11/7/2019 7:00	9	10	9	30.41	4.7	3.6	24.8
11/7/2019 7:10	9	10	9	30.32	4.7	3.7	24.8
11/7/2019 7:20	9	10	9	30.38	4.7	3.6	24.8
11/7/2019 7:30	9	10	9	30.17	5	3.7	24.9
11/7/2019 7:40	9	10	9	30.2	4.5	3.6	24.8
11/7/2019 7:50	9	10	9	30.35	5	3.6	24.7
11/7/2019 8:00	9	10	9	30.51	4.7	3.6	24.7

11/7/2019 8:10	9	10	9	30.47	4.6	3.7	24.8
11/7/2019 8:20	9	10	9	30.29	4.9	3.6	24.9
11/7/2019 8:30	9	10	9	29.83	4.6	3.5	24.9
11/7/2019 8:40	9	10	9	29.74	4.8	3.7	25
11/7/2019 8:50	9	10	9	29.59	4.6	3.8	25
11/7/2019 9:00	9	10	9	29.44	4.6	3.7	24.9
11/7/2019 9:10	9	10	9	29.41	4.5	3.8	24.9
11/7/2019 9:20	9	10	9	29.32	4.5	3.8	24.9
11/7/2019 9:30	9	10	9	29.41	4.9	3.8	25
11/7/2019 9:40	9	10	9	29.38	4.6	3.7	24.9
11/7/2019 9:50	9	10	9	29.59	3.3	3.5	24.9
11/7/2019 10:00	9	10	9	29.89	3.1	3.2	24.9
11/7/2019 10:10	9	10	9	30.2	2.4	2.9	24.7
11/7/2019 10:20	9	10	9	30.08	2.1	2.8	24.8
11/7/2019 10:30	9	10	9	29.5	3.4	3.5	24.9
11/7/2019 10:40	9	10	9	29.22	4.8	3.8	25
11/7/2019 10:50	9	10	9	29.35	4.8	3.7	25
11/7/2019 11:00	9	10	9	29.56	3.4	3.5	24.9
11/7/2019 11:10	9	10	9	30.08	2.7	3.1	24.8
11/7/2019 11:20	9	10	9	30.17	2.1	2.8	24.8
11/7/2019 11:30	9	10	9	30.32	1.9	2.6	24.7
11/7/2019 11:40	9	10	9	30.26	1.5	2.5	24.7
11/7/2019 11:50	9	10	9	30.51	1.5	2.5	24.7
11/7/2019 12:00	9	10	9	30.54	0.9	2.2	23.6
11/7/2019 12:10	9	10	9	30.69	0.9	2.3	3.4
11/7/2019 12:20	9	10	9	30.44	1	2.3	24.6
11/7/2019 12:30	9	10	9	29.99	1.7	2.8	24.7
11/7/2019 12:40	9	10	9	29.5	3.3	3.4	24.9
11/7/2019 12:50	9	10	9	29.47	3.5	3.5	24.9
11/7/2019 13:00	9	10	9	29.99	3.3	3.3	24.9
11/7/2019 13:10	9	10	9	31.02	1	2.2	2.6
11/7/2019 13:20	9	10	9	31.39	0.9	2	0.4
11/7/2019 13:30	9	10	9	31.51	0.9	2	0.4
11/7/2019 13:40	9	10	9	31.51	0.9	2	0.4
11/7/2019 13:50	9	10	9	31.12	0.9	2	0.4
11/7/2019 14:00	9	10	9	30.32	1	2.3	3.2
11/7/2019 14:10	9	10	9	29.65	3.1	3.2	24.8
11/7/2019 14:20	9	10	9	29.13	3.5	3.5	24.9
11/7/2019 14:30	9	10	9	29.25	4.7	3.7	25
11/7/2019 14:40	9	10	9	29.65	3.4	3.5	24.9
11/7/2019 14:50	9	10	9	29.65	3.4	3.5	24.8
11/7/2019 15:00	9	10	9	29.47	3.5	3.5	24.9
11/7/2019 15:10	9	10	9	29.22	4.8	3.8	24.9
11/7/2019 15:20	9	10	9	29.25	4.7	3.8	24.9
11/7/2019 15:30	9	10	9	29.47	4.8	3.7	24.9
11/7/2019 15:40	9	10	9	29.41	4.8	3.7	25
11/7/2019 15:50	9	10	9	29.71	3.5	3.5	24.9

11/7/2019 16:00	9	10	9	29.47	3.7	3.6	24.9
11/7/2019 16:10	9	10	9	29.22	4.8	3.8	24.8
11/7/2019 16:20	9	10	9	29.41	4.7	3.7	24.9
11/7/2019 16:30	9	10	9	29.65	4.6	3.7	24.9
11/7/2019 16:40	9	10	9	29.71	4.7	3.6	24.9
11/7/2019 16:50	9	10	9	29.53	4.7	3.7	24.9
11/7/2019 17:00	9	10	9	29.5	3.4	3.5	24.9
11/7/2019 17:10	9	10	9	29.19	3.4	3.5	24.9
11/7/2019 17:20	9	10	9	29.32	4.7	3.7	25
11/7/2019 17:30	9	10	9	29.44	4.6	3.7	24.8
11/7/2019 17:40	9	10	9	29.59	4.5	3.7	24.9
11/7/2019 17:50	9	10	9	29.68	4.7	3.7	24.9
11/7/2019 18:00	9	10	9	29.53	4.5	3.7	24.9
11/7/2019 18:10	9	10	9	29.22	4.6	3.8	24.9
11/7/2019 18:20	9	10	9	29.47	4.7	3.7	24.9
11/7/2019 18:30	9	10	9	29.83	4.7	3.7	24.8
11/7/2019 18:40	9	10	9	30.11	4.7	3.7	24.8
11/7/2019 18:50	9	10	9	30.54	4.5	3.6	24.7
11/7/2019 19:00	9	10	9	30.72	4.8	3.5	24.6
11/7/2019 19:10	9	10	9	30.57	5.1	3.6	24.7
11/7/2019 19:20	9	10	9	30.51	4.8	3.6	24.7
11/7/2019 19:30	9	10	9	30.54	4.7	3.6	24.7
11/7/2019 19:40	9	10	9	30.54	4.6	3.6	24.6
11/7/2019 19:50	9	10	9	30.96	4.8	3.5	24.5
11/7/2019 20:00	9	10	9	31.36	4.9	3.4	24.1
11/7/2019 20:10	9	10	9	31.57	4.7	3.2	23
11/7/2019 20:20	9	10	9	31.63	4.9	3.3	23.1
11/7/2019 20:30	9	10	9	31.36	4.7	3.4	24
11/7/2019 20:40	9	10	9	31.27	5.1	3.4	24.3
11/7/2019 20:50	9	10	9	31.09	4.9	3.5	24.5
11/7/2019 21:00	9	10	9	31.12	5	3.4	24.3
11/7/2019 21:10	9	10	9	31.33	4.6	3.4	24.1
11/7/2019 21:20	9	10	9	31.54	4.9	3.3	23.4
11/7/2019 21:30	9	10	9	31.79	4.7	3.2	0.6
11/7/2019 21:40	9	10	9	32.09	4.8	3	0.5
11/7/2019 21:50	9	10	9	32.09	4.9	3.2	0.4
11/7/2019 22:00	9	10	9	31.97	4.8	3.1	0.5
11/7/2019 22:10	9	10	9	32	4.9	3.1	0.5
11/7/2019 22:20	9	10	9	32	4.8	3	0.5
11/7/2019 22:30	9	10	9	31.97	4.9	3.2	0.5
11/7/2019 22:40	9	10	9	31.97	1	1.8	0.4
11/7/2019 22:50	9	10	9	31.3	0.8	2	0.5
11/7/2019 23:00	9	10	9	30.38	1.1	2.2	2.7
11/7/2019 23:10	9	10	9	29.8	2.7	3.1	24.8
11/7/2019 23:20	9	10	9	29.19	3.4	3.5	24.9
11/7/2019 23:30	9	10	9	29.22	4.7	3.8	25
11/7/2019 23:40	9	10	9	29.59	4.6	3.7	24.9

11/7/2019 23:50	9	10	9	29.68	4.6	3.6	24.8
11/8/2019 0:00	9	10	9	29.99	4.9	3.5	24.9
11/8/2019 0:10	9	10	9	30.14	4.6	3.7	24.8
11/8/2019 0:20	9	10	9	30.41	4.9	3.6	24.7
11/8/2019 0:30	9	10	9	30.57	4.9	3.5	24.6
11/8/2019 0:40	9	10	9	30.87	4.9	3.5	24.6
11/8/2019 0:50	9	10	9	31.05	4.7	3.4	24.5
11/8/2019 1:00	9	10	9	31.02	4.6	3.4	24.5
11/8/2019 1:10	9	10	9	31.33	5	3.4	24
11/8/2019 1:20	9	10	9	31.6	4.8	3.2	23.2
11/8/2019 1:30	9	10	9	31.76	4.6	3.2	0.6
11/8/2019 1:40	9	10	9	31.97	4.7	3.1	0.5
11/8/2019 1:50	9	10	9	31.97	4.6	3.1	0.5
11/8/2019 2:00	9	10	9	31.94	4.8	3.2	0.5
11/8/2019 2:10	9	10	9	32.03	0.7	1.8	0.4
11/8/2019 2:20	9	10	9	31.48	0.9	1.9	0.4
11/8/2019 2:30	9	10	9	30.72	0.7	2.1	0.4
11/8/2019 2:40	9	10	9	30.32	1	2.4	24.6
11/8/2019 2:50	9	10	9	30.41	1.2	2.3	24.7
11/8/2019 3:00	9	10	9	30.72	1	2.2	3.5
11/8/2019 3:10	9	10	9	30.78	1	2.2	2.5
11/8/2019 3:20	9	10	9	30.47	1.1	2.3	24.6
11/8/2019 3:30	9	10	9	29.62	3.1	3.1	24.8
11/8/2019 3:40	9	10	9	29.16	4.9	3.7	25
11/8/2019 3:50	9	10	9	29.47	4.8	3.6	25
11/8/2019 4:00	9	10	9	29.38	4.6	3.7	25
11/8/2019 4:10	9	10	9	29.44	3.3	3.4	24.9
11/8/2019 4:20	9	10	9	29.56	3.4	3.5	24.9
11/8/2019 4:30	9	10	9	29.13	3.5	3.4	25
11/8/2019 4:40	9	10	9	29.35	5.1	3.7	24.9
11/8/2019 4:50	9	10	9	29.68	4.9	3.6	24.9
11/8/2019 5:00	9	10	9	30.14	4.8	3.5	24.9
11/8/2019 5:10	9	10	9	30.41	4.8	3.5	24.8
11/8/2019 5:20	9	10	9	30.47	4.6	3.6	24.7
11/8/2019 5:30	9	10	9	30.38	4.8	3.6	24.8
11/8/2019 5:40	9	10	9	30.35	4.8	3.5	24.9
11/8/2019 5:50	9	10	9	30.2	4.9	3.7	24.8
11/8/2019 6:00	9	10	9	30.44	4.6	3.6	24.8
11/8/2019 6:10	9	10	9	30.57	4.9	3.6	24.6
11/8/2019 6:20	9	10	9	30.84	4.9	3.4	24.6
11/8/2019 6:30	9	10	9	31.18	4.8	3.4	24.3

EFF_PH	W7RLVL	ER1LVL	W5RLVL	AS_PRS	AS_TMP	RM_TMP	H2OTMP
8.68	-60.6	-57.5	-57.91	28.27	63.3	56.3	50.1
8.6	-60.09	-58.33	-58.13	28.24	62.9	56.6	48.9
8.53	-59.91	-57.19	-58	28.24	63.9	57.2	49.7
8.55	-60.13	-57.13	-58.4	28.39	62.8	56	50
8.57	-60.13	-57.39	-58.19	28.39	64.9	60.2	47.3
8.51	-59.36	-57.29	-58.34	28.39	63.3	56.4	50.7
8.5	-58.59	-58.33	-58.4	28.48	63.6	57.1	50.1
8.57	-60.16	-57.08	-58.19	28.45	63.9	57	49.8
9.09	-60.05	-56.87	-58.37	28.3	62.9	56.1	50.8
8.67	-60.31	-58.22	-58.19	28.14	65	59.2	48.7
8.53	-60.46	-57.65	-58.28	28.14	63.6	56.5	50.5
8.65	-60.53	-57.39	-58.28	28.11	65.3	59.4	50
8.64	-60.13	-57.55	-58.28	28.24	64.6	56.9	50.3
8.57	-58.96	-57.24	-58.16	28.21	63.6	56.2	48.9
8.62	-61.15	-57.76	-58.25	28.14	65.8	59.5	54.3
8.6	-60.27	-57.29	-58.25	28.21	64.4	56.7	49.2
8.55	-59.95	-56.51	-58.52	28.14	65	58	49.5
8.57	-60.75	-57.39	-58.03	28.14	64.9	57.1	52.3
8.62	-60.6	-57.76	-58.19	28.14	64.4	56.3	50.1
8.52	-59.58	-57.13	-58.4	28.21	66.6	60.7	49.1
8.53	-58.85	-57.13	-58.25	28.48	65	56.8	52.2
7.91	-60.27	-57.24	-58.22	28.3	64.7	56.3	48.9
8.72	-60.13	-56.77	-58.06	28.02	66.8	59.1	49.8
8.67	-60.2	-57.6	-58.06	28.02	65.8	56.9	50.5
8.63	-60.38	-57.24	-58.19	28.17	65.6	56.3	47.3
8.56	-60.16	-57.5	-58.25	28.02	67.4	58.1	48.2
8.53	-59.76	-57.24	-57.97	28.05	66.5	56.8	49.8
8.54	-59.51	-57.03	-58.25	27.96	66.4	57.1	49.1
8.53	-59.98	-57.24	-58.13	27.96	67.6	57.8	50
8.57	-60.16	-57.65	-58.28	27.96	66.7	56.8	49.5
8.62	-60.13	-57.19	-58.43	27.93	66.5	56.4	54.2
8.65	-60.24	-57.34	-58.16	27.99	68.3	58.2	49.9
8.58	-60.02	-57.13	-58.22	28.11	67.4	57	49.5
8.49	-57.09	-56.77	-58.16	28.17	66.9	56.6	50.5
8.38	-58.7	-57.39	-58.06	28.08	68.5	59.1	51.1
9.03	-58.37	-56.98	-58.52	27.99	67.2	57.2	52.1
8.69	-59.03	-57.19	-58.03	27.93	66.8	56.9	52.5
8.63	-60.13	-58.69	-58.13	27.78	69.1	60.9	47.6
8.54	-58.77	-57.19	-58.03	27.87	68	57.6	51.9
8.52	-59.14	-57.34	-58.1	27.87	67.2	56.9	49.9
8.53	-58.7	-57.6	-57.79	27.84	66.9	56.6	49.9
8.55	-59.03	-56.04	-58.06	27.96	68.7	58.2	50.9
8.56	-58.3	-57.6	-58.19	27.93	67.8	57.1	48.4
8.59	-58.85	-58.28	-58.06	27.9	67.4	56.6	48.2
8.56	-59.07	-57.81	-58.34	27.78	69.4	60.1	50.3
8.54	-59.43	-57.45	-58.25	27.84	68.2	57.2	46.5

8.52	-59.4	-57.34	-58.16	27.72	67.6	57	51.2
8.53	-59.43	-57.55	-58.03	27.78	69.1	59.6	50.1
8.44	-59.14	-57.5	-58.34	28.02	68.2	57.6	48.8
8.5	-59.76	-56.72	-57.91	28.05	67.7	56.9	47
8.56	-59.4	-57.19	-58.19	28.02	67	56.8	51.6
7.69	-57.71	-56.93	-58.1	27.93	68.8	58.4	51.5
9.2	-57.2	-57.6	-58.06	27.87	67.7	57.1	50.1
8.76	-60.24	-57.19	-57.91	27.81	67.2	57	50.5
8.56	-60.31	-57.34	-58.28	27.78	69.4	60.9	50.5
8.56	-60.68	-56.61	-58.22	27.75	68	57.5	49.1
8.63	-60.16	-57.24	-58.1	27.84	67.6	57.1	48.2
8.51	-58.3	-56.93	-57.91	27.72	68.2	58.3	50.5
8.63	-60.24	-57.34	-58.22	27.84	68.1	58	52.8
8.59	-60.2	-57.7	-58.19	27.84	67.7	57.1	54.7
8.54	-60.27	-56.82	-57.91	27.84	67.1	56.8	49.3
8.59	-61.08	-56.93	-58.1	27.78	69	58.9	51.6
8.65	-60.13	-56.87	-58.19	27.78	67.9	57.1	48.6
8.64	-60.13	-57.45	-58.4	27.81	67.1	57	50.7
8.44	-59.25	-57.55	-58.1	27.81	69.2	60.6	46.3
8.59	-60.2	-57.03	-58.16	27.96	67.8	57.5	50.5
7.87	-60.05	-57.29	-58.13	27.93	66.9	57.1	51.8
8.84	-59.95	-57.24	-58.28	27.81	66.9	57.2	50.2
8.88	-59.91	-56.82	-58.03	27.72	67.9	58.2	50.2
8.68	-60.79	-57.86	-58.1	27.75	66.9	57.1	48.8
8.53	-59.03	-57.13	-58.16	27.75	66.9	56.7	51.6
8.62	-59.87	-57.03	-57.88	27.66	69	59.3	51.1
8.61	-60.79	-57.34	-58.1	27.78	67.8	57.4	52.8
8.59	-60.09	-57.03	-58	27.81	66.9	57.1	49.4
8.58	-60.13	-56.98	-58.25	27.69	68.7	60.2	49.2
8.57	-59.98	-58.43	-57.97	27.75	67.5	57.5	49.6
8.65	-60.42	-57.08	-58.06	27.78	66.7	57	49.5
8.62	-59.8	-57.7	-58.03	27.81	66.4	56.7	47.5
8.54	-58.55	-57.39	-58	27.75	67.8	58.1	52.8
8.56	-60.75	-57.6	-58.03	27.75	66.9	57.1	52.7
8.5	-58.99	-57.65	-58.25	27.9	66.7	56.6	50.8
8.58	-60.16	-57.65	-58.03	27.78	68.7	59.5	49.5
7.73	-59.51	-57.29	-58.19	27.75	67.8	57.3	49.1
8.94	-60.86	-57.45	-58.25	27.78	67.4	57	50.5
8.64	-60.05	-57.13	-58.06	27.56	68.6	59.5	49.5
8.62	-59.76	-57.34	-57.94	27.72	67.8	57.9	51.8
8.57	-60.09	-56.72	-58.1	27.63	67.1	57.1	51.6
8.53	-57.97	-57.65	-58.03	27.75	66.8	56.9	50.3
8.66	-60.02	-57.03	-58.22	27.63	68.1	58.3	49.5
8.58	-60.6	-56.77	-58	27.66	67.4	57.1	49.5
8.68	-60.42	-57.29	-57.76	27.69	66.8	56.8	52
8.52	-59.07	-57.24	-57.88	27.5	68.7	60.5	51
8.54	-60.09	-57.13	-57.79	27.56	67.5	57.4	48.4

8.6	-60.24	-56.56	-57.94	27.63	66.8	56.9	51.6
8.59	-59.25	-56.93	-57.97	27.53	67.7	58.5	51.9
8.54	-60.05	-57.29	-58	27.5	68.1	57.9	49
8.56	-60.02	-56.82	-57.82	27.5	67.1	57.1	52.2
8.64	-60.27	-57.7	-57.73	27.66	66.8	56.7	49.8
8.42	-59.18	-56.61	-58.06	27.66	68.3	58.6	51.1
8.51	-59.03	-56.61	-57.88	27.72	67.5	57.1	51.1
8.55	-59.84	-56.77	-57.67	27.78	67	56.8	50.1
8.56	-58.55	-56.46	-57.91	27.69	69	60.5	50.3
7.92	-60.02	-57.24	-58.03	27.66	67.6	57.4	50.2
9.21	-59.84	-56.15	-57.82	27.47	67	57	50.3
8.99	-58.85	-57.03	-57.76	27.44	67.1	57.2	51.6
8.88	-60.46	-57.13	-57.61	27.35	68.2	57.9	50.2
8.79	-60.31	-56.72	-57.64	27.47	67.6	57.1	49.5
8.76	-60.42	-56.04	-57.79	27.44	66.9	56.8	50.7
8.94	-59.51	-56.04	-57.73	27.35	68.8	59.4	49.6
9.1	-60.02	-57.08	-57.97	27.35	67.6	57.1	55.3
8.98	-59.95	-57.03	-57.55	27.47	66.8	56.9	51.1
8.98	-59.87	-57.13	-57.67	27.32	68.7	60.2	51.3
8.91	-60.42	-56.77	-57.73	27.41	67.9	57.5	50.9
8.64	-58	-56.77	-57.76	27.41	67.2	57.1	49.6
8.67	-59.4	-56.87	-57.79	27.29	67.1	57	51.4
8.65	-59.95	-57.03	-57.85	27.32	68.2	58	51.3
8.69	-60.13	-57.08	-57.73	27.35	67.4	57.1	50.3
8.62	-59.47	-56.36	-57.76	27.35	66.8	57	48.3
8.66	-60.13	-57.29	-57.88	27.32	68.9	59.5	50.1
8.57	-60.13	-57.13	-57.73	27.32	67.8	57.2	49.6
8.54	-58.63	-58.12	-57.61	27.35	67.1	57.1	51.6
8.62	-59.98	-57.6	-57.3	27.17	69	60.3	51.3
8.65	-60.24	-57.08	-57.64	27.26	68	57.6	50.3
8.65	-60.49	-56.93	-57.7	27.38	67.6	57	48.2
8.58	-60.49	-56.46	-57.64	27.26	67.6	56.7	51.6
8.57	-59.95	-57.81	-57.91	27.23	69	58.4	50.9
8.55	-60.27	-56.93	-57.67	27.23	67.9	57.1	49.5
8.66	-60.2	-57.29	-57.42	27.14	67.7	56.9	46.2
8.59	-59.65	-56.2	-57.88	27.17	69.7	60.2	48.4
8.63	-59.73	-55.78	-57.79	27.17	68.5	57.5	50.5
8.56	-59.95	-56.51	-57.61	27.29	67.7	57.1	49.8
8.52	-59.84	-56.3	-57.67	27.11	69.1	59.3	51.2
8.65	-60.05	-57.03	-57.48	27.2	69.4	58	51.9
8.55	-57.97	-57.45	-57.55	27.17	68.9	57.2	51.5
8.62	-59.4	-55.94	-57.88	27.11	68.6	57	48.4
8.53	-60.09	-56.15	-57.67	27.11	70.5	58.6	47.6
8.63	-60.02	-57.34	-57.58	27.14	69.7	57.4	48.4
8.66	-60.05	-56.77	-57.48	27.14	69.4	57.1	49.6
8.56	-57.97	-56.3	-57.61	26.98	71.2	60.6	52.2
8.64	-60.02	-56.3	-57.58	27.01	70.1	57.6	51.4

8.55	-59.14	-56.77	-57.33	27.17	69.7	57.3	48.1
8.65	-59.87	-56.3	-57.39	27.11	69.8	58	49.1
8.62	-59.91	-56.2	-57.36	27.11	70.8	58.3	49
8.64	-60.46	-56.3	-57.39	27.08	70.1	57.5	50.7
8.58	-59.76	-57.24	-57.27	27.14	70	57.2	51.5
8.62	-59.58	-57.13	-57.45	27.08	71.8	60.6	49.2
8.53	-58.66	-57.08	-57.64	27.11	70.4	57.9	49.1
8.53	-57.42	-56.51	-57.82	27.11	70.1	57.2	53.6
8.56	-59.07	-56.82	-57.33	27.14	69.9	57.1	47.7
8.65	-59.21	-56.51	-57.7	27.11	71.1	58.8	52
8.55	-59.98	-56.51	-57.64	27.11	69.9	57.6	51.4
8.65	-59.84	-57.45	-57.55	27.05	70.1	57.1	53.6
8.56	-58.04	-57.39	-57.42	26.83	72.3	58.4	53
8.56	-59.29	-56.82	-57.7	26.92	73.7	58.5	49.8
8.64	-59.51	-56.56	-57.61	26.92	73.5	58.1	53.3
8.63	-59.36	-56.82	-57.33	26.95	73.7	57.8	47.5
8.62	-59.58	-56.61	-57.76	26.98	73.8	57.4	52
8.61	-59.4	-56.56	-57.85	26.89	75.3	59	51.5
8.59	-60.68	-57.08	-57.61	26.83	74.9	58.2	53.3
8.53	-60.31	-56.77	-57.61	26.89	74.8	58.1	47.3
8.52	-60.49	-56.77	-57.7	26.98	75.1	57.8	50.4
8.63	-59.43	-57.24	-57.48	27.01	74.8	57.5	50.1
8.6	-59.65	-56.82	-57.85	26.98	76.7	59.4	51
8.54	-59.43	-57.81	-57.55	26.95	76.1	58.4	52.9
8.61	-59.25	-56.98	-57.58	27.01	75.9	58.1	51.8
8.65	-58.92	-56.82	-57.73	26.98	76.2	57.9	53.7
8.59	-60.27	-56.3	-57.91	27.05	75.6	57.9	51.6
8.56	-58.15	-57.24	-57.82	27.05	75.1	57.6	48.7
8.63	-59.76	-56.77	-57.58	27.01	76.7	60.7	45.3
8.65	-60.16	-57.19	-57.7	27.01	75.2	58.5	50.5
8.63	-59.87	-57.03	-57.55	27.14	74.6	58.2	50.5
8.58	-59.51	-56.72	-57.55	27.08	74.7	58.1	49.9
8.56	-57.97	-56.87	-57.97	27.17	74.6	57.5	49.5
8.59	-59.47	-56.93	-57.64	27.11	74.7	58	51.5
8.68	-59.36	-56.93	-57.94	27.14	74.5	57.8	49.7
8.62	-58.7	-56.82	-57.79	27.08	76.5	60.6	49.6
8.58	-59.76	-56.72	-57.88	27.23	75	58.8	48.7
8.5	-59.76	-57.13	-57.67	27.2	73.8	58.3	50.2
8.56	-59.62	-56.87	-57.64	27.2	73.6	58.2	51.7
8.54	-59.62	-56.72	-57.76	27.29	73.6	57.9	51.3
8.64	-60.13	-56.93	-57.58	27.17	73.6	57.6	48.6
8.54	-58.33	-56.41	-57.73	27.2	75.2	59.5	48.4
8.65	-59.25	-56.87	-57.82	27.23	73.7	58.5	51.7
8.67	-59.8	-57.08	-57.76	27.26	73.1	58.2	51.2
8.62	-59.65	-56.77	-57.76	27.26	73	58.2	48.6
8.62	-59.73	-56.61	-57.88	27.32	72.5	57.9	50.2
8.53	-58.63	-57.6	-57.82	27.32	73	57.1	47.9

8.64	-59.73	-57.08	-57.79	27.2	74.6	60.7	50.5
8.6	-59.62	-57.34	-57.85	27.29	73.6	59	50.5
8.66	-59.98	-57.39	-57.61	27.35	73.1	58.4	52.1
8.53	-58.04	-55.84	-57.88	27.29	72.4	58.2	50.7
8.56	-59.36	-56.51	-57.79	27.41	72	57.8	51.1
8.63	-58.77	-56.72	-58	27.38	71.8	57.5	52.7
8.67	-60.09	-56.61	-57.82	27.32	73.8	60.2	50.2
8.63	-59.62	-57.19	-57.76	27.35	72.4	58.5	47.8
8.61	-59.21	-56.61	-57.91	27.47	71.6	58	49.7
8.65	-59.87	-57.29	-57.7	27.47	71.2	57.8	51.7
8.62	-60.35	-57.34	-57.79	27.5	70.8	57.5	51
8.55	-59.58	-56.51	-57.82	27.35	72.4	60.8	51.6
8.65	-60.02	-56.56	-57.85	27.44	71.3	59	49.6
8.57	-58.33	-57.13	-57.97	27.69	70.6	58	53.8
8.62	-60.9	-57.55	-57.94	27.56	70.2	58	53
8.56	-60.05	-56.82	-57.85	27.63	69.9	57.5	50.9
8.56	-58.3	-57.34	-58	27.66	69.4	57.2	48.9
8.59	-59.4	-57.13	-57.94	27.53	70.9	59.2	49.7
8.58	-58.96	-57.24	-57.82	27.5	69.9	58	53.5
8.58	-59.32	-56.93	-57.85	27.69	69.3	57.4	51.1
8.61	-59.1	-57.5	-57.79	27.63	69.6	57.2	50.1
8.58	-59.58	-56.87	-58.03	27.5	71.1	60.1	48.9
8.62	-59.95	-57.03	-57.82	27.56	70.3	58.4	48
8.67	-60.05	-57.45	-57.76	27.63	69.7	57.8	48.8
8.69	-59.62	-57.03	-57.61	27.63	69.2	57.4	51.4
8.64	-60.49	-57.39	-58	27.66	68.9	57.2	49.7
8.63	-59.65	-57.7	-57.82	27.66	70.1	58.9	49.3
8.54	-58.96	-57.76	-57.39	27.69	69.7	57.9	48.4
8.56	-59.87	-56.72	-58.1	27.72	69.1	57.1	51.6
8.66	-60.79	-56.77	-57.85	27.66	68.8	57	50.5
8.66	-59.87	-57.03	-57.88	27.63	70.8	59.9	48.4
8.53	-59.95	-56.98	-58.03	27.66	69.6	58.2	49.3
8.65	-60.13	-57.13	-57.76	27.75	69	57.5	48.4
8.59	-58.74	-56.82	-57.85	27.78	68.7	57.2	49.5
8.58	-58.85	-56.87	-58.1	27.69	70.3	59.5	47.5
8.65	-59.65	-56.87	-57.82	27.72	69	57.9	50.4
8.63	-59.62	-57.24	-57.94	27.78	68.9	57.4	50.2
8.64	-59.47	-57.55	-58.06	27.78	68.7	57.1	49.6
8.57	-59.58	-57.08	-57.76	27.69	70.3	59.5	50.4
8.65	-60.75	-57.86	-57.73	27.81	69	57.8	51.1
8.63	-59.8	-56.93	-57.91	27.81	68.5	57.4	51.3
8.57	-59.95	-57.29	-58.06	27.72	68.8	57.9	51.1
8.53	-59.51	-56.36	-57.45	27.69	69.6	58.5	52.3
8.63	-59.47	-57.13	-57.76	27.78	68.6	57.4	50.7
8.56	-59.51	-56.77	-57.76	27.81	68.3	57.2	50
8.55	-59.62	-57.39	-58.06	27.75	70.3	60.8	48
8.61	-59.84	-56.77	-57.94	27.93	68.8	57.9	44.8

8.61	-59.58	-57.29	-57.85	27.78	67.9	57.4	48.8
8.67	-60.53	-57.65	-58.1	27.87	67.9	57.1	50.5
8.63	-60.13	-57.29	-57.79	27.69	69.7	60.7	49.6
8.53	-61.01	-57.91	-57.58	27.84	68.2	57.8	49.7
8.56	-59.54	-56.93	-58.03	27.84	67.6	57.4	48.9
8.53	-60.24	-56.82	-57.85	27.84	67.4	57	51.6
8.52	-60.13	-57.65	-57.7	27.84	68.2	58.2	46.7
8.64	-60.09	-56.87	-57.91	27.9	67.4	57.3	50.4
8.54	-57.67	-56.82	-57.76	27.9	66.7	57	50.5
8.65	-60.02	-57.55	-57.85	27.75	68.5	60.2	51.6
8.59	-59.87	-56.72	-57.85	27.84	67.4	57.6	51.5
8.58	-59.87	-56.77	-58.03	27.93	66.7	57.1	52.7
8.54	-59.47	-56.61	-57.94	27.75	67.5	59.2	50.5
8.65	-59.58	-57.29	-57.82	27.93	66.8	58	46.9
8.56	-58.77	-56.41	-57.94	28.05	65.5	57.1	50.5
8.56	-58.11	-56.98	-57.85	28.05	65	56.6	51.8
8.66	-59.95	-56.61	-57.85	27.93	66.8	58.4	48.2
8.59	-59.84	-56.41	-57.88	28.02	66.1	57.1	55.1
8.58	-59.91	-56.61	-57.73	27.99	65.8	56.6	50.7
8.66	-60.53	-57.5	-57.73	27.84	67.9	60.7	51.7
8.53	-58.77	-56.72	-57.91	27.93	66.6	57.1	50.5
8.49	-59.29	-57.34	-58.06	28.14	65.9	56.9	49.5
8.53	-59.65	-56.72	-57.82	27.99	66.9	58.5	51.8
8.47	-59.1	-57.03	-58.1	28.05	66.8	57.9	48.9
8.44	-59.03	-56.51	-58.03	28.08	65.9	56.9	47.6
8.57	-59.87	-57.13	-57.79	28.24	65.5	56.6	50.5
8.53	-59.58	-57.45	-57.85	28.08	66.9	58.8	47.8
8.57	-60.35	-57.6	-57.97	28.24	65.5	57	48
8.5	-59.76	-56.87	-58.13	28.24	64.7	56.5	51
8.56	-60.05	-57.65	-57.79	28.24	66.8	60.3	48.7
8.51	-59.65	-56.72	-57.73	28.17	64.7	56.9	49.5
8.52	-60.13	-56.93	-57.61	28.27	63.9	56.5	49.7
8.25	-60.49	-57.6	-57.7	28.17	65.8	60.5	50.9
8.7	-59.8	-56.98	-57.85	28.08	63.8	57	50
8.71	-60.68	-57.39	-57.85	28.14	63.1	56.3	52
9.24	-59.58	-57.24	-57.97	28.02	65	58.9	48.4
8.68	-59.84	-57.13	-58.19	28.14	63.1	56.7	48.3
8.14	-59.54	-57.39	-58	28.24	62.4	56.1	48.6
8.95	-59.32	-57.29	-57.94	28.14	63.9	57.4	48.9
9	-58.63	-57.03	-57.91	28.11	62.7	56.3	48
8.86	-59.47	-57.76	-57.85	28.02	64.9	59.8	51.3
8.7	-57.56	-57.13	-57.91	28.24	63.4	56.9	49.5
8.66	-60.02	-56.61	-57.73	28.24	62.4	56.1	52.3
8.61	-58.74	-56.77	-57.79	28.17	64.1	58.7	47.2
8.56	-57.86	-57.6	-57.88	28.17	62.5	56.4	48.4
8.53	-57.45	-57.65	-57.7	28.11	63.9	58.8	50.5
8.69	-58.96	-56.15	-57.82	28.27	62.9	56.7	51.6

8.61	-59.47	-56.82	-57.82	28.33	62.1	56	51.7
8.69	-61.04	-56.77	-57.88	28.17	63.6	58.5	51.5
8.62	-58.99	-57.81	-57.64	28.3	62.3	56.2	51.1
8.65	-60.35	-56.82	-57.88	28.05	64.2	60.3	49.5
8.56	-59.73	-56.61	-58.13	28.27	62.7	56.6	50.4
8.59	-60.02	-57.6	-57.82	28.39	61.8	55.9	51.6
8.58	-60.46	-57.6	-57.97	28.24	63.6	57.5	53.7
8.57	-60.6	-57.03	-57.91	28.42	61.7	56	50.1
8.61	-59.36	-56.77	-57.76	28.3	63.9	59.6	54.5
8.62	-59.98	-57.03	-58	28.24	61.7	56	51.4
8.63	-58.7	-56.82	-57.73	28.33	62.1	57.5	50.2
8.53	-60.05	-57.03	-58.13	28.39	62	56.8	50
8.64	-60.13	-56.87	-58.03	28.45	61.3	55.7	50.4
8.68	-60.16	-57.08	-57.91	28.33	62.7	58.1	51
8.65	-59.58	-57.24	-57.91	28.39	61.1	55.9	47.6
8.57	-60.02	-57.7	-57.73	28.24	63.1	59.9	49.4
8.56	-58.15	-57.03	-57.7	28.48	61.4	56.2	51.6
8.65	-60.79	-57.24	-58	28.21	63.5	60.1	50.4
8.53	-60.05	-57.29	-57.88	28.39	62	56.6	48.3
8.65	-59.98	-57.34	-57.88	28.39	61.4	56.3	54.5
8.54	-57.86	-57.5	-57.94	28.33	62.7	57.2	49.6
8.6	-59.51	-57.76	-58	28.45	61.9	56	51.6
8.65	-60.13	-57.24	-57.94	28.24	63.6	58.5	49.7
8.7	-60.2	-57.34	-57.64	28.39	62.5	56.3	53.4
8.62	-60.64	-57.24	-57.94	28.05	64.6	60.3	52.4
8.64	-59.32	-57.29	-57.91	28.33	63.2	56.7	49.3
8.56	-59.58	-57.13	-57.67	28.27	62.4	56	49.6
8.54	-58.22	-56.87	-57.67	28.39	63.6	57.4	54.3
8.65	-59.95	-56.82	-57.97	28.14	62.9	56.2	54.5
8.64	-59.58	-57.13	-57.7	28.14	64.9	59.7	50
8.67	-60.71	-57.08	-57.7	28.3	63.9	56.5	48.9
8.66	-59.95	-56.61	-58	27.99	64.9	59	51.1
8.68	-60.02	-56.77	-57.73	28.21	64.4	57.1	52.1
8.66	-59.25	-56.56	-57.7	28.24	63.6	56.1	49.9
8.56	-59.58	-57.19	-57.94	28.27	65.7	60.1	49.8
8.59	-59.21	-56.77	-57.91	28.24	64.3	56.6	50.3
8.67	-59.98	-56.56	-57.82	28.17	64.3	56.8	50
8.62	-60.35	-57.08	-57.88	28.11	64.7	56.8	50
8.68	-59.76	-57.45	-57.91	27.93	66.8	60.6	51
8.54	-60.82	-57.08	-57.88	28.14	65.3	57	52.2
8.57	-59.76	-55.94	-57.97	28.14	64.8	56.4	51.5
8.59	-59.54	-57.08	-57.79	28.05	67	59.6	51.6
8.67	-60.46	-57.03	-57.88	28.11	65.6	56.8	50.5
8.66	-60.05	-56.87	-57.79	28.11	65.8	56.2	47.8
8.66	-59.14	-57.13	-58.03	28.08	67	58.4	50.5
8.66	-60.13	-57.19	-57.67	28.05	66.1	56.7	48.4
8.6	-60.42	-57.13	-58	28.05	66.1	56.3	48.9

8.56	-58.37	-57.08	-58.03	27.99	67.5	58.1	48.2
8.58	-60.38	-55.63	-58.03	28.05	66.7	56.6	49.7
8.63	-61.04	-57.08	-57.7	27.99	66.4	56.6	50.2
8.65	-60.46	-57.5	-57.64	28.02	67.5	57.8	50.8
8.7	-60.16	-56.82	-57.58	28.08	66.3	56.8	48.1
8.64	-59.54	-56.46	-57.85	28.05	66.2	56.6	53.7
8.58	-60.13	-57.5	-57.61	27.96	66.9	57.8	51
8.63	-59.65	-57.34	-57.7	28.14	66.3	56.7	50.4
8.57	-59.07	-56.25	-57.7	28.05	66.6	57.2	49.5
8.64	-59.43	-57.39	-57.7	28.02	67.4	57.5	50
8.66	-59.98	-57.19	-57.94	28.08	66.4	56.6	49.9
8.64	-61.34	-57.39	-57.79	28.11	65.7	56.3	48.7
8.68	-60.38	-56.61	-57.85	28.02	67.2	58	52.9
8.64	-60.27	-56.98	-57.79	28.05	65.8	56.8	49.8
8.68	-60.38	-57.39	-57.67	27.99	67	59.3	48.1
8.5	-58.48	-56.82	-57.88	28.05	65.7	57.2	49
8.63	-59.07	-57.29	-57.64	28.11	65	56.3	53.3
8.56	-60.13	-56.3	-57.88	27.93	67	60.4	49.6
8.56	-59.54	-57.19	-57.7	28.08	65.4	57.1	48.2
8.67	-60.46	-56.82	-57.97	28.24	64.1	56.4	48.2
8.55	-58.33	-56.61	-57.67	27.99	66.2	59.7	49.9
8.67	-60.46	-57.24	-57.67	28.14	64.7	56.9	50.3
8.62	-59.43	-56.1	-57.94	28.21	63.7	56.3	47.5
8.68	-59.98	-56.87	-57.67	27.99	65.9	60.4	49.4
8.56	-57.71	-57.34	-57.67	28.05	64.2	56.8	51.3
8.66	-60.27	-56.93	-57.85	28.17	63.5	56.2	50.4
8.64	-59.65	-56.98	-57.67	28.14	65	57.9	47.6
8.66	-60.02	-55.94	-57.82	27.99	63.9	56.5	56.5
8.67	-60.53	-56.41	-57.42	28.11	63.8	56.7	49.1
8.58	-59.76	-57.13	-57.76	28.02	64.7	57.3	48.9
8.56	-60.46	-56.93	-57.73	28.3	63.8	56.4	49.7
8.67	-59.76	-56.93	-57.88	27.93	65.8	60.2	56.7
8.56	-58.66	-56.72	-57.79	28.14	64.5	56.8	51.6
8.64	-60.35	-56.98	-57.58	28.02	63.8	56.3	50.9
8.65	-60.49	-57.08	-58.03	28.05	65.8	59.2	50
8.58	-59.29	-56.98	-57.64	28.05	64	56.5	50.9
8.63	-59.98	-57.03	-57.76	28.14	63.6	56	52.1
8.54	-58.52	-56.77	-57.88	28.08	65	57.5	48.3
8.56	-59.47	-56.82	-57.48	28.11	63.7	56.4	51.9
8.66	-60.2	-57.03	-57.76	27.96	66	60.5	51
8.59	-59.73	-57.29	-57.67	28.08	64.2	56.8	50.4
8.53	-60.09	-56.56	-57.76	28.02	63.6	56.3	50.2
8.64	-59.43	-56.25	-57.48	27.96	65.6	58.5	47.5
8.68	-59.25	-57.08	-57.73	28.17	64	56.4	50.5
8.64	-59.98	-56.3	-57.91	28.08	63.8	56.7	48.7
8.56	-59.14	-57.65	-57.64	28.02	64.7	57.3	49.5
8.54	-59.65	-56.98	-57.61	28.08	63.7	56.2	50.3

8.62	-60.2	-56.41	-57.79	27.93	65.8	60.5	47.9
8.56	-58.59	-57.03	-57.67	27.93	64.2	56.8	49.5
8.63	-60.05	-55.84	-57.7	28.05	63.7	56.1	48.4
8.64	-60.09	-56.82	-57.88	27.99	64.9	57.8	50.2
8.58	-60.02	-56.93	-57.42	28.02	64.1	56.5	54.3
8.67	-60.13	-57.08	-57.79	27.9	65.4	59	51.3
8.55	-61.3	-57.29	-57.64	28.05	64.8	57.1	49.6
8.56	-60.16	-57.24	-57.48	27.93	63.9	56.3	53.2
8.64	-59.76	-56.51	-57.55	27.9	66	59.8	50.2
8.62	-60.24	-56.46	-57.64	27.99	64.8	56.7	49.8
8.64	-60.16	-56.56	-57.79	27.93	64.3	56.2	49
8.54	-58.66	-56.93	-57.7	27.96	65.9	58.2	50.5
8.57	-58.26	-56.15	-57.94	27.96	64.9	56.6	49.3
8.58	-60.16	-56.93	-57.7	27.87	65.3	58.2	51.1
8.59	-59.58	-57.19	-57.45	28.02	65.4	57.1	52
8.56	-59.03	-57.08	-57.48	27.99	64.1	56.4	49.5
8.6	-59.58	-57.6	-57.55	27.87	66.4	60.5	54.1
8.66	-60.42	-57.13	-57.79	27.96	64.6	56.8	49.2
8.56	-58	-57.55	-57.64	28.05	63.8	56.1	48.4
8.59	-59.43	-56.77	-57.58	27.84	65.8	58.6	47.7
8.58	-59.84	-57.24	-57.64	27.99	64	56.6	51.2
8.68	-59.03	-56.98	-57.39	27.96	63.6	56.5	50.5
8.5	-57.42	-56.15	-57.76	27.84	64.6	57.3	50.8
8.53	-58.08	-56.93	-57.7	28.02	63.6	56.3	47.9
8.61	-60.05	-57.65	-57.3	27.84	65.8	60.2	51.7
8.85	-59.87	-56.56	-57.33	27.99	63.9	56.8	50.5
8.64	-58.04	-56.51	-57.64	27.96	63.5	56.1	50.9
8.75	-59.8	-56.46	-57.97	27.9	65.1	58.2	49.6
8.84	-59.62	-56.77	-57.36	27.99	63.6	56.4	48.9
9.07	-60.13	-57.19	-57.45	27.87	64.5	58.2	50
9	-59.47	-57.29	-57.36	27.87	64.5	57.1	52.4
9.25	-60.31	-56.77	-57.42	27.81	63.5	56.2	50.1
7.86	-59.21	-56.93	-57.7	27.93	65.4	59.7	51.8
8.03	-60.24	-56.56	-57.55	28.02	63.6	56.5	51.3
8.62	-59.8	-57.81	-57.48	28.05	64.1	57.4	50.5
8.59	-60.46	-57.03	-57.39	27.96	64.4	57.1	49.5
8.61	-59.95	-56.77	-57.3	28.05	63.5	56.3	49.5
8.55	-60.27	-57.13	-57.67	27.87	65.8	60.6	49.5
8.48	-56.79	-57.39	-57.36	28.02	64	56.6	45.4
8.55	-60.16	-56.61	-57.42	27.9	63.5	56.1	49.7
8.55	-57.71	-57.13	-57.36	27.81	64.9	57.8	52.7
8.57	-59.84	-56.36	-57.55	27.81	64	56.2	51.2
8.6	-59.84	-56.82	-57.64	27.72	65.8	59.9	50.1
8.61	-59.62	-56.36	-57.64	27.78	64.2	56.5	51.4
8.63	-59.51	-56.36	-57.58	27.78	63.5	56	47
8.54	-58.48	-56.46	-57.48	27.72	65.1	58.2	49.5
8.66	-60.27	-56.93	-57.42	27.78	64.4	56.4	49

8.58	-59.84	-57.19	-57.27	27.56	65.8	59.9	47.5
8.62	-59.03	-56.87	-57.45	27.78	64.7	56.9	52.3
8.53	-57.64	-56.36	-57.58	27.81	63.9	56.2	51.4
8.54	-59.65	-56.72	-57.3	27.69	65.9	59.2	45.6
8.6	-59.8	-56.56	-57.3	27.78	64.3	56.5	49.5
8.59	-59.76	-56.98	-57.24	27.75	63.8	56.1	49
8.62	-58.59	-56.25	-57.42	27.75	65.4	57.9	41.9
8.67	-60.16	-56.41	-57.39	27.75	63.9	56.6	49.9
8.76	-58.59	-56.46	-57.61	27.66	66.3	60.3	49.5
9.01	-59.58	-56.98	-57.55	27.81	64.6	56.7	50.5
8.62	-60.13	-56.46	-57.33	27.66	63.9	56.3	50
7.98	-60.05	-56.82	-57.45	27.81	66	59.2	50.1
7.84	-59.54	-56.2	-57.42	27.93	64.7	56.5	50.2
7.76	-58.88	-56.46	-57.67	27.84	64.2	56.2	49.9
8.46	-57.23	-57.13	-57.27	27.87	65.6	57.6	50.7
8.45	-57.82	-56.51	-57.45	27.93	64.3	56.6	51.4
8.54	-58.66	-56.04	-57.48	27.87	66.1	60.2	49.1
8.59	-59.29	-56.46	-57.36	27.93	64.9	56.8	49.5
8.57	-59.58	-56.87	-57.36	27.96	64.5	56.3	52.9
8.55	-60.24	-56.2	-57.45	27.84	66.2	60.6	50.8
8.63	-59.29	-56.41	-57.61	27.96	64.4	56.8	47.4
8.58	-59.58	-56.04	-57.48	27.99	63.6	56.1	48.8
8.58	-59.4	-56.46	-57.39	27.81	65.9	58.7	51.1
8.52	-59.65	-56.87	-57.55	27.99	64.7	56.6	49.5
8.53	-59.03	-56.36	-57.7	27.96	64.3	56.2	50.5
8.53	-59.84	-56.41	-57.58	27.84	66.3	57.9	51.2
8.55	-60.16	-57.19	-57.48	27.78	65.6	56.8	50.2
8.65	-60.02	-56.77	-57.3	27.78	64.8	56.3	50.5
8.62	-59.07	-56.56	-57.42	27.66	66.1	57.8	50.2
8.55	-58.41	-56.93	-57.15	27.69	65.1	56.7	50.1
8.6	-60.02	-56.46	-57.7	27.56	64.9	56.4	51.3
8.59	-59.51	-57.13	-57.27	27.69	66.6	57.8	50
8.61	-59.8	-56.72	-57.33	27.69	66.4	56.7	50.5
8.54	-59.8	-56.98	-57.42	27.56	66.5	56.4	50.3
8.62	-59.91	-56.98	-57.55	27.56	68.3	58.2	50.9
8.64	-59.58	-57.08	-57.48	27.56	67.2	57.1	52.2
8.58	-59.1	-56.93	-57.48	27.69	66.8	56.4	50.3
8.64	-59.62	-56.87	-57.39	27.56	68.7	59.8	51.9
8.57	-59.21	-56.1	-57.45	27.66	67.9	57.2	49.8
8.64	-59.51	-57.13	-57.3	27.66	67.6	56.8	51.9
8.67	-59.62	-56.77	-57.61	27.47	69.7	60.3	49.9
8.69	-59.54	-56.15	-57.33	27.53	69	58	51
8.71	-60.24	-56.61	-57.42	27.53	69	57.2	49
8.82	-59.47	-55.99	-57.42	27.69	68.2	57	50.2
9.24	-59.87	-56.87	-57.61	27.5	69.4	58.6	51.1
8.27	-58.15	-56.98	-57.45	27.69	68.5	57.1	52.3
8.4	-59.65	-56.51	-57.24	27.78	68.2	56.9	50

8.51	-57.6	-56.77	-57.61	27.72	70.3	60.4	50
8.62	-59.32	-56.3	-57.73	27.75	69.1	57.4	51.9
8.48	-59.87	-56.72	-57.36	27.81	68.8	57	52.6
8.65	-59.47	-57.24	-57.27	27.47	69.9	59	50.7
8.61	-60.09	-56.46	-57.39	27.5	69.9	58.1	51.6
8.65	-59.76	-56.77	-57.3	27.44	69.1	57.2	49.7
8.62	-58.85	-56.93	-57.58	27.56	68.5	56.9	50.4
8.65	-59.36	-56.25	-57.64	27.47	70.1	59	47.6
8.53	-59.43	-56.98	-57.45	27.63	69.4	57.2	50.1
8.55	-55.95	-56.51	-57.48	27.5	68.9	57	49.1
8.57	-59.65	-55.99	-57.64	27.53	70.7	60.7	52.7
8.56	-58.59	-55.73	-57.55	27.56	69	57.8	47.3
8.58	-60.53	-56.46	-57.39	27.56	68.6	57.2	48.6
8.67	-59.65	-56.41	-57.58	27.5	68.9	57.9	51.9
8.55	-58.44	-57.24	-57.42	27.53	69.3	58.1	49.6
8.62	-58.85	-56.98	-57.45	27.66	68.4	57.1	46.9
8.57	-59.07	-56.61	-57.64	27.66	68	57.1	49.2
8.54	-58.92	-56.77	-57.36	27.69	69.7	59.3	53
8.62	-59.54	-56.3	-57.55	27.63	68.2	57.4	51.1
8.68	-59.73	-56.46	-57.42	27.72	67.7	57.1	49.5
8.72	-59.51	-56.41	-57.79	27.56	69.7	60.7	51
8.73	-59.98	-57.39	-57.36	27.63	68.1	57.8	50
8.79	-59.62	-56.46	-57.48	27.75	67.2	57.2	48.6
8.92	-59.91	-56.36	-57.39	27.72	67	56.8	51.6
8.98	-58.04	-56.51	-57.42	27.69	68.4	58.2	49
8.49	-58.96	-56.56	-57.48	27.84	66.8	57.2	49
8.65	-59.76	-56.2	-57.67	27.9	66.7	56.8	50
8.57	-59.76	-56.46	-57.58	27.84	68.2	59.5	51.6
8.52	-59.25	-56.98	-57.36	27.96	66.8	57.2	47.8
8.62	-59.73	-56.87	-57.58	27.96	66	56.8	53
8.6	-60.05	-56.82	-57.27	27.87	67.9	60.1	50.2
8.46	-58.41	-56.25	-57.61	27.99	66.7	57.4	50.8
8.53	-59.07	-56.93	-57.58	27.78	66.3	56.8	49.9
8.56	-57.97	-56.93	-57.58	27.9	65.9	56.4	50.5
8.61	-59.73	-56.51	-57.33	27.78	67.2	58.4	47.7
8.64	-59.29	-56.46	-57.45	27.78	66.3	57	49.9
8.55	-59.65	-56.3	-57.45	27.81	65.9	56.7	49.7
8.58	-58.77	-56.87	-57.27	27.69	67.9	60.7	49.7
8.65	-59.43	-56.77	-57.45	27.78	66.6	57.1	49.2
8.58	-59.73	-56.41	-57.48	27.9	65.9	56.7	48.1
8.58	-59.25	-56.41	-57.42	27.72	67.9	60.3	48.8
8.62	-59.51	-56.56	-57.42	27.72	66.4	57.2	52.9
8.57	-59.91	-56.77	-57.36	27.81	65.8	56.8	48.2
8.54	-59.4	-56.3	-57.85	27.72	67.9	60.4	51.8
8.6	-58.99	-56.93	-57.48	27.81	67	57.4	51
8.58	-59.91	-56.51	-57.45	27.78	66.4	56.8	50.1
8.56	-58.33	-56.41	-57.27	27.81	66	56.6	50.2

8.57	-59.8	-56.25	-57.64	27.72	67.8	58.5	50.5
8.68	-59.32	-56.87	-57.27	27.75	66.6	56.9	51.9
8.62	-58.41	-57.34	-57.67	27.9	66.4	56.5	51.6
8.52	-59.98	-56.93	-57.42	27.72	68.4	59.3	52.1
8.68	-59.73	-56.82	-57.33	27.72	66.8	57.1	48.7
8.67	-59.65	-56.51	-57.36	27.81	66.3	56.8	55.6
8.71	-59.18	-56.98	-57.45	27.69	68.3	60.4	48.9
8.78	-59.73	-57.08	-57.67	27.84	67	57.8	50.5
8.39	-58.85	-57.19	-57.58	27.9	66.4	56.8	51.3
7.97	-59.62	-56.25	-57.73	27.84	66.4	57.8	50.3
8.15	-58.63	-56.87	-57.55	27.9	66.9	57.6	48.7
7.83	-59.58	-56.72	-57.33	27.87	66.1	56.9	51.9
8.64	-60.13	-56.82	-57.45	28.02	65.3	56.6	52.6
8.65	-59.8	-57.24	-57.24	27.99	66.7	58.3	48
8.67	-60.05	-56.98	-57.58	28.05	65.4	56.8	49.5
8.62	-58.66	-56.2	-57.61	28.08	64.5	56.1	49
8.52	-59.8	-56.93	-57.42	27.96	65.9	57.9	49.6
8.5	-59.47	-56.82	-57.48	27.99	64.7	56.6	45
8.44	-59.32	-56.77	-57.55	28.08	63.7	56.2	52.3
8.57	-59.07	-56.93	-57.58	27.87	65.4	57.8	49.5
8.62	-59.73	-56.56	-57.24	27.96	63.9	56.4	48.9
8.59	-59.73	-56.51	-57.45	27.75	65	58.7	48.4
8.52	-57.16	-56.72	-57.24	28.02	64.5	57.2	52.4
8.51	-59.25	-56.51	-57.55	27.87	63.4	56.3	50.9
8.58	-59.58	-56.36	-57.58	27.78	65.8	60.4	54.2
8.57	-58.44	-57.08	-57.58	27.9	64.4	56.7	51.1
8.56	-59.98	-56.1	-57.61	27.96	64	56.1	49.9
8.61	-59.03	-56.61	-57.55	27.84	65.7	58.7	53.6
8.65	-59.21	-56.46	-57.45	27.9	64.2	56.5	51.5
8.64	-59.76	-56.56	-57.3	27.9	63.9	57.9	46.9
8.65	-59.58	-56.56	-57.33	27.96	64.4	57.1	49.7
8.67	-59.47	-56.77	-57.36	27.9	64	56.2	50.5
8.64	-59.1	-56.04	-57.55	27.78	65.8	60.5	50.1
8.61	-59.51	-56.77	-57.45	27.99	64.3	56.6	52.8
8.63	-57.67	-57.29	-57.33	27.99	63.2	56.2	50.5
8.82	-59.8	-56.61	-57.36	27.99	64.3	57.9	48.2
8.8	-59.29	-56.25	-57.64	27.99	63.7	56.4	49.8
8.84	-57.49	-56.87	-57.39	27.78	66	60.1	50.7
9.01	-60.16	-56.2	-57.64	27.93	63.5	56.8	49.2
9.02	-59.95	-56.98	-57.39	27.99	62.4	56	52.1
8.85	-58.92	-56.36	-57.55	27.81	64.4	57.6	51.1
7.75	-58.44	-57.34	-57.33	28.05	63.6	56.3	50.9
8.13	-59.73	-56.25	-57.45	27.96	66	60.3	50.7
7.85	-59.62	-56.51	-57.58	28.02	64.5	56.6	49.7
8.05	-59.76	-56.2	-57.42	27.93	64.4	56.9	50.4
7.71	-58.59	-56.3	-57.48	27.96	65	57	53
8.04	-59.65	-55.68	-57.55	28.08	63.8	56.2	50.3

8.62	-59.98	-56.98	-57.3	27.93	65.5	60.3	47.9
8.54	-56.68	-57.03	-57.76	28.05	64.1	56.3	51.8
8.47	-59.21	-56.3	-57.58	28.11	63.6	55.9	50.2
8.53	-58.44	-56.61	-57.64	27.93	64.9	57.2	50.8
8.54	-60.02	-57.13	-57.36	27.9	64	56.2	49.5
8.66	-59.62	-56.56	-57.73	27.78	66.1	60.6	49.4
8.58	-59.58	-57.34	-57.18	27.96	64.2	56.5	51.6
8.58	-58.22	-56.51	-57.15	27.96	63.1	55.9	53.2
8.62	-59.65	-56.3	-57.39	27.93	64.6	57.2	50.8
8.58	-59.25	-56.36	-57.42	27.93	63.5	56.2	51.8
8.61	-59.65	-56.56	-57.18	27.84	65.8	60.3	52.6
8.64	-58.99	-56.77	-57.24	27.87	63.8	56.3	50.1
8.56	-59.62	-55.73	-57.33	27.81	63.7	56.5	49.5
8.67	-59.21	-56.87	-57.03	27.9	64.7	57.1	50.4
8.62	-59.1	-57.03	-57.36	27.93	63.7	56	52.9
8.56	-58.77	-56.82	-57.33	27.84	65.8	59.3	52.7
8.56	-58.48	-56.56	-57.3	27.93	64.1	56.2	49.8
8.52	-57.31	-56.41	-57.42	27.78	65.3	58.5	48.8
8.56	-58.08	-56.93	-57.58	27.78	64.7	56.8	46.3
8.54	-58.63	-56.36	-57.3	27.9	64	56.1	51.9
8.51	-58.22	-56.04	-57.12	27.78	65.5	58.8	48.7
8.58	-57.75	-56.25	-57.36	27.84	64.2	56.4	52.4
8.65	-59.87	-56.61	-57.42	27.69	65.8	59.6	51.2
8.71	-59.73	-57.24	-57.39	27.87	64.8	57.1	50.2
8.71	-59.95	-56.36	-57.42	27.93	64.3	56.2	49.1
9.12	-59.54	-56.77	-57.36	27.81	66.1	58.7	49.9
9.18	-58.22	-56.77	-57.39	27.81	65	56.7	52.3
8.12	-59.14	-56.25	-57.48	27.84	66	58.3	50.8
8.63	-59.18	-56.56	-57.42	27.96	66.3	57.3	51
8.64	-59.18	-56.41	-57.42	28.05	65.6	56.6	50.1
8.6	-59.54	-56.46	-57.48	27.81	67.8	60.6	51.4
8.59	-59.29	-56.72	-57.33	27.93	66.3	57	50.1
8.53	-59.87	-56.93	-57.33	27.93	65.8	56.4	50
8.59	-60.02	-56.25	-57.55	27.81	67.7	58	49.3
8.53	-58.59	-57.19	-57.3	27.69	66.6	56.9	50
8.57	-59.84	-56.77	-57.58	27.66	67.1	57.9	51.3
8.65	-59.43	-56.41	-57.45	27.63	68.1	58	52.5
8.6	-59.03	-56.61	-57.36	27.69	67.4	57	50.4
8.5	-59.58	-56.87	-57.36	27.56	67.5	57.1	47.6
8.56	-58.44	-57.03	-57.58	27.66	69	58.1	51
8.52	-59.95	-56.82	-57.21	27.53	68.1	57.1	50.5
8.56	-58.77	-56.36	-57.39	27.63	67.9	56.7	51.4
8.59	-59.32	-56.77	-57.27	27.53	69.4	58.9	49.6
8.6	-59.91	-57.03	-57.18	27.47	68.9	57.2	51.6
8.66	-60.02	-57.08	-57.18	27.56	68.9	57	49.9
8.62	-59.65	-56.41	-57.39	27.38	71.3	61.1	50.1
8.66	-59.54	-56.77	-57.33	27.56	70	58	51.7

8.63	-58.99	-55.99	-57.27	27.56	69.8	57.4	46.2
8.59	-58.22	-56.56	-57.33	27.47	69.8	57.9	49.9
8.62	-59.25	-55.94	-57.12	27.41	71.2	58.5	50
8.64	-59.32	-56.41	-57.3	27.47	70.1	57.6	51.8
8.76	-59.62	-56.46	-57.33	27.5	69.9	57.4	51.9
8.97	-59.73	-56.1	-57.24	27.35	72	59.8	50
8.68	-59.84	-56.56	-57.39	27.35	70.9	57.9	50.7
7.81	-59.51	-55.99	-57.3	27.53	70.4	57.3	50.5
8.51	-59.62	-56.72	-57.12	27.38	72.7	60.9	49
8.51	-57.56	-56.98	-57.18	27.53	71.6	58.3	50.4
8.5	-59.58	-56.36	-57.48	27.5	71.5	57.6	49
8.58	-59.47	-56.15	-57.15	27.5	71	57.3	48.2
8.64	-59.54	-56.82	-57.24	27.47	72.4	59.2	51.5
8.53	-59.32	-56.3	-57.55	27.63	71.4	58.1	48.8
8.56	-57.82	-56.41	-57.15	27.41	71	57.6	50.1
8.53	-59.58	-56.41	-57.42	27.35	70.8	57.3	50.9
8.62	-59.36	-56.87	-57.42	27.23	72.3	58.9	53.9
8.66	-59.1	-56.61	-57.21	27.35	71.3	58.1	50.3
8.59	-59.65	-56.36	-57.3	27.38	70.8	57.6	51
8.55	-59.32	-57.5	-57.33	27.44	70.8	57.4	52
8.59	-59.54	-57.24	-57.12	27.32	72.1	58.7	48.9
8.65	-59.62	-56.72	-57.24	27.44	70.8	57.9	51.3
8.56	-57.78	-56.15	-57.36	27.38	70.5	57.6	49.6
8.51	-59.25	-56.3	-57.48	27.38	70.3	57.3	50.3
8.65	-59.03	-56.3	-57.39	27.35	71.6	59	49.8
8.65	-58.63	-56.2	-57.3	27.35	70.2	58	51.9
8.6	-59.76	-55.99	-57.45	27.44	69.8	57.5	47.5
8.55	-58.3	-56.46	-57.15	27.32	69.2	57.2	49.6
8.62	-58.99	-56.2	-57.24	27.38	71.1	59	47.3
8.58	-59.84	-56.72	-57.33	27.47	70	57.9	50
8.53	-56.79	-56.82	-57.27	27.47	69.1	57.4	49.7
8.66	-59.29	-56.72	-57.21	27.44	69	57.2	51.1
8.65	-59.4	-55.94	-57.27	27.5	70.4	59.2	48.6
8.53	-58.04	-56.41	-57.24	27.44	69	57.8	51.2
8.65	-58.96	-56.36	-57.42	27.5	68.4	57.4	49.2
8.65	-59.76	-57.19	-57.09	27.5	68.1	57.2	51
8.56	-58.19	-56.41	-57.33	27.47	69.4	58.6	50.4
8.64	-59.87	-56.3	-57.15	27.44	68.3	57.6	49.1
8.59	-59.25	-56.1	-57.36	27.56	68.1	57.3	49.9
8.62	-58.33	-56.98	-57.27	27.32	69.7	60.3	52.7
9.16	-59.95	-56.2	-57.45	27.47	68.5	58.2	48.9
7.89	-58.26	-56.15	-57.45	27.72	67.7	57.5	53.2
8.57	-60.02	-56.46	-57.27	27.72	67.1	57.1	51.1
8.47	-59.29	-56.61	-57.21	27.66	70	59.6	52.1
8.5	-57.49	-56.77	-57.12	27.72	68.3	57.6	50
8.47	-59.43	-57.08	-57.3	27.75	67.9	57.2	52.1
8.62	-58.92	-56.46	-57.45	27.5	68.5	58.7	49

8.64	-59.73	-56.51	-57.06	27.56	68.7	58.1	51
8.66	-59.29	-57.03	-57.48	27.5	67.8	57.4	48.7
8.61	-60.02	-56.82	-57.33	27.56	67.7	56.8	51.9
8.58	-59.03	-56.82	-57.33	27.47	69.4	59.2	49.8
8.55	-59.03	-56.72	-57.18	27.41	68.7	57.4	53.6
8.6	-59.32	-56.1	-57.36	27.56	67.4	57.2	50.7
8.55	-59.21	-56.82	-57.09	27.38	69	60.7	48.2
8.56	-59.62	-56.61	-57.15	27.47	67.4	57.9	48.1
8.62	-59.36	-56.51	-57.24	27.47	66.8	57.1	49
8.68	-59.62	-56.98	-57.3	27.56	66.6	56.9	50.3
8.68	-58.63	-55.99	-57.36	27.56	67.9	58.2	52.2
9.01	-59.21	-55.99	-57.15	27.53	66.9	57.1	51.2
8.92	-59.4	-56.25	-57.45	27.5	66.4	57	48.4
7.98	-59.03	-56.87	-57.06	27.63	68.3	59.8	48.6
8.59	-59.03	-56.51	-57.42	27.75	66.9	57.2	51.4
8.62	-58.85	-56.25	-57.21	27.75	66.7	57	50.1
8.63	-59.58	-56.51	-57.39	27.66	67.7	59.5	49.6
8.5	-59.21	-56.36	-57.39	27.75	66.8	57.4	49.3
8.52	-59.29	-56.1	-57.24	27.75	66.1	57	51
8.45	-58	-56.46	-57.27	27.84	65.8	56.5	51.1
8.62	-58.74	-56.72	-57.45	27.53	67.2	58.4	49.1
8.64	-59.43	-56.87	-57.27	27.69	66	57.1	51
8.53	-59.84	-56.46	-57.39	27.56	66.6	56.6	51.2
8.65	-59.62	-56.25	-57.15	27.44	69.1	60.7	50.7
8.64	-59.36	-56.87	-57.45	27.47	67.8	57.4	51.6
8.55	-58.59	-56.3	-57.3	27.53	67.5	56.8	50.9
8.61	-59.58	-56.3	-57.03	27.41	67.9	57.6	55.3
8.63	-59.51	-56.2	-57.24	27.44	68.7	58.1	49
8.57	-59.54	-56.56	-57.15	27.56	67.9	57.1	47.6
8.65	-59.4	-56.82	-57.24	27.47	67.5	56.5	48.1
8.53	-57.71	-56.72	-56.9	27.35	69	59.3	52.1
8.67	-59.29	-56.61	-57.33	27.41	68	57.1	50.9
8.55	-59.87	-56.61	-57.15	27.47	67.6	57.1	50.2
8.68	-59.73	-56.82	-57.06	27.23	70.2	60.6	55.2
8.63	-59.18	-56.1	-57.48	27.35	68.9	57.9	44.8
8.64	-58.88	-56.41	-57.21	27.5	67.8	57.1	51.7
8.87	-58.08	-56.2	-57.24	27.47	67.6	56.8	49
8.8	-59.36	-56.72	-57.36	27.44	68.9	58.3	52.9
8.97	-58.55	-56.51	-57.27	27.41	67.9	57.3	50.9
8.26	-59.18	-56.25	-57.06	27.53	67.2	56.8	51.3
8.47	-58.33	-56.82	-57.15	27.56	69	59.9	50.5
8.56	-58.74	-55.47	-57.3	27.63	67.4	57.2	51.2
8.57	-59.07	-56.36	-57.3	27.66	66.9	56.8	47.8
8.66	-59.21	-55.94	-57.33	27.5	68.3	59.2	47.8
8.48	-59.18	-56.56	-57.06	27.53	67.8	57.6	51.6
8.57	-59.14	-56.15	-57	27.56	66.7	57.1	52.9
8.5	-58.52	-55.94	-57.12	27.5	66.5	56.8	49.9

8.61	-58.92	-56.3	-57.24	27.44	68.1	58.4	50.7
8.52	-59.4	-56.72	-57.21	27.41	66.8	57	49.1
8.61	-59.21	-56.93	-57.03	27.44	66.3	56.6	51.2
8.57	-59.76	-57.19	-57.24	27.29	68.3	60.6	49.4
8.57	-58.37	-55.58	-57.24	27.38	67.2	57.4	51
8.62	-59.21	-56.82	-56.75	27.41	66.5	56.9	53.1
8.62	-59.21	-56.87	-57.09	27.32	66.5	57.4	50.1
8.66	-59.32	-56.2	-57.21	27.41	67.2	57.9	50.9
8.58	-59.1	-56.1	-57.15	27.35	66.4	57.1	49.5
8.54	-58.66	-56.56	-57.18	27.41	66	56.7	52.1
8.62	-59.51	-56.25	-57.03	27.32	67.7	58.2	47
8.66	-59.76	-56.04	-57.24	27.44	66.6	57.1	49.7
8.56	-59.54	-55.78	-57.15	27.38	66.2	56.8	50.7
8.62	-59.43	-57.29	-57.03	27.29	68.6	60.6	50.5
8.57	-59.95	-56.46	-57.27	27.41	66.9	57.2	50.1
8.69	-59.73	-56.3	-57.18	27.41	66.4	56.7	51.7
8.79	-59.47	-56.61	-57.27	27.32	67.5	58.6	50.1
9.27	-59.98	-56.61	-57.12	27.2	67.6	57.9	52.8
8.18	-59.4	-56.41	-57.18	27.41	66.8	57.1	47.5
7.89	-59.73	-57.24	-57.18	27.47	66.5	56.9	52.1
8.6	-59.54	-56.77	-57.15	27.44	68.1	58.8	50.4
8.52	-59.03	-56.56	-57	27.47	67	57.1	49.4
8.55	-59.36	-56.87	-57.15	27.56	66.7	56.9	50.5
8.61	-58	-57.13	-57.3	27.29	68.7	60.6	46.8
8.55	-58.88	-56.41	-57.27	27.35	67	57.6	49.2
8.65	-59.84	-56.56	-57.12	27.35	66.8	57	48.4
8.67	-59.73	-56.56	-57.12	27.29	66.7	57.3	54.5
8.69	-59.32	-56.3	-57	27.29	68.1	58	51.2
8.68	-59.73	-56.51	-57.33	27.23	67	57.1	49.9
8.65	-59.29	-56.36	-57.27	27.35	66.8	56.9	50.8
8.59	-59.65	-56.2	-57.06	27.32	68.6	59.6	48.8
8.66	-59.25	-56.77	-57	27.32	67.4	57.3	49.3
8.56	-58.92	-55.78	-57.27	27.35	66.9	57.1	53.9
8.57	-59.18	-57.08	-57.27	27.26	68.9	60.4	51.3
8.65	-60.09	-56.56	-57.03	27.32	67.8	57.9	47.9
8.69	-59.18	-56.36	-57.24	27.29	67	57.1	51.7
8.7	-58.96	-56.98	-57.12	27.35	66.8	57	47.5
8.89	-59.8	-55.99	-56.97	27.32	68.3	58.5	51.1
8.03	-59.87	-57.03	-56.94	27.41	67.6	57.3	47.9
8.56	-58.37	-56.61	-57.3	27.47	66.9	56.8	52.9
8.57	-59.43	-55.99	-57.33	27.38	69	60.1	48.4
8.5	-59.21	-56.51	-57.12	27.35	67.9	57.2	50.4
8.62	-59.62	-55.89	-57.27	27.44	67.5	57	51.9
8.56	-58.77	-56.1	-57.15	27.14	68.7	59.4	50
8.54	-58	-56.3	-57.21	27.2	68.1	57.8	48.4
8.55	-59.25	-56.04	-57.15	27.26	67.9	57.1	51.4
8.67	-59.21	-56.77	-57.15	27.26	67.4	57	49.4

8.53	-57.05	-56.87	-56.94	27.17	68.8	58.8	51.1
8.6	-59.25	-56.3	-56.97	27.23	67.9	57.1	49.2
8.54	-59.07	-55.84	-57.39	27.32	67.5	57.1	51.3
8.64	-59.47	-56.87	-56.9	27.11	69.7	60.5	50.5
8.63	-59.62	-56.72	-56.97	27.14	68.3	57.8	50
8.67	-59.21	-56.2	-57.03	27.17	67.9	57.4	47.6
8.57	-58.99	-56.56	-57.24	27.11	68.5	58.4	53.1
8.76	-59.1	-55.94	-57.21	27.17	68.7	58.5	52.3
9.27	-57.97	-56.82	-57	27.14	68.1	57.3	50.7
8.41	-58.41	-56.36	-57.24	27.35	67.8	57.1	50.7
8.65	-59.84	-56.25	-57	27.32	69.3	59.3	51.3
8.5	-59.21	-56.15	-57.15	27.38	68.4	57.5	47.9
8.57	-58.74	-55.89	-57.09	27.32	68.1	57.2	53.1
8.55	-58.55	-56.2	-57.27	27.01	69.3	59.5	50.7
8.64	-59.14	-56.56	-57.03	27.14	69.3	58.2	49.6
8.67	-59.21	-56.51	-56.9	27.11	68.9	57.5	51.6
8.56	-58.85	-56.04	-57.15	27.14	68.5	57.2	54.4
8.62	-59.43	-56.93	-57	27.05	70.6	60.7	50.4
8.65	-59.65	-56.3	-57.12	27.11	69	57.8	51.3
8.67	-59.4	-56.41	-57.24	27.17	68.6	57.8	49.9
8.64	-58.85	-56.51	-57.09	27.17	68.3	57.1	51
8.73	-58.74	-56.36	-57	27.01	70	59.5	49.3
8.97	-58.99	-56.61	-57.09	27.2	69	58.1	53
7.94	-58.26	-56.36	-56.97	27.32	68.5	57.4	48.6
8.56	-59.29	-56.1	-57.21	27.26	68.3	57.1	54.9
8.61	-59.29	-56.56	-57.09	27.29	70.1	59.2	50
8.41	-59.14	-56.04	-57.12	27.41	69.2	57.8	52.2
8.65	-58.99	-56.72	-56.97	27.11	68.7	57.5	47.1
8.56	-57.09	-56.3	-57.21	27.14	68.6	57.1	51.2
8.62	-59.1	-56.15	-57.18	27.08	70.1	59.3	51.4
8.55	-58.88	-56.36	-57.18	27.26	69.2	57.6	49.9
8.65	-60.09	-56.72	-57.15	27.2	68.8	57.4	47.3
8.62	-58.55	-56.04	-57.03	27.23	68.5	57.3	50
8.57	-58.08	-56.41	-57.15	27.23	70.6	59.1	48.4
8.66	-59.21	-56.36	-57.21	27.2	69.2	58	46.7
8.74	-59.91	-56.25	-57.06	27.14	68.9	57.5	50.5
8.5	-58.96	-56.77	-57.12	27.38	68.7	57.1	48.8
8.6	-58.74	-56.46	-57.24	27.35	70.2	58.9	49.9
8.54	-59.07	-55.58	-57.18	27.41	69.1	57.8	49.6
8.61	-59.14	-56.15	-57.3	27.26	68.7	57.5	49.3
8.64	-58.99	-56.51	-56.94	27.2	68.5	57.1	46.1
8.59	-58.92	-56.15	-57.09	27.17	70.1	59.4	48.1
8.58	-59.36	-55.99	-57.21	27.23	68.8	57.9	47.4
8.57	-58.33	-55.84	-57.18	27.32	68.5	57.5	50.5
8.53	-59.54	-56.25	-57.12	27.23	68.3	57.1	50.1
8.62	-57.6	-55.89	-57.33	27.23	70.1	59.7	51.1
8.62	-59.1	-56.51	-57.06	27.26	68.8	57.9	50.8

8.68	-59.51	-56.2	-57.3	27.17	68.5	57.4	50.9
8.74	-59.54	-56.56	-57	27.17	68.5	57.9	48.3
8.91	-59.84	-56.2	-57.24	27.23	69.3	58.7	53.4
8.39	-57.82	-55.94	-57.45	27.38	68.4	57.8	49.6
8.53	-59.73	-56.15	-57.21	27.38	67.9	57.4	49.5
8.53	-58.33	-56.15	-57.12	27.44	67.6	57.1	51.6
8.64	-59.32	-56.2	-57.18	27.23	69.2	60.1	49.9
8.53	-59.25	-55.94	-57	27.26	68	57.6	45.1
8.52	-59.84	-57.24	-57.06	27.35	67.4	57.3	50.3
8.66	-59.18	-56.56	-57.06	27.32	66.8	57	53.8
8.57	-59.29	-55.94	-57.39	27.23	68.2	58.5	51.2
8.62	-58.85	-56.98	-57.24	27.32	66.9	57.6	50.4
8.65	-59.73	-56.51	-57.03	27.38	66.5	57.1	50
8.69	-59.36	-56.87	-57.18	27.26	68.3	60.6	51.1
8.69	-59.14	-56.46	-57.21	27.32	66.8	57.9	49.5
8.8	-60.02	-56.46	-57.33	27.41	66	57.4	50.2
9.33	-59.43	-57.29	-57.09	27.32	65.5	57	51.6
8.66	-59.43	-56.51	-57.21	27.5	66.5	58.3	50.5
8.62	-59.76	-56.51	-57.06	27.66	65.5	57.1	51.2
8.5	-58.96	-56.56	-57.15	27.69	64.7	56.9	49.8
8.54	-59.25	-56.2	-57.21	27.47	66.5	59.9	47
8.66	-59.18	-56.2	-57.27	27.53	65	57.1	50
8.65	-58.85	-56.87	-57.21	27.47	64.4	56.7	51.2
8.57	-57.82	-56.98	-57.24	27.47	65.7	59.1	49.6
8.65	-59.65	-56.82	-57.27	27.56	64.8	57.3	50.1
8.61	-58.48	-56.56	-57.42	27.56	63.9	56.8	48.7
8.55	-57.93	-55.84	-57.24	27.53	63.9	56.7	49.5
8.56	-59.47	-56.72	-57.27	27.44	65.5	58	48.4
8.55	-58.48	-56.72	-57.15	27.56	64.1	56.8	50.3
8.61	-59.8	-56.36	-57.12	27.63	63.6	56.4	52.3
8.64	-59.73	-56.15	-57.12	27.53	65.4	58.2	53.9
8.58	-57.23	-57.5	-57.21	27.53	64.3	56.8	49
8.7	-59.14	-55.94	-56.9	27.63	63.7	56.5	49.5
8.95	-58.22	-55.78	-57.21	27.63	65.6	58.5	49.3
8.56	-59.65	-57.08	-57.12	27.81	64.7	56.7	51.7
8.57	-58.92	-56.46	-57.3	27.75	64.2	56.3	49.5
8.5	-58.44	-56.77	-57.27	27.81	65.8	58.5	50.5
8.53	-59.03	-56.3	-57.09	27.75	64.5	56.9	51.8
8.61	-59.07	-56.2	-57.33	27.72	64	56.4	51.4
8.59	-59.76	-56.15	-57.09	27.63	65.6	58.2	49.8
8.54	-60.02	-56.41	-57.39	27.63	64.5	56.7	47.8
8.67	-59.84	-56.56	-57.09	27.56	63.8	56.9	48.2
8.62	-59.03	-56.77	-57.12	27.63	65.3	57.5	49.6
8.63	-59.07	-56.3	-57.55	27.69	64.3	56.6	50
8.61	-59.07	-56.51	-57.18	27.41	64.7	57.4	53.3
8.55	-59.32	-56.98	-57.12	27.66	65.3	57.3	52.3
8.52	-58.66	-55.63	-57.15	27.69	64.3	56.5	52.1

8.53	-57.82	-57.03	-57.06	27.47	65.5	58.7	50.2
8.59	-58.26	-57.13	-57	27.56	65.4	57.1	50.5
8.9	-59.07	-57.03	-57.24	27.63	64.9	56.5	50.3
8.61	-58.08	-55.58	-57.42	27.56	67	60.3	49.5
8.53	-58.74	-56.46	-57.24	27.78	65.6	57	49.1
8.54	-59.36	-56.87	-57.06	27.66	64.7	56.4	51.6
8.52	-58.63	-56.04	-57.12	27.29	67.2	60.2	51.3
8.6	-60.02	-57.03	-57.09	27.5	65.5	56.8	50.4
8.65	-59.65	-56.72	-56.97	27.63	65	56.3	48.8
8.64	-59.54	-56.3	-57.18	27.5	66.9	59.1	50.8
8.63	-59.43	-56.56	-57.15	27.5	65.5	56.8	44.8
8.55	-59.25	-56.1	-57.27	27.63	65.6	56.4	48.4
8.65	-58.37	-56.61	-57	27.53	67.1	58.9	50.4
8.61	-59.03	-56.61	-57.3	27.44	65.7	57	53.4
8.66	-59.25	-55.94	-57.09	27.56	65.8	56.5	49.9
8.63	-59.51	-56.3	-57.21	27.5	66.8	58	49.5
8.93	-58.19	-56.41	-56.97	27.5	66	56.7	51
8.44	-59.8	-56.25	-57.18	27.47	65.8	57	49.2
8.55	-58.66	-56.04	-57.42	27.66	66.7	57.6	48.3
8.57	-59.1	-56.2	-57.06	27.69	66.1	56.8	50.5
8.53	-60.09	-56.25	-57.21	27.72	66.3	57.2	51.6
8.64	-59.07	-56.82	-57.03	27.44	67.5	57.6	50.8
8.59	-58.52	-56.41	-57.27	27.53	66.9	56.8	51.7
8.57	-57.93	-56.56	-57.39	27.38	67.5	57.8	52.1
8.61	-58.74	-56.1	-57.3	27.44	67	57.6	52.2
8.65	-59.84	-56.56	-57.18	27.56	66	56.8	49.4
8.62	-59.1	-56.04	-57.3	27.53	65.6	56.6	47.9
8.64	-59.25	-56.93	-57.24	27.5	67.2	58.8	50.9
8.62	-59.4	-56.77	-57.24	27.63	66.1	57	51.6
8.62	-59.47	-56.46	-57.3	27.53	65.6	56.6	49
8.65	-59.47	-56.3	-57.12	27.5	67.6	60.1	51.6
8.65	-58.88	-56.61	-57.09	27.66	66.2	57.1	51.3
8.67	-58.85	-56.82	-57.27	27.5	65.8	56.6	52
8.67	-58.66	-55.94	-57.21	27.47	67.1	58.7	49
8.65	-59.84	-56.36	-57.42	27.66	66	57.1	50.4
8.66	-58.96	-56.46	-57.03	27.66	65.8	56.7	48.1
8.7	-59.18	-56.82	-57.21	27.47	67.8	60.1	51.2
8.79	-58.55	-56.56	-57.27	27.53	66.4	57.1	52
9.12	-59.18	-56.72	-57.12	27.63	66	56.8	52.3
8.81	-58.85	-55.78	-57.3	27.35	68.1	60.3	51.3
8.51	-57.12	-56.93	-57.06	27.69	67.4	57.4	51.8
8.54	-57.71	-56.3	-57.09	27.56	67.4	56.8	49.5
8.53	-58.3	-56.41	-57.06	27.56	67.8	56.5	52.8
8.56	-58.7	-56.56	-57.12	27.53	70.1	58.6	51.3
8.58	-58.48	-56.77	-57.33	27.38	69	57.3	51.4
8.61	-58.41	-56.61	-57.21	27.44	68.8	57.1	48.9
8.56	-56.9	-56.98	-57.3	27.29	71.2	60.7	51.8

8.67	-58.7	-56.51	-57.12	27.38	70.1	57.8	49.9
8.54	-59.58	-56.46	-57.36	27.38	70.2	57.1	49
8.54	-59.54	-56.77	-57.18	27.26	71.3	58.5	49.8
8.65	-58.66	-56.2	-57.48	27.29	72.2	58.3	50.5
8.57	-58.66	-56.25	-57.18	27.23	71.1	57.5	50.8
8.54	-57.38	-56.3	-57.12	27.5	70.6	57.1	49.8
8.61	-58.7	-57.03	-57.27	27.29	72.5	59.3	49.6
8.56	-58.52	-56.1	-57.06	27.32	72	57.6	53.1
8.57	-58.48	-57.19	-57.15	27.38	71.5	57.3	46.9
8.63	-59.18	-57.6	-57.24	27.17	74	61.1	50.7
8.79	-58.85	-56.41	-57.21	27.29	72.7	58.2	50.2
8.34	-59.32	-55.94	-57.27	27.53	71.2	57.3	46.7
8.14	-59.32	-56.56	-57.24	27.44	71.6	57.8	54.1
8.57	-58.74	-56.46	-57.21	27.5	71.9	58.4	48.3
8.66	-59.8	-56.93	-57.18	27.63	70.1	57.3	50.7
8.61	-59.03	-56.25	-57.03	27.75	69.4	57	48.8
8.49	-59.32	-56.15	-57.3	27.47	71.9	59.2	51.1
8.45	-57.2	-56.25	-57.03	27.69	70.9	57.6	49.8
8.66	-59.54	-56.87	-57.21	27.53	70.8	57.1	49.5
8.58	-59.58	-56.82	-57.18	27.35	72.5	61.2	50
8.54	-59.14	-56.61	-57.24	27.5	71	58.1	49.1
8.59	-58.92	-56.61	-57.12	27.5	70.3	57.3	50.3
8.65	-59.51	-56.2	-57.39	27.44	70.1	57.5	49.1
8.63	-58.77	-56.41	-57.39	27.5	70.9	58.6	51.6
8.56	-59.36	-56.25	-57.21	27.66	69.8	57.6	53
8.7	-59.51	-56.46	-57.27	27.56	69.1	57.1	54
8.56	-58.19	-56.51	-57.3	27.56	70.5	60.1	54.6
8.62	-59.58	-56.25	-57.21	27.63	69.1	57.4	48.4
8.62	-59.54	-56.98	-57.18	27.63	68.2	56.8	49.4
8.57	-58.88	-56.1	-57.21	27.53	70.1	60.9	48
8.61	-59.84	-56.56	-57.27	27.72	68.3	57.8	49.5
8.65	-58.99	-56.82	-57.3	27.81	67.7	57.2	51.6
8.68	-59.1	-55.94	-57.3	27.56	68.7	59.1	50.1
8.56	-59.73	-55.68	-57.58	27.87	68.1	58	48.3
8.6	-59.43	-56.56	-57.42	27.84	66.8	57.2	50.3
8.64	-59.47	-56.61	-57.18	27.87	66.3	56.8	46.3
8.89	-59.51	-56.61	-57.27	27.81	67.6	58.5	51
8.99	-58.7	-56.04	-57.27	27.93	66.3	57.2	45.6
7.69	-59.21	-56.41	-57.21	28.11	66.1	57.1	50.3
8.5	-57.38	-56.1	-57.45	27.9	67.2	58.2	53.3
8.65	-59.47	-56.36	-57.27	28.02	65.8	57.1	50.3
8.6	-59.21	-56.56	-57.3	28.17	65.4	56.7	50.4
8.56	-59.32	-56.15	-57.24	27.96	67.2	59	48.9
8.58	-59.73	-56.3	-57.45	27.93	65.6	57	50.4
8.53	-57.05	-57.03	-57.36	27.99	65.3	56.6	51.6
8.55	-58.48	-56.98	-57.42	27.96	66.6	58.6	52.2
8.62	-59.58	-56.77	-57.61	28.05	65.1	56.6	48.1

8.58	-58.44	-57.08	-57.24	27.81	67	61	50.9
8.6	-58.99	-56.93	-57.21	27.99	65.1	57	52.3
8.59	-59.73	-57.03	-57.42	28.05	64.7	57	50
8.53	-59.21	-56.61	-57.55	28.02	65.8	57.8	51
8.65	-59.4	-56.72	-57.33	28.11	64.5	56.6	48.1
8.57	-58.11	-56.77	-57.48	28.02	66.6	60.8	52.6
8.62	-59.62	-56.04	-57.33	28.11	64.6	57	49.5
8.67	-59.84	-57.08	-57.36	28.02	64.2	57.1	50.7
8.65	-58.48	-56.41	-57.36	28.11	65	57.6	51.4
8.71	-60.02	-56.77	-57.15	28.21	63.8	56.7	50
8.79	-59.54	-56.46	-57.24	28.08	65.7	60.4	49.6
9.35	-59.73	-56.56	-57.09	28.14	63.8	56.7	51.7
8.39	-59.07	-56.98	-57.36	28.21	65.1	60.3	50.5
8.66	-59.47	-56.87	-57.3	28.39	63.3	57	51.8
8.64	-59.62	-57.08	-57.58	28.17	64.7	60.2	49.3
8.6	-58.66	-56.87	-57.36	28.39	63.6	56.7	51.9
8.49	-59.62	-57.34	-57.3	28.21	62.8	57.4	49.4
8.55	-58.66	-56.93	-57.64	28.3	63.5	56.9	49.5
8.67	-59.1	-56.87	-57.48	28.11	63.6	58.6	52.8
8.65	-59.25	-56.3	-57.55	28.33	63.2	56.7	50.4
8.53	-59.07	-57.39	-57.45	28.21	63.2	58.4	50.3
8.63	-59.8	-57.24	-57.42	28.21	62.5	56.8	51.6
8.69	-59.62	-56.56	-57.42	28.24	62.4	57.4	52.4
8.58	-59.76	-56.61	-57.55	28.3	62.5	56.9	48.8
8.64	-59.14	-56.82	-57.45	28.3	61.5	56.3	48.2
8.62	-58.99	-56.87	-57.42	28.39	62.5	57.1	49.5
8.58	-59.76	-57.7	-57.39	28.3	61.4	55.8	51.1
8.68	-60.38	-56.77	-57.58	28.24	62.5	57.3	51.9
8.72	-59.03	-55.94	-57.55	28.27	61.8	56.4	50.3
8.66	-59.58	-55.99	-57.73	28.33	62.3	57.1	51.6
8.84	-59.47	-56.61	-57.33	28.3	61.7	56.9	49.7
9.25	-59.76	-56.51	-57.21	28.39	61.9	56.9	50.2
8.53	-59.21	-56.98	-57.3	28.51	61.7	57.2	51.6
8.62	-59.43	-56.93	-57.27	28.54	61.5	56.5	47.7
8.61	-59.84	-57.19	-57.3	28.6	60.4	55.7	48.7
8.61	-59.07	-57.03	-57.58	28.24	61.5	56.9	54.8
8.56	-58.74	-56.72	-57.48	28.48	60.3	55.7	50.4
8.6	-59.76	-56.98	-57.42	28.42	62.1	57.2	51.8
8.65	-59.65	-56.87	-57.33	28.48	60.6	55.7	51.6
8.65	-59.25	-56.56	-57.42	28.45	61.6	57.2	50.5
8.55	-58.59	-55.99	-57.3	28.57	59.9	55.6	49.6
8.62	-59.03	-56.41	-57.58	28.48	61.7	57.5	50.9
8.56	-60.31	-56.2	-57.36	28.48	60.1	55.5	51.5
8.53	-58.92	-57.19	-57.48	28.45	61.8	58.1	51.9
8.68	-58.88	-56.87	-57.61	28.45	59.9	55.6	50.5
8.62	-58.48	-57.08	-57.45	28.48	60.9	57.9	48.3
8.51	-56.9	-56.3	-57.45	28.57	59	55.1	46.6

8.65	-58.99	-56.82	-57.73	28.45	60.3	57.3	50.4
8.61	-60.09	-57.24	-57.64	28.72	59.1	55.2	50.3
8.59	-57.34	-56.82	-57.33	28.6	59.9	56.7	50.1
8.6	-59.76	-56.46	-57.64	28.48	58.5	56	47.6
8.62	-59.1	-57.13	-57.3	28.57	59.3	56	47.5
8.58	-59.8	-56.2	-57.64	28.45	60.2	58.7	51.7
8.71	-60.13	-56.51	-57.55	28.57	59.1	55.8	51.3
9.27	-59.58	-55.99	-57.58	28.39	60.7	60.1	50
7.68	-60.49	-56.46	-57.55	28.85	58.4	55.5	52
8.11	-58.66	-56.98	-57.79	28.69	59.6	59.4	51
8.59	-60.09	-56.93	-57.18	28.82	57.7	55	50.2
8.58	-59.73	-56.87	-57.39	28.75	59.2	57.5	50.9
8.47	-59.58	-56.93	-57.3	28.88	57.8	54.7	50
8.56	-59.65	-56.41	-57.55	28.51	59	56.1	53.8
8.54	-59.51	-55.99	-57.36	28.6	58.2	56.2	51.5
8.62	-59.36	-57.5	-57.48	28.66	58.5	56	50.3
8.68	-59.47	-56.46	-57.42	28.66	59.3	58.3	51.1
8.58	-58.63	-57.39	-57.33	28.72	57.7	55.2	49.8
8.61	-58.77	-56.36	-57.55	28.63	59	59.7	51.7
8.68	-59.87	-56.87	-57.58	28.75	57.1	54.7	48.2
8.58	-59.47	-55.99	-57.58	28.63	59.8	60.4	49.2
8.65	-59.14	-56.82	-57.45	28.72	57.6	54.9	51.4
8.57	-58.66	-57.19	-57.58	28.6	59.4	59.3	46.9
8.66	-59.32	-57.45	-57.42	28.66	57	54.7	50.5
8.62	-59.03	-56.15	-57.36	28.69	58.4	57.2	49.3
8.69	-58.77	-56.72	-57.58	28.75	56.9	54.4	51.7
8.91	-59.14	-56.77	-57.27	28.75	58.5	56.7	51.2
8.28	-59.98	-57.13	-57.48	28.79	57.2	55	51.8
7.78	-59.65	-56.61	-57.48	28.88	58.3	56	51.7
8.6	-59.47	-57.03	-57.36	28.85	58.1	56.7	49.6
8.62	-60.2	-56.15	-57.24	28.97	57.9	54.9	51.2
8.52	-59.87	-56.41	-57.42	28.79	59.8	60.3	51.2
8.44	-58.15	-56.36	-57.61	28.94	57.8	54.6	50.1
8.54	-59.03	-56.41	-57.36	28.72	59.7	58.1	50.5
8.54	-59.25	-57.03	-57.42	28.69	57.9	54.6	47.3
8.56	-59.76	-56.2	-57.67	28.72	60	56.7	50.7
8.66	-58.96	-56.77	-57.55	28.6	58.5	56	47.8
8.56	-57.67	-56.3	-57.88	28.72	59.9	56.1	49.8
8.63	-59.1	-57.24	-57.48	28.66	59	55.8	50.8
8.65	-59.8	-56.77	-57.45	28.69	59.9	56	47.3
8.6	-58.96	-55.94	-57.55	28.72	59.2	56	50.1
8.56	-58.04	-56.72	-57.48	28.69	59.8	55.7	50.9
8.65	-59.54	-57.03	-57.39	28.63	61	59	49.5
8.55	-59.51	-56.93	-57.7	28.69	59.7	55.4	51.6
8.66	-59.65	-56.98	-57.55	28.54	61.4	59.2	51.4
8.67	-59.07	-56.82	-57.64	28.66	59.4	55.4	55.3
8.92	-59.32	-56.98	-57.48	28.51	61.8	60.1	49.5

7.82	-60.05	-56.46	-57.36	28.91	60	55.2	47.9
8.6	-59.95	-57.08	-57.64	28.75	62.2	60.5	48.7
8.54	-57.56	-56.61	-57.73	28.82	60.2	54.9	51.6
8.45	-58.55	-56.36	-57.48	28.69	62.5	60.2	49.7
8.56	-57.2	-57.24	-57.48	28.72	60.2	55.2	52
8.55	-58.11	-56.51	-57.94	28.48	61.8	58.8	52.4
8.56	-57.71	-56.77	-57.67	28.66	60.3	55.4	52.1
8.6	-59.51	-56.82	-57.48	28.51	62.1	57.9	46.2
8.54	-57.86	-56.87	-57.64	28.6	60.3	55.1	49.8
8.69	-59.84	-56.36	-57.42	28.45	62.2	57.1	50.7
8.68	-59.73	-56.25	-57.64	28.51	61	55.2	46
8.55	-59.58	-56.98	-57.39	28.45	63.1	56.6	49.4
8.65	-59.14	-56.51	-57.73	28.51	62.2	55.9	48.4
8.56	-56.36	-57.03	-57.33	28.45	62.6	56.5	51.1
8.63	-59.18	-56.72	-57.73	28.51	62.6	56.2	51
8.84	-60.05	-57.13	-57.18	28.39	62.5	56.4	45.4
9.41	-59.29	-57.08	-57.55	28.42	62.2	56.2	51.7
8.6	-59.25	-56.87	-57.45	28.63	62.5	56.3	53
8.67	-59.8	-56.36	-57.48	28.66	61.8	55.4	52.6
8.64	-59.54	-56.98	-57.3	28.54	62.7	56.5	52.2
8.44	-59.54	-56.56	-57.33	28.69	61.8	55.4	49.4
8.65	-59.95	-56.82	-57.42	28.42	63.1	56.8	51.7
8.65	-59.36	-56.93	-57.67	28.51	61.4	55.4	47.5
8.56	-59.65	-55.94	-57.61	28.51	63.2	57.5	51
8.59	-59.43	-56.41	-57.45	28.54	61.5	55.5	53.7
8.65	-59.95	-56.2	-57.33	28.45	62.5	57.9	50.1
8.6	-59.98	-55.89	-57.42	28.57	61.2	55.5	51
8.69	-60.38	-57.34	-57.55	28.54	62.5	57.9	51.3
8.65	-59.32	-56.41	-57.42	28.6	60.4	55.2	49.8
8.64	-59.21	-56.72	-57.48	28.57	62.3	57.9	49.3
8.7	-59.84	-56.82	-57.55	28.57	60.4	55.2	52.6
8.68	-59.58	-56.72	-57.42	28.48	62.1	57.5	48.4
8.62	-59.76	-56.61	-57.39	28.54	60.4	55.2	49.5
8.71	-59.51	-56.51	-57.45	28.45	62	57.9	51.4
8.83	-59.54	-56.77	-57.15	28.45	60.5	55.4	53.3
9.11	-59.76	-56.93	-57.61	28.48	61.8	57.4	52.1
8.17	-59.07	-56.51	-57.7	28.72	60.3	55.4	47.6
8.12	-59.98	-57.24	-57.36	28.66	61.7	57	50.8
8.69	-59.8	-55.73	-57.39	28.69	60.3	55	50.9
8.56	-59.14	-56.3	-57.39	28.57	61.6	56.8	49.7
8.58	-59.03	-56.41	-57.48	28.63	60.9	56.4	50.9
8.53	-59.21	-56.2	-57.48	28.51	61.5	56.1	51
8.56	-57.27	-56.3	-57.33	28.45	60.3	55.9	53.4
8.68	-59.07	-55.84	-57.42	28.54	61.3	56.2	45.4
8.64	-59.95	-56.1	-57.61	28.3	61.7	58	50.7
8.56	-59.07	-56.56	-57.24	28.51	61.1	56	49.8
8.61	-60.05	-56.77	-57.33	28.48	61.9	58.4	50.5

8.67	-58.52	-57.24	-57.39	28.63	61	55.9	48.4
8.64	-59.21	-56.56	-57.33	28.33	62.3	59.2	50.7
8.61	-57.75	-55.94	-57.39	28.51	60.9	55.6	50.8
8.69	-58.92	-56.93	-57.45	28.3	62.6	59.7	51.9
8.63	-58.99	-56.82	-57.24	28.51	60.6	55.6	52.1
8.67	-59.29	-56.36	-57.61	28.45	62.4	59.8	50.9
8.74	-59.58	-56.3	-57.7	28.51	60.5	55.4	52.8
9.16	-59.18	-56.51	-57.18	28.39	62.2	58.9	49.2
8	-59.84	-57.13	-57.3	28.69	60.3	55.5	53.3
8.44	-59.84	-56.87	-57.42	28.54	61.9	57.1	52.6
8.62	-59.43	-56.77	-57.18	28.72	60.1	54.9	48.7
8.5	-60.16	-57.03	-57.33	28.57	61.4	56.8	51.5
8.65	-60.46	-57.81	-57.36	28.48	60	54.9	51.7
8.63	-59.07	-56.56	-57.45	28.42	61.4	56.3	54
8.53	-56.28	-56.61	-57.27	28.42	61.4	57.1	51.8
8.57	-58.08	-57.08	-57.45	28.51	61.4	55.9	47.5
8.58	-58	-57.19	-57.58	28.21	62.5	58.8	48.2
8.52	-60.38	-56.3	-57.58	28.48	60.9	55.5	50.2
8.66	-59.07	-55.94	-57.33	28.24	62.9	59.6	48.1
8.66	-59.47	-56.51	-56.97	28.39	61	55.4	47.8
8.56	-59.73	-56.15	-57.42	28.33	62.5	59.9	46.2
8.53	-57.53	-56.46	-57.45	28.48	60.9	55.4	52
8.61	-58.99	-56.15	-57.55	28.3	62.4	59.2	51.2
8.68	-59.62	-56.82	-57.39	28.42	60.5	55.4	49.7
8.66	-59.47	-57.65	-57.3	28.42	62.3	57.9	51.2
8.57	-59.07	-56.72	-57.33	28.33	60.6	55.1	46.2
7.8	-59.36	-56.51	-57.3	28.48	62.1	56.7	50
8.65	-59.76	-56.25	-57.3	28.51	61	55	49.2
8.63	-60.24	-56.04	-57.42	28.63	62.2	56.2	50.2
8.52	-59.18	-55.58	-57.21	28.57	61.6	56	47.5
8.65	-58.66	-57.34	-57.39	28.51	62.3	56	49.5
8.52	-58	-56.51	-57.36	28.42	62.6	58	46.2
8.51	-59.62	-56.04	-57.33	28.45	62	55.8	51.6
8.63	-59.47	-56.77	-57.3	28.14	63.3	58.8	49.9
8.56	-59.65	-57.13	-57.36	28.45	61.8	55.9	51.6
8.58	-59.76	-56.1	-57.55	28.27	63.5	60.3	48
8.55	-59.25	-56.25	-57.3	28.39	61.5	55.6	51.7
8.62	-59.84	-56.93	-57.24	28.24	63.6	60.3	49.3
8.67	-59.18	-56.2	-56.84	28.3	61.6	55.5	48.6
8.66	-59.62	-56.77	-57.18	28.24	63.5	59.9	49.5
8.54	-56.76	-56.77	-57.3	28.3	61.7	55.5	50.9
8.67	-58.85	-56.72	-57.21	28.24	63.7	59.8	50.8
8.53	-59.03	-55.89	-57.33	28.21	61.9	55.5	50.5
8.67	-59.4	-56.77	-57.42	28.24	64	59.7	54.9
8.58	-59.18	-56.3	-57.06	28.3	62	55.7	52.8
8.58	-58.99	-56.56	-57.27	28.24	63.6	59.2	51.3
8.61	-58.85	-56.82	-57.18	28.17	61.4	55.6	51.6

8.62	-60.02	-56.3	-57.15	28.21	63.2	59.2	46.2
8.62	-57.82	-56.36	-57.21	28.33	61.4	55.5	51.3
8.72	-59.4	-56.87	-57.27	28.27	62.8	57.5	48.8
8.65	-58.96	-56.41	-57.3	28.14	61.1	55.5	47.4
8.76	-59.47	-55.21	-57.21	28.14	62.7	58.7	54
9.3	-59.58	-57.19	-57.03	28.21	60.9	55.5	51.2
8.84	-57.93	-56.25	-57.55	28.14	62.5	58	50.9
8.4	-59.21	-56.2	-57.12	28.48	60.6	55.1	53.8
8.65	-59.18	-56.98	-57.18	28.45	62.3	57.5	50.5
8.59	-59.95	-56.93	-57.12	28.45	60.7	55.2	44.8
8.63	-58.96	-56.15	-57.27	28.39	62.2	57.1	50.1
8.53	-56.87	-56.61	-57.39	28.45	60.5	55.1	52
8.64	-58.77	-56.61	-57.27	28.24	62	56.8	49.3
8.54	-60.2	-56.15	-57.21	28.27	60.3	55.2	51
8.59	-59.73	-56.77	-57.03	28.17	61.9	56.4	54.4
8.64	-59.07	-56.93	-57.24	28.33	60.5	55	53.9
8.64	-59.51	-56.72	-57.18	28.24	61.6	56.5	52.1
8.56	-58.52	-56.46	-57.12	28.14	60.7	56.2	46.7
8.65	-59.29	-56.51	-56.94	28.17	61.6	56.1	49.4
8.65	-59.51	-56.46	-57.21	28.24	60.3	55.2	50.8
8.67	-58.74	-56.56	-57.12	28.17	61.8	56.6	49.4
8.65	-59.1	-56.72	-57.18	28.17	61.4	56.9	49.5
8.56	-56.87	-56.87	-57.55	28.24	61.7	56.3	49.7
8.6	-59.43	-55.89	-57.55	28.11	61.1	55.9	51.7
8.76	-59.98	-57.5	-57.12	28.14	61.9	56.5	47.2
9.31	-59.65	-56.77	-57.12	28.08	61.2	56	49.2
8.53	-58.92	-56.36	-57.03	28.11	62	56.2	48.4
8.64	-58.37	-56.98	-56.94	28.21	61.9	57.2	51.6
8.51	-56.9	-56.41	-57.42	28.24	61.7	56.1	50
8.53	-59.91	-56.36	-57.45	28.27	61.3	56.6	50.9
8.53	-59.62	-56.41	-57.3	28.24	61.9	56.2	50.3
8.7	-59.87	-57.13	-57.06	28.02	61.7	56.9	49.3
8.6	-59.73	-56.82	-57.12	28.05	61.5	56.2	52.8
8.57	-57.31	-56.1	-57.03	28.11	61.8	57	50.5
8.56	-58.88	-55.99	-57.39	28.17	62.1	56.2	49.9
8.64	-58.74	-56.25	-57.09	28.11	61.4	56.1	50.1
8.66	-58.99	-55.94	-57.24	28.08	62.1	56.1	51.1
8.64	-59.03	-56.87	-57.12	27.96	62	56.7	51.4
8.61	-59.18	-56.36	-57.24	28.11	62.4	56.1	51.8
8.59	-57.56	-56.25	-57.27	28.11	61.6	55.2	47.5
8.55	-59.62	-56.25	-57.15	28.08	62.8	56.8	50.2
8.57	-57.67	-56.3	-57.18	28.02	61.7	55.4	52.5
8.61	-59.51	-56.2	-57.27	28.02	63.1	56.6	52.9
8.65	-59.4	-57.19	-56.81	27.99	62.3	55	50.7
8.61	-58.96	-56.77	-57.03	28.05	62.7	55.9	51.4
8.67	-53.06	-50.91	-56.23	0.49	59.1	58.6	50.5
8.66	-52.03	-50.34	-55.9	0.49	57.6	54.2	50

8.62	-57.78	-55.47	-56.84	27.84	65.4	57.2	51
8.6	-57.82	-56.41	-56.57	27.72	66	58.2	49.9
8.31	-58.48	-55.78	-56.87	27.99	66	56.5	53.2
8.59	-59.1	-56.3	-56.84	27.9	64.7	55.8	52
8.61	-59.4	-55.73	-57	27.66	66.8	59.2	51.5
8.62	-59.03	-55.89	-56.51	27.78	66.1	56.4	51.6
8.61	-59.07	-55.94	-56.81	27.75	65.7	55.9	50.4
8.62	-59.18	-56.56	-57.06	27.53	68	60.3	49.6
8.6	-57.75	-56.15	-56.9	27.53	66.8	56.5	50.8
8.56	-59.43	-55.68	-57.15	27.75	66.6	56	49.9
8.57	-58.22	-55.99	-57.03	27.63	69	58.6	50
8.2	-58.15	-56.04	-56.9	27.78	67.7	56.5	49.8
8.69	-59.32	-56.3	-56.84	27.63	67.2	56.2	50.7
8.59	-58.99	-57.08	-57	27.5	69	58.4	51.4
8.29	-58.52	-56.56	-56.9	27.63	68	56.6	52.7
8.66	-58.85	-56.2	-56.84	27.63	67.1	56.2	50.8
8.59	-58.7	-55.53	-56.97	27.38	69	58	49.7
8.55	-56.87	-56.72	-57.03	27.5	67.9	56.8	51.6
8.53	-59.25	-56.25	-56.78	27.56	67.6	56.1	48.9
8.57	-58.11	-56.25	-56.81	27.53	69.1	58.8	51.6
8.64	-59.14	-56.93	-57	27.53	68	56.8	54.3
8.67	-59.32	-55.58	-57.06	27.63	67.8	56.5	49.6
8.66	-58.96	-55.73	-56.94	27.44	70.1	59.7	51.8
8.56	-59.36	-56.04	-57.12	27.44	68.4	56.9	52.4
8.66	-58.96	-55.99	-56.9	27.75	67.7	56.4	50
8.59	-58.88	-55.73	-57.03	27.35	70.1	60.4	49
8.72	-58.77	-55.78	-56.97	27.41	69	57.2	49.7
8.55	-59.43	-55.47	-56.75	27.53	68.4	56.6	51
8.59	-58.41	-56.15	-57.03	27.5	68.3	57.5	50.2
8.7	-59.36	-56.36	-56.87	27.44	69.4	57.9	49.2
8.63	-59.8	-56.36	-56.75	27.47	68	56.7	49.1
8.62	-59.36	-55.84	-56.84	27.56	67.4	56.4	46.8
8.57	-57.16	-56.04	-56.94	27.41	69.2	59.3	51.4
8.51	-59.14	-55.58	-56.9	27.63	67.8	56.9	50.5
8.68	-59.1	-56.2	-56.94	27.53	67.4	56.3	50.1
8.65	-59.36	-55.89	-56.75	27.32	69.2	60.3	51.6
9.03	-59.54	-55.99	-56.78	27.47	67.9	57.1	49.1
8.53	-57.6	-55.63	-56.51	27.56	66.8	56.7	50.8
8.6	-59.03	-55.68	-57	27.44	66.6	56	49.2
8.65	-59.25	-56.1	-56.78	27.5	67.9	58.1	49.9
8.8	-59.51	-56.1	-56.87	27.41	66.8	56.7	49
8.58	-58.63	-56.25	-57.09	27.53	66.2	56.5	46.5
8.63	-59.07	-55.89	-56.9	27.44	68.5	59.5	48.6
8.65	-59.8	-55.94	-56.97	27.44	67.1	56.9	51.6
8.63	-58.85	-55.27	-57.06	27.44	66.9	56.6	49.9
8.56	-57.86	-55.89	-56.94	27.53	69	60.1	51.2
8.62	-58.7	-56.72	-57.12	27.41	67.1	57	50.3

8.65	-59.36	-56.15	-56.97	27.44	66.3	56.5	47.2
8.59	-59.73	-55.94	-56.81	27.35	66.4	57.1	51.6
8.64	-59.43	-57.03	-56.78	27.47	67	57.5	50.7
9.14	-57.82	-55.47	-56.66	27.35	66.4	56.5	51.8
8.65	-58.22	-56.1	-56.69	27.63	66.1	56.2	49.5
8.65	-58.66	-55.63	-56.84	27.26	67.7	57.9	49.8
8.59	-59.03	-55.06	-56.81	27.44	66.6	56.6	51.5
8.6	-58.92	-55.63	-56.75	27.5	65.9	56.2	49.1
8.52	-59.18	-56.41	-56.66	27.47	67.9	58.9	48.8
8.51	-58.96	-56.98	-56.63	27.44	66.4	56.7	50.3
8.65	-57.45	-55.84	-56.84	27.53	65.8	56.4	51
7.89	-59.32	-56.41	-56.45	27.5	67.9	60.2	50.7
8.64	-59.1	-55.84	-57	27.66	66.4	56.7	51
8.56	-57.86	-56.36	-56.84	27.63	65.7	56	49.7
8.69	-58.92	-56.1	-56.75	27.32	67.9	60.4	49.8
8.68	-59.43	-56.2	-56.87	27.35	66.8	56.8	48.6
8.65	-59.36	-56.2	-56.63	27.32	66.6	56.3	53
8.68	-58.85	-56.25	-56.78	27.35	68.4	60.5	49.4
8.62	-58.63	-55.89	-56.84	27.32	66.7	56.9	47.3
8.7	-58.48	-56.36	-56.63	27.41	65.7	56.4	49.5
8	-57.2	-56.3	-56.69	27.41	67.8	59.4	50.3
8.54	-58.59	-55.27	-56.94	27.56	66.9	57	49.4
8.45	-58.74	-55.94	-56.87	27.56	66.3	56.3	48.4
8.52	-56.5	-56.51	-56.81	27.23	67.5	58.3	50
8.57	-58.59	-55.32	-56.9	27.32	67.4	57.1	52.4
8.55	-58.04	-55.27	-56.9	27.32	66.7	56.3	49.6
8.6	-59.47	-56.3	-57.09	27.29	66.7	57.3	50.1
8.61	-59.21	-55.84	-56.9	27.26	67.2	57.3	49.3
8.57	-58.99	-55.32	-57.21	27.38	66.1	56.5	50.5
8.66	-59.1	-55.84	-56.94	27.2	67.9	59.8	50.9
8.68	-59.91	-55.63	-56.69	27.32	66.9	57	52.6
8.71	-59.32	-56.3	-56.87	27.35	66.4	56.5	50.2
8.77	-56.72	-55.53	-56.69	27.26	68.1	58.8	51.2
8.42	-59.91	-56.72	-56.66	27.26	66.7	56.7	46.7
8.65	-58.99	-55.37	-56.81	27.44	66.4	56.3	50.5
8.53	-58.66	-55.89	-56.54	27.35	68.3	59.2	49.6
8.61	-59.65	-56.15	-56.84	27.53	66.7	56.8	52.3
8.55	-58	-56.61	-56.6	27.47	66.5	56.4	49.3
8.46	-58.99	-55.73	-56.78	27.32	68.5	59.7	50.3
8.51	-57.71	-55.78	-56.69	27.53	66.9	56.8	53.7
8.47	-57.86	-56.04	-56.66	27.44	66.3	56.3	48.3
8.62	-59.03	-56.1	-56.54	27.38	68.3	59.9	49.7
8.44	-58.85	-55.53	-56.87	27.47	66.8	57	52.1
8.56	-59.8	-56.2	-56.9	27.47	66.4	56.4	50.8
8.56	-59.32	-56.41	-57.03	27.35	68.8	60.4	51.4
8.5	-58.63	-55.73	-56.6	27.44	67.4	57	49.7
8.55	-58.41	-55.21	-56.97	27.44	66.8	56.4	49.8

8.51	-58.63	-55.84	-56.48	27.32	67.6	58.5	49
8.58	-58.63	-55.99	-56.75	27.32	67.6	57.3	52.5
8.51	-57.09	-56.1	-56.69	27.38	66.8	56.5	51.7
8.58	-58.3	-55.58	-56.63	27.53	66.3	56.1	47.8
8.66	-59.07	-55.58	-56.69	27.41	67.5	58	48.8
8.62	-59.25	-56.61	-56.66	27.47	66.4	56.6	50.2
8.64	-58.44	-55.89	-56.78	27.41	66.1	56.1	50.8
8.48	-58.48	-56.41	-56.57	27.41	68.1	58.3	50.8
7.77	-59.1	-55.47	-56.69	27.38	67	56.8	55.9
7.78	-58.55	-55.68	-56.78	27.38	67.1	56.3	45.8
7.91	-56.79	-56.1	-56.81	27.29	69.6	59.3	49.4
7.81	-59.54	-56.25	-56.63	27.26	68.2	56.9	50
8.53	-59.58	-56.1	-56.63	27.32	67.9	56.5	48.1
8.58	-58.52	-56.41	-56.84	27.17	69.9	59.3	50.9
8.53	-59.18	-56.04	-57	27.32	68.5	57.2	51.6
7.68	-59.03	-56.04	-56.97	27.32	68.2	56.6	49.5
7.75	-58.44	-55.89	-56.69	27.2	70	60.3	49.4
8.37	-58.92	-55.94	-56.63	27.29	68.9	57.4	50.4
7.86	-59.07	-55.99	-56.54	27.29	68.2	57	50.3
7.94	-56.25	-55.99	-56.9	27.26	67.6	56.3	52.8
9.37	-58.85	-55.68	-56.69	26.98	69.3	58.3	48.4
9.22	-58.44	-55.47	-56.66	27.11	68.3	57.1	50.8
9.41	-58.88	-55.53	-56.69	27.2	67.6	56.6	49.6
8.8	-58.99	-55.78	-56.69	27.11	69.4	58.4	52.3
8.72	-59.18	-56.2	-56.51	27.23	68.3	57.1	55
8.69	-58.59	-55.94	-56.6	27.17	67.9	56.6	51.1
8.66	-58.41	-55.63	-56.6	27.17	69.3	58.3	50.1
8.72	-59.03	-56.93	-56.69	27.2	68.6	57.1	51.8
8.62	-59.1	-55.73	-56.75	27.29	68.1	56.6	50.9
8.7	-59.1	-56.41	-56.78	27.05	69.9	60.3	50.8
8.61	-57.53	-56.1	-56.84	27.14	68.6	57.2	51.4
8.75	-58.77	-55.73	-57	27.17	67.9	56.9	50.2
8.61	-58.7	-55.73	-56.51	27.08	70.1	60.4	49.1
8.65	-59.07	-55.73	-56.42	26.98	69.3	57.6	50.4
8.71	-59.73	-56.36	-56.87	27.2	68.4	56.8	52.3
8.63	-56.79	-56.93	-56.97	27.2	68	56.6	50.8
8.71	-58.22	-56.1	-56.45	27.17	69.8	58.5	50.4
8.73	-59.18	-55.94	-56.66	27.2	68.7	57.2	50
8.69	-58.48	-55.47	-56.78	27.23	68.4	56.8	53.5
8.7	-58.52	-55.32	-56.84	27.08	70.7	60.6	50.1
8.71	-58.77	-55.53	-56.63	27.17	69	57.3	50
8.71	-58.7	-56.36	-56.81	27.23	68.4	57.2	52.6
8.64	-58.37	-55.47	-56.75	27.14	69.2	58.2	48.8
8.7	-59.18	-56.25	-56.94	27.11	69.7	58.1	46.2
8.71	-59.32	-56.61	-56.75	27.17	68.7	57.2	47.6
8.69	-59.25	-55.89	-56.39	27.26	68.5	57	49.5
8.7	-58.66	-56.72	-56.75	27.14	70.6	59.2	51.2

8.74	-59.07	-56.1	-56.9	27.17	69.6	57.3	52.1
8.68	-57.45	-55.84	-56.81	27.17	69	57	50.3
8.82	-58.92	-55.68	-56.75	27.08	71.6	60.6	51
8.72	-58.33	-56.25	-56.97	27.14	70.1	57.5	51
8.68	-59.36	-55.63	-56.94	27.17	69.7	57.1	49.2
8.82	-59.47	-56.15	-56.78	27.11	69.8	57.1	50.2
8.72	-57.71	-55.53	-56.69	27.05	70.6	58.3	52.5
8.95	-58.19	-56.25	-56.84	27.14	69.8	57.2	50.5
9.11	-59.36	-55.89	-56.84	27.17	69.1	57.1	51.2
8.98	-58.37	-55.84	-56.75	27.01	71	59.8	51.5
8.94	-59.03	-56.04	-56.78	27.14	70	57.9	48.6
8.89	-58.37	-55.78	-56.84	27.11	69.3	57.1	46.7
8.8	-59.03	-55.84	-56.69	26.98	71.2	60.6	51.3
9.03	-59.8	-55.89	-56.87	27.17	70.3	57.9	47.9
9.09	-58.99	-55.68	-57.03	27.17	69.8	57.3	50.5
9.17	-59.29	-55.99	-56.75	27.17	70.1	57.1	51.1
8.76	-59.14	-55.99	-56.87	27.14	71.2	58.7	46.7
8.47	-58.3	-55.78	-56.75	27.08	70.1	57.5	50.2
8	-58.88	-56.3	-56.81	27.32	69.9	57.2	47.1
7.86	-58.44	-56.1	-56.57	27.29	71.8	60.5	50.1
8.53	-56.9	-55.89	-56.81	27.29	70.2	58.1	50
8.63	-58.77	-56.2	-56.78	27.38	69.7	57.3	52.8
8.64	-58.48	-55.89	-56.66	27.23	70.6	59.2	48.4
8.53	-59.1	-56.04	-56.81	27.35	70.5	58.3	51.9
8.55	-57.2	-55.89	-56.78	27.2	69.9	57.3	47.3
8.6	-58.88	-55.84	-56.84	27.23	69.6	57.1	50.5
8.68	-59.14	-56.72	-56.63	27.08	71.2	59.5	47.5
8.57	-57.67	-56.25	-56.66	27.2	69.9	57.9	51.4
8.59	-57.38	-55.94	-56.54	27.26	69	57.2	49.5
8.67	-59.21	-56.1	-56.84	27.11	71	61.1	51.6
8.53	-58.15	-55.73	-56.94	27.2	69.7	58.1	47.7
8.55	-57.75	-55.89	-56.66	27.35	68.7	57.5	52.7
8.63	-59.65	-55.78	-56.81	27.32	68.4	57.1	51.3
8.59	-58.55	-56.1	-56.69	27.2	69.3	58.4	51
8.6	-57.09	-56.1	-56.66	27.32	68.1	57.5	51.8
8.69	-59.43	-56.51	-56.81	27.32	67.9	57.1	50.1
8.69	-59.18	-56.56	-56.63	27.2	69.4	60.1	49.8
8.64	-58.48	-55.89	-56.75	27.35	68.1	57.4	50.1
8.56	-58.7	-55.99	-56.75	27.38	67.8	57.1	49.8
8.59	-58.48	-56.1	-56.84	27.26	69	60.3	51.4
8.71	-58.66	-56.3	-56.87	27.32	68.3	57.8	49.9
8.57	-58.66	-55.78	-56.84	27.41	67.4	57.3	47
8.69	-58.85	-56.25	-56.75	27.35	66.9	56.8	49.2
8.57	-57.6	-56.1	-56.75	27.32	68.4	58.4	54.4
8.64	-59.03	-55.78	-56.66	27.38	67.6	57.2	46.6
8.71	-59.32	-57.03	-56.69	27.41	66.9	56.9	53.3
8.67	-57.67	-55.78	-56.81	27.35	68.6	60.3	54.4

8.71	-58.7	-55.68	-56.81	27.44	67.4	57.3	47.4
8.74	-58.96	-55.78	-57	27.47	66.6	56.9	51
8.8	-58.08	-56.04	-56.81	27.35	67.9	59.4	49.9
8.95	-58.37	-56.04	-56.69	27.47	67.5	57.8	48.7
9	-58.55	-55.99	-56.9	27.44	66.5	57	44.6
8.37	-59.25	-57.03	-56.75	27.63	65.8	56.7	51
8.61	-57.45	-56.15	-56.6	27.53	67.9	58.8	51.6
8.55	-58.88	-55.73	-56.81	27.69	66.2	57.1	51.6
8.6	-59.84	-56.2	-56.57	27.66	66	56.6	50.7
8.62	-59.54	-55.99	-56.66	27.47	67.9	60.8	50
8.58	-58.52	-56.04	-56.75	27.66	66.6	57.2	47.9
8.61	-58.48	-55.73	-56.69	27.53	65.8	56.7	50.5
8.56	-57.93	-56.04	-56.87	27.41	67	58.9	51.1
8.69	-58.19	-56.04	-57.03	27.41	66.4	57.4	49.1
8.65	-58.59	-55.68	-56.75	27.5	65.7	56.8	50.7
8.64	-58.44	-56.56	-56.75	27.53	65.7	56.9	49.3
8.57	-58.7	-56.15	-56.84	27.35	66.8	58	48.6
8.57	-56.72	-55.94	-57.09	27.66	65.8	56.8	50.4
8.66	-58.92	-55.63	-56.81	27.47	65.6	57	52.4
8.53	-59.1	-56.61	-56.97	27.44	66.7	58.1	51.6
8.66	-59.47	-55.73	-56.81	27.53	65.8	56.8	50.5
8.62	-58.33	-55.89	-56.9	27.44	65.1	56.4	48.9
8.57	-59.1	-55.32	-56.75	27.44	66.2	58.2	51.1
8.68	-58.66	-56.41	-56.78	27.47	65.6	56.9	48.9
8.57	-58.85	-57.19	-56.78	27.35	67	60.2	49.4
8.6	-57.38	-55.94	-56.84	27.53	65.8	57.3	49.3
8.62	-57.2	-56.56	-56.87	27.5	64.8	56.8	49.3
8.71	-58.26	-55.78	-56.9	27.38	67	60.7	50
8.98	-58.44	-56.77	-56.81	27.47	65.4	57.1	50.2
8.99	-58.52	-55.99	-56.78	27.5	64.6	56.6	50.1
7.82	-58.77	-55.94	-56.6	27.63	66.6	60.1	52.2
8.63	-58.19	-56.61	-56.78	27.72	64.8	56.9	51.7
8.53	-58.33	-56.2	-56.9	27.75	64.2	56.6	50.5
8.6	-60.02	-56.1	-56.87	27.69	65.8	58.2	52.7
8.52	-56.94	-56.77	-56.63	27.81	64.5	56.7	51.1
8.57	-58.96	-56.72	-57.06	27.38	64.9	58.2	53
8.66	-58.22	-55.58	-56.6	27.44	65.1	57	49.4
8.55	-58.88	-55.94	-56.97	27.53	64.2	56.4	48.6
8.58	-57.23	-55.73	-56.75	27.47	66	60.3	50.3
8.52	-59.07	-56.04	-57	27.44	64.2	56.5	47.8
8.64	-58.99	-55.84	-56.54	27.5	63.8	56.1	49.1
8.57	-57.2	-56.25	-56.84	27.41	65.6	58.2	52.1
8.59	-58.44	-55.06	-57	27.69	64.1	56.6	48
8.6	-59.25	-56.1	-56.9	27.5	66	59.8	50.9
8.54	-55.48	-56.25	-57.12	27.56	64.5	57	49.1
8.57	-59.03	-55.94	-56.97	27.66	64.1	56.2	51.5
8.55	-56.98	-56.3	-56.75	27.5	66	58.6	48.3

8.53	-59.07	-56.25	-56.94	27.56	64.4	56.7	48.3
8.65	-58.66	-56.15	-56.87	27.38	65.6	59.2	49.6
8.59	-59.21	-55.78	-56.81	27.56	64.6	57.1	49.4
8.68	-58.85	-56.2	-56.75	27.63	63.6	56.2	51
8.65	-58.15	-56.46	-56.81	27.47	65.6	58.4	51.2
8.66	-58.99	-56.2	-56.84	27.69	64.1	56.7	49.1
8.58	-57.53	-56.36	-56.87	27.41	65.6	58.9	46.1
8.63	-59.51	-56.56	-57.06	27.47	64.9	57.1	46
8.63	-58.15	-55.89	-56.87	27.56	64.1	56.4	52.5
8.65	-58.59	-56.04	-56.9	27.44	66.1	59.3	50.5
8.62	-57.78	-55.94	-57.03	27.56	64.6	56.5	52.2
8.62	-59.1	-56.36	-56.75	27.47	65	58.2	50.9
8.62	-57.86	-56.51	-56.81	27.63	65.1	57.2	50
8.61	-58.08	-55.94	-56.84	27.66	64	56.5	51.6
8.69	-58.99	-56.46	-56.6	27.38	65.9	59.6	51.3
8.66	-59.14	-56.56	-56.6	27.47	64.4	56.6	49.2
8.69	-58.96	-56.36	-56.94	27.44	65.6	59.4	50.5
8.69	-59.1	-55.78	-56.97	27.56	64.7	57.1	50.4
8.73	-58.88	-56.15	-56.9	27.56	63.8	56.3	49.7
8.78	-58.85	-56.2	-56.81	27.44	65.7	59.2	49.7
8.92	-59.07	-56.51	-56.75	27.63	63.9	56.4	46.8
9.1	-59.14	-55.78	-56.94	27.44	65.1	58.7	54.9
9.27	-58	-55.68	-56.81	27.44	64.8	57	50.1
8.44	-59.76	-56.15	-57.03	27.69	64.4	56.3	50.1
8.66	-58.88	-55.27	-56.97	27.66	66.2	59.1	51.6
8.51	-59.47	-55.73	-56.87	27.75	64.5	56.4	52.8
8.59	-58.77	-56.2	-57.15	27.63	64.9	58	50.4
8.57	-59.03	-55.99	-56.94	27.56	64.9	57.1	50.1
8.54	-56.32	-55.58	-57.03	27.66	63.8	56	50.1
8.59	-58.44	-55.78	-56.9	27.56	65.8	59.4	51
8.65	-58.63	-55.63	-56.97	27.63	64.1	56.4	49.6
8.63	-59.25	-56.46	-56.81	27.47	65.6	59.5	48.6
8.68	-59.29	-56.56	-56.6	27.63	64.4	56.9	51.7
8.67	-58.59	-55.99	-56.87	27.53	63.6	56.3	49.5
8.59	-57.16	-57.03	-56.48	27.53	65.5	59.6	52.2
8.67	-58.41	-55.53	-57.18	27.66	64	56.6	50.1
8.75	-59.25	-56.04	-56.63	27.69	64.7	58.3	50.3
8.88	-59.1	-56.25	-56.81	27.63	64.7	57.1	48.4
7.85	-58.15	-56.61	-56.66	27.75	63.7	56.3	51
8.68	-58.88	-56.2	-56.97	27.75	65.5	59	50.8
8.62	-59.18	-56.61	-56.94	27.93	63.8	56.4	51.2
8.56	-59.03	-56.46	-57.09	27.66	64.6	58.2	49.5
8.56	-58.92	-55.89	-57.09	27.5	64.6	57	49.3
8.56	-58	-55.16	-56.94	27.69	63.6	56	50.5
8.62	-59.84	-55.89	-56.9	27.63	65.6	59.2	48.6
8.67	-58.85	-56.25	-57.12	27.56	64.2	56.6	53.5
8.69	-58.7	-55.94	-57	27.66	64.4	57.2	50.5

8.7	-58.88	-56.36	-56.84	27.69	64.8	57.1	50.5
8.63	-58.7	-56.61	-57	27.66	64	56.2	50.5
8.65	-58.33	-55.58	-56.84	27.53	66.1	60.4	50.1
8.6	-57.34	-56.2	-57.06	27.63	64.3	56.5	49.6
8.69	-58.7	-55.94	-56.94	27.63	66.3	60.7	50.2
8.79	-59.18	-56.3	-56.75	27.75	64.7	56.9	52.7
9.16	-59.36	-55.53	-57.09	27.47	66	60.3	49.5
8.15	-59.14	-55.89	-57.09	27.75	64.7	57	50
8.57	-57.82	-55.89	-56.97	27.72	65.6	59.1	48.3
8.65	-58.59	-55.53	-57.15	27.87	64.7	56.8	52.5
8.5	-59.07	-56.3	-57.09	27.66	66.3	60.8	50.4
8.47	-56.61	-56.82	-57.06	27.81	64.6	56.9	49.3
8.6	-59.21	-55.73	-57.09	27.69	65.3	58.9	48.2
8.66	-58.3	-55.47	-57.03	27.69	64.6	56.9	52.1
8.59	-57.64	-56.3	-57.15	27.53	66.3	61.2	50.5
8.57	-58.55	-56.36	-57.15	27.75	64.5	56.5	50.1
8.63	-59.8	-55.58	-56.97	27.66	66.4	60.8	51.1
8.62	-59.32	-57.03	-57.18	27.72	64.5	56.5	50.8
8.55	-58.22	-56.56	-56.84	27.66	66.8	60.7	53.4
8.59	-56.68	-55.99	-56.9	27.72	64.6	56.4	49.6
8.6	-58.44	-56.25	-57.03	27.5	65.9	59.2	49.7
8.66	-59.07	-56.04	-57.09	27.72	64.2	56	49
8.7	-59.32	-56.36	-56.97	27.69	65.5	57.9	51.8
8.69	-59.29	-56.36	-56.87	27.63	64.5	57.2	49.5
8.68	-59.07	-56.72	-56.66	27.75	65.5	58	49.1
8.71	-58.59	-56.1	-57.18	27.69	64.3	56.3	50.2
8.88	-59.1	-56.41	-57.21	27.69	66.5	58.2	53.6
9.23	-58.92	-55.63	-57.12	27.66	65.6	56.5	46.8
7.96	-58.55	-55.89	-57.18	27.78	66.2	57.6	48.7
8.65	-59.25	-56.04	-57.03	27.81	65.1	56.3	50.9
8.55	-55.55	-55.47	-56.97	27.81	65.9	57.5	48.7
8.6	-59.29	-56.61	-57.03	27.87	64.7	56.1	49.5
8.62	-58.48	-55.73	-56.97	27.69	66	59.3	50.1
8.55	-57.93	-56.15	-57	27.72	64.3	56.2	50.5
8.53	-58.74	-56.61	-57.12	27.72	66.2	60.4	50.4
8.62	-59.18	-55.53	-57.15	27.78	64.5	56.6	50.5
8.66	-59.14	-55.99	-56.81	27.72	64	57	49.9
8.54	-58.92	-55.94	-56.97	27.81	64.8	57.2	50.8
8.66	-59.18	-56.25	-57.15	27.78	63.7	56.2	51.5
8.68	-59.25	-56.25	-57.09	27.63	66.3	60.2	50
8.67	-59.25	-56.3	-57.15	27.78	64.6	56.4	51.4
8.66	-58.96	-55.94	-57	27.66	65	58.2	50.1
8.63	-58.3	-55.78	-56.87	27.72	64.5	57.1	50.4
8.62	-59.1	-56.46	-56.94	27.81	63.6	56.2	49.5
8.66	-58.74	-55.78	-57.18	27.72	65.4	60.1	51.6
8.64	-59.62	-56.3	-57.06	27.81	63.6	56.5	51.8
8.65	-58.63	-56.41	-57	27.66	64.8	59.5	49.8

8.58	-58.48	-55.06	-57.06	27.93	63.7	56.8	49.3
8.68	-59.03	-55.89	-57.27	27.93	62.7	56	49.9
8.69	-59.4	-56.25	-57.3	27.84	64.4	57.9	48.9
8.8	-59.62	-55.99	-57.18	27.81	62.7	56.2	50.3
8.79	-57.82	-56.82	-56.87	27.75	65	60.4	44.8
8.74	-58.99	-56.15	-57.12	27.9	63.5	56.7	50.3
9.29	-58.77	-56.51	-57.21	27.78	63.2	57.2	49.5
8.41	-59.03	-56.25	-57.15	27.9	63.9	57	52.1
8.23	-59.43	-56.04	-57.03	27.9	62.6	56	51.3
7.73	-59.43	-56.1	-57.09	27.9	64.5	59.2	47.5
8.55	-58.37	-55.63	-57.12	28.08	62.8	56.1	52.5
8.67	-58.92	-56.46	-57.12	27.99	64.5	59.7	51.9
8.65	-58.88	-55.99	-57.18	28.14	63.1	56.6	48.6
8.5	-57.42	-55.78	-57.3	28.11	62.5	55.7	46.1
8.57	-58.96	-55.63	-56.94	28.02	63.8	57.4	49.8
8.46	-59.4	-56.46	-57.06	28.02	62.4	55.8	49.3
8.65	-58.66	-56.72	-57.27	27.87	64.5	59.2	51.1
8.65	-58.66	-55.99	-57.15	27.93	62.9	56.1	51
8.65	-58.85	-56.41	-57.12	27.93	64.4	59.6	51.6
8.56	-57.97	-56.41	-57.09	27.96	62.7	56.4	49.5
8.65	-58.96	-56.72	-57.21	27.99	62.4	55.7	51.4
8.53	-56.03	-56.56	-57.18	27.99	63.2	56.8	49.9
8.62	-58.11	-56.2	-57.3	28.11	62	55.7	48.4
8.58	-58.48	-56.41	-57.27	27.9	63.6	57.9	49.9
8.62	-58.63	-55.63	-57.42	27.99	62.1	56	51.9
8.67	-58.66	-56.46	-57	27.96	63.9	59.9	48.1
8.62	-59.36	-57.19	-57.33	28.08	61.9	56	51.3
8.65	-58.22	-55.53	-57.42	27.99	63.8	59.9	50.5
8.6	-57.67	-56.61	-57.18	28.05	62.4	56.1	50.5
8.72	-58.15	-56.36	-57.33	27.9	62.9	58.3	50.9
8.68	-59.73	-56.15	-57.39	28.05	62.4	56.5	49.7
8.91	-59.03	-55.99	-57.27	28.05	61.5	55.8	50.5
8.35	-58.37	-56.04	-57.33	27.99	62.4	57	48.8
7.94	-59.54	-56.04	-57.33	28.24	61.2	55.6	49.2
8.64	-59.51	-56.56	-57.12	28.05	62.3	57.1	51
7.8	-58.99	-55.63	-57.55	28.27	60.7	55.7	53.1
8.58	-58.96	-56.15	-57.45	28.21	62.3	57.2	49.3
8.65	-59.18	-56.72	-57.15	28.42	60.3	55.5	50.4
8.62	-58.92	-55.99	-57.42	28.17	61.9	57.3	47.9
8.53	-58	-57.24	-56.9	28.3	60.2	55.1	46.3
8.5	-58.33	-56.2	-57.12	28.3	61.7	57.1	50.1
8.41	-56.98	-55.58	-56.97	28.39	60.1	55.5	51.5
8.57	-59.47	-56.2	-57.15	28.14	61.7	57.4	47.1
8.67	-58.7	-55.73	-57.12	28.11	59.9	55.1	49.8
8.65	-58.92	-56.36	-57.15	28.11	61.3	57.1	51.8
8.58	-59.65	-56.51	-57.09	28.24	59.8	55.2	49.3
8.61	-58.55	-55.63	-57.03	28.11	61	56.6	49.2

8.54	-59.43	-56.51	-57.33	28.24	60.1	55.7	53.6
8.62	-58.26	-56.46	-57.09	28.14	60.6	56.1	49.6
8.64	-58.77	-56.72	-57.61	28.17	59.9	56.4	48.6
8.57	-59.03	-56.25	-57.42	28.27	60.5	56.2	48.9
8.56	-57.56	-56.2	-57.03	27.99	61.4	58.7	51.6
8.5	-59.76	-55.94	-57.42	28.24	60.1	55.7	48.1
8.61	-58.92	-56.1	-57.09	28.17	61.4	59.8	49.9
8.66	-59.29	-56.36	-56.94	28.24	59.7	55.5	47.2
8.62	-59.36	-56.87	-57.15	28.21	61.8	60.1	49.5
8.64	-58.85	-56.61	-56.84	28.27	59.4	55.5	51.2
8.61	-56.72	-56.72	-57.21	28.24	60.7	58.5	52.5
8.68	-59.07	-57.08	-57.3	28.27	59.1	54.9	51.8
8.69	-59.62	-56.51	-57	28.21	60.3	56.9	47.8
8.69	-58.85	-56.87	-57.09	28.33	59.1	55.5	48.8
8.61	-58.26	-55.58	-57.39	28.42	59.9	56	48
8.65	-59.98	-57.03	-57.15	28.08	60.2	58.1	51.6
8.56	-58.66	-57.08	-57.12	28.27	59.6	55.6	52.2
8.68	-59.73	-56.56	-57.3	28.17	61	59.7	47.9
8.67	-59.18	-56.2	-57.15	28.42	59	55	47.3
8.71	-60.02	-56.93	-57.24	28.21	60.7	59.9	45.4
8.7	-59.14	-56.3	-57.36	28.42	58.8	55.2	54
8.6	-59.4	-56.51	-57.27	28.24	60.5	59.4	47.8
8.58	-59.4	-56.2	-57.36	28.42	58.2	55	50.7
8.7	-59.18	-56.25	-57.15	28.33	59.5	57.2	48.2
8.67	-58.96	-56.61	-57.21	28.42	57.7	54.9	49
8.67	-58.77	-56.25	-57.42	28.51	58.3	56	50
8.66	-58.66	-56.77	-57.24	28.3	58.2	56.9	50.5
8.66	-60.02	-56.2	-57.24	28.57	58.2	55.8	53.7
9.02	-60.38	-56.77	-57.39	28.42	58.2	57.3	53.8
9.2	-58.92	-56.61	-57.27	28.54	57.9	55.5	48.4
9.12	-59.8	-56.61	-57.24	28.33	59.2	58.8	50.1
8.17	-58.92	-55.89	-57.36	28.54	57.6	55.2	52.7
8.63	-59.29	-56.61	-57.33	28.51	59.1	59.6	50.9
8.51	-59.07	-56.77	-57.12	28.6	57.5	54.8	53
8.57	-57.16	-56.98	-57.42	28.54	59.2	57.2	47.4
8.57	-59.1	-56.72	-57.48	28.63	56.9	54.2	51
8.63	-59.25	-56.51	-57.36	28.63	58.5	56.7	50.9
8.5	-56.43	-56.1	-57.42	28.63	57.1	55.1	50.1
8.55	-59.87	-57.03	-57.36	28.72	57.6	55.4	50.7
8.49	-58.15	-56.3	-57.48	28.45	59.6	60.6	49.6
8.58	-59.65	-57.13	-57.18	28.57	57.3	54.6	46.6
8.66	-59.03	-56.72	-57.45	28.51	59.2	59.7	52.1
8.59	-59.03	-56.25	-57.45	28.54	57.1	54.5	49.9
8.66	-59.51	-56.46	-57.27	28.48	59.1	58.1	51.1
8.61	-59.18	-56.1	-57.21	28.6	57.4	54.4	50
8.67	-59.95	-56.56	-57.39	28.45	59.3	56.6	48.1
8.55	-58	-56.46	-57.33	28.54	57.8	54.9	48.8

8.68	-59.36	-56.46	-57.48	28.42	59.5	56.1	50.5
8.64	-59.21	-56.87	-56.9	28.48	59.2	57	52.2
8.65	-59.21	-56.72	-57.36	28.39	59.8	55.9	51.1
8.7	-59.21	-56.87	-57.24	28.27	60.5	58.4	46.9
8.66	-58.37	-57.08	-57.33	28.45	59.7	55.6	52.6
8.56	-58.59	-56.36	-57.33	28.33	62.5	60.9	50.5
8.68	-59.58	-56.1	-57.18	28.3	61.1	55.6	50.5
8.54	-59.87	-56.3	-57.45	28.24	63.1	60.3	50.3
8.65	-59.43	-56.41	-57.33	28.54	61.1	55.5	55.7
8.56	-58.77	-56.3	-57.12	28.3	62.7	59.1	49.6
8.62	-59.1	-56.2	-57.64	28.39	61.2	55.4	52
8.67	-59.4	-56.15	-57.18	28.3	63.5	59.1	52.6
8.59	-59.47	-56.41	-57.24	28.39	62	55.5	53
8.64	-59.21	-56.77	-57.42	28.17	63.8	59.9	51.4
8.65	-58.48	-56.72	-57.39	28.39	62	55.6	51.5
8.62	-57.53	-56.51	-57.33	28.3	64.1	59.5	48.9
8.63	-59.62	-56.51	-57.18	28.27	62.1	55.8	51.8
8.81	-59.43	-56.61	-57.48	28.24	63.9	59.7	49.9
8.9	-59.47	-56.36	-57.42	28.3	62	55.7	50.1
9.27	-59.36	-56.61	-57.24	28.11	64.3	58.9	50.5
9.32	-59.43	-56.93	-57.36	28.27	62.5	55.7	48.6
8.68	-59.18	-56.87	-57.27	27.99	64.4	58.8	50.3
7.82	-59.62	-56.61	-57.58	28.33	63.2	55.6	51.6
8.6	-59.58	-56.72	-57.36	28.27	65	58.6	51.1
8.54	-59.62	-56.2	-57.33	28.33	63.7	55.6	50.2
8.5	-57.34	-56.72	-57.33	28.3	65.5	58.7	50.2
8.52	-59.25	-56.36	-57.64	28.42	63.6	55.5	49.6
8.53	-59.65	-56.72	-57.21	28.17	65.1	60.2	51.4
8.63	-59.18	-56.51	-57.58	28.39	62.5	55.8	48.6
8.53	-59.62	-56.15	-57.42	28.14	64.3	60.5	50.4
8.7	-59.58	-56.51	-57.39	28.3	62	55.7	50
8.55	-58.15	-55.99	-57.48	28.21	63.8	60.5	51.1
8.63	-59.54	-56.51	-57.45	28.24	61.9	55.8	52.3
8.57	-59.58	-56.36	-57.39	28.14	64.5	59.1	52.3
8.67	-59.36	-56.41	-57.42	28.27	62.7	55.5	49.9
8.56	-58.66	-56.87	-57.21	28.17	64.7	59.4	49.8
8.64	-59.14	-56.72	-57.45	28.27	62.8	55.7	55.2
8.57	-59.25	-56.04	-57.55	28.3	64.1	58.1	47.3
8.62	-59.21	-56.56	-57.36	28.33	62.5	55.4	47.9
8.66	-59.54	-57.03	-57.48	28.27	63.1	56.9	50.1
8.61	-59.47	-57.13	-57.42	28.21	62.8	57.4	50.2
8.57	-58.99	-57.08	-57.33	28.21	62.5	56.3	45.9
8.59	-59.62	-56.25	-57.48	28.11	63.7	59.9	49.9
8.53	-56.79	-57.24	-57.42	28.42	62.2	55.8	50.4
8.63	-59.58	-56.51	-57.45	28.24	63.3	60.5	50.5
8.65	-58.44	-56.46	-57.48	28.45	60.9	55.7	49.8
8.67	-59.54	-56.15	-57.39	28.24	62.1	59.2	50.5

8.68	-57.64	-56.61	-57.33	28.39	60.3	55.5	49
8.69	-59.29	-57.19	-57.3	28.45	61.6	57.4	51
9.09	-58.19	-57.03	-57.36	28.48	60.1	55.2	50.8
8	-60.02	-56.56	-57.61	28.48	61.3	56.9	49.3
7.83	-58.52	-56.36	-57.58	28.66	60.1	55	50.2
8.55	-59.1	-55.89	-57.45	28.54	61.1	56.5	52.7
8.54	-58.08	-56.2	-57.67	28.42	61	57.2	51.6
8.52	-59.4	-56.77	-57.64	28.69	60.4	55.9	53.1
8.5	-56.98	-57.03	-57.64	28.57	62	59.5	51.3
8.51	-58.77	-56.72	-57.64	28.69	60	55.6	46.5
8.45	-56.76	-56.87	-57.48	28.57	61.5	60.3	50.5
8.47	-59.91	-56.77	-57.48	28.72	59.4	55.4	49.2
8.57	-57.82	-57.65	-57.39	28.63	60.7	59.2	49.2
8.56	-59.98	-55.84	-57.39	28.63	58.8	55	47.1
8.65	-59.1	-56.41	-57.58	28.57	59.6	57.4	49.1
8.55	-59.62	-56.46	-57.36	28.69	58.2	54.9	51.3
8.56	-57.45	-56.3	-57.58	28.63	59.2	56.1	49.4
8.71	-59.36	-56.56	-57.67	28.72	58.2	56.4	52.4
8.71	-59.29	-56.41	-57.55	28.69	58.2	55.6	49.6
8.86	-58.66	-56.98	-57.55	28.63	59.6	59	50.1
8.99	-57.27	-56.98	-57.42	28.63	57.9	55	49.7
8.56	-58.22	-56.46	-57.45	28.72	60.5	60.3	51.3
8.56	-59.25	-56.77	-57.58	28.85	58.2	54.8	50.9
8.55	-58.59	-57.24	-57.45	28.69	59.8	58.6	49.7
8.65	-59.03	-57.24	-57.48	28.63	57.7	54.5	48.9
8.66	-59.14	-56.93	-57.39	28.63	59.2	58.4	49
8.56	-57.75	-56.51	-57.48	28.75	57.1	54.4	50.4
8.65	-59.21	-55.78	-57.67	28.69	58.2	56.4	51.8
8.66	-59.58	-56.3	-57.7	28.6	58	57.3	49.5
8.62	-59.51	-56.25	-57.7	28.85	57.3	55.1	50.1
8.53	-59.4	-55.11	-57.7	28.6	59.1	59.2	49.5
8.56	-58.88	-56.51	-57.48	28.91	57.2	54.8	48.4
8.62	-58.99	-56.51	-57.58	28.66	58.9	60.3	48.6
8.61	-58.96	-56.77	-57.45	28.75	57	54.8	48.1
8.63	-59.21	-56.82	-57.67	28.63	59	59.8	49
8.66	-59.73	-56.41	-57.18	28.79	56.3	54.2	50.4
8.69	-59.43	-57.03	-57.45	28.79	58.1	57.1	49.3
8.71	-59.29	-56.2	-57.58	28.91	56.3	54.1	49.3
8.71	-59.29	-57.55	-57.58	28.75	58	56.8	55.8
9.04	-59.32	-56.72	-57.3	28.79	56.6	55.4	48.9
9.36	-59.62	-56.87	-57.36	28.75	57.1	55.5	50.1
7.77	-58.11	-56.98	-57.64	28.79	58.4	59.8	51.6
8.65	-59.1	-56.72	-57.67	28.94	56.2	54.3	52.2
8.65	-59.62	-56.72	-57.67	28.88	58.2	60.2	50.9
8.62	-59.95	-56.77	-57.55	29	56	54	52
8.39	-59.29	-57.5	-57.79	29.03	57.6	56.2	49
8.65	-60.09	-56.56	-57.12	28.75	57.1	57.1	49.8

8.62	-60.16	-56.51	-57.36	28.82	56.8	54.9	48.2
8.54	-57.93	-56.3	-57.64	28.66	58.4	60.3	49.7
8.58	-58.15	-56.04	-57.76	28.85	55.9	54.1	48.4
8.69	-60.27	-56.77	-57.7	28.75	57.5	58	50.2
8.68	-58.92	-56.25	-57.61	28.75	56.4	56.4	50.8
8.68	-59.47	-56.87	-57.79	28.94	56.4	54.8	50.2
8.6	-59.43	-56.36	-57.7	28.6	58.4	60.1	46.6
8.59	-59.76	-56.61	-57.7	28.91	55.7	54	49.8
8.59	-59.91	-57.45	-57.61	28.82	57.7	58.4	49.7
8.67	-59.87	-56.93	-57.55	28.75	56.1	55.6	50.1
8.61	-58.92	-57.6	-57.55	29	56.3	54.9	49.5
8.59	-58.37	-56.93	-57.61	28.79	57.8	60.3	50.9
8.56	-55.73	-56.82	-57.85	28.88	55.5	53.9	52.5
8.63	-59.58	-56.3	-57.61	28.72	57.1	57.1	49.6
8.62	-58.33	-57.19	-57.67	28.69	56.8	57.5	53.5
8.67	-59.03	-56.93	-57.58	28.88	55.9	54.5	51.4
8.71	-59.8	-56.2	-57.76	28.75	57.9	60.2	48.6
8.68	-59.29	-57.29	-57.55	28.85	55.5	54.1	52.1
8.74	-60.27	-56.72	-57.55	28.82	57.3	55.6	52
8.71	-59.07	-56.36	-57.58	28.69	58.2	59.2	50.3
8.72	-59.29	-57.13	-57.79	28.91	56.6	54.6	50
8.89	-59.84	-56.72	-57.76	28.69	58.2	59.1	50.1
9.27	-59.43	-56.25	-57.76	28.79	56.8	54.5	48.7
8.03	-59.43	-56.3	-57.79	28.91	57.5	55.6	51.6
8.4	-59.21	-56.56	-57.58	28.79	59.3	60.3	50.1
8.54	-58.7	-56.3	-57.61	28.97	57.2	54.3	49.9
8.56	-59.21	-56.82	-57.79	28.88	59	58.5	51.3
8.66	-58.85	-56.04	-57.88	28.91	57.1	54.7	48.6
8.55	-60.16	-56.51	-57.45	28.91	58.2	55.2	50.2
8.55	-56.72	-56.51	-57.91	28.54	59.5	59.6	51.2
8.64	-59.4	-56.3	-57.85	28.85	57.5	54.3	51.1
8.63	-59.47	-56.87	-57.42	28.69	59.3	59.2	48.4
8.57	-59.76	-56.61	-57.91	28.75	57.3	54.6	48.9
8.63	-59.21	-57.6	-57.67	28.79	58.4	55.2	50.3
8.57	-58.04	-56.3	-57.85	28.48	59.2	58.3	47.3
8.62	-58.77	-56.98	-57.48	28.85	57.8	54.6	50.7
8.67	-58.55	-57.08	-57.67	28.69	59.2	59.9	49
8.6	-57.53	-57.03	-57.7	28.82	57.2	54.4	50.3
8.53	-59.07	-57.13	-57.58	28.85	58.9	56.5	49.6
8.61	-58.48	-56.61	-57.7	28.66	59.1	57.4	50.7
8.67	-59.4	-56.77	-57.91	28.79	58.2	54.9	50.7
8.7	-60.02	-56.61	-57.33	28.63	60.3	60.3	48.8
8.65	-59.76	-56.82	-57.45	28.85	57.6	54.6	49.6
8.65	-59.76	-57.03	-57.61	28.69	59.4	58.7	50.9
8.7	-59.98	-57.19	-57.61	28.79	57.3	54	48.2
8.7	-59.73	-57.08	-57.73	28.69	59.1	56.1	49.2
8.7	-59.58	-56.98	-58	28.6	59.6	58.1	48.6

8.67	-59.73	-56.98	-57.76	28.75	58.3	55	48.4
8.66	-59.43	-56.41	-57.76	28.63	60.4	60.4	52.2
8.62	-59.58	-56.87	-57.79	28.85	58.4	54.4	49.8
8.62	-58.99	-56.82	-57.67	28.63	60.2	59.4	48.6
8.81	-58.99	-56.61	-57.76	28.72	58.3	54.2	47.8
8.85	-59.98	-56.2	-57.64	28.66	59.9	56.3	51.2
8.73	-59.95	-56.3	-57.76	28.75	58.8	55	48.6
8.95	-60.2	-56.93	-57.82	28.69	59.9	55.7	49.8
8.9	-59.1	-57.6	-57.58	28.51	61.6	59.4	48.8
9.03	-59.73	-56.56	-57.94	28.75	60.1	55	47.1
8.52	-59.65	-57.24	-57.76	28.63	62.4	60.6	51
7.99	-59.25	-57.19	-57.79	28.88	60.3	54.8	50.8
8.46	-59.58	-56.98	-57.55	28.69	62.5	60.7	50.2
8.62	-58.99	-56.72	-57.67	28.85	60.3	54.8	50.5
8.56	-58.41	-56.61	-57.76	28.75	62.1	59.2	53.8
8.54	-56.94	-56.51	-57.76	28.88	60.3	54.5	49.7
8.5	-56.1	-56.77	-57.82	28.69	62.5	58	49.2
8.56	-57.82	-56.46	-57.97	28.79	61	54.6	51.6
8.59	-59.18	-56.46	-57.76	28.66	62.6	56.9	50.8
8.68	-59.32	-57.65	-57.73	28.66	61.3	54.8	49.7
8.56	-59.32	-55.94	-57.91	28.75	62.8	56.7	51.6
8.53	-59.91	-56.72	-57.64	28.63	61.7	54.9	45
8.68	-59.47	-56.82	-57.82	28.57	62.9	56.3	52
8.53	-57.2	-57.13	-57.48	28.39	63.7	58.3	49.5
8.68	-59.8	-56.61	-57.7	28.51	62.7	55.9	49.8
8.62	-59.84	-56.93	-57.64	28.24	64.7	59.7	49.5
8.6	-59.65	-57.39	-57.76	28.45	63.3	55.7	49.1
8.63	-59.07	-56.51	-57.67	28.33	65.3	60.3	49.2
8.64	-59.51	-56.56	-57.97	28.45	63.2	55.5	49
8.59	-60.13	-57.65	-57.48	28.39	65.3	59.9	51.4
8.57	-57.64	-56.56	-57.55	28.45	63.4	55.1	50.1
8.56	-60.13	-56.93	-57.67	28.39	65	60.2	49.5
8.65	-59.65	-57.13	-57.45	28.39	63.6	55.6	50.7
8.68	-59.47	-57.45	-57.3	28.27	65.8	60.1	49.5
8.67	-59.25	-56.77	-57.94	28.48	64	55.6	50.2
8.56	-57.97	-56.93	-57.76	28.27	66	60.3	50.8
8.57	-59.84	-56.98	-57.67	28.39	64.1	56	50.4
8.62	-58.85	-56.46	-57.48	28.24	65.6	58.8	49.4
8.68	-59.36	-57.08	-58	28.51	64.1	55.9	45.5
8.59	-60.46	-56.56	-57.7	28.27	64	56.9	51.1
8.69	-59.87	-56.93	-57.79	28.39	64.3	56.2	51.4
8.54	-57.75	-56.04	-57.91	28.54	63.3	55.2	49.5
8.67	-59.43	-56.56	-57.91	28.39	64.4	56.8	50.2
8.6	-59.47	-57.19	-57.85	28.51	62.9	55.1	49
8.56	-59.62	-56.61	-57.82	28.42	64.4	57.1	50.3
8.67	-60.13	-57.45	-57.79	28.51	62.9	55.6	50.1
8.52	-56.06	-56.61	-57.67	28.3	64.7	59.3	49.5

8.59	-58.88	-56.36	-57.82	28.48	63.1	55.7	51.6
8.69	-59.54	-56.61	-57.85	28.42	64.8	60.1	50.5
8.65	-59.95	-57.19	-57.48	28.45	63.1	55.8	50
8.69	-58.92	-56.3	-57.64	28.39	64.8	59.8	46.1
8.83	-58.85	-56.98	-58	28.51	62.7	55.9	53.7
8.89	-59.43	-57.34	-57.82	28.42	62.9	57.6	49
8.91	-59.43	-56.87	-57.76	28.54	62.5	56	50.9
9.28	-59.87	-56.77	-57.79	28.45	62.3	56.9	47.1
8.04	-58.3	-57.03	-57.88	28.63	62.4	56.1	54.6
7.76	-58.88	-56.98	-57.94	28.69	61.8	56.1	48.1
8.52	-59.65	-56.98	-57.61	28.72	62.1	56.1	49
8.59	-59.73	-56.72	-57.79	28.69	61.2	55.8	49.3
8.61	-58.59	-57.03	-57.91	28.63	62.2	56	49.2
8.6	-59.21	-56.77	-57.67	28.69	61.5	56	48.7
8.57	-60.09	-56.41	-57.7	28.66	61.8	56	49.4
8.59	-58.26	-56.56	-57.94	28.69	61.2	55.2	49
8.62	-59.84	-56.41	-57.64	28.63	62.4	56.1	49.3
8.57	-58.96	-57.13	-57.91	28.79	61	55.4	51.3
8.54	-58.66	-57.24	-57.73	28.79	61.9	56.1	50.1
8.56	-59.18	-56.82	-57.76	28.72	60.9	55.2	51.7
8.53	-57.93	-57.29	-57.55	28.66	61.8	56.1	50.1
8.54	-60.24	-57.13	-57.7	28.75	61.2	56	50.5
8.59	-59.25	-56.41	-57.79	28.66	61.7	56	51.9
8.5	-58.99	-57.19	-57.7	28.69	61.4	56.8	47.5
8.54	-59.98	-56.2	-57.88	28.72	61.2	55.8	50.5
8.53	-58.19	-56.51	-57.42	28.63	61.5	57.6	49.9
8.51	-59.07	-56.46	-57.94	28.75	60.7	55.4	53.3
8.54	-59.65	-57.19	-57.7	28.69	62.2	59.7	47.3
8.62	-60.46	-56.51	-57.82	28.91	60.3	55	49.6
8.51	-60.05	-57.13	-57.73	28.69	61.7	59.6	48.4
8.54	-60.2	-56.87	-57.91	28.94	59.8	54.7	49.1
8.54	-58.33	-56.72	-57.79	28.75	61.4	57.8	50.8
8.68	-59.62	-57.08	-57.88	28.88	59.7	54.5	51.1
8.65	-59.73	-56.93	-57.73	28.72	61	56.6	49.5
8.58	-59.62	-56.77	-57.76	28.94	59.5	55.5	50.1
8.65	-59.98	-56.87	-57.94	28.88	60.2	55.6	48.7
8.56	-58.33	-56.46	-57.7	28.6	60.7	58.1	51.9
8.61	-59.03	-56.36	-57.73	28.97	59.9	55.1	49.3
8.56	-59.1	-56.51	-57.91	28.79	61.4	59.4	49.9
8.62	-59.32	-56.72	-58.1	28.88	59.1	54.9	50.8
8.67	-59.36	-57.45	-57.48	28.82	61.1	59.5	49.2
8.66	-59.76	-56.3	-57.97	28.91	59.2	54.7	47.9
8.58	-58.59	-57.24	-57.88	28.79	60.5	57.2	49.5
8.19	-59.21	-56.87	-58.13	28.97	58.8	54.5	47.4
8.55	-58.04	-56.87	-57.67	28.88	59.8	56.1	50.9
8.32	-59.91	-56.77	-58.03	28.75	60.2	57.1	48.7
8.59	-59.14	-56.77	-57.85	28.88	59.9	55.6	52.1

8.55	-57.97	-56.41	-57.91	28.66	61.1	59.1	50.8
8.58	-59.95	-56.72	-57.73	28.85	59.3	55.1	49.8
8.61	-59.21	-57.13	-57.85	28.82	60.9	59.4	47.8
8.53	-58.22	-56.98	-57.55	28.88	58.8	54.7	52.3
8.5	-59.8	-56.87	-57.97	28.75	60.5	60.2	51.3
8.5	-56.68	-56.72	-57.73	28.88	58.3	54.6	50.2
8.64	-59.98	-56.72	-57.85	28.88	59.9	58.1	50.2
8.54	-59.54	-57.45	-57.7	28.91	58	54.2	54.1
8.57	-59.91	-57.03	-57.76	28.88	59.7	56.9	51.2
8.62	-58.44	-57.03	-57.85	28.94	58	54.8	50.5
8.56	-59.76	-56.87	-57.76	28.91	59.2	55.5	50.3
8.61	-59.25	-56.87	-58	28.88	58.2	55.8	52.1
8.56	-58.63	-57.45	-57.64	28.94	59	55.4	47.2
8.48	-60.46	-58.12	-57.88	28.79	58.8	57.1	49.4
8.57	-58.74	-55.89	-57.88	28.88	58.3	54.7	49.5
8.62	-59.58	-57.19	-57.67	28.75	60.3	60.1	50.7
8.63	-59.91	-57.13	-57.67	28.97	57.9	54.5	50.3
8.65	-58.26	-57.39	-57.67	29.03	59.7	59.2	51.6
8.67	-59.98	-56.36	-58	29.06	57.5	54.1	53.1
8.67	-59.8	-56.87	-57.48	28.91	59.2	57.1	50.8
8.54	-57.78	-57.7	-57.64	29.15	57.2	54.1	49.8
8.65	-59.47	-57.03	-57.79	28.94	58.4	55.5	48.9
8.51	-60.31	-56.77	-57.88	28.79	60.1	59.9	48.8
8.69	-59.32	-56.98	-57.67	29	57.8	54.5	52.7
8.55	-58.48	-56.82	-57.79	28.88	59.9	60.3	50.5
8.56	-59.47	-57.91	-57.97	28.97	57.5	54.2	50.3
8.62	-60.02	-57.34	-57.97	28.88	59.4	59	48.6
8.64	-59.54	-56.93	-57.79	29.03	57.1	54.2	50.7
8.59	-59.51	-56.93	-58.06	28.97	59	56.8	48
8.6	-59.43	-57.03	-57.76	29	57	54.2	50.5
8.61	-59.36	-56.87	-57.97	29.03	58.1	55.2	52.8
8.6	-59.29	-57.19	-57.79	28.79	58.5	58.3	49.5
8.52	-60.09	-56.46	-57.82	29	57.4	54.5	50.5
8.53	-57.49	-56.56	-57.88	28.85	59.3	60.3	50.5
8.52	-59.4	-56.46	-57.97	29	56.7	54	46.1
8.64	-59.43	-56.46	-57.88	28.85	58.9	59.7	49.7
8.52	-58.04	-56.87	-57.73	28.88	57.7	56.9	50
8.64	-59.58	-56.77	-57.88	28.94	57.2	54.6	51.2
8.45	-59.58	-56.87	-57.67	28.91	57.2	56.9	50.5
8.46	-58.37	-57.29	-57.76	28.97	56.1	54.2	48.7
8.62	-59.62	-57.08	-57.7	28.66	59.2	60.9	48.4
8.63	-59.25	-56.93	-57.88	28.85	56	54	50.5
8.68	-60.24	-56.72	-57.85	28.75	58	59.9	52
8.69	-60.09	-56.98	-57.79	28.91	55.5	53.9	49.8
8.66	-59.43	-57.03	-58.25	28.88	56.8	56	51.7
8.61	-60.53	-56.87	-57.94	28.82	56.7	57.3	50.1
8.54	-59.51	-58.17	-57.91	28.91	55.9	54.3	46.8

8.62	-59.62	-56.2	-57.97	28.91	57.3	60.1	50.5
8.65	-59.47	-56.51	-57.94	29	55.4	53.8	50.3
8.58	-57.97	-57.65	-57.85	28.82	57.1	56.9	51.6
8.61	-59.18	-56.51	-57.85	28.75	56.8	57.1	51
8.67	-60.02	-56.87	-57.91	28.97	56	54.4	51.4
8.56	-59.4	-56.41	-57.64	28.79	58.2	60.2	50.8
8.68	-59.8	-57.13	-57.82	28.88	55.9	53.8	46.2
8.58	-59.62	-58.33	-57.82	28.85	57.3	56.6	51
8.6	-59.62	-57.34	-57.85	28.72	57.4	57.5	51.1
8.58	-59.91	-56.72	-57.88	28.91	56.3	54	51
8.64	-59.87	-56.46	-57.94	28.79	58.4	59.9	49.6
8.69	-59.8	-57.39	-58.16	28.97	56.6	53.9	51.3
8.69	-59.29	-56.87	-57.85	28.82	58.3	56.6	43
8.67	-60.02	-57.24	-57.61	28.82	57.9	56.9	51.5
8.65	-59.65	-56.98	-58.1	28.91	57.5	54.9	50.5
8.69	-59.21	-57.76	-57.73	28.69	59.2	60.3	51.5
8.62	-59.62	-56.3	-57.88	28.91	57	54.2	47.1
8.65	-59.95	-57.29	-57.88	28.75	59.1	59	50.2
8.62	-59.47	-56.77	-57.97	28.85	57.3	54.1	50.4
8.65	-60.24	-57.03	-57.85	28.75	59.1	56.8	51.2
8.57	-59.73	-56.77	-57.76	28.79	57.6	55.9	52.4
8.64	-59.58	-56.87	-57.94	28.72	58.3	55.1	50
8.68	-59.87	-56.61	-57.94	28.6	59.7	59.1	51.2
8.59	-58.15	-57.7	-57.7	28.72	58.2	54.5	49.3
8.62	-59.25	-57.45	-57.97	28.54	61.4	60.5	48.4
8.66	-59.62	-56.2	-58.06	28.69	58.8	54.3	52.6
8.62	-59.84	-57.5	-57.76	28.66	61.4	59.7	49.8
8.7	-60.16	-57.29	-57.64	28.6	59.4	54.4	49.5
8.66	-59.51	-56.46	-57.88	28.51	61.4	58	48.3
8.68	-59.84	-57.6	-57.64	28.66	59.5	54.3	49.1
8.65	-59.76	-56.98	-57.76	28.57	61.9	57.1	48.9
8.6	-59.51	-56.87	-57.82	28.6	59.7	54.2	51.1
8.55	-59.8	-57.03	-57.94	28.66	60.9	55.9	50.3
8.55	-59.43	-56.56	-57.97	28.57	60.4	56	52.3
8.59	-59.47	-57.03	-58.03	28.57	61.3	55.5	47.3
8.59	-59.8	-57.08	-57.91	28.45	62.6	58.5	50.7
8.58	-59.73	-57.19	-57.79	28.54	61.4	55.1	49.9
8.65	-59.07	-56.98	-57.76	28.24	63.2	59.2	50.8
8.64	-60.02	-57.13	-57.97	28.48	62	54.9	50.5
8.57	-58.44	-57.34	-57.82	28.3	63.5	59.1	50.7
8.68	-60.16	-56.77	-57.91	28.39	61.7	54.9	52.1
8.57	-59.87	-57.34	-57.73	28.33	63.6	59.8	51.6
8.62	-59.51	-56.72	-57.76	28.51	61.7	54.9	50.3
8.68	-60.31	-57.03	-57.94	28.39	62.9	58.5	53.5
8.6	-59.76	-57.08	-57.94	28.57	61.2	54.6	48.8
8.61	-58.59	-57.24	-57.85	28.45	62.3	56.9	49.8
8.54	-59.58	-57.19	-57.88	28.48	60.9	55.1	54

8.56	-57.23	-56.25	-57.85	28.54	62.1	56.3	47.9
8.69	-59.65	-56.98	-57.79	28.57	60.4	54.7	50.4
8.56	-59.8	-56.25	-57.91	28.48	61.3	55.9	50.2
8.66	-59.95	-56.72	-57.67	28.48	60.4	56.3	50.5
8.69	-59.36	-56.56	-57.76	28.63	60.4	55.2	48.4
8.65	-60.13	-56.36	-57.88	28.39	61.8	59.2	50
8.62	-60.05	-57.08	-57.85	28.51	60.2	55	54.3
8.71	-59.65	-56.61	-58.13	28.48	61.9	59.8	48.3
8.62	-59.21	-57.39	-57.88	28.63	59.8	54.9	49.3
8.64	-59.18	-56.41	-57.82	28.51	61.2	59.2	48.6
8.7	-59.8	-57.6	-57.82	28.6	59.4	54.8	48.6
8.58	-59.58	-57.65	-57.91	28.57	61.4	59.9	50
8.61	-58.63	-57.08	-58	28.66	58.8	54.4	49.8
8.62	-59.65	-56.46	-58.03	28.51	60.9	59.2	51.5
8.63	-59.43	-56.46	-57.97	28.75	58.5	54.4	51.4
8.66	-59.73	-56.93	-57.88	28.54	59.9	57.1	52.5
8.71	-59.43	-56.56	-58.06	28.57	59	56.2	49
8.63	-60.13	-57.08	-57.88	28.63	59.2	55.2	52.6
8.65	-58.88	-56.93	-57.76	28.57	59.2	56.7	48.2
8.58	-58.66	-56.61	-57.97	28.63	59.2	54.9	48.8
8.59	-60.75	-57.34	-58	28.48	59.7	58.5	44.2
8.59	-57.67	-57.19	-58.1	28.75	58.2	54.3	52.4
8.65	-59.87	-57.13	-57.82	28.57	60.4	60.5	50.4
8.56	-59.73	-56.51	-57.91	28.75	57.7	54.5	52.4
8.56	-58.96	-56.72	-58.16	28.63	60	60.1	49.7
8.55	-59.51	-56.98	-57.97	28.69	57.4	54.1	53.3
8.61	-59.51	-56.93	-57.79	28.63	59.2	58.2	49.6
8.65	-59.58	-56.98	-57.76	28.82	57	54	52.2
8.61	-59.62	-56.87	-57.88	28.75	58.5	56.5	51.2
8.69	-59.21	-56.56	-57.94	28.6	58.2	57.1	48.4
8.65	-58.26	-57.34	-57.79	28.72	57.6	54.9	51.4
8.56	-60.2	-56.46	-57.82	28.57	59.6	60.2	51.4
8.67	-60.24	-57.91	-58	28.82	57.1	54.2	51
8.56	-59.62	-56.82	-57.97	28.66	59.4	59.7	50.8
8.56	-58.08	-57.03	-57.97	28.85	57.1	54.1	51.6
8.66	-59.91	-56.93	-58.03	28.6	58.3	56.5	49.3
8.62	-59.25	-57.39	-57.94	28.75	56.9	54.6	51
8.57	-59.98	-57.19	-57.97	28.79	57.6	55.2	52
8.67	-59.1	-57.03	-58	28.66	59.1	60.1	48.1
8.66	-60.02	-56.82	-57.85	28.82	56.4	54.2	45.2
8.67	-59.25	-56.3	-57.94	28.6	58.1	59.9	50.4
8.63	-59.29	-56.77	-57.88	28.85	55.6	53.7	48.4
8.65	-60.02	-57.34	-57.85	28.75	57	55.8	50.9
8.64	-60.27	-56.87	-57.85	28.66	57.7	58.5	47.5
8.67	-59.25	-56.93	-58.13	28.85	55.9	53.9	48.6
8.65	-60.05	-57.19	-57.88	28.72	57.6	57.9	51.6
8.57	-60.35	-57.24	-57.85	28.85	55.8	54.2	48.9

8.61	-59.91	-57.24	-58.16	28.85	56.7	54.9	47.7
8.59	-60.42	-56.87	-57.82	28.69	58.2	59.8	50
8.65	-59.29	-57.19	-57.76	28.88	55.4	53.8	50
8.58	-59.47	-55.99	-57.7	28.79	56.4	57.3	51.1
8.6	-59.76	-56.77	-58	28.75	56.1	57.1	49.4
8.61	-59.29	-56.46	-58.13	28.85	55.2	54	53.8
8.61	-59.84	-56.98	-58.06	28.75	56.9	58.4	50.3
8.57	-59.8	-56.51	-58.06	28.88	55.1	54.9	49.2
8.56	-59.91	-57.29	-57.73	28.85	55.1	54.4	51.2
8.57	-59.95	-56.82	-58.06	28.66	57	59.8	51.3
8.57	-59.91	-56.61	-57.91	28.94	54.2	53.4	51
8.59	-59.87	-57.7	-58	28.91	55.4	56.3	50.8
8.69	-59.25	-57.34	-57.88	28.75	56.6	59.2	51.1
8.67	-59.62	-57.03	-58.19	29	54.1	53.2	48.6
8.68	-59.58	-56.82	-57.85	28.85	55.3	56.6	49.7
8.68	-59.47	-56.82	-58.1	28.69	55.9	58.7	52
8.62	-59.91	-57.81	-58.06	29	53.8	53.3	49.4
8.53	-56.28	-56.77	-57.97	28.88	55.3	56.6	52.3
8.56	-58.15	-57.29	-57.76	28.75	54.9	57.1	52.5
8.64	-59.43	-57.81	-57.85	29	53.8	53.6	50.5
8.66	-59.21	-57.24	-58.13	28.91	55.2	58.6	48.7
8.62	-60.31	-57.5	-57.7	28.85	54.2	56.8	49.5
8.65	-60.2	-57.7	-57.88	28.94	53	53.3	52.8
8.65	-60.24	-57.29	-58.1	28.94	54.1	57.1	48.2
8.64	-59.43	-56.98	-58.19	28.88	54.7	58.4	51.3
8.6	-59.54	-57.03	-58.06	29	52.8	52.9	47.3
8.65	-59.87	-57.65	-57.88	28.91	55.1	56.4	48.4
8.54	-59.98	-57.55	-57.91	28.82	53.5	54.7	51.2
8.65	-59.87	-57.19	-57.88	28.88	54	54.4	51.6
8.56	-58.99	-57.24	-58.06	28.82	55.7	59	51.5
8.62	-58.99	-56.82	-57.85	29	53.2	53.3	50.3
8.6	-59.95	-57.29	-57.97	28.88	54.9	57.9	55.8
8.68	-59.4	-56.72	-58.34	29	52	52.6	54.4
8.57	-58.66	-56.46	-58.1	28.94	53.3	54.3	50.1
8.57	-57.82	-57.45	-57.91	28.69	55.2	60.5	49.5
8.65	-59.29	-57.55	-57.79	29.03	51.9	52.5	50.2
8.63	-59.98	-57.55	-57.88	28.82	53.8	58.2	52.2
8.57	-60.53	-57.29	-57.91	28.88	53.2	57	50.9
8.68	-60.09	-56.98	-57.91	28.94	52.5	53.4	49.6
8.58	-59.91	-56.98	-57.97	28.88	54.6	60.3	50.8
8.61	-58.99	-57.45	-57.91	29	51.6	52.5	49.6
8.68	-59.73	-57.08	-57.88	28.94	53.3	57.2	51.2
8.58	-59.8	-56.77	-58.22	28.72	53.9	58.4	49.7
8.62	-59.95	-57.65	-58.1	28.85	53	52.7	49.8
8.65	-59.29	-57.45	-58.22	28.72	55.2	58	49.6
8.56	-57.23	-57.6	-58.22	28.63	54.1	56	47.3
8.68	-59.1	-57.5	-58.1	28.75	54.4	53.8	48.2

8.6	-60.27	-56.93	-58.25	28.54	56.8	60.3	49.6
8.62	-58.48	-56.93	-58.06	28.72	53.7	52.9	50.8
8.71	-60.16	-57.08	-58.13	28.66	55.9	58.7	52.6
8.57	-60.35	-57.29	-58.28	28.63	56	58.1	50.5
8.56	-59.14	-57.13	-58.22	28.63	55.1	53.6	50.1
8.62	-59.54	-57.45	-58.68	28.6	57.1	59.8	54.6
8.63	-59.54	-57.81	-58.03	28.63	54.9	53.5	51.6
8.59	-60.2	-57.13	-58.34	28.72	56.6	55.2	51.6
8.51	-59.18	-57.13	-58	28.69	56.4	57.4	49.6
8.6	-58.15	-57.24	-58.49	28.82	56	53.9	48.3
8.57	-59.8	-57.03	-58.58	28.66	58.9	60.9	50.3
7.79	-60.2	-57.34	-58.34	28.79	56	53.2	48.7
8.06	-59.58	-57.08	-58.64	28.69	58	58.2	52.5
9.09	-58.04	-57.7	-58.13	28.39	58.3	58.2	50.2
8.92	-59.87	-57.24	-58.37	28.6	57.1	53.9	51.6
8.68	-59.84	-57.6	-58.46	28.45	58.9	58.2	48.1
8.6	-60.05	-57.45	-58.19	28.42	58.4	57	50.8
8.68	-60.2	-58.17	-58.1	28.51	58.4	54.8	53.2
8.59	-58.41	-57.76	-58.37	28.33	59.8	58.9	53.4
8.67	-59.91	-57.29	-58.43	28.54	58.4	54	52.1
8.58	-59.87	-57.39	-58.46	28.42	60.3	58	49.6
8.65	-59.58	-57.13	-58.25	28.27	60.6	57.4	50
8.66	-59.98	-57.34	-58.43	28.42	60.3	54.6	50.8
8.58	-58.3	-57.7	-58.28	28.21	62.6	60.2	50.5
8.69	-59.84	-57.24	-58.49	28.27	60.5	54.1	49.8
8.56	-59.21	-56.82	-58.43	28.24	62.2	56.3	46.5
8.66	-60.16	-58.02	-58.06	28.27	60.7	54.6	46.8
8.55	-59.73	-58.48	-58.28	28.27	62.3	55.5	51.7
8.68	-59.43	-57.29	-58.4	28.05	63.6	58.1	52.9
8.53	-59.73	-57.6	-58.28	28.14	63.2	54.6	50.2
8.55	-59.14	-57.5	-58.25	28.14	65.1	60.1	49.9
8.54	-60.24	-57.7	-58.22	28.24	63.8	54.8	52.2
8.55	-59.32	-57.39	-58.34	28.11	66	60.6	49.5
8.58	-60.82	-57.65	-58.28	28.21	64.7	54.9	48.3
8.47	-59.95	-57.55	-58.19	28.11	67	59.7	50.2
7.8	-58.59	-58.59	-58.25	28.17	65.4	54.9	50.9
8.26	-60.05	-56.56	-58.37	27.87	67	57.9	48.7
8.76	-60.68	-57.91	-58.19	28.02	64.9	54.9	49.9
8.66	-58.3	-56.72	-58.55	27.9	66.8	56.7	50.3
8.67	-60.42	-57.55	-58.22	28.02	65.4	54.9	50.9
8.7	-60.64	-57.86	-57.91	27.9	67.2	57.2	47.2
8.66	-59.58	-57.24	-58.61	27.96	65.7	54.9	51.5
8.64	-59.65	-57.45	-58.1	27.9	67	57	48.3
8.57	-60.31	-57.34	-58.34	27.99	65.8	55	52.3
8.58	-60.46	-57.13	-58.25	27.93	66.6	56.5	47.9
8.62	-60.13	-57.08	-58.25	27.99	65.6	55.4	49.4
8.56	-59.29	-57.55	-58.4	27.93	66.8	56.2	51.1

8.53	-57.23	-57.19	-58.4	28.05	65	54.9	49.6
8.61	-58.74	-57.5	-58.61	27.99	66.1	56.2	51.2
8.58	-58.59	-56.93	-58.25	28.11	64.8	54.8	50.5
8.64	-59.91	-57.39	-58.25	28.11	66	56.2	51.3
8.42	-56.68	-58.07	-58.19	28.17	64.7	54.8	50.5
8.52	-58.66	-57.6	-58.22	28.24	66	56.3	48.9
8.53	-58.11	-56.56	-58.52	28.24	64	54.8	52.7
7.86	-59.87	-57.39	-58.22	28.17	65.1	56.5	50.3
8.09	-59.32	-57.45	-58.58	28.11	63.6	54.8	48.9
8.92	-60.6	-56.98	-58.4	28.05	64.8	56.2	47.9
8.91	-60.75	-57.08	-58.46	28.08	62.9	54.7	49.7
8.66	-57.75	-58.07	-58.28	28.08	64.3	56.7	51.7
8.62	-60.71	-57.45	-58.37	28.17	62.5	54.9	49.8
8.68	-59.95	-56.98	-58.71	28.11	63.6	56.2	48.4
8.63	-59.29	-57.24	-58.25	28.17	62.5	55	56.2
8.58	-60.27	-57.19	-58.37	28.11	63.3	55.7	52.3
8.53	-57.56	-58.69	-58.28	27.96	63.3	57.1	51.9
8.56	-59.84	-56.56	-58.4	28.17	62.4	55.2	49
8.6	-59.51	-58.17	-58.28	27.99	63.1	58.3	51.2
8.66	-59.73	-57.39	-58.49	28.21	61.8	54.8	49.8
8.71	-60.38	-57.76	-58.43	28.11	63.3	59.6	50.1
8.59	-60.09	-57.03	-58.4	28.21	61.3	54.7	50.5
8.55	-59.1	-57.24	-58.64	28.39	62.7	58.8	46.3
8.55	-59.43	-57.34	-58.43	28.45	60.3	54.5	46.8
8.58	-59.73	-57.7	-58.49	28.45	61.8	57.1	52
8.42	-60.05	-57.5	-58.4	28.3	60.2	54.4	52.3
8.89	-60.46	-57.55	-58.28	28.21	61.4	55.7	51.6
8.63	-59.62	-57.7	-58.61	28.14	61.9	56.6	51.4
8.63	-59.8	-57.76	-58.46	28.14	62.1	55.6	49.2
8.57	-60.53	-58.22	-58.71	28.21	63.6	59.2	46.8
8.58	-59.1	-57.29	-58.52	28.11	61.9	54.9	50.7
8.64	-59.21	-56.61	-58.4	27.99	63.9	59.3	47.8
8.65	-60.09	-57.6	-58.34	28.21	61.9	54.9	48.4
8.66	-60.05	-57.08	-58.4	28.14	63.2	57.3	51.6
8.67	-60.05	-56.93	-58.16	28.14	61.4	54.6	49.5
8.62	-58.88	-57.34	-58.25	28.11	63.3	57.1	49.6
8.56	-59.76	-57.13	-58.52	28.17	61.4	54.4	53.2
8.67	-59.84	-57.08	-58.37	28.24	62.7	56	52.6
8.61	-58.37	-57.13	-58.46	28.02	62.7	56.3	49.3
8.53	-60.53	-57.29	-58.37	28.27	62.5	55.6	52.4
8.63	-60.27	-57.08	-58.34	28.11	63.6	59	49.5
8.54	-59.95	-57.29	-58.49	28.27	62.5	55.1	53.1
8.52	-58.85	-57.29	-58.64	27.96	64	59.8	51.6
8.79	-60.53	-57.19	-58.25	28.08	62.4	54.9	50.5
8.66	-58.26	-57.29	-58.46	27.96	63.9	59.2	48
8.6	-59.62	-56.61	-58.61	28.08	62.4	55	50.7
8.58	-57.27	-56.87	-58.46	28.05	64	57.1	50.7

8.62	-59.58	-57.39	-58.58	28.08	62.1	54.7	53.2
8.58	-58.88	-57.65	-58.55	28.05	63.3	56.2	48.4
8.63	-59.43	-58.22	-58.34	27.99	62.8	56.8	51.6
8.6	-59.95	-57.55	-58.43	28.14	62.8	55.6	50.7
8.66	-59.65	-57.39	-58.64	28.02	63.4	57.9	46.1
8.61	-60.6	-57.39	-58.71	28.08	63.5	55.4	51.7
8.53	-57.78	-57.29	-58.52	27.87	64.8	59.4	52
8.56	-59.87	-57.39	-58.89	27.99	62.9	55.1	55.7
8.56	-60.2	-57.39	-58.58	28.11	64.7	59.5	51.2
8.56	-60.35	-57.5	-58.46	28.27	62.5	55.2	50.7
8.59	-59.95	-57.65	-58.46	28.17	63.9	59.4	46.8
7.79	-60.97	-57.29	-58.4	28.27	62	54.8	51.7
8.67	-60.46	-57.13	-58.52	27.96	63.4	58.1	51.5
8.88	-60.09	-57.08	-58.58	28.17	61.4	54.8	51.7
8.65	-60.38	-58.07	-58.37	28.08	62.7	56.7	52.4
8.68	-59.84	-57.55	-58.55	28.11	61.1	54.9	52.3
8.56	-58.08	-57.08	-58.25	28.05	62	55.6	51.2
8.68	-59.8	-57.45	-58.25	28.02	62.2	57.8	47.5
8.66	-60.09	-56.93	-58.68	28.14	61.3	55	48.6
8.61	-60.82	-57.13	-58.52	28.11	62.3	59.2	49.5
8.69	-60.49	-57.7	-58.55	28.17	60.3	54.6	51.7
8.57	-59.65	-57.5	-58.46	28.05	62.8	59.9	49.2
8.54	-57.93	-57.03	-58.34	28.14	60.7	54.6	50.3
8.6	-60.31	-57.34	-58.55	28.11	62.5	58.3	49.8
8.67	-60.09	-57.29	-58.64	28.17	60.6	54.6	47.7
8.65	-59.58	-57.19	-58.8	28.21	62.2	56.5	50.5
8.48	-60.2	-57.5	-58.22	28.24	60.5	54.7	50.1
8.5	-56.94	-57.65	-58.25	28.24	61.9	56	50.7
8.62	-59.91	-57.45	-58.55	28.33	61.3	56	49.3
7.93	-60.68	-57.91	-58.43	28.21	61.5	55.4	50.7
8.34	-59.51	-57.5	-58.4	28.05	62.8	59	49.3
8.74	-59.84	-57.7	-58.34	28.11	61.4	55.2	51.1
8.57	-59.1	-57.19	-58.37	28.05	62.7	59.4	53.5
8.67	-59.98	-57.45	-58.52	28.11	60.9	54.9	50.4
8.55	-60.53	-57.39	-58.25	28.02	62.7	60.4	49.6
8.62	-60.9	-57.91	-58.71	28.21	60.7	54.6	51.4
8.67	-60.82	-57.81	-58.68	27.96	62.7	60.2	52.1
8.6	-60.49	-57.7	-58.8	28.11	61.3	54.5	48.4
8.55	-58.74	-57.55	-58.64	27.99	63.4	58.4	50.5
8.67	-59.62	-57.13	-58.46	28.08	61.9	54.8	49.6
8.64	-60.16	-57.24	-58.68	27.99	63.2	56.6	50.7
8.49	-58.3	-57.34	-58.37	28.08	63.2	57.8	53.3
8.56	-59.73	-56.82	-58.83	28.17	62.5	55.6	49.8
7.88	-59.84	-56.77	-58.58	28.05	62	55.8	52.2
9.24	-59.62	-58.07	-58.58	28.05	62.6	55.6	48.6
8.87	-60.9	-57.76	-58.55	27.84	63.6	58.7	49.4
8.69	-59.91	-57.39	-58.71	28.08	62.6	55.2	52.1

8.7	-59.43	-57.65	-58.77	27.9	65.1	60.6	50.9
8.57	-58.74	-57.45	-58.46	27.99	62.9	55.2	49.6
8.55	-59.4	-57.65	-58.49	27.87	64.8	59.5	49.5
8.58	-58.22	-58.17	-58.4	28.11	63.1	55.1	49.5
8.68	-59.14	-57.86	-58.58	27.93	64.6	59.8	51.6
8.6	-60.68	-57.55	-58.64	28.02	63.1	54.9	51.6
8.62	-59.54	-58.02	-58.74	27.93	64.6	58.4	51.6
8.6	-59.14	-56.77	-58.52	27.99	62.8	54.9	50.2
8.66	-60.49	-57.65	-58.77	27.84	64.4	57	50
8.5	-60.27	-58.12	-58.52	28.02	63.4	55.2	51.3
8.62	-59.73	-57.08	-58.43	28.14	64.3	56.1	47.7
8.65	-59.32	-57.65	-58.43	27.99	64.4	57.4	49.5
7.8	-58	-57.81	-58.43	28.05	64.2	55.9	52.6
9.24	-59.58	-57.13	-58.8	27.72	64.7	58.1	47.6
8.95	-59.91	-57.39	-58.68	27.93	64.2	55.8	50.7
8.74	-59.8	-57.34	-58.58	27.87	64.8	58	50.1
8.62	-58.74	-57.24	-58.4	27.93	64.4	56	50
8.63	-59.87	-57.81	-58.74	27.75	65.8	58.5	50.1
8.68	-61.15	-58.02	-58.74	27.9	65.3	55.9	51.2
8.61	-59.03	-57.45	-58.55	27.75	66.8	59.5	53.5
8.64	-59.8	-57.45	-58.64	27.87	65.8	56	50.1
8.66	-59.8	-57.6	-58.68	27.72	66.3	57.3	46.6
8.58	-60.49	-57.86	-58.64	27.81	66.6	56.2	49.5
8.58	-59.84	-57.5	-58.77	27.75	65.7	55.5	49.3
8.56	-60.53	-58.22	-58.58	27.72	66.7	56.8	49.9
8.44	-60.02	-58.17	-58.64	28.02	65.6	55.6	51.6
8.54	-60.68	-56.61	-58.77	27.9	67.2	57.8	48
8.64	-60.38	-56.98	-58.61	27.96	66	55.7	49.2
7.76	-61.04	-57.29	-58.77	27.81	67.9	60.3	49.8
8.5	-59.51	-58.12	-58.52	27.78	66.6	56	45.2
9.32	-60.49	-57.39	-58.58	27.56	68.7	60.3	51.6
8.71	-60.05	-57.81	-58.58	27.78	67.2	56.4	48.4
8.6	-60.42	-57.81	-58.61	27.81	66.5	55.9	52
8.61	-60.79	-57.7	-58.55	27.63	68.2	57.6	52
8.57	-60.53	-57.7	-58.64	27.72	67.5	56.1	51.1
8.69	-60.53	-57.7	-58.52	27.5	69.9	60.6	48.9
8.58	-58.44	-57.91	-58.58	27.69	68.5	56.5	50.3
8.63	-60.05	-57.7	-58.64	27.63	67.8	56	48.4
8.6	-60.16	-56.72	-58.71	27.66	69.3	58.2	48.4
8.68	-60.31	-57.08	-58.37	27.69	68	56.3	50.2
8.57	-59.21	-57.6	-58.52	27.63	68.4	57.4	55.4
8.61	-59.98	-57.19	-58.64	27.53	68.8	57	46.9
8.7	-60.64	-57.76	-58.71	27.78	67.9	56	50.1
8.52	-59.8	-58.22	-58.8	27.72	69.9	60.6	53.9
8.6	-60.38	-56.98	-58.49	27.84	68.4	56.5	49.1
8.47	-60.97	-57.6	-58.61	27.87	67.7	56.1	49.8
7.91	-59.51	-58.43	-58.49	27.81	69.6	58.4	53.1

9.16	-60.53	-57.5	-58.37	27.69	68.2	56.5	51.7
8.94	-60.38	-57.34	-58.77	27.75	67.8	56.1	50.9
8.62	-60.24	-57.86	-58.8	27.72	69.1	57.9	47.3
8.57	-60.02	-57.45	-58.52	27.72	68	56.4	49.7
8.65	-60.35	-57.81	-58.71	27.69	68.4	57.2	49.6
8.65	-60.42	-57.81	-58.49	27.63	68.8	57.1	49.5
8.57	-59.76	-58.17	-58.83	27.81	67.8	56	51.8
8.68	-60.38	-57.7	-58.52	27.56	69.1	58.9	48
8.68	-60.35	-57.81	-58.86	27.72	68.6	56.8	51.6
8.63	-60.16	-57.39	-58.68	27.75	67.5	56.2	51.1
8.67	-59.87	-58.17	-58.68	27.66	69	59.5	49.8
8.6	-58.63	-57.24	-58.68	27.75	68	56.4	46.9
8.51	-59.91	-57.55	-58.64	27.93	67.2	56.3	49.1
8.64	-60.16	-57.45	-58.86	27.81	69.7	60.3	48.4
8.51	-60.9	-58.43	-58.64	27.93	68	56.6	50.4
9.27	-60.75	-58.17	-58.74	27.69	67.2	56.2	50.5
8.8	-59.58	-57.6	-58.52	27.69	68.8	58.7	54.2
8.63	-58.88	-57.76	-58.61	27.75	67.2	56.5	50.5
8.64	-59.47	-57.45	-58.83	27.81	66.4	56	50
8.55	-58.7	-58.07	-58.68	27.69	68.5	58.4	49.2
8.62	-59.95	-58.02	-58.86	27.75	67.2	56.2	48.1
8.65	-59.8	-57.5	-58.74	27.78	66.8	56.4	50.4
8.6	-60.02	-58.9	-59.1	27.81	67.9	57.3	49.5
8.62	-58.77	-57.19	-58.77	27.9	66.8	56.3	50.2
8.52	-60.64	-58.28	-58.71	27.78	69	60.4	50
8.57	-59.58	-57.81	-58.86	28.08	67.1	56.9	50.9
8.7	-60.42	-57.55	-58.98	28.02	65.7	56.2	52.4
9.33	-60.64	-57.65	-58.83	27.66	67.9	60.7	50
8.62	-58.59	-58.38	-58.71	27.87	66.6	56.5	47.4
8.71	-60.09	-57.6	-58.74	27.9	65.7	56	46.9
8.56	-60.05	-57.13	-58.98	27.87	66.8	58.5	47.5
8.56	-59.43	-58.17	-58.89	27.93	65.5	56.2	51.3
8.65	-60.79	-58.38	-58.77	27.96	66.7	60.2	48.2
8.65	-60.24	-58.02	-58.92	27.93	65.5	56.2	51.5
8.59	-60.2	-57.81	-59.01	28.02	64.3	55.7	50.1
8.48	-60.27	-57.45	-58.98	28.08	66.3	58.7	49.6
8.53	-60.35	-57.08	-58.86	28.17	64.4	55.9	50.5
8.69	-59.47	-57.76	-58.89	28.11	65.4	58.4	55.7
7.99	-60.09	-57.7	-59.01	28.17	64.6	56.5	51.4
8.78	-60.42	-57.91	-58.83	28.17	63.5	55.7	50
8.6	-60.75	-57.55	-59.13	28.05	65.4	58.2	49.7
8.71	-60.31	-58.12	-59.16	28.08	64	56	47.8
8.62	-60.2	-58.28	-58.95	27.99	65.9	60.4	51.2
8.59	-58.66	-58.12	-59.44	28.14	64.1	56	49.4
8.68	-60.53	-58.07	-59.13	28.14	63.5	56.1	49.1
8.55	-60.38	-57.86	-59.04	28.08	64.1	56.6	49.5
8.55	-58.59	-58.38	-59.04	28.33	62.8	55.5	50.4

8.44	-60.9	-58.48	-58.86	28.27	64	57.4	48.9
8.64	-60.09	-58.07	-59.04	28.39	62.2	55.6	50.3
8.07	-60.93	-58.02	-59.19	28.42	63.6	59.7	48.1
8.84	-60.46	-58.02	-59.16	28.33	61.7	55.8	49.5
8.64	-59.54	-57.76	-58.92	28.17	63.5	60.2	47.8
8.58	-58.55	-58.48	-59.19	28.39	61.6	55.7	49.4
8.6	-60.42	-57.81	-58.98	28.24	63.6	60.3	50.2
8.55	-60.71	-58.43	-58.89	28.33	61.7	55.8	48.8
8.65	-60.53	-58.07	-59.19	28.17	63.4	60.2	52.9
8.68	-59.95	-57.76	-59.13	28.39	61.4	55.4	50.1
8.62	-59.87	-57.6	-58.98	28.24	62.8	59.3	50.9
8.67	-60.09	-57.76	-59.13	28.39	60.9	55.5	51.7
8.63	-60.86	-58.07	-58.98	28.39	62	59.9	52.1
8.63	-60.27	-58.48	-58.86	28.6	59.8	55.1	50.5
8.55	-59.03	-59	-59.22	28.54	61.4	59.7	51.3
8.43	-60.13	-58.53	-59.19	28.69	59.4	54.8	49.3
9.06	-60.64	-57.6	-59.22	28.39	61	58.5	45.3
8.66	-60.49	-58.12	-59.26	28.57	59.3	54.6	51.2
8.62	-60.35	-57.86	-59.16	28.45	60.2	56.8	49.1
8.68	-60.6	-58.07	-59.01	28.45	58.9	54.9	49
8.64	-60.68	-58.64	-59.04	28.6	59.2	55.6	53.3
8.6	-60.42	-58.74	-59.1	28.39	59.5	57.3	50.3
8.62	-58.74	-58.43	-59.22	28.54	58.9	55	50.2
8.67	-59.43	-58.59	-59.26	28.39	60.3	58.9	50.5
8.69	-61.15	-58.53	-59.01	28.63	58.7	54.7	50.7
8.45	-61.04	-58.9	-59.1	28.57	60.9	60.3	52
8.61	-60.6	-58.12	-59.19	28.72	58.8	54.5	51.6
8.35	-61.08	-58.74	-59.19	28.63	60.2	58.6	50.8
9.09	-59.84	-57.91	-58.8	28.57	58.2	54.3	51.7
8.66	-59.84	-57.45	-59.38	28.48	60.1	58.3	51.2
8.56	-61.34	-57.91	-59.13	28.6	58	54.1	49.8
8.66	-61.3	-58.12	-59.29	28.6	59.3	56.8	51.6
8.56	-57.82	-57.55	-58.98	28.6	57.6	54.5	46.1
8.68	-61.37	-58.53	-59.04	28.6	58.5	55.4	51.6
8.56	-60.86	-58.48	-59.26	28.48	58.2	56.3	51.5
8.66	-61.01	-57.81	-58.98	28.6	58.1	54.9	50.1
8.45	-58.08	-58.53	-59.04	28.63	58.8	58.2	48.6
8.62	-60.82	-58.38	-58.92	28.85	57.5	54.5	50.8
8.6	-60.13	-57.6	-59.26	28.63	60	60.3	50.2
8.65	-60.2	-57.7	-59.29	28.66	57.4	54.4	51.6
8.84	-60.42	-58.02	-59.22	28.6	59.2	58.2	53.6
8.64	-58.96	-58.28	-59.1	28.66	57.1	54.3	47.9
8.63	-60.35	-58.85	-59.13	28.51	58.3	55.5	51.5
8.65	-61.12	-57.65	-59.19	28.66	57.3	55.6	45.8
8.59	-61.56	-58.48	-59.1	28.75	57.7	54.9	49.3
8.65	-60.13	-58.07	-59.35	28.54	59.3	60.4	52.8
8.59	-60.38	-58.28	-59.19	28.72	56.9	53.9	49.7

8.6	-60.79	-58.22	-59.38	28.57	58.8	57.8	51.6
8.58	-60.38	-57.76	-59.35	28.94	56.7	53.5	51
8.12	-59.51	-57.13	-59.53	28.94	57.8	55.5	52.9
9	-61.34	-58.59	-58.95	28.6	58.2	58.4	49.9
8.72	-60.16	-58.43	-59.22	28.79	56.6	54.5	47.3
8.64	-60.16	-57.6	-59.32	28.63	58.4	59.2	49.2
8.54	-61.08	-57.86	-59.13	28.79	56	53.9	48.4
8.58	-59.47	-58.43	-59.29	28.75	57.4	55.5	49.5
8.62	-60.6	-57.39	-59.32	28.57	58.1	59	50.7
8.58	-59.25	-58.33	-59.32	28.82	56.1	54.1	51.1
8.58	-60.6	-58.48	-59.38	28.6	58.5	60.6	48.4
8.6	-60.13	-58.43	-59.22	28.85	56.1	53.7	50.2
8.51	-61.34	-58.07	-59.56	28.85	57.8	56.7	49.4
8.53	-59.91	-58.43	-59.26	28.79	57.5	56.8	49
7.73	-60.27	-58.22	-59.38	28.88	57.4	54.6	49.6
8.89	-60.53	-58.12	-59.5	28.66	59.2	60.3	49
8.62	-58.66	-58.12	-59.26	28.82	57	54.1	49.6
8.71	-60.71	-58.38	-59.53	28.75	58.9	57.1	48.4
8.65	-60.86	-58.28	-59.29	28.66	58	56.5	51.4
8.62	-60.42	-57.45	-59.47	28.72	58.4	54.9	48.1
8.53	-60.53	-58.38	-59.5	28.66	60.3	60.4	52.8
8.57	-60.9	-58.28	-59.32	28.79	58	54.2	50.2
8.56	-60.27	-58.33	-59.47	28.54	60.3	59.8	50.5
8.58	-60.71	-57.86	-59.16	28.69	58.8	54	54.6
8.57	-60.38	-58.28	-59.32	28.63	60.5	58.1	47.4
8.67	-60.6	-58.22	-59.53	28.63	59.1	54.2	52.6
8.61	-60.2	-58.02	-59.26	28.75	60.4	55.8	50
8.5	-58.66	-58.95	-59.32	28.69	59.9	56.2	49.3
8.6	-61.01	-58.48	-59.16	28.75	60.3	55.4	50.5
8.5	-60.75	-57.76	-59.38	28.48	61.1	57.4	49.3
9.02	-60.71	-57.91	-59.41	28.57	60.3	55	49.4
8.75	-59.58	-58.33	-59.59	28.48	62.1	59.2	50.5
8.62	-59.87	-58.12	-59.47	28.63	60.3	54.9	50.4
8.61	-59.18	-58.17	-59.47	28.48	62.6	60.3	51.8
8.68	-60.42	-58.17	-59.38	28.54	60.6	54.8	49.8
8.67	-59.98	-57.91	-59.29	28.45	62.5	59.7	51.5
8.55	-60.71	-58.12	-59.56	28.6	60.4	54.6	52.2
8.59	-60.46	-58.43	-59.38	28.42	62.8	57.6	50.3
8.61	-60.86	-58.48	-59.47	28.45	62.2	54.6	48.7
8.59	-60.75	-58.38	-59.26	28.42	63.6	56.6	49.9
8.61	-60.6	-58.07	-59.59	28.33	62.3	55.7	50.8
8.63	-60.97	-58.17	-59.62	28.27	63.6	56	49.7
8.53	-61.12	-58.85	-59.29	28.42	62.4	54.9	51.6
8.63	-61.01	-58.38	-59.5	28.6	63.3	55.9	49.5
8.52	-59.91	-58.43	-59.29	28.42	63.6	58	50.2
8.59	-58.41	-58.38	-59.29	28.54	63.1	55.2	50.7
8.01	-60.86	-58.64	-59.35	28.39	64.4	58.8	52.4

9.29	-60.2	-58.12	-59.29	28.42	62.2	55.2	48.4
8.75	-60.68	-58.17	-59.38	28.14	64.6	59.5	51.9
8.61	-61.12	-58.74	-59.44	28.39	62.4	54.9	48
8.66	-60.79	-58.59	-59.47	28.33	63.8	59.4	51
8.65	-61.01	-57.86	-59.47	28.51	62	54.9	50.1
8.6	-60.71	-58.12	-59.5	28.45	63.6	57.6	51.3
8.57	-59.1	-58.69	-59.32	28.48	61.8	54.8	48.1
8.64	-59.58	-58.22	-59.38	28.27	62.9	56.7	47.8
8.66	-60.68	-58.85	-59.62	28.45	61.5	54.7	49.1
8.56	-61.67	-58.53	-59.19	28.42	62.6	55.9	49.7
8.58	-61.48	-58.43	-59.19	28.21	62.6	58.1	49.6
8.63	-60.97	-57.45	-59.26	28.42	61.9	55.5	51.7
8.54	-60.35	-57.81	-59.44	28.42	63.3	59.2	50.1
8.58	-60.24	-58.48	-59.59	28.51	61.6	55.1	48.8
8	-60.82	-58.07	-59.44	28.45	63.1	59.9	49.7
8.76	-60.68	-58.74	-59.5	28.42	61	54.9	51.2
8.85	-61.04	-58.17	-59.35	28.3	62.5	59.2	49
8.6	-59.32	-57.86	-59.56	28.54	60.6	54.9	50.3
8.64	-60.31	-58.38	-59.53	28.45	61.9	57	51.3
8.62	-61.15	-58.48	-59.26	28.42	60	54.7	49.5
8.64	-61.01	-58.33	-59.26	28.48	61.3	56	48.6
8.61	-60.24	-57.65	-59.38	28.33	61.2	57.2	48.2
8.62	-60.75	-58.59	-59.5	28.45	60.4	55.1	48.9
8.62	-61.08	-58.69	-59.44	28.39	61.9	59.7	50.5
8.54	-56.94	-58.9	-59.53	28.57	59.6	54.8	53.7
8.61	-60.93	-58.59	-59.53	28.42	61.7	60.1	49.5
8.64	-61.26	-58.43	-59.56	28.54	59.4	54.5	53.8
8.64	-61.48	-59.16	-59.53	28.39	61.4	59.1	51.5
8.5	-60.68	-58.22	-59.56	28.75	59	54.5	50.5
8.66	-60.82	-58.43	-59.29	28.63	61.2	58.2	52.2
8.62	-60.6	-58.22	-59.56	28.72	59	54.3	49.6
8.66	-61.04	-58.48	-59.62	28.69	60.3	56.5	48.6
7.98	-61.48	-59.11	-59.47	28.69	58.4	54.2	48.1
8.96	-61.3	-58.59	-59.38	28.42	60.2	56.2	49.2
8.67	-61.3	-58.48	-59.38	28.63	58.4	54.7	51.6
8.6	-60.09	-58.48	-59.41	28.54	59.8	55.9	51.5
8.65	-60.05	-57.81	-59.65	28.45	59.6	56.5	50.1
8.64	-61.01	-58.17	-59.59	28.57	59.4	54.9	49.9
8.57	-61.23	-58.22	-59.56	28.39	61.2	59.2	52
8.54	-61.08	-58.17	-59.44	28.54	59.3	54.8	50.4
8.65	-61.01	-57.91	-59.65	28.42	61	60.3	52.3
8.64	-60.68	-58.53	-59.29	28.51	59	54.5	47.8
8.65	-61.63	-58.85	-59.5	28.51	60.3	59.4	50.2
8.68	-60.49	-59.05	-59.44	28.45	58.2	54.1	53.1
8.62	-60.68	-58.33	-59.47	28.21	60.7	58.7	49.8
8.56	-60.86	-57.7	-59.56	28.57	58.5	54.1	49.5
8.6	-60.86	-58.53	-59.56	28.66	60.3	56.8	49.9

8.65	-61.01	-58.17	-59.47	28.6	58.5	54.2	50.3
7.76	-60.24	-59.16	-59.44	28.54	60.3	55.9	51
8.82	-60.16	-57.91	-59.56	28.45	59.2	56	49.1
8.72	-60.75	-58.64	-59.47	28.45	59.9	55.2	50.5
8.71	-60.46	-57.91	-59.59	28.24	60.7	58.2	50.7
8.59	-60.16	-58.38	-59.26	28.54	59.7	54.9	48.1
8.65	-61.34	-58.07	-59.5	28.3	61.4	59.3	51.4
8.6	-60.38	-58.07	-59.44	28.42	59.2	54.7	51.8
8.66	-60.9	-59.11	-59.47	28.48	60.6	56.5	53.9
8.69	-60.02	-58.38	-59.5	28.51	59.2	54.2	49.3
8.56	-60.86	-58.17	-59.47	28.33	60.1	55.9	49.9
8.56	-59.32	-57.86	-59.59	28.24	61.7	60.8	49.8
8.66	-61.01	-58.53	-59.53	28.51	59.2	54.6	47.6
8.54	-60.49	-58.28	-59.44	28.39	60.4	59.4	50.4
8.66	-61.63	-58.48	-59.68	28.54	58.7	54	49.6
8.55	-61.26	-57.81	-59.56	28.39	61	60.4	51.5
8.58	-60.49	-58.69	-59.47	28.66	58.2	54.3	50.8
8.65	-61.26	-58.53	-59.41	28.54	60.4	58.6	50.5
8.58	-59.84	-58.33	-59.84	28.57	58.1	54.2	52
8.01	-61.52	-58.95	-59.35	28.54	59.7	56.4	51.6
9.02	-60.86	-57.76	-59.71	28.3	60	58.4	50.2
8.67	-60.75	-58.53	-59.5	28.48	59	55	51.1
8.66	-61.04	-58.48	-59.32	28.24	60.9	59.8	49.5
8.65	-60.31	-58.79	-59.5	28.45	58.8	54.7	48.8
8.58	-58.88	-58.95	-59.56	28.39	60.2	59.4	49.4
8.64	-60.93	-58.48	-59.35	28.57	58.1	54.2	47.8
8.65	-60.16	-58.43	-59.53	28.45	59.7	56.5	51.1
8.56	-59.25	-58.02	-59.41	28.33	58.2	54.5	53.6
8.67	-60.46	-58.95	-59.5	28.48	59.5	55.8	51.7
8.56	-61.01	-58.74	-59.38	28.39	59.1	56.1	51
8.63	-60.97	-58.79	-59.38	28.54	59.2	55.2	49.5
8.6	-60.75	-57.91	-59.38	28.39	59.9	58.2	48.9
8.63	-61.01	-58.38	-59.65	28.63	59.1	54.8	50.8
8.53	-60.86	-58.85	-59.65	28.45	61.1	59.8	48.4
8.46	-60.49	-58.85	-59.5	28.45	58.7	54.7	47.3
8.95	-60.75	-59	-59.38	28.21	61.3	59.9	51.2
8.67	-60.97	-58.28	-59.19	28.33	58.7	54.6	50.5
8.65	-60.64	-57.65	-59.38	28.24	60.6	59.8	47.6
8.59	-59.43	-58.17	-59.8	28.39	58.5	54.3	52.2
8.67	-60.2	-57.7	-59.9	28.21	60.5	57.5	52.5
8.67	-60.68	-58.07	-59.5	28.33	58.4	54	49.6
8.64	-60.13	-58.12	-59.44	28.27	60.3	56.3	49.3
8.66	-61.12	-58.85	-59.5	28.27	58.9	54.9	48.8
8.69	-60.79	-58.48	-59.68	28.33	59.5	55	51.6
8.64	-60.6	-58.95	-59.41	28.11	61.4	60.4	52.4
8.57	-61.04	-58.02	-59.62	28.27	59	54.4	48.7
8.47	-59.54	-58.48	-59.65	28.39	61.3	60.4	49.7

8.65	-61.89	-58.85	-59.62	28.48	59	54.3	52.2
8.47	-60.79	-58.22	-59.65	28.48	60.4	58.9	49.6
8.22	-61.12	-58.22	-59.62	28.42	59.7	56.6	50.7
8.93	-59.54	-58.53	-59.47	28.21	59.9	55.2	48.9
8.72	-60.71	-58.33	-59.41	28.11	59.9	56.9	52.2
8.6	-61.12	-58.43	-59.65	28.33	59.9	55.4	49.7
8.6	-61.12	-58.38	-59.59	28.17	60.7	58.5	50.5
8.7	-60.93	-57.91	-59.74	28.45	59.5	54.8	49.7
8.62	-61.19	-58.79	-59.41	28.14	61.4	59.2	51.1
8.53	-57.53	-58.53	-59.26	28.27	59.3	54.5	49.8
8.53	-60.49	-57.86	-59.62	28.24	60.9	57.1	46.1
8.61	-60.82	-58.85	-59.53	28.24	59.1	54.1	49.3
8.65	-61.37	-58.33	-59.65	28.21	60.7	56.4	50.9
8.66	-61.04	-59.31	-59.5	28.3	60.4	57	51
8.6	-60.75	-57.7	-59.8	28.33	60.3	55.5	54.9
9.04	-60.9	-58.95	-59.29	28.08	60.3	57.1	49.3
8.78	-60.79	-58.9	-59.65	28.27	60.4	55.7	52.6
8.61	-59.87	-57.6	-59.59	28.17	61.2	57.5	47.3
8.59	-60.49	-58.12	-59.44	28.27	60.2	54.9	49
8.66	-60.75	-58.38	-59.41	28.11	62.4	60.6	51.3
8.71	-61.67	-58.43	-59.5	28.21	60.3	54.6	47.8
8.6	-61.08	-58.69	-59.5	28.17	62.5	60.3	50
8.65	-62	-58.95	-59.56	28.24	60.4	54.7	51.6
8.57	-61.34	-58.48	-59.5	28.27	62.7	59.8	49.2
8.62	-60.75	-58.9	-59.59	28.42	61.1	54.9	47.2
9.3	-61.23	-58.33	-59.65	28.02	62.9	59.6	51.4
8.71	-60.93	-58.43	-60.02	28.17	61.5	54.8	50.9
8.59	-60.42	-58.79	-59.41	28.02	63.2	58	51
8.7	-61.19	-59.42	-59.56	28.11	62.1	54.9	50.9
8.61	-60.97	-57.65	-59.77	28.08	63.6	56.4	51.3
8.55	-59.25	-59.11	-59.71	28.02	62.7	56.1	50.4
8.58	-61.19	-58.48	-59.62	27.96	63.6	55.9	47.9
8.61	-61.04	-58.12	-59.38	27.99	64.1	58.4	49.1
8.65	-61.15	-58.43	-59.38	27.99	63.8	55.8	53.5
8.57	-60.93	-58.95	-59.53	27.99	65.5	59.1	49.5
8.65	-61.19	-58.79	-59.59	28.17	64.3	55.8	48.8
7.88	-61.04	-58.64	-59.53	28.02	65.5	58.9	50.9
8.74	-60.46	-57.91	-59.68	27.87	64.7	56.1	49.5
8.65	-61.04	-58.22	-59.53	27.78	65.3	57.9	49.6
8.7	-61.85	-59.37	-59.59	27.87	65.1	56.1	51.3
8.54	-61.15	-58.59	-59.71	27.84	64.3	55.6	50.5
8.69	-62	-58.53	-59.53	27.9	65.7	56.8	50.8
8.56	-59.98	-58.28	-59.68	27.93	64.5	55.5	51.2
8.68	-61.67	-59.31	-59.59	27.69	66.4	57.9	52.8
8.65	-61.48	-58.28	-59.8	27.9	64.9	55.7	50.5
8.62	-61.19	-58.33	-59.53	27.72	67.1	60.4	48.6
8.6	-60.68	-58.59	-59.71	27.96	65.8	56	46.2

8.61	-60.42	-58.07	-59.56	27.9	66.7	58.2	49.4
8.1	-59.84	-58.38	-59.53	27.84	66.5	56.6	52.7
8.68	-60.24	-58.43	-59.53	27.84	65.8	55.9	50.8
8.56	-59.25	-58.02	-59.74	27.69	67.5	58.6	52.6
8.59	-59.43	-58.9	-59.68	27.78	65.8	56	51.6
8.64	-60.71	-58.48	-59.62	27.72	67.1	58.8	48.6
8.68	-61.26	-58.33	-59.9	27.66	66.6	56.5	52.6
8.69	-61.7	-58.59	-59.59	27.87	65.7	56	48
8.69	-61.59	-58.43	-59.71	27.81	67.6	59	50.8
8.69	-61.34	-58.64	-59.56	27.81	66.4	56.2	50.9
8.61	-61.04	-58.53	-59.56	27.9	66.5	57	50.7
8.62	-60.42	-58.53	-59.59	27.93	66.9	57	50.8
9.46	-60.9	-58.69	-59.71	27.78	66.2	56.1	51.1
8.87	-61.56	-58.38	-59.74	27.69	68.5	60.2	47.2
8.7	-60.9	-58.33	-59.9	27.78	66.4	56.5	52.4
8.62	-60.97	-58.33	-59.41	27.81	65.8	56	50.5
8.59	-61.23	-58.28	-59.77	27.75	67.7	58.3	49.6
8.61	-61.85	-58.53	-59.71	27.78	66.1	56.2	51.6
8.64	-61.7	-58.53	-59.68	27.72	65.7	56.6	48.9
8.65	-61.78	-58.43	-59.68	27.81	66.5	56.9	53.6
8.67	-61.08	-58.28	-59.65	27.87	65.6	56	49
8.52	-61.01	-58.69	-59.56	27.87	67.9	60.3	52.1
8.07	-61.26	-58.9	-59.68	27.99	66.3	56.4	47.1
8.91	-60.86	-58.53	-59.9	27.81	65.7	56	50.5
8.63	-60.64	-59.42	-59.65	27.84	67.4	58.1	48.2
8.58	-60.42	-59.37	-59.77	27.78	65.8	56	51.6
8.67	-61.37	-58.43	-59.71	27.78	66.1	57	52.9
8.62	-61.56	-58.43	-59.62	27.78	66.7	56.7	51.4
8.59	-58.55	-58.22	-59.99	27.84	65.9	56	51.2
8.58	-59.43	-58.02	-59.77	27.75	67.9	59.2	53.6
8.56	-60.64	-59.11	-59.74	28.08	66.2	56.2	52.1
8.53	-60.64	-58.22	-59.65	28.05	65.7	55.8	50.4
7.77	-59.14	-58.53	-59.8	27.93	67.2	58	50.7
8.79	-61.19	-58.69	-59.74	27.9	65.8	56.2	50.5
8.69	-60.97	-58.38	-59.68	27.81	66.6	58.2	49.2
8.56	-60.24	-58.53	-59.68	27.84	66.6	56.9	49.7
8.64	-61.19	-58.64	-59.8	27.87	65.4	56	52.1
8.65	-61.08	-58.9	-59.99	27.75	67.4	60.1	50.8
8.66	-61.26	-58.69	-59.68	27.81	65.6	56.4	50.1
8.65	-60.53	-58.85	-59.9	27.93	64.9	55.8	51
8.65	-61.67	-58.48	-59.77	28.05	66.7	57.6	49.8
8.68	-61.34	-58.64	-59.96	28.08	65.3	56	50
9.38	-60.71	-59.05	-59.5	27.75	67.6	60.3	50.5
8.8	-61.08	-58.33	-59.93	27.84	65.8	56.5	49.7
8.65	-60.46	-58.48	-60.05	27.96	65.4	56	49.2
8.56	-62.07	-58.43	-59.8	27.96	66.7	57.4	51.1
8.58	-61.08	-58.9	-59.96	27.93	65	56.1	50.7

8.62	-61.08	-58.79	-59.68	27.75	66.9	59.4	50.9
8.57	-61.56	-58.64	-59.84	27.93	65.9	56.7	50.8
8.48	-61.67	-58.43	-60.11	28.05	65.5	56	52.8
8.7	-61.48	-59.16	-59.9	28.08	67.1	60.3	50.2
8.09	-61.19	-58.95	-59.77	27.99	64.9	56.3	51.2
8.67	-59.87	-59.62	-59.99	27.96	64.7	57.6	49.2
8.62	-60.46	-58.28	-60.05	28.02	64.9	56.8	50.9
8.65	-61.48	-58.9	-59.77	28.05	63.8	55.9	51.5
8.69	-61.56	-59.57	-59.9	27.99	65.8	59.4	52
8.65	-61.7	-58.69	-59.71	28.02	63.7	55.8	47.3
8.65	-61.41	-58.74	-60.08	27.93	65	58.5	48
8.56	-61.41	-59.11	-59.71	28.21	63.6	56.1	52
8.66	-61.04	-58.79	-59.93	28.24	62.8	55.4	50
9.23	-61.37	-58.69	-60.17	28.05	64.1	57.3	50.2
8.56	-61.52	-58.9	-59.8	28.08	62.6	55.6	48.4
8.56	-59.07	-59.05	-59.93	28.08	64.7	59.2	48.4
8.56	-61.08	-59	-59.74	28.24	62.5	55.7	50.3
8.66	-61.52	-59.16	-59.74	27.96	64.1	59.8	50.5
8.66	-61.74	-58.9	-59.8	28.05	62.7	55.7	47.8
8.52	-60.09	-58.48	-60.11	28.21	63.5	58.1	53.4
8.69	-61.3	-58.48	-60.05	28.42	62.8	55.9	50.8
8.06	-61.48	-58.85	-59.96	28.33	62.5	56.4	49.5
8.71	-61.37	-59.47	-59.9	28.02	63.6	56.4	51.4
8.62	-61.67	-59.52	-60.08	28.08	62.9	55.2	48.6
8.62	-60.82	-59.42	-59.68	27.99	64.2	57	52.2
8.58	-61.63	-59.47	-59.99	28.14	62.8	55.4	51.8
8.65	-60.6	-58.69	-60.2	28.02	64.4	57.5	50.1
8.65	-61.56	-58.69	-60.08	28.05	63.3	55.5	49.8
8.43	-61.23	-59.16	-59.8	28.17	64.9	59.1	50.5
8.55	-61.34	-59.16	-59.62	28.24	62.9	55.5	50.4
8.91	-61.56	-59.26	-59.93	27.99	64.7	58.6	48
8.64	-59.91	-57.7	-60.05	28.21	62.6	55.8	47.6
8.56	-61.41	-59.31	-59.93	28.02	64.5	59.9	51
8.65	-61.78	-58.85	-59.9	28.11	62.6	55.6	51.4
8.62	-61.26	-58.64	-60.08	27.99	64.2	60.1	48.8
8.55	-61.67	-58.85	-60.11	28.17	62.4	55.5	47.3
8.65	-61.52	-59.16	-60.08	28.02	63.5	59.5	50.3
8.61	-61.01	-58.33	-60.32	28.39	62	55.6	49.5
7.99	-61.41	-58.74	-60.02	28.3	63.7	59.7	50.5
8.63	-61.08	-58.33	-60.02	28.21	61.5	55.6	52
8.62	-60.93	-59.16	-59.9	28.11	63.4	59.8	50.5
8.66	-61.19	-58.69	-60.05	28.17	61.4	55.4	50.2
8.56	-59.36	-59.42	-60.26	28.05	63.7	59.5	53.8
8.55	-61.19	-58.95	-60.08	28.24	61.4	55.1	49.9
8.65	-61.96	-59.78	-60.11	28.24	63.1	59.7	50.8
8.64	-60.75	-59	-59.84	28.48	60.9	55	45
7.81	-61.34	-58.59	-59.99	28.3	62.5	58.6	50.9

8.9	-60.97	-58.74	-60.02	28.3	61.6	54.9	51.1
8.71	-61.34	-58.64	-60.26	28.17	63.2	58.3	50.1
8.62	-61.59	-58.95	-59.99	28.3	60.7	54.9	49.6
8.59	-59.95	-58.9	-59.99	28.17	62.5	57.3	49.9
8.62	-61.67	-58.53	-59.93	28.27	60.7	55	49.5
8.67	-61.74	-58.9	-60.17	28.17	62.4	56.5	51.6
8.61	-61.37	-58.38	-60.08	28.45	61	55.1	50.7
8.54	-60.86	-59.83	-60.11	28.45	61.9	56	49.4
8.71	-61.12	-59	-59.99	28.08	61	56.4	49.4
8.65	-61.48	-59.05	-60.02	28.21	61.6	55.9	48.1
8.56	-61.92	-58.59	-59.93	28.11	63.4	58.7	52.3
8.71	-61.67	-59.16	-60.14	28.21	62	55.6	49
8.57	-59.87	-59.57	-59.96	28.05	63.7	59.1	49.5
8.55	-61.34	-59.42	-60.26	28.3	61.4	55.4	50.8
8.68	-62.03	-58.59	-59.96	28.33	63.3	60.3	49.5
9.35	-61.81	-59.05	-60.11	28.11	61.1	55.5	50.3
8.71	-62	-59.26	-60.17	28.14	62.9	59.4	48.3
8.65	-61.52	-59.11	-60.11	28.3	61.3	55.2	47.4
8.65	-61.37	-58.53	-60.14	28.14	63.2	58.3	50
8.64	-60.71	-59.11	-59.93	28.27	62	55.1	50.2
8.64	-61.85	-58.69	-60.32	28.21	63.5	57.8	51.8
8.56	-60.46	-58.59	-60.17	28.39	62.1	55.1	51.1
8	-60.79	-59.26	-60.29	28.24	63.7	56.9	50
8.72	-61.89	-59.37	-59.99	28.14	62.1	55.2	49
8.59	-61.81	-59.26	-60.2	28.11	63.9	57.4	47.6
8.66	-61.89	-59.05	-60.11	28.11	62.7	55.2	45.6
8.56	-59.62	-59	-60.08	28.11	64.5	57	49.5
8.67	-62.18	-58.9	-60.05	28.08	63.4	55.2	49
8.58	-61.85	-59.11	-60.14	28.27	64.9	57.3	49.9
7.94	-60.16	-59.26	-60.2	28.3	63.6	55.2	50.1
8.72	-61.7	-58.48	-60.32	28.08	65.6	58.4	51.3
8.68	-61.52	-59.26	-60.23	28.21	63.8	55.7	49.1
8.71	-62.11	-59.05	-60.26	28.05	65.8	59.3	52.2
8.63	-61.48	-58.79	-60.17	28.11	63.9	55.6	48.3
8.6	-61.59	-59.42	-60.14	28.05	66.2	60.3	49.7
8.48	-60.42	-58.59	-60.17	28.21	64.1	56	49.9
8.1	-61.26	-59.26	-60.05	28.14	65.5	59.3	52.3
8.79	-61.34	-58.64	-59.99	28.14	64.4	56.3	51.7
8.7	-61.78	-58.69	-60.35	28.05	64.9	58.1	50.4
8.64	-61.23	-58.59	-60.32	28.14	64.7	56.1	51.6
8.58	-61.3	-59.73	-60.14	28.14	63.6	55.6	52.1
8.67	-61.26	-59.26	-60.29	28.11	65	57.6	51.6
8.62	-61.78	-58.38	-60.23	28.11	63.8	55.8	52
8.68	-61.41	-59.42	-60.14	28.14	65.8	60.3	48.7
8.88	-60.31	-58.85	-60.38	27.99	64.1	55.9	52.5
8.63	-61.7	-58.79	-60.29	27.99	64.7	58.3	53
8.67	-61.52	-59.16	-60.11	28.02	64.4	56.3	50.5

8.56	-61.41	-59.05	-60.42	28.11	63.4	55.6	49.4
8.56	-62.25	-59.16	-60.2	28.05	64.5	57	50.9
8.53	-60.97	-59.31	-59.99	28.39	63.2	55.5	47.3
8.69	-62.18	-58.95	-60.08	28.17	64.7	58.7	50.5
8.83	-61.56	-58.85	-59.96	28.14	63.3	55.9	49.2
8.56	-59.98	-59.47	-60.08	27.93	65	60.1	49.4
8.69	-61.26	-59.11	-60.08	28.05	63.4	56	49.7
8.6	-62.22	-58.9	-60.14	28.05	63.6	57.3	51.8
8.56	-61.92	-59.52	-60.08	28.05	63.6	56	50.3
8.59	-61.15	-59.68	-60.38	28.24	62.5	55.2	50.5
8.65	-60.9	-59.47	-60.2	28.33	63.8	56.9	49.9
8.6	-58.59	-59.26	-60.23	28.21	62.5	55.6	49.5
8.64	-61.41	-59.05	-59.96	28.14	64.3	58.3	49.2
8.66	-61.7	-58.74	-60.26	28.17	62.5	55.4	49.5
8.56	-62.29	-59.26	-60.08	28.05	64.4	59.4	49.8
8.57	-61.78	-59.62	-60.23	28.14	62.1	55.5	50
8.65	-62.11	-59.42	-60.38	28.14	64.3	59.8	51.2
8.03	-61.59	-58.85	-60.32	28.33	62.5	55.9	48.4
8.79	-61.41	-59.11	-60.14	28.02	62.9	58.3	50.9
8.62	-60.6	-59.37	-60.29	28.11	61.9	56	48.6
8.56	-61.04	-58.9	-59.99	28.05	61.4	56.2	51.1
8.56	-60.02	-58.43	-60.35	28.17	62.3	56.2	49.6
8.57	-59.1	-59.47	-60.29	28.08	60.5	55	48.9
8.47	-60.53	-58.9	-60.11	28.3	61.8	56.4	52.2
8.56	-61.23	-58.74	-60.29	28.45	60.3	55.1	49.5
8.84	-61.12	-59	-60.26	28.14	61.6	56.9	49.9
8.58	-58.66	-59.52	-60.29	28.27	60.2	55.5	51.3
8.56	-59.51	-58.69	-60.14	28.17	61.2	56.4	49.8
8.57	-59.8	-59	-60.17	28.24	59.6	54.9	48.1
8.58	-61.63	-60.04	-60.32	28.21	61	56.4	48.8
8.59	-60.93	-59	-60.45	28.24	59.2	54.9	47.5
8.64	-61.3	-59.26	-60.29	28.42	60.5	56.4	51.5
9.1	-61.92	-58.9	-60.23	28.27	59.1	55	51.8
8.6	-59.58	-59.11	-60.23	28.24	60.2	56.3	51.3
8.67	-61.89	-59.57	-60.23	28.27	59.2	55.8	49.5
8.68	-61.85	-59.31	-60.42	28.3	59.9	55.8	51.8
8.68	-61.92	-59.52	-60.14	28.17	60.3	58.6	50.2
8.51	-60.97	-59.26	-60.35	28.45	59.3	55.1	48.1
8.6	-61.41	-59.05	-60.38	28.33	60.7	59.6	50.8
8.93	-61.92	-60.04	-60.2	28.24	58.9	55.1	51.3
8.67	-61.34	-59.47	-60.14	28.14	60.3	59.6	48
8.66	-62.14	-59.47	-59.99	28.39	58.1	54.9	49.7
8.56	-62.33	-58.95	-60.23	28.27	59.7	57.6	50.2
8.57	-61.67	-58.9	-60.57	28.39	57.7	54.7	50.3
8.53	-61.92	-59.42	-60.29	28.57	58.8	56.3	50.3
8.61	-61.85	-59.47	-60.14	28.48	57.5	56	50.9
8.67	-62.25	-59.42	-60.26	28.33	58.1	55.6	48.9

8.54	-60.64	-59.11	-60.35	28.3	59.4	58.7	48.8
8.55	-61.96	-58.95	-60.32	28.42	57.7	54.9	49.4
8.63	-61.37	-59.73	-60.08	28.21	59.2	59.3	48.9
8.54	-61.92	-59.31	-60.26	28.39	57.1	54.5	48.3
8.65	-61.56	-58.59	-60.38	28.54	59.2	59.9	45.6
9.16	-62.33	-59.16	-60.57	28.48	57	54.3	50.7
8.71	-62.25	-59.62	-59.99	28.39	58.5	58.3	48.4
8.68	-61.78	-59.26	-60.26	28.45	56.2	54.2	51.8
8.67	-61.56	-59.42	-60.29	28.42	58.1	56.1	49.9
8.7	-61.7	-58.59	-60.26	28.45	56.7	55	47.6
8.62	-60.9	-59.57	-60.45	28.33	57.5	55.5	53
8.54	-60.97	-59.47	-60.29	28.24	57.5	57.3	49.1
8.56	-61.74	-58.53	-60.26	28.54	57.2	54.9	53
8.59	-61.92	-59	-60.26	28.42	58.4	58.7	51.5
8.84	-60.05	-59.16	-60.32	28.39	56.7	54.3	49.4
8.62	-60.6	-58.69	-60.29	28.3	58.2	57.2	51
8.66	-61.19	-59.26	-60.32	28.42	55.9	53.9	50.2
8.64	-61.81	-59.11	-60.14	28.42	57.6	55.8	50
8.63	-62.33	-59.26	-60.23	28.24	56.6	55	51
8.54	-62.07	-59	-60.35	28.45	57.4	55.1	50.3
8.55	-61.81	-59.05	-60.05	28.33	58.8	59.4	50.7
8.88	-61.81	-59.05	-60.29	28.45	56.7	54.5	48.8
8.66	-61.7	-59.62	-60.35	28.17	58.5	60.1	49.7
8.58	-62.22	-59.73	-60.32	28.24	56.2	54.2	51.9
8.55	-61.23	-58.85	-60.17	28.27	57.9	57.9	49
8.69	-62.29	-58.28	-60.45	28.21	56	54	52.2
8.48	-61.52	-58.9	-60.35	28.45	57.8	56.8	50.4
8.6	-61.59	-59.37	-60.26	28.51	56.4	53.9	49.4
9.12	-61.34	-59.26	-60.08	28.21	57.8	55.8	49.5
8.72	-62	-58.74	-60.02	28.11	57.1	56	50
8.69	-61.41	-59.16	-60.2	28.33	57.4	55.5	51.5
8.66	-61.92	-58.59	-60.35	28.17	58.7	58.8	47.8
8.69	-61.81	-59	-59.96	28.24	57.1	54.3	50
8.66	-61.63	-59.16	-60.23	28.14	58.4	59.2	51.7
8.62	-62.33	-58.85	-60.02	28.54	56.3	54	50.1
9.31	-61.78	-59.47	-60.05	28.17	57.4	55.9	53.6
8.65	-60.35	-58.85	-60.14	28.14	57.1	56.6	50.1
8.71	-61.15	-59.26	-60.08	28.14	57	54.9	48.6
8.61	-60.82	-59.37	-60.02	28.05	58.3	59.1	50.4
8.65	-61.92	-59.11	-60.26	28.21	56.7	54.3	49.3
8.64	-61.59	-59.11	-60.11	28.08	58.2	59.2	49.7
8.62	-61.67	-58.48	-60.29	28.24	56.1	53.8	48.4
8.52	-61.01	-58.74	-60.17	28.27	58	56.6	50.5
9.39	-61.85	-59	-60.48	27.96	57.6	56.4	50.3
8.67	-62.14	-59.16	-60.02	28.11	58	54.9	51.5
8.59	-61.85	-59.52	-60.29	27.81	59.6	59.8	49.6
8.59	-60.2	-59.68	-60.11	28.02	57.8	54.2	50.7

8.67	-61.92	-59.42	-60.23	27.9	60.5	60.1	49.2
8.67	-61.15	-58.59	-60.23	27.99	58.1	54	47.4
8.66	-61.96	-58.22	-60.05	28.08	59.9	57.5	51.3
8.97	-62.47	-58.74	-60.11	27.87	58.5	54.1	50.9
8.71	-61.37	-59.16	-60.02	27.87	60.4	56.6	49.6
8.6	-61.12	-58.64	-60.05	27.81	59.6	55.1	50.5
8.56	-60.93	-58.95	-60.11	27.9	60.4	55.1	47.7
8.64	-61.92	-59.31	-60.23	27.69	61.9	59.2	52.8
8.59	-60.97	-58.85	-60.08	27.81	60.6	54.8	50.3
8.55	-61.85	-59.52	-59.84	27.84	62.5	60.4	51.3
8.43	-62.58	-59.83	-60.14	27.87	60.4	54.8	51.9
8.94	-61.78	-59.11	-60.26	27.69	62.9	60.4	49.5
8.59	-60.53	-59.78	-60.02	27.81	60.6	54.8	51.9
8.58	-60.13	-58.64	-60.11	27.72	62.4	59.6	50.8
8.58	-60.6	-58.53	-60.08	27.81	60.5	54.6	46.5
8.68	-61.59	-58.79	-60.38	27.66	62.3	57.9	50.5
8.65	-61.89	-58.9	-60.08	27.9	60.5	54.4	45.7
7.89	-61.63	-59	-60.29	27.75	61.8	56	48.4
8.77	-61.67	-58.9	-59.74	27.75	60.9	55.2	50.5
8.65	-61.26	-59.16	-59.96	27.66	62	56	48.2
8.65	-61.74	-59.78	-60.02	27.63	61.6	55.7	50.2
8.67	-61.34	-59	-59.96	27.56	62	56	50.2
8.59	-61.92	-59.26	-59.99	27.87	60.4	54.5	50.3
8.21	-61.26	-59.57	-60.17	27.81	61.5	55.9	50.7
8.89	-62.14	-59.26	-60.08	27.5	61.5	56.9	53.1
8.56	-61.81	-58.59	-60.26	27.66	61.4	55.7	52.9
8.71	-61.41	-58.95	-60.14	27.5	62.6	59.5	49
8.56	-59.47	-59.05	-60.14	27.63	61.1	55	50.9
8.68	-61.48	-58.74	-59.84	27.47	62.9	59.7	49.8
8.5	-62.22	-59.11	-60.11	27.78	61.3	54.9	50.9
7.82	-61.78	-58.59	-59.99	27.72	62.9	58.3	50.5
8.68	-60.46	-58.85	-60.23	27.56	61.5	54.9	51.4
8.59	-61.74	-59	-59.99	27.44	63.6	57.9	50.2
8.57	-59.98	-58.43	-59.8	27.53	62.9	54.7	50.4
8.68	-61.7	-58.69	-60.2	27.47	64.4	56.9	51.5
8.53	-61.89	-59.52	-60.05	27.5	63.1	55	48.9
8.56	-62.22	-58.9	-60.08	27.56	64.3	56.9	48
8.66	-61.67	-59.57	-60.29	27.75	62.9	55.1	51.5
8.99	-61.89	-59.37	-60.11	27.38	64.8	57.6	48.6
8.57	-60.49	-59.05	-60.08	27.47	63.6	55.6	50.2
8.61	-61.59	-58.74	-60.02	27.41	64.8	58.2	50
8.56	-59.76	-58.79	-60.08	27.69	62.7	55.2	50.8
8.58	-62.14	-57.86	-60.23	27.53	63.8	58.7	51.1
8.59	-61.56	-59.31	-59.99	27.81	61.5	55.2	49.7
8.56	-61.26	-58.69	-60.11	27.66	62.9	59.9	47.5
8.91	-61.63	-58.9	-60.26	27.66	61.2	55.4	50.5
8.69	-61.74	-59.05	-60.17	27.5	62.7	59.9	51.1

8.58	-60.16	-59	-60.17	27.66	60.7	55.2	49.5
8.64	-61.78	-58.69	-60.11	27.53	62.5	59.7	51.3
8.64	-60.86	-59.31	-60.23	27.72	60.4	55.2	49.6
8.5	-60.46	-58.74	-60.26	27.63	62.5	60.1	52.1
7.81	-62.14	-58.74	-60.35	27.75	60.7	55.1	50.9
8.72	-61.34	-59.16	-60.14	27.56	62.7	60.1	49.8
8.65	-62.22	-58.74	-60.26	27.63	61.1	55.5	52
8.65	-61.3	-59	-60.2	27.47	63.7	60.3	52.5
8.68	-61.34	-58.85	-59.9	27.66	62.5	55.5	51.9
8.6	-61.96	-59.52	-60.38	27.41	64.2	60.3	50.5
8.56	-60.79	-58.64	-60.38	27.75	62.2	55.7	50.3
9.13	-61.48	-58.79	-60.45	27.41	63.7	60.2	49.3
8.71	-61.74	-58.79	-60.32	27.63	61.9	55.7	51.8
8.56	-60.05	-58.85	-60.29	27.44	63.3	58.8	51
8.66	-61.7	-59.31	-60.23	27.66	63.1	56	49.8
8.67	-61.26	-58.33	-60.42	27.41	64.4	59.2	49.2
8.67	-55.29	-53.55	-59.32	0.49	61.1	57.9	49.7
8.62	-54.16	-53.03	-58.92	0.52	59.7	60.6	48.8
8.58	-53.61	-52.62	-58.71	0.49	59.2	58.2	47.8
8.53	-53.21	-52.36	-58.49	0.49	58.2	61.4	46.3
8.49	-52.91	-52.15	-58.28	0.49	58.2	58.3	45.6
8.45	-52.66	-51.94	-58.16	0.52	57.5	61.7	44.7
8.41	-52.44	-51.79	-58.06	0.49	57.6	57.8	43.3
8.37	-52.25	-51.58	-57.94	0.49	57.4	62	42.5
8.34	-52.11	-51.43	-57.85	0.52	57.5	57.8	41.4
8.31	-51.92	-51.32	-57.73	0.52	57.4	60.8	40.5
8.28	-51.78	-51.22	-57.64	0.52	57.1	57	39.7
8.25	-51.59	-51.11	-57.58	0.52	57.1	59.6	39.2
8.23	-51.48	-51.01	-57.45	0.52	56.4	56.4	38.6
8.21	-51.37	-50.91	-57.36	0.55	56.3	60.1	38.4
8.19	-51.3	-50.8	-57.3	0.52	56	56	38.3
8.17	-51.19	-50.75	-57.24	0.52	56	59.8	38.4
8.16	-51.08	-50.65	-57.15	0.55	55.9	56	38.2
8.14	-51.01	-50.6	-57.09	0.52	55.9	60.1	38.4
8.12	-50.93	-50.49	-57	0.55	55.7	55.9	38.5
8.11	-50.86	-50.44	-56.94	0.52	55.9	59.1	38.6
8.1	-50.75	-50.28	-56.87	0.55	55.4	55.5	38.7
8.08	-50.64	-50.23	-56.81	0.55	55.8	58.9	38.6
8.07	-50.6	-50.13	-56.75	0.52	55.4	55.7	38.5
8.06	-50.53	-50.13	-56.66	0.55	55.8	58.7	38.4
8.05	-50.46	-50.08	-56.63	0.52	55.3	55.9	37.8
8.04	-50.38	-49.97	-56.51	0.52	55.8	58.1	37.6
8.03	-50.35	-49.92	-56.48	0.55	55.2	57.1	37.5
8.02	-50.31	-49.87	-56.42	0.52	55.7	57.1	37
8	-50.24	-49.82	-56.36	0.55	55	58.6	36.6
7.99	-50.16	-49.71	-56.32	0.55	55.5	56.5	36.4
7.98	-50.13	-49.66	-56.23	0.55	54.9	61.2	35.8

7.98	-50.05	-49.66	-56.2	0.55	55.2	55.5	36
7.97	-50.02	-49.56	-56.14	0.55	54.8	61.6	35.7
7.96	-49.98	-49.51	-56.11	0.55	55	54.9	36.1
7.95	-49.87	-49.45	-56.05	0.55	54.8	59.6	36.1
7.94	-49.84	-49.4	-56.02	0.58	54.6	54.5	36.3
7.93	-49.8	-49.4	-55.9	0.55	54.8	58.5	36.9
7.92	-49.73	-49.35	-55.9	0.55	54.4	54.4	37.2
7.92	-49.69	-49.25	-55.84	0.55	54.9	57.5	37.4
7.91	-49.62	-49.19	-55.81	0.55	54.2	56.5	37.4
7.9	-49.58	-49.19	-55.74	0.55	55	56.7	37.5
7.89	-49.54	-49.09	-55.71	0.55	54.2	58.8	37.4
7.89	-49.51	-49.04	-55.65	0.55	54.9	55.5	37.5
7.88	-49.47	-48.99	-55.59	0.55	54	60.8	37.5
7.87	-49.4	-48.93	-55.59	0.55	54.6	54.9	37.5
7.86	-49.36	-48.88	-55.53	0.55	53.9	61.4	37.9
7.86	-49.32	-48.83	-55.47	0.58	54.2	54.4	37.7
7.85	-49.29	-48.83	-55.44	0.58	53.8	62.5	38.1
7.85	-49.21	-48.73	-55.41	0.55	54	54.3	38.4
7.83	-49.18	-48.73	-55.35	0.55	53.8	61.4	38.4
7.83	-49.14	-48.68	-55.32	0.58	53.8	53.9	38.6
7.82	-49.1	-48.62	-55.29	0.55	53.8	59.4	38.8
7.82	-49.07	-48.57	-55.26	0.55	53.6	53.6	39.1
7.82	-48.96	-48.52	-55.2	0.55	53.8	58.8	39.5
7.81	-48.92	-48.52	-55.13	0.55	53.4	55.2	39.6
7.81	-48.88	-48.47	-55.1	0.58	53.9	55.5	39.7
7.8	-48.88	-48.47	-55.07	0.55	53.4	61.5	39.8
7.8	-48.85	-48.47	-55.01	0.55	53.6	53.8	40
7.79	-48.77	-48.42	-54.98	0.55	53.2	62.1	40.2
7.79	-48.74	-48.31	-54.95	0.55	53.3	53.7	40.5
7.78	-48.7	-48.31	-54.89	0.58	53	62.4	40.7
7.78	-48.66	-48.26	-54.86	0.55	53.2	53.5	40.5
7.77	-48.63	-48.21	-54.86	0.55	52.9	62.4	40.8
7.77	-48.59	-48.16	-54.8	0.58	53	53.4	41.2
7.76	-48.55	-48.16	-54.77	0.55	53.2	57.8	41
7.76	-48.48	-48.1	-54.74	0.55	52.8	54.8	41.3
7.76	-48.48	-48.05	-54.71	0.55	53.1	55.8	41.1
7.75	-48.41	-48.05	-54.65	0.58	52.5	55.4	41.1
7.75	-48.37	-48	-54.65	0.55	52.9	55.1	41.4
7.74	-48.33	-47.95	-54.58	0.55	52.6	60.9	41.2
7.74	-48.33	-47.95	-54.55	0.58	52.7	53.3	41.3
7.74	-48.26	-47.84	-54.52	0.58	52.7	60.8	41.1
7.73	-48.26	-47.79	-54.46	0.58	52.5	52.7	41.2
7.73	-48.22	-47.79	-54.43	0.58	52.7	57.9	41.5
7.72	-48.15	-47.74	-54.37	0.58	52.3	52.5	41.4
7.72	-48.15	-47.69	-54.34	0.58	52.6	56.7	41.4
7.71	-48.08	-47.64	-54.28	0.58	52	59.7	41.4
7.71	-48.04	-47.59	-54.25	0.58	52.4	53.6	41.1

7.71	-48	-47.59	-54.22	0.55	52.2	61.8	41.1
7.7	-47.93	-47.53	-54.19	0.58	52.2	52.7	41.1
7.7	-47.93	-47.53	-54.16	0.58	52.2	58.2	41.1
7.7	-47.89	-47.48	-54.1	0.55	51.8	56	41.5
7.7	-47.86	-47.48	-54.07	0.61	52.3	54.3	41.2
7.69	-47.82	-47.43	-54.04	0.58	51.8	61.2	41.2
7.69	-47.78	-47.38	-54	0.58	51.9	52.7	41.3
7.68	-47.78	-47.33	-53.97	0.55	51.6	61.3	41.4
7.68	-47.75	-47.33	-53.94	0.58	51.6	53.4	41
7.68	-47.71	-47.27	-53.88	0.58	51.9	55	41
7.67	-47.64	-47.22	-53.85	0.55	51.6	60.8	41.2
7.67	-47.64	-47.22	-53.82	0.58	51.8	52.7	41.4
7.67	-47.6	-47.17	-53.79	0.58	51.7	59.4	41.1
7.67	-47.56	-47.17	-53.76	0.58	51.5	54.4	41.5
7.67	-47.53	-47.12	-53.73	0.58	51.7	54.6	41.5
7.66	-47.49	-47.07	-53.73	0.58	51.5	60.7	41.2
7.66	-47.45	-47.01	-53.67	0.58	51.5	52.6	41.1
7.65	-47.42	-47.01	-53.67	0.58	51.6	59.2	41.2
7.65	-47.38	-47.01	-53.64	0.61	51.3	55	41.3
7.65	-47.38	-46.96	-53.58	0.58	51.6	54.2	41.3
8.62	-52.14	-52.41	-54.19	27.75	53.6	59	46.5
8.47	-53.5	-52.67	-54.8	29.21	48.7	49.7	50.9
8.54	-55.77	-53.35	-54.89	29.03	49	53.3	50.5
8.5	-55.07	-53.45	-55.01	28.94	50.2	59.1	49.1
8.5	-55.15	-53.5	-55.13	29.12	48.9	55.9	49.8
8.61	-55.84	-54.02	-55.2	29.24	48.3	51.6	56.7
8.6	-55.11	-54.75	-55.5	28.97	50.1	59.1	49.5
8.57	-55.88	-53.97	-55.47	28.85	48.9	56.2	52.1
8.64	-56.72	-53.03	-55.87	28.97	48.7	52	49.5
8.41	-56.65	-54.23	-56.11	28.91	51.6	60.1	49.5
8.55	-56.32	-54.23	-56.14	28.91	49.1	54.1	51.3
8.66	-56.83	-55.01	-55.81	28.91	49.6	52.5	51.5
8.59	-57.75	-55.27	-55.81	28.79	51.8	60.2	50.9
8.56	-55.92	-54.64	-56.36	28.88	49.6	54.1	50
8.66	-56.9	-55.53	-56.08	28.91	50.1	53.3	52.9
8.51	-56.76	-55.27	-56.17	28.79	51.8	59.7	49.9
8.67	-57.78	-54.54	-55.87	28.75	51	56.2	46.5
8.48	-56.17	-55.68	-56.29	29.06	50.8	52.3	50.3
8.59	-57.34	-55.21	-56.45	28.6	54.1	60.3	47.9
8.65	-57.2	-54.95	-56.32	28.75	51.6	53.8	53.5
8.26	-57.49	-54.9	-56.6	28.97	52.5	53.8	48.8
8.62	-57.49	-55.73	-56.48	28.57	55.1	60.7	50.5
8.6	-57.64	-55.27	-56.48	28.72	52.9	54	48.3
8.53	-56.47	-55.37	-56.32	28.66	53.8	54.3	51.2
8.82	-57.49	-55.53	-56.66	28.57	55.8	60.6	49.4
8.67	-57.86	-55.53	-56.54	28.94	52.2	52.3	50.4
8.63	-58	-56.04	-57	28.72	53.8	55.4	49

8.62	-58.74	-56.15	-56.78	28.45	55.7	59.2	50.4
8.56	-56.72	-55.99	-56.9	28.66	53.3	52.6	52.4
8.53	-56.72	-55.11	-56.69	28.51	55.4	56.5	47.3
8.56	-57.97	-55.89	-56.94	28.63	56.2	59.5	50.1
8.55	-56.87	-55.84	-56.78	28.63	54.2	52.7	49
8.56	-56.1	-55.78	-57.12	28.6	55.8	56.8	47.5
8.65	-57.78	-55.58	-56.97	28.63	53.8	54.4	49.5
8.66	-59.07	-55.99	-56.94	28.72	53.8	53.3	49.6
8.63	-58.04	-55.58	-57.06	28.6	56.3	58.8	49.9
8.56	-58.59	-55.63	-57.21	28.6	54.5	53.8	50.5
8.58	-57.75	-56.04	-57.09	28.69	55.7	53.9	49.6
8.64	-58.3	-55.32	-57.39	28.54	57.2	60.3	49.7
8.63	-58.22	-56.41	-57.24	28.63	54.8	52.4	49.7
8.54	-56.87	-56.04	-57.3	28.6	56.2	56.5	49.8
8.61	-58.59	-56.82	-57.21	28.39	57.7	59.3	49.4
8.53	-58.37	-56.15	-57.27	28.79	56	53.3	48.6
8.72	-58.74	-56.87	-57.18	28.39	57.6	59.5	48.8
8.71	-58.3	-55.84	-57.48	28.57	55.5	54	47.8
8.62	-58.48	-55.73	-57.3	28.48	57	55.1	49.2
8.54	-56.9	-55.99	-57.45	28.39	56	57	49.5
8.66	-59.14	-56.15	-57.67	28.75	54.6	53.2	52.2
8.59	-59.14	-56.77	-57.55	28.75	56.7	58.6	48.8
7.8	-58.44	-56.41	-57.3	28.97	53.9	52.6	51.4
8.66	-58.59	-55.99	-57.36	28.57	55.4	55.8	50.1
8.64	-59.29	-56.36	-57.36	28.6	57	60.3	49.2
8.65	-59.25	-56.1	-57.79	28.75	53.3	52.9	53.9
8.62	-58.99	-56.77	-57.61	28.66	55	59.7	50.3
8.43	-59.03	-56.61	-57.76	28.91	52.7	52.9	47.4
8.68	-58.99	-56.1	-57.64	28.88	53.7	54.8	48.4
8.66	-58.85	-57.19	-57.45	28.75	53.2	56.7	48
8.67	-58.55	-56.25	-57.82	28.79	52.4	52.9	47.5
8.56	-58.37	-56.51	-57.91	28.97	54.2	60.2	49.2
8.66	-56.9	-56.82	-57.61	28.88	51.6	53.5	47.8
8.64	-58.66	-57.29	-57.67	28.97	52.2	54.3	48.7
8.53	-57.16	-56.36	-57.94	28.94	51.6	56	50.2
8.63	-59.21	-56.77	-57.73	29.27	51	52.8	49.6
8.65	-59.07	-55.94	-57.97	28.88	53	59.2	49.3
8.67	-59.73	-57.24	-57.85	29.03	50.5	53.4	46.8
8.68	-59.14	-56.72	-58	29.06	51.2	53.5	49.9
8.65	-59.47	-57.86	-58.06	29.12	52.9	59.6	51.7
8.82	-59.62	-56.61	-57.7	28.94	49.8	53.1	49.8
8.56	-59.62	-56.82	-57.91	29.06	50.5	53.8	50.1
8.54	-58.66	-56.41	-58.19	29.12	52.5	59.8	49.3
8.66	-59.32	-56.56	-57.76	29.27	49.5	52.5	47.5
8.59	-56.76	-56.56	-58.37	29	50.5	53.9	50.3
8.67	-59.32	-57.39	-58.22	28.91	52.9	59.6	49.7
8.61	-59.36	-56.04	-58	29.12	49.3	52.5	49.3

8.53	-59.18	-57.39	-57.97	29.24	51	54.1	50.3
8.88	-60.16	-57.39	-57.94	28.85	53.9	59.4	48.9
8.58	-58.63	-57.29	-58.34	29.06	50.1	52.1	48.1
8.6	-59.4	-57.08	-58.46	29.06	51	54.6	50.1
8.55	-59.32	-56.82	-58.19	28.97	53	59.5	50.9
8.84	-59.58	-56.41	-58.22	29.18	49.5	51.6	47.3
8.63	-59.47	-57.65	-58.55	29.15	51.3	56.1	49.4
8.54	-57.31	-57.34	-58.46	28.82	52.5	58.9	48.4
8.68	-59.51	-56.77	-58.16	29.4	49.5	51.4	49.2
8.54	-59.47	-57.7	-58.19	29.06	51.4	55	49.8
8.66	-59.03	-57.55	-58.34	28.94	52.9	59.2	54.4
8.49	-58.11	-57.08	-58.1	29.4	49.8	51.5	48.8
8.82	-60.09	-57.08	-58.19	29.06	52.3	58.6	50.1
8.58	-60.16	-57.03	-58.25	28.94	51.6	56.6	51.4
8.58	-59.36	-56.56	-58.61	29.21	50.9	52.1	51.5
8.6	-59.73	-56.04	-58.34	29.18	53.1	60.3	49.4
8.58	-59.58	-57.24	-58.28	29.15	50.1	54.5	52.1
8.57	-59.32	-57.13	-58.52	29.21	50.3	52.8	49.1
8.68	-60.24	-58.07	-58.58	29	52.4	60.4	51.1
8.91	-60.02	-57.5	-58.43	29.21	48.6	52	50.3
8.56	-57.97	-57.19	-58.68	29.3	50	53.5	48.3
8.69	-59.73	-57.45	-58.68	29.03	52.3	60.3	47.8
8.54	-59.87	-56.46	-58.46	29.27	50.2	51.7	50.9
8.67	-60.13	-57.29	-58.4	29.15	51.2	54.2	50.5
8.56	-57.93	-57.6	-58.58	28.82	53.5	59.6	47
8.42	-60.16	-57.55	-58.4	29.33	51.2	53.8	49.3
8.88	-59.29	-57.34	-58.77	29.15	51.7	54	49.5
8.62	-59.58	-57.34	-58.61	28.94	53.7	60.3	50.9
8.61	-59.76	-57.29	-58.61	29.15	50.6	51.7	49.7
8.34	-60.31	-57.45	-58.71	29.24	53	55.7	52.6
8.65	-60.64	-58.33	-58.46	28.85	53.9	59	51.5
8.53	-58.15	-56.93	-58.64	29.15	51.3	51.8	52.4
8.54	-59.76	-57.29	-58.61	29.3	53.1	57.2	50.3
8.79	-60.68	-57.19	-58.8	28.97	52.8	57.3	50.4
8.56	-59.98	-57.5	-58.83	29.24	50.9	51.8	51.4
8.65	-59.47	-57.39	-58.83	29.03	53.3	58.8	51.6
8.79	-58.52	-57.7	-58.68	29.12	52.5	56.4	50.5
8.66	-60.16	-57.7	-58.61	29.18	51.5	53.6	51.6
8.55	-59.76	-57.86	-58.64	29	53.6	60.1	50.7
8.98	-60.09	-57.86	-58.61	28.97	51.1	53.8	49.6
8.53	-58.66	-57.5	-58.89	29.15	51.6	53.5	51.3
8.62	-59.29	-58.22	-58.74	28.91	54.8	60.3	51.9
8.27	-59.51	-57.45	-58.86	29.3	50.6	51.4	49.1
8.55	-60.38	-57.55	-58.83	29.15	51.6	53.9	49.1
8.64	-60.49	-58.02	-58.71	28.91	54	59.6	48.4
8.66	-60.05	-57.29	-58.95	29.33	50.5	51.3	52.6
8.58	-59.95	-56.46	-58.64	29	52.6	57.5	49.1

8.66	-60.42	-57.6	-58.89	29.03	52.7	57.8	51.4
8.54	-59.43	-57.39	-58.71	29.3	51.6	52.1	50.3
8.69	-60.38	-57.29	-58.61	29.06	54	59.3	49.3
8.58	-58.92	-58.38	-58.71	29.03	52.4	55.5	49.5
8.6	-59.87	-57.65	-58.83	29.4	51.5	52.7	49.9
8.65	-60.09	-58.64	-58.71	28.97	54.8	60.4	47.6
8.65	-60.09	-57.55	-58.77	29.24	51.4	52.3	50.8
8.47	-56.54	-57.29	-59.01	29.12	53.1	55.5	49.5
8.77	-60.35	-58.12	-58.8	29	53.7	59.3	48.1
8.53	-59.8	-57.39	-59.01	29.27	51.2	51.2	48.8
8.63	-60.38	-58.07	-58.92	29.33	52.9	56.1	46.5
8.65	-60.05	-57.65	-58.86	28.97	53.9	58.7	48.9
8.53	-58.85	-57.91	-59.13	29.37	50.8	52.2	51.9
8.62	-59.91	-57.91	-59.13	29.24	54.1	59.2	46.2
8.74	-60.46	-58.74	-59.13	29.12	52.7	55.2	48.9
8.67	-60.68	-58.12	-58.92	29.15	52.7	52.7	49.7
8.47	-59.95	-57.5	-59.13	29.33	54.6	60.3	49.5
8.69	-60.53	-58.12	-59.13	29.06	52	54.7	50
8.57	-59.18	-58.17	-59.16	29.27	51.7	52.9	49.8
8.35	-59.98	-58.38	-59.01	29.27	53.8	59.9	51
8.67	-60.2	-58.02	-59.13	29.24	50.7	53.7	48
8.53	-60.93	-57.65	-58.98	29.33	52	53.7	51.5
7.92	-59.65	-58.07	-59.38	29.37	52.3	59.2	50.5
8.57	-58.96	-58.17	-59.19	29.33	48.6	51.2	50.5
8.66	-60.42	-57.91	-58.86	29.43	49.8	55.2	49.6
9.25	-60.68	-58.07	-58.92	29.21	51.9	59.2	46.3
8.57	-58.85	-57.76	-59.22	29.52	49.4	51.5	48.2
8.63	-59.8	-57.39	-59.5	29.43	51.8	58.7	50
8.82	-60.46	-58.28	-59.13	29.18	52.9	58.3	51.6
8.69	-60.42	-58.07	-59.26	29.37	50.7	51.9	52.8
8.61	-60.2	-58.33	-59.16	29.4	52.8	57.3	47.7
8.55	-59.03	-57.34	-59.41	29.06	53.2	57.3	50.8
8.66	-60.35	-58.07	-59.19	29.27	52.2	52.2	50.8
8.53	-60.53	-58.69	-59.01	29.43	54.2	58.5	50.2
8.63	-60.16	-58.02	-59.26	29.15	54.5	57	49.1
8.59	-59.29	-58.28	-59.13	29.12	54.5	53.7	50.5
7.97	-60.42	-58.07	-59.53	29.21	57.2	60.8	49.6
8.57	-60.27	-58.33	-59.19	29.12	54.6	52.9	49.5
8.66	-61.15	-58.17	-59.41	29	56.1	55.1	46.2
8.71	-57.78	-58.69	-59.22	28.88	58.1	60.2	50.4
8.67	-60.79	-58.12	-59.44	29.06	55.4	52.7	51.7
8.63	-60.68	-58.02	-59.19	28.97	57.4	56.1	47.6
8.8	-60.6	-58.69	-59.38	28.75	58.7	58.9	44.4
8.52	-60.2	-57.81	-59.47	29	56.8	53.4	49.5
8.43	-60.35	-58.02	-59.29	28.91	59.6	59.8	49.8
8.6	-60.86	-58.22	-59.44	28.88	57.8	53.5	49.4
8.57	-61.19	-58.22	-59.19	29	59.2	56	51.4

8.62	-60.27	-58.38	-59.47	28.97	57.6	54.5	50.3
8.68	-59.91	-58.43	-59.41	28.88	58.8	54.5	49.7
8.65	-60.24	-58.07	-59.29	28.72	60.4	58.5	50.5
8.56	-60.46	-58.28	-59.22	29.06	58.2	53.2	51.6
8.63	-60.53	-58.33	-59.35	28.75	60	54.9	48.6
8.64	-60.75	-57.55	-59.5	28.51	62.5	60.3	52.6
8.4	-59.03	-58.28	-59.38	28.82	59.5	53.9	49.9
8.54	-58.66	-58.22	-59.35	28.57	61.9	59.6	50.8
8.57	-58.85	-57.55	-59.5	28.69	59.4	53.3	48.6
9	-61.63	-59.05	-59.32	28.69	61.4	56.5	52.3
8.56	-60.53	-58.33	-59.29	28.69	60.3	54.6	50.8
8.64	-60.53	-58.48	-59.32	28.66	61.2	54.5	49.2
8.81	-60.79	-57.81	-59.44	28.54	63.3	59.8	49.8
8.66	-61.67	-58.69	-59.32	28.69	61.2	54	49.9
8.52	-59.21	-58.07	-59.56	28.75	62.9	59.4	50.5
8.66	-60.27	-58.38	-59.5	28.66	60.3	53.7	48.4
8.54	-60.86	-58.64	-59.59	28.63	62	56.6	53.1
7.73	-59.51	-58.12	-59.56	28.82	60.2	54.1	48.4
8.66	-61.15	-58.12	-59.41	28.63	61.4	55.4	49.8
8.55	-61.34	-58.74	-59.44	28.48	61.5	57.1	49.3
8.76	-60.86	-58.53	-59.62	28.66	61	54.6	51.3
8.65	-61.12	-58.02	-59.5	28.6	62.8	60.1	51.7
8.58	-60.9	-58.48	-59.53	28.85	60.3	54	50.7
8.53	-58.11	-58.38	-59.5	28.54	62.2	59.8	49.3
8.66	-61.15	-58.17	-59.44	28.69	59.8	53.7	50.2
7.79	-60.6	-58.17	-59.84	28.79	61.5	58.4	52.2
8.64	-61.37	-57.91	-59.84	28.75	59.6	53.8	51.2
8.56	-60.6	-58.43	-59.38	28.72	60.3	55.5	49.4
8.88	-61.01	-58.48	-59.74	28.66	59.8	55.8	49.8
8.52	-60.6	-59.11	-59.26	28.69	59.9	54.8	48.9
8.62	-60.38	-58.28	-59.5	28.66	61	58.6	49.5
8.64	-60.79	-58.48	-59.71	28.75	59.1	54.2	51.3
8.56	-61.3	-57.91	-59.59	28.6	61	59.8	47.4
7.76	-60.79	-59.11	-59.62	28.97	58.1	53.8	51.4
8.67	-61.26	-58.79	-59.53	28.75	59.6	58.2	48.1
8.44	-59.84	-58.69	-59.41	28.91	57.5	54.2	49.5
8.62	-60.46	-57.7	-59.68	28.75	58.8	55.5	50.4
8.55	-59.65	-57.91	-59.9	28.6	60.2	59.2	49.3
8.46	-61.7	-58.12	-59.62	28.97	58	53.9	49.2
8.67	-60.93	-58.07	-59.71	28.72	60.1	59.7	55.1
8.56	-59.25	-59.16	-59.53	28.94	57.6	53.6	50.7
8.53	-61.19	-58.17	-59.62	28.79	59.4	57	50.3
8.64	-60.86	-58.43	-59.41	28.79	57.6	54.8	49.6
8.62	-61.15	-58.69	-59.53	28.94	58.2	54.5	48.9
8.65	-60.75	-58.69	-59.44	28.72	59.5	59.8	53
8.59	-61.41	-59.42	-59.59	28.88	57.1	53.5	49.2
9.28	-61.59	-57.86	-59.62	28.79	58.5	58.2	52.2

8.65	-60.97	-58.38	-59.8	28.75	57.3	55.6	49.4
8.46	-61.15	-58.02	-59.77	29.03	57.3	54	52.4
8.62	-58.85	-58.28	-59.62	28.79	59.1	59.5	51.8
8.63	-61.3	-58.53	-59.65	29.03	56.4	53.5	50.2
8.6	-61.3	-59.37	-59.53	29	58	57.8	49.9
8.54	-60.09	-58.85	-59.8	28.82	56.9	56	49.6
8.68	-61.34	-59.11	-59.41	28.94	56.8	53.8	47.8
8.78	-61.26	-58.85	-59.74	28.75	58.1	59.8	53.6
8.57	-59.84	-58.64	-59.93	28.97	55.5	52.9	50.2
8.56	-61.19	-58.33	-59.68	29.12	57.1	55.8	49.7
8.6	-60.42	-58.95	-59.84	28.72	58.1	59.2	50.8
8.67	-61.15	-58.64	-59.47	28.94	55.5	53.2	49.1
8.95	-60.82	-57.91	-59.38	28.97	57.1	57.1	51.6
8.66	-61.56	-58.33	-59.44	28.85	56.1	56.3	49.9
8.64	-61.08	-58.85	-59.59	29.12	55.5	53.6	57.3
8.6	-60.64	-58.48	-59.9	28.91	56.9	58.7	51.6
8.58	-60.2	-58.43	-59.74	28.82	55.8	55.8	51.1
8.88	-61.56	-59.37	-59.53	28.88	55.2	53.8	50.2
8.66	-61.15	-58.64	-59.77	28.82	57	59	51.1
8.55	-60.27	-59.62	-59.62	29.06	55.1	54.9	52.1
8.67	-61.52	-59.47	-59.65	28.91	55.8	53.9	48
8.6	-61.15	-58.53	-59.93	28.82	57.3	59.5	50.5
8.72	-60.79	-58.64	-59.62	28.82	55	53.9	49.8
8.62	-60.53	-58.43	-60.05	28.91	55.9	54.4	48.3
8.61	-60.71	-59.16	-59.68	28.97	57.2	59.6	50.1
8.59	-60.68	-58.43	-59.9	28.94	54.8	52.8	50.7
8.65	-60.93	-58.64	-59.9	28.88	55.6	54.4	46.5
8.62	-60.42	-59.16	-59.71	28.82	57.1	59.6	50.2
8.56	-59.47	-59.16	-59.74	28.91	54.5	53.8	45.3
8.39	-61.04	-58.48	-59.84	29.03	55.3	54.3	53.3
8.59	-60.79	-58.9	-59.5	28.75	57.2	59.9	50.2
8.59	-61.19	-58.64	-59.96	29.15	54.8	52.8	48.3
8.57	-61.48	-58.43	-59.74	28.85	55.7	54.8	47.3
8.58	-60.13	-58.74	-59.84	28.75	57	59.6	50.7
9.26	-61.41	-58.53	-60.02	28.88	54.6	52.9	49.2
8.65	-61.23	-58.69	-59.68	28.88	55.7	54.5	49.3
8.6	-60.09	-59.05	-60.02	28.85	57.7	59.8	51.2
8.61	-60.93	-59.26	-59.65	28.79	55.4	53.5	48.4
8.68	-61.26	-58.64	-59.62	28.85	56.2	54.3	48.4
8.65	-59.4	-59.16	-59.74	28.66	58.7	60.6	49.9
8.59	-61.19	-58.95	-59.96	28.88	55.3	52.8	50.4
8.59	-60.35	-59.26	-59.71	29.03	56.8	58.1	50
8.67	-61.34	-58.64	-59.96	28.63	56.8	57.4	50
8.62	-60.86	-58.74	-60.11	28.88	55.5	53.7	50.4
8.66	-59.54	-58.28	-59.77	28.69	56.8	59.6	51
8.53	-60.93	-58.43	-59.68	28.85	54.6	53.6	51.8
8.66	-60.79	-59.37	-59.68	29.06	56	55.5	50.1

8.65	-61.01	-58.43	-59.77	28.79	55.8	57	48.3
8.56	-61.74	-58.74	-59.68	28.91	54.2	53.3	48.8
8.74	-60.6	-58.48	-59.8	28.69	56.6	59.3	47
8.55	-61.7	-58.95	-59.77	28.91	53.9	53.8	50.2
8.61	-61.74	-58.74	-60.08	28.94	56.3	55.2	49.8
8.68	-61.81	-58.38	-59.74	28.63	56.3	56.9	50.1
8.6	-61.04	-58.17	-59.9	28.75	56	53.7	49.7
8.68	-59.65	-58.79	-59.99	28.63	57.9	60.3	50.1
8.61	-62	-58.33	-59.74	28.69	55.1	52.9	48.2
7.86	-61.52	-58.85	-59.8	28.79	58	60.5	50.3
8.57	-60.42	-58.43	-59.77	28.85	55	52.8	50.4
8.51	-61.59	-58.85	-59.84	28.88	57.1	57.1	49.3
8.59	-61.12	-59.26	-59.93	28.63	55	54.1	49.4
8.63	-61.26	-58.48	-59.96	28.79	56.2	54.5	52.6
8.77	-61.34	-59	-59.84	28.69	56.9	58	52.2
8.69	-62.69	-58.17	-60.11	28.75	55.6	53.8	52.2
8.13	-60.9	-58.48	-60.02	28.85	56.8	59.3	51.5
8.57	-59.47	-58.95	-59.8	28.63	54.9	53.7	50.3
8.59	-61.92	-59.26	-59.8	28.91	56.3	54.9	50.5
8.65	-60.93	-58.64	-59.93	28.54	56.7	57.1	48.9
8.58	-60.49	-58.53	-60.11	28.82	56	53.7	50.9
8.59	-61.74	-58.38	-59.8	28.63	58.1	60.7	48.9
8.57	-59.1	-58.9	-59.8	28.72	55.1	52.7	49.9
8.83	-61.04	-58.12	-59.77	28.6	57.4	59.1	46.8
8.56	-61.3	-58.74	-59.99	28.85	54.6	52.7	49.4
8.41	-61.85	-59.05	-59.99	28.91	56	54.8	50.5
8.6	-60.31	-59.31	-59.9	28.51	58.8	61.1	53.1
8.56	-61.26	-58.79	-59.99	28.94	55.8	53.2	50.2
8.65	-61.74	-58.85	-60.23	28.63	58.3	60.3	51
8.54	-60.6	-58.9	-59.74	28.66	55.4	52.7	51.5
9.06	-60.97	-58.64	-60.02	28.6	57.9	57.4	51.6
8.61	-61.37	-58.95	-59.9	28.72	56.2	53.6	49.7
8.55	-58.55	-59	-60.02	28.75	58	54.9	54.6
8.65	-61.7	-58.79	-60.02	28.39	59.5	59.7	54.3
8.46	-61.67	-58.59	-59.84	28.79	57.4	53.3	51.6
8.69	-61.63	-58.85	-60.02	28.51	59.6	58.3	50.3
8.62	-59.95	-58.85	-59.84	28.51	57.7	53.3	49.1
8.93	-60.02	-59	-59.8	28.45	59.4	56.6	51.6
8.65	-61.7	-58.28	-59.96	28.33	61.2	60.1	50.9
8.63	-61.81	-59.05	-60.08	28.66	59.3	53.8	50.5
8.63	-61.48	-58.53	-59.84	28.33	61.2	59.1	50.1
8.55	-61.19	-59.05	-60.2	28.69	59.5	53.7	48.2
8.63	-60.93	-59.05	-60.02	28.51	61	56.1	49.5
8.56	-61.48	-59.31	-60.02	28.27	62	58	49.6
8.68	-61.7	-58.74	-59.9	28.39	60.7	54.3	48.4
8.64	-60.97	-59	-59.84	28.21	63.3	60.3	53.5
8.5	-61.63	-58.85	-60.11	28.45	61.7	54.2	48.1

8.62	-60.93	-58.74	-60.26	28.17	63.6	58	51.7
8.51	-59.8	-58.64	-59.99	28.48	61.9	54.1	47.9
8.69	-61.08	-58.53	-59.99	28.17	63.6	56.8	49.7
8.53	-61.67	-58.59	-60.08	28.27	62.4	54.9	50.7
8.58	-61.7	-59.11	-60.05	28.11	63.6	56.3	49.4
8.57	-61.08	-58.74	-59.99	28.11	63.4	56.9	49.6
8.69	-61.37	-58.74	-60.11	28.11	63.9	55.7	48.2
8.66	-61.85	-59.05	-60.02	28.02	64.7	59	50.1
8.62	-61.01	-59	-59.9	28.02	63.4	55	50.2
8.55	-59.98	-58.43	-60.11	27.99	65.6	60.6	44.4
8.66	-61.7	-59	-60.02	28.33	63.3	55	49.1
8.64	-61.41	-58.95	-60.02	27.93	64.2	57.9	48.3
8.49	-61.3	-59.26	-59.96	28.21	63.4	55.1	51.2
8.59	-62	-58.64	-59.9	27.99	65.4	59.8	51.3
8.62	-61.19	-58.9	-60.02	28.02	63.6	54.9	50.4
8.71	-61.26	-59.37	-60.11	28.02	65.1	59.4	47.7
8.66	-62.14	-59.11	-59.99	28.02	63.2	54.9	50.2
9	-60.97	-59.31	-60.05	27.93	65.1	58.5	48.2
8.59	-60.27	-59	-59.96	28.05	63.5	54.8	50.1
8.57	-61.34	-59.73	-59.8	28.14	65	56.8	48.7
8.57	-60.53	-59.11	-60.2	27.9	63.7	54.7	47.4
8.39	-60.24	-59	-60.05	28.02	65.1	57	49.3
8.57	-59.87	-58.95	-59.96	27.96	63.9	54.9	48.7
8.53	-60.64	-58.22	-60.14	27.87	65.3	56.5	49.9
8.82	-60.53	-59.52	-60.05	27.93	64	55	48.6
8.62	-62	-58.69	-60.17	27.93	65.5	56.4	49
7.99	-61.41	-58.9	-60.29	27.96	64.5	54.9	49.8
8.61	-61.26	-58.95	-59.99	27.93	66.2	57.3	47.6
8.52	-60.16	-58.9	-60.02	28.11	64.6	54.9	51.6
8.56	-59.91	-58.07	-60.17	27.81	66.2	57.5	48.6
8.46	-60.79	-59.16	-59.74	28.08	64.9	55	48.4
8.63	-61.67	-59	-60.17	27.78	66.6	58.5	49.7
8.64	-61.67	-58.74	-60.2	27.84	64.7	55.2	49.3
8.69	-61.37	-59.16	-60.05	27.69	66.8	59.7	54
8.62	-62.29	-58.85	-60.23	27.87	64.9	55.2	53.4
8.74	-62.18	-59.26	-60.11	27.72	66.8	60.2	53.9
8.63	-60.97	-58.59	-60.17	27.84	64.9	55.6	51.3
8.65	-61.85	-59.05	-60.17	27.72	66.2	58.4	50.7
8.65	-61.48	-59	-59.96	27.87	65.3	55.9	49.3
8.62	-60.42	-58.85	-60.14	27.93	65.7	57.6	49.5
8.55	-60.46	-58.9	-60.23	27.87	65.5	56	50.3
8.53	-59.8	-58.85	-60.08	27.99	64.7	54.9	49
8.64	-61.48	-58.9	-59.96	27.78	66	57.1	50
8.61	-61.67	-59.31	-60.2	27.9	64.7	55.1	50
8.62	-61.37	-59.05	-60.2	27.72	66.5	57.9	50.7
8.54	-61.81	-58.64	-60.08	27.87	64.8	55.2	50.5
8.81	-60.97	-59.42	-59.93	27.78	66.8	59.6	53.1

8.67	-61.67	-59.05	-60.42	27.9	65.1	55.5	49.7
8.52	-59.95	-59.31	-59.99	27.84	66.4	58.6	50.3
8.57	-60.82	-59.31	-59.96	27.72	64.9	56	49.5
7.82	-61.26	-58.9	-60.14	28.02	64.5	55.1	50.1
8.66	-61.78	-58.85	-59.93	27.75	65.8	56.9	48.1
8.64	-61.56	-58.79	-60.23	28.02	64.5	55.2	50.4
8.6	-61.67	-58.95	-60.14	27.72	66.3	58.8	46.6
8.59	-60.75	-59.42	-60.23	27.96	64.7	55.4	47
8.67	-61.19	-58.85	-60.17	27.66	66.8	59.7	51.8
8.58	-61.34	-59.31	-60.32	27.99	64.8	55.7	50.7
8.55	-62.03	-59.26	-59.84	27.75	64.7	55.9	50.7
8.52	-61.96	-59.78	-60.02	27.87	65.7	56.3	51.3
8.68	-62.14	-59.16	-60.54	27.87	64.5	55.4	49.7
8.66	-61.37	-59.11	-60.02	27.78	66.1	57.5	49.5
8.68	-61.12	-58.85	-60.17	27.84	64.6	55.6	50.5
8.6	-60.93	-58.79	-59.96	27.72	66.5	59.8	53.1
8.63	-61.56	-58.64	-60.02	27.72	64.7	55.8	50.5
8.66	-62	-59.26	-60.29	27.56	65.4	57.3	50.8
8.7	-61.85	-58.69	-60.02	27.81	65.1	56.3	49.5
8.58	-61.01	-59.11	-60.17	27.78	64.7	55.9	50.7
8.8	-61.63	-59.31	-60.32	27.72	65.7	56.9	50.9
8.68	-61.41	-59.31	-60.29	27.78	64.7	55.5	48.1
8.86	-61.12	-60.09	-60.32	27.72	66.6	59.6	49.5
8.54	-61.48	-58.74	-60.05	27.81	64.9	55.7	50.9
7.94	-61.63	-58.85	-60.05	27.81	66	58.2	49.5
8.64	-61.34	-59.05	-60.17	27.72	65.3	55.9	48.8
8.54	-61.59	-58.85	-60.23	27.93	64.5	55.2	52
8.66	-61.74	-59.57	-60.17	27.75	65.8	57.1	50.1
8.49	-59.4	-58.74	-60.23	27.9	64.6	55.5	47
8.66	-61.3	-58.9	-60.17	27.56	66.6	59.8	47.7
8.48	-61.67	-58.9	-60.11	27.87	64.8	55.6	52.6
8.65	-61.26	-59.68	-60.2	27.47	66.3	58.5	49.1
8.48	-61.52	-59.31	-60.05	27.93	65.1	56.1	47.6
8.54	-61.96	-59.37	-60.42	27.72	64.7	55.2	51.6
8.57	-59.03	-59.99	-59.65	27.78	65.8	56.8	49.3
8.68	-61.89	-59	-60.23	27.72	64.4	55.6	51.6
8.62	-61.74	-59.37	-60.45	27.63	66.8	59.7	50.9
8.75	-61.56	-59.57	-60.26	27.81	64.9	55.9	51.6
8.59	-61.67	-58.95	-59.8	27.66	65.8	57.9	50.2
8.54	-60.6	-59.37	-60.11	27.66	65.6	56	47.9
8.65	-61.81	-59.42	-60.14	27.66	64.6	55.1	48.4
8.62	-61.63	-58.64	-60.48	27.84	66.3	57.9	47.3
8.6	-61.26	-59.26	-60.29	27.69	64.7	55.6	51
8.65	-61.41	-58.95	-60.29	27.75	66.8	59.7	51.3
8.55	-59.73	-59.42	-60.2	27.69	65	55.8	51.2
8.5	-62.11	-58.59	-60.32	27.72	64.7	56.2	50.8
8.61	-61.15	-58.74	-60.14	27.63	65.6	56.6	50.5

8.56	-60.38	-58.95	-60.26	27.81	64.7	55.4	50.5
8.6	-61.56	-59.26	-60.29	27.63	66.4	58.2	51.3
8.54	-61.37	-58.95	-60.38	27.81	64.8	55.5	50.5
8.61	-61.81	-59.47	-60.08	27.47	66.9	59.3	48.6
8.59	-60.35	-58.9	-60.08	27.53	65.4	55.7	48.9
8.62	-61.85	-59.94	-60.29	27.44	65.1	56.6	48.8
8.54	-62.66	-58.95	-60.17	27.56	65.8	56.2	49
8.67	-62.51	-59.47	-60.23	27.56	64.7	55.8	47.7
8.57	-62.8	-58.85	-60.23	27.47	66.8	58.9	49
9.19	-60.13	-59.42	-60.48	27.63	65	55.8	48.1
8.55	-60.71	-59.52	-60.05	27.38	66.4	58.3	48.1
8.44	-62.18	-59.26	-60.35	27.56	65.9	56.1	50.7
8.58	-61.04	-58.28	-59.93	27.56	64.9	55.4	48.7
8.51	-61.89	-59	-60.29	27.66	66.3	57.9	50.4
8.58	-61.15	-59.31	-60.32	27.5	65.1	55.8	47.3
8.65	-61.23	-59.31	-60.23	27.56	67.2	59.6	50.5
8.52	-61.63	-59.42	-60.29	27.47	65.8	56	51.6
8.66	-61.81	-58.95	-60.29	27.66	65.4	55.5	49.5
8.54	-59.18	-59.57	-60.11	27.41	66.8	57.2	49.2
8.56	-61.67	-58.59	-60.23	27.56	65.8	55.6	51.6
8.65	-62.22	-59.42	-60.29	27.26	68.1	60.1	51.9
8.63	-62.07	-58.79	-60.11	27.47	66.4	56.1	49
8.68	-62	-58.95	-60.54	27.35	66	55.6	48.1
8.5	-60.97	-58.69	-60.45	27.47	67.6	57.1	51.6
8.58	-60.93	-58.53	-60.14	27.44	66.5	55.9	50
8.68	-62.22	-58.53	-60.32	27.17	68.8	59.8	53.2
8.59	-61.67	-59.37	-60.08	27.2	67.5	56.5	50.5
8.66	-62	-58.64	-60.35	27.23	66.7	55.8	50.4
8.61	-60.02	-59	-60.29	27.2	68.7	59.1	48.1
8.63	-61.3	-59.11	-60.05	27.23	67.5	56.1	47.6
8.7	-61.7	-59.26	-60.17	27.23	66.8	55.8	50.3
8.61	-62.18	-58.95	-60.23	27.14	68.6	57.3	47.7
9.16	-60.97	-58.74	-60.32	27.14	67.7	56.2	50.5
8.6	-62.47	-58.64	-60.08	27.08	69	58.4	49.6
8.47	-62.07	-59.05	-60.29	27.23	68.5	57	53.8
8.54	-59.29	-59	-60.38	27.17	67.8	56	51.7
8.62	-62.11	-58.74	-60.42	27.2	70.1	59.9	49
8.6	-61.59	-58.9	-60.23	27.01	69.9	56.8	49
8.53	-60.13	-59.26	-60.11	27.23	70.3	56.3	47.3
8.61	-60.75	-59.99	-59.8	26.77	71.8	58.8	50.7
8.62	-61.96	-59.37	-60.11	26.68	72.4	57.1	50.5
8.7	-61.26	-59.47	-59.96	26.8	73.2	56.8	51.6
8.61	-61.08	-58.95	-60.26	26.74	73.6	56.2	50.1
8.55	-62.03	-60.04	-60.11	26.68	75.1	58.6	49.8
8.58	-61.08	-58.95	-60.11	26.65	74.1	57.1	48.9
8.66	-61.85	-59.26	-60.14	26.68	73.2	57	52.1
8.51	-60.49	-58.64	-60.23	26.59	76.2	60.7	47.7

8.74	-62.14	-59.37	-60.29	26.56	74.9	57.3	50.2
8.65	-61.41	-58.9	-59.99	26.71	74.3	57	48
8.66	-61.89	-59.68	-60.11	26.83	74.6	57.9	49.2
8.51	-62.29	-58.59	-60.05	26.56	76.3	58.1	50.4
8.53	-60.53	-58.48	-60.42	26.65	75.8	57.3	49.2
8.61	-61.92	-59.68	-60.05	26.62	75.4	57	51.2
8.62	-62.44	-59.31	-60.05	26.62	77.5	61.2	50.3
8.7	-61.89	-59.47	-59.9	26.56	76.7	58	50.5
8.62	-61.56	-59.05	-60.32	26.71	75	57.5	52.1
8.54	-61.7	-59.47	-60.02	26.59	74.2	57.2	50.9
8.42	-60.64	-58.33	-60.11	26.83	74.3	56.7	49.8
8.64	-62.14	-58.59	-60.02	26.56	76.1	59.3	50.7
8.57	-61.81	-58.85	-60.17	26.62	74.9	57.6	51.6
8.69	-61.37	-58.69	-60.05	26.62	74.4	57.3	53.2
8.58	-60.13	-59.16	-60.11	26.59	74.3	57	49.1
7.82	-61.96	-59.83	-60.05	26.65	76.4	60.6	47.5
8.61	-61.85	-59.11	-60.08	26.59	75.3	58.1	52.1
8.58	-61.23	-59.11	-59.96	26.89	74.5	57.4	50.3
8.66	-62.33	-59.26	-60.08	26.65	74.3	57.2	49
8.61	-61.34	-59.31	-60.02	26.71	74.9	59.2	44.2
8.69	-62.22	-59.62	-59.84	26.65	74.9	58.3	47.9
8.66	-62.03	-59.57	-59.99	26.56	74.5	57.6	48.4
8.62	-61.01	-59.05	-59.77	26.65	74	57.4	49
8.58	-61.89	-59.11	-60.29	26.62	73.8	57.1	48.8
8.67	-59.54	-59.47	-59.74	26.43	75.5	60.1	51.2
8.6	-61.74	-59.42	-60.2	26.56	75.2	58.2	50
8.44	-61.74	-59.11	-60.05	26.83	73.6	57.8	53
8.55	-61.89	-59.05	-60.11	26.71	72.1	57.2	50.1
8.58	-61.26	-59.16	-60.26	26.89	71.9	56.9	49.6
8.72	-62.11	-59.26	-60.14	26.71	72.6	59.7	51.2
8.56	-61.19	-58.69	-60.17	26.89	71.6	58.1	50
9.04	-62.07	-58.43	-60.23	26.95	70.9	57.4	52.2
8.66	-62.29	-59.11	-60.11	26.95	70.4	56.7	50.2
8.53	-59.98	-59.37	-60.17	27.08	71.2	58.5	49.5
8.65	-61.26	-59.52	-60.17	26.89	71.4	58.1	51.4
8.61	-61.01	-59.11	-60.2	27.05	70.3	57.2	50.3
8.67	-61.7	-59.57	-60.23	27.08	69.4	57.1	51
8.65	-62.11	-59.26	-60.35	26.98	69.1	56.6	48.3
8.38	-61.67	-58.69	-60.17	27.2	70.7	59.1	48.7
8.62	-60.35	-58.33	-60.32	27.14	69	57.1	50.5
8.63	-61.56	-59	-59.99	27.38	68	56.9	51
8.65	-61.56	-58.95	-60.17	27.2	67.7	56.6	47.3
8.59	-61.89	-59.37	-60.23	27.17	68.5	58.5	51.5
9.16	-61.52	-59.62	-60.2	27.2	67.5	56.9	51.9
8.64	-62.14	-59.05	-60.42	27.23	67.4	56.5	48.7
8.65	-62.11	-59.62	-60.2	27.32	69.3	60.3	52.6
8.68	-62.11	-59.16	-60.35	27.2	67.9	56.7	49.5

8.66	-62.07	-58.69	-60.48	27.26	66.8	56.2	48.3
8.71	-61.78	-59.42	-60.42	27.14	67.2	57.1	50.1
8.68	-61.59	-59.73	-60.26	27.23	67.9	56.9	51.1
7.77	-60.6	-58.85	-60.11	27.47	66.8	56.4	48.3
8.52	-61.89	-59.57	-60.29	27.38	66.5	56.1	49.3
8.57	-59.76	-59.26	-60.17	27.26	68.1	58.3	51.1
8.75	-62.4	-58.85	-60.38	27.35	66.7	56.6	50.7
8.65	-61.48	-59.16	-60.23	27.35	66	56.1	49.5
8.54	-59.73	-59.47	-60.35	27.5	68.1	59.8	53.5
8.68	-61.63	-59.05	-60.45	27.41	66.7	56.6	50.5
8.57	-61.7	-59.42	-60.23	27.66	65.9	56	50.9
8.63	-60.49	-59.05	-60.48	27.38	67.9	60.1	46.2
8.6	-61.3	-59.52	-60.38	27.53	66.2	56.5	50.3
8.92	-62.07	-59.52	-60.17	27.5	65.5	56.1	48.8
8.58	-59.98	-58.85	-60.45	27.41	67.1	59.2	50.2
8.55	-60.79	-58.95	-60.54	27.69	65.6	56.4	46.5
8.54	-60.42	-59.05	-60.42	27.53	64.8	56.1	51.6
8.54	-61.26	-59.37	-60.66	27.5	66.1	57.1	51.9
8.66	-60.68	-58.33	-60.2	27.63	64.9	55.9	49.5
8.62	-61.89	-59.68	-60.51	27.38	67	59.7	54.8
8.17	-60.09	-58.69	-60.48	27.78	65.8	56.4	49.6
8.59	-62.22	-60.35	-60.48	27.63	64.7	55.6	49.4
8.52	-61.19	-59.31	-60.42	27.69	66.6	58.2	51.1
8.6	-61.7	-60.09	-60.38	27.66	64.6	56	50.2
8.66	-62	-59.26	-60.26	27.53	65.8	58.7	51.7
8.35	-61.81	-59.57	-60.69	27.84	65.4	56.5	51.7
8.58	-60.35	-59.57	-60.35	27.69	64.5	55.8	49.6
8.63	-62.11	-59.31	-60.42	27.66	65.9	58	52.3
8.57	-61.23	-59.94	-60.57	27.96	64.5	55.8	49.2
8.53	-61.96	-60.25	-60.42	27.56	66.5	59.8	49.4
8.6	-61.89	-59.47	-60.42	27.72	64.7	55.9	51.5
7.9	-61.89	-59.68	-60.6	27.87	64.7	57	50.1
8.59	-61.67	-59.94	-60.75	27.66	65.4	56.4	49.3
8.66	-61.85	-58.59	-60.57	27.81	64.1	55.5	49.3
8.79	-62.03	-59.62	-60.54	27.66	65.8	57.1	50.5
8.65	-61.92	-60.14	-60.48	27.81	64.2	55.6	53.5
8.54	-62	-59.11	-60.48	27.81	66.3	59.7	50
8.56	-61.7	-60.09	-60.54	27.75	64.7	55.9	45.5
8.67	-62.8	-59.26	-60.6	27.63	66.3	59.9	49
9.19	-60.79	-59.88	-60.42	27.69	64.7	56	48.9
8.61	-61.3	-59.37	-60.48	27.75	64.2	56.1	52.1
8.61	-62.22	-59.42	-60.75	27.87	65.1	56.4	49.7
8.6	-60.75	-59.83	-60.66	27.78	64	55.2	51.1
8.66	-61.7	-59.52	-60.23	27.69	65.3	57.1	49.8
8.67	-61.96	-59.26	-60.51	27.81	63.8	55.7	49.5
8.7	-61.92	-59	-60.54	27.69	65.6	58.2	49.1
8.31	-59.73	-59.47	-60.72	27.99	63.9	55.6	48.8

8.61	-62.22	-59.47	-60.48	27.72	65.7	59.4	51.1
8.65	-61.41	-59.52	-60.6	27.93	64.4	55.7	47.3
8.6	-61.3	-59.88	-60.54	27.69	65.9	60.1	49
8.67	-63.06	-59.62	-60.75	27.84	64.1	55.9	49.9
8.43	-62.29	-60.66	-60.42	27.78	65.5	58.5	50.4
8.57	-59.21	-59.31	-60.51	27.69	64.6	56.1	48.4
8.69	-62.33	-59.62	-60.42	27.87	64.7	57.1	49
8.57	-61.96	-59.26	-60.42	27.81	64.7	56.2	50.7
8.56	-62.58	-60.14	-60.35	27.84	63.7	55.8	49.9
9.04	-62.07	-59.62	-60.6	27.69	64.7	56.7	48.9
8.59	-61.08	-59.88	-60.45	27.78	63.9	55.9	48.9
8.61	-62	-59.52	-60.45	27.93	65	56.4	50.2
8.54	-62.47	-58.9	-60.29	27.84	63.6	55.2	50.1
8.66	-61.74	-59.16	-60.42	27.72	65.4	57.6	45.9
8.99	-61.89	-59.05	-60.48	27.81	63.9	55.5	51
8.58	-62.22	-59.88	-60.72	27.75	65.6	58.8	48.4
8.64	-62.58	-60.3	-60.45	27.99	63.8	55.4	48
8.56	-60.93	-59.62	-60.26	27.69	65.7	59.6	51.2
8.65	-61.92	-59.52	-60.42	27.75	64	55.4	47.8
8.85	-61.63	-59.88	-60.66	27.69	66.1	60.2	49.2
8.53	-62.51	-60.35	-60.54	27.84	64.4	55.8	49.5
8.55	-61.78	-59.62	-60.75	27.87	65.8	59.8	53.9
8.64	-62.33	-60.09	-60.48	27.78	64.4	56	51.3
8.65	-62.8	-59.31	-60.48	27.75	65.1	58.3	53.3
8.73	-61.81	-59.57	-60.69	27.78	64.7	56.1	50.5
8.65	-62	-59.26	-60.45	27.72	64.6	56.9	48.7
8.57	-62.18	-59.88	-60.51	27.9	65	56	49.7
8.56	-62.22	-59	-60.6	27.78	63.7	55.1	52.2
8.5	-62.07	-59.68	-60.48	27.84	65.1	56.7	49.3
8.62	-61.67	-59.73	-60.51	27.87	64	55.4	52.1
8.66	-62.33	-59.57	-60.84	27.81	65.5	56.7	50.4
8.35	-59.87	-60.09	-60.54	27.99	64.3	55.5	49.6
8.69	-62	-59.62	-60.6	27.78	66.1	58.2	50.9
8.58	-61.81	-59.11	-60.69	27.84	64.7	55.5	44.4
8.68	-60.35	-59.31	-60.6	27.75	66.4	59.2	52.1
8.63	-62.07	-59.73	-60.66	27.81	64.8	55.5	50.7
8.59	-62.18	-59.31	-60.78	27.87	66.6	60.2	49.5
8.63	-62.07	-59.42	-60.66	27.72	64.7	55.8	52.8
8.54	-61.96	-59.99	-60.54	27.72	66.9	60.3	47.8
8.61	-62.4	-59.68	-60.6	27.81	65.4	56.2	48.3
8.68	-62.51	-59.73	-60.51	27.63	66.9	59.7	47.3
8.48	-58.85	-59.88	-60.84	27.93	65.9	56.3	51.6
8.66	-61.96	-59.99	-60.54	27.78	65.3	56	49.3
8.55	-61.7	-59.62	-60.69	27.72	66.8	57.1	50.5
8.39	-62.47	-59.42	-60.69	27.9	65.8	56.1	51.7
8.49	-58.77	-60.25	-60.72	27.69	68.2	60.4	42.1
8.53	-62.22	-59.94	-60.51	27.93	66.3	56.4	48.9

8.65	-62	-59.42	-60.9	27.75	66.8	58.2	49.2
8.65	-55.95	-54.12	-59.71	0.49	63.1	58.9	50.2
8.58	-62.11	-59.26	-60.54	0.49	60.9	57	48.3
8.59	-61.01	-59.68	-60.45	27.66	68.6	59.6	45.7
8.61	-60.27	-59.42	-60.38	27.75	66.8	55.7	51
8.61	-61.85	-59.94	-60.17	27.69	67.2	57.1	51.4
8.62	-62.11	-59.26	-60.42	27.72	67.8	57.1	49.3
8.65	-61.37	-59.05	-60.57	27.78	66.7	56.2	48.1
8.6	-61.92	-58.9	-60.48	27.66	67.4	57.6	47.3
8.56	-61.3	-59.26	-60.6	27.69	67.9	57	52
8.56	-60.53	-59.31	-60.54	27.9	67.5	56.3	47.3
8.61	-61.7	-59.26	-60.6	27.66	67.8	57.8	49.1
8.63	-61.34	-58.53	-60.29	27.78	67.5	56.9	45.5
8.52	-61.26	-59.57	-60.45	27.84	66.6	55.7	40
8.51	-61.67	-59.73	-60.32	27.75	69.1	60.5	50.8
8.5	-60.38	-59	-60.26	27.84	67.5	56.6	50.1
8.47	-61.78	-59.31	-60.17	27.9	67	56.2	48.7
8.53	-60.71	-59.99	-60.26	27.78	69.1	59.2	47.3
8.98	-61.56	-59.47	-60.48	27.69	67.7	56.9	49.4
8.65	-61.78	-59.16	-60.32	27.72	66.3	56.3	49.7
8.66	-62.03	-59.11	-60.17	27.75	67.9	58.3	49.7
8.64	-61.81	-59.05	-60.6	27.72	67.7	56.5	49.2
8.37	-61.89	-59.11	-60.42	27.96	66.3	56.2	48.9
8.53	-60.16	-58.95	-60.17	27.72	68	58.9	49.6
8.63	-61.37	-59.05	-60.51	27.56	67.4	56.5	51.1
8.71	-61.19	-59.88	-60.38	27.72	66.9	56.4	49.6
8.54	-59.91	-59.05	-60.48	27.78	68.1	58.2	51.3
8.34	-60.42	-59.11	-60.32	27.9	66.6	56.5	48.6
8.54	-61.89	-59.26	-60.35	27.84	66.1	56.8	49.8
8.75	-60.6	-59.16	-60.35	27.72	67	57.3	48.9
8.66	-61.85	-59	-60.51	27.81	66.2	56.3	50.7
8.64	-61.56	-59.31	-60.35	27.72	68.2	60.3	48.8
8.54	-61.04	-58.79	-60.51	27.84	66.4	56.9	51.1
8.53	-61.67	-59.31	-60.35	27.75	65.7	56.2	50.3
8.52	-59.73	-59.37	-60.6	27.96	67.2	59	51.8
8.54	-61.01	-58.79	-60.42	27.84	65.5	56.5	49.5
8.57	-59.62	-58.95	-60.45	27.93	64.7	56.2	49.1
8.17	-61.56	-58.43	-60.35	28.02	65.6	57.4	49.5
8.5	-60.35	-59.42	-60.26	27.99	64.3	56	50.2
8.57	-61.34	-59.42	-60.29	27.75	66.2	60.6	46.7
8.64	-59.25	-58.59	-60.42	27.93	64.4	56.5	49.5
8.52	-61.48	-59.05	-60.23	28.17	63.5	55.8	50.3
8.62	-61.78	-58.79	-60.26	27.9	64.8	57.3	50.3
8.66	-61.3	-59.42	-60.38	28.02	63.5	56	48.4
8.66	-61.48	-59	-60.42	27.9	65.4	60.4	51.1
8.22	-61.04	-58.64	-60.35	28.14	63.6	56	49.5
8.55	-61.01	-59.83	-60.29	28.05	64.1	58.6	51.6

8.53	-61.26	-59.57	-60.42	28.08	63.6	56.2	49.5
8.66	-61.3	-58.74	-60.6	28.08	62.4	55.5	57.1
8.53	-59.62	-58.79	-60.23	27.96	63.8	57.3	51.8
8.69	-60.79	-58.64	-60.26	28.05	62.4	55.7	48.4
8.45	-59.25	-58.95	-60.57	27.99	63.9	58.3	51
8.35	-60.79	-58.95	-60.48	28.21	61.9	55.5	49.5
8.63	-61.63	-59.78	-60.45	28.11	63.8	59.1	49.5
8.38	-60.97	-59.31	-60.38	28.33	61.7	55.5	49.3
8.62	-61.37	-59.05	-60.45	28.08	63.8	60.1	48.4
8.65	-61.34	-59	-60.42	28.17	61.8	55.6	50.8
8.63	-60.86	-59.37	-60.32	28.05	63.6	60.3	49.7
8.52	-61.26	-59.31	-60.38	28.17	61.6	55.5	50.7
8.67	-61.48	-59.78	-60.48	28.02	63.2	60.2	47.4
8.59	-60.68	-58.79	-60.35	28.21	61.2	55.2	49.8
8.62	-61.85	-59.26	-60.45	28.11	62.9	59.5	51
8.65	-61.37	-59.31	-60.11	28.24	61.2	55.2	49.4
8.64	-61.48	-59.05	-60.51	28.08	62.5	59.3	51.1
8.57	-60.71	-58.74	-60.48	28.24	61.1	55	51.6
8.48	-61.08	-58.95	-60.2	28.14	62.1	57.5	50
8.63	-61.7	-58.95	-60.26	28.24	60.3	54.9	51.7
8.63	-61.12	-59.47	-60.42	28.21	61.4	56.2	50.3
8.64	-60.64	-59.52	-60.45	28.21	60.3	55.9	52.4
8.58	-61.85	-58.9	-60.08	28.21	60.9	55.8	51.9
8.52	-59.51	-58.22	-60.35	28.17	61.4	58.6	50.4
8.68	-61.08	-59.16	-60.14	28.3	60	55.1	51.1
8.56	-60.79	-59.26	-60.45	28.11	61.6	59.7	48.8
8.5	-61.19	-59.42	-60.42	28.42	59.8	54.8	48.9
8.52	-59.43	-58.43	-60.48	28.3	61.2	58.6	49.7
8.53	-60.9	-58.79	-60.38	28.54	59.1	54.5	48.2
8.51	-61.34	-59.31	-60.2	28.42	61	57.8	50.5
8.44	-61.7	-59.47	-60.38	28.6	59.1	54.3	49.4
8.59	-61.19	-58.59	-60.51	28.48	59.9	56	49.1
8.52	-60.16	-58.64	-60.48	28.54	59	55.8	50.1
8.52	-60.93	-58.64	-60.23	28.54	60.2	56	43.5
8.65	-60.93	-59.83	-60.32	28.51	58.9	55.9	51.3
8.51	-60.49	-59.52	-60.48	28.54	59.4	55.8	51.2
7.76	-60.42	-58.48	-60.42	28.48	59.6	57.2	49.2
7.94	-61.12	-58.79	-60.42	28.57	58.9	54.9	52
8.21	-62.11	-58.9	-60.35	28.39	61.3	60.1	50.4
8.47	-60.68	-58.85	-60.42	28.6	59.3	55	52.1
9.24	-61.67	-59	-60.29	28.14	60.6	59.2	47.1
8.95	-61.01	-58.74	-60.54	28.33	59.2	54.9	50.4
8.7	-60.93	-58.85	-60.32	28.21	60.7	60.3	48.6
8.57	-60.82	-58.9	-60.45	28.48	58.1	54.5	49.2
8.69	-60.75	-59.37	-60.26	28.3	60.3	60.1	50.8
8.54	-60.42	-59.11	-60.38	28.42	58.2	54.3	47.5
8.6	-61.37	-59.05	-60.6	28.33	60	57.1	50.3

8.55	-61.01	-58.9	-60.48	28.48	58.1	54.2	49.2
8.62	-61.34	-59.26	-60.23	28.45	59.4	56	48.3
8.61	-61.12	-59	-60.29	28.24	60.6	60.7	47.7
8.56	-61.15	-58.95	-60.48	28.51	58	54.5	50.7
8.62	-61.52	-59.73	-60.42	28.42	59.3	59.2	48.1
8.63	-61.19	-59	-60.14	28.27	58.5	57.6	48.6
8.55	-60.38	-58.85	-60.35	28.39	58.1	54.7	49.5
8.51	-58.63	-58.53	-60.29	28.3	59.6	59.2	49.9
8.67	-61.01	-59.16	-60.32	28.54	58.1	54.4	48.7
8.57	-60.79	-59.31	-60.38	28.39	59.7	60.1	50.9
8.53	-61.12	-59.05	-60.32	28.57	57.3	53.9	51.3
8.62	-61.04	-59.88	-60.08	28.48	58.8	56.3	50.2
8.63	-61.15	-59.57	-60.26	28.42	58.9	58.1	51.9
8.56	-61.3	-58.85	-60.69	28.48	57.9	54.6	45.6
8.55	-59.4	-59.31	-60.23	28.45	60	60.4	52.1
8.65	-61.7	-58.85	-60.32	28.48	57.8	53.8	50.3
8.49	-62.07	-58.22	-60.29	28.45	59	56.9	49.1
8.64	-61.23	-59.31	-60.05	28.51	58.5	56.8	50.3
8.51	-59.65	-59.31	-60.66	28.54	58.2	54.8	51.6
8.62	-60.9	-58.74	-60.17	28.39	60.3	60.5	50.7
8.6	-60.97	-58.85	-60.29	28.54	57.5	53.9	49.3
8.62	-60.82	-58.85	-60.42	28.51	59.2	56.8	48.8
8.59	-60.93	-58.12	-60.51	28.45	58.7	56.8	48.4
8.58	-60.38	-58.38	-60.66	28.57	58.2	54.7	50.1
8.53	-61.23	-58.85	-60.38	28.54	59.3	60.2	50.7
8.53	-62.47	-59.26	-60.29	28.79	57	53.8	51.6
8.55	-61.23	-58.95	-60.38	28.69	58.2	56	51.6
8.43	-60.2	-59.05	-60.51	28.6	58.5	58	45.3
8.44	-60.38	-58.64	-60.32	28.69	57.5	54.4	50.8
8.45	-61.63	-59.37	-60.26	28.66	59.3	60.2	49.9
8.54	-61.3	-59.26	-60.54	28.72	56.9	53.8	50.5
8.52	-61.12	-59.11	-60.29	28.66	58.2	55.8	48.4
8.51	-62	-59.26	-60.11	28.57	59.4	58.7	51.3
8.55	-61.12	-59.16	-60.29	28.66	57.6	54.1	47.6
8.49	-62.22	-58.85	-60.42	28.66	59.2	59.2	49
8.6	-60.09	-59.31	-60.23	28.63	57.5	54.9	49.2
8.59	-61.01	-58.59	-60.32	28.54	58.7	55.1	45.5
8.56	-61.26	-58.64	-60.42	28.42	60.3	59.8	49.6
8.66	-61.08	-59.26	-60.2	28.51	58.1	54	47.3
8.62	-61.15	-58.85	-60.38	28.45	59.9	57.5	49.5
8.55	-60.46	-58.48	-60.6	28.45	58.3	55.4	51.7
8.59	-60.49	-58.59	-60.38	28.45	59.3	55	52.1
8.67	-61.37	-59.05	-60.26	28.39	61	60.5	49
8.56	-60.82	-59.11	-60.29	28.57	58.4	54	47.7
8.68	-61.52	-59.31	-60.35	28.45	60.4	58.8	51.2
8.56	-61.7	-59.11	-60.05	28.42	58.9	54.9	49.7
8.56	-62.07	-59.05	-60.32	28.45	59.9	55.9	49.5

8.64	-61.59	-59.11	-60.51	28.3	60.6	58.6	48
8.55	-59.8	-58.64	-60.57	28.39	60.1	54.8	50.3
8.56	-60.68	-58.53	-60.45	28.17	62.3	60.2	51.2
8.65	-60.93	-59.05	-60.32	28.33	60.4	54.4	47.8
8.65	-61.37	-59.16	-60.23	28.21	62.7	58.6	43.7
8.63	-61.63	-59.68	-60.08	28.42	60.5	54.6	52.4
8.56	-60.46	-58.74	-60.35	28.33	62.9	57.1	48.6
8.61	-60.53	-58.79	-60.42	28.27	61.5	55	49.8
8.54	-60.9	-58.43	-60.42	28.14	63.1	56.5	51.7
8.65	-60.49	-58.74	-60.26	28.21	61.8	56.8	52.7
8.68	-61.37	-58.9	-60.17	28.21	62.5	56.1	52.9
8.55	-61.52	-58.9	-60.38	28.21	61.6	54.9	51.1
8.66	-61.12	-59.11	-60.02	28.21	63.2	56.5	53.6
8.68	-61.59	-59.11	-60.11	28.02	62.8	56.8	50.5
8.56	-60.82	-58.64	-60.11	28.21	63.1	56	50.9
8.71	-61.74	-59.37	-60.02	28.05	65	59.4	51
8.77	-60.42	-59.11	-60.38	28.14	63.6	55.7	44.4
9.1	-60.9	-58.85	-60.26	28.11	65.4	60.1	51.6
9.18	-61.34	-59.47	-60.29	28.17	63.3	55.2	49.9
8.53	-61.59	-59.62	-60.14	28.02	65.3	58.8	49.5
7.96	-61.08	-58.48	-60.2	28.24	63.5	55	46.6
7.79	-58.33	-58.69	-60.35	28.24	64.6	58.4	51
8.7	-61.37	-58.95	-60.11	28.33	62.9	55.1	45.8
8.53	-60.9	-58.59	-60.14	28.21	64.5	56.9	51
8.64	-61.37	-59.11	-60.38	28.27	63.5	55.1	49.5
8.44	-60.09	-59.16	-60.2	28.14	65.4	57	47.5
8.65	-61.7	-59.16	-60.17	28.02	64.2	55.1	49.1
8.54	-61.85	-59	-60.26	28.02	65.8	57.1	49.8
8.65	-61.48	-58.79	-60.26	28.17	63.7	55	51
8.56	-60.09	-59.16	-60.05	28.11	65.1	57.8	49.9
8.68	-60.97	-59.05	-60.08	28.21	63.6	55.2	49.3
8.62	-61.3	-58.74	-60.35	28.02	65.3	57.9	49.4
8.56	-61.3	-59.37	-60.26	28.14	63.8	55.2	49.6
8.61	-61.56	-58.69	-60.17	28.05	65.5	59.3	49.8
8.65	-61.23	-58.53	-60.11	28.08	63.6	55.6	50.5
8.69	-61.04	-59.42	-60.29	28.08	65.5	59.4	49.2
8.62	-59.47	-59	-60.2	28.14	63.3	55.6	50.5
8.65	-60.97	-58.9	-60.08	28.08	64.7	59.9	50.7
8.62	-60.49	-59.26	-60.02	28.08	63.1	55.5	51.2
8.57	-60.2	-58.74	-60.05	28.05	64.9	59.8	49.4
8.64	-59.07	-58.79	-60.17	28.21	62.8	55.7	47.5
8.72	-59.98	-57.76	-60.26	28.14	64.3	59.9	47.7
9.22	-59.87	-58.85	-60.05	28.21	62.5	55.5	51
8.42	-60.49	-59.31	-60.2	28.21	64.2	60.3	49.5
8.28	-61.12	-58.64	-60.11	28.42	62.2	55.2	50.5
8.65	-61.12	-58.53	-60.29	28.17	63.8	60.2	46
8.51	-61.19	-58.48	-60.02	28.48	61.8	55.1	48.4

8.53	-60.86	-58.74	-60.05	28.33	63.6	59.7	49.5
8.63	-61.41	-58.74	-60.2	28.39	61.6	54.9	50.8
8.65	-61.15	-58.9	-59.93	28.17	62.9	58.6	50.8
8.56	-59.84	-58.17	-60.11	28.24	61	54.9	49.4
8.58	-60.27	-59.05	-60.11	28.24	62.5	57.4	50.9
8.66	-61.01	-58.59	-60.14	28.3	60.5	54.7	50.8
8.61	-61.34	-59.42	-60.17	28.17	62	56.9	49.6
8.65	-60.86	-59	-60.17	28.33	60.2	54.9	49.4
8.56	-61.48	-58.79	-60.17	28.33	61.5	56.1	47.2
8.65	-61.67	-58.9	-59.93	28.27	61.5	57.3	48.2
8.65	-60.86	-59.16	-60.05	28.27	61	55.6	52.8
8.58	-61.19	-58.74	-60.05	28.11	62.6	59.4	51.9
8.68	-60.82	-58.74	-60.2	28.3	60.5	55	51.5
8.65	-58.7	-59.16	-60.17	28.27	62.5	59.7	52.7
8.97	-60.71	-58.64	-60.17	28.39	60	54.9	48
8.59	-59.91	-58.53	-60.29	28.39	61.5	58	45.8
8.47	-61.41	-58.43	-60.26	28.51	59.6	54.7	50.2
8.29	-61.37	-58.74	-60.08	28.48	61	56.3	52.8
8.66	-60.97	-58.9	-60.17	28.6	59.9	55.6	43.2
8.6	-61.37	-59.05	-60.08	28.54	60.6	55.6	51
8.52	-59.95	-58.28	-60.17	28.42	61.2	57.9	51.1
8.48	-61.34	-58.69	-60.26	28.51	60.3	54.9	49.2
8.53	-60.2	-58.74	-60.05	28.21	62.2	60.2	49.7
8.61	-60.64	-58.02	-60.11	28.42	60	55	47.2
8.64	-60.27	-58.48	-60.05	28.3	61.5	59.6	50.3
8.6	-59.32	-58.69	-60.17	28.3	59.2	54.5	50.3
8.63	-61.04	-59.05	-59.65	28.39	60.9	58.7	52
8.57	-61.48	-58.43	-60.54	28.45	59	54.6	50.1
8.66	-61.12	-59.31	-59.93	28.3	60	56.6	49.5
8.62	-60.53	-58.95	-60.05	28.24	60.3	58.2	51.6
8.63	-61.26	-59.16	-59.93	28.39	58.9	54.9	45.1
8.58	-60.68	-58.74	-60.08	28.27	60.1	59.4	50.1
8.75	-60.64	-59.26	-59.77	28.48	58.2	54.5	50.9
9	-59.43	-58.59	-60.14	28.24	60.9	60.9	48.8
8.28	-61.04	-58.53	-59.93	28.63	58	54.4	51.1
8.57	-61.01	-58.74	-59.9	28.57	59.8	59.6	49.5
8.59	-61.41	-58.85	-59.93	28.63	57.7	53.9	49.1
8.42	-59.21	-58.74	-60.2	28.51	59.3	57.6	50.4
8.61	-62	-58.33	-60.14	28.57	57.2	53.8	49.2
8.7	-61.23	-59.52	-60.08	28.42	59	56.6	48.7
8.64	-60.97	-59	-60.14	28.33	58.9	57.5	46.2
8.6	-61.12	-58.69	-59.93	28.45	58	54.9	47.9
8.68	-60.93	-59.26	-60.02	28.33	59	59.1	48.8
8.57	-59.43	-58.48	-59.99	28.48	57.1	54.1	50
8.66	-61.23	-58.9	-59.9	28.45	58.4	56.9	50.9
8.82	-61.23	-58.69	-60.2	28.54	56.1	53.9	49
9.01	-61.08	-58.9	-59.96	28.45	57.7	56	50

7.84	-60.71	-58.85	-60.05	28.48	58.3	58.4	48.7
8.55	-59.36	-59.42	-59.99	28.75	56.7	54.2	49.8
8.63	-61.3	-58.33	-60.02	28.63	58	60.1	51.5
8.57	-61.26	-58.74	-59.96	28.72	55.4	53.3	50.7
8.63	-60.71	-58.53	-60.14	28.6	56.3	55.6	51
8.56	-59.47	-58.64	-59.99	28.39	57.3	58.5	51.4
8.62	-60.46	-58.9	-60.08	28.57	56	54.1	49.1
8.65	-60.93	-58.43	-59.93	28.42	57.8	58.9	50.9
8.67	-61.12	-58.53	-60.23	28.6	55.6	53.9	51.3
8.6	-59.18	-58.59	-60.23	28.48	57.1	55.2	46.9
8.76	-60.49	-58.43	-59.84	28.42	58.5	60.3	48.6
9.08	-60.27	-59.11	-59.96	28.57	56	54.1	51.1
8.48	-61.52	-58.43	-59.96	28.63	56.7	54.9	51
8.59	-60.31	-58.12	-60.05	28.72	56.2	56.2	49.8
8.65	-61.48	-58.22	-60.17	28.72	56.1	54.2	50.2
8.46	-60.46	-58.59	-59.96	28.57	57.9	59.9	50.1
8.63	-61.01	-58.59	-60.02	28.51	55.4	53.4	50.9
8.67	-60.97	-58.9	-60.05	28.51	56.7	55.4	52.6
8.56	-59.18	-58.28	-60.14	28.39	57.4	59.2	48.1
8.67	-60.6	-58.69	-60.23	28.69	54.9	53.7	51.3
8.57	-60.71	-59.05	-59.77	28.54	56.3	57.1	51.9
8.7	-61.26	-58.9	-60.11	28.39	57.3	59.3	51
8.65	-60.49	-58.12	-59.9	28.54	55.1	53.8	50.3
8.98	-60.79	-58.85	-59.68	28.51	56.2	57.2	51.6
8.32	-61.08	-58.74	-59.8	28.54	56.9	58.2	49.1
8.57	-59.73	-58.9	-60.02	28.75	55.8	53.8	48.9
8.48	-60.75	-58.95	-60.26	28.57	57.3	57.4	46.8
8.63	-60.97	-59.05	-59.68	28.3	56.9	56.9	49.5
8.69	-61.01	-59.26	-59.71	28.6	55.9	53.9	47.1
8.68	-61.3	-59.16	-60.14	28.45	57.2	58.8	50.8
8.68	-60.86	-59.37	-60.05	28.33	56.1	56	49
8.66	-60.9	-58.69	-59.96	28.48	56.1	54.4	50.5
8.73	-60.93	-58.64	-59.9	28.45	58	59.7	46.8
8.78	-60.93	-58.48	-59.8	28.42	56.1	54.3	47.5
8.55	-60.6	-59	-60.05	28.54	57.2	54.8	48.3
8.6	-60.93	-58.69	-59.62	28.45	59.2	60.1	50.7
8.52	-60.46	-58.53	-59.84	28.54	56.2	53.5	49.6
8.63	-59.84	-58.9	-59.93	28.48	57.4	55.4	48.4
8.63	-60.16	-58.43	-59.93	28.27	58.9	60.2	52
8.54	-61.23	-58.59	-59.93	28.39	56.8	53.8	50.7
8.66	-60.35	-58.79	-60.2	28.27	58.5	57	49.5
8.55	-59.36	-57.81	-59.99	28.27	59	58	50.5
8.69	-61.37	-58.59	-59.8	28.33	58.2	54.6	50.1
8.7	-61.26	-58.85	-59.68	28.21	60.1	60.1	50.3
8.61	-61.08	-58.28	-59.71	28.14	58.2	54.3	50.3
8.62	-60.05	-57.91	-59.65	28.3	59.7	55.5	48.8
8.54	-59.03	-58.33	-59.96	28.17	61.1	58.3	48.4

8.65	-61.74	-58.69	-59.71	28.27	60.3	54.5	47.1
8.65	-60.46	-58.79	-59.71	27.99	62.9	59.9	50
8.67	-60.86	-59	-59.71	27.96	61.5	54.4	49.5
8.65	-60.71	-58.74	-60.05	27.87	64.9	57.8	50.5
8.64	-60.53	-58.17	-59.99	27.9	64.2	54.8	50.2
8.6	-60.09	-58.64	-59.8	27.78	66.5	57.1	51.6
8.69	-60.82	-58.69	-59.74	27.75	65.6	55.8	48.4
8.91	-61.34	-58.22	-59.9	27.72	66.1	56	50
8.47	-60.35	-58.64	-59.77	27.69	67.7	59.1	51.4
8.58	-60.64	-58.33	-59.84	27.99	66.4	55.8	48.4
8.55	-60.64	-58.53	-59.71	27.84	66	56.5	48.1
8.61	-60.49	-57.55	-59.99	27.69	67.2	56	47.5
8.53	-59.8	-58.22	-59.59	27.56	67.4	56.9	50.3
8.67	-60.71	-58.64	-59.68	27.72	67.1	56.1	54.7
8.56	-58.96	-58.79	-59.68	27.66	66.5	56.5	50.5
8.6	-61.01	-59.05	-59.74	27.56	66.7	56.5	48.4
8.67	-61.74	-58.07	-59.93	27.5	66.9	57.2	49.6
8.76	-61.01	-58.12	-59.74	27.5	67.2	56.5	51.2
8.51	-60.13	-58.85	-59.8	27.9	66.6	55.5	49.2
8.52	-59.62	-58.69	-59.8	27.75	68	57.1	51.1
8.56	-60.71	-57.91	-59.71	27.75	67	55.4	51
8.6	-60.42	-58.12	-59.96	27.5	68.9	59.3	50.5
8.57	-60.42	-58.64	-59.8	27.63	67.5	55.9	48.9
8.53	-58.74	-58.07	-59.71	27.41	69.7	60.3	53
8.68	-60.93	-58.74	-59.74	27.5	68.4	56.1	50.2
8.61	-60.27	-58.48	-59.77	27.56	68.2	55.9	49.9
8.71	-59.95	-58.64	-59.68	27.44	70	58.3	48.6
9.08	-58.99	-58.69	-59.74	27.56	69.8	56.1	52.8
8.56	-60.53	-58.59	-59.56	27.47	71.2	59.7	47.1
8.64	-60.82	-58.22	-59.96	27.75	69.9	56.6	53.1
8.61	-59.84	-58.53	-59.77	27.44	69.7	56	47.4
8.55	-60.97	-58.38	-59.68	27.38	72.1	59.4	49
8.62	-61.37	-58.74	-59.74	27.44	70.8	56.6	51
8.68	-60.64	-58.69	-59.8	27.41	70.8	56	49
8.56	-60.46	-59.05	-59.59	27.35	71.9	58.2	51
9	-60.13	-58.12	-59.53	27.44	70.9	56.6	49.5
8.23	-60.24	-58.02	-59.65	27.66	70.1	56.1	50.2
8.53	-60.97	-58.64	-59.59	27.56	71.2	57.9	50.5
8.57	-60.97	-58.43	-59.65	27.66	69.9	56.4	50.4
8.6	-60.75	-58.22	-59.56	27.44	69.7	56	49.8
8.55	-60.86	-58.28	-59.84	27.41	71	57.9	52.8
8.62	-60.53	-58.74	-59.56	27.47	69.8	56.4	49.3
8.68	-60.53	-59.05	-59.77	27.47	68.8	56	46.3
8.56	-60.64	-58.07	-59.71	27.41	70	58.2	50.2
8.66	-60.46	-58.17	-59.71	27.5	68.4	56.5	49.5
8.99	-59.65	-58.79	-59.77	27.56	67.9	56.1	51
7.76	-60.35	-58.07	-59.5	27.63	69.2	58.2	50.8

8.61	-60.82	-58.28	-59.77	27.72	67.8	56.2	51.6
8.53	-59.8	-58.64	-59.8	27.75	66.8	55.9	51.2
8.56	-59.76	-58.79	-59.68	27.56	67.9	57.4	51.9
8.68	-60.93	-58.53	-59.65	27.63	66.7	56.1	49.1
8.6	-59.91	-57.86	-59.74	27.5	67.9	58.9	50.7
8.66	-60.31	-58.85	-59.41	27.66	66.8	56.6	49
8.57	-58.33	-58.48	-59.68	27.66	66	56	49.5
8.67	-60.09	-57.6	-60.08	27.53	69.1	60.3	51.7
8.94	-60.46	-58.12	-59.71	27.56	67.4	56.3	50.3
8.52	-58.11	-58.22	-59.65	27.75	67.4	55.9	48.1
8.6	-60.24	-58.33	-59.62	27.75	68.9	58.5	50.9
8.64	-59.36	-58.12	-59.8	27.53	67.7	56.3	48.1
8.59	-61.74	-58.64	-59.41	27.63	67.4	56.5	49.7
8.61	-60.49	-58.53	-59.47	27.56	68.4	57.1	49.9
8.71	-60.68	-58.43	-59.74	27.5	67.6	56.2	48.9
8.62	-59.32	-57.55	-59.62	27.35	69	59.3	49
8.84	-60.79	-57.45	-59.53	27.66	68	56.8	51.2
8.31	-60.46	-58.64	-59.47	27.84	67	56.1	50.9
8.56	-59.36	-58.53	-59.62	27.81	68.7	60.3	46.1
8.6	-60.27	-58.43	-59.65	27.81	67	56.4	45.4
8.56	-60.97	-58.38	-59.74	27.78	66	55.7	50.5
8.53	-60.38	-59.05	-59.68	27.75	66.8	57.2	51
8.56	-60.31	-58.02	-59.84	27.75	66.2	56	48.9
8.67	-60.68	-58.9	-59.99	27.56	67.5	59.2	49.5
8.66	-60.27	-58.85	-59.68	27.72	66.3	56.5	48.6
9.25	-59.25	-58.22	-59.68	27.72	65.7	55.8	50.1
8.03	-60.31	-58.33	-59.84	27.84	67.1	58.5	52.3
8.64	-60.16	-58.69	-59.65	28.05	65.6	56	52
8.58	-59.47	-58.64	-59.59	27.56	67.1	59.5	51.1
8.69	-60.79	-58.69	-59.47	27.84	65.8	56.3	51.4
8.65	-60.86	-58.12	-59.71	27.84	64.7	55.6	49.8
8.55	-57.16	-58.43	-59.84	27.78	66.1	57.5	51.7
8.64	-59.8	-58.38	-59.68	27.87	64.6	55.8	49.6
8.74	-61.23	-58.85	-59.65	27.84	66.7	60.1	50.9
8.59	-60.93	-58.17	-59.77	28.02	64.6	55.6	50.1
8.58	-57.38	-58.07	-59.96	27.72	65.8	58.4	49.1
8.56	-61.59	-58.95	-59.62	27.93	64.7	56.5	50.4
8.67	-60.9	-58.28	-59.65	27.96	63.4	55.4	49.7
8.7	-60.53	-58.33	-59.65	27.99	64.7	57.1	48.3
8.64	-60.35	-58.43	-59.68	28.02	63.6	55.4	51.6
9.14	-60.2	-57.7	-59.65	27.81	64.8	58.1	48.8
8.64	-60.13	-58.28	-59.74	28.21	62.5	55.4	50.5
8.69	-60.68	-57.45	-59.96	27.96	63.6	58.3	50.1
8.66	-60.27	-58.22	-60.05	28.08	61.7	55.4	50.2
8.66	-60.46	-58.17	-59.96	27.93	63.5	59.9	49
8.65	-60.53	-58.53	-59.56	28.02	61.2	55.5	49.2
8.97	-60.68	-58.53	-59.68	28.02	62.9	59.5	48.4

8.14	-61.15	-58.53	-59.9	28.3	60.9	55.1	50.5
8.42	-59.54	-58.74	-59.71	28.3	62.2	59.3	52.1
8.7	-60.86	-58.48	-59.59	28.11	60.6	54.8	51.6
8.65	-60.97	-58.07	-59.62	28.14	61.7	57.5	51.4
8.68	-60.53	-58.17	-59.71	28.33	59.9	54.9	49.8
8.79	-59.87	-58.28	-59.65	28.17	61.3	57	49.4
8.57	-61.01	-58.17	-59.53	28.42	59.6	54.8	52.3
8.46	-60.9	-58.12	-59.8	28.33	60.3	55.8	49.5
8.69	-60.93	-58.28	-59.71	28.11	60.6	57.1	50.3
8.58	-60.42	-58.74	-59.41	28.24	60	55.1	49.6
8.64	-60.71	-58.9	-59.71	28.14	61.6	59.4	49.5
8.67	-59.03	-58.43	-59.65	28.24	59.7	55	48
8.77	-59.84	-59.11	-59.68	28.24	61.3	59.9	50.4
8.56	-60.93	-57.6	-59.65	28.51	59.1	54.5	47.4
8.66	-60.46	-58.48	-59.84	28.24	60.6	57.8	49.5
8.57	-58.85	-57.91	-59.68	28.21	58.8	54.4	48.4
8.63	-60.2	-57.81	-59.96	28.11	60.4	56.7	48.6
8.69	-60.27	-58.74	-59.68	28.21	58.9	54.6	46.9
8.74	-60.68	-58.07	-59.59	28.3	59.8	55.4	50.9
8.5	-60.6	-57.86	-59.8	28.33	59.4	57.1	51.6
8.59	-60.31	-58.48	-59.93	28.45	58.9	55	51.5
8.56	-60.64	-58.85	-59.65	28.24	60	59	51.9
8.65	-60.97	-58.48	-59.62	28.33	58	54.4	51.4
8.68	-60.42	-59.05	-59.5	28.21	60.9	61	50.5
8.82	-60.38	-58.53	-59.65	28.45	57.8	54.7	48.1
7.87	-60.42	-58.33	-59.9	28.33	59.3	59.2	49.3
8.55	-59.32	-57.91	-59.68	28.66	57.2	54	49.2
8.56	-60.53	-58.9	-59.84	28.27	59.7	60.3	49.6
8.56	-57.56	-57.81	-59.71	28.48	56.9	54.1	46.8
8.58	-60.68	-57.91	-59.5	28.24	58.9	59.3	48.4
8.79	-60.46	-58.48	-59.9	28.42	56.7	54	47.5
8.09	-60.49	-58.9	-59.84	28.54	59	59.1	51.2
8.6	-60.79	-58.17	-59.62	28.6	56.1	53.6	48.4
8.64	-60.35	-58.07	-59.65	28.42	57.5	56	51.3
8.68	-60.49	-58.79	-59.84	28.24	58.1	58.5	49
8.69	-60.2	-57.91	-59.74	28.51	56.7	54.4	53.4
8.71	-60.53	-58.02	-59.8	28.24	59.2	60.3	51.1
8.5	-60.93	-58.53	-59.84	28.69	56.6	54.1	51.2
8.65	-60.86	-58.28	-59.77	28.54	58.2	59.8	50.5
8.62	-59.91	-58.33	-59.5	28.54	55.4	53.8	50.8
8.56	-58.66	-57.91	-59.99	28.48	56.8	56	47.5
8.64	-59.58	-58.28	-59.77	28.39	57.4	58.2	51.6
8.71	-59.62	-59.11	-59.84	28.6	56.4	54.3	49.5
8.74	-60.68	-58.22	-59.5	28.33	58.2	59.8	50.3
7.84	-61.01	-58.9	-59.62	28.72	56.6	53.8	52.9
8.6	-61.19	-58.38	-59.77	28.6	58.1	55.4	47.6
8.56	-58.88	-58.33	-59.65	28.27	59.8	59.8	49.3

8.69	-60.24	-58.22	-59.77	28.45	57.9	54.4	49.7
8.63	-61.26	-58.64	-59.96	28.24	60.2	60.1	52.8
8.71	-60.2	-58.22	-59.74	28.39	58.2	54.4	49.3
8.63	-59.62	-58.28	-59.68	28.24	60.3	58	49.5
8.68	-60.49	-58.17	-59.59	28.63	58.4	54.1	49.6
8.61	-61.15	-58.74	-59.9	28.48	60.1	56.4	50.5
8.65	-60.68	-58.43	-59.59	28.27	59.2	55	51.7
8.63	-60.71	-58.17	-59.8	28.3	60.4	55.9	51.1
8.62	-60.38	-58.64	-59.59	28.17	60.5	57.1	50.4
8.7	-60.16	-58.9	-59.62	28.33	60	55.2	50.9
9.22	-60.2	-58.28	-59.71	28.02	62.3	59.8	49.5
8.61	-60.46	-58.48	-59.65	28.54	60.3	54.9	51.7
8.51	-60.46	-59	-59.5	28.39	62.5	60.3	52
8.68	-60.64	-58.9	-59.59	28.39	60.4	54.9	49.7
8.66	-59.95	-58.33	-59.74	28.14	62.4	59.7	51.1
8.62	-59.76	-58.48	-59.68	28.21	60.5	54.9	49.7
8.71	-59.87	-58.28	-59.71	28.14	62.5	59.8	51.6
9	-59.76	-58.48	-59.84	28.24	60.5	54.8	49.2
8.66	-60.82	-58.28	-59.77	28.27	62.7	59.8	50.1
8.51	-60.53	-58.69	-59.65	28.39	61.2	54.8	53.1
8.56	-61.41	-58.22	-59.68	28.14	62.5	58.7	52.9
8.54	-60.42	-57.86	-59.93	28.17	60.6	54.7	48.3
8.58	-60.49	-58.38	-59.71	28.05	62.6	57.1	48.7
8.71	-60.05	-58.48	-59.65	28.11	61.1	54.7	49.9
8.69	-60.75	-58.74	-59.65	27.93	62.6	56.1	49
8.65	-60.82	-57.91	-59.71	28.21	61.9	56.4	50.9
8.62	-60.93	-58.07	-59.44	28.24	61.6	55.6	50.5
8.68	-61.92	-58.64	-59.59	28.05	61.2	55.4	48
8.7	-60.24	-58.28	-59.68	28.17	62.1	55.8	49.7
8.57	-60.82	-58.43	-59.62	27.96	63.1	58.2	50.9
8.6	-60.71	-58.22	-59.56	28.11	61.7	55	51.6
8.45	-60.49	-58.17	-59.8	28.14	63.4	59.5	49.9
8.56	-60.75	-57.7	-59.74	28.33	61.5	54.8	50.8
8.59	-61.15	-59	-59.59	27.96	62.8	58.5	51.4
8.58	-60.38	-58.69	-59.65	28.14	61	54.5	48.1
8.6	-60.49	-58.17	-59.65	28.05	63.3	57.8	49.1
8.71	-61.04	-58.38	-59.77	28.21	61.3	54.8	50.2
8.82	-60.82	-58.33	-59.56	28.08	62.6	58	50.2
8.08	-59.4	-58.28	-59.56	28.3	60.5	54.5	49.5
8.56	-58.59	-58.69	-59.59	28.24	61.7	56	51.9
8.7	-60.05	-58.33	-59.74	28.21	60.5	55.6	50.4
8.56	-60.82	-57.55	-59.93	28.14	61.5	55.9	50.8
8.6	-58.48	-57.86	-59.84	28.14	60.2	54.7	51.6
8.72	-60.24	-58.48	-59.68	28.14	61.5	56.3	49.5
8.57	-60.42	-58.85	-59.84	28.24	60.5	54.9	48.7
8.62	-60.53	-57.91	-59.71	28.48	61	55.4	49.8
8.67	-60.79	-58.95	-59.71	28.17	60.9	57.1	51.4

8.59	-59.29	-58.59	-59.53	28.3	60.1	54.8	49
8.67	-60.35	-57.86	-59.71	28.17	61.8	60.4	50.5
8.65	-59.87	-58.17	-59.62	28.27	59.3	54.7	52.5
8.65	-58.55	-57.86	-59.53	28.21	60.7	59.4	48.4
7.93	-60.75	-59	-59.65	28.45	58.9	54.3	48.9
8.58	-60.38	-58.69	-59.74	28.39	61	59.3	50.7
8.62	-59.36	-57.81	-59.62	28.33	58.5	54.3	52.3
8.59	-59.36	-58.02	-59.8	28.17	60.4	58.5	50
8.63	-60.49	-58.17	-59.68	28.24	58.2	54.1	49.6
8.7	-60.75	-58.79	-59.22	28.24	59.7	57.3	49.8
8.76	-60.42	-58.07	-59.65	28.3	57.4	54	50.7
8.47	-58.7	-57.65	-59.84	28.48	58.5	55.4	48.4
8.53	-59.54	-57.6	-59.93	28.42	59.2	58.3	47.9
8.56	-59.65	-57.81	-59.56	28.33	58.1	54.2	48.6
8.67	-60.64	-58.17	-59.56	28.17	59.7	59.8	53.2
8.65	-60.05	-58.17	-59.41	28.39	57.4	53.9	48.8
8.64	-60.13	-58.28	-59.53	28.45	58.8	58.5	50.5
8.72	-59.98	-57.76	-59.62	28.39	57.1	54.9	51.9
8.07	-59.8	-57.55	-59.68	28.54	57.6	54.8	49.4
8.63	-60.31	-58.38	-59.68	28.45	58.8	59.2	48.9
8.58	-60.9	-58.85	-59.47	28.51	56.2	53.9	50.9
8.63	-60.35	-58.74	-59.56	28.42	57.9	59.2	47.7
8.61	-59.87	-58.02	-59.71	28.51	56	54.4	51
8.68	-59.98	-58.38	-59.77	28.45	56.9	55	49.6
8.97	-60.13	-58.53	-59.47	28.27	58.3	59.8	48.8
8.56	-60.53	-58.28	-59.77	28.72	55.6	53.6	52.5
8.6	-60.35	-58.69	-59.32	28.57	56.9	56.5	51.2
8.62	-60.64	-58.02	-59.62	28.48	56	56.1	48.8
8.62	-59.07	-57.81	-59.84	28.63	55.2	54	48.8
8.6	-60.46	-57.03	-59.62	28.33	57.5	60.1	47.2
8.84	-60.2	-59	-59.65	28.57	55.3	53.5	52.1
8.51	-59.4	-57.86	-59.68	28.69	56.9	55.6	50.1
8.57	-59.51	-57.86	-59.68	28.51	57.2	58.8	49.2
8.66	-60.46	-57.86	-59.74	28.57	55.3	53.5	49.7
8.59	-60.13	-58.02	-59.53	28.54	56.7	56.7	45.1
8.71	-60.97	-58.43	-59.74	28.33	56.9	58.1	49
9.02	-59.32	-58.43	-59.68	28.51	55.2	53.6	50.2
8.7	-60.53	-58.22	-59.41	28.69	56.2	57.1	50.2
8.58	-60.16	-58.59	-59.62	28.48	57.1	58.9	50.5
8.57	-61.23	-58.48	-59.84	28.66	54.7	53.5	50.4
8.68	-61.04	-58.12	-59.71	28.48	55.8	58.2	49.8
8.67	-60.6	-58.48	-59.44	28.48	54.5	55.7	51.2
8.99	-60.6	-58.69	-59.65	28.54	53.9	53.8	50.8
8.56	-59.65	-58.79	-59.77	28.72	55.4	58.6	48.8
8.65	-60.71	-58.43	-59.47	28.45	54	55.5	48.2
8.62	-60.68	-57.5	-59.56	28.63	53.8	53.5	48.2
8.55	-57.38	-58.69	-59.47	28.57	55.1	57.9	48.2

8.65	-60.49	-57.55	-59.65	28.45	54.9	57.6	48.9
8.04	-60.71	-58.17	-59.56	28.75	53.2	53.2	50.2
8.56	-60.6	-58.59	-59.44	28.69	54.9	57.3	47.7
8.53	-60.09	-58.33	-59.5	28.45	54.9	57.6	47.5
8.68	-60.31	-58.53	-59.5	28.66	53.8	53.5	50
8.56	-59.21	-57.76	-59.59	28.39	56	60.5	46.7
8.79	-60.16	-58.33	-59.71	28.72	52.5	52.7	49.1
8.54	-60.71	-58.69	-59.53	28.79	54.8	56.5	53
8.65	-60.46	-58.59	-59.44	28.54	54.2	57	51.1
8.63	-59.51	-58.59	-59.47	28.69	53.3	53.4	51.9
8.59	-60.16	-58.33	-59.47	28.54	56	60.3	53
8.73	-60.05	-57.91	-59.56	28.54	53.5	52.7	50.8
8.14	-60.46	-58.02	-59.59	28.69	55.1	57	49.9
8.45	-60.09	-58.79	-59.53	28.6	56	59.2	48.9
8.7	-60.09	-58.12	-59.29	28.66	53.2	52.7	50.5
8.49	-56.54	-58.79	-59.71	28.45	55.9	60.6	48
8.71	-60.71	-58.33	-59.68	28.72	52.4	52.7	49.7
8.87	-60.2	-57.81	-59.62	28.6	53.8	55.1	46.8
8.6	-60.68	-58.02	-59.74	28.57	56	59.8	49.8
8.54	-57.71	-59	-59.59	28.6	52.7	52.6	47.6
8.63	-59.76	-57.6	-59.41	28.54	54.7	56	47.2
8.68	-60.49	-58.17	-59.62	28.45	55.8	59.7	49.4
8.98	-60.68	-58.43	-59.26	28.72	52.8	52.7	49.2
8.7	-60.46	-57.65	-59.35	28.72	54.6	60.4	52.3
8.56	-59.25	-57.91	-59.41	28.63	51.9	52.8	49.7
8.7	-61.01	-58.33	-59.56	28.66	53.5	54.7	52
8.58	-60.46	-57.86	-59.41	28.39	55.5	59.4	48.7
9.16	-60.71	-57.91	-59.74	28.66	53.1	52.6	50.1
8.53	-58.7	-57.55	-59.84	28.72	54.9	56	49.5
8.67	-60.13	-57.29	-59.65	28.39	56.3	59.3	49.5
8.55	-60.97	-57.81	-59.71	28.6	53.3	52.7	49.8
8.69	-60.02	-57.86	-59.44	28.42	56.2	60.3	50.3
8.94	-58.96	-57.86	-59.53	28.57	53.4	52.4	49.8
8.6	-59.84	-58.33	-60.08	28.75	55.1	55.7	51.6
8.65	-60.35	-58.12	-59.5	28.33	56.6	59.9	49.4
8.61	-58.55	-58.59	-59.56	28.57	53.8	52.8	47.2
8.65	-60.46	-58.28	-59.44	28.51	56	59.1	54.8
8	-60.38	-58.12	-59.53	28.66	54.4	54.5	50.2
8.63	-60.2	-58.12	-59.41	28.6	55.1	54.3	48.6
8.6	-60.79	-58.22	-59.44	28.3	57.1	59.4	48.3
8.59	-58.11	-58.12	-59.62	28.57	54.6	52.9	50.1
8.78	-60.82	-58.33	-59.68	28.42	56.6	57.4	46.7
8.31	-59.1	-58.38	-59.13	28.57	54.8	54.4	50.1
8.67	-60.71	-58.22	-59.99	28.54	55.8	54.3	51.7
8.53	-60.53	-58.28	-59.47	28.27	57.7	59.4	48.1
8.57	-59.07	-57.55	-59.38	28.54	55	53.2	50
8.82	-60.31	-58.22	-59.47	28.39	57.5	59.9	49.6

8.66	-59.95	-58.48	-59.38	28.51	56.7	56.5	50.7
8.59	-58.55	-58.28	-59.62	28.33	56.6	54.1	50.3
8.68	-60.46	-57.39	-59.93	28.17	57.5	58.4	49.4
8.7	-60.9	-58.38	-59.65	28.54	55.9	53.6	47.2
8.97	-60.05	-58.28	-59.68	28.3	58	59.2	49.5
8.5	-60.75	-57.34	-59.62	28.6	55.8	53.3	49.2
8.6	-59.62	-57.6	-59.38	28.42	57.5	55.5	49.7
8.65	-60.24	-58.17	-59.53	28.3	58	58.2	49.5
8.65	-60.6	-58.64	-59.53	28.33	57.1	54	50.7
8.71	-59.58	-58.43	-59.35	28.27	59.1	59.6	49.5
8.66	-59.87	-58.38	-59.35	28.54	56.8	54	50.2
8.5	-60.38	-57.65	-59.62	28.45	58.2	55.4	50.3
8.6	-59.21	-58.59	-59.32	28.17	57.7	56.1	51.8
8.7	-60.64	-57.91	-59.62	28.21	58.3	54.7	48.6
8.79	-60.02	-58.59	-59.62	28.17	59.8	59.3	49.9
8.56	-59.4	-58.69	-59.53	28.54	58	53.5	49.8
8.53	-60.05	-57.86	-59.32	28.21	59.5	56.9	50.9
8.54	-58.15	-58.53	-59.41	28.08	59.6	57.4	50.2
8.57	-60.79	-57.76	-59.22	28.3	58.8	54.4	49.7
8.44	-60.09	-58.43	-59.35	28.21	61.5	60.9	49.1
8.61	-59.91	-58.74	-59.38	28.33	58.5	53.6	49.9
8.66	-60.42	-58.22	-59.1	28.11	60.4	58.7	49.8
8.64	-59.18	-58.07	-59.53	28.17	58.8	54.3	51.6
8.91	-60.31	-57.86	-59.56	28.17	59.5	55.4	50.7
8.61	-60.6	-58.02	-59.38	28.11	61.6	59.9	51.1
8.67	-60.71	-58.12	-59.47	28.11	59.5	53.8	47.4
8.59	-60.68	-57.45	-59.41	27.96	60.9	58.2	47.9
8.6	-58.99	-59.26	-59.26	28.02	59.6	55	46.2
8.53	-59.98	-57.55	-59.56	28.08	60.4	55.4	52.5
8.53	-59.87	-58.22	-59.41	28.08	61.9	59.1	51.9
8.58	-58.7	-57.65	-59.41	28.02	59.9	54.2	50.5
8.59	-59.91	-58.12	-59.38	27.87	62	59.9	50.5
8.78	-60.42	-57.6	-59.41	28.11	59.6	53.9	47
8.56	-57.97	-57.65	-59.47	28.11	61.7	56.7	48.9
8.59	-60.02	-58.22	-59.26	27.9	60.3	55.2	51.7
8.66	-60.9	-58.22	-59.68	27.96	61.2	55.2	49
8.58	-58.59	-58.38	-59.62	27.87	62.3	58.8	52
8.54	-60.64	-57.29	-59.62	28.14	60.6	54.5	50.1
8.61	-60.9	-58.02	-59.32	27.9	62.5	60.3	50.1
8.59	-56.98	-58.17	-59.35	28.05	60.3	54.4	46.3
8.62	-59.84	-58.22	-59.44	27.93	62.3	58.8	47.9
8.89	-60.16	-57.76	-59.62	27.93	60.3	54.1	49.7
8.5	-58.52	-57.81	-59.32	28.05	62.2	57	49.5
8.63	-60.38	-57.76	-59.38	27.96	60.3	53.9	48.3
8.64	-60.02	-57.86	-59.5	27.9	61.9	56.1	48.2
8.59	-58.55	-58.33	-59.38	27.81	61	55.4	48.7
8.66	-60.49	-58.64	-59.32	28.08	61.7	55	51.8

8.65	-60.31	-57.7	-59.44	27.81	61.8	57.5	52.4
8.6	-59.03	-58.02	-59.47	27.9	61.5	55.1	50.5
8.53	-60.46	-58.28	-59.47	27.75	63.1	59.3	48.9
9.1	-59.29	-57.86	-59.38	27.84	61.5	54.6	51.1
8.53	-60.6	-56.87	-59.41	27.93	63.5	60.3	47.7
8.67	-59.58	-57.5	-59.53	27.87	61.2	54.5	51.7
8.67	-60.35	-58.33	-59.5	27.72	63.3	60.4	47.7
8.84	-60.24	-58.02	-59.47	27.93	60.5	54.7	49.1
8.58	-59.62	-57.29	-59.44	28.02	62.6	59.2	53.2
8.59	-61.15	-58.53	-59.01	27.96	60.5	54.3	47.8
8.59	-59.76	-58.28	-59.16	27.78	63.1	59.6	51.1
8.56	-60.38	-57.86	-59.35	27.9	60.9	54.6	48.7
8.34	-58.22	-57.19	-59.35	27.9	62.7	59.2	48.4
8.51	-60.38	-58.33	-59.53	28.11	60.7	54.2	50.5
8.6	-60.42	-58.22	-59.04	27.81	62.1	57.4	52.3
8.57	-60.6	-57.81	-59.62	27.9	60.3	54.3	48.7
8.93	-60.9	-58.12	-59.41	27.87	62.2	56.7	48.4
8.62	-59.47	-58.28	-59.19	27.96	61.2	56	46.3
8.65	-59.73	-57.7	-59.29	27.9	61.8	55.6	50.5
8.64	-59.47	-57.6	-59.41	27.75	61.3	56.3	50
8.69	-60.9	-58.38	-59.26	27.9	61.4	54.9	50.2
8.87	-60.49	-58.28	-59.41	27.78	62.7	59	50.7
8.62	-60.46	-58.33	-59.29	28.11	61.1	54.5	56.8
8.68	-59.84	-57.81	-59.44	27.75	63.5	60.4	50.7
8.68	-60.82	-58.17	-59.13	27.99	61.1	54.4	47.1
8.66	-59.91	-56.82	-59.53	27.69	63.1	60.1	48.8
8.56	-59.58	-58.33	-59.26	28.11	61	54.7	50
8.62	-59.8	-58.64	-59.5	27.87	62.5	58.9	49.9
8.61	-59.43	-57.7	-59.26	27.87	61	54.4	50
8.7	-60.05	-58.28	-59.47	27.87	62.8	57.9	48.6
8.44	-59.54	-57.29	-59.38	28.05	61	54.4	49
8.53	-59.98	-57.29	-59.59	27.99	62.8	57.5	47.8
8.56	-59.58	-58.22	-59.13	27.81	61	54.5	49.5
8.57	-59.84	-56.98	-59.53	27.81	62.5	57	47.3
8.6	-60.2	-58.59	-59.32	27.81	61.2	54.6	48.1
8.96	-59.84	-58.53	-59.29	27.81	62.1	56	45.6
8.52	-59.65	-58.17	-59.35	27.87	62.1	56.8	45.8
8.56	-59.32	-57.81	-59.32	27.78	61.9	55.1	50.1
8.59	-59.43	-58.48	-59.29	27.66	63.8	59.8	51
8.62	-60.16	-57.76	-59.19	27.87	62	55	46.5
7.94	-58.77	-58.07	-59.29	27.84	63.9	60.2	49.4
8.56	-59.29	-58.02	-59.38	27.99	61.7	55	46.8
8.65	-60.68	-58.28	-59.38	27.69	63.1	58.8	46.6
8.6	-59.84	-58.79	-59.35	27.96	61.4	54.9	49.3
8.74	-59.84	-58.38	-59.16	27.72	63.4	59.5	50.3
8.57	-59.76	-58.9	-59.26	27.9	61.6	54.7	49.7
8.52	-60.31	-57.81	-59.62	27.75	63.7	58.2	48.7

8.71	-60.79	-57.34	-59.19	27.81	61.9	54.5	54.6
8.7	-60.42	-57.91	-59.29	27.72	63.5	56.7	50.9
8.64	-60.13	-57.6	-59.38	27.99	62.4	54.9	50.1
8.66	-60.38	-58.43	-59.19	27.69	63.3	55.8	50.4
8.66	-60.82	-58.07	-59.38	27.56	64.3	57.5	53.1
8.65	-60.05	-57.24	-59.26	27.72	63.6	55.9	47.4
7.78	-59.91	-58.85	-59.5	27.81	63.1	56.2	49.6
8.63	-59.43	-57.24	-59.29	27.81	63.1	55.7	49.5
8.65	-60.38	-57.6	-59.53	27.72	64.4	59.1	51.1
8.71	-60.31	-58.38	-59.41	27.84	62.5	55.1	48.9
8.7	-58.7	-57.65	-59.38	27.72	64	59.3	50.1
8.55	-60.9	-57.76	-59.47	28.08	61.7	54.9	49.6
8.62	-59.98	-57.81	-59.1	27.78	63.2	58.4	51.5
8.66	-59.8	-59	-59.38	27.9	61.2	54.7	48.2
8.6	-61.08	-58.17	-59.04	27.9	62.5	56.4	49.5
7.89	-59.58	-58.48	-59.22	28.08	60.9	54.9	49.5
8.68	-60.42	-57.65	-59.41	27.96	61.4	55.7	49.5
8.64	-59.36	-58.12	-59.68	27.78	61.6	57.5	51.5
8.56	-58.85	-57.91	-59.47	27.93	60.4	54.9	50.5
8.63	-60.53	-57.5	-59.16	27.9	62.4	60.3	49.7
8.59	-60.49	-57.6	-59.38	28.17	59.7	54.5	48.9
8.66	-60.09	-57.81	-59.38	27.96	61.6	59.1	52.6
8.59	-60.64	-58.43	-59.38	28.02	59.7	54.3	50.5
9.14	-59.25	-56.46	-59.19	27.93	61.4	57.9	48.3
8.5	-60.13	-57.6	-59.16	28.14	59.4	54.2	49.6
8.58	-58.99	-58.07	-59.13	27.96	60.5	56.1	48.6
8.62	-59.91	-57.7	-59.41	28.08	59	55.2	50
8.73	-60.79	-57.7	-59.38	28.14	60	55.8	47.7
8.57	-60.42	-58.02	-59.38	28.24	59.4	56.3	49
8.55	-60.27	-57.6	-59.13	28.17	58.4	54.8	49.4
8.67	-59.87	-57.34	-59.29	28.05	60	59.2	47.3
8.68	-59.65	-58.17	-59.29	28.11	57.6	54.3	54
9.25	-60.05	-58.17	-59.5	27.93	59	57.8	49.4
8.62	-59.47	-57.86	-59.26	28.33	56.7	53.7	47
8.67	-60.24	-58.07	-59.47	28.24	57.8	55.5	50
8.66	-60.02	-57.65	-59.41	28.11	58.8	59.2	50
8.65	-59.32	-57.5	-59.41	28.33	56.7	54.1	52.5
8.66	-60.2	-58.02	-59.47	28.3	58.3	59.6	49.2
8.62	-59.87	-57.76	-59.32	28.42	55.6	53.5	48.6
8.6	-60.46	-58.22	-59.38	28.27	56.8	55.8	51.5
8.58	-58.44	-58.22	-59.35	28.11	57.7	59.2	48
9.17	-59.62	-57.91	-59.44	28.17	55.3	53.9	48.3
8.54	-59.32	-58.22	-59.47	28.42	56.7	56.9	50
8.6	-59.8	-58.02	-59.53	28.27	55.3	56	46.9
8.65	-60.02	-57.81	-59.41	28.45	55.3	54	52
8.82	-60.09	-57.81	-59.59	28.27	57.1	59.9	48.4
8.64	-60.64	-58.02	-59.59	28.48	55.5	55.6	49.1

8.65	-60.24	-58.07	-59.53	28.3	55.3	54.2	49.2
8.69	-60.6	-58.38	-59.41	28.21	58	59.8	50.5
8.67	-59.98	-58.74	-59.47	28.42	55.4	53.6	51.1
8.28	-58.52	-57.81	-59.16	28.48	57.2	55.8	50.1
8.59	-60.24	-58.22	-59.29	28.27	58.9	59.8	50.7
8.54	-60.09	-58.12	-59.62	28.33	56.2	53.7	50.4
8.68	-60.42	-58.43	-59.32	28.21	57.9	56.3	50.5
8.67	-58.66	-58.33	-59.44	28.08	57.3	56.7	50.7
8.56	-58.37	-57.7	-59.71	28.48	57.6	54.2	50.1
8.68	-60.2	-57.86	-59.38	28.17	59.5	59.7	48.4
8.57	-60.05	-57.65	-59.53	28.3	57.4	53.8	50.3
8.68	-60.35	-57.81	-59.62	28.21	59.2	56.1	50.2
8.65	-58.55	-57.6	-59.53	28.05	60.3	58.7	48.2
8.62	-60.42	-58.22	-59.38	28.42	59.2	54.7	50.4
8.69	-60.71	-58.07	-59.44	28.11	61.6	60.5	50.8
8.59	-58.22	-57.65	-59.62	28.11	59.3	54.5	49.9
8.58	-60.13	-56.98	-59.53	28.02	61.5	59.2	49.2
8.16	-58.48	-57.55	-59.29	28.17	59.5	54.3	47.8
8.56	-59.84	-57.86	-59.59	28.11	61.5	57.1	48.4
8.68	-60.49	-58.53	-59.32	28.05	59.7	54.4	50.5
8.68	-59.65	-58.48	-59.38	28.02	61.5	56.2	49.5
8.95	-59.91	-58.12	-59.44	28.02	60.6	56.2	49.9
8.62	-60.24	-58.17	-59.53	28.14	61.4	55.7	50.5
8.69	-61.01	-59.05	-59.29	27.81	62.1	58.2	51.7
8.7	-60.2	-58.59	-59.26	27.96	61.7	55.7	50.3
8.94	-60.49	-58.22	-59.26	27.69	63.6	59.8	48.9
8.59	-60.27	-58.02	-59.35	28.14	61.9	54.9	47.9
8.63	-59.51	-58.22	-59.38	27.75	63.1	58.4	51.9
8.61	-60.2	-57.5	-59.41	27.87	61.7	54.9	51
8.68	-58.96	-58.12	-59.38	27.72	64.1	60.3	53.2
8.56	-59.8	-57.03	-59.44	28.08	62.1	54.9	50.3
8.63	-59.54	-57.6	-59.32	27.84	64.3	59.6	49.6
8.66	-60.09	-57.86	-59.44	27.87	61.9	55	48.8
8.69	-60.2	-58.12	-59.41	27.75	63.1	57.8	52.6
8.41	-59.62	-58.07	-59.16	28.02	61.4	54.4	50.5
8.59	-60.38	-57.81	-59.32	27.81	62.5	56.2	47.9
8.57	-60.27	-57.39	-59.44	27.87	61.9	56.2	53.1
8.71	-60.6	-57.55	-59.29	27.81	62	55.8	47.9
8.66	-60.86	-58.02	-59.47	27.87	63.4	59.2	49.2
8.68	-60.42	-57.7	-59.41	27.96	61.9	55.4	48.6
8.69	-60.86	-57.6	-59.32	27.69	64.2	60.6	51.7
8.71	-60.53	-58.85	-59.22	27.87	61.7	55.2	49.5
8.69	-60.16	-58.17	-59.35	27.99	63.5	60.1	51
8.63	-59.07	-58.12	-59.35	27.9	61	55	50
8.57	-59.18	-57.6	-59.35	27.78	62.6	59.3	50.1
8.55	-58.26	-57.76	-59.38	27.93	60.9	54.9	52.1
9.24	-58.11	-57.13	-59.22	27.99	60.3	57.9	52.7

8.54	-58.22	-58.38	-59.32	28.3	58.2	54.7	49.8
8.61	-58.33	-58.28	-59.35	28.02	59.4	56.3	48.4
8.63	-60.79	-57.76	-59.19	28.14	57.9	54.9	47.7
8.75	-60.27	-57.81	-59.47	28.11	59.2	56.3	49.5
8.59	-60.97	-57.24	-59.38	28.33	57.9	56.1	49.2
8.67	-60.6	-57.29	-59.38	28.17	57.9	55.1	49.3
8.6	-60.13	-57.45	-59.47	28.08	59.4	59.1	49.2
8.66	-60.05	-57.6	-59.65	28.17	58.3	55.4	48.1
7.83	-59.14	-57.86	-59.56	28.33	57.7	56.1	48
8.7	-60.46	-57.91	-59.5	28.33	57.1	54.8	50.7
8.62	-59.87	-58.17	-59.35	28.3	57.9	59.3	48.1
8.61	-59.1	-57.81	-59.32	28.42	55.3	54.2	49
9.03	-58.96	-57.81	-59.44	28.42	56.6	57.8	45.9
8.65	-60.64	-57.6	-59.68	28.63	54.5	53.8	51
8.56	-60.42	-58.02	-59.5	28.42	56.7	57.2	50
8.61	-60.35	-57.55	-59.53	28.42	53.8	53.5	49.7
8.75	-59.62	-58.12	-59.68	28.6	54.7	55.9	51.2
8.56	-58.44	-57.39	-59.5	28.66	55.4	60.3	53.3
8.62	-60.24	-58.28	-59.41	28.51	52.6	53.8	51.2
8.68	-60.64	-58.22	-59.56	28.63	53.9	56.4	49.7
8.64	-59.95	-58.22	-59.44	28.54	53.8	59.5	50.9
8.45	-59.32	-57.91	-59.62	28.91	51.6	53.5	49
8.55	-59.98	-57.81	-59.59	29.03	52.6	55.7	51.4
8.54	-59.65	-58.07	-59.71	28.63	53.4	60.1	49.5
8.63	-60.27	-58.02	-59.77	28.85	50.8	53.8	48.3
9.02	-60.82	-58.07	-59.44	28.88	51.4	54.6	49
8.55	-57.45	-58.33	-59.59	28.97	52.9	60.3	48.9
8.59	-60.24	-58.22	-59.53	28.75	50.8	55.4	52
8.62	-59.76	-58.02	-59.93	28.94	50.4	53.6	51.2
8.73	-60.64	-58.53	-59.56	28.88	51.6	60.1	46.7
8.68	-59.4	-58.59	-59.62	29.21	49.2	52.9	47.2
8.61	-60.2	-58.12	-59.41	28.91	50.4	54.4	47.4
8.57	-61.12	-58.17	-59.41	28.79	52.3	60.3	50
8.69	-59.98	-58.33	-59.68	28.91	48.8	52.6	51.1
8.88	-58.85	-58.33	-59.71	29	50	54.8	51.4
8.67	-59.84	-57.76	-59.59	29.03	51.7	59.8	49.5
8.64	-60.02	-58.53	-59.5	29.21	48	51.7	50.9
8.68	-60.2	-57.7	-59.65	29.06	49.3	54.5	47.1
8.71	-60.75	-58.33	-59.68	28.91	50.8	59.5	47.6
7.96	-59.95	-58.28	-59.41	29.27	48.1	53.3	54.7
8.42	-60.24	-57.91	-59.53	29.24	48.7	53.2	49.2
8.6	-60.2	-58.95	-59.41	28.97	50.3	59.9	46.5
8.7	-60.05	-57.5	-59.9	29.12	47.4	54.2	49.8
9.02	-60.09	-58.17	-59.56	29.15	48.4	53.5	47.1
8.55	-59.8	-58.95	-59.68	29.12	50.1	59.6	50.3
8.62	-59.91	-58.74	-59.41	29.03	47.9	54.9	50.8
8.68	-60.02	-58.07	-59.56	29.12	48.2	52.6	48.8

8.62	-60.6	-58.53	-59.59	28.94	50.5	59.5	49.7
7.7	-61.08	-58.79	-59.62	29.27	48.1	53.9	49.4
8.55	-60.16	-58.53	-59.59	29.27	48.4	53.3	49.6
8.67	-60.24	-58.59	-59.68	29.03	49.7	59.6	51.2
8.66	-60.75	-58.22	-59.84	29.24	47.3	54.5	48.2
8.8	-60.02	-58.43	-59.65	29.15	47.5	52.2	50.1
8.52	-59.87	-58.48	-59.5	29.27	49.3	58.9	51.6
8.56	-58.3	-58.12	-59.74	28.94	49.8	58.8	48.3
8.67	-59.18	-57.81	-59.56	29.33	46.2	50.5	47.4
8.71	-60.24	-58.38	-59.71	29.12	48.6	57.2	50.4
8.53	-60.16	-58.12	-60.08	29.18	50	58.5	52.2
8.55	-60.49	-58.28	-59.44	29.37	46.8	54.2	49.2
8.69	-60.93	-58.59	-59.56	29.37	46.4	51.6	53.2
8.63	-59.43	-57.91	-59.68	29	49.4	58.7	50.7
8.88	-60.42	-58.12	-59.47	29.15	48.4	57.1	50.2
8.55	-60.38	-58.38	-59.74	29.49	46.2	50.9	50.8
8.6	-60.05	-57.7	-59.9	29.21	47.7	56.4	47.5
8.61	-60.35	-58.12	-59.62	29.12	49	58	49.4
8.64	-60.71	-57.55	-59.8	29.55	45.1	50.3	50.1
8.48	-60.13	-58.69	-59.5	29.4	48.2	57.4	50.2
8.62	-60.9	-57.76	-59.32	29.27	49.1	57.6	49.9
8.68	-61.04	-57.6	-59.62	29.3	46.3	52.6	52.4
8.7	-60.68	-58.48	-59.53	29.33	47.1	52.9	49.1
8.88	-60.38	-57.91	-59.77	29.15	49.3	58.5	46.1
8.56	-59.8	-58.85	-59.77	29.24	48.3	57.1	49.8
8.57	-59.29	-57.55	-59.8	29.18	46.2	50.5	51.6
8.62	-60.68	-57.81	-59.59	29.33	47.9	54.5	50.7
8.75	-60.86	-58.07	-59.68	29.15	49.4	57.4	46.3
8.5	-60.49	-57.81	-59.59	29.37	47	54.8	49.2
8.56	-60.42	-58.33	-59.44	29.33	46.4	51.4	49.2
8.67	-60.24	-57.91	-59.8	29.21	48	56.8	47.3
8.63	-60.53	-57.76	-59.5	29.12	49	57.5	47.3
8.76	-59.58	-58.69	-59.35	29.4	46.2	53.2	51.6
8.68	-60.24	-59.11	-59.5	29.58	46.6	52	52.7
8.56	-60.38	-58.28	-59.5	29.27	48.4	57.9	50.7
8.68	-59.76	-58.02	-59.56	29.15	48.1	56.8	45.3
8.61	-59.4	-57.65	-59.65	29.43	45.3	50.5	51
9.23	-59.76	-58.07	-60.05	29.27	47.2	54.8	47.3
8.65	-60.05	-57.76	-59.44	29.21	49.5	56.4	51
8.56	-60.42	-57.5	-59.47	29.43	45.7	51.2	50.4
8.67	-59.76	-58.28	-59.62	29.37	46.6	52.8	51.1
8.6	-59.1	-58.28	-59.77	29.03	49.6	55.8	49.7
8.48	-59.62	-57.76	-59.8	29.43	46.3	52.7	50.4
8.5	-60.38	-58.53	-59.56	29.55	47	52.6	49.8
8.66	-60.79	-58.48	-59.77	29.3	48.5	56.7	49.5
8.56	-57.75	-58.28	-59.53	29.3	46.9	55.6	47.2
8.72	-60.38	-57.91	-59.59	29.49	46.2	51.6	50.2

8.15	-60.46	-58.64	-59.59	29.43	48.7	57	47.8
8.52	-59.65	-58.22	-59.77	29.33	47.9	56.4	48.8
8.57	-59.98	-58.79	-59.65	29.43	46.2	50.6	49.5
8.65	-60.86	-58.85	-59.68	29.21	49.5	55.8	48.1
8.69	-60.38	-58.69	-59.44	29.12	47.5	55.1	48.9
7.85	-59.84	-57.81	-59.77	29.58	46.9	51.1	49
8.45	-58.85	-58.38	-59.84	29.24	49.7	56.3	50.9
8.67	-61.23	-59	-59.71	29.24	47.3	54.3	48.6
8.63	-58.99	-58.33	-59.9	29.37	48	52.2	49.7
8.63	-59.91	-57.81	-59.93	29.24	50	58	51.1
7.83	-60.86	-58.53	-59.93	29.27	48.6	56.4	50.1
8.61	-60.38	-58.12	-59.65	29.52	48	51.4	50
8.65	-59.87	-58.69	-60.02	29.18	50.4	58.4	50.3
8.57	-58.85	-58.64	-59.71	29.15	50.9	57.4	51.1
8.64	-58.08	-58.22	-59.9	29.15	48.7	51.5	49
7.77	-58.37	-58.74	-60.08	29.3	50.8	58.2	50.7
8.56	-59.98	-58.07	-59.8	28.94	52.5	58.8	49.8
8.57	-58.7	-58.48	-59.74	29.27	49.4	52.4	47.2
8.54	-58.15	-58.43	-59.62	29.12	51.1	54.6	48.9
8.77	-59.47	-58.79	-59.84	28.82	53.8	59.4	49.1
8.05	-60.42	-58.38	-59.74	29.18	51.8	55.9	49.7
8.6	-60.9	-58.33	-59.68	28.88	51.5	52	51.6
8.62	-60.35	-58.12	-59.96	28.94	53.9	59.2	49.2
8.68	-60.86	-59	-59.68	28.85	54	58	50.4
8.71	-60.13	-58.12	-59.8	29.15	52.2	52.2	51.4
8.31	-59.95	-57.86	-59.74	29.15	54.5	59	50.2
8.51	-60.31	-58.79	-59.77	28.85	54	57.9	53.8
8.62	-60.13	-57.91	-59.8	29.06	52.7	52.4	50.2
8.62	-59.51	-58.02	-59.74	28.72	55.7	60.3	52.3
8.64	-60.46	-58.02	-59.77	28.88	53.3	54.3	48.4
8.56	-60.24	-58.17	-59.8	28.94	53.9	53.3	49.3
8.62	-60.24	-58.02	-59.96	28.66	57.1	60.6	51.1
8.59	-60.9	-57.45	-59.9	28.88	53.8	52	47.9
8.62	-59.1	-58.17	-59.99	28.79	56.1	56.6	48.9
8.7	-60.49	-58.95	-59.71	28.63	56.7	59.1	52.6
8.64	-60.97	-59.11	-59.65	29.06	54.5	52.3	50.2
8.57	-57.67	-57.86	-59.74	28.75	56.3	57.3	50.5
8.65	-60.79	-58.02	-59.59	28.57	57.4	58.5	46.5
8.59	-61.26	-58.64	-59.96	28.69	55.3	52.6	49.1
8.69	-60.09	-58.28	-59.62	28.6	57.4	58.7	49.6
7.94	-60.93	-58.28	-59.9	28.69	57.1	57.2	48.7
8.56	-60.05	-59.31	-59.5	28.79	56	52.9	52.1
8.63	-59.58	-58.38	-59.77	28.69	57.7	58.9	47.8
8.67	-60.53	-57.86	-59.71	28.6	57	56.8	53
8.55	-60.13	-58.22	-59.71	28.72	56	53.3	50
8.86	-59.8	-58.64	-59.74	28.6	57.8	59.6	49.9
8.57	-57.53	-58.28	-59.47	28.79	56.9	56.7	50.3

8.67	-60.16	-57.91	-59.56	28.6	56	53.2	50
8.56	-60.24	-58.28	-59.62	28.63	57.9	60.3	48.4
8.72	-60.31	-58.59	-59.8	28.6	56.6	56.3	50.5
9.01	-59.8	-58.07	-59.74	28.75	55.7	53.5	50.8
8.58	-58.99	-58.07	-59.71	28.79	57.4	59.4	47.3
8.67	-60.6	-58.48	-59.65	28.6	56.2	56.9	50.2
8.62	-60.24	-58.64	-59.59	28.69	55.6	53.3	48.8
8.59	-61.26	-58.28	-59.53	28.66	57.1	59.8	50.1
8.75	-60.31	-58.17	-59.74	28.66	55.7	56	45.5
7.92	-60.86	-58.07	-59.56	28.94	55.2	53.4	48.9
8.53	-59.62	-57.55	-59.59	28.72	56.7	59.3	49
8.57	-59.98	-58.48	-59.47	28.85	53.7	52.1	49.8
8.7	-60.42	-58.28	-59.35	28.82	55.1	56.3	49.6
8.62	-60.46	-58.79	-59.74	28.63	56.3	59.3	47.1
7.85	-60.6	-57.91	-59.65	29.06	53	52	48.6
8.62	-59.98	-58.12	-59.62	28.85	54.9	56.1	49.3
8.55	-60.16	-58.12	-59.9	28.66	55.3	58.9	48.8
8.68	-60.16	-58.74	-59.62	28.97	52	52.1	52.2
8.74	-60.31	-58.48	-59.99	28.85	54.4	56.7	49.5
8.31	-60.13	-58.02	-59.71	28.88	54.6	58	51
8.57	-60.2	-57.7	-59.68	29.12	52.4	51.8	52.5
8.65	-60.38	-58.85	-59.56	28.97	54.2	58.2	49.4
8.59	-59.25	-58.17	-59.93	28.82	53.7	56.8	48.3
8.66	-60.79	-58.28	-59.93	29.12	52.3	52.3	50.2
8.65	-60.49	-58.22	-59.74	28.97	54.1	58.5	48.2
8.56	-60.42	-58.59	-59.74	29.03	53.2	56.9	48.8
8.68	-60.24	-58.9	-59.68	29.06	51.2	51.6	48.6
8.59	-57.42	-58.48	-59.74	28.88	52.8	57.1	53
8.72	-60.05	-58.9	-59.77	28.85	53.3	58.6	49.1
8.82	-59.76	-57.6	-59.96	29.06	50.5	51.6	45.6
8.54	-59.84	-58.07	-59.68	29.18	52.8	58.1	51.8
8.56	-59.95	-59	-59.93	29	51.9	56.2	48.3
8.65	-60.82	-58.85	-60.02	29.06	51.1	52.1	48.6
8.59	-60.53	-58.07	-59.84	28.91	53.7	59.5	49.8
8.75	-60.64	-57.65	-60.11	29	50.1	52.1	49.4
8.57	-58.96	-58.17	-59.68	29.27	51.6	54.3	49.2
8.63	-59.95	-58.07	-59.84	28.88	52.8	58.8	46
8.67	-60.16	-58.79	-60.02	29.24	49.5	51.1	49.8
8.65	-60.24	-58.33	-59.77	29	51.7	58.2	48
8.76	-60.64	-58.33	-59.99	28.91	53.4	58.3	47.6
8.45	-58.48	-58.64	-59.65	29.4	49.2	50.8	50.2
8.7	-60.24	-58.48	-59.65	29.06	51.2	56.3	45.1
8.6	-60.53	-58.53	-59.41	28.97	52.5	59	50.3
8.64	-61.15	-58.48	-59.62	29.24	48.2	50.4	50.3
8.82	-60.35	-58.43	-59.9	29.15	50.3	56	48.8
8.47	-58.37	-58.43	-60.2	29.3	50.5	56.6	49.2
8.53	-60.42	-58.53	-59.8	29.52	48.6	51.2	49.5

8.69	-60.71	-58.12	-59.96	29.18	49.7	55.9	47.7
8.64	-60.46	-58.64	-60.14	29.12	50.9	58	48.3
8.61	-60.13	-58.28	-59.8	29.49	46.9	50.5	50.7
8.09	-60.97	-58.28	-59.65	29.43	49.5	56.9	49.9
8.58	-60.49	-58.02	-59.59	29.27	50.4	57.4	49.7
8.68	-60.75	-58.38	-59.99	29.4	46.9	53.2	46.9
8.59	-59.65	-58.64	-59.84	29.33	46.9	52.4	51.1
8.59	-58.37	-58.33	-59.74	29.33	49	58	49.3
8.98	-57.12	-57.7	-59.8	29.27	48.1	56.5	51.9
8.61	-58.48	-58.53	-60.14	29.64	46.1	50.2	49.8
8.65	-60.05	-58.43	-59.8	29.27	48.1	54	49.1
8.66	-60.38	-59	-60.02	29.15	49.8	57.6	49
8.64	-59.51	-58.38	-59.59	29.21	47.9	55.6	49.4
8.79	-60.38	-58.95	-59.71	29.3	47.1	51.3	48.8
8.7	-60.16	-58.22	-59.9	29.52	48.7	56	48
8.7	-60.68	-58.07	-59.84	29.06	51	57	50.1
8.7	-60.86	-58.69	-59.68	29.15	48.1	53.8	48.4
8.67	-60.02	-59.05	-59.84	29.33	48.1	51.9	50.2
8.71	-60.49	-58.12	-59.8	29.24	49.6	57.2	54
8.03	-60.05	-57.91	-59.84	29.3	49.3	56.6	49.3
8.61	-60.71	-58.12	-59.93	29.55	47.1	52.1	51.8
8.68	-60.9	-58.53	-59.99	29.4	48	52.3	49.3
8.66	-60.64	-59.37	-59.53	29.3	49.1	57.6	49.2
8.59	-59.8	-58.48	-59.96	29.3	48.3	56.4	49.8
8.73	-58.33	-58.12	-59.9	29.46	46.2	50.2	51.3
8.57	-59.58	-57.7	-59.71	29.43	48.2	55	49.9
8.53	-60.02	-58.59	-59.99	29.37	49.6	56.5	47.5
8.69	-59.8	-58.12	-59.77	29.24	47.4	54	49.3
8.59	-60.6	-58.17	-59.93	29.4	47.9	52.5	50
8.57	-60.93	-58.17	-59.71	29.15	50.5	55.9	44.8
9.03	-60.6	-57.86	-59.96	29.27	47.9	54.8	47.6
8.67	-60.31	-57.81	-60.02	29.46	48	51.4	49.7
8.59	-60.05	-58.12	-59.62	29.24	49.3	57.2	51.7
8.57	-59.84	-58.95	-59.56	29.18	49.3	56	45.6
8.65	-60.49	-58.95	-59.99	29.4	47.5	51	50.1
8.7	-60.93	-58.95	-59.47	29.27	50.5	56	48
8.48	-61.23	-58.12	-59.77	29.46	47.1	53.7	49.5
8.65	-60.05	-59.11	-59.77	29.58	46.6	50.5	49.8
8.7	-60.86	-58.79	-59.71	29.18	50	56.5	50.9
8.6	-60.02	-58.74	-59.62	29.18	48.1	55.5	52.2
8.57	-58.92	-58.59	-59.74	29.33	47.4	51.3	49.1
8.68	-60.75	-58.38	-59.8	29.24	50.3	55.2	51.9
8.62	-60.16	-58.64	-59.96	29.3	46.9	53.2	50
8.48	-60.42	-58.33	-59.71	29.61	46.7	51.8	49
8.69	-60.2	-58.64	-60.11	29.4	48.8	56.6	52.2
8.67	-59.47	-57.7	-60.11	29.37	48	55.9	46
8.61	-57.86	-58.33	-60.02	29.49	46.1	51	48

8.94	-59.95	-57.91	-59.62	29.27	48.9	55.4	47.8
8.61	-60.35	-58.02	-59.47	29.46	46.3	54.2	49.7
8.63	-60.9	-58.64	-59.8	29.61	46.1	50.9	50.5
8.63	-60.05	-58.07	-59.9	29.33	47.2	56.5	50.5
8.62	-60.6	-58.64	-59.65	29.4	47	55.4	49.5
8.62	-60.82	-58.48	-60.05	29.58	45.1	50.1	49.9
9.13	-60.68	-58.07	-59.74	29.52	46.8	53.9	51.5
8.53	-58.37	-58.53	-59.62	29.43	48.7	55.1	48.2
8.57	-60.82	-58.43	-60.02	29.64	45.8	50.4	49.5
8.65	-60.13	-57.91	-59.8	29.46	48.6	54.7	47.4
8.65	-59.62	-58.79	-59.56	29.15	50.5	55.4	49.8
8.66	-60.46	-58.22	-59.8	29.24	48.1	52.6	48.2
8.42	-59.98	-58.38	-59.84	29.46	49.3	52.7	52.2
8.47	-60.6	-58.38	-60.02	29.27	51.6	56.1	51.2
8.66	-61.01	-58.17	-59.74	29.27	48.4	51.9	44.8
8.67	-60.27	-58.48	-59.74	29.37	49.3	52	50.2
8.59	-59.47	-57.91	-59.99	29.21	51.1	57.5	47.8
8.71	-59.58	-58.59	-60.02	29	51.6	56.6	48.9
8.62	-60.35	-58.28	-59.74	29.4	50.5	51.4	50
8.55	-59.87	-58.48	-59.74	29.21	53.2	58.2	50.2
8.63	-60.71	-58.53	-59.68	28.85	53.6	57.5	49.4
8.66	-60.38	-58.74	-60.11	29.21	51.6	51	51.2
8.7	-60.82	-58.17	-60.05	29.06	53.5	55.1	51.2
9.07	-60.31	-58.28	-59.77	28.85	55.8	58.8	47.8
8.56	-59.4	-58.22	-59.65	29.15	52.8	51.6	48.3
8.6	-60.46	-58.85	-59.8	29.12	54.6	54.7	47.3
8.66	-60.64	-58.59	-59.93	28.69	57	59.5	50.5
8.62	-60.82	-58.59	-59.96	28.91	54.4	54.2	50.5
8.63	-60.82	-59.05	-60.08	28.85	55.5	54.1	48.8
8.82	-61.41	-58.38	-59.9	28.66	58.1	60.3	49.1
8.65	-60.46	-59.37	-59.71	28.97	54.8	52	50.9
8.68	-60.93	-58.95	-59.71	28.75	56.9	55.1	49.5
8.68	-60.38	-59.37	-59.74	28.51	59.1	60.1	49.5
8.61	-61.12	-58.38	-59.62	28.69	56.6	52.3	48.6
8.62	-60.05	-57.91	-60.05	28.57	58.7	57.5	49.9
9.2	-60.09	-58.69	-59.99	28.48	59.3	58.6	50.3
8.65	-60.82	-59.11	-59.74	28.88	57.4	52.5	48.6
8.6	-60.31	-58.9	-59.99	28.63	59.5	58.2	51.6
8.63	-60.93	-58.33	-59.77	28.48	59.3	58.5	49.5
8.54	-61.56	-58.22	-59.71	28.66	57.8	52.7	52.1
8.99	-60.24	-58.28	-59.65	28.54	59.5	58.1	49.6
8.6	-61.26	-57.6	-59.9	28.69	59.1	57.2	51.2
8.6	-60.68	-58.69	-59.9	28.6	58.2	53.1	49.8
8.6	-61.08	-58.38	-59.71	28.27	60.6	60.1	52.4
8.63	-60.75	-58.43	-59.8	28.72	57.9	52.7	49.9
8.68	-60.38	-58.22	-59.62	28.45	59.8	56.5	49.9
7.9	-60.6	-58.48	-59.77	28.72	58.2	54.2	51.2

8.64	-61.01	-58.53	-59.99	28.79	58.8	53.8	50.9
8.64	-60.49	-58.85	-59.9	28.39	61.4	60.1	45.1
8.62	-60.35	-58.28	-59.84	28.66	58.2	52.3	50.5
8.65	-59.84	-58.22	-59.96	28.63	59.2	54.9	52.4
8.36	-59.73	-58.43	-59.9	28.63	61.4	60.5	50.3
8.59	-59.87	-58.12	-59.84	28.72	57.9	52.6	49.5
8.61	-60.35	-58.85	-59.77	28.51	59.8	58.5	48.4
8.7	-60.46	-58.12	-59.77	28.6	57.3	53.8	50.5
8.71	-60.9	-58.33	-59.65	28.48	58.8	54.7	49.7
8.85	-60.42	-58.43	-59.68	28.33	60	58.8	49
8.6	-60.31	-58.22	-59.84	28.85	57.7	52.9	51
8.48	-60.53	-58.43	-59.9	28.63	59.6	60.3	48.4
8.56	-60.53	-58.85	-59.84	28.72	56.7	52.1	51.6
8.56	-61.08	-57.86	-59.93	28.54	58.8	56.8	49
8.63	-60.6	-58.53	-59.74	28.54	57.7	56	47.4
8.96	-60.71	-58.64	-59.68	28.69	57.6	54.2	51.4
8.66	-60.86	-58.12	-59.71	28.6	59.5	59.7	51.4
8.56	-60.86	-57.7	-59.77	28.97	56	52.4	49.1
8.71	-61.26	-58.79	-59.77	28.79	58.2	58.6	48.9
8.66	-60.35	-58.28	-59.8	28.69	56.2	54.2	49.9
8.62	-60.35	-58.17	-59.96	28.72	56.4	54.5	46.8
8.66	-59.58	-57.91	-59.84	28.6	58.4	60.4	49.5
8.02	-59.76	-59.16	-60.02	29	54.4	52	50
8.47	-59.47	-57.7	-59.96	28.94	56	57.4	49.5
8.64	-60.79	-58.33	-59.65	28.72	55.1	56.1	50.8
8.56	-60.46	-58.07	-59.93	28.88	54.2	53.1	47.7
8.64	-58.77	-58.43	-59.8	28.75	55.5	59.2	48.6
8.18	-60.64	-58.85	-59.74	28.97	53.3	55.6	50.2
8.48	-58.41	-58.22	-59.84	29.15	52.7	52.5	49.9
8.65	-60.71	-59.26	-59.99	28.82	54.5	59.3	50
8.62	-61.19	-58.12	-59.77	28.75	52.9	54.9	48.6
8.69	-60.38	-58.48	-60.26	28.97	52.4	52.8	50
8.7	-58.19	-58.64	-59.96	28.88	53.6	59.2	50.4
8.53	-60.16	-58.38	-59.99	29.18	51.7	56.1	49.5
8.59	-59.98	-58.85	-59.84	29.03	50.9	52.3	50.1
8.68	-61.19	-58.48	-59.71	28.97	52.8	59.5	49.5
8.68	-60.6	-58.53	-59.93	29	50.8	54.6	49.8
8.74	-59.54	-59.11	-60.02	29.15	50.2	52.6	49.6
7.82	-61.26	-58.22	-59.93	29.3	51	58.7	48.8
8.48	-59.47	-58.12	-59.74	29.24	50.3	56.3	49.5
8.56	-60.13	-58.43	-59.96	29.27	49.1	51.9	45.9
8.62	-59.58	-57.65	-59.71	28.97	51.7	59.2	50.2
8.71	-61.12	-58.79	-59.99	29.24	48.1	52.4	49.5
9	-60.68	-58.17	-59.96	29.24	49	53.7	52.2
8.56	-58.59	-58.9	-59.93	29.27	50.9	58.4	49.8
8.51	-59.76	-58.48	-59.99	29.4	47.5	51.8	50.5
8.65	-60.24	-58.43	-60.02	29.24	49	54.1	49.4

8.6	-59.21	-58.85	-59.8	29	50.1	58.7	50
8.58	-60.46	-58.33	-59.84	29.24	48.7	56.6	49
8.88	-60.64	-58.95	-60.05	29.43	47	50.8	50.5
8.5	-58.92	-58.38	-59.96	29.43	50.1	58.2	50.4
8.65	-60.42	-58.38	-59.9	29.27	49.4	57.1	51.7
8.58	-60.09	-58.07	-59.65	29.37	46.6	50.5	50.2
8.69	-60.02	-57.6	-60.05	29.33	48.2	55.7	49.5
8.57	-58.19	-58.43	-59.99	29.24	48.5	57.1	48.7
8.78	-60.24	-58.43	-59.93	29.55	44.4	49.6	44.9
8.29	-59.98	-58.28	-59.84	29.49	47.4	55.1	49.8
8.55	-60.35	-58.74	-59.77	29.4	48.8	56.8	50.1
8.68	-60.9	-58.38	-60.11	29.4	45.8	54.1	50.9
8.62	-60.97	-58.07	-59.62	29.43	46.2	51	48.3
8.55	-58.96	-57.91	-60.05	29.43	48	56.6	49.1
8.65	-58.52	-58.85	-59.99	29.15	49	57	48.7
8.89	-60.64	-58.64	-59.77	29.46	45.5	52.2	49.9
8.67	-60.42	-58.02	-59.99	29.49	46.3	51.9	48.4
8.53	-60.2	-58.43	-59.84	29.49	47.5	57.5	50.5
8.58	-60.49	-58.48	-59.96	29.21	47.3	56.7	51.8
8.53	-60.9	-59.42	-59.9	29.46	44.8	50.2	52.7
8.59	-61.3	-58.59	-59.84	29.33	48	55.9	49.5
9.21	-60.35	-58.07	-59.93	29.06	48.9	55.6	47.3
8.56	-60.68	-58.48	-60.02	29.49	45.3	52.7	46.2
8.65	-61.23	-58.69	-59.65	29.52	45.7	53.6	47.2
8.61	-61.15	-58.33	-60.2	29.3	47.3	55.4	50
8.63	-61.15	-58.79	-59.74	29.49	44.3	50	50
8.63	-60.16	-58.12	-59.77	29.3	46.5	51.9	45.1
9.09	-60.86	-58.12	-59.9	29.15	49.5	55	48.3
8.53	-60.93	-58.85	-59.96	29.4	46.4	53.2	50.1
8.53	-60.71	-58.79	-60.05	29.61	45.9	52.5	49.7
8.57	-61.01	-58.95	-59.84	29.21	47.9	55.4	50
8.65	-60.42	-58.69	-59.84	29.24	45.7	53.6	49
8.71	-59.73	-58.85	-59.68	29.37	46.7	52	51.1
9.03	-59.54	-58.64	-59.77	29.15	49	54.8	48.9
8.53	-58.92	-57.86	-60.02	29.49	45.7	52.7	50.2
8.62	-59.73	-59.11	-59.96	29.43	47.3	51.8	45.1
8.7	-60.16	-59.16	-59.96	28.97	50.5	54.9	49.1
8.59	-60.53	-58.79	-59.8	29.27	46.8	52.5	50
8.56	-60.82	-58.02	-59.84	29.33	47.4	51	49.4
7.85	-60.09	-58.07	-59.77	29.24	50.8	55	49.6
8.62	-60.05	-58.59	-59.84	29.3	48.5	54.9	49.4
8.61	-59.8	-58.59	-59.65	29.27	47.7	51.8	50.8
8.56	-58.77	-58.33	-59.77	29.24	49.5	56.4	53
8.62	-60.46	-58.69	-59.8	29.03	49	56.2	49.8
8.91	-60.97	-58.74	-59.77	29.37	46.9	50.9	50.5
8.59	-60.64	-59.42	-59.71	29.37	49.4	55.7	49.5
8.52	-60.38	-57.6	-59.99	29.33	47.9	55.5	50.3

8.67	-60.64	-58.53	-60.11	29.33	46.5	50.4	49.2
8.66	-60.16	-58.33	-60.11	29.3	47.3	55.8	50.2
8.64	-59.76	-58.74	-59.99	29.15	48.2	55.7	49.1
8.7	-60.24	-58.69	-59.99	29.33	45.7	50.8	52.3
8.65	-60.2	-58.74	-59.56	29.55	46.4	52.2	49.8
8.47	-60.68	-57.86	-59.8	29.3	48.4	56	46.8
8.56	-60.82	-58.12	-60.11	29.15	48.3	55.6	47.4
8.68	-61.04	-59.73	-59.77	29.43	46.1	49.5	51
8.59	-58.92	-58.33	-59.77	29.18	48.8	55.5	51.5
8.91	-59.18	-58.79	-59.68	28.97	49.2	55.4	51
8.6	-61.52	-58.33	-59.84	29.49	44.7	49.3	50
8.55	-61.04	-58.48	-59.59	29.43	47.1	53.6	49.9
8.59	-60.6	-58.9	-59.68	28.91	49.5	54.8	48.4
8.56	-60.09	-58.43	-59.65	29.27	46.5	50.3	50.5
8.61	-60.79	-58.38	-59.8	29.21	49.5	54.6	49.2
9	-60.42	-58.59	-59.71	28.85	51.1	56.3	50.4
8.63	-60.38	-57.34	-59.9	29.46	48.3	50.1	48.4
8.52	-60.97	-58.07	-60.05	29.12	52.3	56.9	52
8.53	-61.23	-58.64	-59.99	28.82	52.3	56.3	49.5
8.56	-61.12	-58.43	-59.65	28.91	51	50.5	50.8
8.68	-60.71	-58.59	-59.99	28.85	53.5	55.5	50.7
8.59	-58.99	-58.48	-59.99	28.63	56	58.2	50.2
9.32	-60.97	-58.38	-59.84	28.79	53.1	52.2	50.2
8.56	-60.68	-58.38	-59.65	28.91	54.9	53.7	50.1
8.64	-60.38	-58.22	-59.99	28.42	58.2	59.2	48.4
8.58	-60.05	-58.43	-60.11	28.57	56	53.4	48.4
8.63	-60.53	-58.12	-59.99	28.42	58.2	54.4	50.9
8.62	-62.03	-58.85	-59.77	28.24	60.6	60.3	49.1
8.6	-59.29	-58.38	-59.93	28.27	58.8	53.6	46.8
8.84	-60.2	-58.28	-59.8	28.21	60.6	55.1	49
8.47	-58.96	-58.48	-59.59	28.21	62.8	60.4	51.4
8.47	-61.52	-58.69	-59.65	28.48	59.9	52.3	49.3
8.54	-57.75	-58.22	-60.17	28.21	62	56.4	49.4
8.65	-60.24	-58.22	-59.74	27.93	64.2	59.7	50.5
8.53	-60.53	-58.59	-60.02	28.11	62.5	53.7	47.8
8.68	-61.04	-58.48	-60.02	28.02	64.1	56.7	49.8
8.91	-60.93	-58.74	-59.68	27.93	66	60.3	49.9
7.87	-60.75	-58.59	-59.99	28.17	63.8	53.8	49.8
8.51	-60.75	-58.59	-59.68	28.14	66	59.7	49.8
8.63	-60.86	-58.59	-59.8	27.93	64	53.3	48.4
8.6	-60.16	-58.48	-59.74	27.9	66.2	59.5	50.5
8.63	-60.31	-58.28	-59.99	28.02	64.1	53.7	51
8.62	-60.75	-58.43	-59.77	27.93	66.1	57.2	50.2
9.07	-60.79	-58.02	-59.84	27.87	64.9	55	48.4
8.67	-60.97	-58.59	-59.71	28.05	65.7	55.1	50.9
8.52	-61.08	-58.43	-59.62	27.93	67	60.1	49.8
8.65	-61.12	-58.48	-59.84	27.84	65.1	54.2	50.2

8.65	-60.31	-58.12	-59.8	27.78	67.1	59.9	53.8
8.59	-60.35	-58.48	-59.62	27.87	65.3	54.2	50.1
8.57	-57.82	-57.91	-59.68	27.81	67	57.8	46
8.41	-61.41	-58.38	-59.71	27.99	65.3	53.9	50.3
8.6	-60.53	-58.22	-59.62	27.96	66.8	56.6	49.4
8.54	-59.21	-58.53	-59.68	27.81	65.8	55.1	50.5
8.61	-60.2	-58.28	-59.68	27.72	66.8	56	50.5
8.62	-60.68	-58.07	-59.99	27.75	67	57.3	51.8
8.79	-60.9	-58.74	-59.9	27.87	66.6	55.7	48.4
8.49	-60.97	-58.53	-59.74	27.84	67.9	59.6	52.7
8.49	-60.13	-58.12	-59.9	27.99	66.2	55	49.2
8.62	-60.46	-58.85	-59.62	27.84	67.4	60.1	50
8.59	-59.25	-58.64	-59.59	27.87	64.8	54.7	44.1
8.71	-60.86	-58.95	-59.56	27.69	67.2	60.3	51
9.12	-61.08	-57.55	-59.77	27.81	64.8	54.6	49.5
8.65	-60.9	-57.76	-59.77	27.96	66.2	59.7	50.5
8.56	-59.25	-58.17	-59.74	27.93	64.3	54.6	49.1
8.66	-60.35	-58.64	-59.99	27.81	65.9	59.1	49.1
8.61	-60.38	-58.02	-59.56	27.87	63.9	54.3	48.4
9.09	-59.07	-58.64	-59.77	27.72	66.1	58.5	50.1
8.67	-60.49	-58.59	-59.74	28.11	63.9	54.3	54.3
8.6	-60.71	-58.38	-59.8	27.81	65.8	57.3	53.1
8.57	-59.73	-58.79	-59.47	27.9	63.9	54.1	49.5
8.72	-60.6	-58.33	-59.93	27.81	65.4	57.1	50.4
8.71	-60.79	-58.22	-60.05	27.9	63.9	54.1	49.3
8.34	-59.95	-58.22	-59.59	28.02	64.6	55.8	50.5
8.51	-60.2	-58.85	-59.65	27.9	65.5	59.2	48.9
8.55	-60.71	-57.81	-59.84	27.87	64.3	54.8	50.5
8.53	-57.23	-58.95	-59.77	27.9	63.8	56.5	49.3
8.61	-60.9	-58.64	-59.8	27.84	63.6	55	45.1
8.97	-61.52	-58.95	-59.68	27.78	65.1	59.4	56
8.64	-59.58	-58.17	-59.71	28.11	63.6	54.6	51
8.5	-60.09	-57.81	-59.9	27.87	65.4	59.8	51.4
8.63	-60.6	-58.59	-59.99	27.93	63.3	54.6	49.3
8.67	-60.42	-58.53	-59.71	27.78	64.7	59.4	49.8
8.55	-60.79	-58.38	-59.62	27.93	62.9	54.3	47.8
9.3	-60.82	-58.38	-59.74	27.81	65.4	59.7	51.5
8.56	-59.62	-57.91	-59.84	28.21	63.1	54	46.2
8.62	-61.23	-58.64	-59.71	27.84	64.9	58.8	49.6
8.67	-60.68	-58.69	-59.96	27.99	62.7	53.9	48.6
8.61	-58.85	-58.38	-59.5	27.84	65.1	57.6	50.9
8.62	-60.35	-57.65	-59.9	27.93	63.8	54.3	50.5
7.8	-60.75	-58.38	-59.9	27.99	65.4	56.6	50.2
8.5	-59.25	-58.64	-59.77	28.08	63.7	54.3	49.4
8.59	-60.6	-58.85	-59.59	27.84	64.9	55.4	50.1
8.68	-60.24	-58.28	-60.02	27.69	66.8	59.7	50
8.73	-61.12	-58.22	-59.9	27.87	64.7	54.8	47.3

7.81	-59.84	-58.02	-60.02	27.81	66.5	59.6	48.1
8.43	-60.49	-58.43	-59.71	28.08	64.7	54.7	50.7
8.65	-60.27	-58.12	-59.93	27.63	66.5	59.4	49.7
8.65	-60.71	-58.59	-59.99	27.84	64.7	54.5	50.9
8.71	-60.16	-58.07	-60.05	27.72	66.9	59.4	50.3
7.8	-60.42	-58.53	-59.74	27.99	65	54.8	50.1
8.6	-60.35	-58.48	-59.68	27.96	66.6	59.3	48.7
8.53	-60.75	-58.79	-59.71	27.9	64.5	54.2	46.5
8.65	-60.16	-57.86	-60.02	27.87	66	58.2	50.1
8.56	-57.93	-58.95	-59.44	27.87	64.5	54.5	49.1
8.81	-60.38	-58.74	-60.17	27.81	65.8	56.7	49
8.34	-61.01	-58.59	-59.8	27.99	64.6	55.9	48.3
8.52	-61.01	-59.16	-59.93	28.05	64.7	55.6	51.2
8.65	-59.95	-58.85	-60.08	27.75	65.4	57.6	49.5
8.63	-59.51	-58.33	-59.93	27.9	64.6	55.2	47.4
8.53	-61.78	-58.48	-60.11	27.75	66.2	59.4	47.1
8.66	-60.05	-59.42	-59.93	27.87	64	54.9	48.7
7.87	-60.35	-58.59	-59.8	28.02	65.6	59.3	46.3
8.58	-60.64	-58.74	-59.96	28.08	63.8	54.6	49.3
8.55	-60.38	-58.12	-59.65	27.84	65.5	57.3	53.6
8.63	-60.31	-58.79	-59.93	27.96	63.4	54.3	51.6
8.58	-60.35	-58.53	-60.05	27.96	64.3	56	48.8
8.61	-60.13	-58.02	-59.96	27.87	63.4	56	49
8.79	-60.68	-59.26	-60.08	28.05	63.2	55.2	50.7
7.82	-60.6	-58.79	-59.65	27.99	64.4	59	52
8.55	-58.44	-58.59	-59.9	28.21	62.6	54.9	49.6
8.64	-61.01	-58.74	-59.71	27.84	64.1	59.7	51
8.62	-59.54	-58.33	-59.84	28.08	62.3	54.5	50.5
8.67	-61.15	-58.64	-59.9	28.02	63.6	58.8	48.4
8.69	-60.75	-58.43	-59.65	28.11	61.8	54.2	49.4
8.92	-60.35	-58.79	-59.93	28.02	63.5	56.9	50.3
8.42	-60.49	-58.33	-59.9	28.27	61.7	54.2	52.3
8.51	-58.52	-58.85	-59.74	28.17	63.1	56	48.3
8.55	-60.38	-58.48	-59.68	28.02	61.6	55	51.9
8.56	-58.41	-58.59	-60.14	28.05	62.5	55.1	48.1
8.56	-60.75	-58.74	-59.9	27.87	63.2	58.1	47.5
8.66	-60.38	-59.42	-60.02	28.11	62.1	54.9	50.9
7.92	-60.16	-58.69	-59.8	28.02	64.2	60.1	50.5
8.63	-60.75	-58.38	-59.96	28.24	61.8	54.5	47.7
8.6	-59.65	-58.48	-60.11	27.99	63.5	59.2	48.6
8.65	-60.6	-58.95	-60.02	27.99	61.5	54.3	49
8.66	-60.97	-58.22	-59.84	27.96	63.4	58.6	50
8.54	-59.4	-58.85	-59.9	28.11	61.6	54.4	48.2
8.82	-60.27	-58.38	-60.08	27.99	63.6	58.1	48.4
7.85	-60.31	-57.81	-59.8	28.24	61.8	54.2	49.9
8.63	-61.23	-59.42	-60.2	28.21	62.8	56.6	48.4
8.61	-60.13	-58.9	-60.02	28.02	61.4	54	55.5

8.52	-57.78	-57.5	-59.77	27.93	62.5	55.4	50
8.58	-60.79	-59	-59.8	27.96	62.5	56.9	45.9
8.59	-59.65	-58.28	-59.93	28.05	62.6	55.2	49.5
8.94	-58.22	-59.16	-59.8	27.9	63.6	58.8	50.1
8.39	-60.05	-58.74	-59.99	28.08	62.3	54.9	48
8.6	-60.13	-59.05	-59.8	28.08	63.4	58.5	51.2
8.68	-60.79	-58.9	-59.84	28.08	61.9	54.5	49.3
8.58	-61.08	-58.22	-59.99	27.9	64.3	60.3	49.6
8.59	-60.75	-59.11	-59.77	28.17	61.9	54.6	51.6
8.69	-61.19	-58.48	-60.02	28.08	63.6	59.4	49.8
8.66	-59.54	-58.22	-59.84	28.08	61.7	54.5	54.5
7.97	-60.38	-58.12	-60.17	28.17	63.6	59.1	49.3
8.52	-60.64	-58.07	-60.17	28.27	61.9	54.3	50.5
8.68	-60.27	-58.64	-59.96	27.99	63.9	58.5	48.7
8.6	-59.58	-58.43	-59.77	28.08	62.2	54.4	48.4
8.6	-60.79	-58.48	-59.99	27.99	63.7	58.1	45.2
8.71	-60.93	-58.07	-60.02	28.05	62.3	54.6	52.6
8.71	-60.6	-58.9	-60.14	27.99	63.9	56.5	48.1
9.19	-60.35	-58.85	-59.84	27.96	63.6	55.8	51.6
8.5	-57.97	-58.85	-60.05	28.14	64.3	55.8	50.2
8.41	-60.49	-58.38	-59.99	28.21	63.3	54.4	48
8.68	-61.3	-58.79	-60.11	27.93	64.9	56.5	49
8.59	-58.92	-58.59	-59.99	27.99	63.6	54.6	51.2
8.6	-60.27	-58.59	-59.8	27.87	65.5	56.9	51.6
8.64	-60.27	-59.42	-59.99	27.93	64.3	54.9	50.8
8.82	-60.31	-58.85	-59.8	27.84	65.9	56.2	44.5
7.8	-59.25	-58.69	-60.02	27.9	65.7	56.5	50.4
8.63	-60.64	-58.79	-59.77	27.96	66.4	56	47.9
8.55	-61.04	-58.69	-60.08	27.84	65.8	55.8	51.3
8.68	-60.9	-58.17	-60.05	27.75	67.1	56.5	47.8
8.55	-58.55	-58.69	-60.08	27.87	66	55.1	51.9
8.69	-61.12	-58.79	-59.99	27.72	67.9	58.1	50.4
8.8	-60.79	-58.38	-59.99	27.87	66.5	55.4	54.3
7.88	-60.79	-58.9	-59.8	27.78	69	60.1	47.7
8.54	-58.41	-58.79	-59.84	27.96	67.6	55.7	49.5
8.65	-60.09	-58.69	-60.05	27.56	69	58.7	49.2
8.63	-60.46	-58.43	-60.05	27.56	69	56.1	50.8
8.53	-60.97	-58.38	-60.14	27.66	68.7	55.6	49.7
8.66	-60.75	-58.79	-60.2	27.53	71.1	58.1	48.4
8.74	-60.97	-59	-59.99	27.53	70.1	56.1	49.5
9.12	-59.51	-57.65	-60.26	27.32	71.9	59.4	48.2
8.59	-59.51	-58.48	-59.96	27.69	71.9	56.5	51.5
8.63	-61.3	-58.07	-59.77	27.72	71.2	56.1	49
8.63	-60.42	-58.69	-59.9	27.29	73.4	59.7	48
8.53	-60.82	-58.64	-60.29	27.41	72.3	56.5	49
8.68	-60.75	-58.74	-60.02	27.32	72.1	56	48.6
8.64	-61.19	-58.9	-60.14	27.2	74.4	60.1	46.3

8.59	-58.59	-58.17	-60.02	27.32	73.1	57	52
8.74	-60.6	-59.05	-59.96	27.29	72.8	56.2	48.2
8.46	-60.2	-58.79	-59.84	27.44	72.3	56.3	50.5
8.56	-61.34	-58.74	-59.99	27.5	73.4	57.6	49.8
8.53	-62.03	-58.64	-59.9	27.53	72.1	56.5	50
8.55	-60.05	-58.85	-59.8	27.32	72.4	56	49.8
8.71	-61.01	-59.16	-59.9	27.2	74.8	59.8	50.3
8.57	-60.53	-58.33	-59.71	27.29	74	56.6	48.2
8.68	-60.42	-58.64	-59.56	27.26	73.6	56.4	51.1
8.59	-58.59	-58.69	-59.93	27.11	75.1	59.2	50.3
9.09	-60.53	-58.59	-60.14	27.23	74.9	57.4	51.2
8.51	-60.93	-57.91	-59.9	27.41	73.4	56.8	50.1
8.65	-60.97	-58.17	-59.99	27.44	73	56.3	50.5
8.59	-60.79	-58.43	-59.96	27.26	74.4	58.1	49.5
8.62	-60.53	-58.48	-59.96	27.29	73.2	56.8	50.7
8.69	-60.93	-58.33	-60.02	27.35	72.5	56.6	50
8.53	-61.19	-58.48	-59.96	27.14	74.6	60.3	49.3
8.67	-60.6	-58.64	-59.9	27.26	72.8	57	49.5
8.62	-60.13	-57.91	-59.96	27.32	72	56.5	50.4
9.32	-60.93	-58.95	-60.08	27.2	72.3	57.6	49.6
8.64	-60.79	-59	-60.08	27.47	72.6	57.4	49.9
8.53	-59.1	-58.28	-60.02	27.56	71.8	56.7	49.4
8.62	-61.08	-59.05	-59.9	27.41	71.8	56.4	50.9
8.68	-61.15	-58.48	-59.96	27.23	73.3	58.7	53.5
8.65	-60.42	-58.43	-59.9	27.38	71.9	56.9	51.9
8.68	-60.68	-58.12	-59.99	27.35	71.1	56.4	47.5
8.64	-60.35	-58.12	-60.08	27.29	72.5	60.1	52
9.11	-60.79	-58.53	-59.99	27.35	71.2	57	50.1
8.51	-61.01	-58.53	-59.93	27.63	70.1	56.3	46.9
8.52	-60.46	-58.69	-59.84	27.66	69.4	56.4	49.2
8.69	-60.68	-58.59	-60.17	27.38	70.2	57.1	48.1
8.66	-61.01	-58.85	-60.14	27.47	68.9	56.2	50
8.66	-61.41	-59.05	-59.74	27.56	68.1	56	46.9
8.58	-60.31	-59.05	-60.05	27.53	69.8	59.3	49.3
8.71	-60.24	-58.74	-60.14	27.63	68.2	56.4	50.1
8.28	-60.6	-58.33	-59.99	27.84	66.7	55.8	48.7
8.65	-60.42	-59.26	-59.99	27.69	68.9	60.2	49.9
8.58	-61.19	-58.28	-59.99	27.72	67.6	56.2	51.8
8.55	-60.31	-58.59	-60.05	27.63	66.8	55.8	49.9
8.55	-60.71	-57.65	-60.05	27.53	69	59.9	50.1
8.66	-60.6	-59.37	-59.8	27.69	67.4	56.2	47
8.69	-60.53	-59	-59.77	27.69	67.4	55.6	51.5
8.71	-60.9	-58.79	-59.96	27.56	70.2	59.3	49.4
8.93	-61.15	-58.59	-59.99	27.5	69.1	56.4	54.9
8.05	-60.38	-58.59	-60.05	27.66	68.9	56	48.3
8.63	-60.79	-58.48	-59.77	27.75	70.5	58.4	50.2
8.5	-60.02	-58.17	-59.93	27.78	68.7	56.2	50.5

8.58	-59.73	-58.79	-60.05	27.63	68.2	55.9	51
8.53	-60.79	-58.74	-59.96	27.41	70.2	58.9	49.6
8.66	-60.27	-58.74	-59.71	27.56	68.7	56.1	52
8.57	-59.36	-58.48	-60.14	27.56	68.4	55.9	52.6
8.64	-59.14	-59.26	-60.08	27.5	70	57.9	50.8
9.09	-59.14	-58.48	-60.14	27.5	68.6	56.1	47.5
7.77	-58.37	-58.22	-59.99	27.47	70.9	60.3	50.5
8.65	-60.68	-58.64	-60.02	27.72	69.4	56.8	49.7
8.67	-60.71	-58.33	-59.96	27.63	68.5	56	49.2
8.65	-60.79	-59	-60.23	27.47	70.6	59.7	50.4
8.67	-61.01	-58.59	-59.99	27.56	69.1	56.7	51
8.62	-60.71	-59.42	-60.14	27.53	68.3	56	45.6
8.71	-61.59	-59.16	-60.08	27.44	70.6	60.2	47.2
8.9	-59.91	-58.59	-59.99	27.53	69	56.3	49.1
7.87	-60.71	-58.9	-60.05	27.69	68.3	55.9	48.2
8.63	-61.52	-58.74	-59.93	27.66	70.7	59.9	51
8.55	-59.07	-59.57	-60.08	27.53	69	56.1	48.3
8.6	-60.64	-58.85	-59.9	27.53	68.9	55.8	50.2
8.53	-56.83	-58.53	-60.23	27.44	71	59	44.6
8.62	-60.71	-58.59	-60.17	27.56	69.8	56.4	50.4
8.62	-60.02	-59.26	-60.14	27.53	69.6	56	50.5
9.01	-61.12	-58.64	-60.08	27.35	71.2	58.1	49.9
7.76	-60.05	-59.47	-60.29	27.56	70.1	56.3	49.9
8.56	-61.52	-58.28	-60.08	27.69	69.7	57.2	48.4
8.54	-60.93	-59.37	-59.74	27.44	70	57.1	48.3
8.66	-60.2	-58.07	-59.99	27.5	68.4	56.2	52.5
8.67	-60.38	-59.05	-60.05	27.53	67.7	56.1	48.7
8.64	-60.6	-59.16	-60.23	27.47	69.8	56.9	48.2
8.58	-59.03	-58.17	-60.14	27.63	68.2	55.9	50.5
8.71	-60.75	-58.9	-59.93	27.44	69.6	59.6	54.1
8.15	-60.93	-58.69	-60.14	27.72	67.9	56.4	49.8
8.55	-58.33	-58.69	-60.29	27.87	67.2	56	51.4
8.67	-60.79	-58.79	-60.05	27.47	69.2	60.4	45.9
8.66	-60.75	-58.53	-60.08	27.56	68	56.3	49.6
8.61	-61.01	-58.95	-60.05	27.56	67.6	55.7	49.7
8.56	-59.98	-58.22	-59.71	27.44	69.2	58.8	48.2
8.71	-60.93	-58.79	-59.99	27.56	68.1	56.3	49.6
9.02	-60.86	-58.85	-60.05	27.56	67.2	55.9	50
8.51	-59.87	-58.69	-60.26	27.63	68.8	57.2	49.6
8.51	-60.38	-58.74	-60.11	27.75	67.8	56	50.5
8.65	-60.53	-58.69	-59.93	27.44	69.6	60.1	50
8.66	-60.93	-58.79	-60.05	27.63	67.9	56.5	49.2
8.65	-61.08	-58.22	-60.02	27.63	66.8	55.8	47.3
8.58	-60.79	-58.17	-60.32	27.56	69	60.2	50.4
8.73	-60.82	-58.79	-59.9	27.56	67.9	56.3	48.4
8.38	-61.19	-58.33	-60.26	27.69	67.4	56	49.3
8.66	-60.82	-58.38	-59.99	27.87	68.1	57.2	49.9

8.54	-61.23	-58.59	-60.23	27.69	67	56	49.3
8.65	-60.75	-58.33	-60.08	27.44	69	60.1	48.9
8.7	-60.79	-58.48	-60.02	27.56	67.2	56.4	51.5
8.67	-60.71	-58.38	-60.05	27.63	66.2	55.9	48.9
8.65	-60.79	-58.69	-60.14	27.63	67.9	58.8	51.1
8.68	-60.27	-57.45	-59.99	27.75	65.8	56	49
8.28	-60.64	-58.69	-60.11	27.81	66.7	57.6	50.3
8.65	-60.31	-58.02	-60.14	27.96	66.9	56.6	50.1
8.59	-59.91	-58.95	-60.23	27.69	65.5	55.7	49.4
8.54	-60.93	-58.43	-60.29	27.72	65.5	56.4	49.7
8.74	-61.04	-58.33	-60.14	27.66	67	56.8	47.7
8.75	-59.32	-59.26	-60.11	27.69	66	55.9	48
8.48	-60.79	-58.95	-59.93	27.66	68.4	60.2	49.7
8.61	-60.97	-58.17	-60.14	27.84	66.6	56	50
8.56	-58.3	-58.9	-60.05	27.56	65.8	55.5	48.6
8.66	-59.98	-58.79	-60.2	27.56	67.8	57.1	51
8.65	-60.75	-58.59	-60.14	27.66	66.9	56	49.8
8.56	-60.35	-58.22	-60.26	27.47	69.7	60.5	49.9
8.64	-60.38	-58.79	-60.14	27.5	68.5	56.6	49.4
9.22	-61.01	-59	-60.2	27.53	68.2	56.1	50.4
8.03	-60.6	-58.48	-60.29	27.56	70.7	60.3	49.4
8.59	-60.38	-58.69	-60.26	27.53	69.8	56.6	50.2
8.51	-60.46	-58.95	-59.99	27.63	69.8	56.3	52
8.57	-58.15	-59.26	-60.26	27.38	72.2	60.3	51.5
8.63	-60.31	-58.38	-60.26	27.38	71.2	57	48.2
8.69	-61.3	-58.38	-60.17	27.41	71.2	56.7	49.4
8.57	-61.3	-59.05	-60.05	27.23	73.1	59	50.3
8.64	-60.93	-58.69	-60.14	27.32	73.5	57.8	49.2
9.17	-60.53	-58.59	-60.17	27.29	73.4	57.1	48.1
8.64	-60.79	-59.05	-60.08	27.35	73.5	56.8	50.4
8.6	-60.93	-58.64	-60.05	27.32	75.4	58.8	49.2
8.61	-60.05	-59.16	-60.23	27.32	74.7	57.4	50.5
8.57	-61.26	-59.11	-60.11	27.14	74.7	57	52.2
8.63	-60.13	-59.26	-60.14	27.01	77.7	60.8	49.2
8.69	-61.19	-58.28	-60.14	26.98	76.7	58	50.9
8.69	-61.63	-58.79	-60.05	27.08	76.1	57.6	48.9
8.7	-61.48	-58.28	-60.14	27.23	76.4	57.2	48.6
8.71	-61.04	-58.64	-60.14	26.83	79.3	61.2	51.4
8.27	-61.59	-58.85	-60.17	27.08	78.5	58.3	49.4
8.6	-60.53	-59.11	-60.02	27.11	78.4	57.9	49
8.57	-60.79	-58.33	-60.08	26.89	78.4	57.5	48.6
8.57	-58.85	-58.48	-60.05	26.89	78.8	57.2	56.8
8.56	-60.9	-59.31	-60.08	26.92	79	57.3	50.3
8.57	-60.53	-58.69	-60.14	26.8	80.9	59.4	50
8.6	-60.42	-58.43	-60.11	26.83	79.9	58.5	49.2
8.86	-59.87	-58.38	-60.05	26.92	79.7	58	50.9
8.56	-60.68	-58.22	-59.9	27.11	79.9	57.9	51.7

8.5	-60.68	-59	-60.08	26.98	80.6	57.5	50.1
8.56	-61.41	-58.28	-60.05	26.8	80.5	57.6	50.8
8.59	-59.76	-58.79	-60.14	26.83	80.9	57.4	50.4
8.65	-60.93	-58.95	-59.99	26.62	83.2	61.1	49
8.67	-61.04	-58.9	-60.05	26.65	82.3	58.8	50.5
8.64	-60.79	-59.05	-60.02	26.71	81.8	58.3	51.5
8.61	-58.59	-58.85	-60.08	26.71	81.4	58.3	49.6
8.79	-60.71	-58.28	-60.08	26.74	81	58.1	50.8
8.5	-60.93	-58.17	-60.29	26.95	81	58.1	50.3
8.66	-61.34	-58.53	-59.9	26.98	80.9	58	49.5
8.64	-60.86	-59.16	-59.84	26.77	80.9	57.8	51.2
8.61	-59.91	-58.9	-60.02	26.8	80.6	57.8	49.2
8.57	-60.16	-58.79	-60.05	26.74	80.1	57.6	51.6
8.58	-59.03	-59.05	-59.99	26.71	81.8	61.7	45.9
8.63	-60.75	-59.31	-60.14	26.74	80.1	59.1	51.1
8.71	-60.82	-58.43	-60.05	26.8	79.4	58.6	47.3
8.59	-60.38	-59	-60.14	26.92	79.4	58.4	49.4
8.64	-59.95	-58.59	-59.93	27.01	78.8	58.2	50.1
8.56	-60.38	-58.95	-59.8	27.11	78.7	58	50.9
8.6	-60.68	-58.48	-59.99	26.92	78.4	57.9	50.3
8.65	-60.46	-58.64	-60.02	26.92	78	57.8	49.4
8.65	-60.79	-58.59	-59.8	26.95	78	57.5	48.1
8.65	-61.37	-58.69	-60.14	26.95	76.9	57.5	49.4
8.65	-61.01	-58.28	-60.26	26.95	77.3	57.4	49.5
8.85	-60.16	-59	-60.11	26.74	79.1	61.2	50.2
7.81	-60.9	-58.38	-60.26	27.11	78.1	58.9	56.7
8.65	-60.68	-58.53	-59.96	27.2	77.1	58.2	51
8.66	-60.64	-58.85	-60.11	26.95	76.6	58.2	50.7
8.54	-58.66	-58.69	-60.02	27.01	76.5	57.8	51.6
8.55	-58.48	-57.91	-60.17	27.05	76.1	57.8	49.5
8.57	-60.42	-58.48	-60.05	27.08	75.7	57.5	50.5
8.63	-60.71	-58.85	-60.17	27.11	75.1	57.4	50.1
8.74	-61.56	-58.9	-60.14	27.11	74.8	57.3	51.2
8.53	-61.12	-58.9	-60.08	27.08	76.6	60.2	49.1
8.58	-60.6	-58.64	-60.23	27.23	75.1	58.4	49.2
8.51	-61.34	-59.05	-60.14	27.35	73.3	57.9	49.4
8.56	-60.86	-58.69	-59.99	27.14	73.2	57.5	49.2
8.53	-59.32	-58.07	-60.54	27.17	73.1	57.4	49
8.59	-61.26	-58.48	-60.11	27.17	72.7	57.1	50.3
8.75	-61.04	-59.05	-60.29	27.26	74	61.2	50
9.2	-59.84	-58.43	-60.23	27.11	72.3	58.3	53.1
8.68	-60.46	-59	-60.32	27.41	71.5	57.6	48.2
8.6	-61.01	-58.85	-60.11	27.41	71	57.3	52
8.65	-61.52	-58.28	-60.08	27.35	70.1	57	50
8.65	-61.15	-58.33	-60.02	27.29	71	58.2	48.3
8.68	-60.09	-59.16	-60.05	27.23	71.4	58.1	49.6
8.58	-58.74	-58.85	-59.77	27.29	70.8	57.4	49.6

8.65	-60.97	-59.47	-60.17	27.32	70.1	57.1	47.7
8.68	-60.68	-58.74	-60.29	27.29	69.8	56.9	53.7
9.16	-60.82	-58.38	-60.14	27.17	71	58.6	50.7
8.63	-61.23	-58.85	-60.14	27.53	70.3	57.3	49.5
8.53	-60.71	-58.43	-60.32	27.5	70.6	57	51.2
8.64	-60.38	-58.28	-60.17	27.38	69.8	56.8	47.6
8.6	-59.95	-58.28	-60.23	27.23	70.2	59.2	49.4
8.58	-61.15	-58.48	-60.2	27.44	68.4	57.1	49.5
8.69	-60.13	-59.52	-60.14	27.53	66.6	56.9	50.2
8.92	-59.87	-58.33	-60.02	27.38	69	60.2	51.6
8	-60.86	-58.64	-60.32	27.56	68	57.1	49
8.55	-59.73	-59.26	-59.96	27.66	67.9	56.8	49.1
8.67	-60.9	-58.38	-60.14	27.5	66.5	56.3	47
8.53	-61.19	-58.74	-60.26	27.44	68.3	57.6	50.4
8.54	-59.18	-58.02	-59.99	27.53	67.2	56.7	49.9
8.53	-61.34	-58.59	-60.17	27.47	66.6	56.4	49.9
8.65	-60.31	-58.9	-60.29	27.44	68.4	59.8	49.5
8.98	-61.19	-58.12	-59.96	27.5	67.4	57	50.8
8.53	-60.2	-58.95	-60.2	27.66	66.7	56.3	49.6
8.62	-60.93	-59.26	-59.9	27.5	67.8	59.1	49.6
8.67	-60.9	-58.59	-60.05	27.53	66.9	56.8	50.3
8.62	-60.93	-58.95	-60.29	27.44	66.8	56.4	49.1
8.56	-59.43	-58.64	-60.23	27.44	67	57.2	49.5
8.6	-60.86	-59.16	-59.96	27.47	67.9	57.4	51.1
8.65	-61.19	-59.05	-60.02	27.44	66.8	56.5	49
9.06	-60.93	-58.9	-60.11	27.53	66.2	56	49.2
8.65	-60.9	-58.9	-60.17	27.72	67.6	57.9	48.8
8.52	-60.6	-59.11	-60.2	27.75	66.5	56.3	51.6
8.62	-61.34	-58.79	-60.2	27.66	66	55.8	50.5
8.59	-60.24	-58.48	-60.11	27.44	67.8	58.4	49.3
8.63	-61.3	-59.05	-59.93	27.41	66.7	56.5	47.9
8.65	-61.19	-59.42	-60.08	27.53	66.1	56	47.8
8.75	-61.48	-58.85	-60.11	27.44	67.9	58.9	49.3
8.36	-60.71	-58.17	-60.05	27.75	66.6	56.5	50.8
8.5	-61.12	-58.79	-60.14	27.81	66.1	56	49.6
8.67	-61.56	-58.79	-60.08	27.44	67.2	58.1	49.6
8.64	-60.79	-58.95	-60.11	27.56	65.7	56.2	54.9
8.57	-59.65	-59.94	-60.26	27.5	66.1	55.8	50
8.71	-60.9	-58.95	-60.32	27.47	67.7	57.6	51
8.87	-60.68	-58.9	-60.11	27.56	66.4	56.4	48.3
8.47	-60.79	-58.53	-60.17	27.66	66.4	57.3	51.2
8.53	-58.77	-58.74	-60.2	27.63	66.9	57	47.6
8.57	-60.93	-58.17	-60.08	27.5	66.8	56	48.7
8.56	-59.62	-58.12	-60.17	27.44	68.5	59.4	53.4
8.69	-60.75	-58.74	-60.17	27.44	67.9	56.8	49.1
8.62	-60.86	-59.16	-60.11	27.41	67.6	56.3	47.9
8.69	-60.27	-58.64	-60.2	27.29	69.8	60.6	50.8

9.18	-60.82	-58.48	-60.11	27.32	67.8	56.8	49.1
8.31	-58.74	-58.79	-60.26	27.66	66.8	56.1	51.2
8.58	-60.31	-58.07	-60.38	27.5	69	60.6	55.8
8.64	-61.12	-58.95	-60.11	27.53	67.7	56.7	51
8.64	-61.26	-58.95	-60.02	27.41	66.8	56.1	48.3
8.65	-60.68	-58.95	-60.14	27.26	69.1	60.5	48.1
8.66	-61.23	-58.69	-60.14	27.41	68	56.7	47.3
8.65	-61.12	-58.53	-60.17	27.38	67.4	56.4	49.8
9.26	-61.3	-58.43	-60.11	27.26	69.9	60.6	48.4
8.66	-60.97	-58.38	-60.23	27.5	67.9	56.6	47.8
8.56	-59.14	-58.53	-60.11	27.63	67.4	56.2	51.6
8.59	-60.86	-58.43	-60.35	27.32	69.7	60.5	48.7
8.69	-61.37	-58.95	-60.29	27.35	67.9	56.7	49.8
8.59	-59.8	-58.43	-59.9	27.41	67.1	56.3	53
8.63	-60.24	-58.28	-60.23	27.38	69.3	60.5	49.3
8.7	-60.71	-58.64	-60.02	27.44	67.9	56.8	51.7
8.94	-60.31	-59.26	-59.93	27.32	67.2	56.3	49
8.58	-60.2	-58.79	-60.29	27.44	69.7	60.3	47.1
8.5	-60.82	-59	-60.2	27.53	68.2	56.8	50.5
8.55	-61.23	-58.95	-60.02	27.41	67.7	56.3	50.5
8.6	-60.68	-58.28	-59.9	27.38	69.3	60.1	50.1
8.57	-60.53	-58.95	-60.17	27.44	68.1	56.9	51.9
8.65	-60.05	-58.33	-60.29	27.47	67.9	56.3	50.4
8.56	-60.93	-58.95	-60.17	27.26	70.7	60.7	49.8
8.69	-60.05	-58.85	-60.08	27.38	69.7	57.1	51.7
8.68	-60.09	-58.02	-60.42	27.29	70.1	56.5	47.9
8.54	-60.31	-58.95	-60.05	27.32	71.2	58.3	50.1
8.53	-60.82	-58.38	-60.2	27.38	72.3	57.6	49.9
8.68	-60.6	-58.53	-60.17	27.2	72.1	56.9	48.4
8.68	-60.9	-59.16	-60.08	27.23	72.3	56.9	50.7
8.68	-60.31	-58.85	-60.29	27.08	74.6	59.2	47.9
8.67	-60.79	-58.95	-60.08	27.08	74.5	57.4	48.1
8.62	-59.84	-58.22	-60.2	27.01	74.5	57.3	48.8
8.67	-61.01	-58.64	-60.35	26.83	77.4	61	49.4
8.52	-58.74	-58.79	-60.2	27.17	76.7	58.1	47.6
8.53	-60.6	-58.9	-60.14	27.08	76.6	57.8	49.7
8.67	-61.34	-59.37	-60.23	26.95	76.9	57.2	49.1
8.56	-60.2	-59.16	-60.14	26.77	79.5	61.5	50.8
8.68	-60.46	-58.43	-60.14	26.83	77.9	58.5	50.5
8.62	-60.9	-58.53	-60.23	26.83	77.9	58.2	53.1
8.55	-61.19	-58.85	-60.23	26.83	78	57.8	49.5
8.59	-61.12	-59.11	-60.14	26.83	78.4	57.8	49.3
8.75	-61.04	-59.16	-60.2	26.83	78.4	57.5	50.5
8.76	-60.86	-58.79	-60.05	26.59	80.9	60.1	52.8
8.67	-60.79	-58.64	-60.38	26.89	80.1	58.5	51.8
8.5	-60.27	-59.57	-60.14	26.83	80.3	58.2	49.2
8.64	-61.52	-58.74	-60.14	26.71	80.2	58.1	47.6

8.61	-61.19	-59.26	-60.08	26.65	80.1	57.9	49
8.65	-60.38	-58.64	-60.2	26.68	79.9	57.6	51.6
8.67	-60.53	-58.79	-60.32	26.74	79.8	57.6	51.2
8.57	-59.14	-58.38	-60.23	26.68	80	57.9	50.8
8.71	-61.01	-58.95	-60.08	26.71	80.7	57.9	50.8
8.98	-61.12	-58.07	-60.32	26.5	82.7	61.6	50.3
8.65	-61.04	-58.59	-60.11	26.83	81.7	58.9	50
8.52	-59.03	-58.64	-59.99	26.83	81.4	58.6	52.3
8.57	-59.76	-58.69	-60.14	26.71	81.1	58.4	50.3
8.63	-60.09	-58.64	-60.23	26.74	80.5	58.3	51.7
8.66	-60.6	-59.11	-60.32	26.71	80.5	58.3	49.5
8.7	-60.79	-58.53	-60.32	26.71	80.7	58.4	48.9
8.72	-61.7	-59.16	-60.02	26.74	80.5	58.2	47.9
8.76	-61.34	-58.64	-60.11	26.56	80.8	58.1	49.4
7.88	-60.68	-58.38	-60.29	26.89	80.7	58.1	48.9
8.51	-60.53	-59.11	-60.05	26.92	80.1	58.1	51.3
8.56	-61.12	-58.95	-60.02	26.95	79.9	58	48.7
8.6	-61.23	-58.64	-60.08	26.71	79.8	58	50.5
8.57	-59.58	-58.79	-60.23	26.77	79.6	58	49.3
8.64	-60.86	-58.79	-60.26	26.83	79.1	57.9	49.1
8.7	-60.68	-59.37	-60.08	26.8	79.6	58	50.8
8.68	-60.75	-58.59	-60.2	26.92	79.1	57.9	48.9
8.66	-59.58	-58.53	-60.42	26.95	79	57.8	53.2
9.22	-60.38	-58.38	-60.26	26.92	77.8	57.6	49.8
8.56	-58.99	-58.74	-60.29	27.17	78.1	57.8	51.4
8.63	-60.93	-58.74	-60.17	27.14	77.8	57.5	49.3
8.61	-60.93	-58.17	-60.35	26.95	77.5	57.9	50.1
8.65	-61.19	-58.33	-60.57	26.98	77.1	57.6	49.8
8.64	-60.24	-58.43	-60.26	26.89	77.6	59.6	51.6
8.61	-61.12	-58.59	-60.23	27.08	76.5	59.3	52.9
8.72	-61.04	-59.73	-60.11	27.11	74.9	58.6	51.3
8.74	-60.2	-58.53	-60.08	27.14	74	58.2	49.5
8.68	-60.71	-59	-60.42	27.17	73.2	57.9	48.2
8.68	-60.86	-58.69	-60.51	27.41	72.8	57.6	49.4
8.6	-60.86	-58.43	-60.32	27.41	72	57.3	46.7
8.67	-61.34	-59.31	-60.2	27.29	71.3	57.2	52.3
8.63	-60.6	-59.11	-60.42	27.32	71	57.1	47.2
8.64	-60.31	-58.79	-60.35	27.35	72.3	59.4	49.9
8.63	-60.75	-58.74	-60.26	27.35	71.1	57.9	51.7
8.71	-60.46	-58.12	-60.35	27.32	70.5	57.6	51.2
7.85	-60.49	-58.28	-60.26	27.53	70.1	57.2	48.6
8.45	-61.37	-59.05	-60.35	27.66	69.7	57	50.2
8.68	-60.68	-59.78	-60.17	27.44	71.5	60.6	52.1
8.67	-60.82	-59.52	-60.17	27.44	70.1	58.1	51.3
8.64	-60.02	-58.59	-60.14	27.53	69.3	57.3	49.3
8.6	-60.9	-59.26	-60.17	27.53	69	57.1	51.5
8.79	-61.01	-58.9	-60.35	27.47	68.8	56.9	50

8.52	-60.46	-58.28	-60.42	27.53	70.2	58.3	53.2
8.55	-58.22	-59.68	-60.08	27.72	69	57.2	49.5
8.56	-60.82	-59.62	-60.17	27.75	68.5	57	49.5
8.7	-61.52	-59.16	-60.17	27.47	68.4	56.9	50.4
8.64	-61.01	-58.85	-60.29	27.47	69.8	58.3	51.1
8.62	-61.12	-58.43	-60.29	27.5	68.6	57.2	54.2
8.57	-61.3	-59.31	-60.23	27.56	68.3	56.9	50
8.75	-60.9	-59.11	-60.42	27.44	69.4	58.9	49.4
8.49	-59.51	-58.95	-60.29	27.63	69.3	57.6	49.6
8.51	-58.7	-58.9	-60.35	27.69	68.4	57	50.5
8.56	-58.7	-58.69	-60.51	27.63	67.9	56.5	49.5
8.66	-61.52	-59.11	-60.45	27.5	69.4	59.2	45.6
8.57	-61.59	-59	-60.32	27.56	68.3	57.1	48.1
8.7	-61.01	-59.05	-60.02	27.66	67.6	56.8	51.6
8.6	-59.62	-58.69	-60.17	27.53	69.1	59.9	49
8.8	-61.59	-58.9	-60.48	27.63	67.8	57.6	44.5
8.45	-60.71	-59.31	-60.45	27.93	66.7	56.9	48.4
8.58	-59.8	-58.79	-60.32	27.99	66.4	56.2	50.7
8.65	-59.62	-58.33	-60.32	27.69	67.9	57.9	49.5
8.66	-61.26	-58.59	-60.45	27.66	66.5	56.7	51.5
8.56	-61.23	-59.31	-60.32	27.75	65.8	56.2	50.4
8.6	-60.93	-58.85	-60.14	27.69	68	60.2	48
8.71	-59.47	-59.05	-60.54	27.75	66.3	56.9	50.1
7.93	-60.13	-58.69	-60.35	27.93	65.8	56.1	51.4
8.62	-59.73	-58.69	-60.54	27.93	66.7	58.5	47.3
8.57	-60.16	-59.37	-60.11	27.84	66.8	57	50.1
8.64	-59.98	-58.74	-60.48	27.78	65.6	56.2	48.6
8.58	-61.08	-58.28	-60.72	27.72	66.1	57.3	49.7
8.64	-60.75	-58.69	-60.35	27.63	66.3	57.3	50.4
8.82	-60.2	-59.05	-60.38	27.87	65.1	56.5	50.2
8.25	-60.9	-58.22	-60.29	27.9	65.6	57.4	51.6
8.51	-61.78	-59.11	-60.45	27.99	65.8	56.9	49.6
8.57	-61.19	-58.79	-60.51	27.87	64.7	56.2	49.9
8.58	-60.97	-58.28	-60.23	27.69	66.5	59.6	48.2
8.68	-60.53	-58.95	-60.29	27.81	64.9	56.7	48.4
8.59	-61.01	-59.05	-60.29	27.87	64.2	56.1	49.5
8.9	-61.23	-59	-60.48	27.75	66.4	60.3	45.8
8.41	-61.37	-59.11	-60.35	28.08	64.7	56.3	48.4
8.61	-61.26	-59.57	-60.11	28.05	63.9	55.8	48.7
8.67	-60.9	-58.64	-60.51	27.78	65.3	57.3	48.8
8.54	-59.95	-59.57	-60.54	27.99	63.9	56	49.6
8.6	-61.41	-59.42	-60.26	27.78	65.9	60.3	49.8
8.67	-61.59	-58.22	-60.38	27.84	63.9	56.4	48.6
8.6	-59.36	-59	-60.17	27.99	62.8	55.9	50.5
8.94	-61.78	-59.68	-60.23	27.93	64.8	58.1	47.1
7.91	-61.01	-59.42	-60.42	28.08	63.3	56	49.5
8.7	-61.48	-59.68	-60.05	28.11	64.8	60.2	51.5

8.43	-61.12	-58.9	-60.51	28.08	63.1	56	48.2
8.64	-60.09	-59.42	-60.35	27.9	63.6	57.8	47.4
8.57	-61.37	-58.53	-60.42	27.96	63.8	56.5	50.2
8.69	-61.7	-58.85	-60.38	28.05	62.8	55.7	48
8.69	-60.9	-58.22	-60.57	27.93	64.1	57.8	51.6
8.82	-60.42	-59.26	-60.42	27.9	62.4	55.7	50.9
8.41	-58.99	-59.47	-60.26	28.11	64.2	59.4	49
8.62	-60.42	-59.16	-60.14	28.21	62.3	55.8	53.3
8.45	-61.01	-58.59	-60.38	28.08	64.3	59.8	49.7
8.69	-60.68	-58.95	-60.32	28.05	62.5	55.9	53.8
8.61	-60.64	-58.79	-60.42	27.87	63.5	57.6	50.2
8.71	-60.46	-59.57	-60.32	28.02	63.7	56.3	50.7
8.71	-61.37	-58.33	-60.48	27.93	63.5	56.9	53.7
8.73	-60.49	-59.68	-60.26	28.02	63.4	56.5	51.6
9.24	-61.01	-58.79	-60.29	28.08	61.9	55.4	49.8
8.64	-61.56	-58.64	-60.05	28.17	63.5	57.1	48.4
8.62	-61.12	-59.11	-60.29	28.17	62.1	55.4	50.5
8.64	-61.48	-59.78	-60.23	28.08	63.5	57.1	51.9
8.59	-60.16	-59	-60.72	28.08	62.3	55.2	49.2
8.67	-61.78	-58.9	-60.11	27.87	64	58.3	49.7
8.63	-60.53	-59.11	-60.17	27.99	62.6	55.7	50.5
8.75	-61.41	-59.57	-60.38	27.93	64.7	59.6	48.8
9.25	-58.77	-59.05	-60.45	27.93	63.3	55.7	51.6
8.56	-60.2	-58.38	-60.35	28.08	65.7	60.4	50.4
8.55	-59.25	-59.16	-60.69	28.08	64.1	56	50.4
8.68	-61.37	-59.42	-60.29	27.84	65	58.2	51.9
8.65	-60.71	-58.85	-60.26	27.99	65.1	56.4	49
8.61	-60.49	-58.43	-60.23	27.9	64.6	56.2	49.9
8.57	-60.68	-58.64	-60.35	27.81	66.2	57.4	47.8
8.68	-60.97	-59.52	-60.32	27.9	65.3	56.2	50.9
9.03	-59.51	-58.9	-60.35	27.72	67.8	60.3	50.4
8.55	-59.84	-58.95	-60.38	27.99	66.5	56.6	50.1
8.62	-61.41	-59.11	-60.14	27.93	66.1	56	50.7
8.6	-61.56	-59.11	-60.08	27.69	68.3	58.5	51
8.59	-59.47	-58.33	-60.38	27.75	67.2	56.7	49.6
8.63	-59.76	-58.9	-60.23	27.75	66.7	56.1	52.9
8.71	-60.97	-58.48	-60.66	27.69	68.4	57.8	49.4
8.7	-61.08	-59.31	-60.2	27.78	67.4	56.8	50.4
8.7	-61.15	-58.38	-60.42	27.72	67.7	57.3	50.7
8.94	-60.86	-58.59	-60.57	27.78	68.7	57.5	50.5
7.84	-60.6	-59.26	-60.11	27.87	67.5	56.5	48.1
8.55	-59.4	-58.64	-60.45	27.87	69.3	60.2	47.5
8.54	-60.86	-59.57	-60.45	27.93	68.4	57.1	50.4
8.58	-61.04	-59.11	-60.26	27.75	67.9	56.5	51.6
8.62	-60.79	-58.9	-60.17	27.63	70	60.2	51.2
8.7	-61.01	-58.59	-60.26	27.69	69	57.3	46.6
8.63	-59.91	-58.95	-60.51	27.63	68.7	56.8	50.1

8.58	-58.59	-59.42	-60.2	27.66	68.5	56.5	52.3
9.06	-58.44	-58.9	-60.29	27.53	70.1	58.1	51.8
8.62	-60.2	-58.79	-60.29	27.9	69.2	56.8	49.9
8.54	-60.49	-58.22	-60.32	27.81	68.8	56.5	51.8
8.58	-61.74	-58.48	-60.32	27.47	71.2	60.2	51
8.66	-61.04	-58.79	-60.29	27.53	69.7	57.2	48.8
8.63	-61.04	-58.64	-59.8	27.63	69	56.7	46.2
8.6	-60.38	-58.74	-60.29	27.38	70	59.2	54.8
8.83	-61.67	-58.9	-60.08	27.63	69.8	57.8	48.4
8.41	-61.15	-59.11	-60.17	27.81	68.9	56.9	48.8
8.56	-61.26	-58.59	-60.51	27.84	68.4	56.7	52.2
8.6	-61.56	-58.9	-60.2	27.53	70.2	58.8	50.5
8.6	-60.71	-60.04	-60.17	27.72	69	57.1	50
8.65	-61.08	-59.47	-60.26	27.53	68.4	56.8	47.4
8.64	-60.38	-58.95	-60.29	27.5	70.5	60.6	50.4
8.71	-60.97	-58.38	-60.26	27.56	69.1	57.2	52.7
8.78	-60.68	-58.53	-60.45	27.56	68.5	56.9	48.8
8.55	-61.04	-58.74	-60.02	27.69	68.7	57.4	49.4
8.55	-59.8	-58.79	-60.2	27.75	69.4	57.9	49.4
8.64	-60.6	-58.69	-60.26	27.84	68.4	56.9	49.3
8.64	-60.64	-58.59	-60.14	27.63	67.8	56.6	53.2
8.62	-61.56	-58.9	-60.32	27.53	69	59	47.9
8.63	-60.49	-59.11	-60.05	27.56	67.4	57	50.7
8.68	-60.93	-58.48	-59.99	27.69	66.5	56.6	48.2
8.64	-61.67	-58.9	-59.99	27.44	68.6	60.4	48.7
9.17	-61.23	-59.16	-60.05	27.66	66.9	57.2	48.8
8.48	-61.12	-59.05	-59.77	27.84	66.1	56.6	51.2
8.6	-60.75	-59.16	-60.2	27.9	65.8	56.1	50.5
8.65	-61.59	-58.79	-60.29	27.56	67.5	57.9	50
8.63	-60.82	-59	-60.08	27.56	66.2	56.8	52.8
8.69	-61.19	-59.05	-60.2	27.72	65.8	56.3	47.3
8.69	-61.37	-59.31	-60.14	27.53	67.9	59	51.2
8.68	-61.23	-59.05	-60.05	27.63	66.3	56.9	46.8
9.28	-61.34	-59.05	-60.05	27.53	66	56.4	51.6
8.66	-60.35	-58.43	-60.17	27.78	68	60.7	48.4
8.61	-60.97	-59.31	-60.2	27.87	66.4	57	48.3
8.68	-60.53	-58.9	-60.2	27.72	65.9	56.4	49.5
8.67	-60.97	-58.48	-60.38	27.47	67.4	59.2	50.5
8.66	-61.41	-58.9	-60.26	27.63	66.6	57.1	50.8
8.7	-60.75	-59.11	-60.29	27.72	65.8	56.4	47.2
8.72	-61.78	-58.9	-60.08	27.66	66.1	57.1	48.6
8.79	-61.01	-58.9	-60.29	27.69	66.7	57.3	49.2
8.33	-60.64	-59.16	-60.02	27.81	65.8	56.5	51
8.62	-61.41	-58.79	-60.11	27.87	65.8	56.5	55.1
8.67	-61.15	-59.11	-60.17	27.69	66.6	57.3	50.1
8.61	-60.79	-58.53	-60.23	27.69	65.5	56.4	51.4
8.66	-60.75	-58.9	-60.08	27.72	65.4	56.1	48.8

8.72	-59.98	-59.37	-60.35	27.72	66.9	58	49.7
8.98	-61.26	-58.79	-59.96	27.75	65.8	56.9	52
8.58	-61.04	-58.69	-60.35	27.87	65	56.1	49.9
8.56	-60.75	-59.05	-60.17	27.75	66.8	57.8	50.5
8.6	-60.79	-58.33	-60.29	27.75	65.8	56.5	48.4
8.6	-60.97	-59.16	-60.32	27.69	65.4	56.1	51.3
8.67	-61.01	-59.05	-60.2	27.66	66.9	57.9	51.1
8.57	-60.53	-59.37	-60.2	27.69	65.9	56.4	49.7
8.74	-61.34	-58.48	-60.23	27.72	65.6	56.3	49.1
8.45	-60.68	-58.95	-60.29	27.78	67.2	58	51.5
8.53	-59.21	-58.48	-60.17	27.87	66	56.4	46.5
8.61	-61.12	-58.9	-60.2	27.75	65.7	56	49.1
8.65	-60.68	-59.05	-60.05	27.66	67	57.6	51.1
8.65	-61.23	-58.9	-60.08	27.66	65.7	56.4	50.5
8.61	-60.42	-58.74	-60.02	27.69	65.3	56	46.9
8.65	-61.08	-58.9	-59.96	27.69	66.8	58	50.7
8.53	-60.82	-58.79	-60.11	27.63	65.8	56.5	51.1
8.57	-61.37	-58.53	-60.38	27.78	65.8	56.5	47.6
8.63	-61.19	-58.79	-60.17	27.69	66.7	57	47.4
8.65	-60.49	-59.05	-59.96	27.72	65.6	56.2	48.1
8.56	-60.93	-59.05	-60.2	27.53	65.9	57.1	40.5
8.62	-59.51	-59.05	-59.9	27.69	66.6	57.2	50.5
8.69	-61.01	-58.74	-60.02	27.66	65.8	56.3	47.1
8.74	-60.86	-58.9	-59.99	27.56	67.1	59	47.7
8.6	-60.79	-59.05	-60.05	27.78	66.5	56.9	49.5
8.47	-60.09	-59.31	-59.99	27.93	65.7	56.1	49.8
8.58	-61.48	-59.11	-60.05	27.66	67.8	60.4	49.7
8.69	-61.12	-58.85	-59.99	27.66	66.4	56.8	50.9
8.62	-60.09	-59.57	-60.11	27.75	65.3	56.1	50.4
8.57	-61.19	-58.43	-60.08	27.63	67.5	60.3	49.1
8.54	-61.08	-58.38	-60.23	27.63	66	56.5	49.7
8.62	-60.93	-59.26	-60.05	27.84	65.5	56	47.4
8.59	-60.6	-58.22	-60.11	27.56	67.1	58.9	50.1
8.67	-60.6	-58.9	-59.99	27.69	65.8	56.3	47.1
8.64	-59.84	-58.79	-59.77	27.72	65.6	56.4	47.8
8.57	-60.53	-59.31	-60.14	27.63	66.8	57.4	51.7
8.73	-61.3	-58.9	-59.96	27.72	65.7	56.4	54.7
8.46	-60.49	-59.05	-59.96	27.78	65.8	57.2	48.8
8.62	-61.26	-58.9	-60.26	27.81	66.2	57.1	48.4
8.69	-60.13	-58.38	-60.17	27.63	65.5	56.1	48.4
8.68	-60.9	-58.59	-60.05	27.44	67.1	60.3	48.2
8.64	-60.97	-58.17	-60.08	27.56	66.1	56.7	52.4
8.56	-60.79	-58.79	-59.99	27.78	65.4	56.2	51.3
8.83	-60.93	-58.95	-60.2	27.47	67.5	60.3	46.8
8.39	-59.54	-58.64	-59.99	27.81	65.8	56.5	46
8.56	-61.26	-58.33	-59.93	27.81	65.1	55.9	49.5
8.67	-61.63	-59	-60.14	27.66	66.8	57.9	48.4

8.62	-59.21	-59.31	-59.8	27.72	65.6	56.3	50
8.59	-61.08	-59.11	-60.08	27.44	67.2	59.6	48.8
8.7	-60.93	-58.17	-59.96	27.56	66	57	48.4
9.02	-61.15	-58.53	-60.05	27.69	65.4	56.3	51
8.64	-60.71	-59.05	-60.02	27.78	67.6	60.3	51.3
8.68	-60.6	-58.79	-59.96	27.72	66.2	56.4	49.5
8.57	-59.4	-58.69	-60.02	27.66	65.4	56	46.3
8.56	-60.79	-59.05	-59.65	27.53	67.2	59.2	48.2
8.58	-59.18	-57.91	-59.9	27.63	65.9	56.2	49.3
8.99	-60.82	-58.38	-60.02	27.69	65.1	56	47.8
8.68	-61.41	-58.85	-59.93	27.75	66.8	58	49.1
8.53	-60.86	-59.73	-59.74	27.75	65.7	56.1	53.5
8.65	-61.34	-58.69	-60.08	27.56	66.5	58	48.7
8.56	-61.04	-58.43	-60.32	27.56	66.4	57.1	44.2
8.66	-60.9	-58.64	-59.93	27.69	65.5	56	50.1
8.81	-61.04	-58.74	-59.93	27.44	67.9	60.5	51.3
8.68	-60.97	-58.74	-60.17	27.78	66.2	56.7	42.9
8.62	-60.64	-59.26	-59.9	27.84	65.5	56	49.5
8.67	-61.3	-58.79	-60.02	27.5	67.4	59.5	49.5
8.57	-61.67	-58.85	-59.9	27.53	65.9	56.4	49.1
8.67	-60.46	-59.16	-60.17	27.69	65.3	56.1	49
8.57	-60.31	-57.65	-60.05	27.5	67.1	58.7	51.2
9.04	-58.63	-58.85	-59.84	27.69	65.9	56.2	50.5
8.64	-60.42	-58.48	-59.93	27.75	66.7	58.2	49.9
8.57	-61.3	-58.85	-60.02	27.69	66.8	56.9	51.6
8.59	-60.2	-58.79	-59.84	27.66	66	56.4	53.4
8.62	-60.86	-58.9	-59.74	27.5	66.9	58.1	49.6
8.68	-61.01	-58.22	-59.9	27.5	67.4	57	49.4
8.79	-61.34	-58.53	-59.84	27.53	66.7	56.3	49.9
8.18	-59.18	-59.16	-59.84	27.69	67.7	58.2	49.6
8.46	-60.79	-58.64	-59.93	27.72	67.9	57.2	50.7
8.64	-61.04	-58.59	-59.8	27.53	67.1	56.5	50.8
8.56	-60.79	-58.53	-59.8	27.44	68.4	58.4	49.7
8.66	-60.86	-58.53	-59.84	27.47	68.3	57.2	48.6
8.76	-61.04	-58.64	-59.93	27.5	67.6	56.7	50.8
8.57	-59.58	-58.64	-59.99	27.72	67.2	56.4	50.5
8.62	-61.26	-59.57	-59.9	27.32	73.4	65.1	49
8.62	-60.27	-57.81	-60.08	27.08	76.4	61.4	49.3
8.62	-61.23	-58.69	-59.99	27.17	74.2	64.1	48.4
8.61	-60.9	-58.43	-59.9	27.38	72.5	61.4	47
8.58	-60.49	-58.48	-59.96	27.26	73.3	62.2	50.2
8.62	-59.32	-57.81	-59.44	27.17	74.8	62.4	50.4
8.61	-60.24	-58.85	-59.71	27.08	74.4	64.8	49.3
8.62	-61.3	-59.16	-59.59	27.23	73.3	61.4	47.1
8.59	-60.6	-59.42	-59.74	27.38	71.8	59.7	50.5
8.54	-60.64	-58.12	-60.02	27.44	71.2	59.3	52.4
8.58	-59.87	-58.53	-60.02	27.53	71.2	59.2	49.3

8.53	-59.25	-58.48	-60.08	27.5	71.2	58.5	49.6
8.61	-59.95	-58.79	-59.8	27.17	71.3	58.3	49.9
8.61	-60.49	-58.74	-59.71	27.35	70.9	58.1	51.4
8.6	-60.35	-58.22	-59.77	27.29	71	57.9	50.5
8.61	-61.74	-58.28	-59.99	27.26	70.9	57.9	48
8.61	-60.68	-58.17	-59.84	27.26	70.9	56.8	50
8.52	-59.14	-58.59	-59.71	27.11	74.5	63	49
8.56	-61.85	-58.28	-59.84	27.26	73.1	59	49.1
8.69	-56.65	-58.53	-59.99	27.26	72.2	58.3	51.4
8.42	-61.04	-58.59	-59.74	27.44	73.4	60.1	50.8
8.58	-61.01	-58.53	-59.8	27.32	72.7	58.8	52.5
8.65	-60.38	-58.28	-59.9	27.23	72.6	59.2	48.6
8.56	-60.05	-59.26	-59.9	27.2	73.5	59.9	49.5
8.62	-61.12	-58.38	-59.84	27.17	72.5	59.1	51.5
8.7	-60.9	-58.33	-59.84	27.17	72.3	58.7	51.7
8.47	-60.49	-59.11	-59.77	27.08	74.5	61.6	48.4
8.61	-60.64	-58.74	-59.8	27.41	73.1	59.2	51.3
8.55	-60.31	-58.85	-60.05	27.2	72.7	58.7	47.8
8.56	-61.12	-58.28	-59.99	27.14	74.7	62.6	50.5
8.62	-61.37	-58.53	-59.9	27.2	73.3	59.3	49.2
8.62	-60.6	-58.48	-59.96	27.23	72.6	58.9	49.7
8.83	-60.68	-58.79	-59.71	27.01	74.8	62.8	51.5
8.36	-61.04	-58.59	-59.9	27.38	73.4	59.6	52.4
8.55	-60.97	-58.95	-59.68	27.32	72.5	58.9	49.1
8.65	-61.08	-58.12	-59.99	27.23	72.1	58.5	50.8
8.63	-60.24	-58.74	-59.62	27.08	73.4	60.3	47.9
8.63	-60.38	-58.43	-59.59	27.23	72.3	59.1	53.4
8.68	-60.42	-58.69	-59.9	27.2	72.3	59.4	49.7
8.47	-60.38	-58.69	-59.96	27.32	72.9	59.9	51.6
8.68	-60.02	-59	-59.8	27.44	72	58.7	49.8
8.6	-60.53	-58.95	-59.65	27.29	71.2	58.7	49.2
8.64	-60.53	-58.9	-59.8	27.14	73.1	61.1	46.8
8.56	-60.93	-58.28	-59.62	27.26	71.8	59.1	51.4
8.6	-60.93	-58.28	-59.77	27.23	71	58.9	48.1
8.01	-61.01	-58.74	-59.8	27.29	72.9	61.7	44.7
8.45	-60.93	-58.38	-59.84	27.38	71.2	59.1	50.5
8.56	-60.68	-58.48	-59.9	27.29	71	58.5	51.7
8.5	-60.9	-58.59	-59.74	27.2	72.9	62.7	50.5
8.53	-60.6	-58.07	-59.62	27.29	71.2	59.2	50.4
8.71	-60.42	-58.33	-59.9	27.26	70.7	58.7	51
8.57	-60.27	-59.16	-59.71	27.35	72.8	62.5	49.1
8.38	-60.9	-58.48	-59.53	27.41	71.4	59.2	49.2
8.66	-60.46	-58.95	-59.65	27.26	70.7	58.6	49.7
8.54	-59.1	-57.86	-59.77	27.2	72.6	62.7	50.9
8.54	-61.15	-58.12	-60.11	27.29	71.2	59.2	52.2
8.67	-58.92	-58.33	-59.65	27.26	70.8	58.4	48.4
8.51	-60.64	-58.79	-59.68	27.41	72.9	62.6	50.4

8.59	-61.3	-58.48	-59.62	27.29	71.2	59.1	49.6
8.66	-61.08	-58.79	-59.8	27.26	70.6	58.6	49.4
8.58	-60.31	-58.38	-60.02	27.23	72.4	62.4	50
8.56	-59.54	-58.48	-59.44	27.29	71.1	59	52.4
8.91	-60.64	-58.85	-59.65	27.32	70.5	58.6	50
8.5	-60.86	-58.53	-59.9	27.32	72.2	60.9	53.1
8.63	-60.93	-58.28	-59.8	27.35	70.7	58.8	49.2
8.55	-58.55	-58.59	-59.68	27.26	70.1	58.3	48.9
8.6	-59.54	-57.86	-59.74	27.29	71.5	60.6	50.2
8.68	-61.3	-58.43	-59.77	27.32	70.4	58.8	49.5
8.87	-60.71	-57.6	-59.9	27.17	70.4	59.5	50.8
8.56	-60.64	-58.64	-59.74	27.5	70.9	59.3	55.2
8.61	-60.64	-58.64	-59.68	27.29	70	58.6	51.4
8.5	-58.3	-58.64	-59.53	27.26	71.9	62.7	49.5
8.62	-59.43	-58.12	-59.96	27.35	70.3	59	47.9
8.66	-60.42	-58.79	-59.47	27.29	69.9	58.4	48.4
9.08	-61.01	-58.59	-59.68	27.2	72	61.4	50.2
8.6	-60.64	-58.59	-59.8	27.41	70.3	58.7	50.1
8.56	-60.42	-58.59	-59.68	27.2	70	58.3	48.4
8.64	-60.64	-57.91	-59.53	27.29	71	59.4	50.5
8.67	-60.64	-59.11	-59.74	27.35	70.1	58.5	50
9.01	-60.71	-58.9	-59.62	27.23	72	62.7	48.1
8.59	-60.6	-58.07	-59.77	27.41	70.6	58.8	51.1
8.51	-57.78	-58.95	-59.77	27.32	69.6	58.2	50.9
8.53	-60.27	-57.81	-59.62	27.2	71.2	60.6	49.7
8.67	-60.79	-58.79	-59.53	27.35	70	58.6	50.7
9.08	-60.16	-58.64	-59.68	27.08	70.2	60.2	51.3
8.47	-61.15	-58.48	-59.77	27.41	70.1	59.2	51.6
8.63	-60.64	-58.43	-59.74	27.29	69.2	58.2	49.3
8.65	-60.64	-58.17	-59.5	27.29	71.2	61.6	49.6
8.56	-59.07	-58.38	-59.53	27.35	69.8	58.4	53.3
8.6	-59.4	-58.48	-59.62	27.35	70.2	59.9	51
7.79	-60.75	-58.85	-59.53	27.41	70.5	59.1	47.7
8.45	-60.24	-57.65	-59.62	27.5	69.6	58.2	50.5
8.65	-60.31	-58.69	-59.68	27.2	71.2	61.4	50.7
8.53	-59.84	-59.31	-59.68	27.29	70.1	58.4	50.4
8.71	-61.3	-58.33	-59.71	27.23	70.7	60.2	49.1
8.53	-60.42	-57.55	-59.59	27.35	70.5	58.8	46.6
8.62	-60.86	-58.64	-59.35	27.32	69.7	58.2	49.7
8.48	-58.66	-58.22	-59.56	27.23	71.2	60.7	50.5
8.53	-58.63	-57.34	-59.84	27.29	69.9	58.5	49.5
8.51	-60.49	-58.48	-59.5	27.2	70.8	61	49.9
8.54	-60.93	-58.12	-59.59	27.41	70.4	58.8	51
8.52	-60.82	-58.17	-59.62	27.29	69.3	58.2	51.4
8.58	-59.07	-58.48	-59.35	27.26	71.2	60.3	49.3
8.65	-60.68	-58.69	-59.68	27.29	70	58.5	50.9
7.85	-60.46	-58.48	-59.62	27.32	71.9	62.5	52.6

8.5	-60.71	-58.12	-59.65	27.35	70.3	58.6	47.3
8.59	-60.42	-58.79	-59.22	27.23	69.4	58.2	50.7
8.53	-58.48	-58.9	-59.59	27.2	70.7	59.5	52.2
8.71	-59.84	-58.59	-59.5	27.32	69.7	58.4	49.3
8.58	-60.27	-58.53	-59.59	27.38	71.3	62.4	50.1
8.62	-61.01	-58.79	-59.35	27.23	70.1	58.4	47.6
8.54	-60.9	-58.07	-59.41	27.14	71.2	61.5	51
8.64	-60.16	-58.28	-59.59	27.2	70.2	58.9	50
8.65	-60.05	-58.48	-59.32	27.26	69.3	58.2	48.3
8.5	-57.93	-57.86	-59.35	27.35	71.1	60.6	48.8
8.52	-58.7	-58.43	-59.44	27.23	69.6	58.2	51.9
8.53	-59.03	-57.81	-59.56	27.11	71.3	62.5	51.4
8.62	-59.54	-58.02	-59.26	27.23	70.1	58.9	51.3
8.89	-60.46	-58.59	-59.35	27.2	70.1	58.2	49.3
8.64	-60.53	-58.59	-59.38	27.32	71.3	59.7	51.1
8.5	-61.15	-58.38	-59.47	27.23	70.2	58.2	52.1
8.65	-60.27	-58.69	-59.56	27.17	72	62.6	50.4
8.54	-59.47	-58.38	-59.53	27.23	70.4	58.9	48.7
9.23	-60.27	-59.26	-59.47	27.26	69.7	58.4	51.1
8.47	-60.16	-58.02	-59.56	27.32	71	59.8	48.6
8.57	-59.25	-58.38	-59.47	27.23	69.8	58.4	49.7
8.64	-60.68	-58.28	-59.47	27.11	71.5	62.7	48
8.52	-60.46	-57.39	-59.44	27.2	70.1	58.9	48.4
8.44	-58.7	-57.65	-59.26	27.32	69.3	58.3	51.5
8.58	-60.31	-57.76	-59.41	27.35	71.2	60.5	49.2
8.65	-60.35	-58.64	-59.47	27.2	70.1	58.7	49.9
8.57	-59.76	-58.07	-59.68	27.01	71.8	61.5	49.8
8.59	-60.35	-58.17	-59.04	27.14	71	59	50.7
8.53	-59.73	-58.43	-59.38	27.41	70.1	58.4	48.2
8.58	-61.04	-58.85	-59.32	27.11	71.5	60.3	49.7
8.58	-59.58	-57.86	-59.22	27.2	70.3	58.8	50.8
8.66	-60.38	-58.53	-59.29	27.08	70.7	60.2	47.3
9.03	-60.86	-58.22	-59.38	27.2	71	59.5	47.8
8.48	-58.88	-58.69	-59.44	27.32	70.7	58.4	43.4
8.65	-60.46	-57.7	-59.19	27.05	72.8	62.7	49.1
8.61	-59.43	-57.6	-59.29	27.14	71.2	59.1	48.9
8.62	-60.6	-58.17	-59.38	27.11	70.7	58.5	50.9
7.78	-60.75	-58.43	-59.19	27.14	72.6	61.4	47.9
8.42	-58.37	-57.7	-59.5	27.29	71.2	58.7	50.2
8.5	-59.8	-58.38	-59.19	27.08	71.1	58.5	48.4
8.67	-60.42	-58.22	-59.35	26.95	72.7	60.2	49.1
8.71	-60.35	-58.53	-59.1	27.05	72.1	58.8	51
7.73	-60.05	-58.48	-59.47	27.01	74.2	61.2	49.7
8.53	-60.05	-58.43	-59.38	27.14	74.4	59.8	46
8.66	-60.2	-57.81	-59.44	26.98	74.5	59.1	51.6
8.62	-60.24	-58.33	-59.29	26.92	74.6	59	50.2
8.6	-59.84	-58.69	-59.35	26.89	76.2	60.8	50.2

8.67	-60.31	-58.95	-59.38	27.05	76.1	59.3	48.4
8.5	-61.12	-59	-59.22	26.8	76.4	59.2	48.8
8.59	-60.82	-58.17	-59.44	26.65	78.9	63.2	50.4
8.63	-60.75	-58.17	-59.35	26.89	77.5	59.9	48.7
8.94	-60.53	-57.91	-59.13	26.77	77.6	59.7	48.4
8.61	-60.38	-58.02	-59.22	26.83	78.8	61.1	51.1
8.61	-60.35	-58.28	-59.26	26.68	79.1	60.8	52.3
8.54	-58.44	-58.9	-59.44	26.71	79.1	60.2	48.8
8.61	-59.36	-58.74	-59.26	26.68	79	59.9	50.4
8.64	-59.76	-58.38	-59.35	26.89	80.8	63.6	53.3
8.64	-60.09	-58.12	-59.47	26.74	79.1	60.6	51.1
8.59	-59.76	-58.02	-59.13	26.74	78.6	60.2	49.2
8.56	-59.8	-58.02	-59.22	26.83	78	59.8	49.6
8.36	-58.19	-57.86	-59.47	26.83	79.9	63.6	49
8.37	-60.79	-58.28	-59.32	26.98	78.8	60.5	52.3
8.66	-60.75	-58.48	-59.44	26.83	78.5	59.8	49.6
8.55	-58.85	-59.16	-59.35	26.77	78.1	59.7	48.1
8.27	-59.73	-58.17	-59.44	26.98	78.8	61.5	50.5
8.63	-59.32	-57.81	-59.5	26.89	78.1	60.8	49.7
8.54	-57.67	-58.53	-59.16	26.98	77	60.2	49.8
8.54	-60.05	-57.91	-59.29	26.98	76.8	59.7	51.4
8.07	-58.19	-58.22	-59.13	27.01	76.6	60.3	48.8
8.46	-59.62	-58.07	-59.35	27.17	76.9	60.5	49.9
8.56	-59.1	-58.48	-59.38	27.11	75.6	60.2	50.9
8.53	-60.35	-58.43	-59.5	27.08	74.9	59.6	44.5
8.78	-59.07	-58.33	-59.22	27.01	76.6	63.4	48.7
8.53	-59.95	-57.91	-59.44	27.26	75.2	60.3	48.1
8.64	-60.02	-58.22	-59.32	27.17	74.4	59.8	50.4
8.58	-60.9	-58.38	-59.29	27.14	74.1	59.3	50.9
8.85	-60.79	-58.33	-59.44	27.11	74.8	61.1	48.9
8.55	-60.71	-58.22	-59.32	27.38	73.5	59.7	49.6
8.64	-60.13	-58.64	-59.19	27.26	72.4	59.4	49.4
8.62	-60.31	-58.17	-59.22	27.17	74.1	63.1	48.4
8.88	-61.04	-58.22	-59.38	27.35	72.3	59.8	50.2
8.66	-60.75	-57.81	-59.47	27.56	71	59.2	48.9
8.57	-60.71	-58.02	-59.35	27.23	71.6	61.4	51.3
8.62	-59.91	-58.33	-59.26	27.41	70.9	60.1	50
8.58	-58.66	-58.12	-59.38	27.47	69.8	59.2	48.3
8.56	-59.84	-58.17	-59.32	27.75	69	58.7	50.5
8.55	-59.58	-57.81	-59.26	27.38	70.2	60.6	50.7
8.56	-60.13	-58.48	-59.35	27.44	69	59.2	49
8.69	-60.02	-58.22	-59.53	27.56	68	58.8	49.4
8.56	-58.88	-57.91	-59.38	27.78	69.2	60.4	48.4
8.57	-58.7	-58.59	-59.38	27.66	67.9	58.9	50.5
8.65	-59.91	-57.76	-59.13	27.53	69	60.9	48.6
8.72	-60.13	-58.43	-59.44	27.56	69	59.8	49.9
8.69	-59.84	-58.59	-59.29	27.87	67.5	58.5	48.7

8.62	-59.62	-57.81	-59.56	27.63	69.4	63	48.7
8.58	-58.99	-58.02	-59.32	27.72	67.8	58.9	49.3
8.6	-58.55	-58.17	-59.26	27.69	66.7	58.6	46.8
8	-60.05	-58.28	-59.32	27.84	67.8	59.8	48.1
8.67	-60.09	-58.53	-59.32	27.81	66.2	58.3	51.5
8.57	-59.25	-58.22	-59.29	27.69	67.9	61.4	48.7
8.59	-60.27	-58.17	-59.38	27.81	66	58.6	51.1
8.53	-57.53	-58.07	-59.38	27.93	67.8	62.7	48.2
8.55	-59.98	-57.6	-59.56	27.81	66.2	58.8	48.7
8.63	-59.51	-58.28	-59.59	27.72	66.8	60.7	49.3
8.66	-60.46	-57.91	-59.13	27.87	65.9	58.9	48.1
7.9	-59.98	-57.55	-59.62	27.93	66.3	60.3	49.6
8.66	-59.95	-58.28	-59.47	27.84	66	59	52.2
8.6	-59.84	-58.07	-59.47	27.81	66.2	60.4	49.9
8.56	-57.93	-58.85	-59.26	27.9	65.4	58.9	50.2
8.52	-59.76	-58.28	-59.41	28.02	65.3	59.5	51.7
8.59	-59.84	-58.48	-59.41	28.08	65.5	58.8	45.3
8.67	-59.8	-57.86	-59.59	27.96	64.7	58.9	49.8
8.67	-60.02	-58.02	-59.41	27.84	65	58.9	54.1
8.85	-59.65	-58.22	-59.62	27.84	65.7	61.6	48.9
8.63	-60.16	-58.33	-59.26	28.24	64.5	58.2	50.8
8.57	-58.92	-59	-59.41	27.84	66.1	62.6	50.9
8.68	-60.05	-58.38	-59.41	28.02	64	58	49.5
8.7	-60.24	-58.43	-59.44	28.02	65.3	61.9	49.4
8.66	-60.13	-58.33	-59.56	28.24	63.6	57.5	51.7
8.61	-60.09	-57.91	-59.56	27.99	64.8	59.9	49.5
8.68	-60.09	-58.33	-59.38	28.08	63.4	57.1	46.8
8.63	-60.42	-57.7	-59.35	28.02	64.7	59.7	46.8
8.09	-60.38	-57.45	-59.38	28.11	63.2	57.8	50.2
8.58	-59.07	-57.81	-59.04	27.96	63.7	58.4	51
8.63	-59.62	-58.48	-59.32	27.9	64.4	60.3	51.9
8.58	-60.79	-58.12	-59.47	28.08	63.4	58.3	50.1
8.54	-59.43	-57.76	-59.29	28.14	64.7	62.5	46.8
8.62	-60.2	-57.86	-59.5	28.05	62.6	57.9	49.9
8.56	-60.9	-57.39	-59.47	28.08	64.2	62.4	49.7
8.6	-59.07	-58.12	-59.53	28.24	62.1	57.4	50.3
8.5	-60.13	-58.28	-59.41	28.14	64.4	62.9	48.9
8.67	-60.02	-58.28	-59.47	28.17	62	57.1	51.2
8.59	-59.25	-58.85	-59.62	28.11	63.6	60.5	51.7
8.58	-60.24	-58.33	-59.32	28.17	61.4	57.1	51.6
7.84	-60.27	-57.91	-59.35	28.27	63.6	59.2	45.6
8.55	-57.75	-58.33	-59.35	28.21	61.4	57.3	50.1
8.57	-59.65	-58.22	-59.65	28.14	62.6	58.5	46.8
8.71	-60.42	-57.6	-59.53	27.99	63.8	62.2	48.7
8.5	-60.31	-58.38	-59.47	28.39	61.9	57.5	50.4
8.44	-60.31	-57.6	-59.5	28.33	63.8	62.8	46
8.62	-59.43	-57.76	-59.56	28.27	61.6	57.1	53.4

8.71	-60.2	-56.98	-59.74	28.14	63.1	59.6	49.8
8.43	-61.23	-58.28	-59.38	28.42	61.9	58.6	48.4
8.48	-58.88	-58.02	-59.65	28.39	62.4	58.2	50.7
8.62	-60.6	-58.59	-59.29	28.05	63.6	62.1	47.3
8.67	-59.03	-58.38	-59.38	28.24	61.5	57.5	48.1
8.52	-59.84	-57.5	-59.5	28.39	63.6	62.5	49.5
8.47	-59.98	-57.45	-59.41	28.45	60.9	56.8	51.8
8.56	-57.67	-58.79	-59.38	28.3	62.1	59.4	45.2
8.68	-60.64	-58.28	-59.26	28.24	61.4	59.2	43.1
8.66	-59.18	-57.86	-59.13	28.6	61	57.4	49.7
8.65	-60.9	-57.91	-59.32	28.21	62.6	62.7	49.4
8.67	-59.76	-57.7	-59.16	28.39	59.9	56.7	49.7
8.75	-60.53	-57.76	-59.35	28.39	61.3	58.6	48.8
8.64	-60.82	-57.86	-59.19	28.45	62.3	62.2	49.1
8.66	-59.98	-58.43	-59.47	28.45	59.8	56.6	50.3
8.63	-59.95	-57.81	-59.38	28.45	61.3	59.2	48.1
8.92	-58.85	-58.22	-59.53	28.33	61.2	60.2	48.7
8.56	-59.91	-57.81	-59.68	28.66	59.9	56.8	49.7
8.68	-60.53	-57.45	-59.5	28.48	61.4	61.4	50.2
8.53	-58.63	-57.34	-59.04	28.3	60.3	59	50.5
8.63	-60.2	-57.76	-59.68	28.45	60.3	57	49.8
8.44	-60.13	-57.6	-59.65	28.63	61.6	62.2	51
8.62	-59.1	-57.76	-59.32	28.48	60	58	49
8.67	-60.2	-58.22	-59.44	28.57	60.1	57.3	52.3
8.42	-60.97	-57.86	-59.44	28.6	62.2	62.5	48.4
8.54	-60.53	-58.48	-59.41	28.63	59.7	57.1	50.5
8.58	-59.4	-58.07	-59.62	28.42	60.4	57.3	51.4
8.7	-59.87	-58.28	-59.47	28.39	61.8	62.6	48.4
8.17	-59.87	-58.17	-59.38	28.63	59.9	56.6	50
8.57	-59.65	-56.51	-59.38	28.54	61.3	57.5	51.5
8.63	-60.02	-58.74	-59.41	28.42	62.8	62.9	51.8
8.62	-59.51	-57.76	-59.47	28.51	60.5	56.5	47.1
8.21	-60.24	-58.12	-59.35	28.57	61.9	58.2	48.1
8.57	-59.95	-57.86	-59.26	28.3	63.6	62	50
8.7	-60.46	-58.02	-59.41	28.39	61.7	57.1	47.9
8.64	-58.92	-58.22	-59.38	28.33	63.6	60.3	49.9
8.58	-59.58	-57.86	-59.47	28.57	62.2	58.2	50.5
8.69	-60.27	-57.45	-59.22	28.39	63.3	58.1	52.4
8.62	-60.71	-58.12	-59.35	28.21	65.4	63.3	49.2
8.9	-60.13	-58.33	-59.56	28.33	62.8	57.2	50.2
8.59	-60.38	-58.43	-59.19	28.42	64.9	62.5	50.4
8.53	-58.77	-58.53	-59.13	28.33	63.4	57.1	48.6
8.72	-59.95	-58.07	-59.47	28.17	65.4	60.4	50.2
8.74	-60.31	-58.59	-59.1	28.14	63.9	57.4	47.1
8.48	-58.88	-57.55	-59.41	28.27	65.6	58.7	49.5
8.6	-60.02	-57.45	-59.19	28.02	66.2	60.9	49.5
8.62	-59.43	-58.22	-59.59	28.14	65.7	58.3	48

7.82	-59.4	-57.91	-59.22	28.17	67.6	63.1	49.2
8.54	-59.95	-58.48	-59.35	28.21	65.6	57.6	49.1
8.67	-60.53	-58.48	-59.35	28.02	67.9	63.6	49.5
8.57	-58.66	-57.91	-59.1	28.24	65.5	57.9	43.4
8.38	-60.42	-58.28	-59.19	28.24	67.5	63.4	49.6
8.69	-59.65	-56.98	-59.29	28.27	65.4	57.8	52.8
8.61	-60.02	-58.22	-59.32	28.14	66.9	60.7	48.6
8.74	-60.13	-58.28	-59.59	28.3	65.8	57.5	48.8
8.63	-60.24	-58.48	-59.19	28.24	67.5	59.8	48.4
8.69	-59.98	-58.53	-59.01	28.08	66.4	57.2	51.5
8.67	-59.87	-57.91	-59.38	28.02	68	61.1	50.1
8.58	-59.8	-58.33	-59.29	28.14	66.5	57.6	48
8.57	-59.29	-59.42	-59.41	28.33	67.2	59.2	50.3
8.68	-60.31	-58.12	-59.32	28.08	66.3	58.2	50.7
8.62	-60.24	-58.17	-59.26	28.08	66.8	58.3	47.5
8.6	-57.75	-56.87	-59.53	28.02	68.8	63.6	50.4
8.49	-60.82	-58.07	-59.22	28.24	66.8	58.2	50.2
8.53	-60.75	-57.65	-59.38	28.21	68.2	61.4	48.6
8.62	-59.25	-58.38	-58.89	28.17	66.7	58	50.9
8.59	-60.86	-57.91	-59.41	27.9	69.1	63.4	49.9
8.74	-56.58	-57.91	-59.19	28.08	66.7	57.9	48.9
8.65	-60.09	-58.28	-59.22	28.27	68.3	63.1	49.1
8.65	-60.46	-57.6	-59.35	28.17	66.2	57.8	50.3
8.59	-59.1	-58.17	-59.22	27.99	67.9	62.5	51.6
8.8	-60.46	-57.24	-59.22	28.14	66.5	58	50.5
8.57	-60.16	-57.76	-59.41	28.24	68.5	63.5	47.4
8.62	-60.24	-58.17	-59.38	28.14	65.8	57.6	49.3
8.63	-59.62	-57.6	-59.47	28.11	67	62.5	48.2
8.73	-60.05	-58.12	-59.16	28.24	65.3	57.6	47.2
8.67	-60.02	-58.02	-59.26	28.39	66.9	60.8	50.2
8.55	-57.34	-58.9	-59.13	28.21	64.8	57.2	50.5
8.72	-60.42	-58.22	-59.35	28.11	66.6	59.8	48.2
8.63	-60.75	-58.28	-59.32	28.42	64.7	57.2	46.1
8.5	-59.98	-58.22	-59.35	28.45	66.4	59.5	54.5
8.54	-59.98	-58.28	-59.32	28.48	64.1	57.3	49.3
8.59	-59.25	-58.17	-59.35	28.21	65.8	59.8	49
8.63	-60.27	-57.65	-59.01	28.45	64	57.1	49.5
8.85	-59.95	-58.07	-59.29	28.24	65	59.2	51.1
8.6	-59.98	-58.79	-58.86	28.54	64	58.4	48.4
8.57	-57.75	-58.43	-59.5	28.27	64.6	58	50.3
8.69	-60.2	-58.12	-59.16	28.21	64.9	60.4	50.8
8.7	-59.76	-58.33	-59.26	28.39	64.1	58.1	49.5
7.79	-60.13	-57.65	-59.26	28.39	65.9	62.7	49.2
8.67	-59.29	-58.02	-59.16	28.42	63.7	57.5	51.3
8.58	-59.58	-58.33	-59.22	28.24	65.3	62.6	51.1
8.74	-59.98	-58.38	-59.35	28.48	63.2	57.4	51.6
8.38	-60.16	-57.81	-59.44	28.51	64.6	62.2	48.1

8.63	-60.35	-58.17	-59.59	28.66	62.5	57.1	50.5
8.7	-59.14	-57.7	-59.13	28.3	64.7	63	50.2
8.68	-59.18	-57.91	-59.29	28.51	62.5	57.1	49.5
9.03	-60.35	-57.91	-59.32	28.39	64.2	61.4	50.4
8.65	-59.76	-57.7	-59.04	28.69	61.8	56.7	51.1
8.69	-59.98	-57.76	-59.22	28.48	63.6	59.4	51
8.57	-60.75	-57.86	-59.35	28.42	62.7	59.2	48.2
8.65	-59.14	-58.22	-59.38	28.51	62.5	57.6	49.8
8.47	-58.74	-58.74	-59.19	28.54	63.9	62.4	50.3
8.45	-58.19	-57.45	-59.32	28.66	61.7	56.6	46.3
8.66	-59.98	-58.79	-59.32	28.42	63.3	60.6	46.9
8.69	-60.46	-57.6	-59.47	28.54	61.3	57	52.6
8.78	-59.07	-57.19	-59.26	28.54	62.2	58.1	48.9
8.56	-59.87	-57.7	-59.01	28.6	63.8	62.8	50.3
8.67	-60.09	-57.6	-59.29	28.51	61.2	56.7	49.6
8.61	-60.05	-57.86	-59.41	28.45	62.9	60.4	49.5
8.67	-60.05	-58.33	-59.29	28.57	61.3	57.4	50.8
8.69	-59.95	-57.6	-59.1	28.51	61.9	57.6	51.8
8.57	-59.03	-58.12	-59.29	28.57	63.6	62.5	48.6
8.62	-60.13	-58.53	-58.98	28.57	61	56.3	48.4
8.57	-60.31	-58.38	-58.95	28.45	62.6	58.9	51.5
8.77	-60.75	-57.86	-59.29	28.33	63.3	61.5	48.2
7.79	-58.77	-57.19	-59.35	28.79	61.2	56.7	54.2
8.53	-59.65	-57.86	-59.29	28.75	62.5	60.5	49.5
8.63	-59.84	-58.02	-58.98	28.51	61.1	58.2	49.7
8.64	-59.58	-57.91	-59.16	28.66	61.4	57.1	49
8.86	-60.75	-58.48	-59.32	28.48	62.8	62.4	47.1
8.59	-59.14	-57.7	-58.98	28.72	60.6	57.3	48.8
8.66	-59.65	-58.22	-59.26	28.69	61	57	49.3
8.65	-59.4	-57.65	-59.35	28.54	62.5	62.5	51.2
8.68	-60.02	-57.6	-59.32	28.66	60.1	56	50.5
8.89	-60.02	-58.12	-59.38	28.63	61.2	57.6	52.1
8.65	-59.62	-57.91	-59.35	28.63	62.6	62.5	46.5
8.57	-58.66	-57.65	-59.38	28.66	60.1	56.6	49.8
8.65	-60.24	-58.22	-59.13	28.66	61.1	57.5	47.9
8.64	-60.27	-58.17	-58.92	28.51	62.3	62.5	51.1
8.13	-59.54	-58.17	-59.22	28.75	59.9	56.5	48
8.66	-60.02	-58.59	-59.26	28.66	60.5	57	49.8
8.59	-60.42	-56.98	-59.01	28.51	61.5	61.9	49.9
8.66	-59.47	-58.59	-59.16	28.51	59.8	57.6	49.9
9.18	-59.21	-57.81	-59.16	28.66	60	56.9	49.2
8.67	-60.02	-58.48	-58.98	28.72	61.1	61.2	49.3
8.59	-59.95	-57.55	-59.29	28.54	60.7	60.2	46.9
8.67	-59.84	-58.12	-58.95	28.66	59.8	56.8	51.3
8.64	-58.7	-56.93	-58.74	28.42	61.5	62.2	50.3
8.25	-59.54	-57.55	-59.35	28.79	58.9	55.9	48
8.56	-59.95	-57.39	-59.38	28.48	61.1	59.4	51.6

8.71	-60.05	-58.38	-58.89	28.72	58.5	56.8	49.3
8.6	-58.3	-58.33	-59.47	28.72	59.3	56.6	48.6
7.86	-59.43	-58.53	-59.04	28.75	61.3	62.9	50.5
8.58	-60.75	-57.55	-59.1	28.63	59.1	58.2	49.4
8.6	-60.09	-57.91	-59.29	28.63	59.6	57	49.5
8.65	-59.47	-58.22	-59.19	28.54	59.7	59.7	50.8
8.44	-57.09	-58.02	-59.16	28.85	58.8	56.4	46.2
8.57	-59.62	-57.45	-58.92	28.75	61.1	62.8	51.4
8.64	-60.93	-58.07	-59.29	28.79	57.7	55	49.1
8.66	-60.24	-57.29	-59.26	28.63	59.8	59.1	50.1
8.93	-57.49	-58.07	-58.89	28.57	59.4	59.2	49.9
8.67	-59.54	-57.7	-58.86	28.91	59	56.3	49.2
8.66	-59.95	-57.6	-58.8	28.54	60.9	63	47.8
8.62	-60.6	-58.12	-59.29	28.75	57.6	55.9	52.1
8.74	-59.95	-58.43	-59.22	28.72	59.4	58.1	49.3
8.57	-59.62	-57.19	-59.04	28.72	59.5	59.7	47.9
8.68	-60.13	-57.86	-58.92	28.69	58.2	56.1	49.4
8.57	-58.19	-57.03	-59.19	28.51	60	61.8	50.2
8.71	-60.02	-58.28	-58.8	28.79	57.6	55.9	50
8.57	-59.87	-56.98	-58.98	28.88	59.1	57.1	50.5
8.6	-59.98	-57.6	-59.16	28.54	61.2	63.2	50.2
8.73	-60.2	-57.19	-59.13	28.69	58	55.4	49.9
8.65	-59.4	-57.08	-59.04	28.66	60.3	60.6	48.8
8.35	-58.44	-57.13	-59.04	28.66	60	60.4	53.8
8.53	-59.47	-57.39	-59.41	28.88	58.8	55.7	53.8
8.58	-60.82	-58.28	-58.71	28.63	60.3	61.4	47.6
8.62	-59.8	-57.81	-59.13	28.69	57.8	55.9	49.1
9.04	-59.95	-57.13	-59.1	28.75	59.3	57.2	49.4
8.53	-57.78	-58.17	-59.16	28.79	60.4	62	49.1
8.68	-60.42	-58.22	-58.74	28.75	58	55.2	49.9
8.61	-60.05	-57.76	-59.1	28.63	60.1	59.2	52.3
8.65	-60.46	-57.81	-58.8	28.48	61.5	62.1	48.8
8.58	-59.95	-57.29	-59.16	28.91	59.2	55.7	50.3
8.66	-59.87	-57.29	-59.04	28.45	61.9	63.1	46
8.63	-59.03	-57.7	-58.64	28.69	59.2	55.4	50.2
8.65	-60.68	-58.07	-58.98	28.57	61.3	59.2	47.5
8.67	-59.76	-57.45	-59.04	28.6	62.9	62.5	48.3
8.61	-58.7	-57.7	-58.77	28.57	60.7	56.3	48.6
8.65	-59.73	-57.81	-59.1	28.42	63.4	62.7	51.6
8.71	-59.76	-57.6	-58.98	28.51	61.4	56.7	48.8
8.57	-57.53	-57.86	-58.89	28.6	63.4	58.2	48.1
8.61	-59.91	-57.29	-58.95	28.3	62.7	58.7	50.2
8.7	-59.84	-57.86	-58.77	28.48	62.7	57	51.7
8.61	-58.33	-57.7	-59.13	28.33	65.8	63.6	46.8
8.45	-59.18	-56.98	-58.64	28.54	62.9	56.8	50.4
8.57	-59.73	-58.22	-58.95	28.45	65.7	61	48.6
8.63	-59.1	-57.65	-58.98	28.39	63.7	57.2	50.4

8.61	-59.32	-57.34	-58.98	28.3	65.4	58.5	49.6
7.88	-60.05	-58.07	-58.86	28.27	66.6	61.1	48.4
8.65	-59.47	-58.28	-59.04	28.21	65.1	57.1	47.2
8.6	-59.95	-58.22	-58.74	28.17	67.6	62.8	50.8
8.62	-58.48	-57.91	-58.74	28.24	65.5	57.1	44.2
7.98	-59.36	-57.39	-58.83	28.24	67.6	60.4	51.1
8.67	-59.73	-57.91	-58.92	28.17	65.4	57.8	47.9
8.57	-59.91	-58.53	-58.77	28.17	66.4	58.6	49.4
8.7	-59.62	-57.65	-58.71	28.05	66.5	59.5	47.6
7.84	-60.13	-58.07	-59.04	28.27	67.2	58.2	48.9
8.6	-58.3	-57.81	-58.92	27.99	67.9	61.4	48.8
8.66	-60.27	-57.81	-58.83	28.17	67.5	58	50.2
8.69	-60.05	-57.45	-58.89	27.93	69.9	63.5	50.8
8.85	-58.99	-57.5	-58.89	27.99	67.6	58.1	48.4
8.51	-59.8	-57.86	-58.83	28.14	69.7	62.2	49.5
8.56	-57.71	-56.93	-58.8	27.99	67.8	57.5	49.7
8.6	-60.05	-57.7	-58.68	27.87	70.1	61.9	47
8.64	-58.33	-57.81	-58.95	28.08	67.8	57.6	50.3
8.44	-59.84	-57.91	-58.74	28.02	69.8	62.1	48.1
8.59	-57.09	-57.65	-58.89	28.08	67.8	57.6	49.1
8.68	-59.91	-57.39	-58.71	27.87	69.3	61.7	48.1
8.18	-59.98	-58.02	-58.86	28.14	67.4	57.5	47.2
8.57	-59.98	-57.55	-58.77	28.05	69	59.6	48.2
8.57	-60.2	-57.86	-58.77	28.08	67.5	57.3	49.7
8.73	-60.27	-57.7	-59.16	27.87	68.9	59.2	49.8
8.22	-59.76	-57.55	-58.74	28.02	68.6	59.1	50.4
8.59	-59.95	-57.29	-58.86	28.02	68.7	58.4	51.9
8.68	-59.76	-57.5	-58.95	27.93	69	60.4	45.1
8.67	-59.1	-57.76	-58.92	27.96	68.3	58.2	50.9
8.43	-58.96	-57.45	-58.77	28.05	69.7	61.7	47
8.58	-60.46	-57.34	-58.92	28.02	67.9	57.9	50.5
8.62	-58.96	-57.45	-58.58	27.81	69.7	61.5	49.5
8.61	-58.63	-56.77	-58.61	28.02	68.2	58.2	47
8.53	-59.1	-57.65	-58.83	27.99	70.1	62.4	52.4
8.48	-60.16	-57.91	-58.68	28.21	67.9	57.9	49.5
8.68	-59.4	-57.7	-58.71	27.84	69.1	62.2	51.2
8.63	-59.76	-57.91	-58.83	28.05	67.5	57.9	47.3
8.84	-59.84	-56.98	-58.71	27.9	69	61.2	47.6
8.58	-59.21	-57.24	-58.71	28.21	67	57.5	49.4
8.63	-58.52	-57.7	-58.71	27.96	68.1	59.8	49.8
8.68	-59.36	-57.39	-58.86	28.11	66.3	57.3	49.5
8.82	-59.95	-57.45	-58.55	27.96	67.5	59.2	52.3
8.53	-59.43	-57.13	-58.77	28.24	66	57.6	50.1
8.68	-59.25	-57.24	-58.64	27.96	66.4	58.3	49.9
8.65	-59.62	-58.9	-58.71	27.93	66.8	60.2	49.4
8.71	-60.09	-57.34	-58.71	28.17	65.8	57.9	52.6
8.57	-60.13	-57.86	-58.71	28.11	67.6	62.1	50

8.7	-59.32	-57.13	-59.01	28.08	65.4	57.4	47.7
8.65	-59.32	-57.55	-58.77	27.99	66.9	61.5	49.7
8.83	-59.54	-56.98	-58.71	28.17	64.9	57.2	47.3
8.55	-57.27	-58.33	-58.71	28.24	66.8	60.5	51.1
8.67	-59.73	-57.65	-58.86	28.17	64.8	57.1	50.5
8.71	-60.13	-58.07	-58.58	28.11	66	58.7	51.2
8.91	-59.51	-57.24	-58.8	28.11	64.7	57.9	50.5
8.68	-60.02	-57.5	-58.68	28.24	65.8	58.3	51.6
8.7	-59.32	-58.02	-58.64	27.99	65.5	59.7	48.9
8.62	-58.59	-57.76	-58.49	28.11	65.1	57.6	50.5
8.74	-58.52	-57.76	-58.55	27.99	66.7	61.7	46.8
8.56	-58.77	-56.98	-58.83	28.27	64.7	57.1	50.2
8.67	-59.84	-57.13	-58.95	27.9	67.4	63.3	49
8.71	-59.87	-58.02	-58.58	28.17	64.7	57.2	49.1
9.02	-59.03	-57.08	-58.8	27.99	66.9	62.9	48.2
8.46	-59.1	-57.34	-58.83	28.42	64.7	57.1	50.1
8.56	-59.4	-58.12	-58.68	28.14	66.2	61.7	49.8
8.62	-60.27	-58.07	-58.43	28.14	64.1	56.9	48.9
7.79	-60.05	-58.02	-58.52	28.14	66.5	61.6	51.4
8.65	-59.91	-57.45	-58.89	28.21	64.3	57	49.7
8.65	-58.77	-57.7	-58.58	28.05	66.1	60.3	51.7
8.64	-58.41	-56.72	-58.61	28.24	63.8	57	51.9
8.62	-59.4	-56.98	-58.58	28.24	65.6	59	48.2
8.67	-59.51	-58.17	-58.71	28.14	63.9	57.1	48.7
8.66	-59.1	-57.24	-58.74	28.21	64.3	57.9	48.9
8.76	-58.63	-57.81	-58.52	27.96	66.5	62.8	49.9
8.52	-59.54	-57.7	-58.55	28.33	64.1	57	51.5
8.63	-59.07	-56.51	-58.77	28.05	65.9	62.5	47
8.69	-59.76	-57.24	-58.58	28.11	63.8	57	51
8.69	-59.14	-57.24	-58.58	27.99	64.9	59.6	47.9
8.55	-58.74	-57.76	-58.49	28.14	66.4	62.1	49.5
8.64	-58.37	-57.81	-58.58	28.14	64.1	57.1	49.5
8.64	-58.22	-57.55	-58.64	28.05	65.3	61.7	49.5
8.65	-58.41	-57.34	-58.55	28.27	63.4	56.7	49.7
8.53	-57.78	-56.56	-58.86	28.05	65.3	59.9	51
8.6	-58.48	-56.98	-58.61	28.14	63.4	57.3	49
8.81	-59.54	-57.5	-58.43	28.11	64.4	58.2	49.8
8.64	-59.8	-57.45	-58.58	28.17	65.9	62.4	46.7
8.63	-59.54	-57.24	-58.68	28.14	63.6	57.1	49.9
8.71	-59.4	-57.86	-58.46	28.05	65.8	62.4	50
8.4	-59.14	-57.45	-58.61	28.24	63.4	57	51.9
8.66	-60.16	-57.65	-58.71	28.11	65.1	61.5	50
8.67	-59.47	-57.19	-58.89	28.14	62.8	56.9	48.6
8.73	-59.4	-57.65	-58.64	28.08	64.4	58.5	50.3
8.53	-59.47	-57.7	-58.43	28.39	63.8	58.5	50.2
8.71	-59.21	-57.6	-58.58	28.17	63.7	57.5	51.5
8.66	-58.48	-57.03	-58.4	27.96	65.1	61.4	50.7

8.42	-56.83	-56.56	-58.8	28.27	63.3	57.1	52.1
8.59	-58.44	-57.76	-58.55	27.96	64.8	61.8	53.8
8.66	-58.92	-56.98	-58.37	28.08	62.7	56.8	46.2
8.73	-59.03	-57.81	-58.77	28.11	64.4	59.2	48.9
8.55	-59.65	-58.07	-58.58	28.27	63.3	58.3	48.1
8.6	-59.84	-57.34	-58.61	28.24	63.7	57.6	51.3
8.66	-59.47	-56.98	-58.68	27.9	65.3	62.4	50.2
8.53	-59.47	-57.19	-58.43	28.21	62.7	57.1	49.9
8.62	-59.07	-57.19	-58.55	28.05	64.7	61.4	50.2
8.6	-58.33	-57.45	-58.52	28.14	62.4	56.4	49.8
8.74	-59.84	-57.08	-58.49	28.11	63.9	58.3	50.9
8.06	-60.02	-57.6	-58.89	28.17	63.5	59.1	49.7
8.58	-59.29	-57.86	-58.61	28.21	63.3	57	51.3
8.65	-59.18	-57.91	-58.68	27.99	64.9	62.5	47.8
8.89	-59.32	-56.61	-58.52	28.14	62.5	56.7	46.9
8.57	-58.37	-57.29	-58.37	28.17	64.7	62.2	48.2
8.6	-56.79	-58.33	-58.52	28.14	62.3	56.2	50.1
8.63	-59.54	-57.55	-58.52	28.05	64	58.5	52.3
8.59	-58.66	-56.87	-58.55	28.11	64.1	60.2	49.2
8.64	-58.41	-57.91	-58.43	28.17	63.3	57.1	53.3
8.71	-59.95	-57.39	-58.46	28.08	64.9	62.6	50.4
8.55	-59.87	-57.5	-58.64	28.45	62.6	56.6	47.4
8.68	-58.3	-56.87	-58.49	28.05	64.3	59.2	49
8.61	-58.85	-57.81	-58.4	28.17	62.7	57.9	49.5
8.71	-58.11	-57.13	-58.43	28.11	63.7	58	48.7
8.66	-58.77	-57.45	-58.25	28.08	65	62.5	48.9
8.61	-59.65	-57.5	-58.58	28.17	62.8	56.9	54
8.59	-59.47	-57.24	-58.46	27.99	64.5	61.8	48.3
9.18	-59.4	-57.7	-58.46	28.14	62.3	56.5	49.9
8.5	-58.26	-57.34	-58.68	28.24	63.8	58.5	49.9
8.62	-59.21	-57.65	-58.58	27.99	64.8	61.7	49.9
8.7	-59.54	-57.45	-58.37	28.14	62.8	57	48
7.91	-58	-56.41	-58.71	28.08	65	62.4	46.7
8.61	-58.92	-57.39	-58.61	28.21	62.7	56.6	50.7
8.71	-59.58	-57.45	-58.58	28.08	64.3	59.3	48.6
8.69	-58.48	-57.34	-58.55	28.02	63.6	58.8	49.5
8.53	-59.65	-57.5	-58.58	28.3	63.6	57.2	51.1
8.68	-58.85	-57.45	-58.61	27.93	65.1	62.4	52.5
8.64	-58.74	-57.55	-58.49	28.21	62.9	56.7	47.7
8.74	-59.4	-57.34	-58.71	28.08	64.7	60.3	50.7
8.61	-59.29	-56.98	-58.49	28.39	62.9	56.4	47.2
8.73	-59.73	-57.13	-58.77	28.11	64.5	58.3	50.4
8.66	-59.14	-57.34	-58.58	28.05	65.1	61	50.8
8.55	-57.75	-57.29	-58.68	28.21	63.8	57.2	49.5
8.42	-58.77	-57.03	-58.8	28.24	65.8	62.9	49.4
8.58	-57.12	-56.61	-58.74	28.21	63.6	56.9	51.3
8.68	-58.85	-57.45	-58.68	28.08	65.7	61.9	49.2

7.93	-57.56	-57.19	-58.77	28.3	63.4	56.8	49.8
8.54	-59.1	-56.87	-58.8	28.05	65.1	59.5	50
8.65	-58.66	-57.81	-58.25	28.08	63.9	57.5	50.5
8.61	-59.47	-57.08	-58.49	28.05	65	58.3	47.3
7.91	-58.96	-56.98	-58.52	28.05	66.5	62	47.7
8.6	-58.66	-57.39	-58.64	28.14	64.6	57.3	51.8
8.69	-59.47	-56.82	-58.74	27.9	66.8	62.9	47.5
9.01	-59.4	-56.82	-58.68	28.05	64.9	57.3	50.1
8.56	-59.18	-56.98	-58.64	28.17	66.5	61.9	48.3
8.6	-58.26	-57.34	-58.61	28.05	64.4	56.9	50
8.7	-59.18	-56.93	-58.37	27.96	66.8	62.5	47.4
8.55	-58.08	-57.08	-58.89	28.17	64.7	57	49.8
8.65	-59.54	-56.98	-58.25	27.93	66.8	61.3	51.5
8.69	-59.32	-57.34	-58.34	28.02	64.7	57.1	50.1
8.88	-57.2	-57.65	-58.37	27.96	66.3	60.1	47.2
8.44	-58.92	-56.77	-58.55	28.24	64.7	56.9	49.2
8.6	-57.64	-56.3	-58.71	27.96	67.1	59.8	51.3
8.72	-59.43	-57.45	-58.43	27.96	65.8	57.1	52.9
8.53	-59.14	-56.98	-58.46	28.08	66.7	59.4	47.6
8.68	-59.36	-57.7	-58.68	27.93	65.7	57.9	53.5
8.72	-59.36	-57.6	-58.68	27.96	66.4	58.4	50.5
8.83	-59.4	-57.29	-58.58	27.87	66.1	59.2	48.4
8.54	-57.97	-58.02	-58.34	28.14	66.7	58.1	47.1
8.57	-59.87	-56.77	-58.58	27.96	65.9	58.5	50.5
8.68	-58	-57.81	-58.34	27.99	66.1	58.1	48.4
7.81	-59.03	-57.76	-58.61	28.05	67.2	61.3	50.2
8.71	-59.43	-57.39	-58.43	28.02	66	57.9	50.9
8.56	-57.12	-57.65	-58.37	27.81	67.9	61.9	48.6
8.95	-59.58	-57.76	-58.64	27.96	65.9	57.9	45.5
8.54	-59.21	-57.45	-58.46	27.87	67.5	61.6	46.2
8.55	-56.58	-57.24	-58.49	27.9	65.8	57.4	49.1
8.71	-59.21	-57.45	-58.52	27.93	67.8	61.8	50
7.87	-59.4	-56.61	-58.46	28.14	65.8	57.3	48.6
8.7	-58.99	-57.39	-58.46	27.9	67.1	59.3	49.8
8.6	-58.63	-57.03	-58.52	28.05	65.5	57.3	48.7
8.72	-59.87	-57.29	-58.25	27.9	67	59.9	51
8.6	-58.92	-56.87	-58.43	28.21	64.9	57.1	49.2
8.67	-59.4	-57.91	-58.37	27.9	66.4	58.7	50.5
8.71	-59.1	-57.03	-58.43	27.9	65.8	58.6	47.4
8.87	-58.88	-57.13	-58.43	27.84	66.2	58	50.3
8.67	-60.02	-57.45	-58.28	27.81	67.4	61.4	52.1
8.63	-59.36	-57.45	-58.46	28.11	65.6	57.4	50.5
8.71	-59.18	-57.39	-58.74	27.9	67.9	63	47.8
8.58	-58.37	-57.45	-58.46	28.24	65.5	57.4	47.9
8.58	-59.29	-57.34	-58.46	27.9	67.5	62.9	48.3
8.68	-59.25	-56.98	-58.4	28.02	65.1	57.5	50.7
8.55	-56.32	-57.29	-58.43	27.93	66.6	61.7	49.1

8.51	-59.32	-56.87	-58.52	28.24	64.4	57.1	49.2
8.7	-59.4	-56.82	-58.46	27.93	66.5	62.6	50.7
8.71	-59.21	-56.98	-58.64	28.14	64.2	57.3	47.9
8.41	-58.44	-56.51	-58.58	28.11	66	61.5	49.5
8.57	-59.43	-57.6	-58.37	28.11	63.8	56.9	53.4
8.68	-58.77	-56.82	-58.58	28.11	65.1	59.8	50.3
8.66	-58.44	-57.13	-58.37	28.02	64.5	59	50.3
8.55	-56.98	-58.02	-58.25	28.3	64.8	57.8	49.7
8.62	-58.99	-57.08	-58.71	27.96	65.3	60.9	46.8
8.66	-58.08	-57.19	-58.55	28.05	63.9	57.2	52.8
9.02	-57.31	-56.77	-58.49	27.93	65.5	61.6	48.4
8.45	-57.71	-56.87	-58.77	28.3	63.6	56.9	51.8
8.62	-57.12	-57.7	-58.28	27.99	65.7	61.2	50.4
8.72	-58.63	-57.29	-58.52	28.14	63.5	57	50.7
8.53	-58.66	-57.39	-58.28	28.17	65.3	59.5	49.8
8.54	-59.21	-57.6	-58.52	28.17	63.3	56.4	50.4
8.65	-59.58	-57.19	-58.77	28.17	64.6	58.3	51.7
8.71	-58.96	-57.24	-58.52	28.11	63.9	58.6	51.5
8.71	-58.99	-57.34	-58.25	28.24	64.1	57.5	49.8
8.6	-57.67	-57.65	-58.86	27.96	65.5	62.7	49.7
8.57	-55.37	-56.93	-58.55	28.17	63.6	56.9	49.2
8.81	-59.62	-57.6	-58.43	28.02	66	63.1	52.9
8.67	-59.51	-56.77	-58.58	28.39	63.5	56.7	49.7
8.62	-58.96	-56.93	-58.64	28.08	65.3	61.7	49
8.62	-58.48	-57.39	-58.61	28.3	63.2	56.7	48.8
9.21	-59.36	-56.98	-58.55	28.05	64.7	58.8	49.3
8.46	-59.8	-57.65	-58.28	28.42	62.9	56.7	50.2
8.7	-60.13	-57.03	-58.64	28.17	64.7	58.3	46.3
8.67	-59.36	-56.87	-58.55	28.17	64.4	59.7	49.3
8.7	-58.74	-56.51	-58.34	28.11	63.9	57.5	45.1
8.53	-56.87	-56.72	-58.8	28.17	65.4	62.5	48.7
8.67	-59.07	-57.65	-58.52	28.27	63.3	56.8	49.6
8.74	-59.73	-56.98	-58.71	28.11	65	61.9	49.5
8.55	-58.88	-57.34	-58.52	28.42	62.5	56.3	51.2
8.69	-59.18	-56.82	-58.64	28.14	64.1	59.2	50.5
8.56	-58.19	-56.41	-58.61	28.27	62.3	57	47.3
8.94	-59.84	-57.5	-58.4	28.27	63.2	57.8	50.1
8.53	-59.1	-56.51	-58.74	28.27	64.2	61.2	48
8.69	-58.88	-57.86	-58.55	28.33	62.1	56.7	49.5
8.72	-59.03	-56.87	-58.77	28.24	63.2	60.7	50.2
8.18	-57.78	-57.19	-58.52	28.45	62.1	58.4	49.9
8.65	-59.58	-58.02	-58.13	28.33	62	57.1	47.6
8.62	-58.52	-57.19	-58.4	28.21	63.6	62.2	48.3
8.89	-59.21	-56.77	-58.49	28.45	61.3	56.3	49.9
8.53	-58.41	-57.5	-58.64	28.48	62	58.2	49.9
8.59	-56.87	-57.6	-58.28	28.17	63.4	62	49.4
8.73	-60.31	-57.34	-58.55	28.39	60.7	56.3	48.2

8.52	-59.1	-56.93	-58.4	28.54	62.3	59.3	49.6
8.63	-60.09	-58.22	-58.28	28.3	62	59.7	47.6
8.57	-56.32	-57.29	-58.4	28.45	60.7	56.5	50.9
8.48	-59.51	-57.39	-58.49	28.48	62.3	60.9	52.9
8.63	-59.62	-57.5	-58.61	28.42	60.7	57.9	49.3
8.57	-59.29	-58.02	-58.49	28.51	60.6	56.9	48.9
8.79	-59.07	-57.24	-58.52	28.42	62.1	61.5	47.8
8.58	-58.41	-57.7	-58.4	28.48	60.6	58.1	51.6
8.71	-58.92	-56.82	-58.43	28.48	60.4	56.7	49.8
8.56	-59.14	-57.34	-58.64	28.42	61.7	61	53.1
7.89	-59.47	-57.81	-58.46	28.45	59.6	57.3	49.5
8.56	-56.76	-57.65	-58.61	28.45	60.3	57.1	50.3
8.67	-58.92	-57.24	-58.61	28.39	61.6	62.1	52.8
8.64	-58.92	-57.76	-58.37	28.42	59.9	57.3	50.4
8.63	-59.18	-57.34	-58.49	28.72	60.2	56.6	48.3
8.65	-59.43	-57.29	-58.13	28.42	61.5	61.2	51.1
8.65	-58.88	-57.81	-58.43	28.3	60.1	58.1	49.5
8.85	-58.77	-58.07	-58.49	28.48	59.9	56.3	50
8.55	-59.29	-57.34	-58.22	28.63	61.2	61.4	50.8
8.7	-59.29	-57.55	-58.55	28.33	60.3	59.3	50.4
8.62	-56.54	-56.98	-58.37	28.54	59.9	56.9	49.5
8.67	-58.66	-57.08	-58.46	28.57	61.7	62	47.5
8.64	-60.38	-57.39	-58.34	28.48	59.1	56	50.5
8.6	-58.96	-56.25	-58.19	28.33	61.4	62.5	49.9
8.7	-59.51	-57.39	-58.19	28.51	58.4	55.5	46
8.51	-58.59	-56.41	-58.89	28.63	60.3	58.5	47.6
8.61	-57.67	-57.7	-58.74	28.39	60.3	60.3	49.3
8.76	-59.54	-56.87	-58.37	28.54	59.2	56.4	48.6
8.51	-58.66	-56.72	-58.43	28.48	61.5	63.1	50
8.6	-59.47	-56.93	-58.52	28.51	58.4	55.4	52
8.65	-59.18	-57.5	-58.52	28.48	60.5	60.9	48
8.68	-59.32	-56.98	-58.19	28.6	59.1	57.3	47.8
8.68	-59.32	-56.98	-58.19	28.6	59.1	57.3	47.8
8.67	-57.75	-57.08	-58.37	28.51	59.6	56.9	50.5
8.67	-57.75	-57.08	-58.37	28.51	59.6	56.9	50.5
8.69	-58.55	-55.99	-58.55	28.27	61.2	61.8	49.6
8.58	-58.92	-57.03	-58.28	28.79	58.8	55.8	49.2
8.6	-57.56	-57.13	-58.43	28.42	60.4	59.5	50.3
8.65	-59.47	-57.5	-58.37	28.51	58.4	56.3	48.2
8.81	-58.44	-57.13	-58.58	28.54	59.8	57.4	50.4
8.58	-59.51	-56.98	-58.61	28.51	61.3	61.4	50.8
8.66	-58.92	-57.03	-58.61	28.6	59.2	56	51.7
8.71	-59.07	-57.03	-58.28	28.48	61.2	61.9	53.7
8.62	-57.78	-56.2	-58.43	28.57	60.4	59.2	48.8
8.64	-59.36	-56.98	-58.34	28.51	59.7	56.3	47.8
8.72	-59.43	-56.93	-58.55	28.33	61.4	61.6	50.9
7.89	-56.79	-56.93	-58.58	28.69	59.2	55.8	49.9

8.66	-59.4	-57.03	-58.61	28.39	61.3	62.5	49.2
8.55	-59.32	-56.56	-58.58	28.51	58.8	55.6	51.9
8.89	-58.77	-56.41	-58.55	28.42	60.3	57.9	49.8
8.55	-58.44	-56.87	-58.49	28.45	61.1	61.1	51.5
8.68	-59.25	-57.55	-58.58	28.51	58.9	55.8	49.8
8.61	-59.18	-58.38	-58.61	28.54	60.4	60.9	52.3
8.54	-57.53	-56.93	-58.22	28.66	57.7	54.7	51.6
8.58	-57.16	-56.98	-58.37	28.57	59.2	58	49.7
8.62	-59.43	-57.76	-58.49	28.27	61.2	62.8	49.5
9.24	-58.85	-57.45	-58.37	28.48	58.2	55.5	49.1
8.62	-58.04	-57.45	-58.49	28.45	59.9	61.1	49.8
8.66	-59.1	-57.24	-58.4	28.54	57.6	56.1	49.6
8.75	-58.85	-56.98	-58.49	28.48	59.2	57.5	51.1
8.52	-56.5	-56.98	-58.34	28.45	61.3	63.2	49.5
8.69	-59.25	-57.19	-58.43	28.57	57.9	55.1	49.6
8.61	-59.65	-57.55	-58.16	28.48	59.5	59.5	52.6
8.52	-59.14	-57.45	-58.61	28.42	60.3	60.7	50.5
8.66	-58.7	-56.46	-58.28	28.48	58.5	55.6	50.2
8.57	-58.26	-57.24	-58.16	28.3	60.3	60.5	47.4
8.79	-59.18	-56.87	-58.22	28.45	58.2	56	51.7
8.5	-59.29	-56.98	-58.34	28.51	59.5	57.1	51
8.66	-59.25	-57.7	-58.22	28.17	61.7	63.3	49.1
8.57	-56.9	-57.08	-58.43	28.48	58.5	55.4	51
8.71	-58.66	-57.24	-58.46	28.51	60.9	62.1	51.1
8.68	-59.4	-57.13	-58.16	28.3	59	57.3	50.8
8.58	-58.85	-56.72	-58	28.33	59.7	56.9	50.3
7.78	-59.43	-56.87	-58.16	28.42	61.4	62.7	50
8.69	-58.63	-57.6	-58.28	28.45	58.3	55.2	49.5
8.71	-59.25	-56.93	-58.4	28.27	60.2	59.7	47.7
8.49	-56.9	-56.1	-58.55	28.27	60	58.9	46.2
8.64	-58.41	-56.46	-58.25	28.39	59.2	56.1	51.8
8.6	-59.21	-56.93	-58.37	28.14	62	62.6	49
8.66	-58.63	-56.41	-58.37	28.3	59.3	56	47.3
8.68	-58.52	-57.39	-58.13	28.39	61.4	62.4	51.6
8.55	-57.42	-56.56	-58.13	28.11	59.2	55.7	47.7
8.69	-58.96	-56.46	-58.22	28.24	60.7	58.4	52.2
8.18	-57.82	-56.77	-58.19	28.33	59.9	58.4	52.4
8.65	-58.85	-57.6	-58.1	28.27	59.9	56.6	51
8.65	-58.63	-56.82	-58.16	27.93	62.1	62.9	48.7
8.48	-56.06	-56.93	-58.22	28.45	59.2	55.6	50.1
8.69	-58.33	-57.08	-58.16	28.11	61.6	62.5	48.2
8.65	-59.29	-57.19	-58.19	28.21	58.8	55.1	50.2
8.74	-59.18	-56.98	-58.1	28.24	60.7	58.8	52.9
8.64	-59.14	-57.03	-58.03	28.39	59.8	57.9	49.2
8.57	-56.76	-57.03	-58.43	28.17	60.2	56.7	50.9
8.71	-58.96	-57.24	-58.46	28.02	61.9	61.9	48.7
8.66	-58.15	-56.82	-58.19	28.54	59.6	55.7	47.8

8.59	-59.47	-56.98	-58.16	27.99	62.2	62.9	50
8.65	-58.44	-57.29	-58.06	28.27	59.3	55.8	51.9
8.63	-58.37	-57.6	-58.4	28.24	61.3	60.3	48.4
8.55	-56.98	-57.76	-58.19	27.93	61.8	61.3	47.1
8.65	-59.43	-57.34	-58.1	28.14	59.6	55.9	50.3
8.52	-58.44	-56.72	-58.06	28.17	61.9	62.5	50.3
8.6	-58.44	-56.93	-58.1	28.17	59	55.1	48.4
8.71	-58.77	-56.51	-57.97	28.05	61.4	59	48.4
9.05	-59.36	-56.51	-58.1	28.05	60.4	58.5	51.1
8.51	-58.33	-56.56	-57.97	28.24	60.6	56.7	49.5
8.61	-58.88	-56.36	-58.28	27.9	61.8	61.8	50.1
8.71	-58.22	-57.24	-58	28.05	59.5	56	50.8
8.53	-58.85	-56.36	-58.22	28.27	61.5	57.8	50.2
8.66	-58.88	-56.82	-58.03	27.99	60.5	58.5	49.8
8.64	-58.74	-56.87	-58.25	27.99	61.3	56.6	50.2
8.53	-58.55	-56.93	-58.06	28.02	63.2	62.1	49.1
8.63	-57.75	-56.87	-57.73	28.08	60.7	55.9	49.2
8.67	-59.29	-56.72	-58.19	27.87	63.4	63.1	50
8.89	-59.76	-57.34	-57.91	27.99	60.7	55.9	51
8.52	-58.77	-56.82	-58.19	28.05	62.9	60.8	49.8
8.63	-58.37	-57.34	-57.85	27.96	60.3	55.8	51.1
8.71	-58.33	-55.94	-58.06	27.9	61.9	57.3	49.3
8.55	-58.59	-56.25	-57.94	28.02	64.2	63.3	49.6
8.58	-58.52	-57.08	-58.03	27.9	61.4	56	51.4
8.59	-58.52	-56.51	-57.85	27.72	63.3	60.8	48.8
8.55	-58.96	-56.82	-58.16	27.99	62.8	59.2	51
8.57	-59.21	-56.2	-58.03	27.87	62.8	57	49.5
8.57	-58.7	-57.34	-58	27.69	63.5	59.3	53.7
8.59	-59.25	-57.19	-58.03	27.99	62.6	56.4	48.2
8.65	-58.59	-57.19	-58.22	27.75	64.7	63.2	49.6
8.6	-58.88	-56.93	-58.06	27.87	62.5	56	49.5
8.48	-59.14	-56.87	-58.19	27.69	64.4	61	48.7
8.67	-58.85	-56.72	-57.79	27.66	63.1	57.4	50.4
8.63	-58.77	-56.87	-57.88	27.75	63.6	57.1	52.4
8.58	-58.99	-56.82	-58.16	27.75	65.5	62.5	48.3
8.7	-58.77	-56.77	-57.94	27.75	63.1	56	49
8.65	-58.48	-56.51	-57.76	27.56	64.3	58.3	48.6
9.01	-57.27	-56.04	-58	27.63	65.1	61	49.7
8.59	-57.86	-55.84	-57.88	27.84	63.6	56.5	47.8
8.55	-56.43	-56.2	-57.85	27.5	65.1	61.5	51.7
9.02	-57.53	-55.94	-57.61	27.69	63.3	56.2	50.7
8.71	-58.55	-56.41	-57.91	27.53	65.5	59	53.2
8.68	-58.33	-56.61	-57.79	27.5	63.6	56.6	47.9
8.79	-58.99	-56.77	-57.64	27.53	64.6	57.9	49.1
8.46	-58.88	-58.17	-57.73	27.53	66.2	62	51.1
8.61	-59.4	-56.46	-57.97	27.53	64.1	56.8	49.4
8.74	-59.4	-56.56	-57.85	27.44	66	62	49

8.59	-59.4	-56.77	-57.76	27.5	63.7	56.1	48.6
8.71	-59.18	-56.82	-57.7	27.47	65.1	58.9	48.1
9.19	-58.63	-56.36	-57.82	27.38	64.7	58.4	51.6
8.69	-58.55	-56.51	-57.97	27.56	64.8	57.3	51.3
8.71	-58.74	-57.34	-57.79	27.29	66.8	61.9	45.6
8.15	-59.29	-56.41	-57.48	27.69	64.7	56.7	49.7
8.7	-57.93	-57.03	-57.7	27.38	66.5	61.7	47.4
8.69	-58.3	-56.2	-58.06	27.47	64.2	56.6	49.3
8.03	-58.48	-56.51	-57.97	27.53	65.8	58.8	51
8.63	-58.7	-57.29	-57.88	27.35	64.8	58.5	48.9
8.71	-59.21	-56.41	-57.76	27.44	65.3	57.5	47.1
8.32	-57.75	-57.29	-57.73	27.38	66.5	60.7	49.8
8.64	-58.37	-56.3	-57.82	27.44	64.9	57	54.1
8.6	-57.56	-56.51	-57.88	27.29	67	62.5	50.2
8.56	-56.72	-56.77	-57.94	27.66	64.8	56.8	52
8.56	-58.15	-55.58	-57.82	27.35	66.7	61.4	51
8.63	-58.92	-57.08	-58	27.38	64.7	56.9	48.4
8.58	-52.14	-50.96	-56.75	0.49	61.4	61.6	49.9
8.52	-51.3	-50.54	-56.45	0.49	60.4	58.1	49.7
8.47	-50.75	-50.18	-56.23	0.49	60.2	61.2	49.6
8.43	-50.42	-49.92	-56.02	0.49	59.3	58.8	49.8
8.38	-50.16	-49.71	-55.87	0.49	59.4	60.5	49.6
8.35	-49.95	-49.56	-55.71	0.49	58.5	58	49.4
8.32	-49.69	-49.35	-55.59	0.49	58.5	61.4	49.5
8.29	-49.51	-49.19	-55.5	0.49	58.1	58	49.5
8.28	-49.36	-49.04	-55.38	0.49	58.5	60.3	49.5
8.26	-49.21	-48.93	-55.29	0.49	57.9	59.5	49.2
8.24	-49.07	-48.73	-55.2	0.49	58.4	59.7	49.3
8.22	-48.92	-48.68	-55.04	0.49	57.7	61.6	49.3
8.21	-48.81	-48.52	-54.98	0.52	58.3	59.2	49.4
8.2	-48.7	-48.52	-54.92	0.49	57.6	63	49.5
8.19	-48.59	-48.36	-54.83	0.49	58.2	58.9	49.4
8.18	-48.48	-48.31	-54.74	0.49	57.7	63.6	49.7
8.16	-48.41	-48.21	-54.65	0.49	58.2	58.8	49.5
8.15	-48.33	-48.1	-54.58	0.49	57.7	63.7	49.5
8.14	-48.22	-48.05	-54.52	0.49	58.2	58.9	49.5
8.13	-48.15	-47.95	-54.43	0.49	57.8	63.7	49.7
8.12	-48.04	-47.84	-54.34	0.49	58.2	58.7	49.9
8.11	-47.93	-47.74	-54.28	0.49	57.8	63.7	49.6
8.1	-47.89	-47.69	-54.22	0.52	58.2	58.7	49.9
8.09	-47.78	-47.64	-54.13	0.49	57.7	63.7	50.1
8.09	-47.75	-47.53	-54.07	0.52	58.2	58.8	50.3
8.08	-47.64	-47.48	-54	0.49	57.8	63.7	50.1
8.07	-47.6	-47.38	-53.97	0.49	58.2	59	50.4
8.06	-47.53	-47.38	-53.88	0.49	57.8	63.8	50.5
8.06	-47.45	-47.27	-53.82	0.49	58.3	59.2	50.8
8.05	-47.34	-47.27	-53.79	0.49	57.8	63.6	50.9

8.04	-47.31	-47.22	-53.7	0.49	58.7	59.6	51.3
8.03	-47.31	-47.17	-53.67	0.49	58	62	50.9
8.01	-47.16	-47.07	-53.58	0.52	58.8	60.3	50.9
8.57	-52.55	-52.72	-54.62	3.21	58	60.3	47.6
8.65	-52.36	-53.24	-54.89	27.44	67.4	57.4	49.2
8.51	-52.03	-52.83	-55.07	27.26	69.1	61.5	46.8
7.85	-53.1	-54.44	-54.95	27.53	67.9	57.2	49.8
8.59	-54.74	-53.66	-55.29	27.14	70.2	62.5	52.1
8.61	-54.01	-53.66	-55.32	27.23	68.7	57.6	53.6
8.74	-55.51	-54.02	-55.32	27.17	70.4	61.2	48.7
8.62	-55.77	-54.12	-55.47	27.23	69.1	57.5	49.2
8.63	-55.55	-53.6	-55.38	27.2	70.9	61.9	46.8
8.43	-56.43	-53.71	-55.78	27.29	69.4	57.9	48.8
8.62	-56.83	-54.59	-55.59	27.14	71.2	62.2	48.2
8.69	-56.06	-54.64	-55.53	27.26	69.8	58.3	47.7
8.82	-53.42	-53.81	-55.71	27.2	71.2	62.7	50.3
8.57	-54.19	-54.9	-55.59	27.41	69.2	58.2	50
8.62	-56.1	-54.9	-56.02	27.26	70.9	61.9	50.7
8.55	-55.95	-54.28	-56.02	27.29	70.3	58.4	49.5
8.45	-55.44	-54.54	-55.99	27.26	70.7	59.7	47.6
8.5	-56.61	-54.69	-55.71	27.32	70.9	59.2	50
8.41	-55.99	-54.69	-55.99	27.32	70.3	58.6	47.4
8.68	-56.32	-54.02	-56.05	27.2	71	59.3	45.5
8.61	-56.39	-55.21	-55.87	27.14	70.4	58.2	50.4
8.6	-55.66	-54.95	-55.9	27.11	72.1	61	52.8
8.52	-56.5	-55.06	-56.17	27.44	70.4	58.2	47.3
8.71	-55.95	-54.49	-55.99	27.11	71.9	62.8	48.7
8.67	-56.17	-55.32	-55.93	27.26	69.6	58.4	48
8.56	-56.61	-53.66	-55.99	27.2	69.6	60.1	48.7
8.67	-56.03	-54.8	-56.2	27.29	69.6	58.9	46.9
8.67	-56.68	-54.69	-56.08	27.29	68.7	58	52.9
8.58	-56.28	-55.32	-56.26	27.47	69.8	59.3	48.4
8.7	-56.79	-54.95	-56.26	27.26	68.3	58.1	49.1
8.58	-56.61	-54.44	-56.2	27.23	70	60.3	51.6
8.71	-56.54	-54.54	-56.26	27.29	69	58.3	49.9
8.61	-55.99	-54.85	-56.08	27.14	70.2	61.5	49.4
8.97	-57.05	-54.64	-56.26	27.29	68.5	58.2	50.2
8.65	-56.54	-55.11	-56.17	27.23	70.5	62.6	48.4
8.66	-55.73	-55.21	-56.26	27.23	68.3	58.4	47.7
8.63	-56.58	-55.06	-56.48	27.17	69	62.1	50.8
8.62	-56.87	-55.11	-56.26	27.26	67.5	58.6	51.4
8.62	-57.53	-55.37	-56.26	27.17	68.6	61.7	49.6
8.72	-56.39	-54.8	-56.36	27.38	66.9	58.5	48
8.59	-56.5	-54.95	-56.36	27.29	66.6	59.6	48.6
8.62	-55.84	-54.54	-56.66	27.44	66.6	58.6	50.4
8.56	-56.87	-55.58	-56.51	27.35	66.6	59.6	50
8.98	-56.87	-55.47	-56.66	27.35	66.8	58.6	52.5

8.7	-56.68	-55.16	-56.42	27.35	67.2	59.7	47.4
8.5	-56.65	-55.11	-56.66	27.47	67.2	58.5	53.6
8.57	-55.33	-55.21	-56.36	27.38	67.7	60.3	51.2
7.78	-56.76	-54.49	-56.6	27.56	67	58.5	51.3
8.6	-55.73	-55.27	-56.29	27.32	67.9	61.4	48.1
8.53	-57.16	-55.32	-56.6	27.5	66.8	58.2	51.8
8.67	-57.42	-54.9	-56.63	27.17	68.8	61.8	47.8
9.17	-57.34	-55.47	-56.42	27.38	66.7	58.2	50.2
8.62	-57.42	-55.27	-56.42	27.35	68.2	62.4	50.5
8.69	-55.81	-55.21	-56.39	27.41	66.4	58	50.9
8.54	-57.05	-55.11	-56.87	27.38	68.1	62.2	49.8
8.58	-55.59	-55.89	-56.54	27.53	66	57.6	51.6
8.61	-57.27	-55.01	-56.63	27.53	67.9	60.8	51.4
8.68	-56.79	-55.21	-56.6	27.5	66	57.5	50.7
8.64	-57.27	-54.75	-57.03	27.66	66.9	59.4	49.5
8.66	-57.56	-54.8	-56.42	27.44	65.7	58.2	49.7
8.87	-56.58	-55.16	-56.63	27.47	66.5	58.6	47.5
8.65	-56.94	-55.37	-56.66	27.44	66.6	60.1	47.1
8.59	-55.59	-55.53	-56.54	27.56	66	58	49.4
8.6	-57.16	-54.33	-56.87	27.56	67.7	62	50.3
8.53	-54.93	-55.27	-56.78	27.53	65.8	57.5	48.8
8.72	-56.83	-55.37	-57.06	27.47	67.2	61.9	49.2
8.58	-56.61	-55.47	-56.94	27.63	65.3	57.2	47
8.56	-57.45	-55.58	-56.57	27.5	66.6	60.3	44.5
8.66	-56.36	-55.11	-56.87	27.9	64.7	57	48
8.61	-57.45	-55.16	-56.94	27.53	65.9	59	51.7
8.83	-56.9	-55.11	-56.69	27.53	64.9	58	50.8
8.62	-56.76	-55.16	-56.69	27.63	65.7	57.9	49.5
8.63	-56.17	-56.15	-56.84	27.35	66.3	60.5	49.6
7.71	-57.27	-55.58	-56.75	27.69	65.5	58	49.9
8.55	-55.44	-55.78	-56.9	27.5	67.8	62.5	49.7
8.63	-57.38	-55.89	-56.78	27.5	65.6	57.8	50
8.61	-56.54	-55.16	-57	27.53	66.8	62	51.1
8.64	-55.44	-55.53	-56.78	27.5	65	57.4	51.5
8.65	-57.42	-56.2	-56.66	27.72	67.6	63.3	50.5
8.68	-57.56	-56.1	-56.9	27.56	65.1	57.3	50.8
8.46	-57.09	-55.11	-56.97	27.69	67.2	63	52.4
8.63	-56.43	-56.36	-56.66	27.63	64.7	57.1	49.1
8.61	-55.73	-55.78	-56.69	27.66	66.1	61.4	47.7
8.68	-57.12	-55.58	-56.87	27.63	64.4	56.8	47.6
8.64	-56.9	-56.3	-56.87	27.63	65.9	59.9	50
8.63	-57.27	-54.95	-56.97	27.84	64.4	56.8	51.8
8.67	-56.76	-55.47	-56.87	27.53	65.8	58.5	50.4
8.89	-56.65	-55.11	-57.03	27.53	65.5	59.6	53.4
8.56	-55.66	-55.68	-57.06	27.69	64.9	57.9	51.5
8.62	-56.98	-55.63	-56.78	27.53	65.9	60.6	51
8.65	-56.39	-55.21	-56.87	27.81	65.1	57.6	47.7

8.65	-57.23	-55.16	-57	27.56	66.5	61.8	49.5
8.71	-57.49	-56.3	-56.94	27.66	64.5	57.2	48.4
8.61	-56.43	-55.73	-57	27.56	66	59.2	50.5
8.65	-58.08	-56.25	-56.94	27.69	64.5	57.1	48.2
8.67	-57.45	-55.94	-56.94	27.84	65.4	57.9	48.9
8.7	-57.2	-55.21	-57.21	27.53	65.9	60.3	54.1
8.61	-55.33	-55.63	-57	27.5	65.8	57.6	52.3
8.58	-56.5	-54.95	-57.09	27.69	66.8	61.9	48.2
8.55	-56.43	-56.1	-56.9	27.72	65.1	57.4	49.7
8.7	-54.6	-55.47	-56.97	27.47	67.2	62.9	50.2
8.55	-56.17	-55.53	-56.94	27.66	65	57.1	49.9
8.67	-56.61	-56.36	-56.94	27.5	67	62.6	45.3
8.39	-57.05	-56.15	-56.94	27.87	64.8	57.1	51.7
8.65	-57.82	-55.58	-57.06	27.53	66.7	61.2	47.5
8.72	-57.27	-55.06	-57.09	27.63	64.5	57	50.5
8.6	-57.09	-55.73	-57.09	27.81	66	58.9	51.3
8.69	-57.23	-55.32	-57.03	27.47	67.5	63.1	51.9
9.17	-57.45	-55.27	-56.87	27.75	65	57.6	50.3
8.64	-56.54	-56.2	-56.9	27.47	67.4	62.9	47
8.56	-57.31	-55.78	-56.97	27.72	64.9	57.3	48.7
7.95	-57.2	-55.53	-57.03	27.81	66.8	62.6	49.5
8.58	-57.12	-54.95	-57.3	27.81	64.7	56.9	48.8
8.59	-57.05	-55.37	-57	27.69	65.8	60.3	47.4
8.56	-57.78	-56.1	-56.66	27.78	65.8	60.3	48.6
8.64	-57.2	-54.95	-56.97	27.75	64.9	57.6	51.6
8.64	-57.86	-55.89	-57.36	27.44	66.8	62.5	48.8
8.65	-57.09	-55.63	-57.03	27.75	64.7	57.1	49.3
8.7	-57.97	-56.51	-56.87	27.63	66.9	62.8	49
8.68	-56.87	-55.84	-57.24	27.93	64.7	57.1	49.7
8.69	-57.34	-56.2	-57.3	27.63	66.4	61.2	51.2
8.62	-57.56	-55.78	-57.12	27.87	64.3	57.1	48.9
8.64	-57.64	-55.47	-57.21	27.84	66.1	59.9	47
8.67	-57.05	-55.58	-57.03	27.84	64.3	56.8	49.3
8.65	-56.9	-55.11	-57.21	27.72	65.8	59.4	53.9
8.45	-57.56	-55.89	-57.12	27.93	63.9	56.8	51.2
8.6	-55.7	-55.84	-57.21	27.69	65.5	58.5	51.6
8.7	-57.2	-55.21	-57.39	27.9	64.7	58.5	45.5
8.66	-57.12	-55.63	-56.97	27.75	65.3	57.9	47.3
8.46	-55.73	-56.04	-57.18	27.66	65.8	60.7	50.4
8.7	-58.3	-55.99	-56.87	27.75	64.8	57.4	48.4
8.65	-57.38	-56.36	-57.03	27.53	66.8	62.7	50.5
8.62	-57.45	-55.99	-57.18	27.78	64.3	56.9	49.6
8.69	-57.56	-55.11	-57.27	27.72	66.1	61.7	51.6
8.56	-57.6	-54.95	-56.87	28.05	64	57	49.4
8.65	-58.33	-55.53	-57.24	27.72	65.8	60.4	49.9
8.67	-57.09	-55.84	-57.33	27.87	63.9	56.9	49.9
8.57	-57.93	-55.84	-57.3	27.93	65.6	59	45.4

8.63	-57.12	-55.11	-57.39	27.75	65.1	59.2	50
8.41	-55	-55.89	-57.39	28.02	65.5	58.1	49.4
8.56	-55.7	-56.36	-57.21	27.63	67	61.6	51.6
8.69	-57.12	-56.1	-57.24	27.72	65.8	57.6	47.3
8.48	-57.31	-56.51	-57	27.78	67.9	62.5	52.3
8.57	-55.44	-55.89	-57.18	27.75	66.1	57.9	47.8
8.6	-57.82	-55.94	-57.18	27.63	68.2	62.4	48.7
8.5	-55.51	-56.2	-57.15	27.93	66.2	57.6	49.7
8.58	-57.45	-56.46	-57.3	27.66	67.9	61.4	48.1
8.65	-56.36	-55.99	-57.18	27.66	66.6	57.8	49.1
8.59	-57.53	-56.36	-57.18	27.53	68	57.1	50.5
8.62	-56.94	-56.04	-57.27	27.53	68.7	59.3	48.7
8.58	-55.59	-55.78	-57.21	27.81	68.5	57.6	50.8
8.64	-57.27	-56.15	-57.42	27.41	70.8	62.8	50.5
8.62	-58.08	-55.84	-57.27	27.56	69.1	58.5	47.6
8.58	-56.39	-56.04	-57.12	27.47	71.1	62.9	49.2
8.66	-57.56	-55.53	-57.33	27.56	69	58.3	49.9
8.36	-57.82	-56.36	-57.21	27.63	70.2	60.7	46.2
8.55	-54.63	-56.1	-57.39	27.47	69.6	58.6	46.7
8.6	-57.56	-55.84	-56.94	27.47	70.5	60.9	50.1
8.59	-56.83	-55.78	-57.09	27.69	69.7	58.7	48.4
8.58	-56.21	-55.94	-57.33	27.41	70	59.5	48.8
8.74	-57.16	-55.68	-57.55	27.5	70.4	59.2	52.3
8.61	-56.98	-55.84	-57.48	27.66	69.9	59.5	46.6
8.54	-57.05	-55.78	-56.97	27.41	70.1	59.2	54.8
8.53	-57.2	-56.04	-57.3	27.69	69.2	58.1	50.4
8.54	-55.92	-55.47	-57.36	27.38	71.8	60.2	50
8.62	-56.9	-55.32	-57.24	27.44	71.2	56.4	49.8
8.68	-57.2	-55.21	-57.27	27.56	71.2	56.3	46.2
8.59	-57.71	-55.94	-57.27	27.35	72.7	57.5	47.4
8.62	-57.38	-55.99	-57.21	27.44	71.2	56.2	49.8
8.56	-55.51	-55.47	-57.27	27.53	73.2	60.3	49.2
8.62	-57.67	-55.63	-57.45	27.41	71.5	57.3	51
8.63	-57.64	-55.47	-57.45	27.32	73.4	62.4	52.3
8.54	-56.76	-55.58	-57.33	27.66	71.4	57.9	48.3
8.65	-57.16	-56.2	-57.27	27.2	73.6	62.7	52.4
8.72	-57.71	-56.41	-57.45	27.38	72.1	58.7	48.4
8.47	-57.27	-55.94	-57.06	27.53	71.3	58	50
8.59	-57.71	-55.78	-57.3	27.32	73	59.6	50.9
8.47	-57.27	-55.68	-57.33	27.35	72.2	58.3	51
8.65	-57.82	-56.46	-57.24	27.26	74.5	62.8	50.7
8.62	-57.56	-56.04	-57.18	27.29	73.1	58.5	51.6
7.92	-57.56	-55.37	-57.36	27.53	71.9	58.2	51.1
8.56	-56.43	-55.78	-57.33	27.29	73	59.8	49.6
8.59	-57.97	-55.32	-57.39	27.38	71.4	58.5	48.6
8.57	-56.76	-55.63	-57.45	27.44	73.4	62.5	49.3
8.65	-57.75	-55.99	-57.3	27.35	71.8	58.8	48.4

8.64	-57.75	-55.99	-57.12	27.41	71.1	58.2	52.7
8.65	-57.82	-56.77	-57.24	27.5	72.4	59.7	50.5
8.69	-57.71	-56.3	-56.94	27.41	71.2	58.4	51.3
8.71	-57.53	-56.46	-57.21	27.35	72.7	62.7	51.4
8.6	-57.71	-55.73	-57.33	27.69	71	58.5	49.7
8.56	-56.72	-56.04	-57.21	27.41	70.2	58.1	50
8.71	-57.97	-55.78	-57.27	27.41	71.8	59.5	47.6
8.56	-58.08	-55.58	-57.55	27.66	70.2	58.2	50
8.5	-56.65	-56.41	-57.21	27.32	72	61.8	51
8.85	-57.56	-56.41	-57.09	27.44	70.1	58.5	50.8
8.49	-58.08	-56.36	-57.36	27.53	70.6	60.9	49.4
8.59	-56.68	-55.94	-57.21	27.47	69.6	58.8	49.6
8.65	-55.59	-55.84	-57.45	27.63	68.3	58.1	50.5
8.5	-57.45	-56.61	-57.21	27.75	70.2	59.2	51.5
8.53	-57.27	-55.53	-57.33	27.53	69.2	58	49.5
8.99	-58.04	-55.94	-57.3	27.44	71	60.9	48.1
8.54	-56.43	-55.94	-57.55	27.47	69.7	58.2	46.7
8.56	-58	-56.61	-57.24	27.35	70.8	62.5	49.2
8.41	-53.68	-56.36	-57.24	27.53	69.4	58.3	50
8.53	-57.09	-55.89	-57.42	27.41	69.6	59.9	46.5
8.62	-57.64	-56.04	-57.42	27.53	69.1	58.6	50.9
7.74	-57.09	-55.06	-57.55	27.66	68.1	58.1	49.5
8.57	-57.71	-56.3	-57.27	27.56	69	59	51.2
8.7	-57.64	-55.99	-57.15	27.66	67.2	57.9	51.4
8.53	-58.26	-55.99	-57.18	27.78	68.4	59.2	50.5
8.6	-58.44	-55.27	-57.55	27.66	66.8	57.3	51
8.8	-53.9	-56.61	-57.33	27.63	67.8	59.2	48.4
8.54	-57.93	-56.2	-57.33	27.78	65.9	57.5	39.7
8.6	-58.22	-56.93	-57.3	27.69	67.6	58.9	50.3
7.77	-58.04	-55.84	-57.33	27.9	65.7	57.3	50.3
8.6	-57.42	-55.78	-57.45	27.66	66.7	58.7	50.7
8.62	-57.53	-56.2	-57.33	27.69	65.5	58.3	48.2
8.6	-58.33	-56.77	-57.36	27.9	65.5	58.2	51.3
8.66	-57.67	-55.99	-57.42	27.69	65.9	60.4	52
8.86	-57.34	-56.15	-57.21	27.81	64.7	58.1	52.3
8.66	-57.75	-55.63	-57.3	27.81	66.5	62	50.2
8.66	-58.04	-56.25	-57.42	27.84	64.6	57.4	54.3
8.44	-56.98	-55.63	-57.33	27.84	66.2	61.7	49.7
8.57	-58.22	-56.82	-57.48	27.75	64.7	57.1	48.6
8.58	-57.16	-56.3	-57.27	27.75	66.1	60.5	49.5
8.56	-57.23	-55.37	-57.55	28.02	63.8	57.1	47.8
8.65	-58.48	-56.1	-57.36	27.75	65.1	58.9	48.4
8.85	-56.61	-55.84	-57.3	27.78	64.5	57.5	49.6
8.42	-58.19	-56.93	-57.21	27.87	65.1	58.2	53.4
8.55	-56.36	-55.84	-57.12	27.72	65	59.8	50.4
8.97	-57.53	-56.36	-57.09	27.84	64.4	57.6	50
8.6	-57.53	-56.2	-57.58	27.63	66.4	62.1	49.3

8.6	-56.58	-55.11	-57.3	27.72	64.1	57.4	49.1
9.18	-56.28	-56.15	-57.09	27.56	66.6	62.6	51.3
8.6	-57.6	-55.89	-57.48	27.81	64.4	57.1	48
8.65	-57.31	-57.29	-57.21	27.63	66.4	62	47.7
8.55	-57.53	-55.68	-57.55	27.9	64.4	57.1	51.1
8.63	-58.37	-56.1	-57.24	27.69	66.4	60.8	51.6
8.65	-57.05	-56.82	-57.27	27.78	64.5	57.1	50.9
8.33	-56.87	-55.78	-57.36	27.93	65.4	59.3	50.2
8.65	-57.53	-56.41	-57.61	27.78	63.9	56.6	50.5
8.62	-58.19	-56.04	-57.48	27.72	65.1	59.1	49.5
8.5	-57.42	-56.3	-57.36	27.75	64	57.2	49.1
8.58	-56.32	-56.36	-57.27	27.75	65.5	58.4	49.6
8.61	-57.82	-56.25	-57.33	27.75	64	57.6	48.1
9.12	-57.97	-56.25	-57.42	27.66	65	58.2	48.4
8.57	-56.36	-55.84	-57.12	27.63	64.9	59.5	53.8
8.63	-57.34	-56.1	-57.24	27.69	64.7	57.1	48.1
8.91	-57.56	-56.04	-57.06	27.53	66.2	62.5	50.3
8.53	-56.54	-56.04	-57.15	27.9	64.3	57.1	53.4
8.55	-56.61	-55.63	-57.06	27.56	65.8	60.9	48.8
8.75	-57.23	-56.1	-57.36	27.69	63.8	57.1	50.2
8.52	-56.98	-55.89	-57.39	27.87	65.1	58.6	51.2
8.65	-57.82	-55.78	-57.27	27.66	64.4	58.7	51.6
8.81	-57.27	-55.78	-57.15	27.69	64.5	57.9	48.9
8.52	-57.16	-55.68	-57.39	27.75	66.6	62.5	51.6
8.66	-57.31	-56.15	-57.39	27.72	64.5	57.2	49
9.16	-57.31	-56.2	-57.33	27.44	66.7	62.9	48
8.62	-58.11	-56.61	-57.21	27.69	64.5	57.1	51.3
8.65	-57.6	-55.37	-57.36	27.5	66.6	62.2	45.1
8.47	-58.15	-55.94	-57.42	27.78	64.4	56.7	49.5
8.63	-58.55	-55.94	-57.39	27.56	66.1	60.9	48.3
8.59	-56.94	-55.78	-57.12	27.66	64.2	56.9	48.2
8.57	-58.08	-56.1	-57.3	27.75	66.2	59.7	47.9
8.56	-55.73	-56.36	-57.09	27.69	64.4	56.4	49.3
8.72	-56.68	-55.89	-57.36	27.53	65.9	59.1	51.9
8.63	-57.82	-56.3	-57.3	27.53	64.4	57.9	51.2
8.66	-57.42	-56.46	-57.3	27.47	65.4	58.1	48.9
8.33	-57.23	-55.68	-57.33	27.69	65	59.5	49.8
8.67	-57.53	-56.61	-57.21	27.56	64.8	57.4	50.3
8.69	-58.22	-55.58	-57.55	27.47	66.7	62.6	49
7.85	-58.15	-56.15	-57.06	27.81	64.7	57.2	49.4
8.53	-58.44	-55.99	-57.27	27.47	66.7	61.4	50.5
8.65	-57.78	-56.3	-57.27	27.66	64.4	57.1	50.9
7.88	-57.53	-56.04	-57.33	27.78	66.1	60.3	51.8
8.62	-57.12	-56.04	-57.55	27.75	64.1	56.9	47.5
8.58	-56.32	-55.73	-57.39	27.53	65.7	58.8	46.9
7.8	-56.28	-56.3	-57.48	27.53	65.3	58.3	48.7
8.68	-57.45	-56.15	-57.42	27.47	66.4	58.3	46.1

8.62	-56.61	-55.84	-57.42	27.44	66.8	60.3	51.3
8.52	-56.54	-55.63	-57.27	27.47	66.7	58.4	50.2
8.65	-58	-56.46	-57.09	27.47	66	58.7	49.1
8.59	-58.22	-56.25	-57.18	27.44	66.6	58.3	49.9
8.75	-57.16	-56.61	-57.03	27.41	66.3	58.9	49.9
8.57	-57.71	-55.89	-57.24	27.63	66.6	58	45.7
8.67	-57.71	-55.89	-57.42	27.35	67.9	61.5	47.6
8.7	-57.86	-55.84	-57.48	27.38	66.4	57.6	50.5
8.61	-57.56	-56.15	-57.09	27.53	68.6	63.1	50.7
8.58	-58.19	-56.25	-57.33	27.44	66.8	57.5	48.9
8.56	-55.48	-56.04	-57.24	27.32	68.8	63.1	48.1
9.05	-57.53	-56.15	-57.39	27.41	66.8	57.8	49.5
8.5	-58.11	-56.41	-57.33	27.41	68.4	62.4	51.1
8.72	-57.38	-55.89	-57.33	27.44	66.8	57.5	49.6
8.59	-56.1	-55.63	-57.36	27.35	68.4	61.8	51.5
8.44	-56.47	-55.99	-57.39	27.56	66.8	57.5	49.5
8.59	-57.23	-56.2	-57.24	27.32	68.5	60.9	50.3
8.69	-57.38	-56.82	-57.21	27.32	67	57.3	50.2
8.57	-57.49	-55.32	-57.42	27.29	68.8	59.6	49.7
9.27	-57.45	-56.15	-57.09	27.23	67.6	57.8	49.9
8.71	-58.55	-55.68	-57.39	27.41	69	58.8	50.5
8.69	-57.75	-56.41	-57.48	27.17	68.7	59.4	49.1
8.71	-57.75	-55.89	-57.3	27.2	69.1	58.7	49.9
8.38	-56.87	-55.68	-57.42	27.44	68.7	57.9	49.6
8.66	-57.45	-56.41	-57.45	27.17	71.1	59.2	49.9
8.66	-58.15	-56.36	-57.27	27.08	71.2	58.2	53.3
8.73	-58.08	-56.2	-57.33	27.01	73.5	59.4	50.5
8.56	-56.36	-56.1	-57.06	27.23	72.3	58.5	49.5
8.6	-56.72	-56.36	-57.24	26.98	74.2	61.8	49.5
8.69	-57.56	-55.99	-57.3	26.95	73	58.5	49.9
8.85	-57.49	-55.84	-57.24	26.77	74.1	60.6	48
8.55	-57.45	-55.37	-57.48	27.08	74.1	59.2	48.6
8.55	-58.19	-55.47	-57.27	26.92	73.5	58.3	50
8.64	-57.56	-55.94	-57.12	26.74	75.7	62.7	51.3
8.65	-57.97	-56.2	-57.24	26.74	75.5	59.1	48.2
8.62	-57.53	-55.68	-57.15	26.71	76.3	58.5	50.1
8.54	-55.77	-56.25	-57.15	26.71	77.1	60.3	50.7
8.61	-57.12	-56.25	-57.03	26.74	76.3	59.2	51.4
8.68	-57.56	-55.94	-57.12	26.74	75.5	59.1	48.1
8.6	-57.49	-56.25	-57.27	26.89	76.9	59.9	49.5
8.65	-57.27	-55.58	-57.15	26.8	75.9	59.1	49
8.63	-57.97	-55.73	-57.24	26.68	75.6	58.9	53.2
8.41	-57.86	-55.78	-57.12	26.8	77.3	61	51.6
8.54	-58.41	-56.1	-57.3	26.74	76.5	59.2	50.5
8.57	-57.45	-55.94	-57.21	26.74	76.3	59	44.2
9.09	-57.82	-56.3	-57.18	26.53	78.4	63	49.5
8.43	-58.15	-55.73	-57.33	26.83	77	59.5	49.8

8.56	-57.64	-55.21	-57.18	26.68	76.5	59.1	51.8
8.69	-57.97	-55.99	-57.24	26.53	77.7	61.5	51.8
7.86	-58.33	-56.2	-57.3	26.77	77.4	59.7	48.9
8.69	-56.79	-55.89	-57.06	26.62	76.2	59.3	52.4
8.7	-57.86	-55.27	-57.18	26.68	76.4	59	52.5
8.63	-56.65	-56.41	-57.18	26.68	78	61	50.5
8.69	-57.23	-56.2	-57	26.83	76.9	59.5	51.6
8.62	-56.5	-56.25	-57.12	26.59	76.4	59.1	48.1
8.68	-57.38	-55.89	-57.21	26.56	78.8	63	48.3
8.7	-57.49	-55.84	-56.97	26.77	77.1	59.9	50.5
8.63	-57.23	-56.36	-57.27	26.92	76.3	59.3	50
8.67	-58.08	-55.94	-57.06	26.68	76.5	60.1	50.3
8.68	-58	-55.99	-57.15	26.71	77.1	60.5	49.9
8.71	-57.6	-56.36	-57.03	26.71	75.9	59.5	51.1
8.71	-57.27	-55.94	-57.3	26.89	75.6	59	53.7
8.62	-57.67	-55.94	-57.24	26.62	76.6	61.5	48.3
8.62	-57.27	-55.53	-57.21	26.62	75.8	59.6	51
8.68	-56.79	-55.63	-57.27	26.74	75.4	59.3	50.5
8.55	-56.65	-55.68	-57.24	26.92	76.7	62.9	49
8.59	-56.28	-55.89	-57.24	26.8	75.2	59.8	50
8.6	-54.96	-55.89	-57.24	26.8	75	59.3	50.8
8.68	-58.08	-56.56	-57.18	26.8	75	58.9	48.9
7.8	-57.82	-55.99	-57.18	26.89	76.4	60.5	48.2
8.67	-57.38	-55.68	-57.33	26.89	75.2	59.4	52.4
8.57	-55.04	-55.89	-57.21	26.8	74.5	59	52.7
8.63	-57.64	-56.56	-57.36	26.77	75.9	62.5	51.9
8.58	-54.96	-56.15	-57.15	27.01	74.6	59.4	47.2
8.62	-57.27	-56.3	-57.21	27.01	73.8	59.1	51.2
8.58	-57.38	-56.1	-57.39	26.8	74.6	61.4	51.6
8.42	-55.95	-55.78	-57.24	26.98	74.8	59.7	48.1
8.54	-55.59	-56.41	-57.45	26.83	74.2	59	47.9
8.59	-56.39	-55.84	-57.15	26.89	73.5	58.7	46.2
8.65	-54.78	-55.94	-57.36	26.83	73.7	60.6	49.9
8.55	-54.85	-55.16	-57.24	27.2	72.3	59.1	50.3
8.61	-56.54	-55.58	-57.39	27.01	71.9	58.8	48.8
8.56	-55.66	-56.56	-57.36	26.98	73.1	61.2	46.7
8.54	-57.23	-56.04	-57.45	27.14	70.7	59.2	49.8
8.7	-57.64	-55.53	-57.24	27.2	71.3	58.7	49.3
8.66	-57.42	-55.99	-57.61	27.05	72.5	61.1	50.4
8.71	-57.31	-55.63	-57.39	27.11	70.9	59	52.8
8.44	-56.94	-55.27	-57.64	27.26	69.8	58.5	50.8
8.54	-57.71	-55.73	-57.42	27.17	71.3	61.1	48.2
8.62	-57.45	-55.58	-57.18	27.23	70.1	58.7	47.9
8.74	-57.09	-55.94	-57.3	27.2	69.2	58.5	52.6
8.56	-56.94	-55.89	-57.3	27.38	70.1	59.7	49
8.7	-57.75	-55.78	-57.33	27.23	69	58.4	51.6
8.62	-57.56	-55.94	-57.24	27.08	70.6	62.1	49.1

8.7	-57.97	-55.94	-57.45	27.23	69.6	58.9	44
8.6	-57.56	-55.73	-57.45	27.38	69	58.2	51.4
8.63	-57.45	-55.99	-57.39	27.11	70.5	60.5	47.6
8.68	-57.75	-55.89	-57.55	27.26	69	58.7	46.2
8.67	-57.53	-55.99	-57.3	27.08	71	62.4	51.7
8.55	-57.45	-56.41	-57.15	27.41	69	58.9	47.7
8.52	-57.12	-56.46	-57.48	27.29	68.1	58.2	50.9
8.68	-57.42	-55.78	-57.36	27.26	69.7	60.4	48.7
7.86	-56.98	-56.25	-57.3	27.47	68.1	58.3	49.1
8.63	-57.49	-55.99	-57.48	27.17	70.1	62.5	48.7
8.55	-57.34	-55.84	-57.3	27.38	68.1	58.4	50.3
8.7	-56.32	-56.3	-57.3	27.23	68.6	60.4	48.8
8.53	-57.93	-56.46	-57.45	27.47	68.2	58.5	50.4
8.56	-54.78	-56.61	-57.39	27.35	67.1	58.5	48.4
8.56	-57.6	-56.98	-57.18	27.29	68.2	59.1	50.3
8.94	-55.4	-56.04	-57.48	27.41	66.7	57.8	50.8
8.56	-58.22	-56.04	-57.36	27.56	68.1	59.2	52
8.65	-57.49	-56.3	-57.55	27.41	66.7	57.8	49
8.69	-57.38	-56.2	-57.42	27.35	68.1	59.2	49
7.78	-57.23	-56.3	-57.36	27.63	66.8	58	50.5
8.67	-57.86	-56.04	-57.24	27.41	68	59.9	50.3
8.67	-57.56	-56.82	-57.18	27.5	66.3	57.9	49.5
8.7	-57.6	-56.25	-57.48	27.41	68.1	59.7	50.3
8.67	-58.15	-56.3	-57.3	27.69	66.4	57.5	49
8.63	-57.75	-55.78	-57.24	27.44	67.2	59.2	48.9
8.56	-55.4	-56.41	-57.03	27.5	65.6	57.6	49.3
8.7	-58.08	-56.41	-57.45	27.44	67.2	59.2	48.3
8.54	-57.67	-55.53	-57.45	27.63	66.2	58	49.8
8.69	-57.56	-56.3	-57.42	27.5	67	58.7	50.4
8.63	-57.64	-55.68	-57.36	27.38	66.9	59.9	48.9
8.77	-56.76	-56.2	-57.42	27.5	66.7	58.5	49.6
8.55	-57.53	-55.94	-57.33	27.53	67.5	61.3	51.1
8.66	-57.86	-56.41	-57.48	27.63	65.9	58.2	51.8
8.65	-56.43	-55.58	-57.55	27.38	67.8	62.2	49.3
8.52	-57.34	-55.84	-57.58	27.75	65.5	57.8	50.7
8.7	-57.71	-56.3	-57.36	27.41	66.8	61.4	49.1
8.6	-56.87	-55.16	-57.48	27.56	64.9	57.2	49.5
8.5	-57.86	-55.89	-57.21	27.53	66.1	59.7	49.8
8.46	-56.83	-56.15	-57.39	27.9	64.1	57.1	50.5
8.56	-58.26	-55.37	-57.42	27.56	65.4	58.6	50.1
8.67	-56.72	-55.37	-57.67	27.41	64.9	59.2	49.2
7.84	-58.04	-56.36	-57.33	27.78	64.7	58.2	47.8
8.53	-57.82	-55.94	-57.58	27.47	65.4	60.8	49.7
8.71	-57.86	-56.77	-57.3	27.66	63.9	57.6	50.3
8.64	-55.77	-56.25	-57.61	27.47	66.3	63	49.5
8.58	-57.45	-56.04	-57.48	27.87	63.6	57.3	50.2
8.63	-57.56	-56.82	-57.42	27.63	65.3	61.7	49.8

8.6	-58.08	-55.89	-57.42	27.56	63.2	57	50.5
7.86	-57.31	-56.15	-57.76	27.78	65.8	62.9	49.5
8.69	-57.78	-56.15	-57.45	27.63	63.8	57	49.2
8.68	-57.45	-56.77	-57.33	27.5	65.7	61.7	49.1
8.72	-57.27	-56.1	-57.48	27.66	64.6	58.9	50
8.66	-57.09	-55.94	-57.58	27.84	65.1	58.3	46.1
8.61	-58.19	-56.3	-57.55	27.63	64.8	59.1	47.1
8.65	-57.42	-55.99	-57.45	27.66	65.5	58	49.9
9.08	-56.43	-55.99	-57.58	27.41	66.8	62.2	50.5
8.63	-56.98	-56.36	-57.33	27.75	65.7	57.8	50.1
8.64	-57.34	-56.2	-57.64	27.44	68.4	63.3	48.7
8.66	-57.34	-56.25	-57.67	27.47	66.6	58.1	48.8
8.58	-57.49	-56.1	-57.61	27.47	69.3	63.3	49.6
8.58	-58.26	-56.41	-57.58	27.56	67.6	58.2	48.4
8.59	-56.72	-55.89	-57.61	27.26	69.1	61.5	47.3
8.76	-57.82	-55.63	-57.39	27.5	68.4	58.5	52.5
8.6	-57.75	-56.3	-57.48	27.56	69.2	62.1	49.1
8.67	-57.6	-55.78	-57.58	27.44	68.3	58.5	50.4
8.63	-57.64	-55.68	-57.64	27.32	70.4	62.6	47.8
8.5	-58	-56.51	-57.58	27.53	69.2	58.6	50.8
8.56	-57.34	-56.04	-57.58	27.32	71	63.3	47.5
8.69	-57.93	-55.89	-57.67	27.35	69.3	58.5	48.3
8.77	-57.64	-56.77	-57.48	27.38	71.2	62.4	48.4
8.64	-57.16	-56.51	-57.67	27.63	69.8	58.3	49.7
8.65	-57.27	-56.72	-57.36	27.26	71.6	63	49.3
8.56	-57.16	-55.94	-57.58	27.35	70	58.7	48.2
8.38	-58	-56.98	-57.7	27.29	72	62.8	48.3
8.67	-57.75	-56.87	-57.48	27.41	70.5	58.6	47.3
8.58	-55.11	-56.36	-57.55	27.23	71.5	61.1	47.2
8.61	-55.15	-56.15	-57.58	27.32	71.2	59.2	49.6
8.61	-57.49	-56.3	-57.45	27.56	69.8	58.2	46.7
8.68	-57.49	-55.94	-57.48	27.23	71.5	59.5	50.9
8.69	-57.23	-56.93	-57.55	27.29	70.5	58.4	50.5
9.12	-57.12	-56.15	-57.48	27.29	72.2	60.3	50.8
8.47	-56.03	-56.15	-57.76	27.44	70.9	58.3	51.2
8.62	-57.23	-56.46	-57.39	27.14	73	61.5	48.8
8.72	-56.83	-56.72	-57.45	27.17	71.1	58.8	49.5
8.53	-57.64	-56.25	-57.45	27.38	73.1	62.6	49.5
8.65	-57.53	-56.36	-57.45	27.26	71.3	58.6	47.9
8.61	-56.17	-55.84	-57.58	27.23	73.3	62.7	52.3
7.85	-58.08	-55.84	-57.67	27.44	71.4	59	48.4
8.63	-57.6	-56.61	-57.7	27.11	72.9	63	50
8.57	-55.59	-56.61	-57.58	27.29	71.2	59.1	50.3
8.97	-57.97	-56.15	-57.67	27.26	71.5	60.5	49.5
8.53	-57.67	-56.36	-57.45	27.44	71.2	59.2	49.3
8.66	-57.64	-56.93	-57.36	27.29	70.5	58.9	47.7
8.56	-55.15	-56.82	-57.61	27.2	71.9	59.6	50.9

7.85	-58.11	-56.72	-57.58	27.35	70.8	59	54.1
8.56	-58.15	-56.41	-57.45	27.26	71.5	59.6	49.3
8.66	-57.97	-56.25	-57.58	27.38	69.8	58.4	48.1
8.84	-56.68	-55.84	-57.39	27.38	70.9	60.1	50.1
8.58	-56.72	-55.94	-57.55	27.63	69.6	58.2	50.5
8.63	-57.56	-55.99	-57.55	27.26	70.9	60.6	51.6
8.57	-55.92	-56.61	-57.64	27.32	69.7	58.4	47.9
8.52	-57.93	-55.78	-57.58	27.44	70.7	59.8	47.3
8.57	-57.23	-56.46	-57.39	27.32	70	60.2	49.1
8.68	-57.71	-56.3	-57.61	27.38	70.1	59.2	48.3
8.47	-57.34	-56.82	-57.36	27.35	71	62.9	49.5
8.56	-55.66	-56.15	-57.64	27.41	69.2	58.9	50.2
8.64	-58.19	-55.89	-57.48	27.26	70.8	63.3	51.9
8.79	-57.34	-56.51	-57.36	27.35	68.7	58.8	50.5
8.58	-57.97	-56.2	-57.39	27.56	70	61.8	52.3
8.65	-58.26	-56.56	-57.58	27.47	67.9	58.3	50
8.6	-56.47	-56.46	-57.64	27.5	69	60.4	51.7
8.55	-56.54	-55.16	-57.67	27.66	67.6	58.6	51.6
8.66	-58.41	-56.72	-57.48	27.44	68.3	59.7	50.9
8.57	-57.31	-56.36	-57.76	27.47	67.8	60.3	49.8
8.44	-58.08	-56.25	-57.94	27.78	67.8	59.4	50.2
8.68	-57.2	-55.94	-57.58	27.5	66.8	59.1	50.5
8.59	-56.72	-55.73	-57.55	27.56	67.4	59.1	50.1
8.88	-57.45	-56.3	-57.64	27.47	69	64.2	52.6
8.49	-57.56	-56.72	-57.67	27.84	66.3	58.3	52.2
8.59	-58.11	-56.1	-57.61	27.63	68.2	63.4	51.1
8.63	-57.45	-56.1	-57.7	27.75	65.8	58.5	50.2
8.61	-57.86	-56.3	-57.67	27.78	67	61.5	50.4
8.6	-57.49	-56.51	-57.45	27.72	65.3	58.1	48.2
8.59	-57.75	-56.2	-57.39	27.72	66.3	59.9	50.1
8.43	-57.67	-56.87	-57.64	27.84	64.6	57.6	47.9
8.59	-56.54	-56.25	-57.55	27.56	66.2	59.6	51.2
8.7	-58.26	-56.61	-57.58	27.81	64.5	58.3	50.5
8.87	-57.67	-56.36	-57.64	27.81	65.4	58.8	48.4
8.45	-57.75	-56.3	-57.67	27.72	66.5	62.5	51.1
8.71	-57.2	-57.03	-57.61	27.81	64.7	58.2	47
8.61	-55.84	-56.3	-57.76	27.53	65.3	60.9	50.5
8.48	-57.6	-56.1	-57.58	27.9	64.4	58.3	48.7
8.59	-56.58	-57.29	-57.73	27.78	64.7	60.8	49.8
8.56	-57.34	-56.87	-57.73	27.78	63.6	57.9	49.4
8.67	-57.67	-56.1	-57.55	27.72	65.4	63	49.5
8.55	-58.04	-56.82	-57.61	28.08	63.2	57.4	46.2
8.7	-58.55	-55.78	-57.7	27.72	64.7	62.5	48.3
8.6	-54.12	-56.56	-58	27.87	62.9	57.4	49.4
8.55	-56.65	-55.84	-57.88	27.99	64.8	61.7	49.2
8.63	-57.09	-56.72	-57.67	27.93	62.5	57.1	52.5
8.61	-57.56	-56.04	-57.82	27.96	63.7	59.2	49.7

8.94	-56.83	-57.45	-57.58	27.78	64.1	61.1	51.8
8.49	-55.15	-56.04	-57.58	28.11	62.5	57.5	51.1
8.68	-57.75	-56.46	-57.55	27.84	64.3	61.9	49.2
8.56	-57.31	-56.46	-57.67	28.08	61.9	57.1	49.9
8.57	-57.56	-56.46	-57.85	28.08	63.8	62.6	49.4
8.68	-57.23	-56.87	-57.67	28.05	61.5	56.7	49.9
8.61	-56.17	-56.1	-57.91	27.93	63.6	59.9	48.8
8.47	-57.34	-55.84	-57.67	28.02	62	57.1	50
8.62	-57.53	-56.77	-57.48	27.93	63.3	58.2	50.4
8.68	-57.78	-56.56	-57.73	27.93	62.5	58.5	51
8.79	-55.18	-56.93	-57.85	27.99	62.8	57.9	48.3
8.56	-57.75	-56.46	-57.79	27.99	64.7	62.9	51
8.66	-57.27	-56.1	-57.45	27.99	62.4	57.1	47.3
8.74	-57.49	-56.46	-57.73	27.84	64.5	62.7	48.4
8.56	-56.36	-56.04	-57.73	28.11	62.1	56.8	49.7
8.58	-55.22	-57.13	-57.94	27.96	64	60.8	49.2
8.68	-57.53	-56.3	-57.79	27.93	62.1	57.6	49.9
8.45	-55.62	-56.41	-57.76	28.11	62.5	58.1	50.8
8.67	-57.56	-56.56	-57.85	28.05	62.1	59.1	49
8.62	-56.03	-56.51	-57.85	28.08	61.7	57.3	50.3
8.95	-57.49	-56.41	-57.82	27.75	63.1	62.5	52.1
8.49	-56.36	-56.1	-57.67	28.17	60.6	56.2	48.8
8.63	-56.83	-56.3	-58.1	28.05	61.9	58.5	47.3
8.78	-55.81	-56.25	-57.88	27.96	62.4	61.4	51.5
8.62	-57.97	-56.25	-57.79	28.3	60.2	56.4	49.9
8.65	-57.27	-56.3	-57.7	27.99	61.4	61	47.3
8.72	-57.64	-56.77	-57.39	28.05	60.2	58	50.9
8.55	-57.05	-56.2	-57.85	28.33	60	56.9	50.8
8.7	-57.56	-55.73	-57.91	28.02	61.3	62.5	50.3
8.64	-57.6	-55.94	-57.64	28.14	59.2	57	53
8.87	-55.59	-56.3	-57.76	28.08	59.7	57.2	51.6
8.66	-57.75	-57.08	-57.61	28.02	61	62.2	50.2
8.68	-58.48	-56.41	-57.7	28.24	58.4	56.8	49.2
8.76	-57.82	-56.36	-57.79	28.17	59.2	57.1	49.3
8.53	-57.31	-55.99	-57.61	28.39	60.3	62.2	52.3
8.67	-57.45	-56.77	-57.55	28.17	58.9	57.6	50.3
8.66	-58.26	-56.2	-57.64	28.21	58.8	56.7	47.7
8.6	-57.12	-56.51	-57.67	28.39	60.2	61.2	46.9
8.57	-57.16	-56.3	-57.55	28.02	59.6	59.4	51.1
8.66	-58.26	-56.51	-57.97	28.17	58.7	56.2	47.3
8.96	-57.64	-56.2	-57.55	28.17	59.5	59.7	49.7
8.47	-58.7	-56.61	-57.91	28.17	60.6	61.8	49.4
8.62	-57.78	-56.87	-57.48	28.21	58.3	56.1	46.9
8.71	-57.86	-56.87	-57.91	28.17	60.9	63.1	47.8
8.64	-57.16	-56.1	-57.7	28.54	57.3	55.4	53.1
8.7	-58.48	-56.51	-57.79	28.21	59.1	59.2	48.1
8.71	-56.9	-56.2	-57.85	28.24	57.7	58.6	51.9

8.68	-57.82	-56.56	-57.67	28.48	58	56.5	49.7
8.68	-58	-56.25	-57.55	28.17	59.8	62.7	47.3
8.7	-58.22	-56.56	-57.94	28.42	57.4	55.6	49.7
8.35	-57.78	-56.46	-57.91	28.42	59.2	60.8	47.6
8.57	-57.86	-56.36	-57.55	28.11	59.3	60.6	51.1
8.61	-55.59	-56.3	-57.48	28.33	57.6	56	47.6
8.73	-57.71	-56.1	-57.7	28.14	60	63	52.2
8.65	-57.23	-56.56	-57.91	28.42	57.5	55.5	47
8.56	-54.12	-56.46	-58.06	28.24	59.9	60.1	49.1
8.72	-58.08	-56.36	-57.55	28.14	59	58.1	50.3
8.61	-57.67	-56.25	-57.82	28.45	59.7	57.2	49
8.56	-57.93	-56.51	-57.64	27.93	62	62.1	47.6
8.58	-57.34	-56.2	-57.97	28.21	59.9	56.4	50.5
8.57	-57.71	-57.03	-57.73	28.24	61.8	59.2	50.1
8.56	-58.19	-56.51	-57.64	28.11	60.5	56.5	50.8
8.61	-57.78	-56.25	-57.88	28.14	62	57.8	51.2
8.5	-57.56	-56.15	-57.91	28.02	64.7	63.6	47.9
8.55	-58.26	-56.15	-58.06	28.05	61.9	56.7	49.1
8.58	-58.26	-57.34	-57.61	27.99	64.5	62.6	46.8
8.5	-57.75	-56.51	-57.58	28.21	62.5	56.5	51.1
8.6	-58	-56.46	-57.67	27.93	64.3	58.3	50.5
8.66	-57.67	-55.84	-57.67	27.69	66.1	62.1	48.4
8.53	-57.78	-56.72	-57.67	28.11	64.7	57	47.3
8.57	-58.41	-56.72	-57.73	27.81	66.7	62.2	51.8
8.57	-58.41	-56.1	-57.79	27.93	64.7	57	47.3
8.5	-58.55	-56.72	-57.88	28.05	66.6	59.3	50.9
8.66	-57.53	-56.2	-57.79	27.78	65.4	57.3	49.5
8.6	-54.74	-56.61	-57.67	27.84	66.6	58.6	49.5
8.55	-58.08	-56.04	-57.61	27.96	66.1	59.1	46.5
8.64	-58.26	-56.93	-57.64	27.87	65.8	58.2	49.4
8.61	-58.41	-56.46	-57.76	27.63	67.9	61.1	50.5
8.54	-57.93	-57.03	-57.64	27.99	66.6	57.9	46.8
8.56	-58	-56.41	-57.7	27.66	68.9	62.7	52
8.61	-57.16	-55.32	-57.82	27.69	67	57.6	51.3
7.82	-57.67	-56.82	-57.82	27.72	69.9	63.3	50.3
8.57	-57.71	-56.72	-57.85	27.72	68.2	57.6	48.8
8.62	-57.67	-56.04	-57.91	27.56	70.2	61.8	49.6
8.32	-58.15	-55.94	-57.76	27.78	67.9	57.4	48.3
8.59	-57.38	-56.15	-57.79	27.69	70	59.7	50
8.55	-58.48	-56.36	-57.79	27.72	68.8	57.4	52.8
8.91	-57.42	-56.77	-57.67	27.5	70.3	60.3	49.5
8.47	-57.53	-56.46	-58.06	27.75	68.9	57.5	50.5
8.57	-57.09	-57.7	-57.48	27.63	70.5	59.7	49.5
8.6	-55.66	-55.94	-58.06	27.72	68.5	57.6	49.7
8.58	-57.38	-57.03	-57.82	27.72	69.4	58.9	50.7
8.69	-58.48	-56.77	-57.73	27.5	69.3	58.4	48.4
8.69	-58.3	-56.41	-57.45	27.69	69.6	58.6	52.9

8.55	-58.08	-55.89	-57.7	27.66	69	59	52.9
8.57	-58.11	-56.82	-57.55	27.66	69	58.4	49.3
8.63	-57.82	-56.36	-57.79	27.41	70.1	59.8	47.3
8.55	-55.62	-56.61	-57.64	27.84	69.4	58.2	50.8
8.61	-56.47	-56.46	-57.82	27.41	69.4	60.3	50.2
8.7	-58.26	-56.51	-57.61	27.5	68.7	58.3	51.4
8.59	-57.6	-56.98	-57.82	27.66	69.4	61.3	51.3
8.63	-58.33	-56.82	-57.73	27.63	68.6	58	53.1
8.73	-57.75	-56.1	-57.61	27.47	69.2	60.4	50.4
8.51	-55.22	-56.46	-57.58	27.78	68.6	58.2	49.1
8.68	-57.93	-56.41	-57.82	27.44	69.9	61.6	47.7
8.74	-57.82	-56.77	-57.88	27.66	68.2	58.2	43.6
8.56	-57.97	-56.25	-57.55	27.69	69.3	62.1	49.4
8.68	-57.56	-56.41	-57.73	27.63	67.8	58	50.8
8.66	-56.17	-57.29	-57.67	27.53	69.4	62.2	49.6
8.56	-56.98	-56.1	-57.76	27.9	67.1	57.6	48.8
8.66	-58.15	-56.36	-57.94	27.47	68.8	61.9	50.3
8.7	-57.56	-56.1	-57.73	27.69	66.7	57.8	49.8
8.59	-57.6	-56.3	-57.42	27.66	68.4	61.4	49.1
8.61	-57.38	-55.63	-57.76	27.69	66.7	57.3	51.8
8.65	-57.31	-56.36	-57.7	27.56	68.1	60.2	46.2
8.59	-57.49	-56.41	-57.58	27.9	66.2	57.3	49.2
8.68	-57.64	-56.46	-57.67	27.66	67.7	59	52.4
8.62	-58.41	-56.2	-57.64	27.69	66.6	58.1	48.3
8.68	-57.23	-56.51	-57.79	27.81	67	58.2	52.2
8.64	-57.38	-55.63	-57.61	27.66	66.9	59.2	50.2
8.6	-57.97	-56.77	-57.67	27.69	66.8	58.2	49.8
8.65	-57.56	-57.13	-57.64	27.69	68	61.5	50.7
8.6	-55.99	-56.2	-57.73	27.66	66.5	57.6	47.1
8.72	-57.42	-57.08	-57.45	27.66	67.9	62	50.5
8.56	-58.04	-56.51	-57.73	27.9	65.9	57.5	50.5
8.57	-56.43	-56.56	-57.42	27.63	67.4	60.8	49.6
8.63	-57.71	-55.27	-57.64	27.78	65.6	57.2	50.5
8.55	-56.36	-55.99	-57.79	27.84	66.8	59	50.9
8.65	-57.56	-56.46	-57.73	27.69	65.6	58.1	50.4
8.71	-57.82	-56.3	-57.67	27.69	66.2	58.3	50.5
8.56	-57.34	-56.77	-57.82	27.75	66.7	60.4	47.9
8.62	-58.22	-56.2	-57.67	27.69	65.8	57.8	49.7
8.59	-56.03	-56.77	-57.76	27.63	67.7	61.9	50.5
8.65	-57.49	-56.82	-57.67	27.9	65.5	57.2	49.7
8.54	-57.53	-55.99	-57.76	27.66	66.8	62.5	50.5
8.68	-57.45	-57.08	-57.7	27.75	64.6	57.2	48.4
8.53	-56.03	-55.94	-57.64	27.84	65.7	59.9	49.6
8.58	-57.86	-56.77	-57.85	27.75	63.8	56.7	48.2
8.62	-55.55	-56.1	-57.79	27.72	65.3	59.1	50.9
8.63	-58.22	-56.41	-57.64	27.93	64	57.5	49.7
8.69	-57.2	-57.03	-57.55	27.69	65	58.4	49.6

8.69	-57.31	-56.82	-57.7	27.63	64.6	59.2	50.2
8.63	-57.82	-56.82	-57.7	27.99	64.3	57.6	51.6
8.6	-55.22	-57.03	-57.76	27.56	66.2	61.8	49.7
8.7	-57.16	-56.1	-57.7	27.75	64.3	57.4	52.4
8.54	-57.49	-55.84	-57.67	27.84	66.2	62.7	46
8.65	-57.67	-56.2	-57.76	27.69	64	57.2	47.3
8.79	-57.78	-56.04	-57.79	27.69	65.5	61.4	51.4
8.55	-58.37	-55.99	-57.82	27.9	63.6	56.9	51.1
8.64	-55.99	-55.94	-57.67	27.69	65.6	60.3	51.9
8.8	-57.75	-56.56	-57.36	27.72	63.6	56.9	52.1
8.53	-53.97	-56.15	-57.88	27.78	65.4	59.2	48.2
8.71	-57.86	-56.56	-57.7	27.72	63.7	56.9	50.5
8.84	-57.23	-56.25	-57.55	27.69	64.8	58.2	49.5
8.56	-57.23	-56.36	-57.73	27.75	64.8	59.6	49.9
8.65	-57.27	-56.04	-57.67	27.72	64.8	58	47.6
8.69	-57.86	-55.63	-57.61	27.63	65.9	61.7	50.5
8.69	-57.93	-56.61	-57.73	27.78	64.5	57.4	52.3
8.62	-58.04	-56.72	-57.73	27.53	65.7	60.9	52.7
8.99	-57.82	-56.51	-57.55	27.72	63.7	57.2	49.5
8.65	-57.31	-56.41	-57.67	27.63	66.1	62.4	50.7
8.62	-57.38	-56.46	-57.39	27.72	63.8	57.1	49.9
8.55	-57.2	-56.56	-57.42	27.69	65.7	61	50.5
8.65	-57.2	-57.39	-57.48	27.72	63.6	57	47.3
8.66	-58.41	-56.15	-57.64	27.63	65.4	59.6	52.8
7.8	-56.43	-55.84	-57.91	27.9	63.3	57	48.9
8.65	-57.38	-56.25	-57.73	27.56	64.8	59.2	47.9
8.69	-56.98	-57.08	-57.67	27.69	63.1	56.8	48.7
8.53	-56.43	-56.82	-57.39	27.9	64.1	58.1	48
8.67	-56.83	-55.99	-57.3	27.56	65.7	61.9	49.9
8.79	-57.53	-55.78	-57.55	27.69	63.6	57.4	50.5
8.48	-57.71	-55.84	-57.55	27.78	65.8	62.8	50.8
8.58	-56.47	-56.1	-57.45	27.72	63.4	56.9	52.1
8.67	-57.45	-55.63	-57.55	27.66	65.1	62.4	48.1
8.66	-57.16	-56.46	-57.55	27.78	62.9	56.8	50.1
8.65	-57.09	-56.72	-57.36	27.69	64.4	60.2	49.9
8.46	-57.86	-56.1	-57.45	27.78	64	59.6	48.1
8.65	-57.6	-57.08	-57.55	27.66	63.6	57.4	51.1
8.56	-56.98	-56.93	-57.48	27.53	64.7	61.2	50.5
8.62	-57.12	-56.04	-57.73	27.9	63.3	57.1	48.8
8.68	-57.71	-56.04	-57.3	27.66	65	62.6	48
8.62	-56.5	-56.3	-57.55	27.66	63.2	57.2	48.9
8.54	-57.42	-56.61	-57.36	27.75	65.3	62.7	43.9
8.66	-57.75	-56.93	-57.55	27.56	63.2	56.8	48.3
8.75	-57.27	-56.46	-57.48	27.66	65	60.4	51.1
8.65	-57.64	-56.3	-57.39	27.56	62.6	56.6	48.8
8.69	-57.6	-56.3	-57.3	27.66	64.4	59.2	50
7.9	-57.75	-56.1	-57.48	27.75	63.4	58.2	47.6

8.7	-58.08	-56.46	-57.45	27.53	64	58	49.3
8.72	-57.2	-56.72	-57.64	27.5	63.7	59.1	50.9
8.58	-57.78	-56.82	-57.39	27.66	63.8	57.5	50
8.57	-57.27	-56.25	-57.58	27.5	65.4	61.4	48.9
8.61	-56.68	-56.77	-57.58	27.84	63.7	57.2	48.2
8.67	-57.34	-56.15	-57.73	27.41	66	62.8	50.5
8.41	-56.06	-55.27	-57.42	27.78	63.6	57.2	48.1
8.68	-58	-56.25	-57.45	27.47	65.7	62.5	50.7
8.7	-57.93	-56.25	-57.55	27.72	63.6	57	50
8.67	-57.53	-56.1	-57.64	27.47	65.5	60.8	48.3
8.66	-56.65	-56.56	-57.3	27.69	63.5	56.9	49.9
8.54	-57.23	-55.84	-57.55	27.78	64.8	59.2	47.8
8.62	-56.54	-55.99	-57.36	27.32	65.9	61.6	51.5
8.45	-58.08	-56.51	-57.33	27.66	64.3	57.5	51.9
8.62	-57.34	-56.25	-57.61	27.47	66.3	62.8	49.4
8.57	-58.26	-56.51	-57.67	27.69	63.9	57.1	50.3
8.59	-57.49	-56.82	-57.58	27.78	65.6	61.8	49.9
8.62	-57.75	-56.56	-57.7	27.66	63.6	56.8	49.2
8.95	-57.82	-55.73	-57.7	27.5	66	62.5	48.2
8.6	-57.75	-55.89	-57.48	27.66	63.6	57.3	51
8.68	-57.38	-56.15	-57.64	27.56	65.3	60.5	48.8
7.85	-56.32	-56.2	-57.73	27.87	63.4	56.9	49.1
8.61	-57.53	-55.94	-57.55	27.66	64.9	58.9	47.7
8.64	-57.6	-56.51	-57.67	27.56	63.4	57.2	50.3
8.59	-56.83	-56.2	-57.45	27.81	64.8	58.6	48.4
8.69	-57.12	-55.94	-57.58	27.47	64.6	59.9	49.4
8.62	-57.45	-56.2	-57.55	27.63	64.3	58.1	50.1
8.66	-57.49	-56.46	-57.45	27.66	64.8	60.1	49.2
8.58	-56.98	-56.2	-57.48	27.69	64.4	57.6	48.2
8.65	-53.9	-56.36	-57.67	27.44	65.7	61.6	49.7
8.64	-58.52	-56.3	-57.64	27.75	64.1	57.2	51.3
8.63	-57.09	-56.41	-57.73	27.47	66.8	63.3	49.8
8.76	-57.64	-55.94	-57.58	27.53	64.5	57.3	51.1
8.68	-57.67	-56.41	-57.36	27.56	66.7	63	47
8.59	-57.45	-56.1	-57.58	27.56	64.6	57.4	50.8
8.42	-57.38	-56.46	-57.36	27.66	66.4	61.9	49.9
8.66	-57.42	-56.77	-57.55	27.5	64.6	57.1	49.2
8.58	-56.32	-55.68	-57.67	27.5	66.8	61.7	50.2
8.66	-57.82	-56.2	-57.7	27.66	64.9	57.2	47.7
8.6	-57.53	-55.78	-57.67	27.5	66.5	59.9	50
8.71	-56.9	-56.1	-57.45	27.53	64.8	57.2	49.7
8.59	-57.71	-56.04	-57.48	27.66	66.1	59.2	52
8.53	-56.68	-56.72	-57.61	27.63	64.3	57.1	50.1
8.84	-57.09	-56.56	-57.24	27.5	66.1	59.2	50.1
8.42	-53.86	-55.99	-57.82	27.81	64.3	57.1	49.3
8.66	-57.23	-56.87	-57.58	27.53	65.8	58.9	49.3
9.04	-56.65	-56.56	-57.45	27.47	65.7	58.5	51.6

8.65	-57.45	-56.46	-57.45	27.53	65.7	58.2	53.9
8.6	-56.43	-56.1	-57.61	27.47	66.4	61.4	47.9
8.5	-57.23	-56.3	-57.85	27.93	64.6	57.9	48
8.6	-57.56	-56.41	-57.33	27.41	66.2	62.9	48.6
8.66	-57.64	-56.15	-57.64	27.69	63.9	57.6	51.9
8.5	-55.44	-55.63	-57.82	27.81	65.4	62.1	49.6
8.69	-57.53	-55.99	-57.79	27.81	63.5	57.2	49
8.49	-56.94	-57.03	-57.67	27.72	65.4	61.9	47.6
8.56	-55.59	-56.77	-57.7	27.75	63.3	57.1	48.8
8.72	-57.34	-56.41	-57.67	27.63	64.5	59.6	50.2
8.53	-57.49	-57.29	-57.58	27.96	62.9	56.9	50.1
8.71	-57.45	-55.84	-57.67	27.75	64.4	58.8	47.1
8.74	-56.87	-55.94	-57.61	27.66	64.2	59.6	50.8
8.58	-57.2	-56.2	-57.58	27.87	63.9	57.6	50
8.56	-57.78	-57.13	-57.42	27.66	64.2	59.4	48.2
9.04	-56.87	-56.72	-57.76	27.78	63.7	57.5	48.6
8.58	-55.37	-56.41	-57.82	27.66	65.7	62.6	46.7
8.67	-57.97	-56.3	-57.67	27.87	63.6	57.2	51.6
8.61	-57.75	-56.72	-57.7	27.87	65.8	62.7	49.7
8.58	-57.16	-56.72	-57.58	27.81	63.7	57.1	49.5
8.73	-57.49	-55.99	-57.91	27.75	65.7	62.2	49.9
8.55	-57.09	-55.84	-57.85	27.93	63.9	57.1	47.3
8.63	-57.23	-56.15	-57.79	27.75	65.5	60.2	51.6
8.68	-56.5	-56.2	-57.76	27.84	63.6	56.9	46.9
8.63	-56.94	-55.89	-57.7	27.75	65.4	59.2	50.5
8.66	-56.79	-56.56	-57.58	27.75	65	60.9	51.9
8.6	-57.6	-56.72	-57.73	28.05	63.2	57.5	49.6
8.59	-55.55	-55.73	-57.85	27.84	63.2	60.2	51.9
8.92	-57.16	-57.13	-57.73	27.93	62.1	57.2	51.6
8.6	-56.79	-56.61	-57.76	27.75	64.7	62.7	50.9
8.62	-58.04	-56.46	-57.76	27.87	62.9	57.2	49.5
8.56	-57.05	-57.08	-57.82	28.05	64.3	62.5	49.2
8.71	-57.71	-56.98	-57.85	28.02	62.3	56.7	48.8
8.76	-57.38	-56.87	-57.67	27.87	64.5	62.4	48.8
8.52	-56.43	-56.46	-57.7	28.21	62	56.4	47.6
8.59	-57.12	-56.41	-57.76	27.96	63.5	58.2	51.2
8.46	-56.65	-55.84	-57.82	28.08	63.5	60.3	50.4
8.57	-54.82	-56.04	-57.94	28.08	62.5	56.9	53.3
8.9	-57.23	-55.99	-57.76	27.99	64.2	62.5	49.2
8.6	-57.23	-56.41	-57.82	28.14	61.8	56.6	50.9
8.57	-55.15	-56.15	-57.85	28.05	64	60.2	49.9
8.62	-57.05	-56.72	-57.85	28.27	62.1	56.7	50
8.56	-56.06	-57.39	-57.79	27.99	63.4	58.3	49.5
8.54	-57.12	-56.87	-57.88	28.02	63.7	61.2	51.6
8.61	-57.2	-56.2	-57.91	28.17	62.1	57.1	47.7
8.68	-58.11	-56.82	-57.76	27.96	64.2	62.7	53.3
8.6	-56.98	-56.77	-58.03	28.33	61.4	56.5	51.6

8.62	-57.42	-56.1	-57.91	28.11	62.8	59.8	50.8
9.05	-57.34	-56.56	-57.91	28.11	61.4	58	53.2
8.61	-56.94	-56.93	-57.58	28.14	62.1	57.3	48.6
8.68	-57.42	-56.46	-57.79	28.08	63.6	63.1	50
8.61	-57.97	-56.41	-57.82	28.42	61	56.4	50.2
8.63	-56.61	-57.03	-57.73	28.17	62.5	61.3	51.6
9.12	-58.22	-56.82	-57.79	28.3	60.7	58	50.5
8.55	-57.97	-56.36	-57.67	28.33	61	57.4	50.7
8.56	-57.97	-56.25	-57.91	28.08	62.6	62.4	48.8
8.54	-56.47	-56.98	-57.73	28.48	60.4	56.7	49.4
8.69	-57.12	-56.51	-57.76	28.27	61.6	59.1	50.5
8.73	-57.16	-56.93	-57.82	28.39	61.1	59.4	50.7
8.58	-57.2	-56.41	-57.91	28.51	59.3	56.3	49.5
8.67	-57.09	-56.61	-57.82	28.27	60.9	61.9	48.9
8.73	-57.78	-56.72	-57.76	28.33	58.5	58	51.6
8.59	-56.72	-56.56	-57.97	28.48	59.2	56.5	50.1
8.7	-58.04	-56.87	-57.82	28.39	60	61.1	48.7
8.53	-57.42	-55.53	-58.03	28.57	58.9	59.2	51.3
8.7	-56.21	-56.36	-58.1	28.51	57.7	56	47.8
8.93	-57.42	-56.36	-57.76	28.51	59.2	61	50.2
8.58	-56.79	-56.56	-57.82	28.42	58.1	58.7	50.5
8.71	-57.67	-56.56	-57.91	28.51	57.4	56.1	51.4
8.63	-56.98	-56.61	-57.76	28.66	58.8	61	50.5
8.65	-57.49	-56.1	-57.91	28.45	58.1	59.3	51.2
8.74	-56.36	-56.56	-57.85	28.6	57.1	56	50.7
8.69	-57.64	-55.68	-57.73	28.48	58.9	63	50
8.57	-57.53	-56.61	-57.88	28.51	56.2	55.4	51.2
8.62	-58.85	-56.82	-57.64	28.6	58.1	57.4	51.8
8.7	-57.67	-56.93	-57.82	28.24	60.2	61.6	50.7
8.74	-56.72	-55.99	-57.91	28.57	57.8	55.5	48.6
8.64	-57.2	-56.2	-57.88	28.51	59.2	59.2	49.3
8.7	-57.93	-56.25	-57.97	28.42	57.7	57.8	46.2
8.57	-57.45	-56.61	-58.1	28.72	57.9	56.2	51.6
8.61	-56.5	-56.87	-57.82	28.39	59.4	62.9	50.4
8.74	-56.47	-57.45	-58	28.45	57.8	57.2	51
8.64	-56.98	-56.87	-57.97	28.54	58.2	56.5	49.1
8.65	-57.56	-56.51	-57.94	28.33	59.2	61.6	50.1
8.59	-57.56	-56.98	-57.82	28.69	57.4	55.2	49.1
8.67	-57.12	-56.72	-57.94	28.48	59.2	59.4	51.3
9.03	-57.34	-56.82	-57.88	28.39	58.2	58	52.5
8.55	-55.33	-56.2	-57.76	28.57	58.2	56	48.4
8.67	-58.37	-57.19	-57.67	28.48	59.4	62.7	47.5
8.57	-57.05	-56.25	-57.88	28.79	56.6	57.6	48
8.67	-57.42	-56.46	-57.73	28.6	56.8	56	51.3
8.83	-56.25	-55.84	-58	28.57	58.5	62.5	50.5
8.69	-57.53	-56.51	-58	28.63	56.1	56.7	49.5
8.58	-57.34	-57.03	-58.03	28.72	56	56.1	50.7

8.65	-57.2	-57.24	-57.94	28.75	58.9	62.9	52.1
8.57	-56.58	-57.29	-57.88	28.75	55	54.8	49.9
8.74	-58	-56.25	-57.94	28.69	56.9	57.1	50.3
8.5	-57.67	-57.08	-57.94	28.72	58.7	62.2	47.3
8.56	-54.27	-56.15	-58.03	28.72	55.5	55.8	50.4
8.4	-57.71	-56.72	-57.82	28.97	55.7	56.5	50.4
8.66	-58	-56.15	-57.76	28.57	58.3	62.7	47.6
8.62	-57.23	-56.41	-58.19	28.79	55.6	56.9	47.6
8.53	-57.05	-57.08	-58.13	28.91	55.8	56	49.1
8.64	-57.23	-56.72	-57.94	28.63	58.2	62.8	52
9.08	-56.47	-57.08	-57.73	28.69	54.9	56	45
8.68	-57.71	-56.2	-57.94	28.72	56.1	56.2	46.2
8.65	-57.38	-56.25	-57.91	28.6	58.4	62.5	48.4
8.55	-56.1	-56.72	-57.73	28.91	55.9	56.7	48.4
8.56	-57.71	-57.13	-57.94	28.75	56.3	56.1	51.7
8.9	-57.71	-57.5	-58.16	28.57	58.8	62.7	52.5
8.62	-56.5	-56.61	-58	28.6	57.3	57	49.2
8.64	-57.78	-56.41	-57.67	28.54	59.4	57.1	42.5
7.84	-57.23	-56.72	-57.91	28.57	61.6	62.8	47.6
8.64	-57.38	-56.61	-57.97	28.51	59	56	51
8.63	-55.7	-57.24	-58.03	28.48	60.7	57.9	48.9
8.56	-58.22	-57.29	-58.1	28.63	62.6	62.8	51.6
8.63	-57.64	-56.51	-57.91	28.48	60.6	56.5	50.1
8.39	-57.6	-56.56	-58.06	28.57	62.1	57.9	49.5
8.7	-57.38	-56.72	-58.19	28.24	63.9	62.7	49
8.6	-55.95	-56.87	-57.79	28.51	61.3	56	49.1
8.55	-57.16	-56.61	-58.22	28.54	62.9	58.3	50.1
8.61	-58.3	-57.13	-58.16	28.24	64.8	62.7	51.7
8.09	-57.97	-56.72	-57.67	28.6	62.7	56.2	48.2
8.58	-54.6	-56.72	-57.91	28.27	65.4	62.6	44.9
8.85	-57.6	-57.5	-58	28.48	62.7	56.2	50.5
8.58	-58.11	-57.08	-57.97	28.3	65.4	59.2	46.7
8.62	-55.66	-56.3	-58.4	28.33	63.5	56.6	48.6
8.65	-57.75	-56.93	-58.03	28.42	65.8	58.3	50.2
8.59	-57.12	-56.98	-57.97	28.14	66.1	60.7	48.9
8.55	-57.27	-58.02	-58	28.42	64.7	57.1	49.7
8.58	-57.49	-56.61	-57.97	28.17	66.8	62.5	48.9
8.65	-56.87	-57.81	-57.94	28.33	65.1	56.8	50.5
8.56	-56.39	-57.5	-58.22	28.33	66.9	59.3	49.2
8.61	-57.27	-56.36	-58.1	28.02	65.3	57.9	50.9
7.87	-57.23	-56.56	-58	28.21	67	58	50
8.68	-57.64	-56.46	-57.94	27.93	68.4	61.3	47.4
8.74	-58.15	-56.51	-58.1	28.05	67.4	57.5	49.2
8.47	-54.05	-57.03	-57.88	28.05	69.7	62.6	50.9
8.63	-57.71	-57.24	-57.97	28.08	67.8	57.1	50.8
8.66	-56.83	-56.51	-58.06	28.05	70.1	62.8	50.9
8.66	-57.71	-56.87	-58.06	28.14	67.8	57.1	49.5

9.21	-56.98	-56.41	-57.88	27.93	69.8	61.8	46.5
8.57	-57.53	-57.13	-58	28.02	67.6	57.1	50.2
8.68	-57.67	-57.13	-57.94	27.96	69.4	60.6	49.4
8.64	-57.56	-56.51	-58	28.33	66.7	57.1	50.1
8.61	-57.78	-57.39	-58.22	28.05	68	58.7	49.6
8.62	-58.44	-56.36	-57.91	27.99	67.4	58.8	48.2
8.58	-55.95	-55.99	-58.19	28.08	68.1	58.2	49.6
8.69	-56.76	-56.56	-57.91	27.87	68.3	60.6	48.9
8.48	-54.78	-56.51	-58.06	28.24	66.9	57.5	48.3
8.58	-56.03	-57.29	-57.91	28.14	67.1	59	48.7
7.97	-55.92	-56.3	-57.97	28.33	66.7	57.6	51.3
8.55	-55.44	-57.6	-57.64	27.93	68.3	62	48.2
8.63	-57.53	-56.77	-57.94	28.11	66.7	57.9	49.9
8.68	-57.97	-56.2	-57.73	27.99	68.1	61.9	51.5
8.7	-58.88	-57.29	-57.97	28.08	66	57.1	49.8
8.6	-56.72	-56.51	-58.06	28.21	68.1	62.9	49.8
8.63	-57.75	-56.93	-57.88	28.11	65.8	57.1	49.4
9.05	-57.42	-56.82	-58.03	28.05	67.2	60.3	48.7
8.67	-58.08	-56.93	-57.85	28.17	64.9	56.9	48.4
8.69	-57.93	-56.93	-58	28.17	66.5	59.7	47.9
8.62	-57.75	-56.87	-57.76	28.39	64.5	56.6	50.7
8.7	-58.04	-56.61	-57.79	28.14	65.4	58.3	49.3
8.57	-56.9	-56.36	-58.03	28.14	64.3	58.2	49.9
8.68	-57.45	-56.77	-57.88	28.3	65	57.8	51.4
8.69	-57.97	-56.93	-58.16	28.11	65.1	59.8	49.5
8.4	-57.53	-56.36	-57.91	28.42	64.1	57.1	50.8
8.58	-58.19	-56.87	-57.91	28.11	65.7	61.7	50
8.62	-57.64	-56.51	-57.85	28.45	63.7	56.9	50.5
8.61	-58.08	-56.77	-57.91	28.24	65.4	62	48.9
8.76	-58.04	-56.98	-58	28.39	62.9	56.7	51.1
8.61	-57.2	-56.41	-57.94	28.39	64.6	59.1	49
8.68	-57.56	-56.25	-57.91	28.27	63.4	58.4	48.8
8.47	-56.87	-57.45	-58.03	28.48	63.2	57.3	50.7
8.59	-57.2	-56.1	-58	28.17	63.7	60.2	48.6
8.58	-57.82	-56.77	-58	28.39	63.2	56.9	50.5
8.62	-57.82	-57.13	-58.06	28.45	64.7	62.5	50.3
8.63	-58.15	-57.03	-57.91	28.45	62.6	57.2	48.9
8.5	-58.33	-56.36	-57.82	28.51	63.3	57.9	51.6
8.63	-57.42	-56.93	-57.88	28.42	62.6	58.5	45.1
8.75	-58.37	-56.3	-57.91	28.51	62.1	56.9	50.3
8.67	-57.42	-56.77	-58.37	28.39	63.3	60.2	45.8
8.56	-55.81	-56.98	-58.19	28.48	61.5	57.3	49.2
8.55	-56.06	-56.77	-57.97	28.66	61.6	56.8	49.2
8.63	-57.27	-56.56	-58.03	28.39	63.2	62.1	49.9
8.65	-57.27	-56.46	-58.03	28.48	61.1	56.1	50.2
8.54	-57.27	-56.98	-57.97	28.48	62.1	57.2	50.5
8.6	-57.31	-56.51	-57.94	28.42	63.3	61.8	49.9

8.61	-57.82	-57.13	-58.1	28.63	60.4	55.7	52.9
8.68	-57.16	-56.2	-58.1	28.51	61.5	58.2	53.6
7.89	-57.78	-56.82	-58.25	28.51	62.7	62.2	51.3
8.58	-55.88	-56.46	-58.13	28.57	60.2	55.9	49.3
8.68	-56.98	-57.08	-57.94	28.51	61.5	58.2	49.9
8.56	-56.98	-55.89	-57.97	28.57	62.3	62	51
8.7	-57.75	-56.72	-58.28	28.6	59.4	55.7	49.3
8.54	-57.12	-57.13	-58	28.63	60.2	58	50.3
8.64	-58.22	-57.19	-58.06	28.42	61.6	62.5	49.3
8.8	-58.33	-56.87	-57.91	28.57	59	55.8	51.1
8.62	-56.87	-56.15	-57.97	28.51	59.6	57.1	47.2
8.6	-54.49	-57.13	-58.28	28.48	61.2	62.6	49.3
8.56	-57.53	-56.93	-57.79	28.79	58.4	55.6	48.8
8.61	-57.86	-56.61	-58.06	28.57	59.1	57	54.4
8.95	-57.75	-56.98	-57.79	28.33	60.5	62.5	47.6
8.66	-56.98	-57.29	-57.73	28.57	58.8	57.6	49.9
8.65	-57.34	-56.51	-58.22	28.69	58.8	56.3	51.2
8.63	-57.56	-56.72	-57.91	28.72	60.3	62.4	48.1
8.68	-57.49	-56.77	-58.1	28.75	57.3	55.6	47.5
8.56	-57.82	-56.1	-58.16	28.85	59.2	57.5	51.7
8.68	-57.27	-56.77	-57.82	28.45	61.3	63.1	51.2
9	-56.32	-56.36	-58.34	28.75	57.7	55.6	49.7
8.68	-57.53	-56.87	-57.91	28.57	60.3	62.6	49.7
8.59	-57.67	-56.61	-58.16	28.75	57.1	55	51
8.55	-57.75	-56.46	-58.1	28.88	59	58.1	50.9
8.61	-56.21	-56.93	-58.06	28.51	60.4	62.5	48.1
9.19	-57.23	-56.98	-57.73	28.75	57.2	55.4	49.9
8.63	-57.6	-56.82	-58.13	28.6	59.5	62.2	49
8.65	-58.33	-55.27	-58.1	28.54	58.3	58.5	47.5
8.53	-56.58	-57.19	-58.13	28.88	58	56	49.4
8.58	-58.26	-56.98	-58.03	28.63	59.8	62.8	51.2
8.5	-57.16	-57.39	-58.06	28.82	56.7	54.7	52.4
8.63	-57.56	-56.72	-58.16	28.66	58.4	58.2	50.4
8.71	-57.05	-56.41	-57.94	28.51	59.6	61.7	50.1
8.48	-56.98	-57.08	-58.16	28.88	56.9	55	49.9
8.57	-58.04	-56.25	-58	28.63	58.7	59.2	49.4
8.65	-57.67	-56.98	-57.64	28.72	59.2	61.4	50
8.71	-57.82	-56.87	-58.03	28.79	57.1	55.1	47.1
8.89	-58.15	-56.93	-58.13	28.69	58.2	59.4	50.1
8.65	-57.49	-56.3	-58.16	28.66	57.2	57.4	51.5
8.6	-56.32	-57.34	-57.94	28.79	57.6	56.1	47.1
8.61	-56.68	-56.82	-58.25	28.85	59.4	62.5	47.3
8.62	-57.12	-57.03	-58.16	28.66	57.6	57.8	49.8
8.73	-57.38	-56.72	-58.16	28.72	57.7	55.8	53.8
8.63	-56.94	-56.98	-57.88	28.6	59.4	62.5	49.6
8.63	-55.95	-56.93	-58.13	28.63	57.1	57.4	50.4
8.58	-57.97	-57.03	-58.03	28.88	57.8	56	52

8.61	-57.75	-56.3	-57.91	28.6	59.7	62.8	47.1
8.58	-58.41	-56.98	-58	28.79	57	56.5	49.1
8.68	-56.98	-56.04	-57.97	28.75	58	56.4	48.8
8.89	-57.38	-56.46	-57.94	28.57	59.6	62.8	47.8
8.63	-57.2	-56.41	-57.85	28.75	56.6	56	49.1
8.73	-57.67	-56.41	-58.06	28.66	57.4	56.8	47.6
8.48	-56.06	-56.87	-58	28.75	59.3	62.9	51.8
8.65	-56.83	-56.2	-57.85	28.79	56.2	55.5	49.6
8.2	-57.67	-56.25	-58	28.82	57.8	57	49
8.63	-57.56	-56.61	-57.94	28.54	59.4	62.8	49.6
8.78	-57.2	-56.51	-57.91	28.79	56.2	55.1	49
8.67	-57.56	-57.08	-58.1	28.72	57.8	57	48
8.58	-57.45	-55.53	-58	28.48	59.8	62.4	50.1
8.6	-57.56	-56.15	-58.19	28.91	56.7	54.6	49.9
8.68	-57.64	-56.72	-58.4	28.66	58.2	57.3	46.8
8.47	-57.31	-56.2	-58.19	28.57	60.2	62.2	48.6
8.57	-56.21	-56.87	-58.1	28.75	57.1	54.6	48.7
8.6	-57.93	-56.2	-57.91	28.57	59.2	58.5	49.9
8.44	-55.51	-55.84	-57.91	28.69	61	62.2	48.6
8.56	-57.2	-57.08	-57.97	28.66	58.1	55.1	49.5
8.37	-57.05	-56.36	-57.97	28.69	60.1	58.5	45.5
8.56	-58.15	-56.41	-57.97	28.42	61.5	62.2	49.6
8.65	-57.12	-56.93	-57.91	28.66	59.1	55.4	47.6
8.67	-57.97	-56.93	-58.1	28.45	60.9	59.4	50.5
8.69	-58.04	-57.13	-57.97	28.27	62.1	62	49.7
8.56	-56.06	-56.82	-58.19	28.75	59.9	55.6	51.2
8.56	-57.64	-56.87	-57.85	28.39	62	61.8	50.2
8.08	-57.16	-57.13	-57.85	28.66	59.5	54.8	48.3
8.62	-55.73	-56.41	-57.88	28.45	61.4	58.3	50.7
8.71	-57.97	-56.41	-57.97	28.33	62.7	61.3	50.1
8.55	-57.56	-57.91	-57.97	28.51	60.9	55.8	49.5
8.65	-58.19	-56.41	-57.94	28.39	63.5	62.9	50.5
8.65	-57.45	-56.61	-57.94	28.54	61.7	57.9	49.9
8.59	-55.33	-56.77	-57.97	28.27	62.4	57.8	51.7
8.91	-58.3	-56.82	-58.16	28.24	62.2	59.2	49
8.65	-56.61	-56.93	-57.76	28.33	62.1	56.5	51.6
8.56	-57.86	-56.3	-58.16	28.42	63.7	62.4	52.3
8.65	-57.27	-56.98	-57.7	28.57	62.1	57.5	48.2
8.56	-55.99	-55.63	-58.19	28.3	63.2	57.8	52.2
8.99	-55.92	-57.13	-57.97	28.05	63.8	60.8	49.4
8.63	-56.87	-56.82	-58.13	28.33	62.6	56.1	50
8.64	-57.71	-56.72	-57.91	28.24	64.9	61.1	48.2
8.69	-57.45	-57.08	-57.82	28.3	62.4	55.5	48.8
8.57	-57.12	-57.24	-57.97	28.33	63.6	57.6	47.8
8.6	-57.78	-56.82	-58.03	28.27	65.7	62.9	47
8.64	-57.09	-56.98	-58	28.33	63.1	56.5	50.8
7.76	-57.86	-56.82	-58.1	28.39	65.3	62.6	50.8

8.67	-58.11	-56.56	-58.03	28.27	63.2	56	51
8.65	-55.55	-56.98	-57.85	28.27	64.2	58.2	49.5
8.63	-57.45	-55.84	-58.03	27.96	65.8	61.6	51.1
8.64	-57.45	-56.36	-58.1	28.24	64	56.9	48.4
8.51	-57.05	-56.36	-57.82	28.21	65.8	61.8	50.5
8.62	-57.49	-56.46	-57.88	28.24	63.6	56.5	50.2
8.41	-57.56	-55.89	-57.88	28.27	65.6	61.8	50.3
8.65	-56.06	-56.41	-57.82	28.17	63.3	56	50.5
8.59	-56.5	-55.78	-57.91	28.27	64.8	59.4	49.9
8.57	-56.98	-56.36	-57.91	27.99	65.7	61.3	51.2
8.67	-57.12	-56.51	-57.7	28.14	63.6	56.9	51.9
8.54	-57.75	-56.61	-57.97	28.21	65.5	62.5	49.2
8.62	-57.67	-55.99	-57.94	28.21	63.1	56	49.3
8.75	-57.97	-56.61	-57.97	28.08	64	58.3	52.9
8.59	-56.58	-55.99	-57.82	27.93	64.9	61.1	49.3
8.78	-57.78	-56.93	-58	28.21	63.6	57.4	47.9
8.64	-57.27	-56.3	-57.82	27.96	64.7	61.4	50.4
8.59	-57.23	-56.04	-57.91	28.21	62.5	56.6	50.1
8.66	-58.04	-56.82	-57.94	28.3	64.3	61.9	52.3
8.68	-58.3	-56.72	-57.85	28.21	61.9	56.1	47
9.07	-54.82	-55.94	-57.91	28.21	63.5	58.1	49.3
8.62	-57.09	-56.3	-57.94	28.02	64.5	62.4	48.6
8.66	-58.15	-56.61	-57.76	28.17	62.1	56.7	48
8.61	-56.98	-56.04	-57.7	28.3	63.9	60.9	49.9
8.68	-57.71	-55.63	-57.91	28.14	62	57.1	48.9
8.2	-57.09	-55.94	-57.88	28.33	62.5	57.5	49.7
8.62	-57.38	-56.41	-57.85	28.05	64.2	62.2	49.5
9.21	-57.49	-56.56	-57.76	28.14	61.8	56.4	48.7
8.54	-57.53	-56.41	-57.79	28.02	63.3	60.3	48
8.65	-58.15	-56.87	-57.61	28.05	62	57.9	51.6
8.52	-56.5	-56.61	-58.03	28.42	62.3	57	48
8.7	-57.45	-56.82	-58	28.05	64.1	62.5	51.6
8.6	-56.68	-56.15	-58.03	28.45	61.6	56.2	50
8.61	-56.5	-56.41	-57.73	28.08	63.3	60.1	48.4
8.41	-56.03	-55.73	-57.94	28.3	62.7	58.6	48.7
8.69	-57.2	-56.56	-57.88	28.05	62.5	56.9	49.3
8.82	-57.34	-56.2	-57.82	28.02	64.2	62.5	50.5
8.65	-57.93	-56.61	-57.73	28.14	61.9	56.2	50.8
8.62	-57.6	-56.51	-57.82	28.02	63.6	59.7	50.7
8.5	-57.86	-56.98	-57.85	28.11	63.4	59.4	48.4
8.54	-57.75	-56.77	-57.67	28.08	63.5	57.3	49.3
8.54	-57.34	-57.19	-57.48	28.11	63.8	60.2	49.8
8.58	-57.75	-56.72	-57.82	28.05	62.7	56.9	48
8.85	-57.78	-56.98	-57.7	27.96	64.7	62.5	48.4
8.56	-57.93	-57.03	-57.76	28.11	62.4	56.1	49.3
8.66	-56.94	-56.25	-57.76	28.02	63.9	59.1	47.1
8.58	-57.78	-57.24	-57.64	27.99	64.6	61.4	51

8.62	-57.82	-56.82	-57.67	28.11	62.8	56.8	48.7
8.55	-58.15	-56.04	-57.7	28.08	64.8	62.6	51.3
8.57	-58	-56.46	-57.3	28.05	62.1	56.3	50.7
8.49	-57.42	-56.77	-57.55	28.05	63.9	58.8	47.7
8.63	-57.34	-56.51	-57.61	27.9	64.1	60.8	49.5
8.75	-57.93	-56.77	-57.82	27.96	62.9	57	51.3
8.57	-56.06	-57.03	-57.67	27.93	64.6	62.1	48.4
8.62	-56.03	-55.63	-57.97	28.11	62.3	56.4	48.6
8.51	-57.6	-56.15	-57.73	28.17	64	59	51.6
8.67	-58	-56.36	-57.67	27.9	63.6	59.4	51.5
8.57	-57.34	-57.34	-57.76	28.21	63.1	57	47.8
8.62	-56.21	-55.84	-57.82	27.87	64.7	62.1	50.7
8.56	-56.03	-56.15	-57.94	28.14	62.6	56.4	49.7
8.53	-56.61	-56.98	-57.79	27.87	64.4	60.6	50.7
8.45	-55.73	-56.41	-57.73	28.08	62.7	57.1	50.9
8.64	-57.86	-56.3	-57.85	27.93	63.6	57.5	48.7
8.83	-57.75	-56.72	-57.61	27.81	64.5	60.7	49.5
8.68	-57.56	-56.61	-57.82	27.9	62.8	56.6	51
8.7	-56.28	-56.04	-57.61	27.93	64.6	59.7	49.5
8.62	-57.64	-56.3	-57.61	27.9	62.5	56.1	50.3
8.69	-57.34	-56.15	-57.61	27.78	63.8	58.3	49.7
8.66	-58	-55.94	-57.73	27.9	64.9	61.6	48.9
8.6	-57.31	-55.89	-57.73	27.9	63.2	56.8	47.4
7.91	-57.31	-56.82	-57.58	27.9	65	62.4	48.8
8.62	-56.32	-57.24	-57.45	27.96	62.9	56.2	49.8
8.82	-55.77	-57.03	-57.55	27.78	64.4	59	49.2
8.56	-55.07	-56.72	-57.45	27.78	64.2	59.4	52.1
8.6	-57.64	-56.46	-57.67	27.75	63.9	57	47.4
8.5	-56.98	-56.46	-57.58	27.84	65.7	62.5	50.5
8.68	-57.34	-56.41	-57.45	27.81	63.6	56.4	52.6
8.5	-56.83	-56.15	-57.64	27.93	65.3	59.6	48.1
8.59	-57.86	-56.56	-57.61	27.75	64.1	58	49.1
9	-54.96	-56.93	-57.67	27.78	64.8	57.8	49.8
8.54	-57.78	-57.34	-57.64	27.56	66.5	61.8	48.4
8.61	-55.33	-55.99	-57.55	27.78	64.4	57	49
8.6	-57.6	-55.73	-57.48	27.72	65.9	61.4	48.3
8.58	-55.7	-56.2	-57.67	27.72	63.8	56.5	49
8.62	-57.09	-56.15	-57.42	27.84	65.7	59.8	48.1
8.61	-57.6	-55.99	-57.76	27.66	64.4	58	49.5
7.86	-57.31	-56.46	-57.58	27.78	64.7	57.5	51
8.65	-56.9	-55.94	-57.58	27.44	66.1	61	56.6
9.17	-57.56	-56.46	-57.58	27.75	64.6	57.2	55
8.67	-57.09	-56.1	-57.42	27.66	66.1	62.2	49.5
8.62	-57.23	-56.25	-57.67	27.66	64	56.7	51
8.6	-56.58	-55.47	-57.76	27.69	65.4	59.8	49.7
8.58	-56.79	-55.78	-57.45	27.69	63.9	56.8	49.2
8.55	-57.16	-56.36	-57.48	27.93	64.9	58	51.1

8.56	-57.38	-55.94	-57.48	27.53	64.9	59.1	52
8.56	-55.55	-56.56	-57.45	27.87	64.8	57.3	49.5
8.66	-56.79	-56.46	-57.45	27.47	66.3	61.8	46.1
7.98	-56.5	-55.58	-57.27	27.81	64.5	56.9	50.9
8.56	-57.23	-55.94	-57.33	27.53	66.3	62.2	51
8.76	-56.54	-55.58	-57.45	27.69	64.1	56.6	52.3
8.63	-57.49	-55.78	-57.39	27.53	65.8	59.5	51.5
8.71	-57.45	-55.99	-57.36	27.72	63.9	56.8	51.2
8.46	-56.9	-55.84	-57.48	27.81	65.5	58.6	49.3
8.68	-56.58	-56.15	-57.55	27.53	64.6	58.2	49.4
8.55	-57.2	-55.68	-57.33	27.78	65	57.6	50.8
8.59	-56.58	-55.99	-57.67	27.44	66.4	61	51.6
9.15	-57.67	-56.2	-57.55	27.63	65	57.4	47.4
8.52	-57.42	-56.72	-57.64	27.53	66.6	62.8	50.4
8.62	-57.09	-56.25	-57.55	27.63	64.7	57	49.5
8.56	-56.94	-56.04	-57.48	27.41	67.7	62	49.5
8.56	-57.49	-56.04	-57.64	27.56	66.2	56.9	49.4
8.46	-57.67	-56.41	-57.58	27.44	68.4	60.6	48.8
8.61	-57.31	-56.61	-57.24	27.5	66.7	56.9	50.1
8.64	-56.61	-56.2	-57.42	27.53	68.5	59.1	49
8.57	-54.93	-56.46	-57.67	27.5	66.8	56.9	48.3
8.47	-56.76	-56.61	-57.61	27.63	68.5	59.2	49.5
8.58	-56.83	-56.25	-57.55	27.44	67.5	57.9	49.3
8.65	-57.2	-56.3	-57.45	27.29	68.8	58.9	49.3
8.63	-57.12	-56.1	-57.73	27.35	68	58.3	51
8.71	-54.3	-56.41	-57.42	27.29	69.3	59	49.7
8.63	-56.83	-56.1	-57.55	27.44	67.9	57.5	49.9
8.71	-57.16	-56.61	-57.36	27.26	70	59.7	51.2
8.55	-57.34	-55.89	-57.73	27.47	68.7	57.3	47.3
8.62	-57.16	-55.99	-57.73	27.26	70.1	59.2	48.4
8.58	-57.67	-56.25	-57.27	27.47	69.1	57.8	51
8.62	-56.28	-56.25	-57.73	27.26	71.2	59.5	47.2
8.74	-56.9	-56.36	-57.67	27.5	70.2	58.1	49.6
8.62	-57.27	-56.1	-57.55	27.14	72.8	61.8	51.5
8.54	-56.98	-56.3	-57.7	27.35	72	58.5	51.5
8.59	-56.21	-55.99	-57.55	26.95	73.4	60.9	48.7
8.59	-52.44	-51.37	-56.97	27.05	73.8	59.2	49.5
8.88	-57.05	-55.16	-57.45	27.05	73.3	58.2	50.9
8.61	-56.43	-56.2	-57.15	27.17	75.7	62.8	50.2
8.61	-56.36	-56.15	-57.61	27.08	74.5	58.8	50.9
8.62	-56.32	-56.25	-57.61	27.08	74	58.6	51.6
8.67	-56.94	-55.73	-57.55	26.92	76.2	62.8	48.9
8.55	-56.5	-55.94	-57.42	27.26	74.7	58.9	51
8.62	-57.05	-55.68	-57.42	27.01	74.5	58.5	49.3
8.62	-57.56	-56.36	-57.45	26.83	76.6	62.7	50.2
8.74	-56.28	-56.41	-57.45	26.95	75.8	59.2	46.6
8.5	-55.44	-55.16	-57.42	27.01	75.6	58.6	49.5

8.61	-56.61	-55.99	-57.73	26.98	76.2	58.5	47.7
8.75	-56.25	-55.58	-57.48	26.89	78	60.4	50.5
8.44	-54.41	-56.51	-57.36	27.05	77.6	59.2	50.4
8.68	-56.65	-56.3	-57.36	26.89	76.9	59.2	49.6
8.74	-56.79	-55.32	-57.42	26.8	78.9	62.8	50.5
8.62	-56.98	-56.2	-57.48	27.05	77.7	59.6	49.5
8.55	-56.9	-55.73	-57.48	26.83	77.5	59.3	46.6
8.71	-56.87	-55.94	-57.39	26.83	78.1	61.4	47
8.62	-57.38	-56.25	-57.18	27.17	77.2	60.3	51.7
8.59	-56.03	-55.94	-57.36	27.05	76.3	59.4	47.6
8.59	-56.76	-56.25	-57.58	27.01	75.5	59.2	48.7
8.53	-56.43	-56.04	-57.61	27.05	77.2	61.4	49.8
8.61	-56.72	-56.41	-57.15	26.98	76.4	59.6	52.2
8.66	-57.23	-55.58	-57.33	26.95	76.1	59.3	49.5
9.13	-56.98	-56.36	-57.45	26.8	78.7	63.5	47.9
8.54	-56.54	-55.47	-57.48	26.92	76.8	60.2	46.7
8.53	-56.83	-56.36	-57.64	27.08	75.9	59.5	52.3
8.61	-56.76	-56.15	-57.3	27.08	75.4	59.4	50.5
8.5	-56.79	-55.99	-57.48	27.11	77.5	63	49.2
8.52	-57.67	-56.56	-57.21	27.01	76.3	59.9	50.2
8.59	-56.76	-56.3	-57.55	27.05	75.6	59.5	50.3
8.55	-57.53	-56.56	-57.39	27.17	75.5	59.9	50.1
8.64	-56.79	-56.15	-57.42	26.98	76.4	60.3	48.9
8.56	-54.96	-55.68	-57.42	27.01	75.1	59.6	54.2
8.75	-55.22	-56.3	-57.42	27.01	74.3	59.2	48.4
8.62	-56.9	-56.25	-57.3	27.05	75.8	61.8	51.7
8.66	-57.2	-56.2	-57.61	27.14	74.5	59.7	48.6
8.9	-56.98	-56.2	-57.21	27.23	73.6	59.1	49.4
8.43	-57.56	-56.04	-57.55	27.23	75.4	62.9	49.9
8.61	-56.76	-56.46	-57.27	27.17	74.3	59.6	48.1
8.58	-55.7	-56.1	-57.36	27.23	72.8	59.2	49.5
8.53	-56.9	-55.94	-57.45	27.38	72.3	58.7	49.2
8.53	-56.79	-56.3	-57.61	27.2	73.4	60.2	49.4
8.7	-57.09	-56.3	-57.39	27.29	72.4	58.9	49.3
8.56	-55.7	-55.84	-57.58	27.44	71.8	58.6	49.2
8.65	-57.12	-55.78	-57.36	27.26	73.1	60.2	46.3
8.53	-56.79	-56.25	-57.67	27.35	71.8	58.8	50.8
8.62	-57.09	-56.87	-57.67	27.44	71.2	59.2	51.6
8.55	-56.17	-55.63	-57.48	27.41	71.9	59.5	49.9
8.56	-56.72	-56.04	-57.55	27.38	70.7	58.8	49.1
8.52	-55.73	-56.2	-57.42	27.5	71.2	60.1	49.6
8.64	-56.47	-55.94	-57.39	27.35	71.9	59.4	50.1
8.62	-56.43	-56.61	-57.7	27.38	70.6	58.7	50.8
8.53	-55.48	-55.94	-57.58	27.41	72.2	62.5	47.5
8.63	-57.93	-56.36	-57.64	27.32	70.5	58.9	49
8.59	-56.76	-56.1	-57.55	27.47	70.1	58.4	48.4
8.15	-57.2	-56.51	-57.42	27.5	71.9	61.2	49.6

8.62	-56.72	-56.98	-57.55	27.47	70.2	58.6	49.7
8.58	-55.95	-56.3	-57.88	27.53	69.8	58.3	52.6
8.38	-54.49	-56.77	-57.61	27.47	71.2	59.9	51.3
8.61	-56.87	-56.25	-57.42	27.41	70	58.5	49
8.61	-55.44	-56.46	-57.45	27.41	72.1	62.7	51.3
7.93	-55.59	-56.25	-57.61	27.63	70.3	58.9	50.3
8.55	-56.1	-55.99	-57.48	27.56	69	58.1	49.5
8.57	-56.36	-55.78	-57.64	27.5	70.3	60.3	49
8.64	-56.83	-56.3	-57.42	27.72	69	58.3	51.2
8.61	-56.21	-56.25	-57.73	27.35	70.4	62.4	49.7
8.56	-56.98	-56.15	-57.55	27.66	68.4	58.7	52
8.6	-56.36	-56.46	-57.42	27.75	68.4	59.1	48.9
8.58	-57.16	-55.84	-57.7	27.56	68.6	58.9	45.2
8.69	-56.65	-56.46	-57.73	27.66	67.9	58.2	50
8.52	-57.31	-55.78	-57.73	27.69	69.4	59.6	51.3
8.56	-57.53	-56.3	-57.42	27.56	68.1	58.3	47.4
8.7	-57.05	-56.15	-57.85	27.47	70.1	62.5	50.9
8.53	-56.47	-56.72	-57.55	27.84	68.2	58.3	49.5
8.54	-55.11	-56.36	-57.33	27.47	70.3	62.7	51.5
8.71	-56.43	-56.56	-57.36	27.41	69	58.8	49.6
8.44	-56.72	-56.56	-57.73	27.72	68.8	59.5	50.1
8.64	-57.23	-56.77	-57.58	27.56	68.7	58.7	50.5
8.63	-55.7	-57.29	-57.61	27.78	66.8	58.1	49.3
8.45	-56.68	-56.46	-57.94	27.93	67.5	59.2	51.9
8.6	-57.23	-56.36	-57.18	27.81	65.9	57.6	49.3
8.66	-56.21	-56.41	-57.88	27.72	67.1	59.1	50.5
8.53	-57.34	-56.3	-57.76	27.9	65.4	57.3	50
8.65	-57.38	-55.78	-57.55	27.72	66.5	59.1	50.3
8.55	-56.61	-56.72	-57.7	27.72	66.1	57.5	47.9
8.65	-56.76	-56.25	-57.45	27.75	66.8	58.7	49.5
8.58	-57.45	-55.84	-57.39	27.75	66.6	59	47.9
8.55	-56.03	-56.2	-57.7	27.93	66.3	58.3	50
8.56	-55.44	-55.94	-57.67	27.72	65.8	59.2	50
9.18	-56.87	-55.89	-57.82	27.72	65.9	58.2	49.2
8.65	-56.47	-55.73	-57.94	27.75	67.6	61.9	51.2
8.55	-54.45	-56.41	-57.45	27.81	66.1	57.8	48.7
8.43	-57.09	-56.15	-57.7	27.87	68.3	62.2	49.4
8.54	-56.65	-55.99	-57.85	27.87	66.4	57.4	50.5
8.63	-55.88	-56.25	-57.55	27.75	68	61.4	49.1
7.82	-56.43	-56.36	-57.7	27.9	66.3	57.5	51.2
8.65	-56.9	-56.1	-57.64	27.75	67.8	59.5	48.8
8.53	-57.16	-56.3	-57.64	27.78	66.2	57.3	49.9
7.85	-56.68	-56.41	-57.76	27.87	67.6	58.6	52.3
8.57	-56.36	-56.25	-57.61	27.69	67.5	59.5	50.3
8.6	-56.76	-57.03	-57.55	27.78	66.8	58.3	52.1
8.41	-57.23	-55.89	-57.76	27.87	68.2	61.4	46.8
8.58	-56.65	-56.98	-57.58	27.84	66.6	58	48.8

8.58	-56.32	-56.3	-57.42	27.69	68.4	62.2	52.1
8.37	-53.97	-56.1	-57.7	27.99	66.3	57.8	49.3
8.65	-56.94	-56.51	-57.61	27.72	67.9	61.4	51.5
8.54	-56.79	-56.2	-57.42	27.9	65.9	57.6	53.4
8.41	-56.9	-56.04	-57.67	27.87	67.4	59.7	50.5
8.65	-57.2	-57.03	-57.45	27.84	65.8	57.2	51.6
8.59	-56.5	-56.46	-57.55	27.84	66.8	58.8	49.5
8.41	-54.3	-55.68	-57.91	27.78	66.8	59.1	48.7
8.61	-57.09	-56.46	-57.64	27.87	66.6	58	49
8.67	-56.87	-55.73	-57.88	27.69	67.7	61.7	47.3
8.41	-56.72	-56.36	-57.58	28.02	65.9	57.9	49.6
8.62	-57.34	-56.36	-57.79	27.75	67.8	62.2	50.5
8.65	-56.43	-55.84	-57.58	27.84	65.8	57.6	49.4
8.59	-57.2	-56.51	-57.67	27.96	67.2	60.6	47.1
8.62	-56.5	-55.99	-57.7	27.9	65.4	57.2	49.6
8.68	-56.79	-56.36	-57.7	27.87	67.7	59.3	48.1
8.65	-57.12	-56.82	-57.76	28.05	66.2	58.1	49.9
8.59	-56.36	-56.82	-57.67	27.84	66.3	58.4	50
8.69	-57.12	-56.1	-57.82	27.75	67.2	60.4	49.9
8.58	-56.61	-56.56	-57.58	27.99	66	58.1	49.7
8.56	-55.92	-55.89	-57.58	27.72	67.8	61.8	52.4
8.64	-57.12	-56.51	-57.67	27.78	67.5	58.2	50.2
8.56	-56.76	-56.46	-57.55	27.96	67.7	59.5	50.9
8.62	-56.39	-55.99	-57.64	27.99	66	58.2	50.3
8.63	-57.2	-56.15	-57.85	27.69	68.1	61.7	50.5
8.6	-56.61	-56.3	-57.79	28.05	66.9	57.6	50.7
8.63	-57.27	-56.41	-57.58	27.69	69	62.2	50.8
8.62	-56.39	-56.2	-57.76	27.81	67.9	57.9	49.5
8.54	-56.47	-56.04	-57.88	27.87	69.7	61.3	50.5
8.65	-57.67	-56.93	-57.7	27.75	68.2	57.6	48.6
8.61	-57.49	-56.41	-57.73	27.75	69.9	61.6	52.5
8.54	-57.27	-56.36	-57.82	27.96	68.8	58	50.5
8.64	-57.23	-56.72	-57.45	27.53	70.9	61.6	49.1
8.72	-56.58	-56.98	-57.61	27.84	69.2	58.4	49.5
8.56	-56.5	-56.15	-57.61	27.84	71.3	62.8	50.3
8.66	-56.79	-55.89	-57.73	27.69	69.9	58.6	49.5
8.68	-56.5	-56.46	-58.06	27.56	71.9	62.6	49.7
8.62	-57.27	-55.84	-57.79	27.87	70.4	58.9	51.2
8.55	-56.28	-55.94	-57.7	27.66	69.4	58.3	53
8.63	-56.87	-56.77	-57.79	27.63	71.3	59.8	47.4
8.62	-56.9	-56.25	-57.67	27.9	70.2	58.5	49.6
8.59	-56.94	-56.98	-57.67	27.66	71.2	61.3	50.8
8.58	-56.58	-56.2	-57.82	27.69	70.7	58.8	49.9
8.67	-57.27	-56.41	-57.67	27.72	71.8	60.8	51.5
8.62	-55.81	-57.19	-57.82	27.66	71.1	59.2	51.1
8.57	-55.11	-55.99	-57.79	27.63	71	58.5	50.2
7.86	-56.28	-56.3	-57.73	27.72	72.7	61.5	47

8.66	-56.58	-56.25	-57.73	27.66	70.8	58.8	50.9
8.57	-56.72	-55.99	-57.97	27.53	71.8	60.5	49.4
8.66	-56.61	-56.51	-57.79	27.81	72	59.4	45.6
8.65	-56.72	-56.25	-57.64	27.63	71.4	58.5	48.4
8.74	-56.43	-56.56	-57.48	27.56	73.8	62.7	49.6
8.67	-57.2	-57.13	-57.67	27.66	72.1	58.8	51
8.65	-56.47	-56.3	-57.76	27.69	71.4	58.4	48.6
8.55	-56.72	-56.77	-57.61	27.72	72.6	60.1	50.2
8.68	-57.67	-56.15	-57.94	27.63	71.3	58.8	50
8.82	-58.19	-56.56	-57.55	27.56	72.2	59.9	50.1
8.63	-57.49	-56.82	-57.7	27.53	72.4	59.7	46.2
8.64	-56.9	-56.72	-57.94	27.56	71.3	58.8	45.8
8.15	-56.5	-56.1	-57.76	27.72	72	60.4	51.4
8.55	-55.95	-55.78	-57.67	27.53	72.3	59.4	51.1
8.61	-57.09	-56.72	-57.76	27.63	71	58.8	49.5
8.54	-55.18	-57.08	-57.91	27.69	73.3	63.1	50.3
8.64	-56.36	-56.15	-57.58	27.63	71.2	59.2	48.3
8.59	-57.27	-56.61	-57.55	27.63	70.8	58.7	48.4
8.57	-56.43	-56.15	-57.85	27.75	72.9	62.9	49.4
8.53	-55.11	-56.77	-57.64	27.69	70.9	59.2	52.9
8.56	-55.84	-56.3	-57.67	27.72	70.3	58.8	49.4
8.53	-57.27	-56.36	-57.67	27.72	72.2	62.5	50.4
8.63	-56.36	-56.3	-57.76	27.63	70.3	59.1	49
8.69	-56.83	-56.1	-57.91	27.75	69.4	58.5	50.4
8.39	-56.36	-55.53	-57.82	27.84	71.2	61.1	50.5
8.55	-57.71	-56.51	-57.91	27.72	69.7	58.6	47.1
8.68	-57.2	-56.25	-57.85	27.66	68.9	58.5	50.5
8.41	-56.76	-56.61	-57.73	27.84	70.6	60.3	49.8
8.58	-56.9	-56.46	-57.7	27.75	69	58.7	48.4
8.59	-56.1	-55.99	-57.7	27.72	69.1	59.3	49.7
7.96	-56.36	-56.2	-57.61	27.87	69.6	59.3	45.8
8.65	-56.65	-55.89	-57.58	27.78	68.5	58.3	47.3
8.58	-56.65	-55.37	-57.91	27.63	70.5	63	51.2
8.55	-56.79	-56.72	-57.82	27.9	68.9	58.8	50.9
8.62	-56.94	-55.99	-57.64	27.87	67.9	58.3	51.4
8.7	-57.2	-56.77	-57.88	27.75	69.2	60.7	48.4
8.52	-56.36	-56.1	-57.85	27.99	68	58.8	50.3
8.63	-57.31	-56.46	-57.64	27.69	69.9	62.6	51.5
8.58	-56.72	-56.36	-57.73	27.81	68.4	59.1	52.2
8.64	-57.42	-56.25	-57.82	28.08	67.5	58.2	51.3
8.66	-57.09	-56.51	-57.88	27.78	69.3	60.7	48.2
8.67	-56.76	-56.36	-57.61	27.9	67.4	58.4	49.7
8.01	-57.05	-56.15	-57.88	27.99	68.9	62.5	49.4
8.65	-56.17	-56.2	-57.97	27.9	66.8	58.5	47.3
8.58	-56.9	-56.41	-57.67	27.96	66.4	58.2	50
8.49	-57.31	-56.51	-57.76	28.11	67.4	59.1	49.8
8.56	-56.17	-56.51	-57.76	27.96	66.2	57.9	50.5

8.58	-55.51	-56.87	-57.88	27.99	67.4	59.4	48.4
8.56	-55.77	-56.51	-57.73	27.96	65.7	58.2	47.7
8.6	-56.94	-57.08	-57.67	27.96	66.9	59.8	47.5
8.66	-57.16	-56.72	-57.91	28.02	64.8	57.8	49.4
8.55	-56.47	-55.73	-57.7	28.21	66.6	60.3	51.2
8.67	-57.23	-56.04	-57.82	28.08	64.7	57.6	48.8
8.59	-54.67	-56.46	-57.91	27.9	66.1	60.3	54.7
8.62	-56.9	-56.36	-57.7	28.3	64.3	57.6	48.8
8.69	-57.27	-56.56	-57.85	28.05	65.5	59.1	49.8
8.62	-54.82	-55.94	-57.79	28.05	63.9	57.3	50.5
8.51	-55.77	-56.1	-57.73	28.24	65.1	58.7	47.8
8.58	-55.84	-56.36	-57.61	27.99	64.7	58.9	50.2
8.65	-56.39	-56.36	-57.67	28.08	64.7	58.2	47.7
8.67	-56.43	-56.93	-57.73	28.08	66.2	61.4	51.4
8.64	-57.16	-56.51	-57.97	28.11	64.2	58	50.8
8.6	-57.34	-56.25	-57.64	28.02	65.6	62.2	50.4
8.56	-55.73	-56.15	-57.82	28.27	63.6	57.2	51
8.68	-57.6	-56.36	-57.76	27.99	64.9	60.6	49
8.63	-57.09	-55.94	-57.58	28.11	63.4	57.1	49
8.57	-56.03	-56.15	-57.82	28.21	65	59.8	47.3
8.69	-57.6	-56.72	-57.61	28.17	63.1	56.7	53.3
8.62	-56.98	-56.82	-57.97	28.08	64.2	58.4	51.1
8.63	-56.17	-56.3	-57.88	28.27	63.6	58.8	46.9
8.67	-57.38	-56.87	-57.64	28.17	63.8	58.1	51.7
8.62	-57.27	-56.46	-57.61	27.99	64.7	60.9	49.1
8.65	-56.98	-56.82	-57.64	28.3	63.1	57.2	51.2
8.57	-57.2	-56.15	-57.61	28.05	64.7	61	49.5
8.69	-56.5	-56.82	-57.73	28.27	62.7	57	52.3
8.61	-56.76	-56.15	-57.39	28.27	64.4	60.2	48.7
8.62	-55.66	-56.46	-57.94	28.24	62.3	56.6	47.7
8.72	-57.49	-56.72	-57.91	28.05	64.3	59.2	50.4
8.47	-57.38	-56.15	-57.73	28.39	62.8	57.1	49.3
8.69	-56.58	-56.41	-57.58	28.17	63.5	58.2	50.3
8.66	-55.99	-56.3	-57.58	28.11	62.6	58.8	49.4
8.59	-56.1	-56.25	-57.58	28.45	62.9	57.6	48.3
8.55	-57.86	-56.2	-57.58	28.11	63.7	60.7	50.8
8.73	-55.73	-56.51	-57.55	28.21	62.5	57.3	48.3
8.59	-57.09	-56.82	-57.67	28.27	64.6	62.7	47.1
8.57	-56.68	-56.15	-57.88	28.24	62.2	56.6	49.1
8.76	-57.12	-56.2	-57.91	28.14	63.3	59.6	48.9
8.47	-54.56	-55.78	-57.94	28.42	61.5	57.1	48.4
8.63	-56.47	-56.61	-57.61	28.24	62.7	58	47.3
8.6	-56.98	-56.46	-57.7	28.08	63.5	61.1	48.1
8.61	-56.76	-56.41	-57.45	28.45	61.8	57	47.7
8.55	-54.85	-56.25	-57.82	28.14	63.5	61.8	51.2
8.62	-57.2	-56.72	-57.42	28.21	61	56.6	49.1
8.6	-56.83	-56.98	-57.64	28.39	62.5	58.5	48.4

8.6	-54.56	-56.61	-57.55	28.08	62.2	60.2	46.8
8.66	-57.05	-56.41	-57.79	28.3	61.6	57.1	49.6
8.52	-56.76	-56.51	-57.91	28.33	62.8	62.5	51.8
8.67	-57.2	-56.72	-57.79	28.33	60.9	56.4	49.5
8.59	-55.77	-56.77	-57.67	28.21	62.2	58.2	50.1
8.65	-56.25	-55.89	-57.85	28.24	63.5	61.2	51.3
8.67	-56.32	-57.08	-57.73	28.24	61.5	56.8	50.5
8.61	-56.21	-56.41	-58	28.21	62.8	61.6	51
8.32	-57.05	-55.78	-58.1	28.45	60.3	56.7	46.7
8.66	-56.98	-56.15	-57.76	28.3	61.3	57.5	48.4
8.66	-56.43	-56.82	-57.64	28.21	62.8	62.4	50.5
8.46	-55.88	-56.46	-57.7	28.6	60.5	56.5	50.1
8.66	-56.98	-56.3	-58.06	28.45	62	58.6	50.3
8.69	-55.99	-57.19	-57.91	28.24	61.8	59.8	48.3
8.44	-57.82	-56.87	-57.73	28.48	60.6	56.8	49.7
8.55	-56.72	-56.36	-57.97	28.24	62.1	60.8	49.1
8.65	-57.16	-56.41	-57.7	28.27	60.1	57.4	50
8.23	-57.78	-56.25	-57.79	28.39	60.7	57.2	51.3
8.56	-56.17	-56.51	-57.73	28.3	62.4	62.5	50.3
8.68	-56.87	-57.24	-57.73	28.3	60.3	56.3	51
8.42	-56.87	-55.73	-57.73	28.48	61	57.8	51.6
8.66	-56.58	-56.3	-57.88	28.24	62.5	61.8	49.1
8.57	-56.39	-56.46	-57.61	28.39	60.1	56.4	54.1
8.89	-56.21	-55.73	-57.76	28.3	61.4	58.2	50.4
8.67	-57.27	-56.25	-57.76	28.17	62.5	61.6	49.9
8.54	-57.38	-56.36	-58	28.39	60.6	56.4	46.1
8.74	-56.58	-56.61	-57.48	28.21	62.3	59.7	50.3
8.49	-54.08	-57.34	-57.79	28.39	62.2	59.5	49.2
8.68	-57.12	-56.56	-57.61	28.3	61.9	57.2	48.2
8.62	-55.88	-55.47	-57.97	28.11	63.7	61.9	49.8
8.63	-57.56	-56.82	-57.7	28.42	62.1	56.9	47.6
8.59	-56.39	-56.46	-57.82	28.21	63.7	58	52.5
8.61	-56.68	-56.15	-57.76	27.87	65.6	61.9	49.1
8.61	-56.98	-56.3	-57.76	28.42	63.5	57.1	48.4
8.62	-56.1	-56.36	-57.48	28.05	65.8	61.9	50.8
8.56	-57.38	-56.56	-57.73	28.14	63.9	56.8	48.8
7.8	-56.65	-56.72	-57.73	28.21	66	59.6	48.7
8.68	-56.61	-56.56	-57.58	28.05	64.9	58.2	50.5
8.61	-57.09	-56.87	-57.67	28.05	66	58.5	51.1
8.24	-54.52	-57.08	-57.82	28.02	67.1	60.8	51.1
8.55	-56.87	-56.1	-57.88	27.99	66.7	58	51.2
8.57	-55.66	-56.04	-57.73	27.78	68.6	62.5	49.3
9.19	-57.05	-56.41	-57.73	27.93	66.9	58	46.9
8.66	-57.27	-57.03	-57.73	27.78	69.1	63.2	48.4
8.59	-55.95	-56.46	-57.64	27.9	67.5	58.1	48
8.71	-56.06	-56.51	-57.64	27.87	69.2	62.1	50.4
8.59	-56.68	-56.36	-57.61	28.17	67.5	57.8	49.6

8.66	-57.12	-56.15	-57.58	27.63	69.8	62.5	50.5
8.65	-56.5	-56.3	-57.55	27.87	67.9	58.2	49.1
8.59	-57.05	-56.46	-57.7	27.99	70	61	49.5
8.6	-56.25	-56.61	-57.61	27.9	68.2	57.8	49.9
8.58	-56.03	-56.98	-57.79	27.78	70.1	60.7	49.5
8.61	-55.07	-56.2	-57.67	27.87	68.5	58	49.3
8.58	-56.76	-56.46	-57.48	27.81	70.6	60.8	50.9
8.66	-57.05	-56.51	-57.79	27.75	69	58.2	52.6
8.8	-57.56	-56.41	-57.82	27.69	71	60.9	50.7
8.51	-56.72	-56.36	-57.85	27.99	69.3	58.2	50.7
8.62	-56.54	-56.56	-57.61	27.56	71.8	62.5	52.9
8.61	-55.4	-56.41	-57.64	27.72	69.9	58.6	49
8.58	-55.33	-55.73	-57.79	27.78	71.4	61.9	52.4
8.56	-55.95	-55.89	-57.76	27.72	70.2	58.7	49.4
8.57	-55.55	-56.93	-57.55	27.72	70.1	58.6	49.5
8.53	-54.3	-56.72	-57.67	27.81	71	59.2	49.4
8.62	-56.39	-56.15	-57.79	27.69	69.6	58.2	49.2
8.7	-56.94	-56.36	-57.61	27.72	71.2	60.8	50.4
8.56	-56.06	-56.3	-57.64	27.93	69.7	58.5	50.8
8.58	-57.45	-56.3	-57.55	27.53	71.6	62.6	49.4
8.63	-56.9	-56.15	-57.61	27.66	70.1	58.5	45.8
8.93	-57.2	-56.15	-57.79	27.56	70.7	59.9	50.2
8.57	-55.07	-56.36	-57.55	27.56	70.6	59.1	50.9
8.66	-56.61	-56.3	-57.45	27.66	69.1	58.2	49
8.72	-57.2	-55.63	-57.67	27.72	71.2	61.5	48.9
8.56	-56.54	-56.41	-57.09	27.84	69.7	58.4	49.5
8.66	-56.72	-56.04	-57.73	27.56	71.6	62.8	48.2
8.71	-56.61	-55.99	-57.7	27.72	69.9	58.7	50.8
8.65	-56.39	-56.41	-57.45	27.84	69	58.1	50.3
8.66	-57.31	-56.15	-57.73	27.66	70.4	59.4	50.3
8.61	-56.1	-55.99	-57.48	27.72	69	58.3	49.8
8.61	-57.56	-56.2	-57.42	27.75	70.9	61.7	48
8.67	-56.76	-56.3	-57.55	27.56	69.2	58.5	50.5
8.59	-55.81	-56.3	-57.7	27.63	70.8	61.8	45.1
8.66	-56.65	-56.2	-57.42	27.87	69.3	58.8	48.4
8.68	-56.98	-56.15	-57.42	27.75	68.2	58.2	49.8
8.61	-55.81	-56.2	-57.58	27.69	69.3	59.6	49.5
8.68	-56.03	-56.56	-57.67	27.96	67.9	58.2	49.9
8.68	-56.5	-55.73	-57.64	27.66	69.6	61.4	51.8
8.71	-56.5	-56.56	-57.61	27.69	68	58.3	49.6
8.55	-56.87	-55.84	-57.64	27.75	69.6	62.4	49.9
8.65	-56.68	-56.2	-57.48	27.87	67.9	58.4	49.7
8.56	-56.39	-56.51	-57.61	27.69	67.5	58.8	45.2
9.17	-56.36	-56.36	-57.61	27.69	68.5	59	49.2
8.65	-58.26	-56.2	-57.55	27.78	67.4	58	50
8.61	-57.23	-56.1	-57.79	27.75	68.6	59.6	47.3
8.97	-57.31	-56.2	-57.48	27.81	67.6	58.2	49.2

8.53	-56.68	-56.36	-57.64	27.9	69	60.8	50.9
8.65	-57.42	-56.72	-57.48	27.78	67.4	58.1	48
8.83	-56.5	-56.2	-57.27	27.66	69	62.4	51.1
8.51	-56.21	-56.15	-57.36	27.9	67.7	58.1	50.5
8.67	-56.76	-56.87	-57.55	27.63	69.4	62.7	50.1
8.62	-57.67	-56.87	-57.64	27.78	67.7	58.3	50.8
8.5	-56.54	-55.89	-57.76	27.75	69.4	61.9	48.4
8.57	-57.05	-56.46	-57.39	27.75	67.9	58.2	48.8
8.62	-56.61	-56.56	-57.39	27.69	68.5	60.3	47.9
8.59	-57.27	-56.04	-57.18	27.9	68.2	58.5	46.9
8.59	-56.17	-56.15	-57.58	27.66	67.9	59.2	51.3
8.56	-56.21	-56.3	-57.7	27.75	68.1	58.9	49.6
8.19	-57.2	-55.78	-57.61	27.78	68.4	60.1	50.3
8.65	-56.9	-55.37	-57.55	27.63	68.1	58.5	52
8.65	-56.43	-56.61	-57.42	27.75	67.2	57.9	51.8
8.72	-55.48	-55.63	-57.73	27.66	68.6	59.2	48.2
8.67	-57.12	-55.53	-57.42	27.75	67.4	57.5	51.1
8.54	-57.49	-56.77	-57.45	27.69	68.5	59.4	50.4
8.62	-56.72	-56.04	-57.82	27.66	67.1	57.9	51.6
8.61	-55.95	-56.15	-57.7	27.69	68.7	59.5	50.4
8.62	-56.17	-56.41	-57.39	27.75	67.1	57.9	49.2
8.79	-56.9	-56.25	-57.24	27.69	68.1	59.7	48.7
8.55	-57.09	-56.3	-57.21	27.87	66.1	57.6	48.6
8.56	-55.62	-55.89	-57.42	27.63	67.5	60.1	45.5
8.67	-56.1	-55.58	-57.73	27.75	65.8	57.8	48.7
8.66	-56.39	-56.36	-57.48	27.84	66.8	59.4	49.3
8.6	-56.03	-56.82	-57.39	27.84	65.3	57.5	50.8
8.68	-55.92	-55.73	-57.48	27.75	66.8	59.2	50.1
8.28	-56.68	-56.04	-57.42	27.93	65.4	57.5	48.8
8.61	-56.94	-56.3	-57.55	27.81	66.6	59.1	51.6
8.61	-55.33	-56.3	-57.39	27.69	66.1	59.3	51.2
9.23	-56.36	-55.21	-57.45	27.72	66.3	58.5	48.3
8.59	-56.1	-55.37	-57.61	27.56	67	60.8	48.6
8.67	-56.72	-55.63	-57.76	27.69	66.1	58.3	45.7
8.74	-56.32	-55.32	-57.67	27.56	67.5	61.4	49.1
8.56	-56.79	-56.1	-57.48	27.78	66.1	58.1	49.5
8.65	-56.58	-56.2	-57.18	27.53	67.9	62.1	50
8.64	-56.83	-55.84	-57.7	27.72	66	57.9	49.5
8.63	-55.73	-55.68	-57.3	27.78	67.8	62.2	48.4
8.59	-53.86	-56.77	-57.55	27.75	65.8	57.6	52
8.69	-55.95	-56.2	-57.61	27.63	67.6	61.8	51.7
9.15	-56.98	-57.24	-57.12	27.69	65.9	57.5	48.4
8.63	-56.58	-56.2	-57.3	27.63	67.2	60.4	48.2
8.61	-55.59	-56.41	-57.24	27.66	65.7	57.6	51.7
8.64	-55.44	-56.3	-57.18	27.53	67.1	59.8	48
8.56	-56.68	-55.32	-57.3	27.78	65.6	57.5	50
8.57	-55.92	-56.25	-57.45	27.53	66.9	58.8	47.1

8.7	-56.5	-56.25	-57.21	27.5	65.8	58.3	51
8.51	-55.66	-56.72	-57.21	27.78	66.4	58.4	49
8.62	-56.76	-55.06	-57.55	27.41	67.6	61	45.8
8.57	-56.06	-56.04	-57.12	27.5	66.6	58.2	51.2
8.58	-56.36	-55.58	-57.61	27.63	67.9	61.7	49.5
8.62	-55.73	-55.58	-57.3	27.63	66.5	57.9	50.7
8.66	-56.65	-56.04	-57.3	27.41	67.9	62.5	48.9
8.58	-56.32	-56.3	-57.18	27.69	66	57.8	49.6
8.62	-56.36	-56.36	-57.27	27.41	67.9	62	41.9
8.55	-55.95	-56.04	-57.3	27.53	66	57.6	47.4
8.58	-56.36	-55.47	-57.24	27.69	67.7	60.7	48.8
8.67	-56.68	-55.16	-57.55	27.53	65.8	57.6	48.1
8.65	-56.9	-55.84	-57.3	27.44	67.6	59.5	49.1
7.88	-57.16	-55.78	-57.33	27.69	65.8	57.5	49.5
8.68	-56.58	-55.99	-57.27	27.5	67.2	58.8	46.2
8.68	-57.31	-55.68	-57.27	27.38	66.4	58.2	49.5
9.01	-55.84	-56.1	-56.94	27.44	67	58.6	48.3
8.51	-56.1	-56.25	-57.24	27.47	67.4	60.1	50.7
8.55	-55.04	-55.78	-57.18	27.41	66.9	58.2	47.6
8.68	-56.83	-56.77	-57.39	27.32	68.2	61.6	53.6
8.48	-56.32	-56.46	-57.12	27.66	66.7	58.1	46.8
8.65	-56.61	-55.99	-57.15	27.23	68	62.1	49.3
8.88	-56.03	-55.73	-57.18	27.38	66.4	58.1	51.8
8.64	-56.21	-56.77	-57.27	27.35	68	62.4	50.3
8.56	-55.04	-55.58	-57.39	27.38	66.3	57.8	49.7
8.72	-56.79	-55.73	-57.03	27.35	68.1	62.1	48.1
8.51	-55.59	-56.04	-57.18	27.66	66.3	57.6	48.6
8.67	-56.36	-55.99	-57.15	27.35	67.7	61.1	48.8
8.61	-55.73	-55.63	-57.3	27.41	66.1	57.9	49.8
8.56	-55.92	-55.68	-57.15	27.44	67.8	60.4	49.6
8.66	-56.58	-55.01	-57.42	27.38	66.1	57.6	52
8.74	-55.7	-56.41	-57.18	27.29	67.9	60.5	48.9
8.57	-56.28	-56.15	-57.33	27.5	66.1	57.4	48.8
8.57	-56.61	-55.99	-57.15	27.17	68	59.9	51.6
8.72	-55.88	-56.46	-57.21	27.32	66.4	57.8	47.3
8.56	-56.76	-55.68	-57.18	27.38	67.7	59.5	48.8
8.54	-54.05	-55.58	-57.21	27.29	66.4	57.6	49.1
8.71	-56.28	-55.78	-56.97	27.17	67.9	59.5	50.3
8.65	-56.47	-56.2	-57	27.41	66.8	57.5	49.7
8.61	-56.25	-55.73	-57.06	27.2	68.3	59.5	49.4
8.63	-56.83	-54.75	-57.21	27.23	67	58	50.1
8.57	-55.51	-56.15	-57.03	27.35	68.4	59.7	49.4
8.63	-56.25	-55.53	-57	27.17	67.2	57.8	52
8.71	-56.9	-55.73	-57	27.14	68.8	60.6	48
8.67	-56.87	-56.3	-56.9	27.26	67.4	58	49.5
8.6	-56.83	-56.2	-57.3	27.11	69.2	61.1	48.7
8.68	-56.25	-55.06	-57.24	27.08	67.8	58.2	49.3

8.55	-56.36	-56.15	-57.06	27.05	69.9	61.7	49.1
8.64	-56.21	-56.46	-56.87	27.08	68.4	58.2	50.1
8.68	-56.06	-56.25	-56.84	26.98	70.3	62.5	46
7.8	-55.59	-55.73	-57.12	27.2	68.9	58.4	50.7
8.62	-56.43	-55.58	-57.06	26.8	70.1	61.1	48.1
8.65	-55.81	-55.73	-56.97	26.98	69.3	58.7	49.8
8.59	-56.36	-56.15	-56.9	27.14	68.9	58.3	47.6
8.59	-55.59	-55.94	-56.75	26.95	70.1	59.3	49.6
8.71	-56.25	-55.73	-56.94	27.05	68.9	58.2	51.3
8.61	-56.28	-55.27	-56.94	27.11	70.6	60.3	50
8.62	-56.43	-55.78	-57.06	26.95	69.3	58.3	48.6
8.71	-56.43	-55.21	-56.9	26.71	71.2	62.4	51.7
8.64	-57.16	-55.16	-56.9	27.08	69.9	58.8	51.4
8.62	-56.1	-55.68	-56.9	26.89	69.1	58.6	49.3
8.66	-55.88	-56.1	-56.84	26.83	70.4	59.4	52.6
8.61	-56.47	-55.84	-56.87	27.05	69.4	58.3	49.4
8.55	-54.82	-54.69	-56.94	26.74	71.3	62	52.6
8.64	-56.43	-55.47	-56.87	26.89	69.8	58.8	50.5
8.45	-54.93	-55.06	-56.54	26.89	71.2	61.9	49.6
8.65	-56.43	-55.58	-56.97	26.8	70.5	59	48.1
8.9	-55.22	-55.21	-57.06	26.8	69.4	58.5	50.8
8.7	-56.03	-55.78	-56.94	26.68	71.3	60.6	51.1
8.66	-56.17	-55.58	-57	26.8	70.1	58.7	49
9.06	-56.54	-55.73	-56.9	26.62	72	61.9	49.8
8.69	-56.32	-55.73	-56.87	26.74	70.5	59.1	50.3
8.62	-56.5	-55.94	-56.94	26.77	69.8	58.2	47.9
8.51	-56.1	-55.53	-56.84	26.83	71.8	61.1	50.3
8.66	-56.94	-55.63	-56.97	26.74	70.3	58.5	52
8.65	-55.84	-55.63	-56.63	26.62	70.7	59.7	50.9
8.51	-56.28	-55.58	-56.75	26.89	71	59.3	51.1
8.67	-56.28	-55.32	-56.6	26.74	70.1	58.5	49.7
8.65	-55.81	-56.25	-56.75	26.68	72.2	62.6	47.4
8.63	-56.36	-55.53	-56.9	27.01	70.3	58.9	50.7
8.65	-55.66	-55.94	-56.66	26.74	69.7	58.2	49.6
8.78	-56.28	-55.21	-56.75	26.74	71.6	60.9	50.7
8.46	-54.38	-54.95	-56.9	26.92	70	58.5	50.9
8.61	-56.03	-55.73	-56.94	26.77	70.3	60.2	49.2
8.83	-55.22	-56.3	-56.69	26.68	70.4	59.4	50.4
8.51	-55.99	-55.68	-56.54	26.92	69.7	58.6	49.7
8.68	-56.47	-55.99	-56.87	26.77	71.4	61.2	45.1
8.82	-56.25	-54.95	-56.57	26.77	69.6	58.9	50.7
8.59	-54.78	-56.1	-56.63	26.74	69.3	58.2	47.6
8.68	-56.36	-54.95	-56.75	26.8	70.9	60.2	51.3
7.8	-55.95	-56.25	-56.75	26.92	69.7	58.6	50.5
8.53	-56.61	-55.21	-56.69	26.62	71.3	62	47.6
8.75	-55.73	-55.94	-56.75	26.74	70.6	59.2	51.2
8.61	-55.95	-55.32	-56.6	26.74	69.8	58.4	53.2

8.6	-55.59	-55.47	-56.69	26.65	70.9	60.2	51.2
8.56	-56.61	-55.68	-56.9	26.77	70.1	58.4	51.1
8.59	-55.4	-55.37	-56.9	26.59	72	62.7	45.7
8.51	-56.06	-55.47	-56.84	26.89	70.5	58.9	49.3
8.66	-56.32	-55.68	-56.69	26.71	70.1	58.4	47.7
8.62	-55.59	-55.06	-56.75	26.8	72	60.2	48.6
8.55	-55.48	-55.78	-56.6	26.74	71	58.7	51.1
8.49	-54.74	-55.27	-57.06	26.62	72.7	62	47.8
8.67	-56.47	-55.63	-56.57	26.68	71.8	59.4	50.8
8.85	-55.77	-55.47	-56.78	26.68	71.2	58.6	51.2
8.58	-55.99	-56.1	-56.84	26.68	73	62.4	47.8
8.68	-55.88	-55.06	-57	26.74	71.2	59	49.5
8.53	-54.49	-55.37	-56.69	26.77	72.2	61.4	49.1
8.64	-55.15	-55.89	-56.51	26.77	71.9	59.2	48.3
8.45	-55.95	-55.16	-56.9	26.89	71.1	58.7	49.8
8.63	-55.37	-55.37	-56.69	26.65	72.8	62.5	48.6
8.63	-56.17	-55.32	-56.66	26.89	71.2	59.1	50.4
8.41	-55.62	-55.63	-56.78	26.98	71	59.4	48.9
8.7	-56.1	-55.47	-56.78	26.77	71.6	59.6	51
8.3	-54.82	-55.32	-56.94	27.05	70.3	58.6	50.4
8.63	-55.44	-55.32	-56.78	26.8	72.3	61.7	51.6
8.72	-55.51	-56.04	-56.6	26.74	70.7	58.9	51.6
8.53	-55.84	-55.16	-56.57	26.92	70.7	59.7	50.5
8.57	-56.83	-55.73	-56.97	26.8	70.9	59.3	50.2
8.39	-56.5	-55.58	-56.81	26.98	69.8	58.5	50.1
8.61	-54.78	-56.1	-56.84	26.83	71.3	61.4	50.8
8.57	-56.39	-55.84	-56.63	26.8	69.9	58.9	49.2
8.52	-55.48	-55.89	-56.97	27.05	71.3	62.8	46.8
8.62	-55.11	-55.89	-56.57	26.83	69.8	58.9	48.9
8.54	-55.7	-55.53	-57.03	26.98	70	60.3	51.6
8.67	-56.06	-56.25	-56.51	26.92	70.1	59.2	48.9
9.06	-56.1	-55.68	-56.75	26.98	69	58.7	48.1
8.67	-55.84	-55.27	-56.63	26.92	70.7	60.5	50.8
8.69	-55.07	-55.32	-56.97	26.95	69.3	58.6	50.8
8.54	-56.06	-55.78	-57.09	27.05	70.9	62.5	50
8.7	-56.06	-55.21	-57.09	27.05	68.5	58.8	47.3
8.21	-55.48	-55.68	-56.94	26.95	70	62.8	52.1
8.56	-54.16	-55.32	-56.81	27.01	68.1	58.8	51.4
8.7	-56.21	-56.41	-56.78	26.83	68.6	60.5	49.2
8.62	-55.84	-55.47	-56.69	27.17	68.8	59.2	52.5
8.53	-52.11	-55.53	-57	26.83	68.6	59.5	48.4
8.74	-55.59	-55.63	-57.06	26.95	69.1	59.2	48.9
8.67	-56.65	-55.73	-56.69	27.05	68	58.6	48.4
8.6	-53.9	-55.47	-56.81	26.98	69	59.6	50.9
8.56	-55.92	-55.27	-56.94	27.35	67.5	58.1	49.8
8.69	-55.99	-55.78	-56.63	27.08	68.3	59.7	49.4
8.75	-55.55	-55.32	-56.75	27.11	66.8	58.2	49.1

8.61	-55.51	-56.36	-56.69	27.05	68.7	60.2	53.2
8.65	-55.22	-55.84	-57.03	27.14	67.4	58.2	46.8
7.99	-55.99	-55.53	-56.84	27.17	69.1	60.4	50.5
8.61	-55.81	-55.89	-56.75	27.2	67.5	58.1	51.5
8.62	-55	-55.01	-56.9	27.11	68.6	59.7	49.7
8.58	-56.28	-55.27	-56.97	27.35	67.2	58	50.4
8.62	-56.17	-55.37	-56.78	27.08	69	59.8	50.3
8.75	-55.22	-55.73	-57.18	27.2	67.5	58.1	48.7
8.6	-56.03	-55.11	-56.84	27.14	68.6	59.8	49.4
8.55	-54.19	-55.21	-56.94	27.14	66.8	58	48.1
7.81	-55.92	-55.21	-56.84	27.29	67.8	59.8	50.2
8.59	-56.28	-55.68	-56.75	27.11	66.1	57.9	51.9
8.65	-54.52	-55.84	-56.69	27.11	67.8	59.4	46.9
8.7	-55.7	-54.95	-56.9	27.14	66.8	58.9	49.3
8.56	-55.95	-55.16	-56.57	27.23	67.8	58.9	50.3
8.65	-55.92	-55.78	-56.87	27.23	67.8	60.3	49.9
8.57	-54.6	-55.27	-56.87	27.2	67.1	58.6	50.1
9.18	-56.21	-55.27	-56.6	27.05	68.1	62	50.4
8.6	-55.29	-55.78	-56.75	27.29	66.7	58.3	48.6
8.61	-55.18	-54.75	-57.06	27.2	68.2	62.9	49.6
8.56	-56.5	-55.89	-56.87	27.35	66.3	58.1	50.3
8.56	-56.25	-55.63	-56.9	27.14	67.8	61.3	48.3
8.63	-55.4	-56.04	-56.63	27.2	66.2	58.2	50.5
8.59	-55.7	-56.15	-56.84	27.44	67.8	59.8	53.5
8.66	-56.36	-55.63	-56.81	27.23	66.2	58	48.4
9.29	-55.11	-55.27	-57.09	27.05	67.4	59.2	50.7
8.61	-55.62	-55.68	-56.84	27.2	66.6	59.3	49.3
8.56	-54.82	-55.68	-56.94	27.26	67	58.8	49.3
8.54	-56.06	-55.06	-56.75	27.29	67.9	62.4	51.6
8.56	-52.99	-55.89	-57	27.23	66.8	58.4	51.3
8.71	-55.37	-55.27	-56.9	27.2	68.4	62.9	51.1
8.53	-54.08	-55.68	-57.18	27.38	66.4	58.1	52
8.57	-55.55	-54.8	-56.66	27.23	68	61.9	47.7
8.47	-55.51	-55.37	-56.84	27.5	66.4	58.1	49.9
8.56	-56.72	-55.89	-56.9	27.23	68.1	60.3	49
8.64	-55.07	-55.63	-56.81	27.26	66.2	58.1	49.2
8.59	-55.51	-55.21	-57.27	27.41	67.6	59.4	47.6
8.66	-55.55	-55.84	-56.9	27.23	66.3	59	49.9
8.54	-55.48	-55.99	-56.75	27.5	66.3	59.2	48.7
8.61	-55.77	-56.36	-56.81	27.41	65.6	59.2	50.2
8.66	-55.62	-56.1	-56.81	27.41	65.5	58.9	49.8
8.6	-54.19	-55.32	-57.06	27.44	67	61.8	46.8
8.67	-55.59	-55.53	-56.69	27.44	66	58.6	49.6
8.71	-55.81	-55.53	-57.03	27.26	68.2	62.7	51.6
8.48	-54.82	-55.78	-56.84	27.72	65.6	58.3	48.8
8.7	-56.68	-55.89	-56.87	27.35	67	62.7	49.6
8.89	-55.48	-55.94	-56.94	27.53	64.7	58.3	51.8

8.61	-55.44	-54.85	-57	27.38	66.3	61.6	48.9
8.63	-55.33	-54.9	-57.06	27.41	65.8	58.1	50.8
8.53	-55.73	-56.1	-56.78	27.63	67.5	60.3	49.4
8.62	-56.36	-55.78	-56.81	27.35	67.1	58	50.2
8.76	-55.81	-56.04	-57.12	27.44	67.9	59.6	50.3
8.68	-56.21	-55.78	-57.03	27.38	66.9	59.2	50.5
8.61	-55.88	-55.01	-56.9	27.41	66.9	59.2	47.3
8.61	-55.99	-55.99	-56.81	27.56	66	58.6	49.3
8.57	-54.23	-55.84	-57.09	27.44	67.4	59.2	56
8.74	-56.47	-55.53	-57.12	27.23	67.9	60.6	50.1
8.47	-55.51	-55.73	-57.18	27.72	67.5	58.9	49.1
8.65	-55.59	-55.73	-57.33	27.2	68.5	61.4	52.9
8.57	-54.78	-55.16	-57	27.69	67.8	58.7	52.7
8.67	-56.39	-55.63	-56.75	27.32	68.3	61.4	47
9.14	-56.06	-55.78	-56.84	27.44	67.5	59	49.7
8.67	-55.4	-55.68	-56.97	27.2	69.3	62.2	50.5
8.59	-54.56	-55.47	-56.97	27.44	67.9	58.9	50.1
8.5	-56.1	-55.89	-57	27.41	69.7	62.4	49.7
8.56	-56.87	-55.73	-57	27.35	68.5	58.5	50
8.57	-56.79	-55.94	-56.69	27.5	69.7	62.9	52.5
8.68	-55.51	-55.99	-57.03	27.47	67.9	58.1	49
8.62	-56.17	-55.37	-57.06	27.32	69.1	62.4	49.6
8.6	-55.55	-55.99	-56.9	27.56	67.9	58.7	50
8.64	-55.04	-55.89	-56.94	27.41	69	61.9	49.3
9.01	-56.65	-56.46	-56.94	27.32	67.9	59	49.9
8.67	-55.37	-55.73	-57.15	27.26	68.8	60.9	52.3
8.62	-55.4	-55.68	-57.03	27.38	68	59	49.1
8.5	-56.32	-55.99	-56.78	27.56	68.1	60.8	45.9
8.67	-56.76	-56.51	-56.84	27.44	67.2	58.8	50.5
8.64	-55.95	-56.46	-56.84	27.38	68.6	62.8	49.8
7.84	-56.58	-55.84	-56.97	27.69	66.9	58.4	53.8
8.65	-55.77	-56.25	-56.97	27.38	68.9	62.9	52.3
8.61	-56.17	-56.1	-56.94	27.53	66.8	58.4	49.3
8.58	-54.56	-56.56	-57	27.5	68.7	63	50.7
8.64	-56.43	-56.2	-56.9	27.5	66.3	58.2	54.7
8.62	-56.68	-55.63	-57.06	27.5	67.4	61.3	51.1
8.52	-56.28	-55.47	-56.9	27.75	65.8	58.1	48.7
8.6	-54.56	-55.68	-57.03	27.63	66.7	59.9	50.8
8.63	-56.21	-55.27	-57.09	27.66	65.5	58.2	52.2
8.25	-55.33	-55.78	-56.97	27.75	66.2	59.2	46.2
8.66	-56.1	-55.84	-57	27.5	66.3	60.8	48.4
8.65	-55.88	-55.99	-57.15	27.66	65.5	58.5	50.7
8.83	-54.56	-55.32	-57	27.41	66.9	62.2	53.7
8.61	-55.84	-55.73	-57.18	27.99	64.9	58.2	44.1
8.69	-56.32	-56.25	-57.15	27.72	66.2	62.6	48.4
8.77	-56.1	-55.99	-57.18	27.75	64.1	58.1	51
8.58	-56.58	-55.63	-56.87	27.93	65.6	61.1	50.9

8.63	-55.62	-55.89	-56.97	27.93	63.3	57.5	48.7
8.62	-55.04	-55.63	-57.18	27.75	65.5	60.6	50.8
8.64	-56.17	-56.15	-56.81	28.02	63.4	57.3	46.7
8.57	-56.65	-55.58	-57	27.72	64.7	59.2	53.2
8.71	-55.4	-57.08	-56.9	27.78	63.4	58.2	49.5
8.61	-56.25	-56.41	-57.21	28.02	64.9	58.9	48.7
8.59	-56.03	-55.63	-57.12	27.78	63.4	58.2	48.2
8.61	-55.95	-55.94	-56.87	27.84	64.2	58.6	51.4
8.65	-55.95	-55.58	-57.09	27.93	64.4	60.7	48.2
8.64	-55.92	-56.72	-57.06	27.99	63.6	58	54.1
8.63	-54.71	-56.87	-57.24	27.81	65.8	63.6	49.7
8.63	-55.55	-55.32	-57.3	28.08	63.1	57.4	48.4
8.67	-55.7	-55.73	-57	27.93	64.8	63.1	47.9
8.56	-55.48	-55.37	-57.21	27.9	62.6	57.3	50
8.56	-55.37	-55.58	-57.36	28.05	64.6	61.4	48.7
8.65	-55.59	-55.27	-57.21	27.78	62.8	58.7	49.4
8.66	-55.55	-55.47	-57.24	27.93	63.4	58.2	50.7
8.66	-55.33	-56.56	-57.21	28.02	63.8	60.6	49.4
8.56	-54.3	-55.68	-57.06	27.84	62.6	57.6	52.9
8.64	-56.83	-55.84	-57.03	27.87	64.2	60.7	47.3
7.96	-55.84	-55.89	-56.81	28.24	62	57	46.2
8.57	-53.61	-56.3	-56.9	27.99	63.6	59.2	54.2
8.62	-55.88	-55.53	-57.12	27.78	64.1	61.6	49.3
8.64	-56.28	-55.53	-57.27	28.17	62.7	57.6	49.1
8.59	-55	-56.87	-57.09	27.78	64.7	63.2	48.4
8.65	-56.21	-55.68	-57.09	28.08	62.1	57.3	48.4
8.65	-55.62	-55.37	-57.39	28.11	63.7	59.7	48.9
8.63	-54.38	-55.11	-57.03	27.9	62.7	59	51.2
8.67	-56.03	-55.89	-57.24	28.02	63.2	58.2	49.1
8.64	-55.88	-56.25	-57.06	28.05	64.4	62.8	48.8
8.63	-55.4	-56.1	-57.12	28.08	62.1	57.1	47.2
8.63	-55.77	-55.73	-57.33	27.96	63.6	61.9	47.9
8.5	-54.71	-55.94	-57.21	28.24	61.8	57.2	49.6
8.62	-55.04	-56.41	-57.03	28.02	62.7	58.2	51.2
8.63	-56.06	-55.73	-56.81	27.93	64.2	62.9	51.6
8.63	-56.03	-55.84	-57.39	28.33	61.8	57.1	50.9
8.64	-55.18	-55.89	-57.27	28.02	63.3	60.8	51.1
8.76	-56.03	-56.36	-57.12	28.05	62.2	59	48.7
8.56	-56.17	-56.25	-57.24	28.21	62.3	57.6	51
8.59	-55.59	-56.46	-57.15	27.99	63.9	63.1	52.7
8.88	-55.84	-56.1	-57.39	28.11	61.4	56.9	49.4
8.63	-55.29	-54.95	-57.21	28.14	62.7	59.1	51.6
8.58	-54.05	-55.78	-57.58	27.96	62.8	60.6	50.9
9.03	-56.17	-55.99	-57.12	28.11	61.6	57.2	47.9
8.55	-56.58	-55.73	-57.15	27.99	63.5	62.4	51.5
8.57	-55.04	-56.51	-57.09	28.11	61.3	57.2	49.5
8.84	-55.4	-56.25	-56.9	28.17	62.3	58.1	48.6

8.58	-55.77	-55.99	-56.97	28.05	63.6	62.8	47.8
8.67	-56.43	-56.04	-57.18	28.21	61.1	56.7	48.6
9.12	-56.72	-56.04	-57.27	27.99	62.5	59.1	50.5
8.53	-56.54	-55.84	-57.09	28.02	63.6	61.9	48.7
8.65	-55.07	-56.04	-56.94	28.14	61.4	56.6	48
8.95	-55.88	-55.68	-57.39	28.08	62.7	60.3	44.6
8.59	-56.98	-56.36	-57.15	28.05	62.2	59.4	50.1
8.58	-54.49	-56.51	-56.78	28.11	61.5	57.2	48.9
8.51	-56.72	-55.73	-57.24	28.17	62.9	62.5	51.2
8.6	-55.62	-55.68	-57.03	28.08	61.2	57.5	49.4
8.67	-55.04	-56.15	-57.09	28.08	61.9	57.5	52
8.62	-55.77	-56.41	-57.3	28.21	63.5	62.7	50.7
8.58	-56.1	-56.15	-56.81	28.17	60.7	56.1	50.5
8.7	-56.25	-55.89	-57.12	28.14	62.3	58.6	47.1
8.57	-54.63	-55.47	-57.09	28.17	63.4	62.7	50.5
8.56	-54.01	-56.15	-57.09	28.14	60.9	56.3	50.7
8.56	-54.71	-56.3	-57.36	28.14	61.7	58.2	48.1
8.52	-55.11	-55.94	-57.15	28.14	63.1	62.2	47.8
8.57	-53.9	-55.73	-57.15	28.24	60.4	56.4	49
8.64	-54.82	-55.47	-57.15	28.14	61.6	58.5	49.2
8.6	-55	-55.32	-57.09	28.17	62.6	61.4	50.9
8.68	-56.65	-55.89	-57.12	28.24	60.5	56.4	52.1
8.69	-55.66	-56.15	-56.97	28.17	62.5	60.7	50.3
8.55	-56.06	-55.99	-57.15	28.24	59.9	55.9	49.7
8.6	-56.28	-55.84	-56.9	28.11	62	58.7	49.8
8.65	-55.84	-55.94	-57.3	27.99	62.3	60.7	48.6
8.62	-55.59	-56.2	-56.94	28.21	60.4	56.3	49.9
8.59	-54.82	-55.58	-57.21	28.17	62.6	61.4	48.7
8.56	-55.88	-55.84	-57.06	28.42	60	56	50.9
8.68	-55.88	-56.36	-57.12	28.24	61.3	58.1	51.6
8.7	-56.68	-55.78	-57.18	28.11	63.5	63.7	46.9
8.7	-56.1	-55.58	-56.87	28.48	60.6	56.2	53.7
8.58	-55.88	-55.73	-57.24	28.08	62.6	62.1	49.9
8.71	-56.87	-56.46	-57.03	28.02	62.1	59.2	49.4
8.59	-55.59	-56.2	-57.3	28.3	62.3	57.4	49.1
8.59	-55.95	-55.73	-57.12	28.05	62.4	59.7	49.1
8.9	-56.1	-56.36	-56.97	28.21	62.1	57.1	51.5
8.64	-55.81	-55.53	-57.12	28.08	63.7	62.2	54
8.6	-54.3	-55.99	-57.27	28.27	61.4	56.7	46.2
8.64	-55.66	-55.73	-56.84	28.14	62.5	58.2	48.9
8.65	-56.54	-55.63	-57	27.96	64.6	62.6	50
8.59	-54.71	-55.06	-57.03	28.11	62.5	56.8	48.2
7.8	-56.17	-56.41	-57.03	28.11	64.1	62.5	49.5
8.56	-56.17	-56.61	-57.18	28.14	61.8	56.6	49.3
8.65	-54.49	-55.73	-57.15	28.02	63.2	58.4	50.9
8.63	-55.7	-55.63	-57.48	28.24	63.9	61.1	51.9
8.55	-56.54	-56.51	-57.15	28.14	62.9	56.9	50.4

8.73	-56.28	-55.94	-57.18	28.05	65.5	62.6	49.7
8.47	-55.15	-56.46	-57.21	28.21	63.9	56.5	49.4
8.62	-56.65	-55.84	-57.18	28.02	65.8	60.2	50
9.01	-56.06	-56.15	-57.18	27.99	64.6	57.1	49.7
8.63	-56.21	-55.94	-57.06	28.05	66	58.6	50
8.62	-55.73	-55.84	-57.06	27.93	65.7	58.6	49.4
8.16	-53.5	-56.46	-57.09	28.08	66.6	58.3	50.5
8.63	-56.21	-56.04	-57.24	27.72	66.8	60.5	50.1
8.67	-55.07	-55.53	-57.12	27.99	65.9	58.2	51.5
8.65	-55.99	-55.73	-56.97	27.78	68.2	62.5	50.3
8.67	-56.94	-55.78	-57.15	27.87	66.7	57.8	50.5
8.62	-56.58	-55.32	-57.3	27.9	68.9	63.5	49.2
8.7	-55.29	-55.99	-57.18	27.9	66.2	57.6	50.1
8.52	-56.76	-56.1	-57.06	28.02	68.1	63.1	52.6
8.57	-55.73	-56.61	-57.12	27.9	66.2	57.3	49.6
8.61	-55	-55.89	-57.15	27.81	68.3	62.5	49.4
8.62	-55.84	-56.2	-57.3	27.93	66.7	57.4	50.8
8.7	-56.25	-56.3	-57.21	27.75	69	63.4	50.7
8.58	-55.55	-56.04	-56.9	28.02	67.9	57.6	50.5
8.54	-56.25	-55.78	-57.18	27.75	69.3	62.2	51
8.76	-54.93	-55.73	-57.09	27.87	67.7	57.8	46.9
8.59	-56.06	-55.63	-57.06	27.93	68.3	61	43.1
8.59	-55.51	-56.36	-57.09	27.96	65.9	57.1	49.7
8.54	-55.7	-55.73	-57.15	28.08	67.7	60.1	46.2
8.61	-55.66	-57.55	-57.09	27.96	65.5	57.2	50.5
8.57	-56.79	-56.77	-57.21	27.96	66.7	59.7	50.9
8.39	-54.93	-55.89	-57.18	28.14	65.3	57.1	49.9
8.57	-54.71	-56.41	-56.94	27.9	66.8	58.9	49.9
8.66	-55.95	-55.53	-57.18	28.02	64.8	57.1	49.7
8.62	-56.06	-55.89	-57.27	28.21	65.6	58.4	50.9
8.6	-55.99	-55.99	-57.18	27.93	64.9	59.3	51
8.68	-55.44	-56.93	-56.84	28.02	64.9	58.3	47.7
8.59	-56.36	-55.68	-57.21	27.99	65.9	61.3	49.5
8.54	-54.93	-55.47	-57.36	28.02	64.7	57.6	49
8.95	-56.47	-55.27	-56.94	27.9	65.3	60.3	49.3
8.67	-56.03	-55.68	-57.3	28.08	64.5	57.2	49.8
8.57	-56.21	-55.99	-57.09	28.02	65.6	61.7	51.4
9.07	-55.62	-55.89	-57.3	28.02	63.5	57.2	47.2
8.68	-56.21	-56.25	-57.18	27.96	65.3	60.7	49.6
8.63	-55.81	-56.1	-56.87	28.14	63.2	56.7	47.3
8.5	-55.59	-56.36	-56.94	28.24	64	59.7	48.9
8.7	-56.21	-55.89	-57	27.99	64.3	60.7	45.3
8.56	-55.95	-56.61	-57.06	28.11	63.2	57.5	51.2
8.32	-56.17	-56.04	-56.97	28.17	64.8	62.5	49.6
8.66	-56.54	-56.3	-57.21	28.17	62.5	57.1	51.3
8.56	-54.45	-55.84	-57.09	28.08	63.9	62	47.5
8.68	-55.84	-55.73	-57.27	28.33	61.9	57.1	50.8

8.66	-56.03	-55.63	-57	28.11	62.9	58.2	51.2
8.65	-56.87	-56.77	-57.3	28.08	62.2	58.8	48.9
8.65	-55.95	-55.89	-57.03	28.48	62.1	57.4	50.3
8.59	-52.51	-55.73	-56.97	28.14	64	62.6	50.8
8.74	-55.7	-55.68	-57.27	28.3	61.4	56.7	51.7
8.62	-55.99	-56.25	-56.84	28.48	62.6	59.3	49.1
8.58	-55.37	-56.2	-56.69	28.27	61.4	58.4	49.4
8.74	-56.17	-55.47	-57.12	28.27	61.6	57.3	51
8.61	-55.33	-55.78	-57.48	28.39	63.3	62.5	48.3
8.56	-56.32	-56.41	-57.12	28.33	60.9	56.3	47.4
9.08	-55.7	-55.89	-57.18	28.24	62.2	59.3	49.9
8.65	-56.5	-56.2	-57.06	28.24	61.3	58.9	51.4
8.62	-56.21	-55.73	-56.84	28.33	60.6	57	52.3
8.45	-54.41	-56.04	-57.27	28.42	62	61.9	50.3
8.69	-55.84	-55.68	-57.18	28.3	60	57.2	49.9
8.63	-56.36	-55.37	-57.12	28.39	60.2	56.8	54.2
8.38	-53.94	-55.68	-57.3	28.48	61.6	62	52.6
8.63	-56.06	-56.04	-56.94	28.33	59.5	56.7	48.8
8.71	-55.62	-56.25	-57.15	28.39	60	57	49.4
8.57	-53.24	-56.1	-57.12	28.48	61.5	62.5	48.8
8.62	-56.72	-55.78	-57.15	28.48	59	56.5	50.1
8.62	-56.76	-56.1	-57.03	28.45	60	57.1	49.3
8.54	-55.66	-55.37	-57.3	28.42	61.4	62.6	49.6
8.66	-55.92	-55.68	-56.94	28.51	58.7	55.7	49.9
8.7	-55.99	-55.84	-57.06	28.42	59.9	58.2	50.8
8.55	-55.77	-56.3	-57	28.51	60.7	62	50.4
8.64	-54.78	-56.04	-57.09	28.57	58.2	55.8	50.1
8.47	-55.7	-56.25	-57.03	28.54	59.5	58.1	50
8.65	-56.39	-55.78	-57.15	28.24	60.7	61.8	49.3
8.66	-55.29	-55.78	-57.24	28.45	58.2	55.7	50.4
8.41	-53.61	-55.84	-57.03	28.48	59.7	58.5	49.3
8.61	-56.39	-56.1	-56.87	28.17	61.5	62.9	49.2
8.61	-56.39	-55.32	-57.12	28.48	58.8	55.9	47.2
8.62	-55.15	-56.2	-57	28.63	60.3	62.1	50.4
8.65	-56.17	-55.99	-57.09	28.3	58.8	58.3	49.2
8.64	-56.1	-56.25	-57.15	28.48	58.8	56.4	50
8.63	-55.73	-55.84	-57.03	28.57	60.3	63.1	50.1
8.69	-55.84	-56.82	-57.03	28.6	57.4	55	48
8.58	-53.57	-56.04	-56.75	28.45	60	59.4	51.1
8.62	-56.21	-55.68	-57.24	28.42	60.7	62	49.7
8.67	-56.25	-55.58	-57.12	28.51	58.2	55.6	50.4
8.75	-55.81	-56.15	-57.06	28.33	60.3	62.8	48.6
8.58	-55.59	-56.41	-56.94	28.48	58.3	57.8	48.9
8.62	-55.29	-56.25	-56.97	28.51	58.5	56.8	50.4
8.52	-55.62	-56.46	-56.94	28.39	60.6	63	51.7
8.56	-56.39	-56.41	-56.78	28.57	57.2	54.9	46
8.61	-56.39	-55.11	-57.15	28.42	60.2	60.3	50.5

8.44	-56.28	-56.25	-57.18	28.54	59.2	58.6	49.5
8.62	-56.06	-55.06	-56.81	28.45	59.4	56.2	47.9
8.63	-55.88	-56.1	-57.03	28.42	61.4	62.5	48
8.61	-56.36	-55.27	-56.97	28.63	58.4	55	50.3
8.59	-55.77	-56.93	-56.81	28.42	60.3	58.2	47.4
8.59	-56.06	-56.15	-57.06	28.24	61.9	62.8	50.1
8.62	-55.77	-55.94	-57.06	28.69	59.1	55.8	48.9
8.56	-55.88	-55.27	-57.03	28.3	61.4	62.9	47.6
8.71	-56.5	-55.99	-57.3	28.48	58.5	56.2	50.3
8.53	-54.71	-56.25	-57.33	28.57	60.1	57.3	49.8
8.55	-54.52	-55.06	-57.36	28.27	61.6	62.4	48.7
8.7	-56.28	-55.63	-57.03	28.45	58.9	56	49.3
8.53	-55.15	-55.99	-57.27	28.51	61.4	62.7	49.1
8.7	-55.7	-56.04	-56.94	28.39	59.2	57.9	53.1
8.45	-55.44	-55.68	-57.03	28.54	59.8	56.8	48.6
8.62	-55.37	-55.99	-56.81	28.27	61.4	62.8	48.1
8.62	-55	-55.99	-57.18	28.45	58.7	55.2	50
8.65	-55.99	-55.73	-57.03	28.54	61.3	60.3	48.9
8.66	-56.17	-55.84	-57.12	28.24	59.6	58.9	51.3
8.64	-55.59	-55.78	-57.36	28.48	59.4	56.5	50.5
8.6	-55.18	-55.37	-57	28.39	61.6	62.8	44.9
8.59	-55.59	-55.78	-57.3	28.48	58.5	55	51.5
8.82	-56.58	-55.47	-57.12	28.3	60.1	59.8	46.9
8.55	-56.28	-56.41	-57.18	28.39	60.4	61.4	50.1
8.57	-55.07	-56.36	-57.18	28.48	58.2	55.4	50.7
8.89	-55.84	-55.32	-57.03	28.42	59.8	60.3	49.5
8.56	-55.92	-55.58	-56.87	28.48	57.8	57.1	50
8.66	-56.32	-55.37	-57.06	28.51	58.3	56.3	51.3
8.94	-53.35	-56.3	-56.66	28.42	60.3	62.9	49.5
8.66	-56.36	-56.56	-57.03	28.57	56.8	55	49.4
8.65	-55.15	-55.53	-57.18	28.6	58.4	57.1	49.5
8.82	-55.48	-55.01	-56.97	28.33	60.2	62.7	50.5
8.55	-56.06	-55.73	-57.24	28.82	57	54.7	49.9
8.66	-55.37	-55.11	-57.18	28.51	58.7	57.6	50.8
8.88	-54.27	-55.94	-57.27	28.39	60.3	62.4	50.4
8.57	-55.04	-55.94	-57.12	28.63	57.1	54.9	50.3
8.55	-53.53	-55.68	-56.69	28.42	59	58.3	47.5
8.51	-54.85	-56.82	-56.75	28.48	60.1	62.2	47.9
8.7	-55.84	-55.58	-57.15	28.57	57.1	54.7	46.6
8.62	-56.5	-55.89	-56.9	28.54	59.1	58.8	49.9
8.69	-55.4	-56.15	-57.18	28.51	60.3	62.1	49
8.63	-55.48	-55.68	-57.24	28.6	57.7	55.1	50.2
8.69	-56.28	-55.94	-56.78	28.45	59.1	59.2	49.8
8.58	-54.52	-56.25	-56.81	28.57	59.2	59.7	50.1
8.55	-54.27	-55.78	-56.97	28.57	57.9	55.4	48.4
8.63	-54.38	-56.04	-57.18	28.48	59.7	61.6	49.8
8.53	-55.04	-55.73	-57.24	28.63	59.3	59.8	50.3

8.56	-53.68	-56.2	-56.57	28.48	58.5	55.6	48.1
8.65	-54.93	-55.16	-57.09	28.42	60.3	62.2	51.5
8.64	-56.06	-56.41	-56.84	28.75	57.6	55.8	46
8.62	-55.44	-55.53	-57.24	28.48	59.3	57.1	49.2
8.81	-56.03	-56.93	-56.84	28.3	61.4	62.4	49.2
8.63	-55.73	-55.99	-56.97	28.54	58.7	55.1	52.6
8.67	-55.77	-56.56	-56.97	28.33	60.3	59.1	49.7
8.35	-55.22	-55.84	-56.94	28.45	59.2	57.9	53.2
8.62	-55.66	-56.82	-56.87	28.51	59.7	56.4	49.4
8.7	-55.51	-55.78	-56.94	28.27	61.4	62.9	51.6
8.54	-55.18	-54.95	-56.87	28.66	58.7	55	49.8
8.68	-56.03	-55.58	-56.87	28.42	60.4	58.9	49.7
8.74	-56.25	-56.1	-57.09	28.21	60.1	59.2	49.4
8.56	-54.41	-55.37	-57	28.48	59.6	56.3	48
8.68	-55.73	-55.53	-56.94	28.3	61.4	63.2	49
8.24	-55.66	-55.84	-56.78	28.63	58.5	55.7	46.9
8.61	-54.45	-55.89	-56.84	28.39	60.3	60.3	50.7
8.62	-56.43	-55.84	-56.9	28.21	60.6	61.1	50.5
8.53	-55.55	-55.63	-56.75	28.66	59.2	56.1	47.5
8.69	-55.88	-56.04	-56.84	28.21	61.4	62.5	47.5
9.1	-55.84	-55.68	-57	28.45	58.5	55.5	51.3
8.67	-55.48	-55.32	-56.94	28.21	60.6	58.8	55.2
8.63	-55.81	-55.58	-56.81	28.17	60.3	59	49.3
7.97	-53.97	-55.94	-56.9	28.51	59.9	56.3	51.4
8.56	-56.39	-55.73	-56.84	28.21	62.1	63.1	49.1
8.69	-55.84	-55.78	-56.87	28.39	59.2	55.5	53.9
8.51	-53.21	-55.89	-56.87	28.39	61.5	60.8	49.8
8.59	-55.55	-55.11	-56.69	28.17	59.4	56.2	51
8.69	-54.16	-55.99	-56.97	28.3	61.1	58.2	50.1
8.61	-55.66	-55.68	-56.69	27.99	62.6	63.5	45.1
8.65	-55.95	-55.53	-56.78	28.17	59.3	55.9	48.2
8.24	-55.95	-55.47	-56.9	28.21	61.2	61.4	47.9
8.57	-54.08	-54.95	-56.94	28.08	60.3	58.7	50.9
8.6	-56.03	-55.63	-56.78	28.17	60.3	56.9	50.8
8.45	-54.63	-55.06	-57.12	28.11	62.1	62.5	49.2
8.65	-55.15	-55.89	-56.69	28.27	59.5	55.9	48.4
8.47	-55.7	-56.3	-56.81	28.21	61.8	63	47.5
8.69	-56.36	-55.21	-56.75	28.14	60.2	58.6	48.1
8.66	-57.45	-55.89	-56.84	28.14	59.8	56.4	49.6
8.66	-55.88	-55.58	-56.87	28.21	61.5	62.5	47
8.69	-56.43	-55.01	-57.06	28.21	59	55.4	48.4
8.66	-55.04	-55.68	-56.94	28.14	60.6	59.3	53.5
8.56	-55.55	-55.27	-56.75	28.27	59.7	58.5	47
8.58	-53.86	-56.1	-56.69	28.14	59.7	56.7	48
8.75	-56.25	-55.47	-56.66	27.99	61.7	62.4	49.6
8.64	-55.95	-55.06	-56.6	28.17	59.1	55.9	45.2
8.65	-55.33	-55.73	-56.78	28.11	61.3	62.4	51.6

8.41	-55.73	-55.16	-56.94	28.24	59.8	58.8	45.3
8.65	-56.06	-55.06	-56.69	28.24	59.5	56.2	51.2
8.64	-55.81	-55.94	-56.78	27.99	61	61.3	52.1
8.63	-55.29	-56.61	-56.57	28.45	58.8	55.6	51.1
8.62	-55.48	-55.89	-56.81	28.11	60.5	61.8	50.4
8.64	-54.45	-55.53	-56.81	28.17	57.9	55.4	48.4
8.44	-55.15	-55.32	-57.18	28.3	59.8	57.9	48.9
8.57	-54.6	-55.58	-56.75	28.08	60	60.2	51
8.37	-54.45	-55.06	-56.97	28.39	59	56.1	50
8.55	-54.49	-55.99	-56.6	28.17	60.7	61.8	50.3
8.61	-55.37	-55.01	-56.66	28.3	57.9	55.2	48.4
8.58	-55.44	-54.95	-57.03	28.3	59.7	58.3	49
8.67	-56.32	-56.98	-56.69	28.02	60.3	61.1	49.5
8.82	-55.77	-55.11	-56.78	28.24	58.2	56	50.5
8.57	-54.12	-56.46	-56.57	28.05	61	63.2	56.4
8.56	-55.95	-55.73	-56.84	28.21	58	55.1	50.9
7.8	-53.21	-55.11	-56.84	28.27	59.8	58.5	49.8
8.56	-55.73	-55.99	-56.66	28.08	59.8	59.8	46
8.62	-54.82	-55.53	-56.66	28.3	59	56.1	45.2
8.56	-55.37	-55.16	-56.63	28.21	61	62.9	48.8
8.63	-56.25	-55.94	-56.87	28.05	58	54.9	49.4
9.06	-55.7	-55.47	-56.66	28.11	59.6	58.6	48.2
8.67	-55.81	-55.01	-57	27.96	59.9	59.8	47.8
8.65	-54.74	-55.99	-56.63	28.21	58.8	56	52.7
8.59	-55.29	-55.73	-56.63	28.21	60.4	61.5	49.9
8.65	-55.18	-56.41	-56.6	28.05	57.6	54.6	50.7
8.67	-55.88	-55.47	-56.66	28.14	59.9	58.2	50.3
8.53	-54.78	-54.85	-56.75	28.11	60.3	60.9	46.2
8.56	-53.57	-54.95	-56.78	28.08	58.8	55.6	47.8
8.64	-54.52	-56.1	-56.45	28.08	60.6	61.6	49.5
8.55	-54.05	-55.58	-56.78	28.21	57.9	55.1	47.5
8.68	-55.4	-55.27	-56.69	28.08	59.5	57.9	48.9
8.68	-56.03	-56.25	-56.54	28.14	61.6	62.5	51
8.6	-52.88	-54.95	-56.75	28.11	58.5	55.4	48.1
8.71	-55.37	-55.84	-56.48	27.9	60.3	61.7	48.3
8.48	-55.99	-56.15	-56.66	28.33	58.2	56.2	49.9
8.57	-56.21	-55.11	-56.63	28.02	59.4	57.1	47.1
9.2	-55.88	-54.59	-56.9	27.84	61.4	63	47.8
8.63	-54.49	-55.11	-56.45	28.17	58.2	55	52.1
8.67	-55.81	-55.99	-56.48	27.99	60	59	47.2
8.61	-55.95	-55.94	-56.81	28.02	60.9	61.4	49.6
8.64	-54.89	-55.73	-56.81	28.11	58.9	55.5	47.7
8.7	-52.36	-56.36	-56.66	28.05	60.5	60.2	50
8.61	-55.4	-55.11	-56.75	28.11	58.3	56.6	49.5
8.64	-55.7	-55.47	-56.84	28.08	59.6	56.9	50.3
8.21	-55.18	-55.78	-56.6	28.05	61.7	62.5	51.6
8.6	-54.85	-56.2	-56.6	28.08	58.4	55.4	47.6

8.66	-55.4	-55.78	-56.63	28.08	60.1	58.8	51.1
8.53	-53.68	-54.85	-56.42	28.17	59	57.5	48.8
8.72	-55.66	-55.47	-56.57	28.05	59.5	56.6	48.9
8.94	-56.28	-55.89	-56.69	27.9	61.5	63	49.5
8.55	-55.99	-55.11	-56.51	28.14	58.3	54.9	48.6
8.58	-55.04	-56.15	-56.78	27.96	60.3	59	50.2
8.41	-56.76	-55.53	-56.75	28.02	60.7	60.4	47.1
8.65	-54.89	-55.73	-56.54	28.05	59.2	55.9	50.8
8.56	-53.39	-55.63	-56.32	28.05	61.4	62.8	46.3
8.64	-55.29	-55.47	-56.54	28.11	59.2	57.3	49.3
8.65	-56.1	-55.01	-56.63	28.08	59.9	57	49.5
8.7	-55	-55.47	-56.87	27.87	60.5	60.4	51.2
8.56	-55.62	-55.84	-56.32	28.14	59.5	56	49.8
8.57	-53.21	-55.37	-56.78	27.9	61.6	62.9	50.7
9.18	-52.95	-55.16	-56.29	27.96	59.2	56.4	47.3
8.56	-54.78	-54.69	-56.51	27.96	60.2	57.1	48.4
8.62	-56.1	-54.85	-56.69	27.9	60.3	59.6	48.1
8.56	-55.11	-54.9	-56.66	28.24	59.7	55.9	50.5
8.64	-55.29	-55.89	-56.66	27.93	61.8	63.1	47.1
8.94	-55	-55.21	-56.57	28.02	59.4	57	49.2
8.65	-56.1	-55.94	-56.32	27.96	60.1	56.9	50.3
8.56	-53.79	-54.85	-56.69	27.78	61.1	60.3	51.3
8.04	-53.1	-55.37	-56.51	28.17	59.7	56	49.6
8.66	-54.74	-55.32	-56.57	27.9	62	63.1	50
8.58	-55.48	-55.63	-56.63	28.02	60.1	57.4	48.7
8.57	-55.44	-55.11	-56.78	28.17	60.4	56.8	47.6
8.66	-55	-55.32	-56.54	27.9	60.6	59.6	49.6
8.76	-55.73	-54.95	-57.12	28.08	59.5	56	50.1
8.46	-54.82	-55.63	-56.57	28.11	61.7	63	51
8.59	-53.42	-55.63	-56.45	28.14	59	55.1	49.6
8.54	-55.55	-55.11	-56.69	28.11	61	58.2	47.4
8.58	-55.07	-54.9	-56.81	27.93	62.6	62.6	52.5
8.64	-55.11	-55.37	-56.78	28.05	59.4	55.6	49.7
8.57	-55.88	-55.73	-56.57	28.17	61.2	62	49.2
8.6	-54.56	-55.21	-56.39	28.02	59.4	58.7	50.1
8.51	-56.06	-55.01	-56.69	28.3	58.7	56.5	51
8.57	-55.51	-55.78	-56.54	28.02	60.1	62.5	49.7
8.71	-54.78	-55.84	-56.6	28.33	56.9	55.4	48.7
8.56	-53.79	-55.47	-56.54	28.45	58.4	58.3	49.4
8.63	-54.08	-55.78	-56.78	28.05	58.5	59.7	45.7
8.77	-55.22	-55.68	-56.94	28.27	57.7	56	51.1
8.53	-55.66	-56.04	-56.57	28.27	59.6	61.5	44.8
8.64	-55.29	-55.63	-56.45	28.27	57.1	55.2	49.2
8.48	-55.77	-54.95	-56.78	28.33	59.2	58	50.7
8.6	-54.23	-55.78	-56.57	28.02	60.5	61.4	49.9
8.58	-52.84	-55.53	-56.66	28.17	58.7	56.1	50.1
8.56	-55	-55.11	-56.87	28.24	60.9	63	45.8

8.59	-55.07	-55.53	-56.84	28.14	59.2	58.2	49.9
9.15	-54.71	-55.37	-56.9	28.08	60.3	57.2	47.4
8.55	-53.35	-55.78	-56.87	27.93	60.7	59.7	49.7
8.64	-54.56	-55.32	-56.94	28.08	60.6	57	49.8
8.54	-55.62	-55.27	-56.63	28.17	62.8	62.5	51.1
8.69	-55.59	-55.84	-56.81	28.05	61.3	57.1	48.2
8.57	-53.1	-55.63	-56.48	27.99	62.8	58.6	49.5
8.59	-55.04	-55.63	-56.84	28.14	62	57.8	50.7
8.56	-55.4	-55.63	-56.69	27.96	63.2	57.2	48.8
9.15	-55.66	-55.37	-56.78	27.78	64.9	62.5	49.1
8.66	-55.37	-55.73	-56.63	28.11	62.7	56.3	51.6
8.56	-54.82	-55.84	-56.45	27.87	64.3	59.1	49.2
8.64	-54.63	-55.84	-56.84	27.93	65	60.3	50.5
8.66	-55.7	-55.47	-56.69	27.84	64.5	57.3	48.2
8.64	-55.37	-56.3	-57.06	27.72	66.8	62.9	52.1
8.47	-55.62	-55.32	-56.87	28.08	64.4	56.9	51.7
8.56	-55.04	-55.21	-56.63	27.75	66.5	61	50.3
7.84	-56.06	-54.9	-56.81	28.08	64.7	57.2	49.8
8.55	-54.05	-55.63	-56.78	27.75	66.4	58.3	47.6
8.6	-53.06	-55.37	-56.84	27.78	65.9	59	51.4
8.62	-55.44	-55.11	-56.63	27.9	66.9	57.9	49.3
8.65	-55.84	-55.78	-56.87	27.56	68.3	61	46.8
8.74	-55.77	-55.84	-56.63	27.9	67.1	57.6	48.8
8.54	-55.95	-55.16	-56.9	27.69	69.2	62.7	49.7
8.65	-55.11	-55.58	-56.63	27.81	67.6	57.4	50.4
8.55	-55	-55.68	-56.69	27.81	69.2	63.1	49.5
8.68	-55.81	-55.37	-56.63	27.78	66.8	57.1	49.3
8.65	-55.81	-55.78	-56.75	27.63	68.8	61.9	46.5
8.56	-55.55	-55.84	-56.69	27.96	66.4	57.1	49.1
8.59	-54.16	-54.9	-56.81	27.78	67.7	60.2	49.9
9.14	-55.7	-55.94	-56.54	27.78	65.8	57	51.2
8.55	-56.03	-55.63	-56.81	27.72	67.5	59.4	49.2
8.62	-55.37	-55.94	-56.84	27.87	65.6	56.9	49.8
8.65	-55.4	-55.99	-56.54	27.99	67.5	59.2	48
8.6	-54.96	-54.95	-56.78	27.78	65.7	57.1	50.7
8.68	-55.77	-55.21	-56.6	27.75	66.7	58.2	49.5
8.56	-55.51	-55.37	-56.6	27.81	66.7	60.2	48.7
8.63	-56.25	-55.27	-56.87	27.69	66.3	58.1	49.2
8.87	-55.37	-55.99	-56.66	27.78	65.9	59.3	50.5
8.57	-55.33	-54.9	-56.81	27.87	65.8	57.6	50.3
8.57	-55.99	-55.68	-56.66	27.75	67.7	61.8	51.6
8.52	-55.37	-54.95	-56.97	28.05	65.6	57.2	48
8.56	-54.05	-54.59	-57	27.75	67.7	62.6	50.3
8.82	-55.33	-55.11	-56.75	27.81	65.4	57.3	49.2
8.6	-54.41	-54.59	-56.54	27.84	66.8	62.6	49.7
8.68	-55.4	-55.78	-56.54	27.93	64.2	57.1	52
8.65	-55.33	-55.47	-56.54	28.02	65.5	60.8	47

8.57	-54.38	-56.04	-56.6	27.93	63.5	56.7	50.5
8.77	-56.03	-54.95	-56.97	27.9	65.5	60.2	48.8
8.56	-54.19	-54.75	-56.75	27.96	63.7	57.8	48.9
8.68	-55.37	-55.16	-56.6	27.96	64.3	58.1	49
8.56	-54.16	-54.44	-56.84	28.11	63.6	58.9	52.3
8.6	-55.37	-55.58	-56.87	27.96	63.6	57.2	49
8.77	-55.88	-55.47	-56.69	27.9	64.5	60.7	51.1
8.65	-54.52	-55.27	-56.94	28.11	62.9	56.9	48.8
8.65	-56.28	-55.68	-56.87	27.87	65.3	62.5	48.9
8.47	-55.66	-55.47	-56.84	28.27	62.5	56.6	51.7
8.65	-55.51	-55.58	-56.84	27.99	64.8	62.6	49.1
8.5	-54.16	-56.15	-56.78	28.27	62.3	56.5	48.9
8.59	-55.11	-55.99	-56.54	27.96	63.7	59.5	50.3
8.6	-55.73	-55.53	-56.87	28.14	61.6	56.1	48.2
8.53	-55.59	-55.11	-56.81	28.24	63.6	59.1	50.9
8.54	-55.95	-55.32	-56.78	28.14	61.7	57.1	50.2
8.5	-55.4	-55.06	-56.6	28.14	62.6	57.5	50
8.65	-55.29	-55.84	-56.66	27.99	64.4	62.4	49.8
8.64	-54.38	-54.75	-56.69	28.17	61.7	56.6	48.8
8.53	-54.01	-55.37	-56.63	28.14	63.5	61	50.5
8.61	-55.84	-55.68	-56.84	28.11	61.5	57.1	48
9.09	-55.7	-55.21	-56.94	28.05	62.3	57.4	46.5
8.63	-54.93	-55.47	-56.78	27.96	63.7	62.5	51.3
8.55	-53.79	-55.58	-56.39	28.11	61.2	56.4	52.5
8.56	-55.33	-56.3	-56.63	28.39	62.5	59.5	50
8.54	-55.11	-55.63	-56.54	28.14	62.1	59.5	49
8.41	-55.55	-55.68	-56.36	28.45	61.1	56.8	50.7
8.54	-53.5	-55.53	-56.81	28.21	62.5	61.5	50.7
8.76	-54.89	-55.73	-56.78	28.17	60.7	58.1	51.2
8.58	-55.84	-55.47	-56.81	28.24	60.9	56.5	50.5
8.64	-54.89	-55.21	-56.6	28.11	62.4	61.7	51.1
8.59	-53.86	-55.63	-57.06	28.27	60.3	57.1	50
8.62	-55.55	-55.63	-56.63	28.24	61	57.1	50.5
8.62	-55.81	-55.84	-56.66	28.14	62.2	61.6	49.6
8.67	-55.48	-55.78	-57	28.14	61	58.4	48.4
8.61	-55.48	-56.25	-56.84	28.24	60.6	56.4	50.9
8.65	-55	-54.54	-56.78	28.27	61.9	61.6	51.9
8.66	-55.59	-54.85	-57.12	28.14	60.9	59.1	49.1
8.56	-54.27	-55.32	-56.97	28.24	60.3	56.4	49.2
8.64	-55.84	-55.06	-56.81	28.24	61.4	60.2	49.1
8.66	-56.21	-55.78	-56.78	28.17	60.9	59.1	50.4
8.41	-55.4	-55.78	-56.84	28.39	60.3	56.1	52.2
8.59	-55.66	-55.78	-56.69	28.08	62.3	62.6	50
8.63	-55.62	-55.73	-56.51	28.39	59.7	55.7	48.9
8.6	-54.74	-55.16	-56.75	28.14	61.3	58.3	48.8
8.47	-56.17	-55.89	-56.69	28.21	60.7	59.7	51.6
8.57	-55.81	-56.56	-56.78	28.27	60.7	56.3	50.8

8.65	-55.99	-54.95	-56.63	27.96	63.1	62.8	51.7
8.52	-55.33	-55.63	-56.87	28.48	59.9	55.6	49.9
8.58	-53.64	-55.84	-56.97	28.17	62.5	61.9	49.1
8.63	-55.55	-55.53	-56.78	28.45	59.9	55.2	49.9
8.63	-55.66	-55.11	-57.03	28.3	62	58.9	49.3
8.76	-55.37	-55.78	-56.81	28.05	63.2	62.5	50.4
8.66	-55.15	-55.32	-56.84	28.3	60.5	55.9	50.5
8.66	-55.92	-55.73	-56.69	28.24	62.4	61.6	50.9
8.54	-54.6	-55.78	-56.69	28.27	61.4	58.7	52.3
8.65	-56.68	-56.46	-56.6	28.17	61.3	57.1	48.1
8.24	-55.22	-55.68	-57.18	28.24	62.8	61.8	49
8.53	-55.33	-56.56	-56.81	28.39	59.7	55.6	49.3
8.7	-55.51	-56.2	-56.9	28.11	62.4	59.6	50.3
8.62	-55.04	-55.63	-56.84	28.14	60.3	57.1	50.7
8.6	-54.78	-55.16	-56.78	28.27	61.6	57.5	49
8.63	-55.55	-55.94	-56.9	28.24	62.7	61.7	49
8.55	-55.66	-55.68	-56.97	28.21	61.1	56.1	47.3
9.02	-55.44	-55.63	-56.9	28.05	63.4	63.2	49
8.68	-56.1	-55.89	-56.75	28.21	60.3	55.8	49.7
8.59	-54.6	-55.63	-56.69	28.14	62.8	61.6	49.6
8.51	-54.52	-54.75	-56.84	28.39	60.2	55.5	52.2
8.56	-55.73	-56.25	-56.75	28.24	61.9	58.4	49.9
8.58	-55.44	-56.2	-56.84	28.3	62.2	60.2	49.6
8.64	-54.16	-55.84	-56.78	28.24	61	56.4	51.5
8.8	-55.88	-55.73	-56.81	28.08	62.5	62.2	51.7
8.63	-55.81	-55.78	-56.54	28.17	59.8	56.1	49.4
8.55	-55.29	-55.58	-56.84	28.14	61.3	58	53.8
7.83	-55.11	-55.84	-56.84	28.24	61	59.4	49.4
8.62	-54.41	-55.11	-56.81	28.24	60.3	56.4	50.5
8.65	-55.33	-55.53	-56.66	28.17	61.7	61.4	50.8
8.65	-55.59	-55.78	-57	28.54	59.2	55.2	49.6
8.53	-54.96	-56.1	-56.97	28.21	60.6	57.8	51.2
8.78	-55.33	-55.11	-57	28.05	62.8	62.9	51.8
8.55	-54.05	-54.33	-57.18	28.33	59.9	55.5	49
8.68	-55.44	-56.1	-56.63	28.14	62.2	62.7	50.1
7.85	-55.7	-55.06	-56.9	28.51	59.6	55.6	51.1
8.65	-55.73	-55.99	-56.75	28.21	61.1	59	49.5
8.72	-55.22	-55.84	-56.69	28.11	60.7	58.3	46.9
8.59	-55.81	-55.27	-56.97	28.14	60.6	56.6	47.9
8.6	-55.37	-56.25	-56.9	28.08	62.3	61.7	49.8
8.17	-53.79	-55.06	-56.69	28.39	60.3	56.1	48.7
8.69	-55.51	-56.1	-56.84	28.14	62.6	63	49.3
8.6	-55.88	-55.37	-56.69	28.24	59.9	55.6	48.3
8.57	-55.22	-55.99	-57	28.33	62.1	60.9	50.2
8.68	-55.88	-55.78	-56.78	28.21	60	56.1	46.8
8.83	-55.07	-55.53	-56.57	28.17	61.8	58.2	50.9
8.52	-53.32	-55.53	-56.9	28.11	62.2	60.3	49

8.64	-55.99	-55.21	-57.21	28.14	61.5	56.7	51.1
8.64	-55.95	-55.11	-57.06	28.17	64.1	62.9	50
8.58	-54.52	-55.94	-56.9	28.17	61.6	56	51.4
8.61	-56.25	-56.2	-56.97	28.02	64.7	63.4	50.9
8.45	-53.72	-55.53	-56.66	28.42	61.9	56	47.6
8.59	-54.78	-55.21	-56.9	28.05	63.9	60.6	50.5
8.44	-54.89	-56.25	-57.03	28.11	63.7	59.2	50.3
8.67	-56.79	-55.47	-56.84	28.05	63.8	57.4	50.4
8.65	-55.18	-55.06	-57.06	27.93	64.4	59.9	48.3
8.6	-55.48	-55.78	-56.84	28.27	63.7	57	50.3
8.65	-55.29	-55.32	-56.81	28.05	65.8	62.5	52
8.99	-55.4	-55.27	-56.78	28.14	63.6	56.8	47.9
8.6	-54.96	-56.15	-56.94	27.96	65.4	59.3	49.5
8.57	-55.88	-55.89	-56.97	27.93	64.3	57.5	49.7
8.61	-55.18	-55.06	-56.66	28.02	66.4	57.9	48.6
8.63	-55.51	-55.27	-56.87	27.63	67.9	61.3	50.4
8.67	-55	-55.32	-56.94	27.9	66.5	57.6	48.9
8.47	-56.06	-56.04	-56.78	27.72	69.2	62.7	52.2
8.6	-55.18	-55.06	-56.78	27.84	67.9	57.4	50.5
8.33	-54.74	-55.94	-56.66	27.84	70.5	63	51.9
8.56	-54.41	-55.58	-56.84	27.72	68.5	57.8	52.1
8.63	-55.62	-55.89	-56.75	27.56	70.5	61.5	47.3
8.44	-56.25	-54.8	-56.81	27.9	68.6	57.6	48.2
8.61	-55.59	-55.89	-57	27.63	70.4	60.1	47.3
8.46	-55.37	-55.53	-56.9	27.9	69.7	58	49.5
8.58	-55.4	-55.21	-56.69	27.56	72.3	62.4	49.2
8.59	-54.56	-55.11	-56.97	27.47	70.8	58.2	49.8
8.61	-55.51	-55.06	-56.69	27.72	70.9	61.3	52.3
8.65	-55.66	-55.73	-56.57	27.63	69.4	58.2	49.6
9.27	-54.96	-55.21	-56.78	27.41	71.6	60.9	53.1
8.6	-54.82	-55.11	-56.75	27.53	71.2	58.3	49.3
8.71	-55.99	-55.53	-56.81	27.56	70.2	58.5	48.6
8.59	-55.37	-55.63	-56.94	27.81	70.9	58.8	51.3
8.55	-51.12	-55.47	-56.78	27.66	69.8	58	50.5
8.89	-54.85	-55.53	-56.69	27.56	71.4	59.9	49.5
8.56	-53.42	-56.1	-56.75	27.72	69.6	57.8	50.4
8.63	-54.89	-55.01	-56.84	27.47	71.2	61.3	48.4
8.58	-55.66	-55.21	-56.84	27.81	69.4	57.9	48.4
8.59	-54.6	-55.21	-56.69	27.47	71.4	62.5	50.5
8.84	-55.22	-55.11	-56.69	27.53	69.6	58.2	50.9
8.63	-54.71	-54.49	-56.81	27.5	70.8	61.1	48.6
8.58	-55.07	-55.94	-56.69	27.66	70	58.6	47.1
8.62	-55	-55.73	-56.78	27.81	69.1	58.3	49.9
8.6	-55.4	-55.27	-56.78	27.69	70	58.9	48.7
8.53	-52.03	-55.89	-56.78	27.69	68.9	57.6	51.6
8.62	-54.89	-55.47	-56.69	27.66	70.2	60.3	49.5
8.58	-55.11	-55.21	-56.69	27.69	68.7	58.1	51.5

8.62	-56.17	-55.11	-56.78	27.75	70.5	61.7	48.2
8.52	-52.03	-55.27	-56.75	27.66	68.6	58	49.6
8.88	-55.22	-55.89	-56.84	27.53	70.3	62.2	50.7
8.58	-53.42	-55.47	-56.81	27.66	68.4	58.2	48.7
8.67	-55.55	-55.73	-56.66	27.56	68.7	60.1	50
8.5	-55.07	-56.04	-56.87	27.75	68.4	58.4	50.5
8.54	-54.19	-55.27	-56.78	27.78	67.5	57.6	49.9
8.51	-55.15	-55.16	-56.69	27.87	68.5	59.2	52.3
8.63	-55.15	-55.32	-56.63	27.66	67	57.6	52.4
8.74	-55.44	-55.32	-56.66	27.72	68.8	60.2	51
8.58	-56.1	-56.1	-56.69	27.78	67	57.5	50.9
8.57	-53.53	-55.53	-56.9	27.66	68.8	60.6	46.6
8.56	-55.51	-55.78	-56.54	27.96	67	57.6	51.5
8.68	-55.88	-55.53	-56.87	27.69	68.8	61.4	50.8
8.84	-55.33	-55.73	-56.51	27.72	67.2	57.9	51.1
8.6	-54.23	-55.53	-56.48	27.72	68.9	62.1	49.4
8.62	-55.81	-55.37	-56.75	27.84	67	57.9	49.5
8.58	-55.22	-55.73	-56.9	27.81	68.6	62.5	50.9
8.61	-55.37	-55.53	-56.78	27.81	67	57.8	50.5
8.98	-53.61	-54.64	-56.75	27.72	68.8	62.4	50.5
8.53	-55.84	-55.16	-56.57	27.81	66.9	57.9	48.9
8.64	-55.55	-55.53	-56.87	27.75	68.8	62.1	47.5
8.58	-54.82	-55.73	-56.51	28.05	66.8	57.8	49.6
8.62	-55.81	-55.27	-56.66	27.69	68.5	62.4	49.7
9.04	-54.71	-55.06	-56.78	27.84	66.8	57.9	49.1
8.66	-55.51	-56.25	-56.39	27.63	68.5	62.2	47.9
8.67	-55	-54.64	-56.81	27.81	66.7	57.8	48.9
8.61	-55.33	-55.94	-56.9	27.75	68.3	62	51.1
8.64	-55.73	-55.58	-56.63	27.84	66.3	57.5	51.6
8.62	-55.4	-55.94	-56.66	27.93	68	61.3	48.4
8.65	-55.77	-54.8	-56.6	27.84	66.3	57.4	47.5
8.86	-55.88	-55.78	-56.51	27.78	67.9	60.9	50.8
8.56	-54.82	-54.75	-56.57	27.9	66.1	57.3	53.4
8.59	-55.77	-55.53	-56.94	27.66	67.6	59.5	49.7
8.65	-54.74	-55.21	-56.94	27.9	66.2	57.2	51
8.55	-52.4	-55.68	-56.81	27.75	67.2	58.8	49.9
9.09	-55.4	-55.01	-56.94	27.69	66	57.8	48.9
8.58	-55.88	-54.9	-56.9	27.75	66.9	58.2	49.1
8.63	-54.96	-56.46	-56.63	27.69	67.5	60.3	47.7
8.51	-52.55	-55.21	-56.75	27.93	66.6	57.9	51.7
8.67	-55.18	-56.1	-56.63	27.56	67.9	62	48.1
7.78	-55.4	-55.68	-56.9	27.9	66.2	57.8	50.5
8.62	-54.38	-55.47	-56.69	27.69	67.8	61.9	50
8.71	-53.97	-55.32	-56.57	27.78	65.9	57.6	49.9
8.54	-52.99	-55.01	-56.57	27.78	67.4	60.3	51.1
8.66	-55.29	-55.37	-56.63	27.78	65.6	57.2	50.7
8.53	-54.67	-55.47	-56.78	27.96	66.8	59.1	49.6

8.68	-56.32	-55.11	-56.6	27.75	65.5	58	50.7
8.95	-54.67	-55.06	-56.69	27.75	66.6	58.5	47.8
8.59	-55.81	-54.59	-56.81	27.56	66.8	60.2	49.5
8.66	-54.82	-55.78	-56.54	27.81	66.1	57.9	50.3
8.52	-55.15	-55.94	-56.75	27.81	67.5	61.8	49.6
8.65	-55.18	-55.37	-56.69	27.87	65.8	57.4	51.7
7.81	-54.05	-55.21	-56.6	27.81	67.4	61.5	48.1
8.62	-54.74	-55.89	-56.84	27.72	65.4	57.2	52.5
8.71	-54.93	-56.1	-56.75	27.72	66.8	59.9	49.6
8.39	-55.77	-55.11	-56.57	27.96	65.3	56.9	55.4
8.65	-55.04	-54.69	-56.84	27.72	66.7	58.7	46.3
8.51	-54.96	-55.06	-56.42	27.84	65.8	58.3	49.5
8.56	-54.05	-55.21	-56.78	27.75	66.2	58	49.5
8.76	-56.06	-56.04	-56.69	27.56	67.7	61	50.9
8.56	-55.48	-55.37	-56.51	27.81	66.2	57.8	50.3
8.64	-54.45	-55.27	-56.84	27.5	67.9	62.2	49.9
8.65	-55.51	-55.27	-56.66	27.93	66	57.5	52
8.56	-54.19	-56.2	-56.87	27.63	67.4	61.3	52.7
8.88	-54.78	-55.06	-56.6	27.72	65.7	57.6	49
8.68	-55.22	-55.68	-56.54	27.56	67.4	62	47.1
8.56	-55.95	-54.85	-56.81	27.78	65.3	57.1	49.9
8.58	-55.04	-55.16	-56.63	27.87	67.4	61.8	50.2
8.6	-54.63	-55.63	-56.57	27.78	65	57	50
9.07	-53.83	-55.63	-56.54	27.63	66.4	59.4	50
8.66	-54.71	-55.68	-56.6	27.69	64.3	56.9	48.8
8.73	-55.48	-55.73	-56.45	27.84	65.6	58.5	48.6
8.43	-55.37	-55.63	-56.26	27.75	67.1	62.4	49.1
8.58	-54.78	-54.59	-56.63	27.75	65	57.4	48.4
8.27	-54.96	-55.84	-56.51	27.75	66.1	60.9	49.2
8.57	-53.17	-55.94	-56.75	27.66	64.7	57.3	50.5
8.74	-55.37	-55.73	-56.57	27.56	67.2	62.9	47.8
8.65	-55.59	-55.37	-56.39	27.81	64.9	57.1	49.9
8.66	-55.29	-55.11	-56.84	27.53	67.2	63	48.7
8.57	-54.52	-55.11	-56.6	27.93	64.9	57.3	52.2
8.58	-55.48	-54.95	-56.75	27.66	67.1	62.6	49.8
9.04	-54.63	-55.11	-56.66	27.72	64.9	57.3	51.6
8.67	-55.99	-55.32	-56.66	27.47	66.6	62.2	53.8
8.69	-54.19	-55.47	-56.66	27.78	64.5	57.1	48.3
8.65	-55.11	-55.63	-56.54	27.84	66.6	62.2	50.8
8.7	-55.62	-55.94	-56.75	27.9	64.7	57.1	51.6
8.96	-55.66	-55.53	-56.6	27.66	66.3	61.3	48.9
8.56	-54.05	-56.1	-56.75	27.72	64.4	56.8	51
8.57	-54.78	-54.85	-56.54	27.63	65.8	60.3	47.6
8.56	-54.27	-55.47	-56.6	27.84	64.1	56.8	48.8
8.65	-55.37	-55.89	-56.66	27.63	66	59.3	49.9
8.64	-55.29	-55.53	-56.6	27.84	64.4	57.1	47.6
8.57	-53.94	-55.16	-56.48	27.69	65.9	58.5	50.3

8.91	-55.92	-55.78	-56.84	27.56	64.5	57	49.8
8.69	-55.51	-55.32	-56.51	27.69	65.6	58.2	52
8.58	-55.11	-54.44	-56.81	27.53	65.8	59.3	49.7
8.62	-54.6	-54.64	-56.81	27.78	65.9	58	50.4
8.55	-55.55	-55.99	-56.78	27.5	67	60.9	52.3
8.18	-55.22	-54.8	-56.63	27.81	66.2	57.9	50
8.56	-55.44	-56.41	-56.75	27.47	66.8	59.9	56
8.8	-55.15	-55.63	-56.78	27.72	66.1	58	49.5
8.55	-54.96	-54.69	-56.51	27.5	68.8	62.7	51
8.7	-55.07	-55.47	-56.66	27.63	67	58	50.7
8.5	-54.12	-55.21	-56.66	27.56	68.8	61.2	47.5
8.68	-55.07	-55.37	-56.48	27.5	67.9	58.2	47.4
8.48	-55.73	-54.9	-56.66	27.38	69.6	62.5	49.9
8.58	-55.48	-55.58	-56.81	27.56	68	58	50.5
8.68	-55.37	-55.37	-56.54	27.44	70.1	62.6	49.3
8.56	-55	-54.64	-56.81	27.75	68.2	58.2	48.4
8.59	-55.99	-55.78	-56.54	27.47	69.9	62.8	48.4
8.54	-55.22	-54.75	-56.81	27.69	68.1	58.2	50.5
8.59	-55.44	-55.11	-56.32	27.35	70.4	62	49.9
8.65	-55.7	-55.68	-56.63	27.5	69	58.5	51.3
8.61	-54.74	-55.84	-56.75	27.35	69.7	61.1	51.6
8.68	-55.04	-55.73	-56.54	27.44	69	58.8	49.9
8.66	-55.37	-55.47	-56.6	27.44	68	58	49.9
8.73	-54.78	-54.64	-56.81	27.32	69.8	59.2	50.7
8.55	-55.55	-55.37	-56.66	27.56	68.8	58.1	49.7
8.58	-54.23	-55.06	-56.69	27.29	70.8	60.8	50.8
8.56	-52.95	-55.06	-56.87	27.72	69	58.3	50.8
8.68	-55.51	-55.01	-56.66	27.41	70.7	61.2	48.4
8.81	-55.33	-55.68	-56.54	27.41	69.1	58.5	52.1
8.55	-54.6	-55.01	-56.63	27.35	71.5	62.6	49.9
8.64	-55.84	-55.58	-56.63	27.44	70.2	59	50
8.65	-55	-55.68	-56.6	27.63	69	58.2	51.7
8.66	-54.89	-55.68	-56.63	27.38	70.5	60.1	51.5
9.25	-55.55	-55.84	-56.66	27.32	69.1	58.4	51.2
8.56	-54.19	-55.37	-56.57	27.29	71.4	62.7	51.7
8.67	-55	-55.68	-56.48	27.41	69.8	58.7	51.1
8.53	-55.84	-55.21	-56.54	27.63	69	58.3	51
8.64	-54.85	-55.78	-56.48	27.38	70.4	59.4	46.7
8.46	-54.52	-55.63	-56.69	27.5	69.4	58.6	50.5
8.68	-55.55	-55.53	-56.57	27.29	71.3	62.1	48.6
8.64	-55.4	-55.16	-56.57	27.35	70	58.8	48.4
8.7	-55.55	-54.75	-56.75	27.2	71.3	61.5	51.3
8.59	-53.86	-55.63	-56.69	27.32	70.8	59.1	51.3
8.56	-55.22	-55.37	-56.84	27.44	70.1	58.4	47.5
8.56	-55.15	-55.89	-56.6	27.29	72.2	61.1	49.7
8.56	-54.16	-54.8	-56.75	27.47	70.5	58.4	51.4
8.57	-53.5	-54.9	-56.66	27.2	70.6	59.2	50.2

9.19	-55.15	-55.32	-56.69	27.26	71.3	59.5	48.4
8.67	-55.7	-55.63	-56.57	27.38	70.3	58.5	49.7
8.62	-53.06	-55.47	-56.48	27.2	72.3	62.8	45.9
8.65	-54.78	-55.58	-56.57	27.47	70.8	58.9	49.8
8.61	-55.55	-55.78	-56.63	27.41	70	58.4	50.1
8.56	-52.95	-55.53	-56.75	27.41	71.4	60.8	50.1
8.63	-55.4	-55.58	-56.6	27.32	70.1	58.4	49.6
9.09	-55.04	-54.95	-56.57	27.26	69.8	59	48.9
8.67	-55.29	-55.84	-56.63	27.32	70.6	59.2	49.5
8.63	-54.82	-54.85	-56.75	27.38	69.4	58.5	50.3
8.6	-54.52	-55.68	-56.6	27.29	71.2	62.8	50.5
8.62	-54.38	-55.27	-56.54	27.41	69.6	58.8	50.4
8.65	-55.4	-55.63	-56.66	27.5	69.1	58.7	48.8
8.6	-53.97	-55.63	-56.42	27.35	70.2	59.5	55.7
8.22	-53.75	-55.84	-56.51	27.56	69.3	58.2	49.1
8.6	-55	-55.06	-56.51	27.26	71.4	62.9	50
8.74	-54.01	-55.68	-56.48	27.38	69.7	59	55.5
8.63	-55.33	-54.95	-56.66	27.41	68.7	58.2	49.6
8.67	-54.52	-55.94	-56.75	27.32	69.8	59.9	48.7
8.61	-55.48	-54.9	-56.51	27.72	68.3	58.2	49.2
8.66	-55.48	-55.53	-56.45	27.41	70.3	62.7	50.5
8.47	-54.85	-55.16	-56.81	27.53	68.3	58.7	48.1
8.68	-54.93	-55.68	-56.78	27.47	68	58.9	50.5
8.76	-55.37	-55.73	-56.48	27.44	69	59.5	47.9
8.57	-55.33	-55.32	-56.78	27.44	67.9	58.2	51
8.63	-54.56	-55.21	-56.57	27.41	69.6	61	47.1
8.59	-55.37	-55.32	-56.69	27.63	68	58.1	49.6
8.55	-55.55	-54.95	-56.78	27.38	69.3	62.5	48.2
8.48	-55.07	-55.58	-56.57	27.72	67.8	58.4	51.6
8.6	-53.39	-55.78	-56.69	27.41	67.9	59.6	48.1
8.8	-52.44	-55.27	-56.69	27.5	68.1	58.9	50.4
8.65	-54.96	-55.37	-56.45	27.56	66.8	57.6	49.9
8.68	-55.29	-55.99	-56.39	27.47	68.5	59.4	51.6
8.59	-55.4	-55.47	-56.81	27.75	66.8	57.9	53.4
8.69	-55.44	-55.21	-56.69	27.44	68.2	60.3	52.7
8.67	-56.1	-55.94	-56.66	27.78	66.9	58	50
8.59	-55.04	-56.15	-56.66	27.5	68.3	60.5	49.9
8.89	-53.68	-55.16	-56.81	27.53	66.8	58.2	49.8
8.66	-55.73	-55.11	-56.54	27.47	68.6	61.9	47.8
8.65	-54.96	-55.58	-56.63	27.5	66.7	58.1	47.8
8.53	-54.85	-55.27	-56.54	27.69	68.5	62.2	50.4
8.67	-55.59	-55.47	-56.45	27.44	67	58.2	50.5
7.95	-55.22	-54.85	-56.63	27.56	69	62.5	46.7
8.65	-55.29	-55.06	-56.6	27.66	67	58.1	50.3
8.99	-55.59	-55.16	-56.81	27.41	68.7	62.2	50.8
8.67	-55.18	-55.63	-56.75	27.63	66.8	57.9	48.7
8.65	-54.93	-55.78	-56.66	27.44	68.6	62.6	50.4

8.56	-55.48	-55.58	-56.48	27.56	66.6	57.9	49.3
8.69	-55.48	-55.68	-56.94	27.5	68	62.4	50.4
8.52	-52.62	-55.78	-56.57	27.81	66.5	57.9	48.7
8.64	-54.85	-55.58	-56.54	27.41	68.5	62.4	50.5
8.52	-54.89	-55.37	-56.97	27.72	66.4	57.8	48.4
8.61	-55	-54.59	-56.97	27.56	68.1	62.5	49.4
8.8	-55	-55.58	-56.6	27.63	66.4	58	51.1
8.57	-53.61	-55.32	-56.69	27.63	67.9	61.2	49.3
8.66	-55.18	-55.63	-56.84	27.72	66	57.8	49.3
8.61	-54.67	-55.63	-56.57	27.81	67.7	60.6	49.6
8.63	-55.59	-55.16	-56.69	27.66	65.9	57.6	52.4
8.62	-54.82	-54.85	-56.66	27.81	67.1	59.2	46.2
8.58	-53.72	-54.38	-56.42	27.72	65.7	57.2	50.2
9	-53.86	-56.15	-56.69	27.5	66.8	59.1	49.9
8.67	-54.74	-56.04	-56.75	27.56	65.9	58.2	48.9
8.63	-54.45	-54.64	-56.63	27.63	66.8	58.6	48.3
8.61	-55	-55.37	-56.87	27.5	66.4	59.4	50.4
8.7	-55.66	-55.16	-56.75	27.63	66.1	58.2	47.7
8.53	-53.9	-55.21	-56.87	27.75	67.4	61.7	49.3
8.64	-55.11	-55.53	-56.54	27.72	65.5	57.8	49.3
8.54	-55.04	-55.47	-56.36	27.72	67	62.1	50.3
8.58	-56.21	-55.68	-56.6	27.63	64.8	57.2	49.4
8.77	-56.43	-56.61	-56.57	27.66	66.5	60.7	52
8.65	-54.38	-55.63	-56.66	27.75	64.7	57.1	50.4
8.6	-53.02	-55.01	-56.66	27.75	66	59.2	49.6
8.65	-54.56	-55.78	-56.48	27.87	64.9	58.2	48.9
8.57	-55.51	-55.58	-56.94	27.56	65.7	58.3	49
8.42	-54.85	-55.01	-56.66	27.69	66.3	60.3	49.2
8.7	-54.93	-55.63	-56.51	27.75	65.4	57.8	48.7
9.19	-55.37	-55.21	-56.78	27.5	66.8	62	49.9
8.65	-55.15	-55.06	-56.6	27.66	64.7	57.3	52.4
8.67	-53.53	-55.58	-56.57	27.69	66.6	62.5	45.1
8.62	-55.22	-56.15	-56.75	27.72	64.3	57.2	49.6
8.68	-55.18	-56.1	-56.66	27.63	66.3	60.3	50.4
8.47	-53.9	-55.47	-56.81	27.96	64.4	57	49.7
8.63	-54.89	-55.63	-56.81	27.53	66.2	58.9	50.4
8.68	-56.03	-55.53	-56.69	27.84	64.6	57.9	49.3
8.65	-54.71	-56.04	-56.9	27.75	65.7	58.5	49.5
9.16	-54.93	-55.89	-56.78	27.53	64.5	58.6	50.7
8.63	-54.05	-55.32	-56.78	27.75	65.1	58.2	48.3
8.69	-55.11	-55.37	-56.57	27.69	64.7	59.1	50
8.51	-54.05	-55.37	-56.54	27.96	64.7	57.4	49.8
8.71	-54.63	-55.32	-57	27.5	66.2	61.4	46.3
8.56	-54.82	-55.11	-56.75	27.9	64.9	57.3	48.4
8.65	-54.74	-55.47	-56.63	27.66	66.6	62.8	50.5
8.5	-55.48	-55.11	-56.87	27.99	64.5	57.2	49.7
8.55	-53.21	-54.9	-56.69	27.66	66.2	62.1	50.8

8.5	-55.15	-54.8	-56.57	27.9	65	57.1	50.4
8.6	-53.97	-55.73	-56.63	27.63	67.6	61.8	53.4
7.79	-55.15	-54.95	-56.75	27.9	65.9	57.4	52
8.67	-54.89	-56.1	-56.69	27.63	68	61.3	49.1
8.88	-55.4	-55.58	-56.63	27.75	66.1	57.6	46.7
8.65	-55.18	-55.73	-56.84	27.63	68.3	61.5	51
8.69	-55.15	-55.78	-56.9	27.69	67	58	51.4
8.68	-55.59	-56.04	-56.6	27.63	68.8	59.8	49.4
8.72	-54.96	-55.78	-56.9	27.72	67.5	57.6	51.4
8.67	-55.15	-55.68	-56.69	27.81	68.8	59.2	50.5
8.68	-54.93	-55.37	-56.48	27.53	67.6	58.1	49.7
8.51	-55.66	-55.47	-57.06	27.69	68.8	59.1	49.6
8.69	-55	-55.11	-57	27.47	68	58.9	50.1
8.81	-54.63	-55.99	-56.66	27.41	69.1	59.1	49.5
8.66	-55.44	-55.78	-56.81	27.56	68.2	57.8	48.3
8.7	-55.22	-55.78	-56.54	27.47	69.8	59.2	51
8.61	-55	-56.36	-56.78	27.72	68	58.1	48
8.66	-55.22	-55.94	-56.6	27.47	69.6	59.9	49.8
8.63	-54.82	-55.73	-56.6	27.66	68.4	58	46.8
8.65	-54.49	-55.16	-56.94	27.47	70.1	60.1	51
8.43	-53.83	-55.63	-56.51	27.72	68.7	58.1	50
8.65	-55.07	-55.89	-56.84	27.38	71	61.5	49.5
8.81	-55.04	-55.27	-57.06	27.56	69.7	58.6	51.2
8.59	-55.11	-55.63	-56.63	27.29	72.8	62.4	49.7
8.6	-54.08	-55.63	-56.63	27.38	70.6	58.7	50.5
8.61	-55.22	-55.58	-56.75	27.5	72.2	60.3	48.9
8.62	-55.15	-55.94	-56.57	27.32	71.4	59.5	48.8
8.65	-54.56	-55.89	-56.87	27.69	69.6	58.5	52.8
8.58	-55.18	-55.47	-56.75	27.41	71	61	49.9
8.71	-55.29	-55.58	-56.69	27.47	69.4	58.8	51.8
8.67	-55.15	-55.84	-56.84	27.29	71	61.5	53.5
8.79	-55.11	-55.78	-56.75	27.44	70.4	59.2	51.9
8.66	-55.48	-55.78	-56.75	27.32	70.1	58.2	49.6
8.65	-54.49	-55.47	-56.66	27.32	72.3	61.1	49.6
8.65	-55.15	-55.73	-56.66	27.63	70.5	58.5	51.3
8.65	-55.22	-55.21	-56.6	27.23	71.9	61.4	50.1
8.66	-55.44	-55.06	-56.6	27.56	71	59.2	48.7
8.66	-55.33	-55.58	-56.75	27.5	70.1	58.3	44
8.48	-55.18	-55.78	-56.81	27.35	72.3	61.3	49.9
8.67	-55.22	-55.73	-56.9	27.26	70.8	58.7	51.6
8.82	-55.7	-55.58	-56.32	27.32	71.2	60.3	49.8
8.62	-55.66	-56.41	-56.63	27.26	71.3	59.3	50.7
8.71	-55.37	-55.11	-56.87	27.38	70.5	58.6	51
8.56	-55.88	-55.47	-56.75	27.38	72.6	62.1	49.4
8.68	-55.22	-55.89	-56.66	27.29	70.9	58.9	49.8
8.64	-55.7	-55.78	-56.84	27.5	70.4	58.4	49.5
8.58	-55.48	-55.84	-56.6	27.23	71.8	60.3	48.6

8.45	-53.79	-55.58	-56.54	27.44	70.1	58.5	49.5
8.66	-54.3	-55.47	-56.69	27.26	72.3	62.5	49.9
8.91	-55.07	-55.99	-56.69	27.38	70.5	59.2	50.3
8.55	-53.97	-55.27	-56.84	27.41	69.6	58.4	48.1
8.69	-54.63	-55.53	-56.78	27.32	71.6	61.4	50.7
8.66	-54.19	-55.58	-56.54	27.35	70	58.6	51.9
8.59	-53.83	-55.01	-56.45	27.29	70.1	59.2	47.3
8.46	-55.95	-56.77	-56.48	27.53	70.7	59.4	49.2
8.59	-54.16	-55.63	-56.57	27.41	69.8	58.4	50.1
8.63	-55.51	-55.37	-56.81	27.44	71.6	61.4	51.3
8.57	-55.44	-55.58	-56.75	27.29	69.3	58.6	48.9
8.46	-54.41	-55.68	-56.63	27.63	68.1	58.6	47.3
8.57	-53.72	-55.68	-56.75	27.47	68.7	59.4	48.1
8.94	-55.22	-55.47	-56.54	27.44	67.1	58.2	50.5
8.56	-55.37	-54.95	-56.6	27.44	68.8	62	49.3
8.68	-54.89	-55.06	-56.48	27.5	66.8	58.4	49.6
8.66	-54.52	-55.21	-56.87	27.32	68.5	62	46.9
8.66	-55.22	-56.15	-56.54	27.5	66.8	58.6	50.5
8.42	-55.48	-54.8	-56.94	27.69	65.9	58.2	48.9
8.65	-55.07	-55.99	-56.63	27.47	67.1	59.1	49.2
8.63	-54.74	-54.9	-56.81	27.75	65.9	58.3	50.5
8.67	-55	-55.47	-56.51	27.47	67.4	59.5	50.9
7.9	-54.89	-55.73	-56.57	27.75	66	58.1	50.5
8.66	-54.93	-55.58	-56.51	27.5	67.8	61.4	50.1
9.06	-55.18	-55.78	-56.66	27.53	66	58	46.6
8.59	-54.63	-55.11	-56.78	27.38	67.9	62.6	51
8.61	-55.66	-55.58	-56.45	27.44	66.1	58.2	48.1
8.6	-54.89	-55.68	-57	27.53	67.9	62.5	49.5
8.63	-53.02	-55.78	-56.69	27.5	66.2	58.2	50
8.6	-54.74	-55.37	-56.57	27.56	67.8	61.9	51.6
8.69	-54.96	-55.27	-56.78	27.44	66.2	58.3	50.1
8.58	-55.66	-55.47	-56.75	27.56	67.5	61.4	51.4
8.62	-54.52	-55.78	-56.6	27.47	66.1	58.2	50
9.08	-55.4	-55.47	-56.87	27.35	66.7	59.7	49.7
8.55	-54.23	-55.68	-56.66	27.5	66.2	58.3	49.5
8.71	-54.82	-54.95	-56.69	27.38	66.8	59.8	49.1
8.62	-54.82	-55.27	-56.45	27.47	66.1	58.2	51.3
8.65	-54.74	-55.27	-56.51	27.32	66.9	60.4	49.3
8.62	-54.67	-55.94	-56.78	27.72	66.4	58.3	49.8
8.53	-54.93	-55.68	-56.81	27.35	67.6	61.7	52.3
8.67	-55.22	-54.95	-56.69	27.66	66.2	58.2	49.6
8.58	-55.11	-55.11	-56.45	27.29	67	60.9	47.4
8.39	-54.89	-55.47	-56.78	27.56	66.4	58.2	48.9
8.57	-53.39	-55.78	-56.57	27.32	67.6	61.5	48.3
9.1	-55.59	-55.16	-56.63	27.5	66.1	58.2	48.8
8.58	-55.29	-55.37	-56.66	27.35	67.6	62	48.4
8.74	-55.22	-55.73	-56.36	27.53	66.1	58.2	50.1

8.61	-55.4	-55.37	-56.57	27.44	67.9	62.2	50.5
8.71	-55	-55.53	-56.57	27.47	65.8	58.1	49.8
8.57	-54.41	-55.21	-56.54	27.5	67.7	62	50.5
8.55	-52.25	-55.73	-56.57	27.56	65.8	57.9	56.1
8.56	-52.07	-55.32	-56.51	27.63	67.6	62.2	49.5
8.69	-54.93	-55.63	-56.48	27.41	65.7	57.6	50.9
8.06	-54.74	-55.32	-56.42	27.53	67.1	60.6	46.5
8.63	-54.89	-55.16	-56.54	27.41	65.5	57.5	48.7
8.54	-55.04	-55.47	-56.75	27.32	67	60.2	49.4
8.57	-53.1	-55.99	-56.36	27.41	65.4	57.5	51.4
8.7	-54.6	-55.73	-56.42	27.35	66.8	59.4	51.3
8.57	-54.93	-55.27	-56.6	27.44	65.1	57.3	49
8.66	-54.71	-55.47	-56.69	27.29	66.4	58.9	52.3
8.56	-52.99	-54.75	-56.51	27.44	65.7	58.5	49.8
8.62	-55.37	-55.32	-56.66	27.32	66.3	58.4	49.8
8.53	-55.37	-55.01	-56.48	27.41	66.9	60.6	49.8
8.67	-53.86	-55.89	-56.69	27.44	66	58.2	47.6
9.19	-52.47	-55.27	-56.69	27.2	67.7	62	47.9
8.67	-55.15	-54.9	-56.48	27.35	66	57.9	47.8
8.68	-54.38	-55.06	-56.42	27.26	67.8	62	51.7
8.73	-54.89	-55.01	-56.75	27.38	65.8	57.6	49.4
8.62	-53.17	-55.58	-56.63	27.32	67.5	62	52.8
8.63	-55.11	-55.06	-56.63	27.23	65.6	57.5	48.8
8.68	-55.51	-55.21	-56.54	27.29	67.4	61.4	51.1
8.48	-53.39	-55.21	-56.45	27.53	65.5	57.3	50.4
8.69	-55.11	-55.47	-56.81	27.35	66.9	60.2	49.3
8.56	-55.44	-54.8	-56.42	27.5	65.4	57.4	50.3
8.68	-55.22	-54.95	-56.42	27.29	66.6	59	50.4
8.6	-55.51	-55.01	-56.63	27.38	65.8	58.6	50.3
8.58	-55.44	-54.9	-56.66	27.26	66.3	58.3	51.2
8.51	-54.63	-55.32	-56.17	27.29	66.7	60.3	51.9
8.62	-54.23	-55.27	-56.57	27.2	66.2	58.2	50.5
8.68	-54.63	-55.06	-56.63	27.23	67.9	61.9	51.2
8.65	-53.79	-55.06	-56.75	27.32	65.9	58.1	50.4
8.58	-54.74	-55.78	-56.45	27.11	67.7	62.2	52.4
8.58	-54.56	-55.16	-56.54	27.5	65.8	57.8	48.2
8.65	-54.85	-55.27	-56.54	27.29	67.2	61.7	50.4
8.68	-55.7	-55.37	-56.26	27.56	65.5	57.5	49.6
8.65	-54.89	-55.32	-56.51	27.26	66.8	60.1	51
8.22	-54.56	-55.68	-56.63	27.56	65.4	57.4	48.9
8.61	-55.48	-55.06	-56.42	27.32	66.6	59.2	47.9
8.46	-54.08	-55.21	-56.51	27.44	65.5	58.3	51.1
8.58	-55.18	-55.06	-56.57	27.35	66.1	58.3	46.1
8.95	-54.78	-55.32	-56.42	27.2	66.5	60.4	52.6
8.71	-55.48	-55.21	-56.32	27.32	65.8	58	49.5
8.62	-55.51	-55.01	-56.57	27.26	67.5	62.4	50.5
8.49	-54.52	-55.68	-56.63	27.5	65.8	57.9	48.6

8.69	-55.04	-55.37	-56.6	27.29	67.6	62.5	52.2
8.5	-55.44	-54.8	-56.54	27.5	65.5	57.5	50.9
8.65	-54.89	-55.06	-56.78	27.23	66.8	61.8	51.6
8.47	-52	-56.3	-56.51	27.53	65.3	57.6	49.4
8.6	-54.63	-55.68	-56.51	27.29	66.7	60.3	50.1
8.69	-54.89	-55.37	-56.63	27.35	65.4	57.8	51.5
8.6	-53.94	-55.53	-56.39	27.29	66.9	59.2	49.2
8.57	-55.22	-54.38	-56.69	27.47	65.7	57.8	45.7
8.6	-53.9	-55.94	-56.42	27.29	67.6	59.2	49.7
8.67	-54.63	-55.32	-56.66	27.38	66	57.8	49.5
8.56	-54.23	-55.11	-56.6	27.44	67.6	59.3	49.3
8.68	-55.4	-55.32	-56.39	27.29	66.4	57.8	48.3
8.67	-55.81	-55.01	-56.48	27.5	67.8	59.2	47.7
8.62	-53.17	-55.27	-56.39	27.29	67	58.6	49.4
7.94	-55.07	-55.63	-56.6	27.56	67.8	59	51.8
8.66	-54.71	-54.85	-56.63	27.32	67	58.6	48
8.9	-54.49	-55.58	-56.14	27.35	68.1	59.2	47.6
8.61	-54.85	-56.1	-56.54	27.2	67.7	59.3	47
8.71	-55.55	-55.47	-56.63	27.35	68.2	59.1	48.6
8.69	-55.73	-55.58	-56.48	27.23	67.9	59.3	47.4
8.56	-53.75	-55.37	-56.51	27.23	68.5	59.2	47.8
8.62	-55.04	-55.84	-56.57	27.35	68.5	59.5	50
8.68	-54.82	-55.63	-56.26	27.29	69	59.1	49.9
8.65	-55.48	-54.95	-56.48	27.44	68.3	58.2	51.3
8.64	-54.67	-55.58	-56.66	27.23	69.3	59.2	49.4
8.38	-55.07	-54.85	-56.6	27.41	68.6	58.2	50.8
8.71	-56.32	-55.58	-56.78	27.2	70.2	60.1	46.2
8.99	-54.71	-55.84	-56.66	27.26	68.9	58.4	48.4
8.63	-54.78	-54.75	-56.6	27.17	70.3	61.6	52.4
8.74	-54.78	-55.16	-56.75	27.23	69	58.4	51.2
8.71	-55.55	-56.51	-56.63	27.23	70.6	63.1	50.5
8.68	-54.52	-54.85	-56.84	27.32	68.7	58.7	48.6
8.6	-55.18	-54.9	-56.75	27.17	69.2	61	47.4
8.7	-55.51	-55.63	-56.84	27.32	68.7	59.1	49
8.43	-54.16	-55.21	-56.87	27.5	67.7	58.1	48.9
8.71	-54.56	-55.68	-56.54	27.32	69.1	60.1	48.6
8.45	-55.48	-55.53	-56.6	27.53	67.9	58.2	50.1
8.69	-55.18	-55.32	-56.54	27.2	69.4	61.3	54.6
8.54	-53.72	-54.95	-56.78	27.53	67.9	58.3	50.5
8.73	-55.77	-55.47	-56.87	27.17	70.1	62.9	46.2
8.61	-55.18	-55.73	-56.45	27.47	68	58.7	50.9
8.72	-54.74	-55.32	-56.75	27.2	69.8	62.9	48.3
8.44	-53.24	-54.9	-56.78	27.41	68.2	58.8	52.7
8.66	-55.18	-55.32	-56.63	27.2	70	61.2	51
8.89	-54.67	-55.16	-56.66	27.26	69.6	58.9	51.6
8.68	-54.08	-55.63	-56.42	27.32	68.2	58	51.1
8.61	-52.55	-55.63	-56.75	27.35	70.2	60.4	49.2

8.64	-54.6	-55.84	-56.63	27.29	69.3	58.3	49.5
8.63	-54.49	-55.78	-56.63	27.26	70.5	61.4	51
8.62	-55.77	-55.53	-56.51	27.53	68.8	58.7	51.6
8.61	-53.97	-54.85	-56.75	27.11	69.9	61.2	49.5
8.6	-54.45	-55.11	-56.6	27.44	69	58.8	48.9
8.62	-55.48	-55.11	-56.84	27.2	68.1	58.1	48.3
8.32	-54.71	-55.53	-56.54	27.38	69.7	59.9	49.5
8.58	-54.41	-55.06	-56.63	27.38	68.5	58.3	49.8
8.53	-54.27	-55.53	-56.66	27.29	70.1	61.6	50.9
8.57	-55.62	-54.95	-56.75	27.41	68.2	58.5	50
9.03	-53.57	-55.84	-56.57	27.2	69.7	62.7	47.5
8.62	-55.44	-55.53	-56.66	27.38	67.9	58.7	50.3
8.74	-55.04	-55.21	-56.29	27.29	67.9	60.2	47.4
8.59	-52.47	-55.53	-56.57	27.41	67.5	58.6	50.7
8.64	-54.3	-55.63	-56.48	27.53	65.9	58.2	46.2
8.6	-54.45	-55.47	-56.81	27.5	66.8	59.2	52.3
8.64	-54.27	-55.27	-56.81	27.56	65.4	58.1	54.7
8.67	-54.93	-56.04	-56.75	27.5	66.2	59.1	47.6
8.58	-52.84	-55.89	-56.69	27.47	64.3	58.1	49
8.55	-54.6	-55.32	-56.81	27.75	65.3	58.9	47
8.56	-52.4	-54.54	-56.63	27.63	63.8	57.5	48.8
8.6	-55.07	-55.11	-56.42	27.78	64.8	58.9	52
8.68	-54.63	-55.37	-56.63	27.53	63.9	59.2	53.4
8.45	-54.89	-55.16	-56.69	27.84	64.4	58.4	50.2
8.67	-54.74	-54.75	-56.87	27.47	65.1	61.2	49.5
8.66	-54.56	-55.37	-56.63	27.69	63.5	57.9	50.8
8.68	-55.07	-55.27	-56.42	27.56	64.8	62.2	49.6
8.65	-55.15	-55.63	-56.54	27.84	62.7	57.5	51
8.59	-54.63	-54.75	-56.66	27.81	64.2	62.5	49.9
8.59	-55.04	-55.63	-56.54	27.81	62.2	57.2	50.9
8.55	-53.28	-55.32	-56.69	27.78	63.5	59.7	50.5
8.62	-55.77	-55.73	-56.75	27.93	61.8	56.8	51.2
8.5	-54.05	-55.78	-56.54	27.9	63.5	58.6	51.9
8.57	-55.37	-55.21	-56.78	27.81	61.6	57.1	49.3
8.65	-56.06	-55.94	-56.36	27.99	62.8	58.5	49.5
8.63	-54.3	-55.47	-56.78	27.78	61.8	59.2	50
8.47	-54.89	-55.21	-56.78	28.05	62.2	57.8	48.4
8.68	-54.19	-54.9	-56.6	27.78	62.7	60.8	49.3
8.5	-54.74	-55.84	-56.63	28.08	61.9	57.2	48.1
8.59	-54.41	-55.84	-56.87	27.75	63.4	62.6	50.4
8.64	-53.9	-55.63	-56.84	27.9	60.9	56.8	47.9
8.7	-55.15	-55.73	-56.45	27.9	62	58.3	48.7
8.8	-55.62	-55.27	-56.6	27.87	60.5	57.6	49
8.59	-52.95	-55.94	-56.66	27.9	61.3	57.6	48.4
8.7	-55.11	-55.47	-56.75	27.84	62.6	62.4	52.5
8.56	-54.89	-55.47	-56.63	28.05	60.2	56.5	50.2
8.71	-55.22	-55.47	-56.9	27.9	61.6	59.9	50.7

8.65	-54.67	-56.2	-56.94	28.05	60.4	58.6	50.4
8.68	-54.82	-55.37	-56.87	28.11	60.1	57.2	50.3
8.65	-54.71	-55.78	-57.03	28.08	61.5	62.2	49.5
8.67	-55.04	-55.94	-56.9	28.08	59.5	56.4	50.5
8.77	-53.13	-55.94	-56.69	27.93	60.9	57.9	48.9
8.7	-55.04	-55.58	-56.69	27.96	62.4	62.8	44.6
8.75	-54.63	-55.27	-56.9	28.02	60.1	56.1	49.4
8.62	-54.23	-54.75	-56.9	27.93	62	59.8	51.4
8.82	-55.44	-55.63	-56.9	27.93	60.5	58.8	48.7
8.58	-54.89	-55.58	-56.9	28.11	60.2	57.1	48.8
8.69	-54.23	-55.84	-56.87	28.02	61.5	62.2	48.9
8.61	-54.19	-55.89	-57.12	28.08	59.2	57.1	49.8
8.73	-55.81	-55.68	-56.87	28.08	59.6	57.4	51.8
8.51	-55.84	-55.73	-56.51	28.17	61.1	62.5	48.3
8.62	-54.78	-54.9	-56.9	28.05	59.3	57.3	49.5
8.53	-53.42	-56.15	-56.57	28.3	59.5	57.1	49.6
8.66	-55.11	-56.46	-56.6	28.08	60.6	62.4	50.2
8.7	-55.4	-55.21	-56.75	28.21	58.9	57.9	51.4
8.62	-55.33	-55.32	-57	28.08	58.9	56.5	48.7
8.93	-55.4	-55.53	-56.81	27.99	60.1	61.1	49.6
8.71	-55.44	-55.63	-56.66	27.87	59.3	59.7	48.2
8.67	-53.94	-55.37	-56.84	28.17	58.7	56.4	47.3
8.65	-55.33	-55.73	-56.66	28.05	60.1	62.4	50.5
8.69	-55.55	-54.9	-56.84	27.99	59	59	50.5
8.6	-55.55	-55.16	-56.69	28.17	58.3	56.1	51.3
8.71	-56.06	-55.78	-56.81	28.08	59.7	60.7	49.1
8.57	-55.15	-55.94	-56.87	28.21	59.7	60.8	49.7
8.59	-54.01	-55.63	-56.57	28.14	58.1	56.1	51.3
8.68	-55.51	-55.84	-56.81	28.24	60.3	62.9	50.2
8.6	-56.17	-55.06	-57	28.21	57.3	55.2	53.2
8.63	-55.04	-55.84	-56.57	28.42	59.1	58.6	49.6
8.66	-54.56	-55.84	-56.6	28.02	59.3	61.1	47.8
8.49	-53.64	-55.32	-56.81	28.45	57.7	55.9	50.5
8.65	-55.7	-55.99	-56.57	28.08	60	63	51.6
9.29	-55.04	-54.69	-57.03	28.05	57.7	57.5	47.4
8.7	-54.52	-55.73	-56.54	28.17	58.3	56.7	52.7
8.72	-55.55	-56.15	-56.81	28.11	60.3	63.4	49.9
8.68	-54.78	-55.73	-56.87	28.24	57.1	55	53.6
8.72	-55.11	-55.16	-56.94	28.21	58.2	58.2	50.4
8.63	-56.21	-55.73	-56.94	28.27	59.9	63.3	49.9
8.72	-55.73	-55.84	-56.66	28.08	57.7	57.3	48.3
8.65	-54.78	-55.21	-56.94	28.42	58.3	56.7	46
8.69	-54.67	-55.84	-56.87	27.99	59.5	61.8	51.1
8.61	-55	-55.01	-56.87	28.42	56.6	55	51.1
8.63	-53.75	-55.47	-57.06	28.21	58.2	59.6	48.2
8.59	-54.38	-55.27	-56.97	28.21	58.5	60.7	50.5
8.65	-55.07	-54.9	-56.94	28.3	56	55.4	50

8.65	-54.45	-56.1	-57.03	28.39	58.1	60.3	52
8.61	-54.38	-55.63	-56.9	28.24	58	60.5	49.3
7.76	-53.13	-55.63	-56.78	28.51	56	55.4	49.9
8.62	-54.08	-55.16	-56.63	28.21	57.8	61	49.5
9.08	-52.66	-55.78	-56.81	28.14	57.5	59.8	49.5
8.58	-53.97	-55.16	-57	28.33	56.6	55.4	51.1
8.73	-55	-55.37	-56.94	28.27	58.8	61.7	49.6
8.56	-53.53	-54.69	-57.09	28.08	58.2	59.5	48.4
8.66	-54.74	-55.84	-56.63	28.33	57.6	56	49
8.58	-55.59	-55.16	-56.87	28.3	59.9	62.2	51.3
8.59	-54.85	-55.73	-56.75	28.05	58.9	59.2	47.1
8.54	-55.04	-55.27	-56.78	28.45	59	56.3	50.2
8.65	-54.19	-55.99	-56.87	27.99	61.2	63	47.1
8.68	-55.15	-56.15	-56.75	28.24	59.2	57.8	49.9
8.64	-54.63	-55.32	-56.84	28.11	60.2	57.2	45.5
8.44	-54.67	-55.47	-57.12	28.11	61.5	62	50
8.72	-55.73	-55.16	-56.69	28.02	59.5	56.7	49.6
8.78	-55.77	-55.99	-56.78	28.02	61.4	58.6	48.9
8.65	-55.66	-56.51	-56.6	28.08	61.4	59.5	49.7
8.63	-53.64	-55.68	-56.78	28.05	61.5	57.4	47.3
8.67	-55.07	-56.04	-56.57	27.81	63.6	62.5	49.4
8.56	-55	-56.1	-56.78	27.93	62	56.9	51.3
8.61	-55.44	-56.3	-56.63	27.93	65	63.8	51.7
8.62	-54.01	-55.73	-57.03	27.93	62.1	56.6	51.2
8.57	-54.67	-55.01	-56.97	27.96	65.1	63.5	46.8
8.71	-55.15	-55.73	-56.57	27.93	62.6	56.8	47.8
8.65	-54.85	-55.06	-56.9	28.05	64.5	60.3	45
8.62	-54.96	-55.58	-57.12	27.78	64.1	59	52.8
8.38	-53.13	-55.73	-56.97	27.87	65	58.3	50.5
8.63	-55.84	-54.64	-56.66	27.75	64.6	59.6	48.6
8.82	-54.78	-55.84	-57.09	27.81	64.7	58.1	47.5
8.71	-55.44	-55.58	-56.97	27.66	66.8	62.1	50.5
8.74	-55.29	-56.1	-56.63	27.72	64.9	57.6	47.5
8.62	-55.51	-55.53	-56.81	27.69	66.7	62.2	50.1
8.57	-55.59	-55.99	-56.81	27.78	64.7	57	49.7
8.56	-53.53	-56.04	-56.66	27.81	67.1	60.6	49.5
8.68	-54.74	-55.11	-57.09	27.75	65.4	57	48.1
8.65	-55.48	-55.68	-56.9	27.75	67	58.9	50.3
8.64	-54.93	-55.01	-56.87	27.63	65.9	58.2	49.1
8.32	-55	-55.11	-56.97	27.72	67.6	58.2	49.7
8.62	-54.93	-55.32	-56.75	27.47	67.6	60.1	49.8
8.75	-55.48	-55.47	-56.97	27.63	67.5	58.2	48.4
8.65	-55.37	-54.95	-56.81	27.41	68.9	62.4	47.4
8.67	-56.36	-56.2	-56.69	27.47	67.1	58	50.8
8.53	-53.94	-55.89	-56.78	27.66	67.9	62.4	48.7
8.55	-55.4	-55.68	-56.87	27.56	66.4	57.4	48.2
8.17	-54.23	-55.21	-56.75	27.63	68.2	62.5	52.6

8.66	-55.44	-55.11	-56.75	27.56	66.3	57.2	49.8
7.88	-55	-56.04	-56.97	27.63	68.1	61.2	51.9
8.61	-54.49	-54.95	-56.81	27.63	66.3	57.1	49.7
9.24	-55.55	-55.63	-56.87	27.38	68.5	61.9	53.3
8.69	-55.18	-55.01	-56.87	27.63	65.9	57	49
8.62	-53.28	-55.27	-56.97	27.44	67.8	61.4	50.7
8.66	-55.7	-55.63	-56.66	27.53	66.1	56.8	50.8
8.6	-55.04	-55.68	-56.75	27.53	67	59.1	50.5
8.55	-54.82	-55.32	-56.78	27.66	65.8	57.1	54.6
8.66	-54.08	-55.68	-56.81	27.56	67	58.6	51.4
8.65	-54.78	-55.32	-56.9	27.63	66.5	58.6	46.6
8.61	-55.81	-55.01	-56.63	27.63	66.8	58.3	49.7
8.53	-55.29	-55.37	-56.9	27.63	66.3	58.9	53.4
8.65	-54.89	-54.85	-56.78	27.56	65.8	57.3	47.7
8.72	-52.8	-54.9	-56.94	27.38	67.5	61.5	51
8.67	-55.04	-55.27	-57	27.69	65.7	57.5	49.6
8.7	-55.18	-55.58	-56.78	27.44	67.7	62.6	51.5
8.6	-54.56	-54.85	-56.81	27.69	65.4	57.3	50.9
8.72	-56.06	-55.53	-56.9	27.56	66.8	62.4	49
8.55	-54.19	-55.37	-56.81	27.9	64.6	57	50.5
8.62	-53.53	-55.37	-56.6	27.63	66.4	62.1	49.2
8.67	-54.89	-55.32	-56.57	27.87	64.1	56.9	49.9
8.68	-55.29	-55.78	-56.78	27.63	65.6	59.4	53.9
8.43	-55.59	-55.37	-56.78	27.96	63.4	56.7	50.7
8.68	-55.29	-55.78	-56.48	27.63	64.7	58.8	51.1
8.98	-55.7	-55.89	-56.87	27.72	63.2	57.2	53.5
8.65	-53.9	-55.32	-56.94	27.72	64.1	58.2	49.5
8.78	-53.17	-55.21	-57.03	27.56	63.6	58.8	49.8
8.64	-55.37	-55.11	-56.94	27.81	63.7	57.8	48.7
8.79	-54.89	-55.47	-56.81	27.56	64.4	61	49.6
8.6	-53.97	-55.16	-56.75	27.78	62.9	57.1	50.5
8.67	-54.74	-55.32	-56.87	27.72	64.7	62.7	50.5
8.65	-54.78	-55.53	-57	27.99	62.3	56.4	47
8.65	-54.63	-55.84	-56.78	27.75	63.6	59.6	48.8
8.54	-53.53	-55.16	-56.75	27.93	62.3	58.7	50.8
8.64	-55	-55.78	-56.48	27.75	62	57.1	50.8
8.56	-55.73	-56.46	-56.81	27.96	62.9	61.1	50
8.65	-53.86	-55.84	-56.66	27.87	61	58.2	51.6
9.1	-54.3	-54.95	-56.54	27.96	59.9	56.5	50.1
8.69	-54.89	-55.21	-56.57	28.05	59.1	55	54.9
8.75	-54.89	-55.47	-56.54	28.08	58.8	54.8	49.9
8.68	-55.15	-56.1	-56.97	28.11	58.3	53.9	47.3
8.69	-55.18	-55.99	-56.6	28.08	58.2	53.6	50
8.55	-54.16	-55.27	-56.69	28.24	57.9	53.3	42.7
8.71	-55.04	-55.58	-56.9	28.11	57.6	52.9	50.3
8.7	-54.41	-54.8	-56.97	28.27	57.3	52.7	49.1
8.71	-55.37	-55.47	-56.9	28.11	57.3	52.6	59

8.32	-54.78	-54.95	-56.87	28.27	56.9	52.4	47.9
8.62	-53.61	-55.58	-56.75	28.24	56.2	51.8	50.4
9.07	-55.81	-55.99	-56.9	28.08	56.6	51.8	50.7
8.64	-54.3	-55.73	-57.12	28.27	56.7	51.6	50.4
8.61	-55.92	-55.21	-56.87	28.17	56.3	51.6	49.4
8.7	-55.77	-55.47	-56.69	28.14	57.1	51.6	48.8
8.65	-55.51	-55.27	-56.84	28.14	57	51.6	47.8
8.63	-54.85	-55.58	-56.87	28.3	57	51.4	43.5
8.72	-54.85	-55.58	-56.63	28.17	56.9	51.4	48.4
8.51	-55.48	-55.73	-57.18	28.42	56.4	51.1	50
8.65	-55.11	-55.63	-56.94	28.27	56	51.3	49.9
8.64	-55.15	-55.11	-56.54	28.21	55.5	50.9	49.9
8.66	-55.81	-55.47	-56.6	28.24	55.1	50.6	42.6
8.72	-54.71	-55.01	-56.94	28.33	55	50.6	50.2
8.63	-55.18	-56.56	-56.84	28.45	54.9	50.6	50
8.6	-56.06	-56.04	-56.81	28.39	54.8	50.5	50
8.52	-54.89	-55.11	-56.78	28.57	54.5	50.4	47.3
8.69	-55.07	-55.73	-56.66	28.57	53.9	50.1	50
8.61	-54.23	-55.94	-56.87	28.63	54.1	50.1	48.4
8.58	-54.45	-56.15	-56.81	28.42	53.8	50.1	48.4
8.67	-54.93	-56.15	-56.81	28.63	53.7	50	51.2
8.57	-54.74	-56.1	-56.87	28.45	53.5	49.8	48.3
8.88	-55.7	-55.47	-56.87	28.45	53.3	49.7	52.4
8.69	-55.11	-56.15	-56.97	28.45	53.1	49.6	55.4
8.7	-54.71	-55.68	-56.54	28.45	52.9	49.5	48
8.63	-54.41	-55.37	-56.81	28.54	53.1	49.5	50.2
8.7	-55.15	-55.32	-56.75	28.39	52.7	49.4	47.9
8.45	-54.05	-55.73	-56.66	28.66	52.7	49.1	48.4
8.59	-53.75	-55.32	-56.54	28.51	52	49.2	49.9
8.52	-54.27	-55.06	-56.6	28.82	52	49.2	48.2
8.61	-53.86	-55.01	-57.03	28.57	51.8	49	50.4
8.86	-53.17	-55.32	-56.87	28.51	51.4	48.8	50.5
8.6	-53.24	-55.53	-57.09	28.54	51.8	48.8	52.8
8.68	-54.89	-55.53	-56.9	28.57	51.7	49	49.3
8.58	-55.15	-55.58	-56.97	28.6	51.6	48.6	48.4
8.71	-54.93	-55.11	-56.81	28.63	52	48.5	49.5
8.65	-55.77	-55.21	-57	28.72	51	48.5	53.7
8.71	-54.3	-55.99	-56.87	28.6	51.2	48.4	50.8
8.67	-55.07	-55.27	-56.81	28.79	51.2	48.3	50.1
8.71	-54.71	-55.47	-56.87	28.69	51	48.4	50.4
8.62	-55.77	-56.15	-56.84	28.57	50.8	48.2	50.3
8.66	-54.78	-55.16	-56.97	28.6	50.7	47.4	53.7
8.77	-55.66	-55.32	-56.87	28.69	50.5	47.8	50.9
8.71	-55.88	-55.68	-56.81	28.66	50.5	47.6	50.3
8.72	-56.03	-55.78	-56.78	28.63	50	47.7	52.4
8.64	-55.11	-55.58	-56.94	28.82	49.6	47.6	47.8
8.65	-54.96	-55.89	-56.78	28.69	49.6	47.6	49.5

8.62	-55.07	-55.47	-56.78	28.88	50.1	47.7	52
8.64	-54.27	-55.89	-56.78	28.66	50.1	47.5	49.2
8.98	-53.9	-55.21	-56.81	28.79	50.3	47.4	46.5
8.63	-53.42	-55.89	-56.78	28.69	49.8	47.3	49.6
8.63	-54.71	-55.58	-56.9	28.72	49.7	47.5	53.1
8.56	-53.83	-55.47	-56.66	28.66	49.8	47.3	51
8.61	-54.93	-54.9	-56.97	28.69	49.8	47.3	51.1
8.55	-53.75	-55.78	-57.21	28.82	50.1	47.2	49.7
8.59	-54.41	-55.58	-56.6	28.69	50.2	47.3	49.9
7.86	-55.73	-56.2	-56.9	28.82	50.5	47.3	47.9
8.67	-56.03	-56.2	-56.84	28.6	50.6	47.3	48.3
8.61	-54.38	-55.78	-56.84	28.57	51	47.5	48.8
8.67	-55.37	-55.58	-57.15	28.63	51.3	47.4	48.7
8.72	-53.64	-55.58	-56.63	28.54	51.6	47.6	49.7
8.59	-55.66	-55.11	-56.97	28.54	52	47.5	42
8.71	-55.66	-55.32	-56.84	28.63	52	47.9	50.4
8.56	-54.27	-55.53	-57.12	28.75	52.7	47.9	52.1
8.62	-54.67	-55.94	-56.87	28.51	52.7	48	49.9
7.79	-54.93	-55.73	-57.03	28.69	53.2	48.1	47.4
8.71	-55.11	-56.2	-56.66	28.45	53.5	48.1	47.7
8.69	-53.83	-55.99	-56.84	28.48	53.7	48.1	51.3
8.57	-55.62	-56.36	-56.94	28.54	54.1	48.3	47.3
8.64	-54.89	-56.2	-56.57	28.51	54.4	48.5	47.2
8.59	-56.25	-56.25	-56.84	28.33	54.7	48.3	51.4
8.62	-55.59	-55.89	-56.84	28.39	55.5	48.8	49.4
8.56	-55.66	-55.78	-56.9	28.51	55.6	48.7	48.7
8.62	-54.12	-55.78	-56.78	28.33	55.8	48.7	50.3
8.53	-53.68	-55.63	-56.81	28.51	55.8	48.7	50.2
8.61	-52.99	-55.89	-56.78	28.27	55.6	48.8	50
8.45	-53.68	-55.37	-56.84	28.48	56	48.9	50.4
8.63	-54.19	-55.53	-56.94	28.3	57.1	49.5	48.3
8.81	-56.03	-55.53	-56.78	28.14	58	50	50.9
8.62	-54.74	-56.3	-56.87	28.33	58.1	49.5	50.1
8.62	-56.03	-55.63	-56.9	28.11	57.6	49.5	50.4
8.51	-55.22	-56.04	-56.78	28.27	58.1	49.3	49.2
8.67	-55.11	-55.78	-56.81	28.14	58.7	49.6	48.1
8.66	-55.37	-56.82	-56.51	28.48	58	49.6	49.3
8.69	-55.18	-55.73	-57.06	28.24	57.9	49.5	51.6
8.47	-55.4	-55.78	-56.84	28.45	57.7	49.6	48.9
8.62	-54.27	-55.89	-56.87	28.27	57.5	49.6	52
8.63	-52.88	-55.53	-57	28.14	58.2	49.6	50
8.69	-54.45	-56.04	-56.78	28.27	58.5	49.7	50.1
8.71	-55.07	-56.2	-56.75	28.27	58.1	49.9	51.1
8.65	-54.82	-55.78	-56.84	28.45	57.6	49.9	49.6
8.63	-54.01	-55.16	-57.12	28.14	58.2	49.9	49.8
8.66	-55.15	-55.27	-56.97	28.39	58.5	49.9	48.1
8.63	-55.11	-55.27	-56.94	28.21	58.2	50	46.9

8.49	-55.48	-55.53	-56.69	28.42	58	49.9	51.1
8.67	-55.66	-56.15	-56.84	28.21	57.7	49.9	49.6
9.08	-55.11	-55.21	-57.03	28.14	58	50	50.5
8.58	-53.68	-55.27	-57.03	28.24	57.7	50	51.3
8.66	-54.38	-55.53	-57.15	28.14	58.4	50	50.2
8.61	-53.75	-55.63	-56.78	28.21	58.7	50.6	48.4
8.65	-55	-55.53	-56.78	28.21	58.5	50.3	51.3
8.64	-54.82	-56.51	-56.94	28.33	58.9	50.3	49.8
8.7	-55.55	-55.94	-56.75	28.24	58	50.2	50.2
8.69	-56.03	-55.63	-56.97	28.3	57.6	50.2	48.1
8.57	-55.11	-54.95	-56.63	28.24	57.5	50.4	46
8.53	-55.62	-56.15	-56.78	28.27	57	50.2	52
8.63	-55.33	-55.16	-56.9	28.33	57.1	50.1	52.5
8.83	-55.51	-55.32	-56.81	28.3	56.9	50.1	50.4
8.69	-55.22	-55.89	-56.78	28.3	56.6	49.9	52.1
8.58	-52	-55.73	-56.69	28.3	56.1	50	50.5
8.47	-54.12	-56.2	-56.97	28.45	55.8	50	50.4
8.68	-54.96	-55.73	-57	28.33	56	50	49.5
8.67	-55.44	-55.53	-56.97	28.51	56	49.8	48.4
8.62	-55	-55.27	-56.94	28.33	56.1	50	50
9.11	-55.48	-55.68	-56.81	28.33	56	49.8	51.2
8.7	-55.37	-55.47	-57.06	28.33	56	49.8	51.7
8.64	-54.96	-55.01	-56.84	28.39	55.8	49.9	52
8.62	-55.37	-55.99	-56.81	28.42	55.7	49.6	48.4
8.71	-55.04	-56.3	-56.51	28.42	55.4	49.5	51.5
8.54	-55.4	-56.1	-57.06	28.51	55.1	49.6	45.3
8.68	-55	-55.63	-57.15	28.42	54.9	49.5	50.1
8.5	-55.62	-56.1	-57.03	28.54	54.8	49.5	47.7
8.58	-54.38	-54.95	-57.09	28.51	54.8	49.3	49.8
8.76	-54.74	-55.84	-56.66	28.6	54.4	49.5	48.1
8.66	-55.18	-55.53	-57	28.63	53.7	49.2	46.7
8.59	-54.96	-55.73	-56.75	28.6	53.6	49.4	46.6
8.64	-54.82	-55.53	-56.9	28.72	53.6	48.9	48.6
8.59	-54.16	-55.53	-56.9	28.63	53.1	49	52
8.54	-55.4	-56.04	-56.9	28.63	52.8	48.9	47.3
8.66	-55.07	-55.47	-56.87	28.66	52.9	48.9	49.7
8.68	-55.07	-55.58	-57	28.57	52.8	48.8	47.5
8.66	-55.15	-55.94	-57.03	28.57	52.7	48.7	53.2
8.62	-54.89	-56.36	-56.9	28.69	52.3	48.7	49.5
8.5	-54.12	-56.2	-56.75	28.82	52.7	48.3	48.1
8.7	-55.04	-55.53	-56.9	28.66	52.3	48.4	47.3
8.44	-54.85	-54.38	-57.09	28.82	52.3	48.5	54.1
8.58	-55.29	-55.84	-56.97	28.72	52	48.2	51.8
8.68	-54.96	-55.11	-57.12	28.69	51.6	48	50
8.67	-55.4	-56.2	-57.09	28.79	51.6	48	50.9
8.67	-55.4	-55.73	-56.97	28.69	51.6	48.2	50
8.63	-55.11	-55.78	-57.06	28.97	51.4	48.1	50.2

8.57	-54.63	-54.8	-57.18	28.82	51.4	47.9	50.5
9.09	-54.27	-55.84	-56.94	28.79	51.3	47.8	48.4
8.6	-55.59	-55.63	-56.97	28.75	51.3	47.6	48.4
8.68	-54.3	-55.27	-57.24	28.82	51.3	47.6	49.8
8.71	-55.62	-55.73	-56.9	28.79	50.7	47.4	46
8.61	-54.49	-55.32	-56.69	28.82	50.6	47.3	51.4
8.52	-53.35	-55.58	-56.9	28.94	50.3	47.3	45.5
8.61	-54.71	-55.47	-57.03	28.94	50	47.2	50.1
8.56	-53.75	-55.27	-56.97	29.06	49.8	47.1	51
8.61	-54.3	-55.73	-57.18	28.85	49.4	47	48.8
8.45	-54.85	-55.99	-57.09	29	49.3	47	49.6
8.63	-54.63	-55.99	-56.94	28.97	49.4	47	50.1
8.79	-55.62	-55.58	-57.03	28.91	49.3	46.9	50.7
8.56	-54.16	-56.1	-57.24	28.82	49.3	46.6	49.4
8.58	-53.06	-55.99	-57	28.88	49.2	46.6	49
8.5	-52.88	-56.3	-56.9	29.18	49.1	46.6	49.4
8.53	-52.36	-55.78	-57.09	29.03	49.1	46.5	49.8
7.85	-53.72	-55.99	-57.18	29.12	49.2	46.5	47.8
8.6	-54.71	-55.47	-56.75	28.91	49.2	46.7	48.4
9.08	-54.3	-55.16	-57.24	28.88	49	46.5	48.9
8.66	-54.6	-55.63	-57.03	28.88	49	46.3	51.9
8.73	-55.18	-55.99	-57.18	28.85	49.2	46.4	47.2
8.68	-55.11	-55.73	-56.94	29	48.8	46.3	49.2
8.69	-55.18	-56.3	-57.18	29	48.5	46.3	50.3
8.63	-55.44	-55.53	-57.15	29.24	48.6	46	50.1
8.62	-55.15	-55.58	-57.03	28.91	48.4	46.2	51.2
8.27	-55.62	-56.56	-57.06	29.15	48.8	46.1	52.4
8.6	-55.55	-55.84	-57.06	28.94	48.4	45.9	49.5
8.73	-55.84	-56.2	-57.06	28.91	48.2	46.3	46.5
8.59	-55.88	-56.04	-57.06	29.03	48	45.8	46.8
8.64	-55.11	-55.32	-57.12	29.06	47.9	45.9	49.3
8.55	-55.59	-55.68	-56.81	29.18	47.6	46.1	47.3
8.56	-55.11	-55.58	-57.21	29	47.2	45.7	49.2
9.06	-55.07	-54.8	-57.03	28.97	47.3	45.9	50.5
8.56	-55.7	-56.25	-57.39	28.94	47.3	45.7	47.4
8.59	-55.4	-56.1	-57	29.03	47.2	45.5	51
8.46	-55.51	-56.04	-56.84	29.24	46.8	45.6	48.8
8.65	-55.51	-55.01	-57.24	29.12	46.8	45.3	49.2
8.7	-55.33	-55.63	-57.21	29.18	46.9	45.3	49.9
8.71	-55.59	-56.46	-57	29	46.6	45.1	46.8
9.21	-54.08	-55.68	-56.81	29.06	46.5	45.2	48.4
8.56	-52.91	-55.53	-57.12	29.12	45.9	45.2	48.8
8.69	-55.88	-55.63	-56.94	29.15	45.8	45.1	51.6
8.6	-54.78	-56.1	-56.87	29.3	45.7	45	51.6
8.58	-54.71	-55.99	-56.94	29.12	45.5	44.8	47.2
8.28	-55.59	-55.58	-57.06	29.27	45.8	44.9	50.2
8.64	-54.63	-55.89	-57.06	29.06	45.5	44.8	51.4

8.65	-53.35	-55.27	-57.21	29.12	45.5	45	49.6
8.67	-55.81	-56.93	-57.24	29.15	45.7	44.8	49.1
8.66	-55.37	-55.58	-57.21	29.18	45.2	44.5	51.4
8.54	-55.73	-56.25	-56.84	29.43	44.9	44.6	46.8
8.72	-54.71	-56.04	-56.97	29.12	44.9	44.4	50.9
8.58	-53.06	-56.36	-57.21	29.12	44.8	44.5	48.1
8.61	-55.15	-55.27	-57.18	29.18	45.1	44.4	50.1
8.72	-54.96	-56.25	-57.12	29.15	45.3	44.4	49.9
8.47	-54.85	-56.15	-57.06	29.21	45.1	44.5	51.1
8.69	-54.67	-55.84	-56.9	29.21	45.3	44.5	50.8
8.6	-55.15	-56.1	-57.15	29.33	45.1	44.2	50
8.55	-54.08	-55.06	-56.9	29.21	45.1	44.2	50.3
8.92	-56.1	-55.78	-57.24	29.18	45.3	44.4	51.9
8.63	-55.84	-56.1	-56.81	29.15	46.2	44.5	50.1
8.63	-55.55	-55.58	-56.94	29.12	46.4	44.7	48.9
8.52	-55.15	-56.93	-57.21	29.27	46.8	44.6	49.9
8.7	-54.67	-56.15	-56.9	28.97	47.6	44.8	50.9
8.6	-54.67	-56.04	-56.81	29.18	48.1	44.8	52.8
8.58	-53.97	-56.1	-57.33	28.97	48.9	45.1	50.8
9.07	-55.88	-55.21	-57.27	28.97	49.1	44.9	50
8.61	-55.04	-55.27	-57.18	28.85	49.5	45.3	50.1
8.66	-54.19	-55.47	-57.36	28.82	50.1	45.4	50.4
8.54	-55.81	-55.94	-57.03	28.91	50.5	45.5	49.5
8.62	-55.51	-55.84	-56.81	28.75	50.8	45.5	48.6
8.71	-54.93	-55.73	-57.09	28.88	51.4	45.3	50.7
8.56	-51.19	-55.84	-56.94	28.79	52	43.9	50.5
8.85	-55.37	-55.94	-57.18	28.66	51.9	44	50.4
8.62	-54.67	-55.47	-57.06	28.6	53.5	44.2	49.4
8.65	-54.41	-55.84	-56.78	28.66	54.7	44.7	50.1
8.53	-51.15	-54.9	-56.48	0.67	49.5	45.2	49.5
8.65	-53.17	-54.85	-56.87	28.6	54.5	45.9	47.4
8.6	-55	-55.99	-57.06	28.51	56	45.3	45.1
8.64	-55.88	-55.53	-56.84	28.54	57.1	45.4	49.9
8.55	-55.48	-55.27	-57.18	28.57	57.3	45.4	50.3
8.22	-55.37	-55.06	-57.33	28.54	56.7	45	49.1
8.64	-55.66	-55.63	-56.81	28.45	57	45.1	47.2
8.6	-55.4	-56.41	-56.97	28.45	57.3	45.1	50.2
8.23	-55.66	-55.99	-56.97	28.51	57.9	45.3	52.1
8.63	-55	-56.25	-56.87	28.42	58.2	45.5	50.1
8.09	-56.36	-55.16	-57.12	28.51	58.8	46.1	47.7
8.6	-55.22	-55.78	-57.18	28.11	60.5	49.5	49.4
8.66	-56.28	-55.21	-56.87	28.27	59.8	47.2	49.2
8.65	-55.37	-56.82	-56.78	28.33	59.6	47.1	50.1
8.59	-52.69	-55.47	-57.24	28.3	59	47.2	49.9
8.62	-54.56	-55.32	-56.78	28.3	59.1	47.2	50.1
8.66	-54.96	-55.63	-56.66	28.33	59.1	47.3	49
7.77	-55.44	-56.25	-57.06	28.42	59.9	47.3	49.5

8.57	-55.51	-55.84	-56.84	28.39	59.5	48.1	48.1
8.62	-55.22	-55.68	-57.18	28.21	59.4	48.4	48.7
8.62	-53.97	-55.53	-56.9	28.27	59.8	48.7	52
8.66	-55.11	-55.53	-57	28.21	60.4	48.9	51.9
8.62	-55.37	-56.1	-57.15	28.21	59.7	49	46
8.55	-54.89	-56.15	-56.9	28.33	59.4	49.2	51.7
8.58	-54.82	-55.78	-57.09	28.24	59.2	49.1	53.8
8.64	-55.81	-55.27	-57.06	28.27	59.1	49.1	48.6
8.67	-55.62	-55.58	-56.81	28.14	59.2	49.3	49.8
8.56	-53.21	-56.15	-56.94	28.21	59.7	49.4	48.4
8.56	-55.48	-55.94	-57	28.3	59.5	49.4	51.1
8.53	-54.41	-55.73	-57.27	28.45	59.4	49.3	50.2
8.41	-55.44	-56.15	-57.06	28.42	59.6	49.4	52
8.79	-55.73	-55.27	-57.12	28.21	60.3	49.5	52.1
8.59	-52.47	-55.27	-57.15	28.24	60.5	49.5	51.2
8.64	-55.7	-55.68	-57.18	28.21	60.7	49.5	49.9
8.6	-53.5	-54.9	-57.27	28.27	60.3	49.5	49.2
8.56	-54.78	-55.84	-57.09	28.33	60.1	49.5	52.2
8.68	-55.51	-55.58	-57.09	28.3	59.9	49.6	50
8.57	-52.44	-56.04	-56.94	28.42	59.3	49.6	49.5
8.63	-55.4	-55.32	-56.9	28.45	59.1	49.5	48.4
8.94	-55.07	-55.11	-57.03	28.21	59.3	49.6	51.5
8.69	-55.15	-55.89	-56.94	28.27	59.1	49.5	49.7
8.68	-55.48	-55.89	-56.9	28.27	59	49.6	51.6
8.73	-55.37	-55.37	-57.09	28.42	58.8	49.6	49.1
8.57	-53.5	-55.78	-56.9	28.45	58.5	49.5	49.9
8.62	-55.4	-55.73	-57.15	28.48	58.2	49.4	48.6
8.71	-55.51	-55.73	-56.81	28.39	58.2	49.5	49.9
8.67	-54.74	-56.04	-57.12	28.39	57.8	49.5	49
8.7	-54.63	-55.53	-57.24	28.39	57.5	49.5	48
8.66	-55.29	-55.21	-57.03	28.33	57.6	49.2	48.8
9.06	-54.63	-55.73	-56.87	28.33	57.4	49.2	51.8
8.69	-55.33	-56.3	-57.21	28.48	57.1	49.3	49.1
8.65	-55.59	-55.94	-56.9	28.48	57.1	49.1	52.2
8.57	-55.18	-55.58	-56.94	28.48	57.1	49.2	51.1
8.66	-55	-56.04	-56.54	28.51	56.1	49.1	45.3
8.65	-55.18	-55.89	-57	28.72	56.1	48.9	51.8
8.66	-56.17	-56.56	-56.94	28.51	56.3	48.9	48.9
8.19	-53.75	-54.69	-57.06	28.66	56.1	48.9	51.4
8.6	-55.59	-56.2	-57.12	28.39	56.1	48.8	48.7
8.71	-55.22	-55.89	-56.97	28.54	56	48.9	51
8.56	-54.45	-56.15	-57.03	28.75	55.8	48.7	50
8.69	-55.18	-55.78	-57.27	28.57	55.4	48.7	49.7
8.36	-55.18	-55.47	-57.15	28.75	55.2	48.8	46.9
8.65	-55.4	-55.58	-57.06	28.57	55.2	48.4	50.9
8.67	-55.48	-56.15	-57.27	28.6	54.9	48.5	50.2
8.55	-54.05	-55.94	-56.97	28.82	54.7	48.3	48.9

8.59	-54.16	-55.84	-56.9	28.66	54.7	48.2	47.3
9.26	-55.95	-56.46	-57	28.48	54.5	48.4	52.5
8.65	-55.4	-55.84	-57.24	28.57	54.7	48.1	49.9
8.62	-54.74	-55.27	-57.15	28.48	54.6	48.3	49.5
8.62	-55.55	-55.68	-57.06	28.63	53.6	47.9	48.4
8.66	-55.29	-55.94	-57.03	28.72	53.7	48	47
8.66	-55.81	-55.99	-57.21	28.94	53.5	47.9	46.8
8.7	-55.22	-55.16	-57.3	28.63	53	47.9	48.6
8.45	-53.86	-56.15	-57	28.91	52.7	47.7	51
8.57	-54.05	-55.99	-57.15	28.72	52.4	47.6	47.3
8.71	-52.25	-55.99	-57.18	28.82	52.3	47.7	49.6
8.67	-54.82	-56.77	-57.06	28.79	51.6	47.5	50.8
8.67	-54.85	-56.1	-57.24	28.88	51.5	47.4	48.8
7.82	-54.85	-56.15	-57.3	28.97	51.1	47.3	48.3
8.54	-55.11	-55.84	-57.3	28.79	51.7	47.3	48.3
8.71	-55.4	-56.36	-57.15	28.75	51.8	47.2	51.2
8.5	-54.89	-55.58	-57.15	28.97	51.7	47.1	51
8.6	-54.71	-56.04	-57.18	28.91	51.7	47.2	49.5
8.97	-53.13	-55.47	-57.33	28.72	51.6	47.2	50.5
8.68	-55.4	-56.3	-57.21	28.82	51.5	47.2	49
8.63	-55.81	-55.37	-57.18	28.75	51.2	47.1	51.7
8.57	-55.62	-56.41	-57.06	29.03	50.9	47	49.5
8.71	-55.51	-55.99	-57.18	28.85	50.6	46.9	49.4
9.16	-53.64	-56.93	-56.87	28.75	50.7	46.9	47
8.66	-55.37	-55.16	-57.18	28.88	50.7	46.8	47.5
8.63	-55.81	-55.16	-57.3	28.85	50.5	46.9	50.2
8.53	-54.82	-56.56	-57.06	29.12	50.4	46.5	50.4
8.56	-54.38	-56.04	-57.3	28.97	50.2	46.6	50.2
8.92	-55.77	-55.99	-57.18	28.91	50	46.6	50.5
8.66	-55.37	-56.15	-57.39	28.97	49.6	46.4	50.7
8.59	-53.94	-55.53	-57.21	28.85	50	46.2	50.2
8.61	-54.96	-56.36	-57.06	29.15	49.5	46.2	48.8
8.56	-55.07	-56.77	-56.84	28.94	49.5	46.2	47.6
8.4	-55.15	-56.1	-57.24	29.15	49.4	45.9	43.8
8.7	-55.88	-56.51	-56.84	28.91	49.5	46.1	46.5
8.66	-55.77	-55.11	-56.97	28.85	49.8	46.5	47.9
8.56	-54.93	-56.15	-56.75	29.15	49.3	46	50.4
8.57	-54.05	-55.78	-57.06	28.97	49.2	45.9	49.9
8.82	-54.71	-55.84	-57.12	28.94	49.2	45.9	49.8
8.68	-55.07	-55.99	-57.21	29	49.3	45.7	47.9
8.63	-55.33	-56.3	-56.87	28.97	49.2	45.9	49.7
8.17	-56.25	-55.63	-57.12	29.18	49	45.8	51.3
8.65	-55.62	-56.36	-57.18	28.97	48.8	45.5	55.2
8.72	-55.48	-55.58	-56.94	28.94	48.3	45.6	50.9
8.55	-55.62	-56.04	-57.06	29.33	48	45.5	47.6
8.58	-53.35	-55.32	-57.27	29.03	47.6	45.3	50.5
8.57	-52.22	-55.06	-57.06	29.03	47.6	45.2	51.2

8.58	-54.67	-56.82	-57.27	29.06	47.4	45.2	49.1
8.72	-55.51	-55.99	-57.12	29.03	47.2	45.1	51.3
8.64	-55.04	-55.78	-57.12	29.33	47.1	45.1	49.2
8.57	-54.67	-55.27	-57.33	29.15	46.6	45.1	48
8.89	-54.74	-56.3	-57.21	29.18	46.2	45.1	51.8
8.68	-55.73	-56.46	-57.24	29.15	46.4	44.9	52.3
8.57	-54.05	-56.25	-57.06	29.15	46.4	44.9	49.2
8.56	-54.16	-55.63	-56.87	29.3	46.3	44.9	48.9
8.67	-55.15	-55.89	-57.09	29.21	46.3	44.8	48.7
8.7	-55.11	-57.03	-57.15	29.27	46.3	44.7	48.4
8.46	-55.48	-55.63	-57.06	29.43	46.4	44.4	49.9
8.63	-55.66	-56.15	-57.33	29.27	46.2	44.5	50.3
9.21	-55.37	-55.99	-57.15	29.21	46.3	44.6	51.1
8.63	-54.85	-56.41	-57.03	29.18	46.3	44.4	49.6
8.55	-52.95	-56.3	-57.03	29.18	47.3	44.6	49.9
8.68	-55.48	-55.47	-57.55	29.21	48.4	44.7	48.9
8.59	-55.11	-54.95	-57.24	29	48.6	44.7	47.6
8.95	-55.29	-55.73	-57.12	29.12	49.3	44.9	50.2
8.54	-52.77	-56.25	-57.18	29	49.6	45	50.3
8.56	-55.15	-56.41	-57.06	29.03	49.6	45.1	53.3
8.61	-55.73	-55.11	-57.15	29.12	50.4	45.2	49.9
8.65	-55.66	-55.99	-57.21	28.91	51.1	45.3	49.1
8.67	-55.04	-56.15	-57.09	28.85	51.2	45.4	50.2
8.57	-55.29	-55.16	-57.15	28.97	52	45.5	50.1
8.56	-53.06	-56.1	-57.27	28.82	52.5	45.5	49.1
8.92	-56.21	-56.04	-57.12	28.79	53.3	45.7	48.3
8.53	-54.38	-55.84	-57.3	28.69	54	45.8	52
8.62	-55.22	-56.1	-57.3	28.66	54.8	46	48.7
8.1	-55.48	-56.51	-57.06	28.75	55.1	46.1	50.8
8.57	-55.84	-55.32	-57.33	28.54	56	46.3	50.5
8.7	-54.45	-56.36	-57.18	28.6	56.7	46.4	45.3
8.55	-54.82	-56.04	-57.24	28.6	57.1	46.6	49.9
8.7	-56.03	-56.2	-57.06	28.45	57.7	46.7	49.9
8.92	-55.11	-55.89	-57.27	28.54	58.2	46.8	50.8
8.55	-52.03	-56.61	-57.21	28.39	58.5	47.1	50.9
8.59	-55.55	-55.58	-57.18	28.39	59.2	47.2	47.7
7.89	-54.85	-56.51	-57.27	28.54	59.6	47.3	50.7
8.67	-54.82	-56.3	-57.15	28.24	60.2	47.3	51.8
8.71	-55.62	-55.89	-57.27	28.24	60.4	47.5	50.8
8.68	-54.56	-55.99	-57.42	28.48	60.9	47.4	48.7
8.63	-55.62	-56.3	-57.12	28.17	61.4	47.8	49.9
8.63	-54.89	-55.84	-57.33	28.24	61.4	48	50
8.56	-55.07	-56.25	-57	28.27	62.3	48.2	48
8.61	-54.6	-55.89	-57.21	28.11	62.1	48.5	49.1
8.79	-55.59	-55.99	-57	28.11	62.6	48.6	49.9
8.66	-55.29	-55.99	-57.55	28.05	63.2	48.5	50.1
8.71	-54.96	-56.04	-57.09	28.02	63.1	48.6	49.5

8.47	-55.07	-55.63	-57.39	28.17	63.5	49	50.3
8.56	-54.67	-56.04	-57.18	28.02	63.5	48.9	48.4
8.63	-55.84	-55.84	-57.21	27.81	66.9	53.4	49.8
8.63	-55.48	-55.78	-56.97	28.11	65.6	51.1	48.2
8.56	-53.86	-56.1	-57.39	27.96	65	50.9	47.5
8.85	-55.44	-55.68	-56.9	27.96	64.9	50.9	49.2
8.6	-55.84	-55.47	-57.27	27.96	64.8	50.8	50
8.67	-55.4	-56.15	-56.94	27.99	64.4	50.6	50.5
8.58	-53.83	-55.68	-57.09	28.11	64.3	50.5	49.9
8.68	-55.7	-56.36	-56.97	28.02	64.3	50.5	52.4
8.86	-55.62	-56.1	-57	27.9	64.3	50.8	49.8
8.67	-54.93	-56.15	-57.12	27.87	64.1	50.6	50.5
8.68	-54.52	-55.94	-57.06	27.93	64.2	50.6	51.1
8.58	-55	-56.3	-57	28.11	64.4	50.6	49.9
8.59	-54.23	-55.89	-57.09	27.9	64.2	50.6	52.6
8.71	-55.59	-56.2	-57.12	27.9	64.2	50.9	51.4
8.63	-56.03	-55.53	-57.09	28.02	64.2	50.6	49.5
8.7	-55.33	-56.25	-56.78	27.93	64.5	50.6	52.4
9	-55.81	-55.68	-57.24	27.93	64.8	50.9	50.1
8.57	-55.44	-55.78	-57.18	27.87	65.1	50.9	48.8
8.58	-55.7	-55.58	-57.09	27.81	64.5	51.2	49.5
8.53	-55.95	-56.15	-57.03	28.08	64.5	50.9	48.6
8.56	-55.66	-55.99	-57	27.93	64.5	51	47.3
8.64	-55.15	-56.51	-57	27.81	64.6	51.4	52.5
8.62	-55.81	-55.89	-57.24	27.93	64.5	51.2	54.4
8.56	-55	-56.1	-57	27.9	64.1	51.2	48
8.58	-55.04	-55.06	-57.18	28.05	63.9	51	50.8
8.53	-55.22	-55.94	-57	27.93	63.7	51.1	48.4
8.65	-55.81	-56.2	-57.15	27.93	63.5	51.3	49.1
8.44	-55.37	-55.94	-57.12	28.14	63.2	51.2	49.9
8.58	-55.29	-55.58	-57.33	27.99	63.2	51.1	50.3
8.62	-55.18	-56.04	-57.09	27.99	62.7	51	49.1
8.68	-55.04	-55.53	-57.21	27.96	62.5	51.1	50.9
8.63	-54.6	-55.78	-57.18	28.02	62.2	51	50.2
8.51	-53.97	-55.73	-57.09	28.21	62.4	50.8	49.3
8.67	-55.48	-55.73	-56.97	27.96	61.7	50.9	48.6
8.91	-54.49	-55.21	-57.06	28.05	61.6	50.8	50.3
8.59	-53.97	-55.37	-57.03	28.02	61.4	50.6	49.8
8.62	-55.7	-55.68	-57.03	28.08	61.3	50.8	48.2
8.53	-54.6	-55.27	-57.09	28.3	61.3	50.5	48.4
8.68	-55.7	-55.94	-57.15	28.11	61.3	50.5	48.4
9.08	-55.59	-55.63	-57.15	28.08	61.3	50.5	50.9
8.56	-55.18	-55.78	-57.24	28.08	61.3	50.5	51
8.64	-55.59	-55.78	-57.18	28.02	61.1	50.5	49.9
8.58	-55.04	-55.84	-57.12	28.33	61.2	50.3	51
8.66	-55.11	-55.94	-56.97	28.05	61	50.3	48.2
9.28	-55.44	-55.68	-57	27.99	60.4	50.3	49.8

8.71	-54.96	-56.56	-57.15	28.14	60.2	50.3	47.2
8.63	-54.45	-55.84	-57.3	28.11	60	50.4	44.5
8.51	-55.4	-56.04	-57.09	28.3	60.1	50.1	47.6
8.65	-55.84	-56.04	-57.09	28.14	59.9	50.2	45.1
9.04	-54.74	-56.25	-56.75	28.21	59.7	49.9	49
8.66	-55.11	-56.1	-56.9	28.14	59.7	50	50.4
8.61	-55.22	-56.3	-57.09	28.11	59.7	50	50.2
8.56	-55.95	-55.78	-57.15	28.42	59.4	50	50.8
8.56	-53.13	-56.04	-57.06	28.21	58.5	49.8	50.8
8.52	-55.62	-55.99	-57.06	28.39	58.2	49.7	47.1
8.63	-54.82	-56.41	-57.06	28.24	58	49.6	50.7
8.72	-54.93	-55.78	-57.15	28.21	58.2	49.8	50
8.62	-54.56	-56.1	-57.42	28.17	58	49.6	46.1
8.66	-55.29	-55.99	-57.18	28.17	57.9	49.5	50.7
8.54	-55.15	-55.37	-57	28.33	58	49.5	47.2
8.69	-55.51	-56.61	-57.33	28.17	58.5	49.5	49.7
8.85	-55.37	-56.15	-57.21	28.21	58.2	49.5	48.7
8.59	-53.94	-55.84	-57.15	28.21	57.7	49.4	50.5
8.7	-56.36	-56.77	-57.06	28.3	57.4	49.5	49.1
8.53	-54.67	-55.78	-57.24	28.51	57.2	49.4	50.9
8.68	-54.96	-55.21	-57.24	28.24	57.4	49.3	50.5
8.78	-54.23	-56.2	-57.06	28.33	56.4	49.3	48.4
8.6	-54.67	-55.78	-57.09	28.3	56.3	49	49.2
8.65	-54.3	-55.89	-57.3	28.39	56.1	49.2	51.2
8.64	-55.95	-57.24	-57.06	28.54	56.4	49.1	48.3
8.62	-54.63	-55.89	-57.45	28.48	56	49	51.5
8.71	-55.77	-55.84	-57	28.3	56.1	49.1	49.9
8.55	-55.66	-55.84	-57.18	28.6	55.5	48.9	47.2
8.54	-54.19	-55.11	-57.24	28.48	55.6	48.9	50.9
9.03	-54.12	-55.99	-56.97	28.39	55.5	48.8	49.9
8.67	-55.18	-55.68	-57.39	28.45	55	48.7	49.1
8.61	-54.82	-56.2	-57.18	28.3	55.2	48.7	52.3
7.99	-55.37	-56.41	-57.39	28.6	55.4	48.5	51.2
8.65	-56.32	-56.46	-57.18	28.42	54.9	48.4	49.9
8.65	-54.82	-56.04	-57.09	28.51	55	48.5	48.7
8.55	-53.9	-56.41	-57.15	28.69	54.8	48.4	48.8
8.7	-54.52	-56.15	-57.06	28.51	54.1	48.5	49.5
8.64	-54.89	-55.89	-57.21	28.57	53.8	48.3	49.5
8.59	-55.95	-55.27	-57.12	28.72	54.4	48.4	51.4
8.67	-56.17	-55.68	-57.21	28.48	54.9	48.3	52.3
8.76	-53.57	-56.2	-57.09	28.48	54.9	48.2	50.4
8.67	-55.48	-56.46	-57.15	28.39	54.5	48.2	50.4
8.65	-55.4	-56.1	-56.97	28.45	54.5	48	49.8
8.47	-55.88	-55.89	-57.45	28.63	54.9	48	49.7
8.66	-55.04	-56.3	-57.09	28.48	54.5	48	49.5
8.65	-55.55	-56.2	-56.97	28.39	54.9	48	50.3
8.58	-53.32	-56.15	-57.12	28.69	55	47.9	51.2

8.69	-55.55	-55.89	-57.39	28.51	54.9	47.9	49.5
8.65	-55.55	-55.84	-57.33	28.51	54.8	48.1	50.4
8.59	-55.11	-55.21	-57.39	28.6	54.7	48	50.4
8.67	-55.37	-55.21	-57.27	28.51	54.7	47.9	49.3
8.72	-55.04	-56.15	-56.97	28.51	54.2	47.8	49.7
8.51	-54.63	-56.3	-57.24	28.69	54.1	47.7	50.8
8.66	-55.55	-55.89	-57.15	28.48	54.5	47.6	51
8.81	-55.88	-55.94	-57.3	28.48	53.9	47.7	47.6
8.71	-55.59	-56.25	-57.3	28.51	54.6	47.7	48.6
8.59	-53.94	-56.51	-57.15	28.51	54.1	47.7	47.9
9.16	-54.63	-55.32	-57.09	28.45	53.7	47.6	47.5
8.62	-55.44	-55.99	-57.09	28.54	53.2	47.5	49.3
8.69	-55.22	-55.53	-57.36	28.48	53.4	47.5	51.4
9.23	-54.74	-56.72	-57.06	28.39	53.5	47.6	51.2
8.59	-54.08	-56.72	-57.21	28.51	53.2	47.3	50.5
8.56	-56.25	-55.89	-57.39	28.57	53.4	47.3	47.3
8.93	-54.78	-55.27	-57.24	28.54	53.8	47.5	50.2
8.42	-55.92	-55.53	-57.12	28.63	54.4	47.3	50.3
8.55	-54.67	-56.77	-57.36	28.51	54.2	47.4	50.5
8.75	-55.92	-56.25	-57.21	28.54	54.1	47.4	49
8.52	-55.62	-55.89	-57.21	28.72	54.7	47.6	47.8
8.63	-53.83	-56.04	-57.42	28.48	55.3	47.6	48.7
8.71	-53.5	-55.53	-57.36	28.39	56.1	47.9	48.3
8.57	-55.07	-56.98	-57.09	28.63	57	47.8	48.9
8.71	-55.48	-56.51	-57.42	28.33	57.6	47.9	52.7
9.14	-55.11	-56.36	-57.36	28.27	58.1	48.1	47.9
8.68	-54.93	-56.25	-57.27	28.33	58.4	48.1	48.8
8.62	-55.22	-56.25	-57.21	28.24	59.1	48.3	50.5
8.5	-55.33	-55.78	-57.45	28.39	59.4	48.4	44.2
8.6	-54.6	-55.63	-57.09	28.17	60.3	48.6	53
8.58	-53.42	-55.78	-57.45	28.27	60.5	48.7	50.5
7.78	-54.63	-56.36	-57.24	28.3	61.4	48.7	49.1
8.58	-53.28	-55.99	-57.3	28.11	61.9	48.9	51
8.63	-55.44	-56.98	-57.3	28.02	62.5	49.1	53.8
8.57	-56.06	-56.25	-57.39	28.24	63.4	49.2	49
8.63	-55.37	-55.47	-57.45	28.05	63.4	49.3	43.5
8.65	-54.19	-55.58	-57.67	27.99	64.7	49.5	48.9
8.47	-55.37	-55.73	-57.21	28.02	64.7	49.6	50.3
8.64	-55.11	-56.15	-57.27	27.96	65.4	49.7	49.6
9.32	-56.03	-55.73	-57.15	27.87	65.4	49.9	50.3
8.62	-55.95	-55.68	-57.64	27.9	66	50.2	45.7
8.54	-53.57	-56.04	-57.27	27.93	66.4	50.2	48.7
9.21	-55.66	-56.1	-57.3	27.75	66.9	50.3	50.5
8.68	-55.88	-56.46	-57.24	27.81	67.1	50.5	49.5
8.59	-53.9	-55.99	-57.24	27.81	67.9	50.5	49.8
8.87	-55.48	-56.36	-57.42	27.81	68	50.5	49.8
8.64	-54.93	-56.36	-57.18	27.69	67.9	50.6	49.4

8.59	-56.21	-56.41	-57.24	27.72	68.6	50.9	51.6
8.97	-54.6	-56.36	-57.24	27.56	69.4	51.2	49.6
8.64	-54.82	-56.2	-57.18	27.69	69.7	51	52
8.69	-55.88	-55.21	-57.27	27.69	70.5	51.1	49.5
9.11	-56.03	-55.47	-57.3	27.56	70.2	51.6	48.4
8.65	-55	-55.84	-57.24	27.63	70.7	51.6	51.2
8.71	-55.15	-55.68	-57.33	27.5	70.9	51.7	51
8.56	-55.37	-55.89	-57.33	27.69	70.7	51.7	50.7
8.65	-55.66	-55.89	-57.3	27.5	70.2	51.6	49.5
8.57	-53.68	-56.25	-57.27	27.56	70	52.2	49.9
7.85	-54.78	-56.1	-57.48	27.81	69.8	52.1	46.9
8.62	-55.33	-55.99	-57.33	27.56	71.1	54.3	48.4
8.66	-55.73	-55.73	-57.36	27.56	70.5	53.2	50.4
8.64	-55.81	-56.82	-57.12	27.75	70	52.8	51.3
8.69	-54.96	-56.41	-57.3	27.63	70.1	52.8	47.7
8.68	-55.77	-56.04	-57.24	27.66	69.6	52.9	49.2
8.62	-55.51	-55.89	-57.45	27.84	69.7	52.7	49.5
8.59	-55.77	-55.73	-57.27	27.63	69.4	52.8	46.9
8.64	-55.84	-56.25	-57.36	27.63	69.6	52.8	51.6
8.52	-55.59	-55.47	-57.06	27.87	69.7	52.7	49.8
8.65	-54.85	-56.3	-57.61	27.75	69.7	52.9	52.9
8.81	-55.55	-55.58	-57.33	27.63	70	52.9	44
8.55	-52.91	-55.73	-57.39	27.56	69.4	52.9	46.5
8.69	-55.15	-55.89	-57.18	27.69	69.3	52.9	49.7
8.97	-55.59	-56.46	-57.36	27.69	69.2	53.1	48.7
8.57	-56.03	-56.36	-57.21	27.63	69	52.9	50.2
8.62	-55.73	-55.58	-57.39	27.78	68.8	52.7	47.9
8.95	-55.55	-55.89	-57.09	27.53	68.8	53.2	48.6
8.54	-53.64	-56.41	-56.94	27.66	68.6	52.9	49.2
8.59	-54.67	-55.53	-57.21	27.72	68.2	53.2	51.2
7.81	-54.6	-55.68	-57.42	27.9	67.9	52.9	44.7
8.71	-54.93	-55.94	-57.24	27.84	67.5	52.8	46.9
8.6	-55.73	-55.47	-57.36	27.84	67.2	52.7	47.5
8.56	-55.22	-55.94	-57.58	27.93	66.8	52.8	48.4
8.69	-55.18	-55.78	-57.45	27.84	66.5	52.8	51.1
8.72	-55.15	-56.2	-57.18	27.87	66.3	52.7	51.5
8.56	-53.86	-55.47	-57.3	27.96	66.1	52.7	53.2
8.57	-52.99	-55.94	-57.64	27.9	66	52.6	50.8
8.71	-55.44	-56.25	-57.67	27.84	65.7	52.7	49.4
8.58	-55.07	-55.99	-57.33	28.11	65	52.7	46.2
8.65	-55.29	-56.04	-57.12	27.93	64.7	52.7	49.2
8.65	-55.48	-55.89	-57.48	27.9	64.8	52.6	51.5
8.59	-55.48	-56.41	-57.27	28.05	64.5	52.5	51.5
8.62	-54.78	-56.25	-57.27	27.9	63.8	52.3	48.3
8.85	-55.22	-55.89	-57.36	27.96	64.2	52.2	51.9
8.55	-55.62	-55.68	-57.45	28.17	63.9	52.1	48.4
8.66	-55.7	-56.36	-57.45	27.99	63.3	52.1	50

9.09	-54.01	-55.89	-57.39	27.9	62.9	52.3	47.8
8.65	-56.17	-56.1	-57.39	28.02	62.2	52.1	50.7
8.57	-55.55	-55.53	-57.36	28.05	61.8	52	50.1
8.95	-54.3	-56.15	-57.33	27.99	61.9	51.9	43.5
8.66	-55.44	-55.99	-57.61	28.08	61.5	51.7	50.5
8.65	-55.44	-56.93	-57.33	28.02	61.7	51.7	49.5
8.33	-52.73	-56.1	-57.55	28.27	61.5	51.6	51
8.66	-55.51	-56.51	-57.18	28.24	60.9	51.7	50.2
8.62	-56.1	-55.21	-57.7	28.11	60.9	51.4	48.3
8.66	-55.62	-56.93	-57.39	28.33	60.4	51.4	48.9
8.63	-55.62	-55.63	-57.48	28.24	60.4	51.3	47.9
8.61	-55.7	-55.89	-57.42	28.11	60.1	51.4	49.2
8.68	-54.85	-57.08	-57.36	28.39	60.2	51.2	47.3
8.65	-55.15	-56.41	-57.24	28.21	60.2	51.2	47.3
8.62	-55.18	-56.41	-57.42	28.21	60.1	51	51.2
8.61	-55.7	-55.94	-57.24	28.33	60.3	51	50
8.71	-54.49	-56.1	-57.64	28.21	60	51	47.3
8.71	-55.84	-55.63	-57.42	28.24	59.8	50.9	45.9
8.56	-55.55	-56.15	-57.21	28.39	60	50.8	52.5
8.62	-55.29	-56.2	-57.3	28.24	59.5	50.8	49.3
8.82	-56.03	-56.61	-57.33	28.21	59.5	50.6	44.8
8.65	-55.88	-55.47	-57.3	28.21	59.7	50.6	52.2
8.62	-55.73	-55.94	-57.36	28.21	59.6	50.6	50.1
8.65	-55.18	-56.72	-57.18	28.27	60	50.8	51.8
8.57	-55.37	-57.13	-57.42	28.21	59.9	50.5	48.3
8.63	-54.23	-56.1	-57.21	28.24	60	50.5	49.1
8.52	-55.48	-55.63	-57.45	28.39	59.9	50.5	50.9
8.62	-55.22	-56.51	-57.39	28.05	60.3	50.5	50.3
8.64	-55	-55.63	-57.33	28.08	59.8	50.5	50
8.33	-53.13	-55.47	-57.3	28.33	60	50.5	48.8
8.67	-56.06	-56.82	-57.33	28.17	60.1	50.5	48.4
8.56	-55.33	-56.46	-57.24	28.27	60	50.5	49.3
8.6	-55	-56.04	-57.48	28.39	59.7	50.3	50.2
8.55	-53.9	-56.56	-57.24	28.24	59.8	50.4	51.1
8.58	-56.1	-56.46	-57.42	28.17	60.4	50.4	50.3
8.54	-53.39	-56.25	-57.39	28.42	60.9	50.4	50
8.56	-54.71	-55.58	-57.58	28.08	60.7	50.5	52.3
8.72	-55.88	-56.41	-57.24	28.11	61.1	50.6	46.7
8.57	-54.93	-56.61	-57.12	28.33	61.4	50.4	49.6
8.6	-55.88	-56.72	-57.42	28.17	60.7	50.5	49.1
8.65	-55.22	-56.41	-57.24	28.17	61.2	50.6	47.3
8.55	-55.55	-55.73	-57.45	28.24	61.1	50.4	50.1
8.6	-55.22	-56.41	-57.33	28.05	61.2	50.4	45.9
8.76	-55.37	-56.41	-57.61	28.17	61.4	50.5	50.4
8.53	-56.36	-56.2	-57.24	28.05	61.9	50.4	49.8
8.63	-55.59	-55.94	-57.33	28.11	61.9	50.5	49.5
8.55	-55.4	-56.15	-57.33	28.14	61.8	50.5	52.3

8.65	-54.78	-55.73	-57.24	28.05	61.9	50.5	49.8
8.64	-55.48	-56.04	-57.48	27.99	62.5	50.5	51.5
8.52	-52.66	-55.99	-57.33	28.17	62.3	50.5	50.3
8.63	-55.7	-56.25	-57.33	28.05	62.4	50.3	49.1
8.71	-55.51	-56.3	-57.55	28.02	61.7	50.5	50
8.65	-54.96	-56.04	-57.36	28.24	61.5	50.5	51.5
8.7	-55	-56.1	-57.33	28.08	61.2	50.4	50.3
8.71	-54.96	-56.36	-57.18	28.05	61	50.5	52.7
8.5	-53.97	-56.2	-57.21	28.21	60.5	50.5	49.2
8.55	-55.81	-55.16	-57.58	28.05	60.7	50.5	48.3
8.91	-54.19	-56.15	-57.64	28.05	60.7	50.5	52.9
8.66	-55.55	-55.78	-57.45	28.08	60.7	50.5	49.7
8.68	-55.66	-56.04	-57.58	28.05	60.6	50.5	48.2
8.73	-55.51	-56.2	-57.3	28.02	60.6	50.5	49.5
8.64	-55.99	-56.46	-57.24	28.02	60.6	50.5	52.4
8.66	-55.92	-56.46	-57.33	28.11	60.5	50.5	49.3
8.46	-54.85	-56.46	-57.09	28.21	60.5	50.5	50.7
8.6	-54.27	-56.72	-57.39	27.93	60.7	50.5	49.9
8.72	-56.25	-56.51	-57.3	28.05	60.6	50.5	47.3
8.53	-54.74	-55.53	-57.27	28.24	60.9	50.6	50.1
8.68	-55.55	-55.58	-57.55	27.96	60.5	50.5	46.8
8.63	-54.12	-56.82	-57.45	28.02	60.5	50.5	50.9
8.62	-55.95	-56.36	-57.55	28.17	60.7	50.5	49.4
8.58	-55.33	-56.36	-57.27	27.99	60.6	50.5	49.2
8.74	-55.92	-55.63	-57.33	28.02	60.7	50.6	49.6
8.52	-53.97	-56.15	-57.3	28.17	60.7	50.5	51.6
8.67	-55.04	-56.25	-57.48	27.9	60.7	50.6	50.3
8.66	-55.92	-55.58	-57.3	28.02	61	50.8	48.7
8.63	-54.93	-56.15	-57.45	28.14	61.1	50.5	50.7
8.62	-54.74	-55.63	-57.36	27.99	61	50.8	50.1
8.79	-55.07	-55.73	-57.55	27.9	61.2	50.5	50.2
8.55	-56.1	-55.63	-57.48	28.08	61.1	50.5	50.7
8.7	-54.89	-56.25	-57.09	27.9	61.4	50.4	52
9.21	-54.3	-55.94	-57.39	27.87	61.4	50.8	50.3
8.7	-55.48	-55.73	-57.27	27.87	61.4	50.6	47.3
8.59	-55.07	-56.04	-57.12	27.87	61.6	50.8	49.7
8.07	-55.92	-56.1	-57.36	28.08	61.6	50.8	50.1
8.59	-53.86	-55.21	-57.21	27.81	61.8	50.8	47.9
8.57	-55.62	-55.89	-57.18	27.87	61.8	50.8	49.2
8.56	-54.08	-55.21	-57.42	28.08	61.7	51	50.3
8.66	-55.7	-56.04	-57.58	27.96	62	51	51.1
8.54	-55.84	-56.41	-57.3	27.9	62.1	51	49.1
8.68	-55.29	-56.61	-57.24	28.05	62.2	51	51.7
8.61	-53.79	-56.61	-57.33	27.78	62.2	51.1	47.7
8.71	-54.82	-56.46	-57.33	27.9	62.5	50.9	49.1
8.58	-55.51	-55.94	-57.3	28.02	62.5	50.9	51.6
8.69	-55.99	-55.99	-57.45	27.81	62	51	49.3

8.84	-54.85	-56.2	-57.3	27.72	62.3	51.3	51.1
8.65	-55.51	-56.36	-57.33	27.81	62.4	51	53.2
8.62	-55.59	-56.56	-57.24	27.78	62.5	51.1	50.5
7.94	-54.41	-56.1	-57.55	27.93	62.6	51.1	49
8.66	-55.48	-56.51	-57.24	27.84	62.6	51.2	49.9
8.54	-56.28	-56.25	-56.97	27.78	62.6	51.2	50.1
8.53	-55.62	-56.1	-57.48	27.87	62.7	51.3	48.4
8.56	-54.08	-55.58	-57.27	27.78	62.6	51.2	51.6
8.67	-54.85	-55.68	-57.24	27.75	63.1	51.5	48.2
8.61	-55.33	-55.58	-57.33	27.9	63.3	51.4	49.2
8.54	-56.87	-56.25	-57.36	27.72	63.1	51.4	53.7
8.76	-55.29	-56.36	-57.18	27.69	63.3	51.5	49.4
8.54	-55.07	-55.84	-57.06	27.81	63.4	51.3	50.5
8.55	-54.67	-56.46	-57.21	27.72	63.4	51.5	47.3
8.89	-55.07	-56.25	-57.3	27.63	63.2	51.6	48.3
8.64	-56.28	-56.2	-57.27	27.72	63.4	51.4	45.7
8.53	-55.92	-55.78	-57.12	27.63	63.5	51.5	50.5
8.53	-55.33	-55.89	-57.27	27.69	63.5	51.6	49.1
8.63	-55.73	-55.89	-56.97	27.63	63.5	51.6	48.9
8.57	-54.71	-55.84	-57.09	27.53	63.6	51.6	51.4
8.67	-56.03	-55.32	-57.12	27.81	63.8	52.1	47.6
8.68	-56.06	-55.53	-57.12	27.63	63.9	51.8	45.4
8.79	-55.77	-56.3	-57.33	27.47	63.7	51.7	49.7
8.69	-55.7	-55.63	-56.97	27.66	63.7	51.8	49.5
8.56	-53.72	-55.68	-57.33	27.66	63.7	51.8	48.8
8.76	-55.62	-56.1	-57.39	27.53	63.8	52	49.1
8.64	-55.48	-56.46	-57.27	27.56	63.6	51.8	51.9
8.59	-55.7	-55.63	-57.15	27.5	63.8	51.8	48.3
8.69	-54.56	-55.73	-57.21	27.78	63.7	51.7	48.6
8.59	-53.57	-56.15	-57.24	27.56	63.6	51.8	51
8.67	-55.15	-55.94	-57.45	27.47	63.8	51.8	49.8
8.52	-55.77	-56.1	-57.21	27.81	63.7	51.8	49.6
8.56	-55.11	-55.78	-57.15	27.63	63.8	51.7	49.5
9.25	-56.06	-55.94	-57.36	27.5	63.7	51.8	51.9
8.59	-54.93	-55.68	-57.3	27.53	63.7	51.9	49.6
8.68	-55.7	-55.99	-57.36	27.53	63.5	51.7	49.4
8.58	-54.89	-55.01	-57.21	27.72	63.6	52	51.4
8.55	-55.11	-56.04	-57.18	27.66	63.5	51.9	48.4
8.68	-55.04	-56.15	-57.18	27.5	63.6	51.9	48.9
8.57	-54.85	-55.73	-57.09	27.78	63.6	51.7	50.9
8.57	-55.15	-56.3	-57.15	27.47	63.4	51.7	48.8
8.92	-54.82	-56.3	-57.24	27.53	63.2	51.9	51.8
8.63	-55.22	-55.47	-57.21	27.63	63.4	51.9	49.2
8.55	-53.64	-56.1	-57.21	27.56	63.4	51.7	49.6
8.6	-55.4	-56.46	-57.09	27.53	63.5	51.7	52.1
8.67	-55.15	-55.94	-57.36	27.66	63.4	51.7	50.8
8.6	-55.15	-55.58	-57.21	27.72	63.2	51.8	47.8

8.5	-56.06	-56.36	-57.09	27.84	63.5	51.8	48.2
8.58	-54.3	-56.36	-57.24	27.66	63.4	51.8	52.9
8.77	-55.62	-55.89	-57.03	27.66	63.3	51.8	50.5
8.63	-55.33	-55.94	-57.33	27.78	63.3	51.7	50.8
8.66	-55.29	-55.58	-57.21	27.66	63.5	51.8	50.5
8.64	-54.89	-55.78	-57.27	27.63	63.4	51.8	47.9
8.53	-55.29	-56.36	-57.15	27.69	63.6	51.7	51.3
8.68	-55.29	-55.99	-56.9	27.66	63.2	51.6	52.8
8.54	-54.41	-56.15	-57.36	27.72	63.7	51.8	51.2
8.55	-52.51	-55.37	-57.58	27.63	64	51.7	45.4
8.69	-55.33	-55.27	-57.58	27.56	63.8	51.7	51.6
8.5	-55.07	-56.04	-57.45	27.84	64	51.7	51.9
8.67	-55.07	-55.94	-57	27.56	64	51.9	48.7
8.72	-54.71	-56.15	-57.3	27.56	63.9	51.8	50
8.6	-55.18	-55.63	-57.39	27.47	63.9	51.8	46.5
8.52	-55.84	-55.63	-57.39	27.5	63.9	51.7	52.4
8.49	-55.99	-55.94	-57.58	27.72	63.8	51.6	50.8
8.68	-55.55	-56.15	-57.18	27.5	64	51.8	47.6
8.79	-55.84	-55.89	-57.3	27.53	63.9	51.8	48.6
8.53	-53.53	-56.04	-57.33	27.72	64.5	51.7	47.8
8.65	-55.62	-56.04	-57.36	27.56	64.8	51.8	51.1
8.51	-55.11	-56.3	-57.09	27.75	64.6	51.9	49.5
8.56	-54.41	-57.39	-57.3	27.66	64.3	51.8	43.2
8.7	-54.93	-55.68	-57.3	27.56	64.5	51.7	46.5
8.63	-54.85	-55.63	-57.12	27.72	64.9	51.8	50.1
8.62	-55.11	-56.1	-57.24	27.47	65	51.7	49.7
8.7	-55.4	-55.99	-57.24	27.53	64.8	51.9	51.9
8.51	-54.56	-55.84	-57.3	27.75	65	51.9	49.5
8.54	-55.7	-55.01	-57.64	27.47	65	51.8	49.3
8.75	-53.86	-55.94	-57.91	27.56	64.7	52	48.4
8.56	-55.99	-56.04	-57.3	27.69	64.7	51.8	49.1
8.71	-55.11	-57.29	-57.24	27.38	64.9	51.9	48.3
8.88	-55.77	-55.89	-57.42	27.32	65.1	52	51.6
8.53	-55.55	-55.89	-57.48	27.53	65	51.9	50.7
8.61	-54.6	-55.73	-57.58	27.53	64.8	52	49.1
7.75	-55.18	-56.25	-57.45	27.69	65.4	51.9	48.8
8.64	-54.82	-55.73	-57.58	27.66	65	52.1	47.5
8.59	-55.62	-55.37	-57.55	27.56	64.9	52	49.5
8.53	-52.91	-55.89	-57.55	27.69	64.8	52	49.3
8.62	-54.05	-55.73	-57.33	27.47	64.9	52	50.7
8.79	-55.55	-56.15	-57.3	27.41	64.7	52.1	51
8.62	-55.66	-56.61	-57.3	27.56	64.8	52	48.4
8.62	-53.94	-55.37	-57.58	27.53	65.1	52	52.3
8.49	-55.33	-56.77	-57.15	27.69	65.3	52	50.8
8.65	-55.59	-55.84	-57.58	27.56	65.1	52.1	48.8
8.6	-55.77	-55.99	-57.12	27.56	65.4	52.2	49.1
8.62	-55.18	-56.3	-57.33	27.72	65.4	51.7	49.6

8.61	-55.11	-56.15	-57.18	27.44	65.6	52.1	51
8.65	-54.56	-55.78	-57.06	27.41	65.6	52	50
8.58	-55.11	-55.99	-57.03	27.47	65.7	51.9	49.3
8.57	-54.49	-57.39	-57.27	27.5	65.6	52.1	50.5
7.8	-55.37	-56.72	-57.39	27.72	65.8	52.2	49.1
8.68	-55.88	-55.99	-57.33	27.47	65.9	52.1	51.6
8.69	-55.22	-56.46	-57.42	27.5	65.9	52.1	50.7
8.67	-55.48	-55.73	-57.27	27.66	65.9	52.2	51.5
8.61	-55.15	-56.72	-57.09	27.41	66	52.2	47.1
8.61	-54.38	-56.61	-57.24	27.53	65.8	51.9	50.5
8.61	-56.21	-56.04	-57.27	27.69	65.9	52.1	50.7
8.56	-55.4	-55.78	-57.3	27.56	65.8	52.3	50
9.14	-55.77	-56.41	-57.45	27.56	65.8	51.9	49.4
8.57	-54.19	-55.99	-57.45	27.53	65.6	51.9	47.3
8.57	-53.28	-56.77	-57.15	27.66	65.7	52.2	49.3
9.12	-51.89	-56.25	-57.21	27.5	65.3	52.3	50.3
8.58	-53.94	-56.15	-57.48	27.66	65.6	52.1	49.5
8.65	-55.11	-55.89	-57.55	27.56	65.5	52.1	48.7
8.69	-55.59	-55.84	-57.55	27.69	65.6	52.1	50.3
8.56	-55.44	-56.36	-57.27	27.63	65.7	52.2	49.8
8.65	-54.67	-56.87	-57.27	27.56	65.8	52.2	48.1
8.62	-55.7	-55.94	-57.55	27.78	65.8	52.1	50.1
8.58	-56.17	-56.15	-57.45	27.5	65.7	52.2	50.9
8.65	-53.86	-55.94	-57.18	27.53	66.1	52.3	50.7
8.63	-54.89	-56.04	-57.48	27.53	66.1	52.3	52.6
8.69	-55.92	-56.72	-57.33	27.66	66.7	52.3	46.2
7.73	-55.62	-56.51	-57.45	27.66	67	52.5	49.6
8.54	-55.29	-56.61	-57.39	27.47	67.1	52.5	51.2
8.61	-54.85	-55.78	-57.73	27.41	67.6	52.4	45
8.67	-55.99	-55.68	-57.67	27.69	67.9	52.4	48.7
8.62	-55.55	-56.3	-57.48	27.41	68.3	52.4	49.2
8.61	-53.75	-55.84	-57.24	27.41	68.4	52.7	43.3
8.6	-54.82	-56.04	-57.27	27.56	68.7	52.6	50
8.67	-55.29	-56.2	-57.39	27.38	69	53.4	49.2
9.13	-55.29	-56.2	-57.42	27.41	69.1	53.2	48.6
8.53	-55.48	-56.82	-57.27	27.38	69.3	53.2	49.8
8.63	-55.22	-56.3	-57.27	27.41	69.8	53.2	50.9
8.07	-55.22	-56.15	-57.48	27.53	69.8	53.3	49.3
8.57	-54.45	-56.82	-57.58	27.41	69.7	53.1	49.9
8.62	-54.38	-56.04	-57.73	27.38	70	53.5	45.5
8.64	-55.99	-56.82	-57.27	27.5	70.5	53.3	50.1
8.54	-55.95	-56.15	-57.42	27.35	70.6	53.4	52.7
8.81	-54.71	-56.36	-57.27	27.29	71.1	53.6	48.3
8.56	-53.61	-55.63	-57.45	27.26	71.3	53.4	50.5
8.59	-55.07	-55.94	-57.33	27.23	72	53.7	47.7
7.94	-55.95	-56.56	-57.42	27.41	72.1	53.7	51.6
8.68	-55.48	-55.99	-57.48	27.17	72.2	53.8	49.5

8.67	-55.44	-56.25	-57.64	27.17	72.7	53.8	50.1
8.65	-55.37	-56.15	-56.97	27.38	72.9	53.8	50.4
8.63	-56.06	-56.41	-57.12	27.23	72.7	53.9	51.5
8.66	-55.37	-55.78	-57.48	27.11	73.4	54	50.3
8.66	-55.55	-56.3	-57.24	27.17	73.8	54	49.8
8.57	-55	-56.25	-57.42	27.14	73.6	54.1	49.8
8.46	-54.93	-56.46	-57.3	27.32	74.1	54.2	54.9
8.68	-55.51	-56.46	-57.3	27.08	74.5	54.2	51.5
8.68	-54.89	-56.36	-57.39	27.05	76.2	56.1	49.5
8.56	-55.73	-56.25	-57.45	27.23	75.8	55	51.7
8.56	-55.59	-56.15	-57.42	27.08	75.5	55.1	49.6
8.59	-55.37	-56.36	-57.48	27.11	75.5	55	48.4
8.54	-55.07	-55.89	-57.48	27.23	75.5	54.9	51.4
8.61	-55.7	-55.53	-57.42	27.11	75.2	54.9	49.3
8.69	-55.77	-55.94	-57.45	27.08	74.4	55	48.9
8.41	-55.66	-55.84	-57.45	27.17	74.5	54.9	48.4
8.6	-56.25	-55.89	-57.21	27.11	74.5	55	48
8.67	-55.07	-56.1	-57.42	27.11	74.6	54.9	51.1
8.55	-55.84	-55.78	-57.27	27.05	74.7	55.2	48.6
8.67	-55.55	-55.99	-57.73	27.01	74.2	55.2	50.5
8.56	-54.3	-56.51	-57.45	27.2	74	55	49.5
8.62	-55.66	-56.2	-57.3	27.14	74	55	49.9
8.74	-55.33	-55.68	-57.27	27.11	73.6	55.2	49.5
8.47	-55.55	-55.27	-57.61	27.32	73.5	55	48.6
8.65	-55.22	-56.25	-57.7	27.11	73.6	55.2	51
7.71	-55.07	-56.1	-57.64	27.2	73.6	55.1	48.6
8.62	-55.15	-56.15	-57.21	27.11	73.6	55	48.3
8.65	-55.59	-55.84	-57.39	27.11	73.6	55.1	48
8.53	-53.94	-55.63	-57.64	27.32	73.3	55.1	49.6
8.65	-55.37	-55.99	-57.58	27.17	73.5	55.7	47.3
8.48	-55.62	-56.51	-57.36	27.2	73.2	55.2	47
8.59	-56.1	-55.78	-57.7	27.14	73.3	55	48.1
8.59	-54.56	-56.72	-57.42	27.14	73.3	55.2	50.5
8.59	-55.88	-56.61	-57.21	27.26	72.9	55.2	49.8
8.69	-55.51	-56.51	-57.58	27.17	72.9	55.4	50
8.86	-55.59	-56.41	-57.64	27.14	72.7	55.2	48.2
8.55	-53.64	-56.1	-57.58	27.14	72.7	55.1	50.5
8.68	-55.84	-56.04	-57.42	27.2	72.2	55.2	50.9
7.85	-55.18	-55.78	-57.3	27.38	72	55.1	49.9
8.66	-55.37	-56.3	-57.48	27.23	71.4	55.1	48.4
8.61	-56.17	-56.1	-57.58	27.29	71	55	51.1
8.52	-54.6	-56.51	-57.21	27.56	70.6	54.9	52.5
8.66	-55.04	-56.51	-57.45	27.32	70.2	54.9	49.5
8.7	-55.84	-56.51	-57.48	27.35	70	54.9	48.8
8.56	-55.88	-55.89	-57.24	27.5	70	54.9	50.9
8.65	-55	-56.72	-57.39	27.41	70	54.8	49.3
8.95	-55.51	-56.51	-57.18	27.41	69.9	54.8	50.1

8.65	-55.15	-55.89	-57.39	27.35	69.4	54.7	51.6
8.6	-55.55	-56.41	-57.3	27.38	69	54.7	49.6
8.54	-56.36	-55.73	-57.58	27.53	68.4	54.7	47.7
8.62	-55.48	-55.68	-57.48	27.5	68.2	54.5	50.1
8.67	-55.77	-56.2	-57.42	27.44	67.7	54.7	48.9
8.58	-54.93	-55.89	-57.58	27.72	67.9	54.4	48.8
8.54	-53.32	-56.2	-57.45	27.5	67.2	54.3	49.5
9.1	-55.4	-56.2	-57.39	27.38	67.6	54.3	49.5
8.61	-56.65	-56.87	-57.24	27.5	67.1	54.3	50.5
8.59	-55.88	-56.61	-57.48	27.47	66.8	54.3	49.5
8.61	-55.15	-55.84	-57.3	27.81	66.6	54.1	50
8.65	-54.82	-56.1	-57.33	27.63	66.7	54	49.4
8.68	-54.89	-55.73	-57.79	27.56	66.5	53.9	48.8
8.62	-54.74	-56.61	-57.58	27.66	66.1	53.9	49.9
8.61	-54.93	-55.94	-57.7	27.72	65.8	53.8	50.5
8.37	-56.1	-56.15	-57.24	27.72	65.5	53.8	45.6
8.68	-55.73	-56.36	-57.58	27.69	65.3	53.7	50.4
8.72	-55.22	-56.72	-57.58	27.78	65.1	53.6	50.3
8.62	-55.07	-56.15	-57.73	27.9	65	53.4	49.3
8.58	-56.03	-56.3	-57.42	27.78	64.9	53.7	48.4
8.55	-55.29	-56.41	-57.55	27.93	64.5	53.3	47.5
8.57	-55	-54.8	-57.79	27.78	64.4	53.3	50.5
8.55	-55	-56.56	-57.39	27.81	64.2	53.2	52.2
8.57	-52.4	-56.87	-57.55	27.87	63.5	53.2	48.7
8.67	-54.82	-55.99	-57.64	27.87	63.7	52.7	51.5
8.63	-55.15	-56.77	-57.39	27.78	63.9	52.9	48.6
8.61	-55.29	-56.25	-57.48	27.84	63.6	53.1	48.2
8.53	-56.06	-56.3	-57.58	28.05	63.5	52.8	49.8
8.59	-53.68	-56.41	-57.55	27.87	63.4	52.8	50.1
8.59	-55.88	-56.41	-57.48	27.78	63.5	52.7	46.2
8.61	-55.11	-56.56	-57.33	27.81	63.6	52.7	51.5
8.65	-55.73	-56.15	-57.58	27.78	63.3	52.5	49.9
8.47	-54.78	-56.36	-57.55	27.99	63.4	52.6	50.2
8.56	-55.55	-55.94	-57.73	27.84	63.3	52.5	49.6
9.09	-55.04	-56.36	-57.45	27.87	63.5	52.4	49.6
8.56	-55.44	-55.73	-57.73	27.87	62.7	52.5	49.5
8.58	-53.06	-56.2	-57.45	27.81	63.1	52.3	51.3
8.65	-55.81	-56.1	-57.55	27.99	62.9	52.4	49
8.64	-55.11	-56.46	-57.58	27.84	63.4	52.3	49.6
8.26	-55.15	-55.94	-57.48	27.96	63.3	52.3	50
8.64	-55.44	-55.78	-57.61	27.87	62.9	52.2	47.3
8.66	-54.56	-56.61	-57.48	27.75	62.9	52.2	48
8.6	-55.59	-56.51	-57.64	27.9	62.5	52.1	51.5
8.54	-53.53	-56.25	-57.58	27.87	62.6	52.2	48.4
8.55	-54.85	-56.2	-57.73	28.08	62.9	52	50.2
8.59	-54.96	-56.56	-57.21	27.84	62.8	52	51.8
8.84	-54.96	-56.2	-57.55	27.84	63.1	52.1	51.5

8.63	-55.66	-56.25	-57.58	27.84	62.9	52	51.2
8.68	-55.7	-56.56	-57.42	27.96	63.1	52	49.1
8.6	-55.18	-56.41	-57.61	28.05	62.6	51.7	49
8.6	-54.74	-56.56	-57.58	27.87	62.7	52	50.9
8.58	-55.07	-56.36	-57.58	27.99	62.7	51.7	48.7
8.69	-54.82	-55.84	-57.67	27.84	62.6	51.7	49.9
8.61	-54.93	-56.41	-57.42	28.11	62.5	51.8	45.4
8.61	-55.62	-56.56	-57.64	27.87	62.6	51.6	48.7
8.03	-56.36	-56.61	-57.36	28.02	62.4	51.6	50
8.67	-55.55	-56.41	-57.55	27.96	62.5	51.6	50.2
8.34	-55.55	-56.56	-57.42	28.11	62.4	51.6	50.4
8.62	-55.95	-57.03	-57.55	27.87	62.3	51.6	48.8
8.52	-55.15	-55.63	-57.7	27.9	62.1	51.6	51
8.56	-55.77	-56.1	-57.7	27.93	62.2	51.6	51.8
8.88	-56.32	-57.08	-57.42	27.93	62.4	51.6	48.3
8.55	-53.57	-56.3	-57.33	27.9	62.1	51.5	49.9
8.72	-56.21	-57.03	-57.58	27.81	62.3	51.6	51.3
8.6	-55.73	-56.25	-57.61	27.99	62.3	51.6	50.3
8.64	-55.37	-56.36	-57.73	27.9	62.2	51.6	51.8
8.58	-55.22	-56.25	-57.48	28.11	61.9	51.5	50.8
8.54	-54.85	-55.78	-57.36	27.87	61.8	51.6	49.4
9.15	-55.4	-56.51	-57.55	27.87	61.8	51.5	48.7
8.6	-55.44	-55.84	-57.73	27.93	62.1	51.5	51.1
8.63	-55.73	-56.04	-57.79	27.93	62	51.6	50.5
8.59	-55.29	-56.04	-57.79	28.17	62.1	51.4	49.8
8.62	-55.44	-56.98	-57.64	27.93	62	51.4	50.7
8.87	-56.03	-56.61	-57.61	27.9	62.1	51.6	52.4
8.56	-54.16	-56.15	-57.36	27.9	61.9	51.5	52.5
8.53	-55.55	-56.36	-57.48	27.93	62.3	51.5	50.9
7.77	-54.41	-56.2	-57.55	28.05	62.5	51.5	50.1
8.6	-55.62	-55.68	-57.48	27.96	62.5	51.5	49.3
8.56	-53.64	-55.58	-57.7	27.84	62.8	51.6	48.3
8.47	-53.06	-56.25	-57.88	28.02	62.8	51.5	48.7
8.62	-54.78	-56.51	-57.64	27.87	62.9	51.6	45.5
8.5	-56.06	-56.51	-57.91	27.93	62.8	51.5	47.6
8.64	-54.93	-55.99	-57.58	27.93	62.7	51.6	46.9
8.65	-55.33	-55.73	-57.85	27.93	63.2	51.4	49.1
8.51	-51.89	-56.3	-57.91	28.02	63.4	51.1	49.8
8.58	-55.4	-55.99	-57.7	27.84	63.5	51.6	50.2
8.85	-55.99	-56.36	-57.45	27.9	64.2	51.5	50.5
8.71	-56.47	-56.98	-57.55	27.81	64.6	51.3	49
8.62	-54.82	-56.36	-57.64	27.78	64.7	51.4	49.5
8.53	-53.57	-56.15	-57.61	27.99	64.8	51.3	50.5
8.55	-54.45	-55.53	-57.76	27.81	64.9	51.4	48.8
8.81	-55.44	-56.87	-57.58	27.69	65.5	51.2	47.4
8.62	-54.82	-56.61	-57.45	27.87	64.6	51	48.4
8.57	-54.96	-56.46	-57.45	27.78	64.7	51.3	49.9

8.5	-54.96	-56.87	-57.61	27.99	65.6	51.1	49.6
8.61	-55.66	-55.89	-57.67	27.81	65.8	51.4	47.3
8.65	-56.5	-56.3	-57.64	27.75	66.2	51.5	50.1
8.57	-53.72	-56.3	-57.64	27.9	65.9	51.3	49.8
8.54	-54.56	-56.15	-57.79	27.75	66.1	51.6	49.7
8.65	-54.52	-56.61	-57.55	27.81	66.1	51.6	48
8.55	-55.29	-56.25	-57.79	27.96	66.4	51.5	50.8
8.66	-55.51	-55.99	-57.79	27.72	66.3	51.6	44.9
9.02	-55.07	-56.3	-57.61	27.72	66	51.4	47.7
8.63	-55.15	-57.08	-57.42	27.78	65.6	51.6	50.7
8.65	-56.47	-56.25	-57.79	27.63	67.5	51.6	49.5
7.85	-55.88	-56.41	-57.58	27.87	67.8	51.7	47.4
8.52	-55.95	-55.78	-57.58	27.66	67.6	51.5	49.2
8.68	-55.99	-56.56	-57.73	27.66	67.8	51.6	47.9
8.53	-53.79	-56.56	-57.58	27.81	67.8	51.6	50
8.68	-55.51	-56.77	-57.58	27.56	67.9	51.6	49.8
8.78	-54.74	-56.3	-57.42	27.72	67.8	51.6	49.6
8.52	-55.37	-56.41	-57.42	27.78	67.6	51.5	49.6
8.67	-55.22	-56.36	-57.85	27.69	67	51.6	47.9
8.86	-55.33	-56.72	-57.73	27.75	66.9	51.6	49.5
8.54	-55	-56.61	-57.45	27.69	69.7	52.6	46.2
8.54	-56.32	-56.87	-57.45	27.81	70.2	52.7	48.4
8.54	-55.55	-55.84	-57.58	27.5	70.7	53.1	49.7
8.74	-56.17	-55.58	-57.76	27.44	70.8	52.9	50
8.5	-54.78	-56.36	-57.55	27.69	71.2	52.9	50.4
8.57	-53.39	-56.51	-57.73	27.47	70.7	53.1	49
8.49	-54.93	-56.98	-57.24	27.69	71.1	53.3	46.9
8.66	-55.7	-56.77	-57.58	27.53	70.9	53.1	47.9
8.56	-54.19	-56.25	-57.55	27.53	70.9	53.5	49.1
8.61	-55.62	-56.72	-57.64	27.66	70.9	54.7	46.6
8.65	-55.51	-56.3	-57.64	27.5	70.8	54.5	50.7
8.74	-55	-55.99	-57.55	27.63	70.4	54.1	51.5
8.49	-54.82	-57.19	-57.45	27.75	70.2	53.9	51.4
8.57	-54.01	-57.08	-57.24	27.47	70.1	53.9	49.7
9.03	-55.44	-56.1	-57.64	27.56	70.1	54	49.5
8.65	-55.44	-56.41	-57.58	27.53	70	53.9	50.4
8.51	-52.47	-56.72	-57.61	27.5	69.9	53.9	53.9
8.61	-55.62	-55.99	-57.45	27.66	69.9	53.9	48
8.64	-55.95	-55.99	-57.58	27.5	69.8	53.8	47.9
8.69	-55.88	-55.73	-57.7	27.53	69.8	53.7	50.9
8.51	-55.73	-56.1	-57.58	27.69	70	53.9	49.1
8.66	-56.03	-55.58	-57.76	27.53	70.1	53.7	50.7
8.78	-55.81	-56.46	-57.42	27.41	70.1	53.9	49
8.52	-54.19	-56.41	-57.64	27.75	70.1	53.8	48.9
8.68	-55.73	-56.77	-57.33	27.44	70.1	53.9	48.6
8.59	-55.7	-56.41	-57.48	27.44	69.7	53.9	47.6
8.56	-54.05	-56.61	-57.58	27.63	69.6	53.9	47

8.63	-55.33	-56.25	-57.61	27.53	69.7	53.9	47.8
8.67	-56.25	-56.36	-57.79	27.75	69.4	53.8	48.3
8.54	-53.5	-55.78	-57.45	27.63	69	54	51.6
8.68	-54.38	-56.36	-57.7	27.44	68.9	53.8	48.3
8.59	-56.17	-56.2	-57.45	27.81	68.7	53.8	51.1
8.63	-55.4	-56.41	-57.67	27.69	68.5	53.8	48.4
8.18	-55.95	-56.61	-57.42	27.81	68.6	53.8	49.2
8.58	-55.81	-56.36	-57.33	27.56	68.3	53.8	50.9
8.71	-54.93	-56.46	-57.45	27.69	68.5	53.8	47.4
8.48	-54.05	-56.36	-57.61	27.84	68.5	53.8	51.6
8.65	-55.29	-56.3	-57.21	27.69	68.3	53.8	50.5
8.53	-55.4	-56.46	-57.76	27.81	68.1	53.7	51.2
8.65	-55.73	-56.61	-57.39	27.63	67.8	53.7	49.9
8.6	-54.23	-56.1	-57.48	27.66	68.3	53.8	48.3
8.51	-54.12	-56.93	-57.58	27.87	68.1	53.7	49.5
8.62	-55.33	-55.78	-57.42	27.66	68.1	53.6	47.6
9.03	-56.1	-56.51	-57.7	27.69	68.1	53.8	52.5
8.66	-55.81	-56.93	-57.42	27.69	68.1	53.6	52.6
8.69	-55.22	-56.15	-57.33	27.66	68	53.8	49.6
8.67	-56.32	-56.46	-57.48	27.87	68.2	53.6	49.3
8.64	-55.44	-56.04	-57.45	27.72	68.1	53.5	49.1
8.74	-55.81	-56.36	-57.67	27.63	68.1	53.7	50.2
8.54	-53.53	-56.15	-57.82	27.53	67.8	53.6	48.8
8.57	-54.41	-56.04	-57.55	27.56	67.9	53.7	47.6
8.58	-55.07	-56.36	-57.33	27.78	67.9	53.5	53
8.67	-55.55	-56.61	-57.42	27.66	67.6	53.3	49.7
8.68	-54.89	-55.99	-57.42	27.56	67.9	53.5	50.7
8.53	-55.51	-56.04	-57.61	27.72	67.7	53.5	49.1
8.56	-55.11	-56.2	-57.39	27.69	67.8	53.7	49.4
8.66	-55.62	-56.61	-57.36	27.84	67.6	53.5	50.3
8.55	-53.28	-56.72	-57.48	27.72	67.5	53.4	49.1
8.62	-55.33	-56.61	-57.39	27.72	67.2	53.6	51.1
8.51	-55.7	-56.56	-57.36	27.84	67.2	53.4	48.9
8.68	-55.44	-56.3	-57.67	27.69	67	53.4	53.2
8.43	-55.48	-56.41	-57.45	27.81	67.1	53.6	51.3
8.6	-55.33	-56.3	-57.42	27.66	67.5	53.4	47.5
8.66	-55.04	-56.46	-57.79	27.72	67.1	53.6	49.2
8.62	-55.7	-56.1	-57.61	27.87	67.1	53.6	45.7
8.71	-55.51	-56.56	-57.58	27.69	67	53.4	49.3
9.15	-55.44	-56.77	-57.42	27.66	67.2	53.2	49.5
8.67	-55.07	-55.94	-57.7	27.69	66.9	53.3	49.4
8.57	-55.07	-55.68	-57.45	27.69	66.9	53.2	50.2
8.65	-55.73	-56.36	-57.64	27.81	66.7	53.3	50.4
8.65	-55.77	-56.3	-57.42	27.69	66.4	53.3	49.5
8.63	-55.18	-56.2	-57.27	27.66	66.4	53.4	46.9
8.46	-55.15	-56.93	-57.39	27.78	66.5	53.3	48.6
8.66	-55.51	-56.41	-57.55	27.63	66.1	52.9	49.7

8.54	-55.29	-56.36	-57.58	27.9	66.3	53.4	49.1
8.54	-52.99	-56.36	-57.39	27.72	66.1	53.2	50.3
8.68	-55.4	-55.89	-57.48	27.66	66.5	53.2	50
8.58	-55.22	-55.99	-57.48	27.87	66.4	52.8	49
8.65	-55.51	-56.15	-57.64	27.69	66.3	52.9	49
8.71	-55.48	-56.41	-57.58	27.72	65.9	53.2	49.5
8.54	-53.61	-57.03	-57.45	27.81	66	53.1	49.7
8.53	-55.07	-56.51	-57.73	27.75	65.9	53.2	47.9
9.23	-54.38	-55.99	-57.58	27.69	65.7	52.9	49.2
8.55	-55.18	-56.1	-57.7	27.75	65.7	52.8	51
8.67	-55.48	-56.46	-57.27	27.72	65.9	53.3	49
8.59	-54.74	-56.04	-57.7	27.87	65.9	52.9	49.8
8.68	-55.11	-57.08	-57.27	27.69	66.1	52.9	48.6
8.91	-56.43	-56.3	-57.36	27.72	66	53.1	50.8
8.66	-55.51	-56.04	-57.67	27.66	66.1	52.9	49.3
8.65	-54.85	-56.87	-57.48	27.75	66	53.2	45.9
8.64	-55.33	-56.3	-57.45	27.87	65.8	52.9	48.1
8.53	-53.35	-56.2	-57.45	27.63	65.9	53.1	51.4
8.62	-53.02	-56.98	-57.36	27.56	65.8	53.1	47.3
8.55	-54.74	-55.32	-57.27	27.81	66	52.8	48
8.55	-52.4	-56.46	-57.3	27.56	66.1	52.9	48.9
8.51	-55.55	-55.99	-57.64	27.69	65.9	52.8	54.9
8.59	-55.77	-56.41	-57.42	27.69	65.8	52.8	50.5
8.67	-55.04	-55.58	-57.48	27.72	65.7	52.9	52.5
8.61	-54.6	-56.2	-57.33	27.84	65.8	52.9	49.1
8.64	-55.22	-56.72	-57.33	27.72	66.1	52.9	49.2
8.82	-55.04	-55.78	-57.36	27.72	66.3	52.8	49.5
8.58	-55.59	-55.99	-57.42	27.78	66.4	52.8	50.9
8.55	-55.77	-56.87	-57.42	27.53	66.5	52.8	49.4
8.44	-54.49	-56.04	-57.36	27.84	66.5	53.2	49.1
8.56	-53.83	-56.25	-57.18	27.69	66.4	52.7	48.7
8.62	-55.66	-56.15	-57.55	27.75	66.4	53.1	48.8
8.62	-55.15	-55.89	-57.73	27.87	66.5	52.9	49.5
8.62	-55.18	-56.56	-57.67	27.72	66.8	52.9	50.9
8.97	-55.4	-56.04	-57.64	27.69	66.8	53.1	48.6
8.55	-53.68	-56.36	-57.33	27.66	67.1	52.9	52.3
8.64	-55.04	-56.1	-57.61	27.53	67	53.1	53.7
8.59	-55.22	-55.68	-57.61	27.72	67.5	53.1	49.7
8.66	-56.21	-55.84	-57.55	27.66	67.5	53.2	50.8
8.68	-54.78	-56.1	-57.45	27.63	67.8	53.2	49.6
8.5	-54.41	-56.1	-57.48	27.63	67.9	53.1	52.2
8.56	-52.84	-55.99	-57.45	27.41	67.9	53.3	50.2
7.85	-55.15	-56.1	-57.55	27.66	68.2	53.3	48.4
8.59	-55.81	-56.51	-57.61	27.5	68.5	53.5	50.9
8.64	-54.74	-56.3	-57.21	27.41	69.1	53.6	49.2
8.57	-55.77	-56.15	-57.7	27.72	69.9	53.4	48.2
8.61	-55.37	-57.19	-57.42	27.47	70.1	53.8	48.2

9.05	-52.25	-56.46	-57.55	27.44	70.5	53.8	49
8.62	-54.6	-55.94	-57.27	27.38	70.7	53.8	49
8.64	-55.7	-56.1	-57.61	27.44	71	53.9	48.8
8.5	-55.62	-55.58	-57.36	27.69	71.8	53.8	51.7
8.66	-55.22	-57.08	-57.42	27.35	72.1	53.9	52.2
8.8	-55.33	-55.47	-57.39	27.29	72.4	54.1	49
8.54	-55.62	-56.82	-57.24	27.26	72.9	54.3	47.9
8.56	-54.41	-55.53	-57.48	27.26	73.1	54.5	51.3
8.48	-54.93	-55.53	-57.48	27.44	72.9	54.4	49
8.61	-54.52	-56.04	-57.39	27.2	73.4	54.5	48.8
8.63	-55.11	-56.41	-57.33	27.38	73.7	54.5	50.8
8.62	-55.07	-56.2	-57.45	27.26	73.7	54.8	51.6
8.5	-54.16	-55.99	-57.42	27.32	74.3	54.8	49
8.55	-55.51	-56.61	-57.55	27.2	74.4	54.9	51.6
8.65	-55.37	-56.87	-57.36	27.29	75.3	54.9	50.5
8.61	-55.73	-56.93	-57.55	27.17	75.6	55	50.2
8.53	-55.33	-57.19	-57.61	27.23	75.9	55.1	49.8
8.61	-55.37	-56.41	-57.36	26.98	76.9	56.5	49.3
8.5	-55.62	-56.56	-57.39	27.11	76.8	56	47.3
8.55	-55.07	-57.13	-57.55	26.98	77.7	55.8	51.9
8.93	-55.59	-56.72	-57.27	26.95	77.7	56	50.7
8.56	-55.84	-56.04	-57.36	27.08	76.9	56	50.5
8.65	-56.39	-56.82	-57.15	27.01	77.1	56.1	52.6
8.43	-54.96	-56.36	-57.36	27.11	77.8	56.1	51.1
8.53	-55.18	-56.25	-57.33	26.89	78.5	56.2	48.8
7.79	-52.8	-56.51	-57.24	27.08	78.4	56.1	49.5
8.55	-55.33	-56.61	-57.15	26.92	78.6	56.4	50.9
8.67	-55.77	-56.1	-57.27	26.8	78.4	56.4	47.8
8.6	-55.37	-56.25	-57.36	27.08	78.5	56.5	49.9
8.64	-55.04	-55.84	-57.55	26.83	78.5	56.6	52.3
8.55	-55.07	-56.2	-57.48	26.98	78.8	56.6	49.5
8.6	-54.89	-55.73	-57.09	26.83	78.8	56.5	46.9
8.63	-55.18	-55.58	-57.33	26.83	78.9	56.9	48.8
8.42	-53.21	-56.15	-57.39	27.05	78.8	56.6	50.2
8.6	-55.44	-56.41	-57.36	26.89	78.7	56.8	51
8.03	-55.4	-56.46	-57.09	27.05	78	56.8	50
8.56	-53.17	-56.46	-57.15	26.89	78.4	56.8	50.8
8.65	-55	-56.04	-57.12	26.89	78.4	56.9	48.7
8.57	-55.59	-56.46	-57.18	27.01	78.7	57	47.8
8.53	-54.38	-55.68	-57.39	26.89	79.1	58.1	50
8.35	-55.37	-56.25	-57.09	27.01	78.4	57.5	50.2
8.62	-55.29	-56.25	-57.21	26.83	78.3	57.4	49.2
8.63	-54.96	-56.46	-57.21	26.92	78	57.5	52.4
8.66	-54.93	-56.1	-57.3	26.83	77.8	57.2	48.9
8.54	-54.89	-55.89	-57.42	26.83	77.7	57.3	49.5
8.6	-54.71	-55.63	-57.3	27.08	77.7	57.3	50
8.63	-55.18	-56.56	-57.21	26.83	77.5	57.3	50

8.67	-55.18	-56.41	-57.24	26.95	77.4	57.3	48.4
8.53	-53.61	-55.37	-57.42	27.01	77.2	57.3	50
8.65	-55.18	-55.99	-57.3	26.92	76.9	57.2	49.8
8.48	-55.37	-55.63	-57.09	27.05	76.5	57.2	48.1
8.58	-53.24	-55.99	-57.42	26.95	76.4	57.1	48.9
8.84	-55.4	-55.89	-57.12	26.98	75.4	57.2	49.5
8.54	-53.28	-55.16	-57.33	26.98	75.5	57.1	41.6
8.59	-54.82	-55.84	-56.94	26.95	75.2	57.1	49.8
8.62	-55.4	-56.2	-57.09	27.17	75	57	48.7
8.63	-54.49	-55.94	-57.15	26.95	75	57.1	51.6
9.01	-55.4	-55.47	-57.21	26.95	74.7	56.9	48.4
8.59	-55.4	-56.04	-57.12	27.05	74.4	57	48.7
8.69	-55.55	-56.04	-57.06	27.14	74.3	56.9	50.5
8.51	-53.9	-55.73	-57.24	27.26	74	56.8	50.3
8.6	-54.85	-55.78	-57.15	27.05	73.8	56.8	51.8
9.2	-55.07	-55.89	-57.03	27.05	73.8	56.7	50.2
8.53	-55.62	-56.15	-57.12	27.05	73.6	56.8	47.2
8.65	-55.66	-55.68	-57.27	27.11	73.4	56.8	47.6
8.59	-55.33	-56.04	-57.18	27.32	72.7	56.6	50.3
8.57	-54.08	-56.61	-57.27	27.17	72.7	56.5	50.3
8.66	-55.18	-55.94	-57.09	27.26	72.7	56.5	48.9
8.62	-54.71	-56.1	-57.12	27.14	72.7	56.4	50.5
8.65	-55.66	-55.58	-57.24	27.17	72.4	56.5	50.3
8.6	-55.29	-55.84	-57.18	27.11	73	56.4	49.3
8.66	-55.11	-56.15	-57.21	27.08	72.9	56.6	50.1
8.62	-55.48	-55.94	-57.06	27.2	72.8	56.3	49.2
8.58	-55.18	-55.89	-57.09	27.17	72.3	56.4	52.3
8.51	-55.59	-56.87	-57.12	27.2	72	56.2	50.3
8.65	-55.44	-55.58	-57.18	27.14	72.3	56.1	51.4
8.62	-53.39	-55.37	-57.06	27.17	72.2	56.1	49.7
8.49	-55.22	-56.15	-57.45	27.32	72	56.2	48.1
8.64	-55.51	-56.72	-56.97	27.23	71.9	56.2	52
8.43	-54.89	-56.15	-57.24	27.26	71.4	56	49.3
8.58	-55.22	-56.36	-57.03	27.17	71.2	56	49.5
8.63	-53.13	-56.3	-57.06	27.11	71.2	56	50
8.51	-54.41	-55.94	-57.06	27.29	71	56	50.1
8.69	-55.62	-56.04	-57.21	27.08	71	56	48.4
8.6	-55.22	-55.84	-57.06	27.32	70.7	56	48.1
8.69	-55.73	-55.78	-57.21	27.14	70.1	55.9	49.8
8.06	-54.19	-55.99	-56.97	27.26	70.6	55.7	47.5
8.58	-53.79	-55.21	-57.09	27.2	70.5	55.8	48.4
8.74	-53.39	-55.89	-57.09	27.17	70.9	55.8	49.4
8.56	-53.94	-55.68	-57.24	27.23	69.9	55.8	49.7
8.61	-54.78	-56.3	-57	27.2	70.1	55.5	50.7
8.47	-54.3	-55.58	-56.94	27.26	70.5	55.5	49.6
8.61	-54.89	-56.3	-57	27.14	70	55.4	51.2
8.61	-55.04	-55.84	-57	27.32	69.9	55.5	50

8.57	-55.11	-56.41	-56.84	27.14	69.3	55.4	49.4
8.47	-54.89	-55.11	-56.94	27.11	70.4	55.7	52.2
8.65	-55.18	-55.84	-56.78	27.11	70.1	55.5	50.9
8.58	-54.45	-55.37	-57.09	27.14	69.7	55.2	50.9
8.67	-55.95	-55.68	-57.06	27.11	69.7	55.5	49.1
8.53	-52.95	-56.1	-57.12	27.23	69.7	55.2	50.2
8.65	-55.33	-55.78	-57.06	27.38	69.3	55.2	49.5
8.67	-55.44	-56.04	-57.06	27.2	69.4	55.1	48.6
8.28	-53.97	-55.89	-56.87	27.35	68.1	55.1	48
8.63	-55.29	-56.2	-56.87	27.29	67.7	55.1	49.5
8.65	-54.38	-55.58	-57	27.23	67.6	54.9	49.8
8.56	-55.22	-56.3	-56.84	27.2	67.9	55	50.1
8.6	-54.52	-55.84	-56.97	27.2	68.1	55	51.6
8.5	-53.86	-55.47	-56.9	27.41	67.9	54.8	48.6
8.55	-55.15	-56.3	-56.75	27.26	68.1	55	49.7
8.6	-54.78	-55.58	-56.9	27.41	67.6	54.8	52.8
8.59	-55.37	-56.25	-56.81	27.26	67.6	54.8	51
8.53	-55	-55.37	-56.87	27.38	67.5	54.7	48.4
8.65	-55.22	-55.99	-56.84	27.23	67.2	54.8	50.4
8.61	-55.15	-56.04	-56.78	27.26	66.8	54.5	50.8
8.65	-54.56	-55.37	-56.94	27.17	66.9	54.8	48.1
8.6	-54.89	-56.04	-57.06	27.26	66.6	54.6	48.1
9.24	-55.07	-55.01	-56.69	27.23	66.8	54.5	51.3
8.62	-54.89	-55.53	-56.48	27.32	66.8	54.5	51.3
7.87	-55.04	-55.94	-56.84	27.32	66.8	54.5	51.4
8.54	-55.15	-56.04	-57.03	27.2	66.8	54.4	48.8
8.5	-55.22	-56.51	-56.81	27.44	66.8	54.3	49.3
8.56	-55.18	-55.73	-56.78	27.26	66.7	54.5	50.7
8.56	-54.93	-55.84	-56.84	27.35	66.7	54.4	49.5
8.63	-54.93	-56.25	-56.66	27.23	66.8	54.3	50.2
8.51	-54.6	-55.53	-56.94	27.38	67	54.3	36.8
8.56	-54.89	-55.94	-56.75	27.23	67.2	54.3	50.4
8.64	-54.45	-55.53	-56.9	27.32	67.6	54.3	51.1
8.66	-55.92	-55.99	-56.57	27.2	67.6	54.4	51
8.61	-55.15	-55.47	-56.87	27.38	67.1	54.3	52.6
8.69	-54.71	-55.58	-56.69	27.2	67.4	54.3	52.9
8.59	-54.52	-56.2	-56.9	27.38	67.2	54.2	47.6
8.57	-54.74	-55.32	-56.94	27.32	67.1	54.3	49.3
8.65	-55.11	-55.94	-56.84	27.35	67.6	54.3	48
8.55	-50.38	-56.36	-56.66	27.2	67.8	54.1	49.9
8.62	-54.85	-55.73	-56.66	27.29	68.1	54.2	49.2
8.51	-54.6	-55.27	-56.84	27.14	68.6	54.3	51.4
8.55	-54.89	-55.53	-56.9	27.35	69	54.2	52.8
8.59	-53.97	-55.99	-56.87	27.17	69.1	54.5	48.3
8.59	-55.73	-55.47	-56.81	27.29	69.3	54.4	51.3
8.63	-54.96	-56.3	-56.87	27.01	69	54.7	50.9
8.64	-55.15	-56.15	-56.87	27.23	70	54.6	49.4

8.55	-55.18	-54.69	-56.97	26.98	70.2	54.7	45.4
8.57	-54.6	-55.73	-56.87	27.2	70.3	54.7	49.5
8.6	-54.23	-55.78	-56.87	26.95	71.4	54.7	51.6
8.47	-54.23	-57.19	-56.84	27.14	71.8	54.8	49.9
8.62	-55.04	-55.53	-56.75	26.89	71.9	54.9	47.1
8.57	-54.67	-55.78	-56.87	27.11	72.5	54.9	49.5
8.53	-54.38	-56.04	-56.54	26.8	73.1	55	49.9
8.53	-54.82	-55.11	-56.81	27.11	73.3	55	48.7
8.66	-54.96	-55.99	-56.87	26.74	74.3	55.2	46.6
8.47	-53.61	-56.56	-56.78	26.8	75.5	55.2	52.3
8.66	-55.29	-55.58	-56.84	26.71	75.7	55.6	44.4
8.61	-54.74	-55.58	-56.66	26.59	76.3	55.4	50.7
8.59	-53.9	-55.78	-56.63	26.56	77.7	55.8	50
8.62	-54.63	-55.37	-56.69	26.53	79.2	55.7	51.1
8.75	-55.48	-55.94	-56.75	26.37	80.2	56	50.3
8.56	-55.07	-55.47	-56.66	26.28	81.4	56	49.9
8.71	-54.74	-56.15	-56.78	26.43	80.9	56.4	49.7
8.58	-54.41	-55.63	-56.87	26.4	81.5	56.4	49.5
8.78	-54.3	-55.58	-56.78	26.25	81.7	56.6	51.1
8.65	-54.89	-55.53	-56.81	26.31	81.3	56.8	52
8.74	-55	-55.78	-56.6	26.19	82.4	56.6	50.5
8.62	-54.93	-55.63	-56.84	26.13	84.2	57	52.2
8.57	-55.66	-55.63	-56.69	26.01	85.5	57.2	47.5
8.59	-54.71	-55.53	-56.81	26.07	86	57.3	50.5
8.69	-54.52	-55.89	-56.78	26.07	86.4	57.8	51.9
8.64	-54.93	-55.63	-56.84	25.98	86	57.8	49
8.71	-54.63	-55.27	-56.78	26.07	86.1	58.1	48.2
8.56	-53.86	-55.37	-56.54	25.95	88	61.5	51.9
8.7	-55.15	-55.99	-56.63	25.98	86.4	59.9	47.5
8.59	-54.05	-55.58	-56.48	26.07	85.7	59.3	49.4
8.72	-53.39	-55.63	-56.66	26.07	86.3	59.5	50
8.58	-55.37	-55.78	-56.84	25.92	86.7	59.4	47.2
9.09	-54.67	-55.99	-56.81	26.13	86.4	59.5	49.5
8.6	-53.86	-55.47	-56.48	26.01	85.9	59.5	53
8.79	-54.49	-55.78	-56.51	26.01	85.4	59.6	49.8
8.66	-54.89	-55.84	-56.26	26.04	85.1	59.7	51.7
8.38	-54.85	-54.85	-56.51	26.28	85.1	59.5	45.6
8.59	-55.04	-55.37	-56.69	25.98	85.3	59.6	48.9
8.53	-52.51	-55.89	-56.51	26.25	85.4	59.6	50.3
8.52	-54.71	-55.53	-56.54	26.13	85.6	59.7	47.5
8.57	-54.3	-55.06	-56.6	26.25	85.3	59.8	50.2
8.62	-55.04	-55.11	-56.57	26.04	85.3	59.9	51
8.53	-55.15	-56.15	-56.63	25.98	85	59.7	50.3
8.59	-54.45	-55.06	-56.66	26.19	84.8	59.8	54.1
8.67	-54.82	-55.89	-56.54	26.13	84.4	59.7	51.4
8.73	-54.67	-55.68	-56.57	26.07	84.3	59.9	48.9
8.62	-54.6	-55.27	-56.81	26.04	84.8	59.8	47.5

9.04	-54.63	-55.27	-56.54	26.07	84.8	59.9	49.5
8.54	-54.56	-55.21	-56.66	26.19	85.1	60.1	51.9
8.53	-54.6	-55.06	-56.45	26.28	84.6	59.6	49.1
8.56	-54.27	-55.63	-56.57	26.07	84.4	60.1	51.4
8.52	-54.27	-55.68	-56.17	26.31	84	59.9	48.9
8.64	-54.93	-55.32	-56.48	26.13	83.7	59.9	51.1
8.65	-54.89	-54.9	-56.51	26.16	83.3	59.9	47.4
8.63	-54.6	-55.16	-56.45	26.13	83.2	60.2	50.5
8.58	-54.93	-54.95	-56.54	26.19	82.7	59.9	48.6
8.83	-52.95	-55.47	-56.51	26.22	82.4	59.9	50.4
8.6	-54.93	-55.27	-56.39	26.22	82.2	59.8	50.9
8.58	-54.82	-55.94	-56.45	26.4	81.9	59.6	48
8.68	-54.85	-55.32	-56.39	26.22	81.7	59.7	51.5
8.63	-54.27	-55.21	-56.48	26.25	81.1	59.7	49
8.58	-53.61	-55.21	-56.63	26.28	80.9	59.8	53.8
8.63	-54.96	-55.53	-56.42	26.34	79.8	59.7	49.6
8.49	-55.66	-55.78	-56.39	26.5	79.5	59.4	50.9
8.59	-54.3	-55.58	-56.32	26.43	78.5	59.3	53
8.53	-52.8	-55.37	-56.69	26.59	77.8	59.3	48.9
8.61	-54.23	-55.58	-56.29	26.4	77.7	59.2	51.2
8.64	-54.45	-55.27	-56.57	26.43	77.4	59.2	51.1
8.7	-54.82	-55.78	-56.6	26.53	76.8	59.2	50.1
8.64	-54.74	-55.53	-56.66	26.47	76.7	59	50.5
8.6	-54.93	-55.73	-56.39	26.37	76.6	59	49.5
8.5	-54.41	-56.3	-56.6	26.53	76.3	59	50.5
8.56	-54.3	-55.73	-56.48	26.71	75.7	58.6	51.7
8.53	-53.24	-54.75	-56.42	26.56	75.6	58.7	51
8.53	-52.22	-55.73	-56.57	26.5	75.5	58.8	50.1
8.38	-54.49	-54.8	-56.57	26.56	75.3	58.7	49.8
8.62	-54.49	-55.11	-56.54	26.56	75.4	58.6	49.8
8.46	-53.68	-55.84	-56.6	26.74	75.1	58.4	49.1
8.58	-53.79	-55.27	-56.69	26.62	75.5	58.5	49.6
8.51	-52.95	-55.27	-56.51	26.65	75.3	58.4	49.7
8.54	-53.57	-54.69	-56.57	26.89	75.1	58.3	49.1
8.63	-54.71	-55.73	-56.66	26.74	74.5	58.3	48.7
8.58	-54.05	-56.25	-56.66	26.74	74.4	58.2	50
9.08	-54.23	-55.37	-56.45	26.71	74.2	58.1	50
8.62	-54.23	-55.63	-56.48	26.89	73.7	58.2	49.3
8.45	-53.72	-54.9	-56.66	26.98	74	58	49.8
8.59	-53.72	-55.99	-56.57	26.83	73.2	58.2	51
8.51	-54.67	-55.53	-56.6	26.77	73.3	57.9	49.6
8.21	-54.67	-55.63	-56.39	26.98	72.5	57.8	46
8.64	-54.6	-54.95	-56.6	26.83	72.2	57.6	48.7
8.57	-54.85	-55.27	-56.57	26.8	72.3	57.5	49.8
8.41	-54.27	-55.37	-56.45	26.89	72	57.4	48.6
8.64	-54.01	-55.68	-56.29	26.83	72.1	57.3	54.6
8.53	-54.41	-55.06	-56.57	26.83	72.3	57.4	51

9.12	-52.4	-54.95	-56.45	26.8	72.7	57.3	50.9
8.59	-54.05	-55.73	-56.39	26.83	72.9	57.3	49.8
8.62	-54.89	-55.73	-56.6	26.83	73	57.2	49.8
8.83	-54.3	-55.06	-56.48	26.77	72.4	57.1	48.3
8.62	-54.74	-55.37	-56.63	26.98	72.2	57.1	49
8.44	-53.53	-56.2	-56.6	27.08	71.9	57	49.4
8.65	-54.12	-55.94	-56.45	26.89	72.1	57	52.9
8.57	-53.97	-55.73	-56.42	26.92	72	56.9	50.4
8.49	-52.4	-55.27	-56.42	27.08	72.6	56.9	49.8
8.54	-53.64	-56.2	-56.69	26.83	72.7	56.9	50
8.63	-54.41	-55.78	-56.51	26.89	72.6	56.9	47.9
8.43	-54.52	-55.68	-56.51	27.14	72.5	56.9	47.3
8.65	-54.67	-55.89	-56.51	26.98	72.5	56.8	48.4
8.62	-54.63	-55.84	-56.54	26.92	71.8	56.6	51.6
8.84	-54.49	-55.16	-56.51	27.01	71.4	56.9	49.4
8.54	-53.68	-55.99	-56.39	27.01	71.3	56.6	49.9
8.52	-54.67	-55.84	-56.48	27.17	71.2	56.4	51.6
8.71	-54.23	-55.37	-56.63	27.05	70.7	56.5	49.7
8.55	-53.02	-55.32	-56.39	27.08	70.5	56.4	54.2
8.52	-54.6	-55.58	-56.45	27.29	70.1	56.3	49.5
8.65	-54.6	-55.32	-56.45	26.92	70.1	56.3	45.8
8.49	-53.72	-55.16	-56.57	27.08	69.7	56.1	46.9
8.56	-54.82	-55.37	-56.63	27.01	69.8	56.1	50.5
8.56	-54.67	-55.11	-56.54	27.17	69.4	56.2	49.6
8.48	-54.01	-55.32	-56.6	27.2	69.4	56	52
8.84	-54.08	-55.84	-56.48	27.14	69.2	56	50.4
8.62	-54.96	-55.37	-56.54	27.14	68.9	56	51.4
8.6	-54.63	-55.63	-56.42	27.35	68.9	55.8	50
8.66	-54.38	-55.32	-56.51	27.14	68.9	55.8	51
8.6	-54.49	-55.89	-56.54	27.29	68.6	55.7	49.2
8.47	-54.56	-55.06	-56.51	27.35	68.5	55.6	51
8.63	-54.56	-55.21	-56.63	27.17	68.5	55.7	49.5
8.57	-53.86	-56.1	-56.17	27.11	68.4	55.5	49.5
8.25	-54.12	-54.9	-56.45	27.26	68.6	55.5	49.8
8.62	-54.93	-55.89	-56.66	27.14	68.6	55.5	50.2
8.39	-53.97	-55.53	-56.42	27.32	69	55.4	50.2
8.62	-53.64	-55.58	-56.23	27.2	68.6	55.5	49.5
8.6	-54.05	-55.11	-56.57	27.2	69	55.4	50.2
8.55	-54.67	-55.94	-56.36	27.35	68.9	55.1	48.4
8.56	-54.19	-56.2	-56.36	27.2	69	55.4	51.5
8.53	-54.56	-55.27	-56.39	27.23	68.8	55	49.9
9.21	-54.85	-55.27	-56.39	27.14	69	55	51.5
8.53	-53.13	-55.06	-56.48	27.17	69.3	55.4	49.1
8.44	-53.17	-55.68	-56.51	27.41	69.2	55.1	50.3
8.63	-54.74	-54.95	-56.69	27.26	69	55.1	50.9
8.57	-54.71	-55.89	-56.45	27.32	68.6	55.1	50.5
8.51	-52.77	-55.27	-56.39	27.35	68.8	54.9	47.9

8.63	-55.07	-55.78	-56.2	27.14	69.3	55	49.2
8.54	-54.93	-54.49	-56.6	27.14	69.3	55	49.6
8.76	-53.1	-55.27	-56.66	27.23	69.6	54.9	49.5
8.61	-54.45	-55.47	-56.32	27.11	69.8	55.1	50.5
8.52	-54.38	-55.27	-56.39	27.41	69.6	55	49.5
8.49	-54.45	-55.11	-56.36	27.17	70	55	48.9
8.53	-54.56	-55.21	-56.57	27.2	70.2	54.9	49.4
8.33	-54.93	-55.06	-56.48	27.35	70.1	55	47.2
8.62	-54.49	-55.21	-56.51	27.2	70.1	55.2	49.2
8.53	-54.67	-55.32	-56.63	27.35	70.5	55.2	48.6
8.65	-54.71	-55.78	-56.32	27.2	70	55	51.9
8.59	-54.27	-56.04	-56.32	27.2	70	54.9	49.4
8.46	-53.06	-55.73	-56.29	27.38	69.7	54.9	49.7
8.64	-54.45	-55.63	-56.42	27.2	70.1	55.1	51.6
8.5	-53.97	-55.01	-56.6	27.17	70.4	55	50.3
8.6	-53.75	-56.1	-56.39	27.26	70.8	54.9	48.3
8.58	-54.01	-55.78	-56.48	27.14	70.7	55.2	47.3
8.62	-54.52	-55.32	-56.45	27.2	69.8	55	49.8
8.5	-54.78	-55.37	-56.48	27.44	69.7	55	48.4
8.53	-53.28	-55.11	-56.6	27.2	70.2	55.1	52.4
8.62	-54.56	-55.37	-56.48	27.26	70.4	54.9	48.6
8.45	-53.94	-54.9	-56.51	27.35	70.4	55	49.4
8.63	-54.63	-55.58	-56.48	27.23	70.5	55	49.8
8.48	-52.66	-56.25	-56.23	27.23	70.3	55	49.3
8.56	-53.94	-55.32	-56.36	27.44	71.1	55	50.8
8.58	-54.71	-55.27	-56.57	27.2	70	55.2	47
8.6	-54.01	-55.32	-56.45	27.23	70.1	55.1	51.2
8.51	-52.62	-55.78	-56.23	27.38	70.1	55.1	49.2
8.5	-54.41	-55.78	-56.39	27.2	70.2	55.2	48.8
8.56	-54.56	-55.68	-56.39	27.23	70.4	54.9	51
8.61	-53.75	-55.53	-56.6	27.26	70.9	55	49.8
8.52	-54.16	-54.85	-56.23	27.2	70.5	55.2	50
8.5	-53.13	-54.85	-56.02	27.23	69.7	54.9	48.4
8.44	-55.04	-55.21	-56.42	27.41	69.6	54.8	50.2
8.54	-52.51	-54.95	-56.51	27.17	69.9	54.9	48.4
8.5	-54.27	-55.01	-56.48	27.2	70.1	54.9	50.2
8.47	-54.08	-56.2	-56.48	27.38	70.3	54.9	47.8
8.57	-54.71	-54.75	-56.48	27.2	70.1	54.9	50.5
8.52	-52.22	-54.9	-56.36	27.23	69.6	54.8	50.7
8.49	-54.82	-56.04	-56.32	27.38	69.7	54.6	50.5
8.6	-54.63	-55.63	-56.42	27.2	70	54.8	49.2
8.52	-54.93	-56.15	-56.6	27.23	70	54.8	49.7
8.18	-55.18	-55.63	-56.39	27.29	70	54.8	47.6
8.51	-54.27	-56.04	-56.51	27.26	69.6	54.9	50.1
8.5	-54.78	-55.27	-56.63	27.23	69	54.8	48.4
8.3	-54.38	-55.21	-56.57	27.41	69.1	54.8	46.1
8.63	-54.63	-55.11	-56.23	27.35	68.9	54.9	49.4

8.52	-54.74	-55.53	-56.32	27.29	69	54.8	49
7.88	-53.68	-55.37	-56.6	27.41	69.1	54.9	47.1
8.54	-53.97	-54.38	-56.42	27.35	68.5	54.9	48.4
8.49	-52.07	-54.8	-56.39	27.26	68.3	54.8	51.5
8.6	-55.18	-55.47	-56.29	27.5	68.2	54.8	50.2
8.51	-54.85	-54.85	-56.48	27.38	67.9	54.8	49.2
8.52	-53.5	-55.21	-56.29	27.35	67.7	54.6	50.2
8.23	-54.27	-55.16	-56.26	27.69	67.4	54.7	45.4
8.48	-53.21	-55.58	-56.36	27.35	67.4	54.6	49.5
8.5	-54.93	-55.78	-56.69	27.44	66.8	54.6	52.6
8.49	-54.78	-55.37	-56.39	27.69	66.7	54.5	49.8
8.54	-53.64	-55.27	-56.17	27.44	66.6	54.6	48.8
8.62	-54.3	-54.85	-56.29	27.47	66	54.4	49.7
8.23	-55.04	-55.84	-56.48	27.72	66.1	54.3	50
8.5	-53.17	-56.2	-56.14	27.47	66.1	54.5	48.7
8.5	-52.14	-55.01	-56.39	27.53	65.7	54.3	48.7
8.32	-54.08	-55.58	-56.54	27.81	65.4	54.4	47.2
8.51	-54.38	-54.9	-56.17	27.63	65.4	54.3	50.4
8.52	-52.91	-55.53	-56.29	27.72	65.3	54.2	50.1
8.2	-54.12	-55.68	-56.36	27.69	65.4	54.1	51.3
8.6	-53.9	-55.58	-56.45	27.63	64.9	54.2	45.1
8.5	-53.53	-55.32	-56.32	27.63	65	54.2	50.1
9.06	-53.5	-55.11	-56.57	27.44	65.1	54.2	51.3
8.56	-54.27	-55.53	-56.17	27.56	64.8	54.1	49.1
8.51	-54.19	-54.64	-56.42	27.56	64.9	54.1	51
8.95	-54.56	-55.32	-56.54	27.66	64.7	54	50.5
8.45	-52.22	-55.84	-56.45	27.66	64.8	54	50
8.35	-54.41	-55.21	-56.23	27.78	64.7	53.8	49.6
8.53	-52	-55.99	-56.36	27.66	64.4	53.8	49.8
8.53	-54.27	-54.75	-56.42	27.72	64	53.9	48.9
8.59	-54.16	-55.53	-56.2	27.93	63.7	53.8	49.7
8.59	-53.53	-55.32	-56.26	27.78	63.6	53.7	49.3
8.56	-54.6	-54.85	-56.39	27.72	63.7	53.7	50.8
8.21	-52.4	-54.75	-56.36	27.84	63.8	53.7	51.9
8.51	-54.01	-55.47	-56.42	27.69	63.6	53.5	51
8.5	-54.67	-56.04	-56.36	27.69	63.9	53.5	48.7
8.85	-54.27	-55.53	-56.29	27.66	63.9	53.6	50.5
8.53	-54.56	-55.47	-56.42	27.66	64	53.5	52.2
8.39	-54.23	-55.63	-56.32	27.9	63.9	53.4	52.8
8.62	-54.71	-55.37	-56.36	27.72	64	53.4	52.2
8.55	-54.49	-55.01	-56.29	27.72	63.6	53.2	50.5
8.1	-53.57	-56.25	-56.39	27.9	63.4	53.3	48.1
8.59	-53.68	-55.11	-56.63	27.78	62.5	53.2	50.3
8.53	-54.56	-56.04	-56.11	27.78	62.5	53.1	51.2
8.95	-53.1	-55.27	-56.66	27.78	62.3	53.2	51.6
8.48	-53.94	-55.16	-56.2	27.84	61.9	53.1	50.5
8.35	-53.97	-55.06	-56.48	27.96	61.6	52.8	50.3

8.68	-54.16	-55.16	-56.51	27.81	61.7	52.9	53.4
8.6	-53.86	-55.16	-56.48	27.84	61.4	52.6	51.1
8.55	-53.9	-54.9	-56.26	27.96	61.5	52.7	48.8
8.6	-53.06	-56.04	-56.2	27.78	61.5	52.8	51.8
8.55	-54.19	-55.68	-56.08	27.84	62.2	52.7	50.5
8.42	-53.32	-55.94	-56.42	27.99	61.7	52.7	49.6
8.6	-53.72	-55.68	-56.17	27.81	61.4	52.7	50.9
8.44	-54.63	-55.11	-56.36	27.84	61.2	52.4	50.4
8.68	-53.75	-55.21	-56.39	27.84	61.2	52.5	49.7
8.6	-53.68	-55.27	-56.29	27.9	60.7	52.2	49.4
8.5	-53.61	-55.63	-56.26	28.08	60.9	52.4	49
8.58	-53.86	-55.27	-56.17	27.84	60.9	52.3	48.8
8.39	-53.83	-56.1	-56.32	27.99	61	52.3	51.2
8.5	-54.19	-55.32	-56.39	27.78	61.4	52.2	49.1
8.55	-53.97	-55.06	-56.14	27.84	61.1	52.3	49.1
8.62	-53.9	-55.47	-56.23	27.81	61.3	52.3	48.8
8.56	-54.82	-55.78	-56.2	27.81	61.1	52.2	48
8.53	-53.42	-55.53	-56.51	27.81	61	52.3	49.3
8.5	-54.19	-55.89	-56.26	27.87	61.3	52	51.6
8.53	-51.81	-56.04	-56.39	27.9	61.2	52.2	48.7
8.52	-53.61	-54.9	-56.26	27.84	60.9	51.6	51.9
8.64	-54.16	-55.32	-56.32	27.93	61	52.1	50.4
8.62	-53.97	-55.47	-56.32	27.9	60.9	51.9	45.9
8.68	-54.05	-55.06	-56.36	27.96	61.1	51.9	50.4
8.53	-53.02	-56.25	-56.14	27.84	61	51.7	50.5
8.54	-54.49	-55.21	-56.42	27.9	61.2	51.8	49.5
8.54	-54.6	-55.58	-56.29	27.9	60.4	51.8	51
8.59	-54.23	-54.85	-56.02	27.96	60.6	51.8	51.4
8.59	-53.79	-55.11	-56.36	27.93	60.2	51.6	48.4
8.6	-54.3	-55.11	-56.17	27.99	60.5	51.7	51.6
8.53	-53.97	-55.21	-56.11	27.99	60.5	51.6	45.3
8.57	-54.27	-55.47	-56.26	27.9	60.3	51.8	49
8.55	-53.53	-55.99	-56.2	27.9	60.2	51.6	49.4
8.62	-53.94	-55.47	-56.29	27.93	60.2	51.6	50.1
8.52	-53.94	-55.27	-56.42	27.99	60	51.4	51.4
8.52	-52.44	-54.69	-56.45	27.93	60.3	51.6	50.2
8.58	-54.56	-55.47	-56.2	27.96	60.1	51.5	49.6
8.51	-53.9	-54.85	-56.32	27.9	60.5	51.5	54.5
8.55	-54.12	-55.47	-56.17	27.96	60.1	51.5	44.5
8.62	-53.75	-55.21	-56.2	27.93	60.3	51.6	49.2
8.45	-53.17	-55.53	-56.11	27.9	60.3	51.5	51.4
8.68	-54.05	-55.16	-56.32	27.93	60.4	51.4	49.5
8.59	-54.08	-55.06	-56.36	27.9	60.5	51.3	49.5
8.52	-53.83	-54.59	-56.29	28.14	60.9	51.5	47.7
8.5	-55.04	-55.06	-56.17	27.9	61.2	51.5	50.4
8.44	-54.01	-55.27	-56.26	27.9	61.3	51.4	51.4
8.82	-54.89	-54.59	-56.26	27.96	61.4	51.6	50.2

8.44	-54.01	-55.06	-56.17	27.81	61.9	51.7	48.9
8.44	-54.49	-54.95	-56.29	28.05	62.1	51.4	50.9
8.54	-53.97	-55.37	-56.32	27.84	62.1	51.7	49.5
8.55	-53.5	-55.11	-56.32	27.87	61.7	51.6	50.5
8.82	-54.12	-55.21	-56.36	27.9	62	51.4	48.4
8.53	-54.16	-55.94	-56.39	27.87	62.5	51.6	52.8
8.27	-52.14	-55.68	-56.2	28.02	62.6	51.6	47.6
8.51	-52.66	-54.85	-56.2	27.9	63.1	51.6	50.1
8.5	-53.35	-55.16	-56.45	28.02	63.3	51.8	48.9
8.63	-54.52	-55.73	-56.54	27.81	63.6	51.7	51.9
8.45	-54.85	-55.47	-56.29	27.84	63.3	51.7	47.9
8.61	-54.56	-55.32	-56.45	27.84	63.6	51.8	43.8
8.56	-53.75	-55.16	-56.39	27.78	64.4	51.8	49.8
8.06	-54.82	-56.1	-56.51	27.9	64.1	51.8	47.5
8.5	-52.91	-55.16	-56.02	27.81	64.7	51.9	49.6
8.49	-52.4	-55.89	-56.23	27.72	64.5	51.9	49.2
8.57	-53.64	-54.95	-56.11	27.75	64.6	51.9	49.8
8.43	-51.92	-54.38	-56.32	27.84	64.5	51.9	53.4
8.51	-54.12	-55.63	-56.48	27.9	65	51.9	48.3
8.45	-54.45	-55.78	-56.36	27.72	65.9	52	49.4
8.41	-53.68	-54.8	-56.32	27.78	66.2	52.3	48.4
8.55	-53.72	-55.11	-56.29	27.72	66.8	52.3	50.3
8.51	-54.12	-55.21	-56.42	27.63	66.6	52.3	50.5
8.7	-54.12	-54.85	-56.36	27.5	67.1	52.3	49.8
8.5	-52.66	-55.37	-56.23	27.63	67.5	52.5	51.1
7.75	-54.3	-55.47	-56.32	27.75	67.2	52.5	52.3
8.51	-53.42	-54.44	-55.93	27.56	67.9	52.5	48.4
8.53	-54.12	-55.27	-56.2	27.69	68.3	52.7	48
8.51	-54.82	-54.85	-56.08	27.53	68.4	52.7	47.3
8.5	-54.52	-55.32	-56.2	27.66	68.9	52.8	49.5
8.52	-53.97	-54.75	-56.26	27.44	68.5	52.8	49
8.56	-53.79	-55.06	-56.29	27.5	68.7	52.8	50.3
8.52	-52.99	-55.73	-56.2	27.53	69	53.2	49.6
8.56	-54.41	-55.16	-56.11	27.47	68.9	53.2	49
8.61	-54.23	-55.21	-56.17	27.38	68.8	53.1	49.8
8.47	-52.84	-55.21	-56.08	27.53	68.2	53.2	47.8
8.92	-54.45	-55.06	-56.17	27.5	67.9	53.3	51.8
8.56	-53.83	-55.32	-56.26	27.47	68.3	53.3	49.9
8.4	-54.56	-55.63	-56.14	27.69	68	53.3	48.6
8.52	-53.5	-55.01	-56.02	27.66	68.3	53.6	50.3
8.51	-54.19	-55.06	-56.36	27.66	68.1	53.5	48.3
8.48	-53.21	-55.21	-56.36	27.63	67.7	53.2	47.3
8.42	-54.63	-55.53	-56.08	27.66	67.9	53.5	50.3
8.5	-53.02	-55.37	-55.81	27.47	68.1	53.5	53
8.5	-53.39	-55.16	-56.26	27.5	67.8	53.3	50.9
8.58	-53.72	-55.11	-56.14	27.5	67.8	53.6	49
8.46	-55.4	-55.21	-56.23	27.5	67.4	53.5	51.7

8.13	-54.08	-54.9	-56.32	27.78	67.9	53.7	50.8
8.52	-53.1	-55.58	-55.99	27.5	67.9	53.6	52
8.44	-53.86	-55.47	-56.05	27.69	67.8	53.8	50.2
8.55	-53.42	-55.53	-56.11	27.5	67.5	53.6	50.2
8.47	-53.75	-56.15	-56.23	27.75	67.5	53.7	52.9
8.58	-54.01	-55.21	-56.17	27.56	67.5	53.7	47.1
8.44	-54.3	-55.11	-56.2	27.78	66.9	53.7	47.8
8.47	-53.17	-54.49	-56.08	27.5	66.8	53.7	48
8.51	-53.75	-55.11	-56.17	27.66	66.7	53.6	48.6
8.82	-54.05	-55.53	-56.02	27.56	66.2	53.7	50.1
8.59	-53.83	-55.11	-56.17	27.72	66	53.7	48.7
8.26	-54.3	-55.84	-56.11	27.81	65.5	53.6	50.5
8.48	-53.28	-55.53	-56.2	27.66	64.8	53.4	52.1
8.47	-54.56	-54.9	-56.45	27.93	64.9	53.5	49.5
8.6	-53.68	-55.58	-55.87	27.75	64.7	53.5	47.9
8.53	-54.08	-54.75	-56.17	27.93	64.5	53.3	49.1
8.57	-55.15	-55.58	-56.14	27.81	64.3	53.5	48.4
8.5	-54.85	-55.73	-56.32	27.99	63.9	53.2	50.4
8.47	-54.38	-54.49	-56.23	27.81	63.6	53.2	49.4
8.47	-54.82	-54.95	-56.2	27.81	63.6	52.7	49.2
8.62	-53.97	-55.32	-56.11	27.93	63.2	53.3	51.3
8.53	-54.01	-55.47	-56.2	27.93	62.8	52.9	48.4
8.91	-53.94	-55.84	-56.17	27.78	63.1	52.9	49.1
8.5	-54.38	-55.32	-56.05	27.87	62.8	52.8	50.5
8.27	-51.89	-55.16	-56.39	28.05	62.1	52.8	49.6
8.47	-51.04	-55.53	-56.14	28.02	61.8	52.7	51.2
7.86	-53.79	-55.37	-56.02	28.14	61.7	52.7	49.8
8.56	-53.9	-55.47	-56.2	27.93	61.4	52.7	52.2
8.4	-53.9	-55.11	-56.17	28.17	61.2	52.4	50.4
8.54	-53.42	-55.73	-56.08	28.05	61.3	52.6	49.7
8.41	-52.8	-55.58	-56.26	28.14	61	52.3	48.4
8.53	-53.53	-55.32	-56.17	27.96	61.1	52.3	50.2
8.56	-53.53	-55.73	-56.2	28.02	61	52.3	48.7
8.61	-54.27	-54.95	-56.08	27.99	60.9	52.1	51.1
8.55	-53.79	-55.21	-56.05	28.05	60.3	52.1	50.1
8.67	-54.23	-55.63	-56.26	28.02	60.3	52.2	48.4
8.45	-51.7	-55.16	-56.26	28.08	60.2	51.9	51.6
8.71	-54.27	-55.94	-56.17	28.11	60.3	51.9	48.6
8.54	-53.79	-55.68	-55.99	27.99	60.4	51.8	50
8.06	-54.23	-55.37	-56.17	28.11	60.6	51.8	49.9
8.44	-54.6	-55.78	-56.05	27.99	60.3	51.8	48.2
8.54	-53.57	-55.37	-56.36	28.17	60.3	51.6	49.6
8.47	-52.91	-55.53	-56.17	28.02	60.2	51.8	51.2
8.43	-51.74	-54.54	-56.36	28.27	59.9	51.6	53.5
8.5	-53.17	-54.85	-56.08	28.11	59.7	51.6	48.6
8.48	-52.4	-55.27	-56.11	28.24	59.2	51.5	53
8.55	-53.02	-55.01	-56.14	28.08	59.3	51.5	50.5

8.52	-53.9	-54.9	-56.36	28.33	58.9	51.5	52.1
8.59	-53.86	-55.84	-56.02	28.11	58.2	51.5	47.3
8.43	-53.32	-55.32	-56.23	28.27	58.1	51	46.7
8.56	-53.9	-54.64	-56.17	28.11	58	51.1	45.6
8.39	-52.84	-54.8	-56.11	28.24	57.8	51.2	49.4
8.53	-53.24	-54.85	-55.84	28.11	57.6	50.9	53.1
8.59	-54.08	-55.53	-56.02	28.24	57.3	50.9	49.8
8.59	-54.6	-55.16	-56.05	28.27	57.4	50.9	45.7
8.51	-53.72	-55.16	-55.99	28.11	57.4	50.9	51.4
8.53	-53.68	-55.63	-56.42	28.02	57.5	50.6	49.5
8.52	-53.68	-54.8	-56.2	28.14	57.1	50.4	51.2
8.61	-54.05	-54.8	-56.11	28.21	57.3	50.8	50
8.54	-54.01	-55.06	-56.08	28.21	57	50.6	50.3
8.54	-53.1	-55.32	-56.08	28.14	57	50.5	50.2
8.5	-53.28	-55.01	-56.02	28.14	57.1	50.3	50.3
8.48	-51.26	-55.01	-56.32	28.11	57.1	50.6	43.9
8.48	-53.1	-55.37	-55.93	28.14	57.4	50.3	51.5
8.66	-52.95	-55.11	-56.17	28.17	57.4	50.2	48.9
8.58	-53.61	-55.27	-56.17	28.24	57.1	50.3	51.5
8.9	-53.94	-55.78	-55.74	28.27	56.7	50.3	50
8.54	-54.63	-54.85	-56.14	28.24	56.3	50.2	50.7
8.37	-54.08	-55.32	-55.87	28.08	57	50	50.1
8.5	-53.72	-54.85	-56.08	28.27	56.4	50.2	48.4
8.28	-53.97	-54.8	-56.11	28.3	56.2	49.9	49.5
8.5	-53.64	-55.58	-56.2	28.21	56.3	50	48.9
8.15	-53.83	-54.49	-56.17	28.39	56.4	50.1	50
8.54	-53.61	-55.11	-56.08	28.27	57	49.8	48.6
8.21	-53.75	-55.16	-56.05	28.39	57.1	49.9	48.9
8.54	-54.3	-55.32	-55.87	28.27	57	49.9	50.5
8.44	-53.53	-54.38	-56.23	28.45	57.1	49.9	50.1
8.57	-53.72	-55.16	-56.05	28.3	56.7	49.9	49.2
8.48	-52.51	-55.16	-56.02	28.42	56.8	49.8	48.4
8.58	-54.05	-54.75	-56.2	28.17	56.9	49.6	50.7
8.5	-53.64	-55.27	-56.11	28.42	56.9	49.8	49
8.47	-51.23	-55.63	-56.42	28.21	56.2	49.7	51.1
8.45	-54.23	-54.59	-56.29	28.51	56.1	49.7	51.7
8.5	-52.36	-54.8	-56.17	28.24	56.2	49.7	49.8
8.51	-54.23	-54.59	-55.99	28.48	55.9	49.5	51.2
8.56	-54.16	-54.75	-56.05	28.33	56	49.5	51.7
8.45	-53.53	-55.11	-56.05	28.45	56.2	49.6	53.9
8.47	-53.97	-55.73	-56.14	28.24	56.2	49.5	49
8.44	-52.95	-54.95	-55.99	28.45	56.3	49.6	47.4
8.55	-53.9	-56.04	-55.9	28.24	56.2	49.5	50.5
8.5	-54.05	-54.9	-56.29	28.51	56.6	49.5	50.3
8.52	-54.23	-54.95	-56.14	28.21	57.1	49.7	49.7
8.31	-54.01	-55.01	-55.93	28.39	57.1	49.5	51.3
8.61	-54.27	-55.84	-56.14	28.11	57.1	49.6	48.4

8.35	-52.11	-55.32	-56.23	28.39	57.4	49.5	49.7
8.56	-54.05	-54.69	-55.9	28.11	57.8	49.7	48.1
8.44	-53.86	-55.16	-55.93	28.33	58.1	49.6	50.7
8.6	-53.21	-54.9	-56.08	28.08	58.8	49.8	49.5
8.46	-54.05	-55.11	-56.05	28.27	59.2	50.1	50.2
8.48	-53.39	-55.37	-56.02	28.05	59.4	50.1	49.4
8.55	-53.9	-55.73	-56.17	28.05	59.9	49.3	51.4
8.51	-54.52	-54.85	-56.08	28.05	60.5	49	48.6
8.42	-53.97	-54.9	-55.78	28.14	60.6	50.3	49.5
8.54	-53.1	-54.64	-56.36	27.93	61.4	50.5	50.5
8.48	-54.01	-55.27	-55.9	28.14	61.8	50.5	47.6
8.54	-53.53	-54.8	-55.99	27.9	62.8	50.8	48.8
8.47	-53.75	-55.16	-56.02	28.02	63.1	51	48.4
8.55	-53.68	-55.37	-56.08	27.87	63.6	51.2	53.1
8.47	-54.27	-55.58	-56.11	27.99	64.2	51.4	49.3
8.53	-53.57	-55.32	-55.81	27.84	64.8	51.5	47
8.52	-54.01	-54.9	-56.11	27.9	65.5	51.6	47.3
8.55	-54.49	-55.63	-56.2	27.75	66.2	51.8	51.8
8.5	-54.52	-54.59	-56.08	27.87	66.2	52	49.9
8.53	-53.94	-55.27	-55.71	27.56	67	52.1	48.6
8.51	-53.72	-55.06	-56.08	27.84	67.1	52.3	48
8.53	-53.83	-54.85	-56.02	27.66	67.7	52.6	51.1
8.48	-53.21	-55.27	-56.05	27.75	68	52.7	49.9
8.53	-53.94	-54.8	-56.11	27.63	67.4	52.9	49.2
8.5	-52.62	-55.53	-56.08	27.75	68.8	53.4	49.8
8.53	-52.33	-54.75	-55.9	27.53	69.8	53.5	49.5
8.3	-52.73	-55.21	-55.9	27.81	68.2	53.1	52.9
8.54	-53.79	-55.16	-55.93	27.44	68.4	53.1	48.9
8.51	-54.05	-54.85	-56.05	27.69	69	53.3	48.1
8.53	-54.56	-55.21	-55.9	27.44	69.6	53.1	52.5
8.54	-54.01	-55.32	-55.87	27.66	70.7	53.4	47.3
8.55	-53.17	-55.11	-55.93	27.32	71.5	53.4	49.8
8.56	-54.3	-54.95	-55.87	27.63	71.4	53.7	48.7
8.6	-53.86	-54.8	-56.08	27.26	72.3	55.1	49.5
8.49	-53.86	-54.95	-56.05	27.53	72.1	54.2	49.4
8.59	-54.27	-54.8	-55.87	27.38	72.3	54.2	49.9
8.44	-52.62	-55.11	-55.99	27.53	72	54.2	48.3
8.48	-52.91	-55.27	-55.74	27.32	71.6	54.1	50.7
8.54	-53.21	-55.27	-55.74	27.69	70.1	54.2	52.6
8.61	-53.72	-55.37	-55.68	27.5	69.1	54.3	50.4
8.53	-54.41	-55.16	-55.81	27.56	69.4	54.2	50.2
8.5	-53.9	-54.9	-55.9	27.44	70.1	54.3	51.2
8.4	-53.42	-54.64	-55.9	27.69	69.2	54.1	53.4
8.5	-53.06	-54.75	-55.9	27.47	68.8	54.1	48.4
8.45	-54.01	-55.47	-55.87	27.72	68.5	54.2	49.8
8.59	-53.5	-54.95	-55.93	27.47	68.6	54.3	48.6
7.94	-54.16	-54.85	-56.14	27.72	68.6	54.1	47.5

8.57	-54.19	-55.21	-55.81	27.53	68.1	54	49.1
8.15	-53.5	-54.69	-55.9	27.56	68.1	54	50.9
8.58	-53.13	-55.53	-55.87	27.63	68	53.9	49.5
8.6	-53.94	-55.11	-56.11	27.72	67.8	53.9	48.4
8.56	-54.27	-54.95	-55.87	27.53	67.8	53.9	49.7
7.82	-53.5	-55.21	-56.05	27.78	67.7	53.8	50.2
8.58	-53.35	-55.32	-55.9	27.56	67.2	53.8	52.8
8.36	-52.44	-55.63	-56.2	27.81	67.2	53.9	50.1
8.61	-53.83	-55.47	-55.9	27.53	67.4	54	46.5
8.53	-53.06	-54.44	-55.68	27.72	67.9	54	52
8.57	-54.38	-54.75	-55.71	27.56	67.9	53.7	49.2
8.49	-53.42	-54.8	-56.02	27.78	67.4	53.8	47.5
8.59	-53.94	-54.95	-55.74	27.56	66.9	53.8	48.4
8.53	-52.95	-55.11	-55.84	27.87	66.8	53.8	51.8
8.46	-54.16	-55.11	-56.02	27.66	66.7	53.8	49.5
8.47	-51.92	-54.54	-55.74	27.78	66.7	53.8	49.4
8.56	-53.53	-54.95	-55.9	27.66	66.5	53.8	48.7
8.59	-54.08	-55.06	-55.84	27.84	66.2	53.6	49
8.62	-54.41	-54.85	-55.84	27.75	65.6	53.8	51
8.56	-52.95	-55.27	-55.65	27.9	65.7	53.7	51.1
8.5	-52.69	-54.54	-56.05	27.81	65.3	53.5	50.2
8.58	-54.19	-54.9	-55.99	27.96	65	53.4	48.4
8.59	-53.42	-54.85	-55.99	27.78	64.3	53.5	50.2
8.55	-53.5	-54.33	-55.68	28.02	63.8	53.3	50.1
8.46	-54.08	-54.54	-56.05	27.81	63.6	53.4	46.7
8.54	-52.66	-54.59	-56.2	28.05	63.2	53.2	51.2
8.61	-54.08	-54.95	-55.68	27.93	62.8	53.1	48.1
7.92	-54.01	-54.59	-55.68	27.99	62.5	52.8	46.7
8.52	-53.72	-54.75	-56.08	27.9	62.2	52.7	49.2
8.36	-52.95	-54.85	-55.93	28.08	62	52.8	51.6
8.58	-53.24	-54.64	-55.93	27.9	61.5	52.7	48.6
8.21	-53.94	-54.59	-56.08	28.14	61.4	52.7	50.8
8.53	-53.86	-54.64	-56.2	28.05	61.2	52.6	51.7
8.45	-52.22	-54.69	-56.17	27.96	61.1	52.6	49.4
8.52	-51.89	-54.8	-55.65	28.05	60.9	52.3	49.9
8.65	-52.25	-54.54	-55.99	27.9	60.9	52.4	53.1
8.49	-52.29	-56.41	-56.02	27.96	60.5	52.2	47.3
9.11	-51.37	-54.64	-55.9	27.99	60.3	52	51.1
8.56	-53.17	-54.64	-56.26	28.05	60	52	54.7
9.04	-51.19	-55.53	-56.05	28.02	59.9	52	48.9
8.44	-50.6	-55.68	-55.87	27.99	59.6	52	48.8
8.95	-53.64	-55.27	-56.05	28.02	59.6	51.8	50.7
8.53	-54.19	-54.38	-56.08	27.93	60.3	51.8	46.2
8.34	-53.17	-55.63	-56.05	28.17	60.7	51.7	50.3
8.54	-52.36	-54.64	-56.14	28.11	59.7	51.7	47.4
8.6	-53.72	-55.01	-55.93	28.27	59.2	51.7	49.8
8.58	-53.42	-54.95	-55.99	28.02	59.2	51.6	50

8.52	-52.99	-55.37	-55.81	28.27	59	51.5	50.3
8.47	-50.86	-55.06	-56.14	28.14	59.2	51.5	50.1
8.46	-53.5	-53.97	-56.05	28.33	59.8	51.4	49.3
8.61	-53.35	-55.06	-56.11	28.08	59.9	51.6	48.9
8.35	-51.81	-54.85	-55.84	28.27	59.4	51.4	49.4
8.62	-53.32	-55.06	-55.78	28.14	59	51.5	50.2
8.43	-53.5	-55.16	-56.05	28.3	58.9	51.3	49.7
8.48	-50.93	-54.69	-56.26	28.17	58.8	51.1	49.9
8.47	-53.53	-55.58	-56.08	28.39	58.7	51.2	51.3
8.61	-53.42	-54.95	-55.87	28.14	58.7	51.1	48.8
8.38	-53.39	-54.8	-55.78	28.33	58.3	51.1	50.8
8.58	-53.39	-54.75	-55.78	28.17	58.2	51	49.7
8.46	-53.68	-55.16	-55.68	28.39	58.1	50.9	48.2
8.6	-53.39	-54.85	-55.99	28.17	58.1	50.9	50.5
8.5	-51.74	-54.9	-55.87	28.21	58.2	50.6	49.7
8.63	-53.1	-54.69	-55.74	28.21	58.4	50.5	52.1
8.57	-53.53	-55.27	-55.81	28.24	58.4	50.4	47
8.59	-54.01	-55.27	-56.08	28.33	58.2	50.9	50.2
8.56	-53.72	-55.16	-56.08	28.14	58.2	50.6	52.7
8.7	-53.53	-55.68	-55.9	28.21	58.1	50.6	50.3
8.63	-53.9	-55.21	-55.74	28.21	57.7	50.5	49.5
8.67	-54.05	-54.64	-55.9	28.14	57.6	50.5	46.9
8.6	-53.28	-54.8	-55.99	28.21	57.5	50.4	50.3
8.56	-53.06	-55.06	-56.08	28.3	57.8	50.4	48.9
8.51	-53.17	-54.38	-55.47	28.17	57.9	50.4	50.5
8.56	-51.85	-54.95	-55.9	28.11	57.8	50.3	52.8
8.51	-52.88	-54.95	-56.08	28.14	58.2	50.1	47.3
8.63	-53.9	-54.8	-55.9	28.02	58.2	50.2	49.5
8.61	-53.86	-55.16	-55.9	28.05	58.4	50.2	48.1
8.58	-53.75	-54.38	-55.81	28.14	58.3	50.4	49.1
8.59	-53.02	-55.73	-55.99	28.11	57.6	49.9	49.2
8.66	-53.35	-54.75	-55.87	28.14	57.1	50.2	51.1
8.58	-53.21	-54.44	-55.71	28.17	57.5	50.1	49.4
8.65	-53.53	-55.11	-55.5	28.21	57.4	50.1	48.9
8.52	-53.72	-54.8	-55.71	28.21	57.7	50.3	52.2
8.64	-53.57	-55.27	-55.59	28.17	57.9	49.9	46.8
8.51	-52.91	-55.63	-56.08	28.3	57.3	49.9	51.1
8.63	-53.97	-54.95	-55.9	28.24	57.3	50	49.1
8.54	-53.53	-55.16	-56.2	28.27	57.1	49.8	48.4
8.62	-53.75	-55.47	-55.9	28.27	57	50	50.7
8.57	-53.28	-55.84	-56.11	28.21	56.3	49.7	49.1
8.6	-52.99	-54.8	-55.87	28.3	56.4	49.9	48.4
8.54	-54.12	-55.11	-55.93	28.24	56.2	49.7	49.2
8.75	-54.3	-55.11	-55.62	28.39	56.1	49.8	46.1
8.65	-53.86	-54.8	-55.99	28.33	55.9	49.7	50.5
8.72	-53.86	-55.11	-55.78	28.45	55.6	49.7	49.7
8.5	-50.97	-55.32	-56.05	28.3	55.7	49.4	49

8.7	-53.13	-55.01	-56.08	28.3	56	49.6	50.7
8.63	-53.83	-55.06	-55.99	28.21	56.7	49.3	51.2
8.68	-52.88	-55.68	-55.93	28.33	57	49.6	52.4
8.61	-53.79	-55.32	-55.93	28.21	57.6	49.6	48.7
8.7	-53.86	-54.75	-55.62	28.21	58.4	49.9	51.1
8.62	-54.41	-55.58	-55.9	28.11	59.2	49.8	51.6
8.76	-54.19	-55.58	-55.74	28.14	59.4	50.1	53.2
8.63	-53.79	-54.69	-55.9	28.14	60.1	49.9	51.7
8.29	-53.53	-54.95	-56.02	28.24	60.7	50.3	47.5
8.64	-53.57	-55.11	-56.05	28.11	61.4	50.3	47.9
8.62	-53.86	-55.01	-55.9	28.17	61.7	50.5	50.3
8.55	-53.35	-55.06	-56.36	28.02	62.1	50.5	49.7
8.48	-53.86	-55.06	-55.99	28.21	62.7	50.5	48.6
8.5	-52.91	-55.53	-55.99	27.99	63.3	50.5	49
8.56	-53.83	-55.32	-55.81	28.08	63.7	50.9	49.4
8.64	-53.9	-55.63	-55.87	27.87	64.4	51	50.3
7.83	-54.01	-55.32	-56.17	28.02	64.7	51	49.8
8.61	-52.66	-54.49	-55.87	27.75	65.3	51.3	50.3
8.14	-53.28	-55.27	-55.99	27.93	65.9	51.1	48.9
8.63	-54.38	-54.9	-55.84	27.75	66.4	51.5	52.8
8.63	-53.06	-55.16	-55.99	27.96	66.5	51.5	51.8
8.56	-53.72	-55.06	-55.87	27.69	66.8	51.6	50.9
8.53	-53.06	-54.8	-56.02	27.9	67.9	51.7	49.2
8.63	-53.5	-55.21	-55.9	27.69	68	51.8	54.9
8.51	-53.97	-54.75	-55.74	27.84	68.6	51.9	48.3
8.57	-52.33	-55.01	-55.68	27.5	69	51.9	50.7
8.58	-53.42	-55.06	-55.9	27.84	69.7	52.1	49.5
8.46	-53.1	-55.68	-55.87	27.56	68.6	52	49.7
8.56	-54.16	-54.8	-55.78	27.72	69	52.2	49.2
8.5	-52.77	-56.15	-55.74	27.56	69.6	52.3	48.6
8.44	-53.97	-54.59	-55.87	27.81	68.8	52.4	49.6
8.64	-53.72	-55.16	-55.74	27.72	68.5	52.5	49.9
8.42	-52.51	-55.01	-55.87	27.75	69.2	52.4	49.9
8.55	-53.39	-55.27	-56.05	27.47	69.7	52.4	50.5
8.57	-53.64	-54.75	-56.05	27.72	70.3	52.3	49.2
8.55	-52.44	-54.38	-56.05	27.56	69.7	52.7	48
8.47	-52.51	-54.75	-55.9	27.87	69	52.7	49.7
8.61	-54.01	-54.69	-56.02	27.66	69.6	52.8	48.4
8.56	-52.99	-54.95	-55.71	27.78	69.1	52.7	51.1
8.54	-52.07	-54.8	-55.93	27.5	68.8	52.7	51.3
8.55	-53.57	-55.16	-55.93	27.81	68.4	52.8	45.2
8.65	-53.53	-54.85	-55.93	27.53	69.6	52.8	49.5
8.58	-53.28	-54.59	-55.87	27.72	70.1	53.4	48.1
8.65	-53.35	-55.47	-55.87	27.44	69.4	53.4	47.4
8.5	-53.13	-55.21	-55.71	27.75	69.9	53.3	49.6
8.58	-53.64	-54.69	-56.02	27.47	70	53.3	44.6
8.52	-53.61	-54.54	-55.68	27.75	69.8	53.3	51

8.53	-52.33	-53.81	-55.93	27.5	69.8	53.4	50.5
8.5	-53.35	-54.9	-55.71	27.75	70.2	53.4	48
8.51	-52.55	-54.9	-56.05	27.38	70.9	53.5	51.6
8.55	-53.9	-55.27	-55.62	27.69	71	53.7	49.3
8.58	-53.83	-54.8	-55.93	27.47	70.7	53.6	49.6
8.59	-53.94	-55.21	-55.84	27.72	70.1	53.4	50.5
8.61	-53.97	-54.49	-55.84	27.47	70.5	53.6	48.2
8.45	-53.24	-54.59	-56.11	27.72	69.7	53.5	50.4
8.55	-53.28	-55.27	-55.65	27.53	69.2	53.7	50.5
8.54	-52.69	-54.23	-55.81	27.72	69.6	53.4	51.1
8.64	-53.68	-54.85	-55.78	27.63	69.3	53.6	51.6
8.52	-53.68	-53.81	-55.74	27.75	69.4	53.6	47.8
8.55	-53.83	-54.59	-55.99	27.63	69.6	53.7	49.5
8.61	-54.05	-54.75	-55.84	27.78	68.9	53.8	48.1
8.6	-53.39	-54.69	-55.99	27.63	68.7	53.8	51.8
8.46	-52.33	-54.95	-55.78	27.75	68.5	53.6	48.3
8.66	-53.35	-54.64	-55.87	27.63	68.4	53.7	45.9
8.5	-53.68	-54.54	-55.74	27.66	68.1	53.4	49.2
8.66	-54.01	-55.37	-55.93	27.66	67.9	53.7	47.3
8.55	-53.21	-54.9	-55.74	27.69	67.6	53.7	46.6
8.61	-53.42	-54.38	-55.65	27.63	67.4	53.4	52.5
8.55	-52.84	-55.01	-55.59	27.72	67.1	53.3	54.5
8.83	-53.17	-53.09	-55.9	27.63	67	53.8	47
8.53	-51.74	-55.21	-55.62	27.78	67	53.6	49.2
8.44	-53.86	-54.75	-55.74	27.87	66.7	53.6	50.5
8.64	-54.16	-54.8	-55.71	27.75	66.2	53.3	51
8.58	-53.1	-54.28	-56.14	28.05	65.3	53.2	49.5
8.65	-52.91	-54.59	-55.9	27.84	65.5	53.3	51
8.59	-53.61	-55.58	-55.93	28.08	64.7	53.2	49.5
8.63	-54.23	-54.9	-55.68	27.9	64.3	53.2	50.3
8.63	-53.1	-55.21	-55.9	28.05	64.3	53.1	50.7
8.51	-53.17	-54.44	-55.84	27.81	64	53.2	48.2
8.54	-53.21	-54.64	-55.99	28.14	63.3	52.8	51.2
8.59	-53.64	-54.95	-55.71	27.93	63.3	52.7	48.8
8.57	-53.13	-55.53	-55.59	28.08	62.9	52.7	51.1
8.6	-53.21	-54.95	-55.87	28.02	62.5	52.7	48
8.62	-54.05	-55.01	-55.62	28.21	62.2	52.4	50.4
8.56	-53.97	-54.49	-55.87	28.02	61.7	52.5	47.5
8.62	-53.83	-54.64	-55.62	28.24	61.7	52.5	49.5
8.64	-54.23	-54.75	-56.05	28.08	61.4	52.3	50
8.63	-53.68	-55.94	-55.84	28.24	61.3	52.3	49.7
8.64	-53.32	-55.32	-55.84	28.05	61	52.2	48.7
8.25	-51.23	-54.75	-56.11	28.24	61.3	52.2	48
8.65	-54.16	-55.01	-55.71	28.05	60.9	52.1	51.8
7.91	-52.77	-55.58	-55.78	28.27	60.5	51.9	49.5
8.61	-53.79	-54.95	-55.9	28.05	60	51.6	51.2
7.92	-53.97	-53.92	-55.84	28.3	59.9	51.7	49.2

8.53	-52.91	-54.49	-55.81	28.08	60	51.7	49.2
8.64	-53.57	-55.16	-55.99	28.27	59.8	51.7	52.8
8.61	-53.72	-54.9	-55.44	28.11	59.5	51.6	47.1
8.53	-52.18	-54.8	-55.99	28.33	59.7	51.5	49.5
8.6	-53.35	-55.32	-55.93	28.08	59.4	51.5	51.7
8.58	-53.1	-55.27	-56.02	28.42	59.3	51.5	47.3
8.65	-53.79	-54.9	-55.74	28.08	59.4	51.3	50.9
8.29	-52.36	-54.28	-55.93	28.27	59.4	51.4	52.2
8.56	-54.27	-54.64	-55.65	28.17	59.2	51.2	44
8.58	-53.83	-54.54	-56.02	28.42	59.3	51.1	48
8.59	-53.64	-55.06	-55.78	28.17	59.4	51.3	49.1
8.28	-51.59	-54.9	-55.78	28.14	59.2	51.3	47.6
8.53	-53.94	-54.75	-55.84	28.11	59.2	50.9	46.2
8.97	-54.01	-54.75	-55.71	28.14	59.2	51.2	51.4
8.58	-53.53	-55.27	-56.05	28.14	59.4	50.9	51.2
9.06	-53.5	-54.95	-56.02	28.05	59.3	51.1	48.8
8.58	-53.94	-54.59	-55.81	28.14	58.8	51.1	50.5
8.85	-52.4	-54.07	-55.81	28.21	59	51.2	49
8.57	-52.4	-54.44	-55.9	28.14	58.7	51.1	48.3
8.77	-53.35	-54.95	-55.59	28.08	59	51	50.8
8.52	-53.42	-54.69	-55.84	28.17	59	50.9	48.4
8.67	-53.75	-55.27	-55.78	28.08	58.9	50.8	50.5
8.55	-52.95	-54.9	-55.9	28.11	59	50.5	49.3
8.56	-51.26	-54.44	-55.99	28.21	59.1	50.8	47.9
8.64	-53.28	-54.95	-55.78	28.14	59.3	50.5	50.4
8.6	-53.86	-55.16	-55.87	28.14	59.2	50.8	49.9
8.36	-53.17	-54.44	-55.84	28.39	59.1	50.6	49.4
8.64	-53.32	-54.8	-55.84	28.14	59.3	50.9	49.4
8.53	-53.02	-54.49	-55.44	28.27	59.1	50.5	50.4
8.6	-54.16	-54.64	-55.87	28.14	58.9	50.6	49.9
8.52	-52.25	-53.6	-55.87	28.02	59.4	50.5	48.8
8.55	-51.92	-55.68	-55.65	27.99	59.1	50.5	49.2
8.64	-54.27	-55.37	-55.62	28.17	58.5	50.8	50.5
8.63	-53.68	-55.11	-55.93	28.11	58.5	50.5	47
8.48	-53.68	-54.38	-55.84	28.24	58.3	50.3	50.7
8.54	-53.21	-54.28	-55.87	28.21	58.3	50.5	49.2
8.5	-53.64	-55.06	-55.44	28.3	58.1	50.5	50
8.58	-53.39	-54.85	-55.87	28.21	57.8	50.4	50.1
8.61	-53.1	-55.06	-55.78	28.33	57.9	50.3	52.8
8.64	-53.75	-55.01	-55.68	28.17	57.7	50.1	48.4
8.41	-54.23	-54.75	-56.02	28.45	57.3	50.4	49.3
8.57	-53.9	-54.12	-55.74	28.3	57.1	50.2	49.9
8.98	-51.92	-55.06	-55.59	28.14	57.1	50.2	49.8
8.53	-51.52	-54.59	-55.78	28.24	57	50.1	50.7
8.85	-50.97	-54.95	-55.93	28.21	56.8	50	52.4
8.59	-53.02	-54.64	-55.71	28.24	56.7	50	50.9
8.41	-51.23	-54.49	-55.87	28.21	56.7	50	52.2

8.62	-53.13	-54.9	-55.59	28.24	56.4	49.8	47.7
8.93	-53.17	-55.06	-55.68	28.21	57.1	49.9	48.1
8.54	-53.13	-55.47	-55.71	28.17	57.1	49.8	49.1
8.73	-53.32	-54.8	-55.59	28.21	57.8	49.9	52.7
8.65	-54.01	-54.54	-55.59	28.17	58.1	49.9	46.9
8.73	-53.42	-54.75	-55.56	28.05	58.7	50.1	51.1
8.51	-51.48	-54.54	-55.53	28.17	59.1	49.8	50.1
8.61	-52.88	-55.27	-55.84	28.11	59.3	50.2	49.8
8.53	-52.36	-54.38	-55.74	28.05	60	50.2	48.9
8.57	-53.32	-55.37	-55.71	27.96	60.3	50.4	48.9
8.6	-52.88	-54.69	-55.65	28.05	60.6	50.4	49.5
8.64	-53.94	-55.47	-55.74	28.02	61.4	50.5	50.4
8.57	-52.4	-54.75	-55.74	28.02	62.1	50.4	50.4
8.58	-54.12	-54.9	-55.53	27.99	62.5	50.8	49.5
8.47	-52.44	-54.59	-55.87	28.02	62.9	50.9	49.1
8.59	-52.66	-54.64	-55.93	27.93	63.8	51	51.6
8.56	-52.88	-55.27	-55.78	28.05	64.5	50.9	49.4
8.67	-53.02	-55.27	-55.65	27.9	65	51.2	49.9
8.63	-53.5	-55.47	-55.68	27.96	65.8	51.2	47.6
8.63	-53.64	-55.06	-55.71	27.81	66.6	51.3	51.7
8.52	-53.1	-55.06	-55.84	27.9	67.5	51.6	50.7
8.56	-53.17	-54.75	-55.74	27.72	67.9	51.6	51.1
8.22	-53.5	-55.16	-55.74	27.78	68.3	51.6	48.2
8.56	-52.91	-54.49	-55.5	27.63	68.8	51.8	48.1
8.36	-53.17	-55.16	-55.5	27.81	69.4	51.9	53.2
8.56	-53.06	-54.59	-55.59	27.53	70.4	52.1	52.4
8.73	-52.14	-54.95	-55.56	27.47	70.9	52.2	48
8.65	-53.86	-54.75	-55.81	27.32	72	52.3	48.4
8.69	-53.72	-54.49	-55.78	27.38	71.5	52.7	48.4
8.55	-53.17	-54.28	-55.9	27.35	72.4	52.7	48.1
8.71	-53.75	-54.28	-55.81	27.32	74	54.2	52.5
8.58	-53.06	-55.27	-55.65	27.26	74.2	53.3	51.9
8.62	-53.1	-55.27	-55.65	27.32	74.3	53.5	49
8.53	-53.39	-55.16	-55.71	27.17	75	53.5	52.7
8.52	-52.25	-55.63	-55.68	27.2	74.5	53.8	47.7
8.5	-53.24	-54.95	-55.56	27.29	74.5	53.8	50.9
8.48	-50.75	-54.75	-55.68	27.23	74.8	53.8	51.4
8.43	-52.62	-55.21	-55.74	27.35	75.6	54	50.3
8.57	-51.45	-55.21	-55.47	27.08	75.5	54.1	51.4
8.59	-53.21	-54.69	-55.59	27.35	75.8	54.3	48.3
8.66	-52.77	-55.21	-55.68	27.08	76.6	54.4	51.4
8.47	-52.55	-55.73	-55.53	27.2	76.7	54.5	50.9
8.48	-53.02	-55.21	-55.65	27.08	76.3	54.7	48.6
8.59	-53.28	-54.54	-55.53	27.29	76.5	54.6	52.7
8.53	-50.68	-54.85	-55.68	27.11	76.6	54.8	47.6
8.63	-53.64	-54.9	-55.32	27.32	76.6	54.8	49.5
8.58	-53.57	-54.02	-55.5	27.11	76.3	55	50.8

8.59	-53.28	-54.69	-55.53	27.23	76.1	54.9	45.6
8.5	-50.46	-54.85	-55.71	27.08	75.8	55	49.6
8.59	-53.39	-54.59	-55.65	27.26	75.9	55.1	49.4
8.63	-53.79	-54.9	-55.62	27.11	75.7	55	50.7
8.27	-50.82	-54.28	-55.5	27.01	75.6	55.1	49.1
8.65	-52.91	-54.33	-55.65	27.05	76.5	56.7	49
8.65	-53.32	-54.8	-55.62	27.08	75.8	56.2	50.5
8.51	-51.04	-55.01	-55.53	27.01	75.5	56	48.9
8.6	-52.73	-54.69	-55.74	27.11	75.8	56	49.2
8.61	-52.95	-54.69	-55.53	27.11	75.3	56	47.3
8.73	-53.39	-54.44	-55.68	27.08	75.4	56	49.9
8.63	-53.1	-54.9	-55.38	27.08	75.2	55.8	51.6
8.67	-53.28	-55.01	-55.68	27.14	74.7	55.9	51.6
8.59	-53.5	-54.49	-55.62	27.11	74.9	55.8	49.8
8.53	-51.89	-54.75	-55.59	27.14	74.7	56	51.7
8.63	-54.05	-54.95	-55.5	27.14	74.5	55.9	50.3
8.53	-53.13	-54.95	-55.59	27.23	74.1	56	49.3
8.62	-53.68	-54.44	-55.56	27.14	74	55.8	48.4
8.55	-52.03	-54.12	-55.65	27.08	73.7	55.9	52.6
8.48	-53.1	-54.59	-55.62	27.32	73.5	55.9	53.5
8.63	-53.17	-54.64	-55.47	27.23	73.2	55.9	48
8.52	-53.61	-54.07	-55.78	27.26	73.2	55.7	54.4
8.56	-52.47	-54.28	-55.65	27.14	73	55.8	50.3
8.53	-52.47	-55.21	-55.62	27.41	72.8	55.7	48.3
8.53	-52.51	-54.49	-55.41	27.32	72.4	55.7	50.5
8.61	-53.64	-54.38	-55.74	27.41	72	55.7	49.6
8.66	-53.13	-54.69	-55.56	27.26	71.6	55.7	52.2
8.59	-53.1	-54.69	-55.62	27.44	71.5	55.4	48
8.51	-52.88	-54.54	-55.74	27.29	71.2	55.4	48.9
8.53	-52.88	-54.23	-55.59	27.5	71.1	55.5	49.5
8.65	-53.39	-54.75	-55.35	27.38	70.8	55.5	51.3
8.6	-52.51	-54.44	-55.59	27.53	70.6	55.5	47.2
8.55	-53.39	-54.54	-55.56	27.38	70.3	55.4	49.6
8.48	-53.35	-54.59	-55.47	27.63	70.1	55.2	48.9
8.51	-53.35	-54.59	-55.74	27.44	69.8	55.2	49.4
7.97	-53.17	-55.16	-55.62	27.63	69.8	55.2	47.4
8.52	-51.48	-54.44	-55.47	27.35	69.9	55	48.4
8.69	-51.41	-53.92	-55.5	27.32	69.8	55	47.5
8.59	-52.91	-54.95	-55.32	27.41	69.3	54.9	44.6
9	-52.84	-56.2	-55.47	27.35	69.2	55	53.1
8.54	-52.4	-54.49	-55.71	27.41	69	54.9	51.8
8.93	-52.99	-54.75	-55.53	27.44	69.1	55	50.5
8.52	-51.45	-54.75	-55.44	27.38	69.1	54.8	51.2
8.65	-53.02	-54.28	-55.59	27.44	69	54.8	48.9
8.5	-52	-54.8	-55.68	27.47	68.7	54.7	49
8.69	-53.75	-55.01	-55.71	27.53	68.6	54.9	49.4
8.66	-53.13	-54.95	-55.5	27.44	68.4	54.8	49.2

8.6	-53.24	-54.95	-55.5	27.5	68.5	54.7	52.1
8.63	-53.9	-55.01	-55.56	27.53	68.4	54.5	49.6
8.52	-53.97	-55.53	-55.56	27.5	68.2	54.6	49.6
8.66	-53.06	-55.01	-55.68	27.41	68.2	54.5	49.5
8.62	-52.95	-54.75	-55.44	27.53	68.3	54.6	48.7
8.51	-50.82	-54.85	-55.53	27.69	68.2	54.3	49.5
8.65	-53.32	-54.12	-55.78	27.5	68.3	54.5	46.2
8.41	-53.17	-54.38	-55.56	27.66	68.1	54.4	51
8.59	-53.21	-54.75	-55.26	27.47	67.9	54.5	52.8
8.56	-53.64	-55.32	-55.62	27.69	68.2	54.3	49.8
8.65	-53.83	-54.23	-55.5	27.41	67.9	54.3	49.2
8.56	-52.84	-54.9	-55.5	27.72	67.7	54.2	48.7
8.54	-51.23	-54.49	-55.56	27.38	67.5	54.2	50.8
8.5	-53.1	-54.38	-55.59	27.72	67.2	54.2	50.1
8.62	-53.21	-55.11	-55.59	27.47	67.1	54.2	50.5
8.61	-52.88	-54.44	-55.53	27.75	66.9	54	49.9
8.57	-53.02	-53.97	-55.81	27.53	66.8	54.2	51.3
8.51	-53.39	-55.37	-55.41	27.69	66.6	54	49.6
8.65	-53.53	-55.01	-55.56	27.53	66.7	54.2	51.5
8.48	-52.69	-53.81	-55.68	27.78	66.8	53.9	52.4
8.64	-52.99	-54.69	-55.38	27.56	66.6	54	50.8
8.51	-51.04	-54.85	-55.41	27.72	66.6	53.8	50.7
8.52	-51.78	-54.54	-55.53	27.5	66.3	53.9	51.5
8.56	-52.44	-54.95	-55.41	27.72	66.5	53.8	45.1
8.6	-52.69	-54.69	-55.56	27.44	66.8	53.8	48.2
8.53	-52.47	-54.8	-55.59	27.75	66.6	53.8	49.1
8.63	-53.42	-54.8	-55.59	27.5	66.3	53.8	51.2
8.52	-51.48	-54.9	-55.59	27.78	66.1	53.8	49.1
8.64	-53.97	-55.27	-55.29	27.63	65.8	53.7	51.7
8.59	-53.1	-54.38	-55.38	27.78	65.8	53.5	51.6
8.53	-53.39	-54.07	-55.53	27.56	65.6	53.4	51.8
8.62	-53.72	-54.38	-55.32	27.78	65.8	53.7	51.8
8.55	-51.34	-54.85	-55.26	27.63	65.8	53.8	49.3
8.53	-52.47	-54.44	-55.53	27.81	65.7	53.6	48.9
8.53	-53.61	-53.81	-55.62	27.56	65.5	53.4	48.9
8.5	-53.21	-54.59	-55.35	27.81	65.4	53.4	48
8.61	-53.28	-55.11	-55.59	27.69	65.1	53.6	50.3
8.53	-52.47	-53.71	-55.59	27.99	64.9	53.5	50.1
8.61	-53.24	-54.33	-55.35	27.63	64.8	53.5	48.7
8.55	-53.13	-55.53	-55.38	27.87	65	53.2	48
8.52	-51.85	-54.54	-55.44	27.53	64.8	53.5	48.7
7.98	-53.17	-54.28	-55.53	27.78	64.7	53.3	50
8.62	-52.8	-54.95	-55.71	27.66	64.7	53.4	49.5
8.41	-52.88	-54.75	-55.56	27.78	64.7	53.2	50.5
8.62	-52.91	-54.8	-55.62	27.66	64.7	53.3	49.8
8.44	-52.14	-54.49	-55.5	27.84	64.7	53.5	49.6
8.53	-52.55	-54.49	-55.5	27.66	64.6	53.3	50.8

8.17	-52.66	-54.23	-55.38	27.78	64.7	53.1	46.6
8.61	-53.42	-53.97	-55.53	27.56	64.4	53.2	51.7
8.32	-53.35	-54.69	-55.59	27.75	64.7	52.8	50.4
8.53	-53.13	-54.54	-55.5	27.56	64.6	53.2	48.4
8.24	-52.99	-54.44	-55.68	27.75	64.6	53.1	49.8
8.5	-53.53	-54.59	-55.44	27.5	64.7	53.2	49
8.47	-53.83	-54.59	-55.5	27.72	64.7	53.1	51.2
8.55	-54.19	-54.23	-55.68	27.53	64.5	53.1	50.2
7.87	-53.57	-55.06	-55.5	27.72	64.4	52.9	50
8.57	-54.49	-54.02	-55.56	27.44	64.7	53.1	48.8
7.88	-54.93	-54.38	-55.59	27.56	64.7	53.2	50.7
8.55	-55.18	-54.75	-55.41	27.5	64.7	53.1	47.2
8.56	-55.29	-55.01	-55.32	27.75	64.7	53.3	51.3
8.59	-54.71	-54.64	-55.26	27.44	64.9	53.1	51.4
8.47	-55.84	-54.54	-55.35	27.69	64.8	53.2	48.4
8.53	-55.33	-54.49	-55.59	27.47	64.9	53.3	48.4
8.63	-55.66	-54.85	-55.59	27.75	65	53.2	49.5
8.62	-56.36	-54.44	-55.53	27.47	65.3	53.2	49
8.5	-55.07	-54.64	-55.65	27.72	65.4	53.3	47.9
8.51	-53.17	-54.95	-55.41	27.47	65.4	53.4	49.2
8.5	-56.87	-54.44	-55.71	27.69	65.8	53.3	50.5
8.64	-57.93	-54.23	-55.65	27.44	65.8	53.4	51.6
8.4	-57.86	-55.11	-55.29	27.63	65.8	53.4	48.6
8.52	-58.52	-54.07	-55.41	27.5	65.8	53.3	47.7
8.65	-59.32	-54.54	-55.47	27.38	66.2	53.4	49.7
8.6	-59.43	-55.11	-55.38	27.38	66.2	53.5	51.9
8.5	-57.67	-55.06	-55.59	27.38	66.3	53.5	51.8
8.65	-60.82	-54.69	-55.62	27.38	66.4	53.5	47.8
8.61	-60.27	-54.38	-55.35	27.29	66.7	53.5	49.8
8.63	-60.97	-54.38	-55.26	27.41	66.8	53.7	50
8.63	-61.67	-54.95	-55.47	27.35	66.6	53.6	48.2
8.65	-61.37	-53.97	-55.53	27.41	66.8	53.8	50
8.63	-62.51	-54.49	-55.41	27.38	66.8	53.5	53.2
8.73	-62.33	-54.59	-55.68	27.41	66.8	53.7	49.4
8.64	-61.92	-55.11	-55.2	27.32	66.8	53.6	50.5
9.14	-62.47	-54.33	-55.47	27.26	67.2	53.6	50.2
8.62	-63.5	-54.23	-55.62	27.29	67	53.8	49.5
7.95	-63.17	-54.75	-55.5	27.53	67.5	53.6	46.8
8.63	-63.61	-54.64	-55.26	27.32	67.4	53.8	51.3
8.53	-62.58	-53.97	-55.62	27.47	67.7	53.8	49.8
8.54	-63.46	-54.28	-55.29	27.29	67.6	53.8	51.1
8.57	-64.01	-53.92	-55.53	27.41	67.9	53.9	49.6
8.54	-63.46	-55.16	-55.38	27.32	67.5	53.8	48.2
8.51	-64.56	-54.75	-55.5	27.44	67.9	53.9	47.9
8.63	-64.52	-54.64	-55.44	27.17	68.1	54	51.8
8.45	-62.73	-55.01	-55.47	27.41	68.2	54	49.5
8.61	-65.07	-54.69	-55.47	27.17	68.2	54	46.8

8.59	-65.18	-54.54	-55.1	27.41	68	54	49.5
8.69	-65.22	-53.66	-55.35	27.26	67.9	53.9	47.4
8.65	-64.89	-54.75	-55.5	27.2	68.2	53.9	51.6
8.64	-64.93	-55.01	-55.35	27.17	68.2	54	46.8
8.55	-64.01	-54.95	-55.38	27.17	68.5	54	49.8
8.63	-65.18	-54.64	-55.32	27.17	68.3	54.4	50.2
8.5	-60.82	-55.16	-55.26	27.2	68	54.2	49.6
8.65	-64.85	-54.64	-55.2	27.26	68.4	54.2	49.1
8.59	-64.71	-54.44	-55.38	27.14	68.5	54.2	47.1
9.12	-63.42	-54.54	-55.32	27.17	68.7	54.3	49.8
8.62	-64.85	-55.11	-55.38	27.17	68.7	54.2	49.5
7.85	-65.48	-54.44	-55.47	27.32	68.7	54.3	50.5
8.63	-65.66	-54.33	-55.41	27.14	68.7	54.1	48.8
8.53	-65.84	-54.69	-55.38	27.35	68.6	54.2	49.6
8.63	-65.77	-54.64	-55.56	27.08	68.7	54.3	50.5
8.38	-64.27	-54.8	-55.01	27.35	68.4	54.3	47.8
8.54	-65.4	-54.54	-55.29	27.2	68.5	54.4	49.6
8.53	-63.61	-54.69	-55.1	27.14	68.4	54.4	51.5
8.57	-66.1	-53.81	-55.56	27.14	68.5	54.4	48.4
8.65	-65.66	-54.28	-55.32	27.14	68.4	54.5	47.4
8.79	-64.41	-54.44	-55.56	27.08	68.6	54.4	45.1
8.58	-65.22	-54.07	-55.35	27.17	68.3	54.2	48.9
8.35	-64.41	-55.06	-55.1	27.35	68.3	54.5	50
8.61	-65.66	-53.66	-55.35	27.17	68.1	54.3	51
8.61	-66.14	-53.92	-55.32	27.17	67.9	54.3	49.3
8.65	-65.99	-54.12	-55.26	27.05	68	54.2	49.8
8.44	-64.89	-54.38	-55.1	27.29	67.9	54.3	48.7
8.62	-66.5	-54.49	-55.32	27.17	67.9	54.4	49.5
8.54	-64.78	-54.12	-55.26	27.11	67.8	54.2	53
8.57	-65.95	-54.85	-55.2	27.17	67.8	54.2	45.7
8.59	-66.14	-54.07	-55.13	27.11	67.6	54.5	49.4
8.54	-64.6	-54.54	-55.38	27.11	67.8	54.4	49.1
8.55	-66.25	-53.71	-55.38	27.14	67.2	54.1	48.1
8.8	-65.95	-55.01	-55.13	27.2	67.7	54.3	50.3
8.55	-65.11	-54.75	-55.13	27.14	67.4	54.4	50.3
8.44	-66.03	-54.69	-55.13	27.26	67.6	54.3	49.6
8.64	-66.25	-53.97	-55.29	27.14	67.2	54.4	51.2
8.62	-66.76	-54.54	-55.44	27.35	67.4	54.1	51.6
8.54	-65.84	-53.86	-55.32	27.11	67.1	54.3	48.2
8.45	-66.43	-54.54	-55.2	27.23	66.9	54.2	50.4
8.67	-65.99	-53.97	-55.26	27.11	66.9	54.3	48.8
8.62	-66.36	-54.69	-55.26	27.14	67	54.1	51.3
8.64	-66.32	-54.38	-55.32	27.17	67	54.2	51.1
8.61	-66.03	-53.92	-55.41	27.17	66.8	54.1	50
8.76	-66.32	-54.44	-55.13	27.11	66.8	54.1	49.9
8.53	-65.44	-54.69	-54.86	27.14	67	54	50
8.44	-66.06	-54.44	-55.2	26.98	67	54.2	51.3

8.51	-67.2	-54.12	-55.07	27.08	66.9	54.1	50.4
8.46	-66.14	-54.44	-55.13	27.32	66.8	54.2	50
8.59	-65.22	-53.76	-55.23	27.14	66.8	54.1	50.9
8.61	-66.68	-55.11	-54.92	27.29	66.8	54	50.5
8.56	-66.17	-54.44	-55.23	27.11	66.8	54.1	49
8.44	-63.13	-54.59	-55.01	27.29	66.6	53.9	51.6
8.61	-66.36	-54.33	-55.2	27.2	66.7	54.1	50.8
8.54	-64.01	-53.76	-55.1	27.08	66.8	54	51.5
8.64	-66.43	-53.92	-55.13	27.05	66.8	54.1	50.5
8.63	-66.32	-53.66	-55.1	27.11	66.8	53.9	50.5
8.38	-66.43	-54.64	-55.04	27.26	66.8	53.9	49.6
8.62	-66.54	-54.69	-55.07	27.14	66.8	53.8	49.3
8.56	-66.32	-54.33	-54.95	27.2	66.8	53.8	49.8
8.57	-66.36	-54.64	-55.01	27.08	66.6	53.9	50.5
8.58	-65.51	-54.33	-54.98	27.05	66.8	54	49
8.87	-66.32	-54.54	-55.23	27.11	66.8	53.9	51.8
8.62	-66.61	-54.64	-55.23	27.08	66.7	53.9	50.3
8.6	-66.06	-54.12	-55.2	27.26	66.6	53.8	49.5
8.65	-65.99	-54.49	-55.07	27.05	66.7	54	49.6
8.47	-65.22	-53.6	-55.26	27.08	66.6	53.8	49.9
8.67	-66.28	-53.92	-55.07	26.95	66.6	53.8	49.2
8.56	-66.5	-53.92	-54.77	26.95	66.5	54	49.4
8.78	-65.44	-53.5	-55.1	27.05	66.6	53.8	49.5
8.51	-66.65	-53.66	-55.13	26.95	66.7	53.9	49.8
8.57	-65.18	-54.23	-54.98	27.11	66.7	53.8	49.8
8.65	-66.36	-53.76	-54.92	26.98	66.5	53.8	49.1
8.65	-66.5	-54.54	-55.1	26.95	66.8	53.8	46.7
8.69	-65.7	-54.02	-55.2	27.01	66.8	53.8	49.3
8.63	-66.9	-53.86	-55.01	27.01	66.8	53.8	50.5
8.46	-65.33	-53.76	-55.13	27.05	66.8	53.8	49.6
8.52	-65.15	-53.76	-55.13	26.95	66.6	53.8	49.4
8.53	-66.14	-54.28	-54.89	27.08	66.7	53.8	50.9
8.55	-65.99	-54.69	-55.07	26.83	66.9	53.8	51.1
8.53	-67.16	-54.28	-54.77	26.8	67	53.6	47.7
9.09	-65.73	-52.98	-54.95	26.83	66.8	53.8	50.7
8.59	-66.39	-53.86	-55.04	26.92	67	53.8	50.1
8.62	-66.36	-54.59	-55.01	27.05	66.9	53.8	50.1
8.61	-65.77	-54.38	-55.04	26.83	67	54	50.5
8.66	-66.61	-53.86	-55.1	26.83	66.3	53.8	51.3
8.73	-65.66	-53.86	-54.89	26.89	67	53.8	47.6
8.57	-66.28	-54.12	-54.86	26.8	67	53.8	50.1
8.57	-65.33	-54.33	-54.74	27.01	66.8	53.7	50.3
8.5	-63.75	-53.45	-55.07	26.77	66.8	53.7	50
8.42	-64.96	-53.97	-54.95	26.98	67	53.8	56.3
8.62	-65.18	-53.97	-54.86	26.83	67	53.8	50.1
8.63	-65.95	-54.02	-55.07	26.83	67	53.9	45.8
8.41	-66.25	-53.66	-55.1	26.74	67.1	53.8	50.3

8.64	-67.01	-53.5	-55.1	26.77	67	53.8	49.3
8.51	-65.48	-53.97	-54.71	27.01	67.1	53.8	50.5
8.53	-66.61	-54.28	-54.86	26.71	67	53.8	46.6
8.57	-65.62	-53.97	-55.04	26.83	67.2	53.8	48.4
8.66	-66.25	-54.33	-54.95	26.8	67.2	53.9	48.6
8.52	-64.89	-53.86	-54.95	26.74	67	53.7	49.5
8.62	-66.25	-53.71	-54.83	26.92	66.9	54	49.5
8.64	-66.25	-54.07	-54.8	26.77	66.5	53.8	49.5
8.56	-64.45	-53.5	-54.86	26.83	66.2	53.8	50.4
8.69	-64.45	-53.92	-54.89	26.89	66.1	53.8	51.2
8.61	-65.99	-53.97	-54.95	26.92	65.9	53.8	50.7
8.57	-66.39	-53.92	-54.86	27.05	66	53.7	50.2
8.55	-65.73	-54.07	-54.89	26.92	66	53.8	53.6
8.41	-64.93	-53.6	-54.86	26.98	66	53.6	47.2
8.58	-64.74	-54.07	-54.8	26.83	65.8	53.4	46.6
8.55	-65.4	-54.28	-55.01	26.89	65.8	53.6	51.6
8.2	-64.67	-53.76	-54.77	26.98	65.9	53.7	49.9
8.66	-66.61	-53.76	-54.77	26.95	66	53.7	49.9
8.57	-66.06	-54.54	-54.86	26.92	65.9	53.5	49.7
8.61	-66.61	-54.02	-55.01	26.89	65.8	53.8	52.4
8.65	-66.47	-54.38	-54.77	26.89	66	53.8	51
8.48	-64.41	-53.71	-54.8	26.98	66.2	53.8	49.9
8.55	-64.05	-54.59	-54.98	26.77	66.2	53.7	49.2
8.65	-65.88	-53.55	-54.89	26.74	66.4	53.7	51
8.34	-66.76	-53.55	-54.89	26.74	66.7	53.8	53.4
8.57	-66.03	-53.92	-54.89	26.71	66.5	53.8	50.3
8.56	-65.22	-53.71	-54.8	27.01	66.7	53.7	48.4
8.61	-66.65	-54.12	-54.68	26.89	66.7	53.8	50
8.43	-65.77	-53.6	-54.77	26.98	66.7	53.8	49.9
8.65	-66.03	-54.02	-54.74	26.71	66.8	53.8	50.7
8.54	-65.73	-54.02	-54.83	26.77	67.2	53.8	49.7
8.51	-64.85	-53.71	-54.86	26.92	67.7	53.9	50.9
8.62	-66.5	-54.12	-54.65	26.71	67.9	53.9	50.9
8.52	-66.68	-53.81	-54.58	26.68	67.9	54	52.1
8.66	-66.21	-53.55	-54.83	26.62	68.4	54.1	49.4
8.58	-64.71	-53.81	-54.77	26.62	69.3	54.1	49.8
8.01	-63.83	-53.66	-54.98	26.83	69.3	54.2	50.9
8.66	-66.21	-53.97	-54.86	26.68	68.9	54.1	49.5
8.48	-66.9	-54.38	-54.8	26.83	69.2	54.3	50.4
8.6	-65.48	-53.66	-54.98	26.68	69.8	54.4	49.4
8.63	-66.43	-53.92	-54.77	26.65	70.1	54.5	51.2
8.87	-66.21	-54.28	-54.86	26.59	70.7	54.7	49.1
8.56	-66.61	-53.76	-54.98	26.59	70.6	54.5	49.9
8.55	-65.26	-54.85	-54.83	26.74	70.7	54.7	48.4
8.61	-66.5	-54.23	-54.8	26.56	70.6	54.7	51.2
8.65	-66.43	-54.12	-54.62	26.62	70.5	54.7	51.5
8.74	-66.76	-53.4	-54.86	26.53	70.5	54.8	48.9

8.6	-65.99	-54.33	-54.86	26.59	70.1	54.9	51
8.65	-66.39	-54.28	-54.89	26.8	70.1	54.9	48.6
8.57	-66.47	-53.81	-54.95	26.56	70.8	55.9	49
8.44	-66.94	-52.77	-54.74	26.74	70.5	55.2	51.6
8.58	-66.25	-53.66	-54.83	26.62	70.1	55	50.5
8.61	-65.99	-53.81	-54.68	26.62	70.1	55.1	50.2
9.06	-66.32	-53.71	-54.62	26.53	70.2	55	48.7
8.54	-64.01	-54.02	-54.98	26.59	70.2	55	47.8
8.59	-65.81	-53.5	-54.89	26.8	69.9	54.9	49.5
8.53	-66.61	-53.45	-54.68	26.65	69.7	55	50.3
8.63	-66.25	-53.81	-54.77	26.56	69.2	54.9	53.8
8.51	-65.44	-53.29	-54.92	26.8	69.6	54.9	49.5
8.56	-65.44	-53.92	-54.83	26.68	69.7	55.1	49.7
8.68	-66.54	-53.86	-54.74	26.56	70.1	55	52.4
8.63	-66.47	-53.76	-54.55	26.83	70.2	54.9	48.9
8.61	-66.25	-54.49	-54.8	26.53	70.1	54.9	50.1
8.53	-65.88	-54.07	-54.68	26.62	70.1	54.9	50.4
8	-66.14	-54.23	-54.65	26.83	69.8	54.9	50.7
8.55	-64.82	-53.92	-54.71	26.68	70	54.9	50.3
8.58	-66.43	-53.6	-54.8	26.68	69.8	55	50.8
8.67	-66.21	-53.6	-54.8	26.65	70	55.1	50.8
8.55	-66.17	-54.12	-54.83	26.74	70	55.1	48.6
9.1	-65.99	-54.12	-54.92	26.62	70.1	55	49.5
8.65	-65.77	-54.07	-54.98	26.71	69.8	54.9	52.1
8.55	-66.32	-54.28	-54.95	26.8	70.1	55	49.2
8.62	-65.81	-53.97	-54.68	26.74	69.9	55.1	50.4
8.5	-66.32	-54.02	-54.8	26.71	69.8	55	53.8
8.51	-62.69	-54.28	-54.83	26.74	69.3	54.9	51.3
8.58	-66.39	-53.6	-54.58	26.74	69.1	54.9	49
8.97	-66.32	-54.02	-54.77	26.68	69.1	54.9	49
8.55	-64.05	-54.38	-54.68	26.8	69	54.9	49
8.59	-66.68	-53.86	-54.89	26.92	68.9	54.9	49.1
8.65	-66.28	-53.92	-54.86	26.68	68.7	54.9	50.7
8.5	-66.06	-53.5	-54.74	26.77	68.6	54.7	49.2
8.32	-65.59	-54.28	-54.68	26.92	68.5	54.8	47.8
8.65	-65.95	-53.71	-54.74	26.74	68.4	54.9	49.7
8.45	-65.33	-54.28	-54.92	26.98	68.2	54.7	48.4
8.7	-66.03	-54.12	-54.86	26.74	68.1	54.8	50.2
8.62	-65.81	-53.86	-54.92	26.89	67.9	54.7	46.3
8.49	-65.66	-53.66	-55.1	27.08	67.9	54.7	50
8.62	-66.03	-53.97	-54.92	26.74	67.6	54.8	51.5
8.64	-65.73	-53.55	-54.98	26.92	67.2	54.8	48.4
8.68	-66.14	-54.07	-55.1	26.89	67.4	54.6	48.3
8.6	-65.77	-54.02	-54.83	26.95	67.1	54.6	49.8
8.29	-64.96	-53.45	-54.8	27.08	66.9	54.6	49.9
8.48	-65.99	-53.55	-54.74	26.89	66.9	54.5	50.1
8.53	-64.67	-54.69	-54.8	26.89	66.9	54.6	50

8.65	-66.25	-53.92	-54.83	26.83	66.8	54.5	49.6
8.53	-63.53	-53.66	-54.89	26.8	66.9	54.6	49.4
8.5	-66.06	-54.69	-54.86	27.11	67	54.4	50.5
8.65	-65.77	-54.33	-54.83	26.89	67	54.4	49.8
8.61	-66.1	-53.71	-54.86	26.98	66.8	54.3	49.9
7.89	-66.43	-54.02	-54.83	27.17	66.7	54.3	50.5
8.51	-63.39	-52.98	-54.92	26.95	66.8	54.4	48.7
8.52	-66.65	-53.97	-54.86	26.89	66.6	54.3	49.4
8.87	-64.08	-54.9	-54.43	27.01	66.6	54.4	49.9
8.65	-66.39	-54.44	-54.95	26.89	66.5	54.3	48.4
8.59	-66.1	-53.29	-54.95	27.2	66.2	54.2	48.4
8.64	-66.47	-53.92	-54.92	27.01	65.9	54.1	49.4
8.56	-63.86	-53.92	-54.8	27.05	65.7	54	49.7
8.58	-63.53	-53.97	-54.74	27.05	65.6	54.1	50.4
8.53	-63.32	-53.6	-55.1	27.08	65.3	54	50.5
8.39	-66.25	-54.07	-54.68	27.29	65.1	54	50.3
8.58	-65.88	-54.23	-54.8	27.14	64.8	54	51.3
8.53	-64.93	-53.66	-54.92	27.05	64.9	53.8	47.7
8.66	-65.99	-53.76	-54.71	26.98	64.9	53.8	52.7
8.63	-67.01	-53.81	-54.89	27.11	64.9	53.8	47.7
8.38	-64.52	-55.16	-54.83	27.08	64.8	53.9	50.5
8.65	-65.88	-53.86	-54.86	27.11	64.5	53.7	51.7
8.47	-66.98	-53.86	-54.86	27.38	64.5	53.7	51.6
8.61	-66.65	-53.97	-54.92	27.14	64.7	53.6	50.9
8.58	-65.44	-54.54	-54.86	27.11	64.2	53.6	51.6
8.33	-66.21	-53.66	-54.98	27.38	64.1	53.6	50.2
8.64	-65.73	-53.76	-54.83	27.23	63.9	53.5	49.6
8.44	-66.21	-54.28	-54.8	27.38	63.8	53.4	49.5
8.48	-66.14	-54.12	-54.71	27.17	63.8	53.5	50
8.57	-65.62	-54.02	-54.89	27.11	63.7	53.4	50.1
7.96	-66.68	-54.07	-54.92	27.38	63.5	53.2	50.3
8.65	-66.32	-54.38	-54.77	27.17	63.3	53.2	48.9
8.65	-66.87	-53.86	-54.86	27.17	63.1	53.2	47.7
8.55	-67.12	-54.02	-54.92	27.32	63.1	53.2	49.3
8.57	-65.51	-54.07	-54.86	27.23	62.6	53.1	51.8
8.61	-66.06	-54.59	-54.83	27.44	62.8	52.9	47.3
8.63	-66.54	-53.81	-54.8	27.26	62.8	53.1	47.9
8.52	-64.74	-53.14	-54.74	27.26	62.8	52.7	51.3
8.8	-65.88	-53.81	-54.92	27.17	62.9	52.9	52
8.51	-65.62	-54.64	-54.95	27.23	62.9	52.7	50
8.53	-66.03	-54.49	-54.89	27.47	62.7	52.7	48.3
8.62	-66.1	-54.95	-54.89	27.29	62.6	52.8	51.7
8.52	-64.96	-53.5	-55.1	27.26	62.6	52.5	51.8
8.36	-66.9	-54.07	-54.86	27.47	62.6	52.7	51
8.5	-65.81	-54.23	-54.83	27.26	62.6	52.7	48.4
8.55	-66.32	-54.54	-55.01	27.53	62.5	52.7	51
8.54	-63.61	-54.69	-54.55	27.29	62.6	52.6	50.4

8.58	-65.62	-53.4	-55.04	27.41	62.5	52.6	49.9
8.24	-65.11	-53.71	-54.83	27.47	62.5	52.7	51.1
8.61	-66.5	-53.97	-54.8	27.35	62.5	52.6	48.4
8.54	-66.43	-53.6	-54.95	27.69	62.4	52.4	50.4
8.55	-65.44	-53.71	-55.07	27.35	62.3	52.5	50.7
8.6	-65.99	-53.6	-55.01	27.41	62.5	52.4	49.5
8.48	-66.76	-53.86	-55.29	27.66	62.3	52.3	51.6
8.63	-66.94	-53.81	-54.8	27.35	62.1	52.1	50.3
8.64	-66.17	-54.49	-54.8	27.38	62.1	52.6	50.9
8.41	-66.61	-53.45	-54.95	27.56	61.9	52.3	52.9
8.49	-63.39	-53.76	-54.89	27.41	62.1	52.1	46.6
8.43	-64.16	-53.29	-55.13	27.56	62.2	52.1	48.3
8.57	-65.15	-53.81	-54.89	27.35	62.3	52.1	47.4
8.56	-66.83	-53.92	-54.89	27.38	62.6	52.2	51.1
8.39	-66.06	-53.71	-54.77	27.56	62.6	52.1	51.2
8.64	-66.5	-53.14	-54.89	27.41	62.4	52.4	46.1
8.6	-66.21	-53.66	-55.01	27.38	62.7	52.1	51.2
8.72	-65.88	-53.76	-55.01	27.32	62.5	52.3	49.8
8.61	-66.5	-54.33	-55.01	27.44	62.5	52.1	51
8.6	-66.25	-54.02	-55.04	27.63	62.5	51.9	48.1
8.6	-65.99	-54.59	-54.86	27.41	62.9	52.3	49.4
8.63	-66.03	-54.38	-55.01	27.44	62.7	52.2	49.5
8.47	-65.07	-53.76	-55.01	27.69	63.1	52.2	51.6
8.57	-65.51	-53.76	-54.98	27.35	63.2	52.2	50.8
8.59	-65.81	-53.71	-55.1	27.44	63.2	52.3	51.5
8.46	-67.09	-54.54	-54.89	27.78	63.4	52.1	49.5
8.48	-66.39	-53.97	-54.98	27.35	63.5	52.2	51.7
8.63	-66.06	-53.5	-55.01	27.41	63.6	52.3	50.9
8.96	-63.64	-53.6	-55.01	27.32	63.8	52.3	48.3
8.55	-66.03	-54.23	-55.01	27.38	64.4	52.3	47.7
8.6	-66.43	-53.86	-54.77	27.35	64.7	52.4	46.8
8.65	-64.93	-54.69	-55.23	27.29	65.3	52.4	47.3
8.59	-66.98	-54.38	-54.92	27.32	66	52.3	53
8.53	-66.98	-54.02	-54.71	27.47	66.7	52.6	49.3
8.64	-66.39	-54.33	-54.98	27.26	66.2	52.7	45.7
8.51	-64.56	-53.76	-55.07	27.35	66.5	52.8	46.9
8.07	-66.39	-54.33	-55.01	27.32	67.9	52.7	48.7
8.61	-66.03	-54.33	-54.95	27.17	68.6	52.7	49.7
8.62	-66.25	-54.07	-54.86	27.11	68.3	52.7	50.4
9.09	-64.78	-54.23	-55.01	27.11	69	52.7	48.3
8.55	-64.01	-54.02	-54.83	27.11	69.2	52.8	49.6
8.45	-64.85	-53.92	-55.07	27.38	69.1	52.9	51.5
8.67	-66.76	-54.49	-54.89	27.29	69	53.2	48.3
8.55	-66.54	-54.64	-54.92	27.17	69	53.2	49.8
8.84	-66.39	-53.81	-55.1	27.2	69	52.9	52.7
8.48	-64.41	-54.02	-55.32	27.2	69.2	53.2	49.6
8.58	-66.28	-52.88	-54.92	27.35	69.6	53.2	49.3

8.63	-65.84	-54.02	-55.04	27.14	70.5	53.4	47.6
8.64	-66.5	-54.69	-54.89	27.14	69.8	53.4	49
8.72	-66.83	-54.33	-54.98	27.14	69.8	53.4	49.6
8.53	-66.65	-54.38	-55.07	27.11	70.4	53.4	50.5
8.61	-66.43	-53.92	-55.01	27.29	70.1	53.5	48.8
8.65	-66.76	-53.76	-55.04	27.11	71.1	53.8	49.9
8.56	-66.5	-53.76	-54.92	27.17	70.5	53.7	47.5
8.03	-65.99	-53.66	-55.01	27.29	70.6	53.8	50.1
8.54	-66.68	-54.02	-55.01	27.14	70.3	53.9	51.9
8.52	-66.87	-53.86	-55.01	27.17	70.4	53.8	52.7
8.72	-66.76	-53.86	-55.07	27.14	70.6	53.8	53.5
8.65	-67.01	-54.02	-54.8	27.14	70.1	53.9	49.5
8.53	-65.84	-53.86	-55.13	27.26	70.4	53.9	47.8
8.62	-66.61	-54.23	-54.8	27.14	70.2	53.9	46.5
8.56	-67.53	-53.97	-54.98	27.14	70.3	54	49.4
8.58	-66.47	-53.45	-54.98	27.17	70.5	54.2	45.8
8.56	-66.25	-53.97	-55.29	27.05	70.6	54.2	49.8
8.5	-67.16	-54.28	-55.01	27.35	70.2	54.1	50.3
8.56	-65.84	-53.4	-54.95	27.11	70.4	54.3	49.2
8.57	-65.95	-53.81	-54.98	27.17	70.1	54.2	51.2
8.65	-67.05	-54.33	-55.38	27.26	70.1	54.3	49.5
8.56	-66.58	-54.23	-55.23	27.26	70.3	54.4	48.4
8.6	-66.5	-54.49	-55.1	27.44	70	54.4	50.5
8.54	-65.66	-54.02	-55.04	27.23	70.1	54.3	51.2
8.62	-66.36	-53.35	-55.26	27.2	70	54.3	50.2
9.17	-66.94	-54.69	-54.83	27.11	69.9	54.2	47.8
8.57	-66.36	-54.12	-55.07	27.26	70.1	54.4	52.7
8.5	-66.58	-53.6	-55.2	27.26	69.2	54.4	51.1
8.65	-66.47	-53.86	-54.92	27.29	68.6	54.5	53.8
8.54	-65.29	-54.28	-54.95	27.29	68.6	54.1	48.9
7.74	-65.07	-53.97	-55.07	27.5	68.1	54.4	51.2
8.62	-66.5	-53.92	-54.89	27.44	67.8	54.5	48.2
8.55	-66.65	-54.49	-55.04	27.38	67.2	54.3	49
8.71	-65.81	-54.64	-55.01	27.5	66.9	54.2	51.5
8.57	-66.72	-53.81	-55.1	27.41	66.8	54.2	49.8
8.5	-65.73	-54.12	-54.86	27.69	66.4	54.2	49.5
8.59	-66.68	-54.23	-55.32	27.41	66.2	53.9	50
8.58	-66.14	-53.76	-54.95	27.47	65.8	54	50.4
7.84	-66.5	-54.64	-55.01	27.69	65.8	54	48.8
8.53	-64.96	-53.35	-55.1	27.53	65.8	54	50.4
8.47	-66.61	-54.02	-55.1	27.5	65.4	53.8	48.1
8.59	-62.58	-54.59	-55.01	27.63	65.4	53.8	47.8
8.62	-66.58	-53.86	-54.98	27.56	65	53.8	50.8
8.42	-66.47	-53.97	-54.98	27.84	64.7	53.8	52.3
8.62	-66.06	-54.02	-55.1	27.56	64.7	53.8	51.8
8.6	-66.65	-54.49	-54.95	27.66	64.8	53.7	47.8
8.27	-65.44	-54.49	-55.07	27.78	64.7	53.8	49.3

8.6	-66.68	-54.33	-55.04	27.63	64.7	53.6	49.8
8.48	-66.98	-54.44	-55.13	27.72	64.7	53.4	49.5
8.67	-65.99	-54.59	-55.04	27.63	64.4	53.6	50.1
8.62	-66.06	-53.92	-55.26	27.66	64	53.6	50.9
8.56	-66.58	-53.81	-54.92	27.81	64	53.4	48.3
8.56	-66.1	-53.03	-55.1	27.63	63.6	53.4	52.5
8.5	-65.26	-53.86	-55.01	27.66	63.4	53.3	47.8
9.12	-67.38	-54.75	-55.04	27.66	62.7	53.1	50.5
8.63	-66.1	-54.02	-54.98	27.78	62.5	52.9	51.3
8.44	-65.18	-54.23	-55.2	27.93	63.1	53.1	51.9
8.59	-67.12	-54.49	-55.07	27.66	63.1	52.8	49.5
8.46	-66.98	-54.02	-55.04	27.75	63.1	52.7	47.2
7.76	-66.21	-53.97	-55.04	27.96	63.6	52.7	49.4
8.61	-66.36	-54.02	-54.92	27.75	63.1	52.7	49
8.56	-66.65	-54.44	-55.01	27.75	63.1	52.6	48.6
8.57	-66.21	-54.12	-55.1	27.78	63.1	52.8	48.2
8.61	-66.68	-54.28	-54.95	27.75	62.8	52.7	50.9
8.44	-62.84	-54.85	-55.23	27.96	63.1	52.5	49.7
8.6	-65.99	-53.76	-55.13	27.75	62.5	52.6	48
8.6	-67.09	-53.66	-54.89	27.84	61.6	52.5	51.7
8.5	-64.93	-54.54	-55.1	27.75	61.4	52.4	45.9
8.54	-66.5	-53.6	-55.01	27.87	61	52.3	53
8.41	-65.18	-53.76	-55.35	28.02	60.2	52.2	50.4
8.59	-66.94	-53.81	-55.01	27.81	61.1	52.2	51.1
8.57	-66.5	-54.12	-55.23	27.87	60.9	52.2	49.4
8.55	-65.84	-53.92	-54.89	28.08	61.4	52	46.6
8.55	-66.43	-54.12	-55.04	27.81	61.7	51.9	47.3
8.53	-66.58	-54.07	-55.23	27.84	61.7	52	49.7
8.79	-66.58	-53.97	-55.07	27.84	61.8	51.9	49.2
8.59	-65.7	-53.35	-55.01	27.9	61.4	51.9	48.2
8.52	-65.81	-54.12	-54.98	28.02	61.4	51.7	51.1
8.53	-64.78	-54.23	-54.92	27.93	61.4	51.9	49.5
8.57	-65.77	-53.71	-55.04	27.93	61.4	51.7	48.1
8.52	-66.43	-54.28	-54.89	27.96	61.3	51.6	49.4
8.91	-66.87	-53.71	-55.35	27.84	61.4	51.7	52.9
8.61	-66.43	-54.07	-55.01	27.87	61.4	51.7	49.6
8.62	-66.5	-54.23	-54.98	27.9	60.6	51.6	49.5
8.41	-66.58	-54.02	-54.95	28.05	61.2	51.6	49.5
8.61	-66.5	-54.44	-54.89	27.78	61.4	51.6	48.4
8.58	-65.73	-54.23	-55.13	27.84	61.6	51.6	49.7
9.07	-66.83	-53.76	-55.1	27.81	61.4	51.6	45.7
8.63	-66.54	-54.8	-55.07	27.75	61.7	51.4	46.5
8.5	-66.61	-54.64	-54.8	27.99	61.6	51.5	48.3
8.72	-66.94	-53.92	-55.07	27.9	61.6	51.6	49.6
8.61	-66.28	-53.86	-55.26	27.81	61.4	51.5	51.2
8.55	-67.42	-53.97	-55.01	28.08	61.3	51.5	48
8.59	-66.72	-54.49	-55.04	27.84	61.2	51.5	48

8.5	-64.05	-54.23	-55.1	27.96	60	51.5	50
8.9	-66.76	-54.64	-54.77	27.93	59.1	51.4	52.8
8.6	-66.43	-54.28	-54.95	27.93	58.9	51.3	47.8
8.46	-64.74	-54.33	-55.04	28.17	58.9	51.2	51.3
8.5	-66.28	-54.69	-55.07	28.05	58.9	51.2	50
8.51	-65.55	-53.55	-54.89	27.99	58.8	51.1	49.9
8.42	-66.36	-53.97	-55.01	28.17	58.3	51.3	50.9
8.63	-66.28	-54.02	-55.04	28.05	58	50.9	49.6
8.61	-67.01	-53.97	-55.23	28.08	58	50.6	49.3
8.47	-65.88	-54.07	-54.92	28.27	57.6	50.8	48.2
8.71	-65.88	-53.97	-55.01	28.17	57.7	50.9	47.3
8.64	-66.76	-53.81	-55.1	28.02	57.6	50.6	50.8
8.45	-67.16	-53.66	-55.07	28.02	57.7	50.6	52.5
8.38	-66.61	-54.07	-54.86	28.24	58.1	50.8	50
8.5	-63.61	-54.23	-55.01	28.02	58.2	50.6	52.9
8.57	-66.32	-54.23	-55.01	27.96	58.4	50.5	47.5
8.96	-66.65	-54.85	-54.71	27.99	58.9	50.6	48.2
8.51	-66.9	-54.12	-54.89	28.08	59.8	50.6	50.1
8.48	-66.39	-54.02	-55.04	28.14	60.2	50.6	49.6
8.64	-66.58	-54.38	-54.98	27.93	61.2	50.9	53.5
8.59	-67.16	-54.12	-54.95	27.84	61.9	51	51.9
8.53	-63.97	-54.75	-55.26	28.05	62.7	51.2	51
8.53	-65.55	-53.97	-55.13	27.63	63.5	51.4	52
8.63	-66.65	-54.69	-54.74	27.81	64.2	51.3	50.4
9.11	-66.36	-54.59	-54.92	27.66	64.7	51.6	50.2
8.48	-66.47	-54.07	-55.04	27.69	65.6	51.6	49.3
8.44	-67.56	-53.35	-55.1	27.81	66.2	51.6	49.5
8.66	-66.76	-54.75	-54.98	27.63	66.7	51.8	49.3
8.63	-67.23	-53.81	-54.89	27.5	67.5	51.8	48.7
8.62	-66.43	-54.44	-54.74	27.63	67.9	51.9	48.8
8.62	-66.06	-53.66	-55.01	27.41	68.4	52.2	49.8
8.6	-66.72	-54.12	-54.92	27.47	68.6	52.2	50.2
8.47	-67.09	-54.07	-55.01	27.38	69.4	52.2	50.5
8.48	-67.05	-53.92	-54.95	27.35	69.9	52.3	46.2
8.5	-66.5	-54.12	-54.89	27.44	70.5	52.5	47.4
8.69	-67.53	-55.16	-54.89	27.35	70.9	52.6	48
8.51	-66.06	-54.33	-55.01	27.29	72.1	52.7	50
8.59	-67.27	-54.44	-54.95	27.47	72.3	52.8	48.6
8.48	-67.01	-54.44	-54.89	27.23	72.8	53.2	49.5
8.62	-66.28	-54.38	-54.95	27.2	74	53.2	52.3
7.85	-65.95	-54.44	-54.83	27.26	74.5	53.5	48.9
8.58	-66.68	-54.33	-54.98	27.14	75.1	53.4	51.8
8.57	-66.36	-54.07	-54.89	27.08	75.2	53.8	48.9
9.13	-66.87	-54.75	-54.86	27.05	74.7	53.7	48
8.52	-66.47	-53.97	-55.07	27.08	74.4	53.8	49.6
8.5	-67.05	-54.33	-54.95	27.26	75	54	49.8
8.5	-64.49	-54.28	-54.98	26.98	76.2	56.1	50

8.63	-66.76	-54.49	-55.01	27.05	76.2	54.9	49.3
8.78	-66.14	-54.02	-54.98	27.05	76.3	54.9	49
8.57	-66.61	-54.64	-55.07	27.05	75.9	54.9	50.8
8.5	-66.28	-53.97	-54.98	27.17	76.6	54.9	50.9
8.67	-65.99	-54.64	-54.89	26.83	77.3	55.1	49
8.63	-67.2	-54.38	-54.92	26.95	77.4	55.1	48.3
8.43	-66.76	-54.12	-55.01	27.11	77.6	55.1	47.3
8.56	-66.25	-53.71	-55.01	26.8	77.8	55.4	49.3
8.59	-66.61	-53.76	-54.77	26.89	77.8	55.2	48.4
8.47	-64.93	-54.07	-54.8	27.11	77.5	55.4	49.8
8.58	-66.61	-54.07	-54.86	26.92	77.4	55.5	49.1
8.59	-67.09	-54.12	-55.1	26.89	77.6	55.6	52.2
9.15	-65.55	-53.14	-54.95	26.77	77.4	55.8	50.2
8.63	-66.58	-53.45	-54.86	26.83	77.2	55.8	48.3
8.44	-67.31	-53.4	-54.86	27.05	77.3	56	50.5
8.65	-66.65	-54.23	-54.83	26.77	77.4	56	55
8.52	-65.84	-53.6	-54.95	26.89	77.8	56	49.4
8.51	-66.1	-54.07	-54.68	27.05	77.5	55.9	50.3
8.62	-66.76	-54.02	-54.95	26.92	77.1	56.2	51.2
8.53	-66.06	-53.5	-54.86	26.89	77.2	56.1	49.2
8.28	-66.72	-53.81	-54.68	26.98	77.6	57.1	47.3
8.57	-66.68	-53.6	-54.52	26.8	77.1	56.4	50.5
8.53	-66.83	-53.66	-55.04	26.74	77.6	56.4	47.3
8.74	-67.09	-54.38	-54.95	26.83	77.5	56.5	47.7
8.52	-65.77	-53.97	-54.98	26.92	77.7	56.6	49.7
8.49	-66.68	-54.69	-54.86	26.98	77.2	56.5	48.8
8.62	-67.09	-54.44	-54.71	26.92	77.4	56.6	49.5
8.48	-66.87	-54.28	-54.77	26.92	77.2	56.3	51
8.59	-66.76	-54.28	-54.77	27.08	77.3	56.5	52.1
8.55	-65.7	-53.76	-54.86	26.83	77.2	56.6	50.5
8.56	-66.58	-54.33	-54.83	26.83	76.9	56.7	50.5
8.32	-66.94	-54.38	-54.83	27.05	76.6	56.6	50.7
8.53	-65.55	-53.81	-54.89	26.95	76.3	56.6	50.4
8.59	-66.36	-53.55	-54.83	26.95	75.9	56.6	50.5
8.73	-66.25	-54.23	-55.04	26.98	75.7	56.6	51
8.51	-65.4	-54.07	-54.8	26.92	75.5	56.6	47.8
8.5	-66.87	-54.75	-54.92	27.08	75.3	56.6	49.8
8.6	-65.11	-53.81	-54.77	26.98	75	56.7	50.2
8.52	-67.05	-53.71	-54.92	26.95	75.1	56.2	49.4
8.54	-65.18	-54.02	-54.95	27.11	74.5	56.5	49.1
8.62	-66.32	-54.8	-54.8	27.14	74.5	56.5	50
8.54	-66.25	-53.4	-55.04	27.08	74.2	56.4	52.4
8.48	-65.99	-53.81	-54.71	27.23	74.2	56.4	49
8.5	-63.79	-54.23	-54.8	27.05	74.2	56.2	50.9
8.52	-67.2	-54.69	-54.71	27.08	74	56.4	49.9
8.2	-66.72	-54.64	-54.77	27.2	74	56.3	50.5
8.54	-66.03	-54.23	-54.89	27.11	73.6	56.3	48.8

8.56	-65.84	-53.86	-54.95	27.11	73.4	56.2	51.4
8.84	-65.99	-53.55	-54.95	27.14	73	56.4	47.3
8.55	-65.88	-54.07	-54.95	27.08	73.1	56.3	50.5
8.5	-65.4	-53.81	-54.77	27.26	73	56.2	49.4
8.6	-65.07	-54.44	-54.65	27.17	73.1	56.1	48.9
8.54	-65.15	-53.24	-55.07	27.11	73.1	56.2	50.3
8.53	-65.4	-53.86	-54.8	27.29	73.4	56.1	47.6
8.58	-65.99	-54.02	-54.86	27.05	73.4	56	49.6
8.55	-65.37	-53.29	-55.29	27.2	72.9	56	50.5
8.34	-64.41	-53.76	-54.95	27.11	72.3	56.1	47.8
8.52	-64.89	-54.12	-54.77	27.17	72	56	51.1
8.59	-67.01	-53.5	-54.68	27.2	71.4	56	47.3
8.29	-66.5	-53.97	-54.65	27.32	70.9	56	48.7
8.5	-64.52	-53.81	-55.23	27.23	70.5	55.7	47.5
8.52	-66.9	-54.07	-54.86	27.29	70.4	55.7	49.8
8.55	-66.32	-53.29	-54.98	27.47	70.1	55.5	49.2
8.65	-66.58	-54.07	-54.98	27.26	69.9	55.7	50.7
8.56	-66.28	-53.71	-54.77	27.32	69.4	55.5	48.7
8.5	-66.28	-53.92	-54.74	27.38	69	55.7	50
8.18	-65.29	-53.55	-54.86	27.38	69.1	55.4	50.8
8.57	-66.5	-53.66	-55.01	27.23	69.1	55.5	51.7
8.57	-66.36	-54.38	-54.92	27.26	69.7	55.2	48.4
7.8	-66.06	-54.12	-54.77	27.47	69.8	55.2	49.7
8.58	-66.54	-54.28	-54.95	27.26	69.9	55.2	49.5
8.5	-66.28	-53.29	-54.86	27.35	70.2	55	50.2
8.55	-65.81	-53.92	-54.77	27.41	70.4	55.2	51.3
8.62	-65.84	-53.97	-54.86	27.26	70.5	55.2	51.6
8.55	-66.76	-53.92	-54.89	27.17	70.5	55	51.9
8.87	-64.45	-54.28	-54.86	27.26	70.4	55.1	48.4
8.53	-67.34	-54.38	-54.92	27.17	70.4	55.1	48.7
8.44	-62.69	-54.28	-54.95	27.38	70.6	55.1	50
8.62	-66.76	-53.81	-54.77	27.17	70.8	55.2	49.5
8.5	-65.81	-53.97	-54.83	27.26	70.8	55	50.5
8.34	-67.23	-53.66	-54.86	27.38	70.9	55	47
8.56	-62.22	-54.64	-54.92	27.2	71.1	55.2	51.2
8.57	-65.99	-54.12	-54.86	27.23	70.8	55	49.9
8.42	-66.65	-53.92	-54.77	27.44	70.4	55	55.4
8.65	-66.47	-53.71	-54.83	27.23	70	55.4	51.6
8.48	-67.49	-53.81	-54.74	27.23	69.6	54.9	51.2
8.47	-66.5	-53.92	-55.04	27.35	69.6	54.9	48.7
8.56	-65.04	-53.24	-54.8	27.35	69.6	54.9	49.9
8.56	-66.98	-53.66	-54.71	27.32	69.4	54.9	53.3
8.56	-66.47	-54.44	-54.8	27.41	69.3	54.9	51.6
8.67	-66.43	-54.49	-54.83	27.29	69.1	54.8	50
8.61	-66.21	-54.28	-54.71	27.38	68.9	54.8	46.7
8.46	-65.81	-53.81	-54.8	27.44	68.6	54.8	49.3
8.56	-67.05	-53.4	-54.77	27.35	68.9	54.8	50.3

8.5	-63.46	-54.07	-54.89	27.32	69	54.7	53.7
8.41	-66.61	-53.71	-54.8	27.5	68.7	54.8	49.6
8.59	-66.58	-54.9	-54.71	27.29	69	54.8	51.6
8.53	-66.65	-53.76	-54.86	27.29	68.8	54.7	50
8.58	-67.16	-53.66	-54.58	27.38	68	54.5	47.3
9.04	-66.21	-53.71	-54.71	27.41	68	54.7	49.3
8.56	-67.34	-53.71	-54.74	27.35	68.4	54.6	50.5
8.47	-65.99	-53.97	-54.58	27.38	67.9	54.2	49.6
9.02	-67.23	-53.71	-54.68	27.35	68.2	54.6	50.7
8.59	-67.71	-54.12	-54.86	27.44	67.4	54.5	49.2
8.56	-67.12	-53.81	-54.68	27.41	67.4	54.4	51
8.79	-66.87	-52.83	-54.71	27.41	67	54.4	49.9
8.56	-65.77	-53.92	-54.98	27.5	66.9	54.2	50.1
8.6	-66.54	-53.55	-54.95	27.44	67	54.2	49.6
9.08	-61.92	-54.95	-54.74	27.38	67.2	53.9	49.7
8.57	-66.06	-53.71	-54.77	27.44	67.4	54.3	49.5
8.51	-65.77	-53.92	-54.89	27.38	67.6	54.2	50.5
8.27	-66.25	-54.23	-54.71	27.47	67.5	54.3	49.8
8.62	-66.9	-53.76	-54.86	27.41	67.6	54.3	47.7
8.6	-66.9	-54.38	-54.68	27.32	68.1	54.1	50.7
8.62	-66.32	-53.29	-54.86	27.32	68.5	54.2	52.1
8.14	-67.42	-53.86	-54.8	27.5	68.7	54.2	51
8.64	-66.54	-53.71	-54.65	27.35	68.8	54.3	50.7
8.47	-63.28	-53.71	-54.89	27.38	68.8	54.1	49.8
8.51	-66.47	-53.76	-55.07	27.47	68.8	54.3	49.1
8.74	-66.72	-53.86	-54.52	27.32	69	54.2	49.5
8.52	-65.26	-54.23	-54.8	27.35	68.9	54.2	47.2
8.52	-66.61	-54.23	-54.8	27.26	69.1	54	46.3
8.56	-66.72	-53.97	-54.71	27.44	69.7	54.3	47.7
8.61	-66.43	-53.97	-54.92	27.35	69.7	54.2	53.6
8.61	-67.12	-53.71	-54.83	27.29	70	54.2	47.5
8.42	-65.77	-53.86	-54.89	27.35	70.3	54.2	49.1
8.52	-65.15	-53.29	-54.52	27.14	70.2	54.3	50
8.62	-66.25	-54.07	-54.95	27.26	70.4	54.3	48.3
8.58	-67.09	-54.07	-54.8	27.5	70.4	54.4	48.7
8.64	-66.76	-53.5	-54.83	27.29	69.9	54.7	49
8.5	-64.63	-54.54	-54.74	27.26	69.7	54.7	50
8.63	-66.76	-53.6	-54.8	27.5	69.3	54.6	51.6
8.55	-66.72	-53.76	-54.89	27.35	69	54.5	48.4
8.47	-64.82	-53.76	-54.77	27.29	69.1	54.5	48.9
8.02	-66.68	-53.45	-54.95	27.47	69	54.7	50.1
8.58	-66.76	-54.28	-54.95	27.32	69.6	54.7	47.1
8.46	-66.83	-54.64	-54.86	27.32	70.3	54.5	48.9
8.47	-66.17	-53.86	-55.04	27.47	71.1	54.8	50
8.6	-66.06	-54.02	-54.74	27.29	71.1	54.9	49.8
8.61	-66.98	-53.92	-54.86	27.29	71.3	54.9	50.8
8.43	-67.27	-54.12	-54.89	27.38	72.1	55.1	49.5

8.7	-66.65	-53.86	-54.83	27.32	72.1	55.2	50.5
8.51	-65.26	-53.66	-54.83	27.17	72.7	55.1	48.1
8.51	-65.62	-53.66	-54.95	27.17	73.2	55.2	48
8.82	-65.77	-53.45	-54.92	27.14	73.4	55.5	47
8.57	-65.88	-53.6	-54.92	27.01	74.3	55.2	51
8.59	-67.38	-53.97	-54.65	27.14	74.5	55.6	42.7
8.14	-66.5	-53.71	-55.01	27.23	74.5	55.6	51.4
8.56	-66.28	-54.02	-54.89	27.14	74.5	55.5	46.3
8.58	-67.23	-53.97	-54.83	27.08	75.1	55.6	50
8.35	-67.05	-53.97	-54.74	27.2	74.6	55.7	45.5
8.62	-67.2	-54.07	-54.89	27.08	74.9	55.9	50
8.56	-65.51	-54.02	-54.8	27.08	75.1	55.7	49.2
8.31	-66.25	-53.97	-54.65	27.29	74.2	56	49.5
8.5	-67.27	-52.88	-54.74	27.11	74.5	55.9	50
8.56	-66.28	-53.92	-54.86	27.11	74	55.9	51.6
8.33	-66.5	-54.38	-54.8	27.32	73.5	56	47.3
8.58	-67.38	-53.97	-54.86	27.05	73.8	55.7	50.5
8.61	-67.16	-53.6	-54.86	27.17	74.1	55.9	48.2
9.06	-65.07	-53.6	-54.92	27.01	74.1	55.9	49.6
8.52	-64.96	-54.23	-54.58	27.11	73.7	56	50.2
8.56	-66.54	-54.28	-54.71	27.14	73.4	55.9	49.4
7.73	-67.12	-54.02	-54.68	27.35	73.4	56	49.9
8.5	-64.78	-53.71	-54.92	27.2	73.8	56.1	50.5
8.59	-65.95	-53.81	-54.83	27.2	73.4	56	51.2
8.55	-66.83	-53.97	-54.58	27.35	73	55.9	48.9
8.59	-66.68	-53.76	-55.07	27.2	73.1	56	50.4
8.5	-65.26	-53.24	-54.71	27.14	73.1	56	49.7
8.5	-65.77	-54.38	-54.46	27.14	73	56	51.4
8.92	-67.05	-53.45	-54.55	27.17	73	56	50.7
8.55	-66.14	-54.12	-54.86	27.17	73	56	49.5
8.5	-67.6	-54.28	-54.68	27.17	72.6	56	50.4
8.75	-66.32	-53.29	-54.92	27.23	72.3	56	46.2
8.57	-66.9	-53.76	-54.92	27.23	72	56	47.7
8.62	-66.76	-54.28	-54.86	27.29	71.3	56	49.9
7.87	-66.83	-53.76	-55.04	27.44	71.2	56	49.8
8.51	-67.56	-53.55	-54.58	27.26	70.6	55.8	50
8.58	-66.9	-53.81	-54.71	27.32	70.3	55.6	49.4
8.48	-66.5	-53.71	-54.71	27.56	70.1	55.5	46.6
8.66	-66.83	-53.55	-54.83	27.38	69.7	55.9	52.7
8.58	-66.76	-53.81	-54.8	27.44	69.3	55.7	53
8.54	-65.66	-54.23	-54.71	27.47	68.8	55.5	51.6
7.95	-66.83	-53.76	-54.65	27.53	68.6	55.5	49.8
8.5	-67.38	-53.66	-54.68	27.53	68.3	55.5	48
8.5	-66.43	-53.35	-54.77	27.44	67.8	55.2	49.8
8.5	-67.27	-53.97	-54.8	27.72	67.6	55.2	50.9
8.61	-66.9	-53.4	-54.8	27.5	67.1	55	49.7
8.58	-66.76	-54.38	-54.65	27.63	66.8	55.2	45

8.47	-65.77	-53.14	-54.89	27.78	66.3	54.9	50.5
8.7	-66.5	-54.44	-54.71	27.63	66.3	54.9	49.1
8.56	-65.81	-53.6	-54.65	27.72	66.1	54.9	50
8.53	-66.25	-53.86	-54.74	27.69	65.7	54.7	49.8
8.57	-67.01	-53.92	-54.86	27.81	65	54.7	51.4
8.66	-66.87	-54.23	-54.89	27.72	64.6	54.6	48.9
8.61	-67.31	-53.81	-54.77	27.72	64.5	54.4	51.6
8.46	-64.19	-52.88	-54.89	27.78	63.9	54.3	49.5
8.61	-66.83	-53.86	-54.77	27.93	63.6	54.1	49
8.57	-66.14	-53.92	-54.8	27.78	63.6	54.1	54
8.49	-64.34	-53.71	-54.74	27.84	62.9	54.1	51.6
8.5	-67.2	-53.86	-54.68	27.81	62.5	53.9	50.5
8.81	-67.01	-53.71	-54.95	27.87	62.3	53.8	48.3
8.51	-66.58	-54.85	-54.46	27.81	62.2	53.8	51.7
8.47	-66.65	-54.54	-54.89	27.9	61.8	53.6	48.8
8.23	-65.62	-54.23	-54.92	28.05	61.3	53.5	51.6
8.59	-66.76	-53.66	-54.77	27.84	61.4	53.3	54.2
8.59	-66.68	-53.29	-54.89	27.9	61	53.2	47.5
8.55	-66.68	-53.71	-54.74	28.11	60.6	53.1	47.8
8.64	-67.09	-53.97	-55.01	27.93	60.9	53.2	53.1
8.46	-67.01	-54.44	-54.68	27.96	60.3	52.8	51.2
8.52	-65.81	-53.66	-54.83	27.99	60.3	52.7	50.7
8.44	-66.98	-54.23	-54.86	28.14	59.9	52.6	48.1
8.48	-66.61	-54.12	-54.74	27.99	59.9	52.7	51.2
8.48	-64.96	-54.44	-54.62	28.05	60	52.5	47.8
8.57	-66.21	-54.07	-54.55	28.02	59.5	52.4	50.5
8.45	-66.83	-53.4	-54.74	28.21	59.9	52.3	49.2
8.66	-66.72	-53.55	-55.04	28.08	59.5	52.3	52
8.5	-65.66	-53.92	-54.71	28.05	59.3	52.2	50
8.44	-66.83	-54.23	-54.92	27.99	59.5	52.2	53.4
8.42	-66.65	-53.45	-54.77	28.11	61.5	52.1	50.5
7.68	-66.32	-54.49	-54.8	28.05	62.5	52.4	48.6
8.55	-66.87	-54.64	-54.77	27.93	62.9	52.4	49.5
8.52	-66.03	-53.29	-54.98	27.84	62.7	52.2	51.3
8.52	-65.51	-53.55	-54.71	27.93	62	52	49.7
7.92	-66.43	-53.66	-54.65	28.11	62.2	52	49.3
8.5	-66.14	-53.6	-54.77	27.9	62.3	52.2	50.4
8.57	-65.84	-54.54	-54.89	27.96	61.8	52.2	56
8.51	-67.01	-54.23	-54.86	28.08	61.6	52.1	49.9
8.71	-66.68	-53.81	-54.74	27.99	61.8	52	49.8
8.59	-66.9	-53.09	-55.04	27.96	61.7	52	50
8.56	-66.76	-53.76	-54.98	27.99	61.8	51.9	47.8
8.26	-67.01	-53.76	-54.74	28.11	61.4	51.9	49.2
8.6	-66.83	-54.12	-55.04	28.02	61.3	51.9	50.3
8.5	-67.05	-53.55	-54.98	28.05	60.6	51.9	53.3
8.46	-66.39	-54.23	-54.95	28.17	60.4	51.8	50.8
8.66	-66.94	-53.81	-54.83	28.05	60.2	51.7	49.9

8.6	-67.01	-53.86	-54.68	28.02	60.1	51.6	46.3
8.5	-66.61	-53.4	-55.07	28.11	59.5	51.6	49.4
8.6	-67.05	-53.29	-54.58	28.3	59.5	51.4	50.4
8.54	-66.83	-53.45	-54.8	28.14	59.2	51.5	48.8
8.59	-66.39	-53.71	-54.92	28.05	59.6	51.2	53.8
8.47	-67.86	-54.85	-54.65	28.05	59.8	51.4	53.3
7.82	-67.64	-54.02	-54.52	28.27	59.8	51.4	49.9
8.5	-63.64	-53.5	-55.07	28.08	59.4	51.1	50.3
8.59	-66.39	-53.19	-55.01	28.17	59	51.3	49
8.44	-65.81	-53.66	-54.68	28.33	58.5	51.1	51
8.79	-66.76	-53.76	-54.68	28.11	58.4	51.1	50.8
8.52	-65.51	-53.97	-54.95	28.17	58.2	50.9	50.4
8.47	-67.09	-54.12	-55.07	28.14	58.2	51	50.9
8.58	-66.54	-53.81	-54.77	28.45	57.8	50.8	50.5
8.54	-65.66	-53.66	-54.83	28.17	58.1	51	51.4
8.47	-66.68	-53.4	-54.74	28.17	57.7	51	45.7
8.47	-65.04	-53.97	-54.83	28.21	57.8	50.6	49
8.35	-66.9	-53.86	-54.55	28.48	57.7	50.6	50.9
8.51	-67.01	-53.4	-54.71	28.27	58.1	50.8	55.6
8.48	-65.59	-53.71	-54.74	28.14	57.7	50.6	49.6
8.42	-66.87	-54.07	-54.98	28.42	57.7	50.5	51.6
8.7	-67.09	-54.49	-55.04	28.17	58.1	50.4	47.7
8.61	-66.65	-53.66	-54.89	28.14	58.9	50.5	50.5
8.58	-66.76	-53.55	-54.74	28.17	59.6	50.8	50.5
8.53	-67.38	-53.76	-54.8	28.42	59.7	50.8	57.1
8.58	-67.31	-54.33	-54.8	28.11	60.4	50.6	49.9
8.5	-65.88	-54.85	-54.77	28.08	60.6	50.9	52.6
8.46	-65.33	-53.6	-54.86	28.05	60.7	51	47
8.5	-65.66	-54.07	-55.23	28.27	61.4	51.3	48.4
8.63	-67.6	-54.02	-55.13	27.99	61.8	51.3	51.6
8.53	-67.01	-53.35	-54.68	27.96	62.5	51.5	51.9
8.59	-66.83	-53.71	-54.74	27.99	62.9	51.5	50.3
8.88	-65.44	-54.28	-54.92	27.96	63.6	51.5	47.3
8.57	-67.42	-54.59	-54.77	27.9	64.3	51.6	50.7
8.59	-67.34	-54.85	-54.68	27.9	64.4	51.6	50.9
8.39	-65.62	-54.12	-55.2	28.02	64.7	51.5	50.5
8.88	-66.17	-53.97	-55.01	27.93	64.7	51.6	49.5
8.47	-66.68	-54.33	-54.95	27.84	65.1	51.6	52.7
8.5	-67.31	-53.76	-54.8	27.78	65.4	51.8	50.7
8.56	-67.01	-53.4	-54.92	28.02	65.4	51.8	49
8.69	-66.9	-53.71	-55.01	27.78	66.3	51.8	52
8.52	-65.7	-54.23	-54.8	27.75	66.9	52.1	51.2
8.59	-66.43	-53.92	-55.01	27.69	67.2	52.2	48.8
8.54	-67.45	-54.07	-54.86	27.87	67.7	52.1	50.9
8.53	-67.23	-54.54	-54.68	27.72	67.9	52.2	50.5
8.6	-67.82	-53.92	-54.62	27.78	68.1	52.1	48.2
8.53	-66.1	-54.49	-54.68	27.63	68.4	52.4	49.5

8.24	-65.84	-53.6	-54.92	27.84	68.9	52.4	51
8.47	-64.49	-54.75	-54.89	27.63	69.7	52.5	50
8.54	-66.87	-53.4	-54.68	27.63	70	52.5	50.7
8.51	-66.61	-53.81	-54.98	27.63	69.9	52.4	49.1
8.25	-67.23	-54.12	-54.83	27.75	70.5	52.4	49.1
8.52	-64.56	-53.92	-54.95	27.53	70.1	52.7	49.1
8.61	-67.01	-53.45	-55.01	27.63	70.5	52.4	49.2
8.56	-67.01	-54.54	-54.8	27.41	71.3	52.8	47
8.15	-67.34	-55.11	-54.74	27.75	70.9	52.9	48.9
8.55	-66.5	-54.12	-55.07	27.41	72.1	52.9	50.3
8.47	-67.38	-53.71	-55.07	27.41	71.6	52.9	50.5
8.5	-67.93	-53.81	-54.98	27.56	71.5	53.1	49.9
8.68	-67.31	-54.38	-54.98	27.38	71.5	53.2	51.9
8.61	-66.98	-53.6	-54.83	27.53	72.1	53.2	50.5
8.48	-67.53	-54.23	-54.95	27.47	71.9	53.4	49.4
8.5	-65.11	-53.4	-54.95	27.47	72	53.2	46.2
8.62	-67.45	-53.92	-54.98	27.5	71.1	53.3	47.3
8.57	-66.94	-53.5	-54.86	27.69	71.3	53.3	47.1
8.64	-66.98	-53.97	-54.92	27.47	70.9	53.6	50
8.51	-65.37	-53.45	-54.77	27.38	71	53.4	49.4
8.52	-67.42	-54.75	-54.68	27.56	70.5	53.5	48.6
8.49	-66.06	-54.38	-54.8	27.41	70.7	53.5	51.4
8.48	-66.58	-54.23	-54.95	27.72	70.3	53.5	49.4
8.62	-66.36	-53.6	-54.65	27.5	70.4	53.5	51
8.59	-67.71	-53.45	-54.92	27.53	70.2	53.4	49.5
8.55	-66.94	-54.38	-54.92	27.53	70.1	53.5	51.9
8.45	-66.39	-54.12	-54.68	27.84	70.2	53.3	50.4
8.66	-67.16	-53.14	-55.13	27.56	70.1	53.5	49.8
8.59	-67.42	-53.4	-55.01	27.5	70	53.6	49
8.56	-67.78	-54.8	-54.55	27.5	69.9	53.5	51.2
8.55	-67.49	-54.02	-55.01	27.78	69.7	53.5	46.9
8.67	-66.94	-53.4	-55.04	27.53	69.7	53.6	49.5
8.59	-66.65	-53.71	-54.98	27.56	69.4	53.7	49.1
8.57	-67.2	-53.81	-54.89	27.53	69.1	53.4	50.1
8.47	-64.63	-53.92	-54.77	27.81	69.6	53.5	49.3
8.63	-66.47	-54.23	-54.89	27.63	69.2	53.5	48.4
8.59	-67.2	-53.71	-54.86	27.69	69	53.4	48.6
8.57	-68.04	-53.81	-54.83	27.69	68.5	53.6	50.5
8.52	-67.16	-54.28	-54.98	27.87	68.4	53.3	46.9
8.83	-66.83	-53.86	-54.8	27.72	68.1	53.4	53.8
8.54	-66.21	-53.35	-54.83	27.72	68	53.5	48.3
8.6	-67.09	-53.92	-54.74	27.63	67.6	53.4	50.5
8.44	-67.2	-53.55	-54.95	27.9	67.1	53.4	49.9
8.32	-67.05	-53.55	-55.01	27.81	67	53.4	50
8.56	-67.49	-53.6	-55.07	27.75	66.9	53.4	50.1
8.52	-66.06	-53.4	-54.98	27.87	66.4	53.5	52.2
8.47	-67.01	-54.02	-54.8	27.84	66.3	53.5	49.2

8.48	-64.82	-53.5	-54.92	28.11	65.9	53.3	50.1
8.58	-66.83	-53.71	-55.2	27.87	65.8	53.3	49.6
8.57	-66.68	-53.76	-54.68	27.81	64.9	53.4	48.2
8.62	-67.09	-54.07	-54.8	27.9	64.4	53.1	50.4
8.54	-66.28	-53.6	-54.89	28.14	64.2	53.2	53.6
8.69	-67.2	-54.33	-54.92	27.93	63.8	53.3	52.6
8.58	-66.72	-53.92	-55.07	28.02	63.6	53.2	50.2
8.5	-65.4	-53.4	-54.74	28.05	62.9	53.1	50.4
8.37	-67.09	-53.45	-55.01	28.27	62.5	52.8	47.1
8.1	-66.54	-53.97	-55.13	28.14	62.5	52.6	48.2
8.49	-67.38	-54.12	-55.01	28.02	62.9	52.7	51.2
8.46	-67.42	-54.85	-54.68	28.11	62.6	52.7	46.8
8.55	-67.42	-53.97	-54.98	28.08	62.2	52.5	48
8.44	-65.95	-54.9	-54.71	28.21	61.7	52.5	50.3
8.61	-66.65	-53.97	-55.13	28.17	61.5	52.4	43.2
8.53	-67.38	-53.35	-54.92	28.08	61.8	52.4	49.8
8.5	-66.83	-54.44	-54.65	28.14	61.4	52.3	49.8
8.53	-67.38	-53.76	-54.65	28.27	61.9	52.2	51.6
9.06	-66.9	-53.86	-54.77	28.11	61.7	52.1	50.1
8.47	-65.95	-53.71	-54.89	28.17	61.4	52	50.8
8.52	-67.05	-54.38	-54.98	28.24	61.3	52.1	49.5
8.58	-66.68	-53.81	-54.95	28.24	60.4	52	48.7
8.44	-64.41	-53.45	-54.8	28.42	60.3	51.8	47.3
8.53	-66.83	-54.02	-54.74	28.27	60.6	51.8	52
8.6	-67.09	-53.97	-55.13	28.33	60.3	51.6	49.4
8.48	-65.77	-54.33	-54.95	28.21	60.9	51.8	49.8
8.45	-67.23	-53.92	-54.92	28.48	60.5	51.8	48.3
8.33	-67.01	-54.38	-54.98	28.21	59.4	51.6	49
8.55	-67.31	-54.49	-54.89	28.39	59.5	51.6	49.8
8.48	-64.82	-53.92	-54.89	28.21	60.3	51.5	50
8.58	-66.39	-53.71	-55.29	28.21	60.6	51.4	50.3
8.43	-67.34	-54.02	-55.04	28.39	60.3	51.5	48.9
8.83	-66.5	-54.02	-54.95	28.24	60.4	51.6	49.9
8.56	-66.32	-54.44	-55.01	28.27	60.5	51.6	50.3
8.5	-67.31	-54.12	-55.01	28.21	60.3	51.5	49.6
8.54	-67.16	-54.12	-54.92	28.24	60.2	51.3	49.5
8.52	-66.32	-54.28	-55.04	28.48	60.3	51.4	50
8.63	-66.47	-53.71	-54.95	28.39	59.2	51.2	50.5
8.58	-68.08	-53.81	-54.8	28.3	59.3	51.2	52.8
8.55	-66.65	-53.97	-54.77	28.33	59.2	51	49.4
8.36	-67.53	-53.29	-54.8	28.51	59.2	51.2	51.1
8.25	-67.38	-54.23	-54.89	28.42	59.9	51.1	49.8
8.56	-67.56	-54.28	-55.1	28.33	58.8	51	53.9
8.57	-67.38	-53.66	-54.89	28.33	58.4	50.9	50.9
8.58	-67.31	-53.03	-54.98	28.24	58.5	51	48.3
8.55	-67.12	-54.33	-54.86	28.54	58	50.6	51.4
9.06	-65.73	-54.07	-54.86	28.27	57.8	50.8	52.4

8.58	-67.01	-53.35	-54.86	28.45	57.5	50.6	50.4
8.51	-67.01	-53.92	-54.83	28.39	57.2	50.5	51.4
8.47	-66.61	-53.76	-54.92	28.42	57.1	50.5	47.3
8.32	-66.5	-54.07	-54.95	28.6	57.5	50.5	49.5
8.57	-66.54	-53.92	-54.95	28.45	57.1	50.5	50.5
8.55	-67.09	-54.33	-55.1	28.54	56.4	50.3	51.3
8.43	-62.95	-54.23	-55.07	28.42	56.3	50.3	49.4
8.47	-65.84	-53.55	-54.95	28.66	56.4	50.2	49.8
8.87	-67.34	-54.12	-54.86	28.45	56.2	50.2	50.7
8.51	-66.94	-54.33	-54.86	28.39	56.6	50	48.1
8.46	-67.2	-53.4	-55.2	28.51	56.4	50.1	47.7
8.52	-67.42	-54.8	-54.49	28.39	56.2	50	49.1
8.43	-67.16	-53.66	-54.89	28.66	56	49.9	48.7
8.59	-66.5	-53.66	-55.04	28.57	55.6	49.9	47.1
8.53	-66.47	-54.07	-55.26	28.54	55.6	49.9	49.1
8.5	-65.95	-54.23	-54.74	28.54	55.4	49.8	50.5
8.46	-66.43	-54.59	-54.92	28.75	55.4	49.8	50.7
8.73	-64.34	-53.4	-54.98	28.57	55.5	49.7	50
8.5	-62.88	-53.55	-54.89	28.57	56	49.7	48.4
8.47	-64.74	-54.02	-54.92	28.57	55.2	49.6	48
8.52	-66.1	-54.9	-55.1	28.66	54.8	49.5	47.9
8.48	-67.42	-53.66	-54.92	28.79	54.8	49.5	48
8.55	-68.08	-54.28	-54.98	28.54	55	49.5	49.7
8.47	-66.87	-54.8	-54.71	28.57	55.4	49.4	49.5
8.55	-67.45	-54.44	-54.74	28.6	55.6	49.5	46.3
8.54	-66.87	-53.29	-55.13	28.75	56	49.5	51
8.62	-67.45	-53.45	-55.01	28.48	56.7	49.6	51
8.47	-65.81	-54.02	-55.1	28.51	57.2	49.6	50.1
8.44	-66.72	-55.01	-55.1	28.54	57.6	49.6	48.4
8.39	-65.62	-54.23	-55.1	28.6	58.2	49.9	51.2
8.88	-67.2	-54.69	-55.1	28.42	58.9	50	51.1
8.58	-67.05	-54.12	-54.98	28.33	59.6	50.2	51
8.6	-66.54	-54.59	-55.1	28.27	60.2	50.1	51
8.58	-67.2	-54.44	-54.83	28.39	60.5	50.3	53.7
8.35	-67.97	-53.81	-54.92	28.54	61.2	50.5	53.3
8.62	-67.6	-54.64	-55.07	28.3	61.6	50.5	50.7
8.56	-67.42	-53.81	-55.2	28.24	62	50.4	51.6
8.58	-66.94	-53.81	-55.1	28.21	62.6	50.5	49
8.53	-66.47	-53.55	-54.86	28.39	63.6	50.5	48.6
8.85	-65.95	-54.23	-55.23	28.11	64.1	50.8	49.8
8.45	-67.34	-54.33	-55.04	28.05	64.7	51.2	50.9
8.56	-66.25	-54.33	-55.04	27.96	65	51.2	50.1
8.6	-67.34	-53.81	-54.92	27.96	65.8	51	48.2
8.45	-66.87	-54.33	-54.83	28.21	65.9	51.5	49.5
8.64	-67.09	-53.97	-55.04	27.96	66.8	51.6	50.1
8.45	-65.18	-53.14	-54.98	27.96	67.1	51.6	51.6
8.56	-67.16	-53.92	-54.95	27.93	67.5	51.9	49.9

8.47	-66.9	-54.54	-54.86	28.17	67.7	51.7	50.1
8.28	-67.75	-53.55	-55.1	27.84	68.1	51.9	50.2
8.56	-67.64	-53.92	-55.1	27.93	68.9	52.1	48
8.58	-67.12	-54.23	-54.98	27.9	69.1	52.2	49.4
8.56	-67.34	-53.81	-55.07	27.9	69.1	52.4	50.7
8.56	-67.34	-53.76	-55.13	27.78	68.7	52.7	45.8
8.58	-66.61	-54.59	-54.95	27.72	71	52.4	50
8.5	-67.71	-54.23	-54.92	27.96	70.2	52.7	50.5
8.24	-67.49	-54.95	-54.89	27.81	70.7	52.9	49.5
8.6	-67.16	-54.33	-55.2	27.66	70.9	53.2	48.4
8.49	-67.05	-54.28	-55.2	27.72	70.9	53.1	48.4
8.44	-67.71	-53.97	-54.86	27.72	71.1	52.9	51.6
8.5	-66.36	-54.12	-54.83	27.75	71.1	53.2	49.5
8.62	-68.19	-54.07	-54.8	27.69	71.3	53.4	49.9
7.85	-67.38	-54.28	-55.04	27.69	71.9	53.3	50.2
8.5	-65.62	-54.12	-54.95	27.66	72.1	53.6	46.8
8.55	-66.76	-54.28	-55.04	27.69	71.9	53.8	52.6
8.57	-66.87	-53.92	-54.83	27.56	71.9	53.6	51.1
8.52	-67.49	-54.49	-55.1	27.78	72.2	53.8	48.4
8.61	-67.56	-53.66	-54.98	27.66	72.3	53.9	49.6
8.56	-67.82	-53.45	-54.95	27.5	72.3	53.9	50
8.61	-67.49	-54.02	-54.86	27.69	71.9	54.1	50.7
8.55	-67.93	-53.81	-55.07	27.56	72.1	53.8	50.5
8.49	-66.9	-54.38	-55.04	27.87	72.3	54.2	51.1
8.94	-66.65	-53.76	-54.83	27.66	72.5	54.4	45.3
8.58	-67.34	-54.23	-55.23	27.63	72.3	54.4	50.1
8.47	-68.19	-54.38	-54.89	27.69	72	54.4	49.5
8.51	-67.42	-53.03	-54.89	27.56	73.2	55.6	49.5
8.5	-66.83	-53.71	-55.23	27.78	72.5	54.7	49.8
8.91	-67.01	-53.66	-54.68	27.5	72.6	54.9	48.7
8.61	-67.27	-54.69	-55.01	27.53	72.6	55	52
8.6	-67.82	-54.28	-54.92	27.63	72.3	54.9	51.2
8.49	-65.26	-53.92	-54.98	27.56	72.2	54.9	53.4
8.51	-65.99	-53.24	-54.98	27.53	72.5	54.9	49.5
8.54	-67.49	-53.92	-54.8	27.75	72.3	54.9	50.7
8.29	-66.54	-53.97	-54.92	27.72	72.4	54.9	49.7
8.6	-67.45	-54.07	-54.92	27.56	72.3	55	50.2
8.61	-67.34	-53.92	-54.95	27.47	72.8	54.9	44.6
8.53	-66.68	-54.38	-54.83	27.53	72.4	54.9	50.1
8.5	-66.83	-53.81	-55.04	27.63	71.8	54.7	50
8.5	-65.48	-53.66	-54.8	27.56	71.5	54.9	49.5
8.45	-66.9	-54.85	-54.95	27.84	71.2	54.9	52.4
8.26	-66.58	-54.44	-54.86	27.81	71.5	54.9	51.5
8.53	-67.34	-54.75	-55.04	27.66	71.3	54.9	50
8.53	-67.23	-53.71	-54.74	27.56	71	55	48.1
8.52	-67.05	-52.62	-55.29	27.66	70.4	54.9	48.4
8.55	-66.76	-53.66	-55.13	27.72	70.2	54.9	47.2

8.52	-67.64	-54.28	-54.98	27.66	69.7	54.7	50.5
8.53	-67.49	-53.76	-54.98	27.84	69.4	54.6	50.5
8.26	-67.09	-53.76	-54.95	27.87	69.1	54.8	48.7
8.73	-67.2	-53.76	-54.55	27.75	69.1	54.7	49.5
8.54	-67.27	-53.76	-54.8	27.72	68.8	54.5	50.4
8.5	-67.38	-53.6	-55.07	27.78	68.5	54.4	51.2
8.55	-66.68	-54.12	-54.83	27.78	68.4	54.6	49.4
8.56	-67.49	-54.12	-55.01	27.78	67.9	54.3	49.9
8.51	-67.49	-53.81	-54.77	27.87	67.8	54.2	49.9
8.52	-67.34	-54.49	-54.98	28.02	67.7	54.3	49.5
7.97	-64.56	-53.6	-55.07	27.96	67.4	54.4	47.7
8.62	-67.42	-53.81	-55.13	27.9	67.1	54.1	50.4
8.61	-67.2	-54.12	-54.95	27.81	67	54.2	50.1
8.52	-63.35	-53.71	-54.95	27.81	66.9	54.2	49.5
8.49	-67.23	-54.54	-55.01	27.84	66.4	54	50.7
8.53	-67.71	-53.81	-54.98	27.93	66.6	53.8	47.1
8.56	-67.45	-54.02	-54.95	28.02	66.5	53.8	50.5
8.78	-67.34	-55.06	-54.95	27.9	66.3	53.9	49.1
8.48	-65.95	-54.44	-55.13	27.96	66.2	53.7	50.4
8.49	-67.64	-53.97	-55.04	27.96	66.2	53.8	50.3
8.58	-67.27	-53.71	-55.01	27.96	66	53.8	47.7
8.51	-66.32	-53.4	-54.92	27.99	65.8	53.6	46.6
9.18	-67.6	-53.86	-55.04	27.96	65.7	53.7	49.5
8.59	-66.76	-54.23	-54.92	27.96	65.6	53.8	50.8
8.51	-66.98	-54.9	-54.98	27.96	65.4	53.6	48.8
8.54	-67.49	-54.12	-54.71	27.96	65.4	53.6	51.4
8.59	-67.53	-54.23	-55.01	27.9	65.1	53.4	49.2
8.54	-66.98	-53.76	-55.04	28.11	65.1	53.6	49.6
8.92	-64.74	-55.06	-54.83	27.99	64.8	53.7	48.4
8.59	-67.38	-53.81	-54.95	28.05	64.3	53.4	53
8.55	-66.5	-53.6	-54.89	28.02	64.2	53.4	48.9
8.5	-66.76	-53.5	-54.92	27.96	64.1	53.5	54.8
8.6	-66.9	-54.23	-55.07	27.99	64.3	53.2	49.5
8.53	-66.94	-54.75	-55.23	28.24	64.4	52.9	52.4
8.22	-65.11	-54.44	-55.04	28.11	64.2	53.2	51.5
8.6	-67.49	-53.71	-54.89	27.99	64.6	53.2	49.5
8.5	-66.39	-53.35	-55.1	27.96	64	53.1	48.3
8.45	-67.23	-54.23	-54.8	27.99	63.9	52.9	49.5
8.5	-66.68	-54.8	-55.2	27.93	63.9	52.8	48.4
8.58	-67.34	-53.6	-54.77	28.02	63.4	52.8	52
8.47	-66.83	-54.02	-54.74	28.21	62.6	52.6	50.5
8.66	-65.73	-54.44	-54.83	28.02	62.4	52.7	48.8
8.59	-67.34	-53.24	-55.13	28.08	62.4	52.7	48.4
8.57	-67.05	-53.97	-54.74	28.11	62.2	52.6	47.5
8.48	-66.17	-53.81	-54.92	28.17	62.1	52.4	49.2
8.48	-66.21	-53.81	-54.98	28.11	61.9	52.7	49.4
8.46	-66.54	-53.71	-54.98	28.3	62.1	52.3	49.8

9	-66.9	-53.92	-55.04	28.11	61.9	52.2	49.3
8.62	-67.64	-54.07	-55.07	28.11	62.1	52.4	47
8.52	-65.95	-54.12	-55.23	28.05	62	52.4	43.5
8.57	-67.6	-53.29	-54.86	28.14	62	52.2	52.9
8.57	-67.64	-54.49	-54.86	28.17	62	52.1	47.6
8.54	-66.83	-54.33	-54.95	28.24	61.7	51.9	50.5
8.52	-67.34	-54.28	-55.1	28.27	62.3	52.1	51.3
8.61	-67.82	-54.54	-54.92	28.08	62	52	49.5
8.51	-67.86	-53.92	-54.95	28.14	62.2	52.1	50.1
8.59	-67.01	-54.07	-54.83	28.08	61.7	51.9	49.6
8.47	-67.05	-53.66	-55.13	28.11	61.1	52	51
8.57	-66.87	-54.64	-54.86	28.11	61.1	51.9	49.6
8.44	-66.36	-54.49	-55.04	28.24	61.7	51.9	50.1
8.38	-67.38	-53.92	-54.8	28.21	61.8	52.1	48.8
8.55	-67.34	-53.86	-54.83	28.14	61.9	52	52.1
8.6	-67.12	-53.4	-55.07	28.08	61.9	52	48
8.5	-66.36	-54.23	-54.89	28.11	61.6	51.8	49.4
8.52	-66.54	-54.12	-54.89	28.08	61.6	51.7	50
8.55	-67.38	-53.6	-54.8	28.05	61.9	51.8	47.3
8.55	-67.09	-53.6	-55.13	28.11	61.9	51.7	49.9
8.53	-66.72	-53.97	-55.2	28.33	61.9	51.6	49
8.79	-67.31	-53.81	-54.71	28.08	61.9	51.7	50.5
8.54	-66.36	-53.71	-54.74	28.05	61.4	51.6	50.9
8.56	-67.2	-54.07	-54.98	28.14	61.6	51.6	52.2
8.58	-67.45	-54.28	-55.04	28.05	61.3	51.8	48.4
8.53	-66.87	-54.02	-54.89	28.17	61.5	51.6	48.6
8.29	-67.09	-54.69	-55.07	28.24	61.7	51.5	50.7
8.52	-66.98	-53.97	-54.98	28.24	61.8	51.7	48.6
8.62	-66.58	-53.92	-54.77	28.14	62.1	51.6	47.9
8.5	-65.7	-54.07	-54.92	27.96	62.5	51.8	51.6
8.53	-66.83	-53.97	-55.01	28.08	62.9	51.8	46.7
8.59	-67.09	-54.44	-54.98	28.05	63.5	51.9	53.8
8.57	-66.61	-54.28	-55.2	27.93	63.9	51.6	49.8
8.58	-67.23	-54.54	-54.89	28.02	64	51.9	48.4
8.43	-67.64	-53.81	-54.77	28.08	64.4	51.8	51.5
8.41	-67.71	-53.97	-55.01	27.9	64.7	52	49.5
8.63	-67.31	-53.86	-55.07	27.9	64.7	52.2	48.1
8.5	-66.68	-53.86	-54.89	27.9	65.4	52.1	46.7
8.44	-65.37	-54.23	-54.68	27.84	65.9	52.2	51.3
8.5	-66.17	-53.76	-55.23	27.84	65.9	52.6	51.1
8.54	-67.64	-53.19	-54.98	27.81	66.3	52.7	50.5
8.58	-66.25	-53.76	-55.13	27.96	66.8	52.6	49.8
9.18	-67.49	-53.71	-55.1	27.72	67.4	52.7	50.2
8.64	-67.05	-54.75	-54.83	27.56	67.7	52.7	47.3
8.54	-67.01	-53.81	-55.26	27.75	67.9	52.7	49.9
8.48	-65.66	-54.44	-55.04	27.75	68.2	52.9	50.3
8.49	-66.28	-53.76	-54.92	27.63	69.4	53.1	49.4

8.55	-66.47	-53.76	-54.83	27.63	69.6	53.2	49.1
8.53	-67.49	-54.38	-54.86	27.78	69.3	53.4	48.9
8.2	-67.82	-53.66	-54.98	27.81	69.7	53.5	50.8
8.73	-67.56	-54.12	-54.92	27.66	70.1	53.6	47.4
8.54	-66.61	-54.12	-55.01	27.63	70.2	53.6	51
8.47	-67.42	-53.76	-55.32	27.41	71.2	53.8	49.3
8.57	-67.2	-54.07	-54.74	27.38	72.1	53.8	49.7
8.5	-67.78	-54.23	-54.71	27.47	72.1	53.8	50.3
8.49	-66.76	-54.95	-54.92	27.47	72	53.8	49.6
8.48	-67.12	-54.07	-54.95	27.69	72.1	54.1	50.1
8.38	-67.34	-54.69	-54.86	27.66	72.2	54.1	49.7
8.59	-66.1	-53.81	-54.86	27.53	72.3	54.1	51.4
8.48	-67.42	-53.81	-54.77	27.44	72.7	54.3	48.8
8.58	-67.6	-53.71	-54.95	27.35	73.4	54.4	50.5
8.59	-67.23	-54.02	-54.92	27.29	74.6	54.6	49.8
8.51	-67.09	-54.28	-54.86	27.2	75.1	55.2	50
8.38	-67.42	-54.59	-54.92	27.53	74.7	55.1	48.7
8.57	-67.71	-53.71	-54.92	27.32	75	55.2	50.8
9.03	-67.42	-54.28	-55.01	27.08	75.3	55.5	47.5
8.63	-66.06	-53.71	-54.89	27.17	75.9	55.4	51.1
8.59	-67.2	-53.76	-55.01	27.17	76.2	55.5	45.7
8.59	-67.53	-54.07	-54.83	27.26	75.1	55.5	51.5
8.6	-67.75	-53.92	-54.92	27.17	74.7	55.7	50.3
8.43	-66.06	-53.5	-54.92	27.23	74.6	55.6	48.9
8.44	-66.9	-54.12	-54.74	27.32	75.1	55.7	49.5
8.43	-67.86	-53.09	-54.86	27.35	75.7	55.7	50.5
8.74	-66.65	-53.97	-54.77	26.92	75.9	55.8	50.9
8.6	-67.12	-54.12	-54.86	27.14	76.5	55.8	50.5
8.53	-67.16	-53.66	-54.89	27.11	76.3	55.8	50.5
8.47	-67.34	-53.92	-54.95	27.08	76.5	56	49.2
8.58	-66.68	-53.6	-54.95	27.01	76.9	56	50.5
8.55	-67.53	-53.92	-54.95	27.14	76.7	56.1	50.5
8.5	-65.88	-53.45	-54.86	27.26	76.6	56.1	49
8.4	-68.15	-53.6	-55.07	26.95	76.9	56.1	45.8
8.61	-65.22	-54.44	-54.77	27.08	76.8	56.3	51.7
8.56	-67.45	-53.71	-54.71	27.11	76.6	56.1	49.1
8.6	-67.42	-53.29	-54.77	27.05	76.9	57.1	50.5
8.59	-66.87	-53.71	-54.86	26.98	77.2	56.6	50.5
8.47	-67.34	-54.02	-54.74	26.98	77.2	56.6	50.5
8.5	-66.9	-53.97	-54.92	27.05	76.9	56.8	49.8
8.44	-65.26	-53.86	-54.89	27.2	77.1	56.6	51.5
8.39	-67.6	-53.29	-54.86	26.98	76.8	56.8	50.4
8.65	-67.71	-53.97	-54.71	27.05	75.9	56.8	52.6
8.46	-64.41	-53.97	-54.95	27.14	75.3	56.7	52.3
8.55	-67.56	-53.4	-54.65	27.08	75	56.7	49.2
8.44	-68.3	-53.92	-54.71	27.11	74.7	56.6	49.5
8.56	-67.42	-54.44	-54.89	27.05	74.6	56.6	52.4

8.44	-67.2	-53.71	-54.83	27.23	74.3	56.5	51.2
8.57	-66.65	-53.86	-55.01	27.41	74.1	56.4	48.2
9.07	-66.58	-54.44	-54.68	27.11	74.1	56.5	51.9
8.51	-65.81	-53.97	-54.77	27.2	73.5	56.5	52.3
8.56	-67.12	-54.07	-55.04	27.2	73.4	56.5	51.9
8.57	-67.16	-54.33	-54.92	27.14	73.2	56.4	52
8.55	-66.54	-53.97	-54.8	27.26	73.1	56.3	50.2
8.47	-64.49	-54.75	-54.83	27.29	72.9	56.3	51.4
8.34	-65.37	-53.81	-54.92	27.41	72.7	56.4	50.1
8.45	-66.47	-53.71	-54.68	27.47	72.5	56.2	49.9
9.04	-65.62	-54.38	-54.74	27.17	72.6	56.2	49.9
8.66	-67.53	-53.71	-54.86	27.29	72.2	56	49.8
8.59	-66.87	-53.97	-54.71	27.32	72.1	56.1	49.5
8.53	-67.71	-54.23	-54.86	27.29	72.1	56.2	51.6
8.52	-67.49	-53.4	-54.83	27.32	71.8	56	49.9
8.52	-68.08	-53.81	-54.89	27.35	71.9	56	48.4
8.54	-67.05	-54.28	-54.74	27.29	72	56.1	50.3
8.42	-67.6	-53.92	-54.74	27.47	72	55.9	49.8
8.25	-67.89	-53.81	-54.92	27.44	71.9	56	51.7
8.57	-68.04	-54.02	-55.01	27.2	71.6	56.1	50.5
8.52	-67.42	-53.71	-54.74	27.29	71.8	56.2	46.9
8.56	-67.53	-54.64	-54.98	27.23	71.8	56	47.7
8.53	-67.45	-53.55	-54.77	27.35	71.8	56	51.7
8.56	-67.01	-53.97	-54.8	27.29	71.9	55.8	49.6
8.5	-67.01	-52.83	-55.04	27.35	71.5	55.9	50.2
8.5	-67.12	-53.76	-54.89	27.5	71.4	55.9	47.1
8.32	-66.9	-54.33	-54.77	27.35	71.4	55.8	53
8.64	-67.93	-53.71	-54.95	27.35	71.3	56	50.2
8.55	-66.68	-53.81	-54.8	27.29	71.2	56	50.7
8.57	-67.6	-53.71	-54.77	27.32	71.6	55.6	48.4
8.52	-66.32	-53.5	-54.68	27.26	71.4	55.7	49.6
8.47	-66.61	-53.03	-54.98	27.29	71.6	55.7	49.3
8.48	-64.6	-54.33	-54.83	27.35	71.5	55.9	50.5
8.5	-67.78	-54.02	-54.95	27.53	71.5	55.9	47.7
9.08	-66.32	-53.6	-55.04	27.29	71.3	55.9	51.5
8.58	-67.45	-54.02	-54.77	27.32	71.2	55.8	50.7
8.61	-67.49	-54.02	-54.86	27.23	71.3	55.8	49.9
8.59	-67.45	-53.66	-54.83	27.29	71.4	55.8	50
8.58	-67.71	-53.97	-54.74	27.2	71.5	55.8	48.2
8.54	-66.98	-53.97	-54.8	27.32	71.6	55.7	49.5
8.5	-67.38	-53.24	-55.1	27.53	71.5	55.8	50.3
9.08	-66.65	-54.49	-54.8	27.14	71.6	55.7	47.6
8.52	-66.94	-53.55	-54.89	27.26	72.1	55.8	50
8.51	-65.84	-53.81	-54.92	27.23	72	55.8	48.4
8.53	-67.75	-53.97	-54.71	27.2	72.3	55.7	49.5
8.56	-66.39	-53.4	-54.71	27.29	72.3	55.8	50.7
8.58	-67.75	-53.6	-55.04	27.26	72.1	55.9	52.9

8.51	-68	-54.12	-55.26	27.44	72	55.7	52
8.5	-67.2	-54.07	-54.74	27.44	72.2	55.9	50.3
9	-67.86	-53.71	-54.89	27.17	71.9	55.7	48.4
8.5	-63.79	-53.76	-54.89	27.26	72	55.7	50.9
8.53	-67.31	-54.07	-54.68	27.2	71.8	55.6	43.9
8.47	-65.95	-54.12	-55.04	27.26	71.9	55.7	50.2
8.48	-67.53	-53.66	-54.71	27.26	71.5	55.6	50
8.55	-67.01	-53.71	-54.86	27.26	71.5	55.7	53.9
8.54	-67.97	-53.5	-54.86	27.41	71.4	56	49.4
8.77	-67.34	-54.07	-54.83	27.26	71.2	55.5	47.1
8.49	-67.2	-53.5	-54.74	27.26	71.3	55.6	49.9
8.58	-67.01	-53.09	-54.62	27.14	71	55.6	51
8.55	-67.38	-53.81	-54.8	27.23	71.4	55.6	52.2
8.47	-65.07	-53.45	-55.1	27.17	71.2	55.6	48.7
8.37	-67.31	-54.02	-54.83	27.38	71.2	55.5	51.9
8.24	-65.66	-53.19	-54.74	27.44	71.2	55.5	48.7
8.57	-67.16	-54.33	-54.86	27.23	70.9	55.6	49.4
8.51	-67.71	-53.5	-54.65	27.2	70.7	55.6	50.3
8.53	-67.53	-53.4	-54.83	27.2	70.9	55.5	49.5
8.45	-67.45	-52.88	-54.86	27.29	71.2	55.4	47.3
8.42	-68.04	-54.07	-54.86	27.32	71.2	55.4	52.6
8.42	-67.64	-53.76	-54.71	27.35	71.6	55.5	48.9
8.69	-67.53	-54.23	-54.65	27.17	71.8	55.6	46.9
8.6	-67.12	-54.12	-54.71	27.14	71.3	55.6	50.5
8.59	-66.28	-53.45	-54.8	27.26	71.3	55.5	49.7
8.47	-67.49	-54.07	-54.71	27.2	71.1	55.6	44.7
8.5	-67.12	-53.09	-54.83	27.29	70.6	55.4	50
8.37	-66.65	-53.29	-54.98	27.38	70.6	55.1	50.4
8.35	-65.88	-53.29	-54.89	27.38	70.5	55.5	49.7
8.84	-67.2	-53.66	-54.98	27.2	70.4	55.4	51.6
8.54	-67.34	-53.6	-54.8	27.26	70.1	55.4	49.7
8.5	-66.14	-52.88	-54.74	27.17	70	55.4	50.9
8.52	-67.12	-53.92	-54.92	27.32	69.7	55.2	49.1
8.46	-66.98	-53.71	-54.83	27.23	69.8	55.4	51
8.53	-67.53	-53.5	-54.83	27.41	70.1	55.5	49.9
8.19	-65.81	-53.14	-54.89	27.35	71.1	55.6	50
8.66	-66.72	-53.03	-54.95	27.23	71.4	55.6	50.1
8.58	-67.6	-54.12	-54.86	27.26	71.6	55.7	52.7
8.46	-67.78	-53.81	-54.83	27.11	72	55.8	50.1
8.58	-67.6	-54.69	-54.83	27.14	72.2	55.2	48.6
8.55	-66.54	-54.12	-54.83	27.14	72.1	55.6	49.5
8.48	-67.2	-53.5	-54.77	27.2	72.2	55.6	47.1
8.48	-67.78	-54.49	-54.62	27.35	72	55.7	50.7
8.11	-67.12	-53.55	-54.83	27.26	71.2	55.7	51.6
8.63	-67.34	-54.23	-54.83	27.17	71.4	55.8	50.5
8.48	-67.38	-54.02	-54.86	27.2	71.6	55.9	50
8.57	-67.38	-53.55	-55.01	27.17	72	55.7	49.1

8.54	-67.09	-53.71	-54.86	27.11	72.2	55.9	50
8.47	-65.73	-52.72	-54.83	27.11	72.3	55.7	50.1
8.56	-66.9	-53.5	-54.98	27.11	72.3	55.9	49.8
8.53	-67.27	-54.07	-54.83	27.2	72.4	55.9	46.8
7.94	-67.31	-54.07	-54.83	27.26	72.3	56	49.5
8.71	-67.38	-53.76	-54.89	27.23	72.2	55.9	50.2
8.51	-67.64	-53.66	-54.92	27.05	72.3	56.1	49.7
8.5	-67.05	-53.81	-54.8	27.14	72.3	56	51.4
8.58	-67.38	-53.6	-54.8	27.14	72.3	56	49.2
8.53	-67.82	-54.07	-54.62	27.01	72.4	56	48.8
8.46	-67.2	-53.6	-54.98	27.26	72.4	56.1	50.2
8.55	-67.31	-54.33	-54.83	27.26	72.4	56.2	50.1
8.98	-67.42	-53.66	-54.74	26.98	72.5	56.2	50.5
8.48	-66.25	-53.45	-55.01	27.01	72.8	56.2	48.6
8.47	-66.21	-54.38	-54.92	27.01	73	56.2	48.9
8.48	-65.22	-54.07	-54.77	27.08	73.1	56.3	51
8.48	-67.05	-54.64	-54.74	26.98	73.2	56.2	49.5
8.47	-65.62	-54.12	-54.89	27.05	73	56.3	51.7
8.55	-67.2	-53.71	-54.89	27.2	73.1	56.3	51.6
8.7	-65.55	-53.76	-54.92	26.89	73.1	56.4	49.7
8.5	-66.17	-54.44	-54.71	26.98	73.1	56.5	48.9
8.58	-66.68	-54.02	-55.07	26.98	73.2	56.5	51.1
8.54	-67.16	-53.66	-54.83	26.92	73.4	56.5	48.7
8.59	-67.53	-53.5	-54.86	26.98	73.7	56.5	49.8
8.56	-67.53	-53.24	-54.92	26.98	74.2	56.5	52.2
8.54	-67.12	-53.6	-54.89	27.08	74.6	56.6	49.6
9	-67.34	-53.71	-54.89	26.83	75.2	56.7	49.5
8.53	-65.22	-53.86	-54.71	26.8	75.7	56.9	53.7
8.5	-66.14	-53.92	-54.74	26.8	75.9	56.9	51.2
8.47	-66.9	-53.86	-54.8	26.83	76.2	56.9	48.7
8.59	-67.93	-53.66	-54.86	26.8	76.3	57.1	47.7
8.57	-67.86	-54.02	-54.83	26.77	76.5	56.9	47.3
8.47	-67.16	-53.45	-54.89	26.95	76.7	57.1	49.8
8.45	-67.2	-53.92	-55.01	26.98	76.8	57.1	52.5
9.16	-67.56	-53.6	-54.8	26.74	76.8	57.1	49.3
8.59	-68.08	-54.07	-54.95	26.77	76.7	57.1	50
8.49	-65.51	-53.66	-54.95	26.77	76.7	57.1	47.6
8.56	-66.39	-53.29	-54.77	26.68	77.1	57.4	48.3
8.52	-67.71	-53.35	-54.83	26.74	77.2	57.4	47.7
8.5	-67.71	-53.81	-54.92	26.77	77.3	57.3	49.7
8.54	-67.27	-54.12	-54.74	26.77	77.2	57.5	50.4
8.54	-67.64	-54.02	-54.89	27.01	77.1	57.5	49.5
7.94	-67.34	-53.6	-54.89	27.01	76.9	57.8	49.5
8.54	-65.51	-54.23	-54.83	26.83	76.7	57.5	50.2
8.5	-67.16	-53.66	-54.77	26.89	76.6	57.8	49
8.5	-66.47	-52.72	-54.77	26.83	76.6	57.9	51.7
8.56	-67.71	-53.86	-54.83	26.77	76.6	57.4	48.6

8.59	-67.71	-53.76	-55.01	26.89	76.6	57.8	46.6
8.42	-65.4	-53.81	-55.07	27.05	76.4	57.8	49.8
8.28	-67.64	-53.6	-54.8	27.08	76.3	58	50.4
8.62	-67.49	-53.76	-54.95	26.89	76.3	57.8	50.4
8.57	-67.42	-54.23	-54.92	26.8	75.9	57.9	49.5
8.57	-67.56	-53.66	-54.95	26.89	76.1	57.9	51.1
8.57	-68.52	-53.92	-54.89	26.92	75.6	57.8	48
8.54	-66.98	-53.6	-54.98	26.8	75.6	57.8	51.6
8.53	-67.82	-53.81	-54.92	26.83	75.5	57.5	48.7
8.5	-67.38	-53.66	-54.89	27.17	75.2	57.8	48.3
8.5	-67.93	-54.02	-54.77	26.8	74.8	57.6	48.6
8.62	-67.82	-53.19	-55.04	26.95	74.5	57.9	49.2
8.48	-66.21	-54.07	-54.89	26.95	74.2	57.8	50
8.61	-66.94	-53.76	-54.92	26.98	74.3	57.8	46.8
8.59	-67.49	-53.86	-55.07	27.08	74.1	57.8	49.2
8.51	-66.14	-53.97	-54.89	26.92	74	57.6	50.2
8.5	-67.64	-53.97	-54.8	27.17	73.7	57.4	48.6
8.22	-67.45	-53.81	-54.8	27.17	73.7	57.5	49.5
8.72	-65.4	-53.97	-55.13	27.05	73.4	57.5	49.1
8.53	-67.75	-53.86	-55.01	26.95	73.4	57.6	49.8
8.59	-67.45	-54.12	-54.89	27.11	73.4	57.5	49.8
8.56	-67.23	-54.28	-54.95	27.01	73.4	57.4	47.6
8.5	-67.42	-54.33	-54.92	27.01	73.4	57.4	51.3
8.46	-67.78	-54.23	-54.89	27.05	73.3	57.2	51.2
8.47	-67.27	-54.12	-54.86	27.17	73.4	57.4	49.3
8.3	-67.64	-53.71	-54.92	27.17	73.4	57.4	46.6
8.47	-67.75	-53.71	-55.2	27.08	73.2	57.6	50.3
8.55	-67.31	-54.28	-54.92	27.11	73.3	57.4	51
8.58	-67.53	-54.28	-54.98	27.05	73.4	57.4	48.8
8.52	-67.27	-54.23	-55.07	27.08	73.2	57.3	47.6
8.55	-66.98	-54.12	-54.95	27.05	73.1	57.1	48.7
8.54	-67.34	-54.02	-55.07	27.26	73.2	57.1	51.3
8.36	-68.44	-54.23	-55.26	26.98	73	57.2	51.6
8.6	-67.12	-53.66	-55.32	27.05	73	57.4	50.5
8.51	-65.48	-53.6	-55.01	27.08	73.1	57.1	52.1
8.59	-67.27	-54.02	-55.04	27.14	73.1	57.2	50.4
8.48	-67.6	-53.92	-55.01	27.17	73	57.1	51.4
8.49	-67.42	-53.97	-55.1	27.14	72.7	57.2	45.8
8.59	-67.38	-54.07	-55.07	27.14	72.9	57.1	51.9
8.53	-67.38	-53.66	-55.23	27.26	72.8	57	49.1
8.21	-66.03	-53.86	-54.92	27.2	72.7	57.1	48.7
8.58	-66.58	-53.19	-54.86	27.14	72.7	57.2	49.3
8.56	-66.98	-53.66	-54.92	27.11	72.5	57.1	50.2
8.5	-66.61	-54.44	-55.1	27.01	72.7	57.1	48.9
8.53	-67.45	-54.12	-54.74	27.14	72.4	57.1	49.6
8.44	-68.3	-53.71	-54.98	27.17	72.5	57	51
8.58	-67.97	-53.81	-55.1	27.08	72.3	57.1	46.9

8.47	-67.89	-54.02	-55.23	27.23	72.3	57	48.9
8.21	-67.49	-54.33	-55.01	27.23	72.3	57	45.3
8.64	-67.31	-53.97	-54.98	27.05	72.5	57	49.4
8.57	-67.97	-54.02	-54.83	27.08	72.3	57.1	49.8
8.6	-67.6	-54.59	-55.29	27.05	72.1	56.9	46.2
8.56	-66.68	-53.97	-54.89	27.17	72	56.9	51.6
8.6	-67.05	-53.14	-54.98	27.05	71.9	56.8	51.4
8.4	-68.11	-53.71	-55.23	27.29	72	56.9	47.3
8.56	-66.65	-53.86	-55.2	27.26	72	56.8	49.8
8.83	-65.33	-53.97	-54.68	27.05	72.2	56.9	50.3
8.47	-65.62	-54.23	-55.01	27.08	72	56.9	50.8
8.52	-67.71	-53.76	-55.01	27.01	71.9	56.9	51.6
8.58	-67.71	-54.23	-54.86	27.05	71.9	56.8	49.7
8.46	-67.38	-54.02	-55.04	27.08	71.9	56.9	52.2
8.59	-68.08	-53.92	-54.86	27.05	72	56.9	47.3
8.43	-66.83	-53.6	-55.01	27.29	71.6	56.7	49.3
8.48	-67.49	-53.71	-55.07	27.26	71.9	56.7	50.4
8.54	-67.97	-54.64	-54.89	27.14	72	56.7	46.5
8.59	-67.64	-53.97	-55.2	27.14	71.9	56.6	47
8.45	-66.39	-53.92	-55.13	27.05	72	56.7	49.8
8.51	-67.6	-53.55	-55.26	27.14	71.9	56.6	48.2
8.56	-67.78	-53.92	-54.86	27.11	71.6	56.9	48
8.46	-68.11	-53.5	-54.77	27.41	71.5	57	49.9
7.77	-68.19	-53.66	-55.07	27.29	71.4	56.7	50.5
8.64	-68.3	-53.4	-54.92	27.05	71.5	56.4	49.5
8.51	-66.32	-53.55	-54.89	27.11	71.6	56.6	51.1
8.57	-67.56	-54.02	-54.95	27.08	71.2	56.4	48.8
8.56	-68.11	-54.02	-55.04	27.05	71.3	56.6	45.8
8.45	-65.81	-53.76	-54.98	27.11	71.4	56.5	51.7
8.37	-64.85	-54.12	-54.95	27.26	71.4	56.5	49.8
8.09	-66.98	-53.45	-54.98	27.32	71.5	56.6	51.7
8.63	-68.04	-53.29	-55.01	27.11	71.5	56.4	49.3
8.58	-67.89	-54.02	-54.86	27.08	71.3	56.6	50.5
8.6	-68	-54.28	-54.98	27.11	71.5	56.5	50.5
8.56	-67.93	-54.64	-55.04	27.14	71.5	56.5	51.6
8.51	-67.93	-53.71	-55.04	27.11	71.4	56.5	50.5
8.45	-66.54	-53.24	-55.07	27.26	71.5	56.5	52.2
8.5	-67.38	-53.29	-55.1	27.29	71.8	56.4	47.3
8.33	-67.64	-53.55	-55.04	27.23	72	56.5	47.6
8.53	-67.45	-54.8	-54.83	26.98	72.4	56.6	46.9
8.56	-67.12	-54.44	-54.89	27.08	72.7	56.7	50.2
8.46	-66.21	-53.5	-55.13	26.98	72.8	56.6	53
8.55	-67.42	-54.54	-54.98	27.01	73	56.5	51.6
8.47	-68.11	-53.45	-55.2	27.05	73.3	56.7	48.3
8.57	-67.64	-54.33	-55.13	26.89	73.4	56.7	50
8.43	-65.62	-54.23	-55.04	27.11	73.6	56.8	48.6
8.71	-66.17	-54.64	-54.71	26.98	73.6	56.9	48.3

8.5	-66.5	-54.38	-54.86	26.83	73.8	56.7	47.9
8.47	-65.07	-53.5	-55.07	26.98	74.3	56.9	47
8.51	-66.03	-53.14	-55.07	26.98	74.5	56.9	50.1
8.46	-65.59	-53.4	-55.01	26.95	74.5	56.9	52.4
8.44	-66.43	-54.02	-54.86	27.11	74.6	56.8	48.6
8.21	-67.38	-54.59	-55.04	27.11	74.8	57	49.8
8.6	-68.22	-53.76	-55.2	26.92	74.9	57.1	50.2
8.56	-67.6	-54.23	-55.13	26.95	75	56.8	51.6
8.52	-67.45	-53.66	-54.8	26.89	75.2	57	49.5
8.52	-67.6	-53.5	-55.07	26.89	75.4	57.1	51.4
8.44	-67.75	-54.12	-55.13	27.05	76.1	57.3	52.2
8.53	-67.75	-53.92	-54.98	26.92	77.7	57.1	47.3
8.71	-68.04	-54.23	-55.23	26.62	78.6	57.3	53.2
8.51	-68.44	-53.92	-55.01	26.62	79.7	57.4	49.3
8.49	-65.55	-53.86	-54.95	26.56	79.7	57.5	50.7
8.54	-67.53	-54.07	-54.8	26.62	79.9	57.6	50.1
8.56	-68.37	-54.38	-54.89	26.59	80.1	57.6	48.7
8.49	-68.48	-53.66	-55.13	26.77	80.3	57.8	53
8.49	-67.97	-53.71	-54.95	26.68	80.9	57.8	48.8
8.86	-68.19	-53.86	-54.95	26.37	82.9	58	51
8.49	-65.48	-53.76	-54.98	26.34	84.2	58.2	51.8
8.55	-67.16	-53.81	-54.86	26.31	84.9	58.4	50.5
8.5	-66.28	-53.92	-55.04	26.31	84.6	58.5	51.5
8.47	-66.65	-54.12	-54.86	26.31	84.3	58.6	45.3
8.58	-67.97	-53.97	-54.8	26.22	84.6	58.8	48.7
8.55	-68.08	-53.97	-54.65	26.28	85	58.9	48.1
8.43	-68.3	-53.6	-54.92	26.31	84.9	59	52.5
8.47	-67.75	-53.71	-54.92	26.4	84.5	59.2	51.2
8.52	-67.75	-54.02	-54.98	26.22	84.3	59.2	51.7
8.58	-67.49	-53.66	-54.95	26.22	84.5	59.3	51.2
8.57	-67.42	-53.81	-54.83	26.22	85.2	59.5	49.1
8.53	-67.09	-53.86	-55.04	26.25	84.8	59.4	53.1
8.56	-67.23	-54.07	-54.95	26.25	84.5	59.5	49.4
8.49	-66.9	-53.5	-54.95	26.16	85.8	61.5	49.9
8.52	-67.2	-53.86	-54.98	26.25	85.9	61.1	51.4
8.53	-67.16	-53.6	-54.95	26.22	85.8	60.7	49
8.52	-67.27	-53.81	-54.95	26.31	85.6	60.6	50.5
8.54	-67.45	-53.5	-55.04	26.16	85.5	60.5	48.4
8.56	-67.31	-53.66	-54.8	26.22	85.2	60.5	50.9
8.61	-67.75	-53.71	-54.8	26.31	85	60.6	51.6
8.53	-67.89	-53.35	-54.95	26.13	85.1	60.5	51.4
8.52	-67.05	-53.14	-54.83	26.16	85.6	60.3	50.4
8.45	-67.75	-53.81	-54.86	26.19	85.7	60.5	48
8.46	-67.82	-54.23	-54.77	26.28	85.7	60.4	48.6
8.47	-67.89	-54.02	-54.95	26.37	85.5	60.5	49.9
8.52	-67.6	-53.86	-54.95	26.34	85.6	60.5	50.5
8.53	-67.64	-54.02	-54.86	26.34	85.3	60.4	47.9

8.19	-66.36	-54.23	-54.77	26.31	85.3	60.7	52.3
8.81	-68.22	-54.23	-54.89	26.28	84.9	60.6	52.2
8.55	-68.15	-53.55	-54.92	26.22	84.6	60.7	48.4
8.48	-67.78	-53.66	-54.8	26.28	84.3	60.6	51.5
8.56	-67.6	-54.23	-54.74	26.22	84.2	60.6	50.2
8.57	-68.26	-54.33	-55.01	26.25	83.9	60.5	49
8.5	-66.76	-54.44	-54.77	26.31	83.5	60.5	52.3
8.47	-63.9	-53.6	-54.86	26.37	83	60.4	47.8
8.5	-67.89	-53.81	-54.92	26.53	82.8	60.5	49.4
8.38	-68.44	-54.23	-55.01	26.5	82.3	60.5	49.2
8.57	-67.49	-53.81	-54.95	26.37	82.1	60.6	49.2
8.48	-68.22	-53.81	-54.92	26.43	81.9	60.3	49.5
8.45	-67.82	-53.45	-55.01	26.47	82.1	60.3	46.2
8.55	-67.89	-54.12	-55.04	26.4	81.6	60.2	49.8
8.56	-67.42	-53.81	-54.86	26.37	81.3	60.2	51.6
8.44	-67.38	-53.55	-54.83	26.62	81.3	60.2	46.2
8.76	-67.75	-53.86	-55.1	26.37	81.2	60.2	48.7
8.56	-67.93	-54.28	-54.83	26.53	80.7	60.3	49.8
8.58	-67.89	-53.76	-55.13	26.43	80.7	60.1	46.6
8.47	-66.32	-54.02	-55.07	26.53	80.7	59.9	47.7
8.56	-67.97	-54.23	-55.1	26.47	80.6	60.2	50
8.5	-67.93	-53.92	-55.04	26.4	80.2	59.9	50.5
8.52	-67.78	-53.97	-54.89	26.53	79.9	59.8	50.5
8.48	-67.71	-53.92	-54.98	26.65	80	59.5	51.4
8.57	-67.34	-53.76	-55.04	26.65	79.8	59.8	51.3
8.72	-66.43	-54.95	-55.1	26.5	79.7	59.7	51.2
8.54	-66.94	-53.6	-55.07	26.5	79.8	59.7	49.9
8.5	-68.3	-54.49	-54.83	26.47	79.7	59.7	49.2
8.5	-67.86	-53.97	-55.1	26.47	79.6	59.4	51.3
8.56	-67.42	-54.33	-55.01	26.5	79.3	59.5	48.9
8.59	-67.89	-54.28	-55.01	26.53	79.3	59.7	48.4
8.46	-67.42	-54.28	-54.98	26.65	79.4	59.5	49.7
8.48	-67.75	-54.64	-54.8	26.74	79.4	59.5	49.5
8.82	-67.64	-53.86	-54.92	26.53	79	59.5	48
8.5	-67.05	-53.66	-54.83	26.47	79.1	59.5	51.5
8.58	-67.82	-53.5	-54.8	26.5	78.9	59.5	49.1
8.45	-67.89	-53.92	-54.89	26.5	78.8	59.4	49.5
8.53	-67.89	-53.97	-55.01	26.56	78.8	59.5	51
8.57	-67.31	-53.76	-54.95	26.5	78.6	59.3	51.1
8.46	-66.98	-53.76	-55.04	26.68	78.7	59.3	50
8.18	-64.52	-54.38	-54.92	26.59	78.8	59.3	53.2
8.54	-67.34	-53.92	-54.92	26.47	78.6	59.2	53.8
8.53	-67.71	-53.24	-54.92	26.53	78.5	59.3	50.9
8.58	-67.34	-53.55	-55.01	26.59	78.7	59.2	51
8.53	-66.94	-53.76	-54.95	26.59	78.5	59.2	49
8.44	-68.55	-54.44	-55.04	26.53	78.4	59.1	49.4
8.47	-66.36	-53.92	-54.92	26.5	78.4	59.1	47.3

8.43	-68.22	-53.76	-54.77	26.68	78.5	59.2	49.8
7.82	-67.05	-53.86	-54.92	26.65	78	59.2	50.3
8.8	-68.08	-53.5	-54.86	26.5	78.1	59.2	48.2
8.52	-67.23	-53.86	-55.01	26.5	77.9	59.1	50.8
8.6	-68.44	-53.86	-54.89	26.56	77.8	59	49.9
8.47	-66.32	-53.4	-55.13	26.5	77.9	59.1	51
8.45	-65.44	-54.59	-54.95	26.53	77.8	58.9	50.8
8.58	-67.42	-54.23	-54.95	26.53	77.7	59	45.7
8.42	-68.15	-53.71	-54.89	26.65	77.7	59.1	48.1
9.07	-66.14	-53.55	-54.95	26.43	77.7	58.9	52
8.5	-67.05	-53.55	-54.83	26.5	77.9	58.7	51.3
8.47	-65.77	-54.23	-54.95	26.47	78.1	59	51.7
8.53	-68	-53.55	-54.89	26.47	78.1	58.9	49.3
8.58	-67.45	-54.02	-55.07	26.56	78	59	50.8
8.48	-67.86	-53.6	-54.77	26.5	78.3	58.9	49.2
8.46	-66.61	-53.55	-55.01	26.53	78.4	58.7	46.7
8.42	-66.47	-53.71	-54.77	26.65	77.9	58.8	49.7
8.71	-67.53	-54.07	-54.77	26.47	78.1	58.9	51.7
8.46	-68.63	-53.6	-54.98	26.4	78	58.9	48.6
8.56	-67.53	-54.02	-54.8	26.4	77.7	58.9	47.8
8.46	-67.01	-53.29	-55.01	26.43	77.6	58.7	47.2
8.57	-68.33	-53.55	-54.8	26.43	77.5	58.8	52.1
8.51	-67.82	-53.81	-54.65	26.56	77	58.8	51.7
7.76	-68.15	-53.86	-54.83	26.62	77	58.7	50.1
8.57	-66.98	-54.23	-54.92	26.53	77.1	58.7	50.2
8.53	-68.04	-53.97	-54.98	26.37	76.9	58.6	49.9
8.54	-67.27	-54.23	-55.01	26.53	76.6	58.6	48.4
8.6	-68.11	-53.92	-54.8	26.53	76.2	58.5	52.7
8.5	-67.05	-53.29	-54.86	26.47	76.1	58.5	52.8
8.51	-68.08	-54.02	-54.83	26.62	75.9	58.5	49.8
8.33	-67.71	-54.54	-54.92	26.59	75.8	58.5	49.4
8.55	-68.08	-53.45	-55.07	26.59	75.7	58.5	49.5
8.51	-68.04	-54.44	-54.86	26.5	75.6	58.5	47.9
8.43	-67.71	-53.29	-54.83	26.4	76.1	58.5	49.7
8.52	-66.17	-53.71	-55.07	26.47	75.7	58.4	49.5
8.55	-67.93	-53.45	-54.71	26.5	76.3	58.4	50.7
8.49	-68.19	-53.55	-54.68	26.59	76.6	58.2	48.1
8.5	-67.89	-54.07	-54.92	26.62	76.8	58.6	49.7
8.73	-67.75	-53.76	-54.83	26.43	76.9	58.5	50.3
8.56	-68.44	-54.38	-55.04	26.4	77.2	58.6	50
8.58	-68.15	-54.23	-54.89	26.34	77.3	58.6	48.7
8.56	-67.38	-54.02	-54.74	26.4	77.6	58.5	51.1
8.55	-67.6	-53.5	-55.01	26.43	77.4	58.5	50.8
8.43	-66.9	-53.5	-54.92	26.68	77.5	58.6	50.2
9.02	-68.15	-53.76	-54.77	26.28	77.3	58.6	52
8.49	-66.36	-55.11	-54.74	26.43	76.8	58.7	53
8.54	-67.49	-53.97	-54.92	26.4	76.8	58.5	50.1

8.6	-67.64	-54.07	-54.77	26.4	76.6	58.4	48.3
8.5	-66.68	-53.81	-54.92	26.28	76.5	58.5	48.4
8.57	-66.98	-53.6	-54.83	26.56	76.6	58.4	49.4
8.69	-67.97	-53.66	-55.01	26.37	76.6	58.6	48.8
8.56	-67.64	-53.45	-54.8	26.37	76.2	58.6	49.1
8.54	-67.16	-53.76	-54.95	26.37	76.4	58.5	53.3
8.47	-68.26	-53.71	-54.95	26.37	76.5	58.3	48.8
8.5	-66.76	-53.97	-54.68	26.43	76.5	58.4	50.8
8.47	-67.82	-53.92	-54.92	26.56	76.6	58.6	49.4
7.79	-67.75	-53.97	-55.2	26.56	76.6	58.5	49.6
8.51	-65.77	-54.07	-54.95	26.34	76.7	58.4	50.5
8.53	-67.45	-54.12	-54.95	26.34	76.7	58.6	47.9
8.6	-67.78	-53.97	-54.8	26.37	76.7	58.5	42.7
8.48	-67.23	-54.75	-54.86	26.34	76.7	58.5	44.6
8.42	-68	-54.28	-54.89	26.5	76.8	58.5	49
8.26	-67.38	-53.81	-54.98	26.5	76.5	58.5	50.3
8.61	-67.42	-53.92	-54.92	26.53	75.5	58.6	47.1
8.51	-67.89	-53.81	-55.01	26.56	74.7	58.3	50.8
8.47	-66.1	-54.33	-54.77	26.62	74.3	58.5	50.4
8.54	-67.16	-54.02	-54.83	26.71	74.1	58.3	50.7
8.49	-67.86	-53.81	-54.95	26.83	73.5	58.2	50.3
8.2	-67.93	-54.23	-54.86	26.83	73.4	58.2	51.5
8.61	-67.82	-53.71	-54.89	26.71	73.1	58.2	49.4
8.5	-67.38	-54.64	-54.8	26.74	72.9	58.2	50.4
8.54	-68.19	-53.92	-55.01	26.71	72.5	58.2	48.8
8.53	-68.11	-54.07	-54.92	26.74	72.5	58	50.7
8.48	-67.82	-53.35	-55.26	26.98	72.3	58.2	51.1
8	-64.85	-54.33	-54.98	26.92	72.5	57.9	52.2
8.54	-66.54	-55.21	-55.04	26.8	72.6	58.1	47.9
8.48	-67.86	-53.86	-55.13	26.74	72.6	57.9	49.2
8.48	-67.12	-53.14	-55.26	26.74	73	58	49.9
8.46	-68.19	-53.76	-55.1	26.74	72.9	58.1	49.6
8.52	-67.31	-54.54	-54.89	26.89	72.3	57.6	51.5
8.53	-68.3	-53.76	-54.95	27.01	72.6	57.8	50.3
8.42	-67.75	-53.97	-54.92	26.74	72.6	57.9	49.1
8.67	-67.16	-54.12	-55.13	26.71	72.7	57.9	52.1
8.58	-67.71	-53.86	-54.92	26.83	72.6	57.6	53.3
8.56	-67.34	-54.02	-55.26	26.68	72.9	57.6	51.4
8.5	-67.86	-53.14	-55.01	26.71	73.3	57.6	50.1
8.47	-67.86	-54.12	-55.01	26.8	72.9	57.4	49.6
8.54	-66.83	-53.97	-54.8	26.77	73.1	57.5	46.5
8.46	-67.6	-53.97	-55.13	26.98	73.1	57.3	52.5
8.42	-67.56	-53.29	-55.23	27.05	73.4	57.5	50.3
8.59	-67.27	-54.49	-54.95	26.89	72.5	57.3	51.2
8.45	-67.6	-54.07	-55.1	26.8	72	57.4	49.9
8.53	-68	-53.81	-55.32	26.92	71.8	57.5	49.9
8.5	-66.98	-53.6	-55.07	26.95	71.2	57.2	50.7

8.54	-68.33	-53.97	-55.04	27.01	71.1	57.1	50
8.52	-67.49	-54.07	-55.23	27.2	70.7	57.1	50.2
8.26	-67.97	-54.07	-55.1	27.17	70.5	57.1	49.5
8.61	-67.2	-53.35	-55.26	27.05	70.3	57.2	50.8
8.52	-67.86	-54.07	-55.23	27.01	70.2	57.1	49.9
8.55	-66.9	-53.6	-55.29	27.05	70.1	56.8	50.2
8.53	-67.71	-53.76	-55.23	27.05	69.9	56.8	48.9
8.47	-67.49	-53.5	-55.01	27.05	69.7	57.3	49.5
8.47	-67.45	-54.07	-55.04	27.08	69.8	56.9	47.6
8.51	-67.27	-54.33	-55.07	27.17	69.7	56.6	49.4
8.48	-66.94	-53.76	-55.04	27.32	69.6	56.8	49.2
8.55	-67.64	-53.66	-55.07	27.23	69.7	56.6	50.9
9.1	-67.23	-53.35	-55.1	27.08	69.2	56.6	50.1
8.66	-68	-53.86	-55.23	27.14	69.3	56.5	50.7
8.43	-63.32	-54.12	-55.26	27.11	69	56.6	50.2
8.52	-66.98	-53.81	-54.89	27.2	68.8	56.3	49.5
8.48	-66.5	-53.45	-55.23	27.11	68.9	56.4	50.5
8.46	-65.62	-53.86	-55.29	27.14	68.7	56.3	49.8
8.47	-63.72	-54.69	-55.01	27.14	68.5	56.3	47.7
8.44	-66.61	-54.44	-55.07	27.32	68.2	56.3	52.5
8.18	-65.73	-54.28	-55.23	27.38	68.1	56.4	49.2
8.62	-65.77	-54.49	-55.26	27.23	67.9	56.3	49.2
8.48	-65.62	-54.85	-55.1	27.23	67.6	56.3	51.7
8.56	-67.56	-54.23	-55.26	27.14	67.5	56.1	50.8
8.55	-67.6	-54.49	-55.2	27.23	67.4	56	51.4
8.55	-67.31	-54.49	-55.1	27.29	67.2	56	51
8.45	-67.45	-54.28	-55.29	27.38	67.1	55.7	49.3
8.41	-68.41	-54.02	-55.07	27.41	67.2	55.9	51.1
8.24	-67.75	-53.55	-55.41	27.32	67.4	55.8	48.6
8.57	-67.56	-54.12	-55.1	27.17	66.9	55.8	49.1
8.62	-68.81	-54.49	-55.2	27.32	66.9	55.8	49.8
8.56	-67.78	-54.12	-55.2	27.29	66.8	55.6	50.8
8.53	-67.05	-54.02	-55.29	27.32	66.8	55.6	49.7
8.54	-67.49	-54.12	-55.23	27.35	66.5	55.4	50.5
8.36	-67.31	-54.12	-55.29	27.5	66.2	55.4	50.8
8.53	-67.6	-53.76	-55.23	27.44	66.3	55.5	50.1
8.89	-67.6	-54.23	-55.41	27.23	66	55.5	52.2
8.47	-67.75	-53.5	-55.13	27.32	66	55.4	48.8
8.52	-67.2	-54.02	-55.38	27.38	65.7	55.4	48.9
8.47	-66.72	-54.44	-55.38	27.44	65.5	55.4	46.7
8.56	-67.82	-53.76	-55.2	27.41	65.6	55.2	50
8.53	-67.78	-54.33	-55.23	27.5	65.5	55	49.4
8.5	-67.82	-54.12	-55.13	27.66	65.5	54.9	51.2
8.91	-68.26	-54.02	-55.38	27.53	65.3	54.9	50.3
8.52	-67.12	-53.76	-54.95	27.38	65	54.9	49.3
8.47	-67.56	-54.49	-55.38	27.44	64.8	54.6	50.4
8.46	-66.14	-53.76	-55.29	27.47	64.7	54.8	51.1

8.44	-67.93	-53.92	-55.04	27.53	64.5	54.6	49.5
8.38	-65.84	-53.76	-55.35	27.66	64.4	54.6	49.5
8.55	-68.04	-54.12	-55.47	27.66	64.2	54.5	51.6
8.8	-66.87	-53.6	-55.32	27.5	64	54.5	50
8.44	-67.71	-54.69	-55.2	27.53	63.8	54.5	45.3
8.47	-65.55	-54.69	-55.44	27.53	63.8	54.1	50.7
8.55	-68.3	-54.07	-55.26	27.53	63.7	54.4	50.4
8.56	-67.71	-54.23	-55.26	27.44	63.6	54	53.5
8.41	-68.04	-53.71	-55.56	27.72	63.7	54	49.1
8.41	-65.62	-53.5	-55.56	27.81	63.5	53.8	52.8
8.43	-67.97	-54.8	-55.41	27.72	63.3	53.9	49.9
7.79	-66.39	-54.44	-55.07	27.75	63.4	54	49
8.68	-67.75	-54.12	-55.26	27.56	63.4	53.9	49
8.57	-66.1	-54.85	-55.29	27.56	63.2	53.8	46.7
8.5	-67.56	-54.9	-55.2	27.66	63.1	53.9	50.4
8.57	-68.04	-54.75	-55.26	27.66	62.8	53.8	50.7
8.53	-67.82	-54.54	-55.07	27.63	62.8	53.8	48.9
8.54	-67.78	-53.97	-55.44	27.53	62.5	53.8	48.3
8.47	-64.41	-54.12	-55.38	27.69	62.5	53.7	48.4
8.55	-68	-54.95	-55.47	27.66	62.3	53.7	49.6
8.59	-68.19	-54.23	-55.44	27.66	62.2	53.6	47.6
8.47	-66.39	-53.4	-55.44	27.72	62.1	53.5	49.6
8.45	-67.78	-53.55	-55.32	27.9	62.2	53.5	51.3
8.54	-67.64	-54.54	-55.32	27.9	62.2	53.5	51
8.38	-67.49	-53.97	-55.47	27.72	62.1	53.5	52
8.54	-68	-54.02	-55.59	27.66	61.7	53.4	49.9
8.5	-65.77	-54.12	-55.07	27.75	61.6	53.4	51.5
8.48	-67.75	-54.23	-55.71	27.78	61.8	53.1	49.7
8.47	-67.53	-54.49	-55.41	27.81	61.5	52.8	52.5
8.5	-68	-54.59	-55.38	27.75	61.7	52.9	48
8.34	-65.66	-54.02	-55.65	27.96	61.6	53.2	50.2
8.54	-67.64	-54.49	-55.44	28.05	61.4	52.9	50
8.68	-67.12	-54.33	-55.5	27.78	61.3	53.1	50.2
8.56	-67.38	-54.38	-55.32	27.78	61.2	52.8	50.9
8.5	-67.82	-54.12	-55.41	27.81	61.2	52.7	47.2
8.54	-67.86	-54.59	-55.53	27.81	61.3	52.8	48.8
8.42	-68.19	-54.33	-55.38	27.93	61.3	52.7	48.7
9.04	-68.04	-54.38	-55.35	27.78	61.4	52.7	48
8.56	-67.45	-53.76	-55.59	27.84	61.5	52.7	49.4
8.52	-67.01	-54.69	-55.56	27.81	61.8	52.8	53.8
8.47	-67.05	-54.28	-55.38	27.75	62.2	52.8	49.2
7.88	-66.32	-54.33	-55.29	27.93	62.5	52.9	51.4
8.51	-67.6	-54.38	-55.47	27.75	62.8	52.8	54
8.5	-65.99	-54.85	-55.38	27.78	63.1	53.1	49.3
8.57	-67.82	-54.28	-55.38	27.69	63.7	53.1	50
8.32	-67.75	-55.21	-55.26	27.9	63.7	52.9	49.2
8.52	-67.16	-54.9	-55.5	27.78	64	52.8	50.4

8.45	-67.89	-54.02	-55.41	27.75	64.3	53.1	49.2
8.41	-67.97	-54.95	-55.65	27.99	64.8	53.1	48.2
8.5	-67.97	-53.76	-55.56	27.69	64.9	53.2	49.5
8.49	-66.9	-54.69	-55.44	27.66	64.9	52.9	46
8.38	-68	-53.97	-55.47	27.84	64.8	52.8	51
8.59	-67.82	-53.92	-55.53	27.66	65.5	52.9	47.3
8.47	-68	-54.9	-55.5	27.69	65.6	52.7	56.3
8.48	-67.64	-54.28	-55.71	27.81	66	52.9	49.5
8.57	-67.82	-54.28	-55.5	27.63	65.9	52.9	50.7
8.58	-68.04	-54.75	-55.35	27.56	66.5	52.7	49.4
8.51	-68.11	-54.38	-55.44	27.78	66.4	52.9	48.4
8.61	-68	-55.11	-55.53	27.56	66.8	53.1	48.2
8.5	-66.61	-54.64	-55.65	27.72	66.1	52.9	48.1
8.47	-67.71	-54.23	-55.62	27.9	66.1	53.1	51
8.54	-67.82	-53.81	-55.41	27.72	65.9	53.1	51
8.48	-67.42	-53.71	-55.59	27.69	65.8	53.1	48.9
8.38	-67.75	-53.81	-55.59	27.84	65.8	53.3	49.8
8.64	-68.41	-54.44	-55.44	27.66	65.9	53.3	50.7
8.46	-68.08	-54.38	-55.59	27.53	66.1	53.2	50
8.47	-66.68	-53.81	-55.65	27.66	66.1	53.2	52.8
9.05	-68.15	-54.69	-55.47	27.53	66.5	53.3	49.5
8.56	-68.85	-54.64	-55.59	27.69	66.5	53.4	48.4
8.45	-67.16	-54.49	-55.71	27.66	66.8	53.5	49.5
8.1	-68.15	-55.06	-55.47	27.78	66.9	53.3	50.4
8.48	-65.95	-54.9	-55.65	27.66	67.8	53.4	52
8.47	-68.04	-54.75	-55.47	27.5	69	53.6	49.6
8.44	-67.2	-54.54	-55.56	27.72	68.5	53.4	50.5
8.56	-68.19	-54.8	-55.56	27.56	68	53.3	51.6
8.52	-68.04	-53.71	-55.53	27.56	67.9	53.5	47.3
8.53	-68.11	-54.38	-55.47	27.66	68.9	53.7	49.9
8.57	-67.56	-54.69	-55.81	27.5	68.5	53.6	50.4
8.54	-68.41	-55.11	-55.68	27.53	69	53.5	49.4
8.44	-67.97	-54.75	-55.44	27.66	69.6	53.8	50.8
8.54	-67.86	-55.84	-55.56	27.44	70.1	53.8	49.4
8.57	-67.64	-54.12	-55.68	27.44	69.8	53.8	50.2
8.49	-68.11	-54.69	-55.62	27.66	69.2	53.8	49.1
8.52	-66.76	-54.59	-55.32	27.53	69	53.6	49.2
8.57	-68.26	-54.23	-55.5	27.56	69.2	53.7	51.7
8.48	-68.3	-54.23	-55.68	27.44	69.2	53.7	48.7
7.83	-66.47	-54.8	-55.65	27.75	69.6	53.9	50.8
8.44	-67.89	-54.8	-55.62	27.5	69.2	53.8	51.2
8.47	-66.58	-54.33	-55.59	27.5	69.7	53.9	50.8
8.44	-67.42	-54.28	-55.84	27.72	69.3	53.9	49.1
8.65	-68.33	-54.59	-55.68	27.47	69.1	53.9	51.4
8.5	-68.52	-54.44	-55.71	27.66	68.9	53.9	52
8.5	-68.77	-55.16	-55.71	27.38	68.8	53.9	50.4
8.56	-68.44	-54.49	-55.93	27.75	68.8	53.9	50.2

8.56	-68.11	-54.64	-55.56	27.44	69	54	50.4
8.49	-67.23	-54.59	-55.78	27.47	68.9	53.9	50.8
7.92	-68	-54.75	-55.65	27.56	69	54	51.5
8.5	-67.97	-54.12	-55.53	27.5	68.9	53.9	50.7
8.54	-68.48	-54.59	-55.5	27.63	68.9	53.9	49.2
8.12	-67.89	-54.02	-55.62	27.69	68.8	53.8	50.9
8.48	-68.41	-54.44	-55.56	27.66	68.6	54	46.2
8.48	-68.19	-54.8	-55.78	27.47	68.5	54	50.3
8.31	-67.38	-54.64	-55.44	27.81	68.1	54.1	48.2
8.56	-68.08	-54.59	-55.81	27.75	67.9	54.2	48.7
8.46	-68.08	-54.64	-55.38	27.63	67.7	54.1	49.2
8.63	-67.78	-54.23	-55.56	27.69	67.5	54.3	53.2
8.5	-67.82	-54.69	-55.62	27.72	67.1	54.3	49.7
8.47	-67.2	-53.76	-55.53	27.78	67	54.2	48.6
8.61	-68.85	-54.28	-55.84	27.75	66.8	54.2	51.7
8.51	-68.19	-54.59	-55.62	27.69	66.4	54	50.5
8.39	-68.74	-54.8	-55.59	27.9	65.9	54.1	51.5
8.6	-67.75	-54.64	-55.65	27.78	65.8	54.2	50.1
8.56	-68.48	-54.54	-55.81	27.81	65.6	54	44.8
8.52	-68.04	-55.53	-55.53	27.96	65.1	53.9	49.7
8.56	-67.82	-54.54	-55.71	27.81	64.6	53.9	50.4
8.53	-67.78	-54.02	-55.44	27.87	64.5	54	51.2
8.52	-68.55	-54.38	-55.68	28.08	64.2	53.9	48.1
8.53	-67.16	-54.8	-55.65	27.81	63.9	53.8	50.4
8.45	-65.29	-54.59	-55.62	27.93	63.8	53.8	52.9
8.54	-67.27	-54.69	-55.62	28.08	63.5	53.6	49.7
8.48	-68.11	-55.06	-55.5	27.99	63.1	53.8	47.8
8.52	-67.78	-54.8	-55.87	27.87	62.9	53.6	49.6
8.47	-67.86	-54.33	-55.9	28.11	62.2	53.5	48
8.5	-65.99	-54.44	-55.71	27.99	62.2	53.5	50.5
8.46	-67.01	-54.69	-55.93	27.99	62.3	53.5	52.3
8.43	-67.31	-54.64	-55.78	28.05	62	53.3	49.5
8.52	-67.01	-54.02	-55.9	28.02	61.5	53.4	49.9
8.47	-66.36	-54.38	-55.87	28.05	61.3	53.1	50.3
8.48	-68.11	-54.69	-55.81	28.27	60.5	53.2	50.5
8.65	-68.04	-55.01	-55.87	28.17	60.5	52.9	50.9
8.46	-68.52	-55.27	-55.65	28.05	60.7	52.8	50.7
8.56	-68.15	-54.28	-55.78	28.08	60.6	52.6	45.7
9.18	-68.26	-54.9	-55.68	28.08	60.6	52.6	50
8.47	-65.18	-54.23	-55.65	28.21	60.5	52.7	50
8.45	-65.15	-55.01	-55.87	28.24	60.1	52.7	49.4
8.26	-67.53	-54.64	-55.99	28.3	60.2	52.7	52.1
8.49	-67.38	-54.64	-55.62	28.17	60.2	52.4	50
8.54	-68.33	-55.06	-55.71	28.14	59.5	52.3	47
8.24	-68.55	-54.95	-55.87	28.3	59.4	52.4	50
8.55	-67.78	-54.54	-55.9	28.17	59.2	52.3	41.8
8.43	-65.99	-54.49	-55.74	28.21	59.2	52.2	50.5

8.26	-67.2	-55.21	-55.74	28.39	59.2	52.1	49.5
8.51	-68	-55.11	-55.71	28.21	59.2	52.1	50.3
8.47	-67.78	-54.9	-55.74	28.33	59.2	51.8	48.8
7.88	-67.6	-54.54	-55.68	28.42	58.9	52	52.4
8.56	-68.37	-54.59	-55.68	28.17	59	51.8	50.2
8.48	-68.04	-53.92	-56.02	28.21	58.5	51.8	51.5
8.38	-68.52	-53.97	-55.81	28.48	58.5	51.7	47.7
8.53	-67.6	-54.8	-55.78	28.24	58.4	51.7	52.7
8.57	-68.08	-54.8	-55.62	28.24	58.3	51.6	48.4
8.41	-68.77	-54.8	-55.47	28.39	58.2	51.6	49.7
8.53	-69.07	-55.47	-55.81	28.17	58.2	51.5	52.2
8.5	-67.38	-54.28	-55.87	28.17	58.2	51.4	51.6
8.47	-68.04	-54.64	-55.9	28.51	58.1	51.5	48.6
8.5	-67.53	-54.38	-55.71	28.3	57.9	51.4	49.3
8.47	-68.33	-54.38	-55.74	28.33	57.6	51.4	47.9
8.45	-67.6	-54.64	-55.53	28.45	57.6	51.3	49.5
8.48	-66.61	-54.02	-55.68	28.3	57.6	51.3	50.5
8.45	-66.65	-54.9	-55.74	28.39	57.5	51.2	49.8
8.34	-66.28	-55.01	-55.56	28.54	57.1	51.2	50.7
8.47	-65.15	-55.06	-55.84	28.21	57.2	51.1	51.9
8.42	-65.7	-54.85	-55.93	28.3	57.3	50.9	49.7
8.36	-67.01	-54.02	-55.99	28.48	57.1	51	49.1
8.57	-67.16	-54.59	-55.78	28.33	57	50.6	48.7
8.49	-67.2	-55.11	-55.99	28.24	57.4	50.9	51.2
8.35	-66.32	-54.44	-55.78	28.42	57	50.5	49.3
8.54	-65.73	-54.75	-55.78	28.3	56.9	51	48.6
8.47	-67.6	-54.95	-55.84	28.3	56.9	50.6	49.5
8.36	-67.2	-54.23	-55.78	28.54	57.1	50.6	46.6
8.57	-67.93	-55.27	-55.62	28.27	57.1	50.5	48.6
8.44	-66.83	-54.64	-55.68	28.3	57.1	50.5	48.4
8.44	-66.72	-55.47	-56.02	28.51	57.4	50.5	48.4
8.75	-68.96	-54.59	-55.65	28.39	57.2	50.5	48.9
8.45	-68.22	-54.69	-55.81	28.24	56.7	50.8	50
8.55	-68.55	-54.95	-55.53	28.3	56.3	50.4	49.8
8.83	-66.83	-54.8	-55.84	28.39	56	50.6	51.5
8.56	-68.92	-54.59	-55.74	28.39	55.9	50.2	49.8
8.56	-68.3	-55.21	-55.87	28.42	56	50.3	52.7
8.75	-65.33	-54.23	-55.84	28.48	56	50.5	50.1
8.56	-68.66	-55.01	-55.74	28.42	56	50.3	48
8.5	-68.08	-54.9	-55.93	28.45	56.1	50.1	48.9
9.03	-67.23	-55.37	-56.2	28.33	56.2	50	51.6
8.52	-68	-54.9	-55.99	28.39	56.8	50.4	49.6
8.56	-67.97	-55.21	-55.78	28.27	57.8	50.2	52.1
8.56	-67.86	-55.32	-55.93	28.48	58.2	50.4	45.2
8.54	-68.11	-55.16	-55.99	28.14	58.8	50.4	49.2
8.55	-68.04	-54.75	-55.87	28.14	59.1	50.5	49.2
8.48	-67.45	-55.01	-55.71	28.54	59.2	50.5	50.8

8.41	-66.21	-54.8	-55.93	28.08	59.5	50.8	48.8
8.49	-67.6	-55.01	-55.9	28.17	60.1	50.8	51.5
8.5	-69.1	-55.11	-55.71	28.3	61	50.9	50.5
8.59	-68.15	-54.85	-55.93	28.17	61.7	51.2	48.1
8.54	-68.7	-55.21	-55.93	27.99	62.3	51.2	49.4
8.46	-67.64	-54.64	-55.74	28.17	62.5	51.2	49.7
8.72	-68.33	-54.44	-55.87	28.02	63.1	51.3	50.5
8.5	-68.37	-54.23	-55.84	27.99	63.6	51.3	49.5
8.45	-66.68	-54.8	-55.99	27.93	63.9	51.6	49.5
8.94	-65.26	-54.85	-55.68	27.9	65.3	51.6	53.7
8.53	-68.19	-54.49	-55.9	27.75	66.1	51.6	47.2
8.56	-68.15	-54.95	-56.2	27.75	66.9	51.6	49.1
7.76	-68.44	-55.06	-56.02	27.84	67.8	52	49.1
8.47	-67.89	-54.95	-55.9	27.75	68	52.2	48.9
-3.49	-175	-212.5	-119.97	-25	-74.8	-75	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-75	-72.7
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-75	-72.7
-3.49	-175	-212.5	-119.97	-25	-74.9	-74.9	-72.7
8.32	-59.25	-47.07	-53.3	0.52	50.9	50.1	47.9
8.32	-59.1	-46.96	-53.18	0.52	51.3	50.9	47.9
8.3	-58.99	-46.86	-53.09	0.52	51.5	51.5	48.3
8.29	-58.92	-46.76	-53	0.49	51.5	51.7	48.6
8.27	-58.77	-46.65	-52.91	0.52	51.5	51.9	48.8
8.26	-58.63	-46.5	-52.78	0.52	51.5	52.2	49.1
8.25	-58.55	-46.39	-52.69	0.52	51.5	52.2	49.2
8.24	-58.44	-46.34	-52.63	0.52	51.6	52.3	49.5
8.23	-58.37	-46.24	-52.54	0.49	51.6	52.5	49.8
8.23	-58.26	-46.13	-52.45	0.49	51.6	52.5	50.1
8.21	-58.19	-46.08	-52.39	0.52	51.6	52.6	50.4
8.2	-58.11	-45.98	-52.3	0.49	51.6	52.7	50.5
8.19	-58	-45.87	-52.2	0.52	51.6	52.7	50.8
8.18	-57.97	-45.82	-52.17	0.49	51.8	54.5	51
8.18	-57.82	-45.72	-52.08	0.49	52.7	53.9	51.3
8.17	-57.78	-45.67	-51.99	0.49	52.7	53.7	51.5
8.16	-57.67	-45.56	-51.9	0.49	52.8	53.7	51.7
8.15	-57.64	-45.51	-51.84	0.49	52.7	53.6	51.9
8.15	-57.56	-45.46	-51.81	0.49	52.7	53.6	52.2
8.14	-57.53	-45.41	-51.72	0.49	52.7	53.6	52.2
8.13	-57.42	-45.25	-51.65	0.46	52.7	53.7	52.6
8.12	-57.34	-45.25	-51.62	0.49	52.7	53.7	52.5
8.11	-57.27	-45.2	-51.53	0.49	52.7	53.7	53.1
8.11	-57.2	-45.09	-51.47	0.52	52.7	53.7	53

8.1	-57.16	-45.04	-51.44	0.49	52.7	53.6	53.4
8.1	-57.09	-44.99	-51.38	0.49	52.6	53.6	53.3
8.09	-56.98	-44.89	-51.32	0.49	52.5	53.7	53.4
8.09	-56.94	-44.89	-51.2	0.49	52.6	53.7	53.3
8.08	-56.87	-44.84	-51.17	0.49	52.5	53.6	53.8
8.08	-56.83	-44.78	-51.11	0.49	52.5	53.6	53.5
8.07	-56.76	-44.68	-51.07	0.52	52.5	53.6	53.4
8.06	-56.72	-44.63	-51.01	0.49	52.5	53.6	53.6
8.06	-56.65	-44.58	-50.95	0.49	52.5	53.6	53.7
8.05	-56.58	-44.52	-50.89	0.49	52.5	53.6	53.5
8.05	-56.5	-44.52	-50.86	0.49	52.5	53.6	53.6
8.04	-56.5	-44.42	-50.8	0.49	52.5	53.6	53.6
8.04	-56.39	-44.37	-50.74	0.49	52.4	53.5	53.6
8.03	-56.36	-44.32	-50.71	0.49	52.4	53.6	53.3
8.03	-56.32	-44.26	-50.65	0.46	52.4	53.5	53.4
8.02	-56.28	-44.21	-50.62	0.49	52.5	53.5	53.4
8.02	-56.21	-44.16	-50.56	0.49	52.4	53.5	53.2
8.01	-56.1	-44.06	-50.53	0.49	52.4	53.5	53.2
8.01	-56.06	-44	-50.43	0.49	52.4	53.5	52.9
8	-56.03	-44	-50.4	0.49	52.3	53.4	53.1
8	-55.95	-43.95	-50.34	0.49	52.4	53.4	53
7.99	-55.92	-43.9	-50.31	0.49	52.3	53.4	52.9
7.99	-55.88	-43.85	-50.25	0.49	52.3	53.4	52.6
7.99	-55.81	-43.8	-50.22	0.52	52.3	53.3	52.2
7.98	-55.77	-43.75	-50.19	0.49	52.3	53.3	52.4
7.98	-55.7	-43.69	-50.16	0.49	52.2	53.3	52.3
7.97	-55.66	-43.69	-50.1	0.49	52.2	53.3	52.2
7.97	-55.59	-43.64	-50.07	0.49	52.2	53.2	51.9
7.97	-55.59	-43.54	-50.01	0.49	52.2	53.2	51.7
7.96	-55.51	-43.54	-49.98	0.49	52.2	53.1	51.7
7.96	-55.48	-43.49	-49.91	0.49	52.2	53.1	51.6
7.96	-55.44	-43.43	-49.88	0.52	52	53.1	51.2
7.95	-55.4	-43.38	-49.85	0.49	52	53.1	51.4
7.95	-55.33	-43.38	-49.79	0.49	52	53.1	50.9
7.94	-55.29	-43.33	-49.76	0.49	52	53.1	50.9
7.94	-55.22	-43.23	-49.73	0.49	51.9	52.9	50.8
7.93	-55.18	-43.23	-49.67	0.49	51.9	52.9	50.7
7.93	-55.15	-43.17	-49.61	0.49	51.8	52.9	50.7
7.93	-55.11	-43.12	-49.58	0.49	51.8	52.8	50.3
7.92	-55.07	-43.12	-49.55	0.49	51.7	52.8	50.2
7.92	-55.04	-43.07	-49.52	0.49	51.7	52.8	50.1
7.92	-55	-43.02	-49.46	0.49	51.7	52.7	50.2
7.91	-54.93	-42.92	-49.4	0.49	51.7	52.7	49.9
7.91	-54.93	-42.92	-49.37	0.49	51.6	52.7	49.7
7.91	-54.85	-42.81	-49.33	0.49	51.6	52.7	49.6
7.91	-54.82	-42.81	-49.27	0.52	51.6	52.7	49.5
7.9	-54.78	-42.76	-49.24	0.49	51.6	52.7	49.5

7.9	-54.71	-42.71	-49.21	0.49	51.6	52.7	49.1
7.9	-54.67	-42.71	-49.18	0.49	51.6	52.7	49.2
7.89	-54.63	-42.6	-49.15	0.49	51.6	52.6	49
7.89	-54.63	-42.66	-49.09	0.49	51.6	52.6	48.8
7.88	-54.6	-42.6	-49.06	0.49	51.5	52.6	49
7.88	-54.52	-42.55	-49.03	0.49	51.5	52.5	48.4
7.88	-54.49	-42.5	-49	0.52	51.5	52.5	48.6
7.87	-54.45	-42.45	-48.94	0.49	51.5	52.5	48.3
7.87	-54.41	-42.4	-48.88	0.52	51.4	52.5	48.6
7.87	-54.38	-42.4	-48.85	0.49	51.4	52.4	48.3
7.86	-54.3	-42.34	-48.82	0.49	51.4	52.4	48.3
7.86	-54.27	-42.29	-48.79	0.49	51.4	52.4	48.2
7.86	-54.23	-42.29	-48.72	0.52	51.4	52.4	48.2
7.86	-54.19	-42.24	-48.69	0.49	51.3	52.4	47.9
7.85	-54.16	-42.19	-48.66	0.49	51.3	52.3	47.9
7.85	-54.08	-42.19	-48.63	0.49	51.2	52.3	47.9
7.85	-54.05	-42.14	-48.6	0.49	51.2	52.3	47.6
7.85	-54.05	-42.08	-48.57	0.52	51.1	52.3	47.3
7.84	-54.01	-42.08	-48.54	0.49	51.1	52.2	47.7
7.84	-53.97	-42.03	-48.48	0.49	51	52.2	47.5
7.84	-53.94	-41.98	-48.45	0.49	51	52.1	47.4
7.84	-53.86	-41.93	-48.42	0.49	51	52.1	47.4
7.83	-53.83	-41.93	-48.39	0.49	50.9	52.1	47.4
7.83	-53.79	-41.88	-48.36	0.52	50.9	52.1	47.3
7.82	-53.75	-41.88	-48.3	0.52	50.9	52	47.1
7.82	-53.75	-41.77	-48.27	0.52	50.8	52	47.2
7.82	-53.68	-41.83	-48.27	0.52	50.8	52	47.1
7.82	-53.64	-41.72	-48.21	0.49	50.8	51.9	46.7
7.82	-53.61	-41.67	-48.17	0.52	50.8	51.9	46.7
7.82	-53.57	-41.67	-48.17	0.49	50.8	51.9	46.6
7.81	-53.53	-41.67	-48.08	0.52	50.8	51.8	46.6
7.81	-53.5	-41.62	-48.05	0.49	50.7	51.8	46.6
7.81	-53.42	-41.62	-48.02	0.52	50.7	51.8	46.5
7.8	-53.39	-41.51	-47.99	0.52	50.7	51.7	46.2
7.8	-53.35	-41.51	-47.96	0.52	50.6	51.6	46.1
7.8	-53.35	-41.46	-47.93	0.49	50.6	51.6	46
7.8	-53.28	-41.41	-47.9	0.52	50.5	51.6	46.1
7.79	-53.24	-41.36	-47.87	0.52	50.5	51.6	46
7.79	-53.21	-41.36	-47.84	0.52	50.5	51.6	45.7
7.79	-53.21	-41.31	-47.81	0.52	50.5	51.5	45.6
7.79	-53.13	-41.31	-47.78	0.49	50.5	51.5	45.6
7.79	-53.13	-41.25	-47.75	0.49	50.5	51.4	45.4
7.78	-53.06	-41.2	-47.72	0.52	50.4	51.4	45.4
7.78	-53.06	-41.15	-47.69	0.52	50.4	51.4	45.3
7.78	-53.02	-41.15	-47.66	0.52	50.3	51.4	45.4
7.78	-52.99	-41.1	-47.63	0.52	50.4	51.3	45.3
7.77	-52.95	-41.1	-47.63	0.52	50.3	51.3	45.2

7.77	-52.91	-41.1	-47.59	0.52	50.3	51.3	45
7.77	-52.88	-41.05	-47.56	0.52	50.3	51.3	44.9
7.77	-52.88	-41	-47.5	0.52	50.2	51.2	44.9
7.77	-52.84	-41	-47.5	0.52	50.2	51.2	45
7.76	-52.8	-41	-47.44	0.52	50.1	51.2	45
7.76	-52.77	-40.94	-47.44	0.52	50.2	51.2	45.2
7.76	-52.73	-40.89	-47.41	0.52	50.2	51.3	45.1
8.42	-53.24	-41.05	-47.5	0.52	49.5	50.9	45.8
8.41	-52.8	-40.89	-47.38	0.52	50.3	51.7	45.9
8.4	-56.98	-45.41	-48.02	0.49	51.2	51.9	44.5
8.39	-59.58	-47.01	-48.54	27.35	68	51.9	49.7
8.41	-60.53	-47.07	-48.51	27.2	70.7	52.1	49.5
8.42	-60.31	-46.96	-48.94	27.17	72.2	52.7	48.6
8.42	-61.41	-47.69	-49.09	27.05	72.9	52.9	51.1
8.44	-61.3	-48.93	-49	26.98	73.7	53.8	44
8.44	-59.98	-48	-49.52	26.95	75	53.8	51.3
8.38	-58.85	-47.59	-49.4	26.89	76.2	54.8	50.7
8.56	-60.75	-47.84	-49.33	26.77	76.7	55.1	48.4
8.48	-62.25	-48.62	-49.64	26.8	77.1	55.7	49.5
8.47	-61.81	-48.47	-49.64	26.77	77.7	55.9	50.2
8.5	-62.14	-49.25	-49.52	26.77	77.9	56	49.3
8.46	-60.35	-48.05	-49.91	26.68	78.6	55.8	51
8.45	-61.19	-48.57	-49.95	26.62	79	55.9	48.3
8.19	-62.11	-49.3	-49.85	26.83	79.3	55.8	50.5
8.48	-62	-48.62	-50.1	26.65	80.5	57.9	49.1
8.47	-57.16	-43.64	-49.43	26.62	81.2	57.1	50.4
8.44	-61.04	-48.57	-50.01	26.53	81	58	48.4
8.42	-62.07	-48.93	-50.04	26.47	81.3	57.3	48.9
8.26	-62.55	-48.1	-50.13	26.65	81.3	57.4	49.3
8.46	-62.47	-49.25	-50.59	26.4	81.7	57.3	51.7
8.42	-63.02	-48.68	-50.31	26.53	81.6	57.3	50.4
8.52	-62.07	-49.19	-50.31	26.56	82.1	57.3	48.2
8.31	-62.11	-49.66	-50.56	26.56	81.9	57.4	48.6
8.47	-61.85	-49.87	-50.34	26.53	82.7	57.4	50.1
8.38	-61.01	-49.82	-50.59	26.5	82.7	57.4	50.3
8.43	-59.65	-49.3	-50.43	26.5	82.7	57.6	52.3
8.34	-63.39	-49.3	-50.65	26.56	82.4	57.8	49.3
8.55	-62.95	-49.09	-50.77	26.5	82.2	57.5	46.7
8.51	-63.21	-49.19	-50.74	26.5	82.1	57.8	49.4
8.39	-63.13	-49.51	-50.8	26.71	81.7	57.9	50
8.76	-62.91	-49.87	-50.77	26.53	81.6	58.1	50.9
8.54	-62.77	-50.28	-50.74	26.5	81.8	57.9	48.7
8.5	-63.06	-49.51	-50.92	26.53	81.9	57.9	49.4
8.39	-61.59	-49.87	-50.77	26.74	81.9	58.1	49.7
8.5	-61.89	-49.19	-51.01	26.53	82.1	58.1	50.9
8.47	-62	-50.18	-51.07	26.47	81.8	58.2	50.3
8.5	-62.73	-49.56	-50.86	26.53	81.8	58.2	51.6

8.52	-63.35	-50.65	-51.11	26.68	81.9	58.2	51.7
8.56	-63.97	-49.66	-51.17	26.53	81.4	58.3	47.7
8.5	-63.06	-50.7	-51.14	26.53	81.4	58.3	49.1
8.47	-63.02	-49.66	-51.11	26.47	81.5	58.3	51.8
8.43	-62.99	-50.18	-51.2	26.71	81.1	58.2	51
8.77	-63.57	-50.13	-51.2	26.59	81.2	58.3	51.6
8.57	-63.39	-50.13	-51.14	26.59	81	58.4	50.9
8.5	-62.88	-49.61	-51.44	26.62	80.9	58.2	52.4
8.44	-62.8	-50.7	-51.2	26.56	80.8	58.2	48.1
8.29	-63.46	-50.18	-51.59	26.65	81.1	58.3	49.5
8.45	-61.48	-50.44	-51.5	26.71	80.7	58.5	49.6
8.52	-63.5	-50.54	-51.35	26.68	80.2	58.4	50.1
8.52	-63.13	-50.65	-51.38	26.68	80	58.4	50.1
8.38	-63.53	-49.45	-51.47	26.83	79.9	58.3	51.3
8.87	-63.9	-50.23	-51.53	26.62	79.8	58.4	50.5
8.48	-62.33	-49.76	-51.62	26.71	79.2	58.4	48.4
8.44	-62.95	-50.8	-51.38	26.74	78.8	58.3	53.6
8.44	-63.17	-50.44	-51.72	26.83	78.6	58.2	50.2
7.87	-63.94	-50.49	-51.62	26.95	78.1	58.3	49.2
8.53	-63.5	-50.49	-51.56	26.74	77.9	58.3	50.8
8.5	-63.21	-50.44	-51.93	26.95	77.5	58.2	49.2
8.55	-63.46	-50.49	-51.84	26.92	77.1	58.2	47.6
8.47	-63.61	-50.54	-51.78	27.11	76.9	58.1	51.3
8.28	-63.75	-50.85	-51.62	27.05	76.5	58.1	49.7
8.52	-63.53	-51.22	-51.81	27.01	76.4	58.2	49.6
8.52	-63.64	-50.54	-51.81	26.92	76.1	57.8	51.1
8.56	-63.79	-51.01	-52.02	27.01	75.6	57.9	48.3
8.51	-63.83	-50.75	-51.84	27.05	75.3	57.8	50
8.44	-63.21	-50.8	-52.14	27.26	74.9	57.6	49.5
8.54	-62.29	-51.01	-51.87	27.05	74.8	57.6	50.4
8.42	-63.9	-50.7	-51.96	27.14	74.2	57.3	46.1
8.53	-64.08	-50.54	-51.96	27.11	74	57.3	49.5
8.57	-63.53	-51.37	-52.17	27.2	73.5	57.4	52
8.37	-61.96	-50.54	-52.11	27.38	73.4	57.2	48.4
8.95	-63.97	-50.8	-52.11	27.26	73.4	57.3	48.9
8.55	-64.41	-50.8	-52.02	27.29	72.7	57.2	50.4
8.49	-63.64	-50.54	-52.36	27.32	72.4	57.1	49.3
8.48	-64.23	-51.27	-52.33	27.35	72.3	56.8	49.8
8.53	-64.34	-50.85	-51.99	27.44	72.1	56.9	47.9
8.63	-63.97	-51.11	-52.39	27.29	71.6	56.9	50.3
8.49	-64.23	-51.11	-52.3	27.35	71.3	56.8	48.2
8.46	-64.01	-51.06	-52.42	27.41	71.2	56.6	51.6
8.47	-64.34	-51.17	-52.42	27.63	71.1	56.6	51.1
8.67	-64.23	-50.8	-52.33	27.35	70.9	56.7	50.4
8.56	-64.74	-51.68	-52.36	27.32	70.8	56.4	50.5
8.45	-64.56	-51.01	-52.42	27.44	70.7	56.4	49.7
8.5	-64.01	-51.01	-52.26	27.53	70.3	56.3	51

8.58	-64.16	-50.75	-52.39	27.47	70.3	56.4	51.4
8.54	-64.19	-51.68	-52.36	27.44	70.1	56.3	51
8.54	-65.22	-51.53	-52.57	27.47	70.2	56.2	50.5
8.43	-63.61	-51.22	-52.39	27.53	69.7	56.1	51.6
9	-64.93	-51.43	-52.63	27.47	69.8	56	49.8
8.52	-64.08	-50.96	-52.57	27.5	69.2	56.2	49.7
8.49	-64.38	-51.53	-52.72	27.44	68.8	56	50
8.41	-63.97	-50.85	-52.63	27.66	68.3	56	49.4
8.25	-64.16	-51.17	-52.39	27.66	68.1	55.8	44.4
8.56	-64.63	-51.79	-52.48	27.63	67.6	55.8	54.9
8.45	-63.72	-50.65	-52.63	27.66	67.4	55.7	48.7
8.44	-64.05	-51.32	-52.42	27.81	67.2	55.5	50.3
8.87	-64.41	-51.06	-52.6	27.56	67.9	55.5	50.5
8.53	-64.6	-50.75	-52.63	27.63	68	55.6	48.8
8.51	-64.67	-51.84	-52.51	27.5	68	55.6	46.7
8.41	-64.45	-51.06	-53.03	27.78	67.8	55.4	50.5
8.5	-64.08	-51.79	-52.72	27.63	67.8	55.2	49.1
8.55	-63.97	-51.37	-52.57	27.63	67.2	55.5	49.4
8.45	-64.01	-51.27	-52.54	27.56	67.2	55.1	50.1
8.38	-63.97	-51.43	-52.66	27.66	66.9	55.1	50.8
8.57	-64.82	-51.89	-52.57	27.72	66.8	55.2	50.2
8.44	-63.97	-51.68	-52.78	27.72	66.4	55	49.7
8.5	-64.45	-50.91	-52.91	27.84	66.1	55.2	49.4
8.47	-64.45	-52	-52.84	27.75	66.6	55	50.8
8.53	-64.49	-52.1	-52.91	27.63	66.4	54.9	50.1
8.32	-63.57	-51.37	-53.12	27.84	66.3	54.9	50.2
8.74	-65.11	-52.1	-53	27.78	65.6	54.9	52.5
8.47	-63.53	-51.58	-53.03	27.81	65.4	54.5	50.8
8.44	-65.66	-51.84	-52.88	27.72	65	54.7	49.7
7.97	-65.51	-52	-53.09	27.87	65.3	54.6	47.6
8.43	-63.57	-51.94	-53.09	27.81	64.6	54.5	49.5
8.56	-63.83	-51.53	-53.06	27.84	64.4	54.5	51
8.41	-64.96	-51.79	-52.94	27.99	64.5	54.4	50.5
8.5	-64.89	-52	-53.06	27.84	64.4	54.4	48
8.51	-64.78	-51.37	-53.09	27.87	64.2	54.3	49
8.44	-63.72	-51.43	-53.03	28.05	63.7	54.1	52.6
8.48	-64.93	-51.32	-52.97	27.96	63.6	54.2	51.7
8.52	-64.16	-51.58	-53.06	27.9	63.6	54	49.4
8.35	-63.64	-51.58	-53.09	28.14	63.5	53.9	50.1
8.7	-65.33	-51.84	-53.15	27.96	63.7	53.9	49.1
8.41	-65.18	-51.27	-53.18	27.87	63.1	53.8	49.5
8.42	-63.28	-52.31	-52.97	28.05	62.5	53.8	49.8
8.8	-64.71	-51.32	-53	27.96	62.8	53.7	51
8.53	-65.15	-52.36	-52.94	27.93	62.7	53.7	49
8.52	-64.93	-52.2	-53.15	27.87	63.1	53.6	49
8.32	-64.93	-51.11	-53.09	28.11	63.1	53.7	42.7
8.57	-65.15	-52.36	-53	27.9	63.7	53.7	49.8

8.38	-63.1	-51.74	-53.27	27.99	63.8	53.6	51.1
7.95	-63.64	-51.68	-53.3	28.05	64.4	53.7	49.9
8.43	-63.94	-51.89	-53.09	27.84	64.8	53.6	50.2
8.41	-64.08	-52.52	-53.18	27.84	65.4	53.8	51.6
8.41	-65.15	-52.15	-53.39	27.78	66	53.8	50
8.41	-65.07	-52.1	-53.33	27.75	66.7	53.9	50.8
8.53	-64.27	-51.84	-53.06	27.81	67.1	53.8	49.6
8.17	-63.53	-51.68	-53.3	27.84	67.5	54	49.6
8.56	-65.04	-52.41	-53.3	27.72	67.7	54.1	53.2
8.53	-65.15	-52.26	-53.55	27.66	68.1	54.1	55.7
8.78	-64.89	-52.05	-53.33	27.56	68.5	54.4	52.3
8.44	-65.15	-52.1	-53.15	27.63	69	54.3	50.3
8.41	-64.49	-51.27	-53.36	27.75	69.4	54	49.6
8.62	-65.51	-52.05	-53.27	27.53	69.7	54.2	47.7
8.55	-63.1	-51.68	-53.27	27.56	69.9	54.4	46.9
8.5	-64.78	-52.2	-53.18	27.81	70.2	54.3	50.1
8.5	-63.21	-52.31	-53.21	27.56	70.6	54.5	49.5
8.44	-63.97	-51.43	-53.36	27.44	70.8	54.4	53.1
8.51	-64.19	-52.15	-53.3	27.78	71	54.6	51.6
8.42	-64.56	-51.89	-53.55	27.5	71.2	54.6	49.5
8.53	-65.22	-52.05	-53.55	27.5	71.3	54.5	50.7
8.99	-63.97	-52.52	-53.55	27.41	72.2	54.7	52.2
8.5	-63.21	-52.2	-53.39	27.44	72.3	54.8	48.8
8.42	-63.28	-52.05	-53.52	27.53	72.6	54.8	51.1
8.63	-63.17	-51.89	-53.36	27.53	72.4	54.9	49.3
8.46	-62.33	-52.26	-53.39	27.38	73.4	54.8	52.4
8.38	-63.61	-52.52	-53.39	27.53	73.4	54.9	50.1
8.45	-63.72	-52.2	-53.27	27.29	74.1	55	53.2
8.49	-62.88	-52.31	-53.49	27.32	74.2	55.1	51.5
8.52	-61.96	-52.05	-53.67	27.47	74	55.2	50
8.55	-63.02	-52.41	-53.42	27.35	74.5	55.2	50.1
8.55	-62.73	-52.05	-53.46	27.35	74.5	55.1	51.1
8.25	-64.41	-52.57	-53.33	27.32	75	55.4	50.7
8.46	-64.78	-52.36	-53.67	27.14	75.7	55.4	47.1
8.45	-63.94	-52.15	-53.46	27.23	75.5	55.5	50.5
8.67	-64.71	-51.68	-53.49	27.23	75.7	55.5	50.5
8.46	-65.22	-52.72	-53.42	27.29	75.9	55.7	50.2
8.41	-65.11	-52.46	-53.33	27.41	76.5	55.7	47.5
8.53	-65.37	-52.1	-53.42	27.17	76.3	56	55.1
8.56	-65.84	-52.1	-53.36	27.29	76.1	55.9	48.4
8.56	-65.26	-52	-53.73	27.38	76.3	56	48.3
8.56	-64.89	-52.62	-53.64	27.17	76.6	56.1	46.2
8.45	-65.29	-52.36	-53.49	27.2	76.1	56	48.9
8.91	-65.4	-53.24	-53.42	27.26	75.6	56	52.1
8.51	-65.11	-52.77	-53.36	27.29	75.4	56.3	50.3
8.38	-64.56	-51.89	-53.7	27.38	76.1	56.6	47.3
8.45	-64.08	-52.62	-53.42	27.23	75.6	56.1	49.1

8.5	-64.16	-52.26	-53.46	27.26	75.5	56.4	47.3
8.74	-65.84	-52.41	-53.33	27.23	75.4	56.3	49.7
8.49	-64.78	-52.36	-53.73	27.2	75.5	56.3	50.3
8.47	-65.44	-52.57	-53.58	27.44	75.3	56.6	49
8.53	-65.81	-52.57	-53.55	27.17	75.3	56.5	47.4
8.36	-65.18	-52.2	-53.36	27.47	75	56.4	51.2
8.48	-65.62	-52.1	-53.55	27.29	74.9	56.5	50.5
8.55	-65.95	-52.36	-53.76	27.26	74.9	56.4	47.7
8.48	-63.32	-52.62	-53.7	27.38	74.6	56.4	51.5
8.46	-64.16	-51.84	-53.7	27.29	74.5	56.5	50.5
8.47	-64.56	-52.41	-53.7	27.23	74.6	56.5	51.2
7.94	-64.63	-52.31	-53.85	27.41	74.4	56.6	48.2
8.47	-64.93	-52.57	-53.73	27.35	74.2	56.6	49.9
8.47	-64.93	-53.29	-53.36	27.38	74	56.5	48.9
8.8	-65.48	-52.57	-53.82	27.38	73.8	56.6	59.3
8.43	-65.29	-52.05	-53.73	27.32	73.5	56.5	51.1
8.41	-64.45	-52.88	-53.73	27.66	73.2	56.5	46.7
8.48	-65.84	-52.67	-53.58	27.47	72.8	56.5	52.1
8.52	-66.14	-52.67	-53.73	27.53	72.5	56.4	51.6
8.68	-65.33	-52.15	-53.79	27.47	72.2	56.5	50.5
8.51	-65.22	-53.09	-53.73	27.5	72.1	56.4	50.1
8.5	-64.38	-52.83	-53.7	27.72	71.9	56.4	49.4
8.47	-64.41	-52.88	-54.04	27.56	71.3	56.4	50.1
8.41	-63.61	-52.62	-53.76	27.47	71.2	56.4	47.6
8.67	-64.71	-53.14	-53.82	27.53	71.2	56.4	53.6
8.52	-64.63	-52.36	-53.82	27.63	70.8	56.2	47.6
8.46	-61.96	-52.88	-53.76	27.87	70.4	56	50.5
8.42	-62.11	-52.67	-53.82	27.66	70.2	56	48.3
8.42	-64.27	-52.67	-53.91	27.69	70.1	56	50.8
8.69	-63.61	-52.98	-54	27.56	69.4	56	50.2
8.54	-62.51	-51.89	-54.04	27.69	69.6	56	48.6
8.46	-62.99	-53.4	-53.91	27.96	68.9	56	49.9
8.54	-62.88	-52.83	-53.73	27.72	68.1	56	48.7
8.41	-63.64	-53.03	-53.91	27.78	67.9	55.8	50.1
9.02	-63.57	-52.46	-54	27.72	67.9	55.7	52.5
8.45	-63.79	-52.36	-53.67	27.87	67.7	55.4	53.7
8.47	-64.82	-53.09	-54.16	28.02	67.6	55.5	48.3
8.43	-63.94	-52.88	-53.88	27.93	67.2	55.8	49.8
8.55	-64.19	-52.72	-54.04	27.75	67.7	55.5	49.8
8.59	-62.8	-52.72	-53.97	27.84	67.2	55.4	45.5
8.53	-60.53	-53.24	-53.88	27.93	66.9	55.4	49.3
8.73	-60.68	-52.31	-54.1	27.9	66.8	55.5	49.2
8.54	-60.9	-53.24	-53.85	27.96	66.5	55.4	53.9
8.17	-63.5	-52.72	-53.94	28.02	66.6	55.2	51.4
8.43	-62.22	-52.77	-53.88	27.96	66.6	55.1	49
8.47	-59.62	-53.14	-53.73	28.08	66.8	55	49.8
8.44	-62.25	-53.03	-54.07	27.9	66.4	55	49.4

8.5	-65.11	-52.41	-54	27.87	66.3	54.9	49.5
8.67	-65.88	-52.88	-53.91	27.93	66.8	54.7	48.4
8.54	-63.97	-52.83	-54	27.84	66.8	54.8	49.4
8.53	-65.48	-52.88	-54.28	28.05	66.8	54.9	49.2
8.47	-64.52	-52.88	-53.94	27.93	66.3	54.9	49.9
8.36	-64.63	-52.67	-54.16	28.11	66.1	54.6	51.2
8.44	-64.45	-53.09	-54	27.93	65.8	54.8	47.8
8.48	-65.51	-53.09	-54.07	27.96	65.6	54.6	48.6
8.57	-66.25	-53.03	-54.16	27.93	65.5	54.7	52.3
8.45	-66.17	-53.66	-54.28	27.93	65.3	54.6	51.6
8.01	-65.07	-53.14	-54	28.11	65.4	54.5	48.9
8.5	-64.93	-52.98	-54.28	27.99	64.9	54.4	51
8.32	-65.48	-52.72	-54.1	28.21	64.5	54.2	49.8
8.56	-66.28	-53.14	-54.25	28.02	64.7	54.1	52.6
8.44	-64.49	-53.14	-54.22	28.05	64.7	54.3	47.3
8.52	-65.99	-53.35	-54.49	27.96	64.4	54.2	55.9
8.52	-65.4	-53.5	-54.16	28.05	64.2	54.2	52.1
8.29	-66.14	-53.4	-54.1	28.14	64.2	54	49.5
8.52	-65.44	-52.62	-53.94	28.08	64.4	54	50.9
8.42	-63.9	-53.45	-54.43	28.17	63.6	53.9	51
8.45	-64.71	-52.2	-54.49	28.02	63.6	54	51.8
8.45	-66.06	-53.19	-54.31	28.21	62.9	54	48.3
8.57	-66.17	-52.52	-54.25	27.93	63.6	53.8	50.9
8.44	-65.44	-53.4	-54.25	28.17	62.9	53.8	51.2
8.93	-65.84	-53.09	-54.34	28.02	63.1	53.8	48.7
8.51	-65.7	-53.14	-54.19	28.05	62.5	53.6	50.8
8.43	-65.44	-53.4	-54.62	28.33	62.4	53.5	50.5
8.53	-65.37	-52.57	-54.31	28.17	62.4	53.5	49.4
8.45	-64.85	-52.52	-54.46	28.14	61.9	53.6	48.2
8.54	-66.61	-53.03	-54.13	28.11	61.6	53.4	51.6
8.5	-66.03	-52.88	-54.28	28.14	61.6	53.2	45.5
8.6	-63.86	-52.72	-54.22	28.14	61.6	53.4	49.5
8.44	-64.85	-53.71	-54.31	28.14	61.8	53.3	49.9
8.26	-66.17	-53.4	-54.1	28.27	62.1	53.4	49.2
8.43	-65.88	-53.4	-54.13	28.11	62	53.2	47.3
8.3	-66.06	-53.5	-54.04	28.42	62	53.1	50
8.43	-65.18	-52.98	-54.19	28.14	61.7	53.3	51
8.53	-66.5	-53.6	-54.34	28.33	62	53.3	50.5
8.53	-65.84	-53.09	-54.22	28.08	62.1	52.9	51.7
8.51	-66.5	-53.35	-54.19	28.33	62.2	53.1	49.2
8.54	-66.54	-53.19	-54.31	28.05	62.1	52.9	49.6
8.26	-65.66	-53.29	-54.28	28.33	61.6	52.9	49.8
8.57	-66.65	-53.4	-54.37	28.14	61.7	53.1	48.9
8.42	-65.07	-53.24	-54.52	28.21	61.7	52.8	49.1
8.5	-65.59	-52.57	-54.31	28.11	61.6	53.1	50.3
8.56	-66.25	-53.09	-54.43	28.14	61.5	52.9	48.6
8.74	-66.03	-53.4	-54.31	28.21	61.5	52.8	52.7

8.55	-65.84	-53.09	-54.1	28.17	61.6	52.7	51.2
8.26	-65.81	-53.66	-54.43	28.39	61.8	52.8	49.8
8.55	-65.26	-53.4	-54.52	28.11	61.9	52.7	51.9
8.34	-65.44	-52.83	-54.19	28.24	62	52.7	48.9
8.47	-66.47	-52.83	-54.77	28.11	62.2	52.8	51.2
8.45	-66.5	-53.4	-54.43	28.21	62.3	52.8	49.5
8.49	-66.21	-52.83	-54.55	28.08	62.5	52.8	46.5
8.4	-65.66	-53.6	-54.31	28.27	62.6	52.8	49.5
8.54	-66.03	-53.5	-54.25	28.05	63.3	52.9	50.3
8.44	-65.7	-53.66	-54.34	28.14	63.6	52.8	51.3
8.52	-66.47	-53.66	-54.46	28.11	63.9	52.9	48.1
8.41	-65.44	-53.24	-54.62	28.21	64.4	52.8	51
8.5	-65.7	-53.09	-54.43	27.99	64.6	53.1	50.1
8.44	-64.78	-54.33	-54.55	28.11	64.7	53.2	50.5
8.56	-66.1	-53.55	-54.46	27.96	65.4	53.3	50.1
8.37	-66.06	-53.14	-54.52	28.14	65.4	53.2	50.4
8.41	-66.36	-53.19	-54.89	27.9	65.1	53.4	49.2
8.44	-66.14	-53.29	-54.43	28.05	65.8	53.2	48.2
8.41	-64.85	-53.71	-54.58	27.93	65.8	53.5	52.4
8.53	-65.77	-52.88	-54.52	27.96	66	53.3	49.7
8.45	-65.81	-53.14	-54.46	27.9	66	53.7	47.6
8.54	-65.95	-53.6	-54.49	27.9	66.2	53.6	52.9
8.43	-65.44	-51.89	-54.62	27.81	66.4	53.8	50.7
8.51	-65.29	-53.03	-54.46	27.9	66.7	53.6	51.4
8.5	-65.33	-53.71	-54.62	27.87	66.4	53.7	49.7
8.55	-66.14	-53.76	-54.46	27.9	66.6	53.8	48.4
8.53	-66.03	-53.29	-54.71	27.87	66.8	53.8	52.9
8.41	-65.51	-53.55	-54.55	27.87	66.7	53.8	50.5
8.54	-64.49	-53.5	-54.55	27.9	67	53.8	49.8
8.44	-65.81	-53.4	-54.52	27.87	67.4	53.8	50.5
8.48	-64.41	-53.4	-54.74	27.87	67.1	53.8	51.9
8.42	-65.62	-53.55	-54.46	27.75	67.5	53.8	46.9
8.44	-64.49	-53.45	-54.43	27.81	67.6	53.9	51.1
8.44	-65.55	-52.77	-54.89	27.87	67.2	54	50.1
8.58	-65.77	-53.4	-54.89	27.84	67.6	54	49.7
8.54	-65.88	-53.35	-54.68	27.87	67.2	54	52.5
8.5	-65.44	-53.4	-54.49	27.87	66.8	54.2	47.2
8.38	-64.93	-52.52	-54.74	27.87	66.3	54	49.1
8.47	-65.04	-53.29	-54.62	27.81	66	54	50.3
8.53	-65.55	-53.35	-54.31	27.9	65.5	54.1	50.3
8.54	-66.39	-53.55	-54.55	27.9	65	54.2	50.3
8.5	-65.88	-53.86	-54.49	27.87	64.6	53.8	48.9
8.58	-66.21	-53.76	-54.46	27.84	64.6	54	48.9
8.43	-66.76	-52.83	-54.62	27.96	64.2	53.9	50.9
8.56	-66.25	-53.5	-54.55	27.87	64.1	54	51.5
8.41	-65.95	-53.29	-54.58	27.87	63.8	53.9	48.6
8.66	-66.39	-53.45	-54.71	27.9	63.7	53.9	49.9

8.52	-65.51	-52.83	-54.65	27.87	63.5	53.9	51.6
9.01	-66.06	-53.24	-54.71	27.93	63.6	54	50.7
8.55	-65.4	-53.24	-54.74	27.84	63.5	53.9	50
8.33	-66.21	-53.35	-54.68	27.93	63.6	53.9	51.3
8.5	-65.73	-52.88	-54.74	27.9	63.4	53.9	49.5
8.79	-66.14	-53.76	-54.55	27.78	63.5	53.9	49.4
8.54	-66.32	-53.03	-54.77	27.9	63.5	53.8	48.1
8.29	-65.55	-53.45	-54.8	28.05	63.3	53.9	50.4
8.53	-66.36	-53.92	-54.71	27.84	63.4	54	51.3
8.31	-66.32	-53.4	-54.8	28.08	63.4	53.9	50.5
8.45	-66.36	-53.66	-54.71	27.93	63.2	53.8	49.7
8.24	-65.33	-53.19	-54.83	28.08	63.3	53.8	49.7
8.54	-65.99	-53.71	-54.58	27.9	63.3	53.8	49.5
8.27	-65.59	-53.09	-54.58	28.08	63.2	53.8	51.7
8.54	-66.25	-53.71	-54.52	27.93	63.1	53.7	51.6
8.35	-66.14	-54.28	-54.46	27.84	63.2	53.8	51.4
8.51	-66.06	-53.24	-54.43	27.87	63.2	53.8	51.3
8.38	-65.66	-53.45	-54.83	27.87	63.3	53.8	50.5
8.5	-66.28	-53.24	-54.46	27.84	63.2	53.7	49.8
8.91	-63.94	-52.83	-54.68	27.87	63.3	53.8	47.2
8.48	-64.56	-53.92	-54.65	27.81	63.6	53.8	48.4
8.93	-64.23	-54.12	-54.55	27.87	63.3	53.8	51.9
8.48	-65.51	-53.92	-54.86	27.81	63.4	53.7	48.1
8.94	-65.7	-53.66	-54.71	27.81	63.2	53.8	51.4
8.42	-65.18	-53.55	-54.77	27.9	63.2	53.7	50.3
8.56	-65.07	-53.71	-54.77	27.78	63.3	53.9	49.4
8.44	-65.59	-53.55	-54.8	27.81	63.2	53.8	50.5
8.51	-66.17	-53.35	-54.74	27.87	63.1	53.8	49.8
8.41	-63.97	-53.14	-54.62	27.78	63.1	53.8	50.2
8.56	-62.33	-54.07	-54.68	27.87	63.4	53.7	52.5
8.48	-65.29	-53.45	-54.65	27.75	63.2	53.7	50.3
8.47	-63.02	-53.4	-54.52	27.9	63.1	53.9	49.3
8.44	-64.38	-53.5	-54.8	27.87	63.2	53.7	50.2
8.44	-63.94	-53.4	-54.71	27.9	63.2	53.9	52.5
8.47	-64.85	-53.81	-54.74	27.84	63.2	53.6	50.7
8.47	-65.4	-53.19	-54.83	27.81	63.1	53.8	49.4
8.31	-64.01	-53.45	-54.77	28.02	63.3	53.7	49.7
8.46	-62.73	-54.33	-54.74	27.9	63.1	53.6	51.4
8.47	-62.99	-53.55	-54.83	28.02	63.2	53.4	50
8.54	-60.05	-53.55	-54.86	27.84	63.2	53.6	47.9
8.47	-58.37	-53.35	-54.83	28.08	63.2	53.5	51.7
8.5	-63.9	-53.97	-54.58	27.87	63.1	53.6	50.5
8.23	-64.27	-53.66	-54.8	28.02	63.1	53.7	51.4
8.46	-60.49	-48.21	-53.91	0.49	58.8	54	50.3
8.43	-59.29	-47.59	-53.49	0.49	57.1	53.8	49.8
8.41	-58.74	-47.22	-53.27	0.52	56	53.7	49.5
8.37	-58.37	-46.96	-53.09	0.52	55	53.6	49

8.35	-58.08	-46.7	-52.94	0.49	54.5	53.5	48.6
8.32	-57.86	-46.5	-52.72	0.52	53.8	53.4	48.4
8.3	-57.64	-46.34	-52.6	0.49	53.5	53.4	48
8.28	-57.49	-46.18	-52.48	0.49	53.2	53.3	47.6
8.26	-57.34	-46.08	-52.36	0.52	53	53.2	47.4
8.25	-57.2	-45.92	-52.26	0.52	52.8	53.1	47.2
8.24	-57.09	-45.82	-52.14	0.52	52.7	53.1	47.3
8.22	-56.94	-45.67	-52.02	0.52	52.6	52.9	47.1
8.2	-56.83	-45.56	-51.93	0.52	52.4	52.8	46.9
8.19	-56.72	-45.51	-51.84	0.52	52.3	52.8	46.6
8.18	-56.65	-45.41	-51.75	0.52	52.2	52.7	46.7
8.16	-56.5	-45.25	-51.65	0.55	52	52.7	46.3
8.15	-56.43	-45.15	-51.59	0.52	51.9	52.7	46.3
8.14	-56.32	-45.04	-51.5	0.52	51.8	52.7	46.2
8.13	-56.25	-44.99	-51.41	0.55	51.8	52.7	46.2
8.12	-56.17	-44.94	-51.35	0.52	51.7	52.7	46.2
8.11	-56.06	-44.84	-51.29	0.52	51.6	52.5	45.9
8.1	-55.95	-44.73	-51.17	0.55	51.6	52.5	45.7
8.09	-55.92	-44.68	-51.11	0.55	51.6	52.4	45.7
8.08	-55.81	-44.63	-51.01	0.52	51.6	52.4	45.9
8.08	-55.73	-44.58	-50.98	0.52	51.6	52.4	45.5
8.07	-55.7	-44.47	-50.89	0.52	51.5	52.3	45.6
8.06	-55.62	-44.42	-50.86	0.52	51.4	52.3	45.4
8.05	-55.55	-44.37	-50.8	0.55	51.4	52.2	45.4
8.05	-55.44	-44.26	-50.71	0.52	51.4	52.2	45.1
8.04	-55.37	-44.21	-50.65	0.52	51.3	52.2	45.5
8.04	-55.33	-44.16	-50.59	0.55	51.3	52.2	45.3
8.03	-55.29	-44.06	-50.53	0.55	51.2	52.1	45.2
8.02	-55.15	-43.95	-50.43	0.55	51.2	52.1	45.1
8.01	-55.11	-43.9	-50.37	0.52	51.1	52.1	45.1
8.01	-55.04	-43.85	-50.34	0.55	51.1	52.1	45.1
8	-55	-43.75	-50.25	0.52	51.1	52	45.2
8	-54.93	-43.69	-50.22	0.52	51.1	52	45
7.99	-54.89	-43.64	-50.16	0.55	51	51.9	44.9
7.99	-54.82	-43.59	-50.1	0.55	50.9	51.9	45
7.98	-54.74	-43.54	-50.04	0.52	50.9	51.8	45
7.98	-54.67	-43.49	-49.98	0.55	50.8	51.8	45
7.97	-54.67	-43.38	-49.95	0.55	50.8	51.8	44.9
7.97	-54.6	-43.38	-49.88	0.55	50.9	51.8	45
7.96	-54.52	-43.33	-49.82	0.55	50.8	51.7	44.9
7.96	-54.45	-43.28	-49.79	0.55	50.8	51.7	44.9
7.95	-54.41	-43.23	-49.73	0.52	50.8	51.7	44.8
7.95	-54.38	-43.17	-49.67	0.52	50.8	51.6	44.7
7.94	-54.3	-43.12	-49.61	0.52	50.8	51.6	44.6
7.94	-54.23	-43.07	-49.58	0.55	50.7	51.6	44.6
7.92	-54.19	-43.02	-49.52	0.52	50.7	51.7	45
7.93	-54.16	-42.97	-49.46	0.52	50.6	51.6	44.7

7.92	-54.05	-42.92	-49.43	0.55	50.6	51.6	44.7
7.92	-54.01	-42.92	-49.4	0.55	50.6	51.5	44.6
7.92	-53.97	-42.81	-49.37	0.52	50.5	51.5	44.7
7.91	-53.9	-42.71	-49.3	0.55	50.5	51.6	44.6
7.91	-53.86	-42.66	-49.24	0.55	50.5	51.6	44.7
7.9	-53.83	-42.66	-49.21	0.52	50.5	51.6	44.9
7.9	-53.75	-42.66	-49.15	0.55	50.5	51.6	44.5
7.89	-53.75	-42.6	-49.15	0.52	50.6	51.6	44.6
7.89	-53.72	-42.55	-49.09	0.55	50.5	51.5	44.6
7.89	-53.68	-42.5	-49.06	0.55	50.5	51.6	44.8
7.88	-53.61	-42.45	-49.03	0.52	50.5	51.6	45.1
7.88	-53.57	-42.4	-48.97	0.55	50.5	51.6	44.7
7.87	-53.53	-42.45	-48.94	0.55	50.5	51.6	44.7
7.87	-53.42	-42.4	-48.88	0.52	50.5	51.5	45
7.87	-53.39	-42.29	-48.85	0.55	50.5	51.5	45.1
7.86	-53.39	-42.29	-48.79	0.52	50.5	51.5	45.3
7.86	-53.32	-42.24	-48.75	0.52	50.5	51.6	45.2
7.85	-53.32	-42.24	-48.72	0.55	50.5	51.6	45.4
7.85	-53.24	-42.14	-48.66	0.55	50.5	51.6	45.5
7.85	-53.21	-42.08	-48.63	0.55	50.5	51.6	45.5
7.84	-53.17	-42.08	-48.6	0.52	50.5	51.8	46.2
7.84	-53.13	-42.03	-48.57	0.52	50.7	51.8	46.2
7.84	-53.06	-42.03	-48.51	0.52	50.7	51.8	46.8
7.83	-53.06	-41.98	-48.48	0.52	50.7	51.9	47.1
7.83	-53.02	-41.93	-48.45	0.52	50.8	51.9	47.4
7.83	-52.99	-41.88	-48.42	0.52	50.8	51.9	47.7
7.83	-52.91	-41.88	-48.39	0.52	50.8	51.9	48
7.82	-52.91	-41.83	-48.36	0.55	50.8	52	48.3
7.82	-52.88	-41.77	-48.33	0.52	50.9	52	49
7.82	-52.84	-41.77	-48.27	0.52	50.9	52.1	49.4
7.81	-52.77	-41.77	-48.21	0.52	50.9	52.1	49.7
7.81	-52.73	-41.72	-48.21	0.52	51	52.2	50
7.81	-52.69	-41.67	-48.11	0.52	51	52.3	50.5
7.8	-52.66	-41.62	-48.11	0.52	51.1	52.3	51.2
7.8	-52.62	-41.62	-48.05	0.52	51.2	52.4	51.3
7.8	-52.55	-41.51	-48.02	0.52	51.3	52.5	52
7.8	-52.51	-41.46	-47.99	0.52	51.4	52.6	52.4
7.79	-52.47	-41.41	-47.96	0.49	51.5	52.7	52.7
7.79	-52.44	-41.41	-47.93	0.52	51.6	52.7	53.4
7.78	-52.4	-41.36	-47.87	0.49	51.6	52.9	53.6
7.78	-52.36	-41.36	-47.87	0.49	51.6	53.1	54
7.78	-52.33	-41.31	-47.84	0.49	51.8	54.6	54.4
7.78	-52.33	-41.25	-47.81	0.52	52.7	54.4	54.8
7.77	-52.25	-41.25	-47.78	0.49	52.9	54.2	55.2
7.77	-52.22	-41.2	-47.72	0.49	53	54.2	55.7
7.77	-52.22	-41.15	-47.69	0.49	53	54.2	56.2
7.77	-52.18	-41.15	-47.66	0.49	53	54.3	56.6

7.76	-52.11	-41.1	-47.63	0.49	53	54.3	56.6
7.76	-52.07	-41.1	-47.59	0.49	53.1	54.4	57.3
7.76	-52.03	-41	-47.56	0.49	53.1	54.5	57.7
7.75	-52.03	-41	-47.53	0.49	53.2	54.5	57.9
7.75	-52	-40.94	-47.5	0.49	53.3	54.6	58.1
7.75	-51.92	-40.94	-47.47	0.49	53.4	54.7	58.2
7.75	-51.92	-40.89	-47.44	0.49	53.4	54.8	58.6
7.74	-51.89	-40.84	-47.41	0.49	53.5	54.9	58.7
7.74	-51.81	-40.84	-47.38	0.49	53.6	54.9	59.2
7.74	-51.81	-40.79	-47.32	0.49	53.6	54.9	58.9
7.73	-51.78	-40.74	-47.29	0.49	53.7	55.1	59.3
7.73	-51.74	-40.74	-47.26	0.49	53.8	55.1	59.4
7.73	-51.7	-40.74	-47.23	0.49	53.8	55.4	59.8
7.72	-51.63	-40.68	-47.2	0.49	53.8	55.4	59.6
7.72	-51.63	-40.63	-47.14	0.49	53.9	55.5	59.8
7.72	-51.56	-40.63	-47.14	0.49	53.9	55.6	60.1
7.72	-51.56	-40.58	-47.11	0.46	54.1	55.9	60.3
7.71	-51.48	-40.58	-47.05	0.49	54.2	55.8	60.3
7.71	-51.45	-40.53	-47.05	0.49	54.4	55.9	60.3
7.71	-51.45	-40.53	-47.01	0.46	54.4	56	60.4
7.71	-51.41	-40.48	-46.98	0.49	54.5	56	60.6
7.7	-51.37	-40.42	-46.98	0.49	54.6	56	60.5
7.7	-51.34	-40.37	-46.95	0.46	54.6	56	60.7
7.7	-51.3	-40.42	-46.92	0.46	54.6	56	60.4
7.69	-51.3	-40.37	-46.89	0.46	54.7	56.1	60.6
7.69	-51.23	-40.27	-46.86	0.46	54.7	56.1	60.4
7.69	-51.23	-40.22	-46.83	0.46	54.8	56.1	60.6
7.69	-51.19	-40.22	-46.8	0.46	54.8	56.2	60.6
7.68	-51.15	-40.16	-46.77	0.46	54.8	56.2	60.3
7.68	-51.15	-40.16	-46.74	0.46	54.8	56.2	60.4
7.68	-51.12	-40.16	-46.71	0.46	54.8	56.3	60.4
7.68	-51.04	-40.11	-46.71	0.46	54.8	56.3	60.2
7.67	-51.01	-40.06	-46.65	0.46	54.9	56.3	60.3
7.67	-51.01	-40.01	-46.65	0.46	54.9	56.2	60.2
7.67	-50.97	-40.01	-46.62	0.46	54.9	56.3	60.1
7.68	-50.93	-40.01	-46.56	0.46	54.9	56.2	60
7.68	-50.9	-39.96	-46.56	0.46	54.9	56.2	59.9
7.66	-50.9	-39.96	-46.53	0.46	54.9	56.2	59.5
7.66	-50.86	-39.91	-46.5	0.46	54.9	56.2	59.6
7.66	-50.75	-39.91	-46.47	0.46	54.8	56.1	59.4
7.67	-50.75	-39.91	-46.47	0.46	54.8	56.1	59.2
7.65	-50.71	-39.85	-46.4	0.46	54.8	56	58.8
7.65	-50.68	-39.85	-46.4	0.46	54.8	56	58.4
7.65	-50.68	-39.8	-46.37	0.46	54.7	56	58.5
7.64	-50.64	-39.75	-46.34	0.46	54.7	55.9	58.3
7.64	-50.6	-39.75	-46.34	0.46	54.7	55.9	58.1
7.64	-50.57	-39.7	-46.31	0.46	54.6	55.9	58

7.64	-50.53	-39.7	-46.28	0.43	54.6	55.8	57.7
7.63	-50.53	-39.7	-46.25	0.46	54.5	55.8	57.6
7.63	-50.49	-39.65	-46.22	0.46	54.5	55.7	57.2
7.63	-50.46	-39.65	-46.22	0.46	54.4	55.7	56.9
7.63	-50.46	-39.59	-46.19	0.46	54.4	55.7	56.7
7.63	-50.42	-39.59	-46.16	0.46	54.4	55.6	56.4
7.62	-50.38	-39.54	-46.13	0.46	54.2	55.5	56.3
7.62	-50.38	-39.54	-46.1	0.46	54.1	55.5	56
7.62	-50.35	-39.49	-46.1	0.46	54.2	55.4	55.8
7.62	-50.31	-39.49	-46.07	0.46	54.1	55.2	55.6
7.61	-50.31	-39.44	-46.07	0.49	54	55.2	55.4
7.61	-50.27	-39.44	-46.04	0.49	54	55.2	55.1
7.61	-50.24	-39.44	-46.01	0.46	54	55.1	54.9
7.61	-50.2	-39.39	-45.98	0.46	53.9	55.1	54.5
7.6	-50.2	-39.39	-45.98	0.46	53.9	55	54.5
7.6	-50.16	-39.33	-45.92	0.49	53.8	55	54.3
7.6	-50.16	-39.33	-45.92	0.46	53.8	54.9	53.9
7.6	-50.09	-39.33	-45.89	0.46	53.8	54.9	53.9
7.6	-50.09	-39.28	-45.85	0.49	53.7	54.9	53.7
7.59	-50.09	-39.23	-45.85	0.46	53.7	54.9	53.6
7.59	-50.05	-39.23	-45.82	0.46	53.7	54.8	53.5
7.59	-50.02	-39.23	-45.76	0.46	53.6	54.7	53.1
7.59	-49.98	-39.18	-45.76	0.46	53.6	54.7	52.8
7.59	-49.95	-39.18	-45.73	0.46	53.5	54.6	52.8
7.58	-49.95	-39.13	-45.7	0.49	53.5	54.6	52.6
7.58	-49.87	-39.13	-45.67	0.49	53.4	54.5	52.3
7.58	-49.84	-39.02	-45.67	0.46	53.4	54.5	51.9
7.58	-49.84	-39.02	-45.64	0.49	53.4	54.4	52.1
7.59	-49.8	-38.97	-45.61	0.49	53.3	54.4	51.7
7.57	-49.76	-38.97	-45.58	0.46	53.2	54.3	51.6
7.57	-49.76	-38.97	-45.58	0.49	53.2	54.3	51.3
7.57	-49.73	-38.92	-45.55	0.46	53.2	54.2	51.3
7.57	-49.73	-38.87	-45.55	0.49	53.1	54.1	51
7.57	-49.69	-38.87	-45.49	0.49	53.1	54	50.8
7.57	-49.65	-38.82	-45.49	0.49	53	54	50.9
7.56	-49.62	-38.87	-45.46	0.46	52.9	54	50.5
7.56	-49.62	-38.82	-45.46	0.49	52.9	53.9	50.5
7.56	-49.62	-38.76	-45.4	0.49	52.8	53.8	50.2
7.56	-49.58	-38.76	-45.4	0.49	52.8	53.8	50.3
7.56	-49.54	-38.76	-45.37	0.49	52.8	53.8	49.9
7.56	-49.51	-38.71	-45.37	0.46	52.7	53.8	49.8
7.55	-49.47	-38.71	-45.31	0.49	52.7	53.8	49.7
7.55	-49.47	-38.66	-45.31	0.49	52.7	53.7	49.5
7.55	-49.43	-38.61	-45.27	0.49	52.6	53.7	49.6
7.55	-49.43	-38.61	-45.24	0.49	52.6	53.6	49.3
7.54	-49.4	-38.61	-45.24	0.49	52.5	53.5	49.4
7.54	-49.36	-38.56	-45.21	0.49	52.5	53.5	49.1

7.54	-49.32	-38.56	-45.18	0.49	52.5	53.4	49.1
7.54	-49.32	-38.5	-45.15	0.49	52.4	53.4	49
7.54	-49.29	-38.5	-45.15	0.49	52.3	53.3	49
7.54	-49.25	-38.5	-45.12	0.49	52.3	53.3	48.7
7.53	-49.21	-38.45	-45.09	0.49	52.3	53.2	48.9
7.53	-49.21	-38.45	-45.09	0.49	52.2	53.2	48.8
7.53	-49.18	-38.45	-45.06	0.49	52.2	53.1	48.4
7.53	-49.14	-38.4	-45.06	0.49	52	53.1	48.4
7.53	-49.14	-38.4	-45	0.49	52	53.1	48.4
7.53	-49.1	-38.35	-45	0.52	51.9	53.1	48.2
7.53	-49.1	-38.35	-45	0.49	51.9	52.9	48.3
7.52	-49.07	-38.35	-44.97	0.49	51.9	52.9	48.3
7.52	-49.07	-38.35	-44.94	0.52	51.9	52.9	48.4
7.52	-48.99	-38.3	-44.91	0.49	51.8	52.9	48.4
7.52	-48.99	-38.24	-44.91	0.49	51.8	52.9	48.2
7.52	-48.96	-38.24	-44.85	0.49	51.8	52.9	48.2
7.52	-48.92	-38.24	-44.85	0.49	51.8	52.9	48.3
7.51	-48.92	-38.19	-44.82	0.49	51.7	52.9	48.7
7.51	-48.88	-38.14	-44.79	0.49	51.7	52.9	48.9
7.51	-48.85	-38.14	-44.79	0.49	51.8	52.9	49
7.51	-48.85	-38.14	-44.79	0.49	51.8	52.9	48.8
7.51	-48.85	-38.14	-44.76	0.49	51.7	53.1	49.1
7.51	-48.81	-38.09	-44.73	0.49	51.8	53.1	49.3
7.51	-48.81	-38.09	-44.73	0.49	51.8	53.1	49.3
7.51	-48.77	-38.09	-44.69	0.49	51.8	52.9	49.8
7.5	-48.77	-38.04	-44.66	0.49	51.8	53.1	49.7
7.5	-48.74	-38.04	-44.63	0.49	51.9	53.1	50.2
7.5	-48.74	-37.99	-44.63	0.49	51.9	53.2	50.5
7.5	-48.7	-37.99	-44.6	0.49	51.9	53.2	50.7
7.5	-48.66	-37.93	-44.57	0.49	52	53.2	51.3
7.5	-48.66	-37.93	-44.57	0.49	52	53.3	51.6
7.5	-48.63	-37.93	-44.54	0.49	52.2	53.4	52
7.5	-48.63	-37.93	-44.51	0.46	52.2	53.4	52.5
7.5	-48.59	-37.88	-44.51	0.52	52.3	53.5	52.7
7.5	-48.59	-37.83	-44.45	0.49	52.4	53.6	53.4
7.49	-48.55	-37.88	-44.45	0.49	52.4	53.7	53.9
7.5	-48.55	-37.73	-44.42	0.46	52.5	53.7	54.3
7.49	-48.55	-37.73	-44.39	0.49	52.6	53.8	54.8
7.49	-48.48	-37.67	-44.36	0.49	52.7	53.9	55.5
7.49	-48.48	-37.67	-44.33	0.46	52.7	54	56
7.49	-48.44	-37.62	-44.3	0.49	52.8	54.2	56.6
7.49	-48.44	-37.62	-44.3	0.46	52.9	54.3	57.1
7.49	-48.41	-37.62	-44.27	0.46	53	54.3	57.5
7.48	-48.37	-37.57	-44.27	0.46	53.1	54.5	58.1
7.48	-48.37	-37.57	-44.27	0.46	53.3	54.6	58.5
7.48	-48.33	-37.52	-44.18	0.46	53.4	54.7	58.9
7.48	-48.3	-37.52	-44.15	0.46	53.5	54.9	59.7

7.48	-48.3	-37.47	-44.15	0.46	53.6	54.9	60.1
7.48	-48.3	-37.47	-44.11	0.46	53.8	55.1	60.4
7.48	-48.26	-37.47	-44.08	0.46	53.8	55.2	60.7
7.48	-48.26	-37.41	-44.05	0.43	53.9	55.6	61.4
7.48	-48.22	-37.41	-44.05	0.43	54.8	56.9	61.6
7.48	-48.19	-37.36	-43.99	0.4	55.2	56.5	62.3
7.48	-48.19	-37.31	-43.99	0.4	55.3	56.6	62.5
7.48	-48.15	-37.31	-43.96	0.4	55.3	56.6	63
7.48	-48.08	-37.31	-43.93	0.4	55.4	56.7	63.1
7.48	-48.04	-37.26	-43.9	0.4	55.4	56.8	63.7
7.48	-48.04	-37.26	-43.9	0.37	55.4	56.8	64.1
7.48	-48	-37.21	-43.87	0.4	55.5	56.9	64.4
7.48	-47.97	-37.21	-43.84	0.4	55.6	57	64.6
7.48	-47.97	-37.21	-43.84	0.4	55.7	57.1	64.8
7.48	-47.93	-37.16	-43.81	0.4	55.7	57.1	65.1
7.48	-47.89	-37.16	-43.81	0.4	55.8	57.2	65.3
7.47	-47.86	-37.1	-43.75	0.37	55.9	57.2	65.3
7.47	-47.86	-37.1	-43.75	0.4	55.9	57.3	65.8
7.47	-47.82	-37.05	-43.75	0.4	56	57.4	65.8
7.47	-47.78	-37.05	-43.69	0.4	56	57.5	65.9
7.47	-47.75	-37	-43.69	0.4	56	57.6	65.9
7.47	-47.71	-37	-43.69	0.4	56.1	57.8	66.4
7.47	-47.71	-36.95	-43.66	0.4	56.2	57.8	66.5
7.47	-47.67	-36.95	-43.63	0.4	56.2	57.8	66.4
7.47	-47.64	-36.95	-43.63	0.4	56.3	57.9	66.5
7.47	-47.64	-36.9	-43.6	0.37	56.3	57.9	66.7
7.47	-47.64	-36.84	-43.6	0.4	56.3	58	66.4
7.47	-47.6	-36.84	-43.57	0.37	56.4	58	66.6
7.47	-47.56	-36.84	-43.57	0.37	56.4	58	66.6
7.47	-47.53	-36.84	-43.53	0.37	56.4	58.1	66.4
7.47	-47.49	-36.79	-43.53	0.37	56.6	58.1	66.2
7.47	-47.49	-36.79	-43.5	0.37	56.6	58.1	66.1
7.47	-47.49	-36.74	-43.47	0.37	56.6	58.1	66.2
7.47	-47.45	-36.74	-43.47	0.37	56.6	58.2	66
7.46	-47.42	-36.74	-43.41	0.37	56.6	58.2	65.9
7.46	-47.38	-36.74	-43.41	0.4	56.6	58.2	65.8
7.46	-47.38	-36.69	-43.38	0.37	56.6	58.2	65.8
7.46	-47.34	-36.64	-43.38	0.4	56.6	58.2	65.2
7.46	-47.34	-36.64	-43.35	0.4	56.6	58.2	65.1
7.46	-47.31	-36.64	-43.32	0.4	56.6	58.1	64.8
7.46	-47.27	-36.64	-43.32	0.37	56.6	58.2	64.7
7.46	-47.27	-36.64	-43.32	0.37	56.6	58.2	64.5
7.46	-47.2	-36.58	-43.29	0.37	56.6	58.1	64.4
7.46	-47.2	-36.58	-43.26	0.37	56.6	58.1	64.1
7.45	-47.16	-36.58	-43.26	0.37	56.6	58.1	64.1
7.45	-47.16	-36.48	-43.23	0.4	56.6	58.1	63.8
7.45	-47.12	-36.43	-43.2	0.4	56.4	58	63.6

7.44	-47.12	-36.48	-43.2	0.37	56.3	58	63.2
7.45	-47.09	-36.48	-43.2	0.37	56.4	58	63
7.45	-47.09	-36.43	-43.17	0.37	56.4	58	63
7.45	-47.05	-36.43	-43.17	0.37	56.3	57.9	62.8
7.45	-47.01	-36.38	-43.14	0.37	56.3	57.9	62.6
7.45	-47.01	-36.38	-43.11	0.4	56.2	57.9	62.5
7.45	-47.01	-36.38	-43.11	0.4	56.2	57.8	62.5
7.45	-46.98	-36.38	-43.08	0.37	56.2	57.8	62.2
7.44	-46.98	-36.32	-43.05	0.4	56.2	57.8	62
7.44	-46.94	-36.32	-43.02	0.37	56.2	57.6	62
7.44	-46.94	-36.32	-43.02	0.37	56.2	57.6	61.7
7.44	-46.94	-36.27	-42.99	0.37	56.1	57.6	61.7
7.44	-46.9	-36.22	-42.99	0.37	56.1	57.6	61.5
7.44	-46.87	-36.22	-42.95	0.37	56.1	57.6	61.2
7.44	-46.87	-36.22	-42.92	0.4	56	57.5	61.4
7.44	-46.87	-36.17	-42.92	0.37	56.1	57.5	61.1
7.44	-46.83	-36.17	-42.89	0.37	56	57.5	60.9
7.44	-46.83	-36.12	-42.89	0.37	56	57.5	60.9
7.44	-46.79	-36.17	-42.86	0.37	56	57.4	60.7
7.43	-46.79	-36.12	-42.83	0.4	56	57.4	60.6
7.43	-46.72	-36.12	-42.83	0.37	56	57.4	60.5
7.43	-46.72	-36.07	-42.8	0.37	55.9	57.4	60.2
7.43	-46.72	-36.07	-42.77	0.37	55.9	57.3	60.3
7.43	-46.68	-36.01	-42.77	0.4	55.9	57.3	60.1
7.43	-46.68	-36.01	-42.74	0.4	55.9	57.2	60
7.43	-46.65	-35.96	-42.74	0.37	55.9	57.2	60
7.43	-46.61	-35.96	-42.71	0.37	55.8	57.1	59.6
7.43	-46.61	-35.96	-42.71	0.37	55.9	57.2	59.6
7.43	-46.58	-35.96	-42.65	0.37	55.8	57.1	59.5
7.43	-46.58	-35.91	-42.65	0.37	55.8	57.1	59.4
7.42	-46.58	-35.91	-42.62	0.37	55.8	57.1	59.2
7.42	-46.5	-35.91	-42.62	0.37	55.7	57.1	59
7.42	-46.5	-35.86	-42.59	0.37	55.7	57.1	58.8
7.42	-46.5	-35.86	-42.56	0.37	55.7	57.1	58.8
7.42	-46.47	-35.81	-42.53	0.37	55.7	57	58.5
7.42	-46.43	-35.81	-42.5	0.4	55.7	57	58.7
7.42	-46.43	-35.81	-42.5	0.4	55.6	57	58.6
7.42	-46.43	-35.81	-42.47	0.4	55.6	57	58.2
7.42	-46.39	-35.75	-42.47	0.37	55.6	56.9	58.2
7.42	-46.39	-35.7	-42.44	0.37	55.5	56.8	58.2
7.41	-46.32	-35.65	-42.44	0.37	55.5	56.8	57.8
7.41	-46.28	-35.65	-42.41	0.4	55.4	56.8	57.8
7.41	-46.28	-35.65	-42.37	0.4	55.4	56.7	57.8
7.41	-46.25	-35.65	-42.34	0.37	55.4	56.7	57.7
7.41	-46.25	-35.6	-42.34	0.37	55.4	56.7	57.3
7.41	-46.25	-35.6	-42.28	0.37	55.3	56.7	57.3
7.41	-46.21	-35.6	-42.28	0.37	55.3	56.6	57.2

7.41	-46.21	-35.55	-42.28	0.4	55.2	56.6	57.1
7.41	-46.14	-35.55	-42.25	0.4	55.3	56.6	57.1
7.41	-46.14	-35.55	-42.22	0.37	55.2	56.5	56.8
7.41	-46.1	-35.49	-42.19	0.4	55.2	56.5	56.9
7.4	-46.1	-35.49	-42.19	0.4	55.2	56.5	56.7
7.4	-46.1	-35.44	-42.16	0.4	55.1	56.4	56.5
7.4	-46.03	-35.44	-42.16	0.37	55.1	56.4	56.5
7.4	-46.03	-35.44	-42.16	0.37	55.1	56.4	56.5
7.4	-46.03	-35.39	-42.1	0.37	55.1	56.3	56.3
7.4	-45.99	-35.39	-42.1	0.4	55	56.4	56.5
7.4	-45.95	-35.39	-42.07	0.37	55.1	56.3	56.1
7.4	-45.95	-35.39	-42.04	0.4	55	56.2	56.2
7.4	-45.92	-35.34	-42.04	0.37	55	56.2	56
7.4	-45.88	-35.34	-42.01	0.37	55	56.2	56
7.4	-45.92	-35.24	-42.01	0.37	55	56.2	56.1
7.4	-45.88	-35.24	-41.98	0.37	54.9	56.1	56.1
7.4	-45.84	-35.18	-41.95	0.37	54.9	56.2	56
7.39	-45.81	-35.24	-41.92	0.4	54.9	56.1	56
7.39	-45.81	-35.18	-41.92	0.37	54.9	56.1	55.6
7.39	-45.81	-35.13	-41.86	0.37	54.9	56.1	56
7.39	-45.77	-35.13	-41.83	0.37	54.9	56.1	55.8
7.39	-45.77	-35.13	-41.83	0.37	54.9	56.1	56
7.39	-45.73	-35.08	-41.79	0.37	54.9	56.1	55.9
7.39	-45.73	-35.08	-41.76	0.37	54.9	56.1	55.8
7.39	-45.66	-35.08	-41.76	0.37	54.9	56.1	55.8
7.39	-45.66	-35.08	-41.76	0.4	54.9	56.1	55.7
7.38	-45.66	-35.08	-41.73	0.37	54.9	56	55.6
7.38	-45.62	-35.03	-41.7	0.37	54.9	56.1	55.9
7.38	-45.62	-35.03	-41.7	0.37	54.9	56.1	55.8
7.38	-45.62	-35.03	-41.67	0.37	54.9	56.1	56
7.38	-45.59	-34.98	-41.67	0.37	54.9	56.1	55.7
7.38	-45.55	-34.98	-41.64	0.37	54.9	56	55.6
7.38	-45.55	-34.92	-41.61	0.37	54.9	56	55.9
7.38	-45.55	-34.92	-41.61	0.4	54.9	56.1	55.7
7.38	-45.51	-34.87	-41.58	0.37	54.9	56	56
7.38	-45.44	-34.87	-41.55	0.4	54.9	56.1	55.8
7.38	-45.44	-34.87	-41.52	0.37	54.9	56	56
7.38	-45.4	-34.87	-41.52	0.37	54.9	56.1	56
7.38	-45.4	-34.82	-41.52	0.4	54.9	56.1	56
7.38	-45.37	-34.82	-41.49	0.4	54.9	56.1	56.2
7.38	-45.37	-34.77	-41.46	0.37	54.9	56.1	56.3
7.38	-45.33	-34.77	-41.46	0.37	54.9	56.1	56.1
7.38	-45.33	-34.77	-41.43	0.4	54.9	56.1	56.2
7.37	-45.33	-34.72	-41.4	0.37	54.9	56.1	56.5
7.37	-45.29	-34.72	-41.4	0.37	54.9	56.2	56.6
7.37	-45.29	-34.72	-41.37	0.37	54.9	56.2	56.5
7.37	-45.26	-34.72	-41.37	0.37	54.9	56.2	56.8

7.37	-45.22	-34.66	-41.37	0.37	54.9	56.2	56.9
7.37	-45.22	-34.66	-41.31	0.37	54.9	56.2	57.1
7.37	-45.22	-34.61	-41.31	0.37	54.9	56.3	57.2
7.38	-45.18	-34.61	-41.28	0.37	54.9	56.3	57.3
7.37	-45.18	-34.56	-41.28	0.37	54.9	56.3	57.4
7.37	-45.15	-34.56	-41.28	0.37	55	56.3	57.7
7.37	-45.11	-34.56	-41.25	0.37	55	56.3	57.8
7.37	-45.11	-34.56	-41.21	0.37	55.2	56.9	58
7.37	-45.07	-34.51	-41.21	0.37	55.3	56.8	58
7.38	-45.04	-34.51	-41.18	0.37	55.4	56.8	58.3
7.37	-45.04	-34.46	-41.15	0.37	55.4	56.8	58.7
7.37	-45.04	-34.51	-41.09	0.37	55.4	56.9	59.2
7.38	-45	-34.46	-41.09	0.37	55.5	57	59.3
7.37	-45	-34.46	-41.06	0.37	55.5	57	59.7
7.37	-45	-34.4	-41.09	0.4	55.6	57	60.3
7.37	-44.96	-34.4	-41.03	0.37	55.6	57.1	60.5
7.37	-44.93	-34.4	-41	0.37	55.7	57.1	60.5
7.38	-44.93	-34.35	-41	0.37	55.7	57.2	61.2
7.38	-44.89	-34.3	-40.97	0.37	55.8	57.2	61.5
7.37	-44.89	-34.3	-40.97	0.34	55.9	57.8	61.6
7.37	-44.85	-34.3	-40.94	0.37	56	57.8	62.1
7.37	-44.82	-34.25	-40.91	0.37	56.1	57.6	62.4
7.37	-44.82	-34.25	-40.88	0.34	56.2	57.8	62.6
7.37	-44.78	-34.2	-40.88	0.34	56.2	57.9	62.9
7.38	-44.78	-34.25	-40.85	0.37	56.3	57.9	62.9
7.38	-44.74	-34.2	-40.85	0.34	56.4	58	63.1
7.37	-44.74	-34.2	-40.85	0.37	56.4	58.1	63.6
7.37	-44.71	-34.2	-40.82	0.34	56.6	58.2	63.6
7.38	-44.67	-34.15	-40.79	0.34	56.7	58.2	63.9
7.37	-44.67	-34.09	-40.79	0.34	56.7	58.2	63.9
7.37	-44.63	-34.09	-40.79	0.34	56.8	58.3	64.2
7.37	-44.6	-34.09	-40.76	0.37	56.8	58.3	64.2
7.37	-44.6	-34.09	-40.73	0.34	56.8	58.4	64.2
7.37	-44.52	-33.99	-40.73	0.37	56.9	58.4	64.6
7.37	-44.52	-33.99	-40.73	0.34	57	58.4	64.4
7.38	-44.49	-33.99	-40.7	0.34	57	58.5	64.4
7.38	-44.45	-33.99	-40.67	0.37	57.1	58.5	64.5
7.38	-44.45	-33.94	-40.67	0.31	57.1	58.6	64.5
7.38	-44.45	-33.94	-40.63	0.34	57.1	58.5	64.7
7.38	-44.41	-33.89	-40.63	0.34	57.1	58.6	64.5
7.38	-44.38	-33.89	-40.63	0.34	57.1	58.6	64.6
7.38	-44.38	-33.89	-40.6	0.34	57.1	58.6	64.3
7.38	-44.34	-33.89	-40.6	0.34	57.1	58.6	64.3
7.38	-44.3	-33.83	-40.57	0.31	57.1	58.6	64.4
7.38	-44.27	-33.83	-40.54	0.34	57.1	58.6	64.1
7.38	-44.27	-33.83	-40.54	0.31	57.1	58.6	64.1
7.38	-44.27	-33.83	-40.54	0.31	57.1	58.7	63.9

7.38	-44.27	-33.78	-40.51	0.34	57.1	58.6	64
7.38	-44.23	-33.78	-40.51	0.31	57.1	58.6	63.8
7.38	-44.23	-33.78	-40.48	0.34	57.1	58.6	63.7
7.38	-44.19	-33.78	-40.48	0.34	57.1	58.6	63.3
7.38	-44.19	-33.78	-40.45	0.34	57.1	58.5	63.2
7.38	-44.19	-33.78	-40.45	0.31	57.1	58.5	63.1
7.37	-44.16	-33.73	-40.45	0.34	57.1	58.5	62.9
7.37	-44.16	-33.73	-40.42	0.34	57.1	58.4	62.9
7.37	-44.12	-33.73	-40.42	0.34	57	58.4	62.5
7.37	-44.12	-33.68	-40.39	0.31	57	58.4	62.5
7.37	-44.08	-33.68	-40.39	0.34	57	58.4	62.3
7.37	-44.08	-33.63	-40.36	0.34	56.9	58.3	62.1
7.38	-44.05	-33.68	-40.36	0.34	56.9	58.3	61.7
7.37	-44.05	-33.63	-40.3	0.34	56.9	58.3	61.7
7.37	-44.05	-33.63	-40.3	0.34	56.8	58.2	61.5
7.37	-44.05	-33.57	-40.27	0.34	56.8	58.2	61.4
7.37	-44.01	-33.57	-40.24	0.34	56.8	58.2	61
7.37	-43.97	-33.63	-40.24	0.34	56.8	58.2	60.8
7.37	-43.97	-33.57	-40.24	0.34	56.7	58.1	60.8
7.38	-43.97	-33.52	-40.24	0.34	56.7	58.1	60.4
7.37	-43.94	-33.52	-40.21	0.34	56.7	58.1	60.4
7.38	-43.94	-33.52	-40.21	0.31	56.7	58	60.2
7.36	-43.94	-33.47	-40.18	0.34	56.6	57.9	60.2
7.35	-43.94	-33.47	-40.15	0.34	56.4	57.9	59.7
7.35	-43.9	-33.47	-40.15	0.34	56.4	57.9	59.7
7.36	-43.86	-33.47	-40.12	0.34	56.3	57.9	59.2
7.35	-43.86	-33.47	-40.12	0.31	56.3	57.8	59.2
7.36	-43.86	-33.42	-40.12	0.34	56.2	57.6	59
7.35	-43.83	-33.42	-40.09	0.34	56.2	57.6	58.9
7.36	-43.83	-33.37	-40.09	0.34	56.2	57.6	58.6
7.36	-43.83	-33.37	-40.05	0.34	56.1	57.5	58.7
7.35	-43.79	-33.37	-40.05	0.34	56.1	57.5	58.2
7.36	-43.79	-33.37	-40.02	0.34	56	57.4	58.2
7.36	-43.75	-33.37	-40.02	0.34	56	57.4	57.8
7.36	-43.75	-33.37	-39.99	0.31	56	57.3	57.7
7.36	-43.72	-33.32	-39.99	0.34	56	57.3	57.8
7.35	-43.72	-33.32	-39.96	0.34	56	57.2	57.4
7.35	-43.72	-33.32	-39.96	0.34	56	57.2	57.5
7.35	-43.72	-33.26	-39.93	0.34	55.9	57.2	57.2
7.35	-43.64	-33.26	-39.93	0.34	55.9	57.1	57.3
7.35	-43.61	-33.26	-39.9	0.34	55.9	57.1	57.2
7.35	-43.61	-33.21	-39.9	0.34	55.8	57.1	57.1
7.35	-43.61	-33.21	-39.87	0.34	55.8	57.1	56.8
7.35	-43.57	-33.21	-39.84	0.34	55.8	57.1	56.8
7.35	-43.53	-33.16	-39.84	0.34	55.7	57.1	56.8
7.35	-43.53	-33.16	-39.84	0.34	55.7	57	56.8
7.34	-43.5	-33.16	-39.81	0.34	55.7	57	56.5

7.35	-43.5	-33.16	-39.78	0.31	55.7	57	56.4
7.35	-43.5	-33.11	-39.78	0.34	55.6	56.9	56.2
7.35	-43.5	-33.11	-39.75	0.31	55.6	56.9	56.3
7.35	-43.46	-33.06	-39.75	0.31	55.6	56.9	56.1
7.35	-43.46	-33.06	-39.75	0.34	55.6	56.9	56.1
7.34	-43.42	-33.06	-39.75	0.34	55.6	56.8	56
7.34	-43.39	-33.06	-39.72	0.34	55.5	56.8	56
7.34	-43.39	-33	-39.69	0.34	55.5	56.8	56
7.34	-43.39	-33	-39.69	0.34	55.5	56.8	55.9
7.34	-43.35	-32.95	-39.69	0.31	55.4	56.7	56
7.34	-43.35	-32.95	-39.66	0.34	55.4	56.7	55.7
7.34	-43.32	-32.95	-39.66	0.31	55.4	56.7	55.9
7.34	-43.32	-32.95	-39.63	0.31	55.4	56.6	55.9
7.34	-43.32	-32.95	-39.63	0.34	55.4	56.6	55.5
7.34	-43.28	-32.95	-39.6	0.34	55.3	56.6	55.4
7.34	-43.28	-32.9	-39.6	0.34	55.3	56.6	55.7
7.34	-43.24	-32.85	-39.6	0.31	55.2	56.6	55.7
7.34	-43.24	-32.9	-39.57	0.34	55.2	56.5	55.5
7.33	-43.21	-32.85	-39.51	0.34	55.2	56.5	55.5
7.33	-43.21	-32.85	-39.47	0.34	55.2	56.5	55.3
7.33	-43.17	-32.85	-39.47	0.34	55.2	56.4	55.2
7.33	-43.17	-32.8	-39.44	0.34	55.2	56.4	55.2
7.33	-43.17	-32.8	-39.47	0.34	55.1	56.3	55.3
7.33	-43.17	-32.85	-39.44	0.34	55.1	56.3	55.2
7.33	-43.17	-32.69	-39.41	0.31	55.1	56.3	55.2
7.33	-43.13	-32.8	-39.41	0.34	55.1	56.3	55.2
7.33	-43.1	-32.8	-39.41	0.31	55.1	56.3	55.1
7.33	-43.1	-32.69	-39.38	0.34	55.1	56.2	55.4
7.33	-43.06	-32.69	-39.35	0.31	55	56.2	55.3
7.33	-43.06	-32.64	-39.35	0.34	55	56.3	55.1
7.33	-43.06	-32.64	-39.32	0.31	55	56.2	55.5
7.33	-43.02	-32.64	-39.32	0.34	55	56.3	55.2
7.33	-43.02	-32.59	-39.32	0.34	55	56.3	55.5
7.33	-43.02	-32.59	-39.29	0.31	55.1	56.2	55.7
7.33	-42.99	-32.59	-39.26	0.34	55	56.3	55.7
7.33	-42.99	-32.59	-39.23	0.34	55.1	56.3	55.8
7.33	-42.99	-32.54	-39.23	0.34	55.1	56.4	55.9
7.33	-42.99	-32.54	-39.23	0.34	55.1	56.5	56.4
7.33	-42.95	-32.48	-39.2	0.37	55.2	56.5	56.5
7.33	-42.95	-32.48	-39.2	0.31	55.2	56.5	56.6
7.33	-42.91	-32.48	-39.17	0.31	55.2	56.6	56.9
7.33	-42.91	-32.48	-39.17	0.34	55.3	56.6	57.3
7.33	-42.91	-32.48	-39.14	0.34	55.3	56.6	57.5
7.33	-42.88	-32.43	-39.11	0.34	55.3	56.7	57.5
7.33	-42.88	-32.43	-39.11	0.31	55.4	56.8	57.8
7.33	-42.84	-32.43	-39.11	0.31	55.4	56.8	57.8
7.33	-42.77	-32.38	-39.08	0.34	55.5	56.8	58.1

7.33	-42.77	-32.38	-39.05	0.31	55.5	56.9	58.3
7.33	-42.77	-32.38	-39.08	0.31	55.5	56.8	58.3
7.33	-42.77	-32.38	-39.05	0.31	55.5	56.9	58.6
7.33	-42.73	-32.33	-39.05	0.31	55.6	56.9	58.6
7.33	-42.69	-32.28	-39.02	0.31	55.6	57	58.9
7.33	-42.69	-32.28	-38.99	0.31	55.6	57	58.9
7.33	-42.69	-32.33	-39.02	0.31	55.7	57.1	59.2
7.33	-42.66	-32.33	-38.99	0.34	55.7	57.1	59.2
7.33	-42.66	-32.28	-38.96	0.31	55.8	57.1	59.4
7.33	-42.66	-32.23	-38.93	0.31	55.9	57.1	59.8
7.33	-42.62	-32.23	-38.93	0.34	55.9	57.2	59.7
7.33	-42.62	-32.23	-38.89	0.31	55.9	57.2	60.1
8.08	-44.27	-32.9	-39.14	1.16	57.1	56.8	45.5
8.19	-42.77	-32.28	-38.93	0.31	55.7	57.1	51.6
8.21	-42.69	-32.23	-38.89	0.31	55.7	57.3	52.9
8.22	-42.62	-32.17	-38.86	0.31	55.6	57.2	53.9
8.22	-42.58	-32.17	-38.83	0.31	55.7	57.3	54.8
8.21	-42.55	-32.12	-38.8	0.31	56	57.2	55.8
8.2	-42.55	-32.12	-38.8	0.31	55.8	57.2	56.4
8.19	-42.51	-32.07	-38.74	0.31	55.9	57.3	56.8
8.18	-42.44	-32.07	-38.74	0.31	56	57.3	57.3
8.17	-42.44	-32.07	-38.74	0.31	56	57.2	57.5
8.16	-42.4	-32.02	-38.71	0.31	56	57.2	58.1
8.15	-42.4	-32.02	-38.71	0.31	56	57.2	58
8.13	-42.4	-32.02	-38.71	0.31	56	57.2	58.2
8.12	-42.33	-32.02	-38.68	0.31	56	57.2	58.3
8.11	-42.36	-32.02	-38.68	0.31	55.9	57.1	58.5
8.1	-42.33	-31.97	-38.65	0.31	55.9	57.1	58.2
8.09	-42.29	-31.97	-38.65	0.31	56	57.1	58.4
8.08	-42.29	-31.97	-38.62	0.31	55.9	57.1	58.5
8.07	-42.25	-31.97	-38.62	0.31	55.9	57.1	58.5
8.06	-42.22	-31.97	-38.62	0.31	55.9	57.1	58.5
8.06	-42.22	-31.91	-38.62	0.31	55.9	57.1	58.4
8.05	-42.18	-31.91	-38.59	0.31	55.9	57.1	58.5
8.04	-42.18	-31.91	-38.59	0.34	55.9	57.1	58.2
8.04	-42.18	-31.86	-38.59	0.31	55.9	57.1	58.2
8.03	-42.14	-31.86	-38.56	0.31	55.9	57.1	58.3
8.02	-42.14	-31.86	-38.56	0.27	55.8	57.1	58.2
8.01	-42.11	-31.86	-38.53	0.31	55.9	57.1	58
8.01	-42.07	-31.86	-38.53	0.27	55.9	57.1	58.2
8	-42.07	-31.86	-38.53	0.31	55.8	57.1	58.1
8	-42.07	-31.81	-38.5	0.31	55.8	57	58
7.99	-42.03	-31.81	-38.5	0.31	55.8	57	57.9
7.98	-42.03	-31.81	-38.5	0.31	55.8	57	57.9
7.98	-42	-31.76	-38.47	0.31	55.8	57	57.5
7.97	-42	-31.81	-38.47	0.31	55.8	56.9	57.7
7.97	-41.96	-31.76	-38.47	0.31	55.8	56.9	57.5

7.96	-41.96	-31.76	-38.44	0.34	55.7	56.9	57.3
7.96	-41.96	-31.76	-38.44	0.31	55.7	56.8	57.3
7.95	-41.96	-31.76	-38.44	0.31	55.7	56.8	57.1
7.95	-41.89	-31.71	-38.41	0.31	55.7	56.8	57.1
7.94	-41.89	-31.71	-38.44	0.31	55.6	56.7	57.1
7.94	-41.85	-31.71	-38.41	0.31	55.6	56.7	57.1
7.93	-41.85	-31.71	-38.38	0.31	55.6	56.7	56.6
7.93	-41.85	-31.71	-38.38	0.31	55.6	56.7	56.6
7.92	-41.81	-31.65	-38.35	0.31	55.5	56.6	56.6
7.91	-41.81	-31.65	-38.35	0.31	55.5	56.6	56.5
7.92	-41.81	-31.65	-38.35	0.31	55.5	56.5	56.4
7.91	-41.81	-31.65	-38.32	0.31	55.4	56.5	56.2
7.91	-41.78	-31.6	-38.32	0.31	55.4	56.4	56.1
7.9	-41.78	-31.6	-38.32	0.31	55.4	56.4	55.7
7.9	-41.78	-31.6	-38.28	0.31	55.3	56.3	55.7
7.9	-41.78	-31.6	-38.28	0.27	55.2	56.3	55.5
7.89	-41.78	-31.6	-38.28	0.31	55.2	56.2	55.4
7.89	-41.74	-31.55	-38.25	0.31	55.2	56.2	55.3
7.88	-41.7	-31.6	-38.22	0.27	55.1	56.1	55
7.88	-41.7	-31.55	-38.22	0.31	55	56.1	54.8
7.87	-41.7	-31.55	-38.22	0.31	55	56.1	54.6
7.87	-41.7	-31.55	-38.19	0.31	55	56	54.7
7.86	-41.67	-31.45	-38.19	0.31	54.9	56	54.7
7.86	-41.67	-31.45	-38.19	0.31	54.9	56	54.3
7.86	-41.67	-31.45	-38.19	0.31	54.9	56	54.2
7.85	-41.67	-31.45	-38.16	0.31	54.9	55.9	54.1
7.85	-41.63	-31.39	-38.16	0.31	54.9	56	54.2
7.85	-41.63	-31.39	-38.13	0.34	54.8	55.9	53.9
7.84	-41.63	-31.39	-38.1	0.27	54.8	55.8	53.9
7.85	-41.63	-31.39	-38.13	0.31	54.7	55.8	53.6
7.84	-41.59	-31.34	-38.1	0.31	54.7	55.7	53.7
7.83	-41.59	-31.34	-38.07	0.31	54.6	55.7	53.5
7.83	-41.56	-31.34	-38.07	0.31	54.5	55.6	53.4
7.83	-41.56	-31.34	-38.07	0.31	54.4	55.5	53.3
7.82	-41.56	-31.29	-38.07	0.31	54.4	55.5	53.1
7.82	-41.52	-31.34	-38.04	0.31	54.2	55.4	52.7
7.82	-41.52	-31.29	-38.01	0.31	54.1	55.2	52.6
7.82	-41.52	-31.24	-38.01	0.31	54.1	55.2	52.5
7.81	-41.48	-31.29	-38.01	0.31	54	55.1	52.2
7.81	-41.48	-31.24	-37.95	0.31	54	55.1	52
7.81	-41.48	-31.24	-37.95	0.31	53.9	54.9	51.9
7.8	-41.48	-31.24	-37.95	0.31	53.9	54.9	51.9
7.8	-41.41	-31.24	-37.92	0.31	53.8	54.9	51.7
7.8	-41.41	-31.24	-37.92	0.34	53.8	54.9	51.6
7.8	-41.41	-31.14	-37.92	0.31	53.8	54.9	51.3
7.79	-41.37	-31.19	-37.89	0.31	53.8	54.9	51.3
7.79	-41.37	-31.19	-37.89	0.31	53.8	54.9	51

7.78	-41.37	-31.19	-37.89	0.31	53.7	54.8	51.2
7.78	-41.37	-31.14	-37.86	0.31	53.7	54.8	50.7
7.78	-41.37	-31.14	-37.83	0.31	53.6	54.8	50.7
7.78	-41.34	-31.14	-37.83	0.31	53.6	54.7	50.5
7.77	-41.34	-31.14	-37.83	0.31	53.5	54.7	50.5
7.77	-41.3	-31.14	-37.83	0.31	53.5	54.7	50.5
7.77	-41.3	-31.14	-37.8	0.31	53.5	54.7	50.4
7.77	-41.26	-31.08	-37.8	0.31	53.5	54.7	50.1
7.76	-41.26	-31.14	-37.77	0.31	53.6	54.6	50.2
7.76	-41.26	-31.08	-37.8	0.31	53.6	54.6	50.1
7.76	-41.23	-31.08	-37.77	0.31	53.5	54.6	50.2
7.76	-41.23	-31.03	-37.77	0.31	53.5	54.5	49.9
7.75	-41.23	-31.03	-37.77	0.31	53.4	54.5	49.8
7.75	-41.19	-31.03	-37.74	0.31	53.4	54.5	49.7
7.75	-41.19	-31.03	-37.7	0.31	53.4	54.4	50.1
7.75	-41.15	-31.03	-37.7	0.34	53.3	54.3	49.8
7.75	-41.15	-30.98	-37.7	0.31	53.2	54.3	49.5
7.74	-41.15	-31.03	-37.7	0.34	53.2	54.3	49.8
7.74	-41.15	-30.98	-37.7	0.31	53.2	54.3	49.7
7.74	-41.12	-30.98	-37.7	0.34	53.2	54.3	49.5
7.74	-41.12	-30.98	-37.67	0.31	53.2	54.2	49.6
7.73	-41.12	-30.98	-37.67	0.34	53.2	54.3	49.5
7.73	-41.08	-30.98	-37.67	0.31	53.1	54.2	49.8
7.73	-41.08	-30.98	-37.64	0.31	53.1	54.2	49.7
7.73	-41.08	-30.98	-37.64	0.31	53.1	54.2	50
7.73	-41.08	-30.93	-37.64	0.31	52.9	54.1	49.7
7.72	-41.04	-30.93	-37.61	0.31	52.9	54.1	50.4
7.72	-41.04	-30.93	-37.61	0.31	52.7	54	50.3
7.72	-41.04	-30.88	-37.61	0.31	52.7	53.9	50.4
7.72	-40.97	-30.88	-37.58	0.31	52.7	53.9	50.5
7.72	-40.97	-30.88	-37.58	0.34	52.7	53.9	50.8
7.71	-40.97	-30.88	-37.58	0.31	52.7	53.9	50.5
7.71	-40.97	-30.88	-37.55	0.31	52.7	53.8	50.7
7.71	-40.93	-30.82	-37.55	0.31	52.7	53.9	50.8
7.71	-40.93	-30.82	-37.55	0.31	52.7	53.9	50.9
7.7	-40.93	-30.77	-37.52	0.34	52.6	53.8	50.9
7.7	-40.9	-30.77	-37.52	0.34	52.7	53.8	50.9
7.7	-40.9	-30.77	-37.49	0.34	52.7	53.8	51.1
7.7	-40.9	-30.82	-37.49	0.34	52.7	53.8	51.1
7.71	-40.9	-30.82	-37.46	0.31	52.6	53.8	51.1
7.69	-40.9	-30.77	-37.46	0.31	52.6	53.8	51.2
7.69	-40.86	-30.77	-37.46	0.27	52.5	53.8	51.4
7.69	-40.86	-30.72	-37.46	0.31	52.5	53.8	51.5
7.69	-40.86	-30.77	-37.46	0.31	52.5	53.8	51.6
7.69	-40.86	-30.77	-37.43	0.34	52.5	53.8	51.7
7.69	-40.82	-30.72	-37.4	0.31	52.6	53.8	51.8
7.68	-40.82	-30.72	-37.4	0.27	52.6	53.8	51.9

7.68	-40.82	-30.72	-37.4	0.31	52.6	53.8	51.9
7.68	-40.79	-30.72	-37.4	0.31	52.5	53.8	52.2
7.68	-40.79	-30.72	-37.37	0.31	52.6	53.8	52.4
7.68	-40.79	-30.67	-37.37	0.27	52.6	53.8	52.3
7.68	-40.75	-30.67	-37.37	0.31	52.5	53.8	52.5
7.68	-40.75	-30.67	-37.37	0.31	52.6	53.9	52.8
7.68	-40.75	-30.62	-37.34	0.34	52.5	53.8	52.9
7.67	-40.75	-30.62	-37.34	0.31	52.6	53.8	52.8
7.67	-40.71	-30.62	-37.31	0.31	52.6	53.8	53.1
7.68	-40.71	-30.62	-37.31	0.31	52.6	53.9	53.3
7.68	-40.71	-30.56	-37.31	0.34	52.6	53.8	53.5
7.68	-40.68	-30.62	-37.31	0.31	52.7	53.9	53.4
7.67	-40.68	-30.56	-37.28	0.31	52.6	53.9	53.7
7.66	-40.64	-30.56	-37.28	0.34	52.6	54	53.8
7.66	-40.64	-30.56	-37.25	0.31	52.6	53.9	53.8
7.66	-40.64	-30.56	-37.25	0.27	52.6	54	53.7
7.66	-40.64	-30.51	-37.19	0.27	52.7	54	54
7.65	-40.64	-30.56	-37.19	0.31	52.7	54	53.8
7.65	-40.6	-30.51	-37.16	0.31	52.7	54.1	53.8
7.65	-40.6	-30.51	-37.19	0.31	52.7	54.1	53.8
7.65	-40.57	-30.51	-37.19	0.31	52.7	54.1	53.8
7.65	-40.53	-30.51	-37.16	0.31	52.7	54.1	53.8
7.65	-40.53	-30.46	-37.16	0.31	52.8	54.1	53.7
7.65	-40.53	-30.51	-37.16	0.31	52.7	54.1	53.8
7.65	-40.49	-30.46	-37.16	0.27	52.8	54.1	53.8
7.64	-40.49	-30.46	-37.16	0.31	52.9	54.2	53.9
7.64	-40.53	-30.46	-37.12	0.31	52.8	54.3	53.8
7.64	-40.49	-30.41	-37.12	0.31	52.7	54.2	53.9
7.64	-40.46	-30.41	-37.09	0.31	52.7	54.3	54.1
7.64	-40.49	-30.46	-37.09	0.31	52.8	54.2	54.1
7.64	-40.46	-30.41	-37.09	0.31	52.8	54.2	53.9
7.64	-40.46	-30.36	-37.06	0.31	52.8	54.2	54.1
7.63	-40.42	-30.41	-37.06	0.31	52.8	54.2	53.7
7.63	-40.42	-30.36	-37.06	0.31	52.9	54.2	53.6
7.63	-40.42	-30.36	-37.06	0.31	52.9	54.2	53.8
7.63	-40.42	-30.36	-37.06	0.31	52.7	54.2	53.4
7.63	-40.38	-30.36	-37.03	0.31	52.8	54.2	53.1
7.63	-40.38	-30.36	-37.03	0.31	52.8	54.1	53.1
7.63	-40.35	-30.36	-37.03	0.31	52.8	54.1	52.9
7.62	-40.35	-30.31	-37	0.31	52.8	54.1	52.9
7.62	-40.35	-30.31	-37	0.31	52.8	54	52.4
7.62	-40.35	-30.31	-37	0.31	52.9	54.1	52.1
7.62	-40.31	-30.31	-36.97	0.31	52.9	54.1	52
7.62	-40.31	-30.31	-36.97	0.34	52.8	54.1	52
7.62	-40.31	-30.31	-36.97	0.31	52.9	54.1	51.9
7.62	-40.27	-30.2	-36.97	0.31	52.9	54.1	52
7.62	-40.27	-30.2	-36.94	0.31	52.9	54.1	51.6

7.61	-40.27	-30.2	-36.94	0.34	52.9	54.1	51.7
7.62	-40.27	-30.2	-36.94	0.34	52.9	54.1	51.2
7.61	-40.24	-30.2	-36.94	0.31	52.9	54.1	51.3
7.61	-40.24	-30.15	-36.91	0.34	52.8	54.1	51.1
7.61	-40.24	-30.15	-36.91	0.31	52.8	54	51.1
7.61	-40.24	-30.15	-36.91	0.34	52.7	54	50.8
7.61	-40.2	-30.15	-36.88	0.34	52.7	53.9	50.8
7.6	-40.2	-30.15	-36.88	0.31	52.7	53.9	50.4
7.6	-40.2	-30.15	-36.88	0.34	52.7	53.8	50.5
7.6	-40.2	-30.15	-36.85	0.31	52.7	53.8	50.4
7.6	-40.16	-30.15	-36.85	0.31	52.7	53.8	50.3
7.6	-40.16	-30.1	-36.85	0.34	52.7	53.8	50.1
7.6	-40.16	-30.1	-36.85	0.31	52.7	53.8	49.9
7.59	-40.09	-30.1	-36.85	0.34	52.6	53.8	50
7.59	-40.09	-30.1	-36.85	0.34	52.5	53.8	49.9
7.59	-40.09	-30.1	-36.82	0.31	52.5	53.7	49.7
7.59	-40.05	-30.1	-36.82	0.34	52.5	53.6	49.5
7.59	-40.05	-30.1	-36.82	0.34	52.4	53.7	49.1
7.59	-40.05	-30.05	-36.82	0.34	52.4	53.6	49.1
7.59	-40.02	-30.05	-36.82	0.34	52.4	53.6	49.3
7.59	-40.02	-30.05	-36.79	0.34	52.4	53.6	49
7.58	-40.02	-30.1	-36.82	0.34	52.3	53.5	49
7.59	-40.02	-30.05	-36.79	0.31	52.3	53.5	48.8
7.58	-39.98	-30.05	-36.79	0.34	52.2	53.5	48.3
7.58	-39.98	-30.05	-36.79	0.31	52	53.4	48.4
7.58	-39.98	-30.05	-36.76	0.34	52	53.3	48.2
7.58	-39.98	-29.99	-36.76	0.34	52	53.3	48.1
7.58	-39.98	-29.99	-36.76	0.34	52	53.3	47.6
7.58	-39.98	-29.99	-36.73	0.34	52	53.2	47.6
7.59	-39.98	-29.94	-36.73	0.34	52	53.3	47.3
7.57	-39.95	-29.99	-36.73	0.34	51.9	53.3	47.4
7.57	-39.95	-29.99	-36.7	0.34	51.9	53.2	47
7.57	-39.91	-29.94	-36.7	0.34	51.9	53.1	47.1
7.57	-39.95	-29.94	-36.7	0.34	51.9	53.1	46.9
7.57	-39.95	-29.94	-36.67	0.34	51.9	53.1	46.9
7.57	-39.91	-29.89	-36.67	0.34	51.8	52.9	46.8
7.57	-39.91	-29.89	-36.67	0.34	51.7	52.8	46.8
7.57	-39.91	-29.89	-36.64	0.37	51.6	52.7	46.6
7.57	-39.87	-29.89	-36.64	0.34	51.7	52.7	46.6
7.56	-39.91	-29.89	-36.64	0.34	51.6	52.7	46.5
7.56	-39.87	-29.89	-36.64	0.34	51.6	52.7	46.2
7.56	-39.87	-29.84	-36.61	0.34	51.6	52.7	46.2
7.56	-39.87	-29.84	-36.61	0.34	51.6	52.6	46.2
7.56	-39.84	-29.89	-36.61	0.34	51.6	52.6	46.2
7.56	-39.84	-29.84	-36.58	0.37	51.3	52.5	46.2
7.56	-39.84	-29.84	-36.58	0.34	51.5	52.4	46.2
7.56	-39.84	-29.79	-36.58	0.34	51.5	52.5	46

7.56	-39.8	-29.84	-36.54	0.34	51.4	52.5	45.9
7.55	-39.8	-29.79	-36.54	0.37	51.2	52.4	45.9
7.55	-39.8	-29.79	-36.54	0.37	51.1	52.4	45.8
7.55	-39.8	-29.79	-36.54	0.34	51.3	52.4	45.7
7.55	-39.76	-29.73	-36.51	0.34	51.2	52.3	45.6
7.55	-39.76	-29.79	-36.51	0.34	51.3	52.3	45.6
7.55	-39.73	-29.79	-36.51	0.34	51.3	52.3	45.6
7.55	-39.73	-29.73	-36.48	0.34	51	52.2	45.7
7.55	-39.73	-29.73	-36.48	0.37	51.2	52.1	45.6
7.55	-39.69	-29.73	-36.48	0.34	51.1	52.2	45.5
7.55	-39.69	-29.73	-36.48	0.34	50.9	52.2	45.5
7.54	-39.69	-29.73	-36.48	0.37	50.8	52.1	45.4
7.54	-39.69	-29.68	-36.45	0.37	50.8	52.1	45.6
7.54	-39.65	-29.68	-36.45	0.37	50.7	52.1	45.4
7.54	-39.62	-29.68	-36.39	0.37	50.9	52	45.5
7.54	-39.65	-29.68	-36.45	0.34	50.9	52	45.1
7.54	-39.65	-29.68	-36.39	0.37	50.7	52	45.4
7.54	-39.62	-29.68	-36.39	0.37	50.9	52	45.4
7.53	-39.62	-29.68	-36.39	0.37	50.9	51.9	45.3
7.54	-39.62	-29.63	-36.36	0.37	50.8	51.9	45.5
7.54	-39.62	-29.68	-36.39	0.37	50.9	51.9	45
7.53	-39.58	-29.63	-36.36	0.37	50.9	51.9	45.3
7.53	-39.58	-29.63	-36.36	0.34	50.8	51.9	45.3
7.53	-39.58	-29.63	-36.33	0.37	50.8	51.9	45.4
7.53	-39.58	-29.63	-36.36	0.37	50.8	51.9	45.5
7.53	-39.54	-29.63	-36.33	0.34	50.8	51.9	45.3
7.53	-39.58	-29.63	-36.33	0.37	50.8	51.9	45.6
7.53	-39.54	-29.58	-36.3	0.37	50.8	51.9	45.8
7.53	-39.51	-29.58	-36.3	0.34	50.8	51.9	45.5
7.53	-39.54	-29.58	-36.3	0.37	50.9	51.9	45.8
7.53	-39.51	-29.58	-36.3	0.34	50.8	52	45.9
7.53	-39.51	-29.53	-36.3	0.37	50.9	52	45.9
7.53	-39.51	-29.58	-36.3	0.37	50.7	51.6	45.9
7.53	-39.51	-29.53	-36.27	0.34	50.6	51.6	46.2
7.53	-39.51	-29.58	-36.24	0.37	50.6	51.5	46.7
7.55	-43.83	-34.98	-37.09	26.71	60.9	51.7	41.2
6.68	-46.54	-35.81	-37.43	27.17	67	51.7	45.3
7.64	-46.28	-35.65	-37.89	27.38	68.3	51.5	49.1
8.06	-47.89	-36.27	-38.1	27.38	68.5	52	49
8.16	-47.6	-36.32	-38.16	27.2	69.1	52	49.8
8.23	-48.88	-37.1	-38.19	27.14	70	52.1	47.9
8.27	-48.77	-36.74	-38.59	27.11	70.5	52.4	49
8.29	-47.97	-37.73	-38.44	27.17	70.5	52	50.3
8.33	-47.64	-37.21	-38.74	27.14	71	52.9	48.7
8.32	-47.67	-37.67	-38.83	27.11	71.6	53.7	48.1
8.27	-47.93	-38.3	-38.99	27.23	72.2	53.8	49.9
8.35	-46.94	-37.93	-39.17	27.01	72.5	54	50.2

8.36	-47.49	-38.4	-39.51	26.95	72.9	54.5	52.3
8.38	-48.77	-38.3	-39.29	26.98	72.4	54.5	47.7
8.47	-47.67	-38.04	-39.51	27.08	72.3	54.6	50.8
8.4	-49.62	-38.35	-39.44	27.05	72.3	54.8	49.5
8.19	-49.36	-38.56	-39.72	27.23	72.1	54.9	47.6
8.42	-48.7	-38.71	-39.87	27.05	72.1	54.9	48
8.7	-46.14	-38.71	-39.69	26.95	72	54.9	50.2
8.41	-48.92	-38.71	-39.81	27.01	72	55.1	48.9
8.42	-50.05	-39.39	-39.9	27.08	72.3	54.9	49.8
8.35	-47.86	-38.5	-39.99	27.26	72.3	55.2	48.6
8.41	-49.98	-38.61	-39.84	27.01	72.7	55	56.9
8.47	-50.13	-38.82	-40.02	26.98	72.9	55.4	50.1
8.32	-51.01	-38.87	-40.18	27.11	72.9	55.1	47.9
8.35	-49.14	-39.18	-40.15	27.01	72.8	55.6	50.9
8.44	-50.31	-38.76	-40.18	26.83	73.4	55.7	48.7
8.43	-49.58	-39.39	-40.45	27.11	73.4	55.8	49.3
8.48	-48.15	-39.75	-40.12	26.95	73.7	55.9	48.8
8.47	-48.41	-39.75	-40.79	26.92	74	56	50.1
8.49	-46.54	-39.59	-40.67	26.83	74.4	56.2	47.3
7.58	-49.62	-39.59	-40.76	27.01	74.3	56	51.9
8.48	-49.76	-39.85	-40.76	26.89	74.3	56.2	51.7
8.48	-50.31	-39.44	-40.63	26.92	74.1	56.4	48.9
8.48	-50.53	-39.33	-40.79	26.83	73.8	56.3	48.9
8.28	-50.68	-39.75	-40.91	27.08	74.2	56.3	48.4
8.51	-51.34	-39.65	-40.94	26.92	74.2	56.4	50
8.42	-50.27	-39.65	-40.91	26.92	74.1	56.2	49.4
8.41	-48.63	-39.59	-41.09	27.05	73.6	56.5	51.4
8.39	-49.14	-40.53	-41.25	27.01	73.4	56.6	49.5
8.53	-49.84	-40.42	-41.37	27.01	72.9	56.7	48.4
8.52	-50.35	-39.8	-41.31	26.98	73	56.6	50.3
8.4	-47.75	-39.91	-41.15	27.14	73	56.3	50.1
8.38	-48.26	-40.01	-41.46	26.92	72.8	56.7	50.5
8.5	-50.27	-40.68	-41.34	26.92	72.8	56.6	49.5
8.48	-49.87	-39.28	-41.49	26.95	73	56.7	50.5
8.37	-50.49	-39.39	-41.46	27.11	72.8	56.7	51.5
8.41	-50.49	-40.48	-41.58	27.05	72.7	56.8	44.6
8.5	-50.97	-40.27	-41.73	27.01	73	56.7	52.3
8.28	-48.77	-40.63	-41.95	27.05	73	56.8	51.1
8.4	-49.69	-40.22	-41.49	26.92	73.2	56.9	49.8
8.5	-51.92	-40.74	-41.67	26.98	73.4	56.7	49.8
8.14	-50.2	-40.37	-41.92	27.17	73.4	56.8	48
8.47	-51.89	-40.84	-41.76	26.98	73.1	56.8	52
8.48	-52.36	-40.53	-41.83	27.05	73.1	57	52
8.28	-52.29	-40.63	-41.98	27.23	72.7	56.8	49.9
8.47	-51.37	-41.31	-42.04	27.01	72.5	56.9	51.6
8.53	-52.03	-40.84	-42.19	27.01	72.3	57	50.3
8.35	-50.02	-40.68	-42.19	27.2	72.3	56.9	49.7

8.43	-49.76	-41	-42.19	27.05	71.9	56.9	49.4
8.43	-50.86	-40.63	-42.19	26.98	71.8	57	49.8
8.27	-50.6	-40.94	-42.16	27.17	71.3	56.9	51.2
8.49	-48.04	-40.84	-42.41	27.14	71.1	56.8	49.7
8.47	-50.71	-41.1	-42.47	27.11	70.8	56.7	51.5
8.51	-48.19	-41.1	-42.31	27.01	70.8	56.6	49.8
8.31	-50.57	-41.31	-42.47	27.29	70.3	56.7	48.4
8.47	-50.02	-41.51	-42.31	27.2	70.3	56.4	51.1
8.41	-51.45	-41.46	-42.47	27.14	70.1	56.6	50
8.4	-52.69	-41.83	-42.59	27.17	70	56.5	50.9
8.33	-51.96	-41.05	-42.47	27.26	69.3	56.3	50.5
8.4	-52.51	-40.94	-42.71	27.23	69.6	56.3	52.3
8.5	-52.66	-41.25	-42.56	27.2	69.4	56.3	49.3
8.48	-52.44	-41.67	-42.5	27.17	69	56.3	50.1
8.33	-51.08	-40.68	-42.71	27.35	68.9	56.1	49.5
8.35	-50.35	-40.89	-42.89	27.14	68.8	56.1	52.6
8.36	-50.16	-41.67	-42.65	27.17	68.7	56	49.9
8.41	-49.8	-41.36	-42.65	27.2	68.4	56.1	51.5
8.7	-50.86	-41.36	-42.86	27.11	68.4	56.1	47
8.33	-46.61	-42.08	-42.71	27.44	68.3	56	50.7
8.39	-48.37	-42.03	-42.74	27.2	68	56	47.4
8.5	-51.26	-42.81	-42.86	27.14	67.8	56	49.5
8.39	-51.56	-41.83	-42.89	27.23	67.7	56	48.1
8.97	-47.38	-41.62	-43.02	27.17	68.1	55.8	47.3
8.38	-44.85	-42.14	-43.11	27.41	67.6	55.9	51.5
8.47	-47.05	-42.03	-43.17	27.23	67.6	55.7	48.8
8.47	-49.29	-42.19	-43.08	27.14	67.6	55.7	50.1
8.41	-48.81	-41.77	-43.29	27.26	67.4	55.7	49.6
8.11	-48.7	-41.83	-42.92	27.41	67.4	55.5	50.5
8.4	-50.24	-41.62	-43.23	27.44	67	55.6	47.8
8.47	-50.86	-41.98	-43.17	27.38	66.8	55.6	51.2
8.43	-50.86	-41.46	-43.26	27.23	66.8	55.6	52.6
8.37	-52.29	-42.08	-43.11	27.26	66.7	55.5	51.3
8.52	-52.69	-41.83	-43.32	27.14	66.6	55.4	48
8.29	-51.85	-42.34	-43.14	27.41	66.8	55.5	50.4
8.28	-50.49	-41.77	-43.38	27.41	66.8	55.1	49.5
8.47	-49.87	-42.45	-43.41	27.29	66.8	55	50.8
8.37	-51.92	-42.45	-43.26	27.26	66.9	55.2	48.4
8.47	-51.63	-42.71	-43.47	27.29	67.5	55.4	50.1
8.38	-48.52	-42.4	-43.57	27.26	67.1	55	51.3
8.64	-43.97	-41.77	-43.53	27.26	67.1	55.2	49.2
8.28	-47.05	-42.55	-43.29	27.41	67.4	55.1	50.1
8.45	-48.7	-42.08	-43.57	27.23	67.5	55.1	49.1
8.39	-46.54	-42.24	-43.53	27.2	67.7	55.4	49.6
8.43	-41.85	-42.14	-43.47	27.23	67.8	55.1	51.6
8.37	-49.25	-42.76	-43.63	27.29	67.8	55.5	46.9
8.47	-49.76	-42.34	-43.66	27.23	67.7	55.1	49.5

8.83	-47.12	-42.34	-43.72	27.23	67.5	55.1	49.5
8.29	-49.36	-41.83	-43.72	27.41	67.8	55.1	48.4
8.36	-49.36	-42.81	-43.66	27.35	67.9	55.1	49.9
8.44	-46.21	-42.81	-43.6	27.2	67.9	55	49.3
8.36	-47.86	-42.66	-43.72	27.26	67.9	55.1	49.8
8.48	-50.75	-42.81	-43.75	27.17	67.8	55	52.3
8.44	-47.75	-42.45	-43.96	27.2	67.7	55.1	52.5
8.37	-48.37	-43.33	-43.93	27.11	67.8	55	47.6
8.63	-49.62	-42.6	-43.81	27.11	67.8	55.1	50.1
8.09	-48.41	-42.45	-43.78	27.26	67.8	55	50.8
8.33	-51.19	-42.4	-43.84	27.32	67.7	55	51
8.29	-48.33	-43.02	-44.05	27.35	67.8	54.8	47.4
8.41	-49.76	-42.66	-44.02	27.14	67.7	55	51.2
8.42	-48.37	-42.29	-43.78	27.14	67.8	55	48.1
8.48	-42.18	-43.17	-43.93	27.23	67.9	55	49.7
8.44	-49.69	-43.28	-43.93	27.14	67.9	55	50.7
8.37	-46.17	-42.66	-44.05	27.17	67.9	54.9	49.5
8.43	-49.76	-42.71	-44.42	27.14	67.9	55.1	50.1
8.53	-45.18	-43.07	-43.87	27.14	67.9	55	49.2
8.65	-47.34	-43.95	-44.08	27.01	68.1	55.2	49
7.52	-49.25	-43.02	-43.84	27.26	68.1	54.9	51.4
8.29	-48.26	-44.37	-44.18	27.32	68	55.1	51.6
8.47	-45.66	-43.17	-44.36	27.17	68.1	55.2	46.5
8.38	-46.5	-42.4	-44.18	27.14	68.2	55.1	50.8
8.47	-48.7	-43.49	-44.21	27.23	68.5	55.2	47.6
8.43	-48.52	-43.07	-44.33	27.11	68.5	54.9	52.6
8.33	-48.55	-43.49	-44.33	27.17	68.6	55.5	50.3
8.36	-46.72	-43.28	-44.27	27.11	68.7	55.2	49.3
8.43	-46.76	-43.38	-44.42	27.01	68.7	55.2	48
8.43	-50.35	-44.26	-44.36	27.11	69	55.2	50.7
8.45	-50.49	-43.23	-44.18	27.14	69.3	55.5	48.2
8.47	-47.31	-43.49	-44.63	27.05	69.8	55.4	49.5
8.47	-49.29	-43.64	-44.42	27.01	69.8	55.5	47.6
8.48	-49.43	-43.8	-44.36	27.01	70	55.7	51.6
8.43	-50.09	-44	-44.51	26.98	69.8	55.6	50.3
8.36	-51.04	-43.38	-44.6	27.05	69.9	55.6	49.9
8.54	-51.92	-43.75	-44.63	27.08	69.6	55.7	52.2
8.56	-50.42	-43.54	-44.57	27.05	70	55.7	51.9
8.75	-45.4	-43.54	-44.73	27.05	69.8	55.8	50.8
8.06	-48.99	-43.23	-44.82	27.2	69.7	55.8	50
8.38	-52	-43.12	-44.82	27.2	69.9	55.9	51
8.3	-49.73	-43.64	-44.94	27.14	69.9	55.7	47.7
8.33	-47.64	-44.16	-44.42	27.23	69.9	55.8	49.8
8.39	-50.93	-43.17	-44.69	27.14	70.1	55.9	50.2
8.47	-47.31	-43.64	-45	27.01	70.1	56	49.5
8.43	-53.42	-43.69	-44.94	27.01	70.2	56	49.9
8.46	-47.86	-44.37	-44.73	26.98	70.7	56.1	48.6

8.48	-51.12	-43.69	-44.63	27.01	70.5	56	54.2
8.48	-46.32	-43.59	-44.82	26.95	70.7	56	49.3
8.44	-50.82	-43.95	-44.79	26.92	71.2	56	51.3
8.35	-48.08	-43.59	-45.06	26.92	71.5	56.2	49.8
8.4	-48.52	-43.95	-44.91	26.89	72	56.2	49.1
8.47	-49.69	-44.21	-44.79	26.89	72.2	56.3	49.1
8.44	-49.84	-44.16	-45	26.8	72.4	56.5	50.9
8.43	-46.61	-43.85	-44.82	26.77	72.9	56.2	50.7
8.4	-51.37	-43.38	-45.06	26.83	72.8	56.6	49.3
8.43	-51.89	-44	-45.12	26.8	72.6	56.7	49.9
8.36	-49.54	-44.32	-44.88	26.83	73.1	56.5	51.6
8.45	-50.38	-44.26	-44.79	26.71	73.3	56.9	54.3
8.47	-48.08	-44.16	-44.97	26.77	73.6	56.8	49.5
8.42	-47.82	-43.64	-45	26.71	73.6	56.9	48.8
8.51	-43.17	-43.43	-45.09	26.68	74.2	57	49
8.61	-47.56	-43.9	-45.06	26.62	74.8	57	49.8
8.47	-47.42	-44.63	-44.85	26.62	75.3	57.1	51.3
8.52	-49.73	-44.16	-45.18	26.68	75.5	57.1	45.1
8.63	-47.31	-44.26	-44.85	26.56	75.9	57.3	50.4
8.6	-49.47	-44.52	-45.24	26.62	75.8	57.3	50.4
8.88	-45.29	-43.64	-44.94	26.59	76.6	57.5	48.7
8.16	-50.6	-43.54	-44.97	26.56	77.2	57.5	49.5
8.29	-51.3	-43.64	-45.27	26.47	77.8	57.5	48.1
8.71	-47.6	-44.37	-45.4	26.4	78	57.8	46.8
8.65	-49.36	-43.95	-45.18	26.47	78.4	58	47.7
8.61	-52.4	-44.52	-45.15	26.37	78.7	57.9	50.5
8.51	-50.57	-44.32	-45.21	26.4	79.3	58.1	47.5
8.5	-53.32	-44.63	-45.24	26.47	79.4	58.2	50.8
8.48	-51.48	-44.52	-45	26.37	79.5	58.4	49.2
8.44	-53.1	-44.16	-45.4	26.34	79.5	58.3	49.3
8.39	-53.13	-44.32	-45.09	26.4	79.6	58.5	49.2
8.46	-53.1	-44.63	-45.34	26.34	79.7	58.3	50.7
8.4	-51.3	-44.26	-45.4	26.37	79.6	58.6	48.9
8.39	-48.59	-44.26	-45.37	26.28	79.8	58.6	49.5
8.44	-52.22	-44.37	-45.27	26.37	79.5	58.7	49.1
8.47	-48.59	-44.26	-45.18	26.34	79.4	58.8	48.9
8.45	-52.11	-43.95	-45.31	26.34	78.9	58.8	49
8.44	-48.33	-44.16	-45.34	26.37	78.4	58.6	47.9
8.28	-49.76	-44.68	-45.43	26.53	77.9	58.7	49.2
8.28	-51.12	-44.06	-45.34	26.5	77.5	58.5	46.3
8.33	-51.19	-45.04	-45.24	26.5	77.4	58.9	50.1
7.52	-50.86	-44.26	-45.49	26.56	77.7	58.9	52.5
8.82	-50.71	-44.94	-45.52	26.31	77.2	58.8	49.6
8.52	-53.39	-44.68	-45.4	26.4	77.3	58.9	51.7
8.48	-49.54	-44.58	-45.43	26.4	77.1	58.9	50.5
8.45	-49.62	-38.97	-44.48	0.18	67.1	59.4	51.6
8.45	-48.77	-38.45	-44.11	0.21	64.5	59.3	53.3

8.45	-48.3	-38.09	-43.9	0.24	62.5	59.3	54.5
8.45	-47.97	-37.88	-43.75	0.24	61.3	59.3	55.4
8.44	-47.71	-37.57	-43.6	0.24	60.3	59.2	56.4
8.44	-47.49	-37.41	-43.41	0.27	59.6	59.2	57.1
8.44	-47.31	-37.21	-43.29	0.27	59.2	59.2	57.8
8.44	-47.12	-37.05	-43.17	0.27	58.8	59.1	58.2
8.44	-46.98	-36.9	-43.08	0.31	58.3	59.1	58.6
8.44	-46.83	-36.84	-42.95	0.31	58.2	59	58.9
8.43	-46.72	-36.69	-42.86	0.31	58	59	59.5
8.43	-46.61	-36.58	-42.77	0.31	57.8	58.8	59.6
8.43	-46.5	-36.43	-42.65	0.31	57.7	58.8	59.8
8.42	-46.39	-36.38	-42.59	0.27	57.6	58.8	59.8
8.42	-46.28	-36.22	-42.5	0.31	57.5	58.7	60
8.42	-46.17	-36.12	-42.41	0.31	57.5	58.6	60.1
8.41	-46.06	-36.01	-42.34	0.31	57.4	58.6	60.2
8.41	-45.99	-35.96	-42.25	0.31	57.3	58.5	60.3
8.41	-45.92	-35.86	-42.19	0.27	57.3	58.5	60.3
8.4	-45.81	-35.81	-42.1	0.31	57.2	58.4	60.3
8.4	-45.77	-35.75	-42.07	0.27	57.1	58.4	60.5
8.39	-45.7	-35.7	-42.01	0.31	57.1	58.4	60.3
8.39	-45.59	-35.6	-41.95	0.31	57.1	58.3	60.2
8.38	-45.55	-35.55	-41.86	0.31	57.1	58.3	60.3
8.38	-45.44	-35.44	-41.76	0.31	57	58.2	60.3
8.37	-45.37	-35.39	-41.73	0.31	56.9	58.2	60.3
8.37	-45.33	-35.34	-41.64	0.31	56.9	58.2	60
8.37	-45.26	-35.24	-41.58	0.31	56.9	58.2	60.2
8.36	-45.22	-35.18	-41.52	0.31	56.8	58.2	60
8.36	-45.15	-35.08	-41.49	0.31	56.8	58.1	59.9
8.35	-45.07	-35.03	-41.43	0.31	56.7	58.1	60
8.35	-45.04	-35.03	-41.37	0.31	56.7	58	59.9
8.34	-45	-34.92	-41.31	0.31	56.7	58	59.7
8.34	-44.93	-34.87	-41.25	0.27	56.7	58	59.9
8.34	-44.85	-34.77	-41.21	0.31	56.7	58	59.8
8.33	-44.82	-34.77	-41.15	0.31	56.6	57.9	59.8
8.33	-44.74	-34.72	-41.06	0.31	56.6	57.9	59.5
8.32	-44.71	-34.66	-41.03	0.31	56.4	57.9	59.6
8.32	-44.67	-34.61	-40.97	0.31	56.4	57.8	59.5
8.32	-44.6	-34.56	-40.94	0.31	56.4	57.8	59.4
8.31	-44.52	-34.51	-40.88	0.31	56.3	57.8	59.4
8.31	-44.49	-34.46	-40.85	0.31	56.3	57.6	59.4
8.31	-44.41	-34.46	-40.79	0.31	56.3	57.6	59.2
8.3	-44.38	-34.35	-40.76	0.31	56.3	57.6	59.4
8.29	-44.34	-34.35	-40.7	0.27	56.3	57.6	59.2
8.29	-44.27	-34.3	-40.63	0.31	56.3	57.6	59.2
8.29	-44.27	-34.2	-40.6	0.31	56.3	57.5	59.3
8.29	-44.23	-34.25	-40.57	0.31	56.2	57.6	59.2
8.28	-44.16	-34.15	-40.54	0.31	56.2	57.5	59.2

8.28	-44.12	-34.09	-40.48	0.31	56.2	57.6	59.2
8.27	-44.05	-34.09	-40.45	0.31	56.2	57.5	59.3
8.27	-44.05	-33.99	-40.39	0.31	56.1	57.6	59
8.26	-44.01	-33.94	-40.36	0.31	56.1	57.5	59.2
8.26	-43.94	-33.89	-40.3	0.31	56.1	57.5	59
8.26	-43.9	-33.83	-40.24	0.31	56.1	57.5	59.3
8.26	-43.86	-33.83	-40.21	0.31	56.1	57.5	59
8.25	-43.83	-33.78	-40.18	0.31	56.1	57.5	59.3
8.25	-43.79	-33.78	-40.15	0.31	56.1	57.5	58.9
8.25	-43.72	-33.73	-40.12	0.31	56.1	57.5	58.8
8.24	-43.72	-33.68	-40.09	0.31	56.1	57.5	59.2
8.24	-43.61	-33.63	-40.05	0.31	56.1	57.5	59.3
8.24	-43.53	-33.57	-40.02	0.31	56	57.5	59.2
8.23	-43.5	-33.57	-39.99	0.27	56.1	57.5	59.2
8.23	-43.5	-33.52	-39.96	0.31	56.1	57.4	59
8.23	-43.46	-33.47	-39.9	0.31	56.1	57.5	58.9
8.22	-43.42	-33.42	-39.87	0.27	56.1	57.5	59.2
8.22	-43.39	-33.42	-39.87	0.31	56.1	57.5	59
8.21	-43.35	-33.37	-39.81	0.31	56.1	57.5	59.3
8.21	-43.32	-33.37	-39.78	0.27	56.1	57.4	59.2
8.21	-43.24	-33.37	-39.75	0.31	56.1	57.5	59.2
8.2	-43.24	-33.26	-39.72	0.31	56.1	57.4	59.2
8.2	-43.21	-33.26	-39.69	0.31	56.1	57.4	59
8.2	-43.21	-33.21	-39.66	0.27	56	57.4	59.3
8.2	-43.17	-33.21	-39.63	0.31	56	57.4	59.3
8.19	-43.13	-33.11	-39.63	0.31	56	57.4	59.2
8.19	-43.06	-33.16	-39.57	0.31	56	57.4	59.2
8.19	-43.02	-33.11	-39.51	0.31	56	57.4	59.3
8.18	-43.02	-33.06	-39.47	0.31	56	57.4	59.2
8.18	-42.99	-33.06	-39.44	0.31	56	57.4	59.5
8.18	-42.91	-33	-39.41	0.31	56	57.5	59.6
8.18	-42.91	-33	-39.38	0.34	56	57.4	59.9
8.17	-42.88	-32.95	-39.35	0.31	56	57.4	60.1
8.17	-42.88	-32.95	-39.32	0.27	56	57.5	60.2
8.17	-42.77	-32.9	-39.29	0.31	56	57.6	60.2
8.17	-42.73	-32.9	-39.26	0.31	56.1	57.6	60.3
8.16	-42.73	-32.85	-39.23	0.31	56.1	57.6	60.6
8.16	-42.69	-32.8	-39.23	0.27	56.2	57.6	61
8.15	-42.66	-32.8	-39.2	0.27	56.2	57.8	61
8.15	-42.62	-32.8	-39.17	0.27	56.2	57.9	61.5
8.15	-42.62	-32.69	-39.14	0.31	56.3	57.9	61.4
8.15	-42.58	-32.64	-39.11	0.31	56.3	57.9	61.5
8.15	-42.55	-32.64	-39.08	0.27	56.4	58	61.8
8.14	-42.51	-32.59	-39.05	0.31	56.4	58.1	61.7
8.14	-42.47	-32.59	-39.02	0.27	56.4	58.1	62
8.14	-42.47	-32.54	-39.02	0.27	56.6	58.2	62.1
8.14	-42.44	-32.48	-38.99	0.27	56.7	58.2	62.4

8.13	-42.44	-32.48	-38.96	0.27	56.7	58.2	62.5
8.13	-42.36	-32.48	-38.93	0.27	56.8	58.3	62.7
8.13	-42.36	-32.43	-38.89	0.27	56.8	58.4	62.8
8.12	-42.33	-32.43	-38.89	0.27	56.9	58.5	63.2
8.12	-42.29	-32.38	-38.86	0.27	57	58.5	63.6
8.12	-42.29	-32.38	-38.8	0.24	57	58.7	63.7
8.12	-42.25	-32.33	-38.8	0.27	57.1	58.8	64.1
8.12	-42.22	-32.33	-38.74	0.24	57.2	58.8	64.6
8.11	-42.18	-32.28	-38.71	0.27	57.2	59	64.7
8.11	-42.14	-32.28	-38.68	0.27	57.3	59.1	65.1
8.11	-42.14	-32.23	-38.65	0.27	57.4	59.2	65.7
8.11	-42.14	-32.17	-38.62	0.27	57.5	59.3	65.9
8.11	-42.11	-32.17	-38.59	0.24	57.7	59.4	66.4
8.11	-42.07	-32.12	-38.59	0.24	57.8	59.5	66.8
8.1	-42.03	-32.07	-38.56	0.21	57.9	59.6	67.3
8.1	-42.03	-32.12	-38.53	0.24	58	59.8	67.8
8.1	-42	-32.07	-38.5	0.24	58.1	59.9	68
8.1	-41.96	-32.02	-38.47	0.24	58.2	60.2	68.4
8.1	-41.89	-31.97	-38.47	0.21	58.3	60.3	68.9
8.1	-41.85	-31.97	-38.44	0.24	58.4	60.3	69.4
8.09	-41.85	-31.97	-38.41	0.24	58.5	60.4	69.6
8.09	-41.81	-31.91	-38.38	0.18	58.8	60.6	70
8.09	-41.78	-31.91	-38.35	0.21	58.9	60.7	70.3
8.09	-41.74	-31.86	-38.32	0.24	59	60.8	70.7
8.09	-41.74	-31.86	-38.28	0.21	59.1	60.9	70.9
8.09	-41.74	-31.81	-38.25	0.21	59.2	61	71.2
8.08	-41.67	-31.76	-38.22	0.18	59.2	61.1	71.4
8.08	-41.67	-31.76	-38.22	0.18	59.4	61.3	71.7
8.08	-41.63	-31.71	-38.19	0.18	59.4	61.4	72
8.08	-41.59	-31.65	-38.16	0.18	59.5	61.4	72.3
8.08	-41.59	-31.65	-38.16	0.21	59.6	61.4	72.4
8.08	-41.52	-31.65	-38.13	0.18	59.7	61.5	72.4
8.08	-41.56	-31.65	-38.1	0.18	59.7	61.6	72.5
8.08	-41.52	-31.6	-38.07	0.18	59.9	61.7	72.8
8.07	-41.48	-31.6	-38.07	0.18	60	61.8	73.1
8.07	-41.45	-31.55	-38.04	0.18	60.1	61.9	73
8.07	-41.45	-31.55	-38.04	0.18	60.1	61.9	73.1
8.07	-41.41	-31.45	-38.04	0.18	60.1	62	73.2
8.07	-41.37	-31.45	-37.95	0.18	60.3	62	73.3
8.07	-41.37	-31.39	-37.95	0.18	60.2	62.1	73.3
8.06	-41.34	-31.39	-37.92	0.18	60.3	62.2	73.3
8.06	-41.3	-31.39	-37.92	0.18	60.3	62.2	73.4
8.06	-41.26	-31.34	-37.89	0.18	60.3	62.2	73.3
8.06	-41.26	-31.34	-37.86	0.18	60.4	62.4	73.4
8.06	-41.23	-31.34	-37.86	0.18	60.4	62.4	73.3
8.06	-41.23	-31.29	-37.83	0.18	60.4	62.4	73.3
8.06	-41.19	-31.29	-37.8	0.18	60.5	62.4	73.2

8.05	-41.15	-31.24	-37.77	0.18	60.4	62.4	73
8.05	-41.15	-31.24	-37.74	0.18	60.5	62.4	73.1
8.05	-41.12	-31.19	-37.74	0.15	60.4	62.4	73
8.05	-41.08	-31.19	-37.7	0.15	60.5	62.4	73
8.05	-41.08	-31.14	-37.7	0.18	60.5	62.4	72.8
8.05	-41.04	-31.14	-37.67	0.18	60.5	62.4	72.7
8.04	-40.97	-31.14	-37.67	0.15	60.5	62.4	72.5
8.04	-40.97	-31.08	-37.64	0.18	60.4	62.2	72.2
8.04	-40.9	-31.08	-37.64	0.15	60.4	62.2	72.2
8.04	-40.93	-31.08	-37.58	0.15	60.4	62.1	72
8.04	-40.9	-31.03	-37.58	0.15	60.3	62.1	71.7
8.03	-40.9	-31.03	-37.55	0.18	60.3	62.1	71.4
8.03	-40.86	-30.98	-37.55	0.18	60.3	61.9	71
8.03	-40.82	-30.98	-37.55	0.18	60.3	61.9	70.8
8.03	-40.82	-30.98	-37.52	0.18	60.2	61.8	70.5
8.02	-40.79	-30.98	-37.49	0.18	60.2	61.7	70.4
8.02	-40.75	-30.93	-37.46	0.18	60.1	61.6	70.1
8.02	-40.75	-30.93	-37.46	0.18	60.1	61.6	69.8
8.01	-40.71	-30.88	-37.46	0.18	60	61.6	69.4
8.01	-40.71	-30.88	-37.43	0.18	60	61.5	69.3
8.01	-40.68	-30.88	-37.4	0.18	59.9	61.4	69
8.01	-40.64	-30.82	-37.37	0.18	59.9	61.4	68.7
8.01	-40.68	-30.77	-37.37	0.18	59.8	61.4	68.3
8	-40.64	-30.77	-37.34	0.18	59.7	61.3	68
8	-40.6	-30.77	-37.34	0.18	59.7	61.3	68
8	-40.57	-30.77	-37.31	0.18	59.6	61.1	67.8
7.99	-40.57	-30.72	-37.31	0.18	59.5	61.1	67.3
7.99	-40.57	-30.72	-37.28	0.18	59.5	61	67.1
7.99	-40.53	-30.72	-37.25	0.18	59.3	60.9	66.7
7.99	-40.49	-30.67	-37.19	0.15	59.3	60.8	66.5
7.99	-40.49	-30.67	-37.25	0.18	59.3	60.8	66
7.98	-40.46	-30.67	-37.16	0.18	59.2	60.7	65.8
7.98	-40.46	-30.62	-37.16	0.18	59.2	60.6	65.7
7.98	-40.42	-30.56	-37.12	0.18	59.1	60.5	65.2
7.97	-40.42	-30.56	-37.12	0.18	59.1	60.4	65.1
7.97	-40.38	-30.56	-37.09	0.18	59	60.4	64.8
7.97	-40.35	-30.56	-37.09	0.18	58.9	60.3	64.6
7.97	-40.35	-30.51	-37.06	0.18	58.9	60.3	64.2
7.97	-40.31	-30.51	-37.03	0.18	58.8	60.2	64.1
7.96	-40.31	-30.51	-37.03	0.18	58.7	60.1	63.9
7.96	-40.27	-30.51	-37	0.18	58.7	60.1	63.7
7.96	-40.27	-30.46	-37	0.18	58.5	59.9	63.2
7.96	-40.24	-30.46	-36.97	0.18	58.4	59.9	63
7.95	-40.24	-30.46	-36.97	0.18	58.4	59.8	62.8
7.95	-40.2	-30.41	-36.94	0.21	58.3	59.7	62.7
7.95	-40.2	-30.36	-36.94	0.21	58.2	59.6	62.5
7.95	-40.16	-30.36	-36.91	0.18	58.2	59.6	62.2

7.94	-40.16	-30.36	-36.88	0.21	58.2	59.5	62
7.94	-40.09	-30.36	-36.88	0.18	58.2	59.4	62.1
7.94	-40.09	-30.31	-36.88	0.18	58.1	59.4	61.8
7.94	-40.05	-30.31	-36.82	0.18	58.1	59.3	61.6
7.93	-40.05	-30.31	-36.82	0.18	58	59.3	61.2
7.93	-40.02	-30.2	-36.82	0.21	57.9	59.2	61.2
7.93	-39.98	-30.2	-36.76	0.21	57.9	59.2	61.1
7.93	-39.98	-30.2	-36.79	0.18	57.8	59.2	61
7.92	-39.98	-30.15	-36.79	0.21	57.8	59.2	60.9
7.92	-39.95	-30.15	-36.73	0.21	57.8	59.1	60.7
7.92	-39.91	-30.15	-36.73	0.21	57.7	59.1	60.7
7.92	-39.91	-30.1	-36.7	0.18	57.7	59	60.5
7.92	-39.87	-30.1	-36.7	0.21	57.6	59	60.3
7.91	-39.87	-30.1	-36.7	0.21	57.6	58.9	60.3
7.91	-39.87	-30.1	-36.67	0.21	57.5	58.9	60.3
7.91	-39.84	-30.05	-36.67	0.21	57.5	58.8	60.1
7.91	-39.84	-30.05	-36.64	0.21	57.5	58.8	60
7.9	-39.8	-29.99	-36.64	0.18	57.5	58.8	59.9
7.9	-39.8	-29.99	-36.61	0.21	57.4	58.7	59.6
7.9	-39.76	-29.99	-36.61	0.21	57.3	58.7	59.8
7.9	-39.76	-29.94	-36.58	0.24	57.3	58.6	59.5
7.9	-39.73	-29.94	-36.58	0.21	57.2	58.6	59.5
7.89	-39.73	-29.94	-36.54	0.21	57.2	58.5	59.4
7.89	-39.69	-29.94	-36.51	0.24	57.2	58.4	59.3
7.89	-39.69	-29.89	-36.51	0.24	57.2	58.4	59.3
7.88	-39.69	-29.89	-36.48	0.21	57.1	58.4	59.4
7.88	-39.65	-29.89	-36.48	0.24	57.1	58.3	59.4
7.88	-39.65	-29.84	-36.45	0.21	57.1	58.4	59.4
7.88	-39.65	-29.84	-36.45	0.18	57.1	58.3	59.4
7.88	-39.62	-29.84	-36.45	0.24	57.1	58.3	59.5
7.88	-39.58	-29.79	-36.39	0.21	57.1	58.3	59.5
7.87	-39.62	-29.84	-36.39	0.21	57.1	58.3	59.6
7.87	-39.58	-29.79	-36.36	0.21	57.1	58.3	59.4
7.87	-39.54	-29.73	-36.33	0.21	57	58.3	59.6
7.87	-39.51	-29.73	-36.33	0.21	57	58.3	59.3
7.86	-39.51	-29.73	-36.33	0.24	57	58.2	59.4
7.86	-39.51	-29.73	-36.3	0.21	57	58.2	59.3
7.86	-39.51	-29.68	-36.3	0.21	57	58.2	59.5
7.86	-39.47	-29.68	-36.27	0.24	57	58.2	59.4
7.86	-39.47	-29.63	-36.27	0.21	57	58.2	59.3
7.86	-39.43	-29.68	-36.24	0.24	56.9	58.2	59.4
7.85	-39.43	-29.63	-36.21	0.21	56.9	58.2	59.4
7.85	-39.4	-29.63	-36.21	0.21	56.8	58.2	59.3
7.85	-39.43	-29.63	-36.18	0.21	56.8	58.1	59.5
7.85	-39.4	-29.58	-36.18	0.21	56.8	58.1	59.3
7.85	-39.4	-29.58	-36.18	0.21	56.8	58.1	59.4
7.85	-39.36	-29.58	-36.15	0.21	56.8	58.1	59.4

7.85	-39.36	-29.53	-36.15	0.24	56.8	58.1	59.3
7.84	-39.36	-29.53	-36.12	0.21	56.8	58.1	59.3
7.84	-39.32	-29.47	-36.12	0.24	56.7	58.1	59.3
7.84	-39.32	-29.53	-36.09	0.21	56.8	58	59.7
7.84	-39.29	-29.47	-36.09	0.21	56.8	58.1	59.8
7.84	-39.29	-29.47	-36.06	0.21	56.8	58.1	59.8
7.84	-39.21	-29.47	-36.03	0.21	56.8	58.1	59.9
7.83	-39.21	-29.42	-36.03	0.24	56.8	58.1	59.9
7.83	-39.18	-29.42	-36	0.18	56.8	58.1	60.3
7.83	-39.18	-29.42	-36	0.21	56.8	58.1	60.4
7.82	-39.18	-29.42	-35.96	0.21	56.8	58.2	60.3
7.83	-39.18	-29.37	-35.93	0.18	56.9	58.2	60.7
7.83	-39.1	-29.32	-35.93	0.21	56.8	58.2	60.8
7.83	-39.1	-29.32	-35.93	0.21	56.9	58.2	61.1
7.82	-39.1	-29.37	-35.9	0.21	56.9	58.2	61.4
7.82	-39.1	-29.32	-35.87	0.21	56.9	58.2	61.9
7.82	-39.1	-29.32	-35.87	0.21	57	58.3	61.9
7.82	-39.07	-29.27	-35.84	0.21	56.9	58.3	62.3
7.82	-39.07	-29.27	-35.81	0.21	57	58.3	62.5
7.82	-39.03	-29.27	-35.81	0.21	57	58.3	62.6
7.82	-39.03	-29.22	-35.81	0.24	57.1	58.4	62.9
7.81	-38.99	-29.16	-35.78	0.21	57.1	58.5	63.2
7.81	-38.99	-29.16	-35.75	0.18	57.1	58.5	63.6
7.81	-38.96	-29.16	-35.75	0.21	57.1	58.6	63.6
7.81	-38.96	-29.11	-35.72	0.21	57.1	58.6	64.1
7.81	-38.92	-29.11	-35.69	0.21	57.2	58.7	64
7.81	-38.92	-29.06	-35.69	0.21	57.2	58.7	64.4
7.81	-38.88	-29.11	-35.66	0.21	57.3	58.8	64.4
7.81	-38.88	-29.06	-35.66	0.21	57.4	58.8	64.7
7.81	-38.88	-29.06	-35.66	0.21	57.4	58.9	64.7
7.8	-38.88	-28.96	-35.6	0.21	57.4	58.9	65.1
7.81	-38.85	-29.06	-35.57	0.21	57.5	58.9	64.8
7.8	-38.85	-28.96	-35.54	0.21	57.5	59	65.1
7.8	-38.81	-28.9	-35.54	0.18	57.6	59.1	65.3
7.8	-38.77	-28.9	-35.54	0.21	57.6	59.1	65.1
7.8	-38.77	-28.85	-35.51	0.21	57.6	59.2	65.2
7.8	-38.74	-28.85	-35.51	0.18	57.7	59.2	65.6
7.8	-38.74	-28.85	-35.48	0.18	57.7	59.2	65.4
7.8	-38.74	-28.85	-35.48	0.18	57.8	59.2	65.4
7.8	-38.7	-28.85	-35.45	0.18	57.8	59.2	65.2
7.8	-38.66	-28.8	-35.45	0.21	57.8	59.2	65.6
7.8	-38.66	-28.8	-35.42	0.18	57.8	59.2	65.6
7.8	-38.63	-28.8	-35.42	0.18	57.8	59.2	65.4
7.8	-38.59	-28.75	-35.42	0.21	57.8	59.3	65.1
7.79	-38.59	-28.75	-35.38	0.18	57.9	59.3	65.3
7.79	-38.59	-28.75	-35.35	0.21	57.9	59.2	65.1
7.79	-38.59	-28.75	-35.35	0.18	57.9	59.3	65.2

7.79	-38.59	-28.7	-35.35	0.18	57.9	59.3	64.9
7.79	-38.52	-28.7	-35.35	0.18	57.9	59.3	64.8
7.79	-38.52	-28.7	-35.32	0.18	57.9	59.3	64.8
7.79	-38.52	-28.7	-35.32	0.18	57.9	59.3	64.7
7.79	-38.52	-28.7	-35.29	0.18	57.8	59.3	64.7
7.78	-38.48	-28.64	-35.29	0.18	57.9	59.3	64.5
7.78	-38.48	-28.64	-35.26	0.18	57.8	59.3	64.6
7.78	-38.48	-28.59	-35.26	0.21	57.9	59.3	64.4
7.78	-38.44	-28.59	-35.23	0.18	57.9	59.3	64.3
7.78	-38.44	-28.64	-35.26	0.18	57.9	59.3	64.2
7.78	-38.41	-28.59	-35.23	0.21	57.9	59.3	64.1
7.78	-38.41	-28.59	-35.2	0.18	57.9	59.3	64.1
7.78	-38.41	-28.59	-35.2	0.18	57.8	59.3	63.9
7.78	-38.37	-28.54	-35.17	0.21	57.8	59.4	63.8
7.78	-38.3	-28.54	-35.17	0.18	57.9	59.3	63.6
7.77	-38.3	-28.54	-35.17	0.18	57.9	59.2	63.7
7.77	-38.3	-28.54	-35.14	0.18	57.9	59.2	63.6
7.77	-38.3	-28.49	-35.14	0.18	57.8	59.2	63.6
7.77	-38.26	-28.49	-35.11	0.18	57.8	59.2	63.6
7.77	-38.26	-28.49	-35.11	0.18	57.8	59.2	63.3
7.77	-38.26	-28.49	-35.08	0.18	57.8	59.2	63.3
7.77	-38.22	-28.44	-35.08	0.18	57.8	59.3	62.9
7.77	-38.19	-28.39	-35.08	0.18	57.8	59.2	62.9
7.77	-38.19	-28.39	-35.05	0.18	57.8	59.2	63
7.76	-38.19	-28.39	-35.05	0.18	57.8	59.2	62.7
7.76	-38.15	-28.33	-35.02	0.18	57.8	59.2	62.7
7.76	-38.15	-28.33	-34.99	0.18	57.8	59.2	62.9
7.76	-38.15	-28.33	-34.96	0.18	57.7	59.2	62.5
7.76	-38.11	-28.33	-34.96	0.18	57.7	59.2	62.6
7.76	-38.11	-28.33	-34.93	0.18	57.7	59.2	62.5
7.76	-38.11	-28.28	-34.93	0.18	57.8	59.2	62.3
7.76	-38.08	-28.23	-34.9	0.21	57.7	59.2	62.5
7.76	-38.11	-28.23	-34.9	0.18	57.7	59.2	62.5
7.76	-38.08	-28.23	-34.9	0.18	57.7	59.2	62.5
7.75	-38.08	-28.23	-34.84	0.15	57.7	59.1	62.4
7.75	-38.04	-28.23	-34.8	0.18	57.7	59.1	62
7.75	-38	-28.18	-34.8	0.18	57.7	59.1	62.2
7.75	-38	-28.18	-34.77	0.15	57.7	59.1	62.1
7.75	-37.97	-28.13	-34.74	0.18	57.7	59.1	61.9
7.75	-37.97	-28.13	-34.74	0.18	57.7	59.1	61.8
7.75	-37.97	-28.13	-34.74	0.18	57.6	59.1	61.8
7.75	-37.93	-28.07	-34.71	0.18	57.7	59.1	61.5
7.75	-37.93	-28.13	-34.71	0.18	57.6	59.1	61.6
7.75	-37.93	-28.07	-34.68	0.18	57.6	59.1	61.5
7.74	-37.89	-28.07	-34.68	0.18	57.6	59.1	61.7
7.74	-37.89	-28.07	-34.65	0.15	57.6	59.1	61.6
7.74	-37.89	-28.02	-34.65	0.18	57.6	59.1	61.7

7.74	-37.82	-28.02	-34.62	0.18	57.6	59.1	61.7
7.74	-37.82	-28.02	-34.59	0.18	57.7	59.2	61.8
7.74	-37.82	-27.97	-34.59	0.18	57.7	59.2	62
7.74	-37.78	-27.97	-34.59	0.21	57.8	59.2	61.8
7.75	-37.78	-27.92	-34.56	0.18	57.8	59.2	62
7.74	-37.78	-27.92	-34.56	0.15	57.8	59.2	62.1
7.74	-37.75	-27.97	-34.53	0.18	57.9	59.2	62.2
7.74	-37.71	-27.92	-34.53	0.15	57.9	59.3	62.2
7.73	-37.71	-27.92	-34.5	0.18	58	59.3	62.3
7.73	-37.71	-27.87	-34.5	0.15	58	59.3	62.5
7.73	-37.67	-27.87	-34.5	0.18	58	59.3	62.5
7.73	-37.67	-27.81	-34.47	0.18	58	59.4	62.8
7.73	-37.56	-27.87	-34.44	0.18	58.1	59.4	62.6
7.73	-37.56	-27.81	-34.44	0.15	58.1	59.5	62.8
7.73	-37.53	-27.81	-34.47	0.18	58.2	59.5	62.7
7.73	-37.53	-27.76	-34.44	0.18	58.1	59.5	62.9
7.73	-37.49	-27.76	-34.44	0.18	58.2	59.5	62.7
7.73	-37.42	-27.76	-34.44	0.18	58.1	59.5	62.9
7.73	-37.42	-27.76	-34.44	0.18	58.2	59.5	62.7
7.73	-37.42	-27.76	-34.41	0.18	58.1	59.4	62.9
7.71	-37.42	-27.76	-34.41	0.18	58.2	59.5	62.7
7.72	-37.38	-27.76	-34.41	0.18	58.2	59.5	62.6
7.72	-37.38	-27.76	-34.41	0.15	58.2	59.5	62.7
7.72	-37.38	-27.66	-34.41	0.15	58.2	59.5	62.5
7.72	-37.38	-27.66	-34.38	0.15	58.2	59.4	62.5
7.72	-37.34	-27.66	-34.35	0.18	58.2	59.5	62.5
7.72	-37.34	-27.66	-34.35	0.15	58.1	59.4	62.4
7.71	-37.34	-27.66	-34.35	0.18	58.1	59.4	62.1
7.71	-37.34	-27.61	-34.32	0.18	58.1	59.4	62.4
7.71	-37.34	-27.61	-34.32	0.18	58.1	59.4	62.3
7.71	-37.34	-27.61	-34.29	0.15	58.1	59.4	62.3
7.71	-37.34	-27.55	-34.26	0.18	58.2	59.4	62.1
7.71	-37.31	-27.61	-34.26	0.18	58.1	59.4	62.2
7.71	-37.27	-27.55	-34.26	0.15	58.1	59.5	62.3
7.71	-37.27	-27.61	-34.26	0.15	58.2	59.5	62.5
7.71	-37.23	-27.55	-34.22	0.15	58.1	59.4	62.4
7.71	-37.23	-27.5	-34.22	0.15	58.1	59.4	62.5
7.71	-37.23	-27.5	-34.22	0.18	58.1	59.5	62.3
7.71	-37.2	-27.55	-34.19	0.15	58.1	59.5	62.4
7.7	-37.2	-27.5	-34.16	0.18	58.1	59.5	62.5
7.7	-37.2	-27.5	-34.16	0.15	58.1	59.5	62.4
7.7	-37.2	-27.5	-34.16	0.15	58.1	59.5	62.5
7.7	-37.16	-27.45	-34.16	0.18	58.2	59.6	62.7
7.7	-37.16	-27.5	-34.13	0.15	58.1	59.6	62.8
7.7	-37.16	-27.45	-34.13	0.15	58.2	59.7	62.9
7.7	-37.12	-27.45	-34.13	0.15	58.2	59.6	62.9
7.7	-37.12	-27.45	-34.13	0.15	58.2	59.7	63.2

7.7	-37.12	-27.45	-34.1	0.15	58.2	59.7	63.5
7.7	-37.09	-27.45	-34.1	0.15	58.2	59.8	63.6
7.7	-37.09	-27.4	-34.04	0.15	58.2	59.8	63.8
8.37	-37.31	-27.55	-34.19	0.15	58.1	59.6	52.2
8.36	-37.16	-27.45	-34.13	0.18	57.8	59.7	55.1
8.36	-37.12	-27.4	-34.1	0.15	57.9	59.8	56.5
8.37	-37.09	-27.4	-34.04	0.15	57.8	59.8	57.6
8.37	-37.09	-27.4	-34.04	0.15	57.8	59.8	58.5
8.37	-37.05	-27.35	-34.04	0.15	57.8	59.9	59.3
8.36	-37.05	-27.35	-34.01	0.15	57.8	59.9	60.2
8.35	-37.01	-27.35	-34.01	0.18	57.9	59.9	60.7
8.35	-36.98	-27.3	-33.98	0.15	57.9	59.9	60.9
8.34	-36.98	-27.3	-33.98	0.15	57.8	59.9	61.5
8.34	-36.94	-27.3	-33.98	0.15	57.8	60.1	62
8.33	-36.94	-27.3	-33.98	0.12	57.8	60.1	62.3
8.32	-36.9	-27.3	-33.98	0.12	57.9	59.9	62.4
8.31	-36.9	-27.24	-33.95	0.12	57.9	60.1	62.6
8.31	-36.9	-27.3	-33.95	0.12	57.9	59.9	62.8
8.29	-36.87	-27.24	-33.95	0.15	57.9	59.9	62.9
8.29	-36.87	-27.24	-33.92	0.15	58	59.9	63
8.29	-36.83	-27.24	-33.92	0.15	58	59.8	63
8.28	-36.83	-27.24	-33.92	0.12	57.9	59.9	62.9
8.27	-36.83	-27.24	-33.92	0.12	57.9	59.8	62.9
8.27	-36.79	-27.19	-33.89	0.12	58.1	59.8	63.1
8.26	-36.79	-27.24	-33.89	0.15	57.9	59.7	62.9
8.25	-36.79	-27.19	-33.86	0.15	58	59.7	62.7
8.25	-36.79	-27.19	-33.89	0.15	58	59.7	62.9
8.24	-36.76	-27.14	-33.86	0.15	57.9	59.7	62.9
8.24	-36.72	-27.19	-33.86	0.18	57.9	59.6	62.8
8.23	-36.76	-27.14	-33.86	0.15	57.8	59.6	62.7
8.23	-36.72	-27.19	-33.83	0.12	57.8	59.6	62.9
8.22	-36.72	-27.14	-33.83	0.15	57.7	59.6	62.6
8.22	-36.72	-27.14	-33.83	0.15	57.8	59.5	62.5
8.21	-36.68	-27.09	-33.83	0.15	57.9	59.4	62.5
8.21	-36.65	-27.14	-33.83	0.15	57.7	59.4	62.3
8.2	-36.65	-27.09	-33.83	0.15	57.6	59.4	62.3
8.2	-36.65	-27.09	-33.8	0.15	57.7	59.3	62
8.19	-36.65	-27.09	-33.8	0.15	57.7	59.3	61.7
8.19	-36.65	-27.09	-33.83	0.15	57.6	59.3	61.8
8.18	-36.61	-27.09	-33.8	0.15	57.7	59.2	61.5
8.18	-36.65	-27.09	-33.8	0.12	57.6	59.2	61.4
8.17	-36.61	-27.09	-33.77	0.15	57.6	59.2	61.4
8.17	-36.54	-27.09	-33.77	0.15	57.5	59.2	61.2
8.17	-36.54	-27.09	-33.77	0.15	57.5	59.1	61.1
8.16	-36.54	-27.04	-33.77	0.15	57.5	59.1	61
8.16	-36.5	-27.09	-33.77	0.18	57.3	59	60.8
8.15	-36.54	-27.04	-33.74	0.15	57.3	58.8	60.4

8.15	-36.5	-27.04	-33.74	0.18	57.3	58.8	60.4
8.14	-36.5	-27.04	-33.77	0.15	57.3	58.7	60.1
8.14	-36.5	-27.04	-33.74	0.15	57.1	58.7	59.8
8.14	-36.47	-27.04	-33.74	0.15	57.2	58.6	59.4
8.13	-36.47	-27.04	-33.74	0.06	57.1	58.5	59.3
8.13	-36.47	-27.04	-33.74	0.15	57.1	58.5	58.6
8.12	-36.47	-27.04	-33.71	0.18	57	58.3	58.5
8.12	-36.47	-26.98	-33.74	0.15	57	58.3	58.1
8.11	-36.43	-26.98	-33.74	0.12	56.8	58.2	58
8.11	-36.47	-26.98	-33.71	0.15	57	58.2	57.7
8.11	-36.43	-26.98	-33.71	0.18	56.9	58.1	57.3
8.1	-36.43	-26.98	-33.71	0.18	56.7	58	57.1
8.09	-36.43	-27.04	-33.71	0.15	56.8	58	57.1
8.09	-36.43	-26.98	-33.71	0.18	56.6	57.9	56.9
8.09	-36.43	-27.04	-33.71	0.18	56.6	57.8	56.6
8.09	-36.39	-26.98	-33.68	0.18	56.3	57.6	56.5
8.09	-36.43	-26.98	-33.68	0.15	56.3	57.6	56.4
8.08	-36.39	-26.93	-33.68	0.18	56	57.5	56.2
8.08	-36.39	-26.98	-33.68	0.18	55.9	57.3	56
8.08	-36.39	-26.93	-33.64	0.18	55.8	57.3	55.7
8.08	-36.36	-26.98	-33.64	0.18	55.6	57.2	55.4
8.07	-36.36	-26.93	-33.64	0.18	55.3	57.2	55.3
8.07	-36.36	-26.93	-33.64	0.18	55.7	57.1	55.2
8.07	-36.32	-26.98	-33.64	0.18	55.3	57.1	55.4
8.06	-36.36	-26.98	-33.64	0.15	55.3	57	54.9
8.06	-36.36	-26.93	-33.64	0.18	55.3	57	54.7
8.06	-36.36	-26.93	-33.64	0.18	55.7	56.9	54.8
8.06	-36.32	-26.93	-33.64	0.18	55.9	56.8	54.5
8.05	-36.32	-26.93	-33.64	0.18	55.4	56.8	54.4
8.05	-36.32	-26.88	-33.64	0.18	55.2	56.8	54.3
8.05	-36.32	-26.93	-33.61	0.18	55.3	56.7	54.2
8.04	-36.32	-26.93	-33.61	0.18	55.2	56.7	53.9
8.04	-36.32	-26.93	-33.61	0.18	55.2	56.6	53.8
8.04	-36.28	-26.88	-33.61	0.18	55.2	56.6	53.7
8.04	-36.32	-26.88	-33.61	0.18	55.2	56.5	53.6
8.03	-36.32	-26.88	-33.58	0.18	55.2	56.5	53.2
8.03	-36.32	-26.88	-33.58	0.18	55.1	56.4	53.3
8.03	-36.32	-26.83	-33.58	0.18	55.1	56.3	52.9
8.03	-36.28	-26.88	-33.55	0.18	55	56.3	52.9
8.02	-36.28	-26.88	-33.55	0.18	55	56.2	52.8
8.02	-36.25	-26.88	-33.55	0.18	55	56.1	52.6
8.02	-36.28	-26.83	-33.52	0.18	55	56	52.4
8.02	-36.28	-26.83	-33.55	0.18	54.8	56.1	52.3
8.02	-36.28	-26.83	-33.52	0.15	54.8	56	52.2
8.01	-36.25	-26.83	-33.52	0.18	54.9	56	51.9
8.01	-36.25	-26.78	-33.52	0.21	54.7	56	51.6
8	-36.21	-26.83	-33.49	0.21	54.8	55.9	51.6

8.01	-36.21	-26.78	-33.49	0.21	54.7	55.9	51.5
8	-36.21	-26.78	-33.46	0.18	54.7	55.7	51.3
8	-36.21	-26.78	-33.49	0.21	54.6	55.8	50.9
8	-36.21	-26.78	-33.46	0.18	54.5	55.7	51.1
8	-36.17	-26.78	-33.46	0.18	54.5	55.7	50.9
8	-36.17	-26.78	-33.46	0.21	54.4	55.6	50.7
7.99	-36.17	-26.78	-33.46	0.21	54.2	55.5	50.5
7.99	-36.17	-26.72	-33.43	0.21	54.1	55.5	50.3
7.99	-36.17	-26.78	-33.43	0.21	54	55.5	50.2
7.99	-36.17	-26.67	-33.43	0.21	54.1	55.2	50.1
7.98	-36.17	-26.72	-33.4	0.21	54.1	55.2	50.1
7.98	-36.17	-26.72	-33.4	0.21	54.1	55.1	50.2
7.98	-36.14	-26.67	-33.4	0.21	54	55.1	50
7.98	-36.1	-26.72	-33.4	0.21	54	55.1	49.9
7.98	-36.1	-26.67	-33.4	0.21	54	55.1	49.7
7.97	-36.14	-26.67	-33.37	0.21	54	55	49.8
7.97	-36.1	-26.67	-33.37	0.24	53.8	54.9	49.5
7.97	-36.1	-26.67	-33.37	0.21	53.9	54.9	49.5
7.97	-36.1	-26.67	-33.34	0.21	53.8	54.9	49.3
7.97	-36.1	-26.62	-33.34	0.21	53.8	54.9	49.3
7.96	-36.1	-26.57	-33.34	0.21	53.8	54.9	49.1
7.96	-36.06	-26.62	-33.34	0.21	53.8	54.8	48.9
7.96	-36.03	-26.62	-33.34	0.24	53.8	54.8	49.1
7.96	-36.06	-26.62	-33.28	0.21	53.7	54.8	49.1
7.96	-36.06	-26.62	-33.28	0.24	53.6	54.8	49
7.95	-36.03	-26.62	-33.28	0.24	53.6	54.7	48.9
7.95	-36.03	-26.57	-33.28	0.24	53.6	54.7	49
7.95	-36.03	-26.57	-33.28	0.21	53.6	54.6	48.9
7.95	-36.03	-26.57	-33.25	0.21	53.6	54.6	48.8
7.95	-35.99	-26.57	-33.25	0.21	53.6	54.6	49.1
7.95	-35.99	-26.57	-33.25	0.24	53.5	54.6	49
7.94	-35.99	-26.62	-33.25	0.24	53.4	54.6	49
7.94	-35.99	-26.57	-33.25	0.24	53.3	54.6	48.8
7.94	-35.99	-26.57	-33.25	0.21	53.4	54.5	49
7.93	-35.99	-26.57	-33.25	0.24	53.4	54.5	49.3
7.93	-35.95	-26.57	-33.25	0.24	53.4	54.5	49.2
7.93	-35.95	-26.57	-33.22	0.21	53.4	54.5	49
7.93	-35.95	-26.57	-33.22	0.21	53.4	54.5	49
7.93	-35.95	-26.57	-33.25	0.24	53.3	54.5	49.3
7.93	-35.99	-26.57	-33.22	0.24	53.4	54.5	49.5
7.92	-35.95	-26.52	-33.22	0.24	53.3	54.5	49.3
7.92	-35.95	-26.52	-33.19	0.24	53.4	54.5	49.2
7.92	-35.95	-26.52	-33.19	0.24	53.3	54.5	49.6
7.92	-35.95	-26.52	-33.19	0.24	53.4	54.5	49.6
7.92	-35.92	-26.52	-33.16	0.24	53.3	54.5	50
7.92	-35.92	-26.52	-33.16	0.24	53.3	54.5	50.1
7.91	-35.92	-26.41	-33.13	0.24	53.4	54.5	50.4

7.91	-35.92	-26.41	-33.13	0.24	53.4	54.6	50.2
7.91	-35.92	-26.41	-33.16	0.24	53.3	54.6	50.8
7.91	-35.92	-26.41	-33.13	0.24	53.4	54.6	50.7
7.91	-35.88	-26.41	-33.13	0.24	53.3	54.6	51.2
7.91	-35.92	-26.41	-33.1	0.24	53.3	54.6	51.4
7.91	-35.88	-26.36	-33.1	0.24	53.6	54.7	51.7
7.9	-35.88	-26.41	-33.1	0.24	53.5	54.7	51.8
7.89	-35.88	-26.36	-33.1	0.24	53.6	54.8	52
7.9	-35.88	-26.36	-33.06	0.27	53.6	54.7	52.4
7.9	-35.88	-26.36	-33.1	0.21	53.5	54.8	52.5
7.9	-35.84	-26.36	-33.06	0.24	53.6	54.8	53.2
7.9	-35.88	-26.31	-33.06	0.27	53.5	54.9	53.3
7.9	-35.84	-26.31	-33.03	0.27	53.8	54.9	53.8
7.9	-35.81	-26.36	-33.03	0.21	53.8	54.9	54
7.89	-35.84	-26.31	-33.03	0.21	53.8	54.9	54.3
7.89	-35.81	-26.31	-33.03	0.21	53.8	54.9	54.5
7.89	-35.81	-26.31	-33	0.24	53.7	55	54.7
7.89	-35.81	-26.26	-33	0.21	53.6	55	55.3
7.89	-35.81	-26.26	-33	0.24	53.8	55.1	55.6
7.89	-35.77	-26.26	-32.97	0.24	53.8	55	56
7.88	-35.77	-26.26	-32.97	0.21	53.8	55.1	56
7.88	-35.77	-26.26	-32.97	0.21	53.8	55.2	56.5
7.88	-35.77	-26.26	-32.94	0.24	53.8	55.4	56.9
7.88	-35.77	-26.26	-32.94	0.21	53.9	55.4	57.1
7.88	-35.73	-26.26	-32.94	0.21	53.9	55.5	57.6
7.88	-35.73	-26.21	-32.91	0.21	53.7	55.5	57.9
7.88	-35.73	-26.21	-32.91	0.27	54.1	55.6	58.1
7.88	-35.73	-26.21	-32.91	0.24	54.1	55.6	58.3
7.87	-35.66	-26.15	-32.91	0.21	54.2	55.7	58.4
7.87	-35.73	-26.15	-32.88	0.21	54.2	55.8	58.7
7.87	-35.66	-26.15	-32.88	0.21	54	55.8	58.9
7.87	-35.66	-26.15	-32.88	0.21	54.5	55.9	59.2
7.87	-35.62	-26.15	-32.88	0.21	54.4	55.9	59.4
7.87	-35.62	-26.1	-32.85	0.21	54.2	56	59.6
7.87	-35.62	-26.15	-32.82	0.21	54.2	56	60.1
7.87	-35.62	-26.15	-32.82	0.21	54.5	56.1	60.2
7.87	-35.62	-26.1	-32.85	0.18	54.5	56.1	60.2
7.87	-35.59	-26.1	-32.79	0.18	54.2	56.1	60.4
7.86	-35.59	-26.1	-32.79	0.21	54.6	56.2	60.5
7.86	-35.59	-26.1	-32.82	0.21	54.6	56.2	60.9
7.86	-35.59	-26.1	-32.79	0.21	54.7	56.3	60.6
7.86	-35.55	-26.1	-32.79	0.21	54.7	56.4	60.9
7.86	-35.55	-26.05	-32.76	0.21	54.7	56.4	61.1
7.86	-35.62	-26.05	-32.76	0.18	54.7	56.4	58.1
7.86	-35.55	-26.05	-32.76	0.18	54.7	56.5	60
7.86	-35.51	-26	-32.73	0.21	54.9	56.5	60.5
7.85	-35.51	-26.05	-32.73	0.21	55	56.6	60.8

7.85	-35.51	-26	-32.76	0.21	55.1	56.6	61
7.85	-35.51	-26	-32.73	0.21	55.1	56.7	61
7.85	-35.48	-26	-32.73	0.18	54.9	56.7	61.2
7.85	-35.48	-26	-32.73	0.18	55.1	56.8	61.1
7.85	-35.48	-25.95	-32.73	0.21	55.2	56.8	61.5
7.85	-35.44	-26	-32.73	0.21	55.3	56.8	61.5
7.85	-35.44	-26	-32.7	0.18	55.5	56.9	61.4
7.85	-35.44	-25.95	-32.7	0.21	55.3	56.9	61.5
7.85	-35.4	-26	-32.7	0.21	55.4	56.9	61.4
7.85	-35.4	-26	-32.67	0.18	55.3	57	61.4
7.84	-35.4	-26	-32.67	0.18	55.3	57	61.4
7.84	-35.4	-25.95	-32.67	0.21	55.4	57	61.2
7.84	-35.4	-25.89	-32.67	0.18	55.4	57	61.1
7.84	-35.37	-25.95	-32.64	0.21	55.4	57	60.9
7.84	-35.37	-25.95	-32.64	0.18	55.5	56.9	60.9
7.83	-35.37	-25.95	-32.64	0.18	55.4	56.9	60.8
7.84	-35.37	-25.95	-32.64	0.18	55.5	57	60.4
7.83	-35.37	-25.89	-32.64	0.21	55.5	56.9	60.3
7.83	-35.37	-25.89	-32.64	0.18	55.5	57	60.2
7.84	-35.37	-25.89	-32.64	0.18	55.7	56.9	60.1
7.83	-35.33	-25.89	-32.64	0.21	55.7	56.9	59.7
7.83	-35.33	-25.89	-32.61	0.21	55.7	57	59.7
7.83	-35.33	-25.89	-32.64	0.18	55.7	56.9	59.6
7.83	-35.33	-25.89	-32.61	0.21	55.5	56.9	59.4
7.83	-35.29	-25.89	-32.61	0.21	55.4	56.9	59.2
7.83	-35.29	-25.84	-32.61	0.21	55.4	56.9	59
7.82	-35.29	-25.89	-32.64	0.18	55.3	56.9	58.9
7.82	-35.29	-25.89	-32.61	0.21	55.1	56.9	58.7
7.82	-35.26	-25.89	-32.61	0.21	55	56.8	58.4
7.82	-35.26	-25.89	-32.61	0.21	55	56.8	58.4
7.82	-35.26	-25.84	-32.58	0.21	55.2	56.8	58.3
7.82	-35.26	-25.84	-32.58	0.21	55.4	56.7	58.2
7.82	-35.26	-25.84	-32.58	0.21	55.3	56.8	57.9
7.82	-35.26	-25.84	-32.58	0.21	55.4	56.7	57.7
7.82	-35.22	-25.79	-32.58	0.21	55.4	56.7	57.9
7.81	-35.22	-25.79	-32.55	0.24	55.4	56.7	57.7
7.81	-35.22	-25.79	-32.58	0.21	55.4	56.7	57.6
7.81	-35.22	-25.79	-32.55	0.21	55.4	56.6	57.4
7.81	-35.22	-25.84	-32.55	0.24	55.4	56.6	57.3
7.81	-35.22	-25.79	-32.48	0.18	55.4	56.5	57.1
7.81	-35.18	-25.84	-32.48	0.21	55.3	56.5	56.9
7.81	-35.18	-25.79	-32.55	0.21	55.3	56.5	56.6
7.81	-35.18	-25.79	-32.48	0.21	55.3	56.5	56.8
7.81	-35.15	-25.79	-32.48	0.21	55.2	56.5	56.7
7.8	-35.15	-25.79	-32.45	0.24	55.2	56.4	56.4
7.8	-35.18	-25.79	-32.45	0.21	55.2	56.4	56.4
7.8	-35.15	-25.74	-32.45	0.24	55.2	56.3	56.3

7.8	-35.15	-25.74	-32.45	0.24	55.2	56.3	56.2
7.8	-35.11	-25.79	-32.45	0.24	55.1	56.3	56.1
7.8	-35.15	-25.74	-32.45	0.24	55.1	56.3	56
7.8	-35.15	-25.74	-32.42	0.21	55.1	56.2	56
7.8	-35.11	-25.74	-32.42	0.24	55.1	56.1	55.7
7.79	-35.15	-25.74	-32.42	0.24	55.1	56.2	55.5
7.79	-35.11	-25.74	-32.42	0.24	55	56.2	55.6
7.79	-35.11	-25.69	-32.39	0.24	55	56.1	55.5
7.79	-35.11	-25.69	-32.39	0.21	55	56.1	55.4
7.79	-35.07	-25.69	-32.36	0.24	54.9	56.1	55.2
7.79	-35.11	-25.69	-32.39	0.24	55	56	55.2
7.79	-35.07	-25.69	-32.36	0.21	54.9	56	55.1
7.79	-35.07	-25.63	-32.36	0.24	54.9	56	54.9
7.79	-35.07	-25.63	-32.36	0.24	54.9	56	54.9
7.79	-35.04	-25.63	-32.36	0.24	54.8	55.9	54.8
7.78	-35.04	-25.58	-32.33	0.24	54.8	55.9	54.8
7.78	-35.04	-25.63	-32.33	0.24	54.7	56	54.5
7.78	-35.04	-25.63	-32.33	0.24	54.7	55.9	54.6
7.78	-35	-25.58	-32.33	0.21	54.7	55.9	54.3
7.78	-35.04	-25.63	-32.33	0.24	54.7	55.9	54.1
7.78	-35	-25.63	-32.33	0.24	54.7	55.8	54.3
7.78	-34.96	-25.63	-32.3	0.24	54.6	55.8	54.1
7.78	-35	-25.63	-32.3	0.24	54.6	55.8	54
7.78	-35	-25.58	-32.3	0.27	54.5	55.7	53.9
7.77	-35	-25.58	-32.27	0.24	54.5	55.6	53.8
7.77	-34.96	-25.58	-32.27	0.27	54.4	55.6	53.8
7.77	-34.96	-25.58	-32.27	0.27	54.2	55.6	53.7
7.77	-34.96	-25.53	-32.27	0.24	54.2	55.5	53.7
7.77	-34.96	-25.58	-32.27	0.24	54.2	55.4	53.2
7.77	-34.96	-25.53	-32.24	0.24	54.1	55.2	53.1
7.77	-34.93	-25.53	-32.24	0.24	54.1	55.2	53.1
7.77	-34.93	-25.53	-32.24	0.24	54	55.2	52.9
7.77	-34.93	-25.53	-32.24	0.27	53.9	55.1	52.6
7.76	-34.93	-25.53	-32.21	0.24	53.8	54.9	52.5
7.76	-34.89	-25.53	-32.24	0.27	53.8	55	52.3
7.76	-34.89	-25.53	-32.24	0.27	53.8	54.9	52.2
7.76	-34.89	-25.53	-32.24	0.24	53.8	54.9	51.9
7.76	-34.89	-25.53	-32.24	0.27	53.7	54.9	51.9
7.76	-34.85	-25.53	-32.24	0.27	53.7	54.9	51.6
7.76	-34.85	-25.53	-32.24	0.27	53.7	54.9	51.7
7.76	-34.85	-25.53	-32.21	0.24	53.8	54.9	51.9
7.76	-34.85	-25.53	-32.21	0.27	53.8	54.9	51.6
7.75	-34.85	-25.53	-32.21	0.24	53.8	54.9	51.8
7.75	-34.85	-25.53	-32.21	0.27	53.8	54.9	51.8
7.75	-34.82	-25.53	-32.21	0.27	53.8	55	52.1
7.75	-34.82	-25.53	-32.21	0.27	53.8	55.1	52.2
7.75	-34.82	-25.53	-32.18	0.27	53.8	55.1	52.1

7.75	-34.82	-25.48	-32.18	0.27	53.8	55.1	52.4
7.75	-34.82	-25.48	-32.18	0.27	53.8	55.2	52.9
7.75	-34.82	-25.48	-32.18	0.27	53.9	55.2	53.1
7.75	-34.82	-25.48	-32.15	0.27	53.9	55.2	53.2
7.75	-34.82	-25.48	-32.18	0.27	53.9	55.2	53.6
7.75	-34.82	-25.48	-32.15	0.27	54	55.2	53.5
7.74	-34.82	-25.43	-32.15	0.27	54	55.4	53.8
7.74	-34.82	-25.43	-32.12	0.27	54	55.4	53.9
7.74	-34.82	-25.38	-32.15	0.27	54	55.4	54.3
7.74	-34.82	-25.38	-32.12	0.27	54	55.4	54.4
7.74	-34.82	-25.43	-32.12	0.24	54.1	55.5	54.6
7.74	-34.74	-25.43	-32.12	0.24	54	55.5	54.8
7.74	-34.74	-25.38	-32.15	0.24	54.1	55.6	55.1
7.74	-34.74	-25.38	-32.12	0.27	54.2	55.8	55.5
7.73	-34.74	-25.43	-32.12	0.27	54.1	55.7	55.7
7.73	-34.74	-25.38	-32.12	0.24	54.4	55.8	56
7.73	-34.71	-25.38	-32.09	0.27	54.4	55.9	56.3
7.73	-34.74	-25.38	-32.09	0.27	54.6	55.9	56.6
7.73	-34.71	-25.38	-32.09	0.24	54.4	55.9	57.1
7.73	-34.74	-25.38	-32.06	0.24	54.2	56	57.2
7.73	-34.74	-25.38	-32.06	0.24	54.5	56	57.6
7.73	-34.67	-25.38	-32.03	0.27	54.6	56.1	57.9
7.73	-34.71	-25.32	-32.03	0.24	54.8	56.2	58
7.73	-34.67	-25.32	-32.03	0.24	54.8	57.3	58.4
7.73	-34.67	-25.32	-32.03	0.24	55.3	57.8	58.9
7.73	-34.67	-25.32	-32.03	0.21	55.4	58.2	59.2
7.73	-34.67	-25.27	-32	0.21	55.9	58.5	59.5
7.73	-34.67	-25.32	-32.03	0.18	56.2	58.8	59.5
7.74	-34.63	-25.27	-32	0.18	56.6	58.9	59.9
7.74	-34.63	-25.27	-32	0.18	56.3	59.2	60.1
7.74	-34.63	-25.27	-32	0.18	57.1	59.5	60.4
7.74	-34.63	-25.27	-31.97	0.18	57.5	59.9	60.7
7.74	-34.63	-25.17	-31.97	0.18	57.5	60.3	60.9
7.75	-34.6	-25.27	-31.97	0.18	58.2	60.5	61.2
7.75	-34.63	-25.17	-31.97	0.18	58.2	60.7	61.4
7.74	-34.6	-25.17	-31.97	0.18	58.4	60.9	62
7.74	-34.6	-25.17	-31.94	0.18	58.8	61	62.2
7.74	-34.63	-25.17	-31.94	0.18	59.2	61.2	62.4
7.75	-34.6	-25.17	-31.9	0.15	59.1	61.2	62.9
7.75	-34.6	-25.12	-31.9	0.15	59.1	61.4	63
7.75	-34.56	-25.12	-31.9	0.18	59.2	61.4	63.1
7.75	-34.56	-25.12	-31.87	0.15	59.4	61	63.5
7.75	-34.52	-25.12	-31.87	0.18	59.5	60.7	63.5
7.75	-34.52	-25.12	-31.87	0.18	58.5	60.5	63.7
7.74	-34.52	-25.12	-31.84	0.15	59	60.3	64
7.74	-34.52	-25.12	-31.87	0.18	58.8	60.3	63.8
7.74	-34.49	-25.12	-31.84	0.18	58.7	60.2	64.2

7.74	-34.52	-25.12	-31.84	0.18	58.7	60.1	64.4
7.74	-34.49	-25.12	-31.84	0.18	58.2	59.9	64.5
7.74	-34.49	-25.12	-31.81	0.18	58.2	59.8	64.5
7.74	-34.49	-25.12	-31.81	0.18	58.2	59.8	64.6
7.74	-34.49	-25.06	-31.81	0.18	58.2	59.7	64.7
7.73	-34.45	-25.06	-31.81	0.18	58.2	59.7	64.7
7.73	-34.49	-25.06	-31.81	0.21	58	59.7	64.7
7.72	-34.45	-25.01	-31.78	0.18	57.7	59.6	64.7
7.73	-34.41	-25.01	-31.78	0.18	57.8	59.5	64.7
7.73	-34.45	-25.06	-31.78	0.21	57.8	59.5	64.7
7.73	-34.41	-25.01	-31.78	0.18	57.8	59.5	64.7
7.73	-34.41	-25.06	-31.75	0.18	57.9	59.4	64.8
7.73	-34.41	-25.01	-31.75	0.18	58	59.4	64.6
7.72	-34.41	-24.96	-31.75	0.18	58	59.4	64.6
7.72	-34.41	-24.96	-31.75	0.18	58	59.3	64.7
7.72	-34.38	-24.96	-31.75	0.18	58	59.3	64.6
7.72	-34.38	-24.91	-31.75	0.18	58	59.3	64.4
7.72	-34.38	-24.96	-31.69	0.21	58.1	59.2	64.1
7.72	-34.38	-24.96	-31.75	0.18	58	59.2	64.1
7.72	-34.34	-24.96	-31.69	0.18	58	59.2	63.9
7.72	-34.34	-24.96	-31.69	0.18	57.9	59.2	63.7
7.72	-34.34	-24.96	-31.69	0.21	58	59.2	63.7
7.71	-34.34	-24.96	-31.69	0.21	57.9	59	63.5
7.71	-34.34	-24.96	-31.69	0.21	57.9	59.1	63.3
7.72	-34.3	-24.91	-31.69	0.21	57.8	58.9	62.9
7.71	-34.3	-24.96	-31.69	0.24	57.8	58.9	62.6
7.71	-34.3	-24.96	-31.66	0.21	57.7	58.9	62.6
7.71	-34.27	-24.96	-31.69	0.21	57.6	58.8	62.4
7.71	-34.27	-24.91	-31.66	0.21	57.6	58.7	61.9
7.71	-34.3	-24.91	-31.66	0.24	57.4	58.7	62
7.7	-34.27	-24.91	-31.66	0.24	57.4	58.6	61.6
7.7	-34.27	-24.91	-31.66	0.21	57.4	58.5	61.4
7.7	-34.27	-24.96	-31.66	0.24	57.1	58.4	60.9
7.7	-34.23	-24.91	-31.66	0.21	57.2	58.4	60.9
7.7	-34.23	-24.91	-31.66	0.21	57.1	58.3	60.4
7.7	-34.23	-24.91	-31.66	0.24	57.1	58.3	60.3
7.7	-34.23	-24.91	-31.63	0.21	57.2	58.2	60.1
7.7	-34.23	-24.91	-31.63	0.24	57.1	58.2	59.9
7.69	-34.19	-24.91	-31.63	0.24	56.9	58.2	59.8
7.69	-34.19	-24.91	-31.63	0.21	56.8	58.2	59.5
7.69	-34.19	-24.91	-31.63	0.24	56.6	58.1	59.3
7.69	-34.19	-24.86	-31.6	0.24	56.7	58.1	58.9
7.69	-34.19	-24.86	-31.63	0.24	56.7	58	59
7.69	-34.19	-24.86	-31.6	0.24	56.6	57.9	58.8
7.69	-34.19	-24.86	-31.6	0.24	56.6	57.9	58.6
7.69	-34.19	-24.86	-31.6	0.24	56.6	57.9	58.4
7.68	-34.19	-24.86	-31.6	0.24	56.4	57.8	58.4

7.69	-34.16	-24.8	-31.6	0.24	56.3	57.6	58.4
7.69	-34.16	-24.86	-31.57	0.27	56.3	57.6	58
7.68	-34.16	-24.8	-31.57	0.27	56.3	57.5	58
7.68	-34.16	-24.8	-31.57	0.24	56.2	57.5	57.7
7.68	-34.16	-24.8	-31.57	0.24	56.2	57.4	57.9
7.68	-34.16	-24.8	-31.57	0.24	56.1	57.3	57.7
7.68	-34.16	-24.86	-31.57	0.24	56.1	57.3	57.4
7.68	-34.16	-24.8	-31.57	0.27	56.1	57.3	57.2
7.68	-34.16	-24.8	-31.57	0.27	56	57.2	57.2
7.67	-34.16	-24.8	-31.54	0.24	56.1	57.2	56.8
7.68	-34.12	-24.8	-31.54	0.27	56	57.2	57.1
7.67	-34.12	-24.75	-31.54	0.27	56	57.1	57.1
7.67	-34.12	-24.75	-31.51	0.27	56	57.1	56.9
7.67	-34.12	-24.7	-31.51	0.27	56	57.1	56.6
7.67	-34.12	-24.75	-31.51	0.24	55.9	57.1	56.6
7.67	-34.12	-24.75	-31.48	0.24	55.9	57	56.4
7.67	-34.08	-24.7	-31.48	0.27	55.9	57	56.4
7.66	-34.08	-24.7	-31.48	0.27	55.9	57	56.1
7.66	-34.08	-24.7	-31.48	0.27	55.8	56.9	56.2
7.66	-34.05	-24.75	-31.48	0.31	55.7	56.9	55.9
7.66	-34.08	-24.7	-31.45	0.27	55.8	56.9	56
7.66	-34.05	-24.7	-31.45	0.24	55.7	56.8	56
7.66	-34.05	-24.7	-31.48	0.27	55.6	56.8	55.8
7.66	-34.05	-24.7	-31.45	0.27	55.6	56.7	56
7.66	-34.05	-24.7	-31.45	0.27	55.5	56.7	55.5
7.66	-34.01	-24.65	-31.42	0.27	55.5	56.7	55.6
7.66	-34.01	-24.65	-31.42	0.27	55.5	56.7	55.7
7.65	-34.01	-24.65	-31.42	0.27	55.5	56.6	55.6
7.65	-34.01	-24.65	-31.39	0.27	55.4	56.5	55.2
7.65	-34.01	-24.65	-31.39	0.24	55.5	56.5	55.4
7.65	-34.01	-24.65	-31.42	0.27	55.4	56.5	55.4
7.65	-34.01	-24.65	-31.39	0.27	55.3	56.5	55.2
7.65	-33.97	-24.65	-31.39	0.27	55.3	56.5	55.1
7.65	-33.97	-24.65	-31.39	0.27	55.3	56.4	55
7.65	-33.97	-24.6	-31.36	0.27	55.2	56.4	54.9
7.65	-33.97	-24.6	-31.36	0.27	55.2	56.4	54.9
7.65	-33.94	-24.6	-31.39	0.27	55.1	56.3	54.9
7.64	-33.94	-24.6	-31.39	0.27	55.2	56.3	54.7
7.64	-33.94	-24.6	-31.36	0.27	55.1	56.3	54.7
7.64	-33.86	-24.6	-31.36	0.27	55.1	56.3	54.7
7.64	-33.86	-24.6	-31.36	0.27	55.1	56.3	54.5
7.64	-33.94	-24.6	-31.36	0.31	55.1	56.3	54.6
7.64	-33.86	-24.6	-31.36	0.31	55.1	56.3	54.7
7.64	-33.94	-24.6	-31.36	0.31	55.1	56.3	54.7
7.64	-33.86	-24.55	-31.32	0.27	55.1	56.2	54.7
7.64	-33.86	-24.55	-31.32	0.27	55.1	56.3	54.9
7.64	-33.86	-24.6	-31.32	0.27	55.1	56.3	55.1

7.64	-33.86	-24.6	-31.29	0.27	55.1	56.2	55.1
7.63	-33.86	-24.55	-31.32	0.27	55.1	56.3	55.3
7.63	-33.86	-24.55	-31.29	0.27	55.1	56.3	55.3
7.63	-33.86	-24.55	-31.29	0.27	55.2	56.3	55.6
7.63	-33.86	-24.55	-31.29	0.27	55.1	56.4	55.6
7.63	-33.86	-24.55	-31.26	0.27	55.1	56.3	55.5
7.63	-33.86	-24.55	-31.29	0.27	55.1	56.3	55.5
7.63	-33.86	-24.49	-31.26	0.31	55.1	56.4	55.8
7.63	-33.83	-24.49	-31.26	0.27	55.1	56.4	55.8
7.63	-33.79	-24.49	-31.26	0.27	55.2	56.4	55.9
7.63	-33.83	-24.49	-31.26	0.24	55.2	56.4	55.7
7.63	-33.79	-24.49	-31.23	0.27	55.1	56.4	55.7
7.63	-33.83	-24.49	-31.26	0.31	55.1	56.4	56
7.63	-33.83	-24.49	-31.23	0.27	55.1	56.4	55.9
7.63	-33.79	-24.49	-31.23	0.27	55.2	56.4	56
7.63	-33.79	-24.49	-31.2	0.27	55.2	56.4	56
7.62	-33.79	-24.49	-31.23	0.27	55.3	56.4	56
7.62	-33.75	-24.49	-31.23	0.27	55.2	56.4	56
7.62	-33.75	-24.49	-31.23	0.27	55.2	56.4	56.1
7.62	-33.75	-24.44	-31.23	0.27	55.2	56.5	56.4
7.62	-33.75	-24.44	-31.2	0.31	55.2	56.5	56.2
7.62	-33.75	-24.44	-31.2	0.27	55.2	56.5	56.4
7.62	-33.75	-24.44	-31.17	0.27	55.2	56.5	56.2
7.62	-33.75	-24.44	-31.2	0.24	54.9	56.5	56.5
7.62	-33.72	-24.44	-31.17	0.27	55.1	56.5	56.5
7.62	-33.72	-24.44	-31.17	0.27	55.3	56.6	56.6
7.62	-33.72	-24.44	-31.17	0.27	55.1	56.6	56.8
7.62	-33.75	-24.44	-31.14	0.27	54.9	56.6	56.7
7.62	-33.72	-24.39	-31.17	0.27	55.1	56.6	56.8
7.62	-33.72	-24.44	-31.14	0.27	55	56.6	56.8
7.61	-33.72	-24.39	-31.11	0.27	55	56.6	57.1
7.61	-33.68	-24.34	-31.11	0.24	55.1	56.6	57.1
7.61	-33.68	-24.39	-31.11	0.27	55.1	56.6	57.1
7.61	-33.68	-24.39	-31.11	0.27	55.4	56.7	57.1
7.61	-33.68	-24.34	-31.11	0.27	55.2	56.7	57.1
7.61	-33.68	-24.34	-31.08	0.27	55.3	56.7	57.3
7.61	-33.64	-24.34	-31.11	0.27	55.3	56.7	57.2
7.61	-33.64	-24.34	-31.08	0.27	55.3	56.8	57.4
7.61	-33.64	-24.34	-31.08	0.27	55.4	56.8	57.1
7.61	-33.64	-24.29	-31.08	0.27	55.5	56.8	57.4
7.61	-33.64	-24.29	-31.08	0.24	55.4	56.8	57.7
7.61	-33.64	-24.29	-31.05	0.27	55.4	56.8	57.7
7.61	-33.64	-24.29	-31.05	0.27	55.4	56.8	57.7
7.61	-33.64	-24.29	-31.02	0.27	55.4	56.8	57.7
7.61	-33.61	-24.29	-31.05	0.27	55.5	56.8	57.7
7.61	-33.61	-24.29	-31.02	0.27	55.6	56.9	57.7
7.61	-33.57	-24.29	-31.02	0.27	55.6	56.9	57.8

7.61	-33.57	-24.23	-31.02	0.27	55.6	56.9	57.9
7.61	-33.57	-24.23	-30.99	0.24	55.6	56.9	57.7
7.61	-33.57	-24.23	-30.93	0.27	55.5	56.9	57.7
7.61	-33.57	-24.23	-30.99	0.27	55.5	57	58.1
7.61	-33.57	-24.23	-30.93	0.27	55.6	57	58
7.61	-33.53	-24.23	-30.93	0.27	55.7	57	57.9
7.6	-33.53	-24.18	-30.93	0.27	55.7	57	58
7.6	-33.53	-24.18	-30.93	0.27	55.7	57	57.9
7.6	-33.53	-24.18	-30.93	0.27	55.8	57	57.8
7.6	-33.5	-24.18	-30.93	0.24	55.6	57	57.8
7.6	-33.5	-24.18	-30.9	0.24	55.7	57	57.8
7.6	-33.5	-24.13	-30.9	0.24	55.5	57	58
7.6	-33.5	-24.18	-30.9	0.27	55.6	57	57.8
7.6	-33.5	-24.13	-30.87	0.27	55.6	57	57.8
7.6	-33.46	-24.13	-30.87	0.24	55.7	57.1	57.7
7.6	-33.46	-24.13	-30.87	0.27	55.7	57.1	57.6
7.6	-33.46	-24.08	-30.87	0.27	55.7	57.1	57.6
7.6	-33.42	-24.13	-30.87	0.24	55.7	57.1	57.9
7.6	-33.46	-24.13	-30.84	0.24	55.8	57.1	57.7
7.6	-33.42	-24.13	-30.84	0.21	55.8	57.1	57.7
7.6	-33.46	-24.08	-30.84	0.24	55.8	57.1	57.6
7.59	-33.42	-24.08	-30.84	0.27	55.9	57.1	57.5
7.59	-33.42	-24.08	-30.84	0.24	55.9	57.1	57.5
7.59	-33.42	-24.08	-30.84	0.24	55.9	57.1	57.6
7.59	-33.39	-24.08	-30.84	0.24	55.8	57.1	57.3
7.59	-33.39	-24.03	-30.81	0.24	55.9	57.1	57.4
7.59	-33.39	-24.03	-30.81	0.24	55.9	57.1	57.6
7.59	-33.39	-24.08	-30.81	0.27	55.8	57	57.4
7.59	-33.35	-24.08	-30.78	0.24	55.9	57.1	57.6
7.59	-33.35	-24.03	-30.81	0.24	55.8	57.1	57.3
7.59	-33.35	-24.08	-30.78	0.24	55.8	57	57.2
7.59	-33.32	-24.03	-30.81	0.24	55.8	57	57.3
7.59	-33.32	-24.03	-30.78	0.27	55.8	57.1	57.1
7.59	-33.32	-24.03	-30.78	0.24	55.9	57	57.1
7.59	-33.32	-24.03	-30.78	0.24	55.8	57.1	56.9
7.59	-33.32	-24.03	-30.78	0.24	55.8	57	56.7
7.59	-33.32	-23.92	-30.74	0.24	55.8	57	57.1
7.59	-33.28	-24.03	-30.74	0.24	55.8	57	56.9
7.59	-33.28	-24.03	-30.78	0.24	55.8	57	56.9
7.59	-33.28	-23.92	-30.74	0.24	55.8	57	56.6
7.59	-33.28	-24.03	-30.71	0.24	55.8	57	56.6
7.59	-33.28	-24.03	-30.74	0.24	55.7	56.9	56.8
7.58	-33.28	-23.92	-30.74	0.24	55.8	57	56.7
7.58	-33.24	-23.92	-30.71	0.24	55.8	56.9	56.7
7.58	-33.24	-23.87	-30.74	0.27	55.8	56.9	56.5
7.58	-33.24	-23.92	-30.71	0.24	55.7	56.9	56.5
7.58	-33.24	-23.87	-30.71	0.24	55.7	56.9	56.4

7.58	-33.24	-23.87	-30.71	0.24	55.7	56.9	56.3
7.58	-33.24	-23.87	-30.71	0.24	55.7	56.9	56.4
7.58	-33.24	-23.87	-30.68	0.24	55.7	56.9	56.2
7.58	-33.21	-23.87	-30.68	0.24	55.7	56.9	56.2
7.58	-33.21	-23.87	-30.68	0.24	55.7	56.8	56.1
7.58	-33.17	-23.87	-30.68	0.24	55.7	56.8	56.2
7.58	-33.17	-23.87	-30.65	0.27	55.7	56.8	56
7.58	-33.21	-23.82	-30.68	0.24	55.6	56.8	56.1
7.58	-33.21	-23.82	-30.65	0.24	55.6	56.8	56
7.58	-33.17	-23.82	-30.65	0.27	55.6	56.8	56
7.58	-33.17	-23.82	-30.62	0.27	55.6	56.7	55.9
7.59	-33.17	-23.82	-30.62	0.24	55.6	56.7	55.8
7.58	-33.17	-23.82	-30.62	0.24	55.5	56.7	55.8
7.58	-33.17	-23.82	-30.62	0.27	55.5	56.6	55.8
7.58	-33.17	-23.82	-30.59	0.24	55.4	56.6	55.9
7.57	-33.13	-23.82	-30.59	0.24	55.4	56.6	55.7
7.57	-33.13	-23.82	-30.62	0.24	55.5	56.6	55.6
7.57	-33.13	-23.82	-30.59	0.24	55.4	56.6	55.5
7.57	-33.1	-23.82	-30.59	0.24	55.4	56.5	55.4
7.57	-33.13	-23.77	-30.59	0.27	55.4	56.5	55.5
7.57	-33.1	-23.82	-30.59	0.24	55.3	56.5	55.5
7.57	-33.1	-23.82	-30.56	0.27	55.3	56.5	55.3
7.57	-33.06	-23.82	-30.56	0.24	55.3	56.5	55
7.57	-33.06	-23.77	-30.56	0.24	55.3	56.5	55.2
7.57	-33.06	-23.77	-30.56	0.24	55.3	56.5	55.1
7.57	-33.06	-23.77	-30.56	0.24	55.3	56.4	55.1
7.57	-32.99	-23.77	-30.56	0.24	55.2	56.5	55.1
7.57	-32.99	-23.71	-30.53	0.24	55.2	56.4	54.9
7.57	-32.99	-23.77	-30.53	0.27	55.2	56.4	55
7.57	-32.99	-23.77	-30.56	0.24	55.2	56.4	54.7
7.57	-32.99	-23.71	-30.53	0.24	55.1	56.3	54.6
7.57	-32.99	-23.71	-30.53	0.24	55.1	56.3	54.6
7.57	-32.99	-23.71	-30.53	0.24	55	56.3	54.7
7.57	-32.99	-23.71	-30.5	0.24	55.1	56.3	54.6
7.56	-32.99	-23.71	-30.5	0.27	55	56.3	54.3
7.56	-32.95	-23.66	-30.5	0.24	55	56.2	54.5
7.56	-32.95	-23.71	-30.47	0.24	55	56.2	54.3
7.56	-32.95	-23.66	-30.47	0.27	54.9	56.2	54.3
7.56	-32.95	-23.66	-30.5	0.27	55	56.2	54.5
7.56	-32.95	-23.66	-30.5	0.24	55.1	56.2	54.6
7.56	-32.91	-23.66	-30.47	0.24	54.9	56.2	54.8
7.56	-32.91	-23.66	-30.47	0.24	55	56.2	54.7
7.56	-32.88	-23.66	-30.47	0.24	55.1	56.2	54.9
7.56	-32.91	-23.66	-30.47	0.24	55	56.3	55.1
7.56	-32.88	-23.66	-30.47	0.24	55	56.3	55.2
7.56	-32.91	-23.66	-30.47	0.24	55	56.3	55.3
7.56	-32.88	-23.66	-30.47	0.27	55.1	56.3	55.6

7.56	-32.88	-23.66	-30.44	0.24	55.2	56.4	55.7
7.56	-32.88	-23.66	-30.44	0.24	55.1	56.4	56.1
7.56	-32.88	-23.66	-30.44	0.24	55	56.5	56.1
7.56	-32.91	-23.61	-30.44	0.24	55.1	56.5	56.6
7.56	-32.84	-23.61	-30.44	0.24	55.2	56.4	56.6
7.56	-32.88	-23.61	-30.44	0.24	55.1	56.5	56.9
7.56	-32.84	-23.66	-30.44	0.24	55.1	56.6	57.2
7.56	-32.84	-23.66	-30.41	0.24	55.1	56.7	57.3
7.55	-32.84	-23.61	-30.44	0.24	55.2	56.8	57.6
7.55	-32.84	-23.61	-30.41	0.24	55.1	56.8	57.9
7.55	-32.8	-23.61	-30.41	0.24	55.1	56.8	58.3
7.55	-32.8	-23.61	-30.41	0.24	55.2	57	58.5
7.55	-32.84	-23.61	-30.44	0.21	55.2	57	58.9
7.55	-32.8	-23.61	-30.44	0.24	55.3	57.1	59.2
7.55	-32.8	-23.61	-30.41	0.24	55.2	57.1	59.6
7.55	-32.8	-23.61	-30.41	0.24	55.3	57.3	59.9
7.55	-32.8	-23.61	-30.41	0.21	55.4	57.4	60.5
7.55	-32.77	-23.61	-30.41	0.21	55.5	57.5	60.7
7.55	-32.8	-23.56	-30.38	0.24	55.5	57.5	61
7.55	-32.8	-23.56	-30.38	0.21	55.6	57.8	61.4
7.55	-32.8	-23.56	-30.38	0.21	55.5	57.9	61.7
7.55	-32.8	-23.61	-30.38	0.24	55.5	58	62
7.55	-32.77	-23.56	-30.38	0.24	55.6	58.1	62.1
7.55	-32.8	-23.56	-30.35	0.21	55.8	58.2	62.5
7.55	-32.77	-23.51	-30.38	0.21	55.8	58.3	62.8
7.55	-32.77	-23.61	-30.35	0.18	55.9	58.4	63.2
7.55	-32.77	-23.51	-30.35	0.21	56	58.5	63.5
7.55	-32.8	-23.56	-30.35	0.18	56.1	58.7	63.8
7.55	-32.77	-23.56	-30.35	0.21	56	58.8	64.3
7.55	-32.77	-23.56	-30.35	0.21	56.2	59	64.6
7.55	-32.77	-23.56	-30.35	0.21	56.3	59.2	65
7.55	-32.73	-23.51	-30.32	0.18	56.6	59.3	65.6
7.55	-32.73	-23.51	-30.32	0.18	56.6	59.4	65.8
7.55	-32.73	-23.51	-30.32	0.21	56.8	59.5	66.5
7.55	-32.69	-23.51	-30.32	0.18	56.9	59.7	66.8
7.55	-32.73	-23.51	-30.32	0.18	57.1	59.9	67
7.55	-32.73	-23.46	-30.29	0.18	57	60.2	67.5
7.55	-32.73	-23.46	-30.32	0.15	57.1	60.3	67.9
7.56	-32.69	-23.46	-30.29	0.18	57.2	60.4	68.4
7.56	-32.69	-23.51	-30.29	0.15	57.4	60.6	68.9
7.56	-32.69	-23.46	-30.26	0.18	57.5	60.7	69
7.55	-32.69	-23.46	-30.26	0.15	57.7	60.8	69.5
7.56	-32.66	-23.46	-30.26	0.18	57.7	61	69.8
7.56	-32.69	-23.46	-30.26	0.15	57.9	61.2	70.1
7.56	-32.66	-23.46	-30.26	0.15	58	61.3	70.2
7.56	-32.66	-23.4	-30.26	0.15	58.2	61.4	70.5
7.56	-32.66	-23.46	-30.26	0.15	58.1	61.4	70.6

7.56	-32.66	-23.4	-30.23	0.15	58.3	61.5	70.6
7.56	-32.66	-23.46	-30.23	0.15	58.4	61.6	71.1
7.56	-32.62	-23.4	-30.23	0.15	58.7	61.8	71.1
7.56	-32.62	-23.4	-30.26	0.15	58.7	61.8	71.2
7.57	-32.62	-23.4	-30.23	0.15	59	61.9	71.2
7.57	-32.62	-23.4	-30.23	0.15	58.9	62.1	71.5
7.57	-32.58	-23.4	-30.2	0.12	59	62.2	71.6
7.57	-32.58	-23.4	-30.23	0.15	59	62.2	71.6
7.57	-32.58	-23.35	-30.2	0.15	59.2	62.4	71.9
7.57	-32.58	-23.35	-30.2	0.12	59.2	62.5	72
7.57	-32.58	-23.35	-30.2	0.15	59.3	62.5	72
7.57	-32.58	-23.35	-30.2	0.12	59.4	62.5	72
7.57	-32.55	-23.35	-30.2	0.12	59.4	62.6	72
7.57	-32.55	-23.35	-30.13	0.09	59.6	62.6	72
7.57	-32.55	-23.4	-30.2	0.12	59.5	62.7	71.9
7.57	-32.55	-23.35	-30.13	0.09	59.6	62.7	71.7
7.57	-32.55	-23.35	-30.13	0.12	59.8	62.8	71.9
7.57	-32.55	-23.35	-30.2	0.09	60.1	62.8	71.9
7.58	-32.51	-23.35	-30.13	0.09	59.9	62.8	71.7
7.58	-32.51	-23.35	-30.13	0.12	60.1	62.9	71.7
7.58	-32.51	-23.35	-30.13	0.12	60.2	62.9	71.6
7.58	-32.51	-23.35	-30.13	0.12	60.3	62.9	71.4
7.58	-32.51	-23.35	-30.13	0.09	60.3	63	71.2
7.58	-32.51	-23.3	-30.1	0.09	60.3	63	71.3
7.58	-32.47	-23.3	-30.1	0.09	60.2	63	71.1
7.58	-32.51	-23.3	-30.1	0.06	60.5	63	71.2
7.58	-32.51	-23.3	-30.1	0.09	60.4	63	71.1
7.58	-32.47	-23.35	-30.1	0.09	60.4	63	70.8
7.58	-32.47	-23.3	-30.1	0.09	60.4	63	70.7
7.58	-32.47	-23.3	-30.07	0.09	60.4	63	70.7
7.57	-32.47	-23.3	-30.07	0.09	60.5	63	70.4
7.57	-32.47	-23.35	-30.1	0.09	60.6	63	70.2
7.57	-32.47	-23.3	-30.07	0.09	60.4	62.9	70.3
7.57	-32.47	-23.3	-30.07	0.06	60.4	62.9	70.1
7.57	-32.47	-23.3	-30.07	0.09	60.5	62.9	69.9
7.57	-32.47	-23.3	-30.07	0.09	60.7	62.9	69.9
7.57	-32.44	-23.3	-30.07	0.06	60.5	62.9	69.8
7.57	-32.47	-23.3	-30.07	0.09	60.6	62.9	69.6
7.57	-32.44	-23.3	-30.07	0.09	60.6	62.9	69.6
7.57	-32.44	-23.3	-30.04	0.09	60.6	62.9	69.3
7.57	-32.47	-23.3	-30.07	0.09	60.5	62.9	69.3
7.57	-32.44	-23.25	-30.07	0.09	60.5	62.8	69.2
7.57	-32.44	-23.3	-30.04	0.09	60.6	62.8	69.1
7.57	-32.4	-23.25	-30.07	0.09	60.5	62.8	69
7.57	-32.4	-23.25	-30.04	0.06	60.5	62.9	68.9
7.57	-32.4	-23.25	-30.04	0.09	60.5	62.8	68.8
7.57	-32.4	-23.2	-30.04	0.06	60.5	62.9	68.7

7.57	-32.4	-23.25	-30.04	0.06	60.6	62.8	68.6
7.57	-32.4	-23.25	-30.04	0.09	60.4	62.8	68.7
7.57	-32.4	-23.25	-30.04	0.06	60.5	62.8	68.6
7.56	-32.36	-23.2	-30.04	0.06	60.4	62.8	68.3
7.56	-32.36	-23.2	-30.01	0.09	60.6	62.7	68.2
7.56	-32.36	-23.2	-30.01	0.09	60.6	62.7	68.3
7.56	-32.36	-23.2	-30.01	0.09	60.7	62.7	68
7.56	-32.36	-23.25	-30.01	0.06	60.5	62.7	68
7.56	-32.36	-23.2	-30.01	0.06	60.3	62.7	68.1
7.56	-32.36	-23.2	-30.01	0.06	60.4	62.7	67.7
7.56	-32.33	-23.2	-29.98	0.09	60.3	62.6	67.9
7.56	-32.36	-23.2	-30.01	0.06	60.3	62.7	67.8
7.56	-32.36	-23.2	-29.98	0.06	60.3	62.7	67.7
7.56	-32.33	-23.2	-29.98	0.06	60.3	62.7	67.9
7.56	-32.36	-23.14	-29.95	0.06	60.5	62.7	67.5
7.56	-32.33	-23.2	-29.98	0.06	60.4	62.7	67.5
7.55	-32.33	-23.14	-29.98	0.06	60.4	62.7	67.8
7.55	-32.29	-23.14	-29.95	0.06	60.5	62.6	67.3
7.55	-32.33	-23.2	-29.95	0.03	60.3	62.6	67.4
7.55	-32.29	-23.14	-29.95	0.09	60.3	62.6	67.4
7.55	-32.29	-23.14	-29.95	0.06	60.3	62.6	67.2
7.55	-32.29	-23.14	-29.95	0.06	60.3	62.5	67.3
7.55	-32.29	-23.14	-29.95	0.06	60.3	62.6	67.2
7.55	-32.29	-23.14	-29.95	0.03	60.1	62.6	67
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-175	-212.5	-119.97	-25	-74.8	-74.9	-72.6
7.55	-32.22	-23.14	-29.92	0.09	59.4	60.8	66.7
7.53	-32.25	-23.14	-29.92	0.06	59.6	61.2	66.6
7.54	-32.25	-23.14	-29.92	0.06	60.1	61.6	66.7
7.54	-32.25	-23.09	-29.92	0.06	60.2	62	66.5
7.54	-32.25	-23.14	-29.92	0.06	60.2	62.2	66.5
7.54	-32.22	-23.14	-29.92	0.06	60.3	62.4	66.4
7.53	-32.22	-23.14	-29.92	0.06	60.3	62.4	66.6
7.54	-32.22	-23.14	-29.92	0.06	60.3	62.4	66.6
7.54	-32.22	-23.09	-29.92	0.03	60.2	62.5	66.5
7.53	-32.22	-23.09	-29.89	0.06	60.3	62.4	66.6
7.54	-32.22	-23.09	-29.89	0.06	60.2	62.5	66.3
7.53	-32.18	-23.09	-29.89	0.06	60.1	62.5	66.4
7.53	-32.22	-23.09	-29.89	0.06	60.3	62.5	66.1
7.53	-32.22	-23.09	-29.86	0.06	60.3	62.5	66.3
7.53	-32.18	-23.09	-29.89	0.06	60.2	62.5	66.3
7.53	-32.18	-23.04	-29.89	0.06	60.3	62.5	66.3
7.53	-32.18	-23.04	-29.89	0.06	60.3	62.5	66.3
7.53	-32.18	-23.04	-29.89	0.06	60.3	62.5	66.3
7.53	-32.18	-23.04	-29.86	0.06	60.2	62.4	65.9
7.53	-32.18	-23.04	-29.86	0.06	60.3	62.4	66.3

7.53	-32.18	-23.09	-29.89	0.06	60.3	62.4	65.9
7.53	-32.18	-23.04	-29.86	0.06	60.3	62.4	66.2
7.53	-32.11	-23.09	-29.86	0.06	60.3	62.4	65.9
7.53	-32.11	-23.09	-29.86	0.03	60.3	62.4	66.1
7.53	-32.11	-23.09	-29.86	0.06	60.2	62.4	66.1
7.52	-32.11	-23.04	-29.86	0.06	60.4	62.4	65.9
7.52	-32.11	-23.04	-29.86	0.03	60.3	62.2	65.9
7.52	-32.11	-23.04	-29.83	0.06	60.4	62.2	66.2
7.52	-32.11	-23.04	-29.83	0.06	60.4	62.2	66
7.52	-32.11	-23.04	-29.83	0.06	60.4	62.2	65.9
7.52	-32.07	-22.99	-29.83	0.03	60.4	62.2	65.8
7.52	-32.07	-22.99	-29.83	0.06	60.4	62.1	65.8
7.52	-32.11	-23.04	-29.83	0.03	60.4	62.2	65.8
7.51	-32.11	-22.99	-29.83	0.06	60.4	62.1	65.8
7.51	-32.07	-23.04	-29.8	0.06	60.3	62.1	65.9
7.52	-32.07	-23.04	-29.8	0.06	60.4	62.2	65.8
7.52	-32.03	-23.04	-29.8	0.06	60.3	62.1	65.8
7.51	-32.07	-22.99	-29.8	0.06	60.3	62.2	65.8
7.51	-32.03	-22.99	-29.8	0.06	60.3	62.1	65.8
7.51	-32.07	-22.99	-29.8	0.06	60.3	62.2	65.8
7.51	-32.03	-22.99	-29.8	0.06	60.3	62.1	65.8
7.51	-32.03	-22.99	-29.8	0.06	60.3	62.1	65.9
7.51	-32.03	-22.99	-29.8	0.03	60.2	62.2	65.8
7.51	-32.03	-22.99	-29.8	0.06	60.2	62.2	65.8
7.5	-32.03	-22.99	-29.77	0.06	60.2	62.1	65.8
7.5	-32.03	-22.99	-29.8	0.06	60.3	62.2	66
7.5	-32.03	-22.99	-29.8	0.06	60.3	62.2	65.8
7.5	-32.03	-22.99	-29.8	0.06	60.3	62.2	65.8
7.5	-32.03	-22.99	-29.77	0.06	60.3	62.2	65.9
7.5	-32.03	-22.99	-29.8	0.03	60.3	62.2	65.9
7.5	-32.03	-22.99	-29.8	0.03	60.3	62.2	65.9
7.5	-32.03	-22.94	-29.8	0.06	60.3	62.2	66
7.5	-32.03	-22.99	-29.77	0.03	60.4	62.2	66.1
7.5	-32.03	-22.99	-29.77	0.03	60.4	62.2	66
7.5	-32	-22.99	-29.8	0.03	60.4	62.4	66.3
7.5	-32.03	-22.99	-29.77	0.03	60.4	62.4	66.1
7.5	-32.03	-22.99	-29.77	0.03	60.3	62.4	66.3
7.5	-32.03	-22.94	-29.77	0.03	60.3	62.5	66.4
7.5	-32.03	-22.94	-29.74	0.03	60.3	62.5	66.3
7.5	-32.03	-22.94	-29.74	0.06	60.4	62.5	66.3
7.5	-32	-22.94	-29.74	0.03	60.3	62.5	66.6
7.49	-32	-22.94	-29.74	0.06	60.3	62.5	66.7
7.49	-32	-22.94	-29.71	0.06	60.4	62.5	66.6
7.49	-32	-22.94	-29.71	0.03	60.4	62.5	66.6
7.49	-32	-22.94	-29.71	0.03	60.4	62.5	66.8
7.49	-31.96	-22.94	-29.71	0.06	60.5	62.5	66.8
7.49	-31.96	-22.94	-29.71	0.03	60.5	62.5	66.9

7.49	-32	-22.94	-29.71	0.03	60.6	62.6	66.8
7.49	-31.96	-22.94	-29.71	0.03	60.4	62.6	67
7.49	-31.96	-22.88	-29.71	0.03	60.6	62.6	66.8
7.49	-31.96	-22.88	-29.71	0.03	60.4	62.6	67
7.49	-31.96	-22.88	-29.68	0.03	60.5	62.7	67.1
7.49	-31.96	-22.88	-29.68	0.06	60.5	62.6	67.1
7.49	-31.96	-22.88	-29.65	0.03	60.6	62.7	67.2
7.49	-31.96	-22.88	-29.68	0.03	60.7	62.8	67.2
7.49	-31.96	-22.88	-29.68	0.03	60.7	62.8	67.4
7.49	-31.92	-22.88	-29.65	0.03	60.5	62.8	67.7
7.49	-31.89	-22.83	-29.65	0.03	60.9	62.9	67.5
7.49	-31.92	-22.88	-29.65	0	60.6	62.8	67.7
7.49	-31.92	-22.88	-29.65	0	60.7	62.9	67.7
7.49	-31.89	-22.88	-29.62	0.03	60.6	63	67.8
7.49	-31.89	-22.83	-29.62	0.03	60.6	62.9	67.9
7.49	-31.89	-22.83	-29.62	0.03	60.9	63	67.9
7.48	-31.89	-22.83	-29.62	0	60.9	63	67.9
7.48	-31.89	-22.83	-29.62	0	60.9	63	68
7.48	-31.85	-22.83	-29.62	0.03	60.7	63	68
7.48	-31.85	-22.78	-29.62	0.03	60.7	62.9	68
7.48	-31.85	-22.83	-29.62	0.03	61	63	67.9
7.48	-31.85	-22.78	-29.62	0	60.9	62.9	68
7.48	-31.85	-22.83	-29.62	0.03	60.7	63	67.8
7.48	-31.85	-22.83	-29.62	0.03	60.9	63	67.8
7.48	-31.81	-22.83	-29.58	0	60.6	63	67.8
7.48	-31.81	-22.83	-29.58	0	60.6	62.9	67.9
7.48	-31.81	-22.78	-29.58	0.03	60.6	62.9	67.8
7.48	-31.81	-22.83	-29.58	0	60.9	62.8	67.7
7.48	-31.81	-22.78	-29.58	0.03	60.9	62.8	67.5
7.48	-31.78	-22.78	-29.58	0	60.9	62.7	67.5
7.48	-31.78	-22.78	-29.58	0.03	60.7	62.7	67.4
7.48	-31.78	-22.78	-29.58	0.03	60.7	62.7	67.2
7.48	-31.78	-22.78	-29.58	0.03	60.7	62.6	67.1
7.47	-31.81	-22.78	-29.55	0	60.7	62.6	66.9
7.47	-31.78	-22.78	-29.58	0.03	60.7	62.5	66.8
7.47	-31.78	-22.78	-29.58	0.03	60.9	62.5	66.6
7.47	-31.74	-22.78	-29.55	0.03	60.6	62.5	66.4
7.47	-31.78	-22.78	-29.58	0.03	60.7	62.5	66.2
7.47	-31.74	-22.78	-29.55	0.03	60.9	62.4	66
7.47	-31.78	-22.78	-29.55	0.03	60.9	62.2	66
7.47	-31.78	-22.78	-29.55	0	60.9	62.2	65.7
7.47	-31.74	-22.78	-29.55	0.03	60.7	62.2	65.4
7.46	-31.74	-22.78	-29.55	0.03	60.7	62.1	65.4
7.46	-31.74	-22.78	-29.52	0	60.7	62	65
7.46	-31.78	-22.78	-29.52	0.03	60.7	61.9	64.9
7.46	-31.74	-22.78	-29.55	0.03	60.7	61.9	64.7
7.46	-31.74	-22.78	-29.52	0.03	60.6	61.8	64.5

7.46	-31.74	-22.78	-29.52	0.03	60.5	61.7	64.4
7.46	-31.74	-22.78	-29.52	0.03	60.5	61.7	64.3
7.46	-31.74	-22.78	-29.52	0.03	60.4	61.6	63.8
7.45	-31.74	-22.73	-29.52	0.03	60.3	61.6	63.7
7.44	-31.74	-22.78	-29.52	0.03	60.3	61.5	63.8
7.44	-31.74	-22.73	-29.52	0.03	60.2	61.4	63.7
7.44	-31.74	-22.73	-29.52	0.06	60.2	61.4	63.5
7.44	-31.74	-22.73	-29.52	0.06	60.2	61.4	63.1
7.44	-31.74	-22.73	-29.52	0.06	60	61.4	63
7.45	-31.74	-22.73	-29.52	0.03	59.9	61.3	62.7
7.44	-31.7	-22.73	-29.49	0.03	59.8	61.3	62.7
7.44	-31.7	-22.78	-29.49	0.06	59.8	61.2	62.4
7.44	-31.7	-22.63	-29.52	0.06	59.7	61.1	62.4
7.44	-31.7	-22.73	-29.52	0.03	59.6	61.1	62.3
7.44	-31.7	-22.73	-29.49	0.03	59.5	61	62
7.44	-31.7	-22.63	-29.49	0.03	59.6	60.9	61.9
7.44	-31.7	-22.63	-29.49	0.03	59.5	60.9	61.7
7.44	-31.74	-22.73	-29.46	0.03	59.5	60.8	61.8
7.44	-31.7	-22.63	-29.49	0.03	59.3	60.7	61.4
7.44	-31.7	-22.63	-29.46	0.06	59.4	60.7	61.6
7.43	-31.7	-22.73	-29.46	0.03	59.4	60.6	61.2
7.43	-31.7	-22.63	-29.46	0.03	59.2	60.4	61.1
7.43	-31.67	-22.73	-29.46	0.03	59.2	60.4	60.8
7.43	-31.7	-22.63	-29.46	0.03	59.2	60.4	60.9
7.43	-31.7	-22.63	-29.46	0.03	59.1	60.3	60.6
7.42	-31.67	-22.63	-29.46	0.03	59.1	60.3	60.4
7.42	-31.67	-22.57	-29.46	0.06	59.1	60.3	60.3
7.42	-31.67	-22.63	-29.46	0.06	59	60.2	60.2
7.42	-31.67	-22.57	-29.43	0.06	58.9	60.1	60
7.42	-31.67	-22.63	-29.46	0.06	58.8	60.1	59.9
7.42	-31.67	-22.63	-29.43	0.03	58.9	59.8	59.7
7.42	-31.67	-22.63	-29.43	0.06	58.8	59.9	59.7
7.42	-31.63	-22.57	-29.37	0.06	58.7	59.7	59.5
7.42	-31.63	-22.57	-29.43	0.03	58.7	59.8	59.2
7.41	-31.63	-22.57	-29.37	0.06	58.5	59.6	58.9
7.41	-31.63	-22.57	-29.43	0.03	58.5	59.6	58.8
7.41	-31.63	-22.63	-29.43	0.06	58.4	59.5	58.9
7.41	-31.63	-22.57	-29.37	0.03	58.4	59.5	58.8
7.41	-31.59	-22.57	-29.37	0.06	58.3	59.4	58.5
7.41	-31.63	-22.57	-29.37	0.06	58.3	59.4	58.5
7.41	-31.63	-22.57	-29.37	0.03	58.3	59.4	58.4
7.41	-31.63	-22.57	-29.37	0.06	58.2	59.3	58.3
7.41	-31.59	-22.57	-29.34	0.03	58.2	59.2	58.2
7.4	-31.59	-22.57	-29.37	0.06	58.2	59.2	58.1
7.4	-31.59	-22.57	-29.37	0.03	58.2	59.2	57.9
7.4	-31.56	-22.57	-29.37	0.06	58.2	59.2	57.9
7.4	-31.59	-22.57	-29.37	0.06	58.1	59.2	58.1

7.4	-31.59	-22.57	-29.34	0.06	58.1	59.2	58.2
7.4	-31.56	-22.57	-29.37	0.06	58.2	59.2	58.1
7.4	-31.56	-22.57	-29.37	0.03	58.2	59.2	58.2
7.4	-31.56	-22.57	-29.34	0.03	58.2	59.2	58.1
7.4	-31.56	-22.52	-29.34	0.06	58.1	59.2	58.1
7.4	-31.56	-22.57	-29.31	0.06	58.1	59.2	58.2
7.39	-31.56	-22.52	-29.34	0.06	58.1	59.2	58
7.39	-31.56	-22.52	-29.34	0.03	58.1	59.2	58.2
7.39	-31.56	-22.52	-29.34	0.03	58.1	59.2	58.3
7.39	-31.56	-22.52	-29.31	0.03	58.1	59.2	58.3
7.39	-31.52	-22.52	-29.34	0.06	58.1	59.2	58.3
7.39	-31.56	-22.57	-29.34	0.03	58.1	59.2	58.2
7.39	-31.56	-22.57	-29.31	0.06	58.1	59.2	58.5
7.39	-31.56	-22.52	-29.31	0.06	58.1	59.2	58.7
7.39	-31.52	-22.52	-29.31	0.06	58.2	59.2	58.5
7.39	-31.52	-22.52	-29.34	0.06	58.2	59.2	58.9
7.39	-31.52	-22.52	-29.31	0.03	58.2	59.2	58.9
7.39	-31.52	-22.52	-29.31	0.03	58.1	59.2	59.2
7.38	-31.52	-22.52	-29.31	0.03	58.2	59.2	58.9
7.38	-31.52	-22.52	-29.31	0.06	57.9	59.4	59.5
7.38	-31.52	-22.52	-29.31	0.03	58.1	59.4	59.6
7.38	-31.52	-22.52	-29.31	0.06	58	59.5	59.7
7.38	-31.52	-22.52	-29.31	0.06	58.2	59.5	60.1
7.38	-31.52	-22.52	-29.31	0.03	58.3	59.4	60.2
7.38	-31.52	-22.52	-29.31	0.03	58.2	59.5	60.3
7.38	-31.52	-22.52	-29.28	0.03	58.2	59.5	60.6
7.38	-31.52	-22.52	-29.28	0.06	58.2	59.5	60.6
7.38	-31.52	-22.52	-29.28	0.03	58.2	59.6	60.9
7.38	-31.52	-22.52	-29.28	0.03	58.2	59.6	61.4
7.38	-31.52	-22.52	-29.28	0.03	58.2	59.7	61.4
7.38	-31.52	-22.47	-29.28	0.03	58.1	59.9	61.4
7.38	-31.48	-22.47	-29.28	0.03	58.2	59.9	61.7
7.38	-31.48	-22.47	-29.25	0.03	58.2	59.9	62
7.38	-31.48	-22.47	-29.25	0.03	58.3	59.9	62.3
7.38	-31.48	-22.47	-29.25	0.03	58.2	60.1	62.3
7.38	-31.48	-22.47	-29.25	0.03	58.4	60.1	62.5
7.37	-31.48	-22.47	-29.25	0.03	58.7	60.2	62.9
7.37	-31.48	-22.47	-29.25	0.03	58.4	60.2	63
7.37	-31.48	-22.47	-29.25	0.03	58.4	60.3	63
7.37	-31.45	-22.47	-29.25	0.03	58.8	60.3	63.2
7.37	-31.48	-22.47	-29.25	0.03	58.8	60.3	63.5
7.37	-31.48	-22.47	-29.22	0.06	58.8	60.3	63.6
7.37	-31.45	-22.47	-29.22	0.03	58.8	60.3	63.6
7.37	-31.48	-22.47	-29.25	0.03	58.5	60.3	63.7
7.37	-31.45	-22.42	-29.22	0.03	58.5	60.4	63.8
7.37	-31.48	-22.47	-29.22	0.03	58.9	60.4	63.8
7.37	-31.45	-22.47	-29.22	0.03	58.9	60.4	63.9

7.37	-31.45	-22.47	-29.22	0.03	58.9	60.4	63.9
7.37	-31.45	-22.42	-29.22	0.03	58.8	60.5	63.9
7.37	-31.45	-22.42	-29.19	0.03	59	60.5	64.1
7.37	-31.45	-22.42	-29.19	0.03	59.1	60.5	64.1
7.37	-31.45	-22.42	-29.19	0.03	59	60.6	64.3
7.37	-31.45	-22.42	-29.19	0.03	59	60.6	64.3
7.37	-31.45	-22.37	-29.19	0.03	59	60.6	64.3
7.37	-31.41	-22.42	-29.19	0.03	59.1	60.6	64.6
7.37	-31.41	-22.37	-29.16	0.03	59.1	60.7	64.5
7.37	-31.41	-22.42	-29.16	0.03	59.1	60.7	64.6
7.36	-31.41	-22.42	-29.19	0.03	59.2	60.7	64.6
7.35	-31.41	-22.37	-29.16	0.03	59.2	60.7	64.3
7.35	-31.37	-22.37	-29.16	0.03	59.2	60.8	64.3
7.35	-31.41	-22.37	-29.13	0.03	59.2	60.7	64.3
7.35	-31.37	-22.37	-29.16	0.03	59.3	60.7	64.3
7.36	-31.37	-22.37	-29.16	0.03	59.2	60.7	64.4
7.35	-31.37	-22.37	-29.16	0.06	59.2	60.8	64.4
7.35	-31.37	-22.37	-29.16	0.03	59.2	60.8	64.2
7.35	-31.34	-22.37	-29.13	0.03	59.2	60.8	64.2
7.35	-31.34	-22.37	-29.16	0.03	59.2	60.9	64.4
7.35	-31.34	-22.37	-29.16	0.03	59.2	60.8	64.2
7.35	-31.34	-22.37	-29.13	0.03	59.2	60.9	64.2
7.35	-31.34	-22.31	-29.13	0	59.2	60.9	64
7.36	-31.34	-22.31	-29.13	0	59.2	60.9	64
7.35	-31.3	-22.37	-29.13	0.03	59.2	60.9	63.9
7.35	-31.3	-22.31	-29.13	0.03	59.2	60.8	63.7
7.36	-31.3	-22.31	-29.13	0.03	59.3	60.9	63.8
7.35	-31.3	-22.31	-29.13	0.03	59.2	60.8	63.9
7.35	-31.3	-22.37	-29.1	0	59.3	60.8	63.7
7.35	-31.3	-22.31	-29.1	0.03	59.3	60.8	63.5
7.35	-31.3	-22.31	-29.1	0	59.3	60.8	63.6
7.35	-31.3	-22.31	-29.1	0.03	59.3	60.8	63.3
7.36	-31.3	-22.31	-29.13	0.03	59.3	60.7	63.2
7.36	-31.3	-22.31	-29.1	0.03	59.3	60.7	63.3
7.35	-31.3	-22.26	-29.13	0.03	59.3	60.7	63.1
7.35	-31.26	-22.26	-29.1	0	59.2	60.7	62.9
7.35	-31.26	-22.31	-29.07	0.03	59.3	60.7	62.7
7.35	-31.26	-22.26	-29.1	0.03	59.3	60.7	62.8
7.35	-31.26	-22.26	-29.1	0.03	59.3	60.7	62.5
7.35	-31.26	-22.31	-29.07	0	59.3	60.7	62.7
7.35	-31.26	-22.31	-29.1	0	59.2	60.6	62.5
7.35	-31.26	-22.26	-29.07	0.03	59.2	60.6	62.4
7.35	-31.26	-22.31	-29.07	0.03	59.2	60.5	62.2
7.35	-31.26	-22.26	-29.07	0.03	59.2	60.5	62.3
7.35	-31.26	-22.26	-29.1	0.03	59.2	60.5	61.9
7.35	-31.26	-22.26	-29.07	0.03	59.2	60.4	62.2
7.35	-31.26	-22.31	-29.07	0.03	59.2	60.3	61.8

7.35	-31.26	-22.26	-29.07	0.03	59.2	60.4	61.6
7.35	-31.26	-22.26	-29.07	0.03	59.2	60.3	61.9
7.35	-31.19	-22.26	-29.07	0.03	59.2	60.3	61.6
7.35	-31.26	-22.26	-29.07	0.03	59.1	60.3	61.1
7.34	-31.19	-22.26	-29.07	0.03	59.1	60.3	61.4
7.34	-31.19	-22.26	-29.04	0.03	59.1	60.3	61
7.34	-31.19	-22.26	-29.04	0.03	59	60.2	61.1
7.34	-31.19	-22.26	-29.04	0.03	59	60.2	60.7
7.34	-31.26	-22.26	-29.04	0.03	58.9	60.1	60.8
7.34	-31.26	-22.26	-29.07	0	58.9	60.1	60.6
7.34	-31.19	-22.21	-29.04	0.03	58.8	59.9	60.6
7.34	-31.19	-22.26	-29	0.03	58.8	59.9	60.4
7.34	-31.19	-22.21	-29	0.03	58.8	59.9	60.4
7.34	-31.19	-22.21	-29.04	0.03	58.5	59.8	60.2
7.34	-31.19	-22.26	-29	0.03	58.5	59.8	60.1
7.34	-31.19	-22.26	-29.04	0.03	58.5	59.7	59.9
7.34	-31.15	-22.21	-29.04	0.03	58.4	59.7	59.8
7.34	-31.15	-22.26	-29	0.03	58.3	59.7	59.7
7.34	-31.15	-22.21	-29	0.03	58.3	59.6	59.5
7.33	-31.15	-22.21	-29	0.03	58.3	59.6	59.7
7.33	-31.15	-22.21	-29	0.03	58.2	59.5	59.7
7.32	-31.15	-22.21	-29	0.03	58.2	59.5	59.3
7.32	-31.15	-22.21	-29	0.03	58.2	59.5	59.6
7.33	-31.15	-22.21	-29	0.03	58.2	59.5	59.2
7.32	-31.15	-22.21	-28.97	0.06	58.2	59.4	59.4
7.33	-31.12	-22.21	-28.97	0.03	58.2	59.4	58.9
7.33	-31.15	-22.16	-29	0.03	58.2	59.3	59.2
7.33	-31.15	-22.16	-28.97	0.03	58.2	59.3	58.9
7.32	-31.12	-22.21	-28.94	0.03	58.2	59.2	58.6
7.33	-31.12	-22.21	-28.97	0.03	58.2	59.2	58.9
7.32	-31.12	-22.16	-28.94	0.03	58.2	59.2	58.5
7.33	-31.12	-22.16	-28.94	0.03	58.2	59.2	58.7
7.33	-31.12	-22.16	-28.94	0.06	58.1	59.2	58.5
7.33	-31.12	-22.16	-28.91	0.03	58.1	59.2	58.5
7.32	-31.12	-22.16	-28.94	0.03	58.1	59.2	58.2
7.32	-31.12	-22.16	-28.94	0.03	58.1	59.2	58.4
7.32	-31.12	-22.16	-28.94	0.03	58.1	59.2	58.4
7.32	-31.12	-22.11	-28.91	0.03	58	59.1	58.1
7.32	-31.12	-22.16	-28.91	0.03	57.9	59.1	58.1
7.32	-31.08	-22.11	-28.91	0.03	58	59	58.2
7.32	-31.08	-22.11	-28.91	0.03	57.8	59	58
7.32	-31.08	-22.11	-28.91	0.03	57.8	58.9	57.9
7.32	-31.04	-22.11	-28.91	0.03	57.8	58.9	57.7
7.32	-31.04	-22.11	-28.88	0.03	57.8	58.9	57.8
7.32	-31.08	-22.11	-28.91	0.03	57.8	58.9	57.5
7.32	-31.04	-22.11	-28.88	0.03	57.8	58.9	57.6
7.32	-31.08	-22.11	-28.91	0.03	57.8	58.8	57.5

7.32	-31.04	-22.11	-28.88	0.03	57.7	58.8	57.6
7.32	-31.04	-22.11	-28.88	0.03	57.7	58.8	57.7
7.32	-31.04	-22.11	-28.88	0.03	57.7	58.8	57.7
7.31	-31.04	-22.11	-28.88	0.06	57.7	58.8	57.7
7.31	-31.04	-22.11	-28.88	0.06	57.7	58.8	57.7
7.31	-31.04	-22.05	-28.88	0.03	57.7	58.8	57.6
7.31	-31.01	-22.11	-28.88	0.03	57.7	58.8	57.9
7.31	-31.01	-22.05	-28.88	0.03	57.6	58.8	57.9
7.31	-31.01	-22.11	-28.85	0.03	57.7	58.8	57.9
7.31	-31.01	-22.05	-28.85	0.06	57.7	58.8	57.8
7.31	-31.01	-22.05	-28.85	0.03	57.7	58.8	57.9
7.31	-31.01	-22.05	-28.85	0.03	57.6	58.8	58.2
7.31	-31.01	-22.05	-28.85	0.03	57.7	58.8	58.2
7.31	-30.97	-22.05	-28.85	0.03	57.6	58.9	58.2
7.31	-31.01	-22.11	-28.82	0.03	57.6	58.8	58.2
7.31	-31.01	-22.05	-28.85	0.03	57.7	58.8	58.2
7.31	-31.01	-22.05	-28.82	0.06	57.7	58.8	58.3
7.31	-31.01	-22.05	-28.85	0.03	57.7	58.8	58.3
7.31	-31.01	-22.05	-28.82	0.03	57.8	58.8	58.4
7.31	-31.01	-22.05	-28.82	0.03	57.7	58.8	58.2
7.31	-31.01	-22.05	-28.82	0.03	57.6	58.8	58.5
7.3	-31.01	-22.05	-28.82	0.03	57.6	58.8	58.5
7.3	-31.01	-22.05	-28.82	0.03	57.6	58.9	58.3
7.3	-31.01	-22.05	-28.82	0.03	57.5	58.9	58.7
7.3	-31.01	-22.05	-28.82	0.03	57.3	58.8	58.6
7.3	-30.97	-22.05	-28.82	0.03	57.4	58.9	58.7
7.3	-30.97	-22.05	-28.82	0.03	57.4	58.9	58.8
7.3	-30.97	-22.05	-28.79	0.03	57.5	58.9	59
7.29	-30.97	-22.05	-28.82	0.03	57.6	58.9	59.2
7.3	-30.97	-22.05	-28.79	0.03	57.5	58.9	59.2
7.3	-30.97	-22	-28.79	0.03	57.6	58.9	59.5
7.3	-30.97	-22.05	-28.79	0.03	57.6	58.9	59.4
7.3	-30.97	-22	-28.79	0.03	57.6	59	59.8
7.3	-30.97	-22.05	-28.79	0.03	57.5	59	60
7.3	-30.97	-22	-28.79	0	57.6	59.1	60.2
7.3	-30.97	-22	-28.76	0.03	57.8	59.1	60.1
7.3	-30.97	-22	-28.76	0.03	57.8	59.1	60.4
7.3	-30.97	-22	-28.76	0.03	57.9	59.2	60.7
7.3	-30.97	-21.95	-28.76	0.03	58	59.2	60.6
7.3	-30.97	-21.95	-28.76	0.03	57.9	59.2	60.7
7.3	-30.97	-21.95	-28.76	0.03	57.6	59.2	61.1
7.3	-30.93	-21.95	-28.76	0	57.7	59.2	61.5
7.3	-30.97	-21.95	-28.73	0.03	57.8	59.3	61.6
7.3	-30.93	-22	-28.73	0.03	57.7	59.3	61.7
7.29	-30.93	-21.95	-28.73	0.03	58	59.4	62
7.29	-30.93	-21.95	-28.73	0	57.7	59.4	62
7.29	-30.93	-21.9	-28.73	0	57.8	59.5	62.4

7.29	-30.93	-21.95	-28.73	0.03	58	59.5	62.5
7.29	-30.93	-21.95	-28.73	0.03	57.7	59.6	62.8
7.29	-30.9	-21.95	-28.7	0.03	58	59.6	63
7.29	-30.9	-21.95	-28.7	0	58.1	59.7	63.3
7.29	-30.9	-21.95	-28.7	0.03	58.1	59.8	63.5
7.29	-30.9	-21.9	-28.7	0	58.2	59.8	63.8
7.29	-30.9	-21.9	-28.67	0.03	58.4	59.9	64.1
7.29	-30.9	-21.9	-28.67	0	58.3	60.1	64.3
7.29	-30.9	-21.9	-28.67	0	58.4	60.1	64.7
7.29	-30.9	-21.85	-28.67	0	58.4	60.2	64.7
7.29	-30.86	-21.9	-28.67	0.03	58.7	60.3	65.1
7.29	-30.86	-21.85	-28.64	0	58.5	60.3	65.2
7.29	-30.86	-21.85	-28.64	0	58.7	60.3	65.4
7.29	-30.86	-21.85	-28.64	0	58.9	60.3	65.6
7.29	-30.82	-21.85	-28.64	0	58.8	60.4	65.8
7.3	-30.82	-21.85	-28.64	0	58.9	60.4	65.7
7.3	-30.82	-21.85	-28.58	0	58.7	60.5	65.9
7.3	-30.82	-21.85	-28.64	0	58.9	60.5	66.1
7.3	-30.82	-21.79	-28.58	0	58.8	60.6	66.3
7.3	-30.79	-21.85	-28.58	0.03	58.9	60.7	66.1
7.3	-30.79	-21.85	-28.58	0.03	58.9	60.7	66.3
7.3	-30.79	-21.79	-28.58	0	59.2	60.7	66.4
7.3	-30.79	-21.79	-28.58	0	59.1	60.8	66.7
7.29	-30.79	-21.79	-28.58	0	59.2	60.8	66.7
7.3	-30.75	-21.79	-28.58	0	59.3	60.9	66.6
7.29	-30.75	-21.85	-28.58	-0.06	59.3	60.9	66.4
7.3	-30.75	-21.79	-28.58	0	59.3	61	66.6
7.3	-30.75	-21.79	-28.55	0	59.4	61	66.8
7.3	-30.75	-21.79	-28.55	0	59.3	61	66.7
7.29	-30.75	-21.79	-28.55	0	59.5	61.1	66.7
7.29	-30.71	-21.79	-28.55	0	59.4	61.1	66.8
7.29	-30.71	-21.74	-28.55	0	59.5	61.1	66.5
7.29	-30.71	-21.79	-28.55	0.03	59.4	61.1	66.7
7.29	-30.71	-21.79	-28.52	0	59.5	61.2	66.8
7.29	-30.68	-21.74	-28.55	0	59.5	61.2	66.7
7.29	-30.68	-21.79	-28.55	0	59.6	61.2	66.7
7.29	-30.71	-21.74	-28.55	0	59.6	61.3	66.7
7.29	-30.71	-21.74	-28.55	-0.06	59.7	61.3	66.6
7.29	-30.68	-21.74	-28.55	0	59.7	61.3	66.5
7.29	-30.68	-21.74	-28.55	0	59.7	61.2	66.5
7.29	-30.64	-21.74	-28.52	0	59.8	61.3	66.2
7.29	-30.68	-21.74	-28.55	0.03	59.7	61.3	66.3
7.29	-30.68	-21.74	-28.52	0	59.7	61.3	66.1
7.29	-30.64	-21.74	-28.52	0	59.7	61.3	66.1
7.29	-30.64	-21.74	-28.52	0	59.7	61.3	65.8
7.29	-30.64	-21.74	-28.52	0.03	59.7	61.3	65.9
7.29	-30.6	-21.74	-28.52	0	59.7	61.3	65.8

7.29	-30.64	-21.74	-28.52	0.03	59.7	61.3	65.8
7.29	-30.64	-21.74	-28.52	0	59.6	61.3	65.7
7.29	-30.64	-21.74	-28.52	0	59.6	61.3	65.4
7.29	-30.64	-21.69	-28.52	0	59.7	61.3	65.3
7.29	-30.64	-21.69	-28.52	0	59.6	61.3	64.9
7.29	-30.64	-21.74	-28.52	0	59.7	61.2	64.9
7.29	-30.64	-21.74	-28.49	0	59.5	61.2	64.9
7.29	-30.64	-21.74	-28.49	0	59.6	61.2	64.8
7.29	-30.6	-21.69	-28.52	0	59.6	61.2	64.5
7.29	-30.6	-21.69	-28.49	0	59.7	61.2	64.4
7.29	-30.64	-21.69	-28.49	0	59.6	61.2	64.5
7.29	-30.6	-21.69	-28.49	0	59.6	61.1	64.4
7.29	-30.6	-21.74	-28.49	0	59.6	61.1	64
7.29	-30.6	-21.69	-28.49	-0.06	59.6	61.1	64.1
7.29	-30.6	-21.69	-28.46	0	59.6	61.1	64.1
7.29	-30.6	-21.74	-28.46	0	59.7	61	63.6
7.29	-30.6	-21.69	-28.46	0	59.6	61	63.7
7.29	-30.6	-21.69	-28.46	0	59.6	61	63.6
7.29	-30.6	-21.69	-28.46	0	59.5	60.9	63.3
7.29	-30.6	-21.69	-28.46	0	59.5	60.8	63.3
7.29	-30.57	-21.69	-28.46	0	59.5	60.9	63
7.29	-30.6	-21.69	-28.46	0	59.5	60.8	63.2
7.28	-30.57	-21.69	-28.46	0	59.4	60.8	62.7
7.28	-30.57	-21.69	-28.46	0	59.4	60.7	62.7
7.28	-30.57	-21.64	-28.42	0	59.4	60.7	62.5
7.28	-30.57	-21.69	-28.42	0	59.4	60.6	62.5
7.28	-30.57	-21.64	-28.46	0	59.3	60.6	62.5
7.28	-30.57	-21.64	-28.42	0	59.2	60.5	62.2
7.28	-30.57	-21.69	-28.42	0	59.3	60.5	62.2
7.28	-30.57	-21.69	-28.42	0	59.2	60.4	61.8
7.28	-30.53	-21.69	-28.42	0	59.1	60.3	61.6
7.28	-30.53	-21.64	-28.39	0	58.9	60.3	61.4
7.28	-30.53	-21.64	-28.39	0.03	58.9	60.3	61.4
7.28	-30.53	-21.64	-28.39	0	59	60.3	61
7.28	-30.53	-21.64	-28.39	0	58.8	60.2	61.1
7.28	-30.53	-21.64	-28.39	0	58.8	60.1	61.1
7.28	-30.53	-21.64	-28.39	0	58.8	60.1	60.4
7.28	-30.49	-21.64	-28.39	0.03	58.9	59.9	60.4
7.27	-30.53	-21.64	-28.39	0	58.8	59.9	60.3
7.27	-30.53	-21.64	-28.39	0.03	58.7	59.8	60.2
7.26	-30.53	-21.59	-28.36	0.03	58.5	59.8	60.3
7.26	-30.49	-21.59	-28.39	0.03	58.5	59.8	60
7.26	-30.53	-21.59	-28.36	0.03	58.5	59.7	59.8
7.26	-30.49	-21.59	-28.36	0	58.4	59.6	59.7
7.26	-30.49	-21.59	-28.36	0	58.4	59.5	59.3
7.26	-30.49	-21.59	-28.36	0	58.3	59.5	59.2
7.26	-30.46	-21.59	-28.36	0	58.3	59.4	59.2

7.27	-30.46	-21.59	-28.36	0.03	58.3	59.4	59.2
7.26	-30.46	-21.59	-28.36	0.03	58.3	59.3	59
7.26	-30.46	-21.64	-28.36	0.03	58.2	59.3	58.7
7.26	-30.46	-21.59	-28.36	0.03	58.2	59.2	58.7
7.26	-30.46	-21.59	-28.36	0.03	58.2	59.2	58.4
7.26	-30.46	-21.59	-28.36	0.03	58.1	59.2	58.3
7.26	-30.42	-21.59	-28.36	0	58.1	59.2	58.2
7.26	-30.46	-21.54	-28.33	0	58.1	59.1	58.1
7.26	-30.42	-21.54	-28.33	0.03	58	59.1	57.9
7.26	-30.42	-21.54	-28.33	0.03	58.1	59.1	58
7.26	-30.46	-21.59	-28.33	0.03	58.1	59.1	57.7
7.26	-30.42	-21.59	-28.33	0.03	58	59.1	57.8
7.26	-30.46	-21.59	-28.33	0.03	58.1	59.1	58
7.26	-30.42	-21.54	-28.3	0	58	59.1	57.9
7.26	-30.42	-21.54	-28.33	0.03	58	59.1	57.8
7.26	-30.42	-21.59	-28.33	0.03	58	59.1	58.1
7.26	-30.42	-21.54	-28.33	0.03	58.1	59.2	58.1
7.26	-30.42	-21.59	-28.3	0.03	58	59.2	58.2
7.26	-30.42	-21.54	-28.3	0.03	58.1	59.1	58.4
7.26	-30.42	-21.54	-28.3	0.03	57.9	59.2	58.3
7.26	-30.42	-21.54	-28.33	0.03	58	59.2	58.6
7.26	-30.42	-21.59	-28.3	0.03	58.1	59.2	59
7.26	-30.42	-21.54	-28.3	0.03	57.9	59.2	59.3
7.26	-30.42	-21.54	-28.3	0.03	57.9	59.2	59.5
7.26	-30.42	-21.54	-28.3	0.03	58.1	59.2	59.7
7.25	-30.42	-21.54	-28.27	0.03	58	59.2	60.1
7.25	-30.42	-21.48	-28.27	0.03	58	59.3	60.4
7.25	-30.38	-21.54	-28.3	0.03	57.9	59.3	60.7
7.25	-30.42	-21.54	-28.27	0.03	58.1	59.4	61.2
7.25	-30.38	-21.54	-28.3	0.03	58.1	59.5	61.5
7.25	-30.38	-21.54	-28.27	0.03	58.1	59.6	61.7
7.25	-30.38	-21.48	-28.27	0.03	58.1	59.7	62.1
7.25	-30.38	-21.54	-28.27	0.03	58.2	59.7	62.4
7.25	-30.42	-21.48	-28.27	0	57.9	59.8	62.8
7.25	-30.38	-21.54	-28.27	0	58.2	59.9	63.1
7.25	-30.42	-21.48	-28.24	0	58.3	60.1	63.6
7.25	-30.38	-21.48	-28.24	0	58.4	60.2	63.9
7.25	-30.42	-21.48	-28.24	0.03	58.3	60.3	64.5
7.25	-30.38	-21.48	-28.24	0	58.4	60.3	64.7
7.26	-30.38	-21.48	-28.24	0	58.5	60.4	65.2
7.25	-30.38	-21.48	-28.21	0	58.8	60.4	65.4
7.25	-30.38	-21.38	-28.24	0	58.8	60.7	66
7.25	-30.38	-21.48	-28.21	0	58.8	60.7	66.4
7.25	-30.38	-21.38	-28.21	-0.06	59	62	66.8
7.26	-30.38	-21.38	-28.18	-0.06	59.9	63.2	67
7.26	-30.38	-21.38	-28.21	0	60.3	63.7	67.5
7.26	-30.31	-21.38	-28.18	-0.06	60.6	62.9	67.9

7.26	-30.38	-21.38	-28.18	0	60.5	62.8	68.2
7.26	-30.31	-21.38	-28.18	0	60.9	62.7	68.6
7.26	-30.31	-21.38	-28.18	-0.06	60.5	62.7	69
7.27	-30.31	-21.38	-28.15	-0.06	60.5	62.7	69.4
7.26	-30.31	-21.38	-28.18	-0.06	60.9	62.8	69.9
7.26	-30.27	-21.38	-28.18	-0.06	60.7	62.8	70.1
7.26	-30.31	-21.38	-28.18	-0.06	61	62.9	70.4
7.26	-30.31	-21.38	-28.15	-0.06	61	62.9	70.7
7.26	-30.27	-21.38	-28.15	-0.06	61.1	63	71
7.27	-30.31	-21.33	-28.15	-0.06	60.9	63.1	71.4
7.26	-30.27	-21.33	-28.15	-0.06	60.7	63.1	71.4
7.28	-30.27	-21.33	-28.15	0	60.7	63.2	71.9
7.27	-30.27	-21.33	-28.15	-0.06	60.9	63.2	72.2
7.28	-30.24	-21.33	-28.12	0	60.9	63.3	72.3
7.28	-30.24	-21.28	-28.12	-0.06	61	63.4	72.6
7.28	-30.24	-21.28	-28.12	0	61	63.5	72.8
7.28	-30.24	-21.28	-28.12	-0.06	60.9	63.6	73.2
7.28	-30.2	-21.28	-28.09	-0.06	61	63.6	73.2
7.28	-30.24	-21.28	-28.09	-0.06	61	63.7	73.5
7.28	-30.24	-21.22	-28.09	-0.06	60.9	63.7	73.6
7.28	-30.2	-21.28	-28.09	-0.06	61.1	63.8	73.8
7.28	-30.2	-21.28	-28.06	-0.06	61.2	63.9	74.3
7.28	-30.2	-21.22	-28.06	-0.06	61.3	64	74.4
7.28	-30.2	-21.22	-28.06	-0.06	61.4	64.1	74.4
7.29	-30.16	-21.22	-28.06	-0.06	61.3	64.1	74.5
7.29	-30.16	-21.22	-28.06	-0.06	61.4	64.2	74.6
7.29	-30.13	-21.22	-28.06	-0.06	61.4	64.2	74.5
7.29	-30.16	-21.22	-28.09	-0.06	61.5	64.2	74.3
7.29	-30.13	-21.22	-28.09	-0.06	61.5	64.3	74.3
7.29	-30.13	-21.22	-28.06	-0.06	61.5	64.3	74.5
7.29	-30.13	-21.22	-28.06	-0.06	61.7	64.3	74.4
7.29	-30.09	-21.22	-28.06	-0.06	61.7	64.3	74.2
7.29	-30.13	-21.22	-28.06	-0.06	61.6	64.4	74.2
7.29	-30.13	-21.22	-28.06	-0.06	61.7	64.3	74
7.29	-30.09	-21.22	-28.06	-0.06	61.8	64.3	73.7
7.29	-30.09	-21.22	-28.03	-0.06	61.8	64.3	73.7
7.29	-30.13	-21.22	-28.06	-0.06	61.9	64.3	73.3
7.29	-30.09	-21.17	-28.03	-0.06	62	64.3	73.4
7.29	-30.09	-21.17	-28.03	-0.06	62.1	64.3	72.9
7.29	-30.09	-21.17	-28.03	-0.06	62.2	64.2	72.6
7.29	-30.09	-21.17	-28.03	-0.06	62.2	64.2	72.2
7.29	-30.09	-21.17	-28.03	-0.06	62.2	64.2	72.3
7.29	-30.09	-21.17	-28.03	-0.09	62.2	64.2	72
7.29	-30.09	-21.17	-28.03	-0.06	62.2	64.1	71.5
7.29	-30.09	-21.17	-28.03	-0.06	62	64.1	71.3
7.29	-30.05	-21.17	-28.03	-0.06	62	64.1	71.2
7.29	-30.05	-21.17	-28.03	-0.06	62	64.1	71.1

7.29	-30.05	-21.17	-28.03	-0.06	61.8	64	70.7
7.29	-30.02	-21.17	-28.03	-0.06	62.1	63.9	70.3
7.29	-30.05	-21.17	-28	-0.06	62.1	63.9	70.1
7.29	-30.05	-21.17	-28.03	-0.06	62.1	63.8	70.1
7.29	-30.05	-21.12	-28	-0.06	62.1	63.7	70
7.29	-30.05	-21.17	-28	-0.06	62	63.7	69.5
7.29	-30.02	-21.12	-28	-0.06	62	63.6	69.4
7.28	-30.05	-21.17	-28	-0.06	62	63.6	69
7.28	-30.05	-21.12	-28	-0.06	62	63.6	69
7.28	-30.02	-21.12	-27.97	-0.06	62	63.6	68.5
7.28	-30.02	-21.12	-27.97	-0.06	62	63.6	68.5
7.28	-30.05	-21.12	-27.97	-0.06	61.9	63.5	68.2
7.28	-30.02	-21.12	-27.97	-0.06	61.9	63.5	68
7.28	-30.02	-21.12	-27.97	-0.06	61.9	63.4	67.9
7.28	-30.02	-21.12	-27.97	-0.06	61.9	63.4	67.7
7.28	-29.98	-21.12	-27.97	-0.06	61.8	63.4	67.4
7.28	-29.98	-21.12	-27.97	-0.06	61.7	63.4	67.4
7.28	-30.02	-21.12	-27.94	-0.06	61.7	63.3	67.1
7.28	-29.98	-21.12	-27.97	-0.06	61.7	63.3	67
7.28	-29.98	-21.07	-27.94	-0.06	61.7	63.2	66.8
7.26	-29.98	-21.12	-27.97	-0.06	61.6	63.2	66.7
7.26	-29.98	-21.12	-27.94	-0.06	61.7	63.2	66.6
7.26	-29.98	-21.12	-27.94	-0.06	61.6	63.1	66.4
7.26	-29.95	-21.07	-27.94	-0.06	61.5	63.1	66.3
7.26	-29.98	-21.12	-27.94	-0.06	61.6	63	66.2
7.26	-29.98	-21.07	-27.91	-0.06	61.5	63	66
7.26	-29.98	-21.07	-27.91	-0.06	61.5	62.9	65.8
7.26	-29.95	-21.07	-27.91	-0.06	61.5	62.9	65.7
7.26	-29.95	-21.07	-27.91	-0.06	61.4	62.8	65.7
7.26	-29.95	-21.07	-27.91	-0.06	61.4	62.8	65.4
7.26	-29.95	-21.07	-27.91	-0.06	61.4	62.7	65.4
7.26	-29.95	-21.07	-27.91	-0.06	61.4	62.6	65.1
7.26	-29.95	-21.07	-27.91	-0.06	61.4	62.6	65
7.26	-29.95	-21.07	-27.91	-0.06	61.3	62.6	64.7
7.26	-29.95	-21.12	-27.91	0	61.3	62.5	64.7
7.26	-29.91	-21.07	-27.88	-0.06	61.3	62.5	64.7
7.26	-29.95	-21.07	-27.91	-0.06	61.3	62.5	64.6
7.26	-29.91	-21.02	-27.88	0	61.2	62.5	64.6
7.26	-29.91	-21.02	-27.84	-0.06	61.1	62.5	64.2
7.26	-29.91	-21.02	-27.88	-0.06	61.1	62.4	64
7.26	-29.91	-21.02	-27.88	-0.06	61	62.4	64
7.26	-29.91	-21.02	-27.88	-0.06	60.9	62.2	63.8
7.26	-29.91	-21.02	-27.88	0	60.9	62.2	63.7
7.26	-29.87	-21.02	-27.88	0	60.6	62.1	63.6
7.25	-29.87	-21.02	-27.88	-0.06	60.5	62	63.6
7.25	-29.87	-21.02	-27.84	0	60.4	62	63.3
7.25	-29.87	-21.02	-27.88	-0.06	60.5	61.9	63

7.25	-29.87	-21.02	-27.88	0	60.5	61.9	63
7.25	-29.84	-21.02	-27.84	-0.06	60.5	61.8	62.7
7.25	-29.84	-21.02	-27.88	0	60.4	61.8	62.7
7.25	-29.84	-21.02	-27.88	0	60.4	61.7	62.4
7.25	-29.84	-21.02	-27.88	0	60.3	61.6	62.5
7.25	-29.8	-21.02	-27.88	0	60.2	61.5	62.4
7.25	-29.8	-21.02	-27.88	0	60.2	61.5	62.2
7.25	-29.8	-21.02	-27.84	0	60.2	61.4	62.1
7.24	-29.8	-21.02	-27.88	-0.06	60	61.4	61.6
7.24	-29.8	-21.02	-27.88	0	59.8	61.4	61.6
7.24	-29.76	-21.02	-27.88	-0.06	59.7	61.3	61.6
7.24	-29.76	-21.02	-27.88	-0.06	59.6	61.3	61.4
7.24	-29.8	-21.02	-27.88	0	59.8	61.2	61.1
7.24	-29.8	-21.02	-27.88	0	59.7	61.2	61.2
7.24	-29.8	-21.07	-27.88	0	59.7	61.1	61
7.24	-29.76	-21.02	-27.88	0	59.6	61.1	60.8
7.24	-29.76	-21.02	-27.88	0	59.7	61.1	60.7
7.24	-29.8	-21.07	-27.88	0	59.6	61	60.5
7.24	-29.76	-21.02	-27.88	0	59.7	61	60.8
7.23	-29.76	-21.02	-27.88	0	59.6	60.9	60.8
7.23	-29.76	-21.02	-27.88	0	59.6	60.9	60.7
7.23	-29.76	-21.02	-27.88	0	59.5	60.9	60.8
7.23	-29.76	-21.02	-27.88	-0.06	59.5	60.9	60.8
7.23	-29.76	-21.02	-27.88	0	59.4	60.8	61.1
7.23	-29.76	-21.02	-27.84	0	59.4	60.8	61.2
7.23	-29.76	-21.02	-27.84	0	59.4	60.8	60.9
7.23	-29.76	-21.02	-27.88	-0.06	59.4	60.8	61.4
7.23	-29.76	-21.02	-27.88	0	59.4	60.8	61.2
7.23	-29.76	-21.02	-27.88	0	59.4	60.8	61.4
7.23	-29.76	-21.02	-27.84	0	59.4	60.8	61.6
7.23	-29.76	-21.02	-27.88	0	59.4	60.8	61.8
7.23	-29.76	-21.02	-27.88	0	59.3	60.8	61.7
7.23	-29.76	-20.96	-27.88	0	59.3	60.8	61.8
7.23	-29.76	-21.02	-27.84	0	59.3	60.8	62.1
7.22	-29.76	-21.02	-27.88	0.03	59.3	60.8	62
7.22	-29.76	-21.02	-27.88	0	59.3	60.8	62.3
7.22	-29.76	-21.02	-27.88	0	59.3	60.8	62.3
7.22	-29.76	-21.02	-27.88	0	59.3	60.8	62.5
7.22	-29.76	-21.02	-27.88	0	59.3	60.8	62.7
7.22	-29.76	-21.02	-27.88	0	59.3	60.7	62.6
7.22	-29.76	-21.02	-27.84	0	59.3	60.8	63
7.22	-29.76	-21.02	-27.88	0.03	59.2	60.8	63
7.22	-29.76	-21.02	-27.84	0	59.2	60.8	62.9
7.22	-29.76	-21.02	-27.84	0	59.2	60.8	63.5
7.22	-29.76	-21.02	-27.84	0	59.2	60.9	63.5
7.22	-29.76	-21.02	-27.84	0	59.2	60.9	63.6
7.22	-29.76	-21.02	-27.88	0	59.2	60.9	63.9

7.22	-29.76	-21.02	-27.84	0	59.2	60.9	64
7.22	-29.8	-21.02	-27.88	0	59.2	60.9	64.2
7.22	-29.76	-20.96	-27.88	0	59.2	60.9	64.3
7.22	-29.76	-20.96	-27.88	0	59.2	61	64.4
7.22	-29.76	-21.02	-27.88	0	59.2	61	64.7
7.22	-29.76	-21.02	-27.88	0	59.3	61	64.9
7.22	-29.76	-21.02	-27.88	0	59.3	61	64.9
7.22	-29.76	-21.02	-27.84	0	59.2	61.1	65.3
7.22	-29.76	-20.96	-27.84	0.03	59.2	61.2	65.4
7.22	-29.76	-20.96	-27.84	0	59.2	61.3	65.4
7.22	-29.76	-21.02	-27.84	0.03	59.3	61.2	65.7
7.22	-29.73	-21.02	-27.84	0	59.3	61.3	65.8
7.22	-29.76	-20.96	-27.84	0	59.4	61.3	65.9
7.22	-29.76	-20.96	-27.84	0	59.4	61.3	66
7.22	-29.76	-21.02	-27.84	0	59.4	61.3	66.1
7.22	-29.73	-20.96	-27.78	0	59.4	61.3	66.3
7.22	-29.76	-21.02	-27.78	0	59.5	61.3	66.4
7.22	-29.76	-20.96	-27.78	-0.06	59.6	61.4	66.3
7.21	-29.73	-20.91	-27.78	0	59.5	61.4	66.6
7.21	-29.73	-20.96	-27.78	0	59.5	61.4	66.6
7.21	-29.73	-20.96	-27.78	0	59.5	61.4	66.4
7.21	-29.73	-20.96	-27.78	0	59.6	61.4	66.6
7.21	-29.73	-20.96	-27.78	0	59.5	61.4	66.5
7.21	-29.73	-20.96	-27.78	0	59.6	61.4	66.5
7.21	-29.73	-20.96	-27.78	0	59.7	61.4	66.5
7.21	-29.69	-20.96	-27.78	0	59.6	61.4	66.2
7.21	-29.73	-20.96	-27.78	0	59.7	61.4	66.4
7.21	-29.69	-20.96	-27.78	0	59.5	61.4	66.1
7.21	-29.69	-20.96	-27.78	0	59.8	61.4	66.1
7.21	-29.69	-20.96	-27.78	0	59.8	61.4	66
7.21	-29.69	-20.96	-27.78	0	59.7	61.4	65.9
7.21	-29.69	-20.96	-27.78	0	59.7	61.4	65.8
7.21	-29.69	-20.96	-27.78	0	59.8	61.4	65.8
7.21	-29.69	-20.96	-27.78	-0.06	59.7	61.4	65.7
7.21	-29.69	-20.96	-27.78	0	59.8	61.4	65.3
7.21	-29.69	-20.91	-27.75	0	59.9	61.4	65.4
7.21	-29.65	-20.91	-27.75	0	59.8	61.4	65.3
7.21	-29.65	-20.91	-27.78	0	59.8	61.4	65
7.21	-29.65	-20.91	-27.75	0	59.8	61.4	65
7.21	-29.65	-20.91	-27.75	0	59.8	61.4	64.8
7.21	-29.62	-20.96	-27.75	0	59.7	61.4	64.8
7.21	-29.62	-20.91	-27.78	0	59.8	61.3	64.7
7.21	-29.62	-20.91	-27.75	0	59.9	61.3	64.4
7.21	-29.62	-20.91	-27.75	0	60	61.4	64.3
7.21	-29.62	-20.96	-27.78	0	59.9	61.3	64.1
7.21	-29.65	-20.91	-27.78	0	60	61.2	63.8
7.21	-29.62	-20.91	-27.78	0	59.6	61.1	63.9

7.2	-29.62	-20.91	-27.75	0	59.6	61.1	63.6
7.2	-29.62	-20.96	-27.75	0	59.3	61.1	63.5
7.2	-29.62	-20.91	-27.78	0	59.3	61	63.2
7.2	-29.62	-20.91	-27.78	0	59.3	60.9	62.9
7.2	-29.62	-20.91	-27.78	0	59.1	60.9	62.8
7.2	-29.62	-20.96	-27.75	0	59	60.8	62.5
7.2	-29.62	-20.91	-27.75	0.03	58.8	60.8	62.2
7.2	-29.62	-20.96	-27.75	0.03	58.8	60.6	61.9
7.2	-29.62	-20.91	-27.78	0	58.7	60.6	61.6
7.2	-29.62	-20.91	-27.78	0	58.5	60.5	61.6
7.2	-29.62	-20.91	-27.78	0	58.5	60.4	61.4
7.2	-29.62	-20.91	-27.75	0	58.5	60.3	61.2
7.2	-29.62	-20.91	-27.75	0	58.5	60.3	60.9
7.2	-29.62	-20.91	-27.75	0.03	58.7	60.3	60.7
7.2	-29.62	-20.91	-27.75	0.03	58.7	60.2	60.3
7.2	-29.62	-20.91	-27.75	0.03	58.5	60.1	60
7.19	-29.62	-20.91	-27.75	0.03	58.4	59.9	60
7.19	-29.62	-20.96	-27.78	0.03	58.4	59.8	59.7
7.19	-29.62	-20.91	-27.75	0.03	58.3	59.7	59.7
7.19	-29.62	-20.91	-27.75	0.03	58.3	59.6	59.3
7.19	-29.62	-20.91	-27.78	0.03	58.2	59.5	59
7.19	-29.62	-20.91	-27.75	0.03	58.2	59.4	58.9
7.19	-29.62	-20.91	-27.75	0.03	58.2	59.4	58.5
7.19	-29.62	-20.96	-27.78	0.03	58.1	59.2	58.3
7.19	-29.62	-20.91	-27.75	0.03	58.1	59.2	58.2
7.19	-29.62	-20.91	-27.75	0.03	58	59.2	57.9
7.19	-29.62	-20.91	-27.78	0.06	57.9	59.1	57.9
7.19	-29.62	-20.91	-27.75	0.06	57.8	59	57.7
7.19	-29.58	-20.91	-27.75	0.03	57.8	58.9	57.2
7.19	-29.58	-20.91	-27.75	0.03	57.6	58.8	57.1
7.18	-29.62	-20.91	-27.75	0.03	57.6	58.7	57.1
7.18	-29.62	-20.91	-27.75	0.06	57.5	58.6	56.6
7.18	-29.62	-20.91	-27.75	0.03	57.3	58.5	56.3
7.18	-29.62	-20.91	-27.75	0.06	57.2	58.4	56.3
7.18	-29.62	-20.91	-27.75	0.03	57.1	58.4	56.2
7.18	-29.62	-20.91	-27.75	0.03	57.1	58.3	55.9
7.18	-29.62	-20.91	-27.72	0.03	57.1	58.2	55.8
7.18	-29.58	-20.91	-27.72	0.03	57.1	58.2	55.5
7.18	-29.62	-20.91	-27.72	0.03	57	58.2	55.3
7.18	-29.62	-20.91	-27.72	0.03	56.9	58.2	55.1
7.17	-29.62	-20.91	-27.72	0.06	56.8	58.1	55.1
7.16	-29.62	-20.86	-27.72	0.03	56.8	58.1	54.7
7.18	-29.62	-20.86	-27.72	0.06	56.7	58	54.4
7.18	-29.62	-20.91	-27.72	0.03	56.6	57.9	54.3
7.18	-29.62	-20.91	-27.72	0.06	56.6	57.9	54.4
7.17	-29.62	-20.86	-27.72	0.03	56.4	57.9	53.9
7.17	-29.62	-20.86	-27.72	0.03	56.3	57.8	53.9

7.17	-29.62	-20.86	-27.72	0.06	56.3	57.8	53.8
7.17	-29.58	-20.86	-27.72	0.06	56.2	57.6	53.9
7.17	-29.58	-20.86	-27.72	0.06	56.2	57.6	53.7
7.17	-29.58	-20.86	-27.69	0.06	56.2	57.5	53.4
7.17	-29.58	-20.86	-27.69	0.06	56.1	57.5	53.4
7.17	-29.58	-20.86	-27.72	0.03	56	57.4	53.3
7.17	-29.58	-20.86	-27.69	0.06	56	57.3	53.1
7.17	-29.58	-20.86	-27.72	0.06	56	57.2	53
7.17	-29.58	-20.86	-27.72	0.06	55.9	57.2	52.8
7.16	-29.58	-20.86	-27.72	0.06	55.9	57.1	52.7
7.16	-29.58	-20.86	-27.69	0.06	55.8	57.1	52.7
7.16	-29.54	-20.86	-27.69	0.06	55.7	57.1	52.5
7.15	-29.54	-20.86	-27.72	0.06	55.7	57.1	52.4
7.16	-29.54	-20.91	-27.69	0.06	55.7	57.1	52.4
7.16	-29.54	-20.91	-27.72	0.06	55.6	57.1	52.2
7.16	-29.54	-20.86	-27.72	0.06	55.7	57	52.1
7.16	-29.54	-20.91	-27.72	0.06	55.7	57.1	52.4
7.16	-29.54	-20.86	-27.72	0.06	55.7	57.1	52.6
7.16	-29.54	-20.91	-27.72	0.06	55.8	57.1	52.4
7.16	-29.58	-20.91	-27.72	0.06	55.8	57.1	52.8
7.16	-29.58	-20.91	-27.72	0.06	55.7	57.1	53.1
7.16	-29.54	-20.91	-27.72	0.09	55.8	57.1	53.2
7.16	-29.54	-20.91	-27.72	0.06	55.9	57.2	53.2
7.16	-29.54	-20.86	-27.72	0.06	55.9	57.2	53.7
7.16	-29.58	-20.91	-27.69	0.06	56	57.2	53.8
7.16	-29.58	-20.91	-27.69	0.06	56	57.3	54.1
7.16	-29.54	-20.86	-27.69	0.06	56	57.4	54.3
7.16	-29.54	-20.86	-27.69	0.06	56.1	57.5	54.6
7.16	-29.54	-20.86	-27.69	0.06	56.4	57.6	55.1
7.16	-29.54	-20.86	-27.69	0.06	56.2	57.5	55.2
7.16	-29.54	-20.86	-27.69	0.06	56.3	57.6	55.6
7.16	-29.54	-20.91	-27.69	0.06	56.2	57.6	55.7
7.16	-29.54	-20.86	-27.69	0.06	56.6	57.8	56
7.15	-29.54	-20.86	-27.69	0.06	56.4	57.9	56.2
7.16	-29.54	-20.86	-27.69	0.06	56.4	57.9	56.9
7.16	-29.54	-20.86	-27.69	0.06	56.4	58	57.1
7.16	-29.54	-20.86	-27.69	0.06	56.3	58.1	57.5
7.16	-29.54	-20.86	-27.69	0.06	56.7	58.2	57.5
7.16	-29.54	-20.86	-27.69	0.06	57	58.2	58
7.16	-29.58	-20.86	-27.69	0.06	56.9	58.2	58.2
7.16	-29.54	-20.86	-27.69	0.06	56.9	58.2	58.5
7.16	-29.54	-20.86	-27.66	0.06	57.1	58.3	58.9
7.16	-29.54	-20.86	-27.66	0.06	57	58.3	59.5
7.16	-29.58	-20.81	-27.66	0.06	57.1	58.4	59.5
7.16	-29.58	-20.86	-27.66	0.06	57.2	58.6	60.1
7.16	-29.54	-20.81	-27.66	0.03	57.1	58.6	60.3
7.16	-29.58	-20.81	-27.66	0.06	57.2	58.6	60.6

7.16	-29.54	-20.86	-27.66	0.03	57.2	58.7	61.1
7.16	-29.54	-20.81	-27.66	0.06	57.1	58.8	61.4
7.16	-29.54	-20.86	-27.66	0.06	57.3	58.9	61.6
7.15	-29.54	-20.81	-27.63	0.06	57.1	59	61.9
7.16	-29.58	-20.81	-27.63	0.03	57.5	59.1	62.5
7.16	-29.58	-20.81	-27.63	0.03	57.4	59.2	62.7
7.16	-29.54	-20.81	-27.63	0.03	57.6	59.2	63
7.16	-29.54	-20.86	-27.63	0.06	57.4	59.2	63.1
7.16	-29.54	-20.81	-27.63	0.03	57.7	59.4	63.7
7.16	-29.54	-20.76	-27.63	0.03	57.6	59.5	63.8
7.16	-29.54	-20.76	-27.6	0.06	57.7	59.6	64.5
7.16	-29.54	-20.81	-27.63	0.03	58	59.7	64.7
7.16	-29.54	-20.76	-27.63	0.06	57.9	59.9	65
7.16	-29.54	-20.76	-27.6	0.03	58.1	59.9	65.2
7.16	-29.51	-20.76	-27.6	0.03	58.2	60.1	65.4
7.16	-29.54	-20.76	-27.6	0.03	58.2	60.2	65.8
7.16	-29.54	-20.71	-27.6	0.03	58.2	60.3	66
7.16	-29.51	-20.81	-27.57	0.06	58.3	60.3	66.1
7.16	-29.51	-20.76	-27.57	0.03	58.4	60.3	66.3
7.16	-29.51	-20.71	-27.6	0.03	58.3	60.5	66.8
7.16	-29.51	-20.76	-27.57	0.03	58.4	60.5	66.8
7.16	-29.43	-20.76	-27.57	0.03	58.5	60.6	66.9
7.16	-29.43	-20.76	-27.57	0.03	58.5	60.7	67
7.16	-29.43	-20.76	-27.57	0.03	58.7	60.8	67.3
7.16	-29.51	-20.71	-27.57	0.03	58.7	60.8	67.4
7.16	-29.43	-20.76	-27.54	0.03	58.8	60.9	67.7
7.16	-29.43	-20.76	-27.57	0.06	58.8	60.9	67.9
7.16	-29.43	-20.76	-27.57	0.03	58.8	61	67.9
7.16	-29.43	-20.76	-27.57	0.03	58.9	61.1	67.9
7.16	-29.4	-20.76	-27.57	0.03	59	61.2	67.9
7.16	-29.43	-20.76	-27.57	0.03	58.9	61.2	68
7.16	-29.4	-20.76	-27.57	0.03	59	61.2	67.9
7.16	-29.4	-20.76	-27.57	0.03	59.1	61.3	68.2
7.16	-29.4	-20.76	-27.57	0.03	59.2	61.4	68.3
7.16	-29.36	-20.71	-27.57	0.03	59.2	61.4	68.3
7.16	-29.4	-20.71	-27.57	0.03	59.3	61.4	68.3
7.16	-29.4	-20.76	-27.57	0.03	59.3	61.4	68.2
7.16	-29.4	-20.71	-27.57	0.03	59.3	61.4	68.2
7.16	-29.4	-20.71	-27.57	0.03	59.3	61.4	68.3
7.16	-29.36	-20.76	-27.57	0.03	59.4	61.5	68.1
7.16	-29.36	-20.76	-27.57	0.03	59.5	61.5	68
7.16	-29.36	-20.71	-27.54	0.03	59.4	61.5	67.9
7.16	-29.36	-20.71	-27.57	0.03	59.5	61.5	67.9
7.16	-29.36	-20.71	-27.54	0.03	59.5	61.5	67.8
7.16	-29.36	-20.71	-27.54	0	59.7	61.5	67.8
7.16	-29.36	-20.71	-27.57	0	59.6	61.5	67.4
7.16	-29.36	-20.71	-27.57	0.03	59.6	61.5	67.4

7.15	-29.32	-20.71	-27.54	0	59.4	61.5	67.2
7.16	-29.32	-20.71	-27.54	0.03	59.6	61.5	67.1
7.16	-29.32	-20.71	-27.54	0.03	59.5	61.5	66.8
7.15	-29.32	-20.71	-27.54	0.03	59.5	61.5	66.7
7.16	-29.32	-20.76	-27.57	0.03	59.5	61.4	66.8
7.16	-29.32	-20.71	-27.54	0.03	59.5	61.5	66.7
7.16	-29.32	-20.71	-27.54	0.03	59.5	61.4	66.1
7.16	-29.32	-20.71	-27.57	0.03	59.5	61.4	66.3
7.16	-29.32	-20.71	-27.57	0.03	59.6	61.4	65.8
7.16	-29.32	-20.71	-27.57	0.03	59.5	61.4	65.8
7.16	-29.32	-20.71	-27.57	0.03	59.4	61.4	65.8
7.16	-29.32	-20.71	-27.57	0.06	59.6	61.4	65.3
7.16	-29.32	-20.71	-27.54	0.03	59.7	61.4	65.2
7.16	-29.32	-20.71	-27.54	0.03	59.8	61.4	65
7.16	-29.32	-20.71	-27.54	0.03	59.8	61.4	65
7.16	-29.32	-20.71	-27.54	0.03	59.8	61.4	64.9
7.16	-29.32	-20.71	-27.54	0	59.9	61.3	64.5
7.16	-29.32	-20.71	-27.54	0.03	59.9	61.3	64.6
7.16	-29.32	-20.71	-27.54	0.03	59.8	61.3	64.3
7.16	-29.32	-20.71	-27.54	0.03	59.8	61.3	64.3
7.16	-29.32	-20.71	-27.54	0.03	59.8	61.2	64.3
7.16	-29.32	-20.71	-27.54	0.03	59.7	61.2	63.9
7.16	-29.32	-20.71	-27.51	0.03	59.7	61.2	63.9
7.16	-29.32	-20.65	-27.54	0.03	59.6	61.1	63.9
7.16	-29.32	-20.71	-27.54	0.03	59.6	61.1	63.8
7.16	-29.29	-20.65	-27.54	0.03	59.5	61.1	63.6
7.16	-29.32	-20.71	-27.51	0.03	59.4	61.1	63.6
7.16	-29.32	-20.71	-27.51	0.03	59.5	61	63.5
7.16	-29.29	-20.71	-27.51	0.06	59.4	61	63
7.16	-29.29	-20.65	-27.51	0.03	59.4	61	63.1
7.16	-29.29	-20.71	-27.51	0.03	59.5	61	63
7.16	-29.29	-20.65	-27.51	0.03	59.5	61	63
7.16	-29.29	-20.71	-27.51	0.03	59.5	60.9	63
7.16	-29.29	-20.65	-27.51	0.03	59.6	60.9	62.8
7.16	-29.29	-20.71	-27.51	0.06	59.6	60.8	62.6
7.16	-29.29	-20.65	-27.51	0.03	59.5	60.8	62.6
7.16	-29.29	-20.65	-27.48	0.03	59.4	60.8	62.5
7.16	-29.32	-20.65	-27.51	0.03	59.3	60.7	62.5
7.16	-29.29	-20.65	-27.48	0.06	59.3	60.7	62.3
7.16	-29.29	-20.65	-27.48	0.03	59.2	60.7	62.3
7.16	-29.29	-20.65	-27.48	0.03	59.3	60.7	62.1
7.16	-29.29	-20.65	-27.48	0.03	59.2	60.7	61.9
7.15	-29.29	-20.6	-27.48	0.03	59.3	60.7	61.9
7.15	-29.29	-20.65	-27.48	0.03	59.3	60.6	61.8
7.15	-29.29	-20.65	-27.48	0.06	59.2	60.5	61.8
7.15	-29.29	-20.65	-27.45	0.03	59.2	60.5	61.5
7.15	-29.29	-20.65	-27.48	0.03	59	60.5	61.4

7.15	-29.25	-20.65	-27.48	0.06	59.1	60.5	61.4
7.15	-29.25	-20.6	-27.45	0.03	59	60.4	61.4
7.15	-29.25	-20.6	-27.48	0.06	59	60.4	60.9
7.15	-29.25	-20.6	-27.48	0.03	59	60.4	61
7.15	-29.25	-20.65	-27.48	0.03	59	60.4	60.7
7.15	-29.25	-20.65	-27.48	0.06	58.9	60.3	61
7.15	-29.25	-20.6	-27.48	0.03	58.9	60.3	60.7
7.15	-29.25	-20.6	-27.48	0.06	58.9	60.3	60.5
7.15	-29.21	-20.6	-27.45	0.03	59	60.3	60.7
7.15	-29.25	-20.6	-27.48	0.03	58.9	60.3	60.5
7.15	-29.25	-20.6	-27.45	0.03	58.8	60.2	60.4
7.15	-29.25	-20.6	-27.45	0.06	58.5	60.2	60.3
7.15	-29.25	-20.6	-27.45	0.06	58.8	60.2	60.1
7.15	-29.21	-20.6	-27.45	0.03	58.8	60.1	60.3
7.15	-29.21	-20.6	-27.42	0.03	58.8	60.1	60
7.15	-29.25	-20.6	-27.45	0.03	58.8	60.2	60.2
7.15	-29.25	-20.6	-27.45	0.03	58.9	60.2	60.2
7.15	-29.25	-20.6	-27.45	0.06	59	60.2	60.3
7.15	-29.21	-20.6	-27.42	0.06	59	60.1	60.2
7.15	-29.21	-20.6	-27.45	0.06	59	60.1	59.9
7.15	-29.21	-20.6	-27.42	0.03	58.9	60.1	60.3
7.15	-29.21	-20.6	-27.45	0.03	59	60.1	60.1
7.15	-29.21	-20.6	-27.42	0.03	58.9	60.1	60.3
7.15	-29.21	-20.55	-27.45	0.03	58.9	60.1	60.3
7.14	-29.21	-20.6	-27.42	0.03	58.9	60.1	60.1
7.14	-29.21	-20.6	-27.42	0.03	58.9	60.1	60.1
7.14	-29.21	-20.55	-27.42	0.03	58.9	59.9	60
7.14	-29.21	-20.55	-27.42	0.06	58.9	59.9	59.9
7.14	-29.21	-20.6	-27.39	0.03	58.8	59.9	60
7.14	-29.21	-20.55	-27.42	0.03	58.8	59.9	60
7.14	-29.21	-20.55	-27.42	0.06	58.8	60.1	60
7.14	-29.21	-20.55	-27.42	0.03	58.8	59.9	60
7.14	-29.18	-20.55	-27.39	0.06	58.8	59.9	60.2
7.14	-29.18	-20.55	-27.39	0.03	58.7	59.9	60
7.14	-29.21	-20.55	-27.39	0.06	58.8	59.9	60
7.14	-29.18	-20.55	-27.39	0.03	58.5	59.9	60.1
7.14	-29.18	-20.55	-27.39	0.03	58.8	59.9	60
7.14	-29.21	-20.5	-27.39	0.03	58.8	59.9	60.2
7.14	-29.18	-20.55	-27.36	0.03	58.7	59.9	60.1
7.14	-29.18	-20.5	-27.36	0.03	58.7	59.9	60.2
7.14	-29.18	-20.55	-27.36	0.03	58.8	59.9	60.2
7.14	-29.18	-20.5	-27.36	0.03	58.7	59.9	60.2
7.14	-29.18	-20.55	-27.36	0.06	58.7	59.9	60
7.14	-29.18	-20.5	-27.36	0.06	58.7	59.9	59.9
7.14	-29.18	-20.5	-27.36	0.03	58.8	59.9	60
7.14	-29.18	-20.5	-27.33	0.03	58.8	59.9	59.9
7.14	-29.18	-20.5	-27.33	0.06	58.7	59.9	60

7.14	-29.18	-20.55	-27.33	0.06	58.7	59.8	60.1
7.14	-29.14	-20.5	-27.33	0.06	58.7	59.8	60
7.14	-29.14	-20.45	-27.33	0.03	58.8	59.9	59.9
7.14	-29.14	-20.5	-27.33	0.06	58.7	59.9	60.1
7.14	-29.14	-20.5	-27.33	0.06	58.7	59.9	60
7.14	-29.14	-20.45	-27.3	0.03	58.4	59.9	59.9
7.14	-29.14	-20.45	-27.3	0.03	58.5	59.9	59.9
7.14	-29.14	-20.45	-27.3	0.03	58.4	59.8	60
7.14	-29.14	-20.45	-27.3	0.03	58.7	59.9	60.2
7.14	-29.14	-20.45	-27.3	0.03	58.5	59.8	60.2
7.14	-29.14	-20.45	-27.3	0.06	58.5	59.9	60.1
7.14	-29.14	-20.45	-27.26	0.03	58.7	59.9	60.2
7.14	-29.14	-20.39	-27.3	0.03	58.7	59.9	60.2
7.14	-29.1	-20.45	-27.26	0.03	58.7	59.9	60.2
7.14	-29.14	-20.39	-27.26	0.03	58.7	59.9	60.4
7.14	-29.14	-20.39	-27.26	0.03	58.7	59.9	60.5
7.14	-29.1	-20.45	-27.26	0.03	58.8	60.1	60.4
7.14	-29.1	-20.45	-27.26	0.06	58.5	60.1	60.4
7.14	-29.1	-20.39	-27.23	0.03	58.5	60.1	60.5
7.14	-29.1	-20.39	-27.26	0.03	58.8	60.1	60.6
7.14	-29.1	-20.39	-27.23	0.06	58.7	60.1	60.3
7.14	-29.1	-20.39	-27.23	0.03	58.8	60.1	60.5
7.14	-29.07	-20.39	-27.23	0.03	58.5	60.1	60.4
7.14	-29.1	-20.39	-27.23	0.03	58.8	60.1	60.8
7.14	-29.1	-20.39	-27.23	0.03	58.7	60.1	60.8
7.14	-29.1	-20.39	-27.23	0.06	58.8	60.2	60.7
7.14	-29.1	-20.39	-27.23	0.03	58.8	60.1	61
7.14	-29.1	-20.39	-27.23	0.06	58.8	60.2	60.8
7.14	-29.07	-20.39	-27.23	0.06	58.9	60.2	61
7.14	-29.07	-20.39	-27.23	0.03	58.9	60.2	61.1
7.14	-29.03	-20.34	-27.2	0.06	59	60.2	61.4
7.13	-29.07	-20.39	-27.2	0.06	58.8	60.3	61.4
7.14	-29.07	-20.39	-27.2	0.03	58.9	60.2	61.4
7.13	-29.07	-20.34	-27.2	0.03	58.9	60.3	61.1
7.14	-29.03	-20.39	-27.2	0.06	58.8	60.3	61.4
7.13	-28.99	-20.34	-27.23	0.06	58.8	60.3	61.5
7.13	-28.99	-20.39	-27.2	0.03	58.5	60.3	61.6
7.13	-28.99	-20.34	-27.2	0.03	58.5	60.3	61.6
7.13	-28.99	-20.34	-27.2	0.03	58.9	60.3	61.6
7.13	-28.99	-20.34	-27.17	0.03	58.9	60.3	61.7
7.13	-28.99	-20.34	-27.17	0.03	58.9	60.3	61.5
7.13	-28.99	-20.39	-27.17	0.03	58.9	60.3	61.7
7.13	-28.99	-20.34	-27.17	0.03	59	60.3	61.9
7.13	-28.99	-20.29	-27.17	0.03	58.9	60.3	61.7
7.13	-28.99	-20.34	-27.17	0.03	59.1	60.3	61.8
7.13	-28.96	-20.34	-27.17	0.03	59.1	60.3	61.6
7.13	-28.96	-20.34	-27.17	0.06	59.1	60.3	61.8

7.13	-28.96	-20.34	-27.14	0.06	59.1	60.3	61.5
7.13	-28.96	-20.29	-27.14	0.03	59	60.3	61.7
7.13	-28.96	-20.29	-27.14	0.06	59.1	60.3	61.6
7.13	-28.96	-20.29	-27.14	0	59	60.3	61.4
7.13	-28.96	-20.29	-27.14	0.06	59	60.3	61.4
7.13	-28.96	-20.29	-27.14	0.03	59	60.3	61.4
7.13	-28.92	-20.29	-27.14	0.06	59	60.3	61.4
7.13	-28.92	-20.29	-27.14	0.03	59	60.3	61.2
7.13	-28.92	-20.24	-27.11	0.03	59	60.3	61.2
7.13	-28.92	-20.29	-27.11	0.06	59	60.3	61
7.13	-28.92	-20.29	-27.11	0.03	59.1	60.3	60.8
7.13	-28.92	-20.24	-27.11	0.06	59	60.3	60.9
7.13	-28.92	-20.24	-27.08	0.03	58.8	60.3	60.9
7.13	-28.88	-20.24	-27.08	0.03	58.9	60.3	60.8
7.13	-28.92	-20.24	-27.08	0.03	59	60.3	60.7
7.13	-28.88	-20.24	-27.08	0.03	59	60.3	60.5
7.13	-28.85	-20.24	-27.08	0.03	59	60.3	60.8
7.13	-28.85	-20.24	-27.08	0.06	58.9	60.2	60.5
7.13	-28.85	-20.29	-27.02	0.03	59	60.2	60.3
7.13	-28.88	-20.24	-27.08	0.03	59	60.2	60.3
7.13	-28.85	-20.24	-27.02	0.03	59	60.2	60.3
7.13	-28.88	-20.24	-27.02	0.06	59	60.3	60.3
7.13	-28.85	-20.24	-27.02	0.03	58.9	60.2	60.3
7.13	-28.85	-20.13	-27.02	0.03	58.7	60.1	60.1
7.13	-28.85	-20.24	-27.02	0.06	58.7	60.1	60
7.13	-28.81	-20.24	-27.02	0.06	58.7	60.1	60
7.13	-28.77	-20.24	-27.02	0.03	58.8	60.1	60.1
7.13	-28.81	-20.24	-27.02	0.03	58.8	59.9	60
7.13	-28.81	-20.24	-27.02	0.03	58.8	59.9	59.8
7.13	-28.77	-20.24	-27.02	0.03	58.7	59.9	59.6
7.13	-28.81	-20.24	-27.02	0.06	58.7	59.9	59.8
7.13	-28.81	-20.24	-27.02	0.03	58.5	59.8	59.6
7.13	-28.81	-20.24	-27.02	0.03	58.5	59.8	59.4
7.13	-28.77	-20.13	-27.02	0.06	58.5	59.7	59.4
7.13	-28.81	-20.24	-27.02	0.03	58.4	59.7	59.3
7.13	-28.77	-20.24	-27.02	0.06	58.4	59.7	59.4
7.12	-28.77	-20.13	-27.02	0.03	58.4	59.6	59.2
7.13	-28.77	-20.13	-27.02	0.06	58.5	59.6	59
7.13	-28.77	-20.13	-27.02	0.06	58.3	59.6	58.8
7.13	-28.77	-20.13	-27.02	0.06	58.3	59.6	58.8
7.12	-28.74	-20.13	-27.02	0.03	58.2	59.5	58.5
7.12	-28.74	-20.13	-27.02	0.03	58.2	59.4	58.5
7.12	-28.77	-20.13	-26.99	0.06	58.2	59.4	58.6
7.12	-28.77	-20.13	-26.99	0.06	58.1	59.3	58.2
7.12	-28.74	-20.13	-27.02	0.03	58.2	59.3	58.2
7.12	-28.74	-20.13	-27.02	0.06	58.2	59.2	58.1
7.12	-28.74	-20.13	-26.99	0.03	58.1	59.2	58

7.12	-28.7	-20.13	-26.99	0.06	57.9	59.2	58
7.12	-28.7	-20.13	-26.99	0.06	57.9	59.1	57.8
7.12	-28.74	-20.13	-26.99	0.03	57.8	59.1	57.6
7.12	-28.74	-20.13	-27.02	0.03	57.9	59	57.5
7.12	-28.7	-20.13	-26.99	0.06	57.8	59	57.6
7.12	-28.7	-20.13	-26.99	0.03	57.7	59	57.4
7.12	-28.74	-20.13	-26.99	0.06	57.7	58.9	57.3
7.11	-28.7	-20.13	-26.99	0.06	57.6	58.9	57.2
7.11	-28.7	-20.13	-27.02	0.06	57.7	58.8	56.7
7.11	-28.7	-20.13	-26.99	0.06	57.5	58.8	56.8
7.11	-28.7	-20.13	-26.99	0.06	57.6	58.7	56.4
7.11	-28.7	-20.13	-26.99	0.06	57.5	58.6	56.4
7.11	-28.7	-20.13	-26.99	0.06	57.5	58.6	56.4
7.11	-28.7	-20.13	-26.99	0.06	57.4	58.5	56.1
7.11	-28.66	-20.24	-26.99	0.03	57.5	58.4	56.2
7.11	-28.66	-20.13	-26.99	0.03	57.1	58.3	56
7.11	-28.7	-20.13	-26.99	0.06	57.1	58.3	55.9
7.11	-28.7	-20.13	-26.99	0.03	57.1	58.3	55.8
7.11	-28.66	-20.13	-26.99	0.06	57.1	58.2	55.6
7.11	-28.7	-20.13	-26.99	0.06	57.1	58.2	55.2
7.11	-28.66	-20.13	-27.02	0.06	57.1	58.2	55.5
7.11	-28.7	-20.13	-26.99	0.03	57.4	58.2	55.4
7.11	-28.7	-20.13	-27.02	0.06	57.3	58.2	55.2
7.11	-28.66	-20.13	-26.99	0.06	57.1	58.1	55.3
7.11	-28.7	-20.13	-26.99	0.06	57	58.1	55.5
7.11	-28.7	-20.13	-26.99	0.06	56.8	58.2	55.6
7.11	-28.66	-20.13	-27.02	0.06	57.1	58.2	55.7
7.11	-28.7	-20.13	-26.99	0.06	57.1	58.2	55.8
7.11	-28.66	-20.13	-26.99	0.06	57.1	58.2	55.7
7.11	-28.66	-20.13	-26.99	0.09	56.7	58.2	56
7.11	-28.7	-20.13	-26.99	0.06	57.1	58.2	55.9
7.11	-28.66	-20.13	-26.99	0.06	56.9	58.2	55.9
7.1	-28.7	-20.13	-27.02	0.06	57.1	58.2	56
7.1	-28.66	-20.13	-26.99	0.03	56.9	58.1	56
7.1	-28.7	-20.13	-27.02	0.03	57.1	58.2	56.1
7.1	-28.66	-20.13	-26.99	0.09	56.9	58.2	56.1
7.1	-28.66	-20.13	-26.99	0.06	57	58.2	56.4
7.1	-28.66	-20.13	-26.99	0.06	57	58.2	56.5
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.2	56.8
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.2	56.7
7.1	-28.7	-20.13	-26.99	0.06	56.8	58.2	56.9
7.1	-28.66	-20.13	-26.99	0.03	57	58.2	56.9
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.2	57.2
7.1	-28.66	-20.13	-26.99	0.03	57	58.2	57.1
7.1	-28.66	-20.13	-27.02	0.06	56.9	58.2	57.3
7.1	-28.66	-20.13	-27.02	0.06	56.8	58.2	57.4
7.1	-28.63	-20.13	-26.99	0.06	56.9	58.2	57.6

7.1	-28.63	-20.13	-26.99	0.06	56.9	58.2	57.7
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.2	57.4
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.2	57.8
7.1	-28.66	-20.13	-26.99	0.06	57	58.2	57.8
7.1	-28.66	-20.13	-26.99	0.06	57	58.3	58
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.3	57.9
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.3	58.2
7.1	-28.66	-20.13	-26.99	0.06	56.8	58.2	58.2
7.1	-28.66	-20.13	-26.99	0.03	56.8	58.2	58.3
7.1	-28.66	-20.13	-26.99	0.06	56.8	58.2	58.2
7.1	-28.63	-20.13	-26.99	0.06	56.9	58.2	58.2
7.1	-28.63	-20.13	-26.99	0.06	56.8	58.2	58.4
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.3	58.2
7.1	-28.63	-20.13	-26.99	0.06	56.9	58.2	58.3
7.1	-28.66	-20.13	-26.99	0.06	56.8	58.2	58.3
7.1	-28.66	-20.13	-26.99	0.03	56.8	58.2	58.2
7.1	-28.66	-20.13	-26.99	0.09	56.7	58.2	58.5
7.11	-28.66	-20.13	-26.99	0.09	56.8	58.2	58.4
7.1	-28.63	-20.13	-26.99	0.06	56.8	58.3	58.4
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.3	58.2
7.1	-28.63	-20.13	-26.99	0.06	56.9	58.3	58.5
7.1	-28.66	-20.13	-26.99	0.03	56.9	58.3	58.4
7.1	-28.63	-20.24	-26.99	0.06	56.8	58.3	58.2
7.1	-28.66	-20.13	-26.99	0.06	56.9	58.2	58.3
7.1	-28.63	-20.13	-27.02	0.06	56.9	58.2	58.4
7.1	-28.63	-20.13	-27.02	0.06	56.9	58.2	58.1
7.1	-28.63	-20.24	-26.99	0.06	56.7	58.2	58.2
7.1	-28.63	-20.13	-26.99	0.06	56.8	58.2	58
7.09	-28.63	-20.13	-27.02	0.06	56.8	58.2	57.8
7.09	-28.63	-20.13	-26.99	0.06	56.8	58.2	58
7.09	-28.63	-20.13	-26.99	0.06	56.6	58.2	57.9
7.09	-28.63	-20.13	-26.99	0.12	56.7	58.2	57.9
7.09	-28.63	-20.13	-27.02	0.06	56.3	58.1	57.6
7.09	-28.63	-20.13	-26.99	0.09	56.6	58	57.5
7.09	-28.55	-20.13	-26.99	0.06	56.8	58	57.3
7.09	-28.63	-20.13	-26.99	0.03	56.4	57.9	57.2
7.09	-28.63	-20.24	-27.02	0.06	56.7	57.9	57.1
7.09	-28.63	-20.13	-26.99	0.06	56.6	57.9	56.7
7.09	-28.63	-20.13	-27.02	0.06	56.6	57.9	56.4
7.09	-28.63	-20.13	-27.02	0.06	56.7	57.9	56.4
7.09	-28.63	-20.24	-27.02	0.06	56.7	57.9	56.4
7.09	-28.63	-20.24	-27.02	0.06	56.2	57.9	56.4
7.09	-28.63	-20.24	-27.02	0.09	56.7	57.8	56.2
7.09	-28.63	-20.13	-27.02	0.06	56.2	57.8	56.1
7.09	-28.63	-20.13	-27.02	0.06	56.6	57.8	56.2
7.09	-28.63	-20.24	-27.02	0.06	56.2	57.8	56.1
7.09	-28.63	-20.13	-27.02	0.06	55.8	57.8	55.9

7.09	-28.63	-20.24	-27.02	0.06	56.1	57.8	56.1
7.09	-28.63	-20.24	-27.02	0.09	56	57.6	56
7.09	-28.63	-20.24	-27.02	0.06	56.1	57.5	55.9
7.09	-28.63	-20.24	-27.02	0.06	56.1	57.6	55.9
7.09	-28.63	-20.24	-27.02	0.09	55.9	57.5	55.8
7.09	-28.63	-20.24	-27.02	0.06	55.7	57.6	55.7
7.08	-28.63	-20.24	-27.02	0.09	56	57.5	55.5
7.08	-28.63	-20.24	-27.02	0.06	55.8	57.5	55.4
7.08	-28.63	-20.24	-27.02	0.06	55.7	57.5	55.4
7.08	-28.63	-20.24	-27.02	0.06	56	57.5	55.2
7.08	-28.63	-20.24	-27.02	0.06	56	57.5	55.1
7.08	-28.63	-20.24	-27.02	0.09	56.2	57.5	54.9
7.08	-28.63	-20.24	-27.02	0.06	56.1	57.4	55
7.08	-28.66	-20.24	-27.08	0.06	56.1	57.4	55
7.08	-28.63	-20.24	-27.02	0.06	56.1	57.4	54.5
7.08	-28.63	-20.24	-27.02	0.06	56.1	57.3	54.7
7.08	-28.63	-20.13	-27.02	0.06	56	57.3	54.4
7.08	-28.66	-20.24	-27.02	0.06	56.1	57.3	54.5
7.08	-28.66	-20.24	-27.02	0.06	56.1	57.2	54.6
7.07	-28.66	-20.24	-27.02	0.09	56	57.2	54.3
7.08	-28.63	-20.24	-27.02	0.09	56	57.1	54.3
7.08	-28.66	-20.24	-27.02	0.09	56	57.1	54.2
7.08	-28.66	-20.24	-27.02	0.09	56	57.1	54
7.07	-28.66	-20.24	-27.02	0.09	56	57.1	53.9
7.08	-28.66	-20.24	-26.99	0.09	55.9	57.1	53.8
7.08	-28.66	-20.24	-27.02	0.12	55.9	57	53.8
7.08	-28.66	-20.24	-27.02	0.06	55.9	57	53.6
7.08	-28.63	-20.24	-27.02	0.09	55.8	57	53.6
7.08	-28.63	-20.24	-27.02	0.12	55.8	57	53.7
7.08	-28.63	-20.24	-27.02	0.06	55.7	56.9	53.3
7.08	-28.63	-20.24	-27.02	0.09	55.8	56.9	53.2
7.08	-28.63	-20.24	-27.02	0.09	55.7	56.9	52.9
7.08	-28.63	-20.24	-27.02	0.12	55.7	56.8	52.8
7.08	-28.63	-20.24	-27.02	0.09	55.6	56.8	53
7.08	-28.63	-20.24	-27.02	0.09	55.6	56.8	52.9
7.08	-28.63	-20.24	-27.02	0.09	55.5	56.7	52.8
7.08	-28.63	-20.24	-27.02	0.12	55.5	56.8	52.7
7.08	-28.63	-20.24	-26.99	0.09	55.5	56.7	52.3
7.08	-28.66	-20.24	-27.02	0.09	55.4	56.7	52.4
7.08	-28.63	-20.24	-26.99	0.12	55.4	56.6	52.3
7.08	-28.63	-20.24	-27.02	0.09	55.6	56.6	52.1
7.08	-28.63	-20.24	-26.99	0.09	55.4	56.6	52.3
7.07	-28.63	-20.24	-27.02	0.09	55.3	56.6	52.3
7.08	-28.63	-20.24	-26.99	0.12	55.3	56.6	52.1
7.07	-28.63	-20.24	-26.99	0.12	55.3	56.5	52.1
7.07	-28.63	-20.13	-26.99	0.12	55.3	56.5	51.9
7.07	-28.66	-20.13	-26.99	0.12	55.3	56.5	51.8

7.07	-28.66	-20.13	-26.99	0.12	55.3	56.5	51.8
7.07	-28.63	-20.24	-26.99	0.09	55.2	56.5	51.7
7.07	-28.63	-20.13	-26.99	0.12	55.2	56.4	51.8
7.07	-28.66	-20.13	-26.99	0.12	55.2	56.5	51.8
7.07	-28.63	-20.13	-26.99	0.12	55.2	56.4	51.7
7.07	-28.63	-20.13	-26.99	0.12	55.1	56.3	51.6
7.07	-28.63	-20.13	-26.96	0.12	55.1	56.4	51.6
7.07	-28.63	-20.13	-26.99	0.12	55	56.3	51.4
7.07	-28.63	-20.13	-26.99	0.12	55	56.3	51.5
7.07	-28.63	-20.13	-26.99	0.09	55	56.3	51.3
7.07	-28.63	-20.13	-26.96	0.09	55	56.2	51.3
7.07	-28.63	-20.13	-26.96	0.12	54.9	56.2	51.5
7.07	-28.63	-20.13	-26.99	0.12	54.9	56.1	51.2
7.07	-28.63	-20.13	-26.96	0.09	54.9	56.1	51.6
7.07	-28.63	-20.13	-26.96	0.09	54.9	56.1	51.3
7.07	-28.63	-20.13	-26.99	0.12	54.9	56.1	51.3
7.07	-28.63	-20.08	-26.96	0.12	54.9	56	51.2
7.07	-28.63	-20.13	-26.96	0.12	54.8	56	51.4
7.06	-28.63	-20.13	-26.99	0.12	54.9	56.1	51.4
7.07	-28.66	-20.13	-26.96	0.12	54.9	56	51.4
7.07	-28.63	-20.13	-26.99	0.12	54.8	56.1	51.6
7.07	-28.63	-20.13	-26.99	0.12	54.9	56	51.8
7.07	-28.63	-20.13	-26.96	0.12	54.9	56.1	51.9
7.07	-28.63	-20.13	-26.96	0.12	54.9	56	52
7.07	-28.63	-20.13	-26.96	0.12	54.9	56.1	52
7.07	-28.63	-20.13	-26.96	0.09	54.9	56.2	52.3
7.07	-28.55	-20.13	-26.96	0.12	54.9	56.1	52.2
7.07	-28.55	-20.13	-26.96	0.12	54.9	56.2	52.4
7.06	-28.63	-20.13	-26.96	0.12	54.9	56.2	52.3
7.07	-28.63	-20.13	-26.96	0.12	54.9	56.2	52.3
7.07	-28.63	-20.13	-26.96	0.12	54.9	56.2	52.6
7.07	-28.63	-20.08	-26.96	0.12	55	56.2	52.5
7.07	-28.55	-20.13	-26.96	0.12	55	56.2	52.6
7.07	-28.55	-20.08	-26.96	0.12	55	56.2	52.8
7.07	-28.55	-20.13	-26.96	0.12	55.1	56.3	52.7
7.07	-28.55	-20.13	-26.96	0.12	55	56.3	52.9
7.07	-28.63	-20.13	-26.96	0.12	55.1	56.3	52.9
7.07	-28.55	-20.13	-26.96	0.12	55.1	56.3	53.1
7.07	-28.55	-20.13	-26.96	0.12	55.2	56.3	53.1
7.07	-28.55	-20.08	-26.96	0.12	55.2	56.4	53.1
7.07	-28.63	-20.13	-26.96	0.12	55.1	56.4	53.2
7.07	-28.55	-20.13	-26.96	0.12	55.2	56.4	53.6
7.07	-28.55	-20.13	-26.96	0.12	55.3	56.4	53.5
7.07	-28.55	-20.13	-26.96	0.12	55.2	56.4	53.7
7.07	-28.55	-20.13	-26.96	0.09	55.3	56.5	53.8
7.07	-28.55	-20.13	-26.96	0.12	55.3	56.4	53.8
7.07	-28.55	-20.13	-26.96	0.12	55.3	56.5	54.1

7.07	-28.55	-20.13	-26.96	0.12	55.3	56.5	53.9
7.07	-28.52	-20.13	-26.99	0.12	55.3	56.5	53.8
7.07	-28.55	-20.13	-26.96	0.12	55.3	56.5	54.1
7.07	-28.55	-20.13	-26.96	0.12	55.3	56.4	54.3
7.07	-28.55	-20.13	-26.96	0.09	55.3	56.5	54.4
7.07	-28.55	-20.13	-26.96	0.12	55.3	56.5	54.5
7.06	-28.55	-20.13	-26.96	0.12	55.3	56.5	54.3
7.06	-28.55	-20.13	-26.96	0.12	55.3	56.5	54.5
7.06	-28.55	-20.13	-26.93	0.12	55.4	56.6	54.5
7.06	-28.55	-20.08	-26.93	0.12	55.3	56.6	54.6
7.06	-28.55	-20.08	-26.93	0.12	55.4	56.6	54.7
7.06	-28.55	-20.08	-26.96	0.12	55.4	56.6	54.4
7.06	-28.55	-20.08	-26.93	0.12	55.4	56.6	54.8
7.06	-28.63	-20.08	-26.93	0.12	55.4	56.6	54.6
7.06	-28.55	-20.08	-26.9	0.12	55.4	56.6	54.5
7.06	-28.55	-20.08	-26.93	0.12	55.5	56.7	54.7
7.06	-28.55	-20.08	-26.93	0.12	55.4	56.7	54.7
7.06	-28.52	-20.08	-26.9	0.12	55.4	56.7	54.7
7.06	-28.52	-20.08	-26.9	0.12	55.4	56.7	54.8
7.06	-28.52	-20.13	-26.9	0.12	55.4	56.7	54.7
7.06	-28.55	-20.08	-26.9	0.12	55.5	56.7	54.8
7.06	-28.52	-20.08	-26.9	0.09	55.5	56.7	54.5
7.06	-28.52	-20.08	-26.93	0.12	55.5	56.7	54.6
7.06	-28.55	-20.08	-26.9	0.12	55.5	56.7	54.8
7.06	-28.52	-20.08	-26.9	0.12	55.4	56.7	54.7
7.06	-28.52	-20.08	-26.9	0.12	55.5	56.7	54.6
7.06	-28.52	-20.08	-26.9	0.12	55.5	56.7	54.6
7.06	-28.52	-20.08	-26.9	0.12	55.5	56.7	54.6
7.06	-28.52	-20.03	-26.9	0.12	55.5	56.8	54.6
7.06	-28.52	-20.03	-26.9	0.12	55.5	56.7	54.6
7.06	-28.52	-20.03	-26.9	0.12	55.5	56.8	54.7
7.06	-28.52	-20.08	-26.9	0.12	55.5	56.7	54.5
7.06	-28.48	-20.03	-26.9	0.12	55.5	56.8	54.7
7.06	-28.52	-20.08	-26.9	0.12	55.5	56.7	54.5
7.06	-28.48	-20.03	-26.9	0.12	55.5	56.8	54.6
7.06	-28.48	-20.03	-26.9	0.12	55.5	56.8	54.4
7.06	-28.48	-20.08	-26.9	0.12	55.5	56.8	54.6
7.06	-28.48	-20.08	-26.9	0.12	55.5	56.8	54.5
7.06	-28.52	-20.08	-26.9	0.09	55.5	56.8	54.7
7.06	-28.48	-20.08	-26.9	0.12	55.4	56.7	54.4
7.06	-28.52	-20.08	-26.9	0.09	55.5	56.7	54.6
7.06	-28.52	-20.08	-26.9	0.12	55.5	56.8	54.6
7.06	-28.48	-20.08	-26.93	0.12	55.5	56.8	54.7
7.06	-28.48	-20.08	-26.9	0.12	55.5	56.8	54.6
7.06	-28.48	-20.08	-26.9	0.12	55.6	56.8	54.7
7.06	-28.48	-20.08	-26.9	0.12	55.6	56.8	54.6
7.06	-28.48	-20.08	-26.9	0.12	55.6	56.8	54.8

7.06	-28.48	-20.08	-26.9	0.12	55.6	56.8	54.8
7.06	-28.44	-20.08	-26.9	0.12	55.6	56.8	54.8
7.06	-28.48	-20.08	-26.9	0.12	55.6	56.8	55.1
7.06	-28.48	-20.08	-26.9	0.12	55.5	56.8	54.8
7.06	-28.48	-20.03	-26.9	0.12	55.5	56.8	54.6
7.06	-28.48	-20.08	-26.9	0.12	55.5	56.8	54.5
7.06	-28.44	-20.08	-26.9	0.12	55.6	56.8	54.8
7.06	-28.44	-20.08	-26.9	0.12	55.4	56.8	54.3
7.06	-28.48	-20.08	-26.9	0.12	55.4	56.8	54.4
7.06	-28.44	-20.08	-26.9	0.12	55.4	56.8	54.5
7.06	-28.44	-20.08	-26.9	0.12	55.5	56.7	54.1
7.06	-28.48	-20.08	-26.9	0.12	55.4	56.7	54.1
7.06	-28.48	-20.03	-26.9	0.12	55.4	56.6	53.9
7.06	-28.48	-20.08	-26.9	0.12	55.3	56.6	53.8
7.06	-28.44	-20.08	-26.9	0.12	55.2	56.5	53.6
7.06	-28.44	-20.08	-26.93	0.12	55	56.5	53.3
7.06	-28.44	-20.08	-26.9	0.12	55.2	56.5	53.5
7.06	-28.44	-20.08	-26.93	0.12	55.3	56.4	53.3
7.06	-28.44	-20.08	-26.93	0.12	55.1	56.4	53.2
7.06	-28.44	-20.08	-26.9	0.12	55.1	56.3	53
7.05	-28.44	-20.08	-26.93	0.15	55	56.2	52.8
7.05	-28.44	-20.08	-26.9	0.12	54.9	56.1	52.5
7.05	-28.44	-20.08	-26.93	0.12	54.9	56.1	52.4
7.05	-28.44	-20.08	-26.93	0.12	54.9	56	52.1
7.05	-28.44	-20.08	-26.93	0.12	54.8	56	52.1
7.05	-28.44	-20.08	-26.93	0.12	54.8	56	51.9
7.05	-28.44	-20.08	-26.9	0.12	54.7	55.9	51.8
7.05	-28.44	-20.08	-26.93	0.15	54.6	55.8	51.6
7.05	-28.44	-20.08	-26.9	0.12	54.5	55.8	51.6
7.05	-28.44	-20.03	-26.9	0.12	54.5	55.8	51.4
7.05	-28.44	-20.08	-26.9	0.15	54.4	55.6	51.4
7.05	-28.44	-20.08	-26.9	0.15	54.2	55.6	50.9
7.05	-28.41	-20.08	-26.9	0.15	54.2	55.5	50.9
7.05	-28.41	-20.08	-26.93	0.15	54.1	55.4	50.7
7.05	-28.41	-20.08	-26.93	0.12	54	55.4	50.3
7.05	-28.41	-20.08	-26.93	0.15	53.9	55.2	50.4
7.05	-28.41	-20.08	-26.93	0.12	53.8	55.1	50.2
7.05	-28.44	-20.08	-26.9	0.12	53.8	55.1	50
7.05	-28.44	-20.08	-26.9	0.15	53.7	55	49.9
7.05	-28.44	-20.03	-26.9	0.15	53.6	54.9	49.7
7.05	-28.44	-20.08	-26.9	0.15	53.6	54.9	49.6
7.05	-28.44	-20.08	-26.9	0.15	53.6	54.9	49.6
7.04	-28.48	-20.03	-26.9	0.15	53.5	54.9	49.5
7.04	-28.48	-20.08	-26.9	0.15	53.5	54.9	49.3
7.04	-28.44	-20.03	-26.93	0.15	53.4	54.8	48.8
7.04	-28.44	-20.08	-26.9	0.15	53.4	54.7	49
7.04	-28.44	-20.08	-26.9	0.15	53.3	54.7	48.9

7.04	-28.44	-20.08	-26.9	0.15	53.3	54.6	48.4
7.04	-28.44	-20.08	-26.9	0.15	53.4	54.6	48.6
7.04	-28.48	-20.08	-26.9	0.15	53.2	54.6	48.3
7.04	-28.44	-20.08	-26.9	0.15	53.1	54.5	48
7.04	-28.44	-20.03	-26.87	0.18	53	54.4	48.2
7.04	-28.44	-20.08	-26.9	0.15	53	54.4	48
7.04	-28.44	-20.08	-26.87	0.15	53	54.3	48.1
7.04	-28.44	-20.03	-26.9	0.15	52.9	54.3	47.7
7.04	-28.44	-20.08	-26.87	0.15	52.8	54.2	47.7
7.04	-28.44	-20.08	-26.9	0.18	52.7	54.2	47.8
7.04	-28.44	-20.03	-26.9	0.15	52.7	54.2	47.5
7.04	-28.44	-20.03	-26.87	0.15	52.7	54.1	47.5
7.04	-28.44	-20.08	-26.87	0.15	52.7	54.1	47.3
7.04	-28.44	-20.03	-26.87	0.15	52.6	54	47.1
7.04	-28.41	-20.03	-26.87	0.15	52.6	54	47.3
7.04	-28.44	-20.08	-26.9	0.18	52.5	54	47.2
7.04	-28.44	-20.08	-26.87	0.15	52.5	53.9	47
7.04	-28.41	-20.03	-26.87	0.18	52.5	53.9	47
7.04	-28.44	-20.08	-26.9	0.18	52.5	53.8	47.1
7.04	-28.41	-20.08	-26.87	0.15	52.3	53.8	46.8
7.04	-28.44	-20.03	-26.87	0.18	52.3	53.8	47.2
7.04	-28.41	-19.98	-26.87	0.18	52.3	53.7	47.1
7.04	-28.41	-20.03	-26.9	0.18	52.3	53.7	47.1
7.04	-28.44	-20.08	-26.87	0.18	52.2	53.7	47
7.04	-28.44	-20.03	-26.9	0.18	52.2	53.7	47.2
7.04	-28.41	-20.03	-26.87	0.18	52.2	53.7	47
7.04	-28.41	-20.03	-26.9	0.18	52.2	53.8	47.3
7.04	-28.41	-20.03	-26.9	0.15	52.2	53.8	47.5
7.04	-28.44	-20.08	-26.9	0.15	52.3	53.8	47.3
7.04	-28.41	-20.08	-26.9	0.15	52.4	53.9	47.6
7.04	-28.44	-20.08	-26.87	0.15	52.5	53.9	47.8
7.04	-28.41	-20.08	-26.9	0.18	52.5	53.9	48.2
7.04	-28.41	-20.08	-26.9	0.15	52.6	54	48.1
7.04	-28.44	-20.08	-26.9	0.15	52.7	54	48.2
7.04	-28.41	-20.08	-26.9	0.15	52.7	54.1	48.6
7.04	-28.41	-20.08	-26.87	0.18	52.7	54.1	48.7
7.04	-28.44	-20.08	-26.87	0.15	52.8	54.1	48.9
7.04	-28.44	-20.08	-26.87	0.15	52.8	54.2	49.3
7.04	-28.41	-20.03	-26.87	0.18	52.9	54.2	49.7
7.04	-28.41	-20.03	-26.9	0.18	53	54.3	49.7
7.04	-28.41	-20.03	-26.87	0.18	53	54.4	50.3
7.04	-28.44	-20.08	-26.87	0.15	53.1	54.4	50.4
7.04	-28.44	-20.08	-26.87	0.18	53.2	54.5	50.8
7.04	-28.44	-20.08	-26.87	0.15	53	54.7	51
7.04	-28.44	-20.03	-26.87	0.15	53.1	54.9	51.5
7.04	-28.44	-20.03	-26.87	0.18	53.3	54.8	51.6
7.04	-28.44	-20.03	-26.87	0.15	53.8	55.5	51.8

7.04	-28.44	-20.03	-26.87	0.15	54	55.7	52.2
7.04	-28.44	-20.03	-26.84	0.15	53.9	55.4	52.4
7.04	-28.44	-20.08	-26.84	0.12	54.1	55.5	52.5
7.05	-28.44	-20.03	-26.84	0.15	54.4	56.1	53
7.05	-28.44	-20.03	-26.87	0.15	54.8	56.6	53.2
7.05	-28.44	-20.03	-26.84	0.12	55	56.6	53.9
7.05	-28.44	-20.03	-26.84	0.12	55.3	57.1	54.3
7.05	-28.44	-20.03	-26.84	0.12	55.4	57.4	54.9
7.06	-28.44	-20.03	-26.84	0.12	55.7	58	55.2
7.05	-28.44	-20.03	-26.84	0.12	56	58.2	55.7
7.07	-28.44	-19.98	-26.84	0.12	56.6	58.2	55.8
8.21	-32.29	-26.05	-27.78	27.01	74.5	57.1	46.5
8.28	-35.92	-26.67	-28.15	27.11	78.3	57.3	48
8.22	-36.65	-26.88	-28.21	24.97	78	58	51.4
8.39	-35.92	-27.5	-28.64	-0.06	71.3	57.6	47.9
8.29	-36.72	-27.92	-28.97	26.89	79.3	57.9	50.5
8.29	-37.89	-27.45	-28.97	26.83	80.2	58.4	45.5
8.35	-37.78	-27.24	-29.31	25	79.6	58.6	50.1
8.39	-37.71	-28.39	-29.55	26.89	80.3	58.9	51.7
8.41	-38.55	-28.44	-29.68	26.07	80.1	59.1	51.2
8.42	-38.37	-28.33	-29.95	26.89	79.9	59.2	51.7
8.35	-38.81	-29.32	-29.89	26.89	80	59.1	48.4
8.22	-38.77	-29.06	-29.89	26.16	79.3	59.1	50.8
8.36	-38.66	-28.85	-30.04	26.89	79.9	59	51
8.41	-38.19	-28.8	-30.13	26.37	79.9	59	49.8
8.27	-38.77	-28.28	-30.29	26.83	79.4	59.3	51.8
8.41	-38.99	-29.37	-30.56	26.89	79.6	59.1	51.7
8.44	-39.1	-29.42	-30.5	25.55	79.1	58.8	50.5
8.29	-39.43	-29.63	-30.62	26.92	78.8	59.2	49.3
8.42	-39.21	-30.2	-30.71	26.89	79.4	59	51.8
8.45	-39.51	-30.15	-30.84	25.98	79.4	58.9	46.7
8.28	-37.16	-28.9	-31.05	26.25	78.7	59.2	51.2
8.41	-39.47	-29.94	-31.05	26.92	78.9	59	51.2
8.47	-39.62	-29.94	-31.23	26.98	79.6	59	52.9
8.36	-39.91	-30.56	-31.17	25.15	79	59	51.1
8.52	-39.21	-30.62	-31.26	26.95	79.3	59.2	51.6
8.41	-39.51	-30.31	-31.26	26.95	79.5	59	49.3
8.29	-40.97	-29.99	-31.39	25.18	78.8	59.1	49.7
8.45	-40.24	-30.36	-31.57	26.95	79.2	59.2	53.5
8.39	-40.93	-30.31	-31.54	26.95	79.3	59	50.2
8.11	-40.16	-29.42	-31.87	25.03	78.7	59.1	51.3
8.39	-38.37	-30.72	-31.54	26.92	78.9	59.2	50.9
8.38	-38.63	-30.62	-31.81	26.95	79	59.1	56
8.33	-37.71	-30.67	-31.9	25.09	78.3	59	51.2
8.51	-38.63	-30.36	-31.66	26.95	78.7	59.2	51
8.41	-36.98	-30.67	-31.97	26.95	78.7	59.1	45
8.38	-37.97	-30.67	-32.12	25.12	78.3	59.1	52.8

8.47	-40.93	-30.93	-32.3	26.92	78.7	59.5	49.9
8.43	-40.86	-30.62	-32.27	26.95	78.6	59.1	53
8.23	-41.74	-31.45	-32.3	25.06	77.7	59.1	50.1
8.55	-41.23	-31.08	-32.45	27.01	78	59.3	49
8.51	-40.6	-31.39	-32.45	26.98	78	59.1	49.4
8.51	-41.45	-30.82	-32.61	25.27	77.7	59.2	51.8
8.5	-38.88	-30.98	-32.76	26.98	77.4	59.2	50.7
8.44	-40.02	-31.19	-32.48	27.01	77.3	59.2	51.4
8.51	-38.66	-31.76	-32.76	26.01	77.3	58.9	46.1
8.39	-40.02	-32.17	-32.58	26.56	76.7	59.2	53.1
8.54	-41.89	-32.07	-32.76	26.98	76.9	59.1	49.3
8.37	-37.86	-32.28	-32.67	26.47	77.2	58.9	51.4
8.38	-35.88	-31.65	-32.82	26.95	76.6	59.2	51.1
8.38	-40.16	-31.29	-33.03	27.01	76.8	59	50.8
8.52	-41.26	-31.86	-33	25.43	76.6	58.7	45.9
8.57	-38.04	-33.21	-33.03	27.08	76.4	59.2	50.3
8.41	-39.03	-31.45	-33.22	27.11	76.6	58.9	50.2
8.53	-40.57	-32.33	-33.03	25.64	76.3	58.8	49
8.65	-40.64	-32.23	-33.16	27.01	75.8	59.2	52.3
8.42	-40.42	-32.23	-33.19	27.17	75.8	58.9	44.7
8.38	-38.44	-32.9	-33.25	25.27	75.5	58.6	51.7
8.54	-37.71	-32.8	-33.37	27.14	75.6	58.7	46.5
8.5	-41.34	-32.9	-33.25	27.14	75.7	58.7	46.3
8.52	-38.15	-32.28	-33.34	25.18	75.4	58.6	50.5
8.58	-39.8	-32.38	-33.4	27.17	74.9	59	48.4
8.44	-39.8	-33.06	-33.52	27.05	75.1	58.7	51.5
8.47	-40.75	-32.02	-33.58	25.27	74.6	58.4	54.9
8.53	-40.05	-32.69	-33.64	27.14	74.6	58.8	52
8.51	-42.22	-32.12	-33.89	27.23	74.4	58.5	53.4
8.54	-38.96	-32.64	-33.74	25.55	73.7	58.5	51.6
8.78	-40.82	-32.8	-33.86	27.14	73.4	58.9	48.1
8.47	-39.32	-33	-33.71	27.2	73.3	58.6	52.9
8.41	-39.62	-32.33	-33.77	26.37	73	58.3	50
8.4	-38.99	-33.32	-33.92	26.43	71.6	58.5	50.9
8.44	-39.18	-33.32	-33.92	27.26	71.4	58.3	49.7
8.52	-40.02	-32.9	-33.89	27.32	70.9	58.3	49.1
8.39	-40.35	-33.37	-34.16	25.61	70.2	58.5	51.1
8.55	-42.11	-33	-34.19	27.35	70.7	58.2	50.4
8.43	-38.81	-33.47	-34.26	27.26	70.8	58.2	50
8.26	-39.51	-32.85	-34.29	25.31	70.1	58	50.9
8.47	-39.4	-33.94	-34.16	27.23	70.3	58.2	49.5
8.48	-42.22	-33.16	-34.35	27.23	70.6	58	50.5
8.48	-41.7	-33.32	-34.22	25.43	70.2	58	50.8
8.52	-40.38	-33.57	-34.16	27.29	70.1	58.2	49.7
8.56	-35.84	-33.47	-34.53	27.29	70.5	58	50.1
8.44	-40.64	-33.47	-34.32	26.01	70.4	57.8	50
8.38	-40.49	-33.37	-34.62	26.95	70	58	53

8.5	-42.84	-33.47	-34.47	27.17	70.4	57.8	50.5
8.5	-42.18	-34.15	-34.53	27.26	70.4	57.5	47.8
8.11	-41.59	-32.95	-34.5	25.43	69.6	57.6	51
8.49	-41.67	-34.09	-34.38	27.32	70.1	57.9	49.7
8.42	-42.62	-33.21	-34.62	27.29	70.1	57.5	50
8.41	-43.39	-33.63	-34.53	25.31	69.8	57.3	50.3
8.52	-43.1	-33.63	-34.68	27.23	69.7	57.9	49.4
8.41	-38.11	-34.51	-34.8	27.26	70.1	57.5	45.7
8.43	-38.22	-33.94	-34.53	25.46	69.7	57.4	51.6
8.48	-40.79	-34.2	-34.71	27.26	69.8	57.9	52.4
8.4	-42	-33.47	-34.84	27.23	70.2	57.4	50.5
8.41	-42.47	-34.66	-34.77	25.92	70.1	57.2	49.9
8.36	-43.5	-34.15	-34.9	27.01	69.6	57.8	50.8
8.39	-43.57	-34.46	-34.8	27.29	70	57.4	50.9
8.42	-41.89	-33.16	-35.14	26.92	70.2	57.2	49.2
8.38	-41.48	-33.63	-34.99	25.49	69.6	57.5	51.3
8.54	-43.17	-33.99	-35.17	27.23	70.1	57.4	49.5
8.53	-42.91	-34.51	-35.14	27.2	70.3	57.2	49.6
8.43	-43.39	-34.46	-35.02	25.43	69.6	57.4	49.5
8.56	-41.89	-34.2	-35.17	27.32	70.1	57.3	50.5
8.39	-41.45	-34.2	-34.9	27.26	70	57.2	56.6
8.44	-40.82	-33.52	-35.11	25.55	70	57.1	48.6
8.4	-39.14	-34.3	-35.11	26.56	69.6	57.4	50.8
8.55	-40.24	-34.51	-35.29	27.26	70.1	57.3	50.9
8.54	-39.36	-34.25	-35.45	27.29	70.2	57.1	47.5
8.48	-39.21	-34.15	-35.32	26.16	70.2	57.2	47.9
8.38	-42.44	-34.61	-35.66	26.22	69.7	57.4	47.7
8.55	-42.44	-34.25	-35.45	27.23	70.2	57.3	49.7
8.45	-42.66	-35.44	-35.45	27.32	70.3	57.1	50
8.05	-41.12	-33.68	-35.38	25.27	69.8	57.3	51.3
8.58	-42.22	-34.92	-35.2	27.29	70.3	57.3	52.6
8.5	-40.24	-35.13	-35.54	27.26	70.4	57.1	47.3
8.38	-41.41	-34.87	-35.51	26.89	70.6	57.1	49.1
8.38	-42.62	-35.6	-35.48	25.34	70	57.1	52.6
8.61	-42.51	-34.77	-35.57	27.26	70.4	57.4	51.7
8.47	-42.33	-34.66	-35.48	27.29	70.7	57.1	48.7
8.41	-41.19	-33.78	-35.6	27.29	71.1	57.1	44.8
8.21	-40.57	-35.49	-35.6	25.34	70.2	57.1	52.9
8.61	-40.24	-34.61	-35.72	27.26	70.8	57.3	52.2
8.48	-37.34	-35.55	-35.87	27.29	71.2	57.2	51.1
8.41	-41.85	-35.08	-35.75	25.85	71.2	57.1	48.8
8.38	-41.81	-34.72	-35.75	25.82	70.8	57.2	50.1
8.54	-42.03	-34.87	-35.93	27.23	71.5	57.2	48
8.42	-41.41	-33.78	-36.03	27.23	71.9	57.3	45.2
8.38	-41.89	-35.08	-35.96	25.4	71.2	57.2	49.5
8.6	-42.55	-34.82	-36	27.14	71.6	57.3	49.5
8.41	-42.55	-35.6	-36	27.14	72.3	57.1	48.9

8.54	-43.57	-35.34	-35.87	26.59	72.8	57.1	49.8
8.41	-44.12	-35.24	-35.87	25.12	72.6	57.5	51.6
8.49	-42.33	-35.39	-36.21	27.11	73.4	57.5	53
8.52	-42.51	-35.08	-36.09	27.01	74.6	57.4	52.4
8.46	-43.97	-35.18	-36.21	25.24	74.1	57.5	50.1
8.52	-44.52	-35.6	-36.06	26.95	74.5	58	51.2
8.51	-45.81	-34.98	-36.21	26.92	75.6	57.8	49.5
8.49	-44.23	-36.01	-36.21	26.89	76.2	57.6	50.5
7.7	-40.97	-35.08	-36.27	25.03	76.7	57.9	46.3
8.51	-42.99	-36.48	-36.3	27.01	77.8	58.1	51.7
8.51	-43.39	-35.6	-36.48	26.92	77.7	57.9	51.4
8.54	-44.27	-35.96	-36.33	26.07	77.6	58.2	50.8
8.41	-43.42	-34.72	-36.39	25.76	77.7	58.4	50.5
8.48	-39.8	-35.39	-36.36	26.89	77.5	58.4	52.1
8.5	-42.11	-36.22	-36.15	26.95	77.2	58.2	46.6
8.41	-40.75	-35.6	-36.45	25.24	76.8	58.2	50
8.43	-42.88	-35.86	-36.54	26.43	76.6	58.6	49.6
8.46	-38.19	-36.07	-36.54	26.92	77.5	58.6	50.4
8.46	-40.38	-36.79	-36.54	26.89	77.9	58.5	50.2
8.13	-42.36	-36.38	-36.58	24.94	78.3	58.5	49.3
8.63	-34.56	-36.27	-36.58	26.8	79.1	58.9	50.5
8.44	-40.31	-35.75	-36.7	26.92	80.1	58.8	50.2
8.41	-39.14	-35.55	-36.51	25.24	79.6	58.9	51.6
8.38	-38	-36.27	-36.64	26.53	79.7	59.1	52.9
8.44	-39.87	-36.07	-36.79	26.74	80.1	59.1	51
8.43	-35.95	-36.95	-36.64	26.92	79.2	59	49.2
8.37	-34.49	-36.64	-36.67	25.03	78.7	59	52.1
8.43	-38.3	-35.44	-36.88	26.92	78.8	59.4	52.7
8.43	-38.52	-35.75	-36.73	26.95	79.2	59.2	50.9
8.54	-42.07	-36.07	-37	26.95	79	59.2	49.8
8.51	-35.66	-36.17	-36.85	24.94	78.4	59.1	52.7
8.76	-39.91	-36.32	-36.88	26.83	78.8	59.6	51.2
8.38	-38.85	-34.61	-37.06	26.92	79	59.3	50.1
8.5	-34.74	-36.9	-37	26.77	79.5	59.2	50
8.45	-40.6	-36.74	-37	24.91	78.8	59.3	50.7
8.57	-38.19	-36.27	-36.97	26.92	79.3	59.5	50
8.41	-36.14	-36.12	-36.85	26.83	79.4	59.3	50.5
8.47	-39.95	-36.74	-36.79	25.82	79.1	59.2	49.9
8.43	-33.42	-36.48	-36.85	25	78.4	59.4	50.5
8.65	-38.15	-36.95	-37.19	26.8	78.8	59.6	49.3
8.53	-36.72	-37.1	-37	26.83	79.5	59.5	51.6
8.44	-38.3	-36.38	-37.16	26.92	79.6	59.4	53.3
8.43	-36.98	-36.07	-37.43	25.21	79	59.3	49.5
8.42	-37.38	-36.9	-37.19	25.73	78.8	59.6	48.9
8.55	-41.81	-36.32	-37.09	26.92	79.1	59.6	52
8.51	-34.27	-36.27	-37.28	26.98	79.2	59.4	49.8
8.56	-41.41	-36.48	-37.16	26.01	78.7	59.2	45

8.41	-36.83	-35.86	-37.37	25	78.1	59.4	54
8.62	-40.53	-36.22	-37.28	26.95	78.4	59.8	51
8.45	-38.99	-36.74	-37.49	26.98	78.7	59.5	51.6
8.42	-42.18	-36.95	-37.34	27.05	78.3	59.3	49.7
8.43	-39.21	-37.67	-37.64	25.27	77.9	59.3	50.5
8.37	-38.92	-36.22	-37.52	25.4	77.4	59.6	49.5
8.62	-41.81	-37.1	-37.43	27.01	77.4	59.7	51.1
8.48	-39.4	-36.48	-37.64	27.05	77.3	59.5	52.4
8.41	-38.26	-36.38	-37.34	27.05	77.2	59.4	49
8.53	-41.89	-36.95	-37.31	25.52	76.9	59.1	48.1
8.38	-37.75	-37.36	-37.49	25.09	76.4	59.5	52.4
8.56	-41.85	-36.69	-37.86	27.14	76.6	59.7	50
8.45	-39.58	-36.84	-37.64	27.14	76.6	59.4	50
8.42	-42.58	-37.31	-37.43	27.11	76.6	59.2	52.7
8.43	-41.63	-36.58	-37.74	25.85	76.4	59.2	50.4
8.39	-37.64	-36.95	-37.58	25.18	75.6	59.2	49.4
8.57	-41.74	-36.79	-37.67	27.2	76.1	59.6	51.3
8.53	-36.17	-36.79	-37.7	27.11	76.1	59.3	51.8
8.52	-42.4	-37.05	-37.64	27.2	76.1	59.3	47.2
8.47	-35.07	-37.16	-37.74	25.27	75.2	59.2	49.6
8.4	-41.59	-37.1	-37.8	26.5	74.7	59.4	51.1
8.55	-35.88	-36.9	-37.8	27.2	74.9	59.2	50.8
8.47	-41.04	-36.9	-37.77	27.23	74.8	59.1	50.2
8.44	-37.23	-37.41	-37.67	26.56	74.8	59.1	52.7
8.17	-40.27	-36.12	-37.77	25.4	74.1	59.1	48.3
8.58	-39.18	-37.21	-38.13	27.23	74.3	59.2	50.7
8.45	-38.7	-37.99	-38.07	27.14	74.3	59	52.9
8.53	-41.26	-37.36	-38.13	27.17	74.5	59.1	51.3
8.43	-37.2	-38.04	-37.8	25.61	74	58.9	50.4
8.36	-38.19	-38.19	-37.83	25.4	73.3	59	49.2
8.61	-41.26	-37.47	-37.89	27.29	74.1	59	50.8
8.52	-33.35	-37.31	-38.01	27.26	73.6	58.9	52.2
8.46	-38.19	-37.31	-38.04	27.35	73.6	58.6	52.1
8.42	-36.65	-37.21	-38.16	26.01	73	58.5	48.4
8.4	-33.46	-37.21	-38.13	25.43	72.5	58.8	51.6
8.51	-36.17	-37.16	-38.16	27.26	72.9	59	50.5
8.54	-38.26	-37.99	-38.44	27.2	73.2	58.7	52.4
8.44	-35.77	-37.31	-37.89	27.35	73.1	58.5	51.5
8.44	-29.91	-37.52	-38.22	27.11	73.2	58.4	50.3
8.36	-33.32	-37.57	-38.28	25.55	72.4	58.3	49.4
8.38	-36.06	-37.83	-38.04	26.07	72.2	58.7	49.3
8.5	-38.48	-38.19	-38.22	27.23	72.7	58.7	51.5
8.53	-38.22	-37.88	-38.35	27.29	72.9	58.5	52.6
8.5	-37.75	-37.99	-38.32	27.32	72.8	58.4	51.9
8.38	-40.02	-37.88	-38.28	27.29	72.9	58.3	54.4
8.47	-33.35	-37.57	-38.38	25.61	72.6	58.2	49.1
8.38	-32.22	-37.93	-38.53	25.4	72.2	58.5	51

8.44	-31.15	-37.99	-38.25	27.32	72.2	58.7	49.3
8.6	-35.15	-37.57	-38.47	27.35	72.6	58.5	48.8
8.46	-37.09	-38.4	-38.25	27.41	72.6	58.4	50.5
8.45	-36.9	-38.14	-38.38	27.32	72.5	58.2	49.7
8.44	-38.48	-37.16	-38.28	26.01	72.4	58.2	51
7.55	-35.99	-38.19	-38.56	25.52	72.1	58.2	52.3
8.39	-38.59	-38.04	-38.53	25.52	72	58.4	51.6
8.54	-40.6	-37.62	-38.59	27.32	72.1	58.6	51.1
8.5	-40.93	-38.56	-38.5	27.41	72.3	58.3	49
8.48	-40.2	-37.88	-38.68	27.35	72.4	58.1	49.1
8.52	-41.56	-38.24	-38.28	27.41	72.5	58	52.6
8.48	-40.16	-37.88	-38.5	25.58	72.3	58.2	51
8.39	-39.98	-38.5	-38.59	25.43	71.5	58.2	51.6
8.45	-40.09	-38.09	-38.62	27.17	71.6	58.4	49.6
8.6	-40.97	-37.21	-38.83	27.38	72.2	58.2	51.8
8.41	-39.58	-37.88	-38.68	27.35	72.3	58.2	55.6
8.43	-38.22	-37.93	-38.86	27.38	72.3	58.1	49.5
8.38	-35.99	-39.91	-38.8	27.32	72.3	58	49.9
8.44	-35.11	-37.99	-38.68	26.04	72	57.9	50.9
8.34	-36.32	-38.82	-38.62	25.58	71.5	57.8	50.2
8.38	-34.19	-37.93	-39.02	25.31	71.3	58.1	49.7
8.44	-33.57	-38.35	-38.68	25.79	71.1	58.2	51.6
8.46	-35.62	-37.99	-38.8	27.2	71.3	58.2	51.6
8.58	-32.47	-38.45	-38.83	27.35	71.6	58.2	49.5
8.48	-37.71	-38.04	-38.83	27.38	71.4	58.1	46.7
8.47	-38.08	-38.56	-38.86	27.29	71.8	58.2	50.2
8.47	-37.89	-37.57	-38.8	27.44	71.6	57.9	47.3
8.53	-40.05	-38.5	-38.65	27.38	71.5	57.9	49.7
8.56	-40.09	-38.19	-38.83	27.38	71.6	58	48.7
8.47	-40.75	-38.45	-38.71	27.38	71.6	57.9	48.1
8.44	-36.72	-38.4	-39.14	27.41	71.6	58.1	50.2
8.52	-34.3	-38.45	-39.05	27.41	71.6	57.9	47.2
8.44	-32.91	-38.92	-39.14	27.41	71.6	57.9	50.5
8.41	-37.6	-38.5	-38.89	27.41	71.8	57.8	51.5
8.56	-37.97	-38.97	-39.05	27.44	72	57.8	47.9
8.44	-37.01	-38.4	-39.2	27.35	72	57.8	49.5
8.5	-36.39	-37.93	-38.99	27.44	72	57.6	51.5
8.41	-34.49	-39.33	-38.99	27.29	72.1	57.6	53.2
8.42	-35.73	-38.35	-39.14	27.38	72.1	57.8	52.3
8.51	-33.72	-38.14	-39.29	27.35	72.3	57.8	52.7
8.46	-35.84	-38.09	-39.17	27.32	72.5	57.6	50.8
8.41	-37.56	-38.45	-39.26	27.35	72.7	57.8	51.1
8.5	-36.83	-39.54	-39.32	27.38	72.8	57.8	60.4
8.5	-36.03	-38.5	-39.41	27.38	72.8	57.6	48.4
8.51	-38	-38.56	-39.17	27.32	73	57.9	49.8
8.42	-39.1	-37	-39.14	26.5	73.2	57.8	51.3
8.41	-35.48	-38.45	-39.44	25.82	73	57.8	49.9

8.5	-38.55	-38.4	-39.29	25.67	73.1	57.8	49.8
8.52	-37.71	-38.76	-39.35	25.76	73.4	57.8	50.1
8.52	-37.53	-38.97	-39.32	26.04	73.5	58	47.9
8.45	-38.74	-38.76	-39.26	25.67	73.4	57.9	48.6
8.48	-38.11	-38.45	-39.35	25.49	73.4	58	50.7
8.41	-36.76	-38.97	-39.51	25.55	73.4	57.9	52
8.24	-37.38	-38.97	-39.26	25.34	73.5	58	51.1
8.33	-33.17	-39.13	-39.32	25.49	73.7	58	51.9
8.43	-32.62	-38.71	-39.44	25.58	74.4	58.1	51.3
8.41	-33.97	-38.87	-39.26	26.07	74.6	58.1	47.3
8.41	-32.8	-38.82	-39.51	26.56	75	58	47.7
8.38	-36.28	-38.97	-39.35	26.07	75.2	58.2	50.7
8.37	-38.37	-38.45	-39.72	25.58	75.1	58.2	47.4
8.45	-38.22	-38.82	-39.63	25.34	75.2	58.1	49.3
8.48	-32	-38.82	-39.69	25.46	75.2	58.2	47.4
8.51	-33.53	-39.65	-39.41	25.82	75.8	58.3	50.7
8.43	-35.73	-38.66	-39.26	26.47	76.2	58.2	50.7
8.41	-36.43	-39.13	-39.44	27.26	76.2	58.3	50.7
8.38	-34.96	-39.23	-39.51	26.95	76.5	58.2	48.7
8.46	-39.51	-38.97	-39.63	26.19	76.5	58.4	51.4
8.52	-38.11	-38.82	-39.41	25.67	76.9	58.4	49.8
8.53	-39.36	-39.33	-39.69	25.73	77	58.4	46.7
8.43	-39.62	-38.24	-39.78	26.74	77	58.5	52
8.34	-40.35	-38.97	-39.63	27.01	77.3	58.3	50.8
8.5	-34.56	-39.28	-39.47	26.83	77.3	58.6	53.5
8.45	-38.55	-38.61	-39.87	26.53	77.3	58.5	51.1
8.41	-39.14	-38.45	-39.47	26.22	77.2	58.6	51
8.53	-39.65	-39.13	-39.6	26.37	77.4	58.6	51.3
8.44	-38.88	-38.92	-39.69	26.28	77.3	58.7	49.7
8.47	-30.64	-39.7	-39.57	26.19	77.5	58.8	48.8
8.44	-34.41	-38.92	-39.75	25.7	77.5	58.6	50.4
8.49	-38.19	-39.75	-39.84	25.24	77.2	58.8	50.5
8.39	-37.6	-38.97	-39.93	25.27	76.9	58.8	49.4
8.39	-28.3	-39.49	-39.75	25.15	76.9	58.7	51.8
8.02	-37.6	-39.75	-39.75	25.18	76.8	58.7	51.1
8.54	-37.49	-38.87	-39.87	25.09	77.1	58.6	50.4
8.38	-32.22	-39.54	-39.69	25.31	77.1	58.9	50.5
8.54	-31.56	-38.97	-40.09	25.18	77.2	58.7	55.3
8.42	-37.89	-38.66	-39.84	25.24	76.9	58.9	50.8
8.35	-35.99	-39.85	-39.93	25.15	76.7	59.2	51.6
8.35	-33.13	-39.18	-39.87	25.06	76.7	59.1	50.5
8.39	-40.16	-39.8	-39.69	25.09	76.5	59	51.6
8.39	-35.11	-39.44	-39.69	25.27	76.6	58.9	49.5
8.4	-36.25	-39.49	-39.75	25.27	76.9	58.9	50.5
8.52	-37.78	-38.71	-40.09	25.27	76.7	59	50.3
8.51	-30.64	-38.45	-40.15	25.15	76.6	58.9	49.7
8.24	-35.11	-39.33	-39.93	25.24	76.7	58.7	51.6

8.36	-37.42	-38.45	-40.02	25.24	76.7	58.9	50.5
7.91	-31.7	-39.7	-40.12	25.15	76.6	58.9	49.9
8.34	-33.42	-40.48	-39.87	25.27	76.6	59	50.5
8.54	-38.37	-39.96	-39.75	25.12	76.7	59	51
8.41	-33.39	-38.87	-40.21	25.31	76.7	59	51.1
8.44	-32.51	-39.7	-39.96	25.18	76.7	59	51.8
8.52	-35.95	-39.8	-40.05	25.15	76.2	58.9	49.4
8.33	-33.32	-39.39	-40.12	25.27	76.3	59	50.4
8.35	-30.57	-39.23	-40.15	25.27	76.2	58.9	51.1
8.48	-36.94	-39.18	-40.05	25.12	76.3	59	46.6
8.41	-35.81	-39.13	-40.09	25.49	75.9	59	51.4
8.52	-27.56	-39.75	-40.12	25.95	76.1	58.9	52
8.43	-35.18	-39.54	-40.24	26.13	76.2	59.1	49.1
8.47	-34.41	-39.7	-40.27	25.61	76.1	59	51.2
8.52	-27.05	-39.85	-40.15	25.34	75.8	58.9	47.9
8.41	-34.41	-40.06	-40.24	25.12	75.5	58.9	52.7
8.36	-34.74	-39.28	-40.3	25.24	75.1	59	51.8
8.47	-27.56	-39.65	-40.24	25.21	75.2	59	51.3
8.48	-30.71	-40.58	-40.05	25.61	75.3	58.8	52.2
8.44	-37.34	-39.7	-40.3	26.53	75.3	59	51.6
8.51	-37.23	-40.01	-40.21	26.92	75.2	59	49.8
8.38	-38.66	-39.96	-40.27	26.5	75	59	49.6
8.53	-33.24	-39.59	-40.6	26.53	74.8	58.8	50.4
8.39	-33.79	-39.49	-40.24	26.77	74.7	58.7	50.1
8.52	-35.81	-39.91	-40.27	27.01	74.6	58.9	52.1
8.39	-32.51	-39.28	-40.27	27.11	74.5	58.8	48.9
8.51	-27.82	-39.96	-40.3	27.11	74.5	58.8	53.2
8.42	-34.16	-40.37	-40.27	27.08	74.4	58.8	48.2
8.48	-35.51	-39.75	-40.3	27.01	74.3	58.8	50.9
8.52	-33.39	-39.54	-40.42	27.11	74.1	58.9	50.3
8.4	-31.34	-39.54	-40.3	27.17	74.1	59.1	49.5
8.52	-27.82	-39.85	-40.57	27.08	73.8	58.8	44.7
8.6	-29.65	-40.11	-40.24	27.08	73.8	59	50.8
8.5	-33.61	-39.65	-40.3	27.08	73.8	58.9	52.1
8.46	-35.81	-39.65	-40.39	26.19	73.3	59.1	48.4
8.44	-35.51	-40.01	-40.39	25.03	73.2	58.9	48.9
8.35	-31.78	-40.48	-40.51	25.09	73.4	58.6	49.5
8.39	-25.99	-39.96	-40.36	25.27	73.4	58.4	53.5
8.52	-30.2	-39.7	-40.48	25.31	73.5	58.6	51.3
8.44	-31.67	-39.8	-40.36	25.79	73.7	58.5	49.9
8.36	-33.24	-39.85	-40.51	27.05	74.1	58.5	50.7
8.44	-35.51	-39.65	-40.45	27.11	74.2	58.4	49
8.5	-36.14	-40.16	-40.48	27.08	74.1	58.6	51.9
8.54	-33.39	-40.37	-40.6	27.11	74	58.7	48.7
8.48	-32.62	-39.91	-40.39	27.11	74.1	58.4	49.5
8.42	-32.58	-40.01	-40.91	27.05	74	58.4	51.7
8.41	-32.62	-39.59	-40.73	27.08	73.8	58.6	48.1

8.48	-28.81	-39.54	-40.67	27.01	73.6	58.8	52.7
8.6	-25	-40.53	-40.57	27.01	73.7	58.9	50.7
8.47	-25	-39.75	-40.57	26.5	73.3	59.1	55.6
8.45	-27.01	-40.27	-40.63	25.03	73.2	58.8	50.7
8.42	-29.32	-40.27	-40.63	25	73.3	58.8	51.1
8.35	-31.08	-40.16	-40.79	25.03	73.3	58.7	50.9
8.38	-33.64	-40.01	-40.85	24.97	73.4	58.7	50.5
8.36	-32.07	-39.65	-40.67	24.94	73.6	58.6	52.7
8.04	-36.94	-39.44	-40.76	25.09	73.8	58.6	49.7
8.41	-36.03	-39.65	-40.82	25.21	74.5	58.5	49.5
8.42	-37.89	-40.53	-40.39	26.98	75	58.4	49.5
8.5	-36.43	-40.27	-40.67	27.01	74.9	58.4	52.3
8.53	-38	-40.06	-40.76	26.92	75.2	58.5	49.1
8.53	-37.82	-40.42	-40.63	26.95	75.4	58.5	46.5
8.52	-37.42	-41.25	-40.82	26.95	75.3	58.4	47.7
8.5	-36.65	-40.74	-40.63	26.95	75.4	58.6	51.3
8.53	-39.51	-39.85	-40.94	26.83	75.3	58.9	48.8
8.65	-40.42	-40.22	-40.6	26.89	74.7	59	50.5
8.76	-40.93	-40.11	-40.7	26.83	74.5	58.9	47.5
8.47	-41.81	-40.01	-41.03	26.19	73.8	59	49.4
8.45	-42.33	-40.79	-40.88	24.88	73.6	58.8	51
8.41	-41.52	-39.96	-41.03	24.88	73.4	58.8	51.3
8.07	-42.14	-39.91	-40.76	25.03	73.7	58.4	51.4
8.54	-41.81	-40.27	-40.88	25.49	74.1	58.5	52.3
8.49	-41.37	-40.16	-41.03	26.98	74.2	58.4	51
8.53	-41.78	-40.11	-40.7	26.89	74.3	58.4	52.2
8.52	-41.63	-40.37	-40.73	26.95	74.1	58.5	50.1
8.52	-42.95	-40.89	-40.73	27.01	74.3	58.4	54.8
8.48	-41.41	-39.96	-41.03	26.98	74.1	58.5	54.4
8.56	-41.67	-40.58	-40.73	26.98	74	58.7	52.3
8.58	-41.52	-39.75	-41.06	26.89	73.7	58.6	50.4
8.7	-37.71	-41.15	-40.85	26.92	73.6	58.9	51.4
8.44	-38	-39.91	-40.88	26.16	73.4	59	49.5
8.45	-42.22	-40.53	-41.18	24.91	73.4	58.7	51.9
8.39	-34.05	-40.06	-40.94	24.97	73.5	58.6	50
8.4	-40.6	-40.16	-41.15	25.03	74	58.3	52.4
8.52	-42.11	-40.11	-41.09	25.7	74.4	58.2	51
8.54	-42.36	-40.42	-41.03	26.98	74.8	58.3	52.5
8.52	-44.16	-40.22	-41.15	26.92	74.9	58.4	51.9
8.52	-42.95	-40.22	-40.85	26.89	74.9	58.3	50.7
8.41	-42.99	-39.59	-41	26.89	74.9	58.7	52.5
8.48	-38.3	-40.48	-41.06	26.92	75.4	58.6	50.5
8.48	-37.42	-40.79	-41.06	27.01	75.1	58.8	50.5
8.52	-43.46	-40.53	-41	26.89	75.5	58.8	50.2
8.61	-42.4	-40.89	-41.21	26.8	75.7	58.9	49
8.62	-44.12	-40.63	-40.88	26.89	75.7	59.3	52.6
8.62	-40.68	-40.84	-41.31	26.83	75.8	59.2	51

8.62	-45.33	-40.68	-40.91	26.92	76.5	59.2	50.7
8.61	-43.24	-40.53	-40.97	26.83	76.6	59.2	55.1
8.58	-46.1	-39.91	-41.43	26.71	77.1	59.3	53.2
8.44	-43.53	-40.53	-41.25	26.65	76.9	59.4	48.7
8.44	-46.43	-41.36	-40.97	25.06	77.1	59.3	50.5
8.39	-42.36	-40.68	-41.15	24.79	77	59.3	50.9
8.37	-45	-41.1	-41.28	24.82	77.6	59.2	53.2
7.81	-41.78	-40.89	-41.15	24.94	77.7	59.1	50.8
8.26	-43.72	-40.63	-41.34	24.94	78.1	59.2	48.9
8.44	-43.42	-41.72	-41.37	24.82	79	59.3	50.8
8.43	-45.18	-40.58	-41.43	24.79	79.9	59.2	51
8.38	-41.19	-40.68	-41.46	24.76	80.3	59.3	51.7
8.4	-45	-40.89	-41.43	25.03	81	59.4	51.8
8.44	-43.72	-41	-41.46	25.85	81.9	59.5	51.2
8.51	-41.85	-40.53	-41.21	26.56	82.7	59.6	50.7
8.41	-41.74	-40.06	-41.4	26.56	82.5	59.7	51
8.52	-42.62	-40.89	-41.21	26.5	83.2	59.8	49.7
8.5	-42.84	-40.74	-41.49	26.5	83.2	60.3	50.8
8.41	-42.58	-40.48	-41.46	26.5	83.2	59.8	50.9
8.45	-40.71	-40.37	-41.46	26.43	83.1	60.3	49.3
8.5	-40.16	-40.89	-41.28	26.47	82.4	60.3	45.3
8.51	-40.2	-40.79	-41.64	26.47	82.9	60.4	50.5
8.5	-40.42	-40.89	-41.37	26.47	83.2	60.6	50
8.45	-41.08	-40.89	-41.37	26.5	83.2	60.6	49.5
8.48	-42.07	-40.84	-41.46	26.53	83.4	60.8	52.7
8.44	-43.75	-41.51	-41.43	26.47	83.9	60.6	51.3
8.43	-43.28	-40.22	-41.46	26.31	85	60.9	51.5
8.49	-44.63	-40.63	-41.37	26.37	85.6	61	49
8.58	-45.84	-41.31	-41.4	26.19	86.4	61.1	47.3
8.55	-47.2	-40.84	-41.49	26.31	86.4	61.3	51.1
8.6	-42.03	-40.63	-41.49	26.19	86.4	61.5	46.2
8.78	-45.18	-40.11	-41.61	26.22	86.4	61.8	50.7
8.47	-47.38	-40.74	-41.49	25.79	86.6	61.9	51.8
8.44	-45.77	-40.89	-41.52	25.27	86.4	61.9	51.4
8.43	-45.99	-42.24	-41.52	25.09	85.6	61.9	50.8
8.45	-46.98	-41.67	-41.37	25	85.3	62.1	52.4
8.45	-43.64	-41.05	-41.67	24.48	85	62	49.2
8.49	-48.04	-41.2	-41.43	24.36	84.6	61.9	52.3
8.39	-46.25	-41.31	-41.7	24.3	84.2	62	51.6
8.39	-47.27	-41.2	-41.7	24.42	84.2	61.8	50.7
8.37	-46.14	-40.84	-41.73	24.39	84.2	62	51.5
8.37	-45.84	-41.05	-41.67	24.3	84.2	62	50.5
8.39	-46.79	-40.68	-41.52	24.36	84.3	62.1	50.7
8.39	-46.79	-41.36	-41.61	24.36	84.3	61.9	50.8
8.37	-44.89	-41.31	-41.73	24.39	84.2	61.9	49.7
8.4	-48.55	-41.1	-41.76	24.54	84.1	61.7	52.7
8.51	-45.33	-41	-41.55	24.73	84.4	61.7	51.7

8.51	-48.66	-41.31	-41.79	24.91	84.4	61.7	50.4
8.54	-45.99	-41.25	-41.76	24.88	84.5	61.6	51.5
8.51	-48.3	-41.25	-41.79	24.73	84.9	61.7	53
8.5	-45.77	-41.98	-41.67	25	84.6	61.9	52
8.44	-48.92	-41.77	-41.67	26.34	84.6	61.8	50.4
8.43	-47.2	-41.83	-41.73	26.34	84.2	61.7	50.1
8.41	-48.99	-40.53	-41.76	26.43	84.4	61.9	52.6
8.42	-47.82	-41.1	-41.92	26.37	84.4	62	49.2
8.52	-45.62	-41.62	-41.64	26.37	84.4	62.2	51
8.52	-49.36	-41.41	-41.79	26.34	84.1	62.1	52.7
8.41	-48.74	-40.48	-41.73	26.34	84.1	62	50.7
8.47	-45.88	-41.41	-41.79	26.37	84.1	62	50.4
8.52	-49.1	-41.62	-41.83	26.37	83.9	62.4	48.9
8.65	-43.83	-41.2	-41.92	26.43	83.7	62.5	45.9
8.47	-47.12	-41.46	-42.04	25.58	83.2	62.6	56
8.42	-45	-41.31	-41.61	24.36	83	62.4	52.1
8.39	-46.83	-40.84	-41.92	24.48	82.4	62.2	51.7
8.36	-44.6	-40.37	-42.04	24.42	82.5	62.2	50.5
8.38	-43.46	-41.15	-42.07	24.45	82.1	62	47.7
8.4	-46.72	-41.51	-41.86	24.63	82.4	61.7	50.4
8.47	-40.71	-41.36	-41.83	24.73	82.4	61.7	49.8
8.47	-45.07	-42.14	-41.86	25.27	82.7	61.8	50.7
8.44	-39.98	-41.72	-41.86	26.34	82.8	61.7	49.5
8.44	-42.33	-41.2	-41.98	26.53	82.7	61.8	51.5
8.44	-43.1	-41.25	-42.19	26.59	82.7	61.6	49.5
8.4	-42.51	-41.88	-42.04	26.56	82.9	61.6	47.8
8.38	-44.27	-41.72	-42.07	26.47	82.7	61.8	48.6
8.39	-41.74	-41.98	-41.86	26.62	82.4	61.7	46.7
8.46	-44.05	-41.77	-41.95	26.59	82.1	61.7	47.5
8.5	-39.14	-40.63	-42.13	26.56	82	61.7	50.5
8.51	-45.15	-41.51	-42.01	26.62	81.7	61.5	54.5
8.44	-39.69	-41.41	-41.95	26.56	81.5	61.8	50.3
8.43	-42.73	-41.15	-42.16	26.62	81.2	61.7	48.3
8.44	-46.65	-41.46	-42.13	26.62	81	61.6	44.6
8.44	-46.17	-42.14	-42.07	26.68	80.8	61.6	47.3
8.51	-39.62	-41.62	-42.28	26.59	80.3	61.6	51.8
8.45	-44.89	-41	-42.1	26.65	80.2	61.5	49.5
8.93	-45.22	-41.93	-42.25	26.56	79.8	61.9	50.5
8.45	-37.12	-41.77	-42.16	25.98	79.5	61.9	51.3
8.43	-40.97	-41.62	-42.22	25.55	79.1	61.8	50
8.47	-44.93	-41.83	-42.25	25.49	78.8	61.7	52.3
8.41	-45.11	-41.72	-42.19	24.73	78.6	61.6	51.4
8.4	-40.53	-41.05	-42.25	24.73	78.4	61.4	50.8
7.56	-40.2	-41.88	-42.25	24.88	78.6	61.1	48.8
8.42	-39.76	-42.92	-42.31	25.03	78.6	61.1	49.1
8.52	-44.82	-42.03	-42.19	25.03	78.7	61	48.6
8.52	-44.16	-42.08	-42.1	25.18	78.6	61	51

8.47	-45.15	-41.62	-42.34	25.21	78.6	61	50.8
8.42	-44.01	-42.29	-42.19	25.58	78.4	60.8	50.5
8.41	-42.47	-41.72	-42.16	26.71	78.7	61	49.5
8.4	-43.39	-42.19	-42.34	26.74	78.3	60.8	47.4
8.41	-40.16	-41.46	-42.34	26.83	77.7	60.9	43.6
8.43	-40.35	-41.77	-42.28	26.65	77.7	61	49.9
8.42	-40.49	-41.98	-42.47	26.74	77.7	60.7	45.2
8.41	-38.63	-41.77	-42.37	26.77	77.7	60.9	52.2
8.42	-40.42	-42.08	-42.34	26.83	77.7	60.5	52
8.44	-38.11	-41.98	-42.41	26.8	77.8	60.8	51.3
8.38	-42.4	-42.24	-42.25	26.74	77.4	60.9	50.8
8.44	-43.9	-41.2	-42.34	26.59	76.8	61.3	51.8
8.44	-44.96	-41.83	-42.25	24.79	76.3	61	51.6
8.42	-45.26	-42.14	-42.31	24.88	76.1	60.7	49.8
8.38	-42.73	-41.98	-42.59	25	76.1	60.4	49.4
8.41	-40.97	-41.72	-42.41	24.88	75.9	60.3	48.8
8.47	-39.1	-42.08	-42.28	24.91	75.9	60.4	50.5
8.55	-35.29	-41.67	-42.31	25.12	75.9	60.3	48.3
8.45	-38.15	-41.72	-42.37	25.64	76.1	60.3	51.1
8.46	-44.19	-41.46	-42.56	26.89	76.2	60.2	50.1
8.5	-44.63	-42.03	-42.5	26.8	76.3	60.3	54.1
8.41	-42.77	-42.24	-42.28	26.83	75.9	60.3	50.3
8.5	-41.08	-42.08	-42.44	26.95	76.1	60.3	51.6
8.46	-45.07	-41.77	-42.47	26.83	75.8	60.2	52.8
8.44	-46.25	-41.98	-42.44	26.95	75.8	60.3	50.7
8.51	-40.49	-41.98	-42.59	26.83	75.7	60.3	50.9
8.36	-44.63	-41.72	-42.47	26.92	75.7	60.3	49.6
8.47	-44.78	-41.93	-42.62	26.89	75.6	60.3	51.5
8.52	-38.66	-41.83	-42.62	26.74	75.6	60.2	52
8.64	-44.71	-42.4	-42.56	26.83	75.6	60.4	48.3
8.59	-41.85	-42.4	-42.83	26.83	75.4	60.4	49.3
9.06	-46.83	-41.83	-42.5	26.77	75.5	60.6	49.5
8.47	-42	-42.08	-42.71	26.77	75.2	60.3	50.7
8.46	-38.88	-42.5	-42.53	25.31	75.1	60.4	50
8.41	-38.44	-41.88	-42.47	24.88	74.9	60.3	52.8
8.33	-41.59	-43.28	-42.74	24.91	74.9	59.8	51.6
8.54	-44.16	-41.83	-42.44	24.97	75	59.8	51.2
8.53	-38.96	-41.93	-42.92	25.34	75.2	59.7	48.8
8.47	-41.37	-42.24	-42.71	25.52	75.2	59.7	52
8.53	-39.47	-41.93	-42.71	26.19	75.4	59.9	48.3
8.41	-42.88	-42.29	-42.74	26.92	75.5	59.8	49.6
8.5	-41.08	-42.34	-42.83	26.8	75.6	59.9	49.5
8.39	-42.11	-42.4	-42.74	26.89	75.7	59.8	50.3
8.53	-38.59	-41.88	-42.28	26.89	75.5	59.9	50.5
8.44	-41.74	-42.45	-42.86	26.89	75.3	59.9	48.3
8.53	-39.95	-41.83	-42.89	26.89	75.4	59.9	50
8.46	-41.56	-42.24	-42.71	26.92	75.4	59.9	53.7

8.51	-38.44	-42.08	-42.89	26.89	75.5	60.1	51.2
8.54	-40.71	-42.34	-42.74	26.92	75.5	60.1	57.5
8.54	-38.15	-42.29	-42.62	26.8	75.5	60.1	49.5
8.64	-39.29	-42.29	-42.74	26.83	75.4	60.3	47.1
8.46	-38.85	-42.19	-42.71	26.43	75.1	60.3	50.3
8.47	-39.98	-42.08	-42.86	24.88	75	60.1	51.3
8.42	-40.42	-42.19	-42.77	24.85	75.3	60.1	50.8
8.41	-38.41	-42.34	-42.99	24.82	75.5	60.3	51.4
8.37	-42.03	-42.6	-42.89	24.88	75.4	60.1	46.7
7.97	-39.14	-42.34	-42.86	25	75.7	59.7	53.4
8.46	-39.87	-41.88	-43.08	25.15	76.2	59.7	53.4
8.53	-38.37	-42.5	-42.8	26.43	76.6	59.7	50.2
8.44	-41.37	-42.03	-42.83	26.83	76.5	59.9	53.8
8.51	-41.15	-42.14	-43.02	26.95	76.7	59.7	47.1
8.45	-41.26	-42.19	-43.05	26.92	76.4	59.8	51.3
8.41	-43.9	-42.29	-42.8	26.89	76.5	59.8	51.3
8.44	-40.82	-42.19	-43.05	26.89	75.6	59.9	52.8
8.41	-45	-42.45	-43.14	26.83	76.1	59.9	53.2
8.45	-40.09	-42.5	-42.99	26.8	76.1	60.1	51.6
8.44	-45.88	-42.55	-42.8	26.8	76.4	60.1	51.4
8.47	-43.61	-43.02	-42.77	26.8	76.6	60.2	52.1
8.51	-45	-43.54	-43.11	26.77	76.6	60.3	51.3
8.79	-45.59	-42.81	-43.05	26.65	76.6	60.4	50.3
8.42	-45.92	-42.29	-42.99	26.34	76.5	60.4	48
8.44	-44.85	-42.19	-43.14	25.34	76.1	60.5	50.2
8.41	-46.47	-41.98	-43.02	24.73	76.1	60.4	52.6
8.11	-45.81	-42.08	-42.92	24.82	76.4	59.9	50.7
8.48	-45.62	-43.43	-42.92	25.15	76.8	60.1	50.8
8.44	-46.54	-42.76	-42.89	26.71	77.3	60.2	48.9
8.51	-45.84	-42.55	-43.05	26.8	77.3	59.9	42
8.5	-46.39	-42.71	-43.14	26.8	77.3	60.1	52.1
8.5	-46.17	-42.97	-43.23	26.77	77.3	60.3	49.6
8.45	-45.73	-42.45	-43.05	26.71	77.5	60.3	49.3
8.45	-47.27	-42.29	-43.05	26.68	77	60.3	53.3
8.5	-46.68	-42.6	-43.14	26.8	77.6	60.3	50.7
8.48	-46.72	-42.45	-43.11	26.74	77.6	60.5	50.1
8.49	-46.17	-41.83	-42.77	26.74	77.7	60.6	49.4
8.42	-46.17	-42.5	-43.29	26.01	77.5	60.8	51.3
8.45	-39.21	-43.07	-43.17	25.46	77.5	60.7	49.4
8.45	-43.79	-43.07	-43.08	25.31	77.8	60.8	52
8.47	-42.99	-42.71	-43.02	24.66	77.7	60.6	51
8.36	-44.19	-42.6	-42.95	24.69	78.1	60.6	50.4
8.47	-48	-41.98	-43.2	24.66	78.8	60.4	47.1
8.51	-47.97	-42.66	-43.17	26.28	79.2	60.4	50.3
8.42	-48.04	-42.55	-42.99	26.56	79.1	60.5	52.5
8.44	-44.52	-42.14	-43.11	26.65	79.1	60.5	51.1
8.51	-42.29	-43.02	-43.11	26.53	78.9	60.6	49.5

8.42	-45.33	-42.5	-43.11	26.59	78.8	60.4	50.5
8.51	-46.72	-42.66	-43.2	26.59	78.8	60.4	48.7
8.55	-48.37	-43.07	-43.08	26.65	78.8	60.7	49.4
8.44	-44.89	-42.81	-43.23	26.62	78.6	60.9	50.5
8.67	-42.18	-42.71	-43.26	26.53	78.5	61.2	52.2
8.43	-44.74	-42.34	-43.14	25.43	78	61.2	49
8.42	-44.93	-42.92	-43.23	24.51	77.7	61	51.1
7.76	-47.16	-42.4	-43.17	24.69	77.9	60.6	51
8.44	-47.56	-41.83	-43.11	25.85	78.6	60.4	55
8.42	-46.54	-42.71	-43.08	26.56	78.6	60.7	49.9
8.5	-41.48	-43.38	-43.26	26.56	78.9	60.6	51.3
8.45	-44.49	-43.07	-43.14	26.5	78.8	60.7	49.1
8.42	-43.86	-42.14	-43.2	26.62	78.7	60.7	40.9
8.45	-46.83	-43.07	-43.35	26.62	78.6	60.8	51
8.66	-47.16	-43.12	-43.35	26.56	78.3	61.4	50.1
8.44	-47.86	-43.12	-43.23	24.85	77.9	61.1	50.9
8.42	-47.05	-42.76	-43.35	24.54	78	61.1	52.1
8.41	-42.84	-43.17	-43.47	24.54	77.9	60.8	50.4
8.32	-45.88	-42.24	-43.38	24.66	78	60.7	51.5
8.46	-46.47	-42.71	-43.32	24.79	78	60.6	49.9
8.47	-48.33	-42.81	-43.41	26.56	78.4	60.6	46.3
8.54	-48.3	-43.54	-43.57	26.65	78	60.7	46.3
8.54	-47.71	-43.43	-43.32	26.62	77.9	60.5	50
8.53	-48.52	-43.07	-43.17	26.62	78.1	60.7	51.5
8.57	-48.63	-42.81	-43.38	26.65	77.9	60.7	50.5
8.51	-47.86	-43.33	-43.38	26.62	77.9	60.5	50.1
8.56	-47.6	-43.02	-43.11	26.59	77.7	60.7	46.8
8.62	-48.81	-43.17	-43.26	26.59	77.7	60.9	49.7
8.46	-48.44	-43.38	-43.47	25.64	77.4	61.3	51.9
8.42	-47.01	-43.07	-43.5	24.57	77.2	60.8	52.5
8.34	-46.94	-43.23	-43.38	24.69	77.4	60.6	52.2
8.47	-44.52	-42.97	-43.5	24.69	77.3	60.3	49.7
8.55	-41.81	-43.12	-43.47	25.03	77.6	60.4	49.5
8.47	-44.19	-43.07	-43.69	26.22	77.7	60.4	52.4
8.41	-46.98	-42.97	-43.26	26.59	77.5	60.4	49.9
8.53	-48.59	-42.81	-43.53	26.68	77.4	60.4	50.2
8.44	-46.28	-43.33	-43.08	26.59	77.5	60.3	49.4
8.41	-45.99	-43.33	-43.26	26.65	77.5	60.6	50.8
8.52	-41.41	-43.28	-43.38	26.59	77.3	60.7	49.5
8.51	-47.67	-42.6	-43.41	26.65	77.1	60.8	51.4
8.46	-46.47	-42.66	-43.47	26.25	76.6	61.1	50.2
8.44	-45.26	-43.12	-43.69	24.54	76.4	60.7	51.3
8.41	-42.03	-43.02	-43.32	24.69	76.5	60.5	50.3
8.25	-46.14	-43.28	-43.47	24.85	76.7	60.3	51.4
8.52	-47.71	-43.43	-43.6	25.52	77	60.3	45.6
8.42	-46.79	-42.71	-43.38	26.65	77.4	60.3	51.7
8.54	-39.58	-43.43	-43.69	26.65	77.3	60.3	54.5

8.43	-45.7	-42.03	-43.9	26.59	77.3	60.3	51.2
8.44	-45.92	-43.23	-43.35	26.59	77.2	60.4	51.8
8.59	-41.04	-43.17	-43.6	26.68	77	60.6	50.2
9.32	-43.72	-43.33	-43.69	26.37	76.7	61	53.6
8.44	-45.77	-43.49	-43.38	24.57	76.5	60.7	48.1
8.38	-40.97	-43.64	-43.5	24.66	76.6	60.4	46.7
8.41	-44.19	-43.43	-43.84	24.79	77	60.1	52.7
8.47	-44.93	-42.55	-43.26	25.85	77.3	60.3	52.8
8.48	-40.6	-43.28	-43.69	26.68	77.3	60.3	49.5
8.43	-43.75	-43.02	-43.75	26.59	77.3	60.3	50.4
8.38	-38	-43.59	-43.6	26.56	77.2	60.2	51.3
8.45	-37.05	-43.28	-43.29	26.59	77.2	60.4	52.2
8.57	-44.3	-42.92	-43.9	26.56	77.2	60.3	53.7
9.88	-35.15	-42.97	-43.47	26.37	76.9	60.8	51.4
8.47	-42.62	-43.28	-43.75	25	76.6	60.7	52.5
8.43	-37.64	-42.71	-43.66	24.57	76.6	60.5	50.9
8.42	-41.52	-42.6	-43.9	24.54	76.6	60.3	49.5
8.25	-37.01	-42.66	-43.66	24.63	76.6	60.2	48.4
8.49	-40.05	-43.85	-43.6	24.57	76.6	60.1	51
8.43	-36.68	-43.28	-43.66	24.94	76.8	59.9	53.1
8.43	-39.51	-43.54	-43.5	26.43	77	60.3	49.2
8.42	-35.11	-43.28	-43.81	26.53	76.9	60.2	50.4
8.39	-38.74	-43.07	-43.53	26.59	76.9	59.6	49.1
8.41	-36.17	-43.07	-43.87	26.56	76.9	60.2	52.2
8.41	-37.09	-43.23	-43.66	26.59	76.7	60.3	54.4
8.48	-35.22	-42.29	-43.57	26.53	76.6	60.6	52.6
8.44	-32.95	-43.02	-43.63	25.27	76.2	60.5	50.7
8.39	-35.55	-43.64	-43.75	24.51	76.2	60.3	48
8.31	-27.75	-43.28	-43.78	24.73	76.3	59.9	53.7
8.45	-37.12	-43.23	-43.69	25.15	76.5	60.2	50
8.42	-30.64	-42.92	-43.66	26.59	76.8	59.9	47.3
8.41	-31.37	-43.8	-43.66	26.62	76.8	59.9	48.6
8.44	-34.27	-43.17	-43.93	26.62	76.8	60.1	52.6
8.51	-28.48	-43.49	-43.99	26.62	76.7	60.2	47.5
8.51	-33.32	-43.28	-43.6	26.59	76.7	60.2	55.8
8.62	-26.58	-43.17	-43.66	26.59	76.7	60.3	49.1
8.46	-31.01	-43.07	-43.93	26.56	76.5	60.6	51.5
8.42	-27.64	-43.12	-43.87	24.51	75.9	60.3	51.9
8.37	-25.11	-43.02	-43.81	24.54	76.4	60.1	51.5
8.55	-28.08	-43.33	-43.99	24.73	76.5	59.7	49.5
8.34	-25.51	-43.69	-43.93	26.4	77	59.6	52.9
8.47	-30.75	-43.02	-43.78	26.53	76.9	59.8	51.5
8.43	-27.64	-43.07	-43.9	26.56	77.1	60.1	51.6
8.49	-27.38	-43.12	-43.84	26.62	76.9	59.9	51.5
8.5	-26.43	-43.38	-43.81	26.5	77.1	60.1	51.4
8.57	-25	-43.85	-43.99	26.56	77.1	60.5	50.9
8.45	-25.66	-43.33	-43.9	26.56	76.9	60.6	51.1

8.41	-25	-43.28	-43.96	24.48	76.6	60.3	47.3
8.4	-25	-43.59	-44.21	24.54	76.6	60.3	50.1
8.39	-25	-42.81	-43.9	24.63	76.7	60.3	50.5
8.18	-25	-43.07	-43.99	24.69	77.1	60.1	51.2
8.54	-25	-43.12	-44.05	25.09	77.3	59.9	51.4
8.44	-25	-43.28	-43.87	26.53	77.8	60.1	50.5
8.4	-25	-43.28	-43.99	26.56	77.8	60.1	47.9
8.46	-25	-43.75	-43.93	26.53	77.8	60.1	47.8
8.46	-25	-44.58	-43.99	26.5	77.8	60.2	48.9
8.45	-25	-43.02	-44.11	26.5	78.5	60.3	49.5
8.52	-25	-43.69	-43.9	26.53	78.6	60.3	51.8
8.51	-25	-43.33	-43.9	26.47	78.5	60.4	49.4
8.47	-25	-43.38	-44.08	26.53	78.6	60.5	51
8.44	-25	-43.38	-43.87	26.53	78.5	60.8	50.7
8.44	-25	-43.75	-44.08	24.45	78.3	60.8	50.5
8.35	-25	-43.8	-44.08	24.48	78.7	60.4	48.9
8.45	-25	-43.38	-44.02	24.54	79	60.3	50.9
8.46	-25	-42.45	-44.02	25.55	79.4	60.3	52
8.46	-25	-43.95	-43.99	26.5	79.5	60.3	54.4
8.5	-25	-43.64	-44.3	26.43	79.7	60.5	44.6
8.45	-25	-43.33	-44.15	26.47	79.7	60.5	53.4
8.55	-25	-43.49	-44.08	26.43	79.8	60.7	46.5
8.51	-25	-42.97	-44.18	26.43	79.9	61.1	51.8
8.58	-25	-43.33	-44.21	26.4	79.9	61.2	50.8
8.43	-25	-43.38	-44.11	24.42	79.5	61.2	49.5
8.39	-25	-43.38	-44.08	24.39	80	61	52.3
8.46	-25	-44.06	-44.21	24.82	80.9	60.8	49.9
8.41	-25	-43.54	-44.21	26.43	81	60.8	49.5
8.47	-25	-44	-44.02	26.37	81	60.7	48.1
8.52	-25	-43.69	-44.02	26.37	81.2	61	53.9
8.53	-25	-43.69	-44.3	26.31	81.2	61.1	52.9
8.53	-25	-43.33	-44.3	26.4	81.1	61.4	48.6
8.45	-25	-43.69	-44.39	26.31	80.5	61.4	48.8
8.45	-25	-43.54	-44.36	24.36	80.6	61.4	51.2
8.35	-25	-43.9	-44.33	24.39	81.3	61.2	51.4
8.48	-25	-43.59	-44.11	24.82	82.1	61.1	49.2
8.41	-25	-43.28	-44.36	26.25	82.1	61	52.1
8.43	-25	-43.64	-43.96	26.28	82.1	61.2	50.8
8.44	-25	-43.59	-44.21	26.31	82.4	61.4	51.2
8.41	-25	-43.17	-44.15	26.25	82.5	61.4	53.8
8.39	-25	-43.02	-44.36	26.22	82.5	61.5	49.8
8.61	-25	-43.28	-44.33	26.25	82.7	62	47.2
8.46	-25	-43.02	-44.3	24.27	82.1	61.9	51.9
8.4	-25	-43.33	-44.39	24.27	82.1	61.7	48.7
7.83	-25	-43.28	-44.18	24.39	82.3	61.4	51.1
8.43	-25	-43.43	-44.3	24.69	82.9	61.4	51.3
8.37	-25	-43.43	-44.3	26.13	83	61.4	51.5

8.46	-25	-44.37	-44.42	26.34	82.9	61.6	49
8.46	-25	-44	-44.15	26.22	83.5	61.6	50.9
8.42	-25	-43.43	-44.33	26.25	83.6	61.8	51.6
8.54	-25	-44.37	-44.39	26.25	83.9	61.8	45.9
8.55	-25	-43.54	-44.21	26.25	83.7	62.5	42.9
8.47	-25	-42.97	-44.3	25.55	83.5	62.5	52.8
8.44	-25	-43.75	-44.15	24.21	83.3	62.4	50.9
8.35	-25	-43.8	-44.27	24.27	83.3	62.1	51.3
7.94	-25	-43.64	-44.21	24.36	83.2	61.9	52.7
8.46	-25	-43.69	-44.18	24.33	83.4	61.8	49.9
8.45	-25	-43.33	-44.48	24.48	83.5	61.9	49.1
8.48	-25	-44.21	-44.21	24.54	83.6	62	52.1
8.43	-25	-43.43	-44.27	24.69	84	61.8	51
8.5	-25	-44.16	-44.36	26.28	84	62	51.6
8.44	-25	-44.47	-44.33	26.22	84	62.4	49.2
8.52	-25	-43.69	-44.18	26.19	84	62.2	49.4
8.39	-25	-43.33	-44.45	26.16	83.5	62.2	47
8.45	-25	-43.28	-44.36	26.16	83.6	62.2	50.8
8.48	-25	-43.49	-44.54	26.28	83.8	62.5	52.2
8.52	-25	-43.75	-44.36	26.25	83.4	62.6	54
8.68	-25	-43.9	-44.45	26.22	83.1	62.9	51.4
8.44	-25	-44.26	-44.39	24.76	82.5	62.8	51.2
8.45	-25	-43.95	-44.45	24.24	82.2	62.7	50.8
8.35	-25	-44.21	-44.42	24.33	82.2	62.2	50.5
8.38	-25	-43.54	-44.6	24.45	82.1	62.1	51.2
8.42	-25	-44.26	-44.42	24.97	82.5	62.1	52.6
8.44	-25	-44	-44.6	26.31	81.9	62.1	51.2
8.51	-25	-44.06	-44.54	26.34	81.6	62.2	55
8.44	-25	-43.33	-44.57	26.25	81.3	62.4	50.8
8.43	-25	-43.54	-44.45	26.31	81	62.1	51
8.53	-25	-43.59	-44.57	26.34	80.9	62.4	51.2
8.56	-25	-44.16	-44.36	26.31	80.6	62.6	51.5
8.58	-25	-43.02	-44.69	26.34	80	62.6	53.8
8.47	-25	-43.54	-44.42	24.91	79.3	62.5	50.3
8.41	-25	-43.64	-44.57	24.33	79.2	62.2	51.5
8.11	-25	-42.45	-44.54	24.39	79.4	61.9	51.7
8.39	-25	-43.9	-44.48	24.76	79.4	61.6	50.4
8.45	-25	-43.95	-44.66	26.4	79.6	61.5	52.6
8.47	-25	-44.16	-44.45	26.4	79.6	61.8	49.7
8.53	-25	-43.64	-44.54	26.4	79.4	61.8	48.9
8.51	-25	-43.95	-44.76	26.34	79.6	61.9	50.4
8.53	-25	-43.07	-44.57	26.31	79.5	61.9	49
8.62	-25	-43.95	-44.6	26.4	79.3	62.4	49.9
8.47	-25	-44.16	-44.6	26.31	79	62.5	48.4
8.43	-25	-44.26	-44.54	24.63	78.7	62.4	48.7
8.38	-25	-43.85	-44.73	24.36	78.8	62	50.5
8.33	-25	-44.32	-44.79	24.42	79	61.7	53

8.5	-25	-44.21	-44.45	24.63	79.2	61.6	48.6
8.47	-25	-44.06	-44.57	25.85	79.7	61.5	49.9
8.41	-25	-43.69	-44.63	26.4	79.4	61.5	49.8
8.37	-25	-44.21	-44.73	26.25	79.6	61.6	47.7
8.41	-25	-44.78	-44.66	26.43	79.4	61.5	52.6
8.5	-25	-44.26	-44.69	26.4	79.4	61.6	51.6
8.57	-25	-43.64	-44.82	26.4	79.5	61.9	51.3
8.46	-25	-44.26	-44.51	26.13	78.8	62.2	49.5
8.41	-25	-43.95	-44.63	24.3	78.8	61.9	49.8
8.34	-25	-44.26	-44.73	24.42	78.9	61.5	49.6
8.24	-25	-44.37	-44.63	24.54	78.8	61.5	48.9
8.51	-25	-44.16	-44.57	25.67	79.6	61.4	50.8
8.5	-25	-44.32	-44.94	26.4	79.6	61.4	51.6
8.43	-25	-44.26	-44.79	26.4	79.6	61.5	55.2
8.46	-25	-43.9	-44.63	26.4	79.5	61.4	50.7
8.48	-25	-43.9	-44.73	26.37	79.4	61.6	51.1
8.46	-25	-44.06	-44.73	26.37	79.3	61.6	51.8
8.8	-25	-43.95	-44.57	26.22	79	62.1	51.7
8.41	-25	-44.16	-44.88	24.36	78.8	61.9	49.6
8.39	-25	-44.58	-44.82	24.33	78.9	61.5	49.9
8.35	-25	-44.21	-44.79	24.54	78.9	61.4	49.7
8.47	-25	-43.85	-44.79	24.97	79.3	61.4	49.2
8.39	-25	-43.23	-44.69	26.37	79.6	61.3	50.5
8.52	-25	-43.8	-44.82	26.47	79.5	61.4	48.1
8.41	-25	-44.26	-44.88	26.4	79.3	61.4	48.4
8.47	-25	-44.16	-44.85	26.37	79.3	61.5	50.5
8.45	-25	-44.47	-44.91	26.47	79	61.5	51.7
8.45	-25	-45.25	-44.85	26.47	78.8	61.4	51.8
8.67	-25	-44.47	-44.79	26.37	78.6	61.7	51.6
8.44	-25	-44.06	-44.82	24.94	77.7	61.8	50.8
8.41	-25	-44.42	-44.79	24.48	77.7	61.5	48.1
7.97	-25	-44.58	-44.94	24.57	77.6	61.2	50.7
8.51	-25	-44.42	-44.73	24.94	77.7	61.2	51.2
8.45	-25	-44.16	-45.12	26.53	77.9	61.1	45.3
8.45	-25	-43.59	-44.73	26.5	77.9	61.1	53.6
8.41	-25	-44.21	-44.94	26.5	77.7	61.2	53.5
8.47	-25	-43.8	-44.82	26.53	77.7	61.4	46.1
8.38	-25	-44.37	-44.79	26.56	77.6	61.2	52.5
8.53	-25	-44.37	-44.76	26.47	77.5	61.3	51.6
8.53	-25	-44.06	-45.12	26.5	77.4	61.5	54.3
8.75	-25	-44.78	-44.85	26.4	77.3	61.6	49.3
8.47	-25	-44.37	-44.82	24.42	76.8	61.4	50.3
8.36	-25	-43.85	-45.15	24.48	77	61.4	49.8
8.48	-25	-44.26	-44.79	24.85	77.3	61	50.1
8.47	-25	-44.63	-45	26.62	77.7	60.9	49.4
8.41	-25	-43.17	-45.09	26.47	77.7	60.9	51.4
8.46	-25	-44.42	-45.06	26.47	77.6	61.2	49.9

8.53	-25	-44.63	-44.94	26.53	77.6	61.1	49.7
8.49	-25	-44.21	-45	26.5	77.6	61.2	51.2
8.47	-25	-44.37	-45	26.43	77.4	61.2	50.4
8.53	-25	-44.58	-44.94	26.47	77.4	61.4	46.7
8.47	-25	-44.37	-44.91	25.55	77	61.4	49.9
8.45	-25	-44.47	-45.12	24.42	76.8	61.2	50
8.35	-25	-43.69	-44.91	24.57	76.8	61.2	50.4
8.41	-25	-44.37	-44.76	24.66	77.2	60.7	49
8.41	-25	-44.32	-44.94	25.24	77.4	60.6	49.7
8.47	-25	-44.21	-45.24	26.56	77.7	60.8	50.8
8.5	-25	-44.52	-45.09	26.53	77.7	60.8	51.5
8.52	-25	-44.26	-44.94	26.56	77.7	60.9	50.9
8.52	-25	-44.73	-44.97	26.53	77.7	61.1	50.3
8.55	-25	-44	-45.09	26.53	77.5	61.4	51.5
8.42	-25	-44.16	-45.06	25	77	61.4	51.4
8.37	-25	-44.06	-45.06	24.45	77	61.1	47.7
8.44	-25	-44.21	-45.21	24.54	77.2	60.7	50.7
8.49	-25	-44.58	-45.15	26.56	77.7	60.8	52.3
8.5	-25	-44.42	-45.09	26.59	77.7	60.8	51.4
8.53	-25	-44.06	-44.91	26.5	77.7	60.8	50.1
8.53	-25	-44.21	-45.09	26.5	77.9	61.1	50.9
8.51	-25	-44.52	-45.12	26.5	77.9	61.2	50
8.54	-25	-45.15	-45.12	26.43	77.7	61.2	50.2
8.45	-25	-44.84	-45.18	25.82	77.4	61.4	53.2
8.42	-25	-45.41	-45.06	24.48	77.4	61.2	51.5
7.96	-25	-43.9	-45.09	24.51	77.7	60.9	50.1
8.46	-25	-44.47	-45.15	25.31	78.4	60.9	44.6
8.47	-25	-44.84	-45.27	26.4	78.4	60.8	50.7
8.53	-25	-44.63	-45.31	26.43	78.4	61	50.9
8.51	-25	-44.37	-45.21	26.5	78.8	60.9	50
8.45	-25	-44.58	-45.09	26.4	78.5	61.1	54
8.47	-25	-44.21	-45.15	26.43	78.3	61.2	51.4
8.45	-25	-44.68	-45.06	26.22	78	61.6	49.9
8.43	-25	-44.52	-45.12	24.36	77.8	61.4	49.5
8.08	-25	-44.84	-44.94	24.45	77.7	60.9	51
8.46	-25	-44.47	-45.18	24.63	78.3	60.8	50.4
8.38	-25	-44.21	-45.12	25.52	78.8	60.9	52.8
8.44	-25	-44	-45.12	26.43	78.8	61.1	49.8
8.51	-25	-44.42	-45.09	26.53	78.8	60.9	52.2
8.46	-25	-44.37	-45.49	26.43	78.8	61	50.5
8.44	-25	-44	-45.09	26.47	78.8	61	48
8.39	-25	-45.15	-45.15	26.34	78.9	61.3	49.2
8.45	-25	-44.32	-45.27	26.43	78.7	61.3	51.9
8.56	-25	-44.52	-45.31	26.34	78.6	61.5	49.5
8.48	-25	-44.37	-45.4	24.79	78.1	61.5	49.5
8.38	-25	-45.56	-45.12	24.36	78.1	61.4	50.1
8.25	-25	-44.42	-45.21	24.66	77.9	60.9	50.5

8.46	-25	-44.42	-45.27	25.31	78.7	61	46.3
8.52	-25	-44.42	-45.18	26.47	78.7	61	47.1
8.48	-25	-44.78	-45.27	26.37	78.7	61.1	49.5
8.42	-25	-44.52	-45.21	26.4	78.9	61.1	51.6
8.42	-25	-45.09	-45.09	26.37	78.8	61.4	50.5
8.6	-25	-44.52	-45.21	26.4	78.4	61.5	51.1
8.45	-25	-44.63	-45.12	24.97	77.9	61.6	50.8
8.39	-25	-45.25	-45	24.39	77.9	61.2	51.6
8.49	-25	-44.78	-45.12	24.45	78.5	61	51.7
8.52	-25	-44.52	-45.58	26.43	78.8	61.1	51.3
8.42	-25	-44.63	-45.27	26.43	78.8	61	52.6
8.43	-25	-44.52	-45.12	26.37	78.6	61.2	52.6
8.51	-25	-44.94	-45.24	26.47	78.4	61.1	49.4
8.52	-25	-45.46	-45.09	26.4	78.6	61.3	48.4
8.47	-25	-44.47	-45.34	26.28	78.4	61.5	54.1
8.45	-25	-44.58	-45.18	24.73	77.8	61.5	52
8.4	-25	-45.04	-45.27	24.45	77.9	61.1	51.1
8.41	-25	-43.85	-45.24	24.73	78.3	61.1	52
8.39	-25	-44.52	-45.31	26.43	78.4	61.1	52.9
8.53	-25	-44.32	-45.24	26.47	78.5	61.3	50.4
8.48	-25	-44.58	-45.34	26.47	78.3	61.4	51.4
8.57	-25	-44.73	-45.31	26.4	78.1	61.5	50.9
9.96	-25	-44.63	-45.15	26.28	78.1	61.6	51.8
8.47	-25	-44.89	-45.4	24.42	77.6	61.4	49.5
8.38	-25	-44.58	-45.46	24.45	77.4	61.2	50.2
8.41	-25	-44.52	-45.61	24.69	77.7	61	51.9
8.48	-25	-44.26	-45.43	26.5	78	60.9	52.2
8.5	-25	-44.52	-45.31	26.47	77.8	61	50.1
8.41	-25	-44.63	-45.31	26.5	77.9	61.2	50.2
8.5	-25	-44.47	-45.27	26.53	77.7	61.4	55.5
8.44	-25	-44.84	-45.37	24.42	77.1	61.4	51.9
8.39	-25	-45.04	-45.4	24.48	77.2	61.2	51.8
8.53	-25	-44.94	-45.34	24.54	77.4	60.9	49.5
8.47	-25	-44.84	-45.34	25.15	77.7	60.8	50.9
8.44	-25	-44.73	-45.43	26.5	77.9	60.9	54
8.42	-25	-44.63	-45.49	26.59	77.7	60.9	52.5
8.39	-25	-44.78	-45.73	26.59	77.8	60.9	51
8.44	-25	-43.95	-45.46	26.53	77.7	60.9	50.1
8.47	-25	-45.51	-45.46	26.56	77.7	61.1	51.5
8.62	-25	-44.78	-45.31	26.56	77.6	61.3	51
8.47	-25	-45.3	-45.43	24.88	77	61.4	51.6
8.41	-25	-45.2	-45.46	24.51	76.9	60.9	48.4
8.44	-25	-44.84	-45.27	24.54	77.2	60.7	48.9
8.39	-25	-44.63	-45.58	26.53	77.6	60.8	52.5
8.36	-25	-44.63	-45.37	26.5	77.5	60.8	50.5
8.45	-25	-45.41	-45.37	26.56	77.5	60.9	52.8
8.39	-25	-45.25	-45.24	26.53	77.5	60.9	52.3

8.41	-25	-45.41	-45.37	26.5	77.4	60.9	49.5
8.43	-25	-44.52	-45.61	26.59	77.2	61.1	52.8
8.52	-25	-45.04	-45.46	26.56	77.1	61.3	50.3
8.44	-25	-43.85	-45.49	25.79	76.6	61.4	51.7
8.39	-25	-44.84	-45.55	24.51	76.3	61.1	50.7
8.28	-25	-44.58	-45.46	24.63	76.4	60.8	50.3
8.44	-25	-45.15	-45.37	24.97	76.7	60.7	51.8
8.45	-25	-44.84	-45.43	26.5	76.9	60.7	49.6
8.44	-25	-44.89	-45.4	26.56	76.9	60.4	53.8
8.41	-25	-44.73	-45.43	26.59	76.8	60.8	50.5
8.47	-25	-44.99	-45.52	26.56	76.8	61	50.2
8.57	-25	-44.42	-45.49	26.59	76.8	61	50.5
8.43	-25	-44.78	-45.58	25.27	76.1	61.2	51.6
8.37	-25	-45.41	-45.55	24.54	76.1	61	50.7
8.25	-25	-44.78	-45.64	24.63	76.2	60.7	51
8.41	-25	-45.67	-45.61	24.82	76.5	60.4	52.2
8.42	-25	-44.06	-45.43	26.31	76.6	60.5	52.2
8.47	-25	-44.78	-45.46	26.56	76.6	60.5	49.6
8.52	-25	-45.04	-45.46	26.62	76.6	60.5	50.5
8.52	-25	-45.15	-45.7	26.53	76.6	60.7	47.4
8.52	-25	-45.04	-45.49	26.62	76.4	60.9	46.7
9	-25	-45.04	-45.55	26.53	75.8	61.3	49.8
8.41	-25	-45.3	-45.55	24.54	75.5	61	48.4
8.35	-25	-45.15	-45.58	24.69	75.5	60.5	49.3
8.48	-25	-44.89	-45.34	25.15	75.8	60.3	50.9
8.49	-25	-44.94	-45.55	26.74	75.9	60.4	49.7
8.51	-25	-45.46	-45.31	26.68	75.6	60.4	49.9
8.45	-25	-45.15	-45.64	26.68	75.3	60.6	50.5
8.5	-25	-45.04	-45.61	26.68	74.9	60.8	49.5
8.44	-25	-44.84	-45.58	26.16	74.5	61	48.9
8.44	-25	-44.84	-45.49	24.66	74.2	60.7	51.1
8.39	-25	-45.25	-45.52	24.73	74.1	60.4	49
8.41	-25	-45.46	-45.55	24.82	74.3	60.3	50.2
8.36	-25	-45.09	-45.52	26.65	74.9	60.3	50.2
8.5	-25	-45.3	-45.49	26.68	75.1	60.2	49
8.46	-25	-44.78	-45.61	26.68	74.8	60.3	51.9
8.41	-25	-44.63	-45.67	26.62	74.6	60.3	58.8
8.55	-25	-44.78	-45.82	26.68	74.6	60.4	50.9
8.62	-25	-44.89	-45.49	26.77	74.1	60.6	51.2
8.43	-25	-44.63	-45.61	25.82	73.7	60.7	48.7
8.39	-25	-44.99	-45.73	24.73	73.4	60.3	52.2
8.19	-25	-44.26	-45.76	24.88	73.8	60.1	50.2
8.52	-25	-44.63	-45.55	25.67	74.2	59.9	51.5
8.41	-25	-45.41	-45.55	26.77	74.5	59.9	51.6
8.44	-25	-45.25	-45.76	26.77	74.8	60.3	51.7
8.62	-25	-44.63	-45.82	26.71	74.7	60.5	48.8
8.44	-25	-44.94	-45.64	24.76	74.3	60.5	50.4

8.39	-25	-44.68	-45.76	24.79	74.5	60.3	50.5
8.5	-25	-44.68	-45.61	24.88	74.6	59.9	51.2
8.37	-25	-45.3	-45.92	26.71	75.3	59.9	52.9
8.45	-25	-45.2	-45.7	26.71	75.4	59.6	48.7
8.5	-25	-45.09	-45.82	26.71	75.5	59.9	50.8
8.43	-25	-45.2	-45.73	26.71	75.7	60.3	52.1
8.53	-25	-45.3	-45.76	26.71	75.8	60.3	49.2
8.81	-25	-45.72	-45.52	26.59	76.1	60.7	50.5
8.41	-25	-45.3	-45.67	25.06	76.1	60.5	48.9
8.43	-25	-44.68	-45.82	24.66	76.5	60.4	52.3
8.32	-25	-45.09	-45.98	24.63	77.2	60.3	51.2
8.53	-25	-45.2	-45.89	24.79	77.8	60.3	52.3
8.46	-25	-44.84	-46.01	26.68	78.8	60.2	45.5
8.47	-25	-45.72	-45.7	26.56	79.2	60.6	51.5
8.37	-25	-45.04	-45.82	26.5	79.9	60.5	50.4
8.51	-25	-45.56	-45.95	26.53	80.3	60.5	51.7
8.6	-25	-45.3	-45.76	26.59	80.1	60.9	51.4
8.65	-25	-45.46	-45.92	26.47	80.6	61.3	51.1
8.45	-25	-45.04	-45.76	24.45	80.7	61.3	50.5
8.37	-25	-44.84	-46.04	24.63	81	61.2	51.2
8.44	-25	-44.99	-46.04	24.66	81.8	60.9	48.4
8.47	-25	-45.15	-45.76	26.5	82.3	61.1	54.5
8.35	-25	-46.24	-46.04	26.43	82.5	61.3	51.5
8.39	-25	-45.15	-45.64	26.43	82.7	61.4	48.3
8.45	-25	-45.2	-46.01	26.4	82.8	61.5	51.6
8.48	-25	-45.92	-46.04	26.37	83.2	61.7	52.3
8.61	-25	-45.41	-46.01	26.37	83	62.2	49.8
8.44	-25	-45.51	-45.92	24.45	82.7	62.1	52.8
8.41	-25	-45.77	-45.85	24.39	83.1	61.7	50
8.52	-25	-45.72	-45.92	24.45	83.8	61.6	52.4
8.44	-25	-44.73	-46.07	25.4	85.2	61.7	49.7
8.46	-25	-45.09	-45.89	26.28	86.2	61.9	54.6
8.44	-25	-44.73	-45.76	26.25	86.1	62.1	51.3
8.5	-25	-45.51	-45.82	26.31	85.2	62.1	50
8.47	-25	-45.56	-45.98	26.31	85.1	62.4	49.3
8.5	-25	-45.41	-45.92	26.37	84.8	62.5	49.7
8.56	-25	-45.61	-45.92	26.31	84.3	62.5	49.1
8.62	-25	-45.46	-45.82	26.31	84.3	63	44.7
8.47	-25	-45.51	-45.85	24.48	84.1	62.9	50.5
8.41	-25	-45.09	-45.92	24.33	84.2	62.7	50.9
8.12	-25	-45.82	-46.01	24.42	84.2	62.5	51
8.5	-25	-45.3	-45.92	25.18	84.9	62.5	47.9
8.45	-25	-45.56	-45.92	26.16	85.6	62.5	53.2
8.41	-25	-45.61	-45.92	26.28	85.8	62.8	50.8
8.43	-25	-45.61	-45.98	26.19	86	62.9	53.5
8.5	-25	-44.99	-45.92	26.31	86	63.2	52.4
8.55	-25	-45.82	-45.85	26.22	86	63.6	47.9

8.44	-25	-45.09	-45.98	24.73	85.6	63.6	50.9
8.39	-25	-44.78	-46.01	24.21	85.8	63.4	53.4
7.61	-25	-45.67	-45.95	24.36	85.9	63.1	50
8.43	-25	-45.56	-45.67	24.66	86.3	63	53.5
8.32	-25	-46.55	-46.07	25.89	86.3	63.1	50.5
8.41	-25	-45.41	-45.89	26.16	86.1	63.2	49.3
8.46	-25	-45.46	-45.95	26.25	86.4	63.2	46.7
8.48	-25	-45.72	-45.85	26.22	85.9	63.5	52.4
8.5	-25	-44.94	-46.1	26.16	86.2	63.4	49.1
8.45	-25	-44.94	-45.98	26.16	85.9	63.6	50.5
8.68	-25	-45.67	-45.85	26.01	85.8	64.1	57.1
8.43	-25	-44.32	-46.04	24.21	85.9	63.8	50.3
8.07	-25	-45.3	-45.95	24.24	86	63.4	47.3
8.43	-25	-46.86	-46.01	25.31	86.4	63.5	51.3
8.41	-25	-44.94	-45.95	26.28	86.5	63.3	49.6
8.42	-25	-45.41	-46.13	26.22	86.4	63.6	51.5
8.47	-25	-45.2	-46.07	26.16	86.6	63.7	51.8
8.48	-25	-44.89	-46.1	26.19	86.8	63.7	51.4
8.53	-25	-45.87	-45.89	26.19	86.7	63.9	53.5
8.46	-25	-45.25	-45.76	24.97	86.2	64.2	50.2
8.41	-25	-45.72	-46.01	24.21	86	64.1	50.8
8.28	-25	-45.2	-46.04	24.42	86	63.7	49.9
8.39	-25	-45.61	-46.16	25.03	86.2	63.6	50.4
8.39	-25	-45.67	-46.13	26.25	86.3	63.6	48
8.49	-25	-45.25	-46.16	26.19	85.9	63.6	53.3
8.5	-25	-45.46	-46.16	26.19	85.7	63.6	50.5
8.48	-25	-45.67	-46.04	26.22	85	63.9	49.5
8.57	-25	-45.67	-45.98	26.28	84.8	64.2	48.6
8.47	-25	-45.15	-46.01	24.27	83.8	64	49.5
8.34	-25	-45.25	-46.07	24.39	83.9	63.6	50.5
8.47	-25	-45.09	-46.01	24.66	84.2	63.6	50
8.46	-25	-45.82	-46.1	26.34	84.3	63.4	51.4
8.47	-25	-45.2	-45.92	26.28	84.1	63.6	50.5
8.43	-25	-45.56	-46.04	26.25	83.9	63.6	50.9
8.5	-25	-46.08	-45.98	26.34	83.7	63.6	51.3
8.53	-25	-45.2	-46.1	26.37	82.8	63.9	44.2
8.48	-25	-45.87	-46.04	25.61	82	64	49.1
8.43	-25	-45.82	-46.07	24.39	81.5	63.7	49.6
7.35	-25	-44.99	-46.25	24.57	81.5	63.3	49.6
8.42	-25	-45.61	-46.13	25.92	81.7	63.2	47.9
8.47	-25	-45.56	-46.25	26.47	81.5	63.1	51.6
8.51	-25	-45.72	-46.16	26.5	81.4	63.2	46.8
8.5	-25	-45.46	-46.13	26.5	81.2	63.2	52.6
8.46	-25	-46.08	-46.16	26.53	81.1	63.2	48.4
8.5	-25	-45.61	-46.19	26.5	80.9	63.3	49.7
8.44	-25	-45.61	-46.28	25.31	80.1	63.6	51.6
8.4	-25	-45.51	-46.1	24.57	79.8	63.2	52.5

8.47	-25	-46.03	-46.22	24.63	79.9	62.6	52.3
8.47	-25	-45.46	-46.13	26.62	80.6	62.9	50.9
8.44	-25	-45.51	-46.1	26.59	80.2	62.7	52.2
8.38	-25	-45.51	-46.13	26.59	79.9	62.6	49.6
8.43	-25	-45.56	-46.28	26.56	79.9	62.7	51.6
8.54	-25	-45.82	-46.4	26.56	79.7	62.6	52
8.47	-25	-45.56	-46.22	26.37	78.9	63.3	49.4
8.41	-25	-44.89	-46.25	24.66	78.7	62.8	51.8
8.53	-25	-45.67	-46.34	24.76	78.8	62.2	52.1
8.44	-25	-46.03	-46.37	26.68	79.3	62.1	52.7
8.5	-25	-44.99	-46.28	26.71	78.8	62.4	50.8
8.48	-25	-45.51	-46.13	26.71	78.8	62.1	51.3
8.51	-25	-45.82	-46.37	26.68	79	62.1	51.1
8.39	-25	-44.94	-46.31	26.71	79	62.2	50.9
8.61	-25	-45.09	-46.37	26.68	78.8	62.6	48.3
8.46	-25	-44.94	-46.28	24.69	78.4	62.6	50.7
8.38	-25	-45.92	-46.22	24.73	78.3	62.2	51.5
8.16	-25	-45.2	-46.47	24.91	78.3	61.8	48.9
8.35	-25	-45.77	-46.22	25.03	78.3	61.7	50.5
8.41	-25	-45.67	-46.07	26.8	78.1	61.6	51.6
8.41	-25	-45.61	-46.34	26.71	77.9	61.6	50.1
8.39	-25	-45.72	-46.37	26.71	77.5	61.7	54
8.44	-25	-46.91	-46.28	26.71	77.6	62	51.1
8.45	-25	-45.61	-46.56	25.55	76.8	62.1	52.7
8.35	-25	-45.41	-46.43	24.82	77.1	61.7	46.2
8.4	-25	-44.84	-46.28	25.89	77.7	61.5	50.1
8.43	-25	-46.08	-46.31	26.71	77.8	61.4	51.5
8.52	-25	-45.72	-46.19	26.74	77.8	61.4	51.9
8.65	-25	-45.67	-46.22	26.83	77.1	61.9	50.8
8.45	-25	-45.72	-46.25	24.79	76.6	61.9	50.3
8.35	-25	-45.87	-46.16	24.85	76.7	61.4	50.3
8.53	-25	-45.51	-46.34	25	77	61.4	53.6
8.41	-25	-45.72	-46.31	26.71	77.4	61.3	50.7
8.51	-25	-45.41	-46.37	26.74	77.3	61.3	53.6
8.47	-25	-45.46	-46.28	26.83	76.8	61.4	51.6
8.5	-25	-45.67	-46.37	26.8	77	61.4	47.4
8.56	-25	-45.56	-46.43	26.74	76.6	61.8	49
8.47	-25	-45.72	-46.43	24.82	76.2	61.7	52.3
8.38	-25	-45.87	-46.43	24.76	76.2	61.4	51.1
8.32	-25	-46.08	-46.37	24.88	76.3	61.2	50.3
8.45	-25	-45.3	-46.4	25	76.5	61.1	51.2
8.42	-25	-45.67	-46.28	26.89	76.8	61.1	47.7
8.49	-25	-46.13	-46.31	26.8	76.6	61.2	47.2
8.4	-25	-45.3	-46.37	26.8	76.5	61.3	49.4
8.48	-25	-46.13	-46.1	26.77	76.3	61.7	52
8.38	-25	-45.46	-46.4	24.79	76.2	61.3	49.5
8.38	-25	-45.46	-46.4	24.79	76.2	61.3	49.5

8.4	-25	-45.87	-46.22	26.13	77	60.9	50.5
8.4	-25	-45.87	-46.22	26.13	77	60.9	50.5
8.45	-25	-45.61	-46.28	26.8	77.1	60.9	53.3
8.52	-25	-45.51	-46.4	26.71	77.4	61.2	53.4
9.93	-25	-45.46	-46.47	26.71	77.1	61.7	58.4
8.43	-25	-45.3	-46.25	24.79	76.9	61.4	50.9
8.43	-25	-45.3	-46.31	24.94	77.3	61	49
8.44	-25	-45.3	-46.43	26.71	77.9	60.9	47.2
8.38	-25	-45.25	-46.62	26.74	78	61.1	43.7
8.38	-25	-45.46	-46.68	26.74	78.1	61.3	50.7
8.53	-25	-46.03	-46.56	26.77	78	61.3	51.3
8.87	-25	-46.13	-46.5	26.68	77.9	61.7	52.4
8.48	-25	-45.87	-46.56	25.46	77.7	61.5	52.3
8.43	-25	-46.24	-46.28	24.73	78	61.5	51.9
8.34	-25	-45.77	-46.5	24.82	78.3	61.2	50.4
8.24	-25	-46.55	-46.31	24.97	78.5	61.1	51.2
8.45	-25	-45.56	-46.65	26.34	78.8	61.2	49.5
8.47	-25	-45.72	-46.31	26.68	78.8	61.1	50.4
8.51	-25	-45.92	-46.53	26.77	79.1	61.3	50
8.44	-25	-46.34	-46.56	26.68	79.5	61.4	49.5
8.61	-25	-46.08	-46.47	26.65	79.8	61.8	51.1
8.46	-25	-46.03	-46.34	25.31	79.6	61.8	48.3
8.41	-25	-46.08	-46.37	24.66	80	61.6	49
8.25	-25	-46.55	-46.62	24.88	80.3	61.4	51.4
8.45	-25	-46.29	-46.4	25.76	81	61.4	47.7
8.52	-25	-45.61	-46.47	26.56	80.9	61.5	50.9
8.53	-25	-46.03	-46.4	26.65	81.2	61.5	50.8
8.48	-25	-45.3	-46.65	26.53	81.7	61.6	50.7
8.41	-25	-46.08	-46.53	26.47	82.1	61.8	51.6
8.54	-25	-46.18	-46.62	26.53	82.7	62.2	52.1
8.44	-25	-45.77	-46.22	24.39	82.1	62.4	50.8
8.37	-25	-45.67	-46.34	24.63	82.9	62	52
8.52	-25	-46.34	-46.28	24.69	83.3	61.8	49.5
8.47	-25	-45.92	-46.34	25.24	83.5	61.9	51.1
8.42	-25	-46.08	-46.47	26.5	83.3	61.9	50.5
8.47	-25	-45.77	-46.62	26.43	83.4	62.1	48.7
8.46	-25	-45.87	-46.47	26.43	83.9	62.2	52.3
8.39	-25	-46.13	-46.43	26.28	84.1	62.5	51.1
8.61	-25	-45.67	-46.4	26.4	84.2	62.6	51.5
9.56	-25	-45.82	-46.37	26.28	84.2	63.3	50.5
8.46	-25	-45.46	-46.43	24.33	83.9	63.1	52
8.36	-25	-45.25	-46.28	24.36	84.1	62.7	50.9
8.35	-25	-45.25	-46.56	24.48	85.3	62.5	49
8.52	-25	-45.87	-46.56	25.73	86.2	62.4	49.8
8.42	-25	-45.92	-46.65	26.31	86.7	62.9	49.9
8.4	-25	-45.72	-46.65	26.25	86.7	63	52.2
8.38	-25	-46.08	-46.5	26.22	87.2	63.4	47.4

8.47	-25	-45.87	-46.62	26.25	87.4	63.3	51
8.63	-25	-46.24	-46.43	26.13	87.1	63.7	51.9
8.48	-25	-45.67	-46.43	24.21	86.8	63.7	50
8.36	-25	-45.98	-46.62	24.15	87.4	63.4	51.1
8.5	-25	-45.98	-46.62	24.21	87.9	63.4	53.1
8.37	-25	-46.44	-46.68	25.61	87.9	63.3	51.2
8.51	-25	-46.18	-46.68	26.04	88	63.6	51.2
8.48	-25	-45.92	-46.53	26.07	88.4	63.6	50.5
8.38	-25	-45.67	-46.56	26.07	88.5	63.2	50.5
8.48	-25	-45.46	-46.65	26.04	88.7	63.8	51
8.65	-25	-45.72	-46.71	26.07	88.6	64.1	52.8
8.47	-25	-45.98	-46.5	25.64	88.8	64.4	49.9
8.43	-25	-45.67	-46.65	24.05	88.6	64.3	51.2
8.4	-25	-45.67	-46.47	24.15	88.4	64	51.8
8.5	-25	-46.08	-46.68	24.27	88.2	63.9	48.9
8.37	-25	-46.13	-46.28	25.03	87.5	63.9	48
8.54	-25	-45.46	-46.43	26.22	85.3	63.6	55.3
8.49	-25	-46.29	-46.4	26.34	83.8	63.7	51.6
8.49	-25	-45.87	-46.5	26.31	83.2	63.8	51.4
8.5	-25	-45.98	-46.53	26.31	82.8	63.9	52.5
8.57	-25	-45.72	-46.53	26.4	82.4	64	49
8.45	-25	-45.3	-46.47	25.43	81.8	64.3	49.9
8.43	-25	-45.87	-46.68	24.3	81.9	64.1	51.8
8.32	-25	-45.82	-46.83	24.39	82	63.6	48.9
8.43	-25	-45.67	-46.5	24.79	82.3	63.5	51.1
8.47	-25	-45.92	-46.68	26.37	82.5	63.5	49.6
8.44	-25	-45.87	-46.5	26.37	82.3	63.5	50
8.44	-25	-45.82	-46.71	26.4	82.5	63.5	50.2
8.52	-25	-45.82	-46.65	26.37	82.3	63.6	51.2
8.5	-25	-46.5	-46.5	26.43	82.1	63.8	51.2
8.53	-25	-46.81	-46.65	26.4	81.9	63.9	51.9
8.46	-25	-45.67	-46.74	24.73	81.2	63.8	50.8
8.45	-25	-45.3	-46.62	24.42	80.9	63.6	50.8
8.33	-25	-46.34	-46.5	24.51	80.7	63.4	50.7
8.29	-25	-45.92	-46.53	24.63	80.7	63.2	51.6
8.44	-25	-46.29	-46.83	24.73	80.7	63.1	50.4
8.5	-25	-45.77	-46.62	26.47	81	63	52.4
8.53	-25	-46.03	-46.65	26.56	80.9	63.1	51.1
8.46	-25	-46.5	-46.74	26.62	80.8	63.1	53.2
8.55	-25	-45.87	-46.65	26.53	80.5	63.3	53.8
8.62	-25	-45.51	-46.77	26.56	80.3	63.4	50.3
8.63	-25	-46.29	-46.74	26.5	80	63.4	49.5
9.03	-25	-46.03	-46.56	26.53	79.9	63.6	49.1
8.46	-25	-46.29	-46.8	25.12	79.2	63.4	47.7
8.41	-25	-46.13	-46.53	24.54	79.4	63.1	48.3
8.39	-25	-46.44	-46.8	24.73	79.6	62.7	53.2
8.44	-25	-46.81	-46.77	26.56	79.9	62.7	49.5

8.51	-25	-46.5	-46.65	26.56	79.8	62.7	51.6
8.42	-25	-46.5	-46.65	26.62	79.7	62.8	51.6
8.45	-25	-46.39	-46.68	26.59	79.6	62.6	48.4
8.49	-25	-46.44	-46.77	26.65	79.5	62.6	50.8
8.58	-25	-46.29	-46.68	26.56	79.2	63	50.5
8.46	-25	-46.76	-46.68	26.07	78.8	63.1	48.9
8.45	-25	-45.82	-46.71	24.51	78.5	63	51.1
8.32	-25	-46.96	-46.71	24.66	78.5	62.5	51.3
8.52	-25	-46.03	-46.68	24.91	78.4	62.2	47.1
8.39	-25	-46.7	-46.65	26.65	78.9	62.2	49.4
8.42	-25	-45.72	-46.74	26.59	78.8	62.1	53
8.5	-25	-46.24	-46.71	26.68	78.8	62.4	53.2
8.44	-25	-45.72	-46.74	26.62	78.7	62.5	50
9.28	-25	-46.18	-46.71	26.68	78.4	63	49.1
8.45	-25	-46.65	-46.83	24.54	77.7	62.7	51.1
8.38	-25	-46.08	-46.83	24.63	77.8	62.4	51.4
8.35	-25	-45.15	-46.95	25.03	78.3	62	50.2
8.5	-25	-46.13	-46.89	26.68	78.6	62	47.7
8.52	-25	-46.29	-46.89	26.68	78.4	62.1	48.8
8.47	-25	-46.13	-46.74	26.65	78	62.1	49.1
8.5	-25	-46.08	-46.77	26.68	77.8	62.4	46.8
8.51	-25	-46.76	-46.68	26.74	77.4	62.5	50.9
8.44	-25	-46.44	-46.92	25.03	76.8	62.6	50.1
8.37	-25	-46.03	-46.86	24.73	76.8	62.2	51
8.46	-25	-46.24	-46.62	24.85	77.1	61.8	54.1
8.44	-25	-46.7	-46.86	26.83	77.5	61.8	51.1
8.51	-25	-46.39	-46.8	26.74	77.3	61.6	51.8
8.5	-25	-46.86	-46.83	26.8	77.1	61.8	49.7
8.57	-25	-46.13	-46.74	26.77	76.8	61.8	50.3
10.03	-25	-46.44	-46.74	26.59	76.4	62.4	50.9
8.42	-25	-46.24	-46.89	24.76	76.1	62.4	53.3
8.41	-25	-45.61	-46.71	24.73	75.9	61.9	50.3
8.35	-25	-46.29	-46.86	24.88	75.8	61.4	51.1
8.47	-25	-45.92	-46.98	25	75.8	61.2	50.4
8.52	-25	-46.44	-46.95	26.83	76.4	61.4	50.8
8.42	-25	-46.24	-46.98	26.77	76.2	61.4	50.2
8.42	-25	-46.03	-46.92	26.8	75.7	61.4	48.4
8.51	-25	-46.29	-46.71	26.77	75.6	61.4	49.9
8.57	-25	-45.82	-46.83	26.92	75.5	61.6	52.5
8.48	-25	-46.34	-46.98	26.71	75	61.9	49.8
8.44	-25	-46.08	-46.86	24.85	74.6	61.5	51.5
8.14	-25	-45.87	-46.92	24.97	74.9	61.1	51.1
8.38	-25	-45.56	-47.05	25.55	75.4	60.9	53
8.54	-25	-46.5	-46.77	26.89	75.4	60.9	49.5
8.43	-25	-45.15	-47.11	26.89	75.3	61	52.1
8.45	-25	-45.92	-46.92	26.95	75.2	61.2	50.2
8.62	-25	-46.34	-46.83	26.92	74.9	61.4	54.6

8.46	-25	-45.92	-46.92	25.85	74.3	61.4	48.4
8.42	-25	-45.51	-47.05	24.94	74.4	61.3	50.9
8.33	-25	-46.65	-46.74	24.91	74.5	61	50.9
8.5	-25	-46.5	-46.98	25.03	74.9	60.8	52.3
8.48	-25	-46.39	-46.92	26.92	75.4	60.7	46.8
8.47	-25	-46.34	-47.05	26.92	75.5	60.9	51.6
8.49	-25	-46.39	-47.01	26.89	75.6	60.8	51.5
8.46	-25	-46.65	-46.98	26.92	75.7	61	53.6
8.58	-25	-46.39	-46.95	26.89	75.5	61.4	52
8.46	-25	-45.51	-46.98	25.15	75.6	61.4	52.3
8.36	-25	-46.39	-46.92	24.88	76.1	61	51.6
8.43	-25	-46.44	-46.71	25.03	76.7	60.7	51.9
8.47	-25	-46.29	-46.77	26.83	77.7	60.9	49.3
8.52	-25	-46.65	-47.05	26.8	78.1	61	48.2
8.5	-25	-46.55	-47.08	26.83	78	61.3	52.7
8.48	-25	-47.01	-46.92	26.83	77.4	61.7	51.8
8.45	-25	-46.13	-46.98	24.85	77.6	61.4	49.4
8.46	-25	-46.24	-47.14	24.88	77.9	60.9	48.3
8.47	-25	-46.34	-47.11	26.89	78.8	61	50.3
8.46	-25	-46.03	-47.01	26.65	79.1	60.9	49.9
8.5	-25	-46.76	-46.98	26.8	79.4	61.3	51.5
8.54	-25	-46.18	-46.98	26.83	79.9	61.4	50
8.59	-25	-46.44	-47.11	26.77	80	61.6	51.8
9.24	-25	-45.92	-46.95	26.74	79.9	62.1	53.1
8.46	-25	-46.55	-47.08	24.69	80.2	61.9	50.7
8.39	-25	-46.55	-47.08	24.73	80.7	61.7	52.4
8.48	-25	-46.55	-47.01	24.79	81.1	61.4	51.5
8.44	-25	-45.92	-47.11	26.68	82	61.5	49.8
8.41	-25	-46.29	-47.11	26.59	82.2	61.7	51.6
8.43	-25	-46.29	-47.2	26.65	82.3	61.9	49.7
8.55	-25	-46.24	-46.95	26.62	83	62.1	48.9
8.65	-25	-46.81	-46.98	26.59	82.9	62.8	49.5
8.45	-25	-47.07	-47.2	24.88	83.1	62.7	49.9
8.41	-25	-46.24	-47.08	24.54	83.6	62.8	52.5
8.47	-25	-45.98	-47.14	24.54	84.5	62.9	49.4
8.48	-25	-46.81	-47.14	26.47	86.1	63.4	50
8.46	-25	-46.24	-47.08	26.47	86.4	63.7	50.9
8.41	-25	-46.5	-47.26	26.47	86.1	63.5	48.8
8.64	-25	-46.24	-47.14	26.43	85.7	63.6	50.8
8.47	-25	-46.13	-47.11	25.92	85.3	63.9	51.3
8.44	-25	-46.08	-47.23	24.42	86	63.7	51.4
8.36	-25	-46.13	-47.05	24.48	85.8	63.5	48.1
8.41	-25	-46.65	-46.95	24.54	86.2	62.9	51.7
8.5	-25	-46.39	-47.32	26.37	86.4	63.2	51.3
8.44	-25	-46.29	-47.14	26.5	85.3	63.2	50.9
8.52	-25	-46.13	-47.01	26.53	86.2	63.2	50.5
8.42	-25	-47.33	-46.98	26.4	86.4	63.4	51.7

8.48	-25	-46.55	-47.26	26.4	86.4	63.6	50.1
8.62	-25	-46.39	-47.29	26.43	85.8	63.9	52.2
8.45	-25	-46.44	-46.92	24.39	85.4	63.7	50.8
8.38	-25	-46.13	-47.11	24.45	85.3	63.6	47.3
8.44	-25	-46.13	-47.11	24.94	85.6	63.2	49.6
8.4	-25	-47.12	-47.11	26.37	85.6	63.4	52
8.49	-25	-46.18	-47.11	26.47	85.7	63.4	54.6
8.46	-25	-46.18	-47.11	26.43	85.3	63.4	50.1
8.55	-25	-46.03	-46.95	26.37	85.1	63.7	51.6
8.47	-25	-46.24	-47.17	26.34	85	64.1	50.5
8.45	-25	-46.96	-46.92	24.42	85	63.8	53.8
7.88	-25	-46.65	-46.95	24.54	85	63.3	50.3
8.51	-25	-46.44	-47.17	25.34	85.3	63.4	49.5
8.5	-25	-46.81	-47.23	26.5	85.4	63.5	54.4
8.44	-25	-46.55	-46.95	26.47	85.4	63.5	51.4
8.41	-25	-45.67	-47.05	26.43	85.3	63.3	49.1
8.51	-25	-46.24	-47.08	26.47	85.3	63.5	48.8
8.5	-25	-46.96	-47.2	26.4	85.3	63.6	48.3
8.45	-25	-46.7	-47.26	26.47	85.3	63.7	50.4
8.59	-25	-46.5	-47.14	26.43	85	64.1	53.2
8.48	-25	-46.44	-47.08	25.76	84.6	64.3	51.7
8.43	-25	-46.55	-47.14	24.45	84.4	63.9	53
8.41	-25	-47.07	-46.98	24.54	84.8	63.6	50.5
8.41	-25	-46.39	-47.2	24.88	84.8	63.4	53.5
8.47	-25	-46.65	-47.23	26.4	85	63.5	49.6
8.49	-25	-46.55	-47.23	26.5	85	63.5	52
8.48	-25	-46.39	-47.14	26.53	84.9	63.6	52.5
8.59	-25	-46.96	-47.05	26.5	84.3	63.7	50.9
8.47	-25	-46.91	-47.05	26.47	84.1	64.1	48.4
8.46	-25	-46.76	-47.2	24.45	83.7	64	51.6
8.38	-25	-46.13	-47.23	24.51	83.7	63.5	49.2
8.47	-25	-46.13	-47.14	25	83.9	63.4	49.1
8.48	-25	-46.39	-47.05	26.62	84	63.2	50.5
8.38	-25	-46.34	-47.2	26.53	83.6	63.5	50.3
8.51	-25	-46.5	-47.08	26.59	83.5	63.6	53.4
8.43	-25	-46.18	-47.38	26.59	83	63.5	53.4
9.06	-25	-46.08	-47.2	26.56	82.3	64	49.2
8.47	-25	-47.01	-47.2	24.51	81.7	63.6	51.1
7.62	-25	-46.18	-47.11	24.82	81.7	63.1	49.9
8.44	-25	-46.5	-46.98	26.68	81.6	63	51.4
8.53	-25	-46.34	-47.05	26.65	81	62.9	52.4
8.45	-25	-46.18	-47.23	26.71	80.5	62.9	50.5
8.47	-25	-46.29	-46.95	26.77	79.7	63.2	46.5
8.47	-25	-46.55	-47.11	26.83	78.9	63.6	50
8.42	-25	-46.29	-47.2	24.82	77.8	63.2	47.1
8.27	-25	-46.03	-47.23	25.06	77.7	62.6	51
8.37	-25	-46.55	-47.17	26.68	78	62.5	47.8

8.41	-25	-46.55	-47.14	26.95	77.7	62.5	50.8
8.41	-25	-46.7	-47.23	26.89	77.6	62.4	53.6
8.43	-25	-46.44	-47.23	26.98	78	62.5	50.5
8.53	-25	-47.12	-47.14	26.8	77.9	62.7	50.8
8.47	-25	-46.18	-47.23	25.7	77.7	62.8	48.4
8.45	-25	-46.24	-47.23	24.82	77.7	62.5	51.5
8.38	-25	-46.39	-47.26	24.97	77.5	62.2	49.8
8.44	-25	-46.81	-47.2	25.03	77.8	62	51
8.44	-25	-46.76	-47.23	26.95	78.1	61.8	49.7
8.51	-25	-47.33	-47.2	26.89	77.9	61.8	49.7
8.42	-25	-46.5	-47.38	26.95	77.7	61.8	51.8
8.5	-25	-46.76	-47.32	26.98	77.6	62	48.9
8.56	-25	-46.86	-47.11	26.98	77.4	62.2	50.5
8.47	-25	-46.55	-47.23	25.15	76.6	62.2	51.3
8.36	-25	-46.5	-47.44	25	76.6	61.7	49.8
8.54	-25	-46.65	-47.41	25.43	76.8	61.4	48.9
8.43	-25	-46.55	-47.41	27.05	76.6	61.4	51.6
8.45	-25	-46.29	-47.23	27.05	76.6	61.4	47.9
8.5	-25	-47.07	-47.5	27.11	76.6	61.3	50.5
8.44	-25	-46.34	-47.32	27.11	76.4	61.4	50.7
8.5	-25	-46.44	-47.23	27.08	76.4	61.2	51.8
8.63	-25	-46.76	-47.17	27.08	75.8	61.5	49.8
8.49	-25	-46.81	-47.26	25.31	75.3	61.7	49.8
8.41	-25	-46.81	-47.38	25.06	75.1	61.3	51.7
8.44	-25	-46.7	-47.32	25.64	75.5	60.9	51.1
8.41	-25	-46.76	-47.53	27.11	75.2	60.9	48.9
8.44	-25	-46.18	-47.38	27.2	75	60.9	51.8
8.51	-25	-46.5	-47.32	27.23	74.6	60.9	50.3
8.56	-25	-46.55	-47.32	27.17	74.3	61	53.2
8.53	-25	-46.18	-47.26	27.17	74.3	61.3	49.5
8.44	-25	-46.7	-47.29	25.85	73.8	61.3	51.6
8.44	-25	-46.81	-47.5	25.12	73.8	60.9	52.8
8.38	-25	-46.96	-47.47	25.21	73.5	60.7	52.7
8.43	-25	-47.12	-47.66	25.46	73.7	60.4	49.5
8.51	-25	-47.12	-47.38	27.26	74.5	60.4	50.9
8.44	-25	-46.76	-47.53	27.23	74.3	60.5	48.8
8.47	-25	-46.86	-47.44	27.23	74.1	60.4	51.3
8.44	-25	-46.7	-47.17	27.17	74.2	60.5	50.3
8.68	-25	-46.44	-47.29	27.11	73.5	60.9	49.6
8.45	-25	-46.5	-47.44	25.15	73.3	60.7	49.9
8.02	-25	-46.76	-47.44	25.27	73.4	60.2	51.6
8.51	-25	-47.33	-47.44	27.17	74.1	60.2	49.6
8.49	-25	-46.81	-47.47	27.23	74.2	60.3	51.3
8.43	-25	-46.96	-47.2	27.2	73.8	60.2	47.4
8.52	-25	-46.91	-47.29	27.14	73.5	60.5	54.8
8.47	-25	-46.5	-47.38	25.15	72.9	60.3	49.3
8.39	-25	-46.96	-47.53	25.24	73.1	60.1	51.7

8.47	-25	-47.43	-47.29	26.13	73.6	59.7	49.1
8.47	-25	-46.91	-47.44	27.29	73.7	59.9	51
8.38	-25	-46.65	-47.41	27.26	73.6	59.9	52.3
8.43	-25	-46.13	-47.5	27.23	73.5	60.1	51
8.47	-25	-46.55	-47.59	27.14	73.1	60.4	50.7
8.45	-25	-46.76	-47.53	25.18	72.9	60.3	51.4
8.37	-25	-47.01	-47.41	25.34	73.3	59.6	50.5
8.43	-25	-46.7	-47.66	26.89	73.8	59.7	51.4
8.4	-25	-47.01	-47.47	27.23	73.7	59.6	49.2
8.41	-25	-46.81	-47.53	27.2	74.1	59.6	50.1
8.42	-25	-46.86	-47.56	27.2	74.2	59.6	48.7
8.55	-25	-46.91	-47.56	27.2	74.2	60.3	50.9
8.44	-25	-46.76	-47.53	25.12	74.2	60.3	46.5
8.34	-25	-47.48	-47.47	25.21	74.3	59.8	49.7
8.41	-25	-46.18	-47.41	25.49	74.8	59.4	51.2
8.39	-25	-46.7	-47.41	27.11	75.3	59.6	54
8.41	-25	-47.22	-47.53	27.2	75.5	59.7	45.2
8.44	-25	-46.96	-47.59	27.17	75.5	60.1	51.9
8.46	-25	-47.48	-47.69	25.55	75.2	60.4	48.9
8.36	-25	-46.91	-47.26	25.09	75.6	59.8	50.2
8.53	-25	-47.01	-47.56	27.05	76.7	59.7	48.6
8.52	-25	-47.12	-47.47	27.08	77.1	59.9	51.1
8.45	-25	-46.55	-47.66	27.05	77.6	60.3	51.7
8.47	-25	-46.91	-47.56	24.97	77	60.6	50.8
8.41	-25	-46.96	-47.59	25.49	77.7	60.2	47.3
8.52	-25	-46.76	-47.66	26.95	78.6	60.1	47.9
8.56	-25	-46.44	-47.75	26.98	78.4	60.6	52.1
8.33	-25	-45.98	-47.5	24.94	78.8	60.4	48.4
8.47	-25	-47.33	-47.63	26.83	79.7	60.4	49.9
9.38	-25	-47.27	-47.56	26.71	79.1	61.2	47.5
8.55	-25	-46.55	-47.44	25.03	78.9	60.6	51.9
8.49	-25	-46.81	-47.47	26.92	79.6	60.7	53.1
8.51	-25	-46.96	-47.69	26.31	79.2	61.4	49.9
8.45	-25	-47.38	-47.38	25.43	79.8	60.7	49.5
8.36	-25	-47.53	-47.63	26.89	79.9	60.8	49.5
8.5	-25	-47.17	-47.69	26.83	79.6	61.5	46.3
8.52	-25	-47.33	-47.78	24.94	79.9	61	55.1
8.53	-25	-46.86	-47.59	26.83	80.5	61.1	54.2
8.47	-25	-47.17	-47.29	24.73	79.8	61.6	52
8.48	-25	-46.7	-47.63	26.74	81.3	60.9	50.5
8.5	-25	-46.91	-47.59	26.71	81	61.4	53.3
8.41	-25	-46.86	-47.63	24.79	80.5	61.4	52.6
8.52	-25	-46.86	-47.69	26.8	81.1	61.2	45.2
8.58	-25	-46.86	-47.69	26.74	81	62	50.9
8.5	-25	-46.65	-47.66	25.24	81	61.4	50.1
8.48	-25	-47.17	-47.56	26.71	81.7	61.4	51.6
8.47	-25	-47.69	-47.5	24.66	81	62.1	51

8.53	-25	-47.17	-47.69	26.68	81.8	61.5	52.2
8.45	-25	-47.12	-47.69	26.71	81.8	61.6	54.3
8.48	-25	-47.17	-47.41	25.58	81	62.2	53
8.41	-25	-46.65	-47.53	26.22	81.9	61.4	36.7
8.47	-25	-46.96	-47.5	26.62	81.8	61.7	49.4
8.46	-25	-46.76	-47.56	24.63	81.5	62.1	50.8
8.53	-25	-47.07	-47.69	26.68	82.1	61.7	52.3
8.62	-25	-47.38	-47.5	26.59	82	62.1	50.4
8.47	-25	-46.91	-47.5	24.66	81.3	62.2	53.1
8.52	-25	-46.91	-47.56	26.68	81.8	61.8	50.3
8.46	-25	-46.76	-47.41	26.68	81.4	61.9	48.4
8.55	-25	-47.33	-47.63	26.65	81.3	62.2	49.5
8.4	-25	-46.5	-47.69	24.66	80.7	62.2	50.1
8.4	-25	-46.81	-47.69	26.71	81.2	61.9	49.4
8.5	-25	-46.86	-47.5	26.62	81	63	51.2
8.45	-25	-47.07	-47.63	26.71	81.2	61.8	46.5
8.45	-25	-46.55	-47.56	26.71	81.1	62.1	49.4
8.5	-25	-47.12	-47.59	24.57	80.7	62.7	48.4
8.52	-25	-47.43	-47.56	25.64	81.1	62	51.6
8.49	-25	-47.38	-47.41	26.62	81.3	62	49.2
8.51	-25	-47.01	-47.56	24.57	80.5	62.8	48.1
8.51	-25	-47.22	-47.72	26.62	81.1	61.7	48.6
8.78	-25	-47.43	-47.81	26.65	80.9	62.9	49.9
8.36	-25	-47.12	-47.66	24.85	80.2	62.1	51.6
8.38	-25	-46.34	-47.56	26.62	80.9	62.1	49
8.58	-25	-47.01	-47.66	26.74	80.3	62.7	52.1
8.38	-25	-47.12	-47.69	24.97	80.1	61.9	53
8.5	-25	-47.01	-47.63	26.68	80.5	62.1	52.8
8.5	-25	-46.39	-47.84	24.54	79.6	62.7	52.3
8.47	-25	-46.76	-47.69	26.68	80.1	62	51.6
8.42	-25	-47.43	-47.59	26.68	80	62.5	52.8
8.35	-25	-46.55	-47.72	24.76	79.4	62.1	51.1
8.44	-25	-47.07	-47.84	26.71	79.9	61.9	48.1
8.48	-25	-47.22	-47.72	24.82	79.1	62.9	51.5
8.42	-25	-46.86	-47.56	25.98	79.7	61.8	51
8.37	-25	-46.7	-47.59	26.74	79.6	61.9	51.6
8.47	-25	-47.64	-47.81	24.66	78.8	62.5	51.4
8.4	-25	-46.91	-47.72	26.74	79.4	61.8	53.4
8.44	-25	-47.59	-47.75	26.71	79.1	62.1	49.5
8.37	-25	-46.44	-47.81	24.73	78.6	61.9	50.8
8.45	-25	-47.22	-47.78	26.71	79	61.7	49.4
8.51	-25	-47.17	-47.75	24.69	78	62.6	52.1
8.54	-25	-46.81	-47.87	26.8	78.8	61.6	49.7
8.54	-25	-46.86	-47.75	26.77	78.8	62	52
8.44	-25	-47.01	-47.81	24.73	77.9	62.1	50
8.45	-25	-47.33	-47.66	26.74	78.6	61.6	51.3
8.62	-25	-47.48	-47.63	26.77	78.1	62.4	50.5

8.55	-25	-46.96	-47.72	25.12	78	61.5	47.6
8.5	-25	-46.7	-47.78	26.8	78.3	61.8	49.8
8.48	-25	-47.01	-47.78	25.21	77.5	62.2	50.5
8.47	-25	-46.86	-47.72	26.8	78	61.4	51.2
8.5	-25	-47.59	-47.78	26.92	78	61.6	49.1
8.37	-25	-46.44	-47.9	24.79	77.3	61.7	51.6
8.52	-25	-46.81	-47.87	26.89	78	61.4	49.1
8.54	-25	-46.7	-47.75	26.83	77.7	62	52.5
8.56	-25	-47.38	-47.84	24.94	77.4	61.4	51.6
8.39	-25	-47.38	-47.78	26.83	77.7	61.4	50.9
8.5	-25	-46.76	-47.96	24.79	76.9	61.9	51.6
8.41	-25	-46.96	-47.69	26.89	77.7	61.4	50.3
8.52	-25	-47.12	-47.63	26.98	77.6	61.4	49.6
8.48	-25	-47.12	-47.72	25.85	76.9	62.1	52.3
8.55	-25	-47.27	-47.66	25.64	77.3	61.1	48.3
8.43	-25	-46.34	-47.9	26.83	77.4	61.1	50.5
8.46	-25	-47.07	-47.84	24.76	76.6	61.7	48.9
8.54	-25	-47.07	-47.69	26.8	77.5	61.1	50
8.55	-25	-47.01	-47.72	26.77	77.1	61.8	53.1
8.48	-25	-47.27	-47.81	24.94	77	61.1	48.9
8.51	-25	-47.33	-47.75	26.89	77.4	61.2	49.3
8.48	-25	-46.86	-47.66	24.76	76.6	61.7	49.8
8.5	-25	-46.91	-47.75	26.77	77.2	61.1	52.3
8.59	-25	-47.33	-47.78	26.83	77.1	61.5	50.9
8.38	-25	-47.38	-47.81	24.82	76.5	61.2	51.7
8.41	-25	-47.33	-47.72	26.8	77.1	61.1	48.1
8.64	-25	-47.12	-47.66	26.68	76.9	61.4	47
8.4	-25	-47.22	-47.84	24.79	76.6	61.2	47.5
8.48	-25	-47.33	-47.75	26.83	77.1	61	52
8.48	-25	-48	-47.99	24.63	76.3	61.7	52
8.39	-25	-46.76	-47.84	26.77	76.9	61.1	49.8
8.44	-25	-46.7	-47.84	26.68	76.9	61.4	47.7
8.39	-25	-46.91	-47.78	24.79	76.4	61.1	50.8
8.53	-25	-47.38	-47.75	26.74	76.5	61	50.4
8.51	-25	-47.22	-47.93	25	76.2	61.6	51.5
8.45	-25	-47.38	-47.81	25.79	76.8	60.9	50.8
8.42	-25	-47.12	-47.87	26.74	76.4	61	48.4
8.47	-25	-46.91	-47.75	24.57	75.6	61.5	52
8.42	-25	-47.95	-47.63	26.77	76.6	60.7	52.1
8.59	-25	-47.33	-47.93	26.68	75.9	61.4	51.6
8.29	-25	-47.07	-47.81	24.85	75.9	60.7	51.2
8.44	-25	-47.17	-47.75	26.8	76.5	60.9	51.2
8.49	-25	-46.91	-48.02	26.71	75.8	61.6	55.9
8.38	-25	-46.5	-47.78	24.88	75.8	60.6	50.9
8.46	-25	-47.43	-47.81	26.77	76.6	60.9	51
8.61	-25	-46.91	-47.87	26.77	76.4	61	50.5
8.56	-25	-47.64	-47.78	24.94	76.4	60.7	50.5

8.51	-25	-47.64	-48.05	26.68	76.6	60.9	48.3
8.44	-25	-46.86	-47.9	24.57	75.7	61.1	51.7
8.41	-25	-47.84	-47.93	26.74	76.6	60.9	49.9
8.45	-25	-47.38	-47.87	26.89	76.3	60.8	49.6
8.48	-25	-47.64	-47.72	24.57	75.7	61.4	51.9
8.52	-25	-47.43	-47.75	26.65	76.4	60.6	50.2
8.53	-25	-47.22	-47.87	26.71	76.4	61	51.8
8.43	-25	-47.53	-47.93	24.69	75.5	60.9	52.6
8.47	-25	-47.27	-47.63	26.71	76.3	60.7	49.4
8.5	-25	-46.81	-47.93	24.54	75.3	61.4	49.3
8.43	-25	-47.22	-47.72	24.76	75.5	60.7	49.7
8.52	-25	-46.76	-47.81	26.71	75.9	60.6	50.7
8.53	-25	-47.27	-47.84	26.68	75.8	60.8	51.2
8.48	-25	-47.17	-47.99	24.54	75.2	61.3	51.1
8.41	-25	-47.17	-47.9	26.53	76.1	60.6	48.4
8.41	-25	-46.81	-47.93	26.71	75.8	60.7	52.3
8.45	-25	-47.33	-47.87	24.63	75.1	61.1	51.5
8.56	-25	-46.7	-47.9	26.65	75.9	60.7	47.3
8.51	-25	-47.27	-47.78	24.54	75.3	61.4	51.4
8.45	-25	-46.86	-47.9	26.68	76.1	60.7	51
8.43	-25	-46.13	-47.9	26.68	75.9	60.7	51.6
8.51	-25	-46.96	-47.87	26.62	75.7	61.4	48.3
7.8	-25	-46.76	-47.78	24.66	75.6	60.6	51.6
8.46	-25	-46.96	-47.87	26.68	76.3	60.7	51.9
8.47	-25	-46.86	-47.93	26.65	76.3	61	54
8.42	-25	-46.86	-47.99	24.79	75.7	60.4	50.5
8.53	-25	-47.33	-47.72	26.62	76.5	60.7	49.1
8.46	-25	-47.43	-47.81	24.48	75.6	61.2	50.7
8.41	-25	-46.86	-47.81	26.62	76.5	60.6	53
8.54	-25	-46.91	-47.84	26.68	76.5	61	50
8.46	-25	-47.22	-47.99	24.54	75.8	61.1	51
8.47	-25	-47.17	-47.84	26.59	76.8	60.6	51.8
8.48	-25	-47.22	-47.72	26.56	76.7	61.1	51.8
8.47	-25	-47.01	-47.9	25.12	76.7	60.7	48.4
8.48	-25	-47.22	-47.81	26.62	77	60.8	54.2
8.48	-25	-47.27	-48.05	24.39	76.4	61.2	50.2
8.5	-25	-47.43	-48.02	26.62	77.2	60.7	53.5
8.39	-25	-47.12	-47.69	26.53	77.1	60.8	51.3
8.56	-25	-47.33	-47.9	26.56	77.2	61.3	50.2
8.5	-25	-47.12	-47.99	24.39	76.8	61.4	53.1
8.41	-25	-47.43	-47.96	24.69	77	60.7	51.2
8.48	-25	-47.33	-47.87	26.53	77.7	60.7	50.3
8.48	-25	-47.48	-47.96	26.56	77.7	60.8	50.1
8.48	-25	-47.64	-47.75	26.43	77.7	61.1	51.1
8.47	-25	-46.76	-48.02	26.47	77.5	61.5	49.8
8.45	-25	-47.38	-47.69	24.36	77.2	61.3	51.5
8.33	-25	-46.24	-48.05	24.48	77.4	61	50.9

8.51	-25	-46.7	-47.9	25.89	78	60.9	52.5
8.49	-25	-47.59	-47.96	26.43	78.1	60.9	48.7
8.52	-25	-47.64	-47.81	26.43	78.3	60.9	51
8.56	-25	-47.12	-48.02	26.4	78.4	61.4	51
8.49	-25	-47.01	-47.84	26.37	78.5	61.6	50.5
8.44	-25	-47.12	-48.02	24.24	78.6	61.5	49
7.99	-25	-46.96	-47.99	24.36	79.8	61.2	50.2
8.47	-25	-47.22	-47.78	26.22	81.1	61.1	52.3
8.41	-25	-47.38	-48.02	26.28	81.1	61.4	51.1
8.46	-25	-47.33	-47.99	26.22	81.6	61.4	49.1
8.66	-25	-47.27	-47.75	26.16	81.9	61.9	50.4
8.47	-25	-47.17	-47.99	24.08	81.6	62.1	50.1
8.39	-25	-47.01	-48.08	24.02	82.2	61.7	50.7
8.48	-25	-46.5	-47.93	24.3	83.4	61.4	52.3
8.52	-25	-47.27	-47.75	26.19	83.7	61.7	49.2
8.44	-25	-47.12	-48.17	26.01	84.9	61.9	51.4
8.39	-25	-47.33	-47.93	26.01	85.3	62.2	50.5
8.58	-25	-47.22	-47.84	25.95	85.4	62.7	51.9
8.47	-25	-47.22	-47.84	24.18	85.4	62.8	53.2
8.46	-25	-47.48	-47.9	23.84	85.8	62.7	51.4
8	-25	-46.91	-47.99	23.96	86.4	62.5	50.5
8.53	-25	-47.12	-48.08	25.03	87.1	62.4	51
8.46	-25	-47.53	-47.96	25.89	87.2	62.6	54.5
8.39	-25	-47.22	-47.84	25.92	87.2	62.9	49.5
8.64	-25	-47.48	-47.93	25.89	87.2	63.3	50.8
8.48	-25	-46.76	-47.81	24.51	86.8	63.5	51
8.42	-25	-47.07	-47.99	23.78	87.5	63.3	50.4
8.36	-25	-47.17	-48.11	23.96	87.6	63	50.2
8.47	-25	-47.27	-47.78	25.85	88.4	63.2	53.9
8.41	-25	-47.17	-47.99	25.89	88.2	63.1	49.8
8.55	-25	-47.01	-47.96	25.79	88.5	63.5	52.9
8.45	-25	-47.64	-48.11	23.72	88.1	63.8	51.7
8.48	-25	-47.22	-48.02	25.85	88.5	63.4	51.3
8.66	-25	-47.17	-47.99	25.76	88.5	64.1	52.3
8.51	-25	-47.53	-47.93	25.79	88.6	63.6	47.5
8.42	-25	-47.27	-47.9	25.82	88.7	63.9	48.3
8.46	-25	-47.01	-48.11	23.69	87.9	64	50.1
8.47	-25	-47.53	-48.02	25.82	88.4	63.7	49.5
8.51	-25	-47.84	-48.02	25.82	88	63.9	48
8.52	-25	-47.59	-48.02	23.63	87.5	64.5	50.7
8.56	-25	-46.91	-47.99	25.85	87.9	63.6	48.8
8.54	-25	-47.17	-47.87	25.82	87.5	64	52
8.47	-25	-47.53	-47.99	23.69	85.6	64.3	51.5
8.48	-25	-47.38	-48.08	25.89	85.5	63.9	53.2
8.48	-25	-47.22	-48.17	25.92	85.2	63.8	51.9
8.6	-25	-47.27	-48.05	25.89	84.8	64.3	48.9
8.48	-25	-47.53	-48.05	23.78	84	64.2	49.9

8.42	-25	-47.12	-48.11	24.08	83.9	63.5	51.3
8.52	-25	-47.27	-47.96	25.92	84.3	63.6	50.3
8.55	-25	-47.17	-48.05	25.85	84.3	63.6	54.3
8.61	-25	-47.22	-48.02	25.98	84.2	63.9	51.3
8.48	-25	-47.53	-47.87	23.78	83.6	64.2	51.6
8.5	-25	-46.76	-48.17	25.76	84.2	63.6	50.8
8.51	-25	-47.64	-48.11	25.92	84.2	63.7	47.3
8.5	-25	-47.64	-48.21	23.9	83.2	64.3	50.4
8.51	-25	-47.64	-47.99	26.04	83.5	63.5	52.8
8.5	-25	-47.69	-48.08	26.04	83.4	63.8	54.4
8.48	-25	-47.64	-48.27	23.93	82.7	64.1	50.5
8.44	-25	-47.43	-48.08	26.07	83.1	63.5	51.6
8.42	-25	-47.22	-48.11	26.07	83	63.9	47.7
8.29	-25	-46.5	-48.05	24.15	82.2	63.4	51.8
8.43	-25	-47.22	-48.21	26.13	82.7	63.5	51.6
8.51	-25	-47.22	-48.11	23.99	81.7	64.1	54.2
8.56	-25	-47.43	-48.21	26.22	82	63.4	51.8
8.44	-25	-47.17	-47.99	26.16	82	63.6	49.4
8.41	-25	-47.17	-47.99	24.18	81.2	63.5	49.9
8.49	-25	-47.43	-48.21	26.22	81.7	63.2	51.3
8.54	-25	-47.53	-48.3	24.11	80.8	63.8	52
8.46	-25	-47.38	-48.3	25.61	81.4	63.1	50.8
8.47	-25	-47.79	-48.05	26.19	81	63.2	51.5
8.55	-25	-47.79	-48.02	24.15	80.1	63.7	53.6
8.44	-25	-47.69	-48.21	26.34	80.8	63	45.4
8.45	-25	-48.47	-48.39	26.28	80.6	63.2	49.8
8.5	-25	-47.17	-48.24	24.18	79.8	63.6	49.1
8.47	-25	-47.53	-48.08	26.31	80.7	62.7	51.8
8.5	-25	-47.27	-48.27	25.58	79.6	63.7	47.9
8.43	-25	-47.38	-48.36	24.39	79.4	63	50.4
8.42	-25	-47.64	-48.17	26.34	79.9	62.8	51.1
8.53	-25	-47.59	-48.17	26.34	79.8	62.8	49.5
8.48	-25	-47.43	-48.17	24.91	79	63.4	53.3
8.53	-25	-47.48	-48.24	24.51	79.4	62.5	50
8.44	-25	-46.86	-48.21	26.34	79.5	62.5	50.4
8.51	-25	-47.53	-48.24	24.18	78.8	63.2	51.3
8.42	-25	-47.48	-48.21	26.4	79.2	62.5	50.8
8.53	-25	-47.22	-48.27	26.34	78.6	63.4	52.3
8.53	-25	-47.53	-48.39	25.31	79	62.5	51.4
8.42	-25	-47.27	-48.24	26.47	78.8	62.5	49
8.5	-25	-47.48	-48.36	24.3	77.9	63.1	52
8.5	-25	-47.53	-48.08	26.5	78.8	62.4	49.9
8.43	-25	-47.69	-48.3	26.4	78.6	62.7	51.3
8.04	-25	-46.91	-48.3	24.48	78	62.1	51.4
8.48	-25	-47.43	-48.17	26.4	78.5	62.2	51.8
8.47	-25	-47.38	-48.24	24.3	77.5	62.8	49.8
8.49	-25	-47.38	-48.21	26.56	78.1	62	50

8.55	-25	-47.43	-48.51	26.5	78	62.2	50.1
8.47	-25	-47.43	-48.51	24.42	77.2	62.5	48.7
8.51	-25	-47.48	-48.39	26.59	77.7	61.9	51.5
9.94	-25	-47.22	-48.33	26.47	77	62.8	50.5
8.53	-25	-47.27	-48.3	25.34	77.2	61.7	51.6
8.51	-25	-47.43	-48.36	26.59	77.1	61.8	49.7
8.47	-25	-47.43	-48.33	24.36	76.3	62.5	49.5
8.38	-25	-47.33	-48.36	24.79	76.6	61.6	52.6
8.47	-25	-46.91	-48.36	26.59	77	61.5	52.1
8.49	-25	-47.53	-48.24	24.39	76.4	62.4	52.3
8.5	-25	-47.69	-48.36	26.59	77.1	61.4	52.3
8.69	-25	-47.59	-48.3	26.56	76.6	62.1	55.4
8.47	-25	-47.48	-48.27	24.97	76.6	61.4	52.3
8.56	-25	-47.38	-48.24	26.65	76.6	61.4	51.7
8.48	-25	-47.07	-48.42	25.82	75.8	62	52.2
8.17	-25	-47.59	-48.51	24.66	75.7	61.2	51.4
8.48	-25	-47.48	-48.33	26.65	76.5	61.1	51
8.45	-25	-47.59	-48.36	26.68	76.2	61.3	48.8
8.48	-25	-47.22	-48.36	24.66	75.5	61.5	52
8.4	-25	-47.69	-48.3	26.71	76.5	61	51.3
8.86	-25	-47.64	-48.27	26.59	76.1	61.8	47.9
8.48	-25	-47.12	-48.45	26.01	76.8	60.8	50.1
8.48	-25	-47.59	-48.48	26.65	76.7	60.9	50
8.46	-25	-47.27	-48.48	24.57	76.1	61.3	50.5
8.48	-25	-47.33	-48.3	26.77	76.9	60.8	51.1
8.47	-25	-48.31	-48.21	26.68	76.7	60.7	49.5
8.47	-25	-47.48	-48.66	24.51	76.1	61.3	49.7
8.43	-25	-47.33	-48.57	26.68	77.1	60.5	47.5
8.44	-25	-47.95	-48.27	26.71	76.8	60.9	47.5
8.47	-25	-48.1	-48.33	24.97	76.7	60.6	50.5
8.41	-25	-47.74	-48.36	26.65	77.2	60.6	52.1
8.46	-25	-47.07	-48.45	24.63	76.8	61.3	52.1
8.42	-25	-47.43	-48.48	26.62	77.8	60.7	50.5
8.52	-25	-47.53	-48.42	26.65	78.6	60.8	46.9
8.5	-25	-47.79	-48.57	24.45	78.5	61.1	49.9
8.37	-25	-47.48	-48.36	26.53	79.6	60.9	52
8.44	-25	-48.1	-48.42	26.56	79.9	60.9	51.6
8.47	-25	-47.53	-48.48	24.42	78.8	61.4	52
8.43	-25	-47.59	-48.42	26.4	80.3	60.9	49.8
8.47	-25	-48	-48.39	26.5	80.5	61.3	45.9
8.23	-25	-47.33	-48.57	24.48	80.2	61.1	51.6
8.55	-25	-47.69	-48.54	26.47	81.4	60.9	51.3
8.51	-25	-47.59	-48.45	24.24	81.2	61.8	51.2
8.4	-25	-48.1	-48.54	26.34	82.1	61	52.3
8.47	-25	-47.84	-48.42	26.28	83.2	61.4	50.5
8.51	-25	-47.69	-48.48	25.89	82.4	62.2	51.4
7.53	-25	-48.21	-48.45	24.39	83	61.4	50.7

8.54	-25	-47.43	-48.39	26.28	83.9	61.4	51.3
8.41	-25	-49.4	-48.51	26.28	83.9	61.8	49.5
8.47	-25	-47.64	-48.27	24.15	84.2	62	52.7
8.47	-25	-47.95	-48.48	26.22	85.2	61.8	53
8.51	-25	-47.64	-48.63	24.45	84.8	62.6	48.1
8.41	-25	-47.38	-48.45	26.22	85.2	61.8	48.4
8.4	-25	-48.36	-48.6	26.16	85.4	62.4	52.6
8.48	-25	-47.79	-48.45	25.15	85.1	62.9	51.7
8.38	-25	-47.74	-48.36	24.18	84.9	62.5	49.1
8.5	-25	-48	-48.6	26.16	85.2	62.4	51.1
8.52	-25	-48	-48.57	26.22	85.1	62.5	49.6
8.5	-25	-47.48	-48.42	26.25	84.6	62.8	49
8.47	-25	-48.31	-48.54	25.85	83.8	63.4	50.2
8.42	-25	-47.74	-48.42	24.15	83.6	63	49.9
8.55	-25	-47.79	-48.36	24.39	83.7	62.6	52.2
8.48	-25	-47.59	-48.57	26.25	83.9	62.6	49
8.47	-25	-47.79	-48.57	26.31	83.4	62.7	52
8.58	-25	-47.59	-48.42	26.28	83.8	63	49.6
8.81	-25	-48.21	-48.6	26.19	83.3	63.6	52.1
8.48	-25	-47.74	-48.39	24.11	83.2	63.3	51.6
8.34	-25	-47.43	-48.54	24.39	83.2	62.7	50.5
8.51	-25	-47.07	-48.33	26.22	83.8	62.6	51.3
8.47	-25	-47.64	-48.57	26.22	83.9	62.8	45.1
8.46	-25	-47.12	-48.63	26.25	83.8	63.1	51.6
8.52	-25	-47.84	-48.57	25.4	83.5	63.7	54.3
8.41	-25	-47.95	-48.57	24.15	83.4	63.3	51.4
8.42	-25	-47.53	-48.51	26.25	84.1	63	52
8.5	-25	-47.69	-48.39	26.22	84.1	63.1	50.9
8.55	-25	-47.59	-48.6	26.19	83.9	63.4	54.2
8.47	-25	-47.53	-48.69	24.91	83.2	63.7	51.8
8.42	-25	-47.64	-48.69	24.15	83.2	63.3	50.8
8.55	-25	-48.16	-48.63	25.06	83.9	63	53.7
8.5	-25	-47.27	-48.51	26.25	83.9	63.1	51.6
8.39	-25	-47.79	-48.48	26.34	83.7	63.1	50.8
8.64	-25	-47.59	-48.66	26.25	83.5	63.4	46.8
8.53	-25	-47.17	-48.57	24.11	82.8	63.6	50.1
8.41	-25	-48.05	-48.69	24.21	83	63.3	50.9
8.51	-25	-48.31	-48.54	25.46	83.4	63	50.4
8.47	-25	-47.53	-48.54	26.25	83.4	63	50.2
8.44	-25	-48.36	-48.48	26.28	83.1	63.1	50.3
8.54	-25	-47.53	-48.42	26.28	83.1	63.4	47.3
8.5	-25	-48.05	-48.57	25.7	82.2	63.7	49.1
8.41	-25	-48	-48.51	24.27	82	63.2	48.3
8.5	-25	-48.36	-48.6	26.34	82.1	63	50.8
8.54	-25	-47.48	-48.48	26.4	81.7	62.8	51.9
8.61	-25	-47.59	-48.54	26.34	81.1	63.4	51.2
8.42	-25	-47.95	-48.69	24.27	80.3	63.2	49.7

8.4	-25	-47.74	-48.75	26.4	81	62.7	54.7
8.5	-25	-47.64	-48.48	26.34	80.1	63.6	53
8.52	-25	-47.84	-48.79	26.4	80.5	62.5	50.4
8.53	-25	-47.74	-48.72	26.4	79.9	62.8	48.4
8.43	-25	-47.74	-48.63	24.39	78.9	62.9	52.1
8.42	-25	-48.83	-48.6	26.4	79.4	62.5	53.8
8.64	-25	-47.74	-48.69	26.5	78.7	62.9	52.1
8.47	-25	-47.69	-48.72	24.33	78	63.1	50.7
8.5	-25	-48.31	-48.66	24.51	78.3	62.1	52.9
8.48	-25	-47.69	-48.69	26.5	78.5	62.2	47.4
8.53	-25	-48	-48.57	26.5	78.7	62.4	51.6
8.41	-25	-47.22	-48.75	26.53	78.5	62.5	52.5
8.49	-25	-48.05	-48.69	26.43	77.9	62.9	51.4
8.42	-25	-47.53	-48.57	24.36	77.7	62.5	51.9
8.46	-25	-48.21	-48.79	25.34	78.5	62.1	53.8
8.54	-25	-48.26	-48.72	26.5	78.5	62	52
8.46	-25	-48.73	-48.66	26.5	78.6	62.4	49
8.45	-25	-47.74	-48.57	24.39	77.5	62.5	52.3
8.53	-25	-47.74	-48.82	26.53	78	61.9	49.2
8.52	-25	-47.22	-48.88	26.53	77.7	62	51.5
8.5	-25	-47.74	-48.72	24.33	77.2	62.7	48.6
8.45	-25	-47.79	-48.85	26.53	78	61.9	50.5
8.41	-25	-48	-48.63	26.5	78	61.9	50.9
8.44	-25	-48.31	-48.6	24.24	77.6	62.2	52.2
8.41	-25	-47.43	-48.6	26.5	78.6	61.7	52.3
8.47	-25	-47.59	-48.69	24.27	77.8	62.6	51.5
8.44	-25	-47.53	-48.69	26.47	78.8	61.6	49.4
8.44	-25	-47.95	-48.75	26.5	78.7	61.5	49.3
8.51	-25	-48.05	-48.82	24.33	77.9	62.5	52.3
8.47	-25	-48.05	-48.57	26.5	78.7	61.5	47.7
8.43	-25	-46.96	-48.79	26.53	78.5	61.7	56.7
8.51	-25	-47.79	-48.6	24.33	77.7	62.4	52.4
8.52	-25	-48.1	-48.6	26.53	78.5	61.5	46.6
8.56	-25	-47.48	-48.69	26.56	78	61.9	49
8.52	-25	-47.53	-48.63	24.57	77.4	61.5	51
8.5	-25	-48.16	-48.75	26.62	77.4	61.5	53.4
8.46	-25	-48.57	-48.69	24.42	75.7	62.1	51.1
8.54	-25	-48	-48.82	26.56	75.9	61.4	52.1
8.41	-25	-48.57	-48.51	26.59	75.5	61.5	46.2
8.5	-25	-48.05	-48.48	24.42	74.5	61.9	50.9
8.41	-25	-46.91	-48.85	26.16	75.1	61.3	51.6
8.56	-25	-48	-48.66	26.56	75	61.4	50.7
8.47	-25	-47.84	-48.69	24.45	74.1	61.8	51.2
8.5	-25	-47.59	-48.66	26.65	74.7	61.1	52.4
8.7	-25	-47.53	-48.6	26.65	74	61.6	49.7
8.32	-25	-48	-48.85	24.79	74	60.9	50.5
8.48	-25	-48.05	-48.85	26.65	74.4	61	51.1

8.73	-25	-47.74	-48.97	26.68	73.8	61.6	49.6
8.43	-25	-48	-48.69	24.54	73.4	61.1	52.6
8.5	-25	-48.36	-48.79	26.71	74.1	60.9	53.2
8.47	-25	-47.95	-48.72	26.74	73.6	60.9	50.9
8.47	-25	-47.79	-48.79	25.85	73	61.5	50.7
8.42	-25	-48.36	-48.97	24.76	73.4	60.7	48.6
8.42	-25	-47.95	-49	26.62	73.6	60.8	50.5
8.48	-25	-47.95	-48.72	24.48	72.8	61.5	52
8.43	-25	-47.74	-48.72	26.71	73.6	60.6	49.9
8.43	-25	-47.53	-49	26.71	73.4	60.9	47
8.4	-25	-48.26	-48.72	24.51	72.6	60.9	52
8.44	-25	-47.74	-48.97	26.74	73.4	60.4	49.3
8.45	-25	-47.69	-48.82	26.65	73.4	60.8	51.4
8.5	-25	-47.38	-49	25.46	72.5	61.2	51.5
8.43	-25	-47.74	-48.79	24.63	72.6	60.6	51.7
8.47	-25	-48.1	-48.88	26.77	73.4	60.4	52.5
8.45	-25	-47.64	-49.03	26.8	73.1	60.4	49.8
8.59	-25	-48.16	-48.97	26.74	72.8	60.8	52.2
8.46	-25	-48.05	-48.82	24.54	71.8	60.8	45.9
8.4	-25	-48.42	-48.79	24.94	72.2	60.3	49.9
8.44	-25	-47.53	-48.94	26.77	72.6	60.3	50
8.56	-25	-48.1	-48.72	26.77	72.6	60.6	55.3
8.48	-25	-47.84	-48.88	26.62	72	61	51
8.39	-25	-48.26	-48.79	24.69	71.8	60.3	50.5
8.51	-25	-48.36	-48.85	26.89	72.7	60.1	48.9
8.42	-25	-47.69	-49.09	26.74	72.8	60.3	51.7
8.49	-25	-48	-48.94	24.57	71.6	60.7	52.6
8.52	-25	-48.47	-48.85	26.8	72.5	59.9	48.2
8.45	-25	-47.95	-49	26.77	72.3	60.2	51.8
8.4	-25	-47.12	-49	24.73	71.6	60.1	51.1
8.43	-25	-48.05	-48.82	26.71	72.3	59.8	50.5
8.62	-25	-48.1	-48.85	26.77	71.6	60.4	50.7
8.41	-25	-47.84	-48.97	24.73	71.5	59.8	50.2
8.54	-25	-48.31	-48.94	26.77	72.3	59.9	47.4
8.51	-25	-48.42	-49.09	26.8	72	59.7	48.4
8.5	-25	-47.84	-48.85	24.66	71.2	60.4	49.3
8.32	-25	-49.04	-49.06	24.94	71.2	59.7	51.8
8.46	-25	-47.95	-48.88	26.8	72	59.5	50.9
8.43	-25	-47.95	-49.06	26.77	71.5	59.9	50
8.41	-25	-47.95	-49.03	24.57	71.1	60.1	48.6
8.44	-25	-48.88	-48.88	26.8	71.8	59.5	51.5
8.51	-25	-48.52	-48.88	26.65	70.9	60.3	54.8
8.53	-25	-48	-48.85	25.92	71.6	59.3	49.5
8.55	-25	-48.05	-48.94	26.89	71.5	59.5	50
8.5	-25	-47.64	-49.06	24.76	70.7	60.1	50.5
8.46	-25	-48.36	-48.88	26.74	71.6	59.4	50.1
8.43	-25	-47.64	-49.09	26.8	71.4	59.7	50.5

8.44	-25	-48.88	-48.88	24.69	70.8	59.5	46.9
8.51	-25	-48.05	-48.79	26.8	71.5	59.2	51.2
8.48	-25	-48.83	-48.97	25.89	70.8	60.2	50.3
8.47	-25	-47.95	-49.03	26.83	71.5	59.2	54.3
8.53	-25	-48.1	-48.85	26.74	71.4	59.3	50.7
8.44	-25	-47.69	-48.88	24.66	70.5	59.6	52.6
8.43	-25	-48.26	-49	26.83	71.3	59.2	48.9
8.52	-25	-47.84	-48.82	26.8	71.1	59.6	56
8.44	-25	-48.21	-48.72	24.69	70.5	59.5	50.5
8.47	-25	-48.73	-48.85	26.8	71.1	59.2	52.7
8.43	-25	-47.95	-48.75	26.89	70.8	59.2	48.9
8.48	-25	-47.48	-48.88	24.69	69.9	59.7	52.7
8.53	-25	-48.16	-48.94	26.95	71.1	59.1	52.7
8.5	-25	-47.84	-49	26.77	70.9	59.4	50
8.48	-25	-48.42	-48.88	24.88	70.6	59	50.4
8.41	-25	-48	-49.06	26.8	71	59.1	50.3
8.47	-25	-49.04	-48.75	24.66	69.7	59.6	49.5
8.47	-25	-48	-49.09	26.89	70.6	59	51.6
8.47	-25	-48.16	-48.75	26.8	70.3	59.1	50.7
8.45	-25	-47.84	-48.97	24.82	69.2	59.2	49.1
8.54	-25	-48.16	-49.06	26.92	70.1	58.7	49.5
8.59	-25	-47.74	-48.82	26.89	69.8	59.4	50.2
8.47	-25	-48.05	-49	25.09	70	58.9	47.5
8.47	-25	-48.52	-48.97	26.92	70.1	58.9	52.1
8.48	-25	-47.95	-49	24.73	68.9	59.3	53
8.56	-25	-48.31	-48.72	26.92	70.1	58.4	51
8.53	-25	-47.38	-48.97	26.95	69.6	59	52.5
8.34	-25	-48.68	-49.06	25	69.2	58.6	50.9
8.44	-25	-48.36	-49.03	26.83	69.8	58.6	52.2
8.51	-25	-48.21	-48.79	24.85	68.7	59.3	47.4
8.53	-25	-48.31	-48.97	25.12	69.3	58.6	49.5
8.49	-25	-48.31	-48.94	27.01	69.8	58.5	49.1
8.5	-25	-48.31	-49.03	26.22	68.8	59.2	51.6
8.47	-25	-48.83	-49	26.16	69.2	58.4	51.7
8.44	-25	-47.59	-48.94	26.89	69.3	58.5	47.7
8.47	-25	-47.59	-49.09	24.79	68.4	58.9	50.1
8.41	-25	-47.59	-48.82	26.89	69.6	58.2	50.1
8.51	-25	-48.05	-48.82	26.07	68.5	59.2	49.2
8.45	-25	-47.59	-48.94	26.95	69.6	58.2	51
8.49	-25	-48.1	-49.03	26.92	69	58.8	48.9
8.37	-25	-48.42	-48.88	24.79	68.8	58.4	50.4
8.43	-25	-48.1	-48.75	26.89	69.4	58.2	50.5
8.45	-25	-48.47	-48.72	26.89	69.1	58.6	47
8.45	-25	-47.95	-48.79	24.73	68.4	58.8	51.5
8.42	-25	-48.1	-49.09	24.97	69	58.2	51.7
8.42	-25	-48.36	-48.72	27.01	69.3	58.2	49.6
8.45	-25	-48.47	-48.94	26.98	69.2	58.3	51.3

8.66	-25	-48	-49	26.89	69	58.6	50.8
8.47	-25	-47.84	-48.94	24.76	68.5	58.7	50.3
8.48	-25	-48.05	-49	26.95	69.4	58.2	50.1
8.41	-25	-48.62	-48.79	26.92	69.3	58.2	52.2
8.48	-25	-48.16	-49	24.73	68.4	58.8	50.5
8.47	-25	-48.31	-48.79	26.95	69.3	58	52.1
8.56	-25	-48.05	-48.88	26.98	69	58.3	51.1
8.43	-25	-48.21	-48.94	24.79	68.6	58.5	52.7
8.41	-25	-47.69	-49.06	26.92	69.4	58.2	56
8.45	-25	-48.36	-48.88	26.98	69.2	58.2	52.2
8.5	-25	-48.26	-48.79	24.79	68.3	58.8	49.1
8.56	-25	-48.62	-49.09	26.95	69.4	58.2	50.5
8.55	-25	-47.95	-48.88	26.89	69.2	58.4	50.9
8.45	-25	-48.16	-49	25.49	69.3	58.1	49.3
8.44	-25	-48	-48.94	26.98	69.2	58.2	50.4
8.47	-25	-47.95	-49.03	24.82	68.5	58.3	50.4
8.51	-25	-48.26	-48.97	26.95	69.4	58	47
8.41	-25	-48.83	-48.88	26.95	69.4	58.1	54
8.63	-25	-48.78	-49.09	26.83	69.1	58.6	48.8
8.5	-25	-48.83	-48.97	24.66	68.6	58.6	52.5
8.22	-25	-48.21	-48.82	24.91	69	58	49.1
8.48	-25	-48.47	-48.85	26.98	69.7	57.9	51.8
8.54	-25	-48.05	-48.94	26.92	69.6	58.1	49.6
8.42	-25	-47.48	-48.85	27.01	69.4	58.2	50.4
8.52	-25	-47.84	-48.85	26.71	68.8	58.5	50.9
8.41	-25	-48.16	-48.94	24.79	68.7	58.2	50.1
8.45	-25	-47.38	-48.79	26.89	69.7	57.9	50.2
8.53	-25	-48.42	-48.97	26.8	69.6	58	51.6
8.61	-25	-48.26	-49	26.95	69.2	58.3	46.6
8.38	-25	-47.69	-48.85	24.82	68.9	58.2	50.1
8.54	-25	-48.62	-48.85	26.89	69.7	58	51
8.44	-25	-47.79	-48.82	26.83	69.4	58.1	49.7
8.5	-25	-48.62	-48.88	24.79	68.9	58.6	48.6
8.47	-25	-48.21	-49.03	26.92	70	57.9	51.9
8.44	-25	-47.48	-48.79	26.98	69.6	58.1	51.1
8.43	-25	-48.31	-48.85	24.79	68.9	58.2	51.6
8.39	-25	-48.16	-48.75	26.95	69.7	57.8	51.5
8.65	-25	-47.95	-48.97	26.92	69.2	58.2	51.2
8.38	-25	-48.26	-49.03	24.79	69	58.1	47.9
8.54	-25	-48.31	-48.88	26.89	69.6	58	50.8
8.59	-25	-48.62	-48.88	26.8	69.3	58.4	47.9
8.53	-25	-47.79	-49.03	25.03	69.3	57.8	50
8.51	-25	-48.36	-48.79	26.8	69.9	58.1	48.2
8.46	-25	-47.95	-48.79	24.69	68.8	58.3	51.9
8.54	-25	-48.78	-48.97	26.92	70.1	57.9	51.8
8.59	-25	-48.16	-48.75	26.83	69.6	58.3	52.5
8.46	-25	-47.74	-48.69	24.82	69	57.9	51.6

8.53	-25	-48.16	-48.72	26.89	69.8	57.8	51.1
8.46	-25	-48.31	-48.82	24.63	68.8	58.5	50.8
8.52	-25	-47.79	-49.03	26.92	69.9	57.9	49.6
9.12	-25	-48.21	-48.88	26.68	69.1	58.5	54.5
8.47	-25	-48.05	-48.88	24.82	69.4	57.8	48.4
8.56	-25	-48.31	-48.75	26.83	69.9	57.9	52.7
8.47	-25	-47.84	-48.79	24.63	68.9	58.3	52.4
8.54	-25	-47.38	-48.57	26.8	70.1	57.9	52.7
8.5	-25	-48.16	-48.97	26.8	69.8	57.9	52.2
8.46	-25	-48.05	-48.85	24.66	69	58.3	52.3
8.52	-25	-48.1	-48.69	26.83	70	57.9	55.5
8.45	-25	-47.79	-49.12	26.95	69.9	57.8	51.6
8.47	-25	-48.1	-48.69	24.57	69	58.2	50.2
8.51	-25	-48	-48.85	26.98	70.1	57.6	45.1
8.61	-25	-48.31	-48.79	26.83	69.6	58.3	51.6
8.41	-25	-47.84	-48.79	24.79	69.1	58.1	49.6
8.44	-25	-48.1	-48.75	26.83	70.1	57.9	51.8
8.56	-25	-48.73	-49	26.89	70.1	58.1	52.9
8.53	-25	-47.69	-48.88	26.8	70.1	58.2	49.8
8.47	-25	-48.83	-48.94	24.69	69.3	58.3	49.9
8.44	-25	-47.95	-48.75	25.15	70.1	57.8	50.5
8.53	-25	-48.16	-49.03	26.8	70.3	57.9	48.9
8.52	-25	-48.42	-48.75	26.89	70.3	58.2	48
8.46	-25	-47.69	-49.24	24.57	69.6	58.3	50
8.57	-25	-48.62	-48.63	26.8	70.7	57.8	52.5
8.46	-25	-47.84	-49.12	26.89	70.4	58.1	49.5
8.44	-25	-48.62	-48.94	24.85	70.1	57.9	50.8
8.53	-25	-48.1	-48.97	26.89	70.7	58	51
8.44	-25	-49.19	-48.82	24.54	70	58.3	51.6
8.47	-25	-48.47	-48.79	26.77	71	57.9	50.5
8.53	-25	-48.31	-49.06	26.71	70.8	58.2	48.6
8.44	-25	-47.53	-48.72	24.57	70.3	58.3	51.1
8.47	-25	-48.36	-48.97	26.71	71.2	58	50.2
8.54	-25	-48.31	-48.79	26.77	71.2	58.1	51.6
8.47	-25	-48.1	-48.79	24.69	70.5	58.4	50
8.44	-25	-48.31	-48.79	26.83	71.5	58	49.3
8.57	-25	-48.73	-48.82	26.68	71.2	58.6	48.3
8.55	-25	-48.16	-49	24.94	71.4	58	51.2
8.47	-25	-48.52	-48.85	26.74	71.8	58.1	53.3
8.46	-25	-48.05	-48.97	24.54	70.9	58.7	51.3
8.47	-25	-48.21	-48.88	26.74	71.8	58.1	49.5
8.47	-25	-48	-49	26.83	71.8	58.2	50.3
8.51	-25	-48.05	-48.97	24.66	70.9	58.6	50.5
8.53	-25	-48.26	-48.82	26.74	71.8	58.2	51.8
8.46	-25	-48.36	-48.79	26.74	71.8	58.2	60.7
8.46	-25	-48.16	-48.82	24.57	70.9	58.5	52
8.38	-25	-47.43	-48.88	26.83	71.8	58.2	45

8.57	-25	-47.69	-49.09	26.71	71.3	58.5	49.2
8.45	-25	-48.31	-48.88	24.88	71.5	58.1	50.4
8.47	-25	-48.1	-48.94	26.71	71.8	58.2	47.5
8.47	-25	-47.74	-48.79	24.51	71	58.7	50.5
8.49	-25	-48.1	-48.85	26.68	72.1	58.2	50.9
8.52	-25	-48	-48.82	26.68	71.9	58.2	48.3
8.5	-25	-47.64	-48.94	25.09	70.9	58.8	53.1
8.48	-25	-47.69	-48.82	24.94	71.5	58.2	50.5
8.49	-25	-47.84	-48.75	26.65	71.6	58	53.4
8.51	-25	-48.21	-48.94	24.51	70.8	58.9	53
8.53	-25	-48.21	-49	26.74	71.8	58.2	53.7
8.57	-25	-47.84	-48.88	26.65	71.4	58.7	48
8.08	-25	-48.16	-48.6	24.73	71.1	58.2	52.1
8.47	-25	-48.05	-48.79	26.65	71.3	58.2	50.5
8.46	-25	-47.38	-48.69	24.48	70.9	58.9	49.8
8.43	-25	-47.48	-48.88	26.71	71.6	58.2	50
8.53	-25	-48.52	-49	26.65	71.2	58.9	52.2
8.12	-25	-48.21	-48.94	24.66	71	58.2	52.3
8.45	-25	-48.26	-48.94	26.65	71.8	58.4	50.9
8.52	-25	-48.1	-49	24.51	70.8	59	47.7
8.57	-25	-47.95	-48.69	26.56	72	58.2	48.4
8.58	-25	-48.16	-48.66	26.74	71.6	58.6	48.4
8.37	-25	-48.16	-48.69	24.51	71.1	58.4	50
8.42	-25	-48.57	-48.94	26.71	72	58.4	50.1
8.59	-25	-48.21	-48.85	26.65	71.6	59	50.3
8.55	-25	-48.31	-48.75	24.73	71.5	58.2	52
8.55	-25	-47.74	-48.97	26.62	72.1	58.2	50
8.51	-25	-48.47	-48.75	24.42	71.2	58.9	52.6
8.47	-25	-47.95	-49.03	26.59	72.1	58.3	52
8.63	-25	-47.95	-48.94	26.56	71.5	59.1	50.1
8.53	-25	-48.42	-48.88	25.31	72.1	58.3	52.4
8.54	-25	-49.19	-48.94	26.71	72.1	58.5	51.3
8.47	-25	-48.1	-48.97	24.51	71.1	58.7	52
8.44	-25	-47.69	-48.97	26.68	72.3	58.4	50.5
8.52	-25	-47.53	-48.85	26.65	71.6	58.7	49.4
8.46	-25	-47.79	-49.03	24.48	71.2	58.8	49.6
8.56	-25	-48.31	-48.69	26.62	72.3	58.4	52.5
8.5	-25	-48.68	-48.88	26.65	72.2	58.3	51.7
8.62	-25	-48.42	-48.82	26.59	71.8	59.2	49.8
8.26	-25	-48	-48.75	24.66	71.4	58.5	48.7
8.5	-25	-48.1	-49.06	26.65	72.1	58.4	50
8.97	-25	-48.1	-48.94	26.5	71.5	59.3	52
8.5	-25	-47.84	-48.75	26.65	72.3	58.4	54.9
8.5	-25	-48.21	-48.85	26.68	71.9	58.4	50.5
8.41	-25	-48.1	-49	24.51	71.2	58.9	49.8
8.45	-25	-48.31	-48.88	26.62	72	58.3	51.9
8.51	-25	-48.31	-48.75	24.39	71	59.2	52.1

8.54	-25	-48	-48.88	26.71	72.3	58.5	51.4
8.6	-25	-48.73	-48.94	26.62	71.9	58.9	51.4
8.01	-25	-48.16	-48.88	24.66	71.5	58.5	50.9
8.43	-25	-48.16	-48.94	26.68	72.1	58.4	46.1
8.5	-25	-48.73	-48.72	24.45	71.2	59.2	49.7
8.53	-25	-48	-48.82	26.62	72.1	58.3	52.1
8.53	-25	-48	-49	26.62	71.9	58.5	47.7
8.5	-25	-48.05	-48.82	24.48	71.1	58.9	52.3
8.5	-25	-48.42	-48.66	25.64	72.2	58.4	51.1
8.46	-25	-47.07	-48.94	26.71	72	58.6	51
8.57	-25	-47.79	-48.97	26.71	71.3	59	50.2
8.35	-25	-48	-49	24.82	71	58.2	50.8
8.5	-25	-48.42	-49	26.71	71.3	58.4	44.4
8.51	-25	-48.05	-48.88	24.51	70.4	59.1	50.8
8.57	-25	-48.36	-48.94	26.71	71.3	58.3	50.3
8.69	-25	-48.21	-48.85	26.71	70.7	59.1	50.8
8.56	-25	-48.47	-49.03	25.18	70.9	58.2	52.1
8.56	-25	-48.73	-48.85	26.74	70.9	58.4	45.8
8.5	-25	-48.52	-48.79	24.51	70.1	58.9	51.6
8.47	-25	-47.69	-48.85	26.74	71.2	58.3	49.5
8.44	-25	-48	-48.57	26.53	70.8	58.6	51.9
8.43	-25	-48.1	-48.85	24.76	70.6	58.2	48.8
8.45	-25	-47.74	-49	26.8	71.2	58.3	53
8.47	-25	-47.84	-48.97	26.59	70.2	59	49.3
8.27	-25	-48.42	-48.85	24.91	70.5	58.2	49.6
8.43	-25	-48.62	-48.82	26.74	70.8	58.2	51.2
8.5	-25	-48	-48.85	24.54	69.9	58.7	47.3
8.42	-25	-48.21	-48.85	26.77	71	58.2	49.1
8.56	-25	-48.1	-49.03	26.71	70.2	58.8	49.9
8.41	-25	-48.05	-48.82	24.57	70.1	58.5	51.6
8.48	-25	-48.52	-48.94	26.71	70.9	58.1	49.5
8.45	-25	-48.52	-48.82	26.77	70.7	58	48.7
8.5	-25	-48.36	-48.85	26.71	70.5	58.3	50.4
8.49	-25	-48	-48.82	24.82	69.8	58.6	52.6
8.39	-25	-48.47	-48.85	24.69	69.9	58.2	53.9
8.43	-25	-48.21	-48.97	25.82	70.6	57.9	48.9
8.42	-25	-48.21	-48.82	26.77	70.6	58	50.5
8.44	-25	-47.27	-48.97	26.83	70.5	58.1	54.3
8.42	-25	-47.79	-48.85	26.68	70.2	58.2	54.8
8.5	-25	-47.79	-48.97	26.71	70.4	57.9	46.7
8.58	-25	-47.95	-48.94	26.77	70.3	58.2	49.3
8.55	-25	-47.64	-48.94	26.77	70.1	58.2	52.5
8.6	-25	-47.74	-48.75	26.62	70.1	58.5	50
8.5	-25	-48.16	-48.6	25.49	69.6	58.3	51.1
8.46	-25	-48.05	-48.82	24.57	69.6	58.2	50.5
8.37	-25	-47.74	-48.85	24.69	69.9	58	51.2
8.52	-25	-48.42	-48.57	24.82	69.8	57.9	49.6

8.5	-25	-48.42	-48.79	25.24	70.1	57.8	50.2
8.44	-25	-48.1	-48.72	26.04	70.3	57.8	50
8.42	-25	-48.26	-48.97	26.8	70.3	58	48.7
8.46	-25	-47.74	-48.85	26.77	70.2	57.9	51
8.46	-25	-47.79	-48.85	26.77	70.1	58	51.4
8.64	-25	-48.57	-48.82	26.77	69.7	58.4	47
8.48	-25	-48.42	-48.82	24.54	69.3	58.2	51.5
8.41	-25	-48.62	-48.94	24.66	69.6	57.9	50.8
8.44	-25	-48.62	-48.57	24.85	69.7	57.8	52.8
8.41	-25	-48.05	-48.72	26.47	70.1	57.8	49.7
8.5	-25	-47.84	-49.06	26.83	70.1	57.8	55.4
8.55	-25	-47.95	-48.94	26.83	70.1	57.9	49.5
8.52	-25	-47.74	-48.94	26.74	69.8	57.9	49
9.26	-25	-48.52	-48.88	26.68	69.3	58.3	46.9
8.38	-25	-47.95	-48.94	24.66	69	57.9	50.9
8.46	-25	-48.47	-49.09	26.8	69.8	57.6	52.7
8.51	-25	-48.1	-48.57	26.77	69.7	57.5	50.2
8.45	-25	-47.59	-48.82	24.57	68.9	58.3	50.8
8.47	-25	-48.57	-49.03	26.04	69.8	57.5	50.3
8.55	-25	-48.05	-48.79	26.77	69.6	57.6	47.4
8.47	-25	-48	-49.03	24.54	68.8	58.2	49.5
8.42	-25	-47.22	-48.97	26.8	69.7	57.5	51.2
8.62	-25	-48.21	-48.97	26.77	69.3	57.8	53.8
8.41	-25	-48.26	-48.72	24.76	69	57.6	50.8
8.43	-25	-48.57	-48.66	26.8	69.9	57.5	52.7
8.51	-25	-48	-48.94	26.07	68.9	58.2	48.9
8.44	-25	-48.1	-48.85	26.77	70.1	57.6	50.5
8.54	-25	-47.74	-48.88	26.83	69.9	57.5	49.5
8.47	-25	-48.1	-48.72	24.57	69	58.2	50.4
8.43	-25	-47.74	-48.88	26.77	70	57.5	52.2
8.56	-25	-47.95	-48.69	26.83	70.1	57.8	50.8
8.48	-25	-47.74	-48.69	24.63	69	58.2	53.8
8.46	-25	-47.95	-48.69	26.83	70.1	57.2	55.8
8.53	-25	-48	-48.75	26.71	70.1	57.5	52.2
8.45	-25	-47.95	-48.75	24.63	69.4	58	52.7
8.55	-25	-47.95	-48.79	26.89	70.3	57.5	49.5
8.56	-25	-48.47	-49	26.77	70.1	57.8	47.3
8.06	-25	-48.52	-48.75	24.79	70	57.5	51.8
8.47	-25	-48	-48.94	26.74	70.5	57.2	46.8
9.34	-25	-48.16	-48.94	26.71	70.1	58.4	55.1
7.48	-25	-48.68	-48.85	24.82	70.1	57.5	50.7
8.49	-25	-48.05	-48.94	26.74	71	57.8	46.9
8.48	-25	-47.59	-48.54	26.65	70.4	58.5	50.4
8.52	-51.96	-42.55	-47.81	0.15	64.5	58.5	51.7
8.53	-50.97	-42.03	-47.47	0.18	62.5	59.1	52.1
8.49	-25	-47.48	-48.24	26.74	71	58.2	51
8.54	-25	-47.79	-48.3	26.68	71.9	58.7	52.1

8.48	-25	-47.79	-48.63	26.56	72.4	59	49.5
8.46	-25	-47.38	-48.66	26.65	72.6	59.1	51.5
8.49	-25	-47.38	-48.51	26.68	72.4	59	51.5
8.46	-25	-47.95	-48.51	26.62	72.4	58.8	47.2
8.5	-25	-47.33	-48.45	26.68	72.4	58.9	54.8
8.5	-25	-48.1	-48.6	26.65	72.3	58.9	53.8
8.51	-25	-47.59	-48.63	26.68	72.4	58.9	44.1
8.55	-25	-48.47	-48.66	26.62	72.3	58.8	48.7
8.47	-25	-47.59	-48.66	26.65	72.4	58.8	50.3
8.46	-25	-48.21	-48.72	26.68	72.4	59	51.4
8.48	-25	-48.36	-48.6	26.68	72.6	59	50.5
8.46	-25	-47.59	-48.79	26.62	72.7	59.2	50.5
8.62	-25	-47.53	-48.57	26.65	72.9	59.2	51
8.47	-25	-47.95	-48.66	25.03	72.5	59.2	48.4
8.47	-25	-48.1	-48.79	24.48	72.5	59.2	51.1
8.46	-25	-48.42	-48.69	24.45	72.5	59.2	52.7
8.47	-25	-48.68	-48.75	25.73	72.6	59.2	51.5
8.48	-25	-47.95	-48.69	26.01	72.4	59.2	52.1
8.47	-25	-48.73	-48.63	25.31	72.4	59.3	51
8.41	-25	-48.52	-48.72	24.45	72.5	59.2	52.1
8.39	-25	-47.69	-48.75	24.51	72.7	58.9	51.7
8.51	-25	-48	-48.66	24.57	73.1	58.7	51.1
8.45	-25	-48	-48.88	24.76	73.3	58.8	50.7
8.39	-25	-48.21	-48.63	24.91	73.3	58.7	51.6
8.51	-25	-48.62	-48.75	24.63	73.1	58.8	49.6
8.34	-25	-48.31	-48.54	24.69	72.9	58.7	54
8.37	-25	-48.31	-48.88	24.69	73.2	58.8	54.6
8.51	-25	-47.95	-48.88	24.69	73.4	58.8	50.5
8.43	-25	-47.95	-48.79	25.24	73.8	58.7	50.8
8.53	-25	-48.42	-48.72	26.22	74	58.7	53
8.39	-25	-48.05	-48.82	26.34	73.7	58.9	50.5
8.5	-25	-48.1	-48.85	25.27	73.7	58.9	49.5
8.41	-25	-49.25	-48.82	24.63	73.4	59	51.7
8.56	-25	-48.1	-48.72	24.57	73.4	58.9	51.6
8.38	-25	-48.26	-48.88	24.94	73.8	58.9	49.5
8.52	-25	-48.05	-48.79	26.59	74.1	58.9	49
8.43	-25	-48.16	-48.82	26.53	74.2	58.8	49.9
8.53	-25	-48.36	-48.94	26.5	74.2	58.9	51
8.44	-25	-47.95	-48.97	26.59	73.8	59.1	49.9
8.44	-25	-48.31	-48.82	25.52	73.6	58.9	53.8
8.54	-25	-48.36	-49	25.31	73.7	58.8	50
8.38	-25	-48.99	-48.88	26.56	74	58.9	50.5
8.53	-25	-47.79	-48.82	26.56	73.4	58.9	50.1
8.36	-25	-48.88	-49.06	26.59	73.3	58.9	53.8
8.45	-25	-48	-49	26.59	73.4	58.8	50.5
8.49	-25	-48.05	-49.03	26.59	73.3	58.8	53.6
8.43	-25	-48.05	-49.06	26.56	73.4	58.8	49

8.5	-25	-48.36	-49	26.56	73.4	58.9	51.3
8.47	-25	-48.62	-48.82	26.62	73.3	58.8	55.4
8.44	-25	-48.16	-49.09	26.68	72.9	58.8	50.4
8.53	-25	-47.48	-49.21	26.56	73.1	58.9	51.5
8.43	-25	-48.21	-48.75	26.53	73.1	59.2	48.4
8.46	-25	-48.05	-48.94	26.53	73	59	48.3
8.57	-25	-48.73	-48.69	26.62	72.9	59.1	51.7
8.41	-25	-47.48	-49.15	26.65	72.7	58.9	54.5
8.52	-25	-48.16	-49.06	26.56	72.9	59	46.9
8.44	-25	-48.57	-48.82	26.59	72.8	59	50.7
8.48	-25	-48	-48.88	26.59	72.8	59	50.5
8.56	-25	-48.1	-48.85	26.59	72.7	59.2	51.5
8.53	-25	-48.05	-49.12	26.53	72.3	59.3	52.6
8.48	-25	-48.52	-49.09	26.01	72	59.2	50.2
8.45	-25	-47.84	-49.03	26.34	71.6	59.3	52.5
8.74	-25	-48.73	-49	26.53	72	59.2	48.3
8.57	-25	-48.36	-49	26.62	71.8	59.2	51.9
8.62	-25	-48.83	-48.97	26.65	71.8	59.2	51.1
8.45	-25	-48.31	-48.94	26.59	71.4	59.2	52.5
8.49	-25	-48.42	-48.85	24.51	71.2	59	51
8.38	-25	-48.47	-49	24.51	71.2	58.7	51.3
8.41	-25	-48.21	-49.03	24.54	71.2	58.9	49.4
8.38	-25	-48.68	-48.97	24.48	71.1	58.9	51.8
8.44	-25	-48.36	-49.06	24.51	71.1	59	49.5
8.4	-25	-48.16	-49.06	24.48	71	58.9	51.9
8.43	-25	-48.05	-49.09	24.63	71	58.8	51
8.36	-25	-48.42	-48.85	24.51	70.9	58.5	51.5
8.36	-25	-48.1	-49.03	24.79	71.1	58.4	53
8.53	-25	-48.31	-48.97	24.54	71.1	58.4	49.4
8.44	-25	-48.78	-49.18	24.69	71.1	58.3	52.5
8.5	-25	-48.93	-48.97	24.82	71	58.4	49.5
8.48	-25	-48.52	-48.94	24.76	71	58.3	52.7
8.4	-25	-47.84	-48.97	25.03	71.2	58.4	51.6
8.5	-25	-48.26	-48.88	26.31	71.3	58.4	52.9
8.5	-25	-48.31	-49.21	26.8	71.2	58.4	49.5
8.42	-25	-47.84	-49.12	26.77	71.2	58.4	51.8
8.42	-25	-48.05	-49.06	26.74	71.2	58.4	48.4
8.45	-25	-48.57	-49.15	26.74	71.3	58.4	53.5
8.5	-25	-48.26	-48.94	26.74	71.2	58.4	51.6
8.55	-25	-48.99	-48.79	26.68	71.2	58.4	52.9
8.48	-25	-48.26	-48.97	26.65	71.3	58.3	52.4
8.42	-25	-48.52	-49.06	26.68	71.2	58.2	49.5
8.47	-25	-48.52	-48.94	26.65	71.2	58.4	51.6
8.5	-25	-48.26	-49.03	26.74	71.2	58.4	49.4
8.5	-25	-48.31	-49.06	26.62	71	58.2	53.6
8.5	-25	-48.62	-48.97	26.65	71	58.2	50.5
8.43	-25	-48.57	-49.06	26.71	71.1	58.3	50.5

8.45	-25	-48.73	-48.88	26.71	71.1	58.3	49.6
8.42	-25	-47.38	-49.15	26.65	71	58.3	50.5
8.42	-25	-49.04	-49.03	26.65	71.2	58.5	49
8.43	-25	-47.95	-49	26.68	71.1	58.2	52.6
8.44	-25	-48.83	-48.94	26.59	71.2	58.2	50.1
8.44	-25	-48.31	-48.72	26.65	71.3	58.2	49.2
8.49	-25	-48.26	-48.85	26.68	71.2	58.2	52.3
8.51	-25	-48.47	-48.94	26.71	71.1	58.3	50.5
8.53	-25	-48.36	-48.94	26.71	70.8	58.3	52.4
8.5	-25	-48	-48.88	26.65	71	58.2	52.2
8.47	-25	-48.93	-49	26.77	71.1	58.2	47.5
8.41	-25	-48.93	-48.88	26.77	71	58.2	49.5
8.41	-25	-47.84	-49.12	26.83	70.8	58.3	49.9
8.42	-25	-48.16	-49.15	26.74	70.5	58.2	50.1
8.5	-25	-48.78	-49.03	26.77	70.3	58.3	56
8.59	-25	-48.42	-49	26.68	70.2	58.4	53.7
8.62	-25	-48.21	-49.24	26.71	70.1	58.3	47.2
8.53	-25	-48.36	-49.18	26.77	70	58.3	50.5
8.51	-25	-48.62	-48.94	26.8	69.7	58.1	52.1
8.53	-25	-48.47	-49.09	26.77	69.6	58.2	51.6
8.46	-25	-48.31	-49.06	25.92	68.9	58.4	53.2
8.44	-25	-49.04	-49.06	24.73	69	58.2	50.1
8.38	-25	-48.36	-49.09	24.69	68.9	58.1	50.9
8.36	-25	-48.52	-49.18	24.73	69	57.9	50.2
8.36	-25	-48.21	-49.12	24.73	69.3	57.9	49.9
8.34	-25	-48.93	-48.88	24.69	69.9	58	50.9
8.44	-25	-48.52	-49	24.88	70.2	58	52
8.47	-25	-48.73	-49.09	24.88	71.1	58	53.6
8.47	-25	-48.52	-48.97	26.68	71.9	58	49.8
8.45	-25	-48.36	-49	26.65	72.2	58	51.3
8.5	-25	-48.31	-48.94	26.68	72.2	58	50.5
8.51	-25	-48.16	-49.21	26.65	72.7	58.1	51.5
8.44	-25	-48.31	-48.97	26.68	73.3	58.2	50.5
8.5	-25	-48.62	-49.12	26.62	73.3	58.3	50.9
8.53	-25	-48.47	-49.06	26.59	73.8	58.3	54.4
8.41	-25	-48.1	-49.18	26.56	74.4	58.4	51.8
8.52	-25	-48.78	-48.85	26.56	74.8	58.5	57.1
8.5	-25	-48.78	-49.06	26.59	74.8	58.6	52.3
8.47	-25	-48.52	-48.94	26.56	74.8	58.8	51.1
8.61	-25	-48.52	-49.06	26.56	74.4	58.8	51.3
8.61	-25	-48.21	-49.06	26.59	74.4	59	49.6
8.61	-25	-48.99	-49.03	26.65	74.6	59	54
8.62	-25	-48.88	-49.09	26.59	74.7	59.2	49.3
8.59	-25	-48.16	-49.21	26.5	74.9	59.2	50.8
8.47	-25	-48.83	-49.12	26.5	75.7	59.3	51.5
8.43	-25	-48.36	-49.06	24.3	76.1	59.2	49.9
8.39	-25	-48.93	-49.15	24.24	76.9	59.2	54.2

8.42	-25	-48.47	-49.06	24.33	76.8	59	51.3
8.34	-25	-48.78	-49.33	24.27	77.3	59	51.1
8.35	-25	-48.26	-48.94	24.24	77.7	58.9	48
8.44	-25	-48.31	-49.12	24.42	78.7	59	49.5
8.41	-25	-48.68	-49.24	25	79.1	59.1	51.3
8.44	-25	-47.95	-48.88	26.25	79.5	59.2	52.8
8.52	-25	-48.31	-49.12	26.16	79.9	59.2	50.3
8.53	-25	-48.62	-49.3	26.19	80.8	59.4	51.1
8.54	-25	-48.88	-49.06	26.19	81.3	59.3	44.9
8.55	-25	-48.52	-49.12	26.16	82	59.5	49.1
8.44	-25	-49.25	-49.06	25.98	82.4	59.7	50.4
8.48	-25	-48.73	-49.03	25.95	82.3	59.8	50.5
8.53	-25	-47.74	-49.18	25.98	82.7	60.3	51.2
8.44	-25	-48.47	-49.09	24.27	82.2	60.4	51
8.38	-25	-48.26	-49.03	23.78	83.3	60.2	49.2
7.82	-25	-48.26	-49.03	23.9	83.7	60.2	50.8
8.54	-25	-48.21	-49.15	23.84	83.9	60.2	50.2
8.5	-25	-48.62	-49	23.81	83.5	60.2	49.8
8.29	-25	-48.26	-49.24	23.93	84.4	60.3	51.6
8.29	-25	-49.09	-49.12	23.96	84.2	60.4	51.3
8.44	-25	-48.16	-49.03	24.05	84.4	60.5	50.4
8.4	-25	-48.93	-48.97	25.89	84.2	60.5	53.8
8.41	-25	-48.1	-49.21	25.92	84.4	60.5	51
8.41	-25	-48.47	-49.09	25.79	84	60.7	55.8
8.5	-25	-48.05	-49.06	25.89	83.7	60.8	51.6
8.52	-25	-48.52	-49.06	25.89	83.8	60.8	52.6
8.45	-25	-49.82	-49.06	25.82	83.9	61	52.2
8.48	-25	-48.93	-49.03	25.79	84.1	61	52.8
8.53	-25	-48.62	-49.12	25.76	84.1	61.3	51.6
8.43	-25	-48.83	-48.88	25.89	84	61.3	52.6
8.53	-25	-48.31	-49.15	25.76	84.6	61.3	50.2
8.48	-25	-48.42	-49.09	25.7	85.2	61.4	52.7
8.43	-25	-48	-49.15	25.7	85	61.4	50.5
8.53	-25	-48.36	-49	25.67	84.9	61.5	45.1
8.5	-25	-48.62	-49.24	25.67	84.9	61.7	50.8
8.43	-25	-48.42	-49.24	25.73	84.8	61.8	51.6
8.5	-25	-48.47	-49.24	25.73	84.3	61.6	54.2
8.51	-25	-48.73	-49.09	25.79	83.2	61.8	52.3
8.42	-25	-48.16	-49.18	25.7	83.3	61.8	48.9
8.45	-25	-48.36	-49.06	25.7	83.3	61.8	48.6
8.54	-25	-48.78	-49	25.73	83.8	61.9	50.5
8.46	-25	-48.68	-49	25.73	83.8	61.9	51.6
8.52	-25	-48.73	-49.06	25.73	84	62.1	50.7
8.54	-25	-48.42	-49.03	25.73	83.9	62.1	50.2
8.41	-25	-48.31	-48.88	25.64	84	62	51.7
8.47	-25	-48.83	-49.09	25.64	84	62.1	48.2
8.61	-25	-48.68	-49.09	25.64	84.2	62.2	50.8

8.56	-25	-48.57	-49.06	25.7	84.2	62.5	50.2
8.49	-25	-47.84	-49.12	25.7	84	62.5	50.9
8.56	-25	-48.78	-49	25.7	83.8	62.2	48.4
8.45	-25	-48.31	-49.09	25.79	83.2	62.4	55.2
8.44	-25	-48.47	-49	25.7	83.9	62.2	49.8
8.56	-25	-48.52	-49.09	25.7	84.2	62.4	49.6
8.47	-25	-48.42	-49.15	25.64	83.9	62.2	50.5
8.47	-25	-48.26	-48.97	25.7	83.3	62.5	49.6
8.5	-25	-48.62	-48.97	25.73	83.1	62.4	51.9
8.4	-25	-48.05	-49.18	25.7	83.1	62.2	49
8.56	-25	-48.73	-49.18	25.73	82.8	62.2	55.1
8.45	-25	-48.1	-49.21	25.76	82.8	62.2	50.4
8.41	-25	-48.26	-49	25.76	82.5	62	51.8
8.53	-25	-48.68	-48.85	25.76	82.5	62.1	50
8.5	-25	-48.47	-49.15	25.73	82.8	62.1	49.7
8.53	-25	-48.78	-49.15	25.7	82.4	62	48.2
8.46	-25	-48.83	-48.94	25.73	82.1	61.9	50.3
8.47	-25	-48.36	-49.37	23.99	81.2	61.8	52.2
7.77	-25	-48.31	-49.18	23.63	80.5	61.9	53.3
8.37	-25	-48.36	-48.88	23.53	80.2	62.1	52
8.44	-25	-48.57	-49.18	25.31	79.9	62.5	52.1
8.61	-25	-48.68	-49.15	25.85	80.1	62.4	51.1
8.44	-25	-47.84	-49.3	25.82	79.9	62	50.3
8.47	-25	-48.1	-49.24	25.82	80	61.9	49.1
8.53	-25	-48.73	-49.15	25.85	79.6	61.8	51.9
8.52	-25	-48.31	-49.27	25.82	79.4	61.6	48.7
8.44	-25	-48.42	-49.27	25.92	79.5	61.6	51.5
8.39	-25	-48.1	-49.21	23.96	78.9	61.6	50.2
8.04	-25	-48.57	-49.24	23.78	78.4	61.6	50.9
8.4	-25	-48.16	-49.18	23.53	77.9	62	50.5
8.45	-25	-48.42	-49.18	25.43	78.3	62.1	51.3
8.59	-25	-48.52	-49.3	25.82	78.5	61.8	50.2
8.56	-25	-48.42	-49.24	25.89	78.9	61.6	48.2
8.54	-25	-48.68	-49.15	25.95	79.1	61.4	51
8.5	-25	-48.99	-49.18	25.92	79.1	61.5	44.4
8.5	-25	-48.31	-49.21	25.92	79	61.2	49.3
8.5	-25	-48.57	-49.27	24.21	78.8	61.3	52
7.87	-25	-48.26	-49.21	23.78	78.1	61.3	50.5
8.36	-25	-48.31	-49.21	23.57	77.8	61.6	52.9
8.45	-25	-48.47	-49.15	25.89	77.9	61.8	49.5
8.62	-25	-48.42	-49.24	25.92	78.1	61.8	48.6
8.54	-25	-48.93	-49.3	25.92	78	61.4	49.1
8.42	-25	-48.05	-49.33	25.89	77.8	61.3	50
8.48	-25	-48.21	-49.12	25.95	77.6	61.1	49.8
8.49	-25	-48.68	-49.09	25.95	77.1	61.2	53.9
8.41	-25	-48.42	-49.18	23.99	76.7	61	50.8
8.4	-25	-48.83	-49.15	23.69	76.2	61.2	50.5

8.42	-25	-48.16	-49.12	25.76	76.1	61.5	50.7
8.59	-25	-48.99	-49.03	25.95	76.5	61.2	49.9
8.47	-25	-48.88	-49.27	25.89	76.5	61.1	49.7
8.48	-25	-48.83	-49.21	25.95	76.6	61	50.9
8.42	-25	-48.57	-49.15	26.07	76.2	60.8	52.1
8.53	-25	-48.26	-49.21	23.84	75.6	60.9	51.1
8.34	-25	-48.57	-49.12	23.75	75	60.9	52.1
8.41	-25	-48.05	-49.24	25.67	74.6	61.2	49.5
8.58	-25	-48.93	-49.24	26.04	74.7	60.9	47.4
8.51	-25	-48.1	-49.12	26.07	74.7	60.7	50.2
8.46	-25	-48.73	-49.09	26.04	74.7	60.4	53
8.44	-25	-48.78	-49.15	24.54	74.7	60.4	52.3
8.13	-25	-49.51	-49.27	23.84	74.2	60.5	51.7
8.41	-25	-48.73	-49.18	25.58	74.1	60.9	48
8.44	-25	-48.36	-49.24	26.13	74.5	60.5	50.4
8.37	-25	-49.66	-49.37	26.19	74.5	60.3	52.8
8.42	-25	-48.21	-49.33	26.13	74.2	60.4	51.4
8.5	-25	-48.1	-49.12	24.08	74	60.3	49.5
8.43	-25	-48.52	-49.18	23.75	73.5	60.4	51
9.19	-25	-48.68	-49.24	25.92	73.5	60.8	51.7
8.44	-25	-48.62	-49.12	26.04	73.8	60.3	50.7
8.51	-25	-48.47	-49.3	26.19	73.6	60.3	52
8.47	-25	-48.47	-49.46	26.13	73.6	60.2	51.9
8.43	-25	-48.73	-49.27	24.48	74.1	59.9	50.7
8.25	-25	-48.42	-49.24	23.81	73.5	60.1	49.4
8.38	-25	-48.21	-49.18	25	73.7	60.3	48.9
8.61	-25	-48.05	-49.24	26.04	74.8	60.2	49.8
8.37	-25	-48.52	-49.27	26.04	75.2	60.1	49.2
8.5	-25	-48.68	-49.49	26.04	75.4	60.1	49.8
8.41	-25	-48.42	-49.33	25.55	75.9	60.1	53.3
8.37	-25	-49.45	-49.06	23.99	75.7	60.1	50.9
8.4	-25	-49.04	-49.21	23.69	75.5	60.3	48.7
8.6	-25	-48.83	-49.3	26.01	76.6	60.7	44
8.55	-25	-48.57	-49.21	25.95	77.3	60.2	50.4
8.43	-25	-48.57	-49.37	25.85	78.1	60.3	50.3
8.41	-25	-48.57	-49.3	25.98	78.1	60.3	50.1
8.41	-25	-48.73	-49.37	23.9	78	60.3	52
8.37	-25	-48.73	-49.43	24.18	78.4	60.7	52.6
8.56	-25	-48.83	-49.12	25.89	79.3	60.7	51.6
8.52	-25	-48.88	-49.27	26.04	79.8	60.6	50.7
8.44	-25	-48.83	-49.24	25.92	80.2	60.6	52.1
8.42	-25	-48.26	-49.43	25.61	80.6	60.5	51.2
8.34	-25	-49.09	-49.46	23.78	80.6	60.7	52.5
8.41	-25	-48.62	-49.37	24.05	80.8	61.1	52.3
8.52	-25	-48.88	-49.12	25.73	81.6	61.2	50.9
8.38	-25	-49.04	-49.24	25.79	82	61	50.5
8.41	-25	-48.83	-49.33	25.73	82.5	61	51.9

8.44	-25	-48.31	-49.33	25.73	83.2	61.1	48.2
8.56	-25	-48.31	-49.49	23.69	82.8	61.3	49.4
8.36	-25	-48.62	-49.21	23.47	82.7	61.4	51.6
8.44	-25	-48.93	-49.24	25.61	83.5	62	49
8.49	-25	-48.73	-49.4	25.64	84.1	61.8	50.7
8.53	-25	-49.4	-49.3	25.67	84.2	61.6	51.1
8.48	-25	-48.78	-49.43	25.46	84.2	61.6	53.3
8.38	-25	-48.68	-49.3	23.53	84.2	61.8	49.9
8.41	-25	-48.62	-49.27	24.69	83.9	62.5	51.1
8.56	-25	-48.99	-49.21	25.61	83.9	62.5	50.4
8.51	-25	-48.31	-49.3	25.61	83.9	62.2	51
8.52	-25	-49.19	-49.21	25.61	84.1	62	49.3
8.49	-25	-48.99	-49.18	23.38	85.3	62	51.8
8.41	-25	-49.3	-49.33	24.85	85.8	62.6	50.8
8.52	-25	-48.47	-49.43	25.49	86.4	62.6	50.5
8.5	-25	-48.68	-49.52	25.58	85.7	62.6	52.5
8.46	-25	-49.09	-49.37	23.78	85.1	62.5	51.7
8.39	-25	-48.83	-49.18	23.81	86.7	62.9	51.2
8.55	-25	-49.35	-49.21	25.49	86	62.7	49.5
8.44	-25	-48.73	-49.43	25.34	87	62.6	49
8.21	-25	-48.62	-49.46	23.41	86.1	62.8	46.9
8.55	-25	-48.73	-49.43	25.43	86.2	63.4	51.6
8.49	-25	-48.52	-49.46	25.43	88.2	63	49.3
8.48	-25	-48.62	-49.4	24.39	87.9	63	55.3
8.37	-25	-49.25	-49.58	23.2	86.4	63.1	52
8.64	-25	-49.19	-49.33	25.34	87.5	63.6	50.9
8.45	-25	-48.36	-49.4	25.4	87.5	63.2	52
8.47	-25	-48.73	-49.3	25.43	87.5	63.2	48.8
8.53	-25	-49.04	-49.3	23.32	86.4	63.2	46.2
8.43	-25	-48.93	-49.15	24.51	86.1	63.7	50.5
8.47	-25	-48.52	-49.49	25.46	86.8	63.4	51.6
8.41	-25	-48.78	-49.27	25.43	87	63.3	50.5
8.37	-25	-48.68	-49.3	23.35	86.5	63.4	50
8.47	-25	-48.99	-49.4	25.31	86.6	63.9	53.1
8.55	-25	-48.73	-49.37	25.43	87	63.5	55.5
8.46	-25	-48.83	-49.24	25.4	87.5	63.5	50.5
8.48	-25	-48.78	-49.15	24.24	87.6	63.6	52.3
8.37	-25	-48.73	-49.3	23.05	87.4	63.6	50.4
8.49	-25	-49.09	-49.27	25.4	88	64	53.5
8.47	-25	-48.73	-49.24	25.27	88.1	63.7	49.1
8.45	-25	-49.04	-49.27	23.35	87.7	63.6	52.2
8.43	-25	-48.21	-49.52	25.03	87.4	64	49.8
8.48	-25	-48.78	-49.33	25.31	87.5	64	53.5
8.5	-25	-48.83	-49.18	25.4	87.4	63.7	53.1
8.25	-25	-48.42	-49.46	23.17	86.5	63.8	48.2
8.65	-25	-48.36	-49.4	25.34	87.1	64	47.3
8.53	-25	-49.35	-49.33	25.34	87.2	63.8	50.5

8.48	-25	-49.09	-49.33	23.23	86.5	63.6	49.3
8.52	-25	-48.42	-49.21	25.27	87	64.1	51.6
8.49	-25	-48.83	-49.52	25.4	87.2	63.7	45.7
8.35	-25	-48.78	-49.3	23.17	86.6	63.7	48.6
8.53	-25	-48.42	-49.37	25.27	86.8	64.1	51.6
8.55	-25	-48.47	-49.37	25.4	86.4	63.7	47.4
8.52	-25	-48.73	-49.43	23.08	85.5	63.6	49.7
8.54	-25	-48.36	-49.37	25.31	85.5	64.3	52.6
8.51	-25	-48.57	-49.4	25.46	85.7	63.7	48.7
8.49	-25	-48.47	-49.33	23.53	85.3	63.6	51.7
8.39	-25	-48.31	-49.46	25.18	84.4	64	50.4
8.55	-25	-48.83	-49.33	25.46	84.2	63.6	52.1
8.44	-25	-48.42	-49.4	23.35	83.7	63.6	51.4
8.63	-25	-49.61	-49.37	25.49	83.2	63.9	49.5
8.38	-25	-48.93	-49.3	25.55	82.5	63.5	54.3
8.5	-25	-48.62	-49.33	23.38	81.1	63.3	51.2
8.56	-25	-48.68	-49.09	25.49	81	63.7	50.5
8.41	-25	-49.09	-49.37	25.58	80.9	63.2	49.5
7.71	-25	-48.52	-49.46	23.35	80.1	63.2	52
8.59	-25	-49.09	-49.3	25.67	80.2	63.3	51
8.44	-25	-48.26	-49.58	25.61	80.1	62.8	48.7
8.36	-25	-48.47	-49.52	23.72	79.1	63	50.3
8.48	-25	-48.62	-49.55	25.58	79.6	63	51.4
8.5	-25	-48.73	-49.46	24.05	79.2	62.7	53.2
8.45	-25	-48.73	-49.46	25.49	78.8	63.2	52.1
8.54	-25	-49.09	-49.37	25.7	79.1	62.7	52.2
8.52	-25	-48.99	-49.46	23.6	78.7	62.5	53.8
9.04	-25	-48.62	-49.55	25.55	78.7	63	51
8.47	-25	-48.68	-49.49	25.67	78.8	62.5	52.1
8.44	-25	-48.68	-49.37	23.47	78.3	62.4	50.1
8.47	-25	-48.99	-49.43	25.7	78.5	62.9	50.3
8.47	-25	-48.57	-49.21	25.7	78.8	62.5	48.4
8.1	-25	-48.88	-49.43	23.47	78.1	62.4	52.9
8.54	-25	-48.88	-49.46	25.73	78.5	62.5	50.4
8.39	-25	-48.78	-49.43	25.76	78.6	62.1	51.7
8.41	-25	-49.19	-49.43	24.02	77.7	62.5	49.6
8.44	-25	-48.99	-49.46	25.61	78	62.2	54.2
8.52	-25	-48.78	-49.37	23.53	77.8	62	50.4
8.52	-25	-48.52	-49.4	25.76	78.1	62.2	49.7
8.42	-25	-48.99	-49.46	25.58	78.1	61.9	50.9
8.36	-25	-48.26	-49.33	24.73	77.4	62.2	46.9
8.47	-25	-49.09	-49.52	25.73	78.1	62	50.5
8.51	-25	-49.04	-49.46	23.72	77.8	61.8	49.4
8.53	-25	-48.21	-49.4	25.82	77.6	62.5	47.5
8.4	-25	-48.42	-49.76	25.73	77.8	61.8	51.6
8.42	-25	-48.99	-49.37	23.6	77.4	61.8	53.8
8.58	-25	-48.42	-49.49	25.7	77.7	61.9	51.9

8.52	-25	-48.83	-49.4	25.76	77.7	61.7	50
8.38	-25	-48.78	-49.61	23.41	77.1	61.9	51
8.51	-25	-48.31	-49.49	25.73	77.6	61.7	50.5
8.47	-25	-48.78	-49.61	25.06	77.6	61.6	52.3
8.38	-25	-48.88	-49.43	24.36	76.5	61.8	48.3
8.46	-25	-48.52	-49.67	25.76	77	61.7	50.5
8.5	-25	-48.83	-49.52	23.93	77	61.4	48.4
8.78	-25	-48.62	-49.43	25.7	76.8	61.9	50.4
8.53	-25	-48.78	-49.58	25.79	77	61.4	51.6
8.05	-25	-49.04	-49.33	23.57	76.3	61.4	50.5
8.47	-25	-48.36	-49.61	25.79	76.6	61.5	51.6
8.39	-25	-48.31	-49.79	25.79	76.9	61.4	49
8.4	-25	-48.88	-49.49	23.44	76.2	61.4	50.5
8.51	-25	-49.04	-49.43	25.73	76.8	61.5	51.6
8.38	-25	-48.62	-49.37	25.18	76.8	61.3	51.4
8.41	-25	-49.09	-49.37	24.73	76.3	61.4	52.5
8.43	-25	-49.25	-49.21	25.79	76.9	61.2	52.1
8.51	-25	-48.73	-49.37	23.6	76.5	61.2	53.4
8.51	-25	-48.88	-49.55	25.7	76.6	61.6	49.2
8.48	-25	-49.19	-49.37	25.73	76.8	61.4	51.6
8.31	-25	-48.47	-49.43	23.5	76.3	61.3	49.6
8.54	-25	-48.57	-49.52	25.67	76.6	61.4	53
8.44	-25	-48.68	-49.33	23.96	76.7	61	50.1
8.63	-25	-48.47	-49.49	25.7	76.6	61.4	50.9
8.51	-25	-48.88	-49.49	25.76	76.8	61.2	53
8.35	-25	-48.21	-49.4	23.38	76.3	61.2	52.2
8.51	-25	-48.88	-49.49	25.76	77	61.4	47.2
8.5	-25	-48.62	-49.46	24.11	76.7	61.1	53
8.41	-25	-48.78	-49.33	25.55	76.6	61.4	51.7
8.42	-25	-48.52	-49.55	25.7	77.2	61.1	52.7
8.47	-25	-49.09	-49.49	23.6	76.9	60.9	51.2
8.62	-25	-48.68	-49.67	25.7	77.4	61.4	46.2
8.5	-25	-48.73	-49.21	25.76	77.6	61.1	49
8.38	-25	-48.68	-49.37	23.38	77.3	61.1	53.8
8.46	-25	-48.73	-49.27	25.67	78.1	61.3	50.2
8.42	-25	-48.99	-49.49	25.61	78.5	61	51.9
8.4	-25	-48.52	-49.37	24.57	77.9	61.4	52.4
8.51	-25	-48.93	-49.55	25.64	78.7	61.2	52.2
8.47	-25	-48.88	-49.52	23.41	79	61.1	52.6
8.53	-25	-48.73	-49.4	25.55	79.6	61.6	49.5
8.41	-25	-48.57	-49.46	25.49	80.7	61.2	48.8
8.4	-25	-48.21	-49.52	24.11	80.6	61.4	50.7
8.51	-25	-48.83	-49.58	25.55	81.6	61.6	53.9
8.47	-25	-49.25	-49.52	23.26	81.7	61.2	47.9
8.5	-25	-48.57	-49.73	25.46	82.3	61.5	52.1
8.53	-25	-48.83	-49.52	25.43	82.7	61.4	54.7
8.35	-25	-48.93	-49.55	23.05	82.7	61.6	49.5

8.5	-25	-48.83	-49.58	25.27	84	61.7	54.8
8.41	-25	-48.47	-49.61	23.78	84.3	61.5	48.4
8.44	-25	-48.88	-49.58	25.09	83.9	62.2	48.4
8.51	-25	-48.68	-49.73	25.4	84.2	61.8	50.9
8.49	-25	-48.78	-49.64	23.44	83.6	61.8	52.6
8.42	-25	-49.19	-49.58	25.31	83.4	62.4	50.9
8.45	-25	-48.99	-49.52	25.34	83.5	62.1	50.2
8.32	-25	-48.52	-49.55	23.29	82.5	61.9	51.1
8.49	-25	-49.25	-49.82	25.4	82.2	62.4	49
8.38	-25	-48.88	-49.43	25.34	82.2	62.4	47.6
8.32	-25	-49.09	-49.58	22.99	81.7	62.4	51
8.44	-25	-49.04	-49.52	25.4	82.1	62.2	50.3
8.44	-25	-49.19	-49.61	25.4	82.4	62	50.2
8.38	-25	-48.93	-49.52	23.02	81.9	62.4	50.5
8.6	-25	-48.57	-49.73	25.34	82.3	62.4	49
8.53	-25	-48.83	-49.58	25.31	82.9	62.1	49.7
8.37	-25	-48.99	-49.67	23.6	82.1	62.6	51.6
8.44	-25	-49.3	-49.55	25.31	82.3	62.5	51.2
8.29	-25	-48.83	-49.58	23.2	81.7	62.2	49.8
8.58	-25	-49.19	-49.55	25.34	81.8	62.5	49.4
8.53	-25	-49.09	-49.64	24.15	81.7	62.4	52.1
8.43	-25	-48.99	-49.43	25.4	81.4	62.8	52.8
8.38	-25	-48.93	-49.61	25.4	81.7	62.6	47.8
8.42	-25	-49.09	-49.58	23.14	81.7	62.4	47.6
8.54	-25	-48.83	-49.33	25.24	82.1	62.8	51.6
8.52	-25	-49.04	-49.58	25.4	82.5	62.5	51.1
8.34	-25	-48.73	-49.58	23.26	82.3	62.5	50.8
8.47	-25	-48.78	-49.4	25.24	83.2	62.8	51.3
8.52	-25	-48.93	-49.55	25.31	83.8	62.6	55.4
8.35	-25	-49.04	-49.49	22.95	83.4	62.7	50.7
8.52	-25	-48.83	-49.52	25.15	83.8	62.9	51.2
8.5	-25	-48.52	-49.73	23.69	83.7	62.8	50.2
8.38	-25	-49.61	-49.49	25.18	83.5	63.1	51.3
8.5	-25	-48.68	-49.64	25.21	83.9	62.8	50.8
8.19	-25	-48.57	-49.55	22.89	83.3	62.9	52
8.51	-25	-48.88	-49.49	25.18	83.6	63	51.4
8.48	-25	-48.83	-49.49	23.72	83.5	62.8	51.7
8.43	-25	-49.09	-49.49	25.12	83.4	63.4	51.5
8.5	-25	-48.62	-49.58	25.24	84.1	62.9	51.6
8.44	-25	-48.21	-49.67	22.95	84.2	63.1	49.8
8.62	-25	-49.09	-49.55	25.06	85.1	63.3	52.4
8.44	-25	-48.99	-49.64	25.15	85.4	63	50.7
8.32	-25	-49.76	-49.52	22.8	85.5	63.2	50.9
8.56	-25	-49.4	-49.64	25.03	86.1	63.3	51.3
8.51	-25	-48.68	-49.46	24.54	86.3	63.2	52.5
8.39	-25	-48.88	-49.46	23.84	85.9	63.6	51.5
8.39	-25	-48.78	-49.67	25.06	86.6	63.4	51.2

8.41	-25	-48.36	-49.37	23.32	86.5	63.4	49.9
9.7	-25	-48.31	-49.61	24.94	86.4	63.8	48.4
8.44	-25	-48.21	-49.61	25.03	86.5	63.6	51.2
8.52	-25	-49.09	-49.64	22.83	86.5	63.4	52.2
8.59	-25	-48.31	-49.64	25	86.8	63.9	46.9
8.51	-25	-48.99	-49.61	25.09	87.2	63.5	55.4
8.43	-25	-48.78	-49.43	22.74	86.6	63.8	49
8.49	-25	-48.78	-49.46	24.97	87.2	63.7	51
8.48	-25	-48.93	-49.61	23.23	87.1	63.5	48.3
8.78	-25	-48.88	-49.43	25.03	87	64.1	53
8.5	-25	-48.62	-49.61	24.94	87.2	63.6	48.6
8.04	-25	-48.36	-49.64	22.74	86.1	63.7	50.3
8.52	-25	-48.42	-49.52	25.06	86.2	63.7	50.5
8.44	-25	-48.78	-49.73	23.72	86.3	63.7	50.9
8.66	-25	-48.62	-49.61	24.94	86.1	64.1	49.8
8.41	-25	-48.78	-49.52	25.09	86	63.8	52.3
8.41	-25	-48.99	-49.55	22.92	85.5	63.6	51.9
8.5	-25	-48.73	-49.52	25.09	85.3	63.9	49.1
8.39	-25	-49.61	-49.55	24.79	85.2	63.6	50.9
8.41	-25	-48.78	-49.64	24.97	84.2	63.9	48.9
8.47	-25	-48.78	-49.64	25.15	84.3	63.5	52.7
8.16	-25	-48.62	-49.55	22.92	83.7	63.6	50.7
8.52	-25	-48.88	-49.58	25.24	83.7	63.6	48.6
8.53	-25	-49.04	-49.76	23.2	83.5	63.5	51.1
8.56	-25	-48.78	-49.61	25.18	83.3	63.7	51.2
8.41	-25	-48.93	-49.52	25.31	83.2	63.5	51.4
8.38	-25	-48.73	-49.52	22.92	82.4	63.6	50.2
8.49	-25	-49.04	-49.76	25.27	82.9	63.5	53.1
8.54	-25	-48.93	-49.73	23.53	82.7	63.2	51.6
8.6	-25	-48.99	-49.67	25.31	82	63.6	50.3
8.41	-25	-48.52	-49.67	25.4	82.3	63.1	53.3
8.35	-25	-49.04	-49.67	23.05	81.2	63.2	54
8.56	-25	-48.93	-49.76	25.34	81.5	63.2	52.9
8.39	-25	-48.73	-49.88	24.39	81	62.9	51.1
8.39	-25	-48.99	-49.73	24.11	79.9	63.2	50.8
8.5	-25	-48.57	-49.67	25.43	80.7	62.9	54.1
8.42	-25	-49.45	-49.73	23.32	80.1	62.6	49.3
8.68	-25	-48.99	-49.85	25.34	80.7	63.2	52.1
8.42	-25	-49.09	-49.73	25.46	81	62.6	47.3
8.47	-25	-48.83	-49.79	23.26	80.8	62.5	53.7
8.5	-25	-49.3	-49.73	25.43	80.9	62.9	51.6
8.5	-25	-49.19	-49.64	25.4	80.5	62.5	51.5
8.32	-25	-49.19	-49.76	23.23	80.2	62.4	50.8
8.5	-25	-48.78	-49.55	25.24	79.7	62.8	50.5
8.47	-25	-48.83	-49.67	25.43	79.7	62.4	53.8
8.4	-25	-48.99	-49.55	23.14	78.4	62.4	51.2
8.56	-25	-48.83	-49.64	25.43	78.9	62.4	49.4

8.47	-25	-48.73	-49.88	24.02	78.8	62.1	52.4
8.41	-25	-48.73	-49.76	24.97	78	62.5	51.1
8.42	-25	-49.35	-49.76	25.52	78.4	62.1	49.2
8.45	-25	-48.68	-49.85	23.44	78.4	61.9	52
8.44	-25	-49.51	-49.95	25.46	77.7	62.5	51
8.52	-25	-49.3	-49.67	25.46	77.7	61.8	51.8
8.49	-25	-48.88	-49.67	23.32	77.2	61.7	51.4
8.51	-25	-48.68	-49.82	25.49	77.3	61.9	54.2
8.43	-25	-48.47	-49.79	25.55	77.4	61.7	51.3
8.37	-25	-48.73	-49.85	23.26	76.3	61.7	50.2
8.55	-25	-48.83	-49.76	25.52	76.2	61.7	50.1
8.43	-25	-49.04	-49.82	25.55	76.3	61.4	52.6
8.39	-25	-49.04	-49.95	23.29	75.1	61.5	51.9
8.53	-25	-49.19	-49.88	25.58	75.5	61.5	52.9
8.48	-25	-48.73	-49.76	25.64	75.6	61.4	51.4
8.52	-25	-48.52	-49.79	23.38	74.6	61.3	51
8.53	-25	-49.25	-49.85	25.67	74.7	61.6	53.4
8.5	-25	-49.19	-49.64	25.64	75.1	61.2	51.1
8.53	-25	-48.83	-49.82	23.47	74.7	61.1	54.4
9.23	-25	-48.88	-49.98	25.58	74.6	61.5	54.9
8.45	-25	-49.09	-49.85	25.73	75	61.1	51.1
8.45	-25	-49.3	-50.01	23.63	74.3	60.9	50.9
8.44	-25	-49.19	-49.85	25.4	73.8	61.4	49.5
8.53	-25	-49.3	-49.82	25.73	73.8	61	51.7
8.54	-25	-49.19	-50.16	23.93	73.4	60.7	50.5
8.41	-25	-48.93	-49.95	24.85	72.8	61	51.5
8.41	-25	-48.68	-49.88	25.79	73.4	60.8	51.9
8.5	-25	-49.09	-49.82	24.15	73.1	60.3	48.2
8.42	-25	-49.56	-49.95	25.34	72.7	61	51.3
8.39	-25	-48.93	-49.91	25.76	73.2	60.6	51
8.53	-25	-48.73	-49.95	23.6	73.1	60.4	51.2
8.48	-25	-49.3	-49.95	25.82	73.4	60.8	48
8.5	-25	-49.19	-49.88	25.76	74	60.4	53.2
8.41	-25	-48.83	-49.88	23.69	73.8	60.4	51.1
8.47	-25	-49.19	-49.88	25.7	74.5	60.8	50.8
8.5	-25	-49.09	-49.91	25.73	75.1	60.4	50.4
8.36	-25	-49.3	-49.58	23.57	75.1	60.3	52.5
8.53	-25	-49.45	-49.91	25.76	75.9	60.7	47.4
8.44	-25	-49.19	-49.98	25.67	76.7	60.4	52.4
8.41	-25	-49.19	-50.1	23.32	76.2	60.6	51.3
8.45	-25	-49.4	-50.01	25.7	77.1	60.7	49.2
8.38	-25	-49.45	-49.79	24.73	77.5	60.5	49.8
8.37	-25	-48.52	-50.07	24.24	77.3	60.9	47.6
8.41	-25	-48.83	-49.98	25.73	78.1	60.8	52.4
8.39	-25	-49.66	-49.95	24.18	78.8	60.4	49.7
8.39	-25	-49.09	-49.91	25.06	78.8	61.2	50.8
8.5	-25	-49.56	-50.1	25.55	79.6	61.1	51.1

8.54	-25	-49.09	-49.91	23.41	79.8	60.9	50.5
8.67	-25	-48.93	-50.1	25.43	80.2	61.4	47.2
8.5	-25	-49.56	-49.88	25.46	81	61	51.4
8.17	-25	-49.09	-50.01	23.2	81.1	61.2	51.3
8.55	-25	-49.45	-50.04	25.43	82	61.4	51.5
8.51	-25	-49.51	-50.22	25.43	82.5	61.4	47.8
8.42	-25	-48.99	-49.91	22.99	82.4	61.5	51.1
8.56	-25	-49.19	-49.95	25.34	83.4	61.7	50
8.5	-25	-49.09	-49.91	23.57	83.1	61.4	51.2
8.76	-25	-49.35	-49.98	25.24	83.8	62.1	49.2
8.41	-25	-49.3	-49.91	25.21	84	61.7	50
8.33	-25	-49.45	-50.04	23.08	83.9	61.8	50.5
8.48	-25	-48.62	-50.07	25.27	84.6	62.2	51.9
8.53	-25	-49.04	-50.07	25.12	85.3	62	50.5
8.41	-25	-49.25	-50.04	22.92	84.9	62.4	50.3
8.54	-25	-49.45	-50.07	25.21	85.1	62.5	51.1
8.53	-25	-49.4	-50.1	23.72	86.3	62.4	51.4
8.44	-25	-49.56	-50.07	24.91	85.5	62.7	52.6
8.53	-25	-49.66	-50.13	25.09	86.4	62.6	52.4
8.51	-25	-49.51	-50.04	22.8	86.4	62.6	54.9
8.5	-25	-48.68	-50.13	25.06	86.8	63	52.8
8.51	-25	-49.3	-50.13	25	87.8	62.9	51.8
8.26	-25	-49.66	-50.1	22.8	88	62.8	49.8
8.48	-25	-49.56	-50.19	25	88.7	63.2	52.3
8.52	-25	-49.09	-50.19	25.03	88.9	63	52.5
8.36	-25	-49.09	-50.1	22.65	88.1	63.2	50.3
8.59	-25	-49.92	-50.07	24.97	88.6	63.4	51.6
8.42	-25	-48.73	-50.16	24.51	89	63.4	47.7
8.43	-25	-48.99	-49.95	23.23	88.7	63.6	50.2
8.5	-25	-49.25	-50.07	24.88	89.5	63.5	49.4
8.42	-25	-48.57	-50.07	23.02	88.7	63.4	52.5
8.55	-25	-49.4	-50.19	24.94	88.5	63.9	52
8.53	-25	-49.19	-50.04	25	88.3	63.6	52.9
8.42	-25	-49.4	-50.19	22.68	87.8	63.7	51.6
8.58	-25	-49.35	-50.1	25	88.4	63.8	52.7
8.44	-25	-49.4	-50.22	23.93	88.5	63.7	57.8
8.41	-25	-48.83	-50.01	23.96	88.2	64.3	50.4
8.54	-25	-49.45	-50.1	24.97	88.4	64	52.4
8.5	-25	-49.4	-49.91	23.5	88.6	63.9	51.2
8.41	-25	-49.25	-50.01	23.75	88.2	64.7	51.3
8.4	-25	-48.52	-50.01	24.94	88.6	64	52.4
8.48	-25	-49.4	-49.98	22.68	88.6	64	50.5
8.62	-25	-49.51	-50.07	24.88	88.6	64.7	50.9
8.52	-25	-49.45	-49.82	24.88	88.8	64.3	51.5
7.71	-25	-48.88	-50.16	22.59	88.5	64.4	54.9
8.5	-25	-49.45	-49.91	24.85	88.5	64.7	49.9
8.49	-25	-49.61	-49.98	24.91	88.7	64.4	49.5

8.42	-25	-49.56	-50.07	22.56	88.4	64.7	49.7
8.5	-25	-49.3	-50.07	24.91	89	64.7	49.3
8.44	-25	-48.31	-50.28	24.85	89	64.5	52.1
8.41	-25	-49.25	-50.07	22.77	88.4	64.9	51
8.53	-25	-49.35	-50.16	25	89.3	64.8	51
8.41	-25	-48.93	-50.07	22.83	88.8	64.7	49.9
8.54	-25	-48.99	-50.28	24.85	88.8	65.2	50.7
8.52	-25	-48.62	-50.16	24.91	88.9	64.8	51.3
8.44	-25	-49.51	-50.19	22.56	88.6	64.9	51.8
8.45	-25	-49.25	-50.13	24.94	89	64.9	53.4
8.5	-25	-48.88	-50.13	24.94	88.9	64.8	54.1
8.43	-25	-49.04	-50.13	22.56	88.4	64.9	52.8
8.48	-25	-49.71	-50.19	24.91	88.8	65.1	48.8
8.52	-25	-49.35	-50.1	24.94	88.7	64.8	50.4
8.43	-25	-49.45	-50.16	23.32	88.1	65	50.7
8.48	-25	-50.02	-50.1	24.94	88.4	64.8	54.7
8.5	-25	-49.04	-50.13	22.95	88	64.7	51.6
8.49	-25	-49.76	-50.01	24.85	88	65	50.5
8.53	-25	-49.25	-50.13	24.94	87.9	64.7	52.1
8.42	-25	-49.25	-50.1	22.62	86.8	64.9	53.2
8.53	-25	-49.82	-50.04	24.91	87.2	64.8	48.8
8.5	-25	-49.09	-50.16	23.26	87.2	64.7	52.4
8.72	-25	-48.93	-50.1	24.91	86.8	65.2	50.3
8.41	-25	-49.04	-50.16	25	86.4	64.7	54.1
8.07	-25	-50.02	-50.22	22.77	85.6	64.7	51.8
8.58	-25	-49.4	-50.31	25.03	85.4	64.7	51
8.4	-25	-48.93	-50.19	23.41	85.4	64.2	48.7
8.64	-25	-48.83	-50.28	25.06	85.2	64.9	52.8
8.53	-25	-49.82	-49.88	25.03	85.1	64.3	51.8
8.16	-25	-49.09	-50.16	22.77	83.8	64.4	51
8.55	-25	-49.4	-50.13	25.15	83.7	64.7	49.9
8.46	-25	-49.04	-50.13	24.91	83.7	64.2	52.3
8.39	-25	-48.57	-50.22	23.23	82.5	64.4	50.5
8.56	-25	-49.25	-50.04	25.09	82.7	64.2	50.5
8.41	-25	-49.71	-50.22	23.23	82.1	63.9	50.9
8.69	-25	-49.45	-50.37	25.12	81.8	64.7	52.9
8.41	-25	-49.51	-50.16	25.24	82.1	63.9	52.2
8.13	-25	-49.35	-50.19	22.89	81.2	63.8	53.1
8.48	-25	-49.76	-50.19	25.18	81.5	63.9	51.1
8.47	-25	-49.4	-50.13	23.69	81.3	63.6	50.9
8.68	-25	-49.25	-50.22	25.18	80.9	64.1	51.6
8.37	-25	-48.88	-50.25	25.31	80.8	63.6	51.1
8.39	-25	-49.45	-50.22	23.05	80	63.6	49
8.58	-25	-49.25	-50.1	25.31	80	63.7	51.6
8.44	-25	-48.83	-50.19	25.24	79.9	63.5	51.1
8.37	-25	-49.25	-50.37	23.26	78.9	63.6	48.8
8.44	-25	-48.99	-50.34	25.31	79.8	63.5	56.2

8.45	-25	-49.97	-50.37	23.23	79.3	63.1	51.7
8.52	-25	-49.04	-50.4	25.34	79.3	63.6	50.1
8.43	-25	-49.25	-50.37	25.43	79.2	62.9	50.2
8.36	-25	-49.09	-50.19	23.05	78.4	63.3	50.9
8.47	-25	-48.57	-50.13	25.43	78.8	63.2	50.1
8.42	-25	-49.51	-50.25	24.79	78.7	62.9	51.6
8.42	-25	-49.25	-50.31	23.99	77.7	63.2	53.2
8.54	-25	-49.25	-50.37	25.4	78.5	62.9	52.3
8.42	-25	-49.4	-50.19	23.57	78.1	62.8	51.3
8.73	-25	-49.56	-50.19	25.46	77.8	63.3	52
8.51	-25	-49.51	-50.19	25.49	78.1	62.7	50.7
8.36	-25	-50.54	-50.46	23.17	77.6	62.8	51.2
8.55	-25	-49.97	-50.25	25.4	77.8	62.8	51.6
8.47	-25	-48.99	-50.46	23.53	77.7	62.5	51.6
8.51	-25	-50.02	-50.19	25.49	77.6	62.8	49.7
8.55	-25	-49.71	-50.16	25.46	78.3	62.5	49.6
8.38	-25	-48.42	-50.34	22.99	78	62.5	50.2
8.44	-25	-50.13	-50.31	25.34	78.5	62.5	51
8.52	-25	-49.66	-50.28	23.78	78.3	62.2	49
8.44	-25	-49.87	-50.4	24.94	77.7	62.5	52.1
8.41	-25	-49.09	-50.43	25.43	78	62.5	52.7
8.38	-25	-49.25	-50.37	23.96	77.8	62.2	48.8
8.41	-25	-49.45	-50.31	24.66	77.3	62.5	52.1
8.43	-25	-49.61	-50.1	25.55	77.8	62.2	51.5
8.42	-25	-49.97	-50.28	23.84	77.7	62	51.6
8.41	-25	-49.51	-50.4	25.03	77.4	62.5	50.9
8.38	-25	-49.66	-50.13	25.43	78	62.1	51.1
8.39	-25	-50.02	-50.25	23.05	77.6	61.9	55.5
8.48	-25	-50.18	-50.53	25.49	77.6	62.2	45.6
8.46	-25	-49.61	-50.19	25.4	77.8	61.9	49.9
8.39	-25	-49.25	-50.28	23.08	77.4	62	51.6
8.55	-25	-49.51	-50.25	25.49	78	62	50.4
8.43	-25	-49.19	-50.34	24.05	78	62	52.3
8.41	-25	-49.04	-50.28	25.21	77.6	62.1	51.4
8.53	-25	-49.71	-50.22	25.52	77.9	61.8	50.3
8.45	-25	-49.76	-50.25	23.23	77.7	61.8	52.8
8.47	-25	-49.4	-50.25	25.31	78.1	62.4	48
8.55	-25	-50.18	-50.31	25.46	78.5	61.6	51
8.24	-25	-49.45	-50.31	23.14	78	61.7	51.9
8.52	-25	-48.78	-50.37	25.34	78.8	62.1	47.9
8.46	-25	-49.35	-50.34	25.27	78.9	62	49.6
8.27	-25	-49.4	-50.46	23.02	79.1	61.9	50.5
8.57	-25	-50.02	-50.46	25.21	80	62.1	50.2
8.42	-25	-49.19	-50.46	25.27	81.2	61.9	49.8
8.18	-25	-49.51	-50.34	22.89	81.6	61.9	50.7
8.53	-25	-49.45	-50.31	25.15	82.8	62.2	51.9
8.47	-25	-49.35	-50.34	25.06	83.6	62	47.2

8.31	-25	-49.35	-50.34	22.83	83.5	62	54
8.62	-25	-50.13	-50.53	25.12	84.2	62.5	52.2
8.55	-25	-49.71	-50.25	25.06	84.9	62.5	50.2
8.44	-25	-49.09	-50.28	22.95	84.4	62.5	51.6
8.51	-25	-49.76	-50.43	25.06	85.3	62.8	53
8.47	-25	-49.61	-50.31	25.09	85.7	62.5	48.4
8.4	-25	-49.76	-50.37	23.72	85.9	63	51.6
8.48	-25	-49.61	-50.34	24.97	87.2	62.7	54.6
8.26	-25	-49.92	-50.25	22.74	87.4	63	50.2
8.56	-25	-49.4	-50.4	24.85	88	63.6	49.7
8.45	-25	-49.61	-50.43	24.79	88.5	63.3	51.7
8.37	-25	-49.92	-50.43	22.47	88.7	63.6	45.8
8.42	-25	-49.3	-50.65	24.76	89.5	63.6	51.5
8.45	-25	-49.92	-50.31	22.68	89.5	63.6	51.1
8.59	-25	-49.66	-50.34	24.73	90.1	64	50.2
8.41	-25	-49.56	-50.62	24.76	90.6	63.7	46.3
8.44	-25	-49.61	-50.43	23.35	90.8	64.2	48.1
8.39	-25	-49.56	-50.37	24.63	91.6	64.1	52.5
8.45	-25	-49.45	-50.4	22.44	92	64.1	55.8
8.62	-25	-49.92	-50.4	24.51	92.6	64.4	52.6
8.45	-25	-49.45	-50.4	24.54	93.1	64.4	50.4
8.36	-25	-49.45	-50.46	22.44	93.1	64.8	51.8
8.46	-25	-49.3	-50.37	24.45	94	64.7	50.4
8.5	-25	-49.3	-50.56	22.16	94.4	64.8	51.3
8.56	-25	-49.51	-50.53	24.36	94.8	65.3	49.6
8.44	-25	-49.09	-50.34	24.36	95.1	65.2	51.6
8.39	-25	-48.93	-50.53	23.29	95.7	65.5	51.1
8.44	-25	-49.51	-50.28	24.3	96.1	65.4	51.5
7.87	-25	-49.45	-50.28	22.01	96	65.6	51.9
8.47	-25	-49.4	-50.37	24.24	96.9	65.7	53.4
8.38	-25	-50.02	-50.31	22.22	96.7	65.8	52.4
8.6	-25	-49.61	-50.43	24.18	96.7	66.2	57.7
8.46	-25	-48.93	-50.28	24.21	96.9	65.9	53
8.45	-25	-49.56	-50.37	23.66	96.6	66.4	50.8
8.51	-25	-49.25	-50.4	24.15	96.6	66.1	52.3
8.41	-25	-49.35	-50.31	21.89	95.9	66.4	51.6
8.5	-25	-49.3	-50.4	24.18	96	66.3	51.8
7.71	-25	-49.66	-50.43	21.92	95.9	66.6	55.4
8.48	-25	-49.35	-50.34	24.18	96.2	66.8	51.4
8.47	-25	-49.51	-50.43	22.19	95.8	66.7	47.5
8.61	-25	-49.35	-50.46	24.15	95.9	67.2	54.2
8.5	-25	-49.76	-50.4	24.18	95.8	67	51
8.41	-25	-49.76	-50.59	23.41	95.4	67.2	51.2
8.52	-25	-49.45	-50.34	24.21	95.8	67.1	51.3
8.4	-25	-49.61	-50.31	21.73	95.2	67.2	51.9
8.44	-25	-49.51	-50.31	24.15	95.5	67.2	51.8
8.44	-25	-50.18	-50.53	21.83	95.2	67.1	50.5

8.61	-25	-49.82	-50.34	24.18	95.5	67.5	50.7
8.51	-25	-49.51	-50.46	24.11	95.4	67.2	52.9
8.41	-25	-49.51	-50.56	22.13	95.1	67.6	52.5
8.52	-25	-50.02	-50.34	24.15	95.4	67.5	50.1
8.43	-25	-49.61	-50.46	21.95	95.1	67.3	51.8
8.51	-25	-49.25	-50.37	24.15	95.1	67.8	50.9
8.51	-25	-49.66	-50.28	23.53	95.2	67.4	53.4
8.45	-25	-49.56	-50.4	23.69	94.9	67.9	49.6
8.44	-25	-49.71	-50.4	24.02	95	67.6	51
8.46	-25	-49.56	-50.46	21.95	94.6	67.4	51.4
8.52	-25	-49.71	-50.43	24.05	94.7	67.9	47.3
8.51	-25	-49.87	-50.53	23.57	94.6	67.6	49.7
8.44	-25	-49.82	-50.37	24.08	94.1	68	52.9
8.47	-25	-49.56	-50.37	24.18	94.1	67.6	51.5
8.14	-25	-49.56	-50.46	21.76	93.9	67.7	50.1
8.46	-25	-49.45	-50.31	24.15	94	67.7	51
8.53	-25	-49.92	-50.31	21.92	93.1	67.4	52
8.53	-25	-48.78	-50.4	24.15	93.2	67.9	52.1
8.52	-25	-49.76	-50.46	22.56	93	67.4	51.9
8.53	-25	-49.66	-50.53	24.18	92.8	67.9	48.4
8.51	-25	-49.76	-50.4	24.21	92.7	67.3	50.1
8.43	-25	-48.83	-50.53	23.32	92	67.8	51.6
8.48	-25	-49.45	-50.4	24.24	92	67.4	48.9
7.83	-25	-49.04	-50.4	21.92	91.2	67.3	51
8.54	-25	-49.56	-50.37	24.27	91.5	67.6	51.6
8.55	-25	-49.87	-50.43	22.68	91.5	67.2	51.6
8.56	-25	-48.68	-50.46	24.11	91.2	67.5	49.4
8.5	-25	-49.92	-50.37	24.3	91.6	67.1	51.6
8.42	-25	-49.4	-50.46	23.08	91	67.5	49.5
8.44	-25	-49.87	-50.62	24.24	91.5	67.1	50.4
8.44	-25	-49.56	-50.62	22.1	90.6	67.1	50.8
8.47	-25	-49.25	-50.53	24.3	90.3	67.3	51
8.52	-25	-49.76	-50.46	23.66	89.7	67	49.5
8.41	-25	-49.35	-50.62	23.26	89.4	67.3	49.6
8.41	-25	-50.13	-50.62	24.45	89.7	66.9	52.2
8.46	-25	-49.66	-50.59	22.25	88.9	66.7	49.9
8.62	-25	-49.56	-50.56	24.33	88.8	67.1	52.1
8.54	-25	-49.56	-50.56	24.39	88.7	66.5	52.4
8.42	-25	-49.71	-50.65	22.01	88.1	66.6	50.9
8.56	-25	-49.71	-50.43	24.39	88.6	66.7	51.3
8.52	-25	-49.71	-50.62	22.31	88.3	66.3	51.1
8.58	-25	-49.51	-50.43	24.39	88.3	66.8	50.8
8.53	-25	-49.71	-50.65	24.42	88.4	66.3	51.5
8.42	-25	-49.76	-50.4	22.8	87.8	66.4	53.5
8.52	-25	-49.45	-50.46	24.42	88.2	66.1	50.9
8.39	-25	-49.97	-50.53	22.25	87.8	66.1	51.7
8.57	-25	-49.56	-50.65	24.45	88	66.4	51.1

8.53	-25	-49.35	-50.62	23.02	88	66	52.2
8.54	-25	-49.61	-50.53	24.39	87.8	66.6	51.5
8.52	-25	-49.97	-50.68	24.45	88.1	66	53.3
8.41	-25	-49.66	-50.65	22.01	87.5	66.2	51.3
8.54	-25	-49.82	-50.46	24.42	88	66.2	49.5
8.46	-25	-49.71	-50.43	22.44	87.8	65.8	50.8
8.48	-25	-50.13	-50.62	24.42	87.9	66.3	49.7
8.44	-25	-49.25	-50.59	24.42	88	65.8	48.7
8.4	-25	-49.82	-50.62	23.57	87.7	66.2	47.7
8.54	-25	-49.4	-50.62	24.45	88.2	65.9	51.6
8.44	-25	-49.51	-50.68	21.95	87.6	65.9	51
8.45	-25	-49.71	-50.56	24.45	87.8	66	48
8.46	-25	-49.51	-50.53	22.16	87.5	65.8	51.6
8.61	-25	-49.66	-50.56	24.45	87.8	66.1	53.8
8.45	-25	-49.92	-50.34	24.36	87.9	65.8	52.8
8.39	-25	-49.87	-50.43	22.28	87.2	65.9	51.4
8.49	-25	-50.34	-50.59	24.45	87.7	65.8	50.9
8.42	-25	-49.25	-50.8	22.22	87	65.7	51
8.5	-25	-49.19	-50.68	24.42	87.2	65.8	52.2
8.46	-25	-49.66	-50.43	22.59	86.6	65.6	53.6
8.62	-25	-49.76	-50.53	24.36	86.6	65.8	52.4
8.44	-25	-49.71	-50.71	24.48	86.5	65.6	49.9
8.41	-25	-50.18	-50.56	23.6	86	65.8	52.9
8.53	-25	-49.82	-50.68	24.42	86.3	65.5	50.4
8.35	-25	-50.13	-50.65	22.04	85.6	65.4	51.5
8.53	-25	-49.82	-50.68	24.42	86.2	65.6	50.9
8.45	-25	-50.08	-50.53	22.41	85.8	65.3	52.2
8.53	-25	-49.66	-50.68	24.45	86.2	65.7	46.2
8.49	-25	-49.4	-50.59	24.51	86.1	65.3	51.8
8.39	-25	-49.71	-50.65	22.41	85.4	65.5	49.4
8.5	-25	-49.66	-50.62	24.51	85.9	65.3	48.7
8.4	-25	-49.97	-50.77	22.25	85.5	65	52.8
8.51	-25	-49.76	-50.92	24.48	85.9	65.4	51.5
8.54	-25	-50.02	-50.59	22.44	85.9	65.1	51.8
8.49	-25	-50.02	-50.71	24.54	85.6	65.4	49
8.5	-25	-49.25	-50.62	24.48	86	65	48.6
8.44	-25	-50.54	-50.46	23.6	85.4	65.4	50.9
8.41	-25	-49.56	-50.77	24.51	86	65.1	52.4
8	-25	-49.92	-50.68	22.1	85.5	65	51.7
8.56	-25	-49.25	-50.65	24.48	85.9	65.1	51.6
8.39	-25	-49.66	-50.59	22.65	85.9	64.9	51.6
8.55	-25	-49.71	-50.77	24.51	85.9	65.3	52.1
8.52	-25	-50.13	-50.56	24.54	86.2	65	54.9
8.39	-25	-50.13	-50.77	23.63	85.6	65.4	52.6
8.39	-25	-49.61	-50.68	24.54	86.2	65.1	51.3
8.42	-25	-49.61	-50.74	22.07	85.6	65	52
8.5	-25	-49.87	-50.53	24.54	85.9	65	53.2

8.33	-25	-49.82	-50.74	22.22	85.7	64.8	51.1
8.53	-25	-49.76	-50.62	24.42	85.8	65.1	50.5
8.53	-25	-49.82	-50.59	23.93	86.1	64.8	51.9
8.43	-25	-49.35	-50.86	23.66	85.9	65.3	51.7
8.39	-25	-49.92	-50.74	24.48	86.5	64.8	49.5
8.41	-25	-49.82	-50.74	22.01	86.4	64.9	51.5
8.54	-25	-49.82	-50.74	24.36	87.5	65.1	50.5
8.47	-25	-49.35	-50.8	21.95	87.7	64.9	53.3
8.48	-25	-49.66	-50.71	24.42	88.1	65.3	51.8
8.53	-25	-49.87	-50.62	22.65	88.3	65.2	50.2
8.55	-25	-49.61	-50.65	24.39	88.8	65.6	49.3
8.55	-25	-49.82	-50.77	24.39	89.5	65.3	52.4
8.39	-25	-49.87	-50.77	22.71	89.5	65.6	50.4
8.5	-25	-49.35	-50.65	24.39	89.9	65.6	50.5
8.11	-25	-50.08	-50.74	21.98	90.1	65.5	51.7
8.47	-25	-50.44	-50.62	24.3	90.9	65.8	50.9
8.42	-25	-50.13	-50.74	22.04	91.2	65.7	51
8.55	-25	-49.4	-50.89	24.3	91.6	66	53.8
8.51	-25	-49.71	-50.77	23.26	92	65.8	52.7
8.91	-25	-49.87	-50.68	24.3	91.8	66.4	54.8
8.53	-25	-49.87	-50.92	24.27	92.7	66	53.8
8.43	-25	-49.92	-50.83	22.31	92.6	66.4	52.7
8.53	-25	-50.02	-50.71	24.33	93.8	66.3	50.5
7.98	-25	-49.51	-50.68	21.95	92.4	66.3	51.8
8.48	-25	-49.61	-50.68	24.27	92.5	66.5	54.1
8.44	-25	-49.51	-50.77	22.19	92.2	66.4	50.1
8.61	-25	-50.13	-50.74	24.15	92.4	66.8	51.9
8.53	-25	-49.92	-50.89	24.33	92.6	66.4	51.2
8.42	-25	-49.76	-50.8	23.84	92.1	67	55.5
8.48	-25	-49.82	-50.86	24.27	92.2	66.7	51.8
8.39	-25	-50.54	-50.74	22.04	91.7	66.6	51.6
8.54	-25	-49.97	-50.8	24.3	92	66.8	51.6
8.39	-25	-49.97	-50.71	24.11	91.9	66.6	49.6
8.44	-25	-49.76	-50.86	23.53	91.8	67.1	51.6
8.54	-25	-49.66	-50.77	24.21	93.1	66.7	50.8
7.86	-25	-49.97	-50.74	21.92	92.9	66.8	51.6
8.46	-25	-50.08	-50.77	24.21	93.9	67.1	50.4
8.48	-25	-49.92	-50.89	22.1	94	66.8	50.9
8.62	-25	-49.92	-50.83	24.3	93.8	67.2	50.5
8.44	-25	-50.02	-50.83	24.21	93.9	66.9	53.2
8.45	-25	-49.87	-50.8	23.99	94	67.5	51.7
8.52	-25	-50.18	-50.77	24.24	94.4	67.1	50.1
8.38	-25	-49.76	-50.86	21.83	93.8	67.1	49.3
8.53	-25	-50.13	-50.77	24.08	94.3	67.4	49.6
8.49	-25	-49.66	-50.71	22.62	94	67.2	49
8.44	-25	-49.45	-50.86	24.15	93.9	67.9	51.3
8.54	-25	-49.82	-50.92	24.18	94.3	67.2	49.7

8.38	-25	-49.92	-50.71	21.89	94	67.6	53
8.5	-25	-50.02	-50.65	24.05	94.5	67.4	49.9
7.82	-25	-49.92	-50.74	21.86	94.5	67.4	51.3
8.48	-25	-49.76	-50.68	24.11	95.2	67.5	55.7
8.53	-25	-49.56	-50.86	21.89	95.2	67.4	53
8.52	-25	-49.61	-50.77	24.11	95.5	67.9	51.3
8.53	-25	-50.23	-50.68	22.92	95.5	67.5	54.5
8.67	-25	-49.45	-50.95	24.11	95.2	68	51.5
8.52	-25	-49.61	-50.65	24.15	94.9	67.5	50.3
8.37	-25	-49.76	-50.71	21.7	94.8	67.6	52.4
8.55	-25	-49.92	-50.68	24.15	94.8	67.7	53.4
8.49	-25	-49.09	-50.71	21.89	94.8	67.4	50
8.57	-25	-49.92	-50.8	24.15	95	67.9	50.1
8.47	-25	-49.51	-50.89	23.5	94.4	67.5	52.1
8.43	-25	-50.02	-50.71	24.05	94.4	67.9	48.6
8.53	-25	-50.13	-50.68	24.15	94.6	67.5	53
8.41	-25	-49.56	-50.83	21.67	93.9	67.7	51
8.47	-25	-49.56	-50.89	24.18	94.3	67.6	49.7
8.55	-25	-50.02	-50.83	21.76	93.7	67.4	50.2
8.48	-25	-49.35	-50.77	24.11	94	67.7	50.9
8.51	-25	-50.02	-50.8	22.74	94	67.4	53.7
8.61	-25	-49.71	-50.95	24.08	93.5	67.9	53
8.42	-25	-49.66	-50.83	24.15	93.5	67.4	49.5
8.44	-25	-49.76	-50.77	23.26	92.7	67.7	48.7
8.51	-25	-49.66	-50.92	24.21	92.9	67.2	48.4
8.38	-25	-50.02	-50.74	21.76	91.8	67.4	51.1
8.53	-25	-49.61	-50.65	24.21	91.9	67.4	52
8.5	-25	-50.08	-50.8	22.34	91.5	67.1	51.7
8.5	-25	-49.82	-50.89	24.27	91.2	67.8	45.8
8.48	-25	-49.82	-50.98	24.27	91.2	66.9	50.8
8.44	-25	-49.61	-50.83	22.99	90.8	67.4	49.6
8.44	-25	-50.18	-50.77	24.33	91	67	50.5
8.42	-25	-49.97	-50.8	21.89	90.2	67	53.5
8.53	-25	-49.66	-50.98	24.33	90.4	67	50.2
8.44	-25	-49.82	-50.95	22.04	89.5	66.7	47.9
8.56	-25	-49.97	-50.77	24.3	89.6	66.9	49.8
8.46	-25	-49.87	-50.89	22.44	89	66.5	49.1
8.52	-25	-49.61	-50.95	24.36	88.6	66.9	50.2
8.44	-25	-49.61	-50.92	24.39	88.6	66.4	52.3
8.44	-25	-50.13	-50.89	23.6	88	66.7	50.5
8.5	-25	-49.76	-51.04	24.42	88.4	66.3	49.9
8.39	-25	-49.82	-51.01	22.16	87.7	66.1	51.8
8.59	-25	-50.23	-50.98	24.36	88	66.4	52.9
8.53	-25	-50.08	-51.01	24.48	87.8	66	51.2
8.44	-25	-49.87	-50.95	22.65	87	66.2	53.3
8.53	-25	-50.13	-50.86	24.51	87.2	66	54
8.5	-25	-50.23	-50.92	22.28	86.5	65.8	55

8.56	-25	-49.92	-51.11	24.48	86.3	66.1	53.7
8.5	-25	-50.18	-51.01	24.51	86.1	65.7	48.8
8.4	-25	-50.23	-50.98	22.65	85.4	65.8	51.1
8.44	-25	-49.92	-50.92	24.63	85.7	65.7	49.2
8.52	-25	-49.82	-50.98	22.22	85.1	65.3	52.2
8.63	-25	-49.71	-51.2	24.57	85.1	65.6	52.4
8.44	-25	-50.34	-50.92	24.51	85	65	51.2
8.42	-25	-49.97	-51.07	22.47	84	65.4	52.1
8.5	-25	-50.34	-51.11	24.66	84.2	65.2	51.5
8.43	-25	-50.08	-51.01	22.5	83.8	64.8	50.8
8.59	-25	-49.97	-50.95	24.66	83.6	65.3	51
8.41	-25	-50.18	-51.17	24.73	83.6	64.7	51.6
8.42	-25	-50.02	-51.04	22.77	82.8	64.9	51.4
8.5	-25	-49.97	-51.17	24.73	83.1	64.8	50.7
8.44	-25	-50.28	-50.98	22.77	83.1	64.3	49.1
8.45	-25	-50.08	-51.23	24.39	82.7	64.9	50.8
8.44	-25	-50.23	-50.98	24.76	82.9	64.4	49.2
8.47	-25	-50.44	-51.07	22.44	82.2	64.1	52.5
8.6	-25	-50.49	-51.01	24.73	82.4	64.5	49.1
8.46	-25	-50.02	-50.95	24.88	82.4	64	52.1
7.77	-25	-50.44	-50.98	22.34	81.8	63.9	50.9
8.62	-25	-50.23	-51.11	24.82	82.1	64.2	50.7
8.47	-25	-50.34	-51.11	24.79	82.2	63.6	48.9
8.37	-25	-49.76	-51.07	22.28	81.4	63.8	52.1
8.5	-25	-50.23	-51.07	24.88	82	63.8	50.2
8.53	-25	-50.18	-51.04	22.74	81.6	63.6	52.2
8.61	-25	-50.54	-50.95	24.73	81.5	64.1	48
8.47	-25	-49.76	-51.07	24.82	81.7	63.6	49.8
8.11	-25	-49.97	-51.2	22.41	81	63.6	50.7
8.54	-25	-49.82	-51.11	24.79	81	63.6	50.1
8.5	-25	-50.44	-51.04	24.36	80.7	63.4	50.9
8.44	-25	-50.49	-51.01	24.66	79.7	63.7	50.5
8.53	-25	-50.23	-51.04	24.85	80	63.3	50.7
8.06	-25	-50.18	-51.11	22.5	79.1	63.1	47.4
8.5	-25	-50.13	-51.04	24.88	79.4	63.4	54.5
8.42	-25	-49.97	-51.2	23.29	79.6	63.1	51.1
8.44	-25	-49.92	-51.04	24.82	79	63.5	51.6
8.41	-25	-50.13	-51.07	24.91	79.5	63.1	51.8
8.53	-25	-50.6	-51.07	22.5	79	63	49.9
8.5	-25	-50.18	-51.04	24.91	79.1	63.2	49.7
8.53	-25	-50.28	-51.17	24.94	79.5	62.8	49.2
8.05	-25	-50.02	-51.2	22.56	78.7	62.7	51.5
8.61	-25	-50.23	-51.17	24.97	78.8	62.9	51.7
8.39	-25	-50.08	-51.14	24.94	79.2	62.5	53.7
8.4	-25	-50.54	-51.11	22.77	78.1	62.7	52
8.52	-25	-50.08	-51.17	24.91	79	62.6	52.2
8.46	-25	-49.92	-51.2	23.26	78.8	62.4	51.9

8.41	-25	-50.7	-51.29	24.51	78.4	62.7	49.9
8.48	-25	-50.23	-51.23	25	78.8	62.5	53.6
8.54	-25	-50.08	-51.14	22.95	79.2	62.1	51.2
8.41	-25	-50.23	-51.17	24.05	79	62.5	49
8.55	-25	-50.6	-51.17	25	79.4	62.4	50.5
8.42	-25	-49.82	-51.17	23.69	79.7	62.1	50.4
8.44	-25	-50.75	-51.17	24.15	79.6	62.5	52.5
8.37	-25	-50.54	-51.29	24.94	80	62.1	52.8
8.44	-25	-50.54	-51.14	22.59	79.9	62	51
8.54	-25	-50.8	-51.29	24.91	79.9	62.5	52.1
8.42	-25	-51.27	-51.07	24.88	80.2	62	52
8.46	-25	-50.7	-51.04	22.41	79.7	62.1	50.1
8.57	-25	-50.13	-51.2	24.88	80.7	62.2	42
8.47	-25	-50.44	-51.32	24.08	80.8	61.8	52
8.42	-25	-50.34	-51.23	23.5	80.1	62.2	52.4
8.44	-25	-50.18	-51.32	24.85	81	61.9	51.8
8.48	-25	-50.28	-51.11	22.86	81	61.6	52.1
8.45	-25	-50.08	-51.32	24.82	81.1	62.5	53.6
8.47	-25	-50.44	-51.2	24.79	82	62	49.5
8.46	-25	-50.02	-51.23	22.28	82.1	61.7	53.1
8.48	-25	-50.18	-51.17	24.82	82.2	62.5	49.2
8.39	-25	-50.75	-51.23	24.79	83.1	62	50.4
7.96	-25	-50.49	-51.29	22.28	83	62.1	51.5
8.51	-25	-50.54	-51.35	24.69	83.9	62.5	49.2
8.47	-25	-50.13	-51.29	24.76	84.3	62.4	52.3
8.09	-25	-50.02	-51.23	22.22	83.9	62.4	51.6
8.62	-25	-50.18	-51.2	24.82	84.3	62.6	51
8.41	-25	-49.97	-51.35	24.69	85.3	62.5	50.7
8.41	-25	-50.65	-51.2	22.56	85.2	62.7	49.9
8.53	-25	-50.6	-51.29	24.63	85.9	62.7	46.8
8.48	-25	-50.49	-51.44	22.31	86.4	62.6	51.2
8.56	-25	-50.28	-51.23	24.51	86.4	63.1	53.8
8.45	-25	-50.08	-51.29	24.48	87.1	62.7	49.4
8.45	-25	-50.34	-51.53	22.25	87	63	49.5
8.62	-25	-50.54	-51.23	24.51	87	63.2	52.4
8.5	-25	-50.6	-51.44	24.57	87	63	49.5
8.36	-25	-50.44	-51.47	22.13	86.8	63.1	50.8
8.48	-25	-50.02	-51.35	24.48	87.2	63.3	50.1
8.47	-25	-49.56	-51.47	24.48	87.2	63.1	48.4
8.34	-25	-50.49	-51.32	22.1	86.4	63.2	49.8
8.53	-25	-50.91	-51.41	24.51	86.7	63.6	53
8.55	-25	-50.6	-51.35	24.54	86.4	63.3	51.2
8.38	-25	-50.6	-51.17	22.04	86.1	63.5	50.8
8.42	-25	-51.17	-51.29	24.54	86.4	63.5	44.8
8.4	-25	-50.75	-51.29	22.34	86.2	63.5	49.1
8.5	-25	-50.65	-51.32	24.57	86.4	63.8	48.2
8.43	-25	-50.34	-51.5	24.63	86.5	63.3	52.6

8.42	-25	-50.65	-51.41	22.07	86	63.6	55
8.5	-25	-50.28	-51.35	24.51	86.4	63.6	50.9
8.42	-25	-50.34	-51.44	22.74	86.4	63.4	56.8
8.46	-25	-50.54	-51.2	24.39	86.2	63.8	49.5
8.55	-25	-50.08	-51.38	24.57	86.4	63.6	48.4
8.38	-25	-50.85	-51.41	22.22	85.9	63.6	51.5
8.5	-25	-50.18	-51.47	24.57	86.1	64	50.5
8.52	-25	-50.65	-51.44	24.27	86.2	63.5	52.2
8.42	-25	-50.75	-51.29	23.63	85.4	63.8	49.5
8.43	-25	-49.82	-51.44	24.63	85.6	63.6	49.7
8.43	-25	-50.44	-51.41	22.16	85.3	63.4	53.2
8.5	-25	-50.44	-51.41	24.57	85.5	64	48.4
8.45	-25	-50.28	-51.41	24.57	85.4	63.6	52.6
8.38	-25	-50.49	-51.41	22.07	84.8	63.7	50.5
8.41	-25	-50.54	-51.44	24.57	85.3	63.7	52.4
8.44	-25	-50.18	-51.41	22.65	85	63.6	49.6
8.42	-25	-50.8	-51.35	24.51	84.4	64	52.4
8.41	-25	-50.08	-51.41	24.54	84.9	63.7	51.6
8.32	-25	-50.23	-51.5	22.19	84.3	63.6	52.4
8.55	-25	-50.02	-51.62	24.63	84.6	63.8	50.8
8.55	-25	-50.54	-51.41	24.66	84.5	63.6	52.2
8.36	-25	-50.13	-51.44	22.1	83.9	63.7	50.2
8.55	-25	-50.13	-51.47	24.54	84.3	63.6	51.7
8.36	-25	-50.08	-51.53	24.21	84.2	63.5	51.3
8.41	-25	-50.7	-51.62	22.95	83.5	63.8	48.9
8.52	-25	-50.23	-51.41	24.73	83.9	63.6	52.7
8.52	-25	-50.34	-51.47	22.99	83.7	63.5	55.1
8.43	-25	-50.23	-51.47	24.21	83	63.8	50.2
8.43	-25	-50.34	-51.53	24.69	83.2	63.5	50.1
8.44	-25	-50.23	-51.47	22.16	82.2	63.3	55.7
8.5	-25	-50.8	-51.56	24.82	82.3	63.6	56.7
8.52	-25	-50.49	-51.56	24.76	81.8	63.3	53.2
8.39	-25	-50.91	-51.65	22.22	81	63.4	49.3
8.46	-25	-50.6	-51.53	24.82	81.1	63.5	51.8
8.47	-25	-50.8	-51.62	24.85	81	63.3	50.5
8.44	-25	-50.49	-51.56	22.22	79.9	63.5	49.8
8.47	-25	-50.23	-51.5	24.85	80.3	63.3	52.3
8.48	-25	-50.7	-51.44	24.85	80.6	63.1	51.5
8.38	-25	-50.28	-51.56	22.22	79.8	63.2	51.6
8.52	-25	-50.18	-51.47	24.85	79.9	63.4	50.1
8.47	-25	-50.75	-51.5	24.85	79.9	63.1	51.7
8.37	-25	-50.8	-51.38	22.28	79.1	63	48.9
8.48	-25	-51.01	-51.59	24.91	79.4	62.9	50.5
8.52	-25	-50.49	-51.62	24.91	79.4	62.9	52
8.35	-25	-50.18	-51.5	22.41	78.3	62.8	51.7
8.53	-25	-50.7	-51.81	24.94	78.7	63.1	52.5
8.51	-25	-50.75	-51.65	24.88	78.5	62.7	50.5

8.37	-25	-50.65	-51.62	22.31	77.7	62.6	51.4
8.47	-25	-50.18	-51.53	24.88	78	62.7	49.7
8.39	-25	-50.91	-51.65	24.91	78.1	62.5	51.9
8.32	-25	-50.44	-51.59	22.56	77.4	62.6	52.5
8.44	-25	-50.49	-51.72	24.88	77.2	62.8	51.2
8.52	-25	-50.91	-51.53	24.94	77.4	62.5	48.8
8.53	-25	-50.34	-51.56	23.08	77	62.4	50.8
8.43	-25	-50.7	-51.72	24.85	76.3	62.6	51.9
8.39	-25	-51.48	-51.59	24.97	76.6	62.2	53.2
8.45	-25	-50.8	-51.59	22.5	76.4	62	48.8
8.59	-25	-51.37	-51.59	24.91	76.6	62.5	53.3
8.46	-25	-50.49	-51.75	24.94	77	62	53.3
8.32	-25	-50.6	-51.78	22.71	76.6	62	51
8.56	-25	-50.28	-51.68	24.97	76.5	62.4	49.9
8.42	-25	-50.28	-51.81	25	76.8	61.9	51.7
8.42	-25	-51.06	-51.65	22.68	76.3	61.8	50
8.51	-25	-51.58	-51.62	24.97	76.5	62.4	52.4
8.47	-25	-50.96	-51.78	25.06	76.4	61.8	51.7
7.75	-25	-50.54	-51.68	22.5	75.5	61.8	51.2
8.45	-25	-50.28	-51.59	25	75.2	61.8	54.7
8.46	-25	-50.49	-51.65	24.3	75.5	61.6	49.2
8.41	-25	-50.75	-51.72	23.14	74.2	61.8	50
8.54	-25	-50.7	-51.59	25.09	74.5	61.6	57.3
8.51	-25	-50.85	-51.62	23.35	74.1	61.4	51.2
8.43	-25	-50.91	-51.68	24.66	73.6	61.7	51.1
8.48	-25	-51.58	-51.56	25.12	74.1	61.4	50.5
8.5	-25	-50.23	-51.72	22.95	74.2	61.3	52.8
8.43	-25	-50.23	-51.87	24.76	74.1	61.5	51.6
8.53	-25	-50.65	-51.59	25.12	74.3	61.3	50.5
8.41	-25	-50.8	-51.84	22.77	73.4	61.2	53.8
8.52	-25	-50.02	-51.84	25.06	73.3	61.4	56.4
8.49	-25	-50.54	-51.65	25.21	73.8	61.2	51.3
8.5	-25	-50.65	-51.84	22.74	73.5	60.9	48.8
9.23	-25	-49.92	-51.84	25.03	73.4	61.4	47
8.51	-25	-50.49	-51.84	25.18	74	61.1	57.3
8.39	-25	-50.34	-51.81	24.39	74.2	60.9	51.8
8.43	-25	-50.96	-51.62	22.56	73.7	61.1	49.5
8.45	-25	-49.97	-51.62	25.09	74.5	60.9	50.3
8.49	-25	-50.91	-51.84	25.06	74.3	60.9	49.1
8.43	-25	-50.23	-51.81	22.56	73.2	60.9	51.5
8.5	-25	-51.68	-51.65	25.12	74.1	61.2	51.2
8.45	-25	-51.11	-51.65	25.15	74.5	60.7	50.4
8.29	-25	-50.7	-51.9	22.59	74.1	60.7	49.8
8.6	-25	-50.7	-51.9	25.15	74.5	61	49
8.49	-25	-51.06	-51.93	24.73	75	60.7	57.8
8.39	-25	-50.23	-51.81	23.84	74.2	61	50.8
8.48	-25	-50.65	-51.9	25.12	74.8	60.6	50.1

8.44	-25	-50.54	-51.84	23.44	75	60.6	52
8.39	-25	-50.6	-51.81	22.8	74.7	61	50.5
8.55	-25	-51.01	-51.78	25.06	76.1	61	51.8
8.44	-25	-51.37	-51.9	25.09	76.6	60.8	52
8.15	-25	-50.28	-51.96	22.59	76.1	60.7	49.7
8.5	-25	-50.65	-51.81	25	77.5	61	47
8.52	-25	-50.49	-51.96	24.88	78.3	60.8	50.8
8.41	-25	-50.85	-51.72	22.59	78.6	60.9	53.3
8.69	-25	-50.96	-52.08	24.91	79.2	61.4	49.5
8.5	-25	-50.8	-51.81	24.94	80.3	61.2	51
8.47	-25	-50.91	-52.02	23.02	80.8	61.1	51.2
8.38	-25	-50.75	-51.96	22.62	80.6	61.4	52.1
8.53	-25	-51.11	-51.75	24.82	81.4	61.4	50.5
8.51	-25	-51.01	-51.84	24.91	82	61.4	50.3
8.22	-25	-50.49	-51.84	22.28	81.6	61.4	51.1
8.57	-25	-51.17	-51.93	24.79	82.2	61.6	51.3
8.42	-25	-50.65	-52.11	24.88	82.3	61.5	51.2
8.18	-25	-51.11	-51.84	22.28	82.4	61.7	51.5
8.56	-25	-51.32	-51.65	24.73	83.2	62.1	49.9
8.41	-25	-51.11	-51.99	24.85	83.5	61.9	48.1
8.42	-25	-51.32	-51.93	22.44	83.3	62	51.6
8.59	-25	-50.75	-52.11	24.73	83.7	62.5	50.1
8.48	-25	-50.44	-52.08	24.82	84.4	62.1	50.3
8.36	-25	-50.54	-51.84	22.22	84	62.2	50.5
8.53	-25	-50.96	-51.96	24.66	85.1	62.5	52.6
8.45	-25	-50.7	-51.75	23.66	85.3	62.5	51.5
8.38	-25	-51.01	-51.9	23.75	85.5	62.9	50.4
8.44	-25	-50.96	-51.93	24.57	86	62.7	50.1
8.5	-25	-51.06	-52.14	23.63	85.8	62.6	52.2
8.38	-25	-50.75	-51.96	22.04	86.1	63	51.4
8.52	-25	-50.75	-51.99	24.66	86.6	63.2	53.6
8.39	-25	-50.23	-52.02	24.57	87.5	62.8	53.8
8.2	-25	-50.34	-52.14	22.04	87.5	63.3	51.2
8.59	-25	-51.01	-51.87	24.63	88	63.5	52.6
8.44	-25	-50.75	-52.08	24.63	88.5	63.4	49.9
8.39	-25	-50.85	-52.11	22.01	87.4	63.6	51.6
8.54	-25	-51.27	-52.02	24.54	88.1	63.6	50.4
8.43	-25	-50.6	-51.93	24.57	88.8	63.6	51.9
8.39	-25	-51.01	-52.11	21.98	88.5	63.7	51.8
8.5	-25	-51.32	-51.99	24.36	89.3	63.9	50.4
8.49	-25	-50.7	-52.11	24.48	89.4	63.8	50
8.37	-25	-51.06	-51.96	22.19	88.8	63.8	48
8.54	-25	-50.91	-52.14	24.48	88.8	64.4	52.4
8.41	-25	-50.7	-51.87	24.57	88.3	64.1	51.4
8.44	-25	-51.22	-52.11	22.16	88	64	47.6
8.45	-25	-51.11	-51.96	24.48	87.7	64.8	49.5
8.45	-25	-50.6	-52.11	24.63	88	64.1	49.6

8.44	-25	-51.01	-52.08	22.53	87.8	64.2	51.5
9.29	-25	-50.96	-52.11	24.39	87.7	64.7	50.3
8.42	-25	-50.7	-51.99	24.63	88	64.4	51.1
8.33	-25	-50.75	-52.02	22.25	87.4	64.2	52.4
8.63	-25	-51.01	-51.9	24.48	88.2	65	50.7
8.43	-25	-50.54	-52.11	24.45	88.4	64.7	50.5
8.44	-25	-50.7	-52.08	22.31	87.9	64.4	51.4
8.46	-25	-51.22	-52.02	24.39	87.6	65.1	51.6
8.46	-25	-50.96	-51.87	24.57	87.8	64.7	51.9
8.44	-25	-51.01	-52.14	22.59	87.8	64.5	51.7
8.44	-25	-50.85	-51.99	23.05	87.5	65.1	54.3
8.48	-25	-50.85	-52.23	24.57	88.2	64.8	51.5
8.45	-25	-50.91	-52.11	23.14	88.2	64.7	56
8.43	-25	-51.11	-52.14	23.47	87.6	65.2	49.6
8.44	-25	-50.8	-52.11	24.63	87.8	64.9	51.5
8.42	-25	-51.11	-52.08	22.59	87.7	64.8	49.5
9.84	-25	-50.6	-52.11	24.42	87.5	65.4	51.5
8.42	-25	-50.91	-51.99	24.63	87.7	64.9	48.9
8.42	-25	-51.17	-52.02	22.28	87.3	64.7	50.5
8.55	-25	-51.22	-52.14	24.48	87.2	65.5	50.5
8.5	-25	-50.91	-51.99	24.57	87.5	64.9	49.2
8.46	-25	-50.8	-52.02	22.56	87	64.7	53
8.44	-25	-50.8	-52.14	24.15	86.5	65.2	53.5
8.43	-25	-50.96	-51.87	24.63	86.8	64.7	52.3
8.5	-25	-51.06	-52.08	22.31	86.4	64.7	51.9
8.54	-25	-50.96	-52.11	24.63	85.9	65.1	49.5
8.41	-25	-51.11	-52.08	24.63	85.9	64.7	52
8.35	-25	-50.7	-52.23	22.01	85.3	64.7	50.5
8.57	-25	-51.01	-52.11	24.57	85.7	64.8	53.5
8.39	-25	-50.75	-52.2	24.66	85.5	64.7	49.5
8.37	-25	-51.43	-52.23	22.07	84.8	64.7	49.7
8.56	-25	-51.27	-52.08	24.69	84.9	64.7	50.9
8.5	-25	-51.32	-51.9	23.81	84.5	64.5	51.4
8.38	-25	-50.44	-52.3	22.47	83.7	64.7	52.6
8.55	-25	-51.01	-52.2	24.69	83.9	64.4	49.8
8.47	-25	-51.06	-52.17	24.73	83.7	64.3	49.9
8.37	-25	-51.11	-52.17	22.07	83	64.3	53.5
8.56	-25	-51.11	-52.14	24.69	82.8	64.7	51.5
8.43	-25	-51.11	-51.93	24.69	83	64.1	49.8
8.33	-25	-50.8	-52.02	22.16	82.1	64.2	51
8.53	-25	-50.85	-52.17	24.73	82.8	64.3	52.5
8.41	-25	-51.22	-52.11	23.84	82.7	64	50.2
8.42	-25	-51.22	-52.14	23.84	81.6	64.3	51.8
8.41	-25	-50.91	-52.11	24.69	81.9	64	49.3
8.51	-25	-51.17	-52.17	23.75	81.7	63.9	51.1
8.38	-25	-50.7	-52.14	22.1	80.9	64	48.3
8.47	-25	-51.11	-52.2	24.73	81	64	51.2

8.51	-25	-51.01	-52.11	24.79	81.2	63.8	51.4
8.06	-25	-50.85	-52.14	22.16	80.7	63.7	51.7
8.51	-25	-50.54	-52.2	24.69	81.2	63.9	52.2
8.41	-25	-51.27	-52.26	24.45	81.1	63.6	53.1
8.37	-25	-51.22	-52.23	23.05	80.8	63.9	48.4
8.51	-25	-51.06	-52.14	24.76	81.1	63.7	50.1
8.52	-25	-51.06	-52.39	22.62	81	63.5	53.3
8.44	-25	-50.96	-52.23	24.39	80.8	64	52.7
8.48	-25	-50.85	-52.26	24.79	81.2	63.6	50.5
8.52	-25	-51.11	-52.36	22.34	80.8	63.5	47.3
8.57	-25	-50.8	-52.26	24.76	80.6	63.8	52.3
8.51	-25	-51.11	-52.17	24.79	81	63.5	50.2
8.43	-25	-51.37	-52.14	22.31	80.6	63.4	51.3
8.59	-25	-50.6	-52.2	24.82	80.7	63.6	48.2
8.47	-25	-51.17	-52.02	24.82	80.5	63.3	51.1
8.36	-25	-51.01	-52.3	22.16	79.6	63.3	52
8.45	-25	-50.96	-52.14	24.82	80.1	63.5	50.3
8.39	-25	-50.54	-52.23	24.79	80.3	63.1	50.5
8.37	-25	-50.7	-52.23	22.16	80	63.4	51.3
8.56	-25	-51.11	-52.3	24.73	80.5	63.3	50.8
8.37	-25	-51.27	-52.36	24.79	80.8	63	51.7
8.32	-25	-51.11	-52.2	22.34	80.2	63	50.3
8.56	-25	-51.32	-52.26	24.73	80.3	63.6	50.5
8.45	-25	-50.6	-52.26	24.85	80.6	63.2	49.4
8.46	-25	-50.91	-52.2	22.41	80	62.7	53.8
8.76	-25	-51.94	-52.14	24.73	80	63.5	53.3
8.48	-25	-51.53	-52.17	24.76	80.3	63.1	47.3
8.42	-25	-51.53	-52.33	22.44	79.9	62.8	51.6
9.02	-25	-51.53	-52.26	24.73	79.8	63.4	52.1
8.44	-25	-51.17	-52.42	24.69	79.9	63.2	48.4
8.44	-25	-50.8	-52.23	23.08	79.5	62.8	51.9
8.41	-25	-51.11	-52.39	22.83	78.5	63.3	51.7
8.38	-25	-51.32	-52.26	24.76	78.9	62.9	49.4
8.44	-25	-51.68	-52.2	23.41	78.8	62.7	53.8
8.41	-25	-51.37	-52.39	22.41	77.7	62.9	49.3
8.46	-25	-51.32	-52.2	24.73	78.7	62.9	50.9
8.35	-25	-51.74	-52.2	24.54	78.8	62.6	51.8
8.37	-25	-51.17	-52.42	22.1	78.1	63	51.6
8.51	-25	-51.43	-52.23	24.73	78.8	62.8	49.5
8.48	-25	-50.6	-52.17	23.32	78.8	62.6	52.3
8.36	-25	-51.22	-52.3	22.92	78.3	62.9	51.9
8.42	-25	-50.96	-52.39	24.66	78.8	62.7	53.1
8.4	-25	-50.96	-52.39	23.08	78.9	62.5	50.4
8.39	-25	-51.06	-52.14	23.6	78.4	63	53.1
8.45	-25	-51.11	-52.3	24.76	78.8	62.7	50.2
8.47	-25	-50.91	-52.26	22.74	78.8	62.6	51.2
8.41	-25	-51.32	-52.14	23.75	78.4	62.9	51.6

8.49	-25	-51.11	-52.36	24.73	78.9	62.7	50.8
8.47	-25	-50.49	-52.36	23.02	78.9	62.5	49.5
8.41	-25	-51.06	-52.23	23.53	78.6	62.9	49.8
8.44	-25	-51.32	-52.33	24.73	79.2	62.5	50.8
8.41	-25	-51.32	-52.36	22.56	79	62.5	47.7
9.19	-25	-50.6	-52.2	24.51	79.2	63	50.1
8.42	-25	-51.68	-52.23	24.66	79.9	62.5	50.9
8.35	-25	-51.17	-52.36	22.25	79.8	62.5	51.2
8.56	-25	-51.32	-52.48	24.63	80.3	62.8	52.8
8.47	-25	-51.89	-52.23	24.63	80.6	62.4	49.8
8.34	-25	-51.43	-52.3	22.25	80.1	62.5	51.1
8.47	-25	-50.91	-52.45	24.73	80.5	63	53.3
8.41	-25	-51.17	-52.48	24.63	81.5	62.6	53.3
8.33	-25	-51.79	-52.26	22.04	81.1	62.6	51.6
8.57	-25	-51.11	-52.45	24.54	82.1	62.8	52.5
8.42	-25	-51.79	-52.2	23.2	82.1	62.7	49.5
8.41	-25	-50.85	-52.33	23.63	82	63.2	50
8.5	-25	-51.27	-52.26	24.51	82.7	62.9	53.1
8.45	-25	-51.37	-52.48	22.04	82	63	53.6
8.53	-25	-51.17	-52.48	24.51	82.3	63.4	51.8
8.45	-25	-51.06	-52.39	24.33	82.7	63	55.9
8.37	-25	-50.96	-52.36	23.14	82.2	63.1	47.6
8.53	-25	-50.91	-52.26	24.54	83.1	63.3	48.9
8.41	-25	-51.48	-52.36	21.95	83.1	63.1	54.8
8.54	-25	-51.37	-52.36	24.51	83.2	63.5	49.3
8.47	-25	-50.96	-52.42	24.51	83.3	63.3	50.3
8.35	-25	-51.37	-52.39	22.04	83.1	63.3	51.6
8.6	-25	-51.01	-52.33	24.42	83.4	63.6	49.4
8.41	-25	-51.17	-52.33	24.36	84.4	63.5	54.1
8.33	-25	-51.17	-52.36	22.04	84.2	63.3	51
8.58	-25	-51.37	-52.45	24.42	84.8	63.8	50.7
8.48	-25	-51.32	-52.42	24.18	84.9	63.6	50.5
8.39	-25	-51.06	-52.48	23.75	84.4	63.9	52.1
8.41	-25	-51.11	-52.39	24.36	84.6	63.6	52
8.31	-25	-50.96	-52.42	21.98	84.8	63.7	50.9
8.48	-25	-50.75	-52.48	24.33	86.4	63.8	51.9
8.38	-25	-50.6	-52.23	24.3	86.8	63.7	50.7
8	-25	-51.37	-52.45	21.73	86.8	63.9	51.2
8.45	-25	-51.27	-52.48	24.24	87.5	64.2	48.9
8.44	-25	-51.43	-52.45	23.17	88.2	64	51.9
8.43	-25	-51.37	-52.3	23.69	88.2	64.7	51
8.47	-25	-51.43	-52.3	24.27	88.5	64.3	51.3
8.38	-25	-50.96	-52.54	21.86	88.1	64.4	52.5
8.43	-25	-51.11	-52.33	24.21	88	64.8	50.5
8.47	-25	-51.48	-52.3	24.18	88.5	64.5	51.3
8.47	-25	-51.22	-52.51	22.99	88.2	64.4	51.9
8.38	-25	-50.75	-52.33	21.55	87.5	64.8	49.6

8.5	-25	-50.96	-52.45	24.15	88.1	64.7	49.8
8.43	-25	-51.32	-52.2	22.16	88.1	64.7	50.9
8.59	-25	-51.53	-52.45	24.18	88.2	65.2	50.5
8.46	-25	-51.43	-52.33	24.21	88.2	64.8	49.8
8.37	-25	-51.01	-52.26	21.67	87.5	64.9	52.1
8.57	-25	-51.32	-52.45	24.18	87.7	65.1	49.2
8.44	-25	-51.27	-52.48	24.15	87.5	64.7	51.9
8.4	-25	-51.32	-52.3	21.79	87.1	65	49.7
8.42	-25	-51.37	-52.26	24.15	87.9	64.9	51.5
8.45	-25	-51.11	-52.54	21.95	87.7	64.7	51.6
8.58	-25	-51.11	-52.51	24.18	87.5	65.2	51
8.34	-25	-51.11	-52.57	24.21	87.7	64.9	52.3
8.41	-25	-51.37	-52.17	22.53	87.3	65.3	50.4
8.42	-25	-51.22	-52.39	24.15	87.9	65	52.4
8.38	-25	-51.43	-52.42	21.79	87.5	64.8	51
8.5	-25	-51.32	-52.48	24.11	87.6	65.2	50.5
8.47	-25	-51.22	-52.3	24.15	87.8	65	52.7
8.37	-25	-52	-52.51	21.49	87.5	65.3	51.3
8.5	-25	-51.32	-52.48	24.05	88.2	65.1	46.6
8.46	-25	-51.06	-52.45	22.34	88.2	65.1	51.9
8.75	-25	-51.58	-52.36	23.75	88.1	65.6	50.8
8.44	-25	-50.65	-52.39	24.02	88.5	65.2	52.8
8.08	-25	-51.37	-52.51	21.52	87.8	65.2	51.8
8.44	-25	-51.17	-52.54	24.08	88.3	65.3	53.4
8.46	-25	-51.27	-52.42	21.92	88.1	65.1	51.4
8.53	-25	-51.06	-52.51	24.02	87.8	65.7	49
8.48	-25	-51.48	-52.48	24.02	88.1	65.1	49
8.37	-25	-51.22	-52.39	21.46	87.5	65.3	51.5
8.52	-25	-51.22	-52.39	23.96	87.7	65.4	54
8.44	-25	-51.17	-52.42	21.7	87.5	65.2	53.2
8.55	-25	-51.43	-52.39	24.02	87.7	65.6	51.6
8.44	-25	-51.06	-52.36	24.05	87.8	65.2	53
8.37	-25	-51.32	-52.45	21.34	87.4	65.4	51.9
8.44	-25	-51.01	-52.36	24.02	87.7	65.2	52.9
8.43	-25	-51.37	-52.36	21.83	87.5	65.1	52
8.72	-25	-51.37	-52.42	23.93	87.2	65.7	48.7
8.41	-25	-51.22	-52.51	23.99	87.2	65.3	53.2
8.14	-25	-51.27	-52.39	21.46	86.6	65	51.2
8.48	-25	-51.48	-52.33	24.02	86.7	65.2	51.1
8.49	-25	-51.27	-52.42	22.5	86.7	64.9	49.7
8.43	-25	-50.96	-52.48	23.69	86.7	65.6	51.7
8.41	-25	-50.8	-52.54	24.05	87.3	65	53.5
8.53	-25	-50.91	-52.51	21.43	86.8	64.9	53.2
8.48	-25	-51.27	-52.36	23.9	86.6	65.1	51.4
8.45	-25	-51.32	-52.51	23.41	86.8	65.2	54
8.43	-25	-51.01	-52.36	23.78	86.2	65.4	51.5
8.38	-25	-51.32	-52.42	23.99	86.6	65	53.5

8.33	-25	-51.37	-52.42	21.46	86.3	64.9	51.3
8.47	-25	-51.37	-52.45	23.99	86.4	65.2	50.3
8.5	-25	-51.27	-52.63	22.28	86.4	64.9	53
8.39	-25	-51.53	-52.39	23.66	86.5	65.4	51.6
8.53	-25	-51.94	-52.54	23.93	87	65	50.7
8.33	-25	-51.22	-52.45	21.64	86.2	64.8	51
8.62	-25	-51.17	-52.3	24.02	85.8	65	48.9
8.41	-25	-51.17	-52.54	23.2	85.8	64.9	49.8
8.44	-25	-51.68	-52.69	23.2	85.1	65.2	48.8
8.38	-25	-51.79	-52.42	24.05	85.3	64.9	50
8.37	-25	-50.85	-52.45	21.52	84.3	64.7	50.8
8.48	-25	-51.48	-52.26	24.11	84.5	64.9	50.8
8.51	-25	-51.06	-52.39	22.31	84.4	64.4	48.8
8.41	-25	-51.11	-52.54	23.99	84.1	65	53.3
8.51	-25	-51.37	-52.45	24.05	84.8	64.8	49.6
8.26	-25	-51.58	-52.54	21.58	84.5	64.5	55.5
8.57	-25	-51.32	-52.51	24.02	84.6	65	50
8.44	-25	-51.58	-52.6	24.08	85	64.4	49.5
8.44	-25	-51.79	-52.48	21.49	84.8	64.4	47.7
8.45	-25	-51.22	-52.45	23.78	85	65	52
8.44	-25	-51.68	-52.48	24.02	85.2	64.7	50.8
8.4	-25	-51.06	-52.36	22.22	85	64.4	48.7
8.45	-25	-51.32	-52.54	23.93	84.3	64.9	53.7
8.52	-25	-51.22	-52.45	24.08	84.5	64.5	52.7
8.45	-25	-51.06	-52.66	21.7	84.2	64.4	53.5
8.54	-25	-51.84	-52.63	24.15	84.2	64.9	50.1
8.41	-25	-51.32	-52.39	24.08	84.1	64.3	52.9
8.31	-25	-51.32	-52.63	21.76	83.6	64.1	50.2
8.58	-25	-51.53	-52.51	24.15	83.6	64.7	54.5
8.51	-25	-51.27	-52.54	24.21	84	64.1	52.9
8.37	-25	-51.32	-52.42	21.73	83.3	64.1	50.5
8.48	-25	-50.91	-52.63	24.15	83.7	64.5	51.7
8.44	-25	-50.34	-52.66	24.21	83.9	63.9	49.8
8.31	-25	-51.22	-52.63	21.64	83.3	64.1	51.7
8.48	-25	-51.17	-52.69	24.27	83.8	64.2	50.8
8.35	-25	-51.43	-52.57	24.24	83.7	63.9	55.4
8.32	-25	-51.37	-52.75	21.67	82.7	64.1	51.4
8.46	-25	-51.01	-52.48	24.18	83.4	64.1	50.7
8.36	-25	-51.68	-52.66	24.3	83.3	63.8	48.6
8.15	-25	-50.49	-52.63	21.73	82.8	63.9	51
8.58	-25	-51.89	-52.69	24.33	82.5	64	51.2
8.5	-25	-51.58	-52.48	24.36	82.7	63.7	50.8
8.16	-25	-51.84	-52.45	21.79	82.1	63.8	50.5
8.47	-25	-51.48	-52.66	24.3	82	63.9	51.9
8.42	-25	-51.17	-52.66	24.36	82.2	63.6	52.4
8.39	-25	-51.37	-52.57	21.73	81.5	63.9	54.2
8.46	-25	-51.17	-52.54	24.3	82.1	63.7	50.2

8.42	-25	-51.84	-52.6	23.9	82.1	63.6	51.8
8.42	-25	-51.58	-52.57	21.83	81.7	63.6	52.1
8.47	-25	-51.32	-52.66	24.42	82.3	63.6	50
8.44	-25	-51.58	-52.57	24.39	82.8	63.4	51.8
8.39	-25	-51.79	-52.54	21.83	82.1	63.6	49.9
8.5	-25	-51.53	-52.75	24.39	82.7	63.7	51.3
8.47	-25	-51.48	-52.6	24.39	83	63.5	52.3
8.41	-25	-51.43	-52.84	22.01	82.3	63.4	47.2
8.42	-25	-51.11	-52.6	24.33	82.4	63.9	51.6
8.51	-25	-51.84	-52.51	24.39	82.9	63.4	51.2
8.44	-25	-51.68	-52.91	22.71	83	63.3	51.5
8.39	-25	-51.53	-52.6	22.74	82.7	63.7	52.4
8.52	-25	-51.53	-52.72	24.36	83.6	63.5	55
8.39	-25	-51.32	-52.78	23.9	83.6	63.4	46.2
8.41	-25	-51.68	-52.72	21.7	83.5	63.6	51.2
8.53	-25	-51.58	-52.78	24.3	84.8	63.6	49
8.45	-25	-50.91	-52.69	24.24	85.6	63.6	50.1
8.55	-25	-51.32	-52.75	21.92	85.4	63.2	49.6
8.45	-25	-51.48	-52.91	23.02	85.2	63.9	50.7
8.55	-25	-51.84	-52.78	24.24	85.9	63.7	53.7
8.49	-25	-51.89	-52.66	24.21	86.5	63.6	49.9
8.32	-25	-51.22	-52.78	21.86	86.4	63.5	49.5
8.44	-25	-51.79	-52.69	24.24	86.5	64.1	52.3
8.57	-25	-51.74	-52.72	24.21	86.7	63.8	50.9
8.53	-25	-51.84	-52.72	24.21	87.1	63.8	49.8
8.51	-25	-51.27	-52.63	22.8	87.2	63.7	51
8.39	-25	-51.27	-52.91	21.64	86.7	63.8	51.4
8.56	-25	-51.58	-52.84	24.11	87.2	64.3	51.2
8.5	-25	-51.48	-52.75	24.27	87.4	64.1	52.8
8.39	-25	-51.74	-52.72	22.59	87.2	63.8	51.9
8.45	-25	-51.58	-52.66	21.52	86.8	64.2	52.4
8.51	-25	-51.74	-52.75	24.24	87.2	64.4	50.8
8.43	-25	-51.27	-52.72	24.21	87.1	64	56
8.46	-25	-51.37	-52.97	22.13	86.8	63.7	51.8
8.36	-25	-52	-52.66	21.52	86.8	64.2	48.4
8.47	-25	-51.58	-52.91	24.15	87.3	64.5	53.8
8.47	-25	-51.48	-52.88	24.24	87.5	64.2	51.6
8.45	-25	-51.17	-52.78	24.21	87.7	64.2	55.9
8.47	-25	-51.74	-52.94	21.83	87.9	64.1	51.2
8.35	-25	-51.11	-52.88	21.55	87.5	64.5	51.6
8.82	-25	-51.74	-52.88	24.08	88.8	65	50.1
8.44	-25	-51.17	-52.97	24.08	89	64.5	51.4
8.39	-25	-51.74	-52.72	24.18	88.9	64.3	51.1
8.46	-25	-51.68	-52.78	22.86	88.9	64.4	51.9
8.32	-25	-51.79	-53.03	21.58	88.4	64.7	47.4
9.9	-25	-51.84	-52.72	23.96	87.8	65.2	51.2
8.45	-25	-52.26	-52.84	24.21	87.6	64.8	51.9

8.53	-25	-51.74	-52.91	24.3	87.5	64.5	51.8
8.5	-25	-51.89	-52.84	21.83	87.1	64.7	51.3
8.38	-25	-51.37	-52.97	21.49	86.8	64.9	50.7
8.51	-25	-51.79	-53.03	24.21	87.3	65	53.8
8.52	-25	-51.68	-52.78	24.21	87.6	64.9	56.1
8.43	-25	-51.43	-52.94	24.18	87.6	64.7	50.9
8.42	-25	-51.37	-53.06	23.53	87.3	64.7	49.7
8.52	-25	-52.05	-53.06	21.89	86.8	64.5	50.3
8.38	-25	-52	-52.94	21.64	86.7	64.7	50.4
8.41	-25	-51.84	-53	21.52	86.8	65	51.8
9.23	-25	-52.05	-52.91	24.08	87.3	65.4	47.6
8.59	-25	-51.84	-52.97	24.18	87.8	65.1	51.4
8.56	-25	-51.94	-52.94	24.21	87.5	64.9	50.9
8.49	-25	-52.05	-52.94	24.33	87.3	64.8	49.2
8.46	-25	-51.79	-53.03	21.95	87.3	64.7	51.7
8.41	-25	-51.74	-53.09	23.05	87.3	65.3	53.4
8.5	-25	-51.84	-53	24.24	87.6	65	51
8.53	-25	-51.74	-52.84	23.2	87.5	64.9	52.3
8.39	-25	-52.1	-53	21.67	87.1	65.2	51.1
8.54	-25	-51.89	-52.84	24.3	87.4	65.1	52.4
8.39	-25	-51.79	-53.06	24.27	87.3	64.9	51.3
8.22	-25	-51.22	-53.03	21.79	86.7	64.9	50.3
8.57	-25	-51.94	-53.15	24.3	87.1	65.4	49
8.43	-25	-51.53	-52.97	24.21	87.1	64.9	50.7
8.53	-25	-51.58	-53.06	22.1	86.5	64.7	52.7
8.42	-25	-51.84	-53.18	23.84	86.2	65.1	47.4
8.51	-25	-52.26	-53.21	24.33	86.6	64.9	50
8.45	-25	-52.2	-53	23.44	86.4	64.7	49.5
8.41	-25	-51.48	-53.12	21.79	85.7	64.9	51.2
8.61	-25	-51.68	-53.03	24.3	85.9	65.3	50.4
8.53	-25	-51.48	-53.06	24.39	86	65	51.4
8.52	-25	-51.74	-53.15	22.56	85.9	64.7	49.4
8.41	-25	-51.84	-53.24	22.86	85.3	65.1	49.3
8.43	-25	-51.79	-53.18	24.36	85.7	64.8	49.7
8.53	-25	-52.26	-53.12	23.26	85.4	64.5	46
8.33	-25	-51.68	-53.21	21.86	84.5	64.8	48.8
8.59	-25	-52	-53	24.36	84.6	65.3	47.9
8.48	-25	-51.58	-53.21	24.39	84.8	64.7	52.8
8.41	-25	-51.27	-53.03	24.48	84.5	64.4	53.3
8.29	-25	-52.05	-53.12	21.89	83.9	64.7	52.8
8.6	-25	-51.84	-53.18	24.39	84.2	64.9	50.2
8.41	-25	-51.68	-53.21	24.45	84.2	64.5	53.3
8.41	-25	-51.74	-53.3	21.92	83.2	64.5	50.2
8.42	-25	-52	-53.12	24.51	83.2	65.1	50.1
8.45	-25	-52.05	-53.15	24.51	83.7	64.3	52.7
8.48	-25	-51.74	-53.27	24.54	83.4	64.1	52
8.32	-25	-52.15	-53.24	21.92	82.1	64.4	51.8

8.6	-25	-52.31	-53.33	24.45	82.7	64.5	50.9
8.53	-25	-51.68	-53.09	24.51	82.3	64.3	52.8
8.51	-25	-51.79	-53.06	22.1	81.9	63.9	51.1
8.44	-25	-51.58	-53.18	24.39	82.3	64.5	51.7
8.48	-25	-52.26	-53.09	24.51	82.8	64	52.8
8.53	-25	-51.79	-53.33	22.25	81.9	63.9	52.3
9.86	-25	-51.48	-53.24	24.39	81.6	64.5	51.6
8.47	-25	-52	-53.27	24.51	82.5	63.9	51.6
8.41	-25	-51.84	-53.24	21.98	82	63.8	53.9
8.47	-25	-52.62	-53.27	24.51	82.3	64	49.5
8.41	-25	-51.53	-53.09	24.51	82.7	64	49.8
8.5	-25	-52	-53.21	22.31	82.3	63.8	50.8
8.42	-25	-51.84	-53.21	22.41	81.8	64.1	52.5
8.52	-25	-52.05	-53.12	24.57	82.1	64	51.3
8.38	-25	-51.37	-53.36	24.54	82.1	63.6	56.3
8.41	-25	-51.89	-53.18	21.92	81.2	63.7	50.7
8.58	-25	-52.1	-53.21	24.54	81.4	64	49.3
8.42	-25	-52	-53.42	24.57	81.5	63.7	51.2
8.13	-25	-52.1	-53.3	21.92	80.9	63.7	51.9
8.59	-25	-51.43	-53.39	24.51	81	64	47.1
8.43	-25	-52	-53.27	24.48	81.4	63.7	48
8.47	-25	-52.15	-53.39	22.25	81.1	63.6	47.4
8.43	-25	-52.1	-53.3	23.57	80.9	63.9	49
8.46	-25	-51.06	-53.24	24.48	81.1	63.6	51.3
8.48	-25	-52.05	-53.24	24.57	81	63.6	50.3
8.35	-25	-52.98	-53.33	21.89	80.1	63.6	50.5
8.59	-25	-52.52	-53.33	24.54	80.5	63.7	50
8.44	-25	-51.74	-53.27	24.57	80.1	63.5	51.3
8.52	-25	-52.15	-53.27	22.1	79.8	63.3	50.3
9.68	-25	-52.26	-53.27	24.48	79.5	63.7	53.1
8.46	-25	-52.31	-53.27	24.66	79.9	63.4	48.8
8.53	-25	-51.79	-53.21	22.19	79.1	63.2	51.9
8.39	-25	-51.43	-53.42	24.57	78.8	63.6	51.3
8.49	-25	-52.46	-53.42	24.66	79	63.3	51.9
8.53	-25	-52.41	-53.27	22.41	78.7	63	54.4
8.41	-25	-51.53	-53.39	24.24	78.1	63.6	50
8.38	-25	-52.1	-53.52	24.73	78.4	63.2	52.5
8.44	-25	-52.46	-53.46	22.07	77.8	62.9	53.9
8.62	-25	-52.15	-53.21	24.63	77.7	63.4	51.8
8.5	-25	-52.05	-53.39	24.69	78	62.9	54
8.41	-25	-51.89	-53.36	22.28	77.4	62.6	51.6
8.6	-25	-52.1	-53.18	24.66	77.3	63.2	51.1
8.5	-25	-52.31	-53.46	24.73	77.5	62.7	56.1
8.5	-25	-52	-53.39	22.16	76.9	62.6	50.2
8.48	-25	-52.46	-53.27	24.69	76.9	63	51.5
8.43	-25	-52.52	-53.67	24.79	77.1	62.5	52.2
8.5	-25	-52.26	-53.46	22.16	76.7	62.5	54.2

8.58	-25	-52	-53.46	24.76	76.8	62.9	50.8
8.39	-25	-52.2	-53.42	24.73	76.9	62.6	51
8.43	-25	-52.15	-53.58	22.34	76.5	62.4	51.7
8.5	-25	-52.05	-53.55	24.76	77.1	62.8	51.2
8.46	-25	-52.72	-53.52	24.76	77.5	62.5	45.8
8.47	-25	-52	-53.49	22.22	77.1	62.2	46.5
8.57	-25	-52.83	-53.55	24.79	77.2	62.5	48.8
8.41	-25	-51.94	-53.64	24.79	77.7	62.2	51.8
8.42	-25	-51.79	-53.7	22.22	77.6	62.2	50.8
8.47	-25	-51.89	-53.46	24.76	78	62.6	52.1
8.5	-25	-52.2	-53.46	24.69	78.5	62.4	49.1
8.34	-25	-51.94	-53.64	22.04	77.8	62.4	52.3
8.52	-25	-52.05	-53.49	24.79	78.8	62.5	51.1
8.4	-25	-53.19	-53.46	22.53	79.1	62.4	51.9
8.68	-25	-52.36	-53.42	24.63	79.5	62.7	50.8
8.44	-25	-52.72	-53.27	24.63	80.2	62.6	48.9
8.38	-25	-51.48	-53.36	22.19	80.5	62.5	51.6
8.41	-25	-52.05	-53.46	24.02	80.7	62.7	51.6
8.45	-25	-52.15	-53.49	24.73	81.5	62.5	52
8.42	-25	-52.52	-53.52	23.63	82	62.5	51.3
8.37	-25	-52.46	-53.39	22.92	82.1	62.9	47.4
8.39	-25	-52.46	-53.42	24.51	82.8	62.8	51.4
8.48	-25	-52.15	-53.49	22.47	83.1	62.7	51.4
8.42	-25	-52	-53.64	23.41	83.7	63.3	52.2
8.39	-25	-52.26	-53.58	24.45	84.4	63.1	50.9
8.53	-25	-51.53	-53.55	22.68	84.6	63.1	50.7
8.43	-25	-52.62	-53.58	23.05	84.6	63.6	51.3
8.47	-25	-52.15	-53.64	24.39	85.8	63.4	50.7
8.45	-25	-52.26	-53.46	22.07	85.9	63.4	51.5
8.76	-25	-52.31	-53.46	24.39	85	64.1	55.1
8.52	-25	-52.46	-53.39	24.33	85.2	63.6	52.1
8.53	-25	-52.57	-53.39	21.89	86.1	63.6	50.2
8.51	-25	-51.48	-53.55	24.3	86.4	64	50.2
8.44	-25	-52.67	-53.52	24.36	87.5	63.8	49.6
8.41	-25	-52.31	-53.58	21.73	86.6	64.1	47.4
8.43	-25	-52.52	-53.58	24.36	86.8	64.1	50.5
8.43	-25	-52.15	-53.7	21.92	87.9	64.1	46.7
8.61	-25	-52.72	-53.55	24.27	87.5	64.7	54.9
8.39	-25	-52.26	-53.42	24.3	87.7	64.3	49.4
8.38	-25	-52.52	-53.58	21.79	87.2	64.5	50.4
8.45	-25	-52.05	-53.64	24.33	87.5	64.7	52.5
8.53	-25	-51.84	-53.67	22.04	87.5	64.5	51.9
8.48	-25	-52.57	-53.58	24.3	87.3	64.9	51.9
8.51	-25	-52.36	-53.55	24.24	87.7	64.7	47.8
8.37	-25	-52.62	-53.58	22.44	87.5	65	51
8.48	-25	-52.67	-53.67	24.27	87.9	64.8	51.4
8.44	-25	-52.62	-53.64	21.76	87.3	64.7	51.7

8.56	-25	-52.26	-53.49	24.24	87.8	65.2	52.6
8.44	-25	-52.1	-53.55	24.21	88.4	64.8	52.2
8.54	-25	-52.41	-53.55	21.83	88.4	64.7	50.9
9.09	-25	-52.31	-53.67	23.99	88.8	65.4	50.1
8.5	-25	-52.26	-53.73	24.18	88.9	64.9	51.6
8.5	-25	-52.05	-53.55	21.79	88.7	65.1	49.5
8.52	-25	-52.67	-53.46	24.18	88.5	65.5	49.5
8.43	-25	-52.77	-53.67	24.24	88.8	65.1	51.5
8.45	-25	-52.26	-53.49	21.79	88.2	65.2	52
8.59	-25	-52.62	-53.55	24.11	88.5	65.4	50.1
8.43	-25	-52.36	-53.55	24.15	88.6	65.3	52.4
8.34	-25	-52.2	-53.64	21.52	88.4	65.3	49.8
8.53	-25	-52.31	-53.58	24.15	89.2	65.5	52.4
8.53	-25	-52.83	-53.58	24.18	89.2	65.1	55.9
8.41	-25	-52.2	-53.64	21.49	88.6	65.5	49
8.54	-25	-52.57	-53.67	24.08	89.3	65.6	48.6
8.42	-25	-52.1	-53.64	23.35	89.8	65.3	51.4
8.39	-25	-52.36	-53.52	23.44	89.3	65.8	53.9
8.41	-25	-52.05	-53.58	24.05	89.6	65.5	51
8.36	-25	-52.41	-53.52	21.73	89.5	65.4	51.6
8.59	-25	-52.2	-53.46	23.99	89.7	65.8	49.5
8.52	-25	-52.41	-53.55	24.11	89.6	65.5	50.1
8.37	-25	-52.1	-53.55	21.46	89	65.8	51.8
8.53	-25	-52.26	-53.64	24.05	89.6	65.8	51.3
8.47	-25	-52.62	-53.58	22.77	89.5	65.7	51.4
8.42	-25	-52.26	-53.7	23.78	88.8	66	51.8
8.41	-25	-51.79	-53.85	24.18	89.3	65.7	52.3
8.34	-25	-51.68	-53.55	21.67	88.8	65.7	51.9
8.46	-25	-52.2	-53.64	24.05	89.2	65.8	51.8
8.45	-25	-51.94	-53.52	22.53	88.9	65.6	49.6
8.73	-25	-52.26	-53.7	24.05	88.8	66.2	49.5
8.49	-25	-52.31	-53.58	24.11	88.9	65.7	48.7
8.4	-25	-52.26	-53.79	21.76	88.2	65.8	51.6
8.53	-25	-51.94	-53.76	24.15	88.5	65.6	51.3
8.41	-25	-52.52	-53.55	21.86	88	65.6	52
8.56	-25	-52.57	-53.7	24.05	88.2	65.9	52
8.48	-25	-52.15	-53.64	24.08	88.1	65.6	51
7.85	-25	-52.36	-53.55	21.55	87.5	65.5	51.5
8.47	-25	-51.94	-53.76	24.15	87.7	65.8	54.9
8.45	-25	-51.94	-53.85	24.18	87.6	65.6	51.6
8.38	-25	-52.1	-53.67	21.49	86.7	65.7	53.9
8.56	-25	-52.1	-53.73	24.24	87.1	65.7	52.4
8.44	-25	-52.57	-53.67	24.21	86.7	65.4	51.4
8.32	-25	-52.67	-53.58	21.76	86.1	65.4	52.3
8.57	-25	-52.57	-53.67	24.21	86.1	65.9	51
8.51	-25	-52.41	-53.55	24.27	86.2	65.4	50.9
8.13	-25	-52.62	-53.7	21.67	85.5	65.4	51.4

8.55	-25	-52.26	-53.73	24.33	85.7	65.5	53.1
8.49	-25	-52.2	-53.7	22.44	85.3	65.2	49.5
8.39	-25	-52.26	-53.76	23.93	85	65.7	51.7
8.51	-25	-52.83	-53.94	24.3	85.3	65.2	52.5
8.42	-25	-52.2	-53.55	22.34	85	64.9	51.1
8.43	-25	-52.46	-53.64	23.44	84.5	65.4	52
8.48	-25	-52.2	-53.85	24.27	85	65.1	51.6
8.44	-25	-52.57	-53.55	22.62	85	64.8	51.1
8.41	-25	-52.31	-53.85	23.02	84.2	65.3	50
8.5	-25	-52.31	-53.79	24.27	84.8	64.9	52.9
8.32	-25	-52.52	-53.64	22.01	84.2	64.7	50.9
8.59	-25	-52.52	-53.7	24.3	84.8	64.9	50.8
8.39	-25	-52.31	-53.79	23.53	84.9	64.4	54.2
8.4	-25	-52.36	-53.64	21.67	84.1	64.9	52.3
8.48	-25	-52.2	-53.79	24.33	84.8	64.8	52.2
8.41	-25	-51.94	-53.79	23.69	84.6	64.5	50.5
8.41	-25	-52.77	-53.82	21.64	83.9	64.9	50.4
8.42	-25	-52.05	-53.67	24.33	84.3	64.7	51.8
8.51	-25	-52.36	-53.67	24.3	84.2	64.4	53.5
8.36	-25	-52.15	-53.85	21.64	83.1	64.5	50.9
8.59	-25	-52.46	-53.85	24.3	83.2	64.7	52.9
8.41	-25	-52.77	-53.88	24.3	83	64.4	53
8.43	-25	-52.05	-53.73	21.58	82.1	64.5	50.9
8.46	-25	-52.31	-53.67	24.33	82.3	64.4	52.3
8.51	-25	-52.52	-53.88	24.33	82.4	64.1	51.4
8.39	-25	-52.57	-53.79	21.55	81.7	64.4	50.3
8.44	-25	-52.26	-53.76	24.33	82.1	64.1	49.3
8.49	-25	-52.26	-53.73	23.23	82.1	64	52
8.41	-25	-52.72	-53.64	22.28	81.2	64.3	54.3
8.47	-25	-52.62	-53.85	24.18	81.9	64.2	51.5
8.38	-25	-52.26	-53.79	22.16	81.4	63.8	46.2
8.82	-25	-52.1	-53.67	24.18	81.4	64.4	52.4
8.48	-25	-51.94	-53.82	24.21	82.1	64	50.3
8.15	-25	-52.2	-53.73	21.55	81.9	63.9	52
8.59	-25	-52.88	-53.64	24.21	82.4	64.1	46.1
8.48	-25	-52	-53.67	24.27	82.8	63.8	55.2
8.33	-25	-52.05	-53.7	21.49	82.1	64	51.5
8.5	-25	-52.57	-53.94	24.27	82.5	64.1	52.3
8.41	-25	-53.29	-53.52	24.27	82.7	63.7	50.5
8.26	-25	-52.2	-53.85	21.76	82.1	63.7	50.4
8.47	-25	-52.52	-53.79	24.18	82.7	64.1	52.6
8.39	-25	-53.09	-53.76	24.24	82.8	63.8	47.3
8.39	-25	-52.57	-53.76	21.46	82	63.9	51.6
8.46	-25	-52.83	-53.64	24.15	82.7	63.8	52.6
8.48	-25	-52.36	-53.79	21.79	82.5	63.6	53.3
8.63	-25	-52.36	-53.82	24.11	82.8	64.3	50.2
8.5	-25	-52.77	-53.85	24.18	83.1	63.8	51.6

8.35	-25	-52.26	-53.94	21.67	82.8	63.6	53
8.47	-25	-52.98	-53.82	24.11	83.2	64.1	53.2
8.42	-25	-52.31	-53.76	24.15	83.4	63.7	49.2
8.38	-25	-52.98	-53.82	21.43	83.2	63.8	52.4
8.58	-25	-52.77	-53.79	24.18	83.5	63.9	50.3
8.5	-25	-52.62	-53.82	24.11	83.8	63.8	51
8.19	-25	-52.15	-53.91	21.55	83.4	63.6	50.3
8.5	-25	-52.41	-53.58	24.05	83.6	64	49.6
8.48	-25	-52.77	-53.79	24.08	84.2	63.7	51.8
8.51	-25	-52.83	-53.79	21.64	84.1	63.6	51.6
8.72	-25	-52.52	-54.04	24.05	84.2	64.1	53.3
8.4	-25	-53.03	-53.91	24.11	84.9	63.7	50.1
8.46	-25	-52.72	-53.85	21.46	84.5	63.6	52.5
8.57	-25	-52.62	-53.82	24.02	85.1	64.1	50.8
8.52	-25	-52.98	-53.76	24.05	85.4	63.9	51.5
8.39	-25	-52.77	-53.85	21.58	85.4	63.8	50.5
8.65	-25	-52.57	-53.85	23.93	86	64.4	52.6
8.5	-25	-52.46	-53.82	24.02	86.4	64	55.4
8.41	-25	-53.09	-53.79	21.58	86.4	64.1	51.6
8.51	-25	-52.62	-53.88	23.96	87.2	64.4	50.5
8.39	-25	-52.52	-53.76	23.96	87.7	64.2	53.9
8.39	-25	-52.52	-53.88	21.25	87.4	64.5	49.4
8.43	-25	-53.29	-53.82	23.93	88.3	64.7	49.4
8.52	-25	-52.62	-53.97	21.55	88.4	64.4	52.3
8.62	-25	-52.2	-53.88	23.84	88.7	65.1	55.1
8.48	-25	-52.67	-53.97	23.81	89.5	64.7	48.4
8.04	-25	-52.77	-53.88	21.34	89.5	64.9	51.7
8.51	-25	-52.83	-54.04	23.75	90.3	65.1	49.6
8.43	-25	-52.57	-54	23.81	90.7	65	49
8.39	-25	-52.31	-53.97	21.18	90.8	65.2	52
8.51	-25	-52.57	-54.07	23.75	91.5	65.4	49.6
8.44	-25	-52.05	-53.85	23.72	92.2	65.4	52.7
8.35	-25	-52.98	-53.94	21.31	91.9	65.6	51.1
8.6	-25	-52.52	-54.04	23.72	92.7	65.9	55
8.51	-25	-52.77	-54.04	23.69	93.5	65.6	52.5
8.45	-25	-52.57	-54.07	21.28	93.1	65.8	51
8.52	-25	-52.26	-53.94	23.69	93.2	66.3	52.1
8.45	-25	-52.05	-53.88	23.69	94.2	66	51.6
8.37	-25	-52.72	-53.97	21	93.6	66.5	53
8.47	-25	-52.31	-54	23.57	94.7	66.3	49.9
8.53	-25	-52.41	-53.97	21.21	94.7	66.2	49.1
8.6	-25	-52.36	-54	23.66	95.5	66.8	50.3
8.44	-25	-52.98	-54.1	23.66	96.1	66.4	49.8
8.4	-25	-52.67	-54.1	21.28	96	66.6	51
8.56	-25	-53.19	-53.85	23.53	96.6	67	52.1
8.48	-25	-52.46	-53.88	23.57	97.1	66.9	51.7
8.41	-25	-52.77	-54.1	20.94	97	67.2	52.5

8.49	-25	-52.67	-54.13	23.57	97.1	67.3	51.9
8.48	-25	-52.57	-53.97	21.76	97.6	67.1	51.8
8.45	-25	-52.77	-54	23.41	97.7	67.7	53.8
8.41	-25	-52.72	-54	23.57	97.3	67.3	52.8
8.42	-25	-52.26	-54.1	21.15	96.9	67.3	51.7
8.53	-25	-52.57	-54.04	23.5	97.9	67.7	50.8
8.44	-25	-52.36	-53.97	23.57	97.6	67.6	53.2
8.41	-25	-52.41	-53.88	20.91	97.3	67.8	51.6
8.61	-25	-52.77	-53.97	23.5	97.5	67.7	52.9
8.43	-25	-52.31	-53.97	23.53	97.3	67.7	52
8.44	-25	-52.1	-54.04	21.03	97.2	67.8	51.7
8.71	-25	-53.09	-54.04	23.44	97.3	68.5	49.5
8.53	-25	-52.46	-54.07	23.57	97.3	67.9	52.2
8.38	-25	-52.67	-53.94	21.06	97.1	67.9	51.6
8.51	-25	-52.36	-54.16	23.47	97.2	68.5	50.1
8.39	-25	-53.97	-54.07	23.32	97.2	68	50.7
8.41	-25	-52.83	-54.04	22.1	96.7	68.6	52.3
8.52	-25	-52.57	-53.94	23.53	97.2	68.3	54.4
8.55	-25	-52.77	-54.13	21.06	96.8	68.1	48.6
8.61	-25	-52.52	-54.13	23.53	96.9	68.8	49.4
8.5	-25	-52.57	-54.1	23.57	96.7	68.3	51.6
8.44	-25	-52.57	-54.13	21.09	96.1	68.2	52.2
9.55	-25	-52.26	-53.94	23.38	96	69	51
8.46	-25	-52.98	-54.04	23.5	95.8	68.4	50
8.54	-25	-52.41	-54.07	21.03	95.1	68.4	53.1
8.6	-25	-52.83	-54.19	23.57	95.2	68.8	52.5
8.5	-25	-52.52	-54.07	23.57	95.2	68.3	50.5
8.39	-25	-52.83	-54.13	20.91	94.8	68.7	53.6
8.43	-25	-53.03	-54.1	23.63	94.3	68.6	53.4
8.44	-25	-52.57	-54.1	22.8	93.2	68.2	50.7
8.46	-25	-53.4	-54.04	21	92	68.5	52
8.61	-25	-52.57	-54	23.75	91.9	68.4	51.9
8.48	-25	-52.88	-54.1	23.75	91.7	68	48.7
8.35	-25	-52.98	-54.1	21.12	90.7	68.2	51.8
8.56	-25	-53.19	-54.07	23.69	90.8	68.1	50.2
8.54	-25	-52.98	-54.04	23.75	90.8	67.9	49.8
8.37	-25	-52.52	-54.31	21.12	90.3	68	52.5
8.56	-25	-52.98	-54.07	23.69	90.6	67.9	50.9
8.5	-25	-52.72	-54.16	23.23	90.5	67.7	50.2
8.38	-25	-52.36	-54.22	21	89.8	67.9	51.6
8.6	-25	-52.77	-54.07	23.72	90.3	67.9	51.1
8.44	-25	-52.52	-54.16	23.75	90.3	67.5	52.9
8.38	-25	-52.31	-54.04	21.15	89.5	67.6	52
8.58	-25	-53.19	-54.04	23.72	90.1	67.9	51.2
8.47	-25	-52.72	-54.13	23.81	90.1	67.4	53.9
8.39	-25	-52.36	-54.22	21.03	89.5	67.6	50.2
8.48	-25	-52.77	-54.19	23.75	89.8	67.5	50.1

8.44	-25	-52.36	-54.25	21.58	89.7	67.2	51.2
9.09	-25	-53.35	-54.04	23.72	89.6	67.8	51.7
8.41	-25	-52.72	-54.22	23.63	89.7	67.2	51
8.54	-25	-53.03	-54.1	21.28	89.2	67	51.8
8.72	-25	-52.67	-54.25	23.53	89.2	67.6	54.3
8.46	-25	-52.72	-54.25	23.75	89.3	67	51
8.54	-25	-52.52	-54.37	21.31	88.8	66.9	53
8.61	-25	-52.67	-54.28	23.6	88.7	67.6	48.8
8.46	-25	-53.29	-54.25	23.78	89.2	66.9	53.1
8.29	-25	-52.98	-54.13	21.28	88.6	66.8	51.4
8.63	-25	-53.4	-54.16	23.72	88.9	67	53.1
8.47	-25	-53.35	-54.13	23.23	88.8	66.7	52.1
8.43	-25	-53.09	-54.19	22.41	88	67.1	51.5
8.41	-25	-52.72	-54.28	23.78	88.5	66.6	52.8
8.41	-25	-52.62	-54.19	21.28	88	66.5	52.8
8.52	-25	-52.83	-54.19	23.75	87.6	66.9	52.4
8.44	-25	-52.72	-54.31	23.84	88	66.5	51.9
8.38	-25	-53.19	-54.25	21.18	87.4	66.7	51.1
8.52	-25	-52.67	-54.16	23.81	87.7	66.6	52
8.44	-25	-53.4	-54.28	22.53	87.5	66.3	51.3
8.43	-25	-52.98	-54.22	22.95	87	66.8	51.2
8.47	-25	-52.98	-54.28	24.02	87.5	66.3	51
8.46	-25	-53.09	-54.25	21.52	87.2	66.1	52.9
8.43	-25	-53.35	-54.22	23.53	86.6	66.7	54.5
8.43	-25	-52.57	-54.31	23.99	87.1	66.2	51
8.37	-25	-52.57	-54.28	22.62	87.4	65.9	52.3
8.41	-25	-52.1	-54.28	22.86	86.4	66.4	48.4
8.46	-25	-53.03	-54.16	23.99	87.6	66.1	52.4
8.54	-25	-52.77	-54.31	21.67	86.6	65.8	52
8.62	-25	-52.41	-54.46	24.02	87.2	66.3	51.7
8.44	-25	-52.88	-54.25	24.08	87.3	65.7	52
8.35	-25	-53.09	-54.28	21.49	86.1	65.7	49.8
8.58	-25	-52.98	-54.19	24.02	85.8	66	52.3
8.5	-25	-52.88	-54.43	24.08	86.1	65.5	49.5
8.35	-25	-52.67	-54.43	21.4	85.7	65.7	51.5
8.6	-25	-53.35	-54.31	23.99	85.5	65.8	53.9
8.41	-25	-52.88	-54.37	24.11	85.3	65.7	50.1
8.48	-25	-53.14	-54.34	21.58	83.8	65.3	51.5
8.44	-25	-53.14	-54.28	23.66	83.5	65.9	51.4
8.55	-25	-53.24	-54.55	24.21	83.9	65.2	51.5
8.42	-25	-53.66	-54.28	21.67	83.7	65.1	48.8
8.57	-25	-53.24	-54.31	24.18	84.1	65.5	45.9
8.42	-25	-52.57	-54.37	24.18	83.9	65	51.6
8.35	-25	-53.19	-54.46	21.49	82.5	65.1	50.9
8.6	-25	-53.09	-54.43	24.11	82.9	65.2	45.8
8.47	-25	-52.67	-54.37	24.18	83.2	64.8	51.3
8.38	-25	-52.98	-54.49	21.76	82.4	65.2	45.1

8.55	-25	-52.98	-54.43	24.21	83	64.8	49.1
8.39	-25	-52.83	-54.46	22.04	82.4	64.5	44
9.24	-25	-53.24	-54.28	24.05	82	65.1	53.8
8.41	-25	-53.09	-54.55	24.18	81.9	64.5	51.6
8.36	-25	-53.09	-54.58	21.67	81.5	64.5	51.6
8.56	-25	-52.98	-54.34	24.21	81.9	64.7	51.8
8.42	-25	-52.77	-54.37	24.24	81.9	64.3	51.8
8.37	-25	-53.09	-54.43	21.55	81.4	64.3	49.7
8.56	-25	-53.6	-54.55	24.18	81.8	64.5	53.9
8.45	-25	-53.09	-54.52	24.3	81.9	64.2	50.1
8.36	-25	-53.4	-54.49	21.46	81.3	64.3	51.9
8.42	-25	-53.24	-54.28	24.18	81.8	64.2	53.1
8.44	-25	-53.09	-54.52	21.73	81.6	64	50.5
8.55	-25	-52.77	-54.46	24.18	82	64.4	52.2
8.45	-25	-52.88	-54.37	24.21	82.3	64.1	50.5
7.67	-25	-53.09	-54.52	21.58	82.1	63.8	51.2
8.56	-25	-53.03	-54.49	24.15	82.8	64.1	50.5
8.48	-25	-53.4	-54.52	24.15	83.3	63.9	54.8
8.4	-25	-53.24	-54.46	21.46	83.4	64.1	51.6
8.53	-25	-52.98	-54.62	24.11	84.3	64.3	50.2
8.44	-25	-52.57	-54.62	24.11	85	63.8	51.4
8.32	-25	-52.52	-54.49	21.67	85.2	64	48.8
8.59	-25	-53.09	-54.55	24.11	85.8	64.5	51.6
8.46	-25	-52.72	-54.58	24.15	86.2	64.1	48.4
8.39	-25	-52.88	-54.55	21.43	86.2	64.2	52.6
8.57	-25	-53.35	-54.46	24.11	86.8	64.4	50.2
8.42	-25	-53.14	-54.52	22.25	87.1	64.1	50.2
8.47	-25	-53.24	-54.71	23.78	87.3	64.9	51.2
8.5	-25	-52.46	-54.52	24.02	87.6	64.7	52.1
8.39	-25	-53.4	-54.68	21.73	87.7	64.4	51.3
9.3	-25	-53.35	-54.68	23.93	88	65.2	49.1
8.44	-25	-53.66	-54.58	24.02	88.5	64.7	52.1
8.41	-25	-53.45	-54.65	21.64	88.5	64.5	52.1
8.51	-25	-53.35	-54.55	23.93	89	65.1	51.8
8.52	-25	-53.35	-54.46	24.08	89.7	64.8	51
8.41	-25	-52.98	-54.62	21.25	89.4	65	50.4
8.54	-25	-53.35	-54.49	23.96	90	65.2	51.4
8.51	-25	-53.19	-54.77	21.83	90.4	65.1	52.1
8.44	-25	-53.29	-54.55	23.9	90.5	65.6	53.9
8.43	-25	-53.81	-54.71	23.9	91	65.4	52.6
8.43	-25	-53.29	-54.77	21.58	90.1	65.4	51.4
8.44	-25	-53.09	-54.71	23.75	90.7	65.8	52.5
8.45	-25	-53.71	-54.58	23.84	91.5	65.6	51.6
8.45	-25	-52.98	-54.68	21.79	91.1	65.4	49.5
8.44	-25	-52.98	-54.62	23.05	91.1	66	52.8
8.47	-25	-53.14	-54.83	23.84	92.1	65.8	51.2
8.51	-25	-52.98	-54.55	21.4	91.9	65.9	54.3

8.48	-25	-53.29	-54.77	23.75	92.2	66.5	53.6
8.56	-25	-53.19	-54.74	23.84	92.7	65.9	53.8
8.44	-25	-52.77	-54.68	21.4	92.8	65.9	50.5
8.43	-25	-53.5	-54.58	23.53	93.2	66.7	51.3
8.53	-25	-53.35	-54.65	23.75	93.8	66.4	53
8.47	-25	-53.24	-54.58	21.31	93.3	66.3	51.2
8.51	-25	-53.09	-54.55	23.75	93.7	66.9	50.5
8.51	-25	-53.19	-54.46	23.78	93.8	66.5	55.9
8.43	-25	-53.6	-54.74	21	93.3	66.6	47.6
8.47	-25	-53.4	-54.55	23.78	93.8	66.8	53.1
8.53	-25	-53.19	-54.86	21.89	93.2	66.5	47.5
8.42	-25	-53.24	-54.8	22.71	92.8	67.3	52.4
8.53	-25	-53.14	-54.68	23.75	92.7	66.7	52.1
8.45	-25	-53.4	-54.58	21.55	92.5	66.6	51.5
8.49	-25	-53.66	-54.71	23.38	92.6	67.2	51.8
8.45	-25	-53.29	-54.65	23.78	93	66.8	49.3
8.53	-25	-53.19	-54.62	21.34	92.6	66.7	51.9
9.21	-25	-53.71	-54.68	23.69	92.4	67.3	54.3
8.51	-25	-53.5	-54.65	23.78	92.7	66.9	50.8
8.45	-25	-53.09	-54.68	21.18	92.5	66.6	51.8
8.54	-25	-53.45	-54.68	23.69	92.6	67.1	49.5
8.51	-25	-53.35	-54.8	23.81	92.8	66.7	52.7
8.02	-25	-53.71	-54.77	21.18	92.2	66.8	51
8.61	-25	-53.03	-54.71	23.66	92.7	67.1	48.7
8.44	-25	-52.67	-54.74	23.78	92.8	67	46
8.1	-25	-53.24	-54.74	21.18	92.5	66.8	51.8
8.53	-25	-53.76	-54.86	23.69	92.9	67.2	53.9
8.51	-25	-53.24	-54.74	23.72	92.9	67	51.2
8.44	-25	-53.19	-54.58	21.25	92.4	66.6	51.2
9.23	-25	-52.88	-54.83	23.63	92.6	67.6	53.6
8.46	-25	-53.14	-54.74	23.81	92.9	67	48.8
8.41	-25	-53.5	-54.71	21.31	92.6	67	50.3
8.53	-25	-53.14	-54.65	23.69	92.9	67.3	51.1
8.47	-25	-53.5	-54.83	23.75	92.9	67	52.7
8.39	-25	-53.4	-54.74	21.34	92.6	67	51
8.46	-25	-53.19	-54.77	23.32	92.2	67.6	47.7
8.56	-25	-53.24	-54.8	23.69	92	67.2	51.5
8.5	-25	-53.35	-54.77	23.69	91.2	67	54.2
8.48	-25	-53.4	-54.83	23.78	91.2	66.8	52.1
8.39	-25	-53.4	-54.68	21.4	90.4	66.8	51.4
8.41	-25	-53.86	-54.65	21.06	90.1	67.3	52.1
8.45	-25	-53.35	-54.74	22.86	89.7	67.6	51.7
8.62	-25	-53.55	-54.86	23.78	89.7	67.4	49.9
8.41	-25	-53.35	-54.86	23.81	89.5	66.8	52.5
8.52	-25	-53.4	-54.77	23.9	88.8	66.7	56.9
8.48	-25	-52.67	-54.77	21.31	88.4	66.5	50.1
8.42	-25	-53.14	-54.77	22.89	88	67.3	49.5

8.55	-25	-53.24	-54.89	23.9	88.2	66.7	49.8
8.52	-25	-53.55	-54.77	23.84	88	66.6	52
8.48	-25	-52.98	-54.77	21.55	87.4	66.5	48.4
8.37	-25	-53.14	-54.89	21.12	86.5	66.7	51.3
8.42	-25	-53.29	-54.92	21.52	86.3	66.9	51.3
8.45	-25	-53.55	-54.83	22.77	85.8	67.1	49.4
8.45	-25	-52.98	-54.86	22.22	85.4	66.9	51.1
8.48	-25	-53.55	-54.89	22.8	85.3	67	53
8.57	-25	-53.19	-54.95	23.84	85.4	66.7	50.4
8.47	-25	-52.98	-54.92	23.99	85.2	66.2	48.9
8.46	-25	-53.35	-54.95	22.89	85.2	66	50.9
8.38	-25	-53.66	-54.71	21.21	84.2	66.1	51.6
8.5	-25	-53.66	-54.86	23.93	84.2	66.2	53.4
8.41	-25	-54.12	-54.95	24.02	84.2	65.8	47.2
8.42	-25	-53.81	-54.95	23.99	84.2	65.6	52.5
8.45	-25	-54.02	-54.77	21.76	83.6	65.5	51.6
8.36	-25	-53.35	-54.92	21.31	83.4	65.8	50.5
8.61	-25	-53.35	-54.77	24.02	83.7	65.9	55.8
8.52	-25	-53.55	-54.95	24.05	83.8	65.6	49.5
8.5	-25	-53.66	-54.8	21.79	83.8	65.4	52.5
8.41	-25	-53.4	-54.95	22.41	83.5	65.7	48.4
8.48	-25	-53.4	-54.86	24.11	83.8	65.5	50
8.55	-25	-53.29	-54.92	24.05	83.6	65.2	51
8.45	-25	-53.66	-54.92	21.49	83.4	65.1	49.5
8.38	-25	-53.66	-55.04	21.31	83.8	65.5	51.4
8.62	-25	-53.55	-54.89	24.08	84.5	65.3	51.3
8.42	-25	-53.66	-54.95	23.96	83.8	65.2	51.4
8.41	-25	-53.76	-55.01	21.37	83.4	65	52.9
8.5	-25	-53.29	-54.92	24.08	84.2	65.1	52.3
8.5	-25	-53.5	-55.04	24.08	84.1	64.9	51.7
8.42	-25	-53.45	-55.01	21.76	83.3	64.7	49.4
8.42	-25	-53.55	-55.01	21.25	83.1	65.1	51.6
8.59	-25	-53.4	-54.83	24.02	83.6	64.8	50.4
8.38	-25	-53.24	-54.95	24.05	83.3	64.7	53
8.02	-25	-53.45	-55.04	21.43	82.8	64.7	51.4
8.54	-25	-53.4	-55.07	24.05	82.8	65	51.6
8.45	-25	-54.54	-55.04	24.08	83.1	64.7	51.8
8.51	-25	-53.86	-55.04	21.83	82.8	64.4	49.5
8.41	-25	-52.98	-54.86	22.25	82.3	64.9	53.8
8.52	-25	-53.81	-54.95	24.11	82.9	64.5	50.3
8.5	-25	-53.45	-55.1	22.34	82.8	64.4	52.8
8.42	-25	-53.19	-54.92	22.68	81.8	64.8	50.3
8.54	-25	-53.66	-55.04	24.15	81.9	64.3	44.6
8.49	-25	-53.5	-55.01	22.1	81.7	64.3	49.9
8.4	-25	-53.45	-54.89	22.99	81.2	64.5	50.9
8.46	-25	-53.4	-55.23	24.11	81.6	64.3	52.5
8.49	-25	-54.28	-54.98	24.11	81.6	64.1	50.9

8.02	-25	-53.6	-54.98	21.46	81.4	64.1	50.8
8.61	-25	-53.86	-55.1	24.11	81.5	64.5	52.2
8.44	-25	-53.92	-54.98	24.18	81.9	64.2	52.4
8.41	-25	-53.4	-55.2	21.83	81.6	63.9	50.2
8.39	-25	-53.76	-55.1	22.34	81	64.3	49.5
8.45	-25	-53.92	-55.04	24.21	81.2	64	51.9
8.38	-25	-54.33	-54.98	24.21	81.2	64	53.4
8.43	-25	-52.88	-55.07	21.58	80.8	63.8	51.2
8.41	-25	-54.07	-55.07	21.67	80.3	64.2	51.5
8.52	-25	-53.71	-55.2	24.18	80.7	64.2	53.1
8.4	-25	-53.29	-55.2	24.18	80.9	63.7	52.6
8.42	-25	-53.76	-55.01	21.64	80.5	63.8	52.8
8.43	-25	-54.28	-55.1	24.18	80.6	64.3	51.5
8.5	-25	-54.44	-54.98	24.21	81.1	63.8	51.1
8.52	-25	-53.86	-54.98	22.07	81	63.6	49.5
8.39	-25	-53.71	-55.07	22.8	80.2	64.1	51.6
8.49	-25	-53.55	-55.04	24.18	81	63.8	51.6
8.51	-25	-53.76	-55.07	24.15	81.1	63.6	48.6
8.38	-25	-53.6	-55.13	21.73	80.6	63.5	51.1
8.42	-25	-53.6	-54.95	23.32	80.9	64.1	52.6
8.55	-25	-53.4	-55.01	24.18	81.5	63.7	50.1
8.48	-25	-53.86	-55.04	24.11	81.1	63.6	52.6
8.33	-25	-53.81	-55.26	21.7	81	63.6	50.5
8.63	-25	-53.92	-55.2	24.02	81.3	64.1	52.2
8.41	-25	-53.6	-55.29	24.15	81.8	63.6	48
8.42	-25	-53.55	-55.1	21.7	81.4	63.5	52.3
8.56	-25	-53.6	-54.98	24.08	81.7	64	52.7
8.47	-25	-53.6	-55.1	24.21	82.1	63.6	49.8
8.52	-25	-53.71	-55.2	21.73	82	63.5	52
8.41	-25	-53.92	-54.95	21.89	81.6	63.9	51.7
8.6	-25	-53.66	-55.23	24.08	82.5	63.7	49.6
8.38	-25	-53.97	-55.13	24.11	82.8	63.6	50
8.53	-25	-53.66	-55.04	21.46	82.2	63.5	51.8
8.43	-25	-53.81	-55.04	23.41	82.8	64.1	51.9
8.51	-25	-53.71	-55.1	24.08	83.4	63.8	53
8.46	-25	-53.92	-55.13	24.05	83.3	63.7	50
8.42	-25	-53.45	-55.01	21.58	82.8	63.6	50.2
8.7	-25	-53.6	-55.13	24.05	83.1	64.1	53.7
8.41	-25	-54.02	-55.07	24.11	83.2	63.7	51.9
8.51	-25	-54.02	-55.29	21.95	83	63.6	51.6
8.39	-25	-53.45	-55.13	21.49	82.4	64	49.4
8.5	-25	-53.6	-55.2	24.05	82.8	63.8	51.2
8.54	-25	-53.71	-55.13	23.32	82.5	63.6	50.5
8.42	-25	-53.6	-55.01	21.21	81.3	63.9	46.9
8.5	-25	-54.12	-55.07	24.05	81.7	63.8	50.9
8.48	-25	-53.66	-55.1	24.02	81.9	63.6	51.3
8.39	-25	-54.02	-55.07	21.52	81.1	63.7	52.1

8.42	-25	-53.6	-54.98	22.56	80.9	64.1	53
8.56	-25	-53.76	-55.2	24.05	81.2	63.8	52.2
8.45	-25	-53.76	-55.1	24.02	81.3	63.6	52.6
8.13	-25	-54.38	-55.35	21.31	80.8	63.5	51.6
8.62	-25	-53.92	-55.1	23.96	81.1	63.8	48.4
8.45	-25	-53.86	-54.95	24.02	81.3	63.6	51.3
8.38	-25	-53.4	-54.98	21.4	80.7	63.6	51.1
9.2	-25	-53.97	-55.2	23.84	80.8	64.1	52
8.43	-25	-53.86	-55.1	23.96	81.3	63.6	51.7
8.53	-25	-53.71	-55.13	22.5	81.1	63.4	53.1
8.37	-25	-53.66	-55.23	21.15	80.8	63.6	53.6
8.58	-25	-53.86	-55.1	23.9	81.2	63.8	54.9
8.41	-25	-53.92	-55.29	23.93	81.4	63.4	50.9
8.42	-25	-53.92	-55.29	21.25	80.7	63.6	51.6
8.48	-25	-53.76	-55.04	23.81	81.1	63.8	50.3
8.52	-25	-54.44	-55.13	23.99	81.4	63.5	48.7
8.41	-25	-53.86	-55.2	21.79	81.1	63.5	52.2
8.43	-25	-53.66	-55.2	21.31	80.7	63.7	51.6
8.48	-25	-53.5	-55.38	23.93	81.3	63.6	50.8
8.46	-25	-53.71	-55.23	23.96	81.2	63.5	51.6
8.42	-25	-53.14	-55.23	21.03	80.5	63.6	51.6
8.5	-25	-53.45	-55.2	23.93	81.1	63.6	52
8.53	-25	-54.02	-55.1	23.93	81.4	63.5	49.6
8.38	-25	-53.81	-55.35	21.06	80.8	63.6	51.3
8.55	-25	-53.71	-55.23	23.84	81.5	63.6	51.8
8.45	-25	-53.86	-55.04	23.84	81.6	63.5	51.1
8.1	-25	-53.55	-55.2	21.18	81.1	63.5	52.1
8.66	-25	-53.71	-55.23	23.81	81.4	63.9	49
8.45	-25	-53.81	-55.23	23.9	81.8	63.6	54.9
8.53	-25	-54.28	-55.13	22.77	81.9	63.5	51.9
8.37	-25	-53.66	-55.29	21.03	81.2	63.6	51.9
8.54	-25	-53.92	-55.04	23.84	81.8	63.5	48.4
8.53	-25	-53.76	-55.26	23.78	82.1	63.5	50.9
8.32	-25	-53.97	-55.26	21.31	81.4	63.4	51.8
8.48	-25	-53.97	-55.32	23.69	81.5	63.8	50.1
8.49	-25	-53.66	-55.07	23.78	81.8	63.6	53
8.41	-25	-54.02	-55.1	23.81	82	63.5	52.1
8.34	-25	-53.66	-55.2	21.09	81.6	63.5	52.1
8.52	-25	-53.45	-55.26	23.78	81.8	63.9	51.7
8.48	-25	-54.02	-55.07	23.81	82.1	63.4	51.5
8.39	-25	-54.28	-55.04	21.25	81.6	63.4	52.6
8.53	-25	-53.6	-55.04	23.75	81.7	63.8	48.7
8.5	-25	-54.28	-55.13	23.78	82.1	63.4	52.1
8.41	-25	-54.07	-55.07	21.31	81.8	63.5	51.9
8.44	-25	-54.23	-55.04	21.86	81.4	63.8	52.3
8.44	-25	-53.86	-55.1	23.78	81.9	63.5	56.9
8.41	-25	-54.28	-55.2	23.75	82.1	63.5	52.2

8.45	-25	-53.97	-55.32	20.97	81.4	63.5	52.8
8.48	-25	-53.97	-55.47	23.84	82.1	63.7	52.1
8.47	-25	-54.02	-55.26	21.73	82	63.5	55.5
8.44	-25	-53.92	-55.13	21.83	81.5	63.7	51.8
8.5	-25	-53.66	-55.35	23.78	82.1	63.4	51.6
8.48	-25	-53.86	-55.26	23.84	82.1	63.4	50.4
8.51	-25	-53.66	-55.35	21.25	81.7	63.4	51.8
8.35	-25	-53.45	-55.13	20.97	81.2	63.8	50.1
8.57	-25	-54.28	-55.38	23.75	81.9	63.6	53.8
8.43	-25	-54.28	-55.2	23.75	82	63.4	44.9
8.37	-25	-53.97	-55.41	21.03	81.2	63.5	51.6
8.57	-25	-53.97	-55.32	23.78	81.8	63.6	51.6
8.43	-25	-54.69	-55.44	22.71	81.7	63.4	46.7
8.39	-25	-53.66	-55.26	21.03	81	63.6	52.7
8.59	-25	-53.86	-55.23	23.81	81.5	63.7	51.5
8.46	-25	-53.66	-55.26	23.84	81.6	63.4	53.1
8.41	-25	-53.55	-55.47	21.18	81	63.3	51.7
8.44	-25	-53.97	-55.32	23.78	81	63.7	50.9
8.52	-25	-53.6	-55.41	23.78	81.3	63.4	51.6
8.41	-25	-53.81	-55.47	21.55	81.3	63.2	50.5
8.41	-25	-54.33	-55.35	22.62	81	63.7	50.4
8.54	-25	-53.66	-55.29	23.78	81.4	63.2	49
8.44	-25	-53.92	-55.2	22.92	81.3	63.2	51.3
8.38	-25	-53.55	-55.44	21	80.8	63.5	51.2
8.49	-25	-54.02	-55.53	23.84	81.1	63.3	50.1
8.53	-25	-54.02	-55.29	23.17	81.4	63.2	51.5
8.4	-25	-53.97	-55.29	21.7	80.7	63.5	52
8.42	-25	-53.14	-55.41	23.78	81.2	63.2	50.4
8.38	-25	-53.81	-55.29	23.02	81.3	63.1	51.6
8.38	-25	-53.76	-55.32	21	80.8	63.4	50.1
8.55	-25	-53.86	-55.29	23.81	81	63.4	50.2
8.54	-25	-54.33	-55.44	22.77	81.3	63.3	52.5
8.41	-25	-54.07	-55.47	20.97	80.8	63.4	53.2
8.52	-25	-54.23	-55.56	23.78	81	63.3	50.1
8.46	-25	-54.49	-55.26	22.99	81.2	63.3	51
8.35	-25	-53.81	-55.56	21.03	80.9	63.3	52.1
8.46	-25	-53.55	-55.32	23.81	81.3	63.4	51.3
8.39	-25	-53.76	-55.53	23.84	81.6	63.2	49.3
8.38	-25	-54.12	-55.41	21.31	81.1	63	51
8.45	-25	-53.5	-55.47	23.57	80.2	63.6	51.1
8.54	-25	-53.66	-55.47	23.84	80	63.2	49.6
8.5	-25	-53.6	-55.44	23.84	79.8	63.1	51.7
8.45	-25	-54.07	-55.26	21.34	79.2	63	50.8
8.42	-25	-53.92	-55.59	23.53	78.8	63.6	50
8.5	-25	-53.66	-55.59	24.05	79.4	63.2	52.9
8.49	-25	-54.44	-55.29	22.56	79.4	63	51.6
8.41	-25	-54.02	-55.44	21.49	78.7	63.3	51

8.57	-25	-54.07	-55.35	24.05	79.1	63.1	49.2
8.48	-25	-54.02	-55.26	22.59	79.2	63	52.8
8.39	-25	-54.12	-55.53	22.04	78.5	63.3	50.9
8.5	-25	-54.28	-55.38	24.02	79	63	48.9
8.52	-25	-54.02	-55.29	23.99	78.9	62.9	51.7
8.54	-25	-54.28	-55.38	22.07	78.7	62.7	48.7
8.41	-25	-54.12	-55.56	21.25	78	62.8	52
8.49	-25	-53.29	-55.62	24.02	78.6	62.8	51.8
8.5	-25	-54.28	-55.41	23.99	78.5	62.6	53.5
8.55	-25	-53.86	-55.62	21.43	78	62.5	51.4
8.63	-25	-54.23	-55.5	24.02	78	63.2	51.8
8.5	-25	-54.07	-55.47	24.08	78.3	62.5	55.4
8.5	-25	-54.49	-55.38	21.86	78.1	62.5	52.3
8.39	-25	-53.76	-55.5	22.59	77.6	62.9	52.2
8.55	-25	-54.12	-55.44	24.11	78.1	62.6	50.8
8.44	-25	-53.81	-55.56	24.08	78.3	62.5	51
8.13	-25	-54.02	-55.44	21.4	77.6	62.5	52.4
8.57	-25	-53.55	-55.53	24.11	77.7	63	53.3
8.44	-25	-54.54	-55.59	24.15	78	62.5	50.8
8.51	-25	-54.54	-55.59	21.67	77.7	62.4	53.1
8.44	-25	-53.92	-55.62	24.11	77.4	62.8	51.2
8.47	-25	-54.23	-55.62	24.18	77.9	62.5	51.3
8.55	-25	-53.81	-55.53	21.52	77.5	62.4	55.3
8.86	-25	-54.69	-55.71	24.05	77.6	62.9	50.9
8.53	-25	-54.33	-55.62	24.15	77.9	62.2	52
8.48	-25	-54.12	-55.65	22.16	77.8	62.1	50.5
8.38	-25	-54.28	-55.47	21.73	77.3	62.5	52.2
8.56	-25	-54.44	-55.62	24.24	78.1	62.4	51.3
8.47	-25	-53.86	-55.78	23.72	78.3	62.2	50
8.36	-25	-54.28	-55.68	21.34	77.7	62.5	49.4
8.52	-25	-54.12	-55.65	24.15	78.3	62.5	50.8
8.5	-25	-54.59	-55.53	22.89	78.7	62.1	47.5
8.38	-25	-55.01	-55.56	21.55	78	62.6	50.7
8.46	-25	-54.28	-55.68	24.11	78.8	62.4	51.6
8.51	-25	-54.02	-55.53	23.66	79.3	62.2	51.6
8.38	-25	-54.38	-55.59	21.31	78.7	62.5	53.6
8.46	-25	-53.92	-55.59	24.08	79.5	62.4	52.1
8.53	-25	-54.23	-55.59	22.89	79.4	62.4	51.7
8.41	-25	-54.23	-55.47	21.25	79.1	62.5	52.1
8.49	-25	-54.28	-55.47	24.11	79.5	62.5	51.8
8.5	-25	-54.49	-55.9	24.18	79.9	62.5	46.2
8.34	-25	-54.23	-55.56	21.31	79.4	62.5	51.3
8.6	-25	-54.44	-55.84	24.08	79.8	62.9	50.9
8.44	-25	-53.97	-55.84	24.05	80	62.5	50.9
8.51	-25	-53.66	-55.81	21.58	80.3	62.4	50.4
8.43	-25	-54.44	-55.74	22.8	79.9	62.7	52
8.39	-25	-54.44	-55.65	24.02	81	62.6	51.3

8.52	-25	-54.85	-55.68	23.6	81.3	62.5	51
8.41	-25	-54.54	-55.59	21.28	81	62.6	52.8
8.46	-25	-53.55	-55.5	24.05	81.6	63	51.1
8.47	-25	-54.38	-55.62	24.02	82	62.8	54.6
8.49	-25	-54.69	-55.68	23.75	82.3	62.7	51.1
8.42	-25	-54.38	-55.56	21.25	82.1	62.8	53
8.57	-25	-54.07	-55.68	23.93	82.8	63	50.5
8.51	-25	-54.07	-55.62	23.99	83.1	62.9	53.8
8.15	-25	-54.07	-55.56	21.37	82.7	62.8	51.6
9.92	-25	-54.75	-55.65	23.78	83.2	63.5	50.5
8.52	-25	-54.33	-55.59	23.93	83.8	63.2	50.7
8.45	-25	-53.71	-55.74	23.35	84.2	63.1	51.6
8.33	-25	-54.38	-55.74	21.15	84	63.3	51.6
8.56	-25	-54.75	-55.65	23.93	84.8	63.5	49.8
8.46	-25	-54.69	-55.59	23.84	85	63.2	53.1
8.39	-25	-54.02	-55.62	21.09	84.2	63.6	52
8.5	-25	-54.28	-55.9	23.78	84.8	63.6	51.2
8.43	-25	-53.86	-55.74	21.37	84.2	63.4	51.4
8.81	-25	-54.33	-55.78	23.78	84.6	64.1	50.9
8.48	-25	-54.02	-55.9	23.81	85.2	63.6	50.7
8.41	-25	-53.97	-55.65	23.78	85.3	63.5	49.7
7.97	-25	-54.75	-55.71	21.21	85.1	63.6	50
8.54	-25	-54.44	-55.74	23.69	84.9	64	52.6
8.38	-25	-54.33	-55.78	23.75	85.2	63.7	51.2
8.5	-25	-54.75	-55.53	21.34	84.5	63.7	48
8.44	-25	-54.12	-55.71	22.8	84.5	64	52.2
8.44	-25	-54.59	-55.68	23.75	85.1	63.9	51.7
8.44	-25	-54.33	-55.78	21.89	84.4	63.7	52.1
8.44	-25	-54.12	-55.68	20.97	83.2	64	51
8.61	-25	-54.44	-55.78	23.69	83.4	64.1	44.6
8.48	-25	-53.6	-55.87	23.75	83.3	63.8	54
8.41	-25	-54.64	-55.59	21.49	83.2	63.8	50.5
8.44	-25	-53.81	-55.53	22.53	82.7	64.1	50.7
8.52	-25	-54.28	-55.93	23.75	83.1	63.8	55
8.5	-25	-54.02	-55.71	21.92	83	63.7	51.4
8.38	-25	-54.02	-55.74	21.46	82.2	64.1	51
8.48	-25	-53.76	-55.68	23.66	82.9	63.8	50.2
8.54	-25	-54.9	-55.78	21.98	82.8	63.6	49.1
8.36	-25	-54.02	-55.71	21.21	82.1	64.1	49.9
8.42	-25	-54.33	-55.87	23.81	82.9	63.7	51.4
8.5	-25	-54.54	-55.78	22.89	83.1	63.7	51.1
8.44	-25	-54.64	-55.78	20.85	82.3	63.9	53.6
8.46	-25	-54.33	-55.81	23.75	82.8	63.8	51.6
8.5	-25	-54.38	-55.68	23.75	83	63.6	51.8
8.32	-25	-53.97	-55.81	21.15	82.5	63.6	51.9
8.44	-25	-54.8	-55.81	23.66	82.7	64	52.2
8.54	-25	-54.12	-55.74	23.72	82.9	63.9	50.5

8.37	-25	-55.01	-55.62	23.78	83	63.6	50.1
7.76	-25	-54.59	-55.84	21.12	82.4	63.6	48.7
8.45	-25	-54.38	-55.71	23.44	82.4	64.1	51.3
8.44	-25	-54.44	-55.84	23.72	82.9	63.9	52
8.52	-25	-54.49	-55.65	23.29	83	63.6	51.9
8.35	-25	-53.86	-55.84	20.97	82.4	63.7	50.4
8.59	-25	-54.23	-55.71	23.72	82.8	63.8	51.2
8.42	-25	-54.28	-55.78	23.69	83.1	63.8	47.3
7.99	-25	-54.28	-55.84	21.09	82.4	63.7	51.7
8.68	-25	-54.49	-55.84	23.72	82.7	64.2	51.7
8.53	-25	-54.23	-55.78	23.72	82.9	63.7	51.5
8.41	-25	-54.75	-55.74	23.72	83	63.6	53
7.8	-25	-54.69	-55.65	21.15	82.2	63.5	49.9
8.41	-25	-54.44	-55.68	23.57	82.2	64.1	51.4
8.53	-25	-54.33	-55.68	23.81	82.7	63.6	55.6
8.38	-25	-54.38	-55.65	21.89	82.7	63.6	51.3
8.43	-25	-54.75	-55.68	21.28	81.9	63.8	50.3
8.43	-25	-54.64	-55.71	23.81	82.4	63.9	52
8.51	-25	-54.12	-55.81	23.14	82.5	63.6	51
8.39	-25	-54.49	-55.87	21	82	63.7	49.9
8.5	-25	-54.59	-55.81	23.72	82.4	63.8	52.2
8.53	-25	-54.28	-55.78	23.78	82.7	63.5	50.3
8.42	-25	-53.92	-55.74	21.15	82.1	63.6	52.8
8.44	-25	-54.64	-55.9	23.81	81.9	64	52
8.43	-25	-54.23	-55.56	23.78	82.1	63.6	47
8.44	-25	-54.33	-55.84	22.25	82.1	63.5	53
8.41	-25	-54.8	-55.65	20.97	81.6	63.6	50.1
8.52	-25	-54.28	-55.71	23.81	82	63.6	49.6
8.41	-25	-54.33	-55.65	23.78	82.1	63.3	51.6
8.41	-25	-54.75	-55.68	21.06	81.4	63.6	52.8
8.54	-25	-54.23	-55.71	23.78	81.8	63.6	49
8.41	-25	-54.02	-55.84	23.84	82.1	63.4	51
8.37	-25	-54.8	-55.71	21.06	81.6	63.5	49.5
8.59	-25	-54.85	-55.68	23.75	81.9	63.6	51.3
8.42	-25	-54.59	-55.9	23.84	82.1	63.4	46
8.44	-25	-54.75	-55.84	21.46	81.9	63.3	53.2
8.43	-25	-54.23	-55.81	20.97	81.4	63.6	49.7
8.52	-25	-54.44	-55.84	23.75	81.9	63.6	51.2
8.39	-25	-53.66	-55.65	23.75	82.1	63.4	46.2
8.5	-25	-54.38	-55.84	21.37	81.8	63.4	52.1
8.44	-25	-54.69	-55.81	23.47	81.6	63.7	51.6
8.46	-25	-53.86	-55.71	23.75	82	63.3	49
8.39	-25	-54.44	-55.87	21.06	81.6	63.3	48.3
8.57	-25	-54.49	-55.81	23.78	81.8	63.8	51.6
8.51	-25	-54.64	-55.87	23.81	82.1	63.4	50.4
8.51	-25	-54.44	-55.78	21.34	81.8	63.3	52.4
8.43	-25	-54.33	-55.74	23.44	81.5	63.7	52

8.41	-25	-54.69	-55.68	23.84	82.1	63.3	50.5
8.47	-25	-54.69	-55.81	22.77	82	63.2	50.1
8.39	-25	-53.86	-55.9	21.03	81.4	63.4	52
8.52	-25	-54.69	-55.93	23.78	81.8	63.5	51.4
8.4	-25	-54.69	-55.71	23.84	82	63.2	46.5
8.42	-25	-55.32	-55.78	21.25	81.6	63.2	53
8.45	-25	-54.64	-55.81	23.47	81.4	63.6	50.5
8.52	-25	-54.75	-56.02	23.84	81.8	63.4	51.1
8.48	-25	-54.95	-55.84	23.81	81.9	63.2	50.1
8.36	-25	-54.38	-55.74	21.09	81.3	63.2	50.5
8.46	-25	-54.8	-55.87	23.81	81.6	63.6	49.4
8.45	-25	-54.38	-55.84	23.84	82	63.3	52.1
8.48	-25	-54.44	-55.93	21.09	81.3	63	54.7
8.94	-25	-54.23	-56.08	23.72	81.4	63.6	51.8
8.53	-25	-54.64	-55.81	23.78	81.9	63.1	51.9
8.51	-25	-54.75	-55.87	22.1	81.8	63.1	51.1
8.38	-25	-54.02	-55.78	21	81.2	63.3	51.6
8.52	-25	-54.28	-55.81	23.75	81.7	63.5	45.7
8.41	-25	-54.75	-55.78	23.81	81.8	63.1	51
8.41	-25	-54.23	-55.81	23.32	81.8	63.1	53.5
8.35	-25	-54.95	-55.87	21.03	81.3	63.2	50.5
8.46	-25	-54.54	-55.87	23.75	81.8	63.5	48.7
8.46	-25	-54.54	-55.99	23.81	82	63.2	50.8
8.38	-25	-54.59	-55.84	21.09	81.3	63.3	51.9
8.44	-25	-54.54	-55.99	23.78	81.8	63.2	52.1
8.46	-25	-54.69	-55.74	22.62	81.8	63	57.1
8.37	-25	-54.33	-55.93	21	81.1	63.2	51.7
8.54	-25	-54.75	-55.87	23.75	81.7	63.5	52.1
8.5	-25	-54.59	-55.93	23.78	81.9	63.1	46.5
8.5	-25	-54.69	-55.9	21.21	81.7	63.1	51
8.44	-25	-54.23	-55.68	23.53	81.7	63.6	52.1
8.5	-25	-54.33	-55.93	23.84	82	63.3	51.5
8.48	-25	-54.23	-55.9	23.72	82.1	63.2	54.4
8.2	-25	-54.9	-55.78	21.03	81.8	63.1	49.4
8.47	-25	-54.75	-55.9	23.63	81.9	63.7	52
8.53	-25	-54.33	-55.74	23.75	82.7	63.3	54.6
8.47	-25	-54.75	-55.68	23.78	82.5	63.2	53.4
8.24	-25	-54.8	-55.81	21.18	82.1	63.2	53
8.44	-25	-54.95	-55.9	23.72	82.5	63.6	51.3
8.43	-25	-54.64	-55.9	23.78	83.1	63.2	49.4
8.42	-25	-54.59	-55.9	21.03	82.7	63.2	50.5
8.56	-25	-54.69	-55.9	23.81	83.2	63.5	49.9
8.4	-25	-54.8	-55.93	22.1	83.2	63.3	51.1
8.38	-25	-54.85	-55.84	23.38	83.1	63.6	51.6
8.51	-25	-55.06	-56.02	23.78	83.7	63.4	53.2
8.5	-25	-54.33	-55.9	21.12	83.4	63.3	49.4
8.57	-25	-54.64	-56.08	23.69	84.1	63.9	52.1

8.48	-25	-54.85	-55.9	23.75	84.9	63.6	48.3
8.46	-25	-54.59	-55.99	22.07	85.7	63.6	50.9
8.37	-25	-54.28	-56.05	21.21	85.3	63.9	52
8.47	-25	-54.59	-55.87	23.63	86.1	63.7	51.8
8.5	-25	-54.28	-56.05	22.59	86.5	63.7	50.7
8.38	-25	-54.28	-55.9	20.85	86.5	64	52.7
8.48	-25	-55.11	-55.74	23.63	87.4	64	51.5
8.46	-25	-54.69	-55.74	22.04	87.6	64	53.6
8.41	-25	-54.8	-56.05	22.5	87.7	64.4	51.7
8.47	-25	-54.54	-55.74	23.66	88.1	64.2	51.7
8.42	-25	-54.02	-55.93	21.43	88.1	64.2	50.5
8.41	-25	-54.38	-56.02	23.14	87.5	64.8	54.5
8.43	-25	-54.64	-55.99	23.5	88.5	64.4	52.2
8.49	-25	-54.59	-55.74	22.01	88.2	64.3	53.6
8.41	-25	-55.01	-56.02	21.28	87.6	64.8	52.2
8.39	-25	-54.12	-55.9	23.75	88.4	64.7	52.1
8.53	-25	-54.54	-55.99	21.43	88.9	64.7	51.8
8.42	-25	-53.86	-56.05	23.38	88.9	65.3	51.6
8.53	-25	-54.85	-55.99	23.5	89.7	65.1	50.5
8.42	-25	-54.23	-55.93	22.04	89.5	64.8	51.9
8.38	-25	-54.75	-56.08	20.85	88.8	65.4	51.4
8.54	-25	-54.59	-55.93	23.5	89.7	65.2	51.3
8.39	-25	-54.8	-55.84	21.67	89.7	65	51.9
8.41	-25	-54.59	-55.93	22.31	89.4	65.7	51.6
8.45	-25	-54.38	-55.87	23.53	89.8	65.3	53.1
8.5	-25	-54.54	-55.87	20.94	89.2	65.3	52
8.46	-25	-54.75	-55.99	23.47	89.5	65.7	51
8.5	-25	-54.8	-55.74	23.53	90	65.4	51.8
8.27	-25	-54.12	-55.81	20.91	89.5	65.4	52.2
8.6	-25	-54.64	-55.71	23.47	89.9	65.9	51.6
8.42	-25	-54.9	-55.87	23.47	89.7	65.7	50.5
7.77	-25	-54.33	-55.84	20.76	89.3	65.7	53.2
8.48	-25	-55.53	-55.93	23.47	89.6	65.8	51.7
8.51	-25	-54.44	-56.02	21.98	89.6	65.8	51.6
8.44	-25	-54.64	-55.87	23.02	89	66.1	49.7
8.44	-25	-54.9	-55.78	23.47	89.6	65.8	51.9
8.5	-25	-55.06	-55.65	20.94	89.4	65.8	53
8.62	-25	-54.95	-55.99	23.47	89.5	66.3	51
8.51	-25	-54.44	-55.78	23.44	89.4	65.9	51.6
8.4	-25	-54.85	-55.99	20.85	88.7	65.7	51.4
9.21	-25	-54.59	-55.81	23.32	88.6	66.3	53.6
8.46	-25	-54.33	-55.93	23.53	88.5	66	46.3
8.44	-25	-54.95	-55.71	21.15	88.1	65.9	51
8.41	-25	-54.44	-55.9	20.82	87.3	66.1	51.6
8.43	-25	-53.86	-55.84	23.5	87.9	66	54
8.49	-25	-54.49	-55.9	23.41	87.7	65.8	46.5
8.39	-25	-54.59	-56.05	20.67	86.8	66.1	52.8

8.46	-25	-54.8	-55.9	23.5	87.4	65.8	50.1
8.52	-25	-54.85	-55.99	21.15	87	65.7	52.1
8.42	-25	-53.71	-56.02	22.83	86.6	66.2	50.9
8.52	-25	-54.54	-55.99	23.47	87	65.8	52.6
8.41	-25	-53.76	-55.81	21.46	86.6	65.7	51.6
8.44	-25	-55.63	-55.84	22.86	86.3	66.1	51.4
8.4	-25	-54.64	-55.9	23.5	86.5	65.8	51.6
8.47	-25	-54.85	-55.87	21	86.3	65.6	50.5
8.42	-25	-54.8	-55.87	23.44	86.2	66.1	51.2
8.48	-25	-54.54	-55.99	23.53	86.4	65.6	49.7
7.97	-25	-54.69	-55.93	20.82	86	65.6	52.6
8.55	-25	-54.85	-56.02	23.47	86.3	65.7	52.5
8.42	-25	-54.8	-55.99	23.57	86.4	65.6	51.4
8.43	-25	-54.8	-55.78	21.06	85.9	65.3	53.7
8.41	-25	-54.02	-56.08	23.38	85.9	66.1	50.4
8.52	-25	-54.69	-55.99	23.5	86.1	65.6	50.1
8.38	-25	-54.85	-55.9	22.74	86.1	65.3	51.5
8.38	-25	-54.9	-55.93	20.67	85.3	65.6	52.8
8.49	-25	-54.75	-55.78	23.53	85.8	65.5	52.4
8.36	-25	-54.54	-55.93	23.57	85.7	65.3	51.4
8.08	-25	-54.49	-56.02	20.91	85.4	65.2	51.1
8.45	-25	-54.75	-55.9	23.47	85.4	65.8	48.8
8.41	-25	-54.8	-56.11	23.57	85.6	65.3	53.1
8.49	-25	-54.95	-55.87	22.16	85.8	65.2	51.8
8.4	-25	-54.9	-55.81	21.15	85.1	65.5	51.2
8.47	-25	-54.33	-55.93	23.6	85.7	65.2	50
8.42	-25	-54.38	-56.02	22.86	85.6	65.1	52.5
8.39	-25	-54.59	-56.02	20.79	85	65.4	52
8.56	-25	-55.21	-56.02	23.57	85.4	65.3	52.8
8.39	-25	-54.69	-56.02	23.57	85.3	65	51.4
8.37	-25	-54.9	-56.02	20.79	84.6	65.2	51.1
8.49	-25	-55.01	-55.81	23.57	85.1	65.3	50.5
8.47	-25	-54.75	-55.99	23.6	85.3	64.9	53.2
8.35	-25	-55.16	-56.08	20.76	84.4	65	51.6
8.52	-25	-54.23	-56.05	23.5	85	65.2	49.6
8.49	-25	-54.95	-55.99	23.57	85	65	49.2
8.44	-25	-54.23	-56.11	22.53	85	64.9	52
8.36	-25	-54.75	-55.84	20.7	84.2	65	50.9
8.52	-25	-55.06	-55.81	23.5	84.6	64.8	52.2
8.44	-25	-54.44	-55.87	22.31	84.6	64.7	50
8.37	-25	-54.54	-56.02	20.91	84	65.1	52.1
8.5	-25	-54.85	-55.93	23.53	84.4	64.8	53.8
8.51	-25	-54.85	-55.9	23.53	84.6	64.7	51.4
8.23	-25	-54.12	-55.99	20.97	84.2	64.7	54.1
8.5	-25	-54.49	-56.11	23.6	84.2	65	52.1
8.4	-25	-54.49	-55.93	23.53	84.5	64.7	51.2
8.43	-25	-54.38	-56.08	20.94	84.1	64.5	52.8

8.63	-25	-54.49	-56.08	23.57	84.2	65.2	52.8
8.5	-25	-54.85	-55.81	23.63	84.3	64.5	53.8
8.51	-25	-55.16	-56.02	20.91	83.7	64.4	52.4
8.42	-25	-55.16	-56.05	22.92	83.6	65	53.3
8.44	-25	-55.37	-56.11	23.53	84.1	64.7	49.6
8.39	-25	-54.69	-55.93	23.63	84.2	64.3	50.8
8.35	-25	-54.8	-56.08	20.79	83.6	64.5	50.3
8.47	-25	-54.07	-56.17	23.6	83.9	64.9	51.6
8.38	-25	-54.85	-55.93	23.63	83.9	64.4	51.8
8.35	-25	-54.9	-56.08	20.76	83.2	64.7	53
8.43	-25	-54.8	-55.9	23.63	83.6	64.5	51.4
8.41	-25	-55.01	-56.11	21.25	83.6	64.2	51.1
9.03	-25	-54.8	-55.9	23.6	83.4	65	49.5
8.38	-25	-54.75	-56.14	23.66	83.8	64.3	51.5
8.22	-25	-55.16	-56.11	21.06	83	64.2	51.6
8.51	-25	-54.59	-56.14	23.6	83.3	64.7	53.7
8.44	-25	-54.8	-56.14	23.69	83.2	64.2	51.6
8.37	-25	-54.64	-56.11	21	82.4	64.3	51.4
8.53	-25	-55.11	-56.02	23.66	82.7	64.4	51.6
8.47	-25	-54.69	-55.99	23.63	83	64.2	47.6
8.33	-25	-54.44	-56.17	20.91	82.2	64.3	50.2
8.5	-25	-54.49	-56.08	23.57	83.1	64.3	49.2
8.53	-25	-54.75	-56.05	23.75	83.2	64	51.6
8.38	-25	-54.38	-56.08	21.18	82.8	63.9	52.9
8.47	-25	-54.95	-56.14	23.66	83.2	64.5	52.1
8.45	-25	-54.8	-56.11	23.66	83.2	64	50.8
8.47	-25	-54.59	-56.17	23.72	83.5	63.9	51.2
8.36	-25	-54.49	-56.02	20.97	83.3	63.9	48.8
8.37	-25	-54.49	-55.99	20.76	83.3	64.3	48.7
8.54	-25	-55.01	-55.99	23.6	84	64.4	48.4
8.5	-25	-55.37	-56.2	23.69	84.4	63.9	51.8
8.52	-25	-54.9	-56.17	21.09	84.4	64	52.9
8.44	-25	-55.06	-56.23	23.6	84.4	64.5	55.1
8.5	-25	-54.9	-56.08	23.63	84.9	64.1	52.6
8.41	-25	-54.59	-56.14	21.15	85.2	63.8	51.6
8.56	-25	-54.69	-56.23	23.66	85.6	64.5	50.4
8.49	-25	-54.95	-56.17	23.57	86.2	64.2	50.9
8.34	-25	-53.92	-56.26	20.82	85.8	64.4	48.8
8.44	-25	-55.01	-56.23	23.66	86.4	64.7	51.6
8.51	-25	-54.64	-56.2	22.53	87	64.4	50.8
8.36	-25	-54.75	-56.23	21.12	86.6	64.8	53
8.48	-25	-54.85	-56.29	23.63	87.5	64.8	49.5
8.54	-25	-55.11	-56.14	21.58	87.9	64.7	50.7
8.41	-25	-54.8	-56.14	22.53	87.7	65.2	52
8.48	-25	-54.95	-56.29	23.53	88.7	65	54.2
8.44	-25	-54.69	-56.29	21.31	88.6	64.7	56
8.43	-25	-54.75	-56.14	22.77	89.2	65.5	52.1

8.42	-25	-55.47	-56.23	23.63	89.5	65.1	51.2
8.5	-25	-55.01	-56.08	21.28	89.9	65.1	51.3
8.43	-25	-54.9	-56.08	21.83	90.5	65.7	51.8
8.47	-25	-54.59	-56.2	23.5	91.4	65.7	53.8
8.43	-25	-55.27	-56.11	23.63	90.8	65.6	51.3
8.25	-25	-55.01	-56.36	21	90.1	65.6	51.6
8.48	-25	-54.85	-56.14	23.53	90.6	65.9	51.9
8.42	-25	-54.69	-56.23	23.57	90.9	65.8	53.7
8.37	-25	-54.8	-56.2	20.79	91	65.9	51.5
8.48	-25	-54.8	-56.23	23.5	91.9	66	51.3
8.44	-25	-55.06	-56.29	22.68	92.1	65.7	50.9
8.41	-25	-55.06	-56.2	21.28	92	66.2	51.2
8.45	-25	-54.95	-56.26	23.47	93	66.2	50.5
8.46	-25	-54.23	-56.32	21.28	93.5	65.8	51.9
8.42	-25	-54.54	-56.14	23.32	93.8	66.8	51
8.41	-25	-54.75	-56.17	23.38	94.1	66.3	45.7
8.43	-25	-55.32	-56.14	20.85	93.5	66.4	50.5
9.56	-25	-54.8	-56.39	23.32	93.7	67	45.7
8.51	-25	-54.64	-56.11	23.38	92.9	66.6	52.1
8.44	-25	-55.68	-56.17	21.52	92.5	66.5	52
8.39	-25	-55.16	-55.9	20.67	92.4	66.9	51.6
8.57	-25	-54.85	-56.32	23.32	93.8	66.8	53.4
8.44	-25	-54.64	-56.2	23.38	93.6	66.6	53.9
8.36	-25	-54.64	-56.26	20.6	93.5	66.8	51.6
8.6	-25	-54.9	-56.2	23.41	93.7	67	51.6
8.41	-25	-55.27	-56.11	23.38	93.5	66.8	51.4
8.37	-25	-54.69	-56.26	20.63	92.8	67	50.5
8.59	-25	-54.8	-56.17	23.35	93.1	67.2	52.3
8.41	-25	-54.28	-56.23	22.89	93	66.8	50.7
8.44	-25	-54.95	-56.23	21.64	93	67.5	47.8
8.44	-25	-55.01	-56.2	23.38	93	67.1	51.2
8.47	-25	-55.01	-56.17	21.31	93	66.9	50.3
8.45	-25	-54.9	-56.29	21.28	93	67.5	51.9
8.4	-25	-55.01	-56.2	23.35	93.2	67.1	49.4
8.51	-25	-55.37	-56.29	21.58	93.6	67	54.6
8.41	-25	-54.59	-56.26	21.79	93.3	67.6	50.9
8.46	-25	-55.16	-56.26	23.38	93.3	67.3	52.9
8.52	-25	-54.33	-56.17	21.83	93.6	67.1	50.8
8.38	-25	-55.06	-56.26	20.54	93.1	67.6	51.1
8.56	-25	-55.06	-56.26	23.32	93.7	67.4	52.4
8.43	-25	-55.16	-56.11	23.35	93.3	67.2	49.2
7.97	-25	-55.27	-56.08	20.7	92.9	67.1	52.4
9.22	-25	-55.27	-56.32	23.32	93	68	52.3
8.47	-25	-55.16	-56.26	23.29	93.3	67.5	53.8
8.48	-25	-55.06	-56.26	20.94	92.8	67.3	50.9
8.52	-25	-55.27	-56.17	23.29	92.7	67.8	49.4
8.54	-25	-54.75	-56.05	23.32	92.6	67.6	54.6

8.36	-25	-54.33	-56.2	20.63	91.9	67.5	51.5
8.52	-25	-54.59	-56.23	23.26	92.2	67.6	49.9
8.48	-25	-54.69	-56.17	22.07	92.3	67.3	52.3
8.37	-25	-54.75	-56.29	20.54	91.7	67.6	51.6
8.54	-25	-55.21	-56.29	23.32	91.7	67.4	49.7
8.45	-25	-54.59	-56.23	23.35	91.7	67.1	51.3
8.32	-25	-54.49	-56.23	20.76	91	67.1	47.9
8.68	-25	-54.75	-56.36	23.29	91	67.8	52
8.41	-25	-54.75	-56.23	23.38	90.9	67.1	51.2
8.44	-25	-54.8	-56.23	20.76	90.6	67	52.4
8.44	-25	-54.85	-56.32	23.17	90.3	67.7	52.8
8.47	-25	-54.54	-56.23	23.41	90	67	52.2
8.39	-25	-54.9	-56.36	21.49	89.4	66.9	54.6
8.41	-25	-54.85	-56.29	21.89	88.6	67.3	51.5
8.51	-25	-54.69	-56.26	23.41	88.6	66.9	52.4
8.51	-25	-55.27	-56.36	21.83	88.1	66.6	52.7
8.36	-25	-54.75	-56.32	20.63	87.4	67	50.2
8.5	-25	-54.02	-56.23	23.44	87.3	67	52.2
8.44	-25	-54.64	-56.39	23.47	87.2	66.6	52.2
7.78	-25	-54.9	-56.29	20.85	86.3	66.5	49.7
8.46	-25	-55.27	-56.23	23.47	86.3	66.7	52.5
8.41	-25	-54.8	-56.42	23.53	86.1	66.4	49.6
8.38	-25	-55.21	-56.39	20.91	85.4	66.1	52
8.59	-25	-55.63	-56.17	23.6	85.3	66.8	52
8.42	-25	-54.95	-56.32	23.57	85.3	66.2	50.5
8.26	-25	-54.59	-56.29	21.06	84.8	65.9	51.9
8.75	-25	-55.06	-56.42	23.47	84.4	66.7	53
8.42	-25	-55.06	-56.45	23.6	84.5	66	53.8
8.51	-25	-55.06	-56.29	21.4	84.3	65.8	53.8
8.43	-25	-54.85	-56.39	21.92	83.7	66.1	51.6
8.52	-25	-55.21	-56.36	23.63	84	65.8	51.7
8.43	-25	-55.01	-56.32	23.69	83.9	65.7	53.8
8.14	-25	-54.9	-56.39	20.82	83.2	65.6	52.4
8.61	-25	-55.27	-56.36	23.66	83.3	65.9	51.9
8.47	-25	-55.11	-56.48	23.69	83.4	65.4	49.5
8.39	-25	-54.95	-56.32	21.92	83.2	65.3	52.4
8.38	-25	-55.32	-56.45	20.82	82.4	65.4	52
8.5	-25	-55.16	-56.26	23.63	82.7	65.6	50.9
8.47	-25	-54.69	-56.51	23.75	82.8	65.2	48.8
7.75	-25	-55.06	-56.39	20.97	81.9	65.1	52.5
8.55	-25	-54.95	-56.39	23.69	82.1	65.4	50.5
8.36	-25	-54.75	-56.42	23.72	82.2	65	50.3
8.51	-25	-55.21	-56.39	21.4	82	64.8	50.2
8.39	-25	-55.11	-56.36	21.18	81.6	65.2	51.1
8.52	-25	-55.11	-56.48	23.66	82	64.8	51.7
8.48	-25	-55.21	-56.45	23.72	81.9	64.7	55.1
8.35	-25	-55.37	-56.45	23.17	81.7	64.5	52.9

8.1	-25	-55.37	-56.63	21.09	81.1	64.4	52.7
8.39	-25	-55.01	-56.39	23.5	81.1	65	51.8
8.44	-25	-54.75	-56.26	23.81	81.5	64.4	46.2
8.48	-25	-54.9	-56.6	22.19	81.2	64.2	51.6
8.41	-25	-55.21	-56.39	20.85	80.3	64.5	59.6
8.45	-25	-54.54	-56.42	23.75	81	64.3	51.9
8.41	-25	-54.54	-56.42	23.81	81.5	64.1	54.8
8.42	-25	-55.32	-56.29	21.15	81	64.1	52.7
8.42	-25	-55.21	-56.32	22.86	80.6	64.5	50.7
8.46	-25	-55.11	-56.45	23.75	80.9	63.9	50
8.47	-25	-55.16	-56.42	23.78	80.8	63.8	50.9
8.28	-25	-55.27	-56.54	21.25	80.1	63.8	52.9
8.4	-25	-55.27	-56.42	22.59	79.9	64.2	50.5
8.39	-25	-54.9	-56.54	23.84	80.5	63.9	52.3
8.42	-25	-55.27	-56.36	22.71	80.2	63.7	51.5
8.38	-25	-55.16	-56.42	21.55	79.3	64.1	50.2
8.52	-25	-55.63	-56.42	23.84	79.9	63.7	52.1
8.47	-25	-55.21	-56.45	22.19	79.9	63.6	53.2
8.34	-25	-55.21	-56.57	21.28	79	63.9	51.6
8.51	-25	-54.8	-56.48	23.84	79.6	63.6	52.4
8.49	-25	-54.9	-56.57	23.84	79.7	63.4	50.8
8.29	-25	-55.53	-56.48	21.31	79.1	63.3	51.4
8.43	-25	-55.06	-56.26	22.62	78.9	63.8	52.3
8.4	-25	-55.11	-56.36	23.84	79.4	63.5	49.1
8.48	-25	-54.9	-56.45	23.81	79.7	63.3	50.2
8.43	-25	-54.75	-56.57	21.18	79.1	63.2	49.1
8.37	-25	-54.8	-56.39	21.31	78.8	63.5	52.4
8.55	-25	-54.9	-56.54	23.84	79.7	63.5	52.8
8.44	-25	-55.94	-56.42	23.84	79.9	63.3	48.9
8.33	-25	-55.11	-56.57	21	79.6	63.3	51.7
8.51	-25	-55.32	-56.54	23.81	80.1	63.3	51.6
8.49	-25	-55.06	-56.45	23.78	80.8	63.1	51.9
8.36	-25	-54.95	-56.36	21.28	80.5	63	52.6
8.35	-25	-55.16	-56.29	22.25	80.1	63.6	52.7
8.47	-25	-54.95	-56.36	23.81	81.1	63.3	50.8
8.5	-25	-54.95	-56.36	23.81	81.7	63	45.4
8.07	-25	-55.47	-56.42	21.06	81.3	63.1	53.1
8.54	-25	-55.27	-56.51	23.72	81.8	63.6	51.4
8.39	-25	-55.21	-56.45	23.78	82.5	63.2	51.9
8.5	-25	-55.37	-56.57	21.49	82.4	63.1	52
8.37	-25	-56.25	-56.45	20.85	82.5	63.5	51.4
8.55	-25	-55.01	-56.54	23.75	83.6	63.5	51.1
8.45	-25	-54.85	-56.6	23.75	84.2	63.3	50.8
7.99	-25	-54.9	-56.51	21.18	84.2	63.3	52.6
9.82	-25	-55.01	-56.42	23.53	85	64.1	50.9
8.46	-25	-55.63	-56.42	23.69	85.7	63.5	51.9
8.44	-25	-55.21	-56.39	23.66	86.3	63.5	52.2

8.15	-25	-55.21	-56.57	20.97	86.2	63.7	49.8
8.45	-25	-54.9	-56.57	23.57	86.7	64.3	52.5
8.51	-25	-55.01	-56.57	23.5	87.5	63.8	53.2
8.46	-25	-54.49	-56.57	21.49	87.9	64	53
8.36	-25	-55.63	-56.42	20.67	88.3	64.4	51.7
8.55	-25	-54.85	-56.45	23.44	88.8	64.4	53.1
8.41	-25	-55.32	-56.6	23.53	89.6	64.3	52.7
8.41	-25	-55.16	-56.75	20.76	89.5	64.7	50
8.52	-25	-55.53	-56.48	23.41	90.6	64.7	50.7
8.44	-25	-55.11	-56.48	23.26	91	64.5	49.9
8.39	-25	-54.9	-56.51	20.7	90.6	64.9	52.3
8.57	-25	-55.21	-56.51	23.38	91.1	65	50.7
8.43	-25	-55.11	-56.54	23.6	91.7	64.9	51.1
8.42	-25	-55.06	-56.45	20.73	91.6	64.9	51.6
8.44	-25	-55.11	-56.57	23.38	91.6	65.7	52.3
8.53	-25	-55.63	-56.42	23.35	92.2	65.3	54.6
8.52	-25	-55.37	-56.45	21.09	91.7	65.3	50.7
8.41	-25	-55.53	-56.48	22.25	91	65.8	51.8
8.46	-25	-55.73	-56.45	23.32	91.9	65.6	54
8.46	-25	-55.01	-56.42	21.34	92.6	65.4	50.9
8.37	-25	-55.06	-56.48	20.51	92.9	66	53.6
8.48	-25	-55.27	-56.54	23.32	93.9	65.9	47.8
8.46	-25	-55.27	-56.69	23.29	93.8	65.8	51.2
8.36	-25	-55.53	-56.51	20.48	93.5	66.1	50.7
8.51	-25	-54.95	-56.6	23.23	93.8	66.3	54.4
8.45	-25	-55.16	-56.48	22.65	94	66.1	50.5
8.41	-25	-55.11	-56.48	20.91	93.3	66.5	51.3
8.54	-25	-55.11	-56.48	23.2	93.9	66.3	51.1
8.52	-25	-55.11	-56.45	21.49	93.7	66.3	52.2
8.39	-25	-55.16	-56.36	21.25	93.2	66.8	51.8
8.46	-25	-55.37	-56.6	23.2	93.9	66.7	52.5
8.53	-25	-55.06	-56.45	21	93.7	66.6	51
9.39	-25	-54.8	-56.51	23.05	93.8	67.2	50.9
8.47	-25	-55.21	-56.6	23.17	93.9	66.8	52.6
8.45	-25	-54.85	-56.42	20.57	93.7	66.7	52.5
9.82	-25	-54.95	-56.6	22.95	93.6	67.4	52.6
8.52	-25	-55.32	-56.48	23.17	93.9	66.9	53.1
8.37	-25	-54.49	-56.48	20.73	93.8	66.8	56.6
8.43	-25	-55.11	-56.48	22.16	93.5	67.5	51.8
8.47	-25	-55.32	-56.54	23.14	94	67.1	51.4
8.44	-25	-54.85	-56.63	21.18	94	67.1	50.8
8.43	-25	-55.27	-56.54	22.1	93.9	67.6	50.5
8.34	-25	-54.9	-56.39	23.08	94.2	67.4	51.6
8.43	-25	-55.27	-56.39	20.54	94	67	52.1
8.48	-25	-54.8	-56.51	23.08	94.4	67.6	51.6
8.5	-25	-55.32	-56.48	23.02	94.5	67.3	49.5
8.37	-25	-54.9	-56.45	20.51	94	67.2	53.1

8.44	-25	-54.85	-56.51	22.68	94	68	51.9
8.49	-25	-55.21	-56.69	23.08	94.1	67.7	50
8.4	-25	-54.75	-56.63	21.64	93.8	67.4	52.5
8.43	-25	-55.21	-56.63	20.42	93.1	67.7	51.3
8.45	-25	-55.47	-56.51	23.05	93.7	67.6	53
8.49	-25	-55.06	-56.39	23.14	93.6	67.4	53.5
8.36	-25	-55.21	-56.54	20.33	92.6	67.5	52.3
8.56	-25	-55.01	-56.6	23.08	92.9	67.8	51.7
8.49	-25	-55.32	-56.54	23.08	92.9	67.4	47.8
8.16	-25	-54.8	-56.69	20.39	92.1	67.4	50.4
8.57	-25	-55.32	-56.63	23.08	92.4	67.6	54.3
8.39	-25	-54.95	-56.66	23.17	92	67.2	50.5
7.79	-25	-55.37	-56.51	20.51	91.6	67.2	52.4
8.59	-25	-55.01	-56.54	23.14	91.7	67.8	51.9
8.44	-25	-55.21	-56.51	23.17	91.6	67.2	50.7
8.35	-25	-55.73	-56.42	20.67	90.9	67.1	51.9
8.58	-25	-55.27	-56.63	23.14	90.8	67.4	53.1
8.45	-25	-55.78	-56.66	23.2	90.7	67.1	50.1
8.37	-25	-54.85	-56.42	20.36	90.1	67.3	50.7
8.56	-25	-55.58	-56.6	23.2	90.2	67.2	51.1
8.5	-25	-55.27	-56.6	23.23	90.2	66.9	51.5
7.98	-25	-54.59	-56.57	20.57	89.7	66.9	48.8
8.47	-25	-55.32	-56.6	23.17	89.7	67.3	53.2
8.42	-25	-55.68	-56.51	23.26	89.7	67	51.7
8.44	-25	-55.11	-56.63	20.48	89.2	66.5	51.7
8.42	-25	-55.53	-56.54	22.77	88.8	67.3	49.5
8.46	-25	-55.73	-56.54	23.23	89.2	66.9	51.4
8.5	-25	-55.37	-56.63	21.76	88.9	66.7	53.8
8.38	-25	-55.06	-56.66	20.7	88.2	67	51.4
8.52	-25	-55.21	-56.63	23.26	88.3	66.7	53.2
8.5	-25	-55.21	-56.66	21.18	88.1	66.5	51.8
8.42	-25	-55.32	-56.81	21.34	87.4	66.9	51.8
8.51	-25	-55.16	-56.63	23.32	87.5	66.5	51.6
8.5	-25	-55.11	-56.66	23.29	87.4	66.4	51.5
8.47	-25	-55.21	-56.66	20.67	87.1	66.3	51.1
8.4	-25	-55.27	-56.54	22.01	86.7	66.8	51.1
8.41	-25	-55.11	-56.75	23.29	87.6	66.3	51.3
8.38	-25	-55.32	-56.63	20.97	87.5	66	50
8.42	-25	-55.47	-56.54	23.2	87	66.7	50.5
8.5	-25	-55.01	-56.57	23.29	87	66.2	52.2
8.51	-25	-55.58	-56.6	20.79	86.5	66	49.5
9.71	-25	-55.21	-56.63	23.08	86.5	66.5	55.6
8.41	-25	-54.64	-56.66	23.26	86.8	66.1	52.3
8.41	-25	-55.47	-56.54	23.26	86.8	65.8	48.6
8.41	-25	-55.47	-56.54	20.73	87.3	65.8	49.4
8.65	-25	-55.63	-56.66	22.95	87.7	66.5	55.9
8.41	-25	-55.11	-56.57	23.29	88	66	52.1

8.49	-25	-55.32	-56.69	23.26	87.8	65.9	52.7
8.34	-25	-55.47	-56.57	20.48	87.2	65.8	49.1
8.45	-25	-55.32	-56.6	23.32	87.1	66.2	53.5
8.47	-25	-55.21	-56.54	23.32	87.1	65.8	51.7
8.17	-25	-55.32	-56.42	20.6	86.3	65.6	51.5
8.42	-25	-55.06	-56.81	23.2	86.5	66	51.2
8.49	-25	-55.53	-56.57	23.35	86.4	65.5	50.7
8.29	-25	-55.63	-56.66	20.42	85.9	65.6	51.9
8.5	-25	-55.16	-56.6	23.26	86.4	65.8	51.6
8.45	-25	-55.37	-56.63	23.26	86.4	65.5	49.7
8.29	-25	-55.47	-56.63	20.45	86	65.7	51.3
8.57	-25	-55.53	-56.66	23.23	86.4	65.7	51.5
8.43	-25	-54.95	-56.69	23.26	86.4	65.6	52.5
8.46	-25	-55.63	-56.6	22.16	86.4	65.4	51
8.37	-25	-55.47	-56.78	20.42	85.8	65.6	55.8
8.5	-25	-54.95	-56.63	23.23	85.8	65.8	49.7
8.51	-25	-55.01	-56.57	23.32	85.9	65.3	51.4
8.33	-25	-54.49	-56.6	20.63	85.2	65.3	55
8.43	-25	-55.27	-56.48	23.23	85.2	65.9	51.6
8.5	-25	-55.32	-56.69	23.23	85.5	65.5	52
8.37	-25	-54.75	-56.75	23.35	85.7	65.3	52
8.45	-25	-55.63	-56.6	20.63	85.4	65	51.5
8.43	-25	-55.53	-56.54	21.58	85.2	65.7	51.4
8.42	-25	-55.53	-56.63	23.35	85.6	65.2	53.2
8.47	-25	-55.73	-56.84	23.35	85.9	65	52
8.35	-25	-55.63	-56.69	20.76	85.5	65	51.2
8.37	-25	-55.32	-56.51	20.36	85.3	65.5	50.8
8.58	-25	-55.11	-56.69	23.35	85.7	65.3	52.9
8.42	-25	-55.06	-56.69	23.35	85.7	65	51.3
8.38	-25	-55.58	-56.54	20.73	85.3	64.9	52.1
8.41	-25	-55.27	-56.63	21	85.3	65.4	52.4
8.49	-25	-55.53	-56.81	23.29	85.5	65.1	48.7
8.51	-25	-55.53	-56.63	23.35	85.8	64.9	52.7
8.42	-25	-55.47	-56.69	22.22	85.7	64.8	50.8
8.16	-25	-55.27	-56.75	20.57	85.2	64.8	50.8
8.45	-25	-55.58	-56.6	21.98	85.3	65.4	51.9
8.43	-25	-55.53	-56.54	23.2	86	65	51.9
8.42	-25	-55.63	-56.75	23.35	86.1	64.8	50.9
8.38	-25	-55.58	-56.6	20.42	85.9	65	50.2
8.48	-25	-55.27	-56.9	23.32	86.5	65.3	51.8
8.41	-25	-55.53	-56.78	23.32	86.7	65	46.3
8.51	-25	-55.32	-56.75	21.09	86.4	64.7	51.2
8.38	-25	-55.94	-56.81	20.39	86.6	65.3	51.7
8.59	-25	-55.84	-56.78	23.26	87.5	65.2	51.7
8.42	-25	-55.99	-56.66	23.29	87.9	64.9	49.4
8.06	-25	-55.47	-56.81	20.63	87.8	65	56.9
8.6	-25	-55.27	-56.81	23.2	88.6	65.7	53

8.41	-25	-55.32	-56.81	23.23	88.8	65.2	53.6
8.51	-25	-55.11	-56.66	23.26	89.3	65.2	48
8.07	-25	-55.27	-56.81	20.54	89.3	65.3	51.7
9.01	-25	-55.58	-56.78	23.05	89.7	65.8	52.9
8.54	-25	-55.27	-56.87	23.17	90	65.5	49.5
8.44	-25	-55.37	-56.84	23.23	90.6	65.4	53
8.08	-25	-54.75	-56.75	20.45	90.5	65.7	48.4
8.56	-25	-55.78	-56.6	23.14	91.1	66	49
8.5	-25	-55.58	-56.87	23.14	91.1	65.8	46.3
8.47	-25	-55.84	-56.87	21.89	90.9	65.8	55.4
8.37	-25	-55.27	-56.87	20.36	90.3	66	51.9
8.52	-25	-55.21	-57	23.23	90.4	66.4	49
8.43	-25	-55.32	-56.87	23.2	90.5	66	50.1
8.4	-25	-55.06	-56.94	21.09	90.1	65.9	51.3
8.37	-25	-55.68	-56.75	20.97	90.2	66.4	51.1
8.4	-25	-55.27	-57	23.08	91.4	66.1	52.6
8.38	-25	-55.84	-56.97	20.79	91.5	66.1	50.2
8.41	-25	-54.64	-56.81	22.16	90.9	66.6	52.8
8.42	-25	-55.06	-56.78	23.08	91.9	66.3	51.7
8.36	-25	-56.04	-56.66	20.85	92.6	66.2	49.5
8.4	-25	-55.21	-56.9	22.68	91.9	67	52.2
8.39	-25	-55.37	-56.75	23.05	91.6	66.5	53
8.42	-25	-55.63	-56.78	23.14	91.6	66.3	49.8
8.39	-25	-55.32	-56.78	20.45	91.1	66.4	51
8.43	-25	-55.47	-56.87	21.95	90.8	67	51.7
8.53	-25	-55.27	-56.69	23.14	90.8	66.7	49.7
8.51	-25	-55.32	-56.81	23.14	91.2	66.7	51.6
8.5	-25	-55.63	-56.66	20.45	91.4	66.4	50.1
8.37	-25	-55.53	-56.78	20.21	90.8	67	50.3
8.48	-25	-55.53	-56.84	23.08	91.4	67.1	53.4
8.4	-25	-55.21	-56.69	23.08	91.1	66.8	52.5
8.48	-25	-55.53	-56.9	21.46	91.5	66.6	51.1
8.4	-25	-55.37	-56.81	20.18	90.9	67	51.6
8.51	-25	-54.85	-56.69	23.08	91.6	67.1	49.4
8.41	-25	-56.1	-56.81	23.14	91.6	66.7	49.5
8.53	-25	-55.63	-56.81	20.73	91.5	66.7	52.4
8.42	-25	-55.63	-56.84	20.12	91.5	67.1	52.5
8.47	-25	-55.63	-56.81	23.08	91.8	67.1	52
8.43	-25	-55.11	-56.87	22.28	91.8	66.8	49.9
8.43	-25	-55.53	-56.9	21.49	91.6	67.4	52.5
8.45	-25	-55.32	-56.87	23.14	92	67.1	49.8
8.39	-25	-55.06	-56.87	21.64	92.2	66.9	50.5
8.42	-25	-55.11	-56.97	20.21	91.7	67.3	50.9
8.58	-25	-55.94	-56.81	22.99	92.1	67.2	49.9
8.43	-25	-55.32	-56.81	23.08	92.3	67	53.4
8.43	-25	-55.32	-57	20.67	92	67.1	52
8.41	-25	-55.99	-56.66	20.36	91.8	67.4	52.5

8.55	-25	-55.89	-56.87	23.02	92	67.3	52
8.42	-25	-55.01	-56.75	23.05	92.1	67	54
8.35	-25	-55.37	-57	20.18	91.8	67.3	50.3
8.58	-25	-55.89	-56.97	23.02	91.9	67.5	54.3
8.44	-25	-55.32	-56.78	22.99	92	67.2	51.8
8.32	-25	-55.94	-56.87	20.21	91.2	67.3	51.6
8.54	-25	-55.37	-56.84	23.02	91.7	67.6	47.2
8.53	-25	-55.21	-56.84	23.02	91.8	67.1	50.4
8.44	-25	-55.53	-56.81	20.7	91.6	66.9	50.5
8.36	-25	-55.89	-57.06	20.21	91	67.3	53.1
8.55	-25	-55.58	-56.84	23.08	91.1	67.5	51.3
8.5	-25	-55.63	-57.03	23.02	91	67.2	52.9
8.43	-25	-55.89	-57	21.67	90.7	66.9	50.7
8.33	-25	-55.47	-56.94	20.27	89.7	67.2	51.6
8.44	-25	-55.21	-57.03	22.99	87.5	67.7	50.9
8.53	-25	-55.68	-56.84	23.08	87.2	66.9	52.3
8.5	-25	-55.32	-56.9	22.65	87	66.8	49.2
8.39	-25	-55.47	-56.9	20.18	86	67.1	50.8
8.53	-25	-55.32	-56.9	23.17	86.4	66.9	51.7
8.44	-25	-55.94	-57.06	23.2	86.3	66.6	51.1
8.15	-25	-55.32	-56.9	20.36	85.6	66.5	52.2
8.71	-25	-55.63	-56.97	23.14	85.5	67.2	51.8
8.43	-25	-55.53	-56.94	23.23	85.8	66.5	52.8
8.41	-25	-55.47	-57	21.92	85.8	66.2	52.7
8.34	-25	-55.73	-57.09	20.27	85	66.5	51.8
8.5	-25	-55.53	-56.78	23.2	85.5	66.6	54.7
8.46	-25	-55.94	-56.9	23.17	85.7	66.3	50.7
8.49	-25	-55.89	-57.03	21.98	85.6	65.9	50.4
8.37	-25	-55.94	-56.9	20.3	84.9	66.2	49.9
8.57	-25	-55.78	-57.21	23.38	85	66	49
8.44	-25	-55.63	-56.94	23.5	84.2	65.9	54.1
8.37	-25	-55.37	-56.9	20.79	83.2	65.7	52.4
8.41	-25	-55.58	-57.12	21.37	82.3	66.1	51.6
8.53	-25	-55.89	-56.87	23.38	82.4	65.8	50.9
8.42	-25	-55.47	-57.12	23.41	82.2	65.5	51.8
7.94	-25	-56.04	-57.09	20.63	81.8	65.5	51.3
8.57	-25	-56.1	-56.97	23.41	82	65.8	51.7
8.41	-25	-55.58	-57.09	23.53	82.3	65.3	52
8.37	-25	-55.32	-57.03	20.79	81.6	65.1	51.2
8.53	-25	-55.78	-56.97	23.53	81.8	65.6	50.7
8.42	-25	-55.27	-57.09	23.47	82	65.2	53
8.48	-25	-55.84	-57.21	20.82	81.3	64.8	53.6
8.39	-25	-55.84	-57.03	22.01	81	65.4	47.9
8.5	-25	-55.89	-57.18	23.44	81.2	65	50.5
8.47	-25	-55.53	-57.09	23.53	81.2	64.7	49.6
8.34	-25	-55.21	-57.15	20.94	80.5	64.7	52.4
8.44	-25	-55.89	-57.18	23.08	80.3	65.1	52.7

8.43	-25	-55.73	-57.18	23.6	80.8	64.7	54.7
8.5	-25	-55.73	-57.03	21.83	80.6	64.4	51.6
8.35	-25	-55.73	-56.97	20.6	79.6	64.5	51.3
8.5	-25	-55.37	-57.09	23.53	79.9	64.7	50.8
8.53	-25	-56.04	-57.09	23.6	79.8	64.3	52.7
8.44	-25	-55.78	-57.03	23.63	79.6	64.1	52.4
8.3	-25	-55.84	-57.06	21	79.3	63.9	50.8
8.41	-25	-55.27	-57.15	22.68	79.2	64.5	50.4
8.47	-25	-55.68	-57.03	23.57	79.7	64.2	51.5
8.42	-25	-56.25	-57.18	23.63	79.7	63.9	48.2
8.39	-25	-55.73	-57.12	21.09	78.9	63.7	50.5
8.37	-25	-55.99	-57.06	22.13	78.4	64	52
8.42	-25	-55.58	-57.12	23.6	78.6	63.7	50.1
8.43	-25	-55.68	-57.15	23.63	78.7	63.6	49.1
8.39	-25	-55.89	-57.12	21.03	78	63.4	50
8.39	-25	-56.15	-57.18	21.92	77.9	63.8	51.2
8.47	-25	-55.84	-57.24	23.57	78.6	63.7	42.1
8.47	-25	-55.73	-57.09	23.69	78.4	63.2	54.3
8.38	-25	-54.69	-57.21	21.09	77.7	63.3	51.9
8.41	-25	-56.04	-57.12	20.67	77	63.6	50.5
8.46	-25	-55.47	-57.03	23.63	77.4	63.6	51.7
8.46	-25	-55.99	-57.15	23.72	77.6	63.2	52.3
8.51	-25	-55.94	-57.21	22.16	77.3	63	48.2
8.28	-25	-55.37	-57.12	20.82	76.7	63	52.7
8.38	-25	-55.32	-57.27	21.34	76.7	63.5	48.1
8.56	-25	-55.84	-57.27	23.69	76.8	63.2	47.8
8.51	-25	-56.15	-57.3	23.75	77.2	62.9	51
8.51	-25	-55.68	-57.27	23.69	77.3	62.7	48.8
8.13	-25	-56.15	-57.24	20.94	76.6	62.8	51.1
8.65	-25	-56.04	-57.12	23.63	76.9	63.2	56.7
8.41	-25	-55.27	-57.18	23.72	77.3	62.7	55.9
8.38	-25	-55.27	-57.24	21.4	77.2	62.5	52.5
8.36	-25	-55.99	-57.06	20.7	76.7	62.8	48.3
8.53	-25	-55.99	-57.09	23.69	77.6	62.9	46.9
8.39	-25	-55.27	-57.33	23.69	77.8	62.7	52.2
8.5	-25	-55.73	-57.21	23.69	77.8	62.5	52.2
8.06	-25	-55.78	-57.18	21.03	77.6	62.5	51
8.39	-25	-55.99	-57.27	22.68	77.7	63	52
8.53	-25	-55.89	-57.15	23.72	78.4	62.6	51
8.44	-25	-55.27	-57.39	23.72	78.8	62.5	47.9
8.27	-25	-55.37	-57.27	21.15	78.5	62.5	53.8
8.36	-25	-55.84	-57.15	21.34	78.6	62.8	47.2
8.44	-25	-55.94	-57.15	23.69	79.4	62.8	48.2
8.42	-25	-56.1	-57.24	23.75	79.9	62.7	47.5
8.41	-25	-55.16	-57.39	23.69	80.3	62.5	53.3
8.38	-25	-56.15	-57.27	21.89	80.5	62.5	48.8
8.34	-25	-56.04	-57.27	20.82	80.1	62.7	52.7

8.55	-25	-55.89	-57.21	23.69	80.9	63	50.9
8.47	-25	-56.15	-57.12	23.72	81.4	62.6	53.5
8.4	-25	-55.94	-57.27	21.06	81.5	62.5	50.8
8.44	-25	-56.2	-57.12	20.76	81.5	62.9	51.8
8.53	-25	-56.15	-57.39	23.63	82	63.3	50.1
8.46	-25	-55.47	-57.42	23.72	82.5	62.9	52.6
8.5	-25	-56.1	-57.12	23.66	83.1	62.9	52.4
8.47	-25	-55.73	-57.39	22.59	83.3	62.8	50.5
8.31	-25	-55.78	-57.27	20.79	83.1	63.2	50.3
8.44	-25	-55.63	-57.3	23.69	83.9	63.5	50.5
8.4	-25	-55.73	-57.27	23.63	84.2	63.1	49.6
8.37	-25	-56.36	-57.27	21.34	84.2	63	51.5
8.38	-25	-56.15	-57.36	20.73	84	63.5	51.2
8.57	-25	-56.36	-57.18	23.6	84.6	63.5	49.9
8.39	-25	-55.68	-57.3	23.66	85.2	63.4	50.4
8.44	-25	-56.1	-57.36	21.28	85.3	63.3	49.9
8.39	-25	-56.1	-57.21	20.67	85.5	63.5	52.6
8.44	-25	-55.84	-57.55	23.57	86.1	64	48
8.52	-25	-56.04	-57.39	23.5	86.5	63.5	52
8.36	-25	-56.25	-57.24	21.09	86.6	63.6	51.7
8.42	-25	-55.94	-57.33	20.54	86.2	64	52.2
8.55	-25	-56.46	-57.39	23.5	86.5	64	50.3
8.46	-25	-55.78	-57.33	23.53	87.5	63.8	50.5
8.44	-25	-56.1	-57.36	21.34	87.1	63.9	53.8
8.41	-25	-55.78	-57.33	20.6	86.7	64.1	52.5
8.44	-25	-55.94	-57.24	23.05	86.8	64.3	49.9
8.5	-25	-56.25	-57.45	23.47	87.3	64	52.1
8.5	-25	-56.04	-57.45	23.53	86.7	64	46.6
8.37	-25	-56.77	-57.36	21.58	86.3	63.9	52.2
8.39	-25	-55.94	-57.36	20.54	86.4	64.2	52.5
8.5	-25	-55.94	-57.39	23.44	86.7	64.2	52.7
8.41	-25	-55.63	-57.27	23.47	86.6	64.1	52.7
8.46	-25	-56.25	-57.45	23.38	86.3	64	52.7
8.14	-25	-55.78	-57.24	20.7	85.7	64.1	50.4
8.51	-25	-55.58	-57.58	23.47	85.9	64.5	47.4
8.47	-25	-56.3	-57.45	23.57	86.2	64.2	50.5
8.45	-25	-55.68	-57.36	23.53	86.4	64	49.9
8.48	-25	-55.73	-57.39	21	86.3	64	51.3
8.43	-25	-55.68	-57.42	20.54	85.9	64.5	53.6
8.53	-25	-56.2	-57.3	23.53	86.1	64.4	47
8.42	-25	-55.73	-57.48	23.47	86.4	64.2	49.9
8.39	-25	-56.1	-57.39	21.21	85.9	64	51.5
8.35	-25	-55.53	-57.64	20.57	85.4	64.5	51.8
8.52	-25	-55.89	-57.3	23.44	86	64.8	50.9
8.38	-25	-55.94	-57.42	23.44	86.2	64.4	51.3
8.37	-25	-55.73	-57.33	22.95	86.1	64.2	49.5
8.33	-25	-55.68	-57.48	20.67	85.5	64.2	52.4

8.56	-25	-55.84	-57.42	23.47	85.8	64.9	49.5
8.53	-25	-55.94	-57.36	23.53	85.8	64.4	51.9
8.46	-25	-56.04	-57.42	23.47	86.1	64.3	50.9
7.84	-25	-56.82	-57.48	20.73	85.5	64.4	51
8.65	-25	-56.2	-57.42	23.47	85.5	64.9	51
8.48	-25	-56.2	-57.33	23.5	85.8	64.3	49.2
8.41	-25	-55.68	-57.27	23.5	85.6	64.3	51.1
8.18	-25	-55.78	-57.45	20.79	85.2	64.3	51.4
9.08	-25	-55.99	-57.45	23.38	85.1	65	52.2
8.46	-25	-56.2	-57.33	23.6	85.3	64.4	47.7
8.43	-25	-55.37	-57.39	23.5	85.5	64.3	50.8
8.25	-25	-56.15	-57.55	20.91	84.6	64.4	50.8
8.37	-25	-55.84	-57.33	21.4	84.3	64.8	51.3
8.43	-25	-55.99	-57.61	23.53	84.8	64.7	51.5
8.44	-25	-55.73	-57.39	23.6	84.5	64.7	50.7
8.51	-25	-55.94	-57.48	23.57	84.1	64.3	55.6
8.43	-25	-56.41	-57.45	20.97	84.1	64.2	52.2
8.4	-25	-56.41	-57.48	20.63	83.2	64.5	49.8
8.45	-25	-56.56	-57.27	23.6	83.7	64.4	51.1
8.5	-25	-56.2	-57.39	23.6	83.7	64.2	52
8.42	-25	-55.53	-57.48	20.97	82.9	63.9	50.5
8.36	-25	-56.15	-57.36	21.21	82.1	64.7	53.6
8.54	-25	-56.04	-57.36	23.63	82.1	64.2	50.4
8.52	-25	-56.25	-57.55	23.66	81.8	64.1	51.8
8.47	-25	-55.78	-57.42	21.98	81.4	64	50.8
8.1	-25	-55.58	-57.48	20.79	80.6	63.9	49.5
8.36	-25	-56.3	-57.45	20.76	79.9	64.4	49.8
8.47	-25	-56.36	-57.48	23.75	80.6	64.2	50.9
8.46	-25	-56.3	-57.36	23.75	80.7	63.8	51.1
8.47	-25	-55.94	-57.48	21.21	80.1	63.6	51.8
8.39	-25	-55.99	-57.82	21.06	79.4	63.9	50.5
8.53	-25	-56.41	-57.42	23.72	79.9	63.8	53.7
8.38	-25	-55.78	-57.7	23.75	79.8	63.6	53.2
8.29	-25	-56.1	-57.64	21.06	79	63.6	53.3
8.41	-25	-56.1	-57.55	23.2	78.1	63.8	51.4
8.5	-25	-55.73	-57.45	23.72	78.8	63.6	54.6
8.4	-25	-56.51	-57.58	23.72	78.5	63.5	50.8
7.99	-25	-56.3	-57.61	20.97	78.1	63.3	51.5
8.41	-25	-55.99	-57.64	23.14	77.8	63.7	50
8.57	-25	-56.46	-57.55	23.75	78.3	63.6	49.8
8.37	-25	-56.51	-57.58	23.72	77.8	63.2	52.2
8.44	-25	-56.15	-57.7	21.58	77.9	63	51.6
8.42	-25	-56.04	-57.58	20.76	77	63.4	53.8
8.54	-25	-56.1	-57.73	23.81	77.3	63.2	52.6
8.38	-25	-56.61	-57.58	23.81	77.1	62.9	51.5
8.42	-25	-56.15	-57.42	20.97	76.6	62.7	51.5
8.37	-25	-56.82	-57.61	23.57	76.1	63.2	50.7

8.39	-25	-56.1	-57.73	23.84	76.6	62.9	51.5
8.37	-25	-56.25	-57.64	23.84	76.4	62.6	50.5
8.43	-25	-55.94	-57.58	21.76	75.8	62.5	57.3
8.36	-25	-56.51	-57.76	20.79	75.1	62.7	49.9
8.52	-25	-56.25	-57.67	23.84	75.6	62.9	52.2
8.38	-25	-55.99	-57.76	23.84	75.8	62.5	52.6
8.49	-25	-56.51	-57.64	21.18	75.2	62.5	53.3
8.41	-25	-55.73	-57.7	23.47	75.3	62.8	51.7
8.46	-25	-55.78	-57.48	23.81	75.8	62.4	48.9
8.42	-25	-56.51	-57.58	21.4	75.5	62.2	51.4
8.41	-25	-56.2	-57.82	22.19	74.7	62.5	49.7
8.42	-25	-55.78	-57.67	23.96	75.1	62.4	51.1
8.46	-25	-56.36	-57.64	23.9	75.1	61.9	53.7
8.22	-25	-56.36	-57.7	21.03	74.6	62	52.7
8.53	-25	-56.36	-57.79	23.96	74.9	62.5	49.1
8.39	-25	-55.68	-57.73	23.9	75	61.9	54.6
8.38	-25	-56.51	-57.73	21.89	75.2	61.7	50
8.37	-25	-56.2	-57.94	21.83	74.7	62.1	50.8
8.41	-25	-55.27	-57.73	24.02	75.3	61.8	51
8.39	-25	-56.51	-57.7	24.02	75.1	61.7	53.3
8.31	-25	-56.36	-57.76	21.06	74.4	61.7	53
8.56	-25	-56.1	-57.73	23.96	74.5	61.9	50.9
8.45	-25	-56.2	-57.64	24.02	74.5	61.5	51.6
8.35	-25	-56.51	-57.67	21.92	74.4	61.4	49.2
8.41	-25	-56.61	-57.67	20.94	73.4	61.7	50.5
8.45	-25	-56.56	-57.61	24.02	73.8	61.8	51
8.5	-25	-55.89	-57.73	24.05	74	61.4	50.7
8.34	-25	-56.1	-57.91	22.8	73.5	61.2	51.2
8.36	-25	-56.61	-57.58	21.12	72.8	61.4	52.6
8.49	-25	-55.78	-57.67	24.05	73.1	61.3	52.3
8.48	-25	-56.51	-57.73	24.08	73.3	61.3	51.5
8.38	-25	-56.46	-57.67	21.25	73.3	61	52.5
8.44	-25	-55.84	-57.58	23.96	73.6	61.5	52.4
8.43	-25	-56.51	-57.73	24.05	74.1	61.1	50.7
8.47	-25	-56.82	-57.42	21.52	74.4	61.1	56.1
8.39	-25	-56.36	-57.7	21.06	73.8	61.2	51.4
8.45	-25	-56.3	-57.79	23.81	74.3	61.4	51.3
8.55	-25	-56.51	-57.7	24.02	75	61.2	50.9
8.51	-25	-55.94	-57.73	23.96	75.4	61	51.4
8.22	-25	-56.61	-57.7	21.18	75.2	61	52.3
8.61	-25	-56.15	-57.94	23.9	76.1	61.4	54.7
8.39	-25	-56.56	-57.79	23.96	76.6	61.1	51.2
8.45	-25	-56.82	-57.7	21.49	76.9	61.1	50
8.38	-25	-56.82	-57.91	20.91	76.6	61.3	47.7
8.47	-25	-56.36	-57.88	23.78	77.7	61.4	52.9
8.44	-25	-56.3	-57.73	23.78	78.4	61.4	52.6
8.51	-25	-56.56	-57.82	22.04	78.7	61.2	51.7

8.35	-25	-55.99	-57.97	20.76	78.8	61.4	49.7
8.54	-25	-56.46	-57.82	23.75	79.7	61.2	46
8.52	-25	-56.51	-57.82	23.81	80.2	61.4	49.7
8.37	-25	-56.77	-57.82	20.79	80.3	61.6	52
8.45	-25	-55.89	-57.88	23.63	81.2	61.7	49.4
8.47	-25	-56.15	-57.76	23.72	81.8	61.6	53.4
8.39	-25	-55.47	-57.88	21.28	81.9	61.5	50.4
8.38	-25	-56.36	-57.91	20.7	82	62	51.9
8.57	-25	-56.15	-58.03	23.63	82.5	62.4	50.5
8.5	-25	-56.36	-57.76	23.63	83.2	62.1	50.3
8.49	-25	-56.77	-57.88	23.57	83.6	62	50.5
8.11	-25	-55.99	-57.73	20.85	83.5	62.2	50.8
8.64	-25	-55.94	-57.73	23.53	83.9	63	50.5
8.42	-25	-56.36	-57.79	23.66	84.2	62.5	52.3
8.5	-25	-56.41	-57.82	21.55	84.8	62.2	51.5
8.35	-25	-56.1	-58	20.63	84.2	62.7	51.6
8.47	-25	-56.72	-57.73	23.63	85.1	62.8	51.3
8.47	-25	-56.25	-57.79	23.57	85.4	62.6	53.3
8.47	-25	-56.82	-57.91	20.97	84.4	62.6	50.3
8.34	-25	-56.56	-57.94	20.54	84.9	63.1	55.6
8.47	-25	-56.25	-57.91	23.5	86.1	63.2	51.3
8.38	-25	-56.1	-58.16	23.53	86.5	63.1	51.4
8.28	-25	-56.1	-58.03	20.91	86.2	62.9	51.7
8.44	-25	-56.3	-57.88	22.65	86.6	63.6	51.8
8.51	-25	-56.36	-57.88	23.5	87.7	63.5	51.5
8.41	-25	-56.3	-57.82	23.29	87.8	63.3	53.2
8.38	-25	-56.51	-57.88	20.54	87.5	63.6	50.5
8.51	-25	-56.25	-57.97	23.41	87.7	64	51.6
8.47	-25	-56.51	-58.13	23.35	88.5	63.6	54.8
8.39	-25	-56.72	-58.19	21.28	87.4	63.6	51.2
8.4	-25	-56.41	-57.88	20.85	86.7	64.2	51.8
8.55	-25	-57.13	-57.79	23.41	87.5	64	51.3
8.43	-25	-56.41	-57.76	23.38	88.5	63.9	49.9
8.06	-25	-56.77	-58.06	20.57	88.1	63.9	51.7
8.5	-25	-56.77	-58.03	23.35	88.2	64.5	51.3
8.5	-25	-56.41	-57.85	23.47	88.4	64.2	51.1
8.5	-25	-56.2	-57.79	22.19	87.8	64.2	49.4
8.33	-25	-56.04	-57.91	20.54	87.1	64.2	51.6
8.55	-25	-56.72	-58	23.41	87.5	64.8	49.5
8.5	-25	-56.87	-57.91	23.41	87.8	64.5	52.2
8.37	-25	-56.98	-57.91	23.41	87.9	64.4	51.9
8.5	-25	-56.2	-57.88	20.54	87.7	64.5	53.8
8.41	-25	-56.41	-57.91	20.39	87.4	64.9	51.1
8.53	-25	-56.61	-57.88	23.38	88.1	64.8	50.3
8.38	-25	-56.3	-57.85	23.41	88.2	64.4	52.3
8.43	-25	-56.87	-58.03	20.57	88	64.7	51.9
9.32	-25	-56.36	-57.85	23.14	87.9	65.3	51.4

8.48	-25	-56.51	-57.97	23.35	88.3	64.8	51.5
8.43	-25	-56.82	-57.91	20.85	88.1	64.8	50.7
8.4	-25	-55.63	-58	22.56	88	65.4	54.6
8.47	-25	-56.36	-57.94	23.35	88.3	65	51.1
8.5	-25	-56.82	-57.85	23.35	88.4	64.8	52
8.35	-25	-56.25	-57.88	20.67	87.9	64.9	52.1
8.38	-25	-56.77	-57.88	23.14	88.1	65.6	51
8.45	-25	-56.1	-57.85	23.38	88.6	65.2	49.1
8.48	-25	-56.25	-57.82	23.38	88.6	65.1	52.1
8.35	-25	-56.77	-57.94	20.48	87.9	65.3	51.5
8.62	-25	-56.46	-57.82	23.32	87.6	65.8	49.7
8.46	-25	-56.51	-57.88	23.32	87.9	65.3	52.3
8.36	-25	-56.72	-57.91	22.41	87.9	65.1	51.4
8.38	-25	-56.25	-58	20.39	87.3	65.4	52.1
8.54	-25	-56.72	-57.91	23.35	87.5	65.4	50.1
8.41	-25	-56.36	-57.94	23.23	87.3	65	52.8
8.31	-25	-56.1	-58.1	20.48	86.8	65.3	50.9
8.5	-25	-55.99	-57.94	23.35	86.7	65.7	50
8.5	-25	-56.2	-58	23.47	86.7	65.1	50.5
8.44	-25	-56.41	-57.97	21.46	86.6	65	52.5
8.33	-25	-56.72	-58	20.42	86.1	65.4	51.6
8.55	-25	-56.77	-57.91	23.38	86.3	65.4	52.6
8.45	-25	-56.25	-58.03	22.5	86.4	64.9	49.7
8.35	-25	-55.94	-58.06	21.49	85.7	65.5	51.3
8.5	-25	-56.56	-57.91	23.32	85.8	65.2	51.6
8.44	-25	-56.3	-57.91	23.35	86	64.9	52.2
8.15	-25	-56.72	-58.13	20.54	85.3	65.1	51.2
8.65	-25	-56.41	-57.97	23.2	85.3	65.7	53.1
8.43	-25	-56.98	-58.16	23.44	85.8	65.1	51.4
8.52	-25	-56.46	-58.06	23.44	85.5	64.8	53.7
8.39	-25	-56.04	-57.82	20.91	84.9	64.8	51.7
8.38	-25	-56.72	-57.88	21.21	84.2	65.2	51.9
8.51	-25	-56.46	-57.85	23.38	84.6	65.1	48.9
8.5	-25	-56.51	-57.88	23.47	84.9	64.7	51.9
8.03	-25	-56.56	-58	20.57	84.1	64.8	51.9
8.44	-25	-56.15	-57.97	23.38	84.1	65.1	51.6
8.48	-25	-56.46	-57.91	23.38	84.2	64.8	54.3
8.35	-25	-56.72	-57.85	20.79	83.4	64.5	49.8
8.46	-25	-56.72	-57.91	23.44	83.6	65	50.5
8.52	-25	-56.56	-57.97	23.44	83.6	64.7	49.6
8.38	-25	-56.98	-58.06	21.12	83.4	64.5	54.6
8.4	-25	-56.56	-57.97	20.97	82.9	64.9	50.1
8.41	-25	-56.51	-57.97	23.38	83.2	64.5	50.5
8.46	-25	-56.82	-57.91	23.38	83.5	64.5	50.5
8.36	-25	-56.41	-58.06	20.6	83	64.4	49.4
8.38	-25	-56.51	-57.97	20.36	82.5	64.7	51.9
8.5	-25	-56.82	-58.03	23.41	82.8	64.7	53.3

8.4	-25	-56.3	-58.1	23.44	83.1	64.3	49.8
8.53	-25	-56.51	-58.03	21.46	82.9	64.3	51.5
8.34	-25	-56.15	-57.91	20.39	82.2	64.4	52.2
8.46	-25	-56.98	-57.88	23.38	82.8	64.7	51.5
8.5	-25	-56.98	-57.85	23.44	82.8	64.2	52.6
8.42	-25	-56.25	-58	20.63	82.3	64.1	50.5
8.35	-25	-57.08	-57.97	20.48	82	64.5	50.5
8.48	-25	-56.77	-58.06	23.38	82.7	64.3	51.8
8.49	-25	-56.77	-57.97	23.41	83.2	64.1	50.5
8.28	-25	-56.87	-58	20.51	82.4	64.2	49.8
8.55	-25	-56.41	-57.97	23.35	83	64.4	50.4
8.45	-25	-56.82	-57.94	23.38	83.3	64.1	48.4
8.23	-25	-57.13	-57.97	20.67	83	64.1	52.3
8.78	-25	-56.36	-57.94	23.29	83	64.8	51.5
8.45	-25	-56.36	-58.06	23.38	82.8	64.1	55.1
8.43	-25	-56.2	-58.1	22.04	83.1	64	47.9
8.38	-25	-56.98	-58.03	20.42	82.3	64.3	50.8
8.55	-25	-56.36	-58.22	23.41	82.8	64.4	44.1
8.5	-25	-56.51	-58.03	23.41	82.5	64	49.6
8.4	-25	-56.46	-58.1	20.73	82.1	63.9	50.9
8.42	-25	-56.51	-58.03	23.29	81.8	64.5	51.1
8.38	-25	-56.61	-58.22	23.5	82	64.1	50.5
8.24	-25	-56.82	-58.16	20.79	81.6	63.7	53.6
8.52	-25	-56.51	-58.28	23.47	81.4	64.3	51.3
8.49	-25	-57.03	-58.06	23.53	81.6	63.9	49.8
8.44	-25	-56.72	-57.97	21.7	81.3	63.6	50.1
8.29	-25	-56.41	-57.88	20.42	80.7	63.9	52.4
8.53	-25	-56.77	-58.03	23.35	81	64.1	51.6
8.44	-25	-56.82	-58.1	23.44	81.4	63.7	51.1
8.26	-25	-56.56	-57.91	20.73	80.7	63.5	47.4
8.59	-25	-56.77	-58.06	23.38	81	64	48.1
8.38	-25	-56.56	-58.16	23.5	81.1	63.5	52.9
8.42	-25	-56.1	-58.1	20.67	80.8	63.6	50.4
8.44	-25	-56.72	-58.22	23.44	81	64	50.9
8.5	-25	-56.77	-58.06	23.44	81.6	63.7	50.4
8.43	-25	-57.34	-57.91	23.47	81.9	63.6	55.1
7.91	-25	-57.08	-58.13	20.6	81.4	63.6	56
9.02	-25	-57.08	-58	23.32	81.8	64.2	53
8.41	-25	-56.93	-58.13	23.41	82.7	63.5	51
8.51	-25	-56.56	-57.91	21.31	82.7	63.5	51.9
8.38	4	-56.98	-57.88	21.86	82.3	63.9	51.6
8.44	4	-56.82	-58.1	23.38	83	63.6	52
8.46	4	-56.36	-58.25	23.08	83.2	63.5	51.3
8.32	4	-56.61	-58.13	20.39	82.5	63.6	51.6
8.49	4	-56.93	-57.91	23.35	83.1	63.9	50.3
8.49	4	-56.77	-58.13	23.38	83.6	63.6	50
8.45	4	-55.99	-58.03	20.6	83.7	63.4	52.4

8.38	4	-56.36	-58	21.83	83.5	63.9	51.6
8.5	4	-56.36	-57.97	23.35	84.3	63.6	49.8
8.41	4	-56.46	-58.06	21.52	84.6	63.6	49.7
8.36	4	-56.72	-58.03	20.24	84.2	63.5	54.3
8.55	4	-56.82	-58.19	23.26	85	64	50.5
8.42	4	-56.61	-58	23.29	85.5	63.7	55
8.46	4	-56.98	-58	21	85.6	63.6	54.2
8.38	4	-57.08	-58.03	20.73	85.9	64.1	50.8
8.46	4	-56.41	-58.13	23.17	88.3	65.4	53.2
8.47	4	-57.65	-58.1	21.58	88.7	65.7	52
8.34	4	-56.98	-58.34	20.02	89	66.3	50.8
8.52	4	-56.72	-58.28	22.99	89.7	66.7	49.9
8.45	4	-56.46	-58.16	22.99	90.8	66.6	50.3
8.45	4	-56.72	-58.34	20.05	91.2	67	43.8
8.39	4	-57.34	-58.22	20.6	91.1	67.7	51.1
8.52	4	-56.72	-58.03	22.83	92.2	67.9	53.8
8.49	4	-56.82	-58.34	22.86	92.6	67.9	54.5
8.48	4	-56.46	-58.13	21	92.9	67.9	52.3
8.34	4	-56.61	-58.16	19.84	93.1	68.5	52.5
8.52	-183.5	-56.46	-58.16	22.74	94.1	68.8	53
8.44	-183.5	-56.51	-58.16	20.21	94.2	69.8	52.2
8.41	-145.59	-56.04	-58.22	19.63	94.8	69.6	51
8.45	-145.95	-56.2	-58.13	22.65	95.8	69.8	50.2
8.45	-145.91	-56.1	-58.06	19.57	95.2	70.4	52.4
8.44	-146.6	-56.2	-58.13	22.62	96.1	70.3	52.6
8.45	-69.26	-56.2	-58.1	22.34	96.5	71.3	52.8
9.32	-70.04	-56.2	-58	22.5	97.3	71.2	52.2
8.44	-68.76	-56.56	-58.06	22.68	98.2	71.1	48.6
8.45	-65.64	-56.3	-58	22.65	97	70.7	51.3
8.46	-65.23	-56.2	-58.13	19.35	96.9	72	51.6
8.38	-65.78	-51.58	-57.55	-0.15	89.3	71.1	52.1
8.47	-68.71	-56.04	-57.7	22.68	94.1	72.3	48.6
8.49	-69.72	-56.98	-57.94	22.62	97.5	71.7	52.4
8.36	-69.81	-56.3	-58.13	19.63	97.2	71.2	51.8
8.51	-70.59	-56.46	-57.88	19.99	97.7	70.6	51
8.49	-71.32	-56.1	-58	22.59	97.9	70.7	51.1
8.42	-70.86	-56.3	-58.03	19.6	98	70.6	52.1
8.54	-70.36	-56.87	-57.88	22.59	98.3	70.8	50.7
8.51	-70.86	-56.46	-58	22.65	97.9	70.2	49.9
8.46	-70.82	-56.72	-57.94	20.02	97.3	70.1	54.2
8.39	-70.73	-56.25	-58	19.66	96.5	70.5	47.8
8.44	-70.63	-56.1	-57.94	22.62	96.6	70.2	53.4
8.37	-70.31	-56.2	-57.97	22.13	96.8	70	50.5
8.34	-71.69	-56.2	-58.1	19.63	96.5	70.1	50.9
8.47	-71.18	-56.1	-58.06	22.59	97	70.2	53.3
8.42	-70.95	-56.1	-58.06	22.59	97	69.9	53.9
8.53	-70.59	-56.77	-58.1	20.24	96.6	69.5	52.1

8.39	-69.99	-56.82	-58	19.57	96.1	70.1	53.3
8.48	-70.86	-57.13	-57.94	22.65	96.2	70.1	47.9
8.37	-70.36	-56.3	-58.06	22.68	96.2	69.7	50.7
8.38	-71.27	-56.87	-58.03	19.96	95.8	69.6	51.6
8.83	-70.59	-56.56	-58	22.56	95.9	70.3	49.8
8.44	-71.27	-56.72	-58.06	22.62	95.8	69.7	51.5
8.26	-70.91	-57.34	-58.1	19.96	95.2	69.5	51.7
8.5	-71.82	-57.03	-58.06	22.62	95.3	70.1	52.6
8.5	-70.27	-56.98	-58.03	22.68	95.5	69.7	52.2
8.02	-71	-56.61	-58.1	19.81	95.1	69.5	51.5
8.62	-70.86	-57.19	-58	22.59	95.5	70.1	49.8
8.47	-71.5	-56.72	-58.19	22.68	95.8	69.4	42.5
8.42	-70.73	-56.61	-57.97	20.21	95.7	69.3	50.8
8.41	-71.55	-56.61	-58.13	21.92	95.3	70	53.7
8.52	-70.63	-57.39	-58.06	22.62	95.8	69.3	51.6
8.41	-71.46	-56.87	-58.1	19.78	95.2	69.3	53
8.44	-71.55	-56.72	-58.16	22.31	95.1	70	52.7
8.42	-72.1	-56.82	-57.97	22.62	95.4	69.6	52.3
8.51	-71.09	-56.56	-57.94	22.65	95.1	69.1	52.9
8.01	-71.87	-56.72	-58.1	19.78	94.8	69.1	50.5
8.41	-71.69	-56.82	-58.13	22.62	94.9	69.6	51
8.45	-71.78	-57.08	-58.13	22.68	94.9	69.3	52.8
8.37	-71.82	-56.56	-58.25	19.72	94.1	69.3	52.7
8.58	-71.55	-56.61	-58.19	22.59	94.3	69.4	51.6
8.48	-71.27	-56.61	-58.06	22.65	94.5	69	52.5
8.39	-70.86	-56.61	-58.06	19.63	94	69.1	52.2
8.58	-71.64	-56.41	-58.1	22.62	94.4	69.1	49.9
8.52	-71.96	-57.24	-58.1	22.68	94.3	68.9	53
8.46	-71.27	-57.13	-58.1	20.24	94	68.8	53.7
8.34	-71.18	-56.72	-58.25	19.63	93.6	69.1	51.2
8.52	-71.37	-56.3	-58.16	22.59	93.6	69.4	52.3
8.51	-71.32	-56.87	-58.13	22.68	93.5	69	51.2
8.45	-71.78	-57.03	-58.28	22.68	93.5	68.6	48.9
8.44	-72.33	-56.77	-58.16	19.99	93	68.5	51.2
8.42	-72.28	-57.08	-58.1	21.21	92.6	69.1	54.8
8.43	-71.46	-56.56	-58.1	22.65	92.9	68.6	51.2
8.45	-71.96	-57.29	-57.91	20.09	92.4	68.5	52.5
8.43	-71.96	-56.98	-58.06	22.34	91.9	69	50.5
8.41	-71.64	-56.46	-58.28	22.68	92.1	68.5	52.2
8.3	-71.18	-56.2	-58.19	21.03	92	68.2	53.3
8.36	-70.59	-56.93	-58.19	19.66	91.2	68.7	51.7
8.48	-71.82	-57.03	-58.13	22.65	91.6	68.7	48.7
8.46	-70.63	-57.5	-58.13	22.68	91.6	68.2	52.5
8.44	-71.64	-56.87	-58.22	22.71	91.6	68.2	52.9
7.88	-72.19	-56.93	-58.13	19.81	90.8	68.1	51.7
8.46	-71.32	-56.87	-58.16	22.65	90.8	68.8	50.3
8.43	-71.5	-56.51	-58.1	22.68	90.8	68	51.7

8.5	-71.5	-57.13	-58	20.02	90.7	68	53.6
8.37	-72.1	-56.61	-58.19	20.42	90.3	68.3	53.5
8.51	-71.14	-56.56	-58.37	22.68	90.8	67.9	53.1
8.43	-70.86	-56.98	-58.25	22.68	90.8	67.9	47
8.11	-71.27	-57.13	-58.37	19.84	90.3	67.8	51.9
9.57	-71.41	-56.77	-58.28	22.59	90.3	68.3	51.4
8.5	-71.87	-57.13	-58.25	22.68	90.3	67.9	53.7
8.39	-71	-56.51	-58.25	21.28	90.4	67.6	51.8
8.34	-70.95	-56.61	-58.16	19.6	89.7	67.9	51.6
8.58	-71.05	-57.08	-58.16	22.68	90	67.9	52
8.51	-71.32	-56.56	-58.22	22.71	90.1	67.5	52.7
8.46	-70.82	-56.51	-58.34	20.05	89.9	67.4	48.9
8.36	-70.63	-56.82	-58.43	19.87	89.5	67.9	52.6
8.48	-72.19	-56.87	-58.22	22.65	89.5	67.6	50.2
8.43	-72.14	-57.08	-58.1	22.68	89.6	67.3	51.4
8.39	-71.69	-56.72	-58.1	20.21	89	67.2	52.4
8.35	-70.86	-56.41	-58.19	19.57	88.6	67.5	51.7
8.56	-71.55	-56.98	-58.37	22.68	88.9	67.8	51.4
8.39	-70.22	-56.98	-58.25	22.62	89.3	67.3	52.6
8.42	-71.32	-57.55	-58.13	20.48	89	67.2	50.4
8.38	-71.41	-56.93	-58.43	19.57	88.7	67.3	52.5
8.44	-71.46	-57.08	-58.55	22.68	89	67.4	54.6
8.44	-71.18	-57.29	-58.25	22.65	89.2	67.1	50.1
8.38	-72.42	-56.77	-58.49	20.09	88.7	66.9	51.5
8.41	-71.09	-57.45	-58.22	19.54	88.4	67.4	51.7
8.47	-71.18	-56.72	-58.25	22.65	88.7	67.3	53.1
8.43	-71.27	-57.6	-58.28	22.65	88.6	66.9	49.7
8.36	-71.27	-57.13	-58.28	19.93	88.4	66.7	51.1
9.43	-71.69	-56.51	-58.25	22.56	88.4	67.4	50
8.42	-71.64	-56.41	-58.22	22.71	88.7	66.9	54.6
8.36	-72.01	-57.29	-58.25	20.09	88.4	66.7	54.5
8.37	-71.27	-56.56	-58.37	21.73	88	67.2	50.3
8.35	-71.46	-56.93	-58.25	22.74	88.6	66.7	53.9
8.37	-71.32	-57.45	-58.22	19.87	88.5	66.6	48
8.63	-71.5	-57.19	-58.22	22.53	88.5	67.3	51.1
8.4	-70.68	-56.72	-58.34	22.68	88.7	66.8	51.7
8.38	-72.05	-57.39	-58.34	22.65	88.7	66.6	51
8.33	-72.01	-57.55	-58.22	20.09	88.4	66.5	51.9
8.37	-71.37	-57.45	-58.49	20.21	88.2	67	52.4
8.53	-71.27	-56.93	-58.25	22.68	88.6	67	54.5
8.51	-70.86	-56.61	-58.13	22.71	88.6	66.6	52.1
8.42	-71.05	-57.03	-58.16	19.84	88.2	66.4	51.5
8.38	-71.27	-56.41	-58.43	19.72	87.9	66.9	52.3
8.57	-70.82	-56.77	-58.43	22.68	88.4	66.8	51.6
8.47	-71	-56.87	-58.55	22.77	88.7	66.4	53.3
8.29	-70.59	-56.93	-58.34	19.9	88.3	66.4	50.8
8.42	-70.82	-56.98	-58.43	22.5	88.6	67.1	53.3

8.53	-71.69	-57.19	-58.37	22.71	88.8	66.5	50.5
8.5	-72.24	-57.7	-58.34	22.65	89.5	66.5	53.2
8.52	-71.05	-56.98	-58.37	20.24	89.8	66.4	50.9
8.36	-71.32	-57.03	-58.28	19.6	89.9	67	53.8
8.5	-71.41	-57.24	-58.46	22.68	90.9	66.9	51.3
8.38	-71.55	-56.98	-58.43	22.13	91.4	66.8	51.8
8.35	-72.01	-57.03	-58.43	19.78	91	67.1	52.6
8.54	-71.55	-57.19	-58.34	22.74	91.6	67.5	49.7
8.49	-71.78	-57.34	-58.19	22.77	91.9	67.2	53.6
8.48	-71.78	-57.29	-58.4	20.21	91.9	67	51.1
8.39	-71.41	-56.82	-58.52	20.09	91.7	67.8	49.9
8.42	-71.05	-57.45	-58.46	22.71	92.4	67.5	51.2
8.43	-71.23	-57.03	-58.43	22.77	92.1	67.5	50.2
8.5	-71.05	-57.39	-58.4	20.09	91.6	67.2	53
8.41	-71.73	-57.03	-58.52	19.69	91.4	67.8	49.5
8.48	-71	-56.82	-58.43	22.83	92.7	67.9	53.8
8.48	-70.63	-57.5	-58.52	22.77	92.3	67.5	51.6
8.4	-71.23	-57.13	-58.4	19.99	92.4	67.3	50.3
8.41	-71.46	-57.13	-58.52	20.6	92.5	68	48.8
8.44	-72.01	-56.77	-58.52	22.71	92.9	67.7	51.4
8.53	-71.37	-57.03	-58.43	22.74	93.2	67.7	55.9
8.32	-71.69	-57.39	-58.46	19.87	92.6	67.9	51.2
8.48	-71.64	-57.45	-58.55	22.74	92.9	68	52.1
8.47	-72.01	-57.13	-58.49	22.74	92.9	67.8	50.2
8.35	-71.55	-57.03	-58.34	20.05	93.2	67.7	51.4
9.43	-71.27	-57.24	-58.52	22.62	93.7	68.4	53.6
8.5	-71.5	-57.29	-58.55	22.71	94	68	48.7
8.51	-72.6	-56.61	-58.43	22.86	94.2	67.9	51.9
8.41	-72.33	-57.39	-58.61	20.09	93.5	67.9	49.9
8.43	-71.55	-57.29	-58.58	21.09	93.2	68.4	52.1
8.5	-71.5	-56.93	-58.55	22.65	94.3	68.2	51.6
8.42	-71.96	-57.03	-58.52	22.68	95.2	68	52.7
8.36	-71.41	-57.24	-58.49	19.75	94.6	68.1	51.3
8.65	-71	-57.08	-58.8	22.74	94.4	68.7	49.9
8.51	-71.37	-57.39	-58.4	22.65	94.9	68.3	51.6
8.47	-71.69	-57.13	-58.55	20.54	94.5	68.1	50
8.37	-71.18	-56.2	-58.58	19.66	94	68.4	52.8
8.45	-71.32	-57.39	-58.55	22.68	94.7	68.7	50.2
8.41	-71.5	-57.03	-58.68	22.71	95.5	68.3	52.5
8.51	-72.05	-57.19	-58.71	19.87	95.3	68.2	52.5
8.88	-71.82	-57.03	-58.46	22.62	94.6	69.1	53
8.44	-71.69	-57.13	-58.68	22.68	95.1	68.4	49.7
8.42	-71.64	-57.08	-58.64	20.24	94.6	68.2	50.1
8.43	-71.5	-57.03	-58.58	21.21	94.2	68.7	54.8
8.52	-71.69	-57.24	-58.49	22.65	94.3	68.5	51.4
8.41	-71.64	-57.34	-58.49	19.99	93.9	68.3	51.6
8.4	-71.41	-57.29	-58.49	21.58	93.8	68.9	49.5

8.52	-71.96	-57.81	-58.58	22.68	93.6	68.6	48.8
8.44	-72.01	-56.46	-58.61	21.09	93.8	68.4	52.4
8.35	-71.78	-57.19	-58.58	19.63	93.7	68.6	52.1
8.52	-71.92	-57.65	-58.77	22.71	94.2	68.8	52.7
8.45	-71.55	-57.39	-58.61	22.07	94.2	68.4	54.1
8.37	-71.82	-57.34	-58.74	19.54	93.9	68.8	51.1
8.48	-71.73	-56.93	-58.8	22.68	94.4	68.6	51.1
8.5	-72.37	-57.39	-58.58	21.79	94.2	68.4	50
8.35	-71.92	-56.93	-58.74	19.6	93.3	68.6	52.7
8.58	-71.5	-57.29	-58.58	22.62	93.8	68.8	48.9
8.46	-71.37	-57.45	-58.77	22.65	94	68.4	50.2
8.37	-71.96	-57.45	-58.71	19.66	93.6	68.7	52.7
8.55	-71.5	-57.29	-58.68	22.65	93.7	69	50.5
8.37	-71.46	-57.91	-58.55	22.65	94	68.8	51.5
8.48	-71.92	-57.45	-58.64	22.77	93.8	68.5	52.8
8.01	-71.92	-57.03	-58.68	19.81	93.3	68.4	51.9
8.53	-71.46	-56.56	-58.77	22.62	93.1	69.1	52.7
8.4	-71.69	-57.19	-58.71	22.65	93.3	68.4	48.4
8.44	-72.14	-57.29	-58.71	19.84	92.8	68.2	53
8.5	-71.96	-57.45	-58.77	22.68	92.9	68.7	54
8.44	-71.87	-57.45	-58.74	22.77	93.1	68.3	52.5
8.37	-71.69	-57.29	-58.68	19.63	92.5	68.7	52
8.55	-71.87	-57.13	-58.74	22.68	92.8	68.6	51.5
8.51	-72.01	-57.13	-58.58	22.71	92.7	68.3	53.2
8.33	-71.32	-57.39	-58.61	19.75	92.1	68.3	53
8.58	-72.24	-57.65	-58.77	22.68	92.1	68.7	52.6
8.52	-71.92	-57.39	-58.74	22.68	92.3	68.2	48.9
8.51	-72.14	-57.29	-58.89	20.48	91.9	68	50.2
8.42	-71.23	-57.39	-58.58	19.63	91.4	68.4	50.9
8.52	-71.32	-57.34	-58.74	22.68	91.7	68.3	50.5
8.46	-71.37	-57.55	-58.89	22.8	91.5	67.9	51.2
8.37	-72.28	-57.19	-58.68	19.72	90.7	68.2	50.8
8.47	-71.55	-57.08	-58.83	22.74	90.8	68	53.2
8.47	-71.37	-57.24	-58.8	20.36	90.3	67.8	53.8
8.43	-71.69	-57.24	-58.61	19.63	89.5	68.2	49.5
8.48	-72.01	-57.76	-58.68	22.8	90.1	68	51.2
8.47	-71.69	-57.24	-58.89	22.83	89.7	67.8	50.5
8.37	-71.87	-57.39	-58.77	19.96	89.2	67.6	50.9
8.53	-72.37	-57.19	-58.77	22.74	89.2	68.1	52
8.38	-72.47	-57.81	-58.74	22.77	89.2	67.5	52.2
8.38	-72.1	-57.55	-58.74	20.02	88.6	67.3	51.6
8.41	-72.28	-57.13	-58.86	21.06	88.1	67.8	53.6
8.41	-71.82	-57.76	-58.77	22.86	88.4	67.6	51.6
8.41	-72.05	-57.29	-58.77	22.77	88.2	67.1	51.9
8.37	-71.32	-57.7	-58.74	19.81	87.5	67.2	51
8.56	-72.01	-57.24	-58.83	22.8	87.7	67.6	51.2
8.39	-72.24	-57.45	-58.55	22.77	87.6	66.9	53.6

7.88	-71.87	-57.55	-58.64	19.96	86.7	66.9	50.9
8.5	-72.01	-57.39	-58.83	22.89	86.7	67.4	50.1
8.52	-71.73	-57.45	-58.77	22.86	86.8	66.8	50.8
8.37	-71.92	-57.24	-59.04	20.36	86.3	66.6	52
8.38	-71.82	-57.65	-58.95	20.97	85.8	67	49.9
8.47	-71.5	-58.48	-58.86	22.86	86.3	66.6	49.8
8.37	-72.74	-57.13	-58.86	20.42	86.3	66.4	49.8
8.35	-72.24	-57.81	-58.83	20.09	85.9	66.7	51.6
8.48	-71.27	-57.6	-58.89	22.89	86.4	66.5	50.7
8.43	-71.64	-57.7	-58.83	22.92	86.4	66.3	50.7
8.4	-71.92	-57.45	-58.83	20.51	86.1	66.2	51.4
8.35	-72.1	-57.19	-58.89	19.81	85.4	66.4	51.9
8.51	-71.87	-57.86	-59.1	22.99	85.6	66.4	50.7
8.51	-71.87	-57.55	-58.77	22.99	85.4	66	53.2
8.42	-71.09	-57.34	-59.1	20.21	85.1	65.8	53.9
8.42	-71.46	-57.5	-58.64	21.06	84.3	66.3	51.8
8.52	-71.96	-57.24	-58.71	22.95	84.9	66.1	46.2
8.43	-71.78	-57.65	-58.74	22.95	84.8	65.8	49.5
8.37	-71.96	-57.7	-58.74	20.12	84.4	65.5	52
8.42	-72.14	-57.6	-58.86	20.94	83.8	65.9	50.2
8.44	-72.42	-57.55	-58.86	22.99	84.2	65.7	53.6
8.4	-72.37	-58.17	-58.86	22.95	84.1	65.3	50.4
8.52	-71.92	-57.7	-58.86	20.02	83.8	65.3	51.6
8.4	-72.65	-57.91	-58.98	19.69	83.7	65.7	51
8.51	-72.19	-57.91	-58.86	22.95	83.7	65.6	51.3
8.38	-72.74	-56.77	-59.01	23.02	83.5	65.3	50.5
8.4	-72.14	-57.34	-58.8	22.04	83.6	65.2	47.1
8.33	-71.96	-57.19	-58.92	20.09	83	65.2	52.6
8.51	-71.73	-57.45	-58.92	23.02	83.3	65.6	49.6
8.48	-72.28	-57.55	-58.64	23.08	83.5	65.1	51.6
8.47	-72.14	-57.45	-58.8	20.27	83.2	64.7	49.8
8.38	-72.24	-57.19	-58.92	21.4	82.3	65.4	51.3
8.42	-72.1	-57.5	-58.95	23.14	82.9	65	55.3
8.51	-71.92	-58.28	-58.95	20.85	82.8	64.7	49.2
8.34	-72.74	-57.6	-58.95	19.99	81.9	64.9	50.7
8.55	-71.87	-57.6	-58.83	23.02	82.2	65	53.5
8.39	-72.28	-57.19	-58.83	23.05	82.1	64.7	54.5
8.51	-72.05	-57.76	-58.98	20.57	81.9	64.3	51.2
8.35	-72.19	-57.86	-59.01	20.02	81.7	64.5	51.4
8.51	-71.64	-57.39	-58.98	23.2	81.8	64.9	50.5
8.48	-71.69	-57.6	-58.92	23.08	82.2	64.5	49.5
8.51	-72.1	-57.19	-58.98	23.17	82.4	64.2	49.2
8.48	-72.33	-56.87	-59.04	20.27	82.1	64.2	50.7
8.36	-72.42	-57.76	-58.92	19.93	81.7	64.5	53.7
8.46	-71.37	-57.39	-59.04	23.02	82.5	64.4	50.5
8.41	-72.1	-58.02	-58.98	23.2	82.7	64.1	52.7
8.02	-72.74	-57.39	-58.89	20.21	82.2	64.1	50.8

8.75	-71.87	-57.45	-59.1	23.05	82.5	64.8	54
8.5	-72.19	-57.65	-58.98	23.14	83.2	64.2	53.4
8.41	-72.1	-58.17	-59.19	22.68	83.6	64.1	52.2
8.37	-72.14	-57.39	-58.83	20.3	83.2	64.2	54.1
8.38	-71.87	-57.45	-59.13	20.02	83.2	64.7	50.8
8.56	-71.78	-57.55	-59.01	23.05	84.1	64.8	50.7
8.42	-72.97	-57.29	-58.98	23.14	84.4	64.5	51.5
8.18	-71.64	-57.91	-59.01	20.21	84.2	64.4	51.3
8.52	-72.56	-57.29	-59.1	23.08	84.6	64.9	51.3
8.38	-72.51	-57.86	-58.92	23.02	85.3	64.5	49.7
8.35	-72.1	-57.81	-59.04	19.99	85	64.8	53.4
8.55	-72.33	-57.45	-59.19	23.02	86	64.9	49.4
8.45	-71.64	-58.28	-58.83	22.99	86.4	64.7	49.4
8.34	-72.01	-58.02	-58.95	20.02	86.4	65	52.1
8.55	-72.47	-57.29	-59.13	23.02	87.2	65.4	52.5
8.47	-72.1	-58.12	-58.95	22.92	87.8	65.2	47.5
8.42	-72.42	-58.22	-58.98	22.99	88.3	64.9	53.2
8.33	-73.2	-58.17	-59.1	20.24	88.1	65.3	50.8
8.42	-72.79	-57.55	-58.98	22.8	88.6	65.8	50.8
8.53	-72.51	-57.7	-59.19	22.89	89.5	65.6	53.4
8.47	-72.37	-58.12	-58.98	20.57	89.9	65.5	50.5
8.38	-72.65	-57.6	-58.98	21.06	90.1	66	51.2
8.52	-72.24	-57.76	-58.89	22.92	90.8	65.9	50.9
8.41	-71.55	-57.6	-59.19	22.95	91.5	65.8	54.1
8.32	-71.37	-57.91	-58.92	19.93	91	66	51.8
8.56	-72.65	-57.24	-58.92	22.8	91.5	66.6	50.5
8.52	-72.37	-58.22	-59.04	22.89	92.1	66.3	52.8
8.53	-72.14	-57.86	-59.01	22.95	92.6	66.1	49.9
8.39	-72.05	-57.7	-59.1	19.99	92.5	66.1	47.3
8.39	-72.6	-58.38	-59.38	20.79	92.9	66.9	51.7
8.48	-71.55	-57.81	-59.32	22.74	93.9	66.8	51.1
8.5	-71.87	-58.12	-59.13	22.86	94	66.8	52.4
8.32	-72.1	-57.86	-59.16	20.12	93.6	66.7	51
8.57	-72.01	-58.48	-58.98	22.77	94.3	67.4	52.1
8.41	-72.88	-57.5	-59.04	22.77	94.5	66.9	48.3
8.41	-72.01	-58.22	-59.1	19.99	94.5	66.9	51.6
8.5	-72.01	-57.6	-58.98	22.74	94.3	67.5	51.5
8.44	-71.92	-58.43	-59.1	22.89	94	67	51.8
8.44	-72.1	-57.86	-59.19	20.05	93.9	67	51
8.44	-72.01	-57.81	-59.22	22.83	94.7	67.8	53
8.46	-72.05	-57.91	-59.1	22.83	95.5	67.4	52.1
8.39	-72.1	-57.65	-59.13	20.57	95.3	67.4	51.9
8.39	-72.1	-58.07	-59.13	19.69	95.1	67.7	51.3
8.47	-73.06	-57.91	-59.35	22.74	95.1	67.8	50.8
8.41	-72.42	-58.38	-59.22	22.8	94.8	67.7	52.2
8.48	-72.14	-58.33	-59.04	20.6	94.4	67.3	49.6
8.37	-72.01	-57.81	-59.19	19.75	94.1	67.6	50.7

8.6	-72.1	-57.7	-59.13	22.8	94.2	67.9	52.3
8.47	-72.24	-58.38	-59.1	22.8	94.3	67.5	54.9
8.42	-72.24	-58.28	-59.13	19.99	93.9	67.5	49
8.4	-72.6	-57.81	-59.16	21.79	93.9	67.9	49
8.52	-72.79	-58.12	-59.19	22.74	94.2	67.7	51.7
8.51	-71.96	-57.81	-59.1	21.95	94.1	67.5	50.7
8.38	-72.1	-57.81	-59.1	19.75	93.8	67.8	52.9
8.44	-72.6	-58.07	-59.29	22.68	94.1	67.9	51
8.51	-72.28	-58.02	-59.04	22.77	94.1	67.7	51.5
8.38	-72.33	-58.12	-59.04	19.84	93.8	67.9	50
8.59	-72.14	-58.28	-59.26	22.68	94	68.3	52
8.53	-72.1	-57.55	-59.29	22.68	94.4	67.8	51
8.43	-72.97	-57.55	-59.1	22.77	94.3	67.7	53.4
7.97	-72.1	-57.76	-58.95	19.87	93.9	67.9	52
8.45	-72.47	-57.39	-59.32	22.62	94.1	68.5	55.3
8.44	-72.24	-57.7	-59.1	22.71	94.3	68	51.2
8.46	-72.74	-57.65	-59.16	21.18	94.1	67.9	51.6
8.4	-72.37	-57.34	-59.16	19.69	93.7	68.2	51.8
8.5	-72.79	-58.07	-59.29	22.68	94.3	68	51.7
8.43	-72.19	-57.39	-59.26	20.45	94	67.7	52
8.43	-72.28	-58.38	-59.1	20.42	93.3	68.2	54
8.51	-72.28	-58.07	-59.35	22.77	93.8	68	52.9
8.39	-72.97	-58.12	-59.19	22.83	93.7	67.8	51.7
8.3	-72.37	-57.65	-59.44	19.75	93.2	67.9	49
9.41	-72.56	-57.7	-59.29	22.5	93.1	68.4	53
8.54	-72.05	-58.38	-59.13	22.74	93.2	67.9	52.7
8.51	-72.65	-57.7	-59.29	22.77	93.3	67.9	54.4
8.46	-72.37	-57.7	-59.38	20.02	92.8	67.7	48.6
8.35	-72.42	-58.53	-59.26	19.66	92.3	68.2	51.5
8.52	-72.05	-57.7	-59.38	22.71	92.6	68	49.7
8.5	-71.78	-58.12	-59.22	22.77	92.4	67.6	51
8.35	-72.6	-57.76	-59.32	19.81	91.8	67.7	50.5
8.48	-72.51	-57.45	-59.26	22.77	91.9	68	45.9
8.52	-72.19	-58.02	-59.5	22.71	91.8	67.6	49.9
8.33	-72.28	-57.91	-59.26	19.75	90.7	67.7	52.6
8.59	-72.28	-58.17	-59.16	22.8	90.5	68	49.3
8.39	-72.19	-57.7	-59.38	22.8	90.1	67.6	51.5
8.45	-72.37	-58.22	-59.41	22.01	90	67.3	49.5
8.23	-71.78	-57.39	-59.38	19.93	89.2	67.3	50.3
8.41	-72.28	-57.86	-59.35	20.94	88.7	67.8	52
8.43	-72.1	-57.39	-59.38	22.8	89.2	67.4	51.8
8.41	-72.1	-57.65	-59.32	22.86	88.8	67.2	53.9
7.77	-72.28	-58.33	-59.5	19.96	87.9	67	50.4
8.87	-72.37	-58.17	-59.41	22.8	88	67.4	51.5
8.5	-72.79	-57.7	-59.35	22.89	87.9	67.1	52.1
8.5	-71.92	-58.28	-59.35	22.92	87.8	66.6	51.5
8.34	-72.42	-57.81	-59.38	19.84	87	66.7	51.9

8.47	-72.88	-57.55	-59.53	22.92	87.3	66.9	50.9
8.53	-72.01	-58.28	-59.41	22.95	87.3	66.5	51.6
8.12	-72.28	-58.12	-59.41	19.93	86.5	66.4	52.2
8.55	-72.74	-58.28	-59.41	22.89	86.7	66.9	50.4
8.38	-71.96	-57.55	-59.47	22.89	86.7	66.5	49.8
8.5	-72.51	-57.76	-59.5	20.18	86.2	66	50.5
8.42	-72.37	-58.53	-59.44	21.86	85.7	66.4	52
8.43	-72.65	-58.22	-59.59	22.92	86.2	66.5	54
8.41	-72.14	-58.22	-59.5	22.07	86.1	66	53.6
8.33	-72.56	-57.86	-59.59	19.81	85.3	66.2	51.3
8.46	-72.47	-57.76	-59.59	22.86	85.5	66.4	50.5
8.41	-72.51	-57.76	-59.38	22.95	85.3	65.8	55
8.48	-72.37	-58.59	-59.47	20.18	84.6	65.7	53.6
8.42	-72.37	-57.76	-59.38	21.55	84.2	66.2	51.7
8.48	-72.92	-57.86	-59.41	22.92	84.8	65.9	49.3
8.42	-72.74	-58.85	-59.47	23.14	84.5	65.6	53.8
8.46	-72.42	-58.28	-59.35	20.12	83.9	65.5	51.6
8.38	-72.37	-58.28	-59.41	20.63	83.5	65.8	53.3
8.54	-72.6	-58.07	-59.35	23.02	83.9	65.6	49.8
8.48	-72.65	-58.9	-59.16	23.02	84	65.4	51.8
8.4	-73.15	-59	-59.47	20.3	83.2	65.3	50.7
8.35	-72.88	-58.9	-59.38	19.99	83	65.6	50.7
8.56	-72.6	-58.38	-59.59	23.02	83.5	65.5	51.2
8.49	-72.74	-58.33	-59.59	23.05	83.6	65.4	49.8
8.48	-72.74	-57.86	-59.44	20.21	83	64.8	49.6
8.42	-72.19	-58.22	-59.56	21.98	82.9	65.3	53.3
8.51	-72.74	-58.43	-59.44	23.02	83.6	65.1	52.7
8.5	-72.56	-57.65	-59.62	20.91	83.5	64.7	51.7
8.38	-72.65	-58.07	-59.59	19.87	82.5	65.2	52.3
8.47	-72.83	-57.91	-59.59	23.14	83.1	65.1	53.2
8.49	-72.56	-58.17	-59.53	23.05	83.1	64.7	45.4
8.42	-72.47	-58.48	-59.53	20.27	82.3	64.4	51.7
8.39	-72.74	-58.38	-59.5	20.02	81.5	64.8	52.1
8.48	-72.92	-57.5	-59.56	23.14	81.7	64.9	50.4
8.5	-72.83	-58.64	-59.59	23.26	81.4	64.4	51.4
8.37	-72.47	-58.12	-59.59	20.76	81.1	64.1	49.8
8.37	-72.51	-58.12	-59.47	20.05	80.9	64.7	52.7
8.54	-72.56	-57.91	-59.53	23.14	81.6	64.7	48.9
8.44	-72.19	-58.12	-59.47	23.23	81.9	64.1	55.4
8.38	-72.79	-57.24	-59.56	21	81.3	63.9	51.1
8.32	-72.65	-58.53	-59.44	20.24	80.7	63.9	53.6
8.41	-72.74	-58.38	-59.47	23.05	80.7	64.7	51
8.41	-72.19	-58.53	-59.44	23.26	80.6	63.9	50.5
8.35	-72.83	-58.28	-59.47	22.1	80.6	63.8	51.9
8.33	-72.33	-58.38	-59.44	20.02	79.9	64.1	50.8
8.55	-72.47	-58.53	-59.68	23.35	80.7	64.1	52.6
8.5	-72.6	-57.91	-59.96	23.29	81.1	63.7	56.8

8.4	-73.34	-58.02	-59.5	20.85	81	63.6	51.2
8.32	-72.6	-58.12	-59.56	20.18	80.9	63.7	51.5
8.38	-72.51	-57.86	-59.84	23.05	81	64.3	52.9
8.42	-72.47	-58.38	-59.56	23.29	81.8	64	52.4
8.41	-72.92	-58.07	-59.53	23.26	82.5	63.6	52.3
8.38	-72.24	-58.43	-59.5	20.54	82.4	63.7	53.3
8.38	-73.38	-58.43	-59.62	20.02	82.7	64.1	52
8.49	-72.97	-57.6	-59.77	23.08	83.7	64.3	50.7
8.47	-72.88	-58.28	-59.68	23.14	84.2	64	51.9
8.42	-73.38	-58.33	-59.59	22.19	84.9	63.9	52
8.35	-72.97	-58.28	-59.8	20.24	84.9	64.2	52.7
9.06	-72.83	-58.9	-59.5	23.08	85.3	64.8	51.2
8.47	-72.83	-58.48	-59.59	23.17	86.2	64.4	49.5
8.47	-72.65	-58.12	-59.68	23.17	86.7	64.4	51.5
8.32	-72.88	-57.5	-59.68	20.18	86.8	64.7	50.2
8.54	-72.74	-58.38	-59.5	23.05	87.6	65.2	52
8.38	-72.42	-59.37	-59.71	23.08	88	64.9	52.7
8.44	-72.79	-58.43	-59.56	23.14	88.7	64.8	51.1
8.52	-72.47	-58.33	-59.56	20.45	88.8	64.7	50.9
8.4	-72.79	-58.33	-59.84	19.99	88.7	65.2	53.2
8.57	-73.75	-58.64	-59.32	22.99	89.9	65.6	51.3
8.43	-72.88	-58.12	-59.56	23.05	90.3	65.2	50.5
8.4	-72.83	-58.33	-59.53	20.36	90.7	65.4	52.6
8.43	-72.24	-58.28	-59.65	22.65	90.9	66	52.2
8.39	-73.11	-57.91	-59.56	22.83	91.7	65.8	52.1
8.45	-73.29	-58.07	-59.71	21.09	91.8	65.8	50.9
8.38	-73.29	-58.17	-59.68	19.87	91.8	66.2	51.2
8.58	-72.6	-58.48	-59.59	22.95	92.3	66.4	49.5
8.47	-72.33	-58.48	-59.62	22.92	92.9	66.1	50.9
8.19	-72.83	-58.69	-59.56	20.09	92.8	66.2	52.3
8.44	-72.42	-58.38	-59.71	22.71	93.3	66.7	53
8.41	-72.92	-58.53	-59.8	22.89	93.9	66.4	52.4
8.44	-73.29	-58.02	-59.62	22.92	94.1	66.5	51.5
8.48	-72.83	-58.43	-59.8	20.18	94.2	66.5	53.4
8.43	-73.52	-58.53	-59.74	19.72	94.3	67.1	51.1
8.47	-73.15	-58.64	-59.71	22.83	95	67	52.2
8.5	-72.28	-58.59	-59.68	22.89	95.3	66.7	50.3
8.52	-72.28	-58.53	-59.65	20.21	95.4	66.9	50
8.43	-73.24	-58.64	-59.74	21.15	95.5	67.4	51.2
8.52	-72.83	-58.17	-59.65	22.8	95.7	67.2	51.9
8.52	-73.2	-58.22	-59.84	20.24	95.9	67.1	50.8
8.43	-73.01	-58.33	-59.65	21.31	95.3	67.8	52.4
8.53	-73.06	-58.69	-59.93	22.74	96.2	67.4	55.9
8.44	-73.06	-58.02	-59.74	22.77	95.9	67.1	49.7
8.05	-73.15	-58.12	-59.74	19.99	96	67.1	53.5
8.41	-73.29	-58.43	-59.74	22.16	96	67.8	51.9
8.49	-72.92	-58.43	-59.68	22.71	96.2	67.6	50.8

8.52	-72.65	-58.33	-59.93	20.54	95.8	67.4	54
8.38	-73.11	-58.48	-59.77	19.81	95	67.9	51.4
8.47	-73.11	-59.11	-59.77	22.77	95.1	67.7	50.4
8.52	-73.15	-58.59	-59.74	22.83	95.1	67.5	52.2
8.42	-73.01	-58.48	-59.84	21.21	95.1	67.5	50.8
8.34	-72.65	-58.74	-59.84	20.05	94.8	67.5	53.7
8.41	-73.56	-58.79	-59.74	19.75	94.5	67.9	54.3
8.48	-73.01	-57.81	-59.8	22.83	95.1	67.9	47.1
8.5	-72.56	-58.12	-59.74	22.86	95.2	67.7	53.7
8.44	-73.24	-58.48	-59.71	20.09	94.8	67.5	49.6
8.42	-72.01	-58.12	-59.8	22.65	95	68.1	51.8
8.53	-73.06	-58.38	-59.74	22.8	95.1	67.7	50.8
8.41	-72.74	-58.12	-59.77	20.63	94.9	67.6	51.9
8.37	-72.51	-57.81	-59.96	19.75	94.6	67.9	51.6
8.54	-73.47	-58.59	-59.71	22.77	95.1	67.9	50.5
8.39	-73.11	-59.11	-59.8	22.77	95.1	67.8	49.3
8.53	-72.6	-58.74	-59.8	21.21	95.1	67.6	53.7
8.38	-72.37	-59	-59.96	19.78	94.8	67.9	51.4
8.43	-73.61	-58.38	-59.68	22.77	94.9	68.3	52.7
8.44	-72.28	-58.07	-59.9	22.8	95.1	67.9	49.9
8.4	-73.2	-58.59	-59.96	22.86	95	67.6	53.9
7.9	-72.37	-57.91	-59.99	19.93	94.8	67.7	52
9.18	-72.97	-58.28	-59.8	22.47	94.9	68.4	50.5
8.47	-73.34	-58.79	-59.84	22.8	95.1	67.9	52.6
8.45	-73.01	-58.22	-59.84	21.37	94.9	67.6	52.1
8.34	-72.56	-58.17	-59.9	19.72	94.2	67.9	54.3
8.57	-73.06	-58.79	-59.8	22.71	94.5	68.5	51.7
8.52	-72.28	-58.43	-59.74	22.77	94.6	67.9	51.9
8.44	-73.24	-58.9	-59.9	21.79	94.3	67.7	51.8
8.35	-73.06	-58.38	-59.74	19.78	94	68.1	50.8
8.48	-73.01	-58.43	-59.77	22.77	94.2	67.9	51.6
8.37	-73.43	-58.64	-60.02	22.86	94	67.6	49.5
8.38	-73.24	-59	-59.77	19.99	93.5	67.5	52.1
8.39	-73.43	-58.74	-59.84	21.28	92.6	68.1	49.7
8.53	-73.2	-58.85	-59.96	22.89	92.1	67.7	51.4
8.51	-73.61	-58.64	-59.84	22.92	91.6	67.5	53.4
8.11	-72.88	-58.07	-59.71	19.99	90.8	67.3	52.1
8.43	-72.47	-58.38	-59.84	21.37	90.6	67.9	52.3
8.46	-72.65	-58.33	-59.68	22.92	90.3	67.5	49.3
8.5	-72.83	-58.38	-59.93	22.99	89.9	67.2	52.8
7.96	-72.65	-59	-59.9	20.24	88.6	67	51.5
8.42	-72.79	-59	-59.8	22.56	87.9	67.6	52
8.53	-73.06	-59	-59.93	23.02	87.8	67.1	58.4
8.44	-73.01	-58.95	-59.74	22.25	87.4	66.8	49
8.35	-72.83	-58.02	-59.84	19.96	86.5	66.8	51.5
8.58	-72.92	-58.79	-59.93	23.02	87.2	67.1	50.5
8.44	-73.06	-58.74	-59.9	23.08	86.7	66.4	51.8

8.44	-73.11	-58.64	-59.99	20.21	86.2	66.3	51.1
8.43	-73.52	-58.59	-59.96	22.25	85.5	66.9	52.6
8.42	-72.92	-58.02	-60.02	23.05	85.7	66.3	51.2
8.52	-73.24	-58.74	-59.96	23.14	85.9	65.9	51.7
8.18	-73.38	-58.02	-60.08	20.3	85.1	65.9	51.2
8.43	-73.15	-58.79	-59.96	21.03	84.2	66.4	50.7
8.54	-72.56	-58.38	-59.96	23.14	84.8	66.2	51.6
8.44	-73.52	-58.59	-59.8	23.14	84.9	65.7	51.8
8.38	-73.11	-58.69	-59.99	20.48	84.2	65.4	53.7
8.38	-73.01	-58.59	-59.84	20.3	83.6	66	52.7
8.5	-73.2	-58.59	-60.02	23.17	84	65.8	53.3
8.49	-72.92	-58.74	-59.84	23.08	83.9	65.5	51.9
7.62	-73.01	-58.85	-60.17	20.24	83	65.4	53
8.52	-72.88	-58.53	-59.9	23.14	83.1	66	51
8.42	-73.24	-57.86	-60.08	23.2	83.2	65.5	53.3
8.5	-72.83	-59.05	-59.74	21.15	82.9	65.1	47.2
8.35	-73.15	-58.53	-59.96	20.02	82	65.2	51.4
8.49	-73.47	-58.38	-60.08	23.17	82.1	65.5	51.6
8.48	-73.34	-58.64	-59.93	23.17	82.3	65.1	49.8
8.5	-72.97	-59.16	-59.77	20.79	82.1	64.7	51.1
8.37	-72.33	-58.22	-60.02	20.02	81.3	65.1	52.4
8.53	-73.01	-58.74	-59.8	23.23	81.8	65	53.2
8.5	-73.38	-58.79	-60.05	23.26	81.7	64.7	51.9
8.37	-72.56	-58.9	-60.05	20.45	81.1	64.5	52
8.36	-73.52	-59.26	-59.93	20.39	80.8	65	53.7
8.53	-73.06	-58.74	-60.05	23.2	81.3	64.7	54.7
8.49	-73.29	-58.79	-59.99	23.29	81	64.2	51.8
8.41	-72.79	-58.79	-60.14	20.6	80.7	64.2	53.4
8.37	-72.97	-58.85	-60.08	20.05	79.9	64.5	53.8
8.56	-73.01	-59.47	-59.99	23.23	80.5	64.4	48.7
8.41	-73.06	-59.31	-59.93	23.29	80.5	64	55
8.41	-72.74	-58.69	-59.84	20.57	80.2	64	50.5
8.35	-73.15	-58.48	-60.02	20.05	79.7	64.3	51.3
8.59	-73.11	-58.85	-60.08	23.32	80.3	64.4	55.2
8.5	-73.61	-58.53	-60.14	23.29	80.6	63.8	51.6
7.7	-73.11	-58.85	-60.08	20.39	79.8	63.7	51
8.43	-73.24	-59.37	-59.9	23.17	79.7	64.3	52.7
8.49	-73.52	-59.05	-59.9	23.32	80.1	63.8	51.8
8.44	-73.29	-58.38	-59.99	23.41	80	63.6	52.3
8.42	-72.56	-57.86	-60.23	21.4	79.6	63.6	50.3
8.39	-73.47	-59.11	-60.02	20.45	78.7	63.4	49.9
8.35	-73.75	-58.79	-60.17	20.18	78.6	63.7	52.7
8.62	-73.34	-59	-60.14	23.32	78.5	63.9	55.2
8.51	-73.66	-58.38	-60.26	23.35	78.8	63.5	51.5
8.42	-73.66	-58.74	-60.17	21.76	78.8	63.3	51.9
8.34	-72.65	-58.64	-60.2	20.24	78.1	63.5	53.6
8.59	-73.52	-59.11	-60.02	23.35	78.7	63.6	52

8.45	-73.75	-59.11	-59.93	23.38	78.6	63.2	51.8
8.38	-72.51	-58.79	-60.11	20.79	78.7	63.1	51.4
8.33	-73.2	-58.9	-60.23	20.21	78.5	63.4	50.9
8.44	-73.47	-58.69	-60.08	22.34	79	63.6	53
8.58	-73.2	-58.79	-60.05	23.23	79.6	63.5	53.2
8.4	-73.84	-59.11	-59.99	23.32	80.2	63.3	50.5
8.44	-73.15	-58.17	-60.14	23.35	80.5	63.2	50.9
8.5	-73.43	-58.69	-60.35	20.36	80.5	63.2	51
8.35	-72.47	-59	-60.05	21.46	80.3	63.6	53.9
8.51	-73.01	-58.69	-60.26	23.23	81.4	63.5	49.7
8.49	-73.2	-59.26	-59.84	23.32	81.9	63.5	55.5
8.5	-73.01	-59.11	-60.23	20.51	81.9	63.5	51.9
8.37	-73.34	-58.9	-59.9	20.05	82	63.8	51
8.6	-73.98	-58.74	-60.14	23.32	83	64.1	51.4
8.39	-73.88	-59.26	-60.05	23.26	83.6	63.8	51.8
8.48	-72.92	-58.48	-60.23	23.17	84	63.6	51.2
8.39	-72.88	-58.74	-60.14	20.36	83.8	63.8	50
8.39	-73.52	-60.04	-60.26	22.34	84.5	64.3	50.8
8.47	-72.05	-58.79	-60.26	23.14	85.4	64.2	52.7
8.41	-73.66	-59.31	-60.17	22.07	86	64.2	52.8
8.34	-73.34	-59.31	-60.26	20.05	86.1	64.4	51.7
8.89	-73.15	-58.53	-60.26	22.99	86.8	64.9	52.4
8.51	-73.06	-58.64	-60.14	23.14	88	64.8	51.4
8.41	-72.65	-59	-60.35	23.14	88.5	64.7	51.5
8.4	-73.29	-58.48	-60.05	20.36	88.6	64.7	53.8
8.35	-74.11	-58.95	-60.17	19.96	88.6	65.4	49.1
8.46	-73.43	-58.48	-60.08	23.02	89.8	65.2	52.7
8.46	-73.38	-58.9	-60.08	23.05	90.3	65.3	51.1
8.39	-73.11	-58.85	-60.11	20.27	90.4	65	52.8
8.38	-73.43	-58.48	-60.17	22.5	90.9	66.1	52.2
8.48	-73.61	-59.73	-60.26	22.95	91.8	65.6	50.9
8.41	-73.06	-59.42	-60.17	22.95	92.1	65.7	51.6
8.51	-73.11	-58.79	-60.26	20.12	92.2	65.9	50.1
8.41	-72.83	-59.16	-60.11	22.22	92.2	66.5	51.5
8.47	-73.47	-58.9	-60.23	22.95	93.5	66.2	51.4
8.44	-73.29	-59.05	-60.17	20.36	93.2	66	51.2
8.41	-73.7	-59.57	-60.48	20.82	93.1	66.7	53.3
8.51	-73.43	-59.68	-60.02	22.83	94.1	66.7	50.4
8.43	-73.34	-59.16	-60.23	22.83	94.4	66.5	52
8	-73.01	-58.59	-60.2	19.75	94.7	66.5	52
8.38	-73.24	-58.69	-60.38	21.37	94.7	67.4	51.2
8.52	-74.02	-59.42	-60.29	22.74	95.4	67.1	53.8
8.5	-72.92	-59.26	-60.26	22.8	95.4	66.9	52.2
8.52	-72.88	-58.95	-60.14	22.77	95.8	66.9	50.5
8.51	-73.66	-59.47	-60.23	19.96	95.9	66.9	47.4
8.38	-73.29	-58.95	-60.23	19.66	96.2	67.4	53.1
8.66	-73.38	-59.26	-60.35	22.74	96.3	67.9	53

8.4	-74.02	-58.9	-60.17	22.74	96.4	67.5	49.4
8.43	-73.43	-58.79	-60.08	20.91	96.5	67.4	49.7
8.39	-73.43	-59.26	-60.05	19.63	96.1	67.7	53.5
8.5	-73.34	-58.64	-60.32	22.83	95.9	68	51.9
8.48	-73.34	-58.85	-60.05	22.83	95.1	67.7	45.9
8.44	-73.66	-59.11	-60.17	20.36	94.9	67.5	50.1
8.4	-73.43	-58.95	-60.29	19.66	94.5	68	54.5
8.51	-73.2	-59.37	-60.35	22.77	94.6	67.9	53.2
8.5	-73.34	-59.52	-60.45	22.77	94.9	67.7	49.1
8.41	-73.61	-58.9	-60.14	20.54	94.9	67.6	51.8
8.34	-73.43	-59.26	-60.26	19.69	94.7	67.9	51.5
8.42	-73.47	-59.42	-60.29	20.76	94.4	67.9	53.1
8.52	-73.43	-59.11	-60.35	22.77	94.7	68.2	53.2
8.44	-73.43	-59.52	-60.32	22.71	95	67.9	51.1
8.5	-73.47	-59.31	-60.17	20.24	94.8	67.7	50
8.43	-73.43	-58.74	-60.45	19.87	94.5	68.3	52.1
8.52	-73.15	-58.53	-60.35	22.77	94.9	68.1	48.9
8.43	-73.47	-59.11	-60.35	22.77	94.9	67.9	48.7
8.13	-73.43	-58.9	-60.26	19.81	94.2	67.9	51.7
8.41	-73.43	-58.48	-60.51	20.48	94.1	68.5	51.8
8.59	-73.61	-58.64	-60.51	22.74	94.3	68.5	52.4
8.53	-73.24	-59.37	-60.42	22.74	94.3	68.2	50.7
8.49	-73.7	-58.69	-60.32	22.77	94.2	67.9	51.7
8.27	-73.47	-59.26	-60.42	19.99	93.7	67.9	51.7
8.42	-73.47	-58.95	-60.17	22.34	93.6	68.6	52.6
8.5	-73.24	-59.57	-60.29	22.86	93.6	68	49.7
8.42	-73.34	-58.9	-60.45	20.12	93.1	67.8	52.4
8.41	-72.79	-58.69	-60.29	20.18	92.6	68.4	51.7
8.56	-72.47	-58.59	-60.35	22.83	92.9	68	51.2
8.39	-73.66	-58.59	-60.51	22.86	92.8	67.9	52.7
8.53	-73.11	-59.26	-60.35	20.51	92.4	67.7	53.2
8.33	-73.84	-58.69	-60.32	19.81	91.7	67.9	49.5
8.41	-73.88	-59.05	-60.29	22.13	91.6	68.4	51.6
8.47	-73.47	-59.62	-60.17	22.89	91.7	67.9	53.1
8.41	-72.92	-58.79	-60.45	22.95	91.4	67.7	51.6
8.17	-74.21	-58.53	-60.45	19.93	90.8	67.5	52.3
8.62	-73.75	-58.9	-60.38	22.86	90.6	68.4	50.9
8.45	-73.2	-58.79	-60.45	22.89	90.6	67.6	52.4
8.52	-73.47	-59.47	-60.38	20.85	90.1	67.3	50.8
8.31	-73.47	-59.26	-60.38	19.93	89.4	67.4	53.8
8.44	-73.88	-58.64	-60.51	21.83	89.2	67.9	49.1
8.47	-73.29	-58.48	-60.48	22.95	89.3	67.5	53.2
8.45	-73.43	-59.37	-60.57	23.02	88.7	67.2	51.6
8.52	-73.34	-59.11	-60.54	22.56	88.5	66.9	51.3
8.26	-73.38	-59	-60.42	19.96	87.7	66.8	52.3
8.47	-73.61	-59.31	-60.38	23.02	87.8	67.5	52.7
8.37	-73.84	-59.26	-60.48	23.08	87.8	66.9	53.4

8.39	-73.84	-59	-60.38	20.7	87.3	66.6	53.2
8.35	-73.7	-59.37	-60.32	19.96	86.5	66.8	51.6
8.44	-73.84	-59	-60.32	22.99	86.8	67.3	51.6
8.53	-73.43	-58.79	-60.35	23.08	86.8	66.7	53.4
8.44	-73.7	-58.69	-60.29	23.08	86.6	66.5	49.1
8.45	-74.34	-59.05	-60.45	23.17	86.4	66.3	53.1
8.53	-73.7	-59.31	-60.29	21.34	86	66	53.2
8.35	-73.61	-58.79	-60.51	20.05	85.8	66.2	50
9.82	-73.66	-59.05	-60.29	22.92	86.2	66.7	51.6
8.48	-73.56	-59.26	-60.57	23.17	85.9	66.1	49
8.49	-73.84	-59	-60.54	23.14	85.2	65.8	51.5
8.13	-73.15	-59.73	-60.45	20.27	84	65.7	53
8.41	-73.56	-59	-60.57	22.5	83.7	66.3	52.1
8.44	-73.84	-59.47	-60.66	23.17	83.7	65.8	52.8
8.4	-74.07	-59.11	-60.45	23.26	83.2	65.6	49.9
8.47	-73.84	-59.26	-60.35	20.36	82.7	65.3	51.3
8.39	-74.25	-59	-60.45	19.96	81.9	65.8	50.1
8.54	-73.52	-59.78	-60.48	23.17	82	65.6	51.4
8.43	-73.24	-58.79	-60.57	23.26	82.1	65.1	50.5
8.5	-74.02	-59.26	-60.38	20.42	81.4	64.8	51.7
8.33	-73.34	-58.9	-60.57	19.99	81	65.2	50.3
8.47	-73.34	-59	-60.29	23.17	81.1	65.3	49.3
8.4	-73.66	-58.69	-60.72	23.23	81	64.7	53.8
8.41	-73.43	-58.79	-60.45	21.25	80.8	64.5	49.7
8.29	-74.02	-59.52	-60.48	20.05	79.9	64.8	52.2
9.01	-73.34	-59.05	-60.45	23.08	80.1	65.1	52.7
8.5	-73.7	-59.11	-60.45	23.23	80.3	64.7	50.9
8.44	-73.47	-59.94	-60.42	23.26	80.2	64.2	53.8
8.47	-73.2	-59.68	-60.45	21.03	79.9	64.2	51.2
8.15	-74.34	-58.64	-60.45	20.3	79.4	64	53.4
8.33	-73.98	-59.31	-60.45	19.93	79	64.4	51.5
8.43	-73.61	-59.62	-60.48	22.95	78.8	64.7	54.4
8.5	-73.52	-59.16	-60.35	23.2	79.3	64.2	51.9
8.5	-73.61	-59.31	-60.87	23.2	79.3	63.6	51
8.35	-73.98	-58.9	-60.51	20.12	78.8	63.7	51.4
8.43	-73.52	-59.83	-60.51	22.95	78.6	64.3	51.6
8.53	-73.84	-59.31	-60.45	23.26	78.9	63.9	52.9
8.38	-74.02	-59.31	-60.54	23.29	79	63.7	50.8
8.37	-74.34	-59.05	-60.48	23.17	79.1	63.6	53.1
8.41	-73.75	-59.47	-60.51	20.45	78.4	63.4	51.6
8.37	-73.52	-58.74	-60.66	20.05	77.7	63.9	51.8
8.58	-73.88	-59.37	-60.48	23.29	78.1	63.6	50.5
8.43	-73.43	-59.62	-60.48	23.32	78.3	63.4	49.3
8.49	-73.43	-59.16	-60.54	20.42	77.7	63.1	52
8.35	-73.7	-59.83	-60.38	20.09	77.3	63.5	48.4
8.5	-73.66	-59.42	-60.48	23.26	77.8	63.3	50.5
8.5	-73.38	-59.73	-60.45	23.35	77.7	63.1	55.2

8.46	-73.47	-59	-60.38	20.3	77.1	62.9	51.3
8.37	-73.75	-59.42	-60.42	20.12	76.7	63.2	50.4
8.64	-72.79	-59.37	-60.54	23.29	77	63.4	53.8
8.51	-73.06	-58.95	-60.6	23.35	77.3	63.1	48.8
8.48	-73.84	-59.16	-60.69	23.26	77.7	62.8	51.6
8.44	-73.88	-59.42	-60.66	21.15	77.7	62.7	52.4
8.34	-73.34	-58.85	-60.38	20.09	77.3	63	50.7
8.45	-73.98	-59.05	-60.57	23.32	77.9	63.3	52
8.45	-73.66	-59.16	-60.32	23.29	78.4	62.8	54.9
8.5	-74.02	-58.95	-60.42	22.19	78.8	62.6	51.1
8.15	-73.2	-58.95	-61.03	20.24	78.3	62.7	52.1
8.4	-73.34	-59.26	-60.69	19.96	78.6	63.2	52.3
8.55	-73.24	-59.11	-60.84	23.17	79.4	63.6	52.8
8.45	-73.75	-58.9	-60.75	23.17	80	63.2	49.3
8.38	-73.43	-58.85	-60.66	23.26	80.7	63	55.3
8.44	-73.84	-59.31	-60.38	21.03	81	62.9	50.5
8.35	-73.47	-59.26	-60.75	19.93	81.2	63.3	52.3
8.46	-74.34	-60.61	-60.57	23.08	82.2	63.4	52.9
8.5	-73.84	-59.11	-60.72	23.08	82.7	63.2	52.7
8.31	-73.84	-59.78	-60.69	20.24	82.7	63.2	53.4
8.4	-74.3	-59.52	-60.38	21.06	82.9	63.7	49.3
8.53	-73.98	-59.31	-60.57	23.05	83.8	63.8	48.4
8.48	-73.84	-59.78	-60.38	23.08	84.1	63.6	53.5
8.47	-73.24	-59.16	-60.75	23.14	85.2	63.5	48.4
8.45	-73.84	-59.94	-60.72	21	85.9	63.6	51.8
8.33	-73.84	-59.11	-60.54	19.93	85.8	63.8	52.7
8.52	-74.02	-58.95	-60.57	22.99	87.1	64.1	51.1
8.51	-73.38	-59.11	-60.72	23.02	87.4	64	52.6
8.28	-74.07	-60.09	-60.45	20.27	86.5	63.9	50.4
8.42	-74.11	-59.11	-60.6	22.89	86.4	64.7	52.7
8.39	-74.02	-59.62	-60.66	22.99	86.8	64.4	51
8.51	-73.98	-59.78	-60.57	22.99	86.8	64.2	50.5
8.44	-73.38	-59.47	-60.48	20.12	87	64.1	50.1
8.34	-73.61	-58.85	-60.75	19.81	86.7	64.5	52.3
8.61	-73.7	-59.37	-60.6	22.77	87.3	64.9	51.6
8.5	-73.61	-59.88	-60.54	22.86	87.7	64.5	51.6
8.48	-73.98	-58.9	-60.48	22.86	88.1	64.4	50.9
8.4	-73.98	-59.68	-60.54	19.99	88	64.4	51.8
8.43	-73.52	-59.52	-60.54	22.28	88.3	65.2	54.5
8.53	-73.38	-59.05	-60.75	22.8	88.7	64.8	52.7
8.45	-74.43	-59.88	-60.29	22.83	88.6	64.8	50.2
8.15	-73.61	-58.59	-60.72	19.93	88.1	64.8	50.3
8.38	-73.7	-59.16	-60.72	20.63	88.3	65.3	50.3
8.59	-74.43	-59.16	-60.6	22.83	88.7	65.3	53.4
8.41	-73.66	-58.79	-60.75	22.74	89.3	65	51.8
8.47	-73.93	-59.52	-60.6	22.83	89.5	65.1	50.5
7.95	-74.02	-58.79	-60.51	19.84	89.2	64.9	51.6

8.42	-73.66	-59.31	-60.51	22.68	89.3	65.8	50.2
8.45	-74.25	-59.73	-60.57	22.77	89.5	65.4	51.3
8.43	-74.16	-58.79	-60.51	20.42	89.5	65.1	51.3
8.38	-73.24	-59.68	-60.81	19.54	89	65.6	51.5
8.5	-73.66	-59.62	-60.54	22.74	89.3	65.6	52.2
8.5	-73.29	-59.26	-60.6	22.74	89.2	65.5	48.6
8.41	-73.24	-58.28	-60.6	19.93	88.4	65.3	55.3
8.35	-73.34	-58.85	-60.72	19.47	88	65.7	51.1
8.47	-73.61	-58.85	-60.57	22.74	88	65.8	48.2
8.37	-73.56	-59.31	-60.81	22.71	88.1	65.5	51.1
8.42	-73.88	-60.2	-60.72	20.36	87.9	65.2	51.5
8.39	-74.07	-59.16	-60.81	19.47	87.2	65.7	53.1
8.55	-73.84	-59.05	-60.81	22.68	87.5	65.7	51.4
8.4	-73.47	-59.68	-60.35	22.74	87.4	65.2	54.3
8.41	-73.75	-59.37	-60.51	19.9	86.7	65.1	51.9
8.36	-73.88	-59.78	-60.6	19.32	86.4	65.5	53.3
8.53	-74.25	-58.95	-60.6	22.62	86.5	65.8	51.7
8.44	-74.43	-59.31	-60.72	22.56	86.8	65.4	50.4
8.5	-72.92	-59	-60.72	21.7	87	65.3	52
8.37	-74.3	-59.47	-60.75	19.35	86.2	65.5	51.3
8.53	-74.16	-59.16	-60.57	22.62	86.5	65.4	48.3
8.38	-74.02	-59.52	-60.57	20.73	86.4	65.1	52.7
8.38	-73.93	-58.9	-60.66	19.96	86.2	65.5	53.5
8.45	-73.56	-59.73	-60.6	22.62	86.7	65.3	51.5
8.42	-73.2	-59.42	-60.6	22.59	87	65.1	52.3
8.38	-73.52	-59.31	-60.66	19.72	86.5	65	51.7
8.38	-73.56	-59.47	-60.48	19.26	86.3	65.4	50
8.58	-73.7	-59.11	-60.51	22.59	86.8	65.7	51.8
8.42	-74.25	-59.31	-60.57	22.62	87.2	65.2	51.5
8.4	-73.34	-58.69	-60.75	20.09	87	65.1	52.5
8.37	-73.93	-59.62	-60.48	19.87	86.4	65.6	52.4
8.47	-73.93	-59.37	-60.72	22.5	87	65.3	50.3
8.53	-73.84	-58.9	-60.75	22.59	87.1	65	52
8.5	-73.47	-59.62	-60.69	19.57	86.8	65.1	51.2
8.36	-73.61	-59.11	-60.81	19.2	86.5	65.4	51.2
8.55	-74.07	-59.94	-60.72	22.56	87.4	65.7	50
8.52	-73.52	-59.73	-60.75	22.47	87.5	65.3	54.5
8.49	-73.47	-59.42	-60.78	22.59	87.8	65.2	52
7.8	-73.88	-58.69	-60.57	19.51	87.4	65	52.5
8.4	-74.21	-59.57	-60.84	22.01	87.2	65.7	52.3
8.47	-74.07	-60.04	-60.45	22.59	87.8	65.4	52.2
8.48	-73.7	-59.05	-60.81	20.48	87.6	65	53.6
8.38	-73.06	-59	-60.75	19.2	87.2	65.4	54
8.54	-73.24	-59.31	-60.69	22.47	87.5	65.5	53.8
8.45	-74.3	-59.52	-60.57	22.56	87.5	64.9	51.8
8.13	-73.75	-59.47	-60.6	19.54	87.2	64.9	48.4
8.38	-74.34	-59	-60.6	21.73	87	65.7	51

8.44	-73.75	-59.62	-60.6	22.5	87.5	65.3	51.2
8.47	-73.93	-59.62	-60.78	22.56	87.6	65.1	51.7
8.37	-73.56	-59.47	-60.35	19.41	87.1	65.2	52.8
8.51	-73.56	-58.95	-60.57	22.53	87.4	65.4	50.3
8.43	-73.52	-59.57	-60.69	22.53	87.6	64.9	52.5
8.42	-73.75	-58.69	-60.93	19.54	87.4	64.9	50
8.39	-74.25	-59.16	-60.51	19.11	87	65.3	50
8.52	-73.75	-59.47	-60.6	22.5	87.3	65.4	55
8.48	-73.88	-59.62	-60.51	22.59	87.5	65	49.9
8.43	-73.43	-59.78	-60.81	19.57	87.1	64.8	54.6
8.36	-74.21	-59.62	-60.54	19.2	86.8	65.2	52.5
8.46	-74.07	-58.95	-60.57	22.53	87.3	65.5	52.9
8.38	-73.84	-59.31	-60.69	22.53	87.4	65	52.1
8.41	-73.98	-59.68	-60.51	19.96	87.3	65	51.2
8.32	-73.34	-58.9	-60.66	19.2	87	65.1	50
8.48	-73.47	-59.62	-60.72	22.5	87.5	65.4	47.3
8.42	-74.48	-58.9	-60.6	22.68	87.5	65.3	51.8
8.41	-73.66	-59.68	-60.87	21	87.5	64.9	52.3
8.32	-73.98	-59.37	-60.57	19.41	86.8	65	51.7
8.52	-73.84	-59.42	-60.72	22.5	87.1	65.5	50
8.45	-74.3	-59.68	-60.75	22.47	87.5	65.1	54.3
8.46	-74.11	-59.68	-60.69	19.75	87.4	64.7	53
8.36	-73.98	-59.62	-60.57	19.14	87	65.3	52
8.53	-73.84	-59.47	-60.45	22.47	87.5	65.3	54.3
8.41	-73.47	-59.57	-60.81	22.44	87.6	65	50.5
8.51	-73.7	-59.11	-60.75	20.24	87.8	65	51.9
8.32	-74.43	-59.52	-60.72	19.14	87.2	65.3	50.3
8.52	-74.21	-59.11	-60.45	22.47	87.6	65.5	54.4
8.48	-73.66	-59.78	-60.69	22.44	88.1	65.1	50
8.38	-74.34	-59.68	-60.75	19.54	87.7	64.9	44.1
8.39	-74.11	-59.68	-60.78	19.87	87.2	65.5	45.1
8.51	-74.07	-58.95	-60.81	22.44	88	65.2	54.2
8.43	-74.02	-59.68	-60.78	22.41	88	64.9	52.5
8.35	-74.25	-59.83	-60.69	19.23	87.5	64.9	51.5
8.48	-74.07	-59.47	-60.66	22.44	88.2	65.6	50.7
8.44	-73.98	-59.68	-60.6	22.34	88.4	65.2	50.1
8.45	-73.61	-59.62	-60.6	19.93	88.2	64.9	51.5
8.39	-73.66	-60.04	-60.81	19.11	87.7	65.5	49.5
8.58	-74.02	-60.09	-60.66	22.41	87.9	65.5	54.3
8.39	-73.34	-59.47	-60.81	22.34	88.1	65.1	53.1
8.47	-73.93	-59.88	-60.6	19.96	87.8	64.9	50.1
8.35	-73.75	-59.42	-60.78	19.08	87.3	65.2	52.6
8.47	-74.07	-59.42	-60.72	22.34	87.6	65.4	49.8
8.44	-73.98	-59.47	-60.81	22.44	88	65.2	51.2
8.48	-74.02	-59.11	-60.6	19.6	87.9	65.1	53
8.39	-73.75	-59.31	-60.93	21.79	87.7	65.6	50.7
8.46	-73.47	-59.31	-60.72	22.44	88.2	65.2	51

8.48	-73.93	-59.57	-60.66	19.87	87.9	65.1	51.3
8.37	-73.61	-59.11	-60.75	19.54	87.5	65.4	52.3
8.43	-74.16	-60.14	-61	22.41	88.1	65.3	58.2
8.48	-74.25	-59.83	-60.6	22.44	88	65.1	50.7
8.26	-74.11	-59.57	-60.81	19.63	87.6	64.8	50.5
8.41	-73.88	-59.37	-60.78	19.78	87.4	65.5	50
8.55	-73.61	-59.62	-60.84	22.41	87.6	65.4	52.1
8.38	-74.02	-59.57	-60.75	22.53	87.3	65.1	49.3
8.36	-74.25	-59.37	-60.75	19.54	86.4	64.9	51.1
8.59	-74.16	-59.52	-60.81	22.56	86.3	65.7	45.8
8.37	-74.07	-59.83	-60.69	22.59	86.4	65	55.5
8.51	-73.29	-59.37	-60.69	19.54	85.8	64.9	52.3
8.39	-74.07	-58.48	-60.81	21.37	85.3	65.5	54
8.53	-73.98	-59.47	-60.9	22.56	85.5	65.2	54.4
8.38	-74.57	-60.3	-60.75	22.74	85.2	64.9	52.2
8.5	-74.3	-59.62	-60.72	19.93	84.9	64.7	50.3
8.31	-74.71	-59.52	-60.93	19.47	84.2	64.8	50.8
8.42	-74.53	-59.68	-60.93	22.01	84	65.3	53.7
8.4	-74.39	-59.73	-60.78	22.71	84.8	65.1	52.7
8.48	-74.25	-59.37	-60.78	22.71	84.9	64.7	50.7
8.44	-74.21	-60.04	-60.75	19.66	84.6	64.7	51.6
8.4	-73.29	-59.47	-60.81	20.3	84.2	65	51.5
8.54	-74.21	-59.57	-60.96	22.65	85.2	65	52.7
8.35	-74.48	-60.14	-60.9	22.74	85.5	64.7	51.5
8.48	-74.3	-59.62	-60.66	21.43	85.5	64.7	50.5
7.59	-73.56	-60.25	-60.96	19.84	85.2	64.4	50.9
8.42	-74.48	-59.47	-61.18	20.67	85.1	65.1	52.1
8.5	-74.25	-59.47	-60.96	22.74	85.6	64.9	50.2
8.38	-74.02	-58.85	-60.9	22.83	85.6	64.7	52.8
8	-73.88	-59.68	-61	19.81	85.6	64.7	52.2
9	-74.48	-59	-60.81	22.77	85.8	65.3	49.4
8.53	-73.98	-59.62	-60.72	22.68	86.4	64.9	51.1
8.39	-74.34	-59.47	-60.75	22.83	87.1	64.7	49.5
8.37	-73.75	-59.68	-61.03	20.09	86.8	64.5	50.7
8.41	-74.53	-59.83	-60.93	20.57	87.1	65.2	53.4
8.56	-74.07	-59.57	-61	22.86	87.5	65.2	48.9
8.44	-74.34	-59.37	-60.96	22.1	87.9	64.8	48.3
8.34	-74.66	-59.52	-60.75	19.72	87.3	65.2	54.7
8.51	-73.93	-59.57	-60.84	22.8	87.5	65.3	52.1
8.48	-74.98	-59.62	-60.96	22.86	87.5	65	50.7
8.5	-74.39	-59.62	-60.93	20.18	87.3	65	49.5
8.34	-74.39	-58.95	-60.87	19.6	88	65.3	50.4
8.44	-74.02	-59.88	-60.78	22.77	88.7	65.8	52.8
8.52	-74.71	-59.83	-61.09	22.74	89.7	65.6	53.4
8.38	-74.3	-60.09	-60.9	22.77	90.2	65.2	51.9
8.39	-74.16	-60.04	-60.84	20.09	90.6	65.2	51.2
8.39	-74.07	-59.73	-60.84	20.76	90.8	65.8	52.3

8.5	-73.84	-59.57	-60.93	22.65	91.4	65.7	52.6
8.5	-74.53	-60.09	-61	21.34	91.8	65.6	52
8.33	-74.11	-59.16	-60.93	19.66	91.2	65.8	51.6
8.47	-74.16	-59.88	-60.72	22.77	91.2	66.1	49.5
8.51	-74.25	-59.68	-60.9	22.71	91.8	65.8	50.5
8.42	-75.12	-59.57	-61.06	21.52	91.6	65.7	54.2
8.35	-74.39	-59.31	-61.06	19.66	90.8	65.7	53.4
8.64	-73.98	-59.99	-60.96	22.65	91.2	66.2	50.8
8.43	-74.16	-59.78	-60.84	22.71	91.6	65.8	51.6
8.38	-74.25	-59.62	-61	22.74	91	65.9	52.1
8.25	-73.75	-59.78	-60.93	19.78	90.3	65.8	53.1
8.66	-74.07	-59.88	-60.69	22.59	90.3	66.4	48.4
8.44	-74.39	-59.47	-60.75	22.77	90.5	65.9	47.5
8.35	-74.8	-60.56	-60.9	22.77	90.3	65.7	53
8.37	-74.3	-59.62	-60.87	19.69	89.8	65.9	52.6
8.56	-74.62	-59.99	-61.06	22.77	90.2	66.1	52.5
8.45	-74.39	-59.37	-61	22.74	90.4	65.7	51.9
8.28	-74.34	-59.47	-60.9	20.05	90.1	65.6	52.3
8.43	-74.02	-60.2	-61	22.65	90.2	66.1	53
8.44	-74.11	-60.25	-61.03	22.8	90.6	65.8	52.3
8.52	-73.93	-59.11	-61.15	22.8	90.7	65.8	50.9
8.39	-74.62	-59.88	-60.84	20.12	90.5	65.6	49.4
8.37	-74.21	-59.99	-60.93	19.69	90.2	65.9	52.6
8.42	-73.84	-59.68	-61	22.68	90.4	66.4	50.5
8.43	-73.75	-59.26	-60.96	22.8	90.8	65.8	50
8.51	-74.16	-59.57	-61.09	22.8	90.8	65.8	52.1
8.04	-74.11	-60.25	-61	19.93	90.4	65.7	51.7
8.64	-74.43	-59.83	-60.96	22.86	90.5	66.4	52.2
8.4	-73.88	-59.57	-61.06	22.89	90.8	65.8	51.2
8.52	-74.34	-60.2	-61.03	20.12	90.5	65.8	52.8
8.36	-73.93	-59.68	-61.15	19.63	90	66	51.7
8.52	-73.84	-59.94	-61.03	22.77	90.3	66.1	52.3
8.47	-74.48	-59.68	-60.78	22.86	90.4	65.8	52
8.47	-74.75	-60.04	-61.12	20.67	89.9	65.6	52.1
8.37	-74.02	-59.88	-60.87	19.72	89.4	66	51.3
8.57	-74.21	-59.99	-61	22.77	89.9	66.1	43.6
8.42	-74.11	-59.99	-61.18	22.89	89.8	65.8	52.1
8.38	-74.3	-59.78	-61.12	20.05	89.2	65.5	54.2
8.41	-74.3	-59.42	-60.96	20.6	89	66.1	51.9
8.54	-74.21	-59.94	-61	22.86	89.5	65.8	51.8
8.41	-74.71	-60.97	-61.21	22.95	89.4	65.6	52.4
8.53	-74.25	-60.25	-61.03	20.09	88.8	65.4	53.3
8.36	-75.08	-59.68	-60.78	19.78	88.3	65.9	50.9
8.54	-74.57	-59.73	-61.3	22.86	88.3	66.1	60
8.53	-74.85	-60.66	-61.03	22.86	88.3	65.8	52.8
8.46	-73.84	-60.25	-61.06	22.92	88.2	65.4	52.9
8.39	-74.71	-60.2	-60.96	20.76	87.8	65.3	51.8

8.34	-74.66	-60.3	-60.93	19.9	87	65.6	53.8
8.75	-74.57	-59.83	-61.12	22.68	86.8	65.8	51.6
8.53	-74.02	-60.4	-61.03	22.95	87.1	65.6	51.3
8.51	-75.35	-60.4	-61.09	22.99	86.6	65.2	53
8.47	-75.03	-60.2	-60.93	20.67	85.9	65	51.2
8.34	-74.34	-60.14	-61.03	19.96	84.6	65.3	52.5
8.48	-74.02	-59.99	-61.03	23.05	84.5	65.4	51.3
8.47	-74.66	-59.83	-60.93	23.17	84.6	64.9	52
8.5	-75.12	-60.14	-61.06	20.63	84.4	64.8	49.5
8.34	-74.34	-59.73	-61.09	19.99	83.7	64.9	52.8
8.41	-74.3	-60.35	-61.15	22.68	83.6	65.3	51.3
8.45	-74.48	-59.52	-61.3	22.95	83.7	64.9	52.1
8.39	-74.71	-59.94	-61.15	23.08	83.4	64.7	53.5
8.5	-75.03	-59.83	-61.03	20.54	82.9	64.4	52.8
8.36	-74.8	-59.37	-61.06	19.78	81.9	64.8	52.1
8.48	-74.07	-59.73	-61.09	23.05	82	64.7	51.6
8.44	-73.75	-60.2	-61.09	23.17	81.6	64.3	50.3
8.47	-74.07	-60.66	-61.12	20.27	81.8	64.1	51.5
8.38	-74.02	-59.68	-61.27	19.87	81.8	64.5	51.4
8.53	-74.21	-59.16	-61.3	23.08	82.5	64.9	51.9
8.46	-73.84	-59.99	-61.06	23.14	83.1	64.2	48.7
8.48	-74.25	-59.94	-61.09	23.17	83.1	64.1	50.8
8.47	-74.48	-59.62	-61.15	21.79	82.3	63.9	52.4
8.16	-74.3	-60.09	-61.27	20.05	81.5	64	52.7
8.39	-74.75	-60.09	-61.3	22.89	81.2	64.5	52.1
8.41	-74.48	-60.51	-60.9	23.17	81.5	63.9	53.6
8.36	-75.03	-60.2	-61.18	22.5	81.7	63.7	51.6
8.28	-74.39	-60.66	-61.36	20.09	81.1	63.6	51.9
8.41	-74.57	-60.04	-60.96	22.53	81	64.1	52.4
8.55	-74.25	-59.57	-61.15	23.17	81.3	63.8	53
8.42	-74.34	-60.3	-61.21	23.2	81.3	63.6	52.9
8.39	-74.25	-60.82	-61.15	23.17	81.2	63.6	50.1
8.51	-74.66	-60.71	-61.12	20.24	80.3	63.4	49.5
8.37	-74.57	-60.51	-61.06	19.93	79.6	63.6	54.2
8.56	-74.07	-59.88	-61.06	23.14	80	63.7	51.5
8.43	-74.21	-59.42	-61.24	23.2	80.1	63.4	49.3
8.26	-74.57	-60.04	-61.21	20.33	79.7	63.2	49
9.88	-74.85	-59.94	-61.33	22.86	79.2	63.6	50.5
8.44	-74.66	-60.56	-61.06	23.26	79.5	63.4	49.5
8.42	-74.75	-59.78	-61.36	23.17	79.5	63.1	47.8
8.32	-75.08	-59.73	-61.03	20.39	78.8	63	49.9
8.35	-74.66	-59.68	-61.21	19.96	78.3	63.4	51
8.65	-74.07	-59.62	-61.24	23.08	78.5	63.5	58.2
8.44	-74.16	-59.94	-61.09	23.26	78.6	63.1	52.6
8.4	-74.75	-60.2	-61.24	23.23	78.6	62.8	49.3
8.46	-74.02	-59.26	-61.33	21.67	78.5	62.7	50.7
8.38	-74.39	-59.88	-61.12	20.09	77.6	62.9	51.5

8.44	-74.07	-60.35	-61.18	23.2	78	63	53.5
8.43	-74.75	-60.04	-61.18	23.23	78.5	62.7	55.6
8.47	-75.03	-60.35	-61.18	20.97	78.1	62.5	50.7
8.33	-75.03	-59.57	-61.3	20.05	77.6	62.6	51.2
8.75	-75.12	-60.61	-61.39	23.17	77.3	63.1	51
8.39	-74.43	-60.4	-61.27	23.29	77.7	62.6	52
8.46	-74.75	-60.82	-61.24	23.29	77.9	62.5	53.5
8.31	-74.75	-59.83	-61.21	20.67	77.4	62.2	52.7
8.34	-74.34	-60.09	-61.06	20.05	77.1	62.5	50.5
8.43	-74.75	-60.66	-61.21	23.17	77.5	62.8	51.3
8.47	-74.39	-59.99	-61.24	23.26	77.8	62.6	52.2
8.38	-74.39	-60.04	-61.54	23.29	77.9	62.4	52.1
8.51	-74.48	-59.94	-61.06	21.86	78.1	62	53.4
8.23	-74.39	-59.31	-61.21	20.27	78	62.1	51.4
8.37	-74.8	-59.99	-61.33	20.02	78	62.6	50.7
8.54	-73.75	-60.61	-61.27	23.2	78.8	62.8	51.1
8.41	-74.98	-60.35	-61.33	23.32	79.1	62.5	51.2
8.46	-74.53	-60.51	-61.39	23.29	79.5	62.5	46.8
8.41	-74.25	-59.99	-61.36	20.51	79.7	62.1	51.3
8.33	-74.48	-60.25	-61.3	20.02	79.7	62.9	51.5
8.5	-74.34	-59.62	-61.33	23.26	80.7	63	52.4
8.5	-75.49	-61.03	-61.21	23.2	81.2	62.7	51.1
8.28	-74.02	-59.78	-61.48	20.12	81	62.8	51.9
8.41	-74.43	-60.14	-61.51	22.74	81.5	63.3	50.3
8.52	-74.8	-59.88	-61.45	23.23	82.4	63.1	49.2
8.47	-74.16	-59.99	-61.27	23.2	83.2	63	51.6
8.48	-74.57	-59.68	-61.36	20.45	83.3	63	53.3
8.34	-74.53	-60.66	-61.24	19.93	83.7	63.4	50.1
8.41	-74.53	-59.99	-61.21	23.02	84.5	64	51.4
8.42	-75.17	-61.18	-61.51	23.02	85.4	63.6	45.2
8.39	-74.43	-59.99	-61.27	22.83	85.9	63.4	50
8.17	-75.03	-60.77	-61.3	20.02	85.7	63.5	49.7
8.4	-74.07	-60.2	-61.18	22.01	86.2	64.2	53.2
8.44	-74.34	-60.71	-61.24	22.92	87	64.2	53.8
8.48	-74.07	-59.52	-61.45	23.02	86.8	63.8	49.1
8.42	-75.08	-60.14	-61.39	20.12	87.2	63.9	48.8
8.41	-74.8	-60.04	-61.45	19.69	87.6	64.5	51
8.51	-75.08	-60.71	-61.24	22.89	88.4	64.7	50.7
8.39	-74.21	-60.61	-61.39	22.99	88.6	64.4	52.4
8.4	-74.94	-59.83	-61.21	21.34	89.4	64.7	50
8.08	-74.43	-60.77	-61.54	19.99	89.3	64.7	53.8
8.38	-74.85	-59.88	-61.36	19.93	89.7	65.2	52.7
8.44	-75.53	-59.94	-61.3	22.83	90.2	65.4	53.9
8.45	-74.94	-60.61	-61.45	22.95	90.5	65	49.2
8.05	-74.11	-60.04	-61.33	19.87	90.2	65.1	52.5
8.53	-75.03	-60.25	-61.48	22.77	91.2	65.9	50.3
8.45	-75.26	-59.99	-61.51	22.86	91.6	65.5	52.2

8.43	-74.94	-60.71	-61.48	22.41	92	65.5	51.6
8.12	-75.08	-60.56	-61.36	19.69	91.8	65.7	51.4
8.38	-74.16	-59.52	-61.39	22.34	92	66.2	51.1
8.46	-74.75	-59.88	-61.18	22.68	92.6	65.9	50.9
8.44	-73.84	-60.09	-61.39	22.74	93	65.9	49.8
8.24	-74.62	-60.61	-61.24	19.93	91.9	65.9	50.3
8.38	-74.66	-60.14	-61.33	22.65	93	66.7	51.6
8.47	-74.57	-60.4	-61.27	22.68	93.3	66.3	49.9
8.49	-74.21	-60.09	-61.54	22.77	93.5	66.1	50.9
8.28	-74.71	-60.3	-61.33	20.05	92.9	66.2	53.9
8.39	-74.8	-59.68	-61.33	19.69	93	66.8	50.9
8.51	-74.39	-60.35	-61.3	22.71	93	66.8	47.8
8.44	-75.08	-60.25	-61.3	22.74	92.8	66.5	53
8.45	-74.66	-60.14	-61.39	20.76	92.3	66.3	51.7
8.35	-73.84	-59.73	-61.48	19.63	91.6	66.7	52.5
8.53	-74.94	-59.99	-61.39	22.71	91.9	66.8	50
8.45	-75.03	-60.09	-61.45	22.8	92	66.6	52.8
8.41	-74.16	-59.88	-61.27	20.82	91.8	66.4	52.4
8.18	-75.08	-60.2	-61.45	19.75	91	66.5	54
8.4	-75.17	-60.4	-61.3	20.36	91.5	67	51.9
8.47	-75.08	-60.2	-61.36	22.71	92	67.1	50.2
8.48	-74.85	-59.94	-61.21	22.65	91.9	66.5	52.2
8.51	-75.12	-60.51	-61.18	19.99	91.6	66.5	53
8.38	-74.8	-60.25	-61.12	20.27	91.1	67.2	50.3
8.46	-74.3	-60.35	-61.18	22.74	91.8	66.9	50.1
8.44	-73.93	-60.2	-61.54	22.71	91.8	66.5	54.3
8.5	-74.66	-60.09	-61.3	20.33	91.6	66.5	48.9
8.36	-74.57	-59.78	-61.48	19.66	91.1	66.9	52.3
8.42	-74.53	-60.04	-61.15	21.34	91.4	67.3	51.6
8.57	-74.34	-59.62	-61.39	22.74	91.8	67.1	48.4
8.44	-74.16	-60.25	-61.21	22.71	91.8	66.9	54.6
8.38	-74.48	-59.88	-61.33	21.18	91.6	66.7	53.7
8.3	-75.35	-60.61	-61.18	19.78	91.1	66.8	54.2
8.39	-74.66	-60.3	-61.36	22.68	91.2	67.4	51.7
8.5	-74.85	-59.94	-61.3	22.68	91.5	67	53.5
8.41	-74.71	-59.78	-61.36	22.77	91.5	66.7	52.7
8.22	-74.94	-60.3	-61.36	19.87	90.8	66.7	52.3
8.37	-74.39	-59.88	-61.51	19.57	90.6	67.3	52.9
8.52	-74.66	-60.56	-61.27	22.74	90.8	67.3	51.7
8.49	-74.25	-60.3	-61.15	22.86	90.8	66.8	49.4
8.42	-74.53	-59.99	-61.51	20.57	90.5	66.5	51.5
8.33	-74.57	-60.25	-61.48	19.63	89.7	67	51.6
8.5	-74.71	-59.73	-61.15	22.74	90.1	67.2	50.5
8.48	-74.98	-60.04	-61.58	22.8	90.1	66.7	53.8
8.5	-74.8	-59.94	-61.21	20.67	89.7	66.5	51.2
8.37	-74.48	-60.56	-61.39	19.78	89.2	66.7	50.5
8.42	-74.66	-59.83	-61.48	22.5	89	67.1	52.7

8.47	-75.08	-60.87	-61.39	22.89	88.8	66.8	50.7
8.42	-75.03	-59.57	-61.12	22.86	88.9	66.4	48.9
8.47	-74.62	-59.78	-61.39	22.31	88.6	66.3	51.4
8.04	-74.8	-59.62	-61.36	19.9	87.8	66.2	52
8.4	-75.26	-60.04	-61.36	21.15	87.5	66.8	51.7
8.58	-74.71	-60.09	-61.39	22.89	87.7	66.6	52.2
8.42	-74.3	-60.25	-61.54	22.86	87.7	66.1	51.8
8.38	-74.53	-59.62	-61.36	22.74	87.6	65.9	50.9
8.38	-74.71	-60.14	-61.15	19.9	87.3	65.9	51.6
8.35	-74.25	-60.35	-61.3	19.81	86.8	66.2	51.6
8.58	-74.53	-60.09	-61.48	22.92	87.2	66.5	54.1
8.5	-75.17	-60.51	-61.39	22.92	87.3	66	50.9
8.5	-75.12	-60.2	-61.27	22.92	87.2	65.8	47.5
8.37	-75.08	-59.94	-61.45	20.24	86.4	65.6	50.5
8.39	-74.43	-60.3	-61.3	19.72	86	66.1	52
8.55	-74.25	-60.09	-61.79	22.89	86.2	66	51.2
8.5	-75.4	-60.3	-61.45	23.02	86.1	65.8	49.8
8.38	-74.8	-60.3	-61.39	22.99	86	65.4	52.3
8.45	-74.53	-59.16	-61.36	20.39	85.6	65.3	51.6
8.37	-74.75	-60.61	-61.36	19.84	85.2	65.7	50.3
9.56	-74.57	-60.3	-61.64	22.89	85.4	65.9	52.2
8.47	-74.71	-59.62	-61.48	22.89	85.3	65.5	49.2
8.47	-74.8	-60.3	-61.58	23.05	85.3	65.1	56.7
8.4	-74.98	-60.35	-61.54	20.24	84.5	65	52
8.37	-74.94	-60.82	-61.27	19.81	83.9	65.4	55.1
8.5	-75.03	-60.4	-61.36	22.95	84	65.4	51.1
8.38	-74.53	-60.2	-61.3	23.02	83.8	65	53.8
8.45	-74.8	-60.92	-61.67	23.14	83.6	64.8	53.9
8.5	-74.62	-59.52	-61.39	20.09	83.2	64.5	52.3
8.36	-75.3	-60.61	-61.33	19.87	82.9	64.9	51.6
8.42	-74.98	-61.08	-61.45	22.92	82.7	65.4	52.9
8.44	-74.53	-59.99	-61.45	22.92	83	64.9	51
8.44	-75.49	-60.87	-61.3	22.95	83.1	64.5	49
8.53	-74.39	-60.66	-61.36	20.63	82.9	64.4	53.3
8.34	-74.8	-59.94	-61.3	19.9	82.4	64.5	51.8
8.39	-74.3	-60.14	-61.64	21.28	82.1	65	50.2
8.58	-75.17	-60.51	-61.54	22.95	82.4	64.8	52.6
8.42	-75.44	-60.51	-61.36	22.95	82.5	64.4	52
8.47	-73.93	-60.04	-61.3	23.05	82.3	64.3	51.2
8.41	-74.98	-60.14	-61.48	21.73	82.4	64.1	52.5
8.35	-74.39	-59.94	-61.24	19.87	81.9	64.2	53
8.39	-74.98	-59.94	-61.39	22.92	81.8	64.7	51.7
8.53	-74.71	-60.2	-61.54	23.02	82.4	64.3	46.7
8.38	-74.39	-59.83	-61.54	22.95	82.5	64	49.6
8.47	-75.53	-60.71	-61.54	20.18	82.1	63.9	53.2
8.38	-74.75	-60.51	-61.51	19.69	81.8	64.1	51.4
8.48	-74.48	-60.51	-61.45	22.99	82.1	64.2	51.6

8.47	-74.75	-60.35	-61.58	22.95	82.2	64	53.1
8.44	-74.62	-59.62	-61.54	20.63	82.1	63.6	51.5
8.32	-74.62	-59.94	-61.51	19.84	81.2	63.8	52.2
8.38	-74.71	-60.56	-61.58	19.66	81.1	64.1	52.1
8.51	-74.94	-60.3	-61.27	22.86	81.4	64.2	53.4
8.53	-74.8	-60.09	-61.51	22.95	81.6	64	51.7
8.44	-74.62	-60.2	-61.61	22.92	81.8	63.6	50
8.43	-74.57	-60.61	-61.54	20.05	81.2	63.6	50.2
8.31	-74.85	-60.2	-61.48	19.69	80.8	63.8	51.7
9.25	-74.43	-59.99	-61.39	22.8	81	64.2	46.7
8.55	-75.67	-60.3	-61.3	22.86	81.3	63.8	49.4
8.38	-75.08	-59.94	-61.36	22.95	81.4	63.6	52.3
8.45	-74.75	-60.56	-61.48	22.99	81.4	63.5	51.3
8.41	-75.4	-60.25	-61.54	20.02	80.9	63.5	51.2
8.35	-75.12	-60.56	-61.33	19.72	80.5	63.9	51.7
8.57	-74.85	-60.4	-61.39	22.83	81.1	63.9	53.1
8.39	-75.35	-60.2	-61.45	22.92	81.2	63.6	51.8
8.44	-74.48	-60.09	-61.3	22.92	81.1	63.5	48.9
8.47	-75.12	-60.51	-61.51	19.81	80.9	63.4	52.7
8.32	-74.85	-60.09	-61.36	19.57	80.8	63.7	51.9
8.71	-74.02	-60.35	-61.33	22.92	80.9	64	50.8
8.54	-74.48	-60.2	-61.51	22.83	81.3	63.6	51.4
8.47	-74.8	-60.14	-61.51	22.92	81.4	63.3	52.3
8.38	-74.8	-60.56	-61.45	19.93	81.1	63.4	50.9
8.35	-74.98	-60.51	-61.48	19.54	80.7	63.6	53.4
8.55	-74.53	-60.82	-61.36	22.83	81.1	63.7	50.5
8.39	-74.94	-60.14	-61.51	22.86	81.3	63.5	58.6
8.45	-75.67	-60.2	-61.58	22.92	81.5	63.5	50.7
8.5	-75.44	-60.2	-61.73	20.12	81	63.2	51.8
8.36	-75.08	-60.04	-61.64	19.63	80.7	63.5	51.4
8.42	-75.08	-60.2	-61.54	22.5	81	63.9	49.8
8.51	-74.75	-59.88	-61.7	22.77	81.3	63.6	50.4
8.43	-74.66	-60.35	-61.54	22.86	81.6	63.4	52
8.36	-75.21	-60.97	-61.39	22.8	81.8	63.2	47.3
8.09	-75.12	-60.2	-61.39	19.87	81	63.1	51.6
8.38	-74.53	-60.35	-61.33	20.67	80.9	63.6	49.5
8.51	-75.35	-60.09	-61.45	22.77	81.4	63.2	51
8.46	-74.75	-60.35	-61.45	22.92	81.6	63.1	53.2
8.48	-75.08	-60.04	-61.48	19.93	81.2	63.1	52.3
8.37	-74.16	-60.2	-61.39	19.51	80.9	63.5	55.6
9.87	-74.75	-60.92	-61.48	22.71	81	63.8	51.6
8.56	-75.17	-60.35	-61.51	22.8	81.4	63.4	52.9
8.5	-75.12	-59.94	-61.48	22.77	81.6	63.3	50
8.48	-74.48	-59.88	-61.51	21.55	81.7	63.2	51.6
8.29	-75.53	-60.61	-61.51	19.6	81	63.3	50.2
8.77	-75.35	-61.08	-61.51	22.74	81.4	63.7	51.7
8.39	-74.16	-60.66	-61.54	22.74	82	63.2	52.6

8.45	-74.43	-60.3	-61.45	22.8	81.9	63.4	49.4
8.41	-75.3	-60.14	-61.27	19.9	81.7	63.1	52.1
8.38	-74.66	-61.23	-61.45	19.44	81.4	63.5	51.7
8.58	-75.21	-60.97	-61.27	22.77	81.8	63.8	51.6
8.5	-74.53	-61.13	-61.45	22.74	82	63.4	52.3
8.51	-74.94	-60.66	-61.61	22.83	82.4	63.2	52.5
8.51	-75.76	-60.87	-61.33	19.78	82.1	63.2	51.4
8.39	-74.66	-60.87	-61.33	19.47	82.1	63.7	51.7
8.48	-74.85	-60.09	-61.27	22.68	83.2	63.9	49.9
8.5	-75.17	-60.4	-61.36	22.74	83.8	63.5	51.6
8.47	-74.71	-60.92	-61.45	22.74	84.2	63.3	50.5
8.37	-74.94	-60.87	-61.48	19.81	84	63.4	51
8.39	-74.66	-60.35	-61.45	19.32	84.1	63.8	51.8
8.48	-74.43	-60.09	-61.39	22.65	84.5	64.1	50.5
8.52	-74.71	-60.3	-61.51	22.65	85.4	63.9	51.2
8.39	-75.4	-60.2	-61.33	22.68	85.5	63.7	51.6
8.46	-75.12	-60.25	-61.54	22.65	85.9	63.7	56.4
8.5	-74.25	-60.92	-61.45	19.78	85.4	63.6	51.6
8.37	-74.34	-60.09	-61.61	19.47	85.4	64	53
8.42	-75.44	-60.87	-61.27	20.63	85.4	64.4	50.5
8.58	-75.26	-59.99	-61.27	22.62	86.2	64.1	52.3
8.47	-75.21	-60.3	-61.3	22.59	86.5	64.1	50.9
8.41	-75.17	-60.4	-61.51	21.7	86.5	63.9	49.7
7.97	-74.11	-60.25	-61.51	19.63	86.1	64	51.6
8.38	-75.85	-60.2	-61.45	19.41	85.7	64.5	52
8.54	-74.75	-59.88	-61.39	22.65	86.2	64.5	53.4
8.42	-74.66	-60.51	-61.27	22.65	86.2	64.4	53.4
8.38	-74.8	-60.51	-61.54	22.71	86.2	64.1	51.6
8.14	-75.21	-60.09	-61.48	19.75	85.6	63.9	49.6
8.39	-75.03	-59.83	-61.54	20.54	85.5	64.5	53.5
8.5	-75.03	-60.61	-61.36	22.56	85.8	64.4	51.3
8.5	-75.21	-60.4	-61.36	22.68	85.7	64.3	51.7
8.47	-74.98	-60.2	-61.36	19.96	85.3	63.9	48.3
8.34	-75.35	-59.83	-61.39	19.44	84.9	64.3	50.5
8.41	-74.98	-60.09	-61.7	21.7	84.8	64.7	51.4
8.48	-75.26	-60.82	-61.58	22.62	85.3	64.5	52.6
8.47	-75.35	-59.83	-61.64	22.59	85	64.2	50.5
8.41	-74.98	-60.82	-61.64	22.59	84.9	64.1	51.1
8.47	-74.66	-60.4	-61.45	19.75	84.3	64.2	54.3
8.36	-74.53	-60.14	-61.54	19.32	84.2	64.2	53.8
8.56	-74.8	-60.56	-61.54	22.62	84.4	64.5	55.3
8.4	-75.44	-60.82	-61.45	22.56	84.6	64.1	53.3
8.5	-75.44	-60.92	-61.51	20.27	84.3	63.8	52
8.32	-75.26	-60.35	-61.58	19.32	83.9	64.2	51.5
8.41	-75.08	-60.4	-61.36	20.82	83.8	64.7	52.4
8.57	-75.4	-60.92	-61.54	22.53	84.2	64.5	50.7
8.5	-75.03	-60.51	-61.33	22.53	84.2	64	48.3

8.45	-74.98	-60.87	-61.39	22.59	84.3	63.8	51.1
8.42	-75.85	-59.62	-61.36	19.57	83.8	63.9	51.8
8.33	-75.12	-59.83	-61.36	19.2	83.5	64	51.2
8.41	-75.08	-60.66	-61.27	22.47	83.7	64.5	52.9
8.46	-75.26	-60.04	-61.58	22.56	84	64	51.3
8.42	-74.94	-60.2	-61.33	22.68	84.1	63.9	52.7
8.4	-75.03	-60.82	-61.61	19.57	83.6	63.6	55.4
8.36	-75.4	-60.61	-61.58	19.2	83.2	64.1	51.5
8.48	-74.8	-60.04	-61.48	22.62	83.5	64.4	50.2
8.45	-75.17	-59.88	-61.39	22.59	83.8	64.2	51.2
8.46	-75.08	-60.04	-61.54	22.59	83.8	63.7	52.2
8.43	-74.39	-60.2	-61.36	22.5	83.8	63.6	53.7
8.37	-74.57	-60.4	-61.48	19.75	83.3	63.7	50.5
8.38	-75.03	-60.61	-61.67	19.29	83.1	64.1	51.8
8.48	-74.57	-60.4	-61.67	22.59	83.4	64.1	51.2
8.39	-75.3	-60.4	-61.48	22.59	83.7	63.7	54
8.41	-74.53	-60.04	-61.67	20.36	83.5	63.6	53
8.36	-74.71	-60.77	-61.45	19.29	83	63.7	50.5
8.57	-75.35	-60.3	-61.58	22.59	83.2	64	52.2
8.5	-75.67	-60.09	-61.45	22.62	83.5	63.8	49.6
8.47	-75.12	-59.94	-61.54	22.62	83.4	63.6	54.6
8.32	-74.3	-60.51	-61.36	19.72	83.2	63.4	53.3
8.34	-75.58	-60.56	-61.33	19.2	83	63.9	51.3
8.47	-74.71	-60.14	-61.76	22.56	83.2	64.1	53.6
8.51	-75.17	-61.13	-61.64	22.5	83.5	63.5	54.4
8.38	-74.62	-60.4	-61.58	21.67	83.5	63.5	50.5
8.18	-74.48	-60.61	-61.45	19.47	83.1	63.6	52.4
8.35	-75.17	-61.18	-61.54	19.2	82.8	64	54.4
8.52	-75.44	-60.97	-61.39	22.56	83.2	63.8	51.1
8.41	-74.53	-60.04	-61.67	22.53	83.4	63.7	52.3
8.48	-74.75	-60.56	-61.27	22.62	83.4	63.5	52.1
8.24	-75.81	-60.2	-61.54	19.69	83	63.5	51.1
8.41	-74.48	-60.3	-61.21	20.57	83	63.8	51.5
8.44	-75.35	-60.35	-61.58	22.56	83.3	63.6	53.1
8.49	-74.75	-60.09	-61.61	22.5	83.3	63.4	48.8
8.38	-74.39	-59.94	-61.82	20.27	83.3	63.4	48.3
8.38	-74.98	-60.71	-61.33	19.41	83.1	63.6	52.3
8.37	-74.43	-60.71	-61.51	20.94	82.8	63.7	51.4
8.56	-75.44	-60.61	-61.64	22.59	83.3	63.6	50.3
8.38	-74.62	-60.56	-61.58	22.62	83.5	63.5	50.4
8.45	-74.66	-60.51	-61.48	20.82	83.4	63.2	53.2
8.17	-75.12	-60.92	-61.45	19.6	82.8	63.3	50.2
8.39	-74.98	-60.77	-61.67	20.18	82.3	63.7	51.7
8.45	-75.17	-59.62	-61.51	22.68	82.9	63.6	50.5
8.44	-74.75	-60.71	-61.61	22.86	83	63.4	51.6
8.5	-75.03	-60.04	-61.64	20.76	82.8	63.1	52.4
8.21	-74.57	-60.66	-61.64	19.57	82.2	63.2	52.2

8.42	-75.76	-60.77	-61.73	20.24	82	63.6	51.3
8.56	-74.57	-60.61	-61.36	22.68	82.5	63.5	50
8.47	-75.08	-60.71	-61.73	22.71	82.5	63.2	52
8.48	-75.21	-60.3	-61.76	22.65	82.5	63.1	50.2
8.48	-74.75	-61.23	-61.48	20.51	82.3	63	53.7
8.32	-74.94	-60.61	-61.48	19.51	81.5	62.9	50.3
8.38	-74.94	-60.2	-61.33	19.75	80.8	63.4	51.1
8.45	-75.12	-60.14	-61.45	22.62	81	63.3	50.1
8.49	-74.8	-60.3	-61.45	22.71	80.9	63	50.5
8.5	-75.08	-60.66	-61.61	22.71	81.1	62.8	52.6
8.38	-75.58	-60.25	-61.64	20.05	80.8	62.7	51.1
8.36	-74.62	-60.3	-61.61	19.63	80.1	62.9	52.8
8.39	-75.85	-60.77	-61.7	19.41	79.9	62.9	51.6
8.67	-75.03	-60.35	-61.73	22.71	80	63.4	52.7
8.43	-75.12	-60.14	-61.61	22.8	80.2	62.9	53.1
8.48	-75.53	-61.08	-61.54	22.8	80.1	62.6	51.3
8.41	-74.94	-60.04	-61.67	19.9	79.9	62.5	55.1
8.36	-75.4	-60.35	-61.7	19.44	79.6	62.8	50.2
8.45	-75.76	-60.51	-61.79	22.74	79.9	63	51.8
8.5	-74.25	-60.14	-61.51	22.77	80.7	62.7	52.4
8.43	-75.08	-59.83	-61.67	22.34	81	62.5	52
7.76	-74.75	-60.82	-61.67	19.81	80.8	62.5	52.5
8.34	-74.75	-60.04	-61.64	19.47	80.9	63	50.7
8.39	-75.12	-61.03	-61.54	21.92	81.1	63.1	51.9
8.47	-74.98	-60.25	-61.76	22.65	82	63.4	53.8
8.44	-75.3	-60.04	-61.79	22.71	82.3	63.1	52.2
8.47	-74.94	-60.61	-61.73	22.71	82.8	63	51.1
8.29	-74.48	-61.13	-61.85	19.84	82.5	62.9	51.6
8.38	-74.62	-60.56	-61.82	20.63	82.7	63.5	51.7
8.42	-74.53	-60.77	-61.73	22.71	83.5	63.4	50.7
8.4	-74.94	-60.51	-61.48	22.71	83.9	63.1	50.4
8.52	-74.75	-60.66	-61.58	19.99	84	62.9	54.3
8.32	-75.4	-60.51	-61.73	19.54	84.1	63.5	52.4
8.4	-74.75	-59.99	-61.88	20.97	84.1	63.6	51.3
8.56	-75.03	-60.66	-61.76	22.68	84.9	63.9	51.8
8.48	-74.71	-60.82	-61.73	22.77	85.1	63.6	49.6
8.44	-74.85	-60.66	-61.79	21.06	84.9	63.6	53
8.32	-75.08	-60.04	-61.82	19.6	84.3	63.6	52.1
8.39	-75.53	-60.71	-61.58	22.65	84.2	64.1	53.8
8.48	-75.49	-59.94	-61.76	22.65	85	63.7	50.7
8.41	-74.71	-60.35	-61.82	22.65	85.1	63.8	46.8
8.37	-74.75	-60.87	-61.7	22.71	85.5	63.6	48.1
8.38	-74.94	-60.25	-61.51	19.99	85.3	63.6	52.1
8.33	-75.62	-60.3	-61.88	19.54	85.6	63.9	51.1
8.41	-74.21	-60.61	-61.88	20.91	85.3	64.3	49
8.57	-74.8	-60.2	-62.06	22.65	85.3	64.1	51.6
8.5	-74.85	-61.08	-61.51	22.59	85.5	63.9	54.3

8.51	-74.57	-60.09	-61.85	20.27	85.3	63.8	50.1
8.34	-75.49	-60.56	-61.54	19.44	85.1	64.1	53.2
8.47	-75.76	-61.6	-61.79	22.71	85.5	64.4	50.2
8.36	-75.4	-60.66	-61.97	22.74	86.1	63.8	52
8.47	-75.35	-61.03	-61.51	20.54	86	63.6	53
8.37	-75.17	-60.61	-61.7	19.44	85.5	64.3	52.1
8.53	-75.21	-60.87	-61.79	22.62	85.5	64.5	52.3
8.39	-75.26	-60.09	-61.67	22.74	86	64.2	52
8.44	-75.26	-61.13	-61.58	22.74	86.1	63.9	52.8
8.51	-75.03	-60.77	-61.73	19.81	86	63.9	52.3
8.41	-74.34	-60.04	-61.64	19.44	85.3	64.5	53.7
8.44	-75.53	-60.71	-62	22.68	86.4	64.7	49.3
8.46	-74.8	-60.66	-61.88	22.71	86.5	64.2	51
8.52	-74.98	-61.23	-61.85	21.31	86.5	64.2	51.8
8.33	-74.71	-60.3	-61.73	19.66	86.2	64.2	51.7
8.41	-75.4	-60.4	-61.88	20.39	85.9	64.7	53.4
8.57	-74.66	-60.92	-61.94	22.65	86.4	64.5	48.8
8.41	-75.53	-60.61	-61.85	22.71	86.4	64.5	50.8
8.45	-74.39	-60.14	-61.88	22.74	86.8	64.3	51.6
8.48	-75.08	-60.2	-61.7	21.43	87.5	64.1	48
8.28	-75.53	-60.51	-61.88	19.63	87.4	64.5	51.3
8.46	-75.12	-60.97	-61.82	22.59	87.5	65.1	53.2
8.39	-75.12	-60.61	-61.94	22.62	87.9	64.7	51.9
8.51	-74.85	-60.71	-61.58	22.71	87.7	64.4	50.8
8.38	-75.17	-60.25	-61.64	19.81	87.6	64.3	49.8
8.37	-75.03	-60.82	-61.88	19.44	87.3	64.8	50.3
8.5	-75.81	-60.66	-61.94	22.68	87.7	65.1	55.1
8.41	-74.75	-60.14	-62	22.71	88.2	64.7	50.5
8.49	-75.08	-60.25	-61.76	20.97	88.2	64.3	52.7
8.36	-74.98	-60.71	-62.03	19.6	88	64.8	50.9
8.55	-75.53	-60.97	-61.85	22.62	88.6	65.1	51
8.5	-75.26	-60.25	-61.94	22.65	88.7	64.9	50
8.44	-75.26	-60.66	-61.79	22.71	88.7	64.7	50.2
8.44	-75.3	-60.82	-61.58	19.81	88.7	64.5	50.5
8.38	-75.44	-60.61	-61.82	19.47	88.3	64.9	51.6
8.54	-74.57	-60.3	-61.79	22.65	88.7	65.4	54.5
8.53	-75.03	-60.87	-61.76	22.74	88.8	64.9	51.6
8.39	-74.94	-60.35	-61.88	22.74	88.7	64.7	51.6
8.47	-75.21	-60.77	-61.85	20.05	88.9	64.7	51
8.34	-75.26	-60.92	-61.91	19.47	88.6	64.9	52.3
8.42	-75.95	-61.03	-61.88	21.43	88.7	65.3	51.6
8.52	-74.94	-60.92	-61.91	22.65	88.9	65.2	52.9
8.44	-75.21	-60.56	-61.85	22.74	88.9	64.8	51.4
8.45	-74.85	-60.77	-61.7	22.74	88.5	64.7	54.9
8.41	-75.08	-60.77	-61.64	20.21	88.3	64.5	46.3
8.35	-75.21	-60.2	-62.06	19.6	88	64.7	52.3
8.44	-75.58	-60.56	-61.79	21.58	88.3	65.2	51.6

8.47	-74.75	-60.71	-61.82	22.8	88.7	64.9	52.2
8.38	-75.58	-61.03	-61.94	22.68	88.7	64.7	52.5
8.46	-75.03	-60.51	-62	19.78	88.4	64.5	51.6
8.38	-75.9	-60.87	-61.91	19.44	87.8	65	51.2
8.65	-75.4	-60.97	-61.61	22.65	87.9	65.3	52.8
8.56	-75.35	-60.3	-61.76	22.65	88	64.9	51
8.52	-75.4	-60.66	-62	22.71	87.6	64.9	53.1
8.49	-75.58	-60.4	-62.03	22.68	87.6	64.8	51.1
8.5	-75.58	-60.66	-62.03	21.25	87.2	64.4	59.4
8.3	-75.72	-60.87	-61.54	19.72	86.4	64.5	52.4
8.39	-75.26	-61.08	-61.82	21.64	85.9	65	52.3
8.44	-75.53	-60.51	-61.76	22.77	86.2	64.8	50.7
8.48	-75.72	-60.87	-61.73	22.71	85.3	64.7	52.3
8.45	-75.26	-60.61	-61.97	20.3	84.9	64.2	55.8
8.33	-75.17	-61.34	-61.97	19.57	84.3	64.4	48
8.42	-75.72	-60.97	-61.94	21.52	84.1	64.9	51.2
8.55	-75.26	-60.77	-61.82	22.89	83.7	64.7	49.8
8.39	-74.94	-60.92	-62	22.8	83.5	64.2	51.4
8.5	-75.44	-60.56	-62.03	21.7	83.3	63.9	51.2
8.02	-75.4	-60.04	-62.09	19.75	82.3	63.9	52.2
8.41	-75.44	-60.82	-61.85	20.57	81.8	64.4	54.1
8.47	-75.49	-59.88	-61.82	22.8	81.9	64.3	51.9
8.45	-75.4	-60.92	-61.94	22.86	81.9	63.9	50.8
8.5	-75.4	-61.08	-62	21.79	81.6	63.6	49.5
8.11	-75.72	-60.25	-61.79	19.81	81.5	63.6	51.7
8.38	-75.26	-60.77	-62.03	20.09	81.9	64.1	49.8
8.53	-75.12	-60.82	-61.73	22.92	82.7	63.9	54.1
8.48	-75.44	-60.97	-61.85	22.89	82.7	63.6	51.3
8.47	-75.08	-60.82	-61.91	22.86	82.8	63.5	50.1
8.43	-75.3	-60.09	-62.06	20.18	82.1	63.5	51.9
8.33	-75.4	-61.23	-62.06	19.69	81.5	63.7	51.3
8.42	-75.21	-60.77	-61.79	22.53	81.3	64	53
8.54	-75.03	-60.82	-61.97	22.86	81.8	63.6	53.3
8.48	-75.49	-60.92	-61.85	22.95	82	63.4	52.7
8.38	-75.17	-60.71	-61.91	22.95	82.1	63.3	52.7
8.43	-75.35	-61.29	-62.09	20.3	81.7	63.3	53.2
8.32	-75.17	-61.08	-62.28	19.81	81.2	63.2	51.3
8.39	-75.4	-60.61	-62.06	19.63	80.8	63.6	50.5
8.58	-75.17	-60.87	-61.88	22.83	81.2	63.7	51.3
8.41	-75.67	-60.77	-62.06	22.95	81.2	63.2	54.2
8.41	-75.62	-60.82	-61.94	22.56	81.3	63.1	52.2
8.24	-75.9	-61.29	-61.88	19.99	80.7	63.1	52.7
8.41	-75.17	-60.61	-61.91	20.67	80.2	63.6	52
8.52	-75.58	-60.2	-61.97	22.92	81	63.5	51.9
8.38	-75.76	-60.66	-61.85	22.99	81	63.1	51.3
8.37	-75.21	-60.87	-61.85	23.08	81.1	62.9	53.2
8.39	-75.03	-61.34	-62.25	20.51	81	62.8	51.1

8.01	-75.17	-61.03	-62	19.9	80.7	62.8	52.3
8.32	-75.76	-60.51	-62.19	19.72	80.5	63.3	51.8
8.41	-75.62	-60.71	-62.03	22.74	80.6	63.3	49.8
8.49	-75.99	-61.03	-62.12	22.89	80.8	63.2	50.9
8.48	-76.22	-60.35	-62.06	22.95	80.6	63	53.2
8.48	-75.26	-61.44	-61.94	22.01	80.5	62.7	51.4
7.53	-75.4	-60.82	-62.19	19.96	80	62.6	52.6
8.4	-75.58	-60.09	-62.06	19.69	79.5	63.1	52.5
8.57	-75.26	-61.44	-61.88	23.05	80.1	63.1	53.7
8.46	-75.85	-60.77	-61.94	22.99	80.5	62.8	52.8
8.38	-75.62	-61.03	-62.09	22.99	80.3	62.6	52.4
8.42	-75.85	-60.92	-62.06	23.08	79.9	62.5	52.5
8.5	-75.44	-61.86	-61.94	20.33	79.4	62.5	50.5
8.34	-75.3	-60.56	-62.25	19.75	79	62.5	51.5
8.45	-75.3	-61.91	-61.94	22.83	78.8	62.7	52.4
8.56	-74.48	-60.66	-62.03	22.99	78.7	62.5	53.8
8.44	-75.26	-60.82	-62.25	22.99	78.7	62.5	51.6
8.35	-75.44	-60.25	-62.31	22.74	78.9	62.1	51.3
8.32	-75.3	-60.4	-61.94	20.21	78.6	62.1	51.6
8.39	-76.08	-61.39	-61.94	19.78	78.8	62.6	50.1
8.73	-75.62	-61.08	-62.16	22.99	78.9	62.8	52.3
8.45	-75.53	-60.82	-61.91	22.89	79.3	62.7	54
8.38	-76.08	-60.97	-61.97	23.02	79.8	62.2	52.3
8.5	-75.58	-60.92	-62.34	23.05	79.8	62.2	55
8.48	-75.9	-61.03	-62.19	20.27	79.6	62	53.3
8.31	-75.62	-60.92	-62	19.87	79.5	62.4	52.8
8.43	-75.44	-61.08	-62.31	19.72	79.5	62.6	50.4
8.5	-75.49	-61.08	-62.12	22.99	79.9	62.6	49.7
8.53	-75.26	-60.66	-62.19	23.08	80.6	62.5	52.6
8.47	-75.3	-61.65	-62.25	22.77	81.1	62.1	50.8
7.95	-74.85	-61.08	-62.28	20.02	81	62.2	51.1
8.39	-75.53	-60.92	-61.97	19.63	81.1	62.8	51.1
9.26	-75.35	-61.34	-61.82	22.77	81.7	63	55.1
8.48	-75.9	-60.35	-62.16	22.95	82.1	62.8	49.8
8.48	-75.58	-61.39	-62.16	22.86	82.7	62.5	54.6
8.48	-75.44	-60.61	-61.97	22.92	83	62.6	51.6
8.19	-75.76	-61.13	-62.06	19.93	82.7	62.5	51.7
8.41	-75.62	-60.92	-62.34	21.18	82.7	63.1	51.8
8.45	-75.76	-61.86	-62.25	22.92	83.5	63.1	47.7
8.5	-75.12	-61.34	-61.91	22.83	84.2	62.7	51.3
8.41	-75.72	-60.14	-62.25	22.8	84.3	62.7	50.4
8.43	-75.62	-60.97	-62.09	21.46	85.1	62.8	50.9
8.44	-75.12	-60.35	-62.03	19.78	85.3	62.9	50.7
8.36	-75.95	-61.23	-62.43	19.44	86.1	63.4	52.2
8.44	-75.76	-60.92	-62	22.74	87.2	63.7	54
8.41	-75.53	-60.66	-62.03	22.62	87.9	63.5	51.4
8.41	-75.49	-60.2	-62.06	21.21	88.5	63.6	52.1

8.28	-75.26	-61.03	-62.12	19.63	88.7	63.7	50.8
8.43	-76.27	-60.97	-62.34	19.99	89.6	64.3	50.7
8.52	-75.72	-61.65	-62.19	22.56	90.3	64.5	51.7
8.5	-76.17	-61.13	-61.97	22.53	90.8	64.3	51.4
8.45	-75.9	-61.03	-62.16	22.56	91.2	64.3	50.8
8.42	-76.31	-61.03	-62	19.78	91.8	64.3	51.4
8.37	-75.99	-61.13	-62.19	19.32	92.3	64.8	49.4
8.52	-75.95	-60.92	-61.94	22.41	92.7	65.2	49.8
8.51	-75.62	-60.77	-62.31	22.5	92.9	65	51.7
8.37	-75.95	-61.13	-62	22.47	93.3	65	49.4
8.48	-75.76	-60.97	-61.76	19.6	93.6	65.1	50.8
8.38	-75.26	-60.82	-62.06	19.2	93.5	65.5	52
8.41	-75.62	-61.23	-62.06	21.12	94	65.9	51.6
8.54	-75.58	-60.56	-62.25	22.41	94.3	65.8	48.1
8.51	-74.48	-60.61	-62.03	22.41	94.6	65.4	51.1
8.42	-75.35	-60.87	-62.16	19.78	94.8	65.7	52.8
8.35	-75.62	-61.13	-61.97	19.17	94.4	65.9	51.9
8.5	-75.81	-60.3	-62	22.44	94.5	66.5	51.9
8.51	-75.53	-61.03	-62.12	22.44	93.8	66.2	50.5
8.41	-75.58	-60.97	-61.82	22.44	94.1	66	52.4
8.36	-75.58	-61.23	-62.12	22.41	94.8	65.9	52.7
8.45	-75.53	-61.49	-61.97	19.72	94.4	66	53.9
8.35	-75.85	-61.34	-61.97	19.35	94	66.2	52.9
8.41	-75.53	-60.97	-62.19	19.14	93.9	66.4	50.5
8.58	-75.35	-61.34	-62.19	22.41	94	66.9	51.2
8.5	-75.85	-60.97	-62	22.47	94.2	66.5	51
8.44	-75.21	-60.87	-62	21.98	94.4	66.1	50.9
8.34	-75.58	-60.82	-62.03	19.26	94.1	66.5	53.1
8.69	-75.49	-61.23	-61.94	22.41	94.2	67.2	54.3
8.51	-75.99	-61.13	-62	22.41	94.4	66.7	51.2
8.41	-75.67	-60.4	-61.94	22.44	94.4	66.6	52.5
8.5	-76.13	-60.97	-61.97	19.54	94.1	66.5	49.6
8.34	-75.21	-60.56	-61.91	19.26	94	66.8	52.2
8.41	-75.95	-61.13	-62.03	19.05	94	67.2	52.3
9.73	-75.58	-60.71	-62.28	22.25	94.3	67.4	50.3
8.44	-75.26	-60.56	-62.03	22.28	94.5	67	52.7
8.5	-75.44	-61.13	-62.09	22.31	94.5	66.8	52.6
8.41	-75.49	-61.18	-61.91	20.02	94.3	66.8	52.2
8.35	-75.67	-60.66	-62.09	19.17	93.9	67	51.6
8.41	-75.58	-60.82	-62.16	21.55	93.9	67.5	51.2
8.56	-75.3	-61.44	-62.03	22.34	93.9	67.1	49.6
8.45	-75.99	-60.92	-62	22.44	93.9	67	52.9
8.39	-75.76	-60.66	-62	22.44	93.8	66.9	54.9
8.45	-75.76	-61.13	-62.19	22.5	93.6	66.8	51.6
8.45	-75.58	-61.03	-62.12	19.51	92.9	66.9	53.8
8.35	-75.67	-60.51	-62.34	19.17	92.5	67.2	52.4
8.62	-75.3	-60.97	-62.09	22.44	92.7	67.4	49.9

8.39	-75.4	-60.97	-62.12	22.41	92.7	66.8	55.3
8.45	-75.72	-60.14	-62.25	22.5	92.7	66.7	44.7
7.94	-75.49	-61.29	-62.16	19.35	92.1	66.7	51.7
8.42	-75.26	-61.03	-62.19	20.76	92	67.4	52.1
8.47	-75.3	-60.92	-62.19	22.5	92	67.1	53.8
8.39	-75.4	-61.13	-62.06	22.44	92.2	66.8	51.4
8.47	-75.3	-61.29	-62.37	22.53	92.1	66.6	51.6
8.38	-76.31	-61.29	-62.25	20.02	91.8	66.5	51.8
8.23	-75.95	-60.82	-62.4	19.44	91.2	66.7	52.6
8.39	-75.08	-60.87	-62.25	19.17	91.1	67	52
8.45	-75.4	-61.65	-62.16	22.5	91.5	67	51
8.47	-75.53	-61.34	-61.88	22.41	91.6	66.7	48.4
8.5	-75.17	-60.56	-62.06	22.56	91.6	66.4	49.5
8.35	-75.99	-61.39	-62.06	19.69	90.8	66.2	50.1
8.39	-75.44	-60.92	-62.25	19.23	90.8	66.8	51.5
8.57	-75.03	-60.87	-62.03	22.5	90.9	67	47.9
8.52	-74.71	-61.03	-62.16	22.5	91.1	66.7	55.6
8.49	-75.21	-61.13	-62.09	22.5	90.9	66.3	50.5
8.42	-75.85	-61.03	-62.34	22.53	90.9	66.2	54
8.41	-75.76	-61.6	-62	19.63	90.5	66.1	49.7
8.38	-75.76	-61.29	-61.97	19.23	90.5	66.5	51.7
8.43	-75.58	-61.23	-62.25	22.34	90.6	66.9	54
8.46	-75.26	-61.39	-62.19	22.47	90.8	66.5	54.7
8.46	-75.72	-60.71	-62.12	22.53	90.8	66.2	53.8
8.4	-75.53	-61.13	-62.19	20.3	90.7	66.1	53
8.15	-75.26	-61.44	-62.34	19.47	90.3	66	52.5
8.38	-76.08	-60.92	-62.09	19.23	89.8	66.5	51.8
8.4	-75.35	-62.06	-62.12	20.05	89.7	66.6	53.6
8.47	-75.26	-61.23	-62.03	22.56	89.8	66.4	51.9
8.48	-75.76	-60.87	-61.94	22.5	89.7	66.1	49.1
8.46	-75.62	-61.18	-62.28	22.04	89.6	66	51.7
8.18	-75.58	-60.92	-62.4	19.51	89	65.9	50.4
8.37	-75.85	-61.08	-62.25	19.17	88.6	66.4	52.7
8.42	-75.62	-61.91	-62.12	22.53	88.7	66.5	52.7
8.39	-75.9	-60.97	-62.06	22.5	88.5	66.2	53.8
8.41	-75.3	-60.97	-62.25	22.47	88.6	65.8	51.6
8.41	-76.13	-61.18	-62.31	22.5	88.6	65.7	52.3
8.45	-75.76	-60.77	-62.25	19.57	88.6	65.8	53
8.43	-75.44	-60.92	-62.31	19.11	87.8	66.2	51.7
8.58	-74.98	-60.97	-62.12	22.47	87.9	66	54.5
8.45	-75.21	-61.03	-62.06	22.47	87.5	65.6	49.6
8.37	-76.22	-61.44	-62.03	20.57	86.8	65.5	51.6
8.03	-75.49	-61.08	-62.25	19.41	86.2	65.5	48
8.38	-75.3	-61.54	-61.94	19.14	85.8	65.8	52.5
8.42	-75.67	-61.39	-62.16	21.95	85.7	66	51.9
8.47	-75.44	-60.71	-62.12	22.53	85.9	65.8	48
8.5	-75.58	-61.29	-62.06	22.53	85.9	65.6	52.1

8.41	-75.08	-61.49	-62.06	22.5	86.1	65.3	51
8.27	-76.13	-61.08	-62.34	19.44	85.7	65.2	53.9
8.4	-75.81	-61.08	-62.31	21.25	85.5	65.8	49.7
8.54	-75.76	-61.03	-62.28	22.47	86.2	65.6	53.5
8.41	-75.72	-60.97	-62.37	22.53	86.3	65.2	52.3
8.47	-75.58	-61.13	-62.12	19.84	86.1	65	51.3
8.37	-75.08	-61.08	-62.28	19.23	85.6	65.3	53.4
8.38	-75.35	-60.04	-62.28	19.66	85.4	65.6	51.7
8.47	-76.13	-60.87	-62	22.47	85.6	65.6	52.1
8.45	-75.62	-60.71	-62.16	22.44	86	64.8	51.1
8.5	-75.72	-60.4	-62.34	21.76	85.9	65	50
8.25	-75.49	-60.82	-62.06	19.41	85.1	64.9	51.9
8.39	-75.62	-60.61	-62.19	20.09	85.1	65.5	52.9
8.47	-75.53	-60.56	-62.25	22.34	85.5	65.3	53.1
8.47	-75.85	-60.87	-62.28	22.44	85.8	65	48.9
8.44	-75.67	-61.6	-62.28	20.42	85.6	64.8	52.1
8.31	-75.12	-61.03	-62.25	19.17	85.2	64.7	50.4
8.42	-75.76	-61.44	-62.25	19.75	84.9	65.3	54.4
8.58	-75.62	-61.39	-61.97	22.34	85.4	65.1	53.8
8.45	-75.58	-61.8	-62.31	22.41	85.5	64.8	52.2
8.38	-75.81	-60.92	-62	22.44	85.5	64.7	52.2
8.5	-75.58	-61.13	-62.31	19.51	85.3	64.7	53.8
8.35	-75.67	-61.13	-62.06	19.08	84.9	64.8	48.4
8.38	-75.62	-61.08	-62.28	19.6	84.9	65.2	49.7
8.48	-75.72	-61.54	-62.25	22.34	85.3	65	52.8
8.5	-75.12	-61.86	-62.12	22.22	85.5	64.9	48.8
8.46	-75.62	-60.87	-62.28	22.44	85.7	64.8	52.4
8.41	-75.21	-60.71	-62.43	22.44	85.7	64.7	52.1
8.37	-75.95	-60.61	-62.43	19.23	85.6	64.4	52.8
8.37	-75.21	-61.34	-62.28	18.96	85.6	64.9	53.9
9.01	-75.72	-61.18	-62.09	22.34	85.9	65.3	51
8.46	-76.27	-61.96	-62.4	22.34	86	65	50.8
8.5	-75.72	-60.71	-62.4	22.34	86.2	64.8	52.1
8.38	-75.53	-61.18	-62.12	22.25	86.3	64.7	53.9
8.24	-75.76	-61.49	-62.31	19.17	85.8	64.7	53.2
8.41	-75.58	-61.39	-62.12	21.76	86	65.2	52.7
8.45	-75.72	-61.23	-62.31	22.34	86.4	64.8	52.1
8.39	-75.95	-61.7	-62.03	22.31	86.6	64.7	51.9
8.44	-75.4	-61.18	-62.31	20.18	86.5	64.5	52.4
8.16	-75.72	-60.97	-62.34	19.26	86.3	64.7	53.4
8.41	-76.45	-60.71	-62.16	18.96	86.4	65.2	51.9
8.5	-75.35	-61.23	-62.25	22.31	87.1	65.2	52
8.5	-75.26	-61.13	-62.12	22.25	87.3	64.7	52.2
8.47	-75.62	-61.65	-62.06	20.57	87.4	64.7	50.5
8.35	-75.67	-61.39	-62.31	19.11	87.1	64.8	51
8.4	-76.27	-61.6	-62.03	21.7	87.2	65.4	49.4
8.43	-75.85	-61.13	-62.25	22.28	87.5	65.2	53.3

8.36	-76.36	-60.82	-62.25	22.41	87.5	64.7	50.1
8.38	-76.27	-60.92	-62.31	22.41	87.7	64.8	50.3
8.41	-75.67	-61.23	-62.19	19.99	87.5	64.8	54.3
8.07	-75.58	-61.91	-62.25	19.2	87.5	64.7	51.8
8.39	-75.4	-61.54	-62.19	18.89	87.5	65.4	56.2
8.48	-75.35	-61.49	-62.34	22.31	87.9	65.6	51
8.46	-75.26	-61.03	-62.49	22.31	88	65.2	53.9
8.46	-76.22	-60.77	-62.28	21.7	88	65	53.2
8.19	-75.9	-61.8	-62.28	19.14	87.5	65	51.6
8.43	-75.44	-61.08	-62.46	21.12	87.5	65.5	52.7
8.51	-76.4	-61.08	-62.37	22.19	87.8	65.2	49.6
8.44	-75.76	-61.34	-62.28	22.28	87.8	64.9	52.8
8.42	-75.58	-60.71	-62.37	22.25	87.8	65.1	50.4
8.37	-75.67	-61.23	-62.19	21.52	87.9	65.1	51.7
8.29	-75.76	-60.71	-62.55	19.29	87.5	65.1	52.5
8.34	-75.95	-61.08	-62.31	18.83	87.1	65.4	51.3
8.47	-75.44	-61.91	-62.52	22.25	87.5	65.6	51.2
8.4	-76.08	-60.77	-62.34	22.34	87.6	65.3	52.2
8.39	-75.76	-61.13	-62.4	19.14	87.2	65	52.7
8.37	-75.4	-61.86	-62.28	19.41	87	65.6	50.8
8.48	-76.49	-61.65	-62.37	22.25	87.3	65.2	51.6
8.38	-75.53	-60.71	-62.43	22.16	87.5	65.4	51.5
8.39	-75.99	-61.6	-62.31	22.22	87.4	65.1	53.7
8.46	-76.22	-61.8	-62.34	19.69	87.4	65	51.9
8.34	-75.53	-61.03	-62.37	18.99	87	65.1	49.8
8.41	-75.44	-61.39	-62.37	18.77	87.1	65.5	49.4
8.56	-75.76	-61.39	-62.28	22.22	87.6	65.5	56.3
8.5	-75.26	-61.29	-62.43	22.19	87.5	64.9	51.7
8.52	-76.08	-61.23	-62.28	19.26	87.4	65.1	51.3
8.41	-75.99	-60.61	-62.61	19.08	87.1	65.5	51.5
8.59	-75.62	-61.91	-62.28	22.22	87.5	65.5	50.2
8.5	-75.3	-61.44	-62.12	22.16	87.7	65.2	50.7
8.5	-75.62	-61.08	-62.52	20.48	87.5	64.9	52.6
8.08	-76.68	-61.13	-62.25	19.02	87.3	65.1	51.9
8.38	-75.58	-60.97	-62.4	18.77	87.1	65.5	52.8
8.41	-75.95	-61.39	-62.19	22.01	87.2	65.6	53.9
8.43	-76.08	-61.44	-62.28	22.22	87.5	65.5	50.8
8.39	-75.72	-61.29	-62.31	22.16	87.7	65.2	54.3
8.41	-76.36	-61.34	-62.4	20.05	87.7	65	51.7
8.32	-75.99	-61.18	-62.34	18.86	87.3	65.3	53.6
8.45	-75.76	-61.23	-62.46	22.19	87.6	65.7	50.7
8.43	-75.3	-61.03	-62.4	22.22	87.9	65.3	51.6
8.49	-75.9	-61.23	-62.09	22.13	87.8	65.2	53.5
8.35	-75.49	-60.97	-62.34	19.26	87.5	65	50.8
8.38	-75.81	-61.34	-62.37	18.77	87.2	65.4	51.2
8.41	-75.95	-61.13	-62.16	20.97	87.4	65.8	49.4
8.57	-76.08	-61.23	-62.37	22.16	87.6	65.7	52.8

8.49	-75.35	-61.34	-62.28	22.16	87.9	65.2	48.3
8.47	-76.08	-61.8	-62.31	20.02	87.7	65	55.2
8.35	-75.58	-61.23	-62.25	18.89	87.4	65.3	52.2
8.41	-75.62	-61.13	-62.46	21.98	87.4	65.8	51
8.45	-75.44	-61.34	-62.4	22.13	87.9	65.6	50.5
8.39	-75.95	-61.65	-62.4	22.13	88	65.4	52.8
8.39	-76.27	-61.49	-62.4	19.51	88	65.1	53.5
8.35	-75.67	-60.71	-62.28	18.8	87.5	65.4	52
8.51	-75.49	-61.23	-62.37	22.16	87.8	65.8	51.1
8.49	-75.99	-60.77	-62.49	22.13	87.9	65.4	51.1
8.5	-75.99	-61.34	-62.46	22.22	87.9	65.1	53.8
8.39	-75.58	-60.82	-62.43	19.2	87.5	65	51.7
8.44	-76.08	-61.39	-62.19	18.74	87.3	65.6	51.7
8.51	-76.17	-60.66	-62.43	22.07	87.7	65.8	54.4
8.41	-75.9	-61.13	-62.43	22.19	87.7	65.4	51.1
8.44	-75.85	-60.2	-62.25	22.19	87.9	65.1	51.8
8.48	-75.67	-61.13	-62.28	19.26	87.5	65	51.9
8.38	-75.9	-61.29	-62.58	18.74	87.3	65.4	52.1
8.48	-75.95	-61.23	-62.37	22.13	87.5	65.8	52.5
8.5	-75.85	-62.01	-62.37	22.16	87.7	65.4	54.9
8.47	-75.95	-61.6	-62.4	22.19	87.6	65.1	51.7
8.26	-75.49	-61.39	-62.58	19.23	87.3	65	51.5
8.39	-75.49	-61.39	-62.4	18.71	87	65.5	55.7
8.57	-75.58	-61.13	-62.67	22.16	87.3	65.7	50.3
8.38	-76.22	-62.06	-62.58	22.16	87.5	64.9	51.4
8.5	-75.17	-60.97	-62.46	19.51	87.2	64.7	52.8
8.35	-75.67	-61.23	-62.49	18.74	87	65.4	51.8
8.47	-75.62	-61.34	-62.43	22.19	87.3	65.5	51.9
8.52	-75.99	-61.29	-62.43	22.19	87.5	65	52
8.38	-76.17	-61.44	-62.52	20.97	87.5	65	53.2
8.3	-75.49	-61.54	-62.52	19.14	86.8	64.9	52.2
8.37	-75.58	-61.23	-62.49	18.74	86.6	65.5	53.3
8.41	-75.95	-61.39	-62.49	22.1	86.8	65.7	50.5
8.56	-75.62	-61.23	-62.49	22.16	87.1	65.6	54.3
8.43	-75.72	-61.34	-62.28	22.19	87.2	65.2	52
8.49	-76.08	-61.29	-62.55	22.19	87.3	65	52.6
8.24	-75.62	-61.54	-62.43	19.23	86.6	64.9	50.5
8.41	-75.85	-61.54	-62.4	20.6	86.4	65.5	50.5
8.5	-75.17	-60.97	-62.61	22.19	86.7	65.3	48.4
8.47	-75.95	-61.03	-62.37	22.22	86.8	64.9	50.8
8.41	-75.53	-61.23	-62.46	19.99	86.6	64.8	51.6
8.2	-75.85	-61.65	-62.49	19.02	86.1	64.9	51.7
8.35	-75.08	-60.97	-62.4	18.77	85.9	65.1	49.5
8.62	-76.17	-61.7	-62.61	22.22	86.1	65.4	51
8.4	-75.81	-61.29	-62.61	22.16	86.3	64.9	52.2
8.5	-75.9	-60.97	-62.55	22.19	86.4	64.7	51.5
8.46	-75.26	-61.08	-62.46	19.14	86.1	64.7	51

8.36	-76.08	-61.6	-62.46	18.96	85.7	65.2	50.5
8.54	-76.54	-61.49	-62.37	22.25	86.3	65.3	51.6
8.44	-76.31	-61.18	-62.64	22.16	86.4	64.8	49.5
8.41	-75.49	-60.77	-62.55	22.1	86.4	64.5	53.2
8.11	-75.3	-61.34	-62.61	18.99	85.8	64.7	53.7
8.38	-75.62	-61.18	-62.43	21	85.8	65.3	51.2
8.5	-75.99	-61.44	-62.46	22.22	86.4	64.9	51.9
8.47	-75.85	-62.17	-62.4	22.31	86.4	64.7	51.2
8.35	-76.13	-61.29	-62.49	19.26	85.9	64.5	51.4
8.37	-75.99	-62.32	-62.58	19.81	85.5	65.1	53.3
8.54	-76.45	-61.29	-62.52	22.13	86.4	64.9	49.4
8.49	-75.99	-61.8	-62.55	22.22	86.3	64.7	51.3
8.43	-76.27	-61.18	-62.55	20.33	86.1	64.7	51.4
8.33	-75.81	-60.92	-62.52	19.02	85.6	64.7	53.4
8.41	-75.85	-61.39	-62.49	21.98	85.6	65.3	51.6
8.43	-75.81	-61.13	-62.61	22.34	85.8	64.7	50.3
8.41	-75.99	-61.34	-62.61	22.28	85.6	64.7	52.2
8.2	-75.9	-61.49	-62.52	19.26	84.9	64.5	51.9
8.36	-75.53	-61.13	-62.46	18.99	84.5	65.2	51.6
8.53	-75.9	-61.08	-62.64	22.34	84.6	65.2	51.7
8.51	-76.27	-61.03	-62.49	22.41	85	64.7	51
8.47	-76.72	-61.8	-62.43	22.56	84.8	64.3	47.8
8.31	-76.17	-61.08	-62.8	19.41	84.1	64.2	51
8.39	-75.21	-62.06	-62.46	20.79	83.9	64.7	52.2
8.45	-75.53	-61.29	-62.49	22.34	84.4	64.7	54.5
8.41	-75.72	-61.65	-62.77	22.44	84.9	64.3	51.1
8.41	-75.67	-60.82	-62.74	20.3	84.9	64.1	50.2
8.35	-76.13	-61.23	-62.55	19.2	84.3	64.3	52.1
8.43	-75.9	-61.44	-62.55	21.55	84.5	64.8	49.2
8.57	-76.68	-61.44	-62.43	22.5	84.8	64.5	53.5
8.51	-75.49	-61.13	-62.52	22.47	84.9	64.3	51.2
8.47	-76.54	-61.65	-62.46	22.5	85.3	64.2	51.6
8.47	-76.17	-61.18	-62.64	19.66	85.1	64	52.1
8.35	-75.81	-61.91	-62.43	19.2	84.9	64.4	49.9
8.52	-76.68	-61.23	-62.74	22.56	85.3	64.7	50.5
8.41	-76.36	-61.44	-62.67	22.5	85.7	64.2	50.7
8.38	-75.53	-61.7	-62.7	22.16	85.5	64.2	53.8
7.94	-75.99	-61.29	-62.58	19.41	85.3	64.1	53.8
8.41	-76.27	-61.54	-62.61	21.12	85.3	64.7	50.1
8.54	-75.67	-61.18	-62.64	22.5	86	64.5	53.6
8.49	-76.63	-61.23	-62.7	22.53	86.3	64.4	50.4
8.41	-75.99	-61.13	-62.7	22.56	86.4	64.3	50.9
8.46	-76.4	-60.92	-62.74	19.93	86.4	64.2	51.6
8.35	-76.13	-61.13	-62.67	19.26	86.1	64.7	52.7
8.56	-76.72	-62.12	-62.43	22.5	86.4	65	53.2
8.48	-75.44	-60.97	-62.77	22.53	86.4	64.7	50.8
8.4	-76.31	-61.96	-62.61	20.33	86.2	64.5	50.5

8.35	-76.31	-61.29	-62.77	19.17	85.8	64.7	49.7
8.42	-75.95	-61.18	-62.55	21.28	85.9	65	53.5
8.47	-76.27	-61.18	-62.7	22.5	86.4	65	50.4
8.5	-75.85	-62.12	-62.61	22.56	86.5	64.8	52
8.44	-76.4	-61.34	-62.83	22.5	86.6	64.7	52.6
8.38	-76.08	-61.65	-62.52	20.09	86.4	64.4	48.4
8.35	-75.53	-61.03	-62.52	19.23	86	64.7	52.1
8.58	-75.9	-61.34	-62.7	22.56	86.4	65.1	51
8.41	-76.63	-61.8	-62.67	22.59	86.7	64.8	50.5
8.42	-76.27	-61.96	-62.67	21.03	87	64.4	52.5
8.04	-76.22	-61.23	-62.55	19.54	86.8	64.4	48.2
8.41	-76.54	-62.12	-62.55	19.08	87.2	64.9	53.6
8.48	-76.36	-61.18	-62.55	22.53	87.4	65.2	49.5
8.44	-75.81	-61.03	-62.64	22.47	87.8	64.9	52
8.41	-76.27	-61.6	-62.58	22.47	88.2	64.8	51.2
8.4	-76.36	-61.39	-62.64	19.78	88	64.7	54.5
8.37	-75.67	-61.49	-62.67	19.2	87.8	65.2	52.1
8.52	-75.44	-61.6	-62.8	22.47	88.2	65.1	47.4
8.41	-76.31	-62.22	-62.64	22.53	88.6	64.9	51.9
8.48	-76.36	-61.96	-62.77	20.48	88.8	64.7	53.6
8.06	-76.27	-61.7	-62.77	19.41	88.8	64.9	51.5
8.36	-75.99	-61.39	-62.77	19.14	88.9	65.4	48.8
8.42	-76.82	-61.49	-62.74	21.64	89.4	65.7	51.1
8.57	-76.27	-60.92	-62.83	22.5	89.9	65.3	52.2
8.46	-76.59	-61.23	-62.83	22.47	90.1	65.3	53.3
8.43	-76.4	-60.87	-62.7	19.99	89.9	65.1	54.3
8.35	-76.36	-61.23	-62.67	19.2	89.9	65.5	48.2
8.56	-76.72	-61.08	-62.74	22.47	90.4	65.8	51.4
8.48	-76.08	-61.7	-62.7	22.47	90.5	65.7	50
8.41	-76.36	-61.34	-62.89	22.34	90.8	65.5	51.9
8.18	-76.13	-61.6	-62.74	19.29	90.6	65.5	53.5
8.43	-76.82	-61.44	-62.77	21.43	90.7	66.1	51.2
8.48	-76.27	-61.49	-62.77	22.44	91	65.8	52.6
8.38	-76.36	-61.6	-62.52	22.34	91	65.7	51.8
8.44	-76.13	-60.87	-62.7	19.44	90.8	65.7	50
8.39	-75.58	-61.49	-62.83	19.11	90.8	65.8	52.2
8.43	-75.4	-62.01	-62.8	21.76	91.2	66.3	53
8.54	-75.81	-62.01	-62.83	22.34	91.9	66.1	52.5
8.48	-75.9	-62.06	-62.64	22.41	91.8	65.8	52.3
8.35	-75.76	-61.65	-62.7	19.14	91.2	66	52.4
8.62	-76.49	-62.01	-62.7	22.25	91.4	66.6	51.6
8.41	-76.72	-61.23	-62.89	22.25	91.8	66	51.8
8.48	-75.67	-60.87	-62.7	21.4	91.8	66	53.5
8.34	-76.08	-61.39	-62.74	19.2	91.1	66.2	51.6
8.41	-76.36	-61.54	-62.55	21.95	91.1	66.8	52.5
8.59	-76.17	-61.65	-62.8	22.25	91.5	66.5	51.6
8.42	-76.22	-61.03	-62.83	22.28	91.8	66.4	53.2

8.47	-76.22	-62.01	-62.77	22.28	91.5	66.2	51.2
8.46	-75.95	-61.44	-62.74	19.35	91.1	66	47.4
8.38	-76.22	-61.18	-62.77	18.96	91	66.6	51.6
8.48	-76.72	-61.7	-62.8	22.31	91.4	66.7	55
8.41	-76.17	-61.29	-62.74	22.28	91.6	66.3	51.1
8.29	-76.17	-61.39	-62.61	19.47	91.1	66.2	53.2
8.38	-76.54	-60.87	-62.83	19.29	90.9	66.8	51.5
8.48	-76.27	-61.39	-62.55	22.25	91.4	66.8	52
8.52	-75.53	-61.34	-62.8	22.31	91.6	66.4	48.9
8.41	-76.59	-61.13	-62.86	22.22	91.4	66.4	49.5
8.43	-76.17	-61.96	-62.61	19.81	91	66.2	51.5
8.4	-76.22	-62.06	-62.64	19.05	90.6	66.4	51.2
9.06	-76.63	-61.49	-62.8	22.28	90.8	67	52
8.45	-75.85	-61.6	-62.61	22.31	90.9	66.5	50
8.49	-76.68	-62.06	-62.92	21.25	90.8	66.2	49.4
8.35	-76.68	-61.34	-62.74	18.99	90.3	66.5	51.9
8.59	-76.22	-61.49	-62.74	22.34	90.4	67	51.2
8.44	-76.63	-61.7	-62.95	22.44	90.5	66.5	51.7
8.41	-76.13	-61.54	-62.64	22.25	90.4	66.3	52
8.47	-75.85	-61.34	-62.83	19.63	89.9	66.2	51
8.39	-75.49	-61.34	-62.77	19.08	89.2	66.2	53.6
8.42	-75.85	-61.34	-62.74	19.6	89	66.8	51.5
8.56	-76.4	-61.29	-62.58	22.25	89.5	66.7	54.9
8.43	-75.62	-62.06	-62.55	22.28	89.2	66.3	51.6
8.45	-76.54	-61.44	-62.83	19.9	88.6	66.1	53.6
8.38	-76.22	-62.22	-62.67	19.02	87.8	66.2	52
8.57	-76.27	-61.65	-62.86	22.31	88.1	66.6	51.4
8.51	-75.95	-62.17	-62.74	22.31	88.2	66.1	51.1
8.49	-76.36	-61.91	-62.7	21.28	88.3	65.8	50.3
8.28	-76.27	-62.17	-62.92	19.44	87.6	65.7	52.8
8.37	-76.31	-61.29	-62.49	18.96	87.5	66.1	52.2
8.42	-75.81	-61.13	-62.7	20.18	87.3	66.2	53.8
8.52	-76.08	-61.8	-62.55	22.22	87.7	66.2	52.1
8.44	-76.54	-61.54	-62.74	22.34	87.9	65.8	51.6
8.48	-76.36	-61.34	-62.74	19.51	87.5	65.7	52.9
8.37	-76.68	-62.12	-62.7	19.66	87.2	66	50.3
8.5	-75.62	-61.7	-62.64	22.28	87.6	65.8	52.6
8.47	-75.67	-62.37	-62.64	22.31	87.8	65.6	51.3
8.25	-75.81	-61.34	-62.7	19.44	87.4	65.5	52.3
8.38	-76.31	-61.8	-62.7	18.93	87.2	65.8	51.8
8.41	-76.4	-61.13	-62.8	21.58	87.2	66	52.4
8.48	-76.08	-61.44	-62.92	22.34	87.6	65.9	51.3
8.47	-76.31	-61.91	-62.52	22.25	87.5	65.6	50
8.48	-75.85	-61.8	-62.67	20.76	87.7	65.5	52.5
8.35	-76.49	-61.34	-62.83	18.99	87.1	65.7	49.8
8.43	-76.36	-61.54	-62.74	22.31	87.4	65.9	52.5
8.42	-76.13	-61.65	-62.77	22.31	87.6	65.5	51

8.35	-76.86	-61.6	-62.61	19.35	87.3	65.4	51.7
8.41	-75.85	-61.86	-62.7	21.06	87.2	65.9	50.5
8.5	-75.9	-62.12	-62.64	22.25	87.5	65.7	50.1
8.45	-77	-62.12	-62.74	22.41	87.4	65.3	52.3
8.45	-76.36	-61.44	-62.74	19.66	87.4	65.3	53.6
8.34	-76.31	-61.65	-62.7	19.02	86.8	65.4	51.2
8.41	-75.85	-61.65	-62.77	20.97	86.8	65.9	51.8
8.53	-76.77	-61.49	-62.77	22.34	87.3	65.8	51.2
8.47	-75.9	-61.34	-62.74	22.34	87.4	65.4	52.6
8.5	-76.31	-61.7	-62.7	20.54	87.4	65.1	51.6
8.34	-76.49	-62.06	-62.7	19.08	86.8	65.2	51.2
8.39	-76.45	-61.49	-62.86	19.99	86.6	65.8	51.6
8.46	-76.36	-62.74	-62.61	22.25	87.2	65.6	54.4
8.43	-75.81	-61.8	-62.77	22.28	87.2	65.3	50.5
8.48	-75.72	-61.8	-62.7	20.57	87.3	65	55.2
8.32	-76.63	-61.23	-62.8	19.05	86.7	65.2	51
8.41	-76.54	-62.17	-62.74	21.46	86.7	65.6	49.5
8.42	-76.68	-61.44	-63.04	22.34	87.3	65.2	52.7
8.46	-76.13	-61.54	-62.89	22.28	87.2	65.1	50.8
8.45	-76.22	-61.34	-62.95	19.23	86.7	64.9	51.7
8.34	-75.99	-62.74	-62.83	18.86	86.4	65.5	52
8.49	-76.27	-61.44	-62.86	22.25	86.6	65.4	51.5
8.52	-75.95	-61.91	-62.95	22.25	87	65.3	51.4
8.41	-76.08	-61.91	-62.92	22.31	87.1	65	51.6
8.42	-76.4	-61.8	-62.92	19.54	86.5	64.5	51.7
8.35	-75.85	-61.91	-62.83	18.96	86.1	65.1	44.9
8.38	-75.62	-61.39	-62.92	22.13	86.4	65.5	51.7
8.51	-75.81	-61.86	-62.95	22.25	86.7	65.3	52.7
8.38	-75.95	-61.29	-62.77	22.25	86.7	64.9	54.3
8.47	-75.72	-61.23	-62.8	19.35	86.4	64.8	51.3
8.34	-76.13	-61.91	-62.77	18.89	86.3	65.3	51.3
8.59	-75.99	-61.65	-62.92	22.31	86.5	65.5	53.1
8.38	-76.36	-61.96	-62.92	22.31	86.7	65.1	49.7
8.48	-76.08	-62.01	-62.83	22.31	86.8	64.9	45
8.36	-76.45	-62.12	-62.86	19.54	86.7	64.7	51.9
8.36	-76.17	-62.06	-62.77	18.96	86.4	64.9	46.9
8.39	-75.81	-61.44	-62.86	20.48	86.4	65.4	50.4
8.44	-76.4	-61.8	-62.83	22.28	86.8	65.4	53.5
8.5	-76.08	-61.7	-62.86	22.34	87.1	64.9	49.6
7.76	-76.72	-62.06	-62.95	19.17	86.7	64.7	50
8.41	-76.86	-61.91	-62.89	22.01	86.8	65.5	50.1
8.44	-76.36	-61.65	-62.95	22.25	87.4	65.1	52.1
8.48	-76.54	-61.49	-62.83	22.25	87.3	64.8	51.4
8.43	-76.63	-61.29	-62.89	19.6	87.3	64.7	49.6
8.35	-77	-60.92	-62.89	19.02	86.8	64.9	52.7
8.4	-76.68	-61.54	-62.7	18.8	86.8	65.4	49.6
8.47	-76.68	-61.65	-62.95	22.28	87.3	65.3	49.3

8.46	-76.49	-61.65	-62.8	22.25	87.5	64.9	53
8.49	-75.72	-61.7	-62.83	19.23	87.3	64.8	52.7
8.38	-75.95	-62.43	-62.92	19.41	87.1	65.4	52.2
8.49	-76.17	-61.54	-62.86	22.16	87.8	65.3	52.2
8.33	-75.12	-57.86	-62.64	9.16	87.3	65.4	50.9
8.43	-71.73	-56.15	-61.88	-0.09	74.5	66.6	54.6
8.42	-70.95	-55.73	-61.58	-0.09	71.4	66.8	57.1
8.46	-74.71	-60.97	-62.06	22.25	83.1	66.3	53.4
8.44	-75.67	-61.13	-62.4	22.22	87.4	65.8	51.4
8.46	-75.85	-61.54	-62.55	22.19	88.2	65.6	51.6
8.44	-76.59	-62.17	-62.74	22.16	88	65.6	52.5
8.42	-76.49	-62.17	-62.49	22.19	87.8	65.5	51.4
8.5	-76.45	-61.49	-62.86	22.28	87.6	65.7	50
8.44	-76.82	-61.96	-62.86	19.78	87.9	65.5	51
8.5	-76.72	-60.71	-62.92	22.19	87.9	65.9	57.1
8.44	-76.36	-61.39	-62.83	21.4	87.8	65.6	52
8.62	-76.82	-61.8	-63.04	22.22	87.7	66.2	51.6
8.47	-77.32	-62.12	-62.92	21.86	88.1	65.6	48.3
8.5	-76.49	-61.96	-63.01	22.16	88	66	51.1
8.45	-77.27	-61.86	-63.1	19.72	88.1	65.7	47.3
8.46	-76.72	-61.8	-63.35	22.19	88.3	66.3	51.5
8.41	-76.59	-61.49	-63.16	19.41	88.2	65.8	50.4
8.44	-77.46	-62.48	-63.04	22.31	88.2	65.8	51.6
8.41	-76.95	-62.53	-63.07	19.26	87.8	65.6	53.3
8.39	-77.59	-62.37	-62.8	22.31	88.3	65.6	52.2
8.35	-77.09	-62.06	-63.28	19.66	88	65.7	51.5
8.38	-76.91	-62.63	-63.41	22.22	88.6	65.6	48.3
8.35	-76.4	-62.12	-63.13	21.49	88.1	65.8	51.5
8.39	-77.27	-61.23	-63.16	22.28	88.6	65.4	51.5
8.67	-77	-62.58	-63.04	22.28	88.3	65.8	52.4
8.44	-76.68	-62.22	-63.1	22.16	89	65.3	50.1
8.48	-76.86	-61.65	-63.19	22.19	88.9	65.7	52.9
8.47	-76.72	-62.32	-63.44	20.45	89.2	65.3	52.1
8.51	-76.82	-62.37	-63.16	22.25	89.3	65.5	50.5
8.44	-77.23	-62.37	-63.25	19.29	89.5	65.3	52.8
8.47	-77	-62.79	-63.1	22.22	89.7	65.6	53.2
8.28	-76.68	-62.06	-63.38	19.29	89.7	65.1	51.5
8.42	-77.27	-62.27	-63.13	22.07	89.8	65.5	54.8
8.33	-77.04	-61.96	-63.19	18.96	89.5	65.6	52.7
8.41	-77.32	-62.22	-63.41	22.22	90	65.3	50.5
8.37	-77.09	-62.27	-63.41	22.13	89.6	65.8	54.6
8.48	-77.73	-62.95	-63.13	21.58	89.9	65.4	52.2
8.5	-77.73	-62.32	-63.38	22.16	89.7	65.8	52.1
8.42	-76.86	-62.48	-63.22	19.63	89.9	65.3	50.9
8.48	-77.32	-61.86	-63.25	22.22	90.1	65.7	52.9
8.32	-77.04	-62.27	-63.35	19.2	89.7	65.4	51.6
8.38	-77.73	-62.27	-63.53	22.22	90.1	65.5	50.3

8.34	-77.36	-62.69	-63.35	21.18	89.7	65.8	52.9
8.42	-77.64	-62.32	-63.47	22.25	90.4	65.5	52.1
8.35	-76.82	-62.53	-63.47	22.01	90	66	50.3
8.42	-77.36	-61.86	-63.38	22.16	90.3	65.6	51.8
8.5	-77.09	-62.74	-63.41	22.25	89.9	65.8	52.3
8.44	-77.27	-62.37	-63.38	20.76	89.8	65.6	51.3
8.5	-77.09	-63.21	-63.59	22.16	89.7	65.9	50.8
8.47	-77.46	-62.69	-63.5	19.14	90	65.4	53.8
8.45	-77.18	-62.74	-63.53	22.19	89.9	65.7	52.3
8.31	-77.64	-62.69	-63.32	18.93	89	65.7	52
8.41	-77.41	-62.69	-63.25	22.22	89	65.7	52.8
8.34	-77.82	-62.06	-63.41	20.3	88.1	65.9	52.5
8.46	-77.32	-62.58	-63.53	22.16	88.4	65.6	52.2
8.38	-77.18	-62.53	-63.47	19.47	87.7	65.7	51.7
8.47	-78.01	-62.89	-63.25	22.19	88.2	65.5	54.7
8.35	-76.95	-62.95	-63.41	18.86	87.7	65.6	51.2
8.46	-77.09	-62.22	-63.44	22.19	88.1	65.5	51.1
8.35	-77.27	-62.69	-63.38	19.11	87.5	65.6	53
8.47	-77.09	-62.37	-63.53	22.22	88.1	65.5	51.8
8.35	-77.64	-62.48	-63.53	20.02	87.5	65.7	50.5
8.47	-77.55	-62.58	-63.44	22.07	87.9	65.3	51.3
8.54	-77.23	-62.48	-63.59	22.01	87.5	65.8	50.8
8.5	-77.41	-62.53	-63.59	22.16	87.7	65.2	50.2
8.37	-77.78	-63.26	-63.41	21.86	87.3	65.7	51.8
8.47	-77.55	-63.21	-63.68	22.19	87.5	65.1	51.7
9.08	-77.5	-62.84	-63.41	22.1	87	65.6	51.2
8.34	-77.23	-62.53	-63.53	21.73	87.5	65	51.7
8.45	-77.87	-62.22	-63.74	22.22	87.1	65.2	48.1
8.46	-77.36	-62.74	-63.47	21.06	87.2	65.1	52.1
8.52	-77.64	-62.84	-63.65	22.25	86.8	65.3	52.4
8.35	-77.27	-62.95	-63.53	21.52	87.1	64.8	51.7
8.53	-76.68	-63.31	-63.56	22.19	86.4	65.2	50.5
8.42	-77.78	-62.84	-63.5	20.97	86.6	64.8	52.5
8.45	-77.73	-63.26	-63.5	22.19	86.3	65.2	53.4
8.47	-77.55	-63.46	-63.53	20.27	86.5	64.5	51.3
8.44	-77.36	-63.31	-63.65	22.28	86.3	65.1	48.2
8.46	-77.5	-62.79	-63.68	20.02	86.2	64.7	51.1
8.47	-77.5	-62.48	-63.68	22.25	86.2	65.1	52.4
8.45	-77.27	-62.37	-63.8	19.78	86.1	64.7	50.5
8.53	-77.55	-62.63	-63.71	22.19	86.1	65	50.5
8.4	-77.82	-62.79	-63.8	20.21	86.3	64.7	52.9
8.46	-77.69	-62.84	-63.83	22.25	86	64.9	52.2
8.48	-77.64	-62.48	-63.53	20.05	86.1	64.4	50.5
8.47	-77.46	-62.12	-63.59	22.28	86	65	55.3
8.38	-77.64	-62.53	-63.89	19.93	86.3	64.5	50.5
8.51	-77.64	-63.36	-63.83	22.28	86.1	64.7	51.3
8.47	-77.69	-62.53	-63.99	19.54	86.1	64.4	51.3

8.43	-77.59	-63.21	-63.74	22.22	86	64.8	49.7
8.36	-77.59	-62.27	-63.71	19.51	85.8	64.4	50.4
8.47	-77.23	-62.84	-63.71	22.31	85.9	64.7	52.8
8.44	-77.27	-62.95	-63.62	19.57	85.6	64	49.7
8.52	-77.64	-62.69	-63.83	22.31	85.7	64.7	50.5
8.46	-78.37	-63.05	-63.89	19.51	85.5	64.3	57.4
8.5	-76.77	-62.69	-63.89	22.34	85.4	64.5	52.7
8.47	-77.69	-62.43	-63.8	19.2	85.3	64.2	50.3
8.49	-77.09	-62.89	-63.71	22.31	85.2	64.5	49.5
8.47	-77.59	-62.17	-63.86	19.35	85	64.1	50.7
8.55	-77.46	-62.74	-63.68	22.25	85	64.4	51.8
8.43	-77.64	-62.74	-63.8	19.99	85	64.1	52.9
8.41	-77.73	-63.21	-63.65	22.41	84.6	64.7	52.6
8.42	-77.27	-62.06	-63.68	19.96	84.6	64	52
8.51	-78.28	-62.79	-63.89	22.25	84.5	64.4	52.3
8.44	-77.41	-62.79	-63.65	19.44	84.4	64	52.9
8.45	-77.64	-63.15	-63.93	22.22	84.5	64.1	51.3
8.26	-77.09	-63.26	-63.83	19.44	84.1	63.9	50.8
8.5	-77.82	-63.31	-63.8	22.28	84.3	64.1	52.9
8.41	-78.33	-63.21	-63.68	19.32	84.2	63.9	50.9
8.43	-77.59	-64.09	-63.71	22.28	84.2	63.9	51.5
8.47	-77.36	-63.36	-63.86	19.63	84	63.8	51.7
8.42	-77.27	-62.84	-63.89	22.28	83.9	64.2	49
8.43	-77.27	-62.89	-63.83	19.41	83.7	63.6	52.8
8.46	-77.78	-62.79	-63.86	22.34	84.2	63.9	53
8.39	-77.82	-62.63	-64.11	19.6	83.8	63.7	47.5
8.5	-78.28	-63.46	-64.02	22.31	83.7	64	51.9
8.38	-78.6	-63.26	-63.93	19.75	83.8	63.9	52.4
8.52	-77.55	-62.84	-63.93	22.34	83.7	63.8	48.4
8.37	-77.78	-62.79	-63.89	19.57	83.5	63.6	51.8
8.54	-77.96	-62.84	-63.89	22.41	83.7	63.8	51.6
8.4	-77.87	-61.86	-63.99	19.6	83.7	63.5	52.6
8.47	-77.55	-63.31	-63.8	22.44	83.9	63.7	50.7
8.46	-77.55	-63.21	-64.02	19.93	83.8	63.6	51.8
8.41	-77.59	-62.84	-63.89	22.34	83.9	64	53.2
8.37	-78.05	-62.84	-63.86	20.85	84.2	63.6	49.4
8.48	-76.59	-63.31	-63.86	22.31	84	63.9	51.5
8.44	-77.55	-63.36	-64.05	22.44	84.3	63.4	51.6
8.34	-77.91	-62.79	-64.2	21.06	84	63.8	52.2
8.35	-78.05	-62.63	-64.05	22.31	84.6	63.6	55.4
8.33	-77.18	-63.36	-63.71	20.54	84.3	63.7	52
8.44	-78.28	-62.84	-63.89	22.31	85.3	63.6	51.2
8.32	-78.42	-63.15	-64.05	19.93	84.9	63.7	51.1
8.37	-77.82	-62.79	-63.96	22.25	85.6	63.6	51.2
8.18	-77.55	-63.15	-64.05	19.05	85.3	63.6	52.3
8.38	-77.87	-62.95	-63.96	22.22	85.9	63.6	51.6
8.35	-77.64	-63.1	-64.05	19.26	85.7	63.6	52.5

8.43	-77.32	-62.63	-64.2	22.25	86.2	63.7	49.9
8.42	-77.82	-63.26	-63.89	19.14	86.1	63.6	56.7
8.46	-78.65	-63.15	-64.05	22.25	86.4	63.9	50.5
8.43	-77.78	-62.63	-63.93	19.14	86.3	63.6	50.7
8.51	-78.14	-63.1	-63.8	22.22	86.4	63.9	53.5
8.39	-77.09	-63.15	-63.99	19.47	86.6	63.6	51.6
8.43	-77.27	-62.69	-64.02	22.22	86.6	64	53.5
8.47	-77.41	-62.79	-64.11	19.54	86.6	63.8	50.7
8.5	-77.41	-63.36	-64.02	22.22	86.6	64	53.8
8.43	-77.96	-62.89	-64.08	20.45	86.7	63.8	53.1
8.41	-79.15	-62.95	-64.05	22.28	86.6	64.4	52.3
8.36	-77.69	-62.27	-63.99	21.95	87.2	63.9	48.1
8.74	-77.5	-63.15	-63.93	22.16	87	64.4	51.5
8.38	-77.87	-62.84	-63.99	21.86	87.5	63.9	51.6
8.47	-78.19	-62.95	-64.08	22.19	87.4	64.5	51.1
8.44	-77.69	-63.93	-64.17	21.58	87.6	63.9	52.8
8.49	-77.96	-62.89	-64.05	22.19	87.5	64.5	49.6
8.41	-78.78	-63.15	-63.96	22.25	87.8	63.9	51.2
8.52	-77.18	-63.46	-63.99	22.25	87.8	64.5	52.3
8.36	-78.1	-63.26	-64.08	22.25	88.2	64.1	52.6
9.45	-77.73	-63.52	-63.99	22.1	88.2	64.5	52.8
8.47	-77.69	-63.72	-63.89	22.31	88.5	64.2	51.2
8.82	-77.78	-63.05	-64.32	22.16	88.5	64.8	50
8.4	-78.1	-63.21	-64.17	22.16	89	64.4	54
8.55	-78.05	-63.46	-64.14	22.19	88.9	64.8	51.8
8.38	-78.33	-62.58	-64.2	21.37	89.5	64.3	52.3
8.52	-77.91	-63.62	-64.08	22.22	89.2	64.8	50.8
8.42	-78.37	-62.79	-64.29	20.7	89.7	64.7	54.9
8.53	-77.41	-62.84	-64.14	22.28	89.8	64.9	51.9
8.36	-77.64	-62.74	-64.41	21.37	90	64.7	52.2
8.55	-78.28	-63.1	-64.32	22.22	90	65.2	50.9
8.34	-77.87	-63.26	-64.2	20.21	90.2	64.7	51.1
8.52	-77.82	-63.1	-64.17	22.19	90.2	65.1	55.6
8.42	-78.28	-63.78	-63.96	19.81	90.3	64.8	52.9
8.43	-77.5	-62.63	-64.17	22.19	90.3	65.1	51.1
8.36	-76.95	-62.48	-64.02	19.47	90.7	64.9	51.6
8.44	-78.42	-62.69	-64.32	22.19	90.8	65.1	51
8.41	-78.55	-63.15	-64.38	19.63	90.7	65	45.9
8.44	-78.55	-63.36	-64.11	22.1	90.6	65.5	49.8
8.43	-78.05	-63.05	-64.32	20.54	90.6	65.1	50.9
8.44	-78.19	-62.84	-64.29	22.16	90.4	65.4	49.5
8.35	-77.78	-62.63	-64.2	20.33	90.8	65.2	53
8.44	-78.33	-63.31	-64.02	22.13	90.4	65.3	52.7
8.47	-78.42	-63.93	-64.02	20.42	90.5	65.3	51.4
8.53	-77.96	-63.62	-64.08	22.04	90.1	65.6	49.9
8.39	-77.78	-63.93	-64.11	20.42	90.4	65.4	52.7
8.47	-77.82	-63.15	-64.41	22.13	89.8	65.7	51.2

8.45	-77.78	-63.05	-64.11	20.97	90.3	65.3	53.2
8.52	-78.33	-63.46	-64.14	22.22	89.9	65.7	53.3
8.38	-77.73	-62.74	-64.32	21.37	89.8	65.4	53.3
8.56	-78.01	-63.26	-64.17	22.13	89.7	65.8	51
8.43	-78.14	-62.79	-64.23	21.95	89.9	65.5	50.5
8.45	-77.87	-62.69	-64.32	22.13	89.7	65.7	50.1
8.42	-78.1	-63.36	-64.17	20.12	90	65.4	53.4
8.53	-77.41	-63.62	-64.11	22.04	89.7	65.7	51.6
8.45	-77.64	-63.67	-64.02	19.35	89.7	65.2	52.3
8.42	-78.14	-62.58	-64.2	22.22	89.8	65.7	53.3
8.35	-77.59	-63.36	-64.29	19.17	89.6	65.4	51.6
8.49	-77.5	-63.21	-64.2	22.13	89.7	65.5	52.2
8.28	-77.64	-62.89	-64.26	19.26	89.3	65.2	52.8
8.42	-78.05	-63.1	-64.38	22.13	89.6	65.6	50.5
8.4	-78.88	-63.93	-64.29	19.05	89.3	65.1	50.3
8.51	-78.05	-63.26	-64.17	22.13	89.7	65.5	49.6
8.29	-78.19	-62.79	-64.2	19.23	89.2	65.3	53.4
8.41	-78.19	-63.1	-64.14	22.13	89.5	65.7	47.9
8.36	-78.65	-63.52	-64.23	19.23	89	65.3	50.2
8.49	-78.1	-63.15	-64.26	22.13	89.4	65.4	53.7
8.31	-78.65	-63.46	-64.23	19.17	89	65.4	51.4
8.41	-78.83	-63.1	-64.23	22.13	89.2	65.5	53.3
8.41	-77.69	-63.72	-64.14	19.08	88.8	65.3	50.5
8.47	-78.37	-63.67	-64.14	22.13	89	65.6	47.3
8.47	-77.55	-63.41	-64.38	19.84	88.9	65.1	53.3
8.54	-77.73	-63.98	-64.47	22.16	88.9	65.7	51.8
8.47	-77.96	-63.57	-64.17	22.13	89.2	65.3	50.5
8.35	-77.91	-63.05	-64.38	21.06	88.6	65.6	51.6
8.46	-78.46	-63.41	-64.44	22.16	88.9	65.4	52.6
8.38	-77.73	-63.36	-64.29	18.86	88.3	65.5	48.3
8.5	-78.28	-63.67	-64.26	22.07	88.9	65.3	52.2
8.1	-77.96	-63.78	-64.2	18.99	88.4	65.3	51.6
8.48	-78.46	-63.67	-64.47	22.16	88.8	65.3	53.6
7.74	-78.1	-62.79	-64.35	19.08	88.4	65.2	50.8
8.43	-78.01	-63.05	-64.35	22.1	88.6	65.4	51.8
8.31	-78.01	-63.05	-64.6	19.2	88.3	65.2	51.8
8.38	-78.55	-63.93	-64.26	22.16	88.5	65.4	51.6
7.94	-78.1	-63.41	-64.47	19.02	88.1	65	51.6
8.47	-78.19	-63.62	-64.44	22.22	88.5	65	52.8
8.05	-78.14	-63.78	-64.29	18.96	88.1	65.1	51.2
8.38	-78.33	-63.26	-64.17	22.13	88.6	65.2	48.9
8.07	-78.37	-63.98	-64.47	19.02	88	65	52.9
8.47	-78.42	-62.89	-64.47	22.13	88.5	65.1	52.4
8.35	-78.69	-63.26	-64.26	19.08	87.8	65	52.3
8.41	-78.01	-63.31	-64.23	22.07	88.3	65.1	53.2
8.31	-77.87	-64.09	-64.38	19.14	87.8	64.9	51.6
8.51	-77.78	-63.05	-64.35	22.16	88.2	65.1	51.6

8.29	-78.01	-63.21	-64.6	19.14	87.7	64.8	54.5
8.45	-78.37	-63.41	-64.51	22.07	88.1	65.1	51.8
8.37	-78.01	-63.57	-64.35	19.17	87.7	64.8	51.4
8.39	-78.19	-63.21	-64.35	22.1	87.9	65	50.4
8.34	-78.6	-63.1	-64.41	19.02	87.5	64.8	51.8
8.44	-78.65	-63.05	-64.47	22.04	88	65.1	52.4
8.34	-78.05	-63.52	-64.51	19.08	87.5	64.8	51.9
8.44	-77.78	-63.52	-64.51	22.13	87.9	64.9	51.7
7.85	-78.65	-63.78	-64.47	18.93	87.5	64.8	51.7
8.44	-78.33	-63.26	-64.44	22.1	87.7	65	49.5
8.33	-78.33	-63.26	-64.32	19.05	87.3	64.7	52
8.47	-78.55	-63.15	-64.44	21.98	87.5	65	53.9
8.47	-77.69	-63.41	-64.6	19.14	87.2	64.7	50.5
8.42	-78.55	-63.41	-64.38	22.13	87.2	65	52.1
8.38	-78.51	-63.31	-64.35	19.63	87.2	64.7	51.8
8.53	-78.19	-63.41	-64.35	22.1	87	65.3	50.3
8.47	-78.55	-63.46	-64.6	22.13	87.3	64.7	52.7
8.33	-78.19	-63.46	-64.32	21.12	86.7	65.1	53.1
8.44	-78.42	-63.36	-64.51	22.1	87.2	64.8	51.7
8.34	-78.74	-63.52	-64.47	19.69	86.6	64.9	52
8.42	-77.5	-63.46	-64.63	22.07	87.1	64.7	52.2
8.32	-78.88	-64.19	-64.38	18.93	86.4	64.7	52.9
8.36	-78.28	-63.67	-64.63	22.16	87.1	64.7	53
8.35	-78.46	-63.62	-64.44	18.86	86.4	64.7	50.9
8.46	-78.69	-63.67	-64.47	22.13	87	64.7	52.1
8.41	-78.28	-63.78	-64.47	19.05	86.5	64.5	49.3
8.53	-78.01	-63.98	-64.14	22.07	86.8	64.5	51.6
8.5	-78.6	-63.72	-64.63	19.14	86.6	64.4	51.3
8.53	-78.19	-62.89	-64.38	22.07	86.7	64.5	53.2
8.39	-78.28	-63.93	-64.51	19.41	86.7	64.4	50.8
8.43	-78.01	-63.52	-64.41	22.07	86.7	64.7	55.2
8.38	-78.33	-63.31	-64.47	19.87	86.7	64.4	52.1
8.41	-78.46	-63.72	-64.35	22.1	86.7	64.8	52.1
8.38	-78.33	-63.57	-64.41	19.72	86.7	64.4	52.6
8.46	-78.01	-63.72	-64.6	22.07	86.8	64.7	53.2
8.41	-78.78	-63.93	-64.35	19.47	86.5	64.3	50.9
8.44	-78.37	-63.78	-64.51	22.01	86.4	64.7	49.3
8.37	-78.83	-63.57	-64.38	20.09	86.8	64.4	52.8
8.42	-78.1	-63.41	-64.47	22.07	86.6	64.5	51.8
8.36	-77.78	-63.26	-64.63	19.9	86.8	64.2	52.6
8.43	-78.51	-63.93	-64.41	22.1	86.4	64.7	51.2
8.35	-78.42	-64.09	-64.81	21.25	86.8	64.3	51.4
8.48	-77.96	-63.52	-64.35	22.13	86.5	64.8	51.4
8.43	-78.97	-63.1	-64.32	20.42	86.7	64.4	53.1
8.47	-78.1	-63.26	-64.69	22.07	86.7	64.7	51.3
8.42	-77.64	-63.46	-64.57	20.18	86.8	64.3	49.6
8.53	-78.28	-63.83	-64.38	22.04	86.7	64.7	50

8.49	-78.46	-63.15	-64.81	20.73	87.1	64.2	51.6
8.52	-79.01	-63.52	-64.44	22.07	86.8	64.8	53.2
8.42	-78.14	-63.83	-64.44	20.39	87.2	64.3	53.3
8.48	-79.01	-63.57	-64.38	22.01	87.2	64.7	51.2
8.37	-78.42	-63.57	-64.35	21.06	87.3	64.3	52.4
9.34	-77.87	-64.55	-64.75	22.04	87	64.8	51.1
8.42	-78.65	-63.93	-64.51	22.13	87.5	64.3	53.1
8.63	-78.37	-64.09	-64.47	22.04	87.2	64.7	53.3
8.48	-78.83	-64.14	-64.29	22.07	87.5	64.5	51
8.38	-78.55	-64.09	-64.44	22.04	87.2	64.8	51.8
8.47	-78.65	-63.52	-64.78	22.1	87.5	64.2	52.3
8.53	-78.42	-63.57	-64.51	22.01	87.4	64.8	44
8.48	-78.14	-63.78	-64.44	20.09	87.7	64.3	55.1
8.53	-78.51	-63.72	-64.6	22.1	87.7	64.8	48.3
8.45	-78.33	-63.93	-64.44	21.83	88.1	64.4	51.4
8.63	-77.87	-63.62	-64.41	22.01	87.9	64.9	52.1
8.42	-78.1	-63.41	-64.44	21.12	88.3	64.3	50.9
8.49	-78.83	-63.93	-64.6	22.04	88.3	64.8	52.6
8.36	-78.05	-64.19	-64.72	20.51	88.5	64.4	53.2
8.46	-78.46	-63.78	-64.44	22.07	88.4	64.9	52.8
8.47	-78.28	-63.41	-64.47	20.48	88.6	64.5	49
8.48	-78.42	-63.83	-64.57	21.92	88.7	64.8	51.6
8.37	-78.69	-63.31	-64.78	19.44	88.8	64.5	51.9
8.54	-78.74	-64.14	-64.63	22.04	88.7	64.8	51.5
8.41	-78.51	-63.36	-64.78	19.26	88.6	64.5	51.7
8.54	-78.6	-63.93	-64.69	22.04	88.6	64.8	50.8
8.38	-78.19	-63.46	-64.75	19.05	88.6	64.7	51.7
8.51	-78.6	-63.46	-64.63	22.01	89	64.8	51.5
8.42	-78.42	-62.48	-64.66	18.83	89	64.7	52.5
8.5	-78.88	-63.72	-64.38	21.92	89.7	64.8	50
8.43	-78.46	-63.26	-64.78	18.99	89.3	64.7	52.8
8.51	-78.28	-63.31	-64.75	21.92	89.8	65	51.6
8.41	-78.33	-63.57	-64.81	18.99	90.1	64.8	52.3
8.51	-78.92	-63.93	-64.47	21.92	90.2	65.1	51.6
8.38	-78.37	-64.19	-64.41	18.89	90.1	64.7	50.4
8.47	-78.42	-63.31	-64.66	21.95	90.6	65.3	51.2
8.49	-77.96	-63.88	-64.66	19.02	90.7	64.9	57.1
8.51	-78.37	-63.67	-64.63	21.92	90.9	65.3	51.9
8.44	-78.83	-63.57	-64.57	18.93	91.2	65.2	49.6
8.52	-78.46	-63.41	-64.6	21.98	91.4	65.4	52.3
8.38	-78.97	-63.36	-64.63	18.93	90.9	65.2	52.6
8.51	-78.74	-63.62	-64.63	21.92	91.4	65.4	54.4
8.06	-78.51	-63.57	-64.66	18.74	90.9	65.4	51.1
8.41	-78.69	-63.62	-64.44	21.98	91.1	65.6	50.5
8.32	-78.28	-63.36	-64.84	18.62	90.6	65.6	50.7
8.49	-79.06	-63.98	-64.41	21.92	91.5	65.6	51
8.39	-78.65	-63.83	-64.47	18.62	90.9	65.6	48.8

8.37	-78.69	-63.21	-64.63	21.92	91.7	65.7	53.5
8.37	-78.14	-63.36	-64.41	19.6	91.2	65.8	52.6
8.44	-78.37	-63.72	-64.47	21.92	91.6	65.6	53.4
8.35	-78.78	-63.72	-64.63	18.93	91.2	65.8	50.8
8.45	-78.6	-63.36	-64.57	21.89	91.8	65.8	53.5
8.35	-78.97	-63.72	-64.47	20.7	91.2	66	49.4
8.42	-78.6	-63.41	-64.66	21.86	91.8	65.8	49.4
8.78	-78.88	-63.83	-64.66	21.86	91.7	66.2	53.4
8.39	-78.6	-64.09	-64.69	21.12	92.1	65.8	50.4
8.5	-78.19	-63.72	-64.66	21.83	92.1	66.3	48.7
8.44	-78.78	-63.46	-64.99	19.44	92.2	65.8	53.3
8.49	-78.51	-63.62	-64.63	21.76	92.4	66.3	47.3
8.45	-77.69	-63.62	-64.72	19.23	92.6	65.9	52.9
8.54	-78.55	-63.83	-64.75	21.83	92.2	66.3	53
8.39	-78.6	-63.15	-64.81	19.51	92.3	66	51.7
8.53	-78.69	-63.83	-64.63	21.89	92.2	66.3	53
8.41	-78.78	-63.67	-64.66	19.26	92.2	65.9	52.4
8.47	-78.83	-63.1	-64.72	21.89	92	66.5	52.2
8.5	-78.51	-63.62	-64.72	19.02	91.9	66	52.4
8.49	-78.6	-63.31	-64.69	21.86	92	66.3	51.4
8.44	-78.55	-63.62	-64.72	18.74	91.4	66.1	52.5
8.51	-78.74	-63.72	-64.69	21.79	91.1	66.3	52.8
8.42	-78.42	-64.45	-64.69	18.62	90.9	66	51.1
8.45	-78.78	-63.98	-64.72	21.76	90.9	66.4	47.3
8.5	-78.42	-64.35	-64.87	18.68	90.3	66	53.8
8.44	-78.97	-63.62	-64.72	21.79	90.5	66.4	49.6
8.39	-78.14	-63.62	-64.6	18.89	89.9	66	52.1
8.54	-78.6	-64.09	-64.81	21.79	89.9	66.3	52.7
8.41	-78.97	-63.83	-64.57	18.83	89.7	65.9	52.2
8.54	-78.1	-63.62	-64.87	21.89	89.7	66	49.2
8.38	-79.1	-63.57	-64.69	18.77	89.2	65.8	51.6
8.5	-77.91	-63.67	-64.81	21.86	89.3	66	53.7
8.31	-78.74	-63.88	-64.81	18.8	88.7	65.8	54.3
8.46	-78.78	-63.93	-64.6	21.89	88.9	65.9	51.2
8.28	-79.06	-63.93	-64.66	18.8	88.6	65.8	51.6
8.42	-78.65	-63.83	-64.75	21.92	88.8	65.8	50.5
8.15	-78.65	-63.52	-64.84	18.59	88.4	65.8	53.7
8.44	-78.69	-63.93	-64.63	21.95	88.6	65.8	51.6
8.13	-78.6	-63.41	-64.57	18.59	88.1	65.7	51.5
8.5	-78.88	-64.29	-64.75	21.92	88.6	65.8	52.7
8.33	-79.75	-63.78	-64.72	18.59	88.1	65.7	51.6
8.43	-78.74	-63.57	-64.66	21.89	88.4	65.8	52.5
8.32	-78.78	-63.62	-64.72	18.47	87.9	65.7	50.5
8.37	-78.74	-64.61	-64.78	21.86	88.6	65.4	52.2
8.35	-78.42	-64.35	-64.84	19.29	88	65.7	53.2
8.44	-78.6	-63.72	-64.72	21.89	88.5	65.6	46.9
8.34	-78.55	-63.88	-64.72	19.51	87.9	65.6	55.7

8.37	-78.88	-64.35	-64.78	21.92	88.3	65.3	51.7
8.32	-78.88	-63.78	-64.93	19.32	87.6	65.7	48.1
8.41	-78.33	-63.46	-64.72	21.98	88.2	65.4	53.9
8.34	-78.65	-63.98	-64.72	18.68	87.6	65.6	52.1
8.46	-78.74	-63.36	-64.75	21.92	88.1	65.3	51.2
8.09	-78.78	-64.09	-64.81	18.68	87.6	65.2	51.4
8.46	-78.6	-63.72	-64.93	21.92	88	65.3	50.3
8.22	-78.78	-63.72	-64.78	18.96	87.5	65.1	53.1
8.47	-78.92	-63.83	-64.78	21.95	87.7	65.1	51.9
8.5	-78.83	-63.93	-64.9	19.02	87.8	65.1	51.9
8.51	-78.55	-63.52	-64.96	21.95	87.8	65.4	52.5
8.38	-78.6	-63.93	-64.87	19.05	87.5	65	51.9
8.52	-78.37	-63.83	-64.87	22.01	87.7	65.3	51
8.42	-78.65	-63.78	-64.72	19.17	87.7	65	51.4
8.5	-79.06	-63.21	-64.75	21.92	87.8	65.3	51.8
8.43	-78.65	-63.46	-64.84	18.86	87.6	65	52.7
8.47	-78.6	-64.76	-64.87	22.01	87.7	65.3	51.5
8.43	-78.83	-63.67	-65.09	19.02	87.5	64.9	53.9
8.51	-78.46	-63.88	-64.84	21.92	87.5	65.2	51.5
8.44	-78.33	-63.67	-64.9	19.9	87.5	64.8	51.4
8.48	-78.74	-63.93	-64.75	21.95	87.4	65.3	52.3
8.43	-78.01	-64.09	-64.93	21.98	87.5	64.9	51.7
8.39	-78.69	-64.45	-64.93	21.98	87	65.4	53.8
8.38	-79.15	-64.09	-64.96	21.92	87.5	64.8	52.1
8.34	-78.97	-64.09	-64.87	20.57	86.8	65.2	50.7
8.49	-79.06	-63.93	-64.87	22.01	87.3	65.1	53.9
8.33	-79.2	-63.98	-64.87	19.51	86.6	65.1	51.6
8.43	-79.24	-63.83	-64.72	22.01	87.5	64.8	49.8
8.37	-78.83	-64.04	-64.84	19.47	86.7	65	52.3
8.44	-78.6	-64.09	-64.93	22.01	87.2	64.8	50
8.32	-79.01	-63.67	-64.72	19.17	86.4	64.8	50.8
8.39	-79.06	-63.83	-65.21	21.95	87.2	64.8	51.8
8.38	-78.88	-64.29	-64.78	18.62	86.4	64.8	51.2
8.47	-79.06	-64.29	-64.9	21.98	86.8	64.8	52.8
8.36	-78.69	-64.29	-64.93	18.71	86.3	64.7	49.7
8.48	-78.78	-63.72	-64.75	22.01	86.7	64.7	50.9
8.38	-78.83	-63.93	-64.99	18.93	86.4	64.7	50.5
8.5	-78.78	-63.41	-64.9	22.04	86.5	64.7	51.4
8.31	-78.74	-63.88	-64.99	19.08	86.2	64.5	53.1
8.41	-79.06	-64.09	-65.09	22.04	86.4	64.7	54.7
8.3	-78.88	-63.98	-64.75	19.08	85.9	64.4	51.6
8.47	-78.74	-64.35	-65.09	22.1	86.1	64.8	54.3
8.47	-79.01	-63.83	-64.93	19.02	85.9	64.5	51.6
8.53	-78.33	-63.78	-64.93	22.07	86.3	64.7	50.7
8.47	-79.52	-64.35	-64.9	19.69	86	64.3	53.8
8.56	-78.74	-63.98	-64.99	22.16	86	64.7	51.9
8.48	-78.37	-64.14	-64.81	22.1	86.3	64.3	53.8

8.38	-78.28	-64.19	-64.72	21.55	85.7	64.7	50.9
8.47	-78.6	-63.93	-65.02	22.16	86.1	64.3	51.7
8.35	-78.83	-64.09	-64.84	20.27	85.4	64.7	51.7
8.48	-78.05	-63.83	-65.05	22.04	86	64.3	51.5
8.35	-79.47	-64.29	-65.02	18.8	85.5	64.4	51.6
8.38	-79.1	-63.78	-64.99	22.07	86	64.4	49.4
8.31	-78.83	-63.93	-65.12	18.86	85.3	64.4	53.4
8.36	-79.47	-63.78	-64.93	22.13	85.9	64.2	55
8.32	-79.29	-64.81	-65.05	18.93	85.1	64.3	52.4
8.41	-79.47	-63.88	-64.96	22.19	85.6	64.2	54.1
8.33	-78.69	-63.57	-65.05	19.93	85.1	64.5	52.1
8.39	-78.97	-64.09	-65.05	22.16	85.6	64.2	50.5
8.32	-79.24	-63.93	-65.05	18.86	85.2	64.3	51.9
8.46	-79.1	-63.98	-65.24	22.1	85.8	64.2	49.1
8.39	-79.15	-64.09	-64.93	19.17	85.3	64.2	52.6
8.52	-78.83	-64.09	-65.09	22.22	86.1	64.3	48.4
8.29	-79.38	-64.19	-65.12	19.23	85.7	64	54.3
8.44	-79.01	-64.19	-65.15	22.16	86	64.4	52.9
8.38	-79.38	-63.93	-65.18	19.08	85.6	64.3	51.6
8.44	-78.83	-63.83	-65.18	22.19	86	64.3	52.3
8.39	-79.1	-63.78	-65.02	19.14	85.7	63.9	54.6
8.42	-79.42	-63.78	-65.21	22.16	85.9	64.4	51.1
8.41	-79.15	-64.45	-65.15	19.17	86.1	64.1	53.2
8.5	-78.78	-64.5	-65.05	22.1	86.4	64.3	52.3
8.47	-79.38	-63.88	-65.09	19.23	86.4	64.1	55.4
8.53	-78.74	-64.29	-65.15	22.1	87	64.3	53.2
8.48	-79.38	-64.35	-64.99	19.23	87	64.2	50.9
8.49	-78.33	-64.29	-65.09	22.19	87.3	64.4	52.5
8.38	-79.47	-64.29	-65.15	19.11	87.5	64.2	48.7
8.52	-79.42	-63.88	-65.27	22.22	88	64.3	53.7
8.35	-78.74	-64.29	-65.21	19.32	87.9	64.3	50.5
8.43	-78.92	-63.52	-65.15	22.25	89.4	64.2	51.9
8.37	-79.1	-63.88	-65.05	19.51	89.7	64.3	52.5
8.51	-79.61	-64.04	-64.93	22.16	90.4	64.7	49.9
8.48	-78.46	-64.35	-65.12	19.44	90.1	64.4	52.7
8.56	-78.97	-64.29	-65.12	22.22	90.8	64.9	51.6
8.5	-78.74	-64.04	-65.24	19.99	90.7	64.7	51
8.5	-78.97	-64.29	-65.24	22.22	90.4	65	52.6
8.39	-78.78	-63.72	-65.24	20.76	90.9	64.7	51.7
8.51	-79.15	-64.45	-65.12	22.22	90.7	65.2	52.4
8.48	-79.2	-64.09	-65.02	21.55	90.8	64.8	49.9
8.47	-79.29	-64.09	-65.3	22.22	90.6	65.2	50.3
8.43	-79.01	-63.78	-65.09	22.25	90.9	64.7	53
8.4	-79.2	-64.81	-65.18	22.13	90.6	65.1	52.3
8.5	-78.74	-64.61	-65.09	22.25	91	64.9	51.4
8.38	-78.97	-64.61	-65.21	21.98	90.4	65.2	51.8
8.44	-78.55	-64.19	-65.09	22.41	90.6	64.9	53.5

8.38	-78.46	-64.19	-65.02	21.09	89.9	65.2	52.7
8.5	-79.01	-64.76	-65.21	22.25	91	64.8	52.7
8.4	-79.2	-64.04	-65.12	21.28	90.8	65.3	52.2
8.41	-79.06	-64.45	-65.27	22.31	91	65	51.6
8.33	-79.65	-64.55	-64.99	19.35	90.8	65.1	52.3
8.5	-79.56	-64.4	-65.27	22.34	91.2	65	52.3
8.32	-79.2	-64.4	-65.15	19.2	90.9	65.1	51.9
8.44	-79.7	-64.5	-65.27	22.34	91.5	65.1	51.2
8.32	-79.56	-64.19	-65.15	19.23	91.2	65.1	50.3
8.43	-79.15	-64.35	-65.15	22.22	91.7	65.2	53.5
8.26	-79.47	-63.78	-65.09	19.35	91.6	65.1	53.8
8.46	-79.2	-64.29	-65.15	22.34	91.6	65.3	51.1
8.38	-79.93	-63.72	-65.36	19.32	91.5	65	50.8
8.45	-79.24	-63.83	-65.18	22.31	91.5	65.3	49.5
8.38	-79.01	-64.04	-65.24	19.75	91	65.1	51.5
8.53	-79.42	-64.14	-65.45	22.31	91.4	65.3	48.7
8.5	-78.69	-64.71	-65.51	20.09	90.8	65.1	50
8.53	-78.88	-64.29	-65.27	22.25	90.8	65.4	52.2
8.4	-79.2	-64.19	-65.27	21.64	90.8	65	51.6
8.5	-79.06	-63.83	-65.09	22.34	90.4	65.5	52.8
8.36	-79.75	-64.35	-65.3	22.25	90.5	65	52.7
8.38	-79.1	-64.35	-65.36	22.31	90.2	65.5	52.5
8.41	-79.61	-63.98	-65.27	22.34	90.3	65.1	52.4
8.33	-78.65	-63.78	-65.3	19.54	89.8	65.2	51.1
8.43	-79.42	-64.5	-65.21	22.34	90.2	65.1	51.4
7.91	-79.61	-64.45	-65.3	19.41	89.6	65	52.7
8.51	-79.24	-64.09	-65.3	22.34	89.7	64.9	49.7
8.4	-79.15	-63.93	-65.48	19.54	88.8	64.8	51.6
8.53	-79.29	-64.04	-65.15	22.44	88.6	65.1	51.8
8.49	-79.24	-64.14	-65.24	19.44	87.9	64.7	52.6
8.54	-79.15	-64.66	-65.57	22.44	87.9	65	53.8
8.49	-79.1	-64.71	-65.39	19.47	87.4	64.7	52
8.56	-79.15	-64.19	-65.24	22.44	87.4	64.8	52.2
8.48	-79.24	-64.19	-65.48	19.78	87.5	64.7	50.5
8.51	-79.47	-64.81	-65.27	22.47	87.5	65	51
8.42	-79.24	-64.35	-65.12	22.59	87.3	64.4	51.6
8.34	-79.38	-64.55	-65.6	20.85	86.2	64.9	52.9
8.48	-79.38	-64.66	-65.6	22.59	86.3	64.5	51.4
8.35	-79.01	-63.98	-65.36	19.26	85.1	64.7	51.6
8.44	-78.97	-64.45	-65.36	22.5	85.3	64.3	50.5
8.38	-79.47	-64.66	-65.51	19.35	84.2	64.3	52.8
8.44	-79.42	-63.93	-65.27	22.56	84.6	64.3	53.3
8.15	-79.65	-64.09	-65.36	19.41	83.8	64.1	53.9
8.43	-79.38	-64.29	-65.27	22.56	84.3	64.3	51.7
8.46	-79.61	-64.14	-65.27	19.54	84	63.8	57.5
8.51	-78.97	-64.4	-65.3	22.53	84.1	64.3	52.2
8.38	-78.6	-64.55	-65.39	20.51	84.2	63.8	51.9

8.54	-79.15	-64.61	-65.39	22.47	83.7	64.2	49.2
8.5	-79.1	-64.55	-65.57	22.62	83.7	63.8	50.3
8.35	-79.47	-63.72	-65.6	19.23	83.2	64	52.3
8.44	-79.38	-64.19	-65.3	22.53	83.7	63.8	52.8
7.79	-79.79	-64.71	-65.45	19.51	82.9	63.6	51.1
8.42	-79.06	-63.67	-65.48	22.56	82.8	63.9	54.5
8.4	-79.38	-63.41	-65.7	19.72	82.5	63.5	51.6
8.43	-80.39	-64.76	-65.42	22.53	82.1	63.8	52
8.41	-79.52	-64.04	-65.67	22.59	82.5	63.4	53.5
8.34	-78.88	-63.41	-65.48	20.6	82.1	63.7	46.5
8.42	-79.61	-64.29	-65.54	22.59	83.1	63.4	50.4
8.32	-79.47	-64.81	-65.3	19.57	82.1	63.3	51.3
8.48	-80.02	-65.13	-65.36	22.59	82.5	63.4	53
8.38	-79.88	-64.29	-65.51	19.75	82.1	63.3	51.7
8.53	-79.1	-64.19	-65.51	22.53	82	63.6	56.3
8.4	-78.92	-64.09	-65.54	22.53	82.1	63.2	51.1
8.34	-79.75	-64.71	-65.63	21.06	81.9	63.5	51.5
8.49	-79.29	-64.71	-65.57	22.65	82.9	63.2	48.4
8.06	-79.42	-64.04	-65.6	19.54	82.7	63.1	51.1
8.47	-79.2	-64.81	-65.36	22.53	83.3	63.3	50.5
8.51	-79.24	-64.19	-65.48	19.6	82.9	63	50.8
8.47	-79.15	-64.71	-65.45	22.65	82.9	63.5	54.4
8.38	-79.24	-64.14	-65.51	20.42	82.8	63	49.4
8.66	-79.47	-64.55	-65.48	22.56	82.5	63.5	52.2
8.46	-79.52	-64.76	-65.7	22.65	83	63	53.8
8.32	-79.47	-64.09	-65.48	20.94	81.8	63.5	51.3
8.42	-79.06	-64.81	-65.45	22.65	82.2	63	51.4
8.36	-79.1	-64.97	-65.39	19.44	81.6	63	52
8.49	-79.01	-63.98	-65.42	22.68	81.9	63.1	51.4
8.48	-79.75	-64.19	-65.67	19.63	81.8	62.8	53
8.51	-79.38	-64.61	-65.73	22.62	82	63.2	51.6
8.43	-79.42	-64.35	-65.27	20.12	81.9	62.8	46
8.57	-79.06	-64.55	-65.6	22.59	82	63.2	53.7
8.49	-79.61	-64.55	-65.45	22.71	82.2	62.8	54
8.37	-79.79	-64.66	-65.57	21	81.7	63	52.4
8.42	-79.29	-64.66	-65.67	22.65	82.2	62.7	54.2
8.32	-79.65	-64.92	-65.3	19.44	81.4	62.8	50
8.46	-79.56	-65.7	-65.48	22.56	81.8	62.8	52.6
8.45	-79.61	-64.81	-65.51	19.66	81.4	62.5	51.7
8.53	-79.29	-65.02	-65.51	22.56	81.3	62.9	50.7
8.43	-79.61	-64.4	-65.54	21.15	81.3	62.5	56.3
8.38	-79.52	-65.07	-65.36	22.56	80.9	62.9	51.7
8.5	-79.38	-64.81	-65.73	22.68	81.3	62.5	52.4
8.32	-78.88	-64.55	-65.7	19.44	81	62.5	51.5
8.49	-79.47	-64.35	-65.54	22.65	81.6	62.6	51.2
8.45	-79.24	-64.5	-65.63	19.75	81.7	62.4	51.6
8.46	-79.2	-64.14	-65.51	22.71	81.7	62.7	56.3

8.5	-80.02	-63.98	-65.6	20.27	82	62.4	52.5
8.46	-79.52	-64.87	-65.54	22.65	82.2	62.8	50.5
8.39	-79.88	-65.18	-65.42	22.59	83	62.5	52.2
8.35	-80.25	-64.87	-65.39	19.47	82.5	62.6	52.6
8.47	-79.93	-64.61	-65.54	22.62	83.5	62.8	53.7
8.38	-80.16	-64.5	-65.51	20.91	84	62.5	52.7
8.35	-79.2	-64.45	-65.63	20.09	83.9	62.8	50.9
8.45	-79.06	-64.4	-65.57	22.59	84.9	62.7	51.8
8.46	-79.65	-64.71	-65.7	19.99	84.9	62.5	51.8
8.39	-79.47	-64.5	-65.67	22.5	85.2	63	53.1
8.38	-79.52	-64.14	-65.73	22.47	86.1	62.7	52.6
8.35	-79.65	-64.4	-65.67	19.26	86.3	62.9	51
8.48	-78.74	-64.35	-65.42	22.53	87.4	62.9	50.9
7.95	-79.65	-64.55	-65.63	19.44	87.6	62.9	51.1
8.51	-79.47	-65.33	-65.63	22.53	88.3	63.3	51.7
8.5	-79.24	-64.81	-65.6	20.94	88.7	63.1	51.5
8.38	-79.29	-65.02	-65.67	22.31	88.6	63.5	51.1
8.44	-80.07	-64.14	-65.85	22.5	89.4	63.2	50.8
8.37	-79.24	-64.35	-65.63	19.29	89	63.4	53.6
8.41	-79.56	-64.4	-65.63	22.44	89.6	63.6	49.7
7.99	-79.65	-64.45	-65.63	19.47	89.5	63.5	52
8.5	-79.42	-64.61	-65.51	22.31	90	63.6	52.4
8.44	-80.11	-64.45	-65.67	19.72	89.9	63.5	50.4
8.48	-80.11	-64.71	-65.67	22.44	90.2	63.9	52.7
8.41	-79.29	-64.19	-65.67	22.44	90.4	63.6	51.5
8.37	-79.97	-64.29	-65.57	19.26	90.2	63.9	52.2
8.48	-79.52	-64.81	-65.6	22.41	90.8	63.9	52.1
8.47	-79.47	-65.07	-65.51	20.3	90.9	63.6	52.5
8.43	-79.79	-64.61	-65.67	22.31	90.7	64.3	52.1
8.47	-79.2	-64.76	-65.51	22.31	91.6	63.9	52.2
7.75	-79.61	-64.76	-65.79	19.35	91.2	64	52
8.45	-80.02	-64.81	-65.51	22.44	91.8	64.3	54.3
8.5	-79.56	-65.33	-65.73	19.81	91.9	64	53.5
8.54	-79.88	-64.81	-65.73	22.41	92.1	64.7	53.6
8.43	-79.75	-64.29	-65.67	22.34	92.3	64.3	55.4
8.35	-79.75	-64.87	-65.63	19.26	92.3	64.4	52.3
8.42	-79.88	-64.45	-65.73	22.41	92.7	64.5	51.8
8.44	-79.61	-64.97	-65.76	19.6	92.7	64.3	50.1
8.57	-79.79	-64.71	-65.76	22.34	93	64.7	49.5
8.47	-79.75	-64.61	-65.57	20.94	93.3	64.5	51.8
8.38	-79.88	-64.19	-65.79	22.13	92.9	65.1	51.7
8.43	-79.52	-64.4	-65.63	22.44	93.1	64.7	51.9
8.37	-79.65	-64.66	-65.54	19.29	92.1	64.9	52.6
8.41	-79.38	-64.97	-65.7	22.41	92.4	64.8	52.7
8.32	-79.38	-64.92	-65.82	19.26	92	64.8	49.8
8.42	-79.88	-64.87	-65.63	22.34	92.5	65	52.1
8.38	-80.07	-64.4	-65.76	19.63	92.5	64.8	53.4

8.5	-79.56	-64.87	-65.76	22.47	92.4	65.2	52.2
8.47	-79.56	-64.81	-65.76	20.6	92.6	64.9	54
8.41	-80.11	-64.55	-65.51	22.07	92.1	65.4	53.5
8.49	-79.79	-64.61	-65.76	22.44	92.3	65.1	51.6
8.35	-79.84	-65.7	-65.7	19.23	91.9	65.3	49
8.47	-79.88	-64.45	-65.54	22.41	92.5	65.2	52.4
8.5	-79.79	-64.92	-65.85	19.44	92.2	65.1	50.8
8.55	-79.47	-65.07	-65.73	22.28	92.5	65.5	50.4
8.41	-79.97	-64.55	-65.63	20.39	92.4	65.1	53.7
8.87	-79.93	-64.5	-65.6	22.28	92.3	65.8	54
8.48	-78.92	-64.61	-65.73	22.44	92.8	65.2	49.4
8.39	-80.2	-64.81	-65.76	19.2	92.2	65.4	49.8
8.47	-80.02	-65.07	-65.73	22.44	92.3	65.4	53.1
8.29	-79.88	-64.04	-65.88	19.57	92	65.3	51.9
8.45	-80.34	-64.76	-65.91	22.41	92.4	65.6	52.2
8.5	-79.65	-64.55	-65.7	19.87	92.2	65.4	50.7
8.54	-79.52	-64.55	-65.82	22.44	92.2	65.8	52.1
8.5	-79.52	-64.55	-65.79	22.44	92.3	65.5	51.6
8.36	-79.47	-64.09	-65.97	20.73	91.8	65.8	51
8.41	-79.52	-64.5	-65.91	22.5	92	65.4	54.7
8.32	-79.65	-64.55	-65.85	19.32	91.4	65.5	53.4
8.48	-79.88	-65.28	-65.79	22.44	91.9	65.7	53.2
8.42	-79.93	-64.92	-65.88	19.57	91.6	65.4	52.2
8.44	-79.61	-64.55	-65.85	22.34	91.6	65.6	55.1
8.41	-80.07	-64.4	-65.97	19.78	91.5	65.5	52
8.46	-80.16	-65.07	-65.82	22.5	91.5	65.7	49.3
8.46	-79.88	-64.81	-65.91	21.73	91.5	65.5	48.7
8.54	-79.79	-64.81	-65.91	22.44	91.1	65.8	51.9
8.39	-80.52	-65.59	-65.91	22.5	90.9	65.4	54.4
8.4	-79.65	-64.55	-65.79	21.83	90.4	65.7	51.7
8.44	-79.79	-64.35	-66	22.59	90.7	65.4	52.7
8.37	-79.06	-64.87	-65.6	19.32	90	65.5	48.3
8.53	-79.7	-65.02	-65.85	22.5	90.2	65.4	51.7
8.27	-79.61	-64.92	-65.76	19.75	89.7	64.8	51.8
8.5	-79.65	-64.71	-65.7	22.47	89.7	65.4	51.2
8.5	-79.38	-64.87	-65.76	21.79	89.7	64.8	53.7
8.37	-78.97	-64.35	-65.67	21.55	88.9	65.5	53.9
8.49	-79.38	-64.97	-65.91	22.56	88.9	65.1	53.7
8.35	-79.61	-64.45	-65.88	19.47	87.9	65.1	51.5
8.5	-79.56	-64.81	-65.91	22.56	87.9	65.1	52.2
8.42	-80.2	-64.5	-65.82	19.6	87.5	64.8	52
8.47	-80.07	-64.76	-65.91	22.53	87.5	65.2	50.5
8.5	-79.42	-64.55	-66.03	20.91	87.5	64.7	56.5
9.28	-79.65	-65.18	-65.76	22.47	87.2	65.3	51.7
8.41	-79.2	-64.61	-65.94	22.59	87.1	64.7	52.1
8.35	-79.38	-64.55	-65.91	19.47	86.3	64.8	51.9
8.5	-79.29	-64.97	-65.88	22.59	86.6	64.9	52

8.47	-79.75	-64.71	-65.79	19.9	85.8	64.5	50.8
8.5	-79.47	-64.92	-65.91	22.62	85.1	64.9	48.7
8.44	-80.11	-64.66	-65.94	22.68	84.8	64.4	52.4
8.32	-79.42	-65.13	-65.97	20.12	83.9	64.7	51.9
8.46	-79.7	-64.45	-66.06	22.65	84.5	64.4	49.5
8.34	-79.65	-64.29	-66.21	19.78	84.2	64.1	52.8
8.56	-80.66	-64.66	-66	22.62	84.5	64.5	51.2
8.42	-79.79	-65.07	-65.73	20.73	84.4	64	52.4
8.36	-80.02	-64.55	-65.97	20.67	83.9	64.4	54.4
8.51	-79.52	-64.97	-65.94	22.56	84.2	64.1	50.4
8.26	-79.65	-64.66	-66	19.78	83.7	63.8	52
8.56	-79.42	-65.23	-65.91	22.59	84	64.1	51.5
8.31	-79.61	-64.45	-65.85	22.44	84	63.8	53.1
8.37	-79.93	-64.97	-65.88	19.75	83.3	64.1	51.6
8.44	-79.7	-64.71	-65.91	22.59	83.8	64	53.1
8.41	-80.25	-64.76	-65.79	19.84	83.4	63.8	51.6
8.56	-79.7	-65.28	-65.85	22.65	83.3	64.1	53.1
8.5	-79.61	-65.02	-65.97	22.68	83.2	63.7	52.8
8.35	-79.52	-65.23	-65.91	19.35	82.2	63.8	50.7
8.48	-79.79	-65.02	-65.82	22.59	82.8	63.7	51.5
8.43	-79.52	-65.13	-65.82	20.05	82.8	63.6	52.8
8.47	-79.75	-65.02	-65.88	22.65	82.7	63.8	53.6
8.47	-80.07	-65.8	-65.94	22.71	83	63.5	49.6
8.36	-79.56	-64.71	-66.03	19.44	82.2	63.6	51.9
8.46	-80.2	-65.18	-65.88	22.68	82.7	63.6	52.6
8.48	-79.93	-65.13	-65.82	19.69	82.2	63.3	53.5
8.46	-79.7	-65.64	-65.94	22.59	82.1	63.7	49.4
8.41	-79.65	-64.76	-66.03	20.94	82.2	63.2	51
9.51	-79.56	-64.66	-65.88	22.53	81.7	63.6	53.5
8.39	-80.07	-64.81	-65.94	22.77	82.2	63.3	49.5
8.37	-79.38	-65.28	-66	19.41	81.3	63.4	50.8
8.43	-80.02	-64.71	-65.97	22.71	81.6	63.2	51
8.5	-79.61	-64.81	-66	19.9	81.4	63	54.3
8.65	-79.7	-64.61	-66.25	22.65	81.1	63.4	51.6
8.46	-80.02	-65.33	-65.85	22.77	81.3	63	47.1
8.32	-79.65	-64.87	-66	19.47	80.6	63.1	51.3
8.51	-80.07	-64.81	-65.94	22.71	81.1	62.9	51.2
8.35	-79.65	-65.07	-66	19.84	80.6	62.7	51.9
8.48	-79.52	-65.7	-66.06	22.65	80.6	63.1	53.7
8.4	-79.93	-64.66	-66.03	22.86	80.5	62.7	48.9
8.34	-79.47	-64.61	-66.25	19.75	79.5	63	48.8
8.5	-80.25	-64.71	-65.91	22.68	80.5	62.9	49.1
8.47	-79.88	-65.18	-66.09	19.69	80.3	62.6	50.7
8.52	-80.25	-65.07	-65.94	22.71	80.8	63	52.2
8.45	-80.66	-65.59	-65.91	22.16	80.9	62.5	51.6
8.38	-79.7	-64.92	-66.21	20.6	80.7	62.8	51.1
8.47	-79.79	-64.92	-66.09	22.71	81.8	62.8	52.2

8.28	-80.62	-65.59	-66.34	19.44	81.4	63.1	50.2
8.47	-80.07	-65.07	-66.46	22.47	82.1	63.3	51.4
8.43	-80.57	-65.54	-66.37	21.37	82.4	62.8	51
8.39	-79.61	-65.64	-66.55	21.55	82.1	63.3	50.8
8.37	-80.75	-64.81	-66.25	22.68	83.1	63	50.8
8.15	-80.57	-65.75	-66.18	19.44	82.8	63.1	51.8
8.44	-79.88	-65.13	-66.7	22.59	83.7	63.3	51.8
8.44	-79.65	-65.23	-66.46	19.9	83.8	63.1	51.6
8.52	-80.16	-65.96	-66.61	22.53	84.1	63.4	50.9
8.43	-80.07	-65.23	-66.58	22.59	85.1	63.1	49.6
8.35	-80.75	-65.59	-66.61	20.94	84.6	63.5	48.7
8.5	-80.29	-65.28	-66.46	22.5	85.7	63.2	52.8
8.37	-80.02	-65.28	-66.55	19.23	85.6	63.4	49.4
8.45	-80.43	-65.59	-66.34	22.53	86.5	63.6	50.7
8.32	-79.7	-65.8	-66.37	19.66	86.8	63.3	52.1
8.53	-80.39	-65.7	-66.46	22.44	87.4	63.8	51.9
8.5	-80.62	-65.64	-66.52	22.53	87.7	63.5	50.4
8.35	-80.52	-65.59	-66.64	19.6	87.5	63.8	51.5
8.42	-80.16	-65.75	-66.4	22.44	88.6	63.7	51
8.39	-80.84	-65.38	-66.61	19.44	88.8	63.7	52.5
8.49	-80.29	-65.44	-66.52	22.28	89.4	64.2	49.9
8.44	-80.66	-64.66	-66.49	19.81	90.2	63.9	51.5
8.5	-80.16	-65.07	-66.43	22.31	90.2	64.4	52.6
8.5	-80.29	-65.33	-66.46	22.34	91.2	64	53.6
8.37	-80.34	-65.28	-66.31	19.32	91.6	64.4	52.7
8.43	-80.02	-64.76	-66.43	22.25	92.4	64.4	50.8
8.47	-79.93	-65.44	-66.49	19.17	92.8	64.3	51.3
8.47	-80.75	-65.38	-66.37	22.25	93.5	65	50.9
8.49	-80.43	-65.38	-66.61	19.6	93.9	64.7	52.2
8.54	-79.79	-64.97	-66.58	22.25	94.1	65.2	51.6
8.42	-80.66	-64.92	-66.61	21.95	94.4	65	52.1
8.38	-80.39	-65.75	-66.55	21.12	94.4	65.6	49.6
8.5	-80.29	-65.8	-66.4	22.25	94.4	65.2	52
8.34	-80.52	-64.76	-66.34	18.99	94.6	65.5	51.3
8.46	-80.43	-65.33	-66.49	22.16	95.2	65.6	50.2
8.47	-80.52	-65.85	-66.64	19.29	94.9	65.5	54.1
8.51	-80.39	-64.92	-66.64	22.25	94.9	65.6	52.2
8.41	-80.34	-66.84	-66.43	20.18	95.1	65.6	47.5
9.75	-80.2	-65.75	-66.55	22.04	94.3	66.2	50.9
8.47	-80.43	-65.33	-66.58	22.25	94.7	65.9	51.7
8.33	-80.2	-65.33	-66.46	19.05	95.1	65.9	51
8.42	-80.34	-65.44	-66.58	22.16	94.9	66.1	51.7
8.4	-80.02	-65.64	-66.49	19.26	94.7	65.9	54.8
8.48	-80.71	-65.33	-66.46	22.22	95.1	66.5	48.3
8.41	-80.89	-65.8	-66.49	22.22	95.2	66.2	52.2
8.34	-80.2	-65.64	-66.49	19.44	94.1	66.6	52.2
8.39	-80.34	-65.28	-66.61	22.22	94.4	66.3	54.1

8.37	-80.98	-65.23	-66.4	18.96	94.8	66.5	50.5
8.51	-80.34	-65.8	-66.49	22.19	95.4	66.4	53.6
8.38	-80.11	-66.06	-66.46	19.26	94.8	66.4	50.2
8.45	-79.65	-65.59	-66.67	22.16	94.5	66.8	49.5
8.46	-80.39	-65.33	-66.64	20.21	94.2	66.5	49
8.94	-80.02	-65.59	-66.34	22.1	93.9	66.9	55.6
8.43	-80.11	-65.13	-66.64	22.19	94	66.5	50.5
7.9	-80.52	-65.59	-66.64	19.17	93.5	66.6	51.7
8.56	-80.52	-65.64	-66.49	22.13	93.7	66.9	51.6
8.47	-80.02	-65.64	-66.46	19.87	93.2	66.6	52.5
9.08	-80.62	-66.06	-66.49	22.07	92.9	67.2	52
8.41	-80.16	-65.59	-66.49	22.22	92.9	66.8	53.4
8.38	-80.2	-65.23	-66.4	18.96	92.1	67	50
8.45	-80.43	-65.59	-66.46	22.22	92.3	66.8	50.2
7.75	-79.97	-65.54	-66.67	19.08	91.9	66.7	49.5
8.45	-80.16	-65.38	-66.37	22.19	92.3	66.8	54
8.5	-80.66	-65.85	-66.55	19.44	92.1	66.6	51.6
8.56	-80.2	-65.7	-66.58	22.16	92.2	66.9	53.7
8.51	-80.62	-65.28	-66.76	20.97	92.6	66.4	52.5
9.01	-80.16	-65.07	-66.61	22.07	92.3	67.1	51.5
8.46	-80.34	-65.38	-66.58	22.19	92.4	66.6	52
8.36	-80.34	-64.97	-66.52	19.02	92	66.9	49.2
8.44	-80.29	-65.18	-66.49	22.19	92.3	66.6	52.4
8.08	-80.57	-65.33	-66.46	19.17	92	66.7	52
8.51	-80.2	-65.7	-66.49	22.1	91.9	66.9	50.3
8.5	-80.02	-65.8	-66.49	19.75	91.9	66.5	52.6
9.16	-80.75	-65.85	-66.7	22.07	91.6	67.2	51.5
8.47	-80.2	-66.06	-66.55	22.13	91.8	66.4	47.2
8.32	-80.8	-65.18	-66.58	18.93	91.4	66.6	52.3
8.43	-80.25	-65.02	-66.79	22.1	91.4	66.6	52
8.42	-81.3	-64.87	-66.67	19.32	91.4	66.4	52.6
8.55	-80.66	-65.28	-66.67	22.13	91.5	66.7	51.4
8.47	-80.39	-65.7	-66.52	19.78	91.5	66.4	50
8.45	-80.66	-66.06	-66.49	22.13	91.5	66.9	50
8.51	-80.34	-65.23	-66.67	22.16	91.5	66.4	51.5
8.35	-81.03	-65.54	-66.67	18.86	90.5	66.7	51.9
8.54	-80.02	-64.97	-66.67	22.07	90.7	66.5	51.3
8.46	-80.34	-65.54	-66.61	19.32	90.3	66.3	51.8
8.52	-80.29	-65.18	-66.7	22.16	89.9	66.5	53.5
8.46	-80.66	-65.75	-66.73	20.02	89.7	66.2	53.1
8.56	-80.34	-65.33	-66.7	22.1	89.3	66.7	52
8.42	-80.84	-64.71	-66.61	22.25	89.5	66.3	52.2
8.36	-80.43	-65.54	-66.61	19.02	88.7	66.4	51.9
8.5	-80.02	-65.85	-66.58	22.19	88.9	66.2	53.6
8.44	-80.75	-65.13	-66.64	19.14	88.6	66	53.8
8.45	-79.79	-65.33	-66.55	22.13	88.5	66.3	51.9
8.41	-80.39	-65.96	-66.7	22.19	88.7	65.8	53.3

8.34	-80.16	-65.38	-66.67	18.77	87.9	66.1	52.5
8.46	-80.16	-65.02	-66.64	22.19	88.4	66	52
7.99	-80.25	-65.75	-66.52	18.99	87.6	65.8	51.4
8.47	-80.66	-65.23	-66.46	22.25	87.7	65.9	51.6
8.46	-80.84	-65.64	-66.76	19.69	87.8	65.7	49.9
8.38	-80.25	-65.54	-66.64	21.89	87.3	66.1	52.8
8.38	-80.8	-65.59	-66.7	22.16	87.5	65.6	53.8
8.36	-79.97	-66.16	-66.67	18.86	86.7	65.8	51.9
8.51	-80.07	-65.75	-66.7	22.22	87.3	65.7	52.9
8.34	-79.97	-65.44	-66.61	19.14	86.8	65.5	52.7
8.49	-80.94	-65.85	-66.52	22.19	87.2	65.7	51.7
8.48	-80.29	-65.38	-66.58	20.27	87.3	65.3	51.6
8.41	-80.52	-65.13	-66.64	22.1	87.1	65.7	48.6
8.49	-81.07	-66.47	-66.64	22.19	87.4	65.4	52.3
8.34	-80.71	-65.28	-66.61	18.86	86.6	65.5	53.6
8.43	-80.43	-65.38	-66.58	22.19	87.4	65.3	51.5
8.48	-80.57	-65.85	-66.73	19.14	87	65.2	50.9
8.49	-80.66	-64.66	-66.64	22.19	87.4	65.6	51.8
8.42	-80.52	-65.33	-66.83	20.39	87.4	65.2	50.3
9.23	-80.02	-65.85	-66.7	22.07	87	65.6	51.6
8.46	-79.93	-65.64	-66.61	22.25	87.5	65.2	49.6
8.32	-80.66	-65.07	-66.67	18.89	86.7	65.2	52.5
8.38	-80.98	-65.54	-66.67	22.16	87.3	65.1	51
8.39	-80.84	-65.44	-66.73	19.17	87	65	51.4
8.46	-80.66	-65.18	-66.55	22.19	87.1	65.4	51.4
8.39	-80.11	-65.85	-66.79	20.54	87.3	65	49.8
8.35	-79.52	-65.75	-66.58	21.21	86.6	65.5	53.8
8.39	-80.89	-65.33	-66.76	22.16	87.5	65	49.8
8.11	-80.62	-65.96	-66.7	19.14	87.2	64.9	52.4
8.54	-80.43	-66.27	-66.7	22.19	87.4	65.4	49.6
8.45	-80.43	-66.11	-66.58	22.19	87.6	64.9	50.9
8.34	-80.43	-65.75	-66.79	18.86	86.8	65.2	51.5
8.49	-81.21	-65.23	-66.64	22.16	87.3	65.2	49.8
8.38	-80.66	-65.54	-66.67	19.78	87.1	64.9	53.6
8.56	-80.02	-65.38	-66.86	22.13	86.7	65.3	50.5
8.48	-80.62	-65.75	-66.55	22.22	87.3	64.8	53.5
8.32	-80.75	-65.75	-67.01	18.96	86.7	65	51.6
8.44	-80.89	-65.9	-66.61	22.13	86.8	65	53.1
8.5	-80.62	-65.7	-66.7	20.18	87.2	64.8	50
8.35	-80.84	-65.75	-66.79	21.86	86.7	65.2	51.6
8.48	-80.29	-65.38	-66.58	22.13	87.2	64.7	52.3
8.33	-80.84	-65.85	-66.83	18.86	86.5	65	52.4
8.46	-81.03	-64.92	-66.61	22.22	87.1	64.9	53.8
8.38	-80.2	-65.85	-66.79	19.14	86.7	64.7	50
8.53	-80.57	-65.8	-66.76	22.22	86.8	65.1	52.4
8.44	-80.66	-66.01	-66.76	22.19	87.1	64.8	52.3
8.41	-80.94	-65.9	-66.73	19.26	86.8	64.7	50.7

8.48	-80.29	-65.54	-66.95	22.22	87.1	65.2	50.5
8.49	-80.2	-65.8	-66.67	22.16	87.4	64.7	51.5
8.39	-80.52	-65.7	-66.67	19.23	87.3	64.7	49.9
8.55	-79.93	-65.7	-66.76	22.19	87.1	65.2	51.3
8.38	-80.89	-65.7	-66.58	22.19	87.5	64.5	50.1
8.29	-80.52	-65.33	-66.98	18.89	87	64.8	51.6
8.53	-80.62	-65.8	-66.76	22.13	87.2	64.8	48.4
8.37	-80.57	-65.07	-66.76	19.66	87.3	64.5	53.7
8.59	-81.07	-65.64	-66.76	22.13	87.1	65.1	52.8
8.39	-80.39	-65.64	-66.7	22.13	87.5	64.7	54.2
8.37	-81.16	-65.75	-66.7	18.74	87	64.7	51
8.46	-80.25	-65.75	-66.79	22.16	87.4	64.7	50.1
8.39	-80.89	-65.9	-66.76	19.08	87.3	64.5	52.3
8.53	-80.52	-65.85	-66.83	22.04	87.3	64.9	50.2
8.33	-80.43	-64.92	-66.83	22.01	87.5	64.7	54.1
8.34	-80.29	-65.33	-66.95	19.84	87.1	64.9	52.3
8.48	-81.12	-66.21	-66.86	22.07	87.8	64.7	54.1
8.29	-80.71	-66.16	-66.95	19.05	87.6	64.5	51
8.5	-80.25	-65.54	-66.79	22.01	87.6	65	51.6
8.49	-80.75	-66.11	-66.83	22.07	87.9	64.7	48.7
8.2	-81.35	-66.42	-66.86	18.8	87.6	64.7	51.7
8.48	-80.34	-66.16	-66.92	21.98	88.1	65	52.1
8.47	-80.94	-65.44	-66.83	20.12	88.5	64.7	52.4
8.78	-81.07	-65.28	-66.7	21.73	88.8	65.3	51.6
8.42	-80.94	-66.01	-66.79	22.04	89.4	64.7	53
8.33	-81.39	-65.54	-66.79	18.62	88.6	64.8	51.5
8.51	-80.62	-65.8	-66.76	22.04	89.3	64.9	52.7
8.38	-81.16	-66.16	-66.7	19.2	89.3	64.8	53.2
8.55	-80.94	-66.27	-66.76	21.98	89.5	65.3	51.5
8.41	-80.98	-66.06	-66.73	21.76	89.8	65	49.7
8.36	-81.12	-65.8	-66.92	21.15	89.5	65.5	50.3
8.47	-80.29	-66.16	-66.7	21.98	89.9	65.1	52.9
8.35	-80.52	-65.85	-66.83	18.59	89.6	65.2	53.2
8.51	-80.84	-65.9	-66.67	21.95	89.7	65.3	47.5
8.45	-80.89	-65.85	-66.92	19.08	90	65.1	52.5
8.52	-80.8	-66.06	-66.83	21.89	90.2	65.5	50.5
8.41	-80.66	-65.64	-67.07	20.76	90.3	65.2	52.5
8.37	-80.94	-65.54	-66.98	21.67	90.1	65.8	52.8
8.43	-80.75	-65.33	-67.01	21.92	90.9	65.4	51.6
8.32	-80.39	-65.59	-66.79	18.53	90.9	65.5	52.6
8.46	-80.98	-65.7	-67.04	21.89	92	65.7	50.9
8.37	-81.03	-65.59	-66.86	18.74	91.9	65.4	50.5
8.52	-80.52	-65.59	-67.01	21.98	92.4	65.8	53.7
8.46	-80.62	-65.59	-66.7	19.9	92.7	65.7	53.1
8.48	-80.29	-65.9	-66.83	21.73	92.7	66.3	49.5
8.43	-81.07	-65.18	-67.01	22.04	93.5	65.7	52.9
8.34	-80.25	-65.44	-66.98	18.74	93.6	66.2	52.6

8.5	-80.11	-65.96	-67.01	21.98	94.5	66.2	50.3
8.52	-79.93	-66.01	-67.04	19.2	94	66.1	50.1
8.55	-81.12	-65.96	-66.83	21.95	94	66.8	54.4
8.51	-81.03	-65.96	-66.92	22.01	94.6	66.4	52.3
8.36	-80.89	-66.11	-66.92	18.77	94.1	66.7	51.8
8.47	-81.12	-65.59	-66.79	22.04	94.6	66.7	48.4
8.2	-80.84	-65.85	-67.01	18.99	94.5	66.6	52.9
8.53	-81.07	-65.7	-66.92	22.04	95	66.7	50.9
8.47	-80.71	-65.7	-67.07	19.9	95.2	66.7	53.5
8.38	-80.98	-66.11	-66.86	21.58	95.3	67.2	51.6
8.5	-80.66	-65.85	-66.83	21.98	95.5	67	52.6
8.29	-80.62	-65.75	-66.98	18.89	95.4	66.9	49.4
8.47	-81.12	-65.7	-66.95	22.01	95.9	67.1	52.2
8.49	-80.71	-66.01	-66.83	19.41	96.2	67	51.7
8.4	-80.25	-65.8	-67.16	20.94	96	67.6	53.5
8.4	-80.71	-65.33	-67.01	21.98	96.3	67.4	51
8.42	-80.25	-65.38	-67.07	19.51	96.2	67.3	52.4
8.39	-81.12	-65.85	-67.04	20.48	95.9	67.8	51.9
8.48	-80.62	-66.21	-67.04	21.92	96.2	67.6	52.3
8.5	-80.8	-65.9	-67.07	21.98	96.4	67.4	51.4
8.11	-80.57	-66.11	-66.79	18.77	96.1	67.5	51.6
8.55	-80.94	-66.06	-66.95	21.89	96.3	67.9	53.4
8.5	-81.26	-66.16	-66.98	21.98	96.4	67.6	49.7
8.51	-80.66	-66.32	-67.1	19.41	96.5	67.5	50.2
8.38	-80.75	-66.11	-67.01	18.68	96.2	68	52.5
8.47	-81.03	-65.28	-66.95	21.98	96.6	67.9	49.1
8.42	-80.75	-66.21	-66.95	21.89	96.3	67.7	52.3
8.37	-80.52	-65.7	-66.98	19.05	96.1	67.6	52.7
8.6	-80.94	-65.64	-67.04	21.92	95.9	68.3	51.6
8.41	-80.57	-65.28	-66.92	21.86	95.9	67.8	49.6
8.42	-80.66	-65.44	-66.95	18.89	95.7	67.6	48.7
8.39	-80.57	-66.21	-66.95	21.18	95.3	68.2	50.8
8.46	-81.16	-65.9	-67.22	21.86	95.9	68	52.6
8.41	-80.71	-66.01	-66.98	21.95	96.1	67.8	51.4
8.29	-80.89	-65.54	-67.07	19.02	95.7	67.9	51.4
8.82	-81.21	-66.01	-67.1	21.89	95.8	68.3	51.2
8.43	-80.57	-65.9	-66.98	21.95	96	67.9	56
8.26	-80.66	-65.96	-66.92	19.02	95.1	67.8	50.5
8.47	-81.12	-65.8	-66.79	21.95	95.1	68.2	51.2
8.39	-80.94	-65.44	-67.04	22.01	95	67.9	49.3
8.26	-80.8	-65.9	-67.04	19.05	94.1	67.7	51.6
8.48	-80.98	-65.9	-67.01	21.89	93.9	68.3	51
8.48	-80.94	-66.01	-67.01	21.92	93.5	67.9	52.3
8.29	-80.66	-66.53	-67.07	18.83	92.6	67.6	50.5
8.53	-80.75	-66.06	-66.92	21.92	92.7	68	50.7
8.43	-80.57	-66.47	-67.16	21.92	92.5	67.6	51.6
8.39	-81.44	-65.96	-67.01	19.93	92.3	67.5	52.8

8.38	-80.8	-66.06	-66.98	18.47	91.5	67.8	52
8.5	-80.8	-65.96	-67.16	21.89	91.8	67.7	52.7
8.41	-81.35	-66.06	-67.07	22.01	91.6	67.4	53.4
8.37	-81.21	-66.06	-67.1	18.59	91.1	67.4	51.8
8.49	-81.12	-65.7	-67.13	21.92	91.2	67.5	52.4
8.46	-80.75	-65.54	-67.16	21.92	91	67.5	53.7
8.44	-80.94	-66.21	-67.16	19.23	90.8	67.1	50.4
8.37	-80.89	-66.47	-66.92	18.5	90.3	67.5	52.7
8.49	-81.49	-66.16	-67.01	21.98	90.7	67.4	52.7
8.44	-80.94	-66.01	-67.1	22.01	90.5	67.2	47.7
8.52	-80.75	-66.42	-66.98	19.11	90.1	67.1	52.5
8.38	-81.3	-66.32	-67.07	21.4	89.7	67.4	52.5
8.41	-80.75	-65.96	-67.04	22.01	90.2	67	51
8.44	-80.75	-65.75	-67.1	19.47	90	66.7	52.1
8.39	-80.98	-65.85	-67.28	20.94	89.8	67.2	51.8
8.51	-80.57	-66.01	-67.22	22.01	89.8	66.9	51.9
8.47	-80.94	-65.96	-67.16	22.1	89.7	66.7	47.1
8.34	-81.39	-66.21	-67.28	18.83	88.9	66.7	51.1
8.61	-80.89	-65.96	-67.19	22.1	88.6	67.1	50.3
8.43	-80.8	-65.59	-67.13	22.1	88.8	66.8	51.9
8.42	-80.98	-65.85	-67.25	21.46	88.6	66.2	52.4
8.35	-81.07	-66.11	-67.16	18.83	88	66.4	51.6
8.53	-80.94	-65.85	-67.19	22.13	88.3	66.6	51.5
8.42	-81.21	-65.9	-67.13	22.22	88.1	66.2	48.8
8.28	-80.94	-65.28	-67.22	18.86	87.5	66.3	49.7
8.57	-80.75	-65.85	-67.1	22.19	87.6	66.6	52.6
8.37	-81.3	-66.37	-67.31	22.16	87.9	66	49.9
8.49	-80.75	-65.85	-67.04	20.36	87.9	66.1	51.5
8.32	-80.84	-65.8	-67.25	18.8	87.2	66.2	52.8
8.52	-81.26	-66.63	-67.22	22.19	87.4	66.3	48.4
8.39	-81.3	-66.27	-67.22	22.16	87.4	65.9	50.5
8.26	-80.71	-66.32	-66.98	18.99	86.5	65.6	51.4
8.5	-81.39	-65.9	-66.95	22.19	86.7	66.1	53.5
8.38	-80.71	-66.53	-67.28	22.25	86.6	65.7	53.8
8.34	-80.66	-65.85	-67.22	18.96	86	65.7	52.9
8.53	-80.89	-66.27	-67.1	22.22	86.6	65.8	50.9
8.44	-80.71	-66.53	-67.1	22.22	86.6	65.4	51.6
8.31	-80.94	-66.01	-67.37	18.89	85.8	65.7	51.6
8.48	-80.89	-66.11	-67.07	22.19	85.9	65.8	52.9
8.42	-80.8	-65.54	-67.1	22.28	85.9	65.3	51.2
8.47	-80.71	-66.53	-67.28	19.72	85.8	65.1	51.8
8.36	-80.98	-65.9	-67.16	18.93	85.2	65.7	53.8
8.51	-81.39	-66.53	-67.34	22.31	85.6	65.5	53.4
8.37	-81.16	-66.58	-67.07	21.95	85.6	65.2	50.5
8.34	-81.16	-66.11	-67.25	18.96	85	65.3	51.8
8.54	-81.35	-66.42	-67.34	22.31	85.3	65.3	54.3
8.41	-80.98	-66.27	-67.31	22.16	85.5	65	50.3

8.34	-80.98	-66.68	-67.16	18.96	84.5	65	51.8
8.53	-81.03	-65.96	-67.34	22.34	84.9	64.9	48.6
8.37	-81.35	-66.16	-67.25	22.28	85.2	64.9	48.1
8.35	-80.8	-65.8	-67.25	19.08	84.3	65	51.8
8.49	-81.53	-65.64	-67.41	22.28	85.2	65	51.8
8.34	-81.12	-65.75	-67.34	22.41	85.5	64.8	51.4
8.5	-81.26	-65.75	-67.28	19.44	85.3	64.5	54.4
8.41	-80.94	-65.96	-67.25	20.42	85.4	65.1	51.6
8.44	-81.39	-65.9	-67.22	22.31	86	64.9	52.6
8.39	-80.62	-65.9	-67.22	22.41	86.2	64.7	53.3
8.28	-80.34	-66.58	-67.19	19.2	85.9	64.7	52
8.57	-80.84	-66.37	-67.34	22.31	86.4	65	52.3
8.4	-81.39	-66.01	-67.5	22.44	87.2	64.7	51.2
8.43	-81.07	-66.32	-67.34	19.44	86.8	64.7	52.2
8.4	-81.16	-65.96	-67.37	21.49	87.1	65	52.3
8.39	-81.21	-66.42	-67.34	22.44	88	64.8	51.4
8.5	-81.76	-66.58	-67.25	20.27	88.2	64.7	53.3
8.37	-81.03	-65.8	-67.22	19.05	88.4	65	53.4
8.45	-81.21	-66.42	-67.37	22.34	89	65	51.6
8.43	-81.35	-65.64	-67.19	22.41	89.6	64.9	50.5
8.33	-81.39	-66.27	-67.37	19.14	89.6	65.1	51
8.48	-81.44	-66.99	-67.34	22.34	90.2	65.6	55
8.41	-81.3	-65.54	-67.47	22.31	90.8	65.2	53.1
8.47	-81.81	-66.11	-67.22	20.94	91	65.2	52.3
8.32	-81.12	-65.8	-67.41	19.08	90.9	65.6	52.2
8.53	-81.16	-66.32	-67.34	22.25	91.8	65.6	52.1
8.36	-80.89	-66.11	-67.19	21.28	92.6	65.4	52.1
8.34	-81.03	-66.47	-67.44	19.2	92.5	65.8	52
8.54	-81.76	-65.8	-67.31	22.31	93.2	65.8	52.4
8.47	-81.07	-65.9	-67.41	21.4	93.5	65.7	50.5
8.35	-81.44	-65.8	-67.41	19.08	93.7	66.1	51.3
8.45	-81.16	-66.21	-67.37	22.25	94.1	66.1	50.9
8.52	-81.21	-65.8	-67.28	22.25	94.6	66	52.2
7.97	-81.03	-66.06	-67.34	19.14	94.9	66.2	52.5
8.55	-81.07	-66.01	-67.28	22.13	95.1	66.6	48.2
8.48	-81.12	-66.32	-67.56	22.25	95.2	66.3	49.6
8.13	-81.35	-66.16	-67.37	19.2	95.1	66.4	48.6
8.46	-81.07	-65.59	-67.31	22.1	96.1	67.1	51.5
8.43	-81.35	-66.63	-67.41	22.19	96.4	66.5	51.6
8.43	-81.44	-66.47	-67.34	22.16	96.5	66.6	52.3
8.33	-81.26	-66.42	-67.28	19.29	96.3	66.6	51.3
8.39	-81.03	-66.16	-67.41	20.24	97	67.2	52
8.44	-81.39	-66.84	-67.25	22.16	97.5	67.1	51.2
8.42	-81.3	-66.21	-67.34	22.16	97.4	66.9	53
8.38	-81.26	-66.53	-67.31	18.86	97.6	67.4	50.4
8.51	-81.53	-66.47	-67.5	22.1	98.1	67.3	51.4
8.42	-81.21	-66.27	-67.19	22.1	98.4	67.2	50.9

8.32	-81.49	-66.37	-67.25	19.02	97.9	67.3	52.3
8.48	-80.94	-65.8	-67.37	22.04	98.5	67.9	50.4
8.54	-81.12	-66.58	-67.37	22.04	98.4	67.6	52
8.39	-81.12	-66.47	-67.37	19.93	98.2	67.5	52.6
8.39	-80.84	-66.21	-67.34	18.83	97.9	67.9	51.6
8.52	-80.71	-66.68	-67.28	22.07	98	67.9	52.1
8.42	-80.94	-66.42	-67.34	22.07	97.6	67.9	47.9
8.35	-81.12	-66.21	-67.34	19.05	96.9	67.9	52.4
8.5	-80.84	-66.11	-67.5	22.1	97.1	68.2	49
8.46	-80.89	-66.16	-67.22	22.13	97.4	67.9	49.5
8.5	-81.67	-66.01	-67.41	19.69	97.3	67.8	51.6
8.38	-81.03	-66.58	-67.37	20.45	97	68.4	51.6
8.53	-81.53	-66.63	-67.25	22.1	97.4	67.9	50.5
8.41	-81.71	-66.27	-67.37	21.28	97.9	68	52.5
8.36	-81.03	-65.96	-67.44	18.83	97.4	68.3	52.9
8.53	-81.39	-66.63	-67.31	22.1	97.7	68.5	51.2
8.44	-80.94	-66.53	-67.44	22.16	97.5	68.1	52.6
8.39	-81.35	-66.32	-67.34	18.83	97.3	68.5	54
8.47	-80.89	-66.21	-67.44	22.07	97.9	68.3	51.4
8.45	-81.39	-66.32	-67.25	22.1	97.6	68.3	50.8
8.33	-81.26	-66.11	-67.28	18.96	97.3	68.4	52.7
8.48	-81.39	-66.16	-67.44	22.04	97.7	68.8	51.2
8.49	-81.07	-66.21	-67.28	22.1	97.5	68.3	52.8
8.48	-81.26	-66.16	-67.5	19.29	97.4	68.3	50.9
8.38	-81.49	-66.63	-67.25	20.36	97.2	68.9	52.5
8.51	-82.03	-66.99	-67.31	22.1	97.6	68.5	50.2
8.42	-80.98	-66.16	-67.41	19.96	97.7	68.4	51.1
8.38	-81.07	-66.42	-67.31	18.77	97.4	68.9	51.1
8.54	-81.39	-65.96	-67.37	22.07	97.4	68.9	51.9
8.44	-81.44	-66.37	-67.44	22.1	97.5	68.5	51.3
8.07	-81.12	-66.32	-67.31	18.96	97	68.5	51.1
8.47	-81.16	-66.11	-67.37	22.1	96.7	69	53.8
8.51	-80.94	-66.32	-67.47	22.1	96.7	68.4	52.2
8.34	-81.07	-66.68	-67.22	19.2	96.2	68.5	51.9
8.57	-81.39	-66.37	-67.37	22.16	93.6	69	51.9
8.48	-81.67	-65.85	-67.34	22.25	91	68.3	47.6
7.97	-81.26	-65.9	-67.44	19.02	89.7	68.1	52
8.56	-81.21	-66.16	-67.44	22.22	89.3	68.5	51.7
8.43	-81.76	-66.53	-67.25	22.28	89.4	68	55.7
8.36	-81.12	-66.63	-67.53	18.89	88.6	67.9	52.9
8.51	-81.3	-66.11	-67.44	22.16	89	68.1	49.5
8.46	-81.71	-66.89	-67.44	22.16	89.2	67.7	53.1
8.51	-80.84	-66.53	-67.41	19.41	88.9	67.4	52
8.37	-81.62	-66.27	-67.5	19.11	88.6	67.9	50.4
8.41	-81.35	-66.53	-67.59	22.22	88.9	67.6	52.9
8.42	-81.44	-66.11	-67.53	20.48	88.8	67.1	50.2
8.36	-81.62	-66.21	-67.53	18.83	88.2	67.6	52.7

8.53	-81.53	-66.42	-67.37	22.19	88.8	67.4	52.2
8.51	-80.84	-66.68	-67.62	19.41	88.6	67	51.4
9.04	-81.35	-66.89	-67.47	22.1	88.4	67.5	53.2
8.5	-81.44	-66.47	-67.65	22.22	88.6	67	55.4
8.51	-81.12	-66.42	-67.44	20.09	88.5	66.8	56.4
8.35	-81.67	-66.32	-67.34	18.83	88	67.1	51.9
8.47	-81.26	-65.85	-67.56	22.19	88.3	67.3	51.9
8.45	-81.62	-66.84	-67.37	22.25	88.3	66.9	52.5
8.5	-81.16	-66.42	-67.62	19.84	88	66.5	51.6
8.35	-81.35	-66.32	-67.37	19.26	87.5	67	52.1
8.54	-81.49	-66.37	-67.62	22.19	87.8	66.8	51.5
8.39	-81.49	-66.89	-67.62	19.57	87.8	66.4	52.6
9.44	-81.12	-66.01	-67.65	22.16	87.4	66.9	53.6
8.47	-81.62	-66.06	-67.62	22.25	87.6	66.4	51
8.43	-81.53	-66.06	-67.44	20.39	87.6	66.2	51.8
8.32	-81.26	-66.63	-67.31	18.86	86.8	66.4	51.8
8.56	-81.39	-66.42	-67.56	22.19	87.1	66.8	51.9
8.49	-81.53	-66.84	-67.44	22.25	87.3	66.2	53.8
8.5	-81.35	-66.37	-67.53	20.21	87	65.8	52.7
8.38	-81.53	-66.58	-67.62	18.86	86.4	66.2	52.8
8.5	-81.53	-66.58	-67.56	22.19	86.7	66.2	52.5
8.41	-81.53	-66.27	-67.83	22.31	86.7	65.8	52.5
8.29	-81.81	-65.96	-67.56	18.99	86.2	65.8	52.8
8.54	-81.53	-66.68	-67.59	22.31	86.3	66.3	52.1
8.51	-81.3	-66.37	-67.62	22.28	86.4	65.8	51.5
8.41	-81.21	-66.11	-67.59	19.66	86.1	65.5	52.1
8.4	-81.94	-66.27	-67.8	20.67	85.6	66	52.5
8.44	-81.53	-66.27	-67.41	22.31	86	65.7	48
8.48	-81.03	-66.21	-67.56	22.28	86	65.5	54.6
8.33	-81.71	-66.68	-67.65	19.05	85.2	65.5	49.9
8.53	-81.21	-66.37	-67.71	22.31	85.7	65.7	52
8.46	-81.03	-66.27	-67.56	22.47	85.9	65.5	52.8
8.41	-81.44	-66.89	-67.47	19.17	85.5	65.2	53.3
8.54	-81.53	-66.84	-67.47	22.13	85.3	65.7	50.8
8.47	-81.12	-66.63	-67.74	22.34	85.8	65.3	50.2
8.48	-81.44	-66.47	-67.65	19.87	85.7	65.2	50
8.36	-81.3	-66.89	-67.56	18.96	84.8	65.3	52.3
8.51	-81.9	-66.73	-67.59	22.28	85	65.5	52.7
8.43	-81.12	-66.53	-67.59	22.41	85.1	65.1	52.4
8.38	-80.94	-66.42	-67.77	19.84	85	64.9	53.1
8.38	-81.49	-66.53	-67.53	18.99	84.4	65.1	52.3
8.57	-81.62	-67.05	-67.56	22.28	85.1	65.2	51.6
8.41	-81.44	-66.58	-67.65	22.41	85.1	64.8	51.4
8.1	-81.85	-66.53	-67.74	19.29	84.5	64.7	52.3
8.57	-81.03	-66.84	-67.77	22.34	85	65.3	50.9
8.41	-81.16	-65.85	-67.71	22.41	85.3	64.7	56.5
8.5	-81.21	-66.21	-67.71	19.66	84.8	64.7	52.7

8.36	-81.35	-66.84	-67.65	19.96	84.2	65	52.8
8.5	-81.49	-66.63	-67.8	22.41	84.6	64.8	50.8
8.5	-81.3	-66.06	-67.31	22.53	84.6	64.7	53.2
8.38	-81.3	-67.2	-67.53	19.17	84.4	64.4	53.3
8.41	-81.16	-66.32	-67.71	20.97	84.3	65.1	52.4
8.53	-81.62	-67.3	-67.47	22.41	84.8	64.7	53.6
8.49	-81.03	-66.58	-67.5	22.44	84.8	64.7	52.3
8.32	-81.07	-67.1	-67.62	19.41	84.4	64.4	50.7
8.38	-81.12	-67.2	-67.53	22.34	84.6	64.8	48
8.41	-81.81	-66.01	-67.71	22.44	85.2	64.4	51.1
8.41	-81.71	-66.94	-67.62	19.66	85.3	64.3	51.2
8.38	-81.62	-66.42	-67.8	21.79	85.2	64.9	54.2
8.48	-81.44	-66.53	-67.71	22.31	85.7	64.4	51
8.42	-81.53	-66.84	-67.86	22.04	85.8	64.3	51.6
8.37	-81.53	-66.63	-67.8	19.08	85.5	64.4	53
8.57	-80.98	-66.53	-67.74	22.34	86.1	64.9	51.6
8.5	-81.39	-66.63	-67.53	22.34	86.6	64.5	50.1
8.41	-81.49	-66.42	-67.59	19.69	86.6	64.4	51.6
8.38	-81.62	-66.53	-67.62	18.93	86.5	64.7	51
8.57	-81.76	-66.84	-67.74	22.41	87.5	64.9	51.8
8.41	-82.03	-66.42	-67.62	22.34	88	64.7	50.9
8.17	-81.3	-66.94	-67.62	19.11	87.9	64.7	51.5
8.47	-81.44	-66.53	-67.86	22.25	88.8	65	52.8
8.42	-81.26	-66.68	-67.95	22.44	89.2	64.8	51.6
8.15	-81.76	-67.72	-67.89	19.08	89.3	64.9	52.2
8.54	-81.53	-66.73	-67.77	22.28	89.9	65.3	50.4
8.44	-81.35	-66.73	-67.8	22.16	90.6	64.8	51.6
8.42	-81.62	-65.75	-67.86	19.51	90.8	65	52.3
8.4	-81.76	-66.27	-67.89	20.21	91.2	65.7	50.3
8.42	-81.94	-66.11	-68.05	22.25	92.2	65.6	51.5
8.44	-81.62	-66.11	-67.71	21.37	92.7	65.3	51.6
8.38	-81.53	-66.84	-67.77	18.96	93.1	65.8	50.8
8.57	-82.22	-66.37	-67.74	22.28	93.9	65.9	51.6
8.5	-81.49	-66.73	-67.77	22.22	94.4	65.8	52
8.11	-81.67	-66.11	-68.05	19.23	94.7	65.9	53
8.55	-81.67	-66.47	-67.71	22.22	95.1	66.5	51.9
8.47	-81.94	-66.99	-67.56	22.25	95.1	66.2	52.2
8.38	-81.49	-66.63	-67.59	19.41	95.4	66.1	52.1
8.49	-82.13	-66.99	-67.62	22.19	96.1	66.9	51.6
8.44	-81.67	-67.05	-67.83	22.16	96.6	66.4	52.9
8.37	-81.39	-66.68	-67.62	19.05	96.6	66.7	50.5
8.55	-81.44	-66.53	-67.8	22.16	97	67	53.8
8.44	-81.44	-66.63	-67.8	22.16	97.3	66.9	53.7
8.45	-81.39	-66.63	-67.8	20.12	97.6	66.7	49.8
8.39	-81.49	-66.32	-67.77	18.99	97.7	67.3	51.3
8.56	-81.67	-66.47	-67.86	22.13	98.4	67.3	52.7
8.47	-81.26	-66.68	-67.74	22.13	98.5	67.2	53

8.38	-81.21	-66.01	-67.86	19.32	98.4	67.1	51.5
8.56	-81.26	-66.94	-67.89	22.22	98.6	67.8	51.3
8.44	-81.49	-67.3	-67.74	22.25	98.9	67.3	52.8
8.23	-81.07	-66.89	-67.65	19.29	98.7	67.3	52.6
8.48	-81.85	-66.68	-67.65	22.16	98.6	68	52.8
8.51	-81.44	-66.68	-67.77	22.22	98.9	67.5	48.8
8.32	-81.35	-66.73	-67.8	19.35	98.7	67.4	51.8
8.5	-81.67	-66.89	-67.62	22.16	98.6	68.1	53.8
8.51	-81.81	-66.73	-67.53	22.22	98.4	67.7	51.9
8.29	-81.49	-66.42	-67.8	19.41	97.6	67.6	51.1
8.62	-81.76	-67.62	-67.83	22.01	97.7	68.3	52.2
8.53	-81.53	-67.05	-67.77	22.28	97.9	67.9	52
8.43	-81.81	-66.89	-67.89	21.37	97.9	67.6	52.6
8.35	-81.81	-67.2	-67.74	19.08	97.4	68	51.5
8.58	-81.81	-66.68	-67.83	22.22	97.7	68.1	52.1
8.52	-81.16	-66.68	-67.86	22.22	97.7	67.9	51.8
8.01	-81.67	-66.73	-67.74	19.29	97.5	67.9	52.2
8.62	-81.81	-66.89	-67.86	22.16	97.6	68.4	50.3
8.49	-81.49	-67.05	-67.86	22.28	97.9	67.9	52.9
8.44	-81.44	-67.15	-67.8	21.28	97.9	67.9	52.9
8.35	-81.76	-66.06	-67.71	19.05	97.4	68.2	47.6
8.52	-82.26	-66.16	-67.92	22.19	97.9	68.2	51.8
8.47	-82.03	-66.99	-67.77	22.16	97.9	68	55.3
8.03	-81.3	-67.05	-67.86	19.23	97.5	67.9	51.6
8.56	-81.81	-67.05	-67.65	22.25	97.7	68.4	51.5
8.48	-81.94	-67.2	-67.89	22.16	97.9	68	50.8
8.27	-81.76	-66.53	-67.8	19.32	97.5	67.9	52.5
8.53	-81.71	-66.16	-67.83	22.25	97.5	68.4	51.7
8.54	-81.94	-67.05	-67.8	22.28	97.7	68	52.1
8.27	-81.67	-66.37	-67.92	19.47	97.3	67.9	53.1
8.74	-81.9	-66.11	-67.99	22.16	97.3	68.7	52.1
8.51	-81.76	-67.15	-67.74	22.25	97.5	68.1	49.4
8.44	-82.13	-67.25	-67.89	19.35	97.3	68	51.4
8.43	-81.67	-67.05	-67.59	21.31	97.1	68.6	53.5
8.45	-81.99	-66.99	-67.8	22.28	97.3	68	52.3
8.49	-81.99	-67.1	-67.77	20.39	97.3	68	51.6
8.4	-82.08	-67.05	-67.8	19.87	96.7	68.5	53.1
8.44	-81.71	-66.63	-67.8	22.16	96.9	68.1	51.8
8.51	-81.49	-66.94	-67.74	19.57	96.8	67.9	54
8.41	-82.13	-66.84	-67.89	21.28	96.2	68.6	50.9
8.44	-81.9	-66.99	-67.95	22.22	95.9	68	49.6
8.49	-81.44	-66.84	-67.86	22.25	95.4	67.9	51.2
8.15	-81.71	-66.89	-67.99	19.14	94.5	67.9	50.2
8.57	-81.9	-66.73	-67.83	22.16	94.5	68.4	52.5
8.5	-81.67	-66.99	-67.71	22.19	94.1	67.9	53.2
8.3	-81.76	-66.68	-67.89	19.32	92.9	67.9	52
8.55	-82.31	-66.68	-67.8	22.28	92.9	68.3	52.2

8.5	-81.71	-67.56	-67.89	22.22	92.5	67.7	54.6
7.88	-82.45	-66.99	-67.89	19.14	91.6	67.9	52.5
8.51	-81.85	-65.85	-67.92	22.22	91.4	67.9	50.3
8.41	-82.13	-66.32	-67.99	22.28	91.1	67.6	48.1
8.35	-81.76	-67.1	-67.92	19.02	90.4	67.5	53.2
8.47	-81.9	-66.58	-68.11	22.22	90.4	67.9	51.3
8.41	-81.53	-66.58	-67.83	22.28	90.3	67.3	52.8
8.43	-81.85	-66.94	-68.05	19.72	89.8	67.2	52.3
8.34	-82.17	-66.94	-67.92	18.89	89	67.5	48.6
8.5	-81.76	-66.11	-67.8	22.31	89.5	67.4	52.4
8.46	-81.53	-66.73	-67.99	21.86	89.3	66.9	51.8
8.36	-82.08	-66.99	-67.99	19.08	88.6	67.3	52.8
8.45	-81.76	-66.94	-67.92	22.41	88.8	67	53.1
8.44	-81.67	-66.32	-68.08	19.78	88.5	66.5	52.4
8.41	-81.44	-67.1	-67.99	20.45	87.9	67.2	52.4
8.43	-82.08	-66.63	-67.89	22.31	88.4	66.9	51.5
8.51	-82.08	-66.84	-67.95	22.34	88.1	66.6	51.7
8.43	-81.44	-67.15	-67.83	19.2	87.6	66.5	54.7
8.41	-81.67	-67.15	-68.02	21.83	87.2	66.8	53.2
8.44	-81.53	-66.11	-68.08	22.34	87.5	66.6	49.2
8.44	-81.71	-66.89	-68.02	20.7	87.3	66.3	53.1
8.37	-81.71	-66.89	-67.99	19.11	86.3	66.5	53.4
8.53	-81.76	-66.68	-67.89	22.31	86.7	66.3	52.9
8.46	-81.76	-66.89	-67.95	22.34	86.7	66	51.8
8.37	-81.76	-66.99	-67.99	19.44	86.2	65.9	52.9
8.39	-81.81	-66.73	-67.86	20.45	85.9	66.6	51.6
8.53	-81.62	-66.84	-67.95	22.41	86.3	66.3	52.3
8.41	-81.62	-66.94	-68.08	22.41	86.2	65.9	52.2
8.41	-82.08	-67.56	-67.86	19.66	86.2	65.7	49.7
8.38	-81.3	-66.63	-68.08	18.99	86.1	66.1	50.2
8.52	-81.39	-67.46	-67.99	22.41	86.4	65.9	49
8.46	-81.71	-66.73	-67.83	22.53	86.1	65.8	51.5
8.44	-82.08	-67.05	-68.17	19.35	85.3	65.4	51.9
8.37	-81.81	-67.05	-68.14	19.02	85.1	65.8	51.5
8.45	-81.71	-66.63	-68.08	22.44	85.4	65.8	52
8.5	-82.17	-66.37	-68.14	22.47	85.5	65.4	51.5
8.45	-82.13	-66.68	-67.95	19.6	85	65.2	50.3
8.55	-82.26	-67.36	-68.02	22.44	84.9	65.8	50.8
8.43	-81.53	-67.1	-67.99	22.5	85.3	65.4	53.9
8.46	-82.13	-66.53	-68.14	19.6	85	65	52.1
8.37	-81.49	-66.47	-67.95	19.66	84.3	65.6	51.6
8.5	-82.36	-67.1	-68.11	22.44	84.6	65.4	50.5
8.4	-81.71	-66.27	-68.02	22.41	84.8	65	52
8.41	-81.71	-66.84	-68.02	20.05	84.3	64.8	51.8
8.36	-81.39	-67.3	-68.2	19.11	83.6	65.2	52.5
8.54	-82.26	-67.25	-67.83	22.47	84	65.1	53.1
8.42	-81.62	-66.99	-67.92	22.53	84.1	64.7	51.1

8.33	-81.9	-67.1	-68.14	19.32	83.4	64.7	51.8
8.5	-81.9	-66.42	-68.26	22.44	83.9	65.1	50.1
8.46	-81.81	-66.68	-67.92	22.44	84.6	64.7	50.1
8.46	-82.03	-66.73	-68.05	19.96	84.5	64.5	51.4
8.37	-82.54	-66.73	-67.92	19.11	83.7	64.9	51.6
8.47	-82.03	-66.68	-68.02	22.5	84.1	64.9	55.1
8.5	-82.08	-67.25	-68.2	22.5	84.4	64.5	53.7
8.5	-81.76	-67.05	-68.17	20.48	84.2	64.4	52.2
8.34	-82.08	-66.68	-67.99	19.26	83.3	64.5	52.4
8.85	-81.53	-67.05	-68.14	22.44	83.4	64.9	50.4
8.42	-81.85	-67.15	-68.02	22.53	84	64.4	52.9
8.42	-81.9	-66.94	-68.02	21.03	84.5	64.2	52.3
8.34	-81.85	-66.99	-68.14	19.47	84.2	64.7	51.6
8.5	-82.22	-67.3	-67.99	22.5	85.3	64.4	49.7
8.43	-82.31	-66.73	-68.17	22.19	85.5	64.3	53.5
8.34	-82.22	-66.47	-68.14	19.2	85.3	64.4	51.2
8.53	-81.76	-67.2	-68.05	22.59	85.7	64.5	51.7
8.5	-81.81	-66.89	-68.08	22.47	86	64.3	51
8.21	-81.85	-66.84	-68.2	19.32	85.8	64.3	53.7
8.53	-81.21	-67.15	-68.17	22.56	86.3	64.8	54.7
8.43	-82.13	-66.68	-67.92	22.44	87	64.4	51
8.47	-82.17	-66.68	-68.11	22.53	87.5	64.2	49.9
8.29	-82.13	-67.15	-67.99	19.6	87.5	64.3	53.7
8.37	-81.76	-67.15	-68.14	22.01	87.5	64.9	51.1
8.44	-81.71	-66.84	-68.26	22.5	88.4	64.7	51.8
8.5	-82.45	-66.58	-68.02	19.69	88.6	64.7	49.4
8.39	-82.26	-66.89	-68.11	22.16	88.7	65.1	52.6
8.44	-81.9	-67.41	-67.95	22.47	89.5	64.7	51.7
8.48	-81.85	-66.99	-68.2	19.44	89.7	64.7	47.8
8.82	-81.85	-66.21	-68.11	22.28	90.1	65.3	51.5
8.38	-81.94	-67.25	-68.11	22.31	90.9	65	53.7
8.41	-82.26	-67.05	-68.02	20.05	91.4	65	54.3
8.41	-81.76	-66.94	-68.11	19.05	91.2	65.4	51.6
8.51	-81.85	-66.94	-68.17	22.34	92	65.5	51.7
8.47	-82.17	-67.15	-68.11	22.22	92.4	65.3	50.9
8.41	-81.76	-67.1	-67.8	21.18	92.9	65.3	52.6
8.37	-81.62	-67.15	-68.17	19.05	92.7	65.7	52.8
8.53	-81.49	-67.56	-68.2	22.25	93.5	65.8	50.5
8.45	-82.36	-67.15	-68.05	22.25	93.9	65.7	48.2
8.35	-82.36	-66.99	-68.11	19.02	93.6	65.9	51.7
8.51	-82.13	-66.89	-68.29	22.28	94.3	66	54.2
8.46	-82.03	-66.89	-68.26	22.25	94.8	65.8	52.8
8.03	-82.17	-67.1	-68.14	19.11	94.9	66	51.9
8.57	-81.94	-66.94	-68.2	22.16	95.3	66.8	52.2
8.45	-81.94	-66.99	-68.17	22.16	95.7	66.4	52.7
8.46	-81.71	-66.73	-68.2	20.76	96.1	66.3	52.5
8.38	-81.76	-66.58	-68.2	18.89	96.1	66.8	52.1

8.44	-81.85	-66.94	-68.2	22.13	96.2	66.8	52.2
8.42	-81.99	-67.25	-68.2	22.25	96.4	66.8	49.6
8.37	-81.76	-66.99	-68.05	18.96	96.8	66.8	51.9
8.56	-81.85	-66.73	-68.17	22.16	97.4	67.2	49
8.5	-82.03	-66.94	-68.11	22.16	97.9	66.9	52.3
8.05	-82.22	-67.05	-68.11	19.23	97.9	67.2	51
8.41	-81.9	-66.84	-68.26	22.1	98.4	67.8	50.1
8.43	-81.76	-67.46	-68.26	22.1	98.9	67.4	49.8
8.45	-81.94	-66.89	-68.14	22.22	98.4	67.3	52.1
8.38	-81.85	-67.15	-68.26	18.99	98.3	67.5	52.5
8.5	-81.71	-66.68	-68.23	22.13	98.6	67.8	51.6
8.47	-81.81	-67.25	-68.2	22.28	98.4	67.5	53.5
8.42	-82.13	-67.15	-68.23	18.93	97.7	67.9	51
8.52	-82.22	-67.1	-68.14	22.22	98	67.9	52.5
8.41	-81.99	-66.37	-68.17	20.54	98	67.6	53.2
8.38	-82.4	-67.3	-68.23	18.86	97.6	68	54.2
8.51	-82.17	-67.15	-68.05	22.19	98.4	68.1	53.2
8.52	-82.03	-66.94	-68.29	22.28	98.3	67.8	51.4
8.44	-82.72	-66.84	-68.14	19.29	98.2	67.8	51.6
8.41	-82.49	-67.46	-68.26	19.99	98.2	68.4	53.6
8.55	-82.31	-67.15	-68.14	22.16	98.3	68.2	50.3
8.43	-82.22	-67.15	-68.08	22.22	98.1	68	50.8
8.41	-81.76	-67.25	-68.23	19.26	97.9	68	50.9
8.5	-82.81	-67.1	-68.35	22.16	98.1	68.5	51.3
8.52	-82.49	-67.36	-68.29	22.16	98	68.2	53.2
8.43	-82.26	-66.94	-68.23	19.44	98.1	67.9	52.7
8.43	-81.85	-66.99	-68.2	20.12	97.9	68.8	49.2
8.47	-82.17	-67.1	-68.14	22.19	98.2	68.5	51.2
8.47	-82.36	-66.94	-68.32	22.19	98.3	68.2	51.9
8.35	-81.94	-67.15	-68.17	19.29	98.1	68.2	51.5
8.67	-82.49	-66.99	-68.32	21.92	98.3	69	51.2
8.46	-82.72	-67.62	-68.11	22.13	98.3	68.4	54.6
8.45	-81.76	-67.15	-68.26	19.23	98	68.3	51.3
8.44	-81.71	-67.2	-68.2	21.92	98.1	69	53.5
8.44	-82.08	-66.63	-68.26	22.13	98.4	68.6	50.5
8.52	-82.03	-67.1	-68.14	20.12	98.3	68.4	52.1
8.35	-82.36	-67.77	-68.08	18.93	97.9	68.8	52.5
8.53	-81.85	-66.53	-68.29	22.1	98.2	69.1	51
8.51	-81.85	-67.2	-68.14	22.1	98.1	68.6	52
8.42	-82.22	-66.84	-68.26	20.02	97.6	68.3	49.3
8.38	-81.99	-67.2	-68.26	18.77	97	68.7	51.2
8.54	-81.76	-67.46	-68.14	22.1	97.3	68.7	51.2
8.41	-81.76	-67.25	-68.29	22.16	96.9	68.3	53.4
8.38	-81.99	-66.84	-68.32	18.93	96	68.7	53
8.49	-81.94	-66.63	-68.29	22.13	96.2	68.7	49.5
8.48	-82.17	-67.51	-68.23	22.19	96.3	68.4	52.4
8.18	-81.99	-66.53	-68.35	19.11	95.7	68.4	51.3

8.48	-82.54	-66.63	-68.23	22.16	95.5	69	52.6
8.46	-81.85	-67.51	-68.23	22.07	95.5	68.4	50.7
8.47	-82.4	-67.2	-68.17	20.73	95.1	68	50.5
8.37	-82.36	-66.84	-68.05	18.83	94.3	68.5	51.4
8.53	-82.54	-67.3	-68.2	22.16	94.3	68.5	54.3
8.44	-82.49	-67.72	-68.11	22.22	94.1	68.1	50
8.34	-82.03	-67.46	-68.05	18.96	93.2	68.2	51.4
8.57	-82.17	-66.99	-68.5	22.19	93.2	68.1	55
8.41	-82.36	-67.62	-68.14	22.22	92.9	67.9	53.5
8.35	-81.81	-67.25	-68.23	19.23	92.5	67.9	51.7
8.65	-82.45	-66.94	-68.26	22.1	92.1	68.5	52.2
8.5	-81.99	-66.58	-68.38	22.22	92.2	67.9	53.8
8.42	-82.22	-67.67	-68.02	20.05	92	67.6	50.8
8.34	-82.22	-67.05	-68.14	18.83	91.2	68	52.7
8.45	-82.08	-66.89	-68.29	22.19	91.6	67.9	51.4
8.46	-81.53	-66.68	-68.47	21.03	91.6	67.5	53.6
8.35	-82.45	-67.3	-68.38	18.86	90.8	67.8	52.3
8.49	-82.17	-67.15	-68.17	22.16	91.1	67.6	51.7
8.45	-81.81	-67.67	-68.17	20.09	90.9	67.4	52.2
8.35	-82.17	-66.94	-68.26	19.08	90.4	67.8	50.2
8.43	-82.4	-66.94	-68.23	22.16	90.7	67.6	50.3
8.4	-82.17	-66.94	-68.2	21.79	90.6	67.1	50.7
8.36	-82.17	-67.41	-68.17	18.93	90.1	67.4	51.8
8.53	-82.36	-66.73	-68.35	22.16	90.2	67.7	53.4
8.38	-81.85	-66.94	-68.23	22.19	90.7	67.4	51.2
8.47	-82.13	-66.84	-68.29	19.81	90.3	67	52.3
8.37	-81.9	-66.94	-68.32	18.71	89.7	67.4	53.1
8.56	-81.49	-67.3	-68.23	22.13	90.1	67.4	51.6
8.36	-81.94	-66.58	-68.35	22.16	90.2	67	51.6
8.38	-82.49	-67.56	-68.05	19.2	89.8	66.8	51.5
8.58	-82.36	-67.51	-68.38	22.1	89.7	67.5	49.5
8.42	-82.63	-67.25	-68.08	22.25	89.8	66.8	53.4
8.47	-82.4	-67.3	-68.29	19.32	89.6	66.8	52.1
8.39	-82.03	-67.2	-68.35	19.87	89.2	67.2	53.5
8.45	-82.17	-66.42	-68.23	22.19	89.6	66.8	52.5
8.41	-81.35	-66.84	-68.41	22.19	89.6	66.7	53.8
8.28	-82.03	-67.2	-68.47	18.93	88.9	66.7	52.8
8.81	-82.17	-67.15	-68.26	22.13	89	67.2	50.5
8.5	-81.81	-67.2	-68.41	22.13	89.5	66.5	52.3
8.47	-82.26	-66.99	-68.2	22.16	89.5	66.5	52.1
8.32	-82.03	-66.89	-68.2	18.8	88.8	66.5	51.3
8.49	-82.36	-67.56	-68.2	22.1	89.3	67	50.5
8.37	-82.45	-66.99	-68.23	22.1	89.5	66.4	49.6
8.42	-82.13	-67.88	-68.26	19.11	89.5	66.3	51.3
8.41	-82.13	-67.36	-68.29	21.95	89.3	66.9	51.7
8.47	-81.99	-67.3	-68.38	22.19	89.7	66.6	51.5
8.36	-82.31	-67.36	-68.35	21.98	89.9	66.3	52

8.03	-81.94	-67.56	-68.23	19.05	89.6	66.3	52.6
8.41	-82.03	-67.25	-68.2	20.94	89.6	66.8	52.7
8.43	-82.81	-67.15	-68.26	22.19	89.9	66.4	51.3
8.46	-82.08	-67.15	-68.41	22.16	90.1	66.4	49.1
8.38	-82.13	-67.2	-68.41	18.93	89.7	66.6	53.9
8.46	-82.31	-66.84	-68.23	22.19	90	66.5	50.1
8.44	-82.4	-66.84	-68.26	22.07	90.2	66	52.4
8.31	-81.9	-67.62	-68.29	18.93	89.5	66.2	53
8.55	-82.13	-67.2	-68.29	22.19	90	66.5	48.6
8.41	-82.17	-67.82	-68.32	22.16	90.2	66.1	48.7
8.51	-82.72	-67.62	-68.32	19.23	89.9	66	51.7
8.37	-81.81	-66.99	-68.35	20.79	89.7	66.5	51.9
8.53	-81.85	-66.94	-68.2	22.19	90.2	66.1	50.7
8.42	-82.22	-67.2	-68.29	20.85	90.2	65.9	50.2
8.35	-82.08	-67.1	-68.41	18.8	89.8	66.4	51.8
7.91	-81.99	-67.3	-68.38	18.99	90.4	66.1	52.5
8.53	-81.99	-67.1	-68.29	22.19	90.5	66.5	52.9
8.47	-81.94	-67.46	-68.29	22.16	91.1	66.2	54.6
8.5	-82.72	-67.46	-68.29	19.78	91.1	66	53.4
8.36	-82.58	-66.68	-68.38	18.77	90.8	66.5	52.6
8.5	-81.85	-67.1	-68.35	22.16	91.2	66.4	53.2
8.44	-82.22	-66.73	-68.41	22.13	91.7	66	51.6
8.14	-81.9	-66.94	-68.5	18.96	91.4	66.2	50.9
8.47	-82.58	-66.27	-68.41	22.04	91.7	66.9	51.3
8.5	-81.99	-67.51	-68.41	22.07	92.7	66.3	52.3
8.39	-82.08	-67.2	-68.32	19.96	92.9	66.1	53.9
8.36	-82.08	-67.51	-68.32	18.71	92.5	66.8	51.8
8.53	-82.03	-67.51	-68.38	22.1	92.9	66.6	52.1
8.44	-82.45	-67.56	-68.63	21.18	93.2	66.3	51.7
8.36	-82.31	-67.72	-68.5	20.18	93.6	67	51.2
8.48	-82.63	-67.67	-68.47	22.07	94.1	66.7	52.4
8.49	-82.13	-67.36	-68.29	21.7	94.2	66.7	52
8.39	-82.72	-67.2	-68.2	18.8	93.8	66.9	52.4
8.48	-82.58	-67.46	-68.38	22.07	93.8	67.1	54.3
8.42	-81.44	-66.99	-68.29	22.07	93.6	67	51.9
8.51	-81.9	-67.2	-68.47	19.35	92.9	66.6	51.6
8.38	-82.22	-66.94	-68.41	18.68	92.6	67.3	54.2
8.53	-82.36	-67.25	-68.38	22.13	93.2	67.2	50.8
8.48	-82.4	-67.62	-68.32	22.07	93.3	67	54.7
8.41	-82.26	-67.05	-68.29	18.93	93	66.9	51.6
9.4	-82.13	-67.3	-68.26	21.86	93.3	67.6	53.2
8.5	-81.94	-67.25	-68.29	22.1	93.7	67.1	51.4
8.42	-82.45	-67.77	-68.32	19.57	93.3	67	52.8
8.38	-82.54	-67.67	-68.32	18.77	92.8	67.5	52.7
8.47	-82.4	-67.56	-68.41	22.07	93.1	67.3	49.3
8.47	-81.9	-67.77	-68.5	22.1	93	67.2	52.2
8.51	-81.85	-67.05	-68.53	18.99	92.8	67.1	54.4

9.06	-82.49	-66.99	-68.41	21.98	92.5	67.8	51.6
8.51	-82.54	-67.25	-68.57	22.07	92.7	67.2	51.3
8.42	-82.36	-67.56	-68.41	22.04	92.6	67	51.8
8.37	-81.85	-67.36	-68.29	19.11	92.2	67	51.4
8.41	-82.22	-66.58	-68.32	20.76	92.3	67.7	50.9
8.43	-81.76	-66.63	-68.32	22.07	93.2	67.4	51.8
8.44	-82.08	-67.36	-68.38	22.04	94	67.1	50.5
8.36	-82.17	-66.99	-68.47	18.83	94.3	67.4	51
8.47	-82.08	-67.2	-68.57	22.01	95	67.7	52.5
8.51	-82.49	-67.72	-68.35	21.98	95.1	67.4	53.3
8.47	-82.22	-67.15	-68.5	19.02	95.4	67.2	52.8
8.38	-82.13	-67.41	-68.63	18.71	95.9	67.9	51.4
8.53	-82.22	-67.56	-68.23	22.01	96.3	67.9	54.3
8.49	-82.13	-67.36	-68.53	22.04	96.4	67.6	51.3
8.5	-82.03	-67.05	-68.53	19.44	96.5	67.4	52
8.41	-82.17	-67.15	-68.5	19.66	96.2	68.1	52.9
8.48	-81.76	-67.41	-68.47	21.92	96.8	67.8	49.4
8.41	-82.58	-68.29	-68.41	21.98	97	67.8	51.6
8.33	-82.03	-67.15	-68.35	18.83	96.8	67.9	51.6
8.57	-82.17	-67.05	-68.53	21.95	97.3	68.4	50.5
8.53	-81.62	-67.2	-68.5	21.92	97.5	68	52.3
8.46	-82.36	-67.56	-68.5	22.04	97.6	67.9	52.9
8.35	-82.58	-67.67	-68.53	19.11	97.4	67.9	51.2
8.66	-81.76	-66.94	-68.47	21.95	97.3	68.6	51.8
8.38	-82.9	-67.67	-68.47	22.01	97.3	68.1	56.8
8.52	-82.22	-67.51	-68.53	19.11	96.8	67.9	52
8.4	-83.23	-67.41	-68.5	21.34	96.4	68.6	52.8
8.48	-82.08	-67.05	-68.69	21.95	96.3	68.1	54.5
8.48	-82.22	-67.1	-68.26	19.66	96.2	68.1	51.7
8.36	-82.4	-67.25	-68.29	18.68	95.7	68.7	51.6
8.57	-82.22	-67.77	-68.41	21.95	96	68.7	51.4
8.43	-82.22	-67.46	-68.38	22.01	96.2	68.3	52.6
8.47	-82.13	-67.05	-68.47	21.89	95.9	68.3	51.6
8.52	-82.26	-67.41	-68.5	19.05	95.7	68.1	52.3
8.36	-83.09	-67.88	-68.47	18.53	95.8	68.7	52.2
8.54	-82.03	-66.89	-68.35	21.92	96.3	68.5	52.5
8.51	-82.45	-67.46	-68.47	21.95	96.3	68.3	52.1
8.45	-82.45	-67.36	-68.35	19.14	96.1	68.2	52
8.39	-82.13	-66.89	-68.75	19.05	95.8	68.7	51.5
8.54	-82.26	-67.36	-68.35	22.01	96.2	68.5	51.9
8.52	-82.13	-67.3	-68.26	21.95	96.1	68.4	51.5
8.47	-82.4	-68.08	-68.53	19.32	95.8	68.2	51.9
8.38	-82.49	-67.51	-68.32	18.53	95.4	68.6	50.9
8.5	-82.36	-67.51	-68.5	21.92	95.4	68.7	51.5
8.46	-81.9	-67.67	-68.41	21.92	95.3	68.5	51.7
8.46	-82.13	-67.46	-68.41	21.98	95.4	68.4	47.9
8.42	-82.13	-67.62	-68.57	18.99	94.9	68.1	51.7

8.57	-82.08	-67.41	-68.53	21.76	94.5	68.9	49.3
8.42	-82.58	-66.73	-68.5	21.92	94.6	68.3	52
8.41	-82.45	-67.41	-68.57	21.09	94.1	68.1	51.6
8.34	-82.4	-67.46	-68.6	18.62	93.7	68.3	53
8.53	-82.58	-67.72	-68.5	21.98	93.7	68.7	52.3
8.49	-82.03	-67.3	-68.35	21.92	93.6	68.3	51.6
8.48	-82.13	-67.05	-68.57	19.84	93.1	68.1	51.5
8.38	-82.54	-67.25	-68.6	18.77	93.1	68.2	50.2
9.18	-82.31	-67.56	-68.53	21.92	93.3	68.7	51.3
8.51	-82.54	-67.25	-68.69	22.04	93.6	68.1	52.1
8.47	-82.22	-67.25	-68.6	22.04	93.3	67.9	53
8.41	-82.86	-67.72	-68.66	19.69	93	67.9	51.5
8.36	-82.31	-67.46	-68.53	18.77	92.7	67.9	50.4
8.42	-82.08	-67.41	-68.53	21.83	92.6	68.4	49.3
8.55	-82.26	-67.36	-68.53	22.01	92.8	67.9	53.7
8.47	-82.4	-67.72	-68.6	22.07	92.7	67.9	52.9
8.41	-82.77	-67.2	-68.5	22.07	92.5	67.7	51.5
8.49	-81.67	-67.46	-68.66	19.26	92.2	67.4	53.2
8.38	-82.08	-67.25	-68.5	18.74	91.8	67.8	52.6
8.46	-81.67	-67.1	-68.6	21.98	91.8	68.1	51.6
8.57	-82.45	-67.56	-68.32	22.07	91.8	67.8	49.7
8.41	-82.22	-66.94	-68.6	22.07	91.8	67.4	51.8
8.5	-82.17	-67.67	-68.17	22.04	91.6	67.4	49.9
8.47	-82.22	-67.77	-68.69	19.11	91.1	67.2	52.6
8.35	-81.9	-67.2	-68.69	18.77	90.8	67.5	51.3
8.44	-82.54	-67.67	-68.6	21.52	90.8	67.9	53.2
8.5	-82.45	-67.05	-68.35	22.07	91	67.4	50.4
8.43	-82.95	-67.3	-68.5	22.07	90.8	67.2	51.6
8.39	-82.58	-67.41	-68.5	20.3	90.7	67	52.2
7.65	-82.58	-67.41	-68.57	18.93	90.2	67	51.6
8.37	-82.72	-67.56	-68.53	18.62	89.9	67.4	53.6
8.42	-82.9	-67.36	-68.47	19.84	89.7	67.6	51.6
8.5	-83.04	-67.46	-68.47	22.04	89.7	67.5	51.4
8.45	-82.13	-67.36	-68.72	21.98	89.8	67.1	50.3
8.43	-82.54	-68.13	-68.66	22.04	89.8	66.8	55.2
8.41	-81.85	-68.13	-68.47	22.04	90	66.6	52.8
8.51	-82.58	-67.2	-68.5	18.99	89.5	66.6	52.4
8.39	-82.58	-67.82	-68.47	18.47	89	67.1	56
8.48	-82.49	-67.51	-68.57	22.07	89.5	66.9	48.9
8.48	-82.9	-67.62	-68.72	22.04	89.4	66.6	49.4
8.46	-82.4	-67.36	-68.72	20.45	89.2	66.3	53.5
8.05	-82.4	-67.3	-68.38	18.89	88.5	66.4	51.1
8.41	-82.4	-67.62	-68.35	18.56	88.1	66.8	51.3
8.48	-82.49	-67.82	-68.66	22.07	88.5	66.8	53.4
8.48	-82.31	-67.15	-68.6	22.01	88.6	66.3	49.2
8.44	-82.36	-66.99	-68.66	22.04	88.6	66.1	50.7
8.44	-82.17	-67.72	-68.75	19.44	88.5	66	52.9

8.35	-82.45	-67.51	-68.5	18.77	88	66.2	49.5
8.41	-82.22	-67.67	-68.6	21.83	88.1	66.7	51.6
8.46	-82.72	-67.36	-68.72	22.01	88.3	66.4	48.9
8.43	-82.4	-67.62	-68.53	22.04	88.3	65.9	53.3
8.41	-82.77	-67.62	-68.41	21.83	88.2	65.9	49.9
8.33	-82.26	-67.62	-68.53	19.14	87.8	65.8	53.7
8.36	-82.4	-67.77	-68.57	18.68	87.5	66.2	51.5
8.5	-82.77	-67.2	-68.72	22.07	87.6	66.3	48
8.43	-82.17	-66.99	-68.66	22.1	88.1	66	51.6
8.41	-82.49	-67.46	-68.47	22.1	88.1	65.8	53.8
8.43	-82.26	-67.25	-68.57	22.13	88.2	65.6	50
8.49	-82.45	-67.3	-68.5	19.14	87.8	65.7	52
8.39	-82.22	-67.67	-68.69	18.77	87.5	65.9	51.6
9.78	-82.36	-67.41	-68.6	21.89	87.7	66.3	51.6
8.43	-82.58	-67.2	-68.84	22.13	87.9	65.8	50.3
8.44	-82.22	-67.88	-68.66	22.13	88.3	65.7	54.4
8.5	-81.9	-67.67	-68.75	19.17	88.1	65.5	51.2
8.35	-83	-67.51	-68.66	18.77	88	65.8	49.5
8.53	-82.54	-67.46	-68.5	22.16	88.6	65.9	51.9
8.47	-82.08	-67.2	-68.75	22.19	88.9	65.6	50.8
8.43	-82.17	-67.77	-68.78	22.13	89	65.6	51.1
8.44	-81.85	-67.15	-68.6	21.06	89.4	65.5	52.3
8.5	-82.58	-67.62	-68.69	19.17	89.4	65.5	51.6
8.33	-82.63	-67.56	-68.72	18.93	89.4	65.8	52.9
8.41	-82.36	-67.2	-68.69	21.37	89.7	65.9	53.9
8.47	-82.86	-68.13	-68.75	22.07	90.3	65.8	50.5
8.47	-82.17	-67.56	-68.63	22.16	90.7	65.8	48.9
8.37	-82.49	-67.98	-68.75	19.2	90.6	65.8	51.3
8.41	-82.63	-66.94	-68.6	18.71	90.8	66.2	51.6
8.5	-82.54	-66.89	-68.63	22.1	91.4	66.3	50.1
8.52	-82.95	-67.62	-68.69	22.04	91.8	66.2	53.7
8.41	-82.63	-67.72	-68.75	21.95	92.3	66	52.2
8.46	-83.13	-67.56	-68.63	20.21	92.8	65.9	51.8
8.35	-82.17	-67.82	-68.47	18.93	92.7	66.1	52.6
8.44	-82.22	-67.82	-68.63	21.31	92.7	66.8	51.8
8.5	-82.72	-67.51	-68.69	22.01	93.3	66.4	53.8
8.48	-82.54	-67.82	-68.47	22.13	93.2	66.5	51.3
8.4	-82.86	-67.56	-68.53	19.2	92.3	66.3	52.1
8.41	-82.45	-67.56	-68.53	20.33	92.2	66.9	51.1
8.47	-82.58	-67.51	-68.84	22.13	92.3	66.9	52.2
8.49	-83	-67.82	-68.66	22.13	91.8	66.6	52.5
8.48	-82.49	-67.51	-68.75	22.16	91.8	66.4	53.8
8.45	-82.22	-67.67	-68.78	19.84	91.7	66.5	51.4
8.36	-82.77	-67.41	-68.69	18.96	90.7	66.7	52.4
8.4	-82.22	-67.41	-68.63	20.33	91.8	67	53.3
8.54	-82.4	-66.68	-68.81	22.1	92.1	66.9	52.3
8.49	-82.77	-67.51	-68.69	22.1	92.3	66.7	53.6

8.48	-82.81	-67.15	-68.78	21.37	92.9	66.7	51.7
8.24	-82.08	-67.1	-68.63	18.89	92.9	66.7	51.7
8.43	-82.58	-67.1	-68.72	21.98	93	67.3	48.4
8.52	-82.77	-67.46	-68.66	22.04	92.9	66.9	51.4
8.44	-82.49	-67.98	-68.72	22.1	92.6	66.7	56.3
8.47	-82.31	-67.05	-68.78	20.48	94.4	66.7	54.8
8.19	-82.31	-67.82	-68.66	18.96	93.6	66.9	52.5
8.42	-82.54	-66.32	-68.72	20.39	92.9	67.5	52.7
8.56	-82.08	-67.51	-68.78	22.1	91.8	67.2	51.4
8.51	-81.9	-67.36	-68.78	22.1	91.1	67	51.9
8.48	-82.77	-67.36	-68.81	21.37	88.9	66.8	50.5
8.37	-82.4	-67.41	-68.75	19.02	86.8	66.8	51.8
8.57	-82.4	-67.67	-68.69	22.1	86.5	67.2	55.6
8.5	-82.26	-67.46	-68.84	22.1	87.6	66.7	50.9
8.43	-82.72	-67.3	-68.78	22.16	88.7	66.4	49.7
8.45	-82.36	-67.2	-68.93	22.1	89.7	66.3	51.4
8.13	-82.45	-67.56	-68.69	19.05	89.8	66.4	51.9
8.39	-83.04	-67.51	-68.69	20.3	89.8	67	51.6
8.55	-82.36	-67.72	-68.78	22.07	90.6	66.8	50.7
8.46	-82.63	-68.08	-68.72	22.07	91.5	66.5	53
8.32	-82.86	-67.77	-68.75	19.29	91.5	66.3	51.2
8.38	-82.95	-67.2	-68.78	20.51	92	67.1	52.9
8.47	-82.45	-68.19	-68.75	22.1	92.5	66.8	52.4
8.43	-82.36	-67.25	-68.72	22.13	92.9	66.8	51.1
8.41	-82.03	-67.62	-68.66	22.07	93.2	66.5	50.3
8.42	-82.72	-67.98	-68.72	19.57	93	66.5	53
8.35	-83.23	-67.77	-68.75	19.02	92.9	66.8	53.6
8.42	-82.95	-67.88	-68.75	20.36	92.9	67.4	52.5
8.51	-82.72	-67.62	-68.78	22.13	92.9	67.1	54.7
8.43	-82.63	-67.62	-68.87	22.13	93.1	66.8	53.1
8.42	-82.58	-67.41	-68.87	21.79	93.8	66.8	52.2
7.64	-82.9	-67.51	-68.75	19.17	93.3	66.8	51.2
8.38	-83.04	-67.77	-68.78	20.24	93.3	67.4	52.8
8.49	-82.36	-68.39	-68.78	22.1	93.6	67.1	54.1
8.49	-82.31	-67.3	-68.87	22.19	93.5	66.9	54
8.53	-83.23	-67.82	-68.6	20.12	93.3	66.7	54.5
8.37	-82.54	-68.08	-68.81	19.02	93	66.9	50.4
8.43	-82.45	-67.56	-68.78	22.13	92.9	67.4	54
8.42	-82.86	-67.77	-68.69	22.19	93.3	66.9	52.4
8.46	-82.49	-68.13	-68.69	22.25	93	66.8	50.3
8.44	-82.72	-67.82	-68.63	20.57	92.7	66.6	48.1
8.32	-82.31	-66.94	-68.87	19.17	92.5	66.7	51.7
8.41	-82.49	-67.67	-68.75	20.3	92.4	67.2	52.8
8.6	-82.77	-67.93	-68.69	22.22	92.7	67.1	51.4
8.55	-82.4	-67.88	-68.75	22.25	92.4	66.5	53.8
8.45	-82.86	-67.46	-68.84	22.22	92.5	66.6	53.1
8.43	-82.9	-66.94	-68.78	19.57	92.2	66.4	48.8

8.38	-82.31	-67.77	-68.87	19.02	91.6	66.7	53
8.8	-83.23	-67.93	-68.6	22.19	91.5	67.2	53.4
8.49	-82.63	-67.3	-68.57	22.25	91.5	66.5	49.9
8.5	-82.77	-67.98	-68.72	22.34	91.2	66.4	51.6
8.21	-82.81	-67.56	-68.93	19.26	90.5	66.4	52.8
8.43	-82.95	-67.67	-68.87	20.94	90.2	66.9	52.7
8.56	-83.59	-67.51	-68.99	22.28	90.3	66.7	51.2
8.42	-82.86	-67.72	-68.81	22.22	90.5	66.3	53
8.53	-82.77	-67.72	-68.9	22.25	90.5	66.3	51.6
8.47	-82.13	-67.67	-68.81	19.69	90	66	51.9
8.36	-82.63	-67.56	-68.84	19.08	89.7	66.2	51.6
8.54	-82.95	-68.45	-68.63	22.13	89.6	66.7	51.6
8.47	-83.04	-68.19	-68.81	22.25	89.4	66.3	51.5
8.41	-82.95	-67.72	-68.87	22.34	88.8	66	48.9
8.42	-83.09	-67.62	-68.9	19.66	88.4	65.9	50.3
8.32	-82.81	-66.63	-69.05	19.14	87.8	65.9	51
8.42	-82.58	-67.77	-68.87	19.69	87.9	66.4	52.6
8.57	-82.81	-67.62	-68.75	22.34	88.3	66.2	52.5
8.5	-83	-67.46	-68.9	22.41	88.4	65.9	53
8.42	-83.36	-67.67	-68.84	22.34	88.7	65.8	51.6
8.44	-82.72	-68.08	-68.9	21.95	88.5	65.7	52.7
8.43	-83	-67.46	-68.9	19.41	88.1	65.6	52.5
8.39	-82.95	-67.62	-68.84	18.99	87.9	66	51.3
8.48	-82.36	-67.51	-68.96	22.31	88.2	66	52.6
8.51	-82.9	-67.15	-68.81	22.28	88.3	65.7	53.1
8.44	-82.77	-67.93	-68.96	22.44	87.7	65.5	53.4
8.39	-82.17	-67.82	-68.9	19.51	87	65.3	52.9
8.38	-82.72	-67.72	-68.93	19.08	86	65.8	51
8.41	-83.04	-68.08	-69.02	22.25	85.7	66	53.5
8.56	-82.77	-67.3	-68.96	22.28	85.7	65.7	50.9
8.5	-82.86	-67.98	-68.87	22.41	85.7	65.5	49.1
8.48	-82.63	-67.72	-69.02	22.41	85.4	65.2	49.3
8.45	-82.86	-67.67	-69.05	19.63	85.1	65	51.6
8.36	-83	-67.62	-68.96	19.05	84.8	65.1	51.3
8.51	-82.36	-67.77	-69.15	22.41	85.2	65.5	52
8.42	-82.58	-67.98	-69.05	22.34	85.4	65.1	55.9
8.39	-82.95	-67.2	-68.99	22.44	85.3	65.1	50.7
8.4	-82.58	-67.67	-69.11	19.44	84.5	64.8	51.5
8.38	-82.72	-67.77	-68.93	18.99	84.2	65.2	54.3
8.41	-82.95	-68.08	-68.96	19.35	83.9	65.3	51.4
8.53	-82.58	-67.82	-69.08	22.31	84.2	65.1	51.2
8.43	-83.41	-68.24	-69.05	22.31	84.5	64.9	48.4
8.5	-83.04	-67.93	-68.9	22.41	84.5	64.7	52.1
8.49	-82.9	-67.56	-69.02	20.12	84.2	64.5	51.9
8.36	-83.18	-67.62	-69.02	19.08	84.1	64.8	50.2
8.41	-82.9	-67.82	-68.93	21.76	83.9	65	53.4
8.5	-82.49	-67.93	-69.18	22.34	84.2	64.7	53.7

8.42	-82.95	-66.94	-68.99	22.5	84.3	64.4	51.2
8.39	-82.45	-67.56	-69.02	20.24	84.2	64.2	48.4
8.38	-82.72	-67.72	-69.05	19.08	83.6	64.7	51.6
8.52	-82.58	-67.93	-68.93	22.41	84.1	64.7	50
8.51	-82.95	-68.08	-68.93	22.44	84.2	64.5	50.2
8.47	-82.81	-68.08	-68.93	22.41	84.3	64.2	53.6
8.53	-82.58	-67.77	-68.78	19.32	83.9	64.2	50.5
8.36	-82.72	-67.77	-69.02	19.05	83.1	64.3	52.8
8.5	-83	-67.72	-69.08	22.44	83.1	64.7	52.1
8.39	-83.18	-67.98	-68.99	22.34	83.3	64.3	51.3
8.41	-82.4	-68.34	-68.99	22.47	83.5	64.1	51.5
8.5	-82.9	-67.41	-68.96	19.69	83.2	64.1	52.4
8.39	-82.58	-67.67	-69.05	19.08	82.8	64.2	54.7
8.64	-82.17	-67.62	-68.96	22.44	83	64.5	51.7
8.39	-83.23	-68.76	-69.11	22.44	83.2	64.1	50.7
8.43	-82.45	-67.98	-69.05	22.44	83.3	64	53.4
8.53	-83	-67.82	-69.15	22.47	83.5	63.7	50.9
8.41	-83	-67.77	-68.84	19.41	83.4	63.7	48.9
8.36	-83.23	-67.67	-68.99	19.08	83.2	64.1	51.6
8.65	-82.81	-67.93	-69.08	22.34	83.7	64.5	53.1
8.65	-82.81	-67.93	-69.08	22.34	83.7	64.5	53.1
8.55	-83.04	-67.56	-69.15	22.53	84.2	64.1	52.2
8.55	-83.04	-67.56	-69.15	22.53	84.2	64.1	52.2
8.41	-83.68	-67.88	-68.87	22.44	84.5	63.7	49.9
8.48	-82.72	-67.82	-69.08	20.21	84.6	63.7	52.4
8.32	-82.72	-67.67	-68.87	19.2	84.6	64	52.4
8.44	-83.04	-67.82	-69.05	22.31	85.1	64.5	53.6
8.44	-82.81	-68.24	-69.05	22.31	85.8	64.1	50.7
8.46	-82.63	-67.36	-69.18	22.41	86.4	63.9	52.9
8.51	-83.13	-67.51	-69.33	19.47	86.4	63.9	51.9
8.37	-82.58	-67.77	-68.87	19.02	86.5	64.2	51.8
8.46	-83.13	-68.08	-68.96	22.31	87.4	64.7	50.5
8.41	-82.9	-67.51	-69.15	22.31	88.1	64.2	50.5
8.38	-83.36	-68.08	-68.93	22.31	88.6	64.4	50.2
8.37	-83.04	-67.2	-69.08	19.51	88.3	64.2	51
8.41	-82.77	-67.82	-69.18	20.24	88.3	64.7	52.4
8.48	-83.36	-67.98	-68.99	22.25	89.7	65.3	51.4
8.47	-83.36	-67.56	-69.15	22.28	90.3	65.8	53.3
8.44	-83.36	-68.91	-69.21	19.2	90.7	66.1	51.4
8.36	-82.86	-67.98	-68.9	18.83	91.2	66.9	51.9
8.53	-83.27	-67.41	-69.27	22.22	92.3	67.5	52
8.47	-83.09	-67.88	-68.93	22.22	92.8	67.4	52
8.5	-82.81	-67.88	-68.9	20.91	93.9	67.8	53.7
8.18	-83.36	-67.93	-69.08	19.02	93.8	67.9	52.3
8.41	-83	-67.46	-69.3	20.76	94.4	68.7	52.2
8.53	-83.27	-67.72	-69.08	22.13	95.2	69	52.5
8.47	-83	-67.82	-69.3	22.1	95.9	68.8	53.2

8.46	-83.09	-67.98	-69.27	19.72	96.4	69	53
8.37	-82.72	-67.2	-69.3	18.77	96.6	70.1	51.3
8.54	-83	-67.51	-69.02	22.07	97.3	70.8	51.7
8.48	-82.86	-67.46	-69.3	22.01	97.7	70.2	50.1
8.51	-83.45	-67.72	-69.11	19.99	97.9	70.1	52.6
8.38	-83.13	-67.41	-69.15	18.93	97.9	70.7	52.5
8.41	-82.77	-68.39	-69.05	20.6	98.4	71.1	52.7
8.53	-83.13	-67.46	-69.18	21.95	98.7	71.1	51.3
8.47	-83.36	-67.93	-69.15	21.95	99.1	70.9	50.7
8.36	-82.77	-67.93	-69.05	19.11	99.3	71.1	52.8
8.57	-82.77	-67.93	-69.15	21.98	99.1	72.2	49.9
8.47	-83.32	-67.82	-69.33	22.01	99	72.3	49.9
8.35	-83.59	-68.55	-69.36	20.27	100	72.6	52.9
8.47	-83.5	-68.39	-69.27	21.92	100.2	72.6	52.9
8.39	-83.41	-68.39	-69.3	19.14	99.7	70.6	51.2
8.5	-83.59	-68.08	-69.42	22.01	99.5	70.6	51.1
8.47	-83.41	-68.5	-69.02	22.04	99.2	70	52.1
8.41	-84	-68.45	-69.15	19.14	98.4	69.5	51.1
8.46	-83.04	-68.24	-69.21	21.95	98.3	70.1	51.7
8.46	-83.32	-68.29	-69.27	22.1	97.7	69.1	51.9
8.41	-83.55	-68.29	-69.39	19.11	96.7	69	53.9
8.5	-83.64	-68.29	-69.15	22.04	96.9	69.3	54.6
8.45	-84.23	-68.39	-69.45	22.1	96.9	68.9	51.7
8.4	-83.36	-68.76	-69.3	19.23	96.8	68.8	52.1
8.51	-83.55	-68.13	-69.3	22.1	97.3	69	53.2
8.38	-83.41	-67.98	-69.33	22.04	97.1	68.7	52
8.39	-83.87	-68.29	-69.3	18.89	96.4	68.9	50.2
8.53	-83.77	-68.5	-69.18	22.04	96.7	68.8	50.7
8.5	-83.5	-68.19	-69.18	21	96.5	68.5	52.3
8.36	-83.68	-67.82	-69.33	19.41	96.2	68.9	51.8
8.46	-83.77	-67.98	-69.42	22.13	96.5	68.7	52
8.41	-83.68	-69.38	-69.18	20.6	96.6	68.4	52.7
8.35	-83.59	-68.55	-69.45	20.42	96.3	68.9	53.6
8.39	-83.55	-68.55	-69.39	22.13	96.5	68.6	52.4
8.1	-83.96	-68.71	-69.48	18.96	96.4	68.6	53.5
8.47	-83.64	-68.65	-69.36	22.1	96.4	68.8	50.5
8.41	-83.77	-67.88	-69.48	21.03	96.7	68.3	53.7
8.35	-83.27	-68.45	-69.54	20.18	96.2	68.9	53.6
8.41	-84.37	-68.5	-69.36	22.04	96.8	68.7	51.8
8.4	-83.77	-68.19	-69.48	20.05	96.6	68.4	50.1
8.35	-84.05	-68.24	-69.45	19.78	96.1	68.9	51.8
8.42	-84.19	-69.38	-69.57	22.01	95.8	68.6	53
8.47	-83.73	-68.65	-69.36	19.99	96	68.4	50
8.41	-84.05	-68.76	-69.54	21.58	95.5	68.9	54.7
8.5	-83.73	-68.86	-69.48	22.01	96.1	68.4	49.2
8.43	-83.87	-68.45	-69.48	19.44	95.9	68.4	42.6
8.37	-83.68	-69.22	-69.54	21.7	95.9	68.9	51.9

8.47	-83.91	-68.29	-69.66	22.1	96.1	68.5	48.3
8.51	-83.73	-68.45	-69.6	19.35	95.4	68.3	50.5
8.53	-84	-68.45	-69.57	21.98	95.3	69	53.5
8.47	-83.45	-68.55	-69.57	22.07	95.3	68.4	51.9
7.98	-83.5	-68.19	-69.51	18.93	94.8	68.3	52
8.53	-83.96	-67.98	-69.57	22.01	95.1	68.4	50.5
8.44	-83.73	-69.02	-69.42	21.55	95	68.3	54.1
8.38	-83.36	-68.81	-69.54	20.33	94	68.6	51.4
8.42	-83.91	-67.77	-69.6	22.07	94	68.3	51.4
8.43	-84.37	-68.5	-69.54	18.93	93.2	68.1	51.5
8.53	-83.23	-68.5	-69.66	22.1	92.9	68.4	50.5
8.48	-83.59	-68.5	-69.69	22.07	92.7	68.1	51
8.36	-83.32	-68.19	-69.54	18.83	92	68.3	51.4
8.5	-84	-68.55	-69.66	22.07	92.2	68.2	53.8
8.46	-83.77	-68.34	-69.6	21.64	91.6	67.9	51.3
8.35	-83.87	-68.71	-69.6	18.77	90.7	68.1	53.9
8.42	-83.64	-68.91	-69.51	22.1	90.8	68.1	56.2
8.45	-84.05	-68.65	-69.63	19.78	90.7	67.6	52
8.57	-83.73	-68.71	-69.57	22.13	90.2	68.1	50.5
8.42	-83.96	-68.08	-69.6	22.19	90.1	67.7	50
8.32	-83.87	-67.98	-69.54	18.89	89.4	67.6	51.9
8.53	-83.5	-68.34	-69.69	22.19	89.7	67.7	52.2
8.41	-83.96	-67.88	-69.66	22.16	89.7	67.4	51.6
8.34	-83.64	-68.34	-69.66	18.93	88.9	67.4	52
8.5	-83.73	-68.6	-69.6	22.16	89	67.5	51.6
8.44	-83.59	-68.55	-69.63	22.16	89	66.9	42.4
8.35	-84.1	-69.02	-69.54	18.96	88.8	67.3	50.5
8.41	-83.96	-68.97	-69.69	22.13	89.3	67.1	52.2
8.46	-83.45	-67.98	-69.69	20.97	89.4	66.9	51.2
8.42	-83.91	-68.34	-69.66	18.83	88.6	67.1	51.9
8.43	-84.05	-68.45	-69.63	22.16	88.7	67.1	52.1
8.5	-84.23	-68.39	-69.6	22.25	88.6	66.8	51.3
8.33	-84.46	-68.5	-69.69	20.09	87.7	67	51.8
8.46	-83.96	-68.6	-69.57	22.22	88.3	66.9	53.2
8.22	-83.87	-68.24	-69.69	19.32	87.5	66.5	51.4
8.54	-84	-68.29	-69.88	22.28	87.5	66.6	51.6
8.42	-84.19	-67.77	-69.69	22.25	87.9	66.4	46.7
8.35	-83.77	-68.39	-69.73	19.05	87.4	66.6	51.6
8.5	-83.77	-69.07	-69.6	22.22	88.1	66.5	52.1
8.52	-83.41	-68.86	-69.79	19.63	88.1	66.1	53.8
8.64	-84.1	-68.76	-69.82	22.25	87.5	66.8	51.4
8.46	-83.73	-68.6	-69.69	22.19	87.5	66.1	52.8
8.36	-83.68	-69.07	-69.69	19.05	86.5	66.1	50.9
8.53	-84.14	-68.55	-69.69	22.31	87	66.1	48.6
8.47	-84.23	-68.76	-69.69	19.72	86.7	66	52.5
8.67	-84.23	-68.24	-69.85	22.25	86.3	66.4	51.8
8.42	-84.51	-68.5	-69.66	22.25	86.5	65.9	49.7

8.47	-83.91	-68.76	-69.82	19.51	86.1	65.8	52
8.35	-83.96	-68.45	-69.88	21.55	85.3	66.1	53.7
8.47	-84.19	-68.5	-69.63	22.28	85.6	65.8	52.8
8.38	-84.32	-67.98	-69.76	19.41	85.3	65.6	53.7
8.52	-84.05	-69.02	-69.66	22.25	85.3	65.9	51.4
8.38	-84.19	-68.19	-69.76	22.34	85.4	65.5	52.7
8.35	-84	-68.76	-69.94	20.39	84.9	65.7	51.8
8.48	-83.91	-68.71	-69.79	22.34	86	65.5	48.9
8.45	-84.23	-68.97	-69.6	19.44	85.9	65.3	50.5
8.56	-84.14	-68.24	-69.76	22.28	85.7	65.8	51.8
8.46	-84.19	-68.6	-69.6	22.31	85.7	65.4	51.6
8.35	-84.14	-68.24	-69.88	19.26	85.1	65.3	53.2
8.46	-84.05	-68.5	-69.76	22.31	85	65.5	50.7
8.42	-83.73	-69.07	-69.85	22.34	85	65.2	50.5
8.35	-83.73	-68.71	-70.12	18.99	84.8	65.4	53.1
8.51	-84.05	-68.76	-69.85	22.31	85.3	65.4	53.8
8.43	-84.37	-68.86	-69.6	22.28	85.5	65	53.7
8.35	-84.14	-68.45	-69.79	19.02	85	65.2	51.3
8.47	-84.28	-68.81	-69.94	22.25	85.3	65.1	53.5
8.39	-83.96	-68.65	-69.63	21.46	85.2	64.9	52.1
8.37	-84.37	-68.97	-69.91	21.86	84.5	65.2	51.7
8.43	-84.28	-69.17	-69.76	22.34	85.3	64.8	52.5
8.28	-84.32	-69.54	-69.63	19.08	85.1	64.8	52.3
8.5	-83.91	-68.76	-69.79	22.31	85.4	64.9	54.2
8.44	-84	-68.71	-70.12	19.87	85.4	64.7	51.8
8.35	-83.87	-68.24	-69.82	22.13	85.3	65.2	52.7
8.45	-84.19	-68.6	-70.06	22.31	85.7	64.8	52.2
8.46	-84.78	-69.12	-70.06	19.6	85.5	64.7	50.7
8.59	-84.64	-68.29	-69.79	22.19	85.2	65.1	52.2
8.43	-84	-68.65	-69.85	22.28	85.9	64.7	55.8
8.47	-84.6	-68.71	-69.88	19.2	86	64.5	50.3
8.44	-84	-68.08	-70.12	22.22	86.4	64.9	51.1
8.42	-84.55	-68.39	-70.09	20.54	87.1	64.7	50.7
8.54	-84	-69.07	-69.82	22.19	87.5	65.2	52.1
8.34	-83.91	-68.71	-69.76	22.1	88.2	64.8	53
8.35	-84.19	-68.45	-69.88	21.79	88	65.1	54.3
8.46	-84.69	-68.81	-69.85	22.13	88.8	64.8	51.5
8.41	-84.55	-68.45	-69.69	19.47	89.5	64.8	52.8
8.35	-84	-68.76	-70	21.18	89.6	65.2	52
8.42	-84.05	-68.5	-69.91	22.22	90.3	65.1	44.5
8.45	-84	-68.81	-70	20.85	90.6	65	53.7
8.35	-84.64	-68.45	-69.94	20.05	90.2	65.5	52.4
8.45	-84.97	-68.76	-69.73	22.13	90.6	65.4	51.2
8.42	-84.42	-68.65	-69.88	19.72	90.7	65.3	53.4
8.35	-84.55	-68.71	-70	20.36	90.7	65.7	51.3
8.44	-84.55	-68.91	-69.91	22.13	91.7	65.6	51.9
8.45	-84.19	-68.55	-69.94	19.6	91.5	65.3	51.4

8.51	-84.97	-68.55	-70.12	22.07	91.5	65.9	51.9
8.47	-84.28	-69.02	-69.91	22.1	92.1	65.6	51.1
8.32	-84.37	-68.76	-70	18.89	91.8	65.8	51.7
8.46	-83.96	-68.5	-69.91	22.01	92.1	65.8	51.6
8.43	-84.6	-68.45	-69.97	21.95	91.9	65.7	49.5
8.33	-84	-68.45	-69.88	18.83	91.5	65.9	51.4
8.47	-84.74	-68.71	-69.85	22.04	91.7	65.9	56
8.46	-84.28	-68.97	-70.31	20.05	91.9	65.7	51.7
8.35	-84.28	-67.88	-69.88	21.34	91.4	66.3	51.9
8.48	-83.96	-68.71	-69.97	22.13	91.8	66.1	51.7
8.38	-84.74	-69.8	-69.97	19.05	91.1	65.8	52.6
8.55	-83.91	-68.81	-70	22.1	91.7	66.3	53.9
8.39	-84.23	-69.59	-70.09	22.1	91.8	65.9	49.1
8.35	-84.97	-68.76	-69.97	19.05	91	66	49
8.52	-83.5	-68.55	-70	22.04	91.1	66.3	52.5
8.35	-84.55	-69.38	-70.12	22.07	91.4	65.8	50.9
8.38	-84.51	-68.71	-69.97	18.77	91.5	66.3	51.6
8.38	-84.42	-69.64	-69.91	22.04	92.4	66.1	51.8
7.85	-84.51	-69.02	-70.12	18.96	92.1	66.1	53.9
8.47	-85.01	-69.64	-69.88	22.04	93	66.5	48.7
8.39	-84.32	-68.65	-70.18	19.44	93	66.2	52.6
8.38	-84.55	-69.38	-70	21.92	93.1	66.9	50.7
8.5	-83.96	-68.6	-70.15	21.98	94	66.5	53.5
8.44	-84.14	-68.86	-69.91	19.69	93.8	66.5	51.8
8.37	-84.46	-69.33	-69.97	20.6	93.6	67	54.6
8.48	-83.68	-68.76	-70	22.01	93.9	66.5	50.5
8.45	-84.19	-68.55	-70.09	19.23	93.8	66.5	50.1
8.45	-84.46	-68.81	-69.82	22.01	94	67.1	52.2
8.5	-84.1	-68.29	-69.82	22.01	94.5	66.5	46.5
8.35	-84.1	-68.81	-69.97	18.71	94.2	67	51.9
8.41	-83.77	-68.91	-69.97	22.01	95.1	67	52.5
8.38	-84.55	-69.02	-70.09	18.99	94.9	66.8	49.2
8.45	-84.42	-68.65	-69.91	21.95	95.4	67.3	51.5
8.39	-84.32	-67.88	-70	20.12	95.5	67	51.1
9.38	-84.1	-68.76	-70	21.86	95.4	67.7	49.7
8.43	-84.64	-68.86	-70	22.01	95.5	67.2	53
8.47	-84.14	-69.02	-70.12	18.96	95.2	67.2	52.6
8.56	-83.73	-68.76	-70.09	21.86	95.4	67.8	51.6
8.44	-84.37	-69.48	-70.12	21.95	95.5	67.4	53.8
8.29	-84.19	-68.76	-70.15	18.99	95.3	67.4	50.1
8.51	-83.91	-69.02	-69.85	21.92	95.8	67.8	51.6
8.46	-84.55	-68.86	-70	21.55	95.9	67.5	52.4
8.38	-84.6	-68.76	-70.09	20.85	95.9	67.9	51.7
8.38	-84.23	-68.29	-69.85	21.92	96.3	67.5	52
8.17	-84.28	-68.45	-70.09	18.68	96.2	67.7	54.4
8.5	-84.19	-68.97	-69.88	21.86	96.6	67.8	52.3
8.39	-84.32	-69.07	-70.06	20.12	96.3	67.7	51.3

8.4	-84.32	-69.54	-70.18	21.15	96.2	68	52.1
8.47	-84.83	-68.71	-69.97	21.86	96.4	67.9	51.6
8.06	-84.37	-69.02	-70	18.77	96	67.9	49.5
8.47	-84.55	-68.81	-70.06	21.89	95.9	67.9	53
8.48	-84.64	-69.38	-70.06	19.23	95.4	67.7	49.5
8.53	-84.19	-69.33	-69.97	21.92	95.3	68.2	51.3
8.44	-84.14	-69.12	-70.12	21.92	95.2	67.9	52.5
8.37	-84.42	-68.91	-70.18	19.02	94.5	68.2	51.4
8.47	-84.55	-68.97	-70.12	21.86	94.9	67.9	54.2
8.43	-84.69	-68.81	-70.06	20.54	94.8	67.8	52
8.38	-84.46	-69.12	-70.18	19.2	94.2	68.3	50.5
8.47	-84.19	-69.17	-70.06	21.76	94.1	68	51.6
8.5	-84.28	-69.43	-70.46	19.26	93.8	67.8	53.9
8.75	-84.64	-68.97	-70.06	21.58	93.3	68.2	51.3
8.38	-84.32	-68.81	-70.15	21.89	93.8	67.8	52.4
8.39	-84.37	-69.95	-70.12	18.99	92.9	67.7	52.8
8.44	-84.74	-68.91	-70.18	21.92	93.1	68.1	53.5
8.46	-84.51	-69.17	-70.27	21.92	93	67.9	54
8.29	-84.64	-69.17	-69.97	18.96	92.6	67.6	51.8
8.52	-84.19	-69.12	-70.34	21.95	92.3	68	54.2
8.37	-84.14	-68.91	-70.06	21.89	92.4	67.7	50.7
8.35	-84.42	-68.91	-70.15	19.02	91.7	67.9	51.6
8.48	-84.46	-69.43	-70.34	21.92	92.1	67.6	52.6
8.42	-83.96	-69.02	-70.15	19.02	91.8	67.5	56.1
8.58	-84.19	-68.91	-70.31	21.89	91.6	67.9	50.1
8.36	-85.47	-68.76	-70.06	21.95	91.7	67.5	51.1
8.28	-84.83	-69.33	-70.06	18.99	90.9	67.5	51.6
8.43	-84.51	-69.02	-69.97	21.95	90.9	67.5	51.6
8.4	-84.28	-68.97	-70.24	21.98	90.8	67.3	51.9
8.33	-84.32	-68.91	-70.34	18.59	90.3	67.5	54.1
8.47	-84.6	-68.76	-70.24	21.95	90.8	67.4	51.7
8.29	-84.6	-69.02	-70.31	19.05	90.3	67.2	52.3
8.46	-84.28	-68.39	-70.18	22.01	90.2	67.4	49.5
8.5	-84.83	-68.91	-70.27	21.98	90.3	67.1	52.5
8.34	-84.32	-68.97	-70.21	18.96	89.7	67.4	53
8.41	-84.46	-69.74	-70.52	22.01	90.2	67.2	52.7
8.45	-84.32	-69.48	-70.49	19.51	89.9	66.8	52.2
8.64	-84.1	-68.86	-70.4	21.98	89.6	67.5	50.8
8.36	-85.06	-68.81	-70.24	21.98	89.7	66.9	52.8
8.34	-84.46	-69.38	-70.24	19.9	88.9	67.1	48.4
8.47	-84.55	-69.33	-70.31	22.07	89.5	66.9	50.8
8.44	-84.19	-69.33	-70.21	19.23	89.2	66.7	49
8.36	-84.97	-69.59	-70.18	21.89	88.8	67.2	51.2
8.41	-84.42	-68.86	-70.37	22.04	89.3	66.8	51.9
8.39	-84.64	-68.71	-70.12	18.86	88.8	66.6	48.4
8.5	-84.46	-69.12	-70.4	21.98	88.7	67	47.4
8.44	-84.42	-69.48	-70.21	21.95	88.8	66.6	53.6

8.47	-84.74	-69.59	-70.31	18.93	88.4	66.4	53.1
8.47	-84.74	-69.64	-70.18	22.13	88.1	67	53.6
8.39	-84.28	-69.54	-70.24	22.04	88.6	66.5	50.5
8.27	-84.83	-68.97	-70.27	18.93	87.8	66.3	50.9
8.44	-84.28	-68.81	-70.43	22.07	88.2	66.4	52.6
8.47	-84.37	-69.07	-70.46	19.93	88.1	66.1	53.5
8.35	-85.19	-69.33	-70.18	21.67	87.5	66.7	50.8
8.46	-84.37	-69.38	-70.34	22.07	88.1	66.1	51.6
8.03	-85.1	-69.69	-70.31	18.77	87.5	66	53.5
8.42	-84.51	-69.17	-70.43	22.07	87.8	66.2	51.4
8.47	-84.78	-69.43	-70.24	19.69	87.6	65.8	52
8.36	-84.46	-69.17	-70.31	20.63	87.1	66.4	52.9
8.42	-84.78	-69.07	-70.31	22.07	87.5	66.1	52.3
8.37	-85.24	-69.12	-70.37	19.93	87.5	65.8	50.9
8.32	-84.74	-69.17	-70.31	20.33	86.6	66.1	51
8.42	-84.83	-69.48	-70.24	22.07	87.2	65.9	52.8
8.39	-85.06	-69.07	-70.52	18.89	86.6	65.7	53.3
8.45	-84.46	-69.59	-70.37	22.04	86.6	66.1	52.7
8.38	-84.78	-69.02	-70.21	22.07	87	65.8	53.8
8.41	-84.83	-69.12	-70.46	18.93	86.7	65.5	55.1
8.53	-85.51	-69.02	-70.18	22.07	86.6	66.1	50.2
8.37	-84.28	-69.33	-70.12	22.07	87.1	65.6	51
8.26	-84.42	-69.02	-70.37	19.14	86.5	65.4	51.9
8.52	-84.19	-69.38	-70.34	22.04	86.6	66	50.5
8.41	-84.42	-69.07	-70.49	22.1	87.1	65.6	52.2
8.27	-84.32	-69.48	-70.27	19.08	86.6	65.3	51.7
8.46	-84.74	-69.33	-70.43	21.98	87.2	65.8	54.4
8.47	-84.74	-69.33	-70.34	22.13	87.8	65.6	50.5
8.34	-85.56	-68.65	-70.55	19.72	87.5	65.8	52.7
8.44	-84.6	-69.33	-70.37	22.07	88.6	65.5	53.7
8.33	-84.23	-69.64	-70.31	18.77	87.9	65.6	53.2
8.47	-84.14	-69.69	-70.24	22.13	88.6	65.6	49.2
8.44	-84.78	-69.07	-70.24	19.2	88.6	65.6	49.4
8.42	-84.78	-69.38	-70.43	22.1	88.9	65.9	52.9
8.45	-84.28	-69.33	-70.7	22.07	89.7	65.6	51.8
8.3	-84.97	-68.91	-70.49	19.96	89.3	65.9	52.1
8.48	-85.06	-69.07	-70.52	22.1	90	65.8	51.9
8.01	-85.24	-69.54	-70.37	18.89	89.8	65.7	52.6
8.39	-84.74	-69.48	-70.46	22.04	90.6	65.9	51.2
8.38	-84.6	-68.5	-70.43	22.1	90.8	65.7	51.7
8.34	-84.83	-69.02	-70.37	18.71	90.9	66	52.9
8.48	-85.01	-68.97	-70.4	22.1	91.8	66	51
8.45	-85.15	-69.43	-70.61	19.63	92	65.8	53.1
8.35	-84.83	-68.97	-70.43	21.46	92.2	66.4	51.6
8.45	-84.83	-69.33	-70.4	22.01	92.6	66	54.9
8.17	-85.24	-69.43	-70.4	18.8	92.5	66.2	51.9
8.46	-85.33	-69.33	-70.61	22.01	93.1	66.4	51.8

8.49	-85.33	-69.54	-70.4	19.17	92.9	66.2	53.4
8.53	-85.15	-69.38	-70.4	22.01	93.3	66.6	51.5
8.35	-85.42	-69.64	-70.43	21.7	93.6	66.5	53.1
8.34	-85.1	-69.95	-70.46	20.85	93.7	66.9	48.4
8.45	-84.42	-69.59	-70.64	22.01	94.2	66.6	50.8
8.35	-85.38	-69.59	-70.4	18.74	94	66.8	52
8.45	-85.01	-69.33	-70.67	21.98	95	66.8	51.5
8.4	-84.51	-69.8	-70.61	18.96	95	66.9	53.7
8.54	-85.15	-69.54	-70.43	22.01	95.3	67.2	54.2
8.47	-85.1	-69.59	-70.55	21.98	96.2	67	51.5
8.35	-84.64	-69.8	-70.55	18.74	95.9	67.3	50.5
8.52	-85.06	-69.48	-70.49	21.98	96.8	67.3	51.7
8.5	-84.87	-69.59	-70.52	19.47	96.9	67.2	53
8.63	-84.37	-69.85	-70.4	21.92	97.3	67.9	50.5
8.42	-84.74	-69.38	-70.49	21.89	97.7	67.5	52.3
8.33	-84.87	-69.54	-70.55	18.62	98.2	67.9	51.8
8.47	-85.38	-69.43	-70.76	21.92	98.8	67.7	51.9
8.3	-84.78	-69.22	-70.58	19.05	98.6	67.6	51
8.52	-84.78	-69.54	-70.55	21.92	99.1	67.9	52.4
8.49	-85.33	-69.33	-70.67	20.73	98.7	67.9	52
8.37	-84.74	-68.91	-70.58	21.06	97.3	68.4	53.3
8.39	-84.78	-69.48	-70.46	21.95	98.6	68.1	51.2
8.13	-85.61	-70.21	-70.64	18.86	97.6	68.1	52.6
8.47	-85.29	-69.9	-70.55	21.89	98.9	68.3	54
8.47	-84.87	-69.59	-70.55	19.23	98.6	68.2	51.5
8.55	-84.87	-69.64	-70.7	21.92	98.9	68.7	51
8.47	-84.78	-70	-70.58	21.92	98.7	68.2	52
8.37	-84.64	-69.8	-70.52	20.82	98.1	68.8	50.4
8.45	-84.69	-69.07	-70.73	21.98	98.1	68.4	53.8
8.01	-84.69	-69.17	-70.61	18.93	97.7	68.4	52.9
8.54	-85.06	-69.33	-70.61	21.89	98.3	68.7	50.7
8.48	-85.15	-69.48	-70.61	20.21	98.1	68.5	53
8.4	-85.24	-69.64	-70.52	21.7	98	69	50
8.41	-84.83	-69.38	-70.58	21.98	98.3	68.7	55.1
8.2	-84.74	-68.6	-70.52	18.77	98.3	68.7	52.5
8.45	-84.64	-69.54	-70.73	21.95	99.1	68.9	52.3
8.51	-84.97	-70.05	-70.82	19.29	98.7	68.7	51.7
8.48	-84.97	-69.43	-70.49	21.95	98.5	69.1	52.9
8.35	-84.83	-69.33	-70.7	21.67	98.8	68.8	49.5
8.41	-84.69	-69.64	-70.55	21.79	98.4	69.5	52.8
8.44	-85.42	-69.48	-70.7	21.98	98.8	69	52.5
8.33	-84.6	-69.54	-70.85	18.74	98.2	69	50.4
8.52	-84.69	-69.33	-70.67	21.95	98.7	69	51.8
8.42	-85.1	-69.22	-70.64	19.17	98.4	68.9	51.6
8.5	-85.06	-70.26	-70.67	21.89	98.3	69.5	49
8.46	-84.78	-69.69	-70.58	21.95	98.4	69	51.3
8.35	-84.87	-69.17	-70.82	18.71	98.3	69.1	52.1

8.42	-85.19	-69.59	-70.67	22.01	98.4	69.3	53.9
8.44	-85.29	-69.59	-70.55	21.98	98.6	69	54.9
8.35	-85.15	-70	-70.52	18.71	98.3	69.4	52.8
8.51	-85.15	-69.07	-70.67	21.98	98.5	69	52.4
8.52	-84.74	-69.43	-70.92	18.93	98.4	68.9	53.4
8.57	-84.83	-69.54	-70.92	21.92	98.6	69.4	51
8.5	-84.97	-70	-70.55	19.99	98.4	69	51.8
8.75	-85.01	-69.74	-70.7	21.98	98.1	69.8	51.9
8.42	-84.69	-69.85	-70.98	21.89	98.1	69.1	51.6
8.29	-85.42	-69.64	-70.73	18.8	97.6	69.1	50.8
8.52	-85.1	-69.9	-70.64	21.98	97.7	69.3	51.8
8.52	-84.83	-69.85	-70.55	22.01	97.3	69	52.7
8.35	-84.74	-69.43	-70.73	18.68	96.3	69.3	51.3
8.41	-84.97	-69.59	-70.76	21.92	96.2	69	51.6
8.52	-85.06	-69.9	-70.73	19.02	95.5	68.9	52.8
8.5	-85.15	-70	-70.95	22.01	95.3	69.3	51
8.45	-84.6	-69.48	-70.85	21.15	95.1	68.8	53.8
8.64	-85.51	-69.48	-70.76	21.95	94.4	69.4	51.8
8.5	-85.06	-69.69	-70.73	21.95	94.3	68.8	54
8.35	-84.55	-69.48	-70.95	18.86	93.3	68.8	53.1
8.43	-85.24	-69.43	-70.67	21.98	93.6	68.7	52.7
8.36	-84.74	-69.17	-70.92	18.93	92.7	68.4	52.8
8.46	-84.83	-70	-70.92	21.98	92.6	68.9	51.5
8.35	-85.84	-69.85	-70.89	21.18	92.4	68.3	52.8
8.37	-85.24	-69.17	-70.7	21.21	91.9	68.8	50.8
8.4	-85.38	-69.48	-70.98	22.04	92.1	68.5	53.4
8.35	-84.64	-69.9	-70.92	19.14	91.7	68.1	51.1
8.5	-85.24	-70.16	-70.73	22.04	91.5	68.5	51
8.4	-84.64	-70.63	-70.76	21.49	91.6	68.1	53.1
8.35	-84.83	-69.43	-70.67	19.54	90.7	68.4	53.6
8.42	-85.15	-69.17	-70.85	22.07	90.9	68.1	53.2
8.38	-85.47	-69.85	-70.67	19.02	90.4	67.9	52.3
8.47	-84.78	-69.48	-70.85	22.07	90.6	68	51.8
8.38	-85.38	-69.22	-70.95	20.24	90.6	67.8	53
8.37	-85.19	-69.54	-71.1	21.89	89.9	68.1	49.9
8.46	-85.1	-69.8	-71.01	22.07	90.1	67.8	50
8.37	-85.15	-69.9	-71.01	19.08	89.7	67.7	50.5
8.53	-85.24	-69.85	-70.95	22.07	89.7	67.8	53.3
8.47	-84.87	-69.9	-71.1	21.31	89.7	67.5	50.7
8.35	-84.55	-70.05	-70.92	20.05	89	67.9	53.7
8.45	-85.47	-69.59	-70.92	22.1	89.6	67.4	51.7
8.41	-85.29	-69.8	-70.92	21.18	89.4	67.2	51.2
8.31	-85.65	-69.95	-70.95	18.68	88.7	67.5	51.2
8.43	-85.19	-69.8	-70.85	22.1	89.2	67.2	51.9
8.5	-84.78	-69.85	-70.82	19.35	89.3	67.1	45.4
8.43	-85.61	-69.54	-71.04	22.13	89	67.4	50.9
8.5	-85.38	-69.64	-70.98	22.13	89.3	67	54.6

8.32	-85.19	-70.37	-70.89	18.8	88.6	67.2	51.3
8.51	-85.7	-69.9	-70.76	22.1	88.6	67	51.4
8.43	-84.51	-70.26	-71.01	22.13	88.7	66.8	54.8
8.33	-85.42	-69.22	-70.76	18.8	88.1	67	52.5
8.47	-85.47	-69.74	-71.01	22.13	88.1	67	52.2
8.46	-85.19	-69.74	-70.95	19.54	88.2	66.5	52.8
8.53	-85.19	-70.31	-70.92	22.16	87.9	67.1	51.2
8.46	-85.38	-69.8	-71.01	22.16	88.1	66.6	53.9
8.33	-85.29	-69.9	-70.95	18.77	87.5	66.7	52.1
8.52	-85.24	-70.37	-71.04	22.13	87.9	66.7	52.3
8.44	-85.65	-70.16	-70.85	20.02	88	66.3	52.7
8.35	-85.38	-69.43	-71.01	22.04	87.5	66.8	51.9
8.41	-84.78	-70	-70.82	22.16	87.9	66.5	50.3
8.45	-85.06	-70.16	-71.01	19.14	87.8	66	51.6
9.09	-85.56	-70.31	-70.89	22.04	87.6	66.7	50.5
8.47	-85.1	-69.9	-70.95	22.16	87.8	66.2	53
8.35	-85.29	-69.59	-71.04	19.17	87.5	66	50.8
8.54	-85.19	-69.69	-70.95	22.1	87.4	66.5	53.8
8.37	-85.33	-69.74	-70.95	22.16	87.3	66	53.5
8.14	-85.15	-70.16	-71.16	18.89	87.1	66	53.8
8.49	-84.78	-69.8	-71.13	22.19	87.3	66.1	52.3
8.34	-84.97	-69.85	-70.89	21.95	87.2	65.8	53.9
8.29	-85.19	-69.9	-71.04	19.66	86.4	66.2	49
8.4	-85.47	-69.43	-71.07	22.22	87	65.9	52.3
8.47	-84.83	-69.43	-71.01	19.41	86.7	65.7	52.6
8.38	-85.1	-69.64	-71.01	21.76	86.5	66.3	54.5
8.45	-85.33	-69.43	-71.01	22.16	87	65.8	52.2
8.46	-85.1	-70.05	-71.22	19.44	87	65.7	52.7
8.38	-85.42	-69.8	-71.01	22.1	86.7	66.1	49.5
8.44	-86.29	-70	-70.98	22.19	87.4	65.9	52.2
8.5	-85.84	-70.47	-71.83	22.31	87.4	65.8	51.9
8.41	-86.11	-70.11	-71.71	19.84	87.4	65.8	52.6
8.32	-85.65	-70.89	-71.74	19.26	86.8	66.1	51.5
8.51	-85.74	-70.89	-71.8	22.25	87.7	65.9	53.6
8.38	-86.06	-70.83	-71.74	22.13	87.9	65.7	52.7
8.32	-86.29	-70	-71.68	19.08	87.5	65.9	50.5
8.53	-85.97	-70.63	-71.53	22.41	88.3	66	56
8.39	-86.48	-70.73	-71.47	22.31	88.6	65.7	51.1
8.22	-86.16	-70.31	-71.65	19.44	88.6	65.7	51.6
8.37	-86.29	-70.73	-71.68	22.16	89.5	66.4	50
8.39	-86.16	-70.63	-71.8	22.31	90.3	65.9	49.2
8.37	-85.84	-70.63	-71.53	19.51	90.6	65.8	52.1
8.39	-86.34	-70.16	-71.68	21.15	90.8	66.3	51.5
8.39	-86.11	-70.16	-71.86	22.19	91.8	66.1	52.5
8.41	-85.79	-69.64	-71.56	20.24	92.4	66	48
8.37	-85.93	-71.04	-71.71	21	92.2	66.5	51.7
8.42	-86.25	-70.73	-71.86	22.13	92.9	66.2	49.5

8.29	-86.06	-70.05	-71.77	19.05	93	66.2	51.2
8.42	-85.7	-70.37	-71.77	22.13	94	66.8	52.9
8.48	-85.56	-70.47	-71.83	22.13	94.3	66.4	52.1
8.32	-85.47	-69.9	-71.83	18.86	94.4	66.8	52.7
8.54	-85.88	-70.73	-71.77	22.1	94.8	67	49.2
8.44	-85.7	-70.37	-71.86	22.1	95.1	66.7	53.7
8.29	-86.2	-70.99	-71.8	19.11	95.2	67	53.1
8.43	-86.25	-70.47	-71.74	22.07	95.8	67.5	50.4
8.41	-86.11	-71.25	-71.86	22.07	96.1	67.2	51.6
8.09	-86.11	-70.57	-71.89	18.93	96.2	67.3	51.9
8.51	-86.2	-70.63	-71.86	22.01	96.4	67.8	51.3
8.4	-85.93	-70.21	-71.86	22.04	96.7	67.5	54.4
8.5	-86.25	-70.57	-71.86	19.23	96.9	67.6	52.3
8.39	-85.65	-70.42	-71.8	20.97	97.1	68.1	52.1
8.41	-86.16	-70.26	-71.74	22.01	97.6	67.9	49.9
8.5	-86.2	-70.83	-71.86	19.44	97.6	67.9	51.6
8.39	-85.51	-70.16	-71.71	19.96	97.3	68.5	52.7
8.47	-85.93	-71.3	-71.8	21.98	97.9	68.2	52
8.42	-85.65	-70.57	-71.77	19.81	98.5	68.1	54.9
8.34	-85.88	-70.83	-71.68	18.62	98.7	68.7	51.3
8.46	-85.79	-70.89	-71.77	22.01	99.3	68.6	50.5
8.46	-86.25	-70.83	-71.8	21.92	99.5	68.5	52.4
8.36	-85.7	-70.47	-71.83	18.74	99.5	68.8	52.4
8.56	-85.7	-70.42	-71.74	21.86	100.3	68.9	51.4
8.45	-85.74	-70.05	-71.83	21.89	100.2	68.7	55.1
8.32	-86.43	-71.3	-71.86	18.56	99.7	69.1	53.7
8.5	-86.48	-70.94	-71.8	21.92	100.1	69	52
8.47	-86.16	-70.47	-71.65	20.09	100	68.7	52.8
8.38	-86.11	-70.73	-71.89	20.51	99.3	69.6	51.9
8.42	-86.16	-70.83	-71.68	21.92	99.5	69	49.8
8.28	-86.06	-71.09	-71.68	18.99	98.7	69.3	53.5
8.43	-86.29	-70.63	-71.77	21.95	98.8	69.7	52.7
8.39	-86.16	-70.21	-71.83	20.48	98.8	69.4	52.8
8.38	-85.56	-70.47	-71.89	21.43	98.7	69.8	54.1
8.5	-85.79	-70.63	-71.8	21.92	99.2	69.4	54.7
8.36	-86.06	-70.68	-71.74	19.08	98.7	69.4	52.2
8.47	-86.48	-70.11	-71.74	21.83	98.9	70	52
8.39	-85.65	-70.42	-71.89	21.92	98.9	69.6	50.8
8.46	-86.52	-70.42	-71.74	18.89	99	69.5	50.9
8.5	-85.93	-70.63	-71.77	21.92	99.2	70.1	53.7
8.39	-85.88	-70.16	-72.08	21.89	99.2	69.8	49.8
8.09	-86.29	-70.42	-71.71	18.71	99.1	69.8	51.2
8.54	-85.97	-71.14	-71.95	21.83	99.2	70.1	51.9
8.42	-86.2	-70.42	-71.86	21.89	99.3	69.9	49.1
8.4	-85.97	-70.42	-71.98	18.93	99	70	51
9.1	-85.79	-70.47	-71.86	21.73	99.2	70.4	53.9
8.47	-85.7	-70.94	-71.95	21.89	99.1	70	52.3

8.31	-85.84	-70.21	-71.89	18.62	98.5	70.1	53.6
8.45	-86.11	-70.63	-71.83	21.79	99	70.1	53
8.41	-85.79	-70.37	-71.95	21.86	98.9	69.8	50.3
8.34	-86.06	-69.9	-71.95	18.68	98.4	70.1	51.7
8.49	-86.11	-70.78	-72.01	21.86	98.7	70.4	52.1
8.44	-85.93	-70.83	-71.98	21.89	98.8	70.1	47.4
8.41	-85.97	-70.57	-71.95	18.89	98.4	69.9	50.1
8.53	-85.84	-70.68	-71.92	21.89	98.2	70.7	50.5
8.39	-85.93	-70.78	-71.86	21.92	98.4	70	52.5
8.38	-86.16	-71.04	-71.92	18.89	98.2	70	53.2
9.41	-86.43	-71.35	-71.77	21.7	98	70.5	52.6
8.44	-86.16	-70.78	-71.92	21.92	98	70	53.8
8.52	-85.74	-70.68	-71.83	18.89	97.5	70	51.5
9.26	-86.16	-70.73	-71.92	21.76	97.3	70.6	56.3
8.38	-86.2	-70.47	-71.74	21.92	97.3	70	50.4
8.42	-86.38	-70.73	-71.83	18.99	97.1	69.9	50.4
8.4	-86.2	-70.94	-71.92	21.4	96.8	70.5	53.7
8.47	-86.06	-71.2	-71.95	21.89	96.8	69.9	53.2
8.33	-86.29	-70.83	-71.83	18.99	96.6	69.8	52.7
8.5	-85.93	-70.57	-71.89	21.86	96.4	70.2	48.7
8.39	-85.88	-70.73	-71.95	21.92	96.3	69.7	46.6
8.33	-85.97	-70.83	-71.89	18.96	95.9	69.7	51.6
8.57	-86.25	-70.94	-71.8	21.92	95.7	70.3	51.5
8.41	-86.25	-70.57	-71.89	21.86	95.8	69.8	52.3
8.44	-86.43	-71.04	-71.98	19.17	95.3	69.4	52
8.41	-85.65	-70.47	-71.95	21.09	95	70	50.9
8.43	-85.97	-71.3	-71.98	21.89	95.3	69.5	54.2
8.39	-86.11	-70.94	-71.98	19.35	95.3	69.3	53.6
8.39	-85.97	-70.89	-72.08	19.72	95.1	69.9	52.1
8.46	-86.34	-70.37	-72.01	21.92	95.2	69.5	50.4
8.43	-86.2	-70.68	-72.2	20.05	95.1	69.1	51.1
8.34	-86.38	-70.73	-71.89	19.05	94.5	69.6	51.9
8.41	-86.34	-70.83	-72.23	21.92	95.1	69.5	52.3
8.33	-86.29	-71.46	-71.86	21.79	95.1	69	54.4
8.34	-86.25	-71.35	-72.01	18.68	94.5	69.3	52.2
8.48	-85.93	-70.63	-72.05	21.92	94.9	69.4	52.7
8.46	-85.93	-70.83	-71.98	21.95	94.9	69	53.5
8.49	-86.06	-70.73	-72.01	19.08	94.6	69	52.4
8.4	-86.48	-71.14	-71.92	19.78	94.1	69.5	52.2
8.46	-86.34	-70.68	-72.01	21.95	94.6	69	52.8
8.36	-86.16	-71.14	-72.08	19.41	94.2	68.9	51.6
8.38	-85.88	-70.26	-72.2	20.05	93.8	69.4	52.4
8.51	-86.16	-70.83	-72.14	21.92	94	69	53
8.45	-86.11	-70.57	-71.95	21.86	94.1	68.8	49.1
8.34	-85.93	-70.78	-72.14	18.5	93.8	69	52.7
8.55	-86.52	-70.42	-72.23	21.98	94.1	69	51.5
8.42	-86.25	-70.94	-72.08	21.95	94.4	68.7	51.6

8.35	-85.84	-70.78	-72.01	18.62	93.8	68.9	53.1
8.43	-86.11	-70.68	-72.01	21.92	94.1	69	54
8.5	-86.29	-70.78	-72.14	20.33	94	68.6	52
8.35	-86.66	-71.2	-71.92	21.25	93.7	69	53.9
8.46	-86.43	-70.57	-72.01	21.92	94.1	68.7	52.5
8.35	-86.25	-70.78	-71.89	18.93	93.9	68.6	53.8
8.46	-86.16	-70.83	-72.17	21.89	94	68.9	53.2
8.41	-86.71	-70.37	-72.11	21.89	94.1	68.6	52.8
8.46	-86.2	-70.94	-71.98	19.05	93.9	68.4	52.9
8.41	-86.25	-71.09	-71.89	21.18	93.8	69	54.4
8.46	-86.43	-71.09	-72.11	21.89	94	68.5	51.7
8.37	-86.29	-70.83	-72.17	18.99	93.7	68.3	50.4
8.45	-86.11	-70.78	-72.08	21.86	93.6	68.8	53.2
8.46	-85.84	-70.94	-71.98	21.92	93.8	68.3	52.3
8.35	-85.7	-70.73	-72.17	18.53	93.3	68.4	52.3
8.53	-85.97	-70.89	-71.92	21.86	93.6	68.5	52.4
8.42	-86.25	-70.42	-72.01	21.76	93.8	68.3	52.6
8.35	-86.2	-71.14	-72.01	18.86	93.2	68.6	52.6
8.45	-86.43	-70.78	-71.98	21.89	93.5	68.5	51.7
8.46	-86.38	-71.14	-72.14	18.89	92.9	68.2	53.4
8.38	-86.2	-70.83	-72.05	21.73	92.8	68.8	50.4
8.46	-85.93	-70.68	-72.17	21.86	93	68.2	52.2
8.47	-86.25	-70.63	-72.08	18.8	92.9	68.1	51.2
8.71	-85.88	-70.99	-72.14	21.83	92.9	68.8	50.7
8.47	-86.52	-70.99	-72.08	21.89	93	68.1	50.3
8.37	-85.88	-70.31	-72.08	18.96	92.6	67.9	50.8
8.38	-86.2	-70.68	-72.05	20.79	92.5	68.5	56.1
8.46	-86.34	-71.46	-72.14	21.73	92.8	68.2	52.2
8.41	-86.89	-71.4	-72.05	19.08	92.6	67.9	51.6
8.67	-85.84	-70.16	-72.47	21.55	92.6	68.6	52.2
8.47	-86.06	-70.68	-72.2	21.92	92.9	68	54.8
8.39	-86.43	-70.89	-72.11	19.11	92.7	67.9	51.6
8.36	-85.97	-70.47	-72.05	21.73	92.6	68.5	52.9
8.48	-86.57	-70.99	-72.26	21.89	93	68	51.2
8.4	-86.34	-70.47	-72.26	21.86	93.3	67.9	52.3
8.28	-86.61	-70.57	-72.17	18.44	93	68	50.7
8.51	-86.29	-70.78	-72.2	21.89	93.6	68.2	50.3
8.46	-86.57	-71.04	-72.17	21.89	94	67.9	52.8
8.33	-86.2	-70.26	-72.29	18.83	93.5	68.3	54.2
8.42	-86.06	-70.83	-72.38	21.95	94	68.1	50.9
8.35	-86.16	-70.94	-72.2	18.89	94.3	67.9	53.4
8.48	-86.8	-70.31	-72.38	21.79	94.9	68.3	52.2
8.37	-86.75	-70.99	-72.08	21.86	95.5	68.1	51.9
8.14	-86.25	-70.68	-72.17	18.8	95.3	68	50.3
8.41	-86.2	-71.3	-72.17	21.92	95.7	68.4	53.3
8.37	-86.34	-70.57	-72.08	21.86	96.1	68	52.1
8.29	-85.84	-70.47	-72.17	18.56	96.1	68.3	52.1

8.46	-86.52	-70.89	-72.2	21.83	96.4	68.5	53.4
8.36	-86.66	-71.4	-71.98	21.86	96.8	68.4	52.7
8.34	-86.34	-70.78	-72.2	18.93	96.6	68.3	52.2
8.48	-86.57	-70.78	-72.17	21.89	97.1	69	55
8.45	-86.57	-70.94	-72.08	21.83	97.4	68.6	54.6
8.26	-86.75	-71.25	-72.17	18.59	97.4	68.7	50.7
8.5	-85.97	-70.89	-72.11	21.89	97.7	69	50
8.36	-85.97	-71.14	-72.14	21.92	98.4	68.9	53
7.96	-86.38	-71.04	-72.32	18.74	98.3	68.9	52.3
8.53	-86.11	-70.89	-72.17	21.83	98.6	69.5	53.3
8.47	-86.66	-71.56	-72.17	21.83	98.9	69	51.6
8.05	-86.29	-71.09	-72.32	18.71	98.9	69	51.7
8.53	-86.34	-70.99	-72.11	21.83	99.5	69.5	52.2
8.45	-86.52	-71.51	-72.32	21.86	99.7	69.3	51.6
8.3	-86.43	-70.99	-72.14	18.5	99.6	69.7	54.3
8.44	-86.93	-70.94	-72.11	21.79	100.4	69.8	55.1
8.37	-86.61	-71.25	-72.29	21.76	101	69.7	53.8
8.21	-85.84	-70.73	-72.01	18.89	101.1	69.6	51.5
8.8	-86.61	-71.2	-72.11	21.67	101.4	70.2	52.3
8.47	-85.88	-70.78	-72.17	21.76	101.6	70	51.6
8.44	-86.25	-71.4	-72.17	19.35	101.9	70	55
8.35	-86.11	-71.25	-72.08	18.89	101.9	70.5	52.4
8.49	-86.38	-71.04	-72.23	21.79	102.3	70.2	49.5
8.42	-86.06	-71.09	-72.29	19.66	102.6	70.1	53.3
8.37	-86.34	-70.99	-72.2	19.47	102.6	70.8	52.3
8.51	-86.48	-70.89	-72.14	21.76	102.7	70.4	53.5
8.41	-86.52	-70.78	-72.2	19.17	103	70.3	53.7
8.4	-86.38	-70.68	-72.32	21.18	103.4	71	51.6
8.45	-86.06	-71.14	-72.41	21.64	103.4	70.7	51.4
8.39	-86.2	-70.89	-72.5	18.68	102.8	70.6	53.2
8.52	-86.71	-71.2	-72.26	21.67	102.3	71.2	51.9
8.38	-86.52	-70.78	-72.26	21.73	101.8	70.9	51.5
8.36	-86.57	-71.2	-72.32	18.35	101.5	70.9	51.9
8.46	-86.29	-71.3	-72.2	21.67	101.4	71.2	51.5
8.46	-86.66	-70.68	-72.29	21.58	101.4	70.9	52.2
8.35	-86.38	-70.57	-72.44	18.47	100.9	71	50.7
8.46	-86.52	-70.89	-72.59	21.7	101	71.3	51
8.5	-86.48	-70.83	-72.32	21.7	101.1	71.1	50.1
8.32	-86.57	-71.25	-72.32	18.68	100.7	71	52.3
8.62	-86.66	-70.78	-72.47	21.64	100.5	71.6	52
8.39	-86.61	-70.83	-72.47	21.76	98.8	71.1	51.4
4.09	-88.4	-68.29	-71.83	19.75	95.8	70.9	51.3
8.42	-80.71	-64.97	-71.31	-0.21	81.5	72.1	58.8
8.41	-79.79	-64.55	-71.07	-0.18	77.7	72.2	65
8.38	-79.24	-64.19	-70.85	-0.18	75.2	72.3	68.3
8.36	-78.92	-63.98	-70.64	-0.18	73.6	72.3	71.1
8.35	-78.6	-63.83	-70.49	-0.15	72.6	72.4	73

-3.49	-183.5	-212.5	-119.97	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.94	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.97	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.97	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.94	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.97	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.97	-25	-74.8	-74.9	-72.5
-3.49	-183.5	-212.5	-119.94	-25	-74.8	-74.9	-72.5
8.35	-77.09	-62.63	-69.39	-0.12	69.4	70.3	80.3
8.35	-77	-62.53	-69.27	-0.12	70	71.1	80.5
8.35	-76.91	-62.43	-69.15	-0.15	70.4	71.8	80.7
8.35	-76.82	-62.32	-69.05	-0.18	70.7	72.2	81
8.35	-76.72	-62.27	-68.96	-0.18	70.9	72.4	81
8.35	-76.59	-62.22	-68.9	-0.15	70.9	72.5	81.1
8.35	-76.54	-62.17	-68.81	-0.15	70.9	72.6	81.1
8.35	-76.49	-62.17	-68.72	-0.18	70.9	72.7	81
8.35	-76.4	-62.17	-68.63	-0.18	70.9	72.7	81.1
8.35	-76.31	-62.12	-68.57	-0.15	70.9	72.6	81.1
8.35	-76.27	-62.12	-68.5	-0.18	70.9	72.6	81
8.35	-76.22	-62.01	-68.38	-0.18	70.9	72.6	81
8.35	-76.13	-61.91	-68.32	-0.18	70.8	72.6	80.9
8.35	-76.08	-61.7	-68.23	-0.18	70.8	72.5	80.8
8.35	-75.95	-61.65	-68.14	-0.18	70.8	72.5	80.6
8.34	-75.9	-61.54	-68.05	-0.18	70.8	72.5	80.6
8.34	-75.85	-61.49	-67.99	-0.18	70.7	72.4	80.5
8.34	-75.76	-61.44	-67.92	-0.18	70.7	72.4	80.3
8.33	-75.72	-61.34	-67.83	-0.18	70.7	72.4	80.1
8.33	-75.67	-61.29	-67.77	-0.18	70.6	72.3	79.9
8.33	-75.62	-61.23	-67.71	-0.21	70.7	72.3	79.7
8.32	-75.58	-61.18	-67.62	-0.18	70.6	72.3	79.8
8.32	-75.49	-61.08	-67.56	-0.18	70.5	72.3	79.4
8.32	-75.44	-61.03	-67.5	-0.21	70.6	72.2	79.3
8.32	-75.4	-60.97	-67.44	-0.21	70.5	72.2	79
8.31	-75.35	-60.92	-67.37	-0.21	70.5	72.2	79
8.31	-75.3	-60.87	-67.31	-0.21	70.4	72.1	78.9
8.31	-75.26	-60.82	-67.22	-0.21	70.4	72.1	78.8
8.31	-75.21	-60.77	-67.19	-0.21	70.4	72.1	78.7
8.29	-75.12	-60.71	-67.13	-0.21	70.3	72	78.3
8.29	-75.12	-60.66	-67.1	-0.21	70.3	72	78.3
8.29	-75.08	-60.61	-67.04	-0.21	70.3	72	78
8.29	-75.03	-60.56	-66.98	-0.21	70.2	71.9	77.9
8.29	-74.98	-60.51	-66.92	-0.21	70.1	71.9	77.9
8.29	-74.94	-60.4	-66.83	-0.21	70.2	71.8	77.7
8.29	-74.85	-60.35	-66.79	-0.24	70.1	71.8	77.6
8.28	-74.8	-60.3	-66.73	-0.21	70.1	71.8	77.6
8.28	-74.75	-60.3	-66.67	-0.21	70.1	71.8	77.4
8.28	-74.71	-60.2	-66.61	-0.24	70.1	71.7	77.2

8.28	-74.66	-60.14	-66.55	-0.21	70.1	71.6	77
8.26	-74.62	-60.14	-66.52	-0.24	70.1	71.6	77
8.27	-74.57	-60.09	-66.49	-0.21	70	71.6	76.9
8.27	-74.53	-60.04	-66.43	-0.21	69.9	71.4	77
8.26	-74.48	-59.99	-66.37	-0.21	69.9	71.4	76.7
8.26	-74.43	-59.94	-66.34	-0.21	69.9	71.3	76.7
8.26	-74.39	-59.88	-66.31	-0.21	69.8	71.3	76.6
8.26	-74.34	-59.83	-66.25	-0.21	69.8	71.3	76.5
8.25	-74.3	-59.78	-66.21	-0.21	69.8	71.3	76.4
8.25	-74.25	-59.78	-66.15	-0.24	69.7	71.2	76.3
8.25	-74.25	-59.68	-66.09	-0.24	69.7	71.2	76.2
8.25	-74.16	-59.68	-66.03	-0.24	69.7	71.2	76.1
8.24	-74.11	-59.62	-66	-0.24	69.6	71.1	75.8
8.24	-74.07	-59.57	-66	-0.21	69.6	71.1	75.7
8.24	-74.07	-59.52	-65.94	-0.21	69.6	71	75.6
8.24	-74.02	-59.52	-65.88	-0.24	69.3	71	75.5
8.23	-73.98	-59.47	-65.85	-0.24	69.4	70.9	75.6
8.23	-73.93	-59.42	-65.82	-0.24	69.3	70.9	75.4
8.23	-73.88	-59.42	-65.76	-0.21	69.3	70.8	75.4
8.23	-73.84	-59.31	-65.7	-0.21	69.3	70.8	75.2
8.22	-73.75	-59.31	-65.7	-0.21	69.2	70.8	74.9
8.22	-73.75	-59.26	-65.67	-0.24	69.1	70.7	74.9
8.22	-73.7	-59.16	-65.6	-0.24	69.2	70.7	74.7
8.22	-73.66	-59.16	-65.57	-0.21	69.1	70.7	74.8
8.22	-73.61	-59.11	-65.51	-0.21	69.1	70.7	74.8
8.21	-73.56	-59.05	-65.51	-0.21	69	70.6	74.6
8.21	-73.56	-59	-65.45	-0.24	69	70.5	74.6
8.21	-73.47	-58.95	-65.42	-0.21	69	70.4	74.6
8.21	-73.47	-58.9	-65.39	-0.21	69	70.4	74.5
8.2	-73.43	-58.9	-65.36	-0.18	69	70.3	74.3
8.2	-73.38	-58.9	-65.3	-0.24	68.9	70.3	74.3
8.2	-73.38	-58.85	-65.27	-0.21	68.9	70.2	74.2
8.2	-73.34	-58.79	-65.24	-0.21	68.8	70.2	74.1
8.2	-73.29	-58.79	-65.21	-0.24	68.9	70.1	74
8.18	-73.24	-58.69	-65.18	-0.21	68.8	70.1	73.8
8.18	-73.24	-58.74	-65.12	-0.24	68.7	70.1	73.7
8.18	-73.2	-58.69	-65.09	-0.24	68.7	70	73.5
8.19	-73.15	-58.64	-65.05	-0.21	68.6	70	73.5
8.19	-73.15	-58.59	-65.05	-0.21	68.6	70	73.4
8.18	-73.11	-58.59	-64.99	-0.21	68.6	69.9	73.2
8.18	-73.11	-58.53	-64.96	-0.21	68.5	69.8	73.2
8.18	-73.01	-58.53	-64.93	-0.21	68.5	69.8	73.4
8.18	-72.97	-58.48	-64.9	-0.21	68.5	69.8	73.2
8.18	-73.01	-58.48	-64.87	-0.21	68.5	69.8	73.2
8.17	-72.92	-58.43	-64.81	-0.21	68.4	69.7	73.1
8.17	-72.92	-58.43	-64.78	-0.21	68.4	69.7	72.9
8.17	-72.88	-58.38	-64.75	-0.21	68.4	69.7	73.3

8.17	-72.83	-58.33	-64.72	-0.21	68.4	69.7	73.1
8.17	-72.83	-58.33	-64.69	-0.21	68.3	69.6	73.2
8.17	-72.79	-58.28	-64.66	-0.21	68.3	69.6	73.2
8.16	-72.79	-58.28	-64.6	-0.21	68.3	69.7	73.4
8.16	-72.74	-58.17	-64.6	-0.21	68.3	69.6	73.5
8.16	-72.65	-58.17	-64.51	-0.21	68.3	69.7	73.6
8.16	-72.6	-58.12	-64.51	-0.21	68.3	69.7	73.7
8.15	-72.6	-58.12	-64.44	-0.21	68.3	69.7	73.8
8.15	-72.56	-58.07	-64.41	-0.21	68.3	69.6	73.8
8.15	-72.51	-58.07	-64.38	-0.21	68.3	69.7	74.1
8.15	-72.51	-58.02	-64.35	-0.21	68.4	69.7	74.4
8.15	-72.51	-57.91	-64.32	-0.21	68.4	69.7	74.4
8.15	-72.42	-57.91	-64.29	-0.21	68.4	69.8	74.6
8.14	-72.42	-57.86	-64.23	-0.21	68.4	69.8	74.7
8.14	-72.37	-57.86	-64.23	-0.18	68.5	69.9	75.1
8.14	-72.37	-57.86	-64.2	-0.21	68.5	69.9	75.2
8.14	-72.33	-57.81	-64.17	-0.24	68.5	69.9	75.5
8.14	-72.28	-57.76	-64.14	-0.21	68.6	70	75.5
8.14	-72.24	-57.7	-64.11	-0.21	68.6	70	75.9
8.14	-72.24	-57.7	-64.08	-0.21	68.6	70.1	76.2
8.13	-72.19	-57.65	-64.05	-0.21	68.7	70.1	76.4
8.13	-72.14	-57.65	-64.02	-0.24	68.7	70.1	76.6
8.13	-72.1	-57.65	-63.99	-0.21	68.8	70.2	76.9
8.13	-72.1	-57.6	-63.96	-0.21	68.8	70.2	77.2
8.13	-72.1	-57.55	-63.93	-0.21	68.9	70.2	77.4
8.13	-72.05	-57.55	-63.89	-0.21	68.9	70.3	77.6
8.13	-72.01	-57.5	-63.86	-0.21	69	70.4	77.8
8.13	-71.96	-57.5	-63.83	-0.24	69	70.4	77.8
8.12	-71.96	-57.45	-63.8	-0.24	69	70.5	78
8.11	-71.92	-57.39	-63.74	-0.24	69	70.6	78.4
8.12	-71.92	-57.39	-63.71	-0.24	69.1	70.5	78.7
8.12	-71.87	-57.34	-63.68	-0.24	69.1	70.6	78.8
8.11	-71.87	-57.34	-63.65	-0.24	69.2	70.7	78.9
8.12	-71.82	-57.29	-63.62	-0.24	69.2	70.7	79.4
8.11	-71.78	-57.29	-63.59	-0.21	69.3	70.8	79.5
8.11	-71.73	-57.24	-63.56	-0.24	69.3	70.8	79.7
8.11	-71.69	-57.19	-63.53	-0.24	69.3	70.9	79.8
8.1	-71.69	-57.19	-63.5	-0.21	69.4	70.9	79.9
8.11	-71.69	-57.13	-63.47	-0.24	69.6	71	80.1
8.11	-71.64	-57.13	-63.44	-0.24	69.6	71	80.3
8.11	-71.55	-57.13	-63.41	-0.24	69.7	71	80.5
8.1	-71.55	-57.08	-63.38	-0.21	69.7	71	80.7
8.1	-71.5	-57.03	-63.35	-0.24	69.7	71.1	80.7
8.1	-71.46	-57.03	-63.32	-0.24	69.8	71.2	81
8.1	-71.41	-56.98	-63.28	-0.24	69.8	71.2	81.1
8.1	-71.41	-56.98	-63.28	-0.24	69.8	71.2	81.2
8.1	-71.37	-56.93	-63.25	-0.27	69.9	71.2	81.2

8.1	-71.37	-56.87	-63.19	-0.24	69.8	71.2	81.6
8.1	-71.32	-56.93	-63.19	-0.27	69.9	71.2	81.5
8.1	-71.27	-56.82	-63.16	-0.27	69.9	71.3	81.5
8.09	-71.27	-56.82	-63.13	-0.24	70	71.3	81.7
8.09	-71.27	-56.77	-63.13	-0.27	70	71.3	81.7
8.09	-71.23	-56.77	-63.1	-0.24	70	71.4	81.8
8.09	-71.18	-56.72	-63.07	-0.27	70.1	71.4	81.8
8.09	-71.14	-56.72	-63.04	-0.27	70.1	71.4	81.7
8.09	-71.14	-56.61	-63.01	-0.27	70.1	71.3	81.9
8.09	-71.09	-56.61	-62.95	-0.24	70.1	71.4	81.8
8.09	-71.05	-56.56	-62.92	-0.24	70.1	71.4	81.7
8.08	-71.05	-56.51	-62.89	-0.27	70.1	71.4	82
8.08	-71	-56.51	-62.86	-0.27	70.1	71.3	81.7
8.08	-71	-56.51	-62.86	-0.27	70.1	71.4	81.8
8.08	-71	-56.46	-62.83	-0.24	70.1	71.3	81.5
8.08	-70.91	-56.41	-62.8	-0.27	70.1	71.3	81.6
8.08	-70.91	-56.41	-62.77	-0.27	70.1	71.4	81.6
8.08	-70.91	-56.36	-62.74	-0.27	70.1	71.4	81.3
8.08	-70.86	-56.36	-62.74	-0.27	70.1	71.3	81.3
8.07	-70.82	-56.36	-62.7	-0.27	70.1	71.3	81.3
8.07	-70.82	-56.3	-62.7	-0.27	70.1	71.3	81
8.07	-70.82	-56.25	-62.67	-0.27	70.1	71.3	81
8.07	-70.77	-56.25	-62.61	-0.27	70.1	71.2	80.9
8.07	-70.73	-56.25	-62.61	-0.27	70.1	71.2	80.8
8.07	-70.73	-56.2	-62.58	-0.24	70	71.2	80.6
8.07	-70.68	-56.15	-62.58	-0.27	70.1	71.2	80.4
8.06	-70.63	-56.15	-62.55	-0.27	70	71.1	80.1
8.06	-70.63	-56.15	-62.52	-0.27	70	71.1	79.9
8.06	-70.59	-56.1	-62.49	-0.27	70	71	79.9
8.06	-70.59	-56.1	-62.49	-0.27	69.9	71	79.8
8.06	-70.59	-56.1	-62.46	-0.27	69.9	71	79.4
8.06	-70.54	-56.04	-62.46	-0.27	69.9	70.9	79.2
8.05	-70.54	-56.04	-62.4	-0.27	69.8	70.9	79
8.05	-70.5	-55.99	-62.4	-0.27	69.8	70.8	78.8
8.05	-70.4	-55.94	-62.37	-0.27	69.7	70.8	78.4
8.05	-70.4	-55.94	-62.37	-0.27	69.7	70.7	78.2
8.05	-70.4	-55.89	-62.34	-0.27	69.6	70.7	78
8.04	-70.36	-55.89	-62.31	-0.27	69.6	70.6	77.6
8.04	-70.36	-55.94	-62.28	-0.24	69.4	70.6	77.4
8.04	-70.31	-55.89	-62.28	-0.27	69.4	70.5	77.2
8.04	-70.31	-55.84	-62.25	-0.27	69.3	70.4	77.1
8.04	-70.27	-55.84	-62.25	-0.27	69.3	70.4	76.5
8.04	-70.27	-55.78	-62.16	-0.27	69.2	70.3	76.5
8.03	-70.22	-55.78	-62.16	-0.27	69.2	70.3	76.1
8.03	-70.18	-55.73	-62.12	-0.27	69.1	70.2	75.7
8.03	-70.18	-55.73	-62.09	-0.27	69.1	70.2	75.7
8.02	-70.13	-55.73	-62.09	-0.24	69	70.1	75.5

8.03	-70.13	-55.68	-62.06	-0.27	69	70.1	75.2
8.02	-70.08	-55.68	-62.03	-0.24	69	70	74.9
8.02	-70.08	-55.68	-62.03	-0.24	68.9	70	75
8.02	-70.08	-55.63	-62	-0.27	68.9	70	74.7
8.02	-70.04	-55.63	-61.97	-0.24	68.9	69.9	74.5
8.02	-70.04	-55.58	-61.97	-0.27	68.8	69.9	74.3
8.01	-69.99	-55.58	-61.94	-0.24	68.7	69.8	74.2
8.02	-69.99	-55.53	-61.94	-0.24	68.7	69.8	74
8.01	-69.95	-55.53	-61.91	-0.24	68.7	69.7	73.6
8	-69.95	-55.47	-61.88	-0.27	68.6	69.7	73.7
8	-69.9	-55.37	-61.88	-0.24	68.5	69.6	73.4
8	-69.9	-55.47	-61.85	-0.24	68.6	69.6	73.4
8.01	-69.86	-55.37	-61.82	-0.27	68.5	69.5	73.3
8	-69.81	-55.37	-61.82	-0.24	68.4	69.5	73
8	-69.81	-55.32	-61.79	-0.24	68.4	69.4	72.8
8	-69.76	-55.32	-61.76	-0.24	68.4	69.4	72.5
8	-69.76	-55.27	-61.73	-0.24	68.3	69.3	72.5
8	-69.76	-55.27	-61.73	-0.24	68.3	69.3	72.4
8	-69.72	-55.27	-61.7	-0.24	68.2	69.1	72.2
8	-69.72	-55.21	-61.67	-0.27	68.2	69.1	72
8	-69.72	-55.21	-61.64	-0.24	68.2	69	71.6
7.99	-69.67	-55.16	-61.64	-0.24	68.1	69	71.7
7.99	-69.63	-55.16	-61.61	-0.24	68.1	69	71.5
7.99	-69.58	-55.16	-61.58	-0.24	68	68.9	71.5
7.98	-69.58	-55.11	-61.54	-0.24	68	68.9	71.2
7.99	-69.58	-55.06	-61.54	-0.24	67.9	68.8	71.2
7.99	-69.58	-55.06	-61.51	-0.24	67.9	68.8	70.8
7.99	-69.53	-55.01	-61.51	-0.24	67.9	68.8	70.9
7.98	-69.49	-55.01	-61.48	-0.24	67.9	68.7	70.6
7.99	-69.49	-55.01	-61.45	-0.24	67.9	68.6	70.6
7.98	-69.49	-55.01	-61.45	-0.24	67.8	68.6	70.5
7.98	-69.44	-54.95	-61.39	-0.24	67.8	68.6	70.4
7.98	-69.4	-54.95	-61.36	-0.24	67.7	68.5	70.3
7.98	-69.4	-54.95	-61.36	-0.24	67.7	68.5	70.1
7.98	-69.4	-54.9	-61.33	-0.21	67.6	68.5	70.1
7.98	-69.4	-54.85	-61.33	-0.24	67.6	68.3	70
7.97	-69.31	-54.85	-61.27	-0.24	67.6	68.3	70
7.97	-69.26	-54.8	-61.27	-0.24	67.5	68.2	69.9
7.97	-69.26	-54.8	-61.24	-0.24	67.5	68.3	69.5
7.97	-69.26	-54.8	-61.24	-0.24	67.5	68.2	69.5
7.97	-69.21	-54.8	-61.21	-0.24	67.4	68.2	69.6
7.97	-69.17	-54.8	-61.21	-0.24	67.4	68.1	69.1
7.97	-69.17	-54.75	-61.18	-0.24	67.4	68.1	69.2
7.97	-69.17	-54.69	-61.18	-0.24	67.2	68.1	69.3
7.96	-69.12	-54.69	-61.15	-0.24	67.2	68.1	69.1
7.96	-69.12	-54.69	-61.12	-0.24	67.1	68	69.1
7.96	-69.08	-54.64	-61.09	-0.21	67.1	68	69

7.96	-69.03	-54.64	-61.09	-0.24	67.1	68	69.1
7.96	-69.03	-54.64	-61.06	-0.21	67	67.9	69
7.96	-69.03	-54.59	-61.03	-0.24	67	67.9	69
7.96	-68.99	-54.59	-61.03	-0.21	67	67.9	69
7.95	-68.99	-54.54	-61	-0.24	66.9	67.9	68.9
7.94	-68.94	-54.54	-60.96	-0.24	66.9	67.9	69
7.95	-68.94	-54.49	-60.96	-0.24	66.9	67.9	69
7.95	-68.94	-54.54	-60.93	-0.21	66.9	67.8	68.9
7.95	-68.94	-54.44	-60.93	-0.24	66.9	67.8	68.9
7.95	-68.85	-54.44	-60.9	-0.24	66.8	67.8	69
7.95	-68.85	-54.44	-60.9	-0.21	66.8	67.8	69
7.95	-68.8	-54.44	-60.84	-0.24	66.8	67.7	69
7.94	-68.8	-54.38	-60.84	-0.24	66.8	67.7	69
7.94	-68.8	-54.33	-60.84	-0.21	66.8	67.7	69.3
7.94	-68.76	-54.33	-60.81	-0.24	66.8	67.7	69
7.94	-68.76	-54.33	-60.81	-0.24	66.8	67.7	69.3
7.94	-68.71	-54.33	-60.78	-0.21	66.8	67.7	69.3
7.94	-68.71	-54.28	-60.75	-0.24	66.8	67.7	69.6
7.94	-68.66	-54.23	-60.72	-0.24	66.8	67.7	69.4
7.94	-68.66	-54.23	-60.72	-0.21	66.8	67.8	70.1
7.93	-68.66	-54.23	-60.69	-0.24	66.8	67.7	70.1
7.92	-68.62	-54.23	-60.69	-0.24	66.8	67.8	70.2
7.93	-68.57	-54.12	-60.66	-0.21	66.8	67.8	70.5
7.93	-68.57	-54.07	-60.6	-0.21	66.8	67.9	70.8
7.93	-68.53	-54.07	-60.57	-0.24	66.8	69	71.3
7.93	-68.53	-54.07	-60.57	-0.21	67.7	69.8	71.4
7.92	-68.48	-54.07	-60.54	-0.27	68.3	70.3	71.4
7.93	-68.48	-54.02	-60.51	-0.27	68.9	70.6	72.2
7.93	-68.48	-54.07	-60.51	-0.27	69.4	71	72.4
7.93	-68.44	-54.02	-60.48	-0.27	69.8	70.6	72.7
7.92	-68.44	-53.92	-60.45	-0.27	69.7	70.4	73.1
7.92	-68.39	-53.92	-60.45	-0.27	69.6	70.3	73.4
7.93	-68.39	-53.92	-60.42	-0.27	69.4	70.2	73.6
7.93	-68.34	-53.92	-60.42	-0.27	69.2	70.2	74.1
7.92	-68.34	-53.86	-60.35	-0.27	69.1	70.1	74.5
7.91	-68.3	-53.86	-60.35	-0.27	69.1	70.2	74.8
7.92	-68.21	-53.81	-60.08	-0.27	69.1	70.1	75.2
7.91	-68.21	-53.81	-59.99	-0.27	69	70.1	75.4
7.92	-68.21	-53.81	-59.96	-0.27	69	70.1	75.8
7.92	-68.16	-53.76	-59.93	-0.27	69	70.1	76.2
7.92	-68.16	-53.76	-59.93	-0.27	69	70.2	76.4
7.91	-68.12	-53.76	-59.84	-0.27	69	70.2	76.7
7.92	-68.12	-53.71	-59.84	-0.24	69	70.3	77
7.91	-68.07	-53.66	-59.8	-0.27	69.1	70.3	77
7.91	-68.07	-53.66	-59.77	-0.27	69.1	70.4	77.5
7.91	-68.02	-53.66	-59.77	-0.27	69.1	70.4	77.7
7.91	-68.02	-53.66	-59.74	-0.27	69.2	70.4	77.9

7.91	-67.98	-53.6	-59.71	-0.27	69.2	70.5	78
7.92	-67.98	-53.6	-59.71	-0.27	69.3	70.6	78.4
7.91	-67.98	-53.6	-59.68	-0.27	69.3	70.6	78.7
7.91	-67.93	-53.55	-59.65	-0.27	69.4	70.6	78.7
7.9	-67.93	-53.5	-59.65	-0.27	69.4	70.7	79
7.91	-67.89	-53.5	-59.65	-0.27	69.6	70.7	79.1
7.91	-67.84	-53.45	-59.62	-0.27	69.6	70.8	79.1
7.91	-67.84	-53.45	-59.59	-0.27	69.7	70.8	79.5
7.91	-67.84	-53.45	-59.56	-0.27	69.7	70.8	79.6
7.91	-67.84	-53.4	-59.56	-0.27	69.7	70.9	79.8
7.91	-67.79	-53.4	-59.53	-0.27	69.8	70.9	80
7.91	-67.75	-53.4	-59.53	-0.27	69.8	71	79.9
7.91	-67.75	-53.35	-59.53	-0.31	69.9	71.1	80.3
7.9	-67.75	-53.29	-59.5	-0.31	69.9	71.1	80.4
7.9	-67.7	-53.29	-59.47	-0.27	69.9	71.1	80.4
7.91	-67.7	-53.29	-59.44	-0.27	70	71.1	80.4
7.91	-67.66	-53.24	-59.47	-0.27	70	71.2	80.5
7.91	-67.66	-53.24	-59.41	-0.31	70	71.2	80.4
7.91	-67.61	-53.24	-59.41	-0.27	70.1	71.2	80.1
7.91	-67.61	-53.24	-59.38	-0.27	70.1	71.2	80.4
7.91	-67.57	-53.24	-59.38	-0.27	70.1	71.3	80.3
7.9	-67.57	-53.19	-59.35	-0.27	70.1	71.2	80.3
7.9	-67.57	-53.14	-59.35	-0.31	70.1	71.3	80.1
7.9	-67.52	-53.09	-59.35	-0.31	70.1	71.3	80
7.9	-67.52	-53.14	-59.32	-0.31	70.1	71.3	79.9
7.9	-67.47	-53.09	-59.32	-0.27	70.1	71.3	79.9
7.9	-67.47	-53.09	-59.32	-0.27	70.1	71.3	79.7
7.89	-67.43	-53.03	-59.29	-0.27	70.1	71.3	79.6
7.9	-67.47	-53.03	-59.26	-0.27	70.1	71.3	79.4
7.89	-67.43	-53.03	-59.26	-0.27	70.1	71.3	79.3
7.9	-67.38	-53.03	-59.22	-0.27	70.1	71.3	79.2
7.9	-67.38	-52.98	-59.22	-0.27	70.1	71.3	79
7.9	-67.38	-52.98	-59.19	-0.27	70.1	71.3	78.8
7.89	-67.34	-52.98	-59.19	-0.27	70.1	71.3	78.8
7.88	-67.34	-52.88	-59.16	-0.27	70.1	71.3	78.7
7.89	-67.29	-52.88	-59.16	-0.27	70.1	71.3	78.5
7.88	-67.25	-52.83	-59.13	-0.31	70.1	71.3	78.2
7.89	-67.25	-52.83	-59.13	-0.27	70.1	71.2	77.9
7.89	-67.25	-52.77	-59.1	-0.31	70.1	71.2	77.7
7.89	-67.2	-52.77	-59.1	-0.27	70.1	71.2	77.6
7.89	-67.2	-52.77	-59.04	-0.27	70.1	71.2	77.6
7.89	-67.2	-52.77	-59.01	-0.27	70	71.2	77.3
7.89	-67.2	-52.72	-59.01	-0.27	70	71.2	77.1
7.88	-67.11	-52.77	-59.01	-0.27	70	71.1	76.8
7.87	-67.11	-52.77	-58.98	-0.27	69.9	71.1	76.9
7.88	-67.06	-52.72	-58.95	-0.27	69.9	71.1	76.6
7.88	-67.06	-52.67	-58.95	-0.27	69.8	71	76.3

7.88	-67.06	-52.67	-58.92	-0.27	69.8	71	76.4
7.88	-67.02	-52.67	-58.92	-0.27	69.8	70.9	75.9
7.88	-66.97	-52.62	-58.89	-0.27	69.7	70.9	75.7
7.88	-67.02	-52.62	-58.86	-0.27	69.7	70.9	75.6
7.87	-66.97	-52.62	-58.86	-0.27	69.7	70.8	75.5
7.87	-66.92	-52.62	-58.83	-0.27	69.6	70.8	75.4
7.87	-66.92	-52.57	-58.8	-0.24	69.6	70.7	75.2
7.87	-66.92	-52.57	-58.8	-0.27	69.4	70.6	74.9
7.87	-66.88	-52.57	-58.8	-0.27	69.4	70.6	74.8
7.87	-66.88	-52.52	-58.77	-0.27	69.3	70.6	74.6
7.87	-66.83	-52.52	-58.77	-0.27	69.3	70.5	74.5
7.87	-66.83	-52.46	-58.77	-0.27	69.3	70.4	74.5
7.87	-66.83	-52.46	-58.74	-0.24	69.2	70.4	74.2
7.86	-66.79	-52.41	-58.71	-0.27	69.2	70.4	73.8
7.86	-66.79	-52.41	-58.71	-0.27	69.2	70.3	73.7
7.86	-66.74	-52.41	-58.68	-0.27	69.1	70.2	73.5
7.86	-66.74	-52.41	-58.68	-0.24	69.1	70.2	73.4
7.86	-66.7	-52.41	-58.68	-0.27	69	70.1	73.4
7.86	-66.7	-52.36	-58.64	-0.27	69	70.1	73.3
7.86	-66.7	-52.36	-58.61	-0.27	69	70.1	73.2
7.86	-66.7	-52.31	-58.61	-0.24	69	70	73
7.86	-66.65	-52.31	-58.58	-0.24	68.9	70	72.8
7.86	-66.6	-52.31	-58.55	-0.24	68.9	70	72.4
7.86	-66.6	-52.31	-58.55	-0.27	68.9	69.8	72.5
7.85	-66.6	-52.26	-58.52	-0.27	68.9	69.8	72.4
7.85	-66.6	-52.26	-58.52	-0.27	68.8	69.8	72.2
7.85	-66.56	-52.2	-58.52	-0.24	68.7	69.7	72
7.85	-66.56	-52.2	-58.49	-0.24	68.6	69.6	72.1
7.85	-66.56	-52.2	-58.49	-0.24	68.6	69.6	72
7.85	-66.51	-52.2	-58.46	-0.27	68.6	69.5	71.6
7.85	-66.51	-52.2	-58.46	-0.24	68.6	69.4	71.4
7.84	-66.47	-52.15	-58.46	-0.24	68.5	69.4	71.5
7.83	-66.47	-52.15	-58.43	-0.27	68.5	69.3	71.2
7.83	-66.47	-52.1	-58.43	-0.24	68.4	69.3	71
7.83	-66.42	-52.15	-58.4	-0.24	68.3	69.1	71
7.84	-66.42	-52.1	-58.4	-0.27	68.3	69	70.9
7.83	-66.47	-52.1	-58.37	-0.24	68.2	69	70.9
7.83	-66.42	-52.05	-58.37	-0.24	68.2	69	70.7
7.83	-66.42	-52.05	-58.34	-0.27	68.2	69	70.6
7.83	-66.33	-52.05	-58.34	-0.24	68.1	68.9	70.5
7.83	-66.33	-52	-58.28	-0.27	68.1	68.9	70.2
7.82	-66.38	-52	-58.28	-0.24	68.1	68.8	70.1
7.82	-66.33	-52	-58.28	-0.24	68	68.8	70.1
7.82	-66.33	-52	-58.25	-0.21	68	68.8	70.2
7.82	-66.33	-52	-58.25	-0.24	67.9	68.8	69.9
7.82	-66.28	-51.94	-58.22	-0.24	67.9	68.8	69.9
7.82	-66.28	-51.94	-58.22	-0.24	67.9	69	70

7.82	-66.28	-51.94	-58.19	-0.24	68	69.5	70.1
7.82	-66.24	-51.89	-58.19	-0.21	68.2	69.7	70.1
7.82	-66.24	-51.89	-58.16	-0.24	68.3	70	69.9
7.82	-66.19	-51.84	-58.13	-0.24	68.5	70.1	70
7.82	-66.15	-51.89	-58.13	-0.24	68.7	70.1	70
7.82	-66.15	-51.84	-58.13	-0.24	68.9	70.3	70.1
7.82	-66.15	-51.84	-58.1	-0.24	69	70.5	70.4
7.82	-66.15	-51.84	-58.1	-0.24	69	70.5	70.3
7.82	-66.1	-51.79	-58.06	-0.27	69.1	70.6	70.7
7.82	-66.1	-51.79	-58.03	-0.24	69.2	70.6	70.9
7.82	-66.1	-51.79	-58.03	-0.24	69.2	70.6	71.2
7.82	-66.05	-51.79	-58.03	-0.27	69.3	70.7	71.3
7.82	-66.05	-51.74	-58	-0.24	69.4	70.8	71.6
7.81	-66.05	-51.74	-58	-0.24	69.6	70.9	71.7
7.82	-65.96	-51.74	-57.97	-0.27	69.7	71.2	71.9
7.82	-65.96	-51.68	-57.97	-0.27	69.9	71.3	72.3
7.81	-65.92	-51.68	-57.94	-0.27	70	71.2	72.4
7.81	-65.92	-51.58	-57.94	-0.27	70.1	71.2	72.8
7.82	-65.87	-51.58	-57.91	-0.24	70.1	71.2	73.1
7.82	-65.92	-51.53	-57.91	-0.24	70.1	71.3	73.3
7.82	-65.87	-51.53	-57.88	-0.27	70.1	71.3	73.5
7.82	-65.87	-51.53	-57.88	-0.27	70.1	71.4	74.2
7.82	-65.87	-51.53	-57.85	-0.27	70.2	71.4	74.3
7.82	-65.83	-51.53	-57.85	-0.27	70.2	71.6	74.5
7.82	-65.83	-51.53	-57.85	-0.27	70.3	71.6	74.9
7.82	-65.78	-51.48	-57.82	-0.27	70.3	71.6	75.4
7.82	-65.78	-51.43	-57.79	-0.27	70.4	71.8	75.5
7.82	-65.73	-51.43	-57.79	-0.27	70.5	71.9	75.8
7.82	-65.73	-51.43	-57.76	-0.24	70.5	71.9	76.1
7.82	-65.73	-51.37	-57.73	-0.27	70.6	72	76.6
7.82	-65.69	-51.43	-57.73	-0.27	70.7	72.1	76.8
7.82	-65.69	-51.37	-57.73	-0.27	70.7	72.1	77.1
7.82	-65.64	-51.32	-57.7	-0.27	70.9	72.9	77.5
7.82	-65.64	-51.32	-57.67	-0.27	71.3	73.4	77.7
7.82	-65.64	-51.32	-57.67	-0.27	71.8	73.3	78
7.82	-65.6	-51.32	-57.64	-0.27	72	73.2	78.3
7.82	-65.55	-51.32	-57.61	-0.27	72.1	73.2	78.8
7.81	-65.55	-51.27	-57.58	-0.31	72.1	73.2	78.8
7.82	-65.55	-51.27	-57.58	-0.31	72.1	73.3	79.3
7.83	-65.55	-51.22	-57.58	-0.31	72.3	73.9	79.6
7.82	-65.51	-51.22	-57.55	-0.31	72.7	74.5	79.8
7.82	-65.51	-51.17	-57.48	-0.27	73.3	74.9	79.9
7.82	-65.46	-51.22	-57.48	-0.34	73.6	75.3	80.3
7.82	-65.46	-51.17	-57.45	-0.31	74.1	75.2	80.6
7.82	-65.46	-51.17	-57.45	-0.31	74.1	75.1	80.9
7.82	-65.41	-51.11	-57.42	-0.31	74.1	75.2	81
7.82	-65.41	-51.11	-57.39	-0.31	74.2	75.1	81.2

7.82	-65.41	-51.11	-57.39	-0.31	74.2	75.2	81.5
7.82	-65.37	-51.06	-57.36	-0.31	74.2	75.2	81.6
7.82	-65.37	-51.11	-57.36	-0.27	74.2	75.2	81.7
7.82	-65.32	-51.01	-57.33	-0.31	74.2	75.3	81.9
7.82	-65.32	-51.06	-57.33	-0.31	74.3	75.4	82.2
7.83	-65.32	-51.01	-57.3	-0.31	74.3	75.4	82.2
7.83	-65.28	-50.96	-57.3	-0.27	74.3	75.4	82.5
7.83	-65.23	-50.96	-57.27	-0.31	74.3	75.4	82.8
7.83	-65.23	-50.96	-57.27	-0.31	74.4	75.5	82.7
7.83	-65.23	-50.96	-57.24	-0.31	74.4	75.5	82.8
7.83	-65.23	-50.96	-57.24	-0.31	74.5	75.5	82.9
7.84	-65.18	-50.91	-57.21	-0.31	74.5	75.5	82.9
7.83	-65.18	-50.85	-57.21	-0.31	74.5	75.5	83.1
7.83	-65.18	-50.85	-57.21	-0.31	74.5	75.5	83.2
7.83	-65.14	-50.85	-57.18	-0.31	74.5	75.5	83.2
7.83	-65.14	-50.85	-57.18	-0.31	74.5	75.6	83.4
7.83	-65.14	-50.85	-57.18	-0.27	74.5	75.6	83.2
7.83	-65.09	-50.85	-57.15	-0.31	74.5	75.6	83.4
7.83	-65.09	-50.8	-57.15	-0.31	74.5	75.9	83.4
7.83	-65.05	-50.75	-57.12	-0.31	74.7	76.3	83.2
7.83	-65.05	-50.75	-57.15	-0.31	75	76.6	83.3
7.82	-65	-50.7	-57.15	-0.31	75.2	76.8	83.2
7.82	-65	-50.75	-57.12	-0.31	75.4	76.7	83.2
7.82	-65	-50.75	-57.09	-0.31	75.5	76.6	83.1
7.83	-65	-50.7	-57.09	-0.31	75.4	76.4	83.2
7.82	-64.96	-50.65	-57.06	-0.31	75.2	76.2	83
7.82	-64.96	-50.65	-57.06	-0.31	75	76	82.9
7.82	-64.86	-50.65	-57.06	-0.31	74.8	75.9	82.9
7.83	-64.86	-50.65	-57.03	-0.27	74.7	75.7	82.7
7.82	-64.86	-50.6	-57.03	-0.31	74.5	75.6	82.5
7.82	-64.86	-50.6	-57.03	-0.27	74.5	75.5	82.5
7.82	-64.82	-50.6	-57	-0.31	74.3	75.5	82.1
7.82	-64.82	-50.6	-56.97	-0.27	74.3	75.4	82
7.82	-64.77	-50.6	-56.97	-0.27	74.1	75.2	82.1
7.82	-64.77	-50.54	-56.97	-0.27	74	75.2	81.8
7.83	-64.77	-50.54	-56.94	-0.27	73.8	75.1	81.3
7.81	-64.77	-50.49	-56.94	-0.27	73.7	75	81.4
7.82	-64.77	-50.54	-56.9	-0.27	73.6	74.8	81.1
7.82	-64.73	-50.49	-56.9	-0.27	73.5	74.7	81
7.82	-64.73	-50.49	-56.9	-0.27	73.4	74.6	80.8
7.82	-64.68	-50.49	-56.87	-0.27	73.4	74.5	80.5
7.81	-64.68	-50.44	-56.87	-0.27	73.3	74.5	80.5
7.8	-64.68	-50.44	-56.87	-0.27	73.2	74.4	79.9
7.8	-64.68	-50.44	-56.84	-0.27	73.1	74.3	79.8
7.8	-64.64	-50.44	-56.81	-0.27	73	74.2	79.5
7.8	-64.64	-50.44	-56.81	-0.27	72.9	74.1	79.4
7.8	-64.64	-50.34	-56.78	-0.27	72.7	74	78.8

7.79	-64.64	-50.34	-56.78	-0.27	72.7	73.9	78.8
7.79	-64.59	-50.34	-56.78	-0.24	72.6	73.9	78.4
7.79	-64.54	-50.28	-56.75	-0.24	72.5	73.7	78.3
7.8	-64.59	-50.28	-56.75	-0.24	72.4	73.5	78
7.8	-64.54	-50.23	-56.69	-0.27	72.3	73.5	77.7
7.8	-64.54	-50.23	-56.69	-0.24	72.3	73.4	77.7
7.79	-64.5	-50.23	-56.66	-0.24	72.2	73.4	77.4
7.79	-64.5	-50.23	-56.66	-0.24	72.2	73.3	77
7.79	-64.5	-50.23	-56.63	-0.24	72.1	73.1	76.9
7.79	-64.45	-50.23	-56.63	-0.24	72	73.1	76.6
7.79	-64.45	-50.23	-56.63	-0.21	71.9	72.9	76.3
7.79	-64.45	-50.23	-56.6	-0.24	71.8	72.9	76.1
7.78	-64.41	-50.18	-56.6	-0.24	71.6	72.8	75.7
7.79	-64.41	-50.18	-56.57	-0.21	71.5	72.7	75.5
7.78	-64.41	-50.18	-56.57	-0.24	71.4	72.6	75.5
7.78	-64.36	-50.13	-56.54	-0.21	71.3	72.5	75.2
7.78	-64.36	-50.08	-56.54	-0.24	71.2	72.4	74.9
7.77	-64.36	-50.13	-56.51	-0.21	71.2	72.3	75
7.77	-64.32	-50.08	-56.48	-0.21	71.2	72.3	74.7
7.77	-64.32	-50.08	-56.48	-0.21	71.1	72.2	74.5
7.77	-64.32	-50.08	-56.45	-0.24	71	72.1	74.3
7.77	-64.27	-50.08	-56.48	-0.24	70.9	72	74.2
7.77	-64.27	-50.02	-56.45	-0.21	70.8	71.9	73.7
7.77	-64.27	-50.02	-56.45	-0.21	70.8	71.8	73.4
7.76	-64.27	-50.02	-56.42	-0.21	70.7	71.7	73.4
7.77	-64.22	-49.97	-56.42	-0.21	70.6	71.6	73.2
7.76	-64.22	-49.97	-56.39	-0.21	70.5	71.6	73.1
7.76	-64.22	-49.97	-56.36	-0.21	70.4	71.3	72.9
7.76	-64.18	-49.97	-56.36	-0.21	70.3	71.2	72.7
7.76	-64.18	-49.92	-56.36	-0.18	70.3	71.2	72.6
7.76	-64.18	-49.92	-56.32	-0.21	70.1	71.1	72.5
7.76	-64.18	-49.92	-56.32	-0.21	70.1	71	72.1
7.76	-64.18	-49.92	-56.29	-0.21	70.1	71	72
7.75	-64.13	-49.87	-56.29	-0.21	70.1	70.9	72
7.75	-64.13	-49.87	-56.29	-0.18	70	70.8	71.4
7.75	-64.09	-49.87	-56.29	-0.21	69.9	70.7	71.5
7.75	-64.09	-49.82	-56.26	-0.21	69.8	70.6	71.2
7.75	-64.09	-49.87	-56.26	-0.21	69.8	70.5	71.2
7.75	-64.04	-49.82	-56.23	-0.18	69.7	70.4	71
7.75	-64.04	-49.82	-56.23	-0.18	69.6	70.4	70.5
7.75	-64.04	-49.76	-56.2	-0.21	69.4	70.2	70.7
7.74	-64.04	-49.82	-56.2	-0.18	69.3	70.1	70.2
7.74	-63.99	-49.76	-56.2	-0.18	69.3	70.1	70.3
7.74	-63.99	-49.76	-56.17	-0.18	69.2	70.1	70.2
7.74	-63.95	-49.76	-56.17	-0.18	69.2	70.1	70
7.74	-63.95	-49.76	-56.17	-0.18	69.1	70.1	70
7.74	-63.95	-49.71	-56.14	-0.18	69.1	70.1	69.6

7.74	-63.95	-49.71	-56.14	-0.18	69.1	70	69.8
7.74	-63.95	-49.71	-56.14	-0.18	69.1	69.9	69.4
7.74	-63.9	-49.71	-56.14	-0.18	69	69.6	69.4
7.74	-63.9	-49.66	-56.08	-0.18	68.9	69.7	69.5
7.73	-63.9	-49.71	-56.11	-0.18	68.9	69.8	69.4
7.72	-63.86	-49.66	-56.08	-0.18	68.9	70.1	69.4
7.72	-63.86	-49.66	-56.08	-0.18	69	70.1	69.3
7.72	-63.86	-49.66	-56.05	-0.18	69	70.3	69.3
7.73	-63.86	-49.61	-56.05	-0.18	69.2	70.5	69.2
7.72	-63.77	-49.61	-56.02	-0.18	69.2	70.6	69.5
7.73	-63.77	-49.61	-56.02	-0.18	69.3	70.7	69.6
7.72	-63.77	-49.56	-56.02	-0.18	69.4	70.8	69.8
7.72	-63.72	-49.56	-55.99	-0.18	69.7	70.9	69.8
7.71	-63.72	-49.56	-55.99	-0.21	69.7	71	70
7.71	-63.72	-49.56	-55.93	-0.18	69.7	71	70.1
7.71	-63.72	-49.56	-55.93	-0.18	69.8	71	70.3
7.71	-63.67	-49.56	-55.9	-0.18	69.9	71.1	70.6
7.71	-63.67	-49.51	-55.9	-0.21	69.9	71.2	70.7
7.71	-63.63	-49.51	-55.87	-0.21	70	71.2	71.1
7.71	-63.63	-49.51	-55.87	-0.18	70.1	71.2	71.3
7.71	-63.63	-49.45	-55.87	-0.21	70.1	70.9	71.4
7.71	-63.63	-49.45	-55.84	-0.18	70	70.8	72.1
7.71	-63.58	-49.45	-55.84	-0.21	69.9	70.7	72.4
7.71	-63.58	-49.4	-55.81	-0.18	69.8	70.7	72.7
7.71	-63.58	-49.4	-55.81	-0.18	69.7	70.7	73.4
7.72	-63.58	-49.4	-55.78	-0.18	69.7	70.7	73.7
7.71	-63.54	-49.4	-55.78	-0.18	69.7	70.7	74.4
7.71	-63.54	-49.35	-55.74	-0.18	69.7	70.7	74.8
8.16	-63.49	-49.35	-55.74	-0.18	69.4	70.1	75.2
8.19	-63.45	-49.35	-55.74	-0.18	69.3	70.6	75.9
8.21	-63.49	-49.3	-55.71	-0.18	69.4	70.8	76.4
8.23	-63.45	-49.3	-55.71	-0.18	69.4	70.8	76.9
8.24	-63.45	-49.3	-55.71	-0.18	69.6	70.9	77.3
8.25	-63.45	-49.3	-55.71	-0.18	69.4	70.9	77.9
8.25	-63.4	-49.25	-55.68	-0.18	69.6	71	78.8
8.25	-63.4	-49.25	-55.68	-0.21	69.6	71.1	79.2
8.26	-63.35	-49.19	-55.68	-0.21	69.7	72.2	79.7
8.26	-63.35	-49.25	-55.65	-0.18	70.2	72.3	79.9
8.25	-63.35	-49.19	-55.62	-0.21	70.3	72.7	80.6
8.25	-63.35	-49.19	-55.62	-0.21	70.8	73.5	80.9
8.25	-63.31	-49.19	-55.62	-0.21	71.1	73.7	81.4
8.25	-63.31	-49.09	-55.62	-0.21	71.4	74.2	81.8
8.25	-63.31	-49.09	-55.59	-0.21	72.2	74.5	82.1
8.25	-63.26	-49.09	-55.56	-0.24	72.1	74.7	82.4
8.25	-63.26	-49.09	-55.59	-0.24	72.3	74.8	82.6
8.24	-63.22	-49.04	-55.56	-0.24	72.7	75	83
8.24	-63.22	-49.04	-55.53	-0.27	72.8	75.3	83.2

8.24	-63.22	-49.04	-55.5	-0.24	73.1	75.4	83.2
8.24	-63.22	-49.04	-55.5	-0.27	72.9	75.5	83.4
8.24	-63.17	-49.04	-55.47	-0.27	73.1	75.6	83.8
8.24	-63.17	-48.99	-55.47	-0.27	73.4	75.7	83.9
8.23	-63.17	-48.99	-55.44	-0.27	73.3	75.8	84.1
8.23	-63.17	-48.93	-55.44	-0.24	73.5	76	84.1
8.23	-63.12	-48.93	-55.44	-0.27	73.6	76.2	84.3
8.23	-63.12	-48.93	-55.44	-0.27	74	76.3	84.5
8.22	-63.12	-48.93	-55.41	-0.27	74.6	76.7	84.7
8.23	-63.08	-48.93	-55.38	-0.27	74.4	76.8	84.8
8.23	-63.08	-48.93	-55.41	-0.27	74.2	76.2	84.9
8.23	-63.03	-48.88	-55.38	-0.27	74	76	85
8.22	-63.03	-48.88	-55.35	-0.31	74.1	76.9	85.1
8.22	-63.03	-48.88	-55.35	-0.27	74.5	77.3	85.2
8.22	-63.03	-48.83	-55.32	-0.27	74.7	76.8	85.2
8.22	-63.03	-48.83	-55.32	-0.27	74.5	76.6	85.4
8.21	-62.99	-48.83	-55.32	-0.27	74.5	77.2	85.3
8.21	-62.99	-48.78	-55.29	-0.27	74.8	77.5	85.5
8.21	-62.94	-48.78	-55.29	-0.27	75.1	77.6	85.6
8.21	-62.94	-48.78	-55.29	-0.31	75.4	77.7	85.4
8.21	-62.94	-48.78	-55.32	-0.31	75.5	77.7	85.6
8.21	-62.94	-48.73	-55.32	-0.31	75.5	77.1	85.6
8.21	-62.9	-48.78	-55.32	-0.27	75.4	76.8	85.5
8.2	-62.9	-48.73	-55.35	-0.31	75.1	76.7	85.6
8.2	-62.9	-48.73	-55.32	-0.31	75	76.6	85.6
8.2	-62.9	-48.68	-55.29	-0.27	74.9	76.5	85.5
8.19	-62.85	-48.73	-55.26	-0.31	74.8	76.4	85.3
8.2	-62.85	-48.68	-55.26	-0.27	74.7	76.3	85.3
8.19	-62.85	-48.68	-55.26	-0.27	74.6	76.2	85.4
8.19	-62.85	-48.68	-55.23	-0.27	74.5	76.2	85.1
8.19	-62.85	-48.62	-55.23	-0.27	74.5	76	85.1
8.19	-62.8	-48.62	-55.2	-0.24	74.5	75.9	85.1
8.19	-62.8	-48.62	-55.2	-0.27	74.4	75.8	84.9
8.18	-62.76	-48.62	-55.13	-0.24	74.4	75.8	84.9
8.18	-62.76	-48.57	-55.13	-0.24	74.4	75.7	84.6
8.18	-62.71	-48.57	-55.1	-0.24	74.2	75.7	84.5
8.18	-62.71	-48.57	-55.1	-0.27	74.2	75.6	84.2
8.17	-62.71	-48.57	-55.1	-0.24	74.2	75.5	84.2
8.17	-62.71	-48.52	-55.1	-0.27	74.1	75.5	83.8
8.17	-62.71	-48.52	-55.07	-0.24	74	75.5	83.7
8.16	-62.62	-48.52	-55.07	-0.27	73.7	75.4	83.6
8.16	-62.71	-48.52	-55.04	-0.24	73.8	75.3	83.2
8.16	-62.62	-48.52	-55.04	-0.24	73.8	75.2	83.2
8.15	-62.62	-48.47	-55.01	-0.24	73.7	75.2	82.9
8.15	-62.62	-48.52	-55.01	-0.24	73.5	75.1	82.7
8.15	-62.58	-48.47	-54.98	-0.24	73.6	75	82.5
8.15	-62.58	-48.47	-54.98	-0.27	73.5	74.9	82.1

8.14	-62.53	-48.42	-54.95	-0.24	73.5	74.9	82.1
8.14	-62.58	-48.42	-54.95	-0.24	73.4	74.9	81.9
8.14	-62.53	-48.42	-54.95	-0.24	73.4	74.8	81.6
8.13	-62.53	-48.42	-54.92	-0.24	73.4	74.7	81.4
8.13	-62.53	-48.42	-54.92	-0.24	73.4	74.6	81
8.13	-62.48	-48.42	-54.89	-0.24	73.3	74.6	81
8.13	-62.48	-48.42	-54.89	-0.24	73.2	74.6	80.9
8.12	-62.48	-48.36	-54.89	-0.24	73.2	74.5	80.6
8.12	-62.44	-48.36	-54.86	-0.24	73.1	74.5	80.4
8.12	-62.48	-48.36	-54.86	-0.24	73.1	74.5	79.9
8.12	-62.44	-48.31	-54.83	-0.24	73	74.5	79.9
8.12	-62.44	-48.31	-54.83	-0.24	73	74.3	79.8
8.11	-62.44	-48.31	-54.83	-0.21	72.9	74.3	79.8
8.11	-62.39	-48.31	-54.8	-0.24	72.9	74.2	79.5
8.1	-62.39	-48.31	-54.8	-0.24	72.8	74.2	79.3
8.11	-62.35	-48.31	-54.77	-0.21	72.8	74.2	79.1
8.1	-62.39	-48.26	-54.77	-0.24	72.7	74.1	78.9
8.09	-62.35	-48.26	-54.74	-0.21	72.7	74	78.8
8.1	-62.35	-48.26	-54.74	-0.24	72.7	74	78.7
8.09	-62.35	-48.26	-54.74	-0.21	72.6	73.9	78.5
8.09	-62.3	-48.21	-54.71	-0.21	72.5	73.9	78.5
8.09	-62.3	-48.21	-54.71	-0.24	72.5	73.7	78.2
8.09	-62.3	-48.16	-54.71	-0.18	72.4	73.7	78.2
8.09	-62.25	-48.16	-54.68	-0.18	72.4	73.6	77.9
8.08	-62.25	-48.16	-54.68	-0.21	72.3	73.6	77.8
8.08	-62.25	-48.16	-54.65	-0.21	72.3	73.5	77.7
8.08	-62.25	-48.16	-54.65	-0.21	72.3	73.5	77.6
8.08	-62.21	-48.1	-54.62	-0.21	72.3	73.4	77.6
8.07	-62.21	-48.1	-54.62	-0.21	72.2	73.4	77.3
8.06	-62.21	-48.1	-54.58	-0.21	72.2	73.4	77.3
8.07	-62.16	-48.1	-54.58	-0.21	72.2	73.4	77
8.07	-62.16	-48.05	-54.58	-0.21	72.1	73.3	76.9
8.07	-62.16	-48.05	-54.55	-0.18	72.1	73.3	76.9
8.06	-62.16	-48.05	-54.52	-0.21	72	73.2	76.7
8.06	-62.12	-48.05	-54.52	-0.18	72	73.2	76.6
8.06	-62.12	-48.05	-54.49	-0.21	71.9	73.1	76.6
8.06	-62.12	-48	-54.49	-0.21	71.9	73.1	76.4
8.06	-62.12	-48	-54.49	-0.18	71.8	73	76.1
8.06	-62.07	-48	-54.49	-0.21	71.8	72.9	76.2
8.05	-62.07	-48	-54.46	-0.18	71.8	72.9	76.1
8.05	-62.03	-47.95	-54.46	-0.21	71.6	72.8	75.8
8.05	-62.07	-47.95	-54.46	-0.18	71.5	72.8	75.6
8.05	-62.03	-47.95	-54.43	-0.21	71.5	72.7	75.6
8.05	-62.03	-47.95	-54.43	-0.18	71.5	72.7	75.5
8.04	-62.03	-47.95	-54.37	-0.18	71.4	72.6	75.5
8.04	-62.03	-47.84	-54.37	-0.21	71.4	72.6	75.4
8.04	-62.03	-47.84	-54.37	-0.18	71.3	72.6	75.2

8.04	-61.98	-47.84	-54.37	-0.18	71.3	72.5	75.1
8.04	-60.98	-47.84	-54.37	-0.18	71.3	72.5	75
8.04	-60.98	-47.84	-54.31	-0.18	71.2	72.4	75
8.02	-60.98	-47.79	-54.34	-0.18	71.2	72.4	75
8.03	-60.93	-47.79	-54.31	-0.18	71.2	72.5	75
8.03	-60.93	-47.79	-54.31	-0.21	71.2	72.5	75
8.03	-60.93	-47.79	-54.31	-0.18	71.2	72.5	74.9
8.03	-60.93	-47.79	-54.28	-0.21	71.2	72.5	74.9
8.03	-60.93	-47.74	-54.28	-0.18	71.2	72.8	75
8.03	-60.89	-47.74	-54.25	-0.18	71.3	72.9	75
8.01	-60.89	-47.74	-54.25	-0.21	71.4	72.7	75
8.01	-60.89	-47.74	-54.22	-0.18	71.3	72.6	74.9
8.02	-60.89	-47.74	-54.22	-0.21	71.3	72.7	75.1
8.02	-60.84	-47.69	-54.22	-0.18	71.3	72.7	75.2
8.01	-60.84	-47.69	-54.19	-0.18	71.2	72.6	75.2
8.01	-60.84	-47.69	-54.19	-0.18	71.2	72.6	75.4
8.01	-60.8	-47.64	-54.16	-0.18	71.2	72.6	75.4
8	-60.8	-47.64	-54.16	-0.18	71.2	72.6	75.4
7.96	-62.22	-47.64	-54.37	-0.18	71.2	72.9	62.8
8.38	-66.52	-48.83	-55.56	21.86	88.6	72.1	52
8.35	-67.39	-48.83	-55.68	18.19	94.7	73	54.8
8.39	-67.99	-48.99	-55.93	21.52	96.3	72.1	52.1
8.49	-68.4	-49.45	-56.08	21.52	96.5	73.1	52.3
8.39	-182.5	-49.04	-56.14	18.25	97.1	72.8	51.3
8.42	-182.5	-49.09	-56.26	21.58	98.3	72	52.9
8.64	-182.5	-49.04	-56.48	17.7	98.4	73.4	52.8
8.44	-182.5	-48.88	-56.75	21.55	96.9	73	53.2
8.41	-182.5	-48.73	-56.66	18.19	98.6	73.2	54.1
8.47	-182.5	-48.99	-56.51	-0.27	87	74	54
8.16	-182.5	-48.99	-56.63	18.62	98.6	72.3	52.1
8.4	-182.5	-49.25	-56.75	-0.27	93	73.4	53.4
8.38	-182.5	-49.09	-56.75	18.41	98.6	73.4	52.9
8.46	-182.5	-48.88	-56.78	18.8	99.8	72.2	53.7
8.65	-182.5	-48.88	-56.75	-0.31	94.8	74.1	53.8
8.62	-61.53	-48.93	-56.17	-0.31	81.8	73.3	52.9
8.33	-66.57	-49.51	-56.94	18.38	98.7	72.9	52.1
8.3	-64.32	-48.62	-56.26	18.41	99.5	72.7	53.2
8.44	-65.19	-49.61	-56.42	-0.24	84.2	73.7	52.7
8.29	-67.76	-49.56	-56.66	18.53	98.5	72.4	52.6
8.45	-67.94	-49.66	-56.78	18.93	99.7	72.3	54.6
8.45	-68.63	-49.71	-56.97	21.73	99.5	72	53.9
8.46	-68.95	-49.87	-57.12	21.7	99.2	72.3	51.9
8.44	-68.95	-50.18	-57.33	19.51	98.6	73	54
8.38	-69.08	-49.87	-57.27	18.41	98.6	72.1	51.7
8.45	-69.4	-50.13	-57.3	21.79	98.9	71.9	52.5
8.46	-69.13	-50.44	-57.24	18.22	98	72.8	51
8.37	-69.31	-50.02	-57.24	18.44	98.1	72.2	53.6

8.47	-69.5	-50.08	-57.15	21.83	98.2	71.4	50.5
8.44	-69.73	-50.28	-57.3	21.83	98	71.8	49.9
8.45	-69.59	-50.44	-57.61	18.19	97.3	72.6	48.7
8.39	-69.95	-50.49	-57.39	18.41	97.1	71.8	52.4
8.48	-69.86	-50.7	-57.33	21.92	97.4	71.2	54.4
8.46	-69.77	-50.85	-57.67	21.58	97.2	72.6	53.3
8.44	-69.82	-50.6	-57.67	18.25	97.1	71.9	51.6
8.45	-69.91	-50.54	-57.73	18.86	97.9	71.1	49.1
8.47	-69.77	-50.65	-57.67	21.79	98	71.1	52.3
8.53	-69.86	-50.54	-57.7	21.79	97.7	71.8	53.8
8.45	-69.91	-50.96	-57.73	18.28	97.3	72.3	49.6
7.97	-70.32	-50.7	-57.79	18.74	97.1	71.1	52.7
8.44	-70.46	-50.91	-57.85	21.83	97.2	71.2	53.2
8.45	-70.14	-50.85	-57.97	18.22	96.8	72.3	53.9
8.38	-69.95	-51.06	-58	18.5	96.6	71.2	53
8.48	-70.5	-50.8	-58.1	21.83	97.1	70.8	52
8.48	-70.46	-50.96	-58.13	21.79	97	71	50.9
8.45	-70.41	-51.22	-58.1	18.22	96.3	72	50.8
8.37	-70.09	-51.01	-58.25	18.44	96.1	71	50.1
8.45	-70.41	-50.96	-58.43	21.89	96.4	70.7	53.1
8.47	-70.92	-51.27	-58.25	19.35	95.7	72	52.2
8.44	-70.46	-51.11	-58.13	18.38	95.3	71.2	51.3
8.47	-70.46	-51.11	-58.1	18.8	95.4	70.3	50.5
8.46	-70.55	-51.22	-58.19	21.86	95.7	70.5	52
8.46	-70.64	-51.43	-58.1	20.45	94.8	71.6	52.9
8.39	-70.69	-51.22	-58.22	18.47	94.6	70.6	52.4
8.45	-70.92	-51.53	-58.37	21.89	95.1	70.3	56.8
8.57	-70.55	-51.27	-58.46	21.83	94.5	71.2	51.5
8.44	-71.24	-51.48	-58.16	18.32	94	71	51
8.34	-71.01	-51.37	-58.37	18.56	94	70.1	51.7
8.47	-71.01	-51.58	-58.28	21.89	94.4	70.1	48.7
8.58	-70.82	-51.53	-58.49	21.79	94	70.6	54.1
8.44	-70.78	-51.68	-58.37	18.28	93.2	70.8	54.2
8.48	-71.19	-51.74	-58.25	21.83	93.8	69.6	52.5
8.56	-71.1	-51.48	-58.43	21.83	93.6	70.5	51.7
8.46	-70.96	-51.48	-58.68	18.19	92.9	70.8	52.7
8.38	-71.24	-51.43	-58.55	18.38	92.9	70.1	52.5
8.46	-71.01	-51.48	-58.55	21.86	93.3	69.4	51.9
8.47	-70.64	-51.89	-58.58	21.79	93.3	69.9	50.8
8.46	-71.01	-51.79	-58.58	18.19	92.7	70.5	51.9
8.07	-71.37	-51.84	-58.55	18.62	92.9	69.3	51.7
8.51	-71.51	-51.58	-58.68	21.86	93.2	69.8	54.3
8.48	-71.37	-52	-58.74	18.19	92.7	70.4	50.1
8.37	-71.56	-51.58	-58.64	18.38	92.7	69.6	52.2
8.47	-70.96	-52	-58.64	21.86	93.3	69	54.4
8.49	-71.24	-51.74	-58.55	21.83	93.1	69.9	53.4
8.46	-71.65	-51.89	-58.58	18.16	92.6	70.2	52.2

7.83	-70.96	-51.94	-58.8	18.71	92.8	69	50.7
8.47	-71.37	-51.94	-58.58	21.86	93.2	69.6	49.5
8.45	-71.19	-51.74	-58.71	18.19	92.5	70.1	51
8.35	-71.19	-52.26	-58.92	18.5	92.6	69	52.3
8.47	-71.51	-51.84	-58.71	21.86	93.2	69	53.9
8.52	-71.47	-52.05	-58.68	21.79	92.9	69.5	50.5
8.47	-71.33	-52	-58.98	18.19	92.3	70	52.7
8.35	-71.33	-51.94	-58.86	18.5	92.2	68.8	53.2
8.46	-71.6	-52.1	-58.89	21.83	92.7	68.9	51.5
8.47	-71.65	-52.05	-58.83	18.13	92.1	70.1	51.6
8.29	-71.79	-52.1	-58.86	18.59	92.2	68.8	51.1
8.45	-71.6	-52	-58.98	21.92	92.5	69	52.5
8.45	-71.47	-52.05	-58.95	19.05	91.9	70	52.4
8.45	-71.88	-52.1	-58.95	18.22	91.7	69.4	52.4
8.45	-71.74	-52.1	-58.71	21.79	92.2	68.5	52.4
8.56	-71.79	-52.31	-58.92	21.79	92	69.5	51.5
8.46	-71.74	-52.1	-58.92	18.1	91.6	69.5	51.6
8.46	-72.29	-52.36	-58.83	21.83	92	68.4	53.2
8.49	-71.92	-51.84	-58.98	21.83	91.8	69	52.7
8.46	-71.92	-52.1	-59.04	18.1	91.1	69.5	51.6
8.35	-71.6	-52.31	-58.92	18.35	91.4	68.7	51.8
8.46	-71.97	-52.41	-58.92	21.79	91.8	68.4	58.2
8.55	-71.47	-52.36	-59.01	21.83	91.7	69	48.7
8.43	-71.79	-52.15	-59.26	18.22	91.1	69	51.6
8.47	-72.24	-52.36	-59.13	21.76	91.8	68.3	52.6
8.46	-71.56	-52.05	-59.1	21.25	91.2	69.5	53.5
8.42	-72.43	-52.46	-58.92	18.19	91.1	68.8	51.6
8.46	-71.92	-52.36	-58.95	21.86	91.8	68	51.2
8.51	-71.6	-52.52	-59.35	21.86	91.7	68.8	53.2
8.44	-71.92	-52.26	-59.32	18.13	90.8	69	52.3
8.47	-72.43	-52.2	-59.13	19.05	91.5	67.9	52
8.46	-72.2	-52.26	-59.13	21.83	91.2	68.7	52.1
8.45	-71.97	-52.62	-58.86	18.13	90.5	68.8	51.9
8.45	-71.51	-52.41	-59.41	21.73	91.2	68	52.6
8.47	-72.01	-52.52	-59.22	18.01	90.4	69	52.7
8.44	-71.79	-52.46	-59.19	21.86	90.8	67.9	52.4
8.46	-71.65	-52.36	-59.32	18.13	90.1	69.1	51
8.32	-72.01	-52.05	-59.29	18.41	90.2	68	53.8
8.46	-71.83	-52.36	-59.26	21.86	90.6	68.1	53.3
8.44	-71.92	-52.57	-59.22	18.07	89.7	68.7	53.8
8.45	-71.65	-52.46	-59.38	21.83	90	67.9	51.6
8.46	-72.06	-52.52	-59.38	18.16	89.7	69	52.1
8.46	-72.38	-52.57	-59.29	21.79	90.3	67.8	50.5
8.45	-72.2	-52.62	-59.26	18.07	89.7	68.8	51.6
8.45	-72.29	-52.62	-59.35	18.89	90	67.6	51
8.5	-72.34	-52.36	-59.41	21.86	89.8	68.2	51.4
8.42	-72.24	-52.57	-59.47	18.16	89.4	68.4	52.9

8.47	-72.2	-52.62	-59.41	21.83	90.2	67.6	52.8
8.45	-72.11	-52.62	-59.38	18.1	89.5	68.6	52.8
8.46	-71.88	-52.62	-59.5	21.86	90.2	67.6	51.2
8.45	-72.06	-52.46	-59.32	18.1	89.4	68.6	52.6
8.46	-72.47	-52.88	-59.26	21.79	90.1	67.3	48.3
8.46	-72.29	-52.62	-59.38	18.04	89.8	68.7	53
8.46	-72.15	-52.72	-59.62	20.09	90.7	67.5	52.8
8.78	-72.47	-53.03	-59.41	21.67	90.7	68.8	50
7.76	-72.75	-52.77	-59.41	18.68	90.9	67.5	53.4
8.57	-72.47	-52.77	-59.53	21.83	91.5	68.8	51.7
8.39	-71.74	-52.72	-59.71	18.32	91.6	68.3	53.5
8.46	-72.24	-53.03	-59.47	21.83	92.4	67.9	52.4
8.45	-72.52	-52.77	-59.47	18.13	92.3	68.6	52
8.46	-72.43	-52.83	-59.59	21.86	93.2	67.7	49.3
8.45	-72.38	-52.83	-59.56	20.6	93.1	69.1	51.9
8.29	-72.52	-52.83	-59.74	18.56	93.6	67.9	52.8
8.5	-72.61	-53.03	-59.74	21.79	93.9	68.4	53.7
8.44	-72.38	-52.98	-59.9	18.38	93.5	68.5	52.7
8.48	-73.34	-52.98	-59.59	21.92	94.1	68.2	51.7
8.46	-72.7	-52.88	-59.65	18.22	93.8	69	52.9
8.45	-72.75	-52.88	-59.62	21.79	94.2	68.1	51.3
8.46	-72.2	-52.77	-59.77	20.79	93.8	69.6	52.5
8.34	-72.98	-52.83	-59.71	18.47	93.5	68.5	52.3
8.46	-72.7	-52.98	-59.74	21.79	94.1	68.6	50.2
8.44	-72.61	-52.67	-59.68	18.25	94.2	69.3	52
8.46	-72.93	-53.09	-59.8	21.83	95.2	68.8	51.4
8.46	-72.34	-52.98	-59.93	18.1	95.1	70	51.6
8.35	-72.98	-52.98	-59.77	18.86	95.3	68.8	52
8.46	-72.84	-53.19	-59.84	21.83	95.9	69.1	53.5
8.45	-72.56	-53.14	-59.71	18.19	95.3	70	50.5
8.46	-72.88	-52.83	-60.02	21.86	95.5	69	53.2
8.45	-72.7	-53.24	-59.77	18.07	94.5	70.3	50.5
8.47	-69.54	-52.52	-59.44	-0.18	82.2	70.4	53.2
8.43	-71.47	-52	-58.68	-0.15	77.6	70.5	52.2
7.97	-72.56	-52.98	-59.65	21.55	96	69.5	52
8.46	-72.66	-53.4	-59.47	18.89	97.3	69.4	52.1
8.47	-72.43	-53.29	-59.71	19.44	98.1	69.3	52
8.44	-72.61	-53.09	-59.71	21.73	98.2	69.9	52.4
8.44	-72.38	-53.14	-59.71	18.22	98	70.7	53.6
8.44	-72.29	-53.24	-59.9	21.73	98.6	70.1	53.3
8.44	-72.56	-53.19	-59.96	18.28	96.7	70.8	53.1
8.5	-72.75	-53.14	-59.96	21.83	97.6	71.2	53.2
8.58	-72.98	-53.14	-59.71	21.73	99.4	72.7	51
8.45	-72.56	-53.14	-60.05	18.25	99.6	72.4	51.6
8.35	-72.52	-53.14	-59.9	18.86	98.9	70.8	51.9
8.47	-72.66	-53.19	-59.8	21.89	99	70.8	49.9
8.45	-72.84	-53.19	-59.93	18.25	98.1	71.8	52.5

8.47	-72.66	-53.09	-59.9	19.41	97.6	70.2	52.3
8.56	-72.75	-52.98	-60.02	21.83	97.7	71.4	52.9
8.42	-72.75	-53.19	-60.05	18.5	96.9	70.7	53.8
8.46	-72.84	-53.35	-60.02	21.92	97.2	70.4	51.9
8.45	-73.07	-53.35	-59.9	18.35	96.5	71.1	52.7
8.48	-72.61	-53.14	-59.99	21.89	97	69.9	51.2
8.47	-72.93	-53.29	-60.14	18.32	96.6	71	52.5
8.49	-72.7	-53.24	-60.14	21.92	97.2	69.9	49.7
8.47	-72.88	-53.29	-60.14	18.32	96.9	71.1	52.5
8.3	-72.84	-53.29	-60.08	19.11	96.6	69.6	52
8.53	-73.02	-53.4	-59.99	21.95	96.9	70.5	52.6
8.44	-72.61	-53.03	-60.11	18.5	96.3	70.6	51.9
8.46	-72.66	-53.14	-60.11	21.98	96.9	69.8	51.6
8.45	-73.25	-53.5	-60.08	18.41	96.1	70.7	53.4
8.48	-73.34	-53.35	-60.14	21.98	96.4	69.6	52.5
8.46	-73.21	-53.55	-60.14	18.41	96	70.6	52.7
8.47	-73.02	-53.4	-60.11	21.95	96.1	69.5	52
8.45	-72.93	-53.45	-60.14	18.41	95.7	70.7	49.4
8.4	-73.16	-53.45	-60.05	21.73	96.2	69.4	52.3
8.46	-73.16	-53.5	-60.48	21.83	95.9	70.8	52
8.41	-73.39	-53.35	-60.08	18.62	95.5	70	52.2
8.47	-73.11	-53.5	-60.38	21.95	96.2	69.4	51.6
8.47	-72.88	-53.45	-60.29	18.38	95.4	70.6	52.2
8.47	-72.75	-53.4	-60.35	21.98	95.9	69	53.3
8.46	-73.07	-53.5	-60.29	18.35	95.2	70.6	52.7
8.36	-73.48	-53.45	-60.32	19.11	95.3	69	51.8
8.59	-73.16	-53.6	-60.32	21.98	95.4	70.2	53.6
8.44	-73.21	-53.45	-60.2	18.47	94.9	69.9	54.1
8.45	-73.21	-53.19	-60.23	22.01	95.3	69.4	52.7
8.46	-73.66	-53.29	-60.2	18.44	94.6	70.3	53.3
8.48	-73.39	-53.5	-60.23	19.54	94.8	69	54.9
8.57	-73.16	-53.35	-60.35	22.01	94.9	69.9	52.2
8.44	-73.16	-53.6	-60.38	18.59	94.1	69.7	54
8.45	-73.34	-53.55	-60.32	21.98	94.7	69	53.2
8.45	-73.3	-53.55	-60.45	18.47	93.8	69.8	52.7
8.45	-73.02	-53.5	-60.45	22.04	94.2	68.9	52.7
8.47	-73.62	-53.6	-60.2	18.38	93.7	70.1	51.6
8.12	-73.53	-53.71	-60.42	18.99	93.3	68.9	53.5
8.48	-73.02	-53.66	-60.42	22.04	93.3	69	51.2
8.46	-73.21	-53.5	-60.54	18.53	92.2	69.6	52.3
8.45	-73.16	-53.5	-60.42	22.01	92.8	68.7	50.1
8.44	-72.93	-53.6	-60.51	18.41	91.7	69.8	52.5
8.47	-73.43	-53.6	-60.42	22.1	92.3	68.4	51
8.46	-73.16	-53.71	-60.35	18.41	91.5	69.8	52.4
8.34	-73.02	-53.6	-60.66	18.83	91.4	68.6	49.9
8.45	-73.43	-53.86	-60.32	22.04	91.7	68.6	53
8.46	-73.39	-53.71	-60.38	18.5	90.8	69.1	50.5

8.49	-73.07	-53.6	-60.57	19.78	91.2	68.1	52.6
8.57	-73.3	-53.71	-60.69	22.07	91	69	52.8
8.43	-73.3	-53.71	-60.66	18.56	90.4	68.8	53.2
8.46	-73.39	-53.81	-60.57	22.01	90.8	68.1	52.8
8.46	-73.57	-53.86	-60.54	18.44	89.8	69	52.4
8.45	-73.16	-53.81	-60.6	22.1	90.3	67.9	53.4
8.47	-73.21	-53.76	-60.69	18.41	89.5	69	52.9
8.48	-73.21	-53.86	-60.51	19.81	89.9	67.8	52.7
8.54	-73.34	-53.76	-60.66	22.07	89.7	68.8	52.5
8.42	-73.57	-53.97	-60.66	18.62	89.2	68.4	52
8.46	-73.62	-53.66	-60.96	22.13	89.7	67.7	55.2
8.46	-73.21	-53.86	-60.81	18.47	88.6	68.9	57.6
8.47	-73.57	-53.76	-60.75	19.05	88.7	67.5	51.6
8.57	-73.43	-53.86	-60.72	22.04	88.7	68.2	51.3
8.38	-73.21	-53.92	-60.81	18.62	88.3	67.7	52.9
8.47	-73.3	-54.02	-60.72	22.1	88.8	67.9	53.8
8.42	-73.53	-53.92	-60.78	18.53	88.2	68.1	50.2
8.45	-73.25	-54.02	-60.66	22.13	88.8	67.3	52.7
8.52	-73.48	-53.81	-60.69	22.13	88.4	68.2	52.1
8.44	-73.71	-53.86	-60.51	18.59	87.9	67.9	51.8
8.44	-73.48	-54.12	-60.93	22.1	88.5	67	50.8
8.45	-73.75	-53.81	-60.66	18.41	87.5	68.2	53.1
8.32	-73.43	-54.07	-60.72	18.89	87.7	67	52.2
8.45	-73.62	-54.02	-60.72	22.13	87.9	67.4	51.8
8.45	-73.75	-54.02	-60.84	18.56	87.1	67.7	52.9
8.44	-73.43	-54.07	-61	22.13	87.6	67	52.1
8.44	-73.62	-53.81	-60.81	18.47	87.1	67.9	52.3
8.45	-73.57	-53.97	-60.66	19.47	87.4	66.8	54.4
8.46	-73.62	-54.07	-60.9	22.16	87.3	67.2	52.6
8.43	-73.43	-53.97	-60.81	18.41	86.6	67.7	53.1
8.41	-74.03	-53.92	-60.69	21.98	87	66.5	52.4
8.56	-73.11	-53.97	-60.93	22.16	86.4	67.4	50.7
8.43	-73.43	-53.97	-60.78	18.56	86	67	52.2
8.43	-73.25	-53.97	-60.84	22.13	86.8	66.7	54.5
8.46	-73.62	-53.97	-60.81	18.47	85.8	67.4	51.5
8.45	-73.34	-53.92	-60.96	22.13	86.6	66.3	53.6
8.44	-73.94	-54.23	-60.93	20.09	85.8	67.5	52.1
8.31	-73.71	-53.97	-60.9	18.96	86.1	66.4	51.7
8.51	-73.34	-54.07	-60.87	22.16	86.1	66.9	51.8
8.42	-73.94	-53.92	-60.9	18.59	85.3	66.8	50.2
8.46	-74.17	-53.97	-60.72	22.16	86.3	66.3	52
8.45	-73.85	-54.07	-60.93	18.53	85.8	67	50.9
8.46	-73.48	-54.28	-60.84	22.19	86.5	66	52.8
8.47	-74.26	-54.23	-60.87	20.54	85.5	67.1	51.1
8.37	-73.94	-54.28	-60.84	18.77	85.3	66.5	52
8.45	-73.66	-53.97	-61	22.13	85.6	66.2	51.5
8.43	-74.03	-54.07	-60.96	18.5	84.6	66.7	49.9

8.45	-73.43	-54.23	-61.06	22.22	85.6	65.8	52.4
8.46	-74.08	-54.38	-60.96	18.53	84.5	66.8	52.4
8.44	-73.8	-54.28	-61.03	22.16	85.5	65.9	51.5
8.46	-73.53	-54.02	-60.96	18.47	84.6	66.8	52.8
8.33	-73.94	-54.33	-61.03	18.83	85	65.9	50.2
8.44	-73.21	-54.44	-61.09	22.19	85.6	65.8	51.6
8.44	-73.94	-54.33	-61.09	18.47	85	66.5	51.4
8.37	-74.12	-54.33	-60.96	19.26	85.4	65.5	51.2
8.47	-73.98	-54.49	-61.06	22.16	86.1	66	50.4
8.43	-73.48	-54.33	-61.21	18.59	85.9	66.3	51.6
8.46	-73.85	-54.02	-60.96	22.19	86.7	65.8	52.9
8.43	-73.57	-54.07	-61.09	18.56	86.4	66.5	49.6
8.46	-74.12	-54.38	-61.03	22.13	87.5	65.5	52.4
8.46	-74.26	-54.07	-61	18.53	87.1	66.6	52.4
8.47	-73.48	-54.33	-61.3	19.69	87.8	65.8	50.2
8.54	-73.71	-54.44	-61.06	22.19	88.4	65.9	52.1
8.45	-73.75	-54.44	-61.12	18.62	88.2	66.5	51.6
8.45	-73.71	-54.38	-61.18	22.19	89.3	65.8	54.2
8.46	-73.98	-54.33	-61.27	18.47	88.9	66.8	50.4
8.45	-74.21	-54.33	-61.39	19.87	89.7	65.7	53.8
8.45	-74.58	-54.38	-61.36	20.94	89.8	67	48.9
8.35	-73.8	-54.59	-61.3	18.89	90.1	66	51
8.46	-73.94	-54.28	-61.3	22.16	91.1	66.4	51.7
8.44	-74.21	-54.38	-61.12	18.53	91.1	66.9	51.9
8.46	-73.16	-54.23	-61.39	22.1	91.8	66.1	51.7
8.45	-73.75	-54.33	-61.21	18.53	91.7	67.3	52.4
8.44	-74.12	-54.33	-61.15	20.6	92.2	66.2	52.1
8.52	-73.71	-54.44	-61.15	4.55	90.9	67.6	48.2
8.33	-74.03	-54.02	-61.21	18.89	92.6	66.8	53.5
8.46	-74.03	-54.44	-61.45	22.13	93.2	66.6	52.4
8.46	-73.8	-54.8	-61.3	18.89	92.9	67.6	54.2
8.4	-73.71	-54.49	-61.27	18.74	93.3	67.2	51.9
8.45	-74.12	-54.49	-61.36	22.13	94.3	66.9	52.3
8.45	-74.08	-54.49	-61.27	21.52	94	67.9	52.2
8.43	-74.49	-54.59	-61.36	18.77	94	67.6	49.5
8.45	-74.3	-54.38	-61.39	22.1	94.1	67.2	52.1
8.46	-73.66	-54.59	-61.21	18.41	94.6	68	52.5
8.25	-73.71	-54.69	-61.33	18.99	95	67.2	52.3
8.47	-74.4	-54.64	-61.21	22.07	96	67.8	52.4
8.43	-74.12	-54.54	-61.45	18.56	95.7	67.9	51.6
8.48	-74.12	-54.44	-61.39	22.07	96.2	67.7	51.5
8.45	-74.12	-54.54	-61.33	18.5	96.8	68.4	50.4
8.48	-74.08	-54.44	-61.21	22.07	96.8	67.8	54.4
8.47	-74.17	-54.69	-61.33	19.99	96.8	68.9	51.5
8.42	-74.08	-54.54	-61.36	18.53	97.2	68.4	50.4
8.46	-74.3	-54.44	-61.3	22.04	97.9	67.9	55.1
8.46	-73.8	-54.64	-61.39	19.41	98.1	69.1	52.2

8.38	-73.75	-54.75	-61.45	18.62	98.4	68.2	50.5
8.45	-74.12	-54.54	-61.45	21.95	98.7	68.3	52.4
8.44	-74.3	-54.38	-61.36	18.5	98.3	69	49.3
8.46	-74.21	-54.69	-61.51	21.92	98.7	68.5	52.2
8.46	-74.08	-54.54	-61.3	18.32	98.2	69.4	51.8
8.48	-74.3	-54.64	-61.27	22.01	97.6	68.4	51.6
8.48	-74.53	-54.54	-61.27	18.32	97.2	69.8	51.2
8.01	-74.08	-54.44	-61.64	18.86	96.9	68.7	53.1
8.51	-74.53	-54.64	-61.33	21.98	97.3	69	55.2
8.44	-74.49	-54.64	-61.39	18.41	97.2	69.3	49.9
8.45	-74.53	-54.75	-61.48	21.95	97.6	68.8	51.7
8.45	-74.44	-54.54	-61.45	18.41	97.3	69.8	54.7
8.47	-74.12	-54.59	-61.67	21.92	97.5	69	52
8.47	-73.53	-54.69	-61.51	18.28	97.3	70.1	52.7
8.37	-74.44	-54.75	-61.51	18.71	97.4	69	51.9
8.45	-74.08	-54.69	-61.48	22.01	98.3	69	50.7
8.46	-74.35	-54.75	-61.39	18.41	97.9	70.2	48.4
8.44	-74.35	-54.64	-61.48	19.02	98.3	68.9	51.4
8.54	-74.44	-54.54	-61.51	22.01	98.6	69.8	52.5
8.42	-74.58	-54.54	-61.45	18.53	97.9	69.6	53.6
8.48	-74.3	-54.54	-61.51	22.01	98.5	69.6	52.6
8.44	-74.4	-54.9	-61.64	18.47	98.1	70	52.3
8.45	-74.3	-54.59	-61.58	21.98	98.5	69.3	53.3
8.47	-74.35	-54.75	-61.61	18.41	98	70.2	53
8.47	-74.49	-54.9	-61.54	21.92	98.4	69.4	54.6
8.46	-74.3	-54.85	-61.79	21.73	98.4	70.6	49
8.38	-74.3	-54.49	-61.51	18.71	98.2	69.5	52.6
8.47	-74.26	-54.59	-61.67	21.95	98.5	69.7	51.7
8.42	-74.35	-54.9	-61.64	18.53	97.6	69.9	51.7
8.47	-74.3	-54.69	-61.54	21.86	98.2	69.8	50.5
8.45	-74.49	-54.75	-61.7	18.47	97.7	70.2	54
8.46	-74.26	-54.9	-61.58	21.98	98.3	69.3	49.7
8.51	-74.03	-54.8	-61.61	18.35	97.6	70.6	53.6
8.39	-74.17	-54.64	-61.7	18.62	97.5	69.8	52.5
8.47	-74.12	-54.69	-61.85	21.95	98	69.3	52.6
8.48	-74.44	-54.8	-61.48	18.41	97.3	70.4	53.4
7.55	-74.3	-54.59	-61.61	18.96	97.1	69.1	52.3
8.46	-74.3	-54.75	-61.7	21.98	97.3	69.7	51.7
8.46	-74.26	-54.75	-61.67	18.59	96.3	69.8	54.2
8.47	-74.4	-54.8	-61.36	21.92	96.6	69.4	51
8.44	-74.58	-54.9	-61.67	18.53	95.7	70	52.6
8.48	-74.49	-54.95	-61.73	22.01	96.2	69.3	52.8
8.45	-74.62	-54.8	-61.64	18.53	95.3	70.1	52.5
8.48	-74.53	-54.75	-61.54	21.98	95.8	69	51.6
8.56	-74.21	-54.95	-61.67	21.92	95.2	70.1	53.4
8.38	-74.49	-54.8	-61.67	18.77	94.5	69.1	52
8.46	-74.12	-54.8	-61.64	22.1	95.1	69.4	56.4

8.42	-74.53	-54.8	-61.58	18.71	94	69.5	51.9
8.47	-74.76	-54.95	-61.79	22.13	94	69	52.9
8.46	-74.49	-54.85	-61.67	18.62	93.5	69.5	54.4
8.44	-74.58	-55.01	-61.79	22.04	93.7	68.8	52.3
8.45	-74.81	-54.54	-61.54	18.53	93.1	69.6	51.6
8.47	-74.49	-54.9	-61.64	22.01	93.7	68.7	52.1
8.45	-74.62	-54.75	-61.67	18.5	92.6	69.7	51.3
8.39	-74.26	-55.06	-61.76	18.74	92	69	52.2
8.47	-74.44	-54.85	-61.76	22.07	91.9	68.4	53.7
8.46	-74.3	-54.95	-61.79	19.11	91.1	69.5	50.5
8.4	-74.21	-54.85	-61.82	18.74	91.2	68.6	52.6
8.46	-74.67	-54.85	-61.76	22.1	91.8	68.3	51.9
8.46	-74.72	-55.06	-61.64	18.56	91.4	69.1	53.4
8.49	-74.58	-55.11	-61.79	22.04	91.9	67.9	52.2
8.46	-74.9	-55.11	-61.73	18.47	90.9	69.1	51.1
8.47	-74.4	-55.01	-61.79	22.1	91.4	67.9	49.4
8.45	-74.81	-54.95	-61.82	18.47	90.7	69.1	53
8.29	-74.85	-54.95	-61.85	18.96	90.5	67.9	51.5
8.46	-74.12	-55.11	-61.79	22.01	90.6	68	53
8.46	-74.3	-54.95	-61.97	18.5	89.9	68.9	52.3
8.4	-74.95	-55.01	-61.88	18.77	90.1	68.1	51.8
8.45	-74.72	-55.16	-61.61	22.1	90.7	67.8	52.6
8.47	-74.58	-55.01	-61.79	18.5	90.2	68.6	50.4
8.46	-74.49	-55.06	-61.82	22.07	90.8	67.4	47.3
8.47	-74.81	-55.16	-61.76	18.44	90.2	68.6	53.3
8.45	-74.44	-55.01	-61.82	20.24	90.7	67.5	52
8.52	-74.3	-55.01	-61.79	22.19	90.7	67.9	52.9
8.45	-74.81	-54.95	-61.94	18.53	90.1	68.3	51.6
8.47	-74.58	-55.21	-61.82	20.02	90.7	67.3	52.4
8.53	-74.62	-54.95	-61.76	22.04	90.5	67.9	51
8.42	-74.76	-55.16	-61.85	18.56	89.9	67.9	52.8
8.44	-74.81	-54.95	-61.82	22.13	90.4	67.3	52
8.46	-74.67	-55.16	-61.88	18.5	89.7	68.2	53.2
8.45	-74.72	-54.95	-61.94	22.07	90.3	67.3	49.9
8.44	-74.49	-55.11	-61.94	18.47	89.8	68.2	52.4
8.44	-75.22	-55.11	-61.7	22.13	90.3	67.1	44.9
8.45	-74.67	-55.16	-61.97	20.63	89.7	68.1	50.5
8.41	-74.9	-55.11	-61.85	18.62	89.7	67.7	51.8
8.45	-74.99	-55.11	-61.94	22.13	90.4	67.1	51.4
8.56	-74.95	-54.9	-61.91	22.1	89.9	67.9	51.6
8.43	-74.72	-54.85	-61.97	18.56	89.4	67.5	52.3
8.46	-74.81	-55.16	-61.97	22.13	89.8	66.9	55.1
8.46	-74.81	-55.27	-61.82	18.47	88.7	67.8	48.9
8.45	-74.67	-55.01	-61.85	22.07	89.3	66.8	51.3
8.47	-74.67	-55.32	-62.03	18.47	88.6	67.9	53.9
8.46	-74.58	-55.06	-62.09	20.05	88.8	66.8	52.8
8.57	-74.76	-55.06	-61.91	22.16	88.7	67.5	51.4

8.43	-74.85	-55.06	-61.97	18.5	88.3	67.6	52.6
8.46	-74.9	-55.11	-62	19.26	88.7	66.5	51.2
8.44	-75.77	-55.27	-61.97	22.1	88.9	67	53.8
8.44	-74.58	-55.32	-61.94	18.56	88.1	67.6	50.8
8.44	-74.85	-55.16	-62	22.19	89	66.5	51
8.45	-75.08	-55.01	-61.91	21.09	88.6	67.7	50.2
8.36	-75.49	-55.21	-61.73	18.83	88.7	66.7	53.1
8.47	-74.95	-55.37	-61.97	22.13	89.4	66.9	53.9
8.44	-74.62	-55.27	-62.09	18.56	88.7	67.1	53.1
8.46	-75.17	-55.16	-61.94	22.1	89.5	66.6	49.6
8.44	-74.95	-55.47	-61.97	18.44	88.6	67.4	53.1
8.46	-74.9	-55.06	-62.03	22.07	89.6	66.3	53
8.47	-74.35	-55.27	-62.06	18.47	89.2	67.5	51.5
8.47	-75.17	-55.11	-62.06	19.63	89.8	66.2	53.4
8.61	-74.72	-55.53	-62.03	22.13	90.2	67.3	52.8
8.43	-75.13	-55.16	-62.25	18.59	90.1	67.1	51.5
8.47	-74.53	-55.32	-62.16	22.07	91	66.4	52.4
8.45	-74.95	-55.06	-62.16	18.41	90.8	67.5	51.1
8.45	-75.22	-55.32	-62.06	19.05	91.4	66.3	50.2
8.59	-75.31	-55.21	-62.06	22.04	92	67.5	50.7
8.39	-74.53	-55.11	-62.16	18.71	92	67.1	52.1
8.47	-75.17	-55.27	-62.12	22.13	92.9	67.1	52.2
8.45	-74.9	-55.27	-62.12	18.62	92.8	67.5	52.6
8.47	-75.13	-55.27	-62.25	22.04	93.7	67.3	51.5
8.44	-74.49	-55.58	-61.97	18.5	93.6	67.9	51.7
8.44	-74.99	-55.32	-62.12	22.04	94.1	67	52.3
8.47	-74.99	-55.68	-62.16	18.38	94.3	68.1	51
8.45	-74.72	-55.58	-62.19	20.51	95.1	67.1	52.4
8.46	-75.22	-55.58	-62.34	20.33	95.1	68.5	52.7
8.12	-75.08	-55.27	-62.25	18.99	95.8	67.3	53.2
8.58	-74.62	-55.58	-62.06	22.01	96.6	68.4	54.6
8.43	-74.72	-55.16	-62.19	18.5	96.2	68.1	52.4
8.47	-75.45	-55.32	-62.16	21.89	97.3	68	51.7
8.47	-75.45	-55.53	-62.12	18.38	96.9	68.5	52.6
8.47	-74.99	-55.27	-62.09	22.07	97.5	67.7	51.8
8.46	-75.27	-55.58	-62.25	18.44	97.4	69.1	53.4
8.49	-75.4	-55.47	-62.31	21.98	97.3	68.1	53.4
8.5	-75.13	-55.47	-62.09	18.22	97.7	69.3	52.5
7.89	-74.58	-55.53	-62.4	18.93	98.1	68.3	52
8.52	-75.17	-55.63	-62.12	21.98	98.8	69	50.2
8.45	-74.72	-55.47	-62.28	18.5	98.5	69.3	52.3
8.46	-75.4	-55.37	-62.34	22.04	98.5	68.4	51.4
8.47	-74.99	-55.37	-62.19	18.41	98.8	69.8	50.5
8.47	-74.85	-55.32	-62.55	19.14	98.4	68.4	53.9
8.58	-75.17	-55.16	-62.4	21.95	98.4	69.7	51.8
8.35	-74.99	-55.53	-62.46	18.77	98.3	68.7	49.8
8.59	-75.17	-55.47	-62.43	21.98	98.5	69.9	52.3

8.44	-74.49	-55.68	-62.49	18.56	99.2	69.5	53.8
8.47	-75.17	-55.37	-62.52	22.04	99.8	68.8	53.9
8.54	-74.81	-55.47	-62.55	22.04	100	69.3	50.9
8.45	-75.08	-55.63	-62.8	18.44	100.1	69.8	52.4
8.47	-75.08	-55.68	-62.58	22.01	100.1	68.8	53.9
8.47	-74.72	-55.73	-62.67	18.35	99.7	70.1	53
8.5	-75.08	-55.58	-62.7	21.98	99.8	69	51.6
8.46	-75.13	-55.68	-62.7	18.35	99.3	70.4	51.3
8.33	-74.3	-55.68	-62.77	18.96	98.7	69.1	51.3
8.48	-74.99	-55.63	-62.83	22.07	98.8	69.3	52.2
8.48	-75.77	-55.84	-62.58	18.5	98.1	70.3	52.9
8.31	-74.99	-55.37	-62.92	18.96	98	69	52.3
8.46	-75.13	-55.73	-62.8	22.04	98.4	69.3	51.7
8.44	-75.45	-55.68	-62.77	18.62	97.9	69.9	51.7
8.47	-75.27	-55.68	-62.8	22.07	98.1	69.1	51.1
8.47	-75.13	-55.94	-62.67	18.53	97.6	69.9	51.9
8.49	-75.54	-55.53	-62.8	22.07	98	69.4	52.7
8.47	-74.72	-55.63	-62.8	18.5	97.5	70.2	51.2
8.41	-75.13	-55.58	-62.89	18.77	97.3	69.5	53.6
8.46	-75.86	-55.68	-62.61	22.01	98	69.1	48.4
8.46	-74.95	-55.63	-62.89	19.08	97.4	70.3	52.1
8.32	-75.54	-55.73	-62.95	18.96	97.3	69	52.7
8.51	-74.81	-55.78	-62.89	22.01	98	69.7	52.1
8.46	-75.4	-55.58	-62.8	18.59	97.4	69.9	52.7
8.47	-75.36	-55.53	-62.95	22.01	97.9	69.3	53.7
8.46	-75.13	-55.78	-63.07	18.59	97.3	70.1	52
8.46	-75.59	-55.99	-62.92	22.04	98	69.1	51.9
8.47	-75.45	-55.99	-63.04	18.5	97.3	70.2	51.5
8.5	-75.45	-55.68	-62.92	22.01	97.9	69	52.7
8.48	-75.4	-56.04	-63.04	18.47	97.4	70.4	53.6
8.36	-75.31	-55.94	-63.04	18.89	97.2	69.1	52.4
8.45	-74.99	-55.99	-62.89	22.1	97.3	69.5	53.6
8.47	-74.99	-55.89	-63.1	18.59	97	70.1	51.8
8.47	-75.45	-56.04	-62.89	22.01	97.3	69	51.5
8.48	-75.27	-55.94	-63.25	18.44	96.5	70.3	54
8.46	-75.36	-56.04	-63.19	21.21	97.2	68.9	49.3
8.47	-75.63	-55.84	-63.04	7.88	96	70.3	52.2
8.46	-75.31	-56.15	-62.95	19.54	96.8	68.8	47.4
8.49	-75.4	-55.99	-63.07	21.86	96.5	70.5	51.5
8.35	-75.63	-56.1	-62.92	18.93	96.2	69.1	50.1
8.57	-74.99	-55.78	-62.95	22.1	96.4	69.7	50.5
8.43	-75.72	-56.04	-63.19	18.74	95.2	69.6	51.7
8.46	-75.72	-56.04	-63.07	22.16	95.4	69	49
8.46	-75.54	-55.89	-62.95	18.59	94.8	70.1	51.7
8.36	-75.45	-55.78	-63.07	18.86	94.3	69.3	51.2
8.47	-75.82	-56.04	-62.83	22.1	94.7	68.8	52.7
8.46	-75.31	-55.73	-63.01	18.62	93.8	70	52.6

8.47	-75.63	-55.94	-63.01	19.57	93.3	68.5	53.2
8.58	-75.4	-55.84	-63.01	22.19	92.7	69.4	50.5
8.43	-75.68	-55.99	-62.64	18.86	92	69	54
8.48	-75.49	-55.84	-63.04	22.22	92.2	68.9	52.1
8.44	-75.45	-55.99	-62.92	18.8	91.1	69	52.5
8.47	-75.59	-55.94	-62.8	22.22	91.6	68.7	53.5
8.46	-75.82	-55.89	-62.89	18.74	90.8	69.3	50.5
8.46	-75.4	-56.04	-63.01	19.63	90.8	68.1	52.6
8.51	-75.27	-56.25	-62.95	22.22	90.5	68.7	52.2
8.43	-75.49	-55.89	-62.95	18.77	89.8	68.8	51.2
8.47	-75.49	-56.1	-62.83	22.25	90.6	68.1	51.3
8.45	-75.77	-56.15	-62.95	18.71	89.9	68.8	53.2
8.44	-75.4	-56.04	-63.04	22.28	90.1	67.9	51
8.47	-75.49	-55.89	-63.16	18.71	89.7	68.8	51.6
8.32	-75.68	-55.94	-62.92	19.08	89.9	67.9	51.9
8.45	-76	-55.99	-62.8	22.28	90.2	67.8	51.1
8.47	-75.68	-56.25	-62.89	18.71	90.1	68.7	50.9
8.31	-75.77	-56.15	-62.86	19.47	90.7	67.4	53.7
8.48	-75.91	-55.94	-62.86	22.28	90.9	68	55.2
8.45	-75.77	-56.1	-63.04	18.8	89.5	68	52.1
8.45	-75.63	-56.2	-63.04	22.22	89.8	67.6	49.5
8.44	-75.72	-56.25	-62.92	18.86	89.4	68	53.2
8.47	-75.54	-56.04	-62.92	22.25	89.7	67.5	52.5
8.45	-75.77	-55.99	-62.92	18.74	89.6	68.2	53.3
8.46	-75.59	-55.84	-62.95	19.32	89.7	67	52.1
8.47	-75.59	-56.15	-63.04	22.34	89.5	67.6	55.4
8.45	-76.18	-56.15	-62.92	18.71	88.3	68	52
8.47	-75.59	-55.99	-63.01	19.47	88.6	66.9	51.6
8.47	-75.77	-55.99	-62.89	22.34	88.3	67.5	53.4
8.43	-75.72	-56.1	-62.86	18.86	87.8	67.6	50.5
8.47	-75.45	-55.84	-62.92	22.34	88.4	67.1	48.9
8.44	-75.77	-56.2	-62.89	18.83	87.4	67.6	48.7
8.46	-75.59	-56.2	-63.01	22.25	88	66.8	51.4
8.46	-75.54	-56.25	-62.8	18.77	87.7	67.8	52.9
8.49	-75.49	-56.15	-62.92	22.31	88.2	66.6	53
8.63	-76.41	-56.41	-62.86	22.22	87.5	67.8	52.7
8.38	-76	-56.04	-63.04	19.05	87.1	66.7	52.5
8.48	-75.72	-56.04	-63.01	22.41	87.4	67.1	53.4
8.44	-75.86	-56.15	-63.07	18.86	86.5	67	48.8
8.46	-75.54	-56.15	-62.95	22.34	87.2	66.6	55.4
8.46	-75.59	-56.1	-62.92	18.89	86.4	67.1	52.9
8.45	-75.68	-56.3	-62.89	22.34	86.6	66.3	57.8
8.47	-75.4	-56.25	-63.07	18.74	85.7	67.4	52.7
8.31	-75.72	-56.2	-63.07	19.14	86.1	66.1	52.7
8.47	-75.63	-56.2	-63.1	22.41	86.2	66.4	54.3
8.43	-75.77	-56.2	-63.04	18.83	85.5	66.8	52
8.45	-75.72	-56.1	-62.95	22.31	86.3	66.3	53.9

8.46	-75.54	-56.36	-63.19	18.86	85.5	66.7	52.3
8.45	-75.49	-56.2	-63.19	22.34	85.6	66.3	55.3
8.45	-76.36	-56.04	-63.07	18.77	85.3	66.9	50.7
8.46	-76.09	-56.2	-62.95	19.54	85.7	65.8	53.8
8.47	-76.09	-56.2	-63.1	22.41	85.7	66.1	50.5
8.45	-75.77	-56.2	-63.04	18.8	84.3	66.5	53.4
8.44	-75.59	-56.36	-63.07	22.34	85.3	65.7	51.4
8.45	-75.54	-56.25	-62.92	18.77	84.3	66.6	52.4
8.47	-75.54	-56.1	-63.07	22.44	85.2	65.6	51.8
8.45	-75.91	-56.41	-63.01	18.74	84.1	66.7	53.2
8.48	-75.72	-56.3	-63.13	19.84	84.5	65.5	50.3
8.56	-76.09	-56.36	-62.83	22.41	85	66.2	50
8.44	-76.36	-56.41	-63.1	18.86	84.6	66.1	53.6
8.47	-75.77	-56.04	-63.1	21.43	85.3	65.4	52.3
8.58	-75.63	-55.99	-63.13	22.41	85.2	65.8	50.9
8.43	-76.04	-56.1	-63.04	18.89	84.3	65.9	54.2
8.44	-76.18	-56.3	-63.04	22.31	85.3	65.5	52.4
8.45	-75.72	-56.36	-62.86	18.83	84.8	66.3	51.2
8.47	-75.59	-56.3	-63.25	22.53	86	65	52.1
8.46	-75.54	-55.99	-63.13	18.74	85.4	66.3	51.3
8.47	-75.63	-56.46	-63.07	22.34	86.5	65.2	54.1
8.48	-75.77	-56.25	-63.28	18.59	86.1	66.1	52.2
8.51	-76.27	-56.36	-63.01	19.44	87	65.2	51.4
8.47	-76	-56.46	-63.13	22.31	87.8	65.8	49.2
8.46	-76.23	-56.3	-63.1	18.83	87.8	66.1	53.2
8.46	-76.09	-56.36	-62.95	22.28	88.7	65.3	52.1
8.45	-75.86	-56.25	-63.28	18.74	88.6	66.4	51.5
8.46	-75.68	-56.3	-63.22	22.34	89.5	65.5	50.9
8.47	-76.23	-56.3	-63.07	18.68	89.6	66.5	52.5
8.47	-76.32	-56.46	-63.25	19.32	89.9	65.5	51
8.48	-75.95	-56.46	-63.16	22.25	90.9	65.9	52.9
8.47	-76.41	-56.61	-62.89	18.77	90.8	66.6	52.6
8.47	-75.86	-56.04	-63.16	22.22	91.6	65.9	54.9
8.61	-75.86	-56.46	-63.01	22.19	91.8	67.1	52.3
8.36	-76	-56.2	-63.13	18.99	91.9	66.2	52.9
8.48	-76.09	-56.46	-63.13	22.22	93.1	66.4	49.5
8.41	-76.18	-56.61	-63.16	18.89	93	66.5	51.5
8.5	-76.27	-56.51	-63.19	21.76	92.3	67.3	53.3
8.42	-75.86	-56.61	-63.25	18.8	93.3	66.9	53.2
8.46	-76.18	-56.25	-63.28	22.19	94.2	66.7	51.9
8.46	-76.09	-56.56	-63.22	18.59	94.3	67.6	55
8.37	-76.18	-56.3	-63.1	18.93	94.6	67	53.3
8.47	-76.27	-56.46	-63.16	22.16	95.3	67.1	53.3
8.45	-76.04	-56.56	-63.16	18.68	95.3	67.8	50.3
8.47	-75.86	-56.51	-63.22	22.22	96	67.2	54.1
8.47	-77.01	-56.72	-63.22	18.68	95.7	67.9	52.9
8.47	-76.09	-56.41	-63.32	22.13	96.4	67.4	53.9

8.47	-76.04	-56.36	-63.44	18.59	96.4	68	52.2
8.48	-75.95	-56.46	-63.22	19.78	97.1	67.5	49.4
8.47	-75.82	-56.46	-63.32	22.04	97.3	67.9	51.7
8.45	-76.18	-56.46	-63.22	18.56	97.6	68.5	51.8
8.49	-76.04	-56.36	-63.13	20.02	98.2	67.7	51.6
8.61	-76.18	-56.41	-63.22	22.04	98.5	68.4	54.7
8.39	-76.04	-56.56	-63.07	18.74	98.8	68	52.8
8.59	-75.86	-56.46	-63.44	22.04	98.7	68.7	51.5
8.44	-76.04	-56.46	-63.16	18.62	98.7	68.6	52.6
8.46	-75.82	-56.3	-63.41	22.01	99.2	68.1	55.2
8.46	-76.41	-56.41	-63.22	18.62	98.7	69.3	51.6
8.43	-76.55	-56.46	-63.28	18.68	98.4	68.6	51.6
8.49	-76.27	-56.41	-63.32	22.13	98.4	68	49.9
8.47	-75.91	-56.36	-63.47	18.53	97.5	69.5	54.3
8.48	-76.09	-56.25	-63.38	22.04	97.9	68.2	47.9
8.5	-76.04	-56.46	-63.32	18.5	97.4	69.5	52.1
8.49	-76.09	-56.3	-63.22	22.16	97.5	68.3	51.6
8.49	-76.23	-56.46	-63.38	21.52	97.9	69.7	50.9
8.46	-76.18	-56.46	-63.28	18.71	97.6	69	50.9
8.44	-75.95	-56.51	-63.22	22.04	98.3	68.5	52.1
8.47	-76.41	-56.2	-63.04	18.47	98.2	69.7	52.9
8.51	-75.68	-56.61	-63.19	19.17	98	68.5	51
8.61	-76.23	-56.56	-63.32	22.13	98.4	69.4	51.4
8.43	-75.77	-56.36	-63.44	18.71	98	69.3	51.6
8.49	-76.32	-56.25	-63.5	22.04	98.5	69	53.2
8.44	-75.77	-56.41	-63.41	18.68	97.6	69.6	51.8
8.46	-76.32	-56.36	-63.47	22.07	98	69	52.2
8.46	-76.36	-56.61	-63.5	18.53	97.9	70	51.6
8.32	-76.04	-56.72	-63.44	19.2	97.9	68.7	52.3
8.47	-76.27	-56.51	-63.38	22.01	98.2	69.1	52.5
8.47	-75.77	-56.46	-63.41	18.56	97.6	70	52
8.47	-76.23	-56.3	-63.38	19.32	97.7	68.6	52
8.6	-76.27	-56.3	-63.47	22.1	97.7	69.7	52.6
8.35	-76	-56.72	-63.41	18.86	97.3	69.1	53.5
8.47	-76.04	-56.2	-63.38	22.25	96.7	70	52.3
8.43	-76.64	-56.61	-63.41	18.71	97.1	69.6	53.6
8.48	-76.23	-56.56	-63.41	22.1	97.2	69	50.5
8.48	-76.23	-56.87	-63.35	20.76	96.7	70.1	53.5
8.43	-75.68	-56.61	-63.44	18.77	96.3	69.5	52.8
8.47	-76.46	-56.41	-63.56	22.1	96.7	69	52.6
8.46	-75.86	-56.77	-63.38	18.59	96.1	70.1	54.5
8.47	-76.36	-56.61	-63.53	22.13	96.4	68.8	53.2
8.47	-76.27	-56.41	-63.5	18.56	95.7	70.1	51.3
8.5	-76.18	-56.3	-63.53	22.16	96	68.6	53.3
8.5	-76.18	-56.46	-63.32	18.53	95.1	70.2	53.2
8.48	-75.95	-56.46	-63.41	19.26	95	68.7	53.2
8.56	-76.09	-56.51	-63.47	22.16	95.1	70.1	52.8

8.44	-75.82	-56.61	-63.53	18.83	94.4	69.4	51.4
8.46	-76.36	-56.46	-63.32	22.22	94.8	68.9	51.8
8.48	-76	-56.56	-63.56	18.68	94.2	69.8	51.7
8.5	-76.36	-56.46	-63.62	22.25	94	68.6	51.7
8.47	-76.27	-56.61	-63.5	18.53	92.7	69.9	51.7
8.49	-75.86	-56.56	-63.44	19.51	92.3	68.4	53.3
9.16	-76.46	-56.72	-63.32	22.04	91.9	69.9	53.5
8.38	-76.27	-56.61	-63.47	18.96	91.4	68.7	52
8.49	-75.86	-56.77	-63.47	22.28	91.7	68.8	53.8
8.45	-75.86	-57.03	-63.62	18.74	90.9	69.3	51.6
8.47	-76.36	-56.56	-63.56	20.7	91.2	68.3	51.6
8.53	-76.68	-56.46	-63.35	22.25	90.8	68.7	52.3
8.47	-76.09	-56.51	-63.53	18.74	89.7	68.8	52.6
8.47	-76.36	-56.82	-63.44	22.28	90	67.9	52.2
8.47	-76.55	-56.72	-63.5	19.2	89	69	52.1
8.36	-76.23	-56.51	-63.56	18.89	88.9	67.9	54.2
8.45	-76.41	-56.72	-63.68	22.28	89	68.1	51.3
8.44	-76.73	-56.61	-63.35	18.8	88.3	68.6	53
8.47	-76.04	-56.77	-63.59	22.25	88.6	67.7	52.2
8.45	-76.32	-56.51	-63.53	18.62	87.8	68.5	51.6
8.49	-76.41	-56.77	-63.38	22.28	88.4	67.3	52.6
8.48	-76.36	-56.77	-63.59	18.62	87.5	68.6	53.7
8.41	-76.68	-56.72	-63.56	18.89	87.4	67.7	52.6
8.46	-76.27	-56.61	-63.59	22.22	87.8	67.4	51.9
8.45	-76.46	-56.87	-63.53	18.68	87	68.2	53
8.32	-76.23	-56.82	-63.53	19.11	87	67.1	54.9
8.47	-76.04	-56.87	-63.5	22.34	87.3	67.3	52.8
8.46	-76.36	-56.72	-63.35	18.74	86.4	67.9	50.7
8.45	-76.23	-56.82	-63.5	22.34	87.2	66.8	50.1
8.46	-76.23	-56.77	-63.68	18.71	86.6	67.9	50.3
8.43	-76.18	-56.56	-63.59	22.47	86.8	66.8	53.5
8.46	-76.64	-56.72	-63.59	18.71	85.9	67.9	51.9
8.38	-76.73	-56.93	-63.47	18.96	85.9	67	51.7
8.47	-76.36	-56.51	-63.53	22.28	86.4	66.6	51.3
8.47	-76.36	-56.56	-63.65	18.71	86	67.6	52.3
8.36	-76.18	-56.93	-63.56	18.99	86.1	66.6	52.2
8.47	-76.5	-56.77	-63.71	22.34	86.4	66.7	49.1
8.45	-76.59	-56.93	-63.47	18.83	85.3	67.3	51
8.47	-76.27	-56.98	-63.8	22.41	85.7	66.1	50.2
8.47	-76.5	-56.98	-63.62	18.71	84.9	67.2	52.7
8.45	-76.36	-56.72	-63.56	22.41	85.5	66.2	49.9
8.45	-76	-56.77	-63.56	22.13	85.3	67.3	50.8
8.44	-76.59	-56.72	-63.68	18.86	84.8	66.8	50.2
8.48	-76.04	-56.46	-63.53	22.47	85.4	65.9	51.6
8.56	-76.23	-56.72	-63.8	22.34	85.2	66.8	53.9
8.37	-76.23	-57.03	-63.56	19.02	85.1	66.1	52.5
8.59	-76.36	-56.61	-63.71	22.34	85.4	66.8	53.4

8.41	-76.36	-56.93	-63.65	18.93	85.3	66.2	52.9
8.47	-76.41	-56.41	-63.59	22.34	85.5	66.3	53.6
8.44	-76.55	-57.08	-63.5	18.8	84.2	66.5	52.9
8.47	-76.73	-56.82	-63.74	22.34	84.9	65.6	53.4
8.47	-75.91	-56.87	-63.8	21.7	83.8	66.8	52.6
8.41	-76.55	-56.61	-63.53	18.89	83.7	66.1	51.5
8.45	-76.36	-56.82	-63.71	22.41	84.9	65.7	52.7
8.47	-76.5	-56.82	-63.65	18.68	83.9	66.5	54.3
8.47	-76.32	-56.82	-63.86	22.41	84.4	65.5	51
8.46	-77.05	-56.98	-63.59	18.68	83.5	66.5	51.1
8.47	-76.36	-56.98	-63.59	22.41	84.4	65.4	53.9
8.47	-76.64	-56.51	-63.68	18.71	83.5	66.5	53.1
8.31	-76.64	-56.98	-63.44	19.17	83.7	65.3	52.6
8.45	-76.32	-56.77	-63.74	22.28	84.8	65.6	53.2
8.44	-76.46	-56.87	-63.62	18.74	84.2	66.2	52.1
8.47	-76.32	-57.08	-63.56	19.47	84.6	65.1	52.2
8.49	-76.59	-57.03	-63.65	22.41	84.8	65.7	55.7
8.44	-76.41	-56.93	-63.71	18.83	84.2	65.9	52.1
8.48	-76.73	-57.13	-63.8	22.28	85.3	65.2	49.4
8.46	-76.59	-56.56	-63.74	18.68	84.9	66	51.8
8.47	-76.04	-56.87	-63.8	22.44	85.9	65.1	51.6
8.5	-76.46	-57.03	-63.65	16.36	85.4	66.3	50.8
8.33	-76.59	-56.87	-63.86	19.47	85.9	65.1	53.6
8.47	-76.73	-57.08	-63.8	22.31	86.8	65.6	53.5
8.44	-76.5	-56.87	-63.59	18.86	86.6	66	52.7
8.48	-76.64	-56.72	-63.71	22.44	87.7	65.2	53.9
8.46	-76.78	-56.98	-63.56	18.74	87.5	66.3	52.6
8.5	-76.68	-57.13	-63.86	20.12	88.3	65.1	51.4
8.46	-76.73	-56.98	-63.71	21.76	88.3	66.4	52.9
8.47	-76.68	-57.13	-63.65	19.35	89.2	65.4	50.2
8.54	-76.18	-56.98	-63.8	14.84	86.8	66.3	52.5
8.38	-76.09	-56.93	-63.71	18.83	89.7	65.8	53
8.46	-76.78	-56.82	-63.74	22.19	91.1	65.8	52
8.47	-76.55	-56.93	-63.86	18.62	91.4	66.6	52.2
8.38	-76.73	-56.98	-63.8	18.89	91.5	65.9	51.5
8.45	-76.41	-56.98	-63.74	22.22	92.5	65.9	52.5
8.46	-76.78	-57.13	-63.68	18.71	92.5	66.7	52.1
8.46	-76.55	-57.03	-63.74	22.22	93.5	66.4	51.4
8.46	-76.78	-56.98	-63.86	18.56	93.7	67.1	52.5
8.47	-76.23	-57.03	-63.74	22.13	94.3	66.2	48.9
8.58	-76.78	-57.13	-63.59	22.07	94.6	67.5	50.5
8.43	-76.59	-57.19	-63.68	18.71	94.8	67.1	50.8
8.48	-76.23	-57.08	-63.65	22.07	95.4	66.7	47.5
8.47	-76.96	-57.29	-63.74	18.53	95.5	67.7	49.5
8.47	-76.91	-57.13	-63.65	22.04	96.3	66.9	52.5
8.46	-76.64	-57.08	-63.74	18.41	96.4	67.9	53.5
8.48	-76.46	-57.08	-63.71	22.04	96.8	67.2	53.6

8.56	-76.82	-56.98	-63.86	22.04	97.4	68.1	48.8
8.46	-76.78	-57.24	-63.83	18.44	99.2	69.7	49.1
8.49	-76.68	-57.19	-63.65	21.89	100.9	71.1	50.4
8.46	-76.82	-57.03	-63.8	18.28	100.7	71.2	52.8
8.53	-76.68	-56.93	-63.8	19.29	100.6	69.5	55.6
8.5	-72.61	-56.04	-63.04	5.04	99.8	71.1	53.8
8.47	-75.27	-60.82	-63.56	21.95	100.1	70.1	52.8
8.48	-76.64	-62.12	-63.68	21.95	101.4	70.1	52.4
8.55	-76.36	-62.37	-63.8	21.95	101.8	70.4	56.4
8.24	-77.19	-62.32	-63.99	18.89	101.9	70.2	54.9
8.48	-76.78	-62.53	-63.89	20.63	102.3	70	51.8
8.52	-76.59	-62.48	-64.11	21.89	102.5	70.6	52.3
8.32	-77.05	-62.95	-64.2	18.96	102.5	70.5	52.7
8.52	-77.1	-62.63	-64.02	21.89	102.2	70.1	51.8
8.5	-77.19	-62.69	-64.17	19.47	101.6	70.9	52.6
8.61	-77.33	-62.79	-64.2	21.92	102.2	72	51.8
8.5	-77.92	-62.84	-64.2	21.86	101.7	71.2	51.7
8.5	-76.87	-63.1	-64.17	18.99	102	71	50.9
8.82	-77.19	-63.15	-64.51	21.83	101.5	71.2	53.4
8.51	-77.05	-63.36	-64.38	21.89	101.5	70.6	53.7
8.48	-77.46	-63.62	-64.44	20.73	101.2	70.3	51.2
8.36	-77.55	-63.31	-64.38	18.56	101	70.7	53
8.49	-77.6	-63.46	-64.47	21.79	101.4	70.5	51.8
8.44	-77.6	-63.41	-64.63	21.92	101.2	70.3	49.5
8.54	-78.24	-63.36	-64.51	18.96	101.5	70.2	52
9.05	-77.55	-63.57	-64.63	21.79	101.2	70.9	52.5
8.5	-77.69	-63.41	-64.78	21.89	101.3	70.4	52.9
8.47	-77.88	-63.62	-64.75	21.03	101	70.3	52.2
8.36	-78.15	-63.83	-64.78	18.96	100.9	70.5	52.3
8.52	-77.6	-63.93	-64.81	21.86	101.2	70.4	53.6
8.47	-77.55	-63.57	-64.81	21.92	101.2	70.5	51.6
8.5	-77.69	-63.26	-64.9	18.8	100.8	70.3	51.6
8.43	-77.65	-63.26	-64.9	21.83	100.8	70.9	53.1
8.56	-77.97	-63.31	-64.9	21.86	101.1	70.5	52.7
8.47	-78.24	-63.57	-64.96	21.89	101.2	70.5	50.4
8.18	-78.29	-63.57	-64.96	18.68	100.8	70.5	55.1
8.58	-78.1	-64.04	-65.02	21.79	100.9	71	51.2
8.47	-77.92	-63.98	-65.09	21.89	100.9	70.7	52.2
8.47	-78.06	-63.93	-65.02	19.84	100.6	70.5	48.6
8.42	-78.2	-63.72	-64.99	19.99	100.2	71	50.3
8.56	-77.74	-63.62	-65.21	21.89	100.5	70.8	50
8.47	-77.83	-64.14	-65.09	21.89	100.2	70.6	52.1
8.36	-77.88	-63.98	-65.15	18.93	99.7	70.4	52.2
8.59	-78.01	-64.35	-65.09	21.86	99.5	71.2	51.4
8.46	-78.24	-64.29	-65.3	21.86	99.5	70.7	51.8
8.51	-78.47	-63.62	-65.24	21.89	99.4	70.5	54.3
8.13	-78.24	-64.29	-65.18	18.74	98.9	70.6	51.2

8.6	-78.01	-63.88	-65.51	21.92	98.9	71	54.1
8.53	-78.2	-64.14	-65.24	21.86	98.7	70.7	52.3
8.46	-78.1	-64.09	-65.15	20.36	98.6	70.5	52.8
8.44	-78.79	-63.93	-65.18	18.59	98.3	70.7	52.4
8.57	-78.06	-64.14	-65.36	21.95	97.6	70.8	53
8.52	-78.2	-64.14	-65.51	21.89	96.8	70.6	53.5
8.48	-78.29	-64.55	-65.42	21.89	96.5	70.2	52.2
8.47	-78.47	-64.35	-65.54	19.05	95	70.3	53.2
8.41	-78.42	-64.87	-65.42	18.44	93.8	70.4	49.4
8.54	-78.75	-64.14	-65.6	21.86	93.8	70.7	53.3
8.44	-78.29	-64.29	-65.67	21.89	93.6	70.2	48.9
8.51	-78.29	-63.98	-65.57	21.92	93.3	70	52.6
8.31	-78.42	-64.29	-65.39	18.96	92.7	70.1	52.2
8.41	-78.79	-64.55	-65.54	21.25	92.5	70.5	52.6
8.51	-78.84	-64.97	-65.7	21.89	92.7	70	50.5
8.49	-78.56	-64.81	-65.67	21.86	92.8	69.9	51.4
8.5	-78.88	-64.55	-65.57	20.21	92.6	69.7	54
8.03	-78.42	-64.61	-65.7	18.71	92.2	69.7	53.5
8.42	-78.2	-64.14	-65.79	18.38	92	69.9	51.9
8.47	-79.02	-64.87	-65.67	21.79	92.2	70.1	51.6
8.58	-78.79	-64.61	-65.82	21.95	92.3	70	52.5
8.5	-79.07	-64.71	-65.85	21.92	92.5	69.7	52.7
8.47	-79.02	-64.4	-65.73	21.92	92.4	69.5	51.5
8.46	-78.88	-64.45	-65.79	20.82	92.5	69.4	50.1
8.32	-78.79	-64.5	-65.76	18.59	91.9	69.5	51.1
8.53	-78.52	-64.66	-65.91	21.92	92.1	69.7	53
8.51	-78.88	-64.35	-65.91	21.83	92.3	69.4	52.4
8.46	-78.56	-64.81	-65.85	21.95	92.4	69.3	51.2
8.46	-79.02	-64.55	-65.91	18.89	92.1	69.1	51.8
8.37	-78.79	-65.02	-65.82	18.47	91.9	69.5	51.5
9.38	-78.97	-64.97	-65.97	21.73	92.1	69.8	53
8.53	-79.11	-64.5	-65.88	21.83	92.2	69.5	50.5
8.56	-78.88	-64.81	-65.97	21.92	92.2	69.5	52.1
8.76	-79.2	-64.81	-65.88	21.95	92	69.7	51.9
8.42	-78.93	-64.61	-66.03	18.71	91.8	69.5	52.6
8.38	-78.88	-64.5	-66.15	18.41	91.7	69.3	52.3
8.34	-79.34	-64.97	-66.03	18.59	91.7	69	52.3
8.32	-79.2	-65.07	-65.94	18.59	91.5	69	52.2
8.41	-79.2	-65.07	-65.94	18.41	91.5	69.1	52
8.42	-79.29	-64.97	-66.18	19.08	91.5	69.3	51.6
8.41	-79.07	-65.28	-66.18	20.57	91.7	69.5	53.5
8.44	-78.84	-64.92	-66.25	18.35	91.7	69.3	53.8
8.38	-79.02	-64.81	-66.09	18.38	91.2	69	53.3
8.27	-78.88	-64.87	-66.25	18.59	91.4	68.7	51.8
8.33	-79.07	-64.92	-66.25	18.77	91.5	68.7	52.3
8.38	-79.25	-64.66	-66.06	18.8	91.4	68.7	53.1
8.35	-79.25	-65.02	-66.28	18.53	91.4	68.8	53.6

8.33	-78.56	-64.87	-66.34	18.5	91.2	68.7	52.1
8.29	-79.07	-65.23	-66.28	18.56	91.4	68.4	52.3
8.38	-79.11	-64.81	-66.15	18.83	91.5	68.5	51.7
8.32	-78.88	-65.9	-66.34	18.89	91.7	68.4	51.6
7.93	-79.07	-64.92	-66.15	18.68	91.6	68.5	52.8
8.32	-79.16	-65.33	-66.09	18.53	91.5	68.6	52.1
8.32	-79.11	-65.02	-66.21	18.53	91.6	68.5	51.6
8.32	-79.34	-65.02	-66.28	18.83	91.5	68.4	53.6
8.47	-79.57	-65.59	-66.28	18.89	91.7	68.4	52.8
8.47	-79.43	-65.18	-66.31	18.99	91.6	68.3	50.9
8.44	-79.2	-65.07	-66.34	18.77	91.4	68.4	50.5
8.28	-79.39	-65.38	-66.4	18.89	91.1	68.2	53.3
8.47	-79.2	-65.07	-66.55	18.77	91.1	68.2	52.3
8.47	-79.71	-65.23	-66.37	19.32	91.7	68.2	53
8.5	-79.43	-65.33	-66.52	21	91.8	68.3	50.7
8.49	-79.43	-65.28	-66.49	21.86	91.8	68.2	53.2
8.44	-79.39	-64.97	-66.49	21.89	91.8	68.2	56
8.51	-79.16	-65.38	-66.46	20.39	91.7	68	51.5
8.53	-79.98	-65.44	-66.43	19.23	91.7	68.1	52.9
8.51	-79.57	-65.38	-66.52	19.23	91.6	68.2	51.6
8.49	-79.43	-65.07	-66.49	20.76	91.8	68.1	52
8.46	-79.16	-65.28	-66.4	21.86	91.8	68.1	52.1
8.5	-79.02	-65.85	-66.52	21.86	91.8	68.2	52.6
8.46	-79.07	-65.75	-66.67	21.83	92.1	68.3	51.7
8.47	-79.71	-65.33	-66.67	21.98	92.3	68.1	54.3
8.45	-79.84	-65.8	-66.61	21.92	92.5	68.2	52.1
8.5	-79.43	-65.28	-66.64	21.95	92.9	68.2	54
8.46	-79.62	-65.23	-66.67	21.95	93.2	68.2	52.2
8.47	-79.8	-65.75	-66.73	21.98	93.6	68.3	54.9
8.51	-79.89	-65.07	-66.7	21.92	93.9	68.4	54
8.49	-79.71	-65.59	-66.61	21.89	94.7	68.4	47.4
8.46	-79.52	-65.85	-66.73	21.95	94.5	68.4	51.8
8.5	-79.8	-65.9	-66.7	21.92	94.4	68.5	51.2
8.45	-79.89	-65.7	-66.67	21.92	95	68.5	53.8
8.5	-79.89	-65.96	-66.73	21.86	94.7	68.4	51.5
8.46	-79.98	-65.7	-66.86	21.89	95.4	68.7	49.2
8.5	-79.84	-65.7	-66.67	21.83	95.7	68.7	51.5
8.5	-79.75	-65.75	-66.95	21.86	95.7	68.9	53.8
8.52	-79.94	-66.11	-66.73	21.92	95.5	68.8	55.9
8.52	-79.75	-65.75	-66.83	21.86	96.1	68.9	51.7
8.52	-79.94	-66.32	-66.79	21.86	96.9	68.8	54.4
8.5	-79.62	-65.54	-67.07	21.83	97.1	69	53.2
8.49	-79.71	-65.44	-67.04	21.89	97	69	53.8
8.47	-79.89	-66.06	-66.92	21.89	96.7	69	52.5
8.52	-79.75	-65.59	-66.83	21.86	97.1	69.1	54.6
8.5	-79.94	-66.11	-67.01	21.89	97.3	69.3	50.3
8.52	-80.12	-66.11	-66.95	21.89	97.4	69.3	50.3

8.53	-79.98	-66.06	-67.01	21.79	98.2	69.5	51.6
8.48	-79.89	-65.85	-66.95	21.79	98.7	69.4	49.1
8.46	-79.2	-66.16	-67.01	21.83	98.8	69.7	53.4
8.5	-79.66	-66.11	-67.22	21.83	98.7	69.7	51.8
8.51	-80.35	-66.47	-67.1	21.86	98.8	69.7	51.6
8.53	-80.16	-66.11	-67.04	21.83	99.5	69.8	50.9
8.53	-79.71	-66.01	-67.19	21.79	100.1	69.8	54.6
8.48	-80.03	-65.85	-67.1	21.79	100.3	70	51.3
8.51	-79.94	-65.96	-67.13	21.76	100.5	70.1	54.3
8.52	-80.26	-65.96	-67.13	21.83	101.1	70.1	49.8
8.54	-80.62	-66.16	-67.19	21.79	101.5	70.1	52
8.53	-80.12	-66.16	-67.13	21.79	101.6	70.3	51.7
8.5	-75.45	-60.71	-66.21	-0.15	83.1	70.8	56.4
8.51	-74.08	-60.04	-65.79	-0.12	77.2	71.3	63.7
8.48	-73.43	-59.62	-65.51	-0.15	74.3	71.7	68
8.47	-73.02	-59.31	-65.27	-0.15	72.4	71.8	71.1
8.47	-72.66	-59	-65.09	-0.12	71.3	72	73.5
8.46	-72.47	-58.79	-64.9	-0.12	70.7	72.2	75.6
8.46	-72.2	-58.64	-64.75	-0.09	70.4	72.2	77.2
8.46	-72.01	-58.48	-64.6	-0.09	70.1	72.3	78.5
8.46	-71.88	-58.43	-64.38	-0.12	70.1	72.4	79.4
8.45	-71.65	-58.17	-64.29	-0.09	70	72.6	80.5
8.46	-71.47	-58.02	-64.17	-0.09	70.1	72.6	81.1
8.46	-71.37	-57.86	-64.05	-0.09	70.1	72.8	82
8.46	-71.24	-57.76	-63.96	-0.09	70.3	72.9	82.5
8.46	-71.05	-57.65	-63.83	-0.12	70.3	73.1	82.9
8.46	-70.96	-57.55	-63.71	-0.12	70.2	73.2	83.4
8.46	-70.92	-57.45	-63.62	-0.12	70.4	73.3	83.9
8.45	-70.82	-57.34	-63.53	-0.12	70.6	73.4	84
8.46	-70.69	-57.29	-63.44	-0.12	70.7	73.4	84.3
8.46	-70.55	-57.19	-63.35	-0.09	70.9	73.4	84.7
8.46	-70.46	-57.08	-63.25	-0.12	71	73.5	84.9
8.46	-70.41	-57.03	-63.19	-0.12	71	73.5	85
8.46	-70.32	-56.98	-63.1	-0.12	71.1	73.5	85.2
8.46	-70.27	-56.82	-63.04	-0.12	71.2	73.5	85.4
8.45	-70.18	-56.77	-62.92	-0.12	71.2	73.6	85.5
8.46	-70.09	-56.72	-62.86	-0.12	71.2	73.6	85.5
8.45	-70.05	-56.61	-62.8	-0.12	71.2	73.6	85.6
8.45	-70	-56.56	-62.74	-0.15	71.3	73.6	85.7
8.44	-69.91	-56.46	-62.67	-0.12	71.3	73.6	85.7
8.45	-69.82	-56.46	-62.61	-0.15	71.3	73.5	85.7
8.44	-69.77	-56.36	-62.55	-0.15	71.2	73.6	85.8
8.44	-69.73	-56.3	-62.46	-0.12	71.3	73.6	85.8
8.44	-69.68	-56.25	-62.43	-0.15	71.3	73.6	85.7
8.43	-69.63	-56.2	-62.37	-0.15	71.3	73.6	85.7
8.43	-69.54	-56.15	-62.31	-0.15	71.4	73.6	85.5
8.43	-69.5	-56.1	-62.25	-0.15	71.4	73.6	85.4

8.43	-69.4	-56.04	-62.19	-0.15	71.4	73.5	85.4
8.42	-69.36	-55.99	-62.12	-0.15	71.3	73.6	85.3
8.42	-69.31	-55.94	-62.09	-0.15	71.4	73.6	85.2
8.42	-69.27	-55.89	-62.03	-0.15	71.4	73.6	85.1
8.41	-69.22	-55.84	-62	-0.15	71.4	73.5	84.9
8.41	-69.18	-55.84	-61.94	-0.15	71.4	73.5	84.9
8.41	-69.13	-55.73	-61.88	-0.15	71.4	73.6	84.7
8.4	-69.08	-55.73	-61.85	-0.15	71.4	73.5	84.6
8.39	-69.04	-55.68	-61.79	-0.15	71.4	73.5	84.6
8.4	-68.99	-55.63	-61.73	-0.18	71.4	73.5	84.5
8.38	-68.95	-55.58	-61.7	-0.15	71.4	73.4	84.2
8.38	-68.9	-55.53	-61.67	-0.18	71.3	73.4	84.2
8.38	-68.86	-55.53	-61.64	-0.15	71.4	73.4	84.1
8.38	-68.81	-55.47	-61.61	-0.15	71.3	73.4	83.9
8.38	-68.76	-55.37	-61.58	-0.15	71.3	73.4	83.7
8.38	-68.72	-55.32	-61.54	-0.15	71.3	73.4	83.8
8.38	-68.72	-55.27	-61.51	-0.18	71.3	73.4	83.7
8.37	-68.67	-55.27	-61.45	-0.15	71.3	73.4	83.6
8.37	-68.63	-55.27	-61.39	-0.15	71.2	73.4	83.3
8.37	-68.58	-55.21	-61.36	-0.15	71.3	73.3	83.3
8.36	-68.53	-55.16	-61.33	-0.15	71.2	73.3	83.3
8.36	-68.49	-55.11	-61.3	-0.15	71.2	73.3	83.2
8.35	-68.49	-55.06	-61.27	-0.15	71.2	73.2	83
8.36	-68.4	-55.01	-61.24	-0.18	71.2	73.2	83
8.35	-68.4	-55.01	-61.18	-0.15	71.2	73.2	83
8.35	-68.31	-55.01	-61.15	-0.15	71.2	73.2	82.9
8.35	-68.31	-54.95	-61.12	-0.15	71.2	73.2	82.7
8.34	-68.26	-54.9	-61.09	-0.15	71.2	73.1	82.5
8.34	-68.21	-54.85	-61.03	-0.15	71.2	73.1	82.5
8.34	-68.17	-54.8	-61	-0.15	71.2	73.1	82.4
8.34	-68.12	-54.8	-60.96	-0.15	71.1	73	82.4
8.32	-68.12	-54.75	-60.93	-0.18	71	73	82.1
8.32	-68.08	-54.75	-60.9	-0.15	71.1	73	82.1
8.33	-68.03	-54.69	-60.87	-0.15	71	73	82
8.32	-67.99	-54.64	-60.84	-0.15	71	73	82
8.32	-67.94	-54.59	-60.78	-0.15	71	73	81.9
8.32	-67.94	-54.59	-60.75	-0.15	71	72.9	81.8
8.32	-67.89	-54.54	-60.72	-0.15	71	72.9	81.7
8.32	-67.85	-54.49	-60.69	-0.15	70.9	72.9	81.6
8.31	-67.8	-54.49	-60.66	-0.15	70.9	72.9	81.4
8.31	-67.76	-54.44	-60.57	-0.15	70.8	72.9	81.2
8.31	-67.76	-54.44	-60.54	-0.15	70.8	72.9	81.4
8.31	-67.71	-54.38	-60.51	-0.15	70.8	72.9	81.1
8.29	-67.66	-54.33	-60.51	-0.15	70.8	72.9	81.2
8.29	-67.66	-54.33	-60.45	-0.15	70.8	72.8	81.1
8.29	-67.62	-54.28	-60.42	-0.15	70.7	72.8	81
8.29	-67.57	-54.23	-60.42	-0.15	70.8	72.8	81

8.29	-67.57	-54.23	-60.35	-0.15	70.8	72.8	81
8.29	-67.48	-54.12	-60.35	-0.15	70.7	72.7	81
8.29	-67.48	-54.12	-60.32	-0.15	70.7	72.7	80.9
8.29	-67.48	-54.07	-60.26	-0.15	70.8	72.7	80.8
8.29	-67.44	-54.02	-60.26	-0.15	70.7	72.7	80.8
8.29	-67.39	-54.02	-60.2	-0.15	70.8	72.6	80.9
8.27	-67.39	-53.97	-60.2	-0.15	70.7	72.6	80.7
8.27	-67.39	-53.97	-60.17	-0.15	70.7	72.6	80.7
8.28	-67.3	-53.92	-60.14	-0.15	70.7	72.6	80.8
8.28	-67.3	-53.92	-60.11	-0.12	70.7	72.6	80.5
8.28	-67.21	-53.86	-60.08	-0.15	70.6	72.5	80.6
8.26	-67.16	-53.81	-60.05	-0.15	70.7	72.5	80.6
8.26	-67.12	-53.81	-60.02	-0.15	70.6	72.5	80.5
8.26	-67.12	-53.76	-59.99	-0.15	70.6	72.4	80.6
8.26	-67.07	-53.71	-59.96	-0.15	70.5	72.5	80.5
8.26	-67.07	-53.71	-59.96	-0.15	70.6	72.4	80.4
8.26	-67.02	-53.71	-59.9	-0.15	70.6	72.4	80.3
8.26	-66.98	-53.66	-59.9	-0.15	70.6	72.4	80
8.26	-66.98	-53.6	-59.84	-0.15	70.6	72.4	80.1
8.26	-66.93	-53.6	-59.8	-0.15	70.5	72.3	80.1
8.26	-66.93	-53.6	-59.77	-0.15	70.5	72.3	80.3
8.25	-66.89	-53.55	-59.77	-0.15	70.5	72.3	80
8.25	-66.89	-53.55	-59.74	-0.12	70.4	72.3	80
8.25	-66.84	-53.55	-59.71	-0.12	70.5	72.3	80
8.25	-66.79	-53.45	-59.68	-0.15	70.5	72.3	80
8.25	-66.79	-53.45	-59.65	-0.15	70.4	72.3	79.9
8.24	-66.75	-53.45	-59.62	-0.15	70.4	72.3	80
8.24	-66.75	-53.4	-59.59	-0.15	70.4	72.3	79.9
8.24	-66.75	-53.4	-59.56	-0.15	70.3	72.3	79.7
8.24	-66.7	-53.35	-59.56	-0.15	70.3	72.3	79.9
8.24	-66.66	-53.35	-59.53	-0.12	70.3	72.3	79.7
8.24	-66.66	-53.29	-59.53	-0.15	70.3	72.3	79.7
8.23	-66.66	-53.29	-59.5	-0.15	70.3	72.2	79.8
8.23	-66.61	-53.29	-59.47	-0.15	70.2	72.2	79.7
8.23	-66.61	-53.29	-59.44	-0.15	70.3	72.2	79.5

8.23	-66.57	-53.24	-59.41	-0.15	70.1	72.2	79.7
8.23	-66.52	-53.19	-59.41	-0.15	70.2	72.6	79.6
8.5	-71.56	-58.28	-60.38	21.83	84.4	72.2	55.8
8.42	-68.21	-54.02	-59.99	-0.12	78.5	72.1	56.8
8.5	-72.56	-59.31	-60.78	21.76	92.1	71.4	50.5
8.52	-73.21	-59.78	-61.03	18.62	93.2	71.2	56
8.47	-73.57	-59.99	-61.39	21.73	94	71.6	51.6
8.49	-74.44	-60.25	-61.39	21.76	94.2	71.4	51.8
8.37	-74.03	-60.71	-61.82	21.4	94	71.8	51.5
8.53	-74.26	-60.92	-61.73	21.73	94.4	71.3	53.6
8.36	-74.08	-60.87	-62.25	18.47	94	71.2	53.7
8.54	-74.44	-61.03	-62.34	21.76	94.1	71.2	47.5
8.51	-75.17	-61.03	-62.25	21.83	94.3	71.2	52.3
8.33	-75.63	-61.44	-62.34	18.41	93.9	71.2	52.9
9.7	-75.31	-61.18	-62.43	21.64	94	71.9	51.9
8.59	-75.31	-61.39	-62.55	21.67	94.1	71.6	50.7
8.14	-75.4	-61.96	-62.49	21.79	94.3	71.3	51.5
8.48	-75.72	-61.39	-62.86	21.79	94.1	70.9	53.2
8.5	-75.68	-61.6	-62.86	21.7	94	70.6	49.7
8.59	-75.68	-61.7	-62.92	21.76	93.9	70.5	51.6
8.57	-75.31	-62.17	-63.07	21.83	93.6	70.6	52.2
8.59	-76.04	-62.43	-63.01	21.76	93.5	70.6	52.8
8.61	-75.63	-62.43	-63.07	21.86	93.6	70.2	52.3
8.62	-76.09	-62.27	-63.41	21.83	93.6	70	51.9

8.52	-76.27	-61.54	-63.32	21.86	93.7	69.8	52.2
8.52	-76.23	-62.27	-63.25	21.83	93.6	69.4	51.4
8.5	-76.41	-62.43	-63.35	21.76	93.6	69.5	51.9
8.56	-76.23	-62.32	-63.53	21.7	93.8	69.5	52.4
8.62	-76.09	-63.1	-63.53	21.86	93.3	70	50.9
8.58	-76.59	-62.58	-63.56	21.79	93.1	69.8	51.6
8.57	-76.5	-62.63	-63.71	21.79	93	69.5	52.1
8.51	-77.14	-62.74	-63.5	21.83	93	69.3	52.8
8.5	-76.55	-62.43	-63.65	21.79	93	69.1	52.5
8.49	-76.5	-62.74	-63.96	21.79	93.2	69	47.9
8.52	-76.59	-63.05	-63.89	21.79	93.1	69.3	49.7
8.56	-76.59	-62.95	-64.02	21.79	93.1	69.3	50.3
8.53	-76.82	-62.53	-63.89	21.79	93.1	69	52.5
8.58	-76.73	-62.58	-63.93	21.79	93.2	69	52.2
8.38	-74.17	-58.33	-63.47	6.01	92.2	69	52.2
8.49	-71.42	-57.24	-62.83	-0.21	75.8	69.7	57.7
8.48	-70.69	-56.77	-62.49	-0.21	71.9	69.8	61.5
8.47	-70.18	-56.36	-62.25	-0.21	70	69.9	64.1
8.47	-69.86	-56.15	-62.06	-0.18	68.9	70.1	65.9
8.46	-69.54	-55.89	-61.88	-0.18	68.1	70.1	67.5
8.46	-69.22	-55.78	-61.76	-0.15	67.9	70.1	68.9
8.46	-69.08	-55.63	-61.64	-0.18	67.6	70.1	70.1
8.46	-68.9	-55.47	-61.51	-0.15	67.4	70.2	71
8.45	-68.76	-55.27	-61.39	-0.18	67.4	70.2	71.3
8.45	-68.63	-55.21	-61.3	-0.15	67.4	70.2	72

8.46	-68.53	-55.11	-61.21	-0.15	67.4	70.2	72.5
8.45	-68.44	-55.01	-61.15	-0.15	67.5	70.2	72.8
8.46	-68.26	-54.9	-61.03	-0.15	67.5	70.3	73.3
8.45	-68.17	-54.85	-60.96	-0.18	67.6	70.3	73.4
8.45	-68.12	-54.75	-60.87	-0.15	67.7	70.3	73.5
8.45	-67.99	-54.64	-60.81	-0.18	67.7	70.3	73.8
8.44	-67.94	-54.59	-60.78	-0.18	67.8	70.4	73.7
8.44	-67.85	-54.49	-60.69	-0.15	67.8	70.4	74.2
8.45	-67.8	-54.44	-60.6	-0.15	67.9	70.4	74.2
8.44	-67.76	-54.38	-60.54	-0.15	67.9	70.4	74.4
8.44	-67.66	-54.33	-60.48	-0.15	68	70.4	74.5
8.44	-67.62	-54.28	-60.45	-0.18	68	70.4	74.3
8.44	-67.57	-54.12	-60.38	-0.15	68	70.4	74.4
8.44	-67.53	-54.07	-60.35	-0.18	68	70.5	74.5
8.43	-67.44	-54.02	-60.29	-0.18	68.2	70.5	74.4
8.43	-67.39	-53.97	-60.23	-0.15	68.2	70.5	74.5
8.43	-67.34	-53.92	-60.2	-0.15	68.2	70.5	74.5
8.43	-67.3	-53.86	-60.11	-0.15	68.3	70.5	74.5
8.42	-67.21	-53.86	-60.08	-0.18	68.4	70.5	74.7
8.42	-67.16	-53.76	-60.05	-0.18	68.3	70.5	74.6
8.41	-67.12	-53.76	-59.99	-0.15	68.4	70.4	74.5
8.41	-67.07	-53.71	-59.96	-0.15	68.3	70.5	74.5
8.41	-67.02	-53.66	-59.9	-0.18	68.4	70.5	74.6

8.41	-66.98	-53.66	-59.84	-0.18	68.5	70.5	74.5
8.4	-66.93	-53.6	-59.8	-0.15	68.5	70.4	74.5
8.4	-66.89	-53.55	-59.77	-0.15	68.3	70.4	74.4
8.39	-66.84	-53.5	-59.71	-0.15	68.5	70.4	74.5
8.38	-66.79	-53.45	-59.68	-0.15	68.5	70.4	74.4
8.38	-66.79	-53.45	-59.65	-0.15	68.4	70.4	74.4
8.38	-66.75	-53.4	-59.62	-0.18	68.4	70.4	74.5
8.38	-66.7	-53.35	-59.59	-0.15	68.4	70.3	74.2
8.38	-66.66	-53.35	-59.56	-0.15	68.5	70.4	74.2
8.38	-66.66	-53.29	-59.5	-0.15	68.5	70.3	74.2
8.37	-66.61	-53.24	-59.47	-0.18	68.3	70.3	74.2
8.37	-66.57	-53.24	-59.47	-0.15	68.4	70.3	74.2
8.37	-66.52	-53.19	-59.44	-0.15	68.5	70.3	74.1
8.37	-66.47	-53.19	-59.38	-0.18	68.5	70.3	74.2
8.36	-66.47	-53.14	-59.35	-0.18	68.5	70.3	74
8.36	-66.43	-53.09	-59.35	-0.18	68.4	70.3	73.8
8.35	-66.38	-53.09	-59.32	-0.15	68.4	70.2	73.8
8.35	-66.38	-53.03	-59.29	-0.18	68.4	70.2	73.8
8.35	-66.34	-53.03	-59.26	-0.15	68.4	70.2	73.7
8.35	-66.34	-52.98	-59.22	-0.15	68.4	70.2	73.6
8.35	-66.29	-52.88	-59.19	-0.15	68.4	70.2	73.7
8.34	-66.25	-52.88	-59.19	-0.15	68.4	70.1	73.5
8.34	-66.25	-52.88	-59.13	-0.15	68.4	70.1	73.6

8.34	-66.2	-52.83	-59.13	-0.15	68.3	70.1	73.6
8.32	-66.11	-52.83	-59.04	-0.18	68.4	70.1	73.5
8.33	-66.11	-52.77	-59.04	-0.15	68.4	70.1	73.5
8.32	-66.06	-52.72	-59.01	-0.15	68.4	70.1	73.4
8.33	-66.06	-52.72	-58.98	-0.15	68.3	70.1	73.4
8.32	-65.97	-52.72	-58.95	-0.15	68.3	70.1	73.2
8.32	-66.02	-52.67	-58.92	-0.15	68.3	70.1	73.2
8.32	-65.97	-52.62	-58.92	-0.15	68.3	70	73.3
8.31	-65.92	-52.62	-58.86	-0.18	68.3	70	73.4
8.31	-65.88	-52.57	-58.86	-0.15	68.2	70	73.1
8.31	-65.88	-52.57	-58.83	-0.15	68.3	70	73.3
8.31	-65.83	-52.52	-58.83	-0.15	68.3	69.9	73
8.3	-65.83	-52.52	-58.8	-0.15	68.3	69.9	73.1
8.3	-65.79	-52.46	-58.77	-0.15	68.2	69.9	73.1
8.29	-65.79	-52.46	-58.74	-0.15	68.2	69.9	73.1
8.29	-65.74	-52.41	-58.71	-0.15	68.1	69.9	72.9
8.29	-65.74	-52.41	-58.68	-0.18	68.1	69.9	72.9
8.29	-65.7	-52.41	-58.68	-0.15	68.1	69.8	73.1
8.29	-65.65	-52.36	-58.64	-0.15	68.1	69.9	73
8.29	-65.65	-52.31	-58.61	-0.15	68.1	69.8	72.8
8.29	-65.65	-52.31	-58.61	-0.15	68.1	69.8	72.8
8.28	-65.6	-52.26	-58.55	-0.15	68.1	69.8	72.7
8.28	-65.56	-52.26	-58.55	-0.15	68.1	69.7	72.9
8.28	-65.56	-52.26	-58.52	-0.15	68.1	69.7	72.9

8.28	-65.51	-52.2	-58.49	-0.15	68.1	69.7	72.8
8.28	-65.51	-52.2	-58.49	-0.15	68.1	69.7	72.7
8.27	-65.47	-52.15	-58.46	-0.15	68	69.6	72.8
8.26	-65.47	-52.15	-58.43	-0.15	68.1	69.6	72.4
8.27	-65.42	-52.15	-58.43	-0.15	68.1	69.6	72.6
8.27	-65.42	-52.1	-58.4	-0.15	67.9	69.6	72.5
8.26	-65.42	-52.05	-58.37	-0.15	68	69.6	72.4
8.26	-65.38	-52.05	-58.37	-0.15	67.9	69.5	72.3
8.26	-65.38	-52.05	-58.34	-0.12	68	69.5	72.4
8.26	-65.33	-52.05	-58.28	-0.15	68	69.5	72.2
8.26	-65.33	-52	-58.28	-0.15	68	69.5	72.3
8.26	-65.28	-52	-58.25	-0.15	67.9	69.4	72.2
8.25	-65.24	-52	-58.25	-0.15	67.9	69.4	72.2
8.26	-65.24	-51.94	-58.22	-0.15	67.9	69.4	71.9
8.26	-65.24	-51.89	-58.19	-0.12	67.9	69.4	72
8.25	-65.19	-51.94	-58.19	-0.15	67.9	69.4	72.3
8.25	-65.19	-51.89	-58.16	-0.15	67.8	69.4	72.2
8.25	-65.19	-51.89	-58.16	-0.15	67.8	69.4	72.2
8.25	-65.15	-51.89	-58.13	-0.15	67.9	69.4	72.3
8.24	-65.15	-51.84	-58.13	-0.15	67.9	69.4	72.2
8.24	-65.1	-51.84	-58.1	-0.15	67.9	69.4	72.3
8.24	-65.1	-51.79	-58.06	-0.15	67.9	69.5	72.3
8.24	-65.05	-51.79	-58.06	-0.15	67.9	69.5	72.7
8.24	-65.05	-51.79	-58.03	-0.12	67.7	69.6	72.8
8.24	-64.96	-51.74	-58	-0.15	67.8	69.6	73
8.24	-64.96	-51.74	-58	-0.15	67.8	69.7	73.4
8.23	-64.96	-51.68	-57.97	-0.15	67.9	69.7	73.5
8.23	-64.92	-51.68	-57.94	-0.15	67.9	69.8	73.8
8.23	-64.92	-51.58	-57.94	-0.15	67.9	69.9	74.2
8.23	-64.87	-51.58	-57.91	-0.15	67.9	70	74.6
8.23	-64.87	-51.58	-57.91	-0.12	67.9	70.1	75
8.23	-64.83	-51.58	-57.88	-0.12	68	70.1	75.2
8.23	-64.83	-51.53	-57.85	-0.15	68.1	70.2	75.5
8.22	-64.78	-51.48	-57.85	-0.15	68.1	70.3	75.8

8.22	-64.78	-51.48	-57.82	-0.12	68.3	70.4	76.4
8.22	-64.78	-51.53	-57.79	-0.15	68.2	70.5	76.8
8.22	-64.73	-51.48	-57.79	-0.15	68.4	70.6	77.1
8.22	-64.73	-51.43	-57.79	-0.12	68.6	70.7	77.3
8.22	-64.69	-51.43	-57.76	-0.12	68.8	70.8	77.7
8.22	-64.69	-51.43	-57.76	-0.15	68.7	70.9	78.2
8.22	-64.64	-51.43	-57.73	-0.15	68.8	71.1	78.7
8.21	-64.64	-51.32	-57.73	-0.15	68.9	71.2	78.9
8.21	-64.64	-51.37	-57.7	-0.15	69	71.2	79.3
8.21	-64.6	-51.32	-57.67	-0.15	69	71.3	79.7
8.21	-64.6	-51.37	-57.67	-0.15	69.1	71.6	80
8.21	-64.55	-51.32	-57.64	-0.15	69.3	71.7	80.5
8.21	-64.55	-51.32	-57.64	-0.15	69.4	71.8	80.7
8.21	-64.55	-51.27	-57.61	-0.15	69.6	72	81.1
8.21	-64.51	-51.27	-57.58	-0.15	69.7	72.2	81.5
8.21	-64.46	-51.22	-57.55	-0.15	69.8	72.3	81.9
8.21	-64.51	-51.22	-57.55	-0.15	70	72.3	82.1
8.2	-64.46	-51.17	-57.48	-0.15	70.1	72.5	82.9
8.19	-64.41	-51.11	-57.48	-0.15	70.2	72.6	83
8.2	-64.41	-51.11	-57.48	-0.15	70.3	72.8	83.4
8.2	-64.37	-51.11	-57.45	-0.12	70.5	73	83.8
8.2	-64.37	-51.11	-57.42	-0.15	70.5	73.1	84.2
8.2	-64.37	-51.11	-57.39	-0.15	70.7	73.3	84.3
8.2	-64.32	-51.06	-57.39	-0.12	70.9	73.4	84.9
8.2	-64.32	-51.06	-57.36	-0.15	71	73.5	85.2
8.2	-64.32	-51.01	-57.36	-0.15	71.2	73.6	85.4
8.19	-64.23	-51.01	-57.36	-0.15	71.2	73.9	85.7
8.2	-64.28	-51.01	-57.33	-0.15	71.4	74	86.2
8.19	-64.23	-51.01	-57.3	-0.15	71.5	74.1	86.3
8.19	-64.23	-50.96	-57.27	-0.15	71.6	74.3	86.6
8.19	-64.18	-50.96	-57.27	-0.15	71.9	74.4	86.8
8.18	-64.18	-50.96	-57.24	-0.15	72	74.5	87.1
8.19	-64.14	-50.91	-57.24	-0.15	72.1	74.5	87.5
8.19	-64.14	-50.91	-57.21	-0.15	72.2	74.7	87.5
8.19	-64.14	-50.85	-57.21	-0.18	72.2	74.8	87.5
8.19	-64.14	-50.91	-57.18	-0.18	72.3	74.8	88
8.19	-64.09	-50.85	-57.21	-0.15	72.4	74.9	88.1
8.19	-64.09	-50.8	-57.21	-0.18	72.5	75	88.2
8.19	-64.05	-50.85	-57.18	-0.18	72.6	75.1	88.3
8.19	-64.05	-50.8	-57.18	-0.15	72.7	75.2	88.5
8.19	-64	-50.8	-57.21	-0.18	72.8	75.3	88.6
8.19	-64	-50.8	-57.24	-0.18	72.9	75.3	88.9
8.19	-64	-50.75	-57.24	-0.18	72.9	75.4	88.9
8.19	-63.96	-50.7	-57.27	-0.18	73	75.5	88.9
8.18	-63.96	-50.7	-57.27	-0.18	73.1	75.5	89.2
8.18	-63.96	-50.7	-57.27	-0.18	73.1	75.5	89.1
8.18	-63.96	-50.7	-57.27	-0.18	73.2	75.5	89.1

8.18	-63.96	-50.7	-57.3	-0.18	73.3	75.6	89.3
8.18	-63.82	-50.7	-57.27	-0.18	73.4	75.6	89.3
8.18	-63.86	-50.7	-57.27	-0.18	73.4	75.7	89.2
8.18	-63.82	-50.65	-57.27	-0.18	73.5	75.7	89.3
8.18	-63.77	-50.65	-57.27	-0.18	73.5	75.7	89.2
8.18	-63.82	-50.65	-57.27	-0.18	73.6	75.7	89.4
8.18	-63.77	-50.65	-57.24	-0.18	73.6	75.8	89.1
8.18	-63.77	-50.65	-57.24	-0.18	73.6	75.8	89.1
8.18	-63.77	-50.6	-57.21	-0.21	73.6	75.8	89
8.17	-63.77	-50.6	-57.15	-0.18	73.7	75.9	88.8
8.17	-63.73	-50.6	-57.12	-0.18	73.7	75.8	88.8
8.17	-63.73	-50.6	-57.09	-0.18	73.8	75.9	88.7
8.17	-63.73	-50.54	-57.06	-0.21	73.6	75.9	88.5
8.17	-63.68	-50.54	-57.03	-0.21	73.6	75.9	88.3
8.17	-63.68	-50.49	-57	-0.21	73.7	75.9	88.1
8.17	-63.68	-50.49	-57	-0.21	73.7	75.9	87.9
8.17	-63.68	-50.49	-56.97	-0.21	73.7	75.9	87.8
8.17	-63.64	-50.49	-56.94	-0.21	73.7	75.9	87.7
8.16	-63.59	-50.49	-56.9	-0.21	73.7	75.8	87.5
8.16	-63.59	-50.44	-56.9	-0.21	73.7	75.8	87.4
8.16	-63.59	-50.44	-56.87	-0.21	73.7	75.8	87.2
8.16	-63.59	-50.44	-56.87	-0.24	73.6	75.8	86.9
8.16	-63.59	-50.34	-56.84	-0.21	73.6	75.8	86.8
8.16	-63.59	-50.34	-56.84	-0.21	73.7	75.7	86.4
8.16	-63.54	-50.34	-56.81	-0.21	73.6	75.7	86.4
8.15	-63.54	-50.34	-56.81	-0.21	73.7	75.7	86.2
8.15	-63.5	-50.34	-56.78	-0.21	73.7	75.7	85.9
8.15	-63.5	-50.28	-56.78	-0.21	73.7	75.7	85.8
8.15	-63.5	-50.28	-56.75	-0.21	73.6	75.6	85.6
8.15	-63.5	-50.28	-56.75	-0.24	73.6	75.6	85.3
8.15	-63.5	-50.28	-56.69	-0.21	73.6	75.6	85.3
8.15	-63.45	-50.23	-56.66	-0.21	73.4	75.5	85
8.14	-63.45	-50.23	-56.66	-0.21	73.4	75.5	84.9
8.14	-63.41	-50.23	-56.66	-0.21	73.5	75.5	84.5
8.14	-63.41	-50.18	-56.63	-0.21	73.5	75.5	84.6
8.14	-63.41	-50.18	-56.63	-0.21	73.5	75.5	84.3
8.14	-63.41	-50.18	-56.6	-0.21	73.4	75.4	84.2
8.14	-63.36	-50.13	-56.6	-0.21	73.4	75.4	84.2
8.13	-63.36	-50.13	-56.57	-0.21	73.4	75.3	84
8.13	-63.36	-50.13	-56.57	-0.21	73.4	75.3	83.8
8.13	-63.36	-50.13	-56.54	-0.21	73.4	75.2	83.5
8.13	-63.32	-50.08	-56.54	-0.21	73.3	75.2	83.4
8.13	-63.27	-50.08	-56.51	-0.21	73.3	75.1	83.2
8.13	-63.27	-50.08	-56.51	-0.21	73.3	75.1	83.2
8.13	-63.27	-50.08	-56.51	-0.21	73.2	75	82.8
8.11	-63.22	-50.02	-56.48	-0.24	73.2	75	82.9
8.11	-63.22	-50.08	-56.45	-0.21	73.1	74.9	82.6

8.11	-63.22	-50.02	-56.42	-0.21	73.1	74.9	82.5
8.12	-63.22	-49.97	-56.42	-0.24	73.1	74.9	82.2
8.12	-63.18	-49.97	-56.42	-0.21	73	74.8	82.1
8.12	-63.18	-49.97	-56.42	-0.21	73	74.8	82.1
8.11	-63.18	-49.97	-56.39	-0.24	72.9	74.7	81.9
8.1	-63.18	-49.92	-56.36	-0.21	72.8	74.7	81.7
8.11	-63.13	-49.92	-56.36	-0.21	72.8	74.6	81.6
8.11	-63.09	-49.92	-56.32	-0.21	72.7	74.6	81.3
8.1	-63.09	-49.87	-56.32	-0.21	72.7	74.5	81.2
8.1	-63.09	-49.87	-56.29	-0.21	72.7	74.5	81.2
8.11	-63.09	-49.87	-56.29	-0.21	72.6	74.5	81
8.09	-63.04	-49.82	-56.29	-0.21	72.6	74.5	80.9
8.09	-63.09	-49.87	-56.26	-0.24	72.6	74.5	80.8
8.09	-63.04	-49.82	-56.23	-0.21	72.5	74.4	80.7
8.09	-63.04	-49.82	-56.23	-0.24	72.5	74.3	80.5
8.1	-62.99	-49.82	-56.23	-0.24	72.4	74.3	80.3
8.09	-62.99	-49.82	-56.2	-0.24	72.3	74.2	80.3
8.1	-62.99	-49.82	-56.2	-0.24	72.3	74.2	80.1
8.09	-62.99	-49.76	-56.17	-0.21	72.3	74.1	80
8.1	-62.95	-49.71	-56.17	-0.21	72.3	74.1	79.9
8.09	-62.95	-49.76	-56.17	-0.21	72.3	74	79.8
8.09	-62.95	-49.71	-56.14	-0.21	72.2	74	79.9
8.09	-62.95	-49.71	-56.14	-0.18	72.1	74	79.6
8.09	-62.9	-49.71	-56.14	-0.24	72.1	73.9	79.5
8.09	-62.9	-49.71	-56.11	-0.21	72	73.9	79.3
8.09	-62.9	-49.66	-56.11	-0.21	72.1	73.7	79
8.08	-62.86	-49.66	-56.11	-0.21	72	73.6	79
8.07	-62.86	-49.66	-56.08	-0.21	72	73.6	78.9
8.08	-62.86	-49.61	-56.08	-0.18	71.9	73.6	78.8
8.07	-62.86	-49.66	-56.05	-0.21	71.6	73.5	78.8
8.07	-62.77	-49.61	-56.05	-0.21	71.6	73.5	78.8
8.08	-62.77	-49.61	-56.02	-0.18	71.5	73.5	78.8
8.08	-62.77	-49.61	-56.02	-0.21	71.5	73.4	78.6
8.07	-62.72	-49.61	-56.02	-0.21	71.6	73.4	78.6
8.07	-62.72	-49.56	-56.02	-0.21	71.5	73.4	78.6
8.07	-62.72	-49.56	-55.99	-0.21	71.5	73.4	78.5
8.06	-62.72	-49.51	-55.99	-0.21	71.6	73.4	78.7
8.07	-62.67	-49.51	-55.93	-0.21	71.6	73.4	78.8
8.07	-62.63	-49.56	-55.93	-0.21	71.4	73.4	78.8
8.07	-62.63	-49.51	-55.9	-0.18	71.4	73.4	78.8
8.06	-62.63	-49.56	-55.9	-0.21	71.3	73.4	78.9
8.06	-62.63	-49.45	-55.9	-0.21	71.3	73.4	79
8.06	-62.63	-49.45	-55.87	-0.21	71.3	73.5	79.6
8.06	-62.58	-49.45	-55.84	-0.18	71.4	73.5	79.5
8.06	-62.58	-49.4	-55.84	-0.21	71.5	73.5	79.8
8.06	-62.58	-49.45	-55.84	-0.21	71.5	73.6	80.1
8.06	-62.58	-49.4	-55.84	-0.18	71.5	73.6	80.4

8.06	-62.54	-49.45	-55.81	-0.18	71.5	73.6	80.6
8.06	-62.54	-49.4	-55.81	-0.21	71.5	73.7	80.9
8.06	-62.54	-49.4	-55.81	-0.21	71.4	73.7	81.2
8.06	-62.54	-49.4	-55.78	-0.21	71.6	74	81.6
8.06	-62.49	-49.35	-55.74	-0.21	71.6	74	81.9
8.05	-62.49	-49.35	-55.78	-0.24	71.8	74.1	82.4
8.05	-62.49	-49.35	-55.74	-0.15	71.9	74.2	82.6
8.05	-62.45	-49.35	-55.74	-0.18	72	74.3	83.1
8.05	-62.45	-49.35	-55.74	-0.18	72.1	74.4	83.5
8.05	-62.45	-49.3	-55.74	-0.18	72.2	74.5	83.8
8.05	-62.4	-49.3	-55.71	-0.21	72.3	74.5	84.1
8.05	-62.45	-49.3	-55.71	-0.18	72.3	74.5	84.2
8.05	-62.4	-49.3	-55.68	-0.18	72.4	74.6	84.7
8.05	-62.4	-49.25	-55.65	-0.18	72.5	74.7	84.7
8.05	-62.35	-49.25	-55.65	-0.18	72.5	74.8	85.3
8.05	-62.35	-49.25	-55.62	-0.18	72.6	74.9	85.5
8.05	-62.35	-49.25	-55.62	-0.21	72.7	75	85.7
8.05	-62.31	-49.19	-55.62	-0.21	72.8	75.1	86.1
8.05	-62.31	-49.19	-55.59	-0.21	72.8	75.2	86.2
8.05	-62.31	-49.19	-55.59	-0.21	72.9	75.2	86.4
8.05	-62.26	-49.19	-55.59	-0.21	73	75.3	86.6
8.05	-62.26	-49.09	-55.56	-0.21	73	75.4	86.9
8.05	-62.26	-49.09	-55.56	-0.21	73.2	75.5	87
8.05	-62.22	-49.09	-55.53	-0.21	73.2	75.5	87.4
8.05	-62.22	-49.04	-55.53	-0.21	73.4	75.6	87.4
8.05	-62.22	-49.09	-55.5	-0.21	73.4	75.7	87.6
8.05	-62.22	-49.04	-55.5	-0.21	73.4	75.8	87.8
8.05	-62.17	-48.99	-55.5	-0.24	73.5	75.9	88.1
8.05	-62.22	-48.99	-55.47	-0.24	73.6	76	88.2
8.05	-62.17	-48.99	-55.47	-0.24	73.7	76.2	88.3
8.05	-62.12	-48.99	-55.44	-0.24	73.7	76.2	88.7
8.05	-62.12	-48.93	-55.47	-0.24	74	76.3	88.9
8.05	-62.12	-48.99	-55.44	-0.24	74	76.4	88.9
8.05	-62.12	-48.93	-55.41	-0.24	74.1	76.5	89.2
8.05	-62.08	-48.93	-55.41	-0.27	74.2	76.5	89.2
8.05	-62.08	-48.93	-55.38	-0.24	74.4	76.6	89.5
8.05	-62.08	-48.88	-55.38	-0.27	74.4	76.6	89.5
8.05	-62.03	-48.88	-55.35	-0.24	74.4	76.7	89.7
8.05	-62.03	-48.88	-55.38	-0.27	74.5	76.7	89.7
8.04	-62.03	-48.83	-55.35	-0.27	74.5	76.7	89.8
8.04	-62.03	-48.83	-55.32	-0.27	74.6	76.8	90
8.04	-61.99	-48.83	-55.32	-0.27	74.6	76.8	89.9
8.04	-61.99	-48.83	-55.29	-0.27	74.6	76.9	90
8.04	-61.94	-48.83	-55.29	-0.27	74.7	77	90.1
8.04	-61.94	-48.78	-55.29	-0.27	74.7	77.1	90
8.04	-61.94	-48.78	-55.26	-0.27	74.8	77.1	90.2
8.04	-61.94	-48.78	-55.26	-0.27	74.8	77.1	90.3

8.04	-61.9	-48.78	-55.26	-0.27	74.9	77.2	90.4
8.04	-61.9	-48.78	-55.23	-0.27	74.9	77.2	90.5
8.04	-61.9	-48.78	-55.23	-0.27	74.9	77.3	90.4
8.04	-61.9	-48.73	-55.23	-0.27	75	77.3	90.5
8.04	-61.9	-48.73	-55.2	-0.27	75.1	77.3	90.4
8.04	-61.9	-48.68	-55.2	-0.27	75.1	77.4	90.5
8.04	-61.85	-48.68	-55.2	-0.27	75.1	77.4	90.4
8.04	-61.85	-48.68	-55.2	-0.27	75.2	77.4	90.2
8.04	-61.85	-48.68	-55.2	-0.27	75.3	77.4	90.1
8.04	-61.8	-48.68	-55.13	-0.27	75.3	77.4	90.1
8.04	-61.8	-48.68	-55.13	-0.27	75.3	77.5	90.1
8.04	-61.8	-48.62	-55.13	-0.27	75.3	77.5	90.1
8.04	-61.8	-48.62	-55.13	-0.27	75.4	77.5	89.9
8.04	-61.76	-48.62	-55.1	-0.27	75.4	77.5	90
8.04	-61.76	-48.62	-55.1	-0.27	75.3	77.5	89.6
8.04	-61.76	-48.62	-55.1	-0.27	75.2	77.5	89.6
8.03	-61.76	-48.57	-55.1	-0.27	75.2	77.5	89.7
8.03	-61.76	-48.62	-55.1	-0.31	75.3	77.4	89.5
8.02	-61.71	-48.62	-55.07	-0.27	75.3	77.4	89.2
8.03	-61.76	-48.57	-55.07	-0.31	75.3	77.4	89.1
8.02	-61.71	-48.52	-55.07	-0.31	75.3	77.2	88.9
8.03	-61.71	-48.52	-55.04	-0.27	75.2	77.2	88.7
8.03	-61.71	-48.57	-55.01	-0.27	75.1	77.2	88.4
8.03	-61.62	-48.52	-55.04	-0.31	75.2	77.1	88.1
8.03	-61.62	-48.52	-55.04	-0.27	75.1	77.1	88
8.03	-61.62	-48.52	-55.01	-0.27	75	76.9	87.5
8.01	-61.62	-48.52	-54.98	-0.31	75	76.9	87.5
8.02	-61.58	-48.47	-54.98	-0.27	74.9	76.8	87.3
8.01	-61.58	-48.47	-54.98	-0.27	74.8	76.7	87.1
8.02	-61.58	-48.47	-54.98	-0.27	74.8	76.7	86.8
8.01	-61.58	-48.47	-54.95	-0.31	74.8	76.6	86.6
8.02	-61.53	-48.42	-54.95	-0.31	74.8	76.6	86.3
8.01	-61.53	-48.42	-54.95	-0.31	74.6	76.5	86.1
8	-61.53	-48.42	-54.92	-0.31	74.5	76.5	85.9
8.01	-61.48	-48.47	-54.89	-0.31	74.5	76.4	85.5
8	-61.48	-48.42	-54.89	-0.27	74.5	76.3	85.3
8	-61.48	-48.42	-54.89	-0.27	74.4	76.2	85.1
8	-61.48	-48.36	-54.89	-0.27	74.4	76.2	84.9
8	-61.48	-48.36	-54.86	-0.27	74.3	76	84.8
8	-61.48	-48.36	-54.86	-0.27	74.2	75.9	84.3
8.01	-61.44	-48.31	-54.83	-0.27	74.1	75.9	84.2
8.01	-61.44	-48.31	-54.83	-0.27	74.1	75.9	84.1
8	-61.44	-48.31	-54.8	-0.27	74.1	75.8	83.8
8	-61.39	-48.31	-54.8	-0.31	74	75.7	83.4
8	-61.39	-48.31	-54.8	-0.27	73.8	75.6	83.3
8	-61.39	-48.26	-54.77	-0.27	73.8	75.6	83.2
8	-61.39	-48.26	-54.77	-0.31	73.7	75.5	83

8	-61.35	-48.26	-54.74	-0.27	73.6	75.5	82.8
8	-61.35	-48.26	-54.74	-0.27	73.6	75.5	82.6
8	-61.35	-48.26	-54.71	-0.27	73.5	75.5	82.2
7.98	-61.35	-48.26	-54.71	-0.27	73.5	75.4	82.1
7.98	-61.3	-48.26	-54.71	-0.27	73.4	75.4	82
7.98	-61.3	-48.26	-54.68	-0.27	73.4	75.3	81.8
7.99	-61.3	-48.16	-54.68	-0.27	73.4	75.3	81.8
7.98	-61.25	-48.21	-54.68	-0.27	73.4	75.2	81.5
7.99	-61.25	-48.16	-54.65	-0.27	73.4	75.2	81.2
7.99	-61.25	-48.16	-54.65	-0.27	73.3	75.1	81.2
7.99	-61.25	-48.16	-54.62	-0.27	73.3	75	81
7.97	-61.21	-48.16	-54.62	-0.27	73.2	75	80.7
7.97	-61.21	-48.1	-54.62	-0.27	73.2	75	80.7
7.98	-61.21	-48.1	-54.58	-0.27	73.2	74.9	80.6
7.98	-61.21	-48.1	-54.55	-0.27	73.1	74.9	80.5
7.98	-61.16	-48.1	-54.58	-0.27	73.1	74.8	80.3
7.97	-61.16	-48.1	-54.55	-0.27	73.1	74.7	80.1
7.97	-61.16	-48.1	-54.55	-0.27	73.1	74.7	79.9
7.98	-61.16	-48.1	-54.52	-0.27	73	74.7	79.9
7.97	-61.12	-48.1	-54.49	-0.27	72.9	74.7	79.8
7.97	-61.12	-48.05	-54.49	-0.27	72.9	74.6	79.5
7.98	-61.12	-48	-54.49	-0.27	72.9	74.6	79.6
7.97	-61.07	-48	-54.46	-0.27	72.8	74.5	79.3
7.97	-61.07	-48	-54.49	-0.27	72.8	74.6	79.3
7.97	-61.12	-48	-54.49	-0.27	72.7	74.5	79
7.97	-61.07	-48	-54.46	-0.24	72.7	74.5	79
7.97	-61.07	-48	-54.46	-0.27	72.7	74.5	79
7.97	-61.07	-47.95	-54.43	-0.27	72.6	74.4	78.8
7.97	-61.03	-48	-54.46	-0.27	72.5	74.4	78.7
7.96	-61.07	-48	-54.46	-0.27	72.5	74.4	78.6
7.96	-61.03	-47.95	-54.43	-0.24	72.5	74.3	78.4
7.96	-61.03	-47.95	-54.43	-0.24	72.4	74.3	78.3
7.96	-61.03	-47.84	-54.43	-0.21	72.4	74.3	78.3
7.96	-61.03	-47.95	-54.37	-0.21	72.4	74.2	78
7.96	-61.03	-47.95	-54.37	-0.24	72.3	74.2	78
7.96	-60.98	-47.84	-54.37	-0.21	72.3	74.2	78.2
7.96	-60.98	-47.84	-54.37	-0.24	72.3	74.2	77.9
7.96	-60.98	-47.84	-54.34	-0.21	72.3	74.2	78.2
7.96	-60.98	-47.84	-54.34	-0.21	72.3	74.2	77.9
7.96	-60.93	-47.84	-54.31	-0.21	72.3	74.1	77.7
7.96	-60.93	-47.84	-54.31	-0.24	72.3	74.1	77.9
7.96	-60.93	-47.84	-54.31	-0.24	72.3	74.1	77.9
7.96	-60.93	-47.79	-54.28	-0.24	72.3	74.1	77.9
7.95	-60.93	-47.79	-54.28	-0.24	72.3	74.1	78
7.95	-60.89	-47.79	-54.28	-0.24	72.2	74	78.3
7.95	-60.89	-47.79	-54.25	-0.24	72.3	74	78.2
7.95	-60.89	-47.79	-54.25	-0.24	72.2	74	78.4

7.94	-60.89	-47.79	-54.25	-0.24	72.2	74.1	78.4
7.95	-60.84	-47.79	-54.22	-0.24	72.2	74	78.6
7.94	-60.89	-47.74	-54.22	-0.21	72.2	74.1	78.8
7.95	-60.84	-47.74	-54.19	-0.24	72.2	74.1	78.8
7.95	-60.84	-47.74	-54.19	-0.21	72.2	74.1	78.9
7.95	-60.84	-47.69	-54.19	-0.21	72.2	74.1	79
7.95	-60.8	-47.69	-54.19	-0.21	72.2	74.2	79.2
7.95	-60.8	-47.69	-54.16	-0.21	72.2	74.2	79.4
7.94	-60.8	-47.69	-54.16	-0.21	72.2	74.2	79.9
7.94	-60.75	-47.69	-54.16	-0.24	72.2	74.2	79.9
7.94	-60.75	-47.69	-54.13	-0.24	72.3	74.3	80
7.94	-60.75	-47.64	-54.1	-0.24	72.3	74.3	80.5
7.94	-60.75	-47.64	-54.13	-0.24	72.3	74.3	80.8
7.94	-60.75	-47.64	-54.1	-0.24	72.3	74.4	81
7.94	-60.71	-47.64	-54.1	-0.24	72.3	74.5	81.4
7.94	-60.71	-47.59	-54.1	-0.24	72.3	74.5	81.6
7.94	-60.71	-47.59	-54.07	-0.24	72.4	74.5	82
7.94	-60.71	-47.53	-54.07	-0.24	72.5	74.6	82.4
7.94	-60.71	-47.59	-54.04	-0.27	72.5	74.7	82.9
7.94	-60.66	-47.53	-54	-0.24	72.6	74.8	83.3
7.94	-60.66	-47.59	-54	-0.27	72.6	74.9	83.7
7.94	-60.66	-47.53	-54	-0.27	72.8	75	84
7.94	-60.66	-47.53	-53.97	-0.27	72.9	75.1	84.5
7.94	-60.61	-47.48	-53.97	-0.24	72.9	75.2	84.9
7.94	-60.61	-47.48	-53.97	-0.27	73	75.3	85.4
7.94	-60.61	-47.48	-53.97	-0.27	73.1	75.4	85.8
7.94	-60.52	-47.43	-53.94	-0.27	73.2	75.5	86.2
7.94	-60.52	-47.48	-53.94	-0.27	73.2	75.5	86.4
7.92	-60.52	-47.43	-53.94	-0.31	73.3	75.6	87
7.93	-60.52	-47.48	-53.91	-0.31	73.4	75.7	87.5
7.92	-60.48	-47.48	-53.91	-0.27	73.5	75.9	87.6
7.93	-60.48	-47.43	-53.91	-0.27	73.5	75.9	88.2
7.93	-60.48	-47.38	-53.85	-0.31	73.6	76	88.5
7.92	-60.43	-47.38	-53.85	-0.31	73.8	76.2	88.8
7.92	-60.43	-47.38	-53.85	-0.31	73.8	76.3	89.1
7.93	-60.43	-47.38	-53.85	-0.31	74	76.4	89.4
7.94	-60.43	-47.38	-53.82	-0.31	74.1	76.5	89.6
7.94	-60.43	-47.33	-53.82	-0.31	74.1	76.6	89.9
7.94	-60.38	-47.33	-53.79	-0.31	74.2	76.6	90.2
7.94	-60.38	-47.33	-53.82	-0.27	74.3	76.7	90.3
7.94	-60.38	-47.33	-53.85	-0.31	74.4	76.7	90.5
7.94	-60.34	-47.33	-53.88	-0.31	74.4	76.8	90.6
7.94	-60.38	-47.27	-53.91	-0.31	74.5	76.9	90.8
7.94	-60.38	-47.33	-53.91	-0.31	74.5	76.9	91
7.94	-60.34	-47.33	-53.94	-0.31	74.5	77	91.2
7.94	-60.34	-47.33	-53.94	-0.34	74.6	77.1	91.4
7.94	-60.34	-47.27	-53.94	-0.31	74.6	77.1	91.5

7.94	-60.34	-47.27	-53.97	-0.31	74.7	77.2	91.7
7.94	-60.29	-47.27	-53.97	-0.31	74.8	77.2	91.7
7.94	-60.29	-47.22	-53.97	-0.27	74.7	77.3	91.8
7.94	-60.29	-47.22	-53.97	-0.31	74.9	77.3	91.7
7.94	-60.29	-47.27	-53.97	-0.31	74.9	77.3	91.8
7.94	-60.29	-47.22	-53.97	-0.31	75	77.4	91.8
7.94	-60.29	-47.27	-53.97	-0.31	75	77.4	91.7
7.94	-60.29	-47.22	-53.94	-0.27	75	77.4	91.6
7.94	-60.25	-47.22	-53.94	-0.31	75.1	77.5	91.5
7.94	-60.25	-47.22	-53.88	-0.31	75.1	77.5	91.4
7.94	-60.25	-47.22	-53.85	-0.31	75.1	77.5	91.3
7.94	-60.25	-47.22	-53.85	-0.31	75.1	77.5	90.9
7.92	-60.25	-47.22	-53.82	-0.31	75.2	77.5	90.9
7.93	-60.25	-47.17	-53.79	-0.31	75.2	77.5	90.8
7.92	-60.2	-47.17	-53.76	-0.31	75.2	77.5	90.6
7.94	-60.2	-47.17	-53.76	-0.31	75.2	77.5	90.5
7.92	-60.2	-47.17	-53.73	-0.31	75.2	77.5	90.2
7.92	-60.2	-47.17	-53.73	-0.31	75.2	77.5	90.1
7.93	-60.2	-47.17	-53.73	-0.31	75.2	77.4	90.1
7.92	-60.2	-47.17	-53.73	-0.31	75.2	77.5	89.7
7.93	-60.2	-47.12	-53.7	-0.31	75.2	77.4	89.6
7.92	-60.16	-47.12	-53.7	-0.31	75.3	77.3	89.4
7.92	-60.16	-47.12	-53.67	-0.31	75.2	77.3	89
7.92	-60.16	-47.12	-53.67	-0.31	75.2	77.3	89
7.92	-60.16	-47.12	-53.67	-0.31	75.3	77.3	88.8
7.91	-60.16	-47.07	-53.67	-0.31	75.2	77.2	88.3
7.91	-60.11	-47.07	-53.64	-0.31	75.3	77.2	88
7.91	-60.16	-47.07	-53.64	-0.31	75.1	77.2	87.9
7.91	-60.11	-47.07	-53.64	-0.27	75.2	77.1	87.6
7.91	-60.11	-47.07	-53.58	-0.31	75.2	77.1	87.5
7.91	-60.11	-47.07	-53.64	-0.31	75.1	77	87.3
7.91	-60.11	-47.07	-53.58	-0.31	75.1	77	86.9
7.91	-60.11	-47.07	-53.58	-0.34	75.1	76.9	86.8
7.91	-60.11	-47.01	-53.55	-0.31	75	76.9	86.4
7.91	-60.06	-47.07	-53.55	-0.31	75	76.9	86.2
7.91	-60.06	-47.01	-53.52	-0.27	75	76.8	85.9
7.91	-60.06	-47.01	-53.52	-0.31	75	76.7	85.6
7.9	-60.06	-47.01	-53.49	-0.31	75	76.7	85.5
7.9	-60.02	-47.01	-53.49	-0.27	74.9	76.7	85.4
7.9	-60.02	-47.01	-53.49	-0.31	74.8	76.6	85.2
7.91	-60.02	-47.01	-53.49	-0.31	74.9	76.6	84.9
7.91	-60.02	-47.01	-53.46	-0.31	74.8	76.6	84.7
7.91	-59.97	-46.96	-53.46	-0.31	74.7	76.6	84.3
7.91	-60.02	-46.96	-53.42	-0.31	74.6	76.5	84.2
7.9	-59.97	-46.96	-53.42	-0.31	74.6	76.4	84
7.9	-59.97	-46.96	-53.42	-0.31	74.5	76.4	83.7
7.9	-59.97	-46.96	-53.42	-0.31	74.5	76.4	83.6

7.89	-59.97	-46.91	-53.39	-0.31	74.6	76.3	83.4
7.89	-59.97	-46.91	-53.39	-0.31	74.5	76.3	83.1
7.89	-59.97	-46.86	-53.39	-0.31	74.6	76.2	83.2
7.89	-59.97	-46.91	-53.39	-0.31	74.4	76.2	82.9
7.9	-59.93	-46.86	-53.39	-0.27	74.5	76	82.4
7.89	-59.93	-46.91	-53.36	-0.31	74.5	75.9	82.1
7.89	-59.93	-46.86	-53.36	-0.31	74.4	75.9	82.2
7.88	-59.93	-46.86	-53.36	-0.27	74.4	75.8	82.1
7.88	-59.93	-46.86	-53.33	-0.31	74.4	75.8	81.9
7.89	-59.93	-46.86	-53.36	-0.31	74.3	75.7	81.7
7.88	-59.93	-46.81	-53.33	-0.27	74.2	75.6	81.5
7.88	-59.88	-46.86	-53.33	-0.27	74.2	75.6	81.2
7.89	-59.88	-46.81	-53.33	-0.27	74	75.5	81
7.88	-59.88	-46.81	-53.3	-0.27	74.1	75.5	81
7.88	-59.88	-46.81	-53.27	-0.31	74.1	75.5	80.8
7.88	-59.84	-46.81	-53.27	-0.27	74	75.5	80.6
7.88	-59.84	-46.81	-53.24	-0.27	74	75.4	80.3
7.88	-59.84	-46.81	-53.24	-0.27	73.8	75.3	80.4
7.88	-59.79	-46.76	-53.21	-0.27	73.8	75.3	79.9
7.88	-59.79	-46.76	-53.21	-0.27	73.7	75.2	79.8
7.88	-59.79	-46.76	-53.18	-0.27	73.7	75.2	79.7
7.88	-59.74	-46.7	-53.18	-0.24	73.6	75.1	79.6
7.87	-59.74	-46.76	-53.18	-0.24	73.6	75.1	79.4
7.87	-59.79	-46.7	-53.18	-0.27	73.6	75	79.2
7.87	-59.74	-46.7	-53.15	-0.27	73.5	75	79
7.87	-59.74	-46.7	-53.15	-0.27	73.4	74.9	78.9
7.87	-59.7	-46.7	-53.15	-0.27	73.4	74.9	79
7.87	-59.7	-46.7	-53.15	-0.27	73.4	74.8	78.8
7.87	-59.74	-46.7	-53.15	-0.24	73.4	74.8	78.6
7.87	-59.7	-46.7	-53.15	-0.24	73.4	74.7	78.5
7.86	-59.7	-46.65	-53.15	-0.24	73.3	74.7	78.3
7.87	-59.7	-46.65	-53.12	-0.27	73.3	74.6	78.3
7.87	-59.7	-46.65	-53.12	-0.24	73.3	74.5	78.2
7.86	-59.7	-46.65	-53.12	-0.24	73.2	74.5	77.8
7.87	-59.7	-46.65	-53.09	-0.24	73.1	74.5	77.7
7.87	-59.65	-46.65	-53.12	-0.24	73.1	74.5	77.6
7.86	-59.65	-46.65	-53.09	-0.24	73.1	74.4	77.7
7.86	-59.65	-46.55	-53.09	-0.24	73.1	74.4	77.5
7.86	-59.65	-46.55	-53.09	-0.21	73	74.4	77.4
7.86	-59.61	-46.55	-53.06	-0.21	73	74.3	77.3
7.86	-59.65	-46.65	-53.06	-0.21	72.9	74.3	77.3
7.86	-59.61	-46.55	-53.03	-0.21	72.8	74.2	77.3
7.86	-59.61	-46.5	-53.03	-0.21	72.8	74.1	77.2
7.86	-59.61	-46.55	-53.03	-0.24	72.7	74.1	77.2
7.86	-59.61	-46.5	-53.03	-0.21	72.7	74.1	77.2
7.86	-59.61	-46.5	-53	-0.21	72.6	74.1	77
7.86	-59.61	-46.5	-53	-0.21	72.6	74	77.2

7.86	-59.61	-46.44	-52.97	-0.21	72.6	74	77
7.85	-59.56	-46.5	-52.97	-0.21	72.5	73.9	77.2
7.85	-59.56	-46.44	-53	-0.21	72.5	73.9	77.2
7.85	-59.51	-46.5	-52.97	-0.21	72.5	73.7	77
7.85	-59.51	-46.44	-52.97	-0.21	72.5	73.7	77.1
7.85	-59.56	-46.44	-52.94	-0.21	72.5	73.7	77.1
7.85	-59.51	-46.44	-52.94	-0.21	72.4	73.7	77.1
7.85	-59.51	-46.44	-52.94	-0.21	72.4	73.6	77.1
7.85	-59.51	-46.44	-52.94	-0.21	72.3	73.7	77.3
7.85	-59.42	-46.39	-52.91	-0.21	72.3	73.6	77.4
7.85	-59.42	-46.39	-52.91	-0.21	72.3	73.6	77.3
7.85	-59.42	-46.39	-52.91	-0.21	72.2	73.6	77.6
7.83	-59.42	-46.39	-52.88	-0.18	72.2	73.6	77.7
7.83	-59.42	-46.39	-52.88	-0.21	72.2	73.6	77.7
7.83	-59.42	-46.34	-52.88	-0.18	72.3	73.6	77.8
7.83	-59.38	-46.39	-52.84	-0.18	72.3	73.6	78
7.83	-59.38	-46.34	-52.84	-0.18	72.3	73.5	78.3
7.83	-59.38	-46.34	-52.84	-0.18	72.3	73.6	78.2
7.83	-59.38	-46.34	-52.84	-0.18	72.2	73.6	78.4
7.83	-59.38	-46.34	-52.78	-0.18	72.3	73.6	78.6
7.83	-59.33	-46.29	-52.78	-0.18	72.2	73.6	78.6
7.83	-59.33	-46.29	-52.75	-0.18	72.2	73.6	78.9
7.83	-59.29	-46.29	-52.75	-0.21	72.3	74.1	78.8
7.83	-59.29	-46.29	-52.75	-0.21	72.3	73.9	78.8
7.84	-59.29	-46.29	-52.72	-0.18	72.3	73.7	79
7.83	-59.29	-46.24	-52.72	-0.18	72.2	73.6	79.1
7.83	-59.29	-46.24	-52.69	-0.21	72.2	73.9	79
7.83	-59.29	-46.24	-52.72	-0.18	72.2	73.7	78.9
7.83	-59.24	-46.24	-52.72	-0.18	72.2	73.7	78.9
7.83	-59.29	-46.18	-52.69	-0.18	72.2	73.7	78.9
7.82	-59.24	-46.24	-52.69	-0.18	72.1	73.7	78.8
7.82	-59.24	-46.18	-52.69	-0.18	72.3	73.7	78.7
7.82	-59.24	-46.24	-52.66	-0.18	72.2	73.6	78.7
7.82	-59.19	-46.18	-52.66	-0.18	72.2	73.6	78.5
7.82	-59.19	-46.18	-52.63	-0.18	72.2	73.6	78.3
7.82	-59.19	-46.18	-52.63	-0.18	72.1	73.6	78.4
7.82	-59.19	-46.18	-52.63	-0.18	72.1	73.6	78.2
7.82	-59.15	-46.13	-52.63	-0.18	72	73.5	77.9
7.82	-59.15	-46.13	-52.6	-0.18	72.1	73.5	77.7
7.82	-59.19	-46.13	-52.6	-0.18	72	73.4	77.6
7.82	-59.15	-46.08	-52.6	-0.18	72	73.4	77.5
7.82	-59.15	-46.13	-52.57	-0.18	72.1	73.4	77.2
7.82	-59.15	-46.08	-52.57	-0.18	72	73.4	76.9
7.82	-59.1	-46.08	-52.57	-0.18	72	73.4	77
7.82	-59.1	-46.13	-52.57	-0.18	72	73.3	76.7
7.82	-59.1	-46.08	-52.54	-0.18	72	73.3	76.6
7.82	-59.1	-46.08	-52.54	-0.18	72	73.2	76.3

7.81	-59.1	-46.08	-52.54	-0.18	72	73.2	76.3
7.81	-59.06	-46.03	-52.54	-0.15	72	73.2	76.2
7.81	-59.06	-46.03	-52.54	-0.18	72	73.1	75.9
7.82	-59.06	-46.03	-52.51	-0.15	71.9	73.1	75.8
7.81	-59.01	-46.03	-52.48	-0.18	71.9	73.1	75.5
7.82	-59.06	-46.03	-52.48	-0.15	71.9	73	75.5
7.82	-59.01	-45.98	-52.48	-0.18	71.9	73	75.3
7.82	-59.01	-45.98	-52.48	-0.18	71.8	72.9	75.1
7.81	-59.01	-45.98	-52.45	-0.18	71.8	72.9	75.1
7.81	-58.97	-45.98	-52.45	-0.18	71.6	72.9	74.9
7.82	-59.01	-45.92	-52.45	-0.18	71.6	72.8	74.7
7.82	-58.97	-45.92	-52.45	-0.15	71.6	72.8	74.7
7.82	-58.97	-45.92	-52.45	-0.15	71.6	72.7	74.5
7.81	-58.97	-45.92	-52.42	-0.18	71.5	72.7	74.4
7.8	-58.97	-45.92	-52.42	-0.15	71.5	72.6	74.4
7.81	-58.92	-45.92	-52.42	-0.15	71.5	72.6	74.3
7.8	-58.92	-45.92	-52.39	-0.18	71.5	72.6	74
7.8	-58.92	-45.92	-52.39	-0.15	71.5	72.5	74
7.81	-58.87	-45.92	-52.39	-0.15	71.4	72.5	73.8
7.8	-58.87	-45.87	-52.39	-0.18	71.4	72.5	73.7
7.8	-58.87	-45.87	-52.39	-0.18	71.4	72.4	73.5
7.8	-58.87	-45.87	-52.36	-0.18	71.3	72.4	73.4
7.8	-58.87	-45.87	-52.36	-0.15	71.3	72.4	73.5
7.81	-58.87	-45.87	-52.36	-0.18	71.3	72.3	73.4
7.81	-58.87	-45.87	-52.33	-0.18	71.2	72.3	73.3
7.8	-58.83	-45.82	-52.33	-0.15	71.2	72.3	73.3
7.8	-58.83	-45.87	-52.33	-0.18	71.2	72.3	73
7.8	-58.83	-45.82	-52.3	-0.15	71.2	72.3	73
7.79	-58.83	-45.77	-52.3	-0.15	71.2	72.3	72.9
7.79	-58.78	-45.82	-52.3	-0.18	71.2	72.2	72.8
7.8	-58.78	-45.77	-52.3	-0.15	71.1	72.1	72.5
7.79	-58.78	-45.77	-52.26	-0.18	71	72.2	72.6
7.79	-58.78	-45.77	-52.26	-0.18	71	72.1	72.4
7.79	-58.78	-45.77	-52.23	-0.18	71	72.1	72.4
7.79	-58.78	-45.77	-52.26	-0.18	71.1	72.1	72.3
7.79	-58.78	-45.77	-52.23	-0.15	71	72	72.2
7.79	-58.74	-45.77	-52.26	-0.15	71	72	72.3
7.79	-58.74	-45.77	-52.23	-0.18	71	71.9	72.3
7.79	-58.78	-45.77	-52.23	-0.18	70.9	71.9	72.1
7.79	-58.74	-45.72	-52.2	-0.18	70.9	71.9	72.1
7.79	-58.74	-45.72	-52.2	-0.18	70.8	71.9	71.9
7.79	-58.74	-45.72	-52.2	-0.15	70.8	71.8	71.7
7.79	-58.74	-45.72	-52.2	-0.18	70.8	71.8	71.7
7.79	-58.74	-45.72	-52.2	-0.18	70.8	71.8	71.6
7.79	-58.69	-45.72	-52.17	-0.18	70.7	71.8	71.6
7.79	-58.69	-45.67	-52.2	-0.18	70.7	71.8	71.3
7.79	-58.69	-45.67	-52.17	-0.15	70.7	71.7	71.3

7.78	-58.69	-45.67	-52.14	-0.18	70.7	71.7	71.2
7.79	-58.64	-45.67	-52.17	-0.18	70.7	71.6	71.3
7.79	-58.64	-45.67	-52.14	-0.15	70.7	71.6	71.2
7.79	-58.64	-45.67	-52.14	-0.18	70.6	71.6	71.2
7.78	-58.64	-45.67	-52.11	-0.15	70.6	71.6	71
7.79	-58.64	-45.61	-52.14	-0.15	70.6	71.4	71.1
7.79	-58.64	-45.61	-52.11	-0.15	70.6	71.4	71.1
7.79	-58.6	-45.61	-52.08	-0.18	70.6	71.3	71.1
7.79	-58.6	-45.61	-52.11	-0.18	70.5	71.3	70.9
7.79	-58.6	-45.56	-52.08	-0.15	70.4	71.3	70.9
7.79	-58.6	-45.56	-52.08	-0.18	70.5	71.3	70.9
7.78	-58.6	-45.56	-52.08	-0.15	70.4	71.2	70.7
7.79	-58.6	-45.56	-52.02	-0.18	70.4	71.2	70.7
7.78	-58.6	-45.56	-52.02	-0.15	70.4	71.2	70.7
7.78	-58.55	-45.51	-52.02	-0.15	70.3	71.2	70.7
7.78	-58.55	-45.51	-51.99	-0.18	70.4	71.2	70.5
7.78	-58.55	-45.56	-52.02	-0.18	70.4	71.2	70.5
7.78	-58.55	-45.51	-51.99	-0.15	70.3	71.1	70.5
7.78	-58.51	-45.51	-51.99	-0.15	70.3	71.1	70.4
7.78	-58.51	-45.51	-51.99	-0.18	70.3	71.1	70.4
7.77	-58.51	-45.51	-51.96	-0.15	70.2	71.1	70.1
7.77	-58.51	-45.51	-51.96	-0.15	70.2	71.1	70.2
7.78	-58.46	-45.51	-51.96	-0.15	70.2	71.1	70.5
7.78	-58.51	-45.51	-51.96	-0.15	70.2	71	70.2
7.78	-58.46	-45.46	-51.96	-0.15	70.1	71	70.3
7.77	-58.51	-45.51	-51.93	-0.15	70.2	71	70.1
7.78	-58.46	-45.46	-51.93	-0.15	70.1	70.9	70.1
7.77	-58.46	-45.46	-51.9	-0.15	70.1	70.9	70.1
7.77	-58.46	-45.46	-51.93	-0.15	70.1	70.9	70.1
7.78	-58.46	-45.41	-51.9	-0.15	70.1	70.9	70.1
7.78	-58.46	-45.41	-51.93	-0.15	70.1	70.8	70
7.77	-58.42	-45.46	-51.9	-0.15	70.1	70.9	69.9
7.78	-58.46	-45.46	-51.9	-0.15	70.1	70.8	70
7.78	-58.42	-45.41	-51.9	-0.15	70.1	70.8	69.8
7.77	-58.42	-45.41	-51.9	-0.15	70	70.8	70
7.78	-58.42	-45.41	-51.87	-0.12	70.1	70.8	69.8
7.78	-58.32	-45.41	-51.87	-0.15	70	70.7	69.6
7.78	-58.32	-45.41	-51.84	-0.15	70	70.7	69.6
7.77	-58.32	-45.3	-51.84	-0.15	69.9	70.7	69.6
7.76	-58.32	-45.3	-51.84	-0.15	69.9	70.7	69.6
7.78	-58.32	-45.3	-51.84	-0.15	69.9	70.7	69.5
7.77	-58.32	-45.3	-51.81	-0.15	69.9	70.6	69.8
7.77	-58.32	-45.3	-51.81	-0.15	69.8	70.6	69.5
7.77	-58.28	-45.3	-51.81	-0.15	69.8	70.6	69.4
7.77	-58.32	-45.3	-51.78	-0.15	69.9	70.6	69.3
7.77	-58.28	-45.3	-51.81	-0.15	69.8	70.6	69.3
7.76	-58.28	-45.25	-51.78	-0.12	69.9	70.6	69.2

7.77	-58.23	-45.25	-51.78	-0.15	69.9	70.6	69.3
7.77	-58.23	-45.25	-51.78	-0.12	69.7	70.6	69.2
7.76	-58.23	-45.25	-51.78	-0.15	69.8	70.6	69.2
7.76	-58.23	-45.25	-51.78	-0.12	69.8	70.6	69.3
7.76	-58.23	-45.25	-51.75	-0.15	69.8	70.5	69.4
7.76	-58.23	-45.2	-51.75	-0.15	69.8	70.5	69.4
7.76	-58.23	-45.2	-51.75	-0.15	69.8	70.5	69.4
7.77	-58.23	-45.2	-51.75	-0.12	69.8	70.5	69.5
7.76	-58.23	-45.2	-51.75	-0.12	69.7	70.5	69.5
7.77	-58.23	-45.2	-51.72	-0.12	69.7	70.5	69.6
7.77	-58.19	-45.2	-51.72	-0.12	69.7	70.5	69.6
7.77	-58.19	-45.2	-51.72	-0.12	69.4	70.5	69.5
7.76	-58.23	-45.2	-51.68	-0.12	69.7	70.6	69.9
7.76	-58.19	-45.15	-51.68	-0.15	69.8	70.5	69.8
7.76	-58.19	-45.2	-51.72	-0.15	69.7	70.5	70
7.76	-58.19	-45.2	-51.68	-0.15	69.6	70.6	70
7.76	-58.19	-45.15	-51.68	-0.15	69.7	70.6	70
7.76	-58.19	-45.15	-51.68	-0.15	69.7	70.5	70.1
7.76	-58.19	-45.15	-51.68	-0.12	69.7	70.5	70.2
7.75	-58.14	-45.15	-51.65	-0.12	69.7	70.5	70.1
7.76	-58.14	-45.15	-51.65	-0.12	69.7	70.5	70.3
7.76	-58.14	-45.15	-51.65	-0.12	69.7	70.5	70.3
7.76	-58.14	-45.15	-51.65	-0.12	69.7	70.5	70.4
7.76	-58.14	-45.15	-51.62	-0.12	69.7	70.4	70.5
7.76	-58.1	-45.09	-51.62	-0.15	69.6	71.2	70.6
7.76	-58.14	-45.09	-51.62	-0.15	69.8	71.1	70.7
7.75	-58.1	-45.15	-51.62	-0.12	69.9	70.8	71
7.76	-58.1	-45.09	-51.62	-0.12	69.9	70.7	71.2
7.76	-58.05	-45.09	-51.59	-0.12	69.8	70.6	71.4
7.75	-58.1	-45.09	-51.59	-0.12	69.8	70.6	71.6
7.75	-58.05	-45.09	-51.59	-0.12	69.7	70.6	72
7.75	-58.05	-45.04	-51.56	-0.15	69.8	70.6	72.2
7.75	-58.05	-45.04	-51.56	-0.12	69.8	70.7	72.2
7.75	-58.05	-45.04	-51.56	-0.12	69.8	70.7	72.7
7.75	-58.05	-45.04	-51.56	-0.12	69.7	70.7	72.7
7.75	-58.05	-45.04	-51.53	-0.09	69.7	70.7	73.1
7.75	-58.05	-44.99	-51.53	-0.12	69.7	70.7	73.3
7.75	-58	-45.04	-51.53	-0.12	69.7	70.7	73.4
7.75	-58	-45.04	-51.5	-0.12	69.8	70.7	73.5
7.75	-58	-45.04	-51.5	-0.12	69.8	70.7	73.6
7.75	-58	-44.99	-51.5	-0.12	69.8	70.8	73.8
7.75	-58	-44.99	-51.5	-0.12	69.8	70.8	74.3
7.75	-57.96	-44.99	-51.5	-0.12	69.8	70.9	74.2
7.75	-57.96	-44.99	-51.47	-0.12	69.9	70.8	74.5
7.75	-57.96	-44.99	-51.47	-0.12	69.8	70.9	74.5
7.75	-57.91	-44.99	-51.47	-0.12	69.8	70.9	74.8
7.75	-57.96	-44.99	-51.47	-0.12	69.9	70.9	75.1

7.75	-57.96	-44.94	-51.44	-0.12	70	71	75.2
7.75	-57.96	-44.94	-51.44	-0.12	69.9	71	75.5
7.75	-57.91	-44.94	-51.44	-0.15	70	71.1	75.5
7.75	-57.91	-44.94	-51.44	-0.12	70	71.1	75.5
7.75	-57.91	-44.94	-51.44	-0.09	70	71.1	75.8
7.75	-57.91	-44.89	-51.41	-0.12	70.1	71.2	75.8
7.75	-57.87	-44.89	-51.41	-0.12	70.1	71.2	76.2
7.75	-57.87	-44.89	-51.41	-0.12	70.1	71.2	76.3
7.75	-57.87	-44.89	-51.41	-0.12	70.1	71.2	76.4
7.75	-57.87	-44.89	-51.38	-0.12	70.1	71.2	76.5
7.75	-57.87	-44.84	-51.38	-0.12	70.1	71.2	76.6
7.75	-57.87	-44.84	-51.38	-0.12	70.1	71.3	76.4
7.74	-57.87	-44.78	-51.38	-0.12	70.1	71.2	76.6
7.74	-57.87	-44.84	-51.35	-0.12	70.1	71.3	76.6
7.73	-57.82	-44.84	-51.35	-0.12	70.1	71.3	76.6
7.74	-57.82	-44.84	-51.35	-0.12	70.1	71.3	76.7
7.74	-57.82	-44.84	-51.32	-0.12	70.2	71.3	76.6
7.74	-57.82	-44.84	-51.35	-0.12	70.2	71.3	76.6
7.74	-57.82	-44.78	-51.32	-0.12	70.2	71.3	76.6
7.74	-57.82	-44.78	-51.32	-0.12	70.2	71.3	76.6
7.74	-57.77	-44.78	-51.29	-0.12	70.2	71.4	76.4
7.74	-57.77	-44.78	-51.32	-0.09	70.2	71.4	76.4
7.74	-57.77	-44.73	-51.29	-0.12	70.2	71.4	76.5
7.74	-57.77	-44.78	-51.29	-0.12	70.3	71.6	76.4
7.74	-57.73	-44.73	-51.29	-0.09	70.3	71.6	76.3
7.74	-57.73	-44.73	-51.29	-0.12	70.3	71.6	76.2
7.74	-57.73	-44.73	-51.23	-0.09	70.3	71.6	75.7
7.74	-57.73	-44.73	-51.23	-0.09	70.3	71.6	75.8
7.74	-57.73	-44.68	-51.2	-0.12	70.3	71.4	75.6
7.74	-57.73	-44.73	-51.2	-0.09	70.3	71.6	75.6
7.73	-57.68	-44.68	-51.2	-0.12	70.3	71.6	75.3
7.74	-57.68	-44.68	-51.2	-0.12	70.4	71.4	75.2
7.74	-57.68	-44.68	-51.2	-0.12	70.4	71.4	75
7.74	-57.68	-44.68	-51.2	-0.12	70.3	71.4	75.1
7.74	-57.68	-44.68	-51.17	-0.09	70.3	71.4	74.6
7.73	-57.68	-44.68	-51.17	-0.12	70.3	71.4	74.6
7.74	-57.68	-44.63	-51.17	-0.09	70.3	71.3	74.6
7.73	-57.64	-44.63	-51.17	-0.09	70.3	71.3	74.4
7.72	-57.68	-44.63	-51.17	-0.09	70.3	71.2	74.2
7.72	-57.68	-44.63	-51.14	-0.12	70.3	71.2	74
7.72	-57.64	-44.63	-51.14	-0.09	70.3	71.2	74
7.73	-57.64	-44.63	-51.14	-0.09	70.2	71.2	73.5
7.72	-57.64	-44.63	-51.11	-0.09	70.2	71.2	73.4
7.72	-57.59	-44.63	-51.11	-0.09	70.1	71.1	73.4
7.73	-57.64	-44.63	-51.07	-0.09	70.2	71	73.2
7.72	-57.59	-44.63	-51.07	-0.09	70.1	71	73.1
7.72	-57.59	-44.58	-51.07	-0.09	70.1	70.9	73

7.72	-57.59	-44.63	-51.07	-0.09	70.1	70.9	72.8
7.72	-57.59	-44.58	-51.07	-0.09	70.1	70.8	72.5
7.72	-57.55	-44.58	-51.04	-0.09	70.1	70.8	72.3
7.72	-57.55	-44.58	-51.04	-0.09	70.1	70.8	72.2
7.73	-57.55	-44.52	-51.04	-0.09	70.1	70.8	72
7.72	-57.55	-44.58	-51.04	-0.09	70	70.7	72.1
7.73	-57.55	-44.58	-51.01	-0.09	70	70.6	71.9
7.72	-57.55	-44.52	-51.01	-0.09	70	70.6	71.7
7.72	-57.55	-44.58	-51.01	-0.09	69.9	70.5	71.6
7.72	-57.5	-44.52	-51.01	-0.12	69.9	70.5	71.3
7.71	-57.5	-44.52	-50.98	-0.09	69.8	70.5	71.2
7.71	-57.5	-44.52	-50.98	-0.09	69.9	70.4	71.2
7.71	-57.5	-44.47	-50.98	-0.09	69.8	70.4	71
7.71	-57.5	-44.47	-50.95	-0.09	69.8	70.4	70.8
7.71	-57.45	-44.47	-50.95	-0.09	69.7	70.3	70.8
7.71	-57.45	-44.42	-50.95	-0.06	69.7	70.3	70.7
7.71	-57.45	-44.47	-50.95	-0.09	69.7	70.3	70.4
7.71	-57.45	-44.47	-50.92	-0.09	69.6	70.2	70.3
7.71	-57.45	-44.47	-50.92	-0.09	69.6	70.2	70.3
7.71	-57.45	-44.42	-50.92	-0.09	69.6	70.2	70.1
7.71	-57.45	-44.42	-50.92	-0.09	69.6	70.1	70
7.71	-57.41	-44.42	-50.89	-0.09	69.4	70.1	69.9
7.71	-57.41	-44.42	-50.89	-0.09	69.3	70.1	69.6
7.71	-57.41	-44.42	-50.89	-0.09	69.4	70.1	69.9
7.71	-57.41	-44.42	-50.86	-0.09	69.3	70	69.8
7.72	-57.36	-44.42	-50.86	-0.06	69.3	70	69.4
7.71	-57.36	-44.42	-50.86	-0.09	69.2	70	69.4
7.71	-57.36	-44.32	-50.86	-0.09	69.2	70	69
7.71	-57.36	-44.37	-50.86	-0.09	69.2	69.9	69
7.71	-57.36	-44.37	-50.86	-0.09	69.2	69.9	68.9
7.71	-57.32	-44.37	-50.83	-0.06	69.1	69.9	69
7.71	-57.36	-44.37	-50.83	-0.06	69.1	69.8	68.8
7.71	-57.32	-44.37	-50.83	-0.09	69	69.9	68.8
7.71	-57.32	-44.37	-50.83	-0.09	69	69.8	68.7
7.7	-57.32	-44.32	-50.83	-0.09	69	69.8	68.9
7.71	-57.32	-44.32	-50.8	-0.09	69	69.7	68.6
7.71	-57.32	-44.32	-50.8	-0.09	69	69.7	68.4
7.71	-57.32	-44.32	-50.8	-0.09	69	69.7	68.3
7.71	-57.32	-44.32	-50.8	-0.06	68.9	69.7	68.2
7.71	-57.32	-44.32	-50.77	-0.09	68.9	69.6	68
7.71	-57.27	-44.32	-50.77	-0.09	68.9	69.6	68.1
7.71	-57.32	-44.26	-50.77	-0.09	68.9	69.6	68.1
7.71	-57.32	-44.32	-50.77	-0.09	68.9	69.6	68
7.71	-57.27	-44.26	-50.77	-0.09	68.8	69.5	67.9
7.71	-57.27	-44.32	-50.74	-0.09	68.8	69.5	67.9
7.71	-57.27	-44.32	-50.74	-0.09	68.8	69.5	67.9
7.71	-57.27	-44.26	-50.74	-0.06	68.7	69.5	67.7

7.71	-57.18	-44.26	-50.74	-0.06	68.8	69.5	68
7.71	-57.27	-44.26	-50.74	-0.06	68.7	69.4	67.9
7.71	-57.18	-44.26	-50.71	-0.09	68.7	69.4	67.9
7.7	-57.18	-44.26	-50.71	-0.06	68.6	69.4	67.9
7.7	-57.18	-44.21	-50.71	-0.09	68.6	69.5	67.9
7.7	-57.18	-44.21	-50.71	-0.06	68.5	69.4	67.9
7.7	-57.18	-44.21	-50.68	-0.06	68.7	69.4	67.9
7.7	-57.18	-44.21	-50.68	-0.09	68.6	69.4	68.4
7.7	-57.13	-44.21	-50.68	-0.06	68.6	69.4	68.6
7.7	-57.13	-44.21	-50.68	-0.06	68.6	69.5	68.4
7.7	-57.13	-44.21	-50.68	-0.06	68.7	69.5	69
7.7	-57.13	-44.16	-50.68	-0.09	68.6	69.5	69
7.7	-57.13	-44.21	-50.62	-0.06	68.7	69.5	69.2
7.7	-57.13	-44.21	-50.65	-0.06	68.7	69.6	69.4
7.7	-57.13	-44.16	-50.62	-0.09	68.8	69.6	69.6
7.7	-57.09	-44.16	-50.62	-0.09	68.7	69.6	70
7.7	-57.09	-44.16	-50.62	-0.09	68.7	69.7	70.1
7.7	-57.09	-44.16	-50.62	-0.06	68.7	69.7	70.4
7.7	-57.09	-44.16	-50.59	-0.06	68.8	69.8	70.5
7.7	-57.04	-44.06	-50.59	-0.06	68.8	69.9	70.9
7.7	-57.04	-44.06	-50.56	-0.06	68.8	69.8	71.3
7.7	-57.04	-44.06	-50.59	-0.06	68.9	69.9	71.7
7.7	-57.04	-44.06	-50.59	-0.06	68.9	70	72
7.7	-57.04	-44.06	-50.56	-0.09	68.8	70	72.3
7.7	-57	-44	-50.56	-0.09	68.9	70.1	72.6
7.7	-57	-44	-50.53	-0.06	68.9	70.1	73.1
7.7	-57	-44	-50.53	-0.06	68.9	70.2	73.1
7.7	-57	-44	-50.53	-0.09	68.9	70.2	73.3
7.7	-57	-44	-50.53	-0.09	69	70.2	73.6
7.7	-56.95	-43.95	-50.46	-0.06	69	70.3	74.2
7.7	-56.95	-43.95	-50.46	-0.06	69	70.5	74.3
7.7	-56.9	-43.95	-50.46	-0.06	69	70.5	74.7
7.7	-56.95	-43.95	-50.43	-0.09	69.1	70.6	74.9
7.7	-56.95	-43.95	-50.43	-0.09	69.1	70.6	75.5
7.7	-56.9	-43.95	-50.43	-0.09	69.2	70.6	75.8
7.7	-56.9	-43.95	-50.4	-0.06	69.2	70.7	76.1
7.7	-56.95	-43.95	-50.4	-0.09	69.2	70.8	76.4
7.7	-56.95	-43.95	-50.37	-0.09	69.3	70.8	76.6
7.7	-56.9	-43.9	-50.37	-0.09	69.3	70.9	76.7
7.7	-56.9	-43.9	-50.37	-0.09	69.4	70.9	77.2
7.7	-56.9	-43.9	-50.34	-0.09	69.4	71	77.5
7.7	-56.86	-43.9	-50.37	-0.09	69.6	71.1	77.7
7.7	-56.86	-43.85	-50.34	-0.09	69.6	71.1	77.8
7.7	-56.86	-43.9	-50.34	-0.09	69.7	71.1	78.2
7.7	-56.86	-43.85	-50.31	-0.12	69.7	71.2	78.2
7.7	-56.81	-43.85	-50.31	-0.09	69.6	71.2	78.6
7.7	-56.81	-43.85	-50.28	-0.12	69.8	71.3	78.8

7.7	-56.81	-43.8	-50.28	-0.09	69.8	71.2	79
7.7	-56.81	-43.85	-50.28	-0.09	69.8	71.3	79.1
7.7	-56.81	-43.8	-50.28	-0.12	69.7	71.3	79.4
7.7	-56.81	-43.8	-50.28	-0.09	69.9	71.4	79.5
7.7	-56.77	-43.8	-50.28	-0.09	70	71.6	79.5
7.69	-56.81	-43.75	-50.28	-0.12	70	71.4	79.7
7.69	-56.77	-43.75	-50.25	-0.12	70.1	71.6	79.7
7.68	-56.77	-43.75	-50.25	-0.12	70	71.4	79.8
7.69	-56.77	-43.75	-50.25	-0.12	70	71.4	80.1
7.69	-56.77	-43.75	-50.22	-0.12	70.1	71.4	79.9
7.69	-56.77	-43.75	-50.22	-0.12	70.1	71.6	79.9
7.68	-56.77	-43.75	-50.22	-0.12	70.1	71.6	80.1
7.68	-56.72	-43.75	-50.22	-0.12	70.1	71.7	80.3
7.69	-56.72	-43.75	-50.22	-0.12	70.1	71.7	80.1
7.69	-56.72	-43.75	-50.22	-0.12	70.1	71.7	80
7.68	-56.72	-43.69	-50.22	-0.12	70.3	72.1	80
7.69	-56.72	-43.69	-50.22	-0.15	70.2	72.1	80.1
7.69	-56.68	-43.69	-50.19	-0.12	70.3	72	80
7.69	-56.68	-43.69	-50.19	-0.12	70.3	72	79.9
7.69	-56.68	-43.64	-50.19	-0.12	70.3	71.9	79.9
7.68	-56.68	-43.64	-50.19	-0.15	70.4	71.8	79.9
7.69	-56.68	-43.64	-50.19	-0.15	70.4	71.9	79.8
7.69	-56.63	-43.64	-50.19	-0.15	70.4	71.9	79.6
7.69	-56.68	-43.64	-50.19	-0.15	70.3	71.8	79.5
7.68	-56.68	-43.64	-50.19	-0.15	70.3	71.8	79.4
7.68	-56.63	-43.64	-50.19	-0.15	70.3	71.8	79.3
7.69	-56.63	-43.64	-50.16	-0.15	70.4	71.8	79.1
7.69	-56.63	-43.59	-50.16	-0.15	70.6	71.8	78.8
7.69	-56.63	-43.59	-50.16	-0.15	70.6	71.8	78.7
7.68	-56.63	-43.59	-50.16	-0.15	70.7	71.8	78.5
7.69	-56.58	-43.59	-50.16	-0.15	70.7	71.7	78
7.69	-56.58	-43.59	-50.13	-0.15	70.9	71.7	77.9
7.68	-56.63	-43.59	-50.13	-0.15	70.7	71.8	77.6
7.69	-56.63	-43.59	-50.13	-0.12	70.8	71.7	77.3
7.69	-56.58	-43.59	-50.13	-0.15	70.9	71.7	77
7.69	-56.58	-43.59	-50.13	-0.15	70.8	71.7	76.8
7.69	-56.58	-43.54	-50.1	-0.12	70.8	71.6	76.5
7.68	-56.58	-43.59	-50.13	-0.15	70.8	71.6	76.1
7.68	-56.54	-43.54	-50.1	-0.12	70.7	71.6	75.6
7.69	-56.58	-43.54	-50.1	-0.15	70.7	71.6	75.4
7.68	-56.54	-43.54	-50.07	-0.15	70.6	71.4	75.2
7.68	-56.58	-43.54	-50.07	-0.12	70.6	71.4	74.7
7.68	-56.54	-43.59	-50.07	-0.15	70.5	71.3	74.5
7.68	-56.54	-43.54	-50.07	-0.12	70.5	71.4	74.1
7.68	-56.54	-43.54	-50.07	-0.15	70.4	71.3	73.7
7.68	-56.54	-43.54	-50.04	-0.12	70.3	71.3	73.4
7.68	-56.54	-43.54	-50.04	-0.12	70.3	71.2	73.3

7.68	-56.54	-43.54	-50.04	-0.12	70.2	71.2	73.1
7.68	-56.54	-43.54	-50.01	-0.12	70.2	71.2	72.9
7.68	-56.54	-43.49	-50.01	-0.12	70.1	71.2	72.5
7.68	-56.49	-43.49	-50.01	-0.12	70.1	71.2	72.3
7.68	-56.49	-43.49	-50.01	-0.12	70.1	71.1	72.1
7.68	-56.49	-43.49	-50.01	-0.12	70.1	71.1	71.6
7.68	-56.49	-43.49	-50.01	-0.12	69.9	71.1	71.4
7.68	-56.49	-43.49	-50.01	-0.12	69.9	70.9	71.2
7.68	-56.45	-43.49	-49.98	-0.12	69.9	70.9	71.1
7.68	-56.49	-43.43	-49.98	-0.12	69.8	70.9	70.6
7.68	-56.45	-43.49	-49.95	-0.12	69.7	70.8	70.5
7.68	-56.45	-43.43	-49.91	-0.12	69.7	70.8	70.3
7.68	-56.45	-43.43	-49.95	-0.12	69.6	70.7	70.1
7.68	-56.45	-43.43	-49.95	-0.12	69.6	70.7	69.9
7.68	-56.45	-43.43	-49.91	-0.12	69.4	70.6	69.5
7.68	-56.4	-43.38	-49.91	-0.09	69.4	70.6	69.4
7.68	-56.45	-43.38	-49.91	-0.12	69.3	70.5	69.3
7.67	-56.4	-43.43	-49.88	-0.12	69.2	70.5	69
7.67	-56.4	-43.38	-49.88	-0.12	69.2	70.5	69
7.67	-56.4	-43.38	-49.88	-0.12	69.1	70.4	68.9
7.67	-56.4	-43.38	-49.88	-0.12	69.1	70.3	68.5
7.67	-56.4	-43.38	-49.88	-0.12	69	70.3	68.4
7.67	-56.4	-43.38	-49.85	-0.12	69	70.2	68.4
7.67	-56.4	-43.38	-49.85	-0.09	69	70.2	68.1
7.67	-56.36	-43.33	-49.85	-0.09	68.9	70.2	68.2
7.67	-56.36	-43.38	-49.82	-0.09	68.9	70.1	67.8
7.67	-56.36	-43.33	-49.82	-0.09	68.9	70.1	67.8
7.67	-56.36	-43.33	-49.82	-0.09	68.7	70.1	67.7
7.67	-56.36	-43.33	-49.82	-0.09	68.7	70	67.8
7.67	-56.36	-43.33	-49.82	-0.09	68.7	70	67.3
7.67	-56.31	-43.33	-49.79	-0.09	68.6	69.9	67.3
7.67	-56.36	-43.33	-49.79	-0.12	68.6	69.9	66.8
7.67	-56.36	-43.28	-49.79	-0.09	68.5	69.9	66.7
7.67	-56.31	-43.33	-49.79	-0.09	68.5	69.9	66.8
7.67	-56.36	-43.28	-49.79	-0.09	68.5	69.8	66.6
7.67	-56.31	-43.28	-49.76	-0.09	68.5	69.7	66.3
7.66	-56.26	-43.28	-49.76	-0.09	68.4	69.7	66.3
7.65	-56.31	-43.28	-49.76	-0.09	68.4	69.6	66.1
7.66	-56.31	-43.28	-49.76	-0.09	68.3	69.6	66
7.66	-56.26	-43.28	-49.76	-0.12	68.3	69.5	65.9
7.66	-56.26	-43.28	-49.73	-0.12	68.3	69.5	65.9
7.65	-56.26	-43.28	-49.73	-0.12	68.2	69.5	65.7
7.66	-56.31	-43.23	-49.73	-0.12	68.2	69.4	65.4
7.66	-56.26	-43.28	-49.73	-0.12	68.1	69.3	65.2
7.65	-56.26	-43.23	-49.73	-0.12	68.2	69.3	65.3
7.66	-56.26	-43.28	-49.73	-0.12	68.2	69.3	65.2
7.66	-56.26	-43.23	-49.73	-0.09	68.1	69.1	65

7.66	-56.26	-43.23	-49.67	-0.09	68.1	69.1	64.8
7.66	-56.22	-43.23	-49.67	-0.09	68.1	69	65
7.66	-56.22	-43.23	-49.67	-0.09	68.1	69	65
7.66	-56.22	-43.23	-49.64	-0.09	68	69	65.2
7.66	-56.22	-43.17	-49.64	-0.12	68.1	68.9	65.3
7.65	-56.22	-43.23	-49.64	-0.12	68	68.9	65.1
7.66	-56.22	-43.23	-49.64	-0.12	68	68.9	65.4
7.66	-56.22	-43.17	-49.64	-0.12	68	68.8	65.6
7.66	-56.22	-43.23	-49.64	-0.09	68	68.8	66
7.66	-56.22	-43.17	-49.61	-0.12	68.2	68.9	66
7.66	-56.17	-43.17	-49.61	-0.12	68.4	69	66.2
7.66	-56.17	-43.17	-49.61	-0.15	68.3	69	66.6
7.65	-56.17	-43.17	-49.58	-0.15	68.3	69.3	66.8
7.66	-56.17	-43.17	-49.58	-0.12	68.6	69.7	67
7.66	-56.17	-43.17	-49.58	-0.12	68.6	69.5	67.3
7.66	-56.17	-43.17	-49.58	-0.12	68.5	69.4	67.9
7.66	-56.08	-43.12	-49.58	-0.12	68.7	69.4	68.1
7.65	-56.08	-43.12	-49.58	-0.12	68.6	69.4	68.5
7.65	-56.08	-43.12	-49.55	-0.12	68.6	69.5	69
7.65	-56.08	-43.12	-49.55	-0.12	68.7	69.6	69.2
7.66	-56.08	-43.07	-49.52	-0.15	68.7	69.6	69.4
7.65	-56.08	-43.12	-49.52	-0.12	68.8	69.7	70
7.65	-56.08	-43.12	-49.52	-0.15	68.8	69.8	70.1
7.65	-56.03	-43.07	-49.52	-0.12	68.9	69.9	70.7
7.66	-56.03	-43.07	-49.52	-0.12	68.9	69.9	71.1
7.66	-56.03	-43.07	-49.52	-0.12	68.8	70.1	71.4
7.66	-56.03	-43.07	-49.49	-0.12	68.9	70.1	71.9
7.66	-56.03	-43.07	-49.49	-0.15	69	70.3	72.3
7.66	-55.99	-43.02	-49.49	-0.12	69	70.3	72.5
7.66	-55.99	-43.02	-49.46	-0.12	69	70.3	73.1
7.66	-55.99	-43.02	-49.46	-0.15	69	70.3	73.4
7.66	-55.99	-42.97	-49.46	-0.15	69.1	70.4	73.6
7.65	-55.99	-43.02	-49.43	-0.15	69	70.4	74.2
7.65	-55.94	-42.97	-49.43	-0.12	69.2	70.8	74.6
7.65	-55.94	-43.02	-49.43	-0.15	69.3	71.3	74.8

7.65	-55.94	-42.97	-49.4	-0.15	69.6	71.4	75.2
7.65	-55.94	-42.97	-49.4	-0.15	69.8	71.7	75.5
7.65	-55.94	-42.97	-49.4	-0.15	70	71.8	75.9
7.65	-55.94	-42.92	-49.37	-0.15	70	71.9	76.5
7.66	-55.94	-42.97	-49.4	-0.15	70	72.1	76.8
7.66	-55.94	-42.92	-49.37	-0.15	70.1	72.2	77
7.66	-55.9	-42.92	-49.37	-0.15	70.2	72.3	77.5
7.66	-55.9	-42.92	-49.33	-0.18	70.3	72.4	77.7
7.66	-55.9	-42.92	-49.33	-0.18	70.4	72.5	78
7.66	-55.85	-42.92	-49.33	-0.15	70.6	72.6	78.4
7.66	-55.85	-42.92	-49.33	-0.15	70.5	72.8	78.6
7.66	-55.85	-42.92	-49.3	-0.15	70.7	72.9	78.8
7.66	-55.85	-42.81	-49.3	-0.18	70.9	73	78.9
7.66	-55.85	-42.81	-49.27	-0.18	70.9	73.1	79.3
7.66	-55.85	-42.81	-49.27	-0.15	70.9	73.2	79.6
7.65	-55.85	-42.81	-49.27	-0.18	71	73.3	79.7
7.66	-55.81	-42.81	-49.27	-0.18	71	73.3	79.7
7.66	-55.85	-42.76	-49.27	-0.18	71.2	73.4	79.9
7.66	-55.81	-42.81	-49.27	-0.18	71.2	73.4	80
7.66	-55.81	-42.81	-49.24	-0.15	71.3	73.5	80.3
7.66	-55.81	-42.76	-49.27	-0.18	71.2	73.6	80.3
7.66	-55.76	-42.81	-49.24	-0.18	71.3	73.6	80.4
7.66	-55.76	-42.76	-49.24	-0.18	71.4	73.9	80.5
7.66	-55.76	-42.76	-49.24	-0.18	71.5	73.9	80.5
7.66	-55.76	-42.76	-49.21	-0.18	71.6	74	80.7
7.66	-55.76	-42.71	-49.21	-0.18	71.8	74	80.5
7.66	-55.76	-42.76	-49.21	-0.18	71.8	74.1	80.7
7.65	-55.76	-42.71	-49.21	-0.18	71.9	74.1	80.8
7.67	-55.71	-42.71	-49.18	-0.18	72	74.1	80.8
7.67	-55.71	-42.66	-49.18	-0.18	72	74.2	80.8
7.67	-55.71	-42.66	-49.18	-0.18	72	74.2	81
7.67	-55.71	-42.66	-49.18	-0.18	72	74.2	80.7
7.67	-55.71	-42.66	-49.15	-0.18	72	74.2	80.6
7.67	-55.71	-42.66	-49.15	-0.18	72.1	74.2	80.8

7.67	-55.71	-42.66	-49.15	-0.18	72.1	74.2	80.7
7.67	-55.71	-42.66	-49.15	-0.18	72.2	74.2	80.7
7.67	-55.67	-42.66	-49.15	-0.18	72.2	74.2	80.4
7.67	-55.67	-42.66	-49.15	-0.18	72.3	74.2	80.6
7.67	-55.67	-42.66	-49.15	-0.15	72.2	74.2	80
7.67	-55.67	-42.6	-49.12	-0.18	72.3	74.2	80.3
7.67	-55.67	-42.6	-49.12	-0.18	72.3	74.2	79.9
7.67	-55.67	-42.6	-49.12	-0.18	72.4	74.1	79.9
7.67	-55.62	-42.6	-49.12	-0.18	72.3	74.1	79.8
7.67	-55.67	-42.6	-49.12	-0.18	72.4	74	79.5
7.67	-55.67	-42.6	-49.12	-0.18	72.4	74	79.3
7.67	-55.62	-42.6	-49.12	-0.18	72.2	74	79.1
7.67	-55.62	-42.55	-49.09	-0.18	72.3	73.9	79.1
7.66	-55.62	-42.6	-49.09	-0.18	72.3	73.9	78.8
7.65	-55.62	-42.55	-49.09	-0.18	72.3	73.6	78.8
7.66	-55.62	-42.6	-49.09	-0.18	72.3	73.6	78.6
7.65	-55.62	-42.6	-49.09	-0.15	72.3	73.6	78.3
7.66	-55.62	-42.6	-49.09	-0.15	72.1	73.6	77.8
7.66	-55.62	-42.55	-49.09	-0.18	72.2	73.5	77.7
7.66	-55.62	-42.55	-49.06	-0.18	72.1	73.4	77.6
7.66	-55.58	-42.6	-49.06	-0.18	72.1	73.4	77.4
7.66	-55.58	-42.55	-49.06	-0.18	72.1	73.4	77.3
7.66	-55.62	-42.55	-49.06	-0.18	72	73.3	76.9
7.66	-55.58	-42.55	-49.03	-0.18	71.9	73.3	76.7
7.66	-55.58	-42.55	-49.03	-0.18	72	73.2	76.5
7.66	-55.62	-42.55	-49.03	-0.18	71.9	73.1	76.2
7.66	-55.58	-42.5	-49.03	-0.18	71.9	73	76.1
7.66	-55.53	-42.5	-49.03	-0.15	71.8	72.7	75.8
7.66	-55.58	-42.5	-49	-0.18	71.6	72.6	75.7
7.66	-55.53	-42.5	-49	-0.18	71.5	72.5	75.5
7.65	-55.53	-42.5	-49	-0.18	71.5	72.4	75.3
7.65	-55.53	-42.5	-49	-0.18	71.4	72.3	75
7.65	-55.53	-42.5	-49	-0.18	71.3	72.3	74.9
7.65	-55.53	-42.5	-48.97	-0.15	71.2	72.3	74.7
7.65	-55.53	-42.5	-48.97	-0.18	71.2	72.1	74.5
7.65	-55.53	-42.5	-48.97	-0.18	71.2	72	74.2
7.65	-55.53	-42.5	-48.97	-0.18	71.1	71.9	74
7.65	-55.49	-42.5	-48.97	-0.18	71	71.8	73.7
7.65	-55.49	-42.45	-48.94	-0.18	70.9	71.7	73.6
7.65	-55.49	-42.45	-48.94	-0.18	70.9	71.7	73.2
7.65	-55.49	-42.45	-48.94	-0.18	70.8	71.4	73.3
7.65	-55.44	-42.45	-48.88	-0.18	70.7	71.4	72.9
7.65	-55.49	-42.45	-48.88	-0.18	70.6	71.3	72.8
7.64	-55.44	-42.45	-48.88	-0.18	70.5	71.3	72.6
7.64	-55.49	-42.45	-48.88	-0.18	70.5	71.2	72.4
7.64	-55.44	-42.45	-48.88	-0.18	70.4	71.2	72.3
7.64	-55.44	-42.4	-48.85	-0.15	70.3	71.1	72.1

7.64	-55.49	-42.45	-48.88	-0.18	70.3	71	71.9
7.64	-55.44	-42.4	-48.88	-0.18	70.2	70.9	71.5
7.64	-55.44	-42.4	-48.85	-0.18	70.1	70.9	71.4
7.63	-55.44	-42.4	-48.85	-0.18	70.1	70.8	71.3
7.64	-55.44	-42.4	-48.85	-0.15	70.1	70.6	71.1
7.64	-55.44	-42.4	-48.85	-0.18	70.1	70.6	70.9
7.63	-55.44	-42.4	-48.82	-0.18	70	70.5	70.9
7.63	-55.39	-42.4	-48.82	-0.18	69.9	70.5	70.6
7.63	-55.39	-42.4	-48.82	-0.18	69.9	70.4	70.5
7.62	-55.39	-42.4	-48.82	-0.18	69.8	70.3	70.2
7.63	-55.39	-42.4	-48.82	-0.18	69.7	70.2	70.1
7.62	-55.39	-42.34	-48.82	-0.18	69.4	70.2	70.1
7.62	-55.39	-42.34	-48.82	-0.18	69.2	70.1	69.9
7.62	-55.39	-42.34	-48.79	-0.18	69.2	70.1	69.8
7.62	-55.39	-42.34	-48.79	-0.18	69	70.1	69.4
7.62	-55.35	-42.34	-48.79	-0.18	69	70.1	69.4
7.62	-55.35	-42.34	-48.79	-0.18	69	70	69.2
7.62	-55.39	-42.34	-48.79	-0.18	69	69.9	69
7.62	-55.39	-42.29	-48.75	-0.18	68.9	69.9	69.1
7.62	-55.35	-42.34	-48.79	-0.18	68.9	69.8	69
7.62	-55.35	-42.34	-48.75	-0.18	68.8	69.7	68.7
7.62	-55.35	-42.34	-48.75	-0.18	68.8	69.6	68.7
7.62	-55.35	-42.34	-48.75	-0.18	68.7	69.6	68.5
7.62	-55.35	-42.29	-48.75	-0.18	68.8	69.6	68.5
7.62	-55.35	-42.29	-48.75	-0.18	68.8	69.6	68.3
7.62	-55.35	-42.29	-48.72	-0.15	68.9	69.6	68.3
7.62	-55.3	-42.29	-48.72	-0.18	68.8	69.4	68
7.62	-55.3	-42.29	-48.72	-0.18	68.8	69.5	68.1
7.62	-55.3	-42.29	-48.72	-0.15	68.8	69.5	67.9
7.62	-55.3	-42.29	-48.72	-0.18	68.8	69.6	68.1
7.62	-55.3	-42.29	-48.72	-0.15	68.9	69.6	67.9
7.62	-55.3	-42.29	-48.72	-0.18	68.9	69.6	68.1
7.62	-55.3	-42.29	-48.72	-0.18	68.9	69.6	68.2
7.62	-55.3	-42.24	-48.69	-0.18	69	69.7	68.3
7.62	-55.3	-42.24	-48.69	-0.18	69	69.7	68.4
7.62	-55.3	-42.24	-48.69	-0.15	69.1	69.7	68.4
7.62	-55.26	-42.24	-48.69	-0.18	69.1	69.8	68.7

7.62	-55.3	-42.24	-48.66	-0.18	69.1	69.8	68.8
7.62	-55.26	-42.24	-48.69	-0.18	69.1	70	68.9
7.62	-55.26	-42.24	-48.66	-0.15	69.1	70.1	69.2
7.62	-55.26	-42.24	-48.66	-0.18	69.1	70.1	69.4
7.62	-55.26	-42.24	-48.63	-0.18	69	70.2	69.8
7.62	-55.21	-42.24	-48.63	-0.18	69	70.3	69.8
7.62	-55.26	-42.24	-48.63	-0.18	69.2	70.4	70.1
7.62	-55.26	-42.19	-48.63	-0.18	69.3	70.5	70.6
7.62	-55.21	-42.19	-48.63	-0.18	69.4	70.6	70.8
7.62	-55.21	-42.24	-48.63	-0.18	69.3	70.7	71.1
7.62	-55.21	-42.24	-48.63	-0.18	69.6	70.8	71.3
7.62	-55.21	-42.14	-48.6	-0.18	69.7	70.9	71.4
7.62	-55.21	-42.19	-48.6	-0.18	69.7	71	72.1
7.62	-55.21	-42.19	-48.6	-0.18	69.8	71.2	72.3
7.62	-55.21	-42.14	-48.57	-0.18	69.9	71.2	72.7
7.62	-55.21	-42.14	-48.6	-0.18	70	71.4	73.2
7.62	-55.16	-42.14	-48.57	-0.18	70	71.6	73.4
7.62	-55.16	-42.14	-48.6	-0.18	70.1	71.7	73.8
7.62	-55.16	-42.14	-48.57	-0.18	70.1	71.8	74.4
7.62	-55.16	-42.14	-48.57	-0.18	70.2	72	74.6
7.62	-55.12	-42.14	-48.54	-0.15	70.3	72.1	75.2
7.62	-55.12	-42.08	-48.54	-0.18	70.5	72.2	75.4
7.62	-55.12	-42.08	-48.54	-0.15	70.5	72.3	75.8
7.62	-55.12	-42.14	-48.54	-0.18	70.5	72.3	76.2
7.62	-55.12	-42.08	-48.51	-0.18	70.7	72.5	76.6
7.62	-55.07	-42.03	-48.51	-0.15	70.7	72.6	76.8
7.62	-55.07	-42.08	-48.51	-0.18	70.7	72.7	77.3
7.62	-55.07	-42.08	-48.51	-0.18	70.9	72.9	77.7
7.62	-55.07	-42.08	-48.48	-0.18	71	73	78
7.62	-54.98	-42.03	-48.48	-0.18	71.1	73.1	78.4
7.62	-54.98	-42.03	-48.48	-0.18	71.1	73.2	78.7
7.62	-54.98	-42.03	-48.45	-0.18	71.2	73.3	78.9
7.62	-54.98	-42.03	-48.45	-0.18	71.3	73.4	79.4
7.62	-54.98	-42.03	-48.42	-0.18	71.3	73.5	79.6
7.62	-54.98	-41.98	-48.42	-0.18	71.3	73.6	79.9
7.63	-54.98	-41.98	-48.42	-0.18	71.5	73.7	80.4
7.62	-54.94	-41.98	-48.42	-0.18	71.6	73.9	80.6
7.62	-54.94	-41.98	-48.39	-0.18	71.6	74.2	80.7
7.62	-54.94	-41.98	-48.39	-0.21	71.9	73.7	81
7.62	-54.94	-41.98	-48.39	-0.18	71.6	73.6	81.2
7.62	-54.94	-41.98	-48.39	-0.18	71.8	73.5	81.3
7.62	-54.94	-41.93	-48.36	-0.18	71.6	73.5	81.7
7.62	-54.89	-41.93	-48.36	-0.18	71.5	73.5	82

7.62	-54.89	-41.93	-48.36	-0.18	71.5	73.5	81.9
7.62	-54.89	-41.93	-48.36	-0.18	71.5	73.5	82
7.62	-54.94	-41.93	-48.36	-0.18	71.5	73.5	82.2
7.62	-54.89	-41.93	-48.33	-0.18	71.5	73.5	82.5
7.62	-54.89	-41.88	-48.33	-0.18	71.5	73.5	82.6
7.62	-54.89	-41.88	-48.33	-0.21	71.5	73.5	82.7
7.63	-54.84	-41.88	-48.33	-0.18	71.6	73.5	83.1
7.63	-54.89	-41.88	-48.33	-0.18	71.6	73.5	83.1
7.63	-54.89	-41.88	-48.33	-0.18	71.6	73.5	83.2
7.62	-54.84	-41.88	-48.3	-0.18	71.6	73.5	83.2
7.62	-54.84	-41.88	-48.3	-0.21	71.8	73.5	83.1
7.63	-54.84	-41.88	-48.3	-0.21	71.6	73.5	83.3
7.62	-54.84	-41.83	-48.27	-0.18	71.6	73.6	83.2
7.62	-54.8	-41.83	-48.3	-0.21	71.8	73.5	83.2
7.62	-54.8	-41.83	-48.3	-0.18	71.8	73.6	83.2
7.62	-54.84	-41.83	-48.3	-0.21	71.8	73.6	83.2
7.62	-54.8	-41.83	-48.27	-0.21	71.8	73.6	83.2
7.62	-54.8	-41.83	-48.27	-0.18	71.8	73.6	83.2
7.62	-54.8	-41.77	-48.27	-0.18	71.8	73.6	83
7.62	-54.8	-41.77	-48.24	-0.18	71.9	73.6	83.1
7.62	-54.8	-41.83	-48.27	-0.18	71.8	73.6	82.7
7.62	-54.8	-41.77	-48.24	-0.18	71.9	73.5	82.5
7.62	-54.8	-41.77	-48.24	-0.18	71.9	73.6	82.4
7.62	-54.75	-41.77	-48.24	-0.18	72	73.5	82.2
7.62	-54.75	-41.77	-48.24	-0.18	72	73.5	82.1
7.62	-54.75	-41.72	-48.24	-0.18	72.1	73.5	81.9
7.62	-54.75	-41.77	-48.21	-0.18	72	73.5	81.7
7.62	-54.75	-41.72	-48.21	-0.18	72.1	73.4	81.5
7.63	-54.75	-41.77	-48.21	-0.18	72.1	73.4	81.2
7.62	-54.75	-41.72	-48.21	-0.18	72.1	73.4	81
7.62	-54.75	-41.77	-48.21	-0.18	72.1	73.4	80.7
7.62	-54.71	-41.72	-48.17	-0.18	72.1	73.3	80.5
7.62	-54.71	-41.77	-48.17	-0.18	72	73.3	80.3
7.62	-54.75	-41.72	-48.17	-0.18	72	73.3	80
7.63	-54.71	-41.77	-48.17	-0.18	72	73.2	79.6
7.62	-54.71	-41.72	-48.17	-0.18	72	73.2	79.5
7.62	-54.71	-41.72	-48.17	-0.18	71.9	73.1	79
7.62	-54.71	-41.72	-48.11	-0.18	72	73.1	78.9
7.62	-54.71	-41.72	-48.11	-0.18	72	73	78.8
7.62	-54.71	-41.67	-48.11	-0.18	71.9	73	78.6
7.62	-54.71	-41.67	-48.11	-0.18	71.9	72.9	78
7.62	-54.66	-41.67	-48.11	-0.18	71.9	72.9	77.7
7.62	-54.66	-41.67	-48.11	-0.21	71.8	72.8	77.5
7.62	-54.66	-41.67	-48.08	-0.18	71.6	72.8	77.3
7.62	-54.66	-41.67	-48.08	-0.21	71.6	72.7	77.2
7.62	-54.62	-41.67	-48.08	-0.18	71.6	72.7	76.7
7.62	-54.66	-41.67	-48.08	-0.18	71.5	72.7	76.6

7.62	-54.62	-41.67	-48.08	-0.21	71.5	72.6	76.6
7.62	-54.62	-41.67	-48.08	-0.18	71.5	72.5	76.3
7.62	-54.66	-41.67	-48.05	-0.18	71.4	72.5	75.9
7.61	-54.62	-41.67	-48.05	-0.18	71.4	72.4	75.5
7.61	-54.66	-41.62	-48.05	-0.18	71.4	72.4	75.5
7.61	-54.62	-41.62	-48.02	-0.18	71.3	72.3	75.3
7.61	-54.62	-41.62	-48.02	-0.18	71.3	72.3	75
7.61	-54.62	-41.62	-48.02	-0.18	71.2	72.3	74.9
7.61	-54.57	-41.62	-48.02	-0.21	71.2	72.3	74.7
7.61	-54.62	-41.62	-48.02	-0.18	71.2	72.2	74.5
7.61	-54.57	-41.62	-47.99	-0.18	71.2	72.2	74.3
7.61	-54.57	-41.62	-47.99	-0.18	71.2	72.1	74.3
7.61	-54.57	-41.51	-47.99	-0.18	71.1	72	74.1
7.61	-54.57	-41.51	-47.99	-0.18	71	72	73.6
7.61	-54.57	-41.51	-47.96	-0.18	71	71.9	73.4
7.61	-54.57	-41.51	-47.99	-0.18	71	71.9	73.4
7.61	-54.57	-41.51	-47.96	-0.18	70.9	71.8	73.2
7.6	-54.57	-41.51	-47.96	-0.18	70.8	71.8	73
7.6	-54.52	-41.51	-47.96	-0.18	70.8	71.7	72.9
7.61	-54.57	-41.51	-47.96	-0.18	70.8	71.6	72.5
7.6	-54.52	-41.51	-47.93	-0.18	70.7	71.6	72.3
7.59	-54.52	-41.46	-47.93	-0.18	70.7	71.4	72.4
7.6	-54.52	-41.51	-47.93	-0.18	70.6	71.3	72.3
7.59	-54.52	-41.46	-47.93	-0.18	70.6	71.3	72.1
7.59	-54.52	-41.51	-47.9	-0.18	70.5	71.2	71.7
7.59	-54.52	-41.46	-47.93	-0.18	70.4	71.2	71.9
7.6	-54.52	-41.51	-47.9	-0.18	70.4	71.2	71.6
7.6	-54.52	-41.41	-47.9	-0.18	70.3	71.1	71.4
7.59	-54.52	-41.41	-47.9	-0.18	70.3	71.1	71.2
7.59	-54.48	-41.46	-47.9	-0.18	70.3	71	71.3
7.59	-54.48	-41.41	-47.9	-0.18	70.2	71	71.2
7.59	-54.48	-41.46	-47.87	-0.18	70.2	70.9	71
7.6	-54.48	-41.46	-47.87	-0.18	70.1	70.9	70.8
7.59	-54.48	-41.41	-47.87	-0.18	70	70.8	70.7
7.59	-54.48	-41.41	-47.87	-0.15	69.9	70.8	70.7
7.59	-54.48	-41.41	-47.87	-0.18	69.7	70.8	70.4
7.59	-54.43	-41.46	-47.87	-0.18	69.7	70.7	70.3
7.59	-54.43	-41.41	-47.87	-0.18	69.7	70.7	70.1
7.59	-54.43	-41.41	-47.87	-0.15	69.8	70.7	70.1
7.59	-54.43	-41.41	-47.87	-0.18	69.7	70.6	70
7.59	-54.43	-41.41	-47.84	-0.18	69.6	70.5	69.9
7.59	-54.43	-41.41	-47.87	-0.18	69.7	70.5	69.6
7.59	-54.43	-41.41	-47.84	-0.18	69.7	70.5	69.6
7.59	-54.43	-41.41	-47.84	-0.18	69.6	70.5	69.6
7.59	-54.43	-41.41	-47.84	-0.18	69.6	70.5	69.3
7.59	-54.43	-41.41	-47.84	-0.18	69.7	70.5	69.3
7.59	-54.43	-41.41	-47.81	-0.18	69.6	70.4	69.4

7.59	-54.43	-41.41	-47.81	-0.18	69.6	70.4	69.4
7.59	-54.39	-41.36	-47.81	-0.18	69.7	70.4	69.5
7.59	-54.43	-41.36	-47.81	-0.18	69.8	70.4	69.4
7.59	-54.39	-41.36	-47.81	-0.18	69.8	70.4	69.4
7.59	-54.43	-41.36	-47.81	-0.18	69.8	70.4	69.5
7.59	-54.39	-41.36	-47.81	-0.18	69.8	70.4	69.9
7.59	-54.39	-41.36	-47.81	-0.18	69.8	70.4	70
7.59	-54.39	-41.36	-47.78	-0.18	69.8	70.4	70.2
7.59	-54.39	-41.36	-47.78	-0.18	69.7	70.4	70.3
7.59	-54.39	-41.36	-47.78	-0.15	69.7	70.4	70.4
7.59	-54.34	-41.36	-47.78	-0.15	69.7	70.4	70.7
7.59	-54.34	-41.36	-47.75	-0.15	69.7	70.4	71.2
7.59	-54.34	-41.36	-47.75	-0.18	69.7	70.5	71.3
7.59	-54.34	-41.36	-47.75	-0.15	69.6	70.5	71.4
7.59	-54.34	-41.31	-47.75	-0.18	69.7	70.5	72
7.59	-54.34	-41.31	-47.75	-0.15	69.7	70.6	72.2
7.59	-54.34	-41.31	-47.72	-0.18	69.8	70.7	72.5
7.59	-54.34	-41.31	-47.72	-0.15	69.7	70.7	72.8
7.59	-54.29	-41.31	-47.72	-0.18	69.8	70.8	73.3
7.59	-54.29	-41.31	-47.72	-0.18	69.8	70.8	73.4
7.59	-54.29	-41.25	-47.69	-0.15	69.8	70.9	74
7.59	-54.29	-41.31	-47.72	-0.18	69.8	71	74.4
7.59	-54.29	-41.31	-47.69	-0.18	69.8	71.1	74.7
7.59	-54.29	-41.31	-47.69	-0.18	69.9	71.1	75.2
7.59	-54.25	-41.25	-47.69	-0.18	69.9	71.2	75.7
7.59	-54.25	-41.25	-47.69	-0.18	69.9	71.2	76.1
7.59	-54.25	-41.2	-47.69	-0.18	70	71.3	76.5
7.59	-54.25	-41.2	-47.66	-0.18	70	71.4	76.9
7.59	-54.25	-41.2	-47.66	-0.18	70.1	71.6	77.4
7.59	-54.25	-41.2	-47.66	-0.18	70.1	71.7	77.8
7.58	-54.25	-41.2	-47.66	-0.18	70.1	71.8	78.3
7.58	-54.2	-41.2	-47.66	-0.15	70.1	71.9	78.8
7.58	-54.2	-41.2	-47.66	-0.18	70.2	72	79.1
7.59	-54.2	-41.2	-47.63	-0.18	70.2	72.1	79.4
7.59	-54.2	-41.15	-47.63	-0.18	70.3	72.2	79.9
7.59	-54.16	-41.2	-47.63	-0.15	70.4	72.3	80.4
7.59	-54.16	-41.15	-47.63	-0.15	70.4	72.3	80.9
7.59	-54.2	-41.15	-47.63	-0.15	70.5	72.4	81.1
7.59	-54.16	-41.15	-47.66	-0.15	70.6	72.5	81.4
7.59	-54.16	-41.15	-47.63	-0.18	70.6	72.6	81.7
7.59	-54.16	-41.1	-47.63	-0.18	70.7	72.7	82
7.59	-54.16	-41.15	-47.63	-0.15	70.8	72.8	82.2
7.59	-54.11	-41.1	-47.66	-0.15	71	72.9	82.8
7.59	-54.16	-41.15	-47.66	-0.18	70.9	73	83.1
7.59	-54.11	-41.15	-47.66	-0.18	71	73	83.2
7.59	-54.11	-41.15	-47.72	-0.15	71.1	73.1	83.4
7.59	-54.11	-41.1	-47.72	-0.18	71.1	73.3	83.7

7.59	-54.11	-41.1	-47.75	-0.15	71.2	73.3	83.9
7.59	-54.07	-41.15	-47.75	-0.18	71.2	73.4	83.9
7.59	-54.11	-41.1	-47.75	-0.18	71.2	73.4	84.2
7.59	-54.11	-41.15	-47.78	-0.18	71.3	73.5	84.3
7.6	-54.11	-41.15	-47.81	-0.18	71.4	73.5	84.5
7.6	-54.11	-41.1	-47.81	-0.15	71.4	73.6	84.6
7.6	-54.07	-41.1	-47.81	-0.18	71.5	73.7	84.8
7.6	-54.07	-41.1	-47.84	-0.18	71.6	73.7	84.9
7.6	-54.07	-41.1	-47.84	-0.18	71.6	73.9	85
7.59	-54.07	-41.15	-47.84	-0.15	71.6	74	85.1
7.59	-54.07	-41.1	-47.87	-0.15	71.8	74	85.2
7.6	-54.07	-41.1	-47.84	-0.18	71.8	74.1	85.2
7.6	-54.07	-41.15	-47.87	-0.18	71.9	74.1	85.3
7.6	-54.02	-41.1	-47.84	-0.18	72	74.1	85.3
7.59	-54.07	-41.15	-47.87	-0.15	72	74.2	85.3
7.6	-54.07	-41.1	-47.87	-0.15	72	74.3	85.2
7.6	-54.07	-41.1	-47.87	-0.15	72.1	74.3	85.1
7.6	-54.07	-41.1	-47.87	-0.18	72.1	74.3	85.3
7.6	-54.07	-41.15	-47.87	-0.18	72.1	74.3	85
7.59	-54.07	-41.1	-47.87	-0.18	72.2	74.4	85
7.6	-54.07	-41.1	-47.9	-0.18	72.3	74.4	85.1
7.6	-54.02	-41.1	-47.87	-0.18	72.3	74.5	84.8
7.6	-54.07	-41.1	-47.81	-0.18	72.3	74.4	84.9
7.6	-54.07	-41.05	-47.78	-0.18	72.3	74.4	84.5
7.61	-54.02	-41.1	-47.75	-0.18	72.3	74.5	84.2
7.61	-54.07	-41.1	-47.72	-0.15	72.3	74.5	84.2
7.6	-54.02	-41.05	-47.75	-0.15	72.4	74.5	84.1
7.6	-54.02	-41.05	-47.69	-0.18	72.4	74.5	83.9
7.6	-53.97	-41.05	-47.69	-0.18	72.5	74.5	83.8
7.61	-54.02	-41.1	-47.66	-0.18	72.5	74.5	83.6
7.6	-54.02	-41.05	-47.66	-0.18	72.6	74.5	83.4
7.61	-54.02	-41.05	-47.66	-0.18	72.5	74.5	83.2
7.61	-54.02	-41.05	-47.66	-0.18	72.6	74.4	82.9
7.61	-54.02	-41.05	-47.63	-0.18	72.6	74.4	82.7
7.6	-53.97	-41.05	-47.63	-0.15	72.6	74.4	82.6
7.59	-53.97	-41.05	-47.63	-0.18	72.6	74.3	82.1
7.6	-54.02	-41.05	-47.59	-0.18	72.6	74.3	82.1
7.59	-53.97	-41.05	-47.59	-0.18	72.6	74.3	81.9
7.6	-54.02	-41.05	-47.59	-0.18	72.6	74.3	81.6
7.59	-53.97	-41	-47.56	-0.18	72.7	74.2	81.2
7.59	-53.97	-41	-47.56	-0.18	72.6	74.2	81
7.6	-53.97	-41	-47.56	-0.18	72.6	74.2	80.9
7.6	-53.97	-41	-47.53	-0.18	72.6	74.1	80.7
7.6	-53.97	-40.94	-47.53	-0.18	72.5	74.1	80.6
7.6	-53.97	-41	-47.53	-0.18	72.5	74.1	80.3
7.59	-53.88	-41	-47.5	-0.18	72.5	74	80.3
7.59	-53.97	-41	-47.5	-0.18	72.5	74	79.9

7.6	-53.88	-40.94	-47.5	-0.15	72.5	73.9	79.6
7.6	-53.88	-40.94	-47.5	-0.18	72.5	73.9	79.5
7.59	-53.88	-40.94	-47.5	-0.18	72.5	73.7	79.4
7.59	-53.88	-40.94	-47.47	-0.18	72.5	73.7	79
7.59	-53.88	-40.94	-47.47	-0.18	72.4	73.7	78.9
7.6	-53.88	-40.94	-47.47	-0.21	72.4	73.6	78.8
7.59	-53.84	-40.94	-47.44	-0.18	72.4	73.6	78.7
7.59	-53.84	-40.94	-47.44	-0.18	72.4	73.5	78.5
7.59	-53.88	-40.94	-47.44	-0.18	72.3	73.5	78.2
7.59	-53.84	-40.89	-47.44	-0.15	72.3	73.4	77.8
7.59	-53.84	-40.89	-47.41	-0.18	72.3	73.4	77.7
7.59	-53.84	-40.89	-47.41	-0.18	72.3	73.4	77.7
7.59	-53.84	-40.89	-47.41	-0.18	72.3	73.4	77.4
7.59	-53.84	-40.89	-47.38	-0.18	72.3	73.3	77.2
7.59	-53.84	-40.84	-47.38	-0.18	72.3	73.3	77
7.59	-53.84	-40.89	-47.38	-0.18	72.3	73.3	76.8
7.59	-53.84	-40.84	-47.38	-0.18	72.2	73.2	76.6
7.59	-53.84	-40.89	-47.38	-0.18	72.2	73.2	76.4
7.59	-53.79	-40.89	-47.38	-0.18	72.2	73.1	76.5
7.59	-53.79	-40.84	-47.32	-0.18	72.1	73.1	76.2
7.59	-53.79	-40.84	-47.32	-0.18	72	73	75.9
7.59	-53.79	-40.84	-47.32	-0.18	72	73	75.8
7.58	-53.79	-40.84	-47.32	-0.15	72	72.9	75.6
7.58	-53.79	-40.84	-47.29	-0.18	72	72.9	75.2
7.58	-53.75	-40.84	-47.29	-0.18	71.9	72.9	75.3
7.58	-53.75	-40.84	-47.26	-0.18	71.9	72.8	75
7.58	-53.75	-40.84	-47.29	-0.15	71.8	72.7	74.8
7.58	-53.75	-40.84	-47.26	-0.15	71.8	72.7	74.5
7.58	-53.75	-40.79	-47.26	-0.18	71.6	72.6	74.5
7.58	-53.75	-40.79	-47.26	-0.18	71.6	72.6	74.5
7.58	-53.75	-40.79	-47.23	-0.18	71.5	72.5	74.3
7.58	-53.75	-40.79	-47.23	-0.15	71.5	72.5	73.8
7.58	-53.75	-40.79	-47.23	-0.18	71.4	72.5	74.1
7.58	-53.75	-40.79	-47.23	-0.15	71.4	72.4	73.6
7.58	-53.7	-40.79	-47.23	-0.15	71.3	72.3	73.4
7.58	-53.75	-40.79	-47.23	-0.15	71.3	72.3	73.3
7.57	-53.75	-40.74	-47.23	-0.18	71.3	72.3	73.3
7.56	-53.7	-40.74	-47.2	-0.18	71.3	72.2	73.1
7.57	-53.7	-40.74	-47.2	-0.18	71.2	72.2	72.9
7.57	-53.7	-40.74	-47.2	-0.18	71.2	72.2	72.8
7.57	-53.7	-40.74	-47.2	-0.18	71.2	72.1	72.7
7.57	-53.7	-40.74	-47.2	-0.18	71.2	72.1	72.4
7.57	-53.65	-40.79	-47.2	-0.18	71.1	72.1	72.4
7.57	-53.7	-40.74	-47.17	-0.18	71.1	72	72.3
7.57	-53.7	-40.74	-47.17	-0.18	71	72	72.1
7.57	-53.65	-40.74	-47.17	-0.18	71	71.9	72.3
7.57	-53.65	-40.74	-47.17	-0.18	70.9	71.9	72.1

7.57	-53.65	-40.79	-47.14	-0.18	70.9	71.9	72
7.57	-53.65	-40.74	-47.14	-0.21	70.8	71.9	72
7.57	-53.65	-40.74	-47.14	-0.18	70.8	71.8	71.7
7.57	-53.65	-40.74	-47.14	-0.18	70.8	71.8	72
7.57	-53.65	-40.74	-47.14	-0.18	70.8	71.7	71.9
7.56	-53.65	-40.68	-47.11	-0.18	70.8	71.7	72
7.57	-53.65	-40.68	-47.14	-0.18	70.7	71.7	71.9
7.56	-53.61	-40.68	-47.11	-0.15	70.7	71.7	72.3
7.57	-53.65	-40.68	-47.11	-0.18	70.7	71.8	72.3
7.57	-53.65	-40.68	-47.11	-0.18	70.7	71.7	72.5
7.56	-53.65	-40.68	-47.11	-0.18	70.6	71.7	72.6
7.56	-53.65	-40.68	-47.11	-0.18	70.6	71.8	72.9
7.55	-53.61	-40.68	-47.11	-0.18	70.6	71.8	73.2
7.55	-53.61	-40.68	-47.08	-0.18	70.6	71.8	73.4
7.56	-53.61	-40.63	-47.08	-0.18	70.6	71.8	73.5
7.55	-53.61	-40.68	-47.05	-0.18	70.6	71.8	74.1
7.56	-53.61	-40.63	-47.08	-0.18	70.6	72	74.4
7.56	-53.56	-40.63	-47.08	-0.18	70.6	72	74.7
7.56	-53.61	-40.63	-47.05	-0.18	70.7	72.1	75
7.56	-53.61	-40.63	-47.05	-0.18	70.7	72.1	75.4
7.56	-53.56	-40.63	-47.05	-0.18	70.7	72.2	75.6
7.56	-53.56	-40.63	-47.05	-0.18	70.8	72.3	76.1
7.56	-53.56	-40.63	-47.01	-0.15	70.7	72.3	76.4
7.56	-53.56	-40.58	-47.01	-0.18	70.7	72.3	76.9
7.57	-53.56	-40.58	-47.01	-0.18	70.8	72.4	77.3
7.57	-53.52	-40.58	-47.01	-0.15	70.8	72.5	77.7
7.57	-53.52	-40.58	-47.01	-0.18	70.9	72.5	78.2
7.57	-53.52	-40.58	-46.98	-0.15	71	72.6	78.6
7.57	-53.47	-40.58	-46.98	-0.18	71	72.7	78.8
7.57	-53.47	-40.53	-46.98	-0.18	71	72.8	79.2
7.57	-53.47	-40.58	-46.98	-0.18	71.1	72.9	79.7
7.57	-53.52	-40.53	-46.98	-0.15	71.2	73	80
7.57	-53.47	-40.53	-46.95	-0.18	71.2	73.1	80.7
7.57	-53.47	-40.53	-46.95	-0.18	71.2	73.2	81
7.57	-53.47	-40.53	-46.95	-0.15	71.2	73.3	81.4
7.57	-53.42	-40.53	-46.92	-0.15	71.3	73.4	81.9
7.57	-53.47	-40.48	-46.95	-0.18	71.3	73.4	82.1
7.57	-53.42	-40.48	-46.92	-0.18	71.4	73.4	82.4
7.57	-53.42	-40.48	-46.89	-0.18	71.5	73.6	82.8
7.57	-53.42	-40.48	-46.89	-0.18	71.6	73.7	83.2
7.57	-53.42	-40.53	-46.86	-0.18	71.6	73.7	83.5
7.58	-53.42	-40.48	-46.86	-0.18	71.8	74	83.6
7.58	-53.38	-40.48	-46.89	-0.18	71.9	74	84.1
7.58	-53.38	-40.48	-46.86	-0.15	71.9	74.2	84.2
7.58	-53.38	-40.42	-46.86	-0.18	72	74.2	84.6
7.58	-53.38	-40.42	-46.86	-0.18	72.1	74.3	84.8
7.58	-53.38	-40.42	-46.86	-0.18	72.2	74.4	84.9

7.58	-53.38	-40.42	-46.83	-0.18	72.2	74.5	85.1
7.58	-53.38	-40.42	-46.83	-0.18	72.2	74.5	85.2
7.58	-53.38	-40.42	-46.83	-0.18	72.3	74.5	85.4
7.58	-53.33	-40.37	-46.83	-0.18	72.3	74.6	85.4
7.58	-53.33	-40.42	-46.83	-0.18	72.3	74.7	85.6
7.58	-53.33	-40.37	-46.83	-0.18	72.4	74.7	85.6
7.58	-53.33	-40.37	-46.8	-0.18	72.4	74.8	85.6
7.58	-53.33	-40.37	-46.8	-0.18	72.5	74.8	85.9
7.58	-53.29	-40.37	-46.8	-0.18	72.5	74.8	85.9
7.58	-53.29	-40.37	-46.8	-0.18	72.5	74.9	85.9
7.58	-53.33	-40.37	-46.8	-0.18	72.6	75	86.1
7.58	-53.29	-40.27	-46.8	-0.15	72.7	75	86.2
7.59	-53.29	-40.27	-46.8	-0.18	72.7	75.1	86.2
7.59	-53.29	-40.27	-46.8	-0.18	72.8	75.2	86.1
7.59	-53.29	-40.37	-46.8	-0.18	72.8	75.2	86.2
7.59	-53.29	-40.27	-46.8	-0.15	72.9	75.2	86.2
7.59	-53.29	-40.27	-46.77	-0.15	72.9	75.3	86.1
7.59	-53.29	-40.27	-46.77	-0.18	73	75.3	86.1
7.59	-53.24	-40.27	-46.77	-0.18	73	75.3	86.1
7.59	-53.24	-40.27	-46.77	-0.18	73	75.4	85.9
7.59	-53.24	-40.27	-46.74	-0.18	73.1	75.4	86.1
7.59	-53.24	-40.27	-46.77	-0.18	73.1	75.4	86.1
7.59	-53.24	-40.27	-46.77	-0.18	73.2	75.5	85.9
7.59	-53.24	-40.22	-46.74	-0.18	73.3	75.5	85.7
7.59	-53.24	-40.22	-46.74	-0.18	73.3	75.5	85.8
7.59	-53.24	-40.16	-46.74	-0.18	73.3	75.5	85.7
7.59	-53.24	-40.22	-46.74	-0.18	73.4	75.5	85.5
7.59	-53.24	-40.22	-46.74	-0.18	73.4	75.5	85.6
7.59	-53.2	-40.16	-46.71	-0.18	73.4	75.5	85.3
7.59	-53.24	-40.16	-46.71	-0.15	73.4	75.5	85.1
7.59	-53.24	-40.22	-46.71	-0.18	73.4	75.5	85
7.59	-53.2	-40.22	-46.71	-0.18	73.4	75.5	84.9
7.59	-53.2	-40.22	-46.71	-0.18	73.4	75.5	84.7
7.59	-53.2	-40.22	-46.71	-0.18	73.5	75.5	84.7
7.59	-53.2	-40.22	-46.71	-0.18	73.4	75.5	84.3
7.59	-53.2	-40.22	-46.68	-0.18	73.4	75.5	84.2
7.59	-53.2	-40.22	-46.68	-0.18	73.5	75.4	84.1
7.59	-53.2	-40.16	-46.68	-0.18	73.5	75.4	83.9
7.59	-53.2	-40.16	-46.68	-0.18	73.6	75.4	83.6
7.59	-53.2	-40.16	-46.68	-0.15	73.5	75.4	83.5
7.59	-53.2	-40.16	-46.68	-0.18	73.6	75.4	83.2
7.59	-53.2	-40.16	-46.68	-0.18	73.6	75.3	83.1
7.59	-53.2	-40.16	-46.68	-0.18	73.6	75.3	82.8
7.59	-53.2	-40.11	-46.65	-0.15	73.5	75.3	82.7
7.59	-53.15	-40.16	-46.65	-0.18	73.4	75.2	82.2
7.59	-53.2	-40.11	-46.65	-0.18	73.4	75.2	82.1
7.59	-53.15	-40.16	-46.65	-0.18	73.4	75.2	82

7.59	-53.15	-40.16	-46.62	-0.18	73.4	75.2	81.9
7.59	-53.15	-40.11	-46.65	-0.18	73.3	75.1	81.5
7.59	-53.15	-40.16	-46.62	-0.18	73.3	75.1	81.4
7.59	-53.1	-40.11	-46.62	-0.18	73.3	75	81.1
7.59	-53.15	-40.11	-46.62	-0.18	73.4	75	81.1
7.59	-53.1	-40.11	-46.62	-0.18	73.4	75	81
7.59	-53.1	-40.11	-46.62	-0.18	73.3	74.9	80.7
7.59	-53.15	-40.16	-46.62	-0.15	73.3	74.9	80.7
7.58	-53.1	-40.11	-46.62	-0.18	73.3	74.8	80
7.58	-53.1	-40.11	-46.56	-0.18	73.3	74.8	80
7.58	-53.15	-40.11	-46.56	-0.18	73.4	74.7	79.9
7.58	-53.15	-40.11	-46.56	-0.18	73.3	74.7	79.8
7.58	-53.1	-40.11	-46.56	-0.18	73.3	74.6	79.4
7.58	-53.1	-40.06	-46.56	-0.18	73.3	74.6	79.4
7.58	-53.1	-40.11	-46.53	-0.18	73.1	74.5	78.9
7.58	-53.1	-40.06	-46.53	-0.18	73.2	74.5	79
7.58	-53.1	-40.06	-46.56	-0.18	73.2	74.5	78.8
7.58	-53.1	-40.06	-46.53	-0.18	73.1	74.5	78.6
7.58	-53.1	-40.06	-46.53	-0.18	73.1	74.5	78.5
7.58	-53.1	-40.06	-46.5	-0.18	73	74.4	78.3
7.58	-53.06	-40.06	-46.5	-0.18	72.9	74.3	78
7.58	-53.06	-40.06	-46.5	-0.18	72.9	74.3	77.9
7.58	-53.06	-40.06	-46.5	-0.18	72.9	74.2	77.7
7.57	-53.06	-40.06	-46.5	-0.18	72.8	74.2	77.6
7.57	-53.06	-40.06	-46.47	-0.18	72.8	74.1	77.5
7.57	-53.06	-40.01	-46.47	-0.18	72.8	74.1	77.2
7.58	-53.06	-40.01	-46.47	-0.18	72.7	74	76.9
7.58	-53.06	-40.06	-46.47	-0.18	72.8	74	77
7.57	-53.01	-40.01	-46.47	-0.18	72.6	74	76.6
7.57	-53.01	-40.06	-46.47	-0.18	72.6	73.9	76.8
7.56	-53.01	-40.01	-46.43	-0.18	72.7	73.9	76.5
7.57	-53.01	-40.01	-46.43	-0.18	72.7	73.7	76.3
7.57	-53.01	-40.01	-46.43	-0.18	72.6	73.7	76.3
7.57	-53.01	-40.01	-46.43	-0.18	72.6	73.6	76.1
7.57	-53.01	-39.96	-46.43	-0.18	72.6	73.6	75.7
7.57	-52.97	-39.96	-46.43	-0.21	72.6	73.6	75.6
7.57	-52.97	-39.96	-46.4	-0.18	72.5	73.5	75.6
7.57	-52.97	-39.96	-46.4	-0.18	72.5	73.4	75.5
7.57	-52.97	-39.96	-46.4	-0.18	72.4	73.4	75.2
7.57	-52.97	-39.91	-46.4	-0.18	72.4	73.4	75.4
7.57	-53.01	-39.96	-46.4	-0.18	72.3	73.4	75.1
7.57	-52.97	-39.96	-46.4	-0.15	72.3	73.4	75.1
7.57	-52.97	-39.96	-46.4	-0.18	72.3	73.4	75
7.57	-52.92	-39.96	-46.37	-0.18	72.3	73.3	74.8
7.56	-52.97	-39.96	-46.37	-0.18	72.3	73.2	74.5
7.56	-52.97	-39.96	-46.37	-0.15	72.3	73.2	74.5
7.55	-52.92	-39.96	-46.37	-0.18	72.2	73.2	74.4

7.55	-52.97	-39.96	-46.37	-0.18	72.2	73.1	74.2
7.56	-52.92	-39.91	-46.37	-0.15	72.1	73.1	74.2
7.56	-52.97	-39.96	-46.37	-0.18	72.1	73.1	74.3
7.56	-52.92	-39.96	-46.37	-0.18	72	73	74.1
7.55	-52.92	-39.96	-46.37	-0.18	72	73	74.1
7.56	-52.97	-39.96	-46.34	-0.18	72	73	73.8
7.56	-52.92	-39.96	-46.34	-0.18	72	72.9	73.6
7.55	-52.92	-39.96	-46.34	-0.18	72	72.9	73.6
7.55	-52.97	-39.96	-46.34	-0.18	71.9	72.9	73.7
7.55	-52.92	-39.96	-46.34	-0.18	71.9	72.9	74.1
7.55	-52.92	-39.91	-46.34	-0.18	71.9	72.9	74.1
7.55	-52.92	-39.96	-46.31	-0.18	71.9	72.9	74.2
7.56	-52.92	-39.91	-46.34	-0.18	71.8	72.9	74.3
7.55	-52.92	-39.91	-46.34	-0.21	71.6	72.9	74.5
7.56	-52.92	-39.91	-46.34	-0.18	71.8	72.9	74.5
7.56	-52.92	-39.91	-46.31	-0.18	71.8	72.9	74.9
7.56	-52.88	-39.85	-46.31	-0.18	71.6	72.9	75.1
7.56	-52.92	-39.85	-46.31	-0.18	71.6	73	75.4
7.56	-52.88	-39.91	-46.31	-0.18	71.6	73	75.6
7.56	-52.92	-39.85	-46.31	-0.18	71.6	73.1	75.6
7.56	-52.88	-39.91	-46.31	-0.21	71.6	73.1	76.1
7.56	-52.88	-39.85	-46.31	-0.18	71.8	73.2	76.4
7.56	-52.88	-39.85	-46.28	-0.18	71.6	73.2	76.8
7.56	-52.88	-39.85	-46.28	-0.18	71.8	73.3	77.3
7.56	-52.88	-39.85	-46.28	-0.18	71.8	73.4	77.5
7.56	-52.88	-39.85	-46.28	-0.18	71.8	73.4	77.7
7.56	-52.88	-39.85	-46.25	-0.18	71.9	73.4	78.2
7.56	-52.83	-39.85	-46.25	-0.18	71.9	73.5	78.6
7.56	-52.83	-39.85	-46.25	-0.15	71.9	73.5	79
7.56	-52.83	-39.85	-46.25	-0.18	72	73.6	79.2
7.56	-52.88	-39.8	-46.25	-0.18	72.1	73.7	79.6
7.56	-52.83	-39.8	-46.22	-0.18	72	73.7	79.9
7.56	-52.83	-39.8	-46.22	-0.15	72.1	74	80.3
7.56	-52.74	-39.8	-46.22	-0.18	72.1	74	80.7
7.56	-52.74	-39.8	-46.22	-0.18	72.2	74.1	81
7.56	-52.74	-39.8	-46.22	-0.18	72.3	74.2	81.5
7.56	-52.74	-39.8	-46.22	-0.18	72.3	74.3	81.7
7.56	-52.74	-39.8	-46.22	-0.15	72.3	74.4	82.2
7.56	-52.69	-39.8	-46.22	-0.15	72.3	74.5	82.7
7.56	-52.69	-39.75	-46.19	-0.15	72.4	74.5	83.1
7.56	-52.69	-39.75	-46.19	-0.15	72.4	74.6	83.3
7.55	-52.69	-39.75	-46.19	-0.18	72.5	74.7	83.8
7.56	-52.69	-39.75	-46.19	-0.15	72.6	74.8	84.1
7.57	-52.69	-39.75	-46.16	-0.15	72.6	74.9	84.6
7.57	-52.69	-39.75	-46.16	-0.18	72.7	75	84.8
7.57	-52.69	-39.75	-46.16	-0.18	72.8	75.1	85.3
7.57	-52.69	-39.7	-46.13	-0.15	72.9	75.2	85.5

7.57	-52.65	-39.7	-46.13	-0.18	72.9	75.3	85.8
7.57	-52.65	-39.7	-46.13	-0.15	73.1	75.4	86
7.57	-52.65	-39.7	-46.13	-0.18	73.1	75.5	86.4
7.57	-52.65	-39.7	-46.1	-0.18	73.2	75.5	86.6
7.57	-52.65	-39.65	-46.1	-0.18	73.2	75.6	86.9
7.58	-52.65	-39.7	-46.1	-0.15	73.3	75.6	87.1
7.58	-52.65	-39.7	-46.07	-0.15	73.4	75.7	87.3
7.58	-52.65	-39.65	-46.07	-0.15	73.4	75.8	87.5
7.58	-52.6	-39.7	-46.07	-0.15	73.4	75.9	87.7
7.58	-52.6	-39.65	-46.07	-0.18	73.5	75.9	87.7
7.58	-52.6	-39.65	-46.07	-0.18	73.5	76	88
7.58	-52.6	-39.59	-46.07	-0.18	73.6	76.2	88.3
7.58	-52.6	-39.59	-46.07	-0.18	73.6	76.3	88.3
7.58	-52.6	-39.65	-46.07	-0.18	73.8	76.4	88.6
7.58	-52.6	-39.59	-46.1	-0.18	73.8	76.4	88.7
7.59	-52.6	-39.65	-46.1	-0.18	74	76.5	88.7
7.59	-52.55	-39.59	-46.1	-0.18	74	76.6	88.9
7.59	-52.55	-39.59	-46.1	-0.18	74.1	76.6	89
7.59	-52.6	-39.59	-46.1	-0.18	74.3	76.6	89.1
7.59	-52.51	-39.59	-46.07	-0.15	74.5	76.5	89.1
7.59	-52.55	-39.59	-46.07	-0.18	74.3	76.5	88.9
7.59	-52.51	-39.54	-46.1	-0.18	74.4	76.5	88.7
7.59	-52.55	-39.54	-46.1	-0.18	74.4	76.6	88.6
7.59	-52.55	-39.54	-46.07	-0.18	74.5	76.5	88.2
7.59	-52.55	-39.59	-46.1	-0.18	74.4	76.5	88.1
7.59	-52.51	-39.59	-46.07	-0.18	74.5	76.5	87.8
7.59	-52.55	-39.59	-46.07	-0.15	74.5	76.6	87.5
7.59	-52.55	-39.54	-46.07	-0.18	74.6	76.5	87.1
7.59	-52.51	-39.54	-46.04	-0.18	74.5	76.5	86.9
7.59	-52.51	-39.54	-46.07	-0.18	74.5	76.5	86.6
7.59	-52.51	-39.54	-46.04	-0.18	74.5	76.5	86.4
7.59	-52.51	-39.59	-46.04	-0.18	74.5	76.4	86.1
7.59	-52.51	-39.54	-46.04	-0.18	74.5	76.4	85.9
7.59	-52.51	-39.54	-46.04	-0.18	74.5	76.4	85.5
7.59	-52.51	-39.49	-46.04	-0.18	74.5	76.3	85.3
7.59	-52.51	-39.54	-46.04	-0.15	74.6	76.3	85
7.59	-52.51	-39.54	-46.04	-0.18	74.5	76.3	84.3
7.59	-52.51	-39.54	-46.01	-0.18	74.5	76.2	84.3
7.59	-52.51	-39.49	-46.04	-0.15	74.5	76.2	84
7.59	-52.51	-39.49	-46.04	-0.18	74.5	76	83.7
7.59	-52.51	-39.49	-46.01	-0.18	74.5	76	83.3
7.59	-52.51	-39.54	-46.01	-0.18	74.5	76	83.2
7.59	-52.51	-39.49	-46.01	-0.15	74.5	75.9	82.8
7.59	-52.51	-39.49	-46.01	-0.18	74.5	75.8	82.7
7.58	-52.51	-39.49	-46.01	-0.18	74.4	75.8	82.1
7.58	-52.51	-39.49	-46.01	-0.15	74.4	75.8	82
7.58	-52.51	-39.49	-45.98	-0.18	74.4	75.7	81.7

7.58	-52.46	-39.49	-45.98	-0.18	74.3	75.6	81.5
7.58	-52.46	-39.49	-45.98	-0.18	74.3	75.6	81.3
7.58	-52.46	-39.49	-45.98	-0.18	74.2	75.6	81
7.58	-52.46	-39.49	-45.98	-0.15	74.3	75.5	80.9
7.58	-52.46	-39.49	-45.98	-0.18	74.3	75.5	80.5
7.58	-52.46	-39.49	-45.98	-0.15	74.2	75.5	80.4
7.58	-52.46	-39.49	-45.95	-0.15	74.1	75.5	80.3
7.58	-52.46	-39.49	-45.95	-0.15	74	75.4	79.9
7.58	-52.46	-39.49	-45.95	-0.15	74.1	75.4	79.8
7.58	-52.46	-39.49	-45.95	-0.18	74	75.3	79.6
7.58	-52.46	-39.49	-45.95	-0.15	74	75.3	79.2
7.57	-52.42	-39.49	-45.95	-0.15	73.8	75.2	79.1
7.57	-52.46	-39.49	-45.95	-0.15	73.8	75.2	78.8
7.57	-52.42	-39.49	-45.95	-0.18	73.8	75.2	78.9
7.56	-52.42	-39.49	-45.92	-0.18	73.7	75.1	78.7
7.57	-52.42	-39.44	-45.92	-0.18	73.7	75.1	78.3
7.57	-52.42	-39.44	-45.92	-0.18	73.7	75	78.3
7.57	-52.42	-39.44	-45.92	-0.18	73.6	74.9	78
7.57	-52.42	-39.44	-45.89	-0.15	73.6	74.9	77.8
7.57	-52.42	-39.44	-45.89	-0.18	73.5	74.8	77.6
7.57	-52.42	-39.44	-45.89	-0.15	73.5	74.8	77.7
7.57	-52.37	-39.44	-45.89	-0.18	73.4	74.8	77.3
7.57	-52.37	-39.44	-45.85	-0.15	73.5	74.7	77.4
7.57	-52.37	-39.44	-45.85	-0.18	73.4	74.6	77.1
7.57	-52.37	-39.44	-45.85	-0.18	73.4	74.6	77.1
7.56	-52.37	-39.44	-45.85	-0.15	73.4	74.6	76.8
7.56	-52.37	-39.44	-45.85	-0.15	73.4	74.5	76.6
7.55	-52.37	-39.39	-45.85	-0.18	73.4	74.5	76.6
7.55	-52.37	-39.44	-45.85	-0.18	73.3	74.5	76.3
7.56	-52.33	-39.39	-45.85	-0.18	73.3	74.5	76.4
7.55	-52.33	-39.39	-45.82	-0.15	73.2	74.4	76.3
7.56	-52.37	-39.39	-45.82	-0.15	73.2	74.4	76.1
7.56	-52.33	-39.39	-45.82	-0.18	73.2	74.3	75.8
7.55	-52.33	-39.39	-45.82	-0.15	73.1	74.2	75.9
7.56	-52.33	-39.39	-45.82	-0.15	73.1	74.2	75.9
7.56	-52.33	-39.39	-45.82	-0.15	73	74.2	75.6
7.56	-52.33	-39.39	-45.82	-0.18	73	74.1	75.4
7.56	-52.33	-39.33	-45.76	-0.15	73	74.1	75.4
7.55	-52.33	-39.39	-45.76	-0.15	72.9	74.1	75.3
7.56	-52.33	-39.39	-45.76	-0.18	72.9	74	75.2
7.55	-52.33	-39.33	-45.76	-0.15	72.8	73.9	75.1
7.55	-52.33	-39.33	-45.76	-0.18	72.8	73.9	75.1
7.55	-52.33	-39.33	-45.76	-0.15	72.7	73.9	74.9
7.55	-52.33	-39.39	-45.76	-0.15	72.6	73.7	74.8
7.54	-52.33	-39.33	-45.76	-0.18	72.6	73.7	74.6
7.55	-52.33	-39.33	-45.76	-0.15	72.6	73.7	74.6
7.55	-52.33	-39.33	-45.73	-0.15	72.6	73.6	74.4

7.55	-52.33	-39.33	-45.73	-0.15	72.6	73.6	74.4
7.54	-52.33	-39.33	-45.76	-0.15	72.6	73.6	74.4
7.54	-52.33	-39.33	-45.73	-0.18	72.5	73.6	74.3
7.54	-52.33	-39.33	-45.73	-0.15	72.4	73.5	74.2
7.55	-52.28	-39.33	-45.73	-0.15	72.5	73.5	74.2
7.55	-52.33	-39.33	-45.73	-0.15	72.5	73.5	74
7.54	-52.33	-39.33	-45.7	-0.15	72.4	73.5	74.2
7.55	-52.33	-39.33	-45.73	-0.15	72.4	73.5	74
7.54	-52.28	-39.33	-45.7	-0.15	72.4	73.4	74
7.54	-52.28	-39.28	-45.73	-0.18	72.3	73.4	74.3
7.54	-52.28	-39.33	-45.7	-0.18	72.4	73.4	74.1
7.54	-52.28	-39.28	-45.73	-0.15	72.3	73.4	74.4
7.54	-52.33	-39.33	-45.73	-0.15	72.3	73.4	74.4
7.55	-52.28	-39.28	-45.7	-0.15	72.3	73.4	74.5
7.55	-52.28	-39.28	-45.7	-0.15	72.3	73.4	74.6
7.54	-52.28	-39.28	-45.7	-0.15	72.3	73.4	74.7
7.54	-52.28	-39.28	-45.7	-0.15	72.3	73.4	75
7.54	-52.28	-39.28	-45.7	-0.15	72.3	73.4	75.2
7.55	-52.28	-39.28	-45.7	-0.15	72.3	73.5	75.5
7.55	-52.28	-39.28	-45.7	-0.15	72.3	73.5	75.6
7.55	-52.28	-39.28	-45.67	-0.15	72.3	73.6	75.8
7.55	-52.28	-39.28	-45.7	-0.15	72.3	73.6	76.3
7.55	-52.28	-39.28	-45.67	-0.15	72.3	73.6	76.6
7.55	-52.28	-39.28	-45.67	-0.15	72.3	73.7	76.8
7.54	-52.28	-39.28	-45.67	-0.15	72.3	73.9	77.2
7.55	-52.28	-39.28	-45.67	-0.15	72.3	74	77.7
7.55	-52.23	-39.28	-45.67	-0.15	72.4	74	78.2
7.55	-52.28	-39.28	-45.67	-0.15	72.4	74.1	78.6
7.55	-52.23	-39.28	-45.64	-0.15	72.5	74.2	78.9
7.55	-52.23	-39.28	-45.64	-0.15	72.5	74.2	79
7.55	-52.23	-39.28	-45.64	-0.15	72.5	74.3	79.6
7.55	-52.23	-39.28	-45.64	-0.15	72.6	74.4	79.9
7.55	-52.23	-39.23	-45.64	-0.15	72.6	74.5	80.4
7.55	-52.19	-39.23	-45.67	-0.15	72.7	74.5	80.9
7.55	-52.23	-39.23	-45.64	-0.15	72.8	74.6	81.2
7.55	-52.19	-39.23	-45.64	-0.12	73	74.6	81.6
7.55	-52.19	-39.23	-45.61	-0.15	72.8	74.8	82
7.55	-52.19	-39.18	-45.61	-0.15	72.9	74.9	82.4
7.55	-52.14	-39.23	-45.61	-0.15	73.1	75	82.8
7.55	-52.19	-39.23	-45.61	-0.15	73	75.1	83
7.55	-52.19	-39.23	-45.58	-0.15	73.2	75.2	83.4
7.56	-52.19	-39.23	-45.58	-0.12	73.2	75.3	83.7
7.56	-52.19	-39.18	-45.58	-0.15	73.2	75.4	84.1
7.56	-52.14	-39.18	-45.58	-0.15	73.4	75.4	84.3
7.55	-52.14	-39.18	-45.58	-0.15	73.4	75.5	84.6
7.55	-52.14	-39.18	-45.58	-0.15	73.4	75.5	84.9
7.56	-52.14	-39.18	-45.55	-0.15	73.4	75.6	85.3

7.56	-52.14	-39.18	-45.55	-0.15	73.5	75.7	85.5
7.56	-52.14	-39.13	-45.52	-0.15	73.5	75.9	85.9
7.56	-52.1	-39.13	-45.55	-0.15	73.6	75.9	86
7.56	-52.1	-39.13	-45.55	-0.15	73.7	76.2	86.4
7.57	-52.1	-39.13	-45.52	-0.12	73.8	76.2	86.6
7.57	-52.1	-39.13	-45.52	-0.12	74	76.3	86.9
7.57	-52.1	-39.02	-45.52	-0.12	74.1	76.4	87.1
7.57	-52.1	-39.13	-45.49	-0.15	74.1	76.5	87.3
7.57	-52.05	-39.13	-45.49	-0.12	74.1	76.6	87.5
7.57	-52.05	-39.02	-45.49	-0.15	74.2	76.6	87.7
7.57	-52.05	-39.02	-45.49	-0.15	74.3	76.6	87.8
7.57	-52.1	-39.02	-45.46	-0.15	74.4	76.7	87.9
7.57	-52.05	-39.02	-45.46	-0.15	74.4	76.7	88.1
7.57	-52.05	-39.02	-45.46	-0.15	74.5	76.7	88
7.57	-52.05	-38.97	-45.46	-0.15	74.5	76.8	88
7.58	-52.05	-39.02	-45.46	-0.15	74.5	76.8	87.9
7.58	-52.01	-38.97	-45.46	-0.15	74.5	76.8	88
7.58	-52.01	-38.97	-45.43	-0.15	74.5	76.8	88
7.58	-52.01	-38.97	-45.43	-0.12	74.6	76.8	87.9
7.58	-52.01	-39.02	-45.46	-0.15	74.6	76.8	87.8
7.58	-52.01	-39.02	-45.43	-0.15	74.6	76.9	87.8
7.58	-52.01	-38.97	-45.43	-0.15	74.7	76.9	87.6
7.58	-52.01	-39.02	-45.46	-0.15	74.7	76.9	87.5
7.58	-52.01	-38.97	-45.43	-0.15	74.7	76.9	87.3
7.58	-52.01	-38.97	-45.4	-0.15	74.8	76.9	87.3
7.58	-52.01	-38.97	-45.43	-0.15	74.8	77	87.2
7.58	-52.01	-38.97	-45.4	-0.15	74.8	76.9	87
7.58	-52.01	-38.97	-45.43	-0.15	74.8	76.9	86.8
7.58	-51.96	-38.97	-45.4	-0.15	74.8	76.9	86.8
7.58	-51.96	-38.92	-45.4	-0.15	74.9	76.9	86.6
7.58	-51.96	-38.92	-45.4	-0.15	75	76.9	86.6
7.58	-52.01	-38.92	-45.4	-0.15	74.9	76.9	86.4
7.58	-51.96	-38.92	-45.43	-0.15	74.9	76.8	86
7.58	-51.96	-38.92	-45.4	-0.15	74.9	76.8	85.9
7.58	-51.96	-38.92	-45.43	-0.15	75	76.8	85.8
7.58	-51.96	-38.92	-45.43	-0.15	74.9	76.8	85.5
7.58	-51.96	-38.92	-45.43	-0.15	74.9	76.8	85.4
7.58	-51.96	-38.92	-45.43	-0.15	74.9	76.8	85.2
7.58	-51.96	-38.92	-45.46	-0.15	74.8	76.8	85
7.58	-51.96	-38.92	-45.46	-0.15	74.7	76.7	84.8
7.58	-51.96	-38.92	-45.46	-0.15	74.7	76.7	84.3
7.58	-51.96	-38.97	-45.46	-0.15	74.7	76.7	84.2
7.58	-51.96	-38.92	-45.46	-0.15	74.8	76.6	84
7.58	-51.96	-38.92	-45.43	-0.15	74.8	76.6	84
7.58	-51.96	-38.97	-45.46	-0.15	74.7	76.6	83.7
7.58	-51.96	-38.92	-45.46	-0.15	74.7	76.6	83.4
7.58	-51.96	-38.97	-45.43	-0.15	74.7	76.5	83.3

7.58	-51.96	-38.92	-45.43	-0.15	74.7	76.4	83.2
7.58	-51.96	-38.92	-45.43	-0.15	74.8	76.4	82.9
7.57	-51.96	-38.92	-45.43	-0.18	74.8	76.3	82.7
7.57	-51.96	-38.92	-45.43	-0.15	74.8	76.3	82.2
7.57	-51.96	-38.92	-45.43	-0.18	74.8	76.2	82
7.57	-51.96	-38.97	-45.4	-0.18	74.7	76.2	81.9
7.57	-51.96	-38.92	-45.4	-0.18	74.7	76	81.7
7.57	-51.96	-38.92	-45.4	-0.15	74.6	75.9	81.6
7.57	-51.96	-38.92	-45.4	-0.15	74.6	75.9	81.3
7.57	-51.96	-38.92	-45.4	-0.15	74.6	75.9	80.9
7.57	-51.96	-38.92	-45.4	-0.15	74.6	75.8	81
7.57	-51.96	-38.92	-45.37	-0.15	74.5	75.7	80.6
7.57	-51.91	-38.92	-45.4	-0.15	74.5	75.7	80.7
7.57	-51.91	-38.92	-45.37	-0.15	74.5	75.6	80.4
7.56	-51.91	-38.92	-45.37	-0.15	74.4	75.6	79.9
7.57	-51.91	-38.87	-45.37	-0.15	74.4	75.5	79.9
7.57	-51.91	-38.92	-45.37	-0.15	74.4	75.5	79.9
7.55	-51.91	-38.87	-45.37	-0.15	74.4	75.5	79.6
7.56	-51.91	-38.87	-45.37	-0.15	74.3	75.5	79.4
7.56	-51.91	-38.92	-45.37	-0.15	74.3	75.4	79.2
7.56	-51.91	-38.92	-45.34	-0.15	74.2	75.3	78.9
7.56	-51.91	-38.87	-45.37	-0.18	74.1	75.2	78.8
7.56	-51.91	-38.87	-45.34	-0.15	74.1	75.2	78.8
7.56	-51.91	-38.87	-45.37	-0.15	74.1	75.2	78.6
7.56	-51.91	-38.87	-45.34	-0.15	74	75.2	78.4
7.56	-51.87	-38.87	-45.34	-0.18	74.1	75.1	78.2
7.56	-51.87	-38.87	-45.34	-0.15	74	75	78
7.56	-51.87	-38.87	-45.34	-0.15	74	75	77.8
7.55	-51.87	-38.87	-45.34	-0.15	73.8	74.9	77.7
7.56	-51.91	-38.82	-45.31	-0.15	73.8	74.9	77.6
7.55	-51.87	-38.82	-45.31	-0.15	73.7	74.8	77.4
7.55	-51.87	-38.82	-45.31	-0.15	73.7	74.8	77.3
7.54	-51.87	-38.87	-45.31	-0.18	73.6	74.7	77.2
7.55	-51.82	-38.82	-45.31	-0.15	73.6	74.7	77.1
7.55	-51.87	-38.82	-45.27	-0.15	73.6	74.6	76.8
7.55	-51.87	-38.82	-45.27	-0.15	73.5	74.6	76.6
7.55	-51.87	-38.82	-45.31	-0.15	73.4	74.6	76.4
7.55	-51.87	-38.82	-45.27	-0.15	73.4	74.5	76.3
7.55	-51.87	-38.82	-45.27	-0.18	73.4	74.5	76.4
7.55	-51.82	-38.82	-45.27	-0.15	73.4	74.5	75.9
7.54	-51.82	-38.82	-45.27	-0.15	73.4	74.5	75.9
7.55	-51.87	-38.76	-45.27	-0.18	73.4	74.4	75.8
7.54	-51.82	-38.82	-45.24	-0.15	73.3	74.4	75.7
7.54	-51.82	-38.82	-45.27	-0.15	73.3	74.4	75.6
7.54	-51.82	-38.76	-45.24	-0.15	73.2	74.3	75.4
7.55	-51.82	-38.76	-45.24	-0.15	73.2	74.2	75.2
7.55	-51.82	-38.82	-45.24	-0.15	73.1	74.2	75.2

7.54	-51.78	-38.76	-45.24	-0.15	73.1	74.1	75.1
7.53	-51.82	-38.82	-45.24	-0.18	73.1	74.1	74.9
7.53	-51.82	-38.82	-45.21	-0.15	73	74.1	74.9
7.53	-51.82	-38.76	-45.24	-0.15	73	74	74.7
7.53	-51.82	-38.76	-45.21	-0.18	73	74	74.7
7.53	-51.82	-38.82	-45.24	-0.15	73	74	74.6
7.53	-51.78	-38.76	-45.24	-0.18	72.9	74.2	74.5
7.53	-51.82	-38.76	-45.21	-0.18	73	74.4	74.3
7.53	-51.78	-38.76	-45.21	-0.15	73.1	74.5	74.4
7.53	-51.82	-38.76	-45.21	-0.18	73.2	74.5	74.5
7.53	-51.82	-38.76	-45.21	-0.18	73.2	74.5	74.4
7.53	-51.82	-38.76	-45.21	-0.15	73.3	74.5	74.2
7.53	-51.78	-38.76	-45.21	-0.15	73.3	74.5	74.2
7.53	-51.82	-38.76	-45.21	-0.18	73.3	74.5	74.2
7.53	-51.78	-38.76	-45.21	-0.18	73.3	74.5	74.3
7.53	-51.82	-38.76	-45.21	-0.15	73.2	74.5	74.3
7.53	-51.82	-38.76	-45.21	-0.18	73.2	74.5	74.6
7.53	-51.78	-38.76	-45.21	-0.15	73.1	74.5	74.9
7.53	-51.78	-38.76	-45.21	-0.15	73.2	74.5	74.9
7.53	-51.78	-38.76	-45.21	-0.15	73.2	74.5	75.1
7.53	-51.78	-38.76	-45.21	-0.15	73.3	74.5	75.3
7.53	-51.78	-38.76	-45.21	-0.18	73.2	74.5	75.5
7.53	-51.78	-38.82	-45.18	-0.15	73.2	74.5	75.7
7.53	-51.78	-38.76	-45.18	-0.15	73.3	74.5	75.8
7.53	-51.78	-38.76	-45.18	-0.15	73.2	74.6	76.2
7.53	-51.78	-38.76	-45.18	-0.15	73.2	74.6	76.4
7.53	-51.78	-38.76	-45.18	-0.15	73.2	74.6	76.4
7.53	-51.78	-38.76	-45.18	-0.18	73.2	74.7	76.6
7.53	-51.78	-38.71	-45.18	-0.15	73.3	74.6	76.6
7.53	-51.78	-38.71	-45.18	-0.18	73.3	74.6	77
7.53	-51.78	-38.71	-45.18	-0.15	73.2	74.7	77.1
7.54	-51.78	-38.71	-45.18	-0.15	73.2	74.7	77.2
7.53	-51.78	-38.71	-45.18	-0.15	73.2	74.7	77.2
7.53	-51.78	-38.71	-45.18	-0.18	73.2	74.7	77.4
7.53	-51.73	-38.71	-45.18	-0.18	73.3	74.7	77.6
7.53	-51.78	-38.71	-45.15	-0.18	73.3	74.7	77.4
7.53	-51.78	-38.71	-45.15	-0.18	73.4	74.7	77.4
7.53	-51.78	-38.71	-45.18	-0.15	73.3	74.7	77.5
7.53	-51.78	-38.71	-45.18	-0.15	73.4	74.7	77.3

7.53	-51.73	-38.71	-45.15	-0.18	73.3	74.7	77.5
7.53	-51.73	-38.71	-45.15	-0.15	73.3	74.7	77.5
7.53	-51.73	-38.71	-45.15	-0.15	73.3	74.8	77.5
7.53	-51.73	-38.71	-45.15	-0.15	73.4	74.7	77.3
7.53	-51.73	-38.71	-45.15	-0.15	73.4	74.8	77.5
7.53	-51.73	-38.71	-45.15	-0.18	73.4	74.7	77.4
7.53	-51.73	-38.66	-45.15	-0.15	73.4	74.7	77.6
7.53	-51.73	-38.66	-45.12	-0.15	73.4	74.7	77.3
7.53	-51.64	-38.71	-45.12	-0.18	73.4	74.7	77.3
7.53	-51.73	-38.66	-45.12	-0.15	73.4	74.7	77.4
7.53	-51.73	-38.66	-45.12	-0.18	73.4	74.7	77.1
7.53	-51.64	-38.66	-45.09	-0.18	73.4	74.6	77.4
7.53	-51.64	-38.66	-45.09	-0.15	73.4	74.6	77.3
7.53	-51.64	-38.66	-45.09	-0.15	73.3	74.6	77.2
7.53	-51.64	-38.66	-45.09	-0.18	73.4	74.7	77.3
7.53	-51.64	-38.66	-45.09	-0.15	73.4	74.7	77.2
7.53	-51.64	-38.66	-45.09	-0.18	73.3	74.7	77.2
7.53	-51.59	-38.66	-45.09	-0.18	73.3	74.7	77.4
7.53	-51.64	-38.66	-45.09	-0.15	73.3	74.7	77.2
7.53	-51.59	-38.61	-45.09	-0.15	73.3	74.7	77.3
7.53	-51.59	-38.66	-45.06	-0.15	73.3	74.7	77.5
7.53	-51.59	-38.61	-45.06	-0.15	73.3	74.5	77.6
7.53	-51.59	-38.61	-45.06	-0.15	73.3	74.5	77.3
7.53	-51.59	-38.61	-45.06	-0.15	73.2	74.5	77.7
7.53	-51.59	-38.61	-45.06	-0.15	73.2	74.4	77.7
7.53	-51.55	-38.61	-45.06	-0.15	73.1	74.5	77.8
7.53	-51.59	-38.61	-45.06	-0.15	73	74.4	77.9
7.53	-51.55	-38.61	-45.06	-0.15	73	74.4	78
7.53	-51.55	-38.56	-45.06	-0.15	73	74.4	78.2
7.53	-51.55	-38.56	-45.06	-0.18	73	74.4	78.6
7.53	-51.55	-38.61	-45.06	-0.15	73.1	74.3	78.5
7.53	-51.55	-38.61	-45.06	-0.15	73.1	74.4	78.7
7.53	-51.55	-38.56	-45.06	-0.15	73	74.3	78.8
7.53	-51.55	-38.56	-45.06	-0.15	73.1	74.3	78.6
7.53	-51.55	-38.56	-45	-0.15	73	74.3	78.8
7.53	-51.55	-38.56	-45	-0.15	73	74.4	79
7.53	-51.5	-38.5	-45	-0.15	73	74.3	78.8
7.53	-51.55	-38.56	-45	-0.15	73.1	74.3	78.8
7.53	-51.55	-38.56	-45	-0.18	73.1	74.3	78.9
7.53	-51.55	-38.5	-45	-0.15	73.1	74.3	78.8
7.53	-51.55	-38.5	-44.97	-0.18	73	74.4	78.8
7.53	-51.5	-38.56	-44.97	-0.15	73.1	74.3	78.9
7.53	-51.5	-38.56	-44.97	-0.15	73	74.3	78.8
7.53	-51.5	-38.5	-44.97	-0.15	73.1	74.3	78.6
7.53	-51.5	-38.5	-44.97	-0.15	73	74.3	78.7
7.53	-51.5	-38.5	-44.97	-0.15	73	74.3	78.5
7.53	-51.5	-38.56	-44.97	-0.15	73	74.3	78.5

7.53	-51.5	-38.5	-44.94	-0.18	73.1	74.3	78.4
7.53	-51.5	-38.5	-44.94	-0.15	73	74.2	78.3
7.53	-51.5	-38.5	-44.97	-0.15	73	74.2	78.2
7.53	-51.5	-38.56	-44.94	-0.15	73	74.2	77.9
7.53	-51.5	-38.5	-44.94	-0.15	73	74.2	77.9
7.53	-51.5	-38.5	-44.94	-0.15	73	74.2	77.8
7.53	-51.46	-38.5	-44.94	-0.18	72.9	74.2	77.8
7.53	-51.5	-38.5	-44.91	-0.15	72.9	74.2	77.6
7.53	-51.5	-38.5	-44.91	-0.15	72.9	74.2	77.6
7.53	-51.5	-38.5	-44.94	-0.15	72.9	74.2	77.3
7.53	-51.5	-38.5	-44.91	-0.15	72.9	74.1	77.2
7.53	-51.5	-38.5	-44.91	-0.15	72.9	74.1	77.1
7.53	-51.5	-38.5	-44.94	-0.15	72.9	74.1	76.8
7.53	-51.5	-38.5	-44.91	-0.15	72.9	74	76.8
7.53	-51.46	-38.5	-44.91	-0.18	72.8	74	76.6
7.53	-51.46	-38.5	-44.91	-0.15	72.8	74	76.5
7.53	-51.46	-38.5	-44.91	-0.15	72.8	73.9	76.2
7.53	-51.46	-38.45	-44.91	-0.15	72.8	73.9	76.2
7.53	-51.46	-38.45	-44.91	-0.15	72.7	73.7	75.9
7.53	-51.46	-38.45	-44.91	-0.15	72.7	73.9	75.7
7.53	-51.46	-38.45	-44.88	-0.15	72.7	73.7	75.8
7.53	-51.46	-38.5	-44.88	-0.15	72.7	73.6	75.5
7.53	-51.46	-38.45	-44.88	-0.15	72.7	73.6	75.5
7.53	-51.46	-38.45	-44.88	-0.15	72.6	73.6	75.3
7.53	-51.46	-38.45	-44.88	-0.15	72.6	73.5	75.1
7.53	-51.46	-38.45	-44.88	-0.18	72.6	73.5	74.9
7.53	-51.46	-38.45	-44.85	-0.15	72.5	73.4	74.6
7.53	-51.46	-38.45	-44.85	-0.15	72.5	73.4	74.8
7.53	-51.46	-38.45	-44.85	-0.15	72.5	73.4	74.5
7.52	-51.46	-38.45	-44.85	-0.15	72.5	73.4	74.5
7.52	-51.46	-38.4	-44.85	-0.15	72.4	73.3	74.4
7.52	-51.41	-38.4	-44.85	-0.15	72.4	73.3	74
7.52	-51.41	-38.4	-44.85	-0.18	72.3	73.3	74
7.52	-51.41	-38.4	-44.85	-0.15	72.3	73.2	74
7.52	-51.41	-38.4	-44.85	-0.15	72.3	73.2	73.6
7.52	-51.41	-38.4	-44.82	-0.15	72.3	73.2	73.7
7.52	-51.41	-38.4	-44.85	-0.15	72.3	73.1	73.4
7.52	-51.41	-38.4	-44.82	-0.15	72.3	73.1	73.4
7.52	-51.41	-38.4	-44.82	-0.15	72.2	73	73.2
7.52	-51.36	-38.45	-44.82	-0.15	72.2	73	73.3
7.51	-51.36	-38.4	-44.82	-0.18	72.2	73	73.2
7.52	-51.41	-38.4	-44.82	-0.18	72.2	72.9	73.1
7.51	-51.36	-38.4	-44.82	-0.15	72.2	72.9	72.7
7.51	-51.41	-38.4	-44.82	-0.15	72.1	72.8	72.7
7.52	-51.36	-38.4	-44.82	-0.15	72	72.8	72.6
7.52	-51.36	-38.4	-44.82	-0.15	72	72.7	72.6
7.51	-51.41	-38.4	-44.82	-0.15	72	72.7	72.3

7.52	-51.36	-38.4	-44.82	-0.15	72	72.7	72.4
7.52	-51.36	-38.4	-44.79	-0.15	71.9	72.5	72.3
7.52	-51.36	-38.4	-44.79	-0.15	71.9	72.6	72.3
7.52	-51.36	-38.4	-44.79	-0.15	71.8	72.5	72.2
7.51	-51.36	-38.35	-44.79	-0.15	71.8	72.5	71.9
7.52	-51.36	-38.35	-44.79	-0.15	71.6	72.5	72
7.52	-51.36	-38.35	-44.76	-0.15	71.6	72.4	71.9
7.52	-51.36	-38.35	-44.76	-0.18	71.6	72.3	71.5
7.52	-51.36	-38.35	-44.76	-0.15	71.6	72.3	71.6
7.52	-51.36	-38.35	-44.76	-0.15	71.6	72.3	71.5
7.52	-51.36	-38.35	-44.76	-0.15	71.5	72.3	71.3
7.52	-51.32	-38.35	-44.76	-0.15	71.5	72.3	71.3
7.52	-51.32	-38.35	-44.76	-0.15	71.5	72.3	71.2
7.52	-51.32	-38.35	-44.76	-0.15	71.4	72.2	71.1
7.52	-51.32	-38.35	-44.76	-0.15	71.3	72.2	71.1
7.51	-51.36	-38.35	-44.73	-0.15	71.3	72.2	70.9
7.52	-51.36	-38.35	-44.76	-0.15	71.3	72.2	70.9
7.51	-51.32	-38.35	-44.76	-0.15	71.2	72.1	70.6
7.52	-51.32	-38.3	-44.73	-0.18	71.2	72.1	70.8
7.51	-51.32	-38.3	-44.76	-0.18	71.2	72.1	70.5
7.51	-51.32	-38.3	-44.76	-0.15	71.2	72	70.7
7.5	-51.32	-38.3	-44.73	-0.15	71.2	72	70.6
7.5	-51.32	-38.3	-44.73	-0.15	71.2	72	70.4
7.5	-51.36	-38.35	-44.73	-0.15	71.2	71.9	70.4
7.51	-51.32	-38.35	-44.73	-0.15	71.1	71.9	70.5
7.5	-51.36	-38.3	-44.73	-0.15	71.2	71.9	70.5
7.5	-51.32	-38.35	-44.73	-0.15	71.2	71.9	70.4
7.5	-51.32	-38.3	-44.73	-0.15	71.1	71.9	70.4
7.5	-51.32	-38.35	-44.73	-0.15	71.1	71.9	70.4
7.5	-51.32	-38.35	-44.73	-0.15	71.1	71.9	70.7
7.5	-51.32	-38.35	-44.73	-0.15	71.1	71.9	70.9
7.5	-51.32	-38.35	-44.73	-0.15	71.1	71.9	71.2
7.5	-51.32	-38.35	-44.73	-0.15	71.1	72	71.1
7.5	-51.32	-38.35	-44.73	-0.15	71.1	71.9	71.3
7.5	-51.32	-38.35	-44.69	-0.18	71.1	72	71.5
7.5	-51.32	-38.35	-44.69	-0.15	71.1	72	71.9
7.5	-51.32	-38.35	-44.69	-0.15	71.1	72	72.2
7.5	-51.27	-38.3	-44.73	-0.15	71.1	72	72.2
7.5	-51.32	-38.35	-44.69	-0.18	71.1	72.1	72.4
7.5	-51.32	-38.35	-44.69	-0.15	71.2	72.1	72.8
7.5	-51.32	-38.35	-44.69	-0.15	71.2	72.2	73
7.5	-51.32	-38.3	-44.69	-0.15	71.2	72.2	73.4
7.5	-51.32	-38.3	-44.69	-0.15	71.2	72.2	73.6
7.5	-51.27	-38.35	-44.69	-0.15	71.2	72.3	74.1
7.5	-51.27	-38.3	-44.69	-0.15	71.2	72.3	74.4
7.5	-51.27	-38.3	-44.69	-0.18	71.2	72.3	74.7
7.5	-51.32	-38.3	-44.69	-0.15	71.2	72.4	74.9

7.5	-51.27	-38.35	-44.69	-0.15	71.2	72.5	75.2
7.5	-51.27	-38.3	-44.69	-0.15	71.3	72.5	75.5
7.5	-51.27	-38.3	-44.69	-0.15	71.3	72.6	75.8
7.5	-51.27	-38.3	-44.69	-0.18	71.3	72.7	76.3
7.51	-51.27	-38.3	-44.69	-0.15	71.3	72.7	76.5
7.51	-51.27	-38.24	-44.66	-0.15	71.4	72.9	76.9
7.51	-51.27	-38.3	-44.66	-0.18	71.4	72.9	77.1
7.51	-51.23	-38.3	-44.66	-0.15	71.5	72.9	77.4
7.51	-51.27	-38.3	-44.66	-0.15	71.5	73	77.7
7.5	-51.27	-38.3	-44.66	-0.18	71.5	73	78
7.5	-51.23	-38.3	-44.66	-0.18	71.6	73.1	78.4
7.51	-51.27	-38.24	-44.66	-0.15	71.6	73.2	78.5
7.5	-51.23	-38.3	-44.66	-0.18	71.5	73.2	78.8
7.5	-51.23	-38.24	-44.66	-0.18	71.6	73.3	79.2
7.5	-51.23	-38.24	-44.66	-0.15	71.8	73.3	79.4
7.5	-51.23	-38.3	-44.63	-0.18	71.8	73.4	79.6
7.51	-51.18	-38.24	-44.63	-0.15	71.9	73.4	79.9
7.51	-51.23	-38.24	-44.63	-0.18	71.9	73.4	80.3
7.5	-51.18	-38.24	-44.63	-0.18	71.9	73.5	80.4
7.5	-51.23	-38.19	-44.63	-0.15	72	73.5	80.8
7.5	-51.18	-38.24	-44.6	-0.18	72.1	73.6	80.9
7.51	-51.18	-38.24	-44.6	-0.18	72	73.7	81
7.5	-51.23	-38.19	-44.57	-0.18	72.1	73.7	81.3
7.5	-51.18	-38.19	-44.6	-0.18	72.2	73.7	81.4
7.5	-51.18	-38.19	-44.57	-0.18	72.2	73.9	81.6
7.51	-51.18	-38.19	-44.57	-0.18	72.2	74	81.5
7.5	-51.14	-38.19	-44.57	-0.18	72.3	74	81.6
7.51	-51.18	-38.14	-44.57	-0.18	72.3	74	82
7.51	-51.14	-38.19	-44.57	-0.18	72.3	74	82
7.51	-51.18	-38.14	-44.57	-0.18	72.3	74.1	81.9
7.52	-51.14	-38.14	-44.54	-0.18	72.3	74.1	82.1
7.52	-51.14	-38.19	-44.54	-0.15	72.4	74.1	82.2
7.52	-51.14	-38.14	-44.54	-0.18	72.4	74.2	82.1
7.52	-51.14	-38.14	-44.54	-0.18	72.4	74.2	82.2
7.52	-51.14	-38.14	-44.54	-0.18	72.4	74.3	82.2
7.52	-51.09	-38.14	-44.51	-0.18	72.4	74.3	82.2
7.52	-51.14	-38.14	-44.51	-0.18	72.4	74.3	82.4
7.52	-51.14	-38.14	-44.51	-0.18	72.5	74.3	82.4
7.52	-51.09	-38.14	-44.51	-0.18	72.5	74.3	82.4
7.52	-51.09	-38.14	-44.51	-0.15	72.5	74.4	82.2
7.52	-51.09	-38.09	-44.51	-0.18	72.6	74.3	82.5
7.52	-51.09	-38.14	-44.51	-0.18	72.6	74.4	82.2
7.51	-51.09	-38.09	-44.51	-0.18	72.6	74.4	82.2
7.52	-51.09	-38.09	-44.51	-0.18	72.6	74.5	82.2
7.51	-51.09	-38.09	-44.48	-0.18	72.6	74.5	82.1
7.51	-51.09	-38.09	-44.48	-0.18	72.7	74.4	82.1
7.52	-51.04	-38.09	-44.51	-0.18	72.7	74.5	82

7.52	-51.04	-38.04	-44.48	-0.18	72.7	74.4	81.9
7.52	-51.04	-38.04	-44.48	-0.18	72.7	74.4	81.5
7.52	-51.04	-38.04	-44.48	-0.18	72.7	74.5	81.5
7.52	-51.09	-38.04	-44.48	-0.18	72.7	74.4	81.5
7.52	-51.09	-38.04	-44.48	-0.18	72.8	74.4	81.4
7.52	-51.04	-38.04	-44.48	-0.18	72.8	74.4	81.2
7.52	-51.04	-38.04	-44.48	-0.18	72.8	74.4	81
7.52	-51.09	-38.04	-44.48	-0.18	72.8	74.4	80.9
7.52	-51.04	-38.04	-44.48	-0.18	72.7	74.4	80.8
7.52	-51.04	-38.04	-44.48	-0.18	72.9	74.4	80.5
7.52	-51.04	-38.04	-44.45	-0.18	72.9	74.4	80.4
7.51	-51.04	-38.04	-44.45	-0.18	73	74.4	80.4
7.51	-51.04	-38.04	-44.48	-0.18	72.9	74.3	79.8
7.5	-51.04	-38.04	-44.48	-0.15	73	74.3	79.8
7.5	-51.09	-38.04	-44.48	-0.18	72.9	74.3	79.5
7.5	-51.04	-38.09	-44.45	-0.18	72.9	74.2	79.4
7.51	-51.09	-38.09	-44.48	-0.18	72.9	74.2	79
7.51	-51.09	-38.04	-44.48	-0.18	72.9	74.2	78.8
7.5	-51.04	-38.04	-44.48	-0.18	72.9	74.2	78.9
7.5	-51.04	-38.04	-44.48	-0.18	72.9	74.2	78.6
7.5	-51.04	-38.04	-44.48	-0.18	72.9	74.1	78.4
7.5	-51.04	-38.04	-44.48	-0.18	72.8	74.1	78.2
7.5	-51.04	-38.04	-44.48	-0.18	72.8	74	77.9
7.5	-51.04	-38.04	-44.48	-0.18	72.8	74	77.8
7.5	-51.04	-38.04	-44.45	-0.18	72.8	73.9	77.7
7.5	-51.04	-38.04	-44.45	-0.18	72.8	73.9	77.2
7.5	-51.04	-38.04	-44.48	-0.18	72.8	73.9	77.1
7.5	-51.04	-38.04	-44.48	-0.18	72.7	73.7	77
7.51	-51	-38.04	-44.48	-0.18	72.8	73.7	77
7.5	-51	-38.04	-44.45	-0.18	72.7	73.6	76.5
7.51	-51	-38.09	-44.48	-0.18	72.6	73.6	76.4
7.5	-51.04	-38.04	-44.45	-0.18	72.6	73.5	76.4
7.51	-51.04	-38.04	-44.45	-0.18	72.5	73.5	75.8
7.5	-51	-37.99	-44.45	-0.18	72.5	73.4	75.8
7.5	-51.04	-38.04	-44.45	-0.18	72.5	73.4	75.6
7.5	-51	-38.04	-44.45	-0.18	72.5	73.4	75.3
7.5	-51.04	-38.04	-44.45	-0.18	72.5	73.4	75.4
7.5	-51	-38.04	-44.45	-0.18	72.4	73.3	74.9
7.5	-51	-38.04	-44.42	-0.18	72.4	73.3	74.9
7.5	-51	-38.04	-44.42	-0.18	72.3	73.2	74.7
7.5	-51	-38.04	-44.45	-0.18	72.3	73.2	74.5
7.5	-51	-38.04	-44.42	-0.18	72.3	73	74.5
7.5	-51	-38.04	-44.42	-0.18	72.3	73.1	74.3
7.5	-51	-37.99	-44.42	-0.18	72.3	73	73.8
7.5	-51	-37.99	-44.42	-0.18	72.2	72.9	73.6
7.5	-51	-38.04	-44.39	-0.18	72.1	72.9	73.7
7.5	-51	-37.99	-44.39	-0.18	72.1	72.8	73.4

7.5	-51	-37.99	-44.42	-0.18	72.1	72.7	73.2
7.5	-51	-37.99	-44.39	-0.18	72	72.6	73.2
7.5	-51	-37.99	-44.39	-0.18	71.9	72.6	73
7.5	-50.95	-37.99	-44.42	-0.18	72	72.6	72.9
7.5	-50.95	-37.99	-44.39	-0.18	71.9	72.5	72.6
7.5	-51	-37.99	-44.39	-0.18	71.9	72.5	72.6
7.5	-50.95	-37.99	-44.39	-0.18	71.8	72.4	72.3
7.5	-51	-37.99	-44.39	-0.18	71.6	72.4	72.1
7.5	-50.95	-37.93	-44.39	-0.18	71.6	72.3	72.3
7.5	-50.95	-37.93	-44.39	-0.18	71.5	72.3	72.1
7.5	-50.95	-37.99	-44.36	-0.18	71.5	72.3	71.9
7.5	-50.95	-37.93	-44.36	-0.18	71.3	72.2	71.6
7.5	-50.95	-37.99	-44.36	-0.18	71.3	72.2	71.5
7.5	-50.95	-37.93	-44.36	-0.18	71.1	72.1	71.3
7.5	-50.95	-37.93	-44.36	-0.18	71.1	72.1	71.2
7.5	-50.95	-37.99	-44.36	-0.18	70.9	72	71.1
7.5	-50.95	-37.99	-44.36	-0.18	70.9	72	71
7.5	-50.95	-37.93	-44.33	-0.18	70.8	71.9	70.7
7.49	-50.95	-37.93	-44.36	-0.18	70.8	71.9	70.5
7.49	-50.95	-37.93	-44.36	-0.18	70.6	71.8	70.7
7.49	-50.95	-37.99	-44.36	-0.18	70.6	71.8	70.4
7.49	-50.91	-37.93	-44.36	-0.18	70.6	71.7	70.3
7.49	-50.95	-37.93	-44.36	-0.18	70.6	71.7	70.2
7.49	-50.95	-37.99	-44.36	-0.21	70.8	71.7	70.1
7.5	-50.95	-37.93	-44.36	-0.18	70.7	71.6	70
7.5	-50.95	-37.93	-44.33	-0.18	70.7	71.6	70
7.5	-50.95	-37.93	-44.33	-0.18	70.8	71.6	70.1
7.5	-50.95	-37.93	-44.33	-0.15	70.7	71.6	70.1
7.49	-50.95	-37.93	-44.33	-0.18	70.7	71.6	70.1
7.49	-50.91	-37.93	-44.33	-0.18	70.7	71.6	70
7.49	-50.95	-37.93	-44.33	-0.18	70.8	71.6	70.1
7.49	-50.95	-37.93	-44.33	-0.18	70.7	71.6	70.1
7.49	-50.91	-37.93	-44.33	-0.18	70.8	71.6	70.5
7.49	-50.91	-37.93	-44.33	-0.18	70.7	71.6	70.5
7.49	-50.91	-37.99	-44.33	-0.18	70.9	71.6	70.7
7.49	-50.91	-37.88	-44.3	-0.18	70.8	71.6	70.7
7.49	-50.95	-37.93	-44.33	-0.18	70.8	71.6	71.1
7.49	-50.91	-37.93	-44.3	-0.15	70.7	71.7	71.2
7.49	-50.91	-37.93	-44.3	-0.15	70.5	71.7	71.3
7.49	-50.91	-37.93	-44.3	-0.18	70.9	71.7	71.5
7.49	-50.91	-37.93	-44.3	-0.18	70.9	71.7	72.1
7.49	-50.91	-37.88	-44.3	-0.18	70.9	71.8	72.2
7.49	-50.91	-37.93	-44.3	-0.18	70.9	71.8	72.6
7.49	-50.91	-37.93	-44.3	-0.18	71	71.8	72.9
7.49	-50.91	-37.93	-44.3	-0.18	70.9	71.9	73.2
7.49	-50.91	-37.93	-44.3	-0.18	71	71.9	73.4
7.49	-50.91	-37.93	-44.3	-0.18	71	72	73.5

7.49	-50.91	-37.93	-44.3	-0.15	71.1	72	74
7.49	-50.91	-37.88	-44.3	-0.18	71.1	72.1	74.3
7.49	-50.91	-37.88	-44.27	-0.18	71	72.2	74.6
7.49	-50.91	-37.88	-44.3	-0.18	71.1	72.2	74.8
7.49	-50.91	-37.93	-44.3	-0.18	71.1	72.2	75
7.49	-50.86	-37.88	-44.3	-0.18	71.2	72.3	75.5
7.49	-50.91	-37.88	-44.27	-0.18	71.2	72.3	75.9
7.49	-50.86	-37.88	-44.27	-0.18	71.2	72.3	76.2
7.49	-50.86	-37.88	-44.27	-0.15	71.2	72.3	76.6
7.49	-50.86	-37.88	-44.27	-0.18	71.2	72.5	76.9
7.49	-50.86	-37.88	-44.27	-0.18	71.2	72.5	77.2
7.49	-50.86	-37.88	-44.21	-0.18	71.2	72.6	77.6
7.49	-50.86	-37.88	-44.21	-0.18	71.2	72.7	77.9
7.49	-50.86	-37.88	-44.21	-0.18	71.2	72.7	78.3
7.49	-50.82	-37.88	-44.21	-0.18	71.2	72.8	78.6
7.49	-50.82	-37.83	-44.21	-0.18	71.2	72.9	78.8
7.49	-50.86	-37.88	-44.21	-0.15	71.3	73	79.1
7.49	-50.82	-37.83	-44.18	-0.18	71.4	73.1	79.6
7.5	-50.82	-37.83	-44.18	-0.18	71.5	73.1	79.9
7.5	-50.82	-37.83	-44.18	-0.21	71.3	73.3	80.5
7.5	-50.82	-37.83	-44.18	-0.18	71.5	73.3	80.6
7.5	-50.82	-37.83	-44.15	-0.18	71.6	73.4	81
7.5	-50.82	-37.73	-44.18	-0.18	71.8	73.4	81.2
7.5	-50.82	-37.73	-44.15	-0.18	71.9	73.5	81.5
7.5	-50.82	-37.83	-44.15	-0.18	72	73.6	81.7
7.5	-50.82	-37.73	-44.11	-0.18	71.9	73.6	82
7.5	-50.77	-37.73	-44.11	-0.18	71.9	73.7	82.1
7.5	-50.77	-37.73	-44.11	-0.18	72	73.9	82.2
7.5	-50.77	-37.73	-44.11	-0.18	72	73.9	82.6
7.5	-50.77	-37.73	-44.11	-0.18	72.1	74	82.7
7.5	-50.77	-37.73	-44.08	-0.18	72.1	74.1	82.9
7.5	-50.77	-37.67	-44.08	-0.18	72.3	74.1	83.2
7.5	-50.72	-37.73	-44.11	-0.18	72.3	74.2	83.2
7.5	-50.77	-37.67	-44.11	-0.18	72.3	74.2	83.3
7.5	-50.72	-37.67	-44.08	-0.18	72.3	74.3	83.5
7.5	-50.72	-37.67	-44.08	-0.18	72.3	74.4	83.5
7.5	-50.72	-37.67	-44.08	-0.18	72.3	74.4	83.5
7.5	-50.72	-37.67	-44.08	-0.18	72.4	74.5	83.7
7.5	-50.72	-37.67	-44.08	-0.18	72.4	74.5	83.8
7.5	-50.72	-37.67	-44.08	-0.18	72.4	74.5	83.8
7.5	-50.72	-37.67	-44.08	-0.18	72.5	74.5	83.8
7.5	-50.72	-37.67	-44.05	-0.18	72.6	74.5	83.8
7.5	-50.68	-37.67	-44.08	-0.18	72.7	74.6	83.8
7.5	-50.68	-37.62	-44.05	-0.21	72.6	74.6	83.7
7.51	-50.72	-37.67	-44.05	-0.18	72.7	74.6	83.6
7.51	-50.68	-37.62	-44.05	-0.18	72.7	74.7	83.6
7.5	-50.72	-37.62	-44.05	-0.21	72.7	74.7	83.6

7.5	-50.68	-37.62	-44.05	-0.18	72.7	74.7	83.4
7.5	-50.68	-37.62	-44.05	-0.18	72.8	74.7	83.4
7.5	-50.68	-37.62	-44.05	-0.21	72.9	74.8	83.3
7.5	-50.68	-37.62	-44.05	-0.18	72.8	74.8	83.2
7.51	-50.68	-37.62	-44.02	-0.18	72.9	74.8	83.2
7.51	-50.68	-37.62	-44.05	-0.21	72.9	74.8	83.1
7.51	-50.68	-37.62	-44.02	-0.18	73	74.9	83
7.5	-50.68	-37.62	-44.05	-0.18	73	74.8	82.8
7.51	-50.68	-37.62	-44.02	-0.18	73	74.8	82.6
7.5	-50.68	-37.62	-44.05	-0.18	73.1	74.8	82.6
7.5	-50.63	-37.62	-44.02	-0.18	73.1	74.8	82.1
7.51	-50.68	-37.62	-44.02	-0.18	73.1	74.8	82
7.5	-50.68	-37.62	-44.02	-0.18	73.1	74.8	81.8
7.5	-50.68	-37.62	-44.02	-0.18	73.2	74.7	81.7
7.5	-50.68	-37.62	-44.02	-0.18	73.2	74.7	81.4
7.5	-50.63	-37.62	-44.02	-0.18	73.2	74.7	81.2
7.51	-50.68	-37.62	-44.02	-0.18	73.1	74.7	81.2
7.5	-50.68	-37.62	-44.02	-0.18	73.2	74.7	81
7.5	-50.68	-37.62	-44.02	-0.21	73.2	74.7	80.9
7.5	-50.63	-37.62	-43.99	-0.18	73.3	74.6	80.7
7.5	-50.63	-37.57	-44.02	-0.18	73.3	74.6	80.6
7.5	-50.68	-37.57	-44.02	-0.18	73.3	74.6	80.1
7.5	-50.68	-37.62	-43.99	-0.18	73.2	74.5	80
7.5	-50.63	-37.62	-43.99	-0.18	73.3	74.5	79.9
7.5	-50.63	-37.57	-43.99	-0.18	73.3	74.5	79.7
7.5	-50.68	-37.62	-43.99	-0.21	73.3	74.5	79.5
7.5	-50.68	-37.57	-44.02	-0.18	73.2	74.5	79.4
7.5	-50.63	-37.57	-43.99	-0.18	73.2	74.5	78.9
7.5	-50.63	-37.57	-43.99	-0.18	73.2	74.5	79
7.5	-50.68	-37.57	-43.99	-0.21	73.2	74.4	78.7
7.5	-50.63	-37.62	-43.99	-0.21	73.2	74.4	78.7
7.5	-50.63	-37.57	-43.99	-0.18	73.1	74.3	78.5
7.5	-50.63	-37.57	-43.99	-0.18	73.1	74.2	78.3
7.5	-50.63	-37.57	-43.96	-0.18	73.1	74.3	78
7.5	-50.63	-37.57	-43.96	-0.18	73	74.2	77.8
7.5	-50.63	-37.62	-43.96	-0.18	73	74.1	77.6
7.5	-50.63	-37.57	-43.96	-0.21	73	74.1	77.5
7.5	-50.63	-37.57	-43.96	-0.18	73	74.1	77.3
7.5	-50.63	-37.57	-43.96	-0.18	72.9	74.1	77.3
7.5	-50.63	-37.57	-43.96	-0.18	72.9	74	77
7.5	-50.63	-37.57	-43.96	-0.18	72.9	74	76.9
7.5	-50.54	-37.52	-43.96	-0.18	72.9	74	76.6
7.5	-50.63	-37.52	-43.93	-0.18	72.8	73.9	76.6
7.5	-50.54	-37.52	-43.96	-0.18	72.8	73.7	76.4
7.5	-50.63	-37.52	-43.93	-0.18	72.8	73.7	76.1
7.5	-50.54	-37.57	-43.93	-0.18	72.8	73.7	76.1
7.5	-50.54	-37.52	-43.93	-0.18	72.7	73.7	75.8

7.5	-50.54	-37.52	-43.93	-0.18	72.7	73.6	75.6
7.5	-50.54	-37.52	-43.93	-0.21	72.7	73.6	75.6
7.5	-50.54	-37.52	-43.93	-0.18	72.7	73.6	75.5
7.5	-50.54	-37.52	-43.9	-0.18	72.6	73.5	75.2
7.49	-50.54	-37.52	-43.9	-0.18	72.6	73.5	75.2
7.49	-50.54	-37.52	-43.93	-0.18	72.6	73.5	75
7.49	-50.54	-37.52	-43.9	-0.18	72.5	73.5	74.8
7.49	-50.54	-37.47	-43.9	-0.18	72.5	73.4	74.9
7.49	-50.49	-37.52	-43.9	-0.18	72.5	73.4	74.7
7.49	-50.54	-37.52	-43.9	-0.18	72.5	73.4	74.6
7.49	-50.49	-37.52	-43.9	-0.18	72.4	73.4	74.5
7.49	-50.54	-37.47	-43.9	-0.21	72.4	73.4	74.4
7.49	-50.49	-37.52	-43.87	-0.18	72.4	73.4	74.4
7.49	-50.49	-37.47	-43.87	-0.18	72.4	73.3	74.2
7.49	-50.49	-37.52	-43.87	-0.18	72.3	73.3	74.2
7.49	-50.49	-37.47	-43.9	-0.18	72.3	73.3	74
7.49	-50.49	-37.47	-43.87	-0.18	72.3	73.3	73.8
7.49	-50.45	-37.47	-43.87	-0.18	72.3	73.2	73.6
7.49	-50.49	-37.52	-43.87	-0.18	72.3	73.2	73.7
7.49	-50.45	-37.47	-43.87	-0.18	72.3	73.1	73.6
7.49	-50.45	-37.47	-43.87	-0.18	72.2	73.1	73.6
7.49	-50.49	-37.47	-43.87	-0.18	72.2	73.1	73.5
7.49	-50.45	-37.47	-43.84	-0.18	72.2	73.1	73.4
7.49	-50.45	-37.47	-43.87	-0.18	72.2	73	73.3
7.49	-50.45	-37.47	-43.84	-0.18	72.1	73	73.3
7.49	-50.45	-37.47	-43.84	-0.18	72.1	72.9	73.3
7.49	-50.45	-37.47	-43.84	-0.18	72.1	72.9	73.2
7.49	-50.49	-37.41	-43.84	-0.18	72	72.9	73.2
7.49	-50.45	-37.47	-43.84	-0.18	72	72.9	72.9
7.49	-50.45	-37.41	-43.84	-0.18	72	72.8	73.2
7.49	-50.45	-37.47	-43.81	-0.18	71.9	72.8	73
7.49	-50.45	-37.47	-43.81	-0.15	71.9	72.9	73
7.49	-50.45	-37.47	-43.84	-0.18	71.9	72.8	72.8
7.49	-50.45	-37.41	-43.81	-0.18	71.9	72.8	72.8
7.49	-50.4	-37.41	-43.84	-0.18	71.8	72.8	73
7.49	-50.4	-37.41	-43.81	-0.18	71.8	72.8	72.9
7.49	-50.45	-37.47	-43.81	-0.18	71.8	72.7	72.8
7.49	-50.45	-37.41	-43.84	-0.18	71.8	72.8	73.1
7.49	-50.4	-37.41	-43.81	-0.18	71.8	72.8	73.1
7.49	-50.45	-37.41	-43.81	-0.18	71.6	72.7	73.3
7.49	-50.4	-37.47	-43.81	-0.18	71.6	72.8	73.4
7.49	-50.4	-37.47	-43.81	-0.18	71.6	72.7	73.5
7.49	-50.45	-37.47	-43.81	-0.18	71.6	72.7	73.7
7.49	-50.4	-37.41	-43.78	-0.18	71.6	72.8	73.7
7.49	-50.4	-37.41	-43.81	-0.18	71.6	72.8	74.1
7.49	-50.45	-37.41	-43.81	-0.18	71.6	72.9	74.5
7.49	-50.4	-37.41	-43.78	-0.15	71.8	72.9	74.7

7.49	-50.4	-37.41	-43.78	-0.18	71.8	72.9	75
7.49	-50.4	-37.41	-43.78	-0.18	71.8	73	75.3
7.49	-50.4	-37.41	-43.78	-0.18	71.8	73	75.5
7.49	-50.4	-37.41	-43.78	-0.18	71.8	73.1	75.6
7.49	-50.4	-37.41	-43.78	-0.18	71.8	73.2	76.1
7.49	-50.4	-37.41	-43.78	-0.18	71.8	73.3	76.4
7.49	-50.4	-37.41	-43.78	-0.18	71.8	73.3	76.6
7.49	-50.4	-37.36	-43.78	-0.18	71.9	73.3	77.1
7.49	-50.36	-37.36	-43.75	-0.18	72	73.4	77.3
7.49	-50.4	-37.41	-43.75	-0.18	72	73.4	77.7
7.49	-50.4	-37.41	-43.75	-0.18	72	73.4	78.3
7.49	-50.4	-37.36	-43.75	-0.18	72	73.5	78.6
7.49	-50.36	-37.36	-43.75	-0.18	72.1	73.6	78.9
7.49	-50.36	-37.36	-43.72	-0.15	72.1	73.7	79.4
7.49	-50.36	-37.36	-43.72	-0.18	72.2	73.9	79.6
7.49	-50.36	-37.36	-43.72	-0.18	72.2	73.9	80.3
7.49	-50.36	-37.36	-43.72	-0.18	72.3	74	80.6
7.49	-50.31	-37.31	-43.72	-0.18	72.3	74	80.7
7.49	-50.36	-37.31	-43.72	-0.18	72.3	74.2	81.1
7.49	-50.31	-37.31	-43.69	-0.15	72.4	74.3	81.1
7.5	-50.31	-37.31	-43.72	-0.18	72.3	74.3	81.5
7.5	-50.36	-37.31	-43.69	-0.18	72.5	74.4	81.7
7.5	-50.31	-37.31	-43.69	-0.15	72.5	74.5	82
7.5	-50.31	-37.31	-43.66	-0.18	72.5	74.5	82.4
7.5	-50.31	-37.31	-43.69	-0.18	72.6	74.5	82.6
7.5	-50.31	-37.31	-43.69	-0.18	72.6	74.6	82.7
7.5	-50.31	-37.26	-43.66	-0.18	72.7	74.6	83
7.5	-50.27	-37.26	-43.66	-0.18	72.7	74.7	83.1
7.5	-50.27	-37.26	-43.66	-0.18	72.7	74.8	83.3
7.5	-50.27	-37.26	-43.66	-0.15	72.8	74.8	83.4
7.5	-50.27	-37.26	-43.66	-0.18	73	74.9	83.3
7.5	-50.27	-37.26	-43.63	-0.18	73	74.9	83.5
7.5	-50.27	-37.26	-43.63	-0.18	73.1	75	83.4
7.5	-50.22	-37.26	-43.63	-0.18	73.1	75	83.5
7.5	-50.22	-37.26	-43.63	-0.18	73.1	75.1	83.5
7.5	-50.22	-37.26	-43.63	-0.18	73.2	75.2	83.7
7.5	-50.27	-37.26	-43.63	-0.18	73.3	75.1	83.4
7.5	-50.22	-37.26	-43.63	-0.18	73.4	75.2	83.3
7.5	-50.27	-37.26	-43.63	-0.18	73.3	75.2	83.3
7.5	-50.22	-37.26	-43.63	-0.18	73.4	75.3	83.2
7.5	-50.22	-37.26	-43.63	-0.18	73.4	75.3	83.1
7.5	-50.27	-37.21	-43.63	-0.18	73.4	75.3	83.1
7.5	-50.22	-37.21	-43.63	-0.18	73.4	75.3	82.9
7.5	-50.22	-37.26	-43.63	-0.18	73.4	75.3	82.9
7.5	-50.22	-37.21	-43.63	-0.18	73.4	75.3	82.7
7.5	-50.22	-37.21	-43.63	-0.18	73.5	75.2	82.5
7.5	-50.22	-37.21	-43.63	-0.18	73.4	75.2	82.2

7.5	-50.22	-37.21	-43.63	-0.18	73.4	75.2	82.2
7.5	-50.22	-37.21	-43.63	-0.18	73.4	75.2	81.9
7.5	-50.22	-37.21	-43.63	-0.18	73.4	75.1	81.8
7.5	-50.22	-37.21	-43.6	-0.15	73.4	75.1	81.6
7.5	-50.27	-37.21	-43.6	-0.15	73.4	75	81.3
7.5	-50.22	-37.21	-43.6	-0.18	73.4	75.1	81.1
7.5	-50.22	-37.21	-43.6	-0.18	73.4	75	80.8
7.5	-50.22	-37.21	-43.6	-0.15	73.5	75	80.5
7.5	-50.22	-37.16	-43.6	-0.15	73.5	74.9	80.3
7.5	-50.22	-37.16	-43.6	-0.18	73.4	74.9	79.9
7.5	-50.22	-37.16	-43.57	-0.15	73.5	74.8	79.6
7.5	-50.17	-37.16	-43.6	-0.15	73.4	74.7	79.3
7.5	-50.17	-37.16	-43.6	-0.15	73.4	74.7	79
7.5	-50.22	-37.16	-43.57	-0.18	73.4	74.7	79
7.5	-50.17	-37.16	-43.6	-0.18	73.4	74.6	78.6
7.5	-50.17	-37.21	-43.57	-0.18	73.4	74.5	78.5
7.5	-50.17	-37.21	-43.57	-0.21	73.4	74.5	78.4
7.5	-50.17	-37.16	-43.6	-0.18	73.4	74.5	77.7
7.5	-50.17	-37.16	-43.57	-0.18	73.4	74.5	77.7
7.5	-50.17	-37.16	-43.57	-0.15	73.3	74.5	77.5
7.5	-50.17	-37.16	-43.57	-0.18	73.2	74.4	77.4
7.5	-50.17	-37.16	-43.57	-0.18	73.2	74.4	77.1
7.49	-50.17	-37.16	-43.57	-0.18	73.2	74.3	77
7.49	-50.17	-37.16	-43.57	-0.15	73.1	74.2	76.7
7.49	-50.17	-37.16	-43.57	-0.18	73.1	74.2	76.6
7.49	-50.17	-37.16	-43.57	-0.18	73	74.1	76.4
7.49	-50.13	-37.16	-43.53	-0.18	73	74.1	76.2
7.49	-50.17	-37.16	-43.57	-0.18	73	74.1	75.9
7.49	-50.17	-37.16	-43.53	-0.18	73	74	75.7
7.49	-50.17	-37.16	-43.53	-0.18	72.9	74	75.5
7.49	-50.17	-37.16	-43.53	-0.18	72.9	73.9	75.6
7.49	-50.17	-37.16	-43.53	-0.18	72.9	73.9	75.3
7.49	-50.17	-37.16	-43.53	-0.15	72.8	73.9	75.3
7.49	-50.13	-37.16	-43.53	-0.18	72.8	73.7	75
7.49	-50.17	-37.1	-43.53	-0.18	72.7	73.7	75
7.49	-50.13	-37.16	-43.53	-0.18	72.6	73.6	74.7
7.49	-50.17	-37.16	-43.5	-0.15	72.6	73.5	74.7
7.49	-50.13	-37.1	-43.5	-0.18	72.6	73.5	74.5
7.49	-50.17	-37.16	-43.53	-0.18	72.6	73.5	74.4
7.49	-50.17	-37.16	-43.5	-0.18	72.6	73.4	74.2
7.49	-50.13	-37.16	-43.5	-0.18	72.6	73.4	74.2
7.49	-50.13	-37.16	-43.5	-0.18	72.4	73.4	74
7.49	-50.13	-37.1	-43.5	-0.18	72.4	73.4	73.8
7.48	-50.13	-37.1	-43.5	-0.15	72.4	73.4	73.7
7.49	-50.13	-37.1	-43.5	-0.18	72.4	73.4	73.6
7.49	-50.13	-37.1	-43.5	-0.18	72.4	73.3	73.5
7.49	-50.13	-37.1	-43.5	-0.18	72.3	73.3	73.4

7.49	-50.13	-37.1	-43.47	-0.18	72.3	73.3	73.2
7.49	-50.13	-37.1	-43.47	-0.18	72.3	73.1	73.3
7.49	-50.13	-37.05	-43.47	-0.18	72.3	73.1	73.2
7.48	-50.08	-37.05	-43.47	-0.18	72.3	73.1	72.9
7.48	-50.08	-37.1	-43.47	-0.18	72.2	73	73.1
7.47	-50.08	-37.1	-43.47	-0.18	72.2	72.9	72.9
7.47	-50.08	-37.1	-43.47	-0.18	72.2	72.9	72.7
7.48	-50.08	-37.1	-43.41	-0.18	72.2	72.9	72.6
7.48	-50.08	-37.05	-43.47	-0.18	72.1	72.8	72.5
7.48	-50.08	-37.1	-43.41	-0.15	72	72.8	72.3
7.48	-50.08	-37.05	-43.41	-0.15	72	72.7	72.4
7.47	-50.08	-37.05	-43.41	-0.15	72	72.7	72.3
7.47	-50.04	-37.05	-43.41	-0.18	72	72.7	72
7.48	-50.08	-37.05	-43.41	-0.21	71.9	72.6	72.1
7.48	-50.08	-37.05	-43.41	-0.18	71.9	72.6	72
7.48	-50.04	-37.1	-43.38	-0.18	71.8	72.5	71.6
7.47	-50.04	-37.05	-43.41	-0.18	71.8	72.5	71.6
7.48	-50.04	-37.05	-43.41	-0.18	71.8	72.5	71.5
7.48	-50.04	-37.05	-43.41	-0.18	71.6	72.4	71.5
7.47	-50.04	-37.05	-43.38	-0.18	71.6	72.3	71.2
7.48	-50.04	-37.05	-43.38	-0.18	71.5	72.3	71.2
7.47	-50.04	-37.05	-43.38	-0.18	71.5	72.3	71.2
7.48	-50.04	-37.05	-43.38	-0.18	71.5	72.3	71
7.48	-50.04	-37	-43.38	-0.18	71.4	72.3	70.9
7.47	-50.04	-37.05	-43.38	-0.18	71.4	72.3	71
7.48	-50.04	-37	-43.38	-0.18	71.4	72.2	70.9
7.48	-50.04	-37	-43.38	-0.18	71.3	72.2	70.5
7.47	-50.04	-37	-43.38	-0.15	71.3	72.1	70.7
7.47	-50.04	-37.05	-43.38	-0.21	71.3	72.1	70.5
7.48	-50.04	-37.05	-43.35	-0.18	71.3	72.1	70.5
7.47	-50.04	-37.05	-43.38	-0.18	71.3	72.1	70.4
7.48	-50.04	-37	-43.38	-0.18	71.2	72.1	70.4
7.47	-49.99	-37	-43.35	-0.18	71.2	72	70.5
7.47	-50.04	-37	-43.35	-0.18	71.2	72	70.6
7.47	-49.99	-37	-43.35	-0.18	71.2	72	70.4
7.48	-50.04	-37.05	-43.35	-0.18	71.2	72	70.4
7.47	-50.04	-37	-43.35	-0.18	71.2	72	70.5
7.47	-50.04	-37	-43.35	-0.18	71.2	72	70.6
7.47	-50.04	-37	-43.35	-0.18	71.1	72	71
7.48	-49.99	-37	-43.35	-0.18	71.2	72	70.9
7.47	-49.99	-37	-43.35	-0.18	71.2	72.1	71.1
7.48	-49.99	-37	-43.35	-0.18	71.2	72.1	71.2
7.47	-49.99	-37	-43.35	-0.18	71.2	72.1	71.3
7.48	-49.99	-37	-43.35	-0.18	71.2	72.1	71.6
7.47	-50.04	-37	-43.35	-0.18	71.2	72.1	71.7
7.48	-49.99	-36.95	-43.32	-0.18	71.2	72.2	72.2
7.48	-49.99	-37	-43.35	-0.18	71.2	72.2	72.2

7.47	-49.99	-37	-43.35	-0.18	71.2	72.2	72.6
7.48	-49.99	-37	-43.32	-0.18	71.2	72.3	72.9
7.47	-49.99	-36.95	-43.32	-0.18	71.2	72.3	73.1
7.48	-49.99	-37	-43.35	-0.18	71.2	72.3	73.4
7.47	-49.99	-37	-43.32	-0.18	71.2	72.3	73.6
7.47	-49.99	-37	-43.32	-0.18	71.2	72.4	74
7.48	-49.99	-37	-43.32	-0.15	71.2	72.4	74.1
7.48	-49.99	-37	-43.32	-0.18	71.3	72.5	74.5
7.48	-49.99	-36.95	-43.32	-0.18	71.3	72.6	74.6
7.48	-49.99	-36.95	-43.32	-0.18	71.3	72.6	75.1
7.48	-49.99	-36.95	-43.32	-0.18	71.3	72.7	75.3
7.48	-49.99	-37	-43.32	-0.18	71.4	72.7	75.5
7.47	-49.95	-37	-43.29	-0.18	71.4	72.8	76.1
7.47	-49.95	-36.95	-43.32	-0.18	71.5	72.8	76.2
7.48	-49.95	-36.95	-43.29	-0.18	71.5	72.9	76.6
7.48	-49.99	-36.95	-43.29	-0.18	71.5	73	76.9
7.48	-49.95	-36.95	-43.29	-0.18	71.5	73.1	77.3
7.48	-49.95	-36.95	-43.29	-0.18	71.6	73.1	77.4
7.48	-49.95	-36.95	-43.29	-0.18	71.8	73.2	77.7
7.48	-49.95	-36.95	-43.29	-0.15	71.8	73.3	77.9
7.48	-49.95	-36.95	-43.26	-0.18	71.8	73.3	78.5
7.48	-49.9	-36.95	-43.26	-0.18	71.8	73.4	78.8
7.48	-49.95	-36.9	-43.26	-0.18	71.9	73.4	78.9
7.48	-49.95	-36.9	-43.29	-0.18	72	73.4	79.1
7.48	-49.95	-36.95	-43.26	-0.18	72	73.5	79.3
7.48	-49.95	-36.9	-43.26	-0.18	72.1	73.5	79.5
7.48	-49.9	-36.9	-43.26	-0.18	72.1	73.6	79.6
7.48	-49.95	-36.9	-43.26	-0.18	72.1	73.7	79.7
7.47	-49.9	-36.9	-43.26	-0.18	72.1	73.9	80.1
7.48	-49.9	-36.9	-43.23	-0.18	72.2	73.9	80.3
7.47	-49.9	-36.84	-43.23	-0.18	72.2	73.9	80.5
7.47	-49.9	-36.84	-43.23	-0.18	72.3	74	80.4
7.48	-49.9	-36.9	-43.23	-0.18	72.3	74.1	80.6
7.47	-49.9	-36.9	-43.23	-0.18	72.3	74.1	80.6
7.48	-49.9	-36.84	-43.23	-0.18	72.3	74.2	80.6
7.47	-49.9	-36.9	-43.23	-0.18	72.3	74.1	80.5
7.48	-49.9	-36.9	-43.23	-0.18	72.3	74.2	80.6
7.48	-49.9	-36.9	-43.23	-0.18	72.3	74.3	80.5
7.48	-49.85	-36.84	-43.23	-0.18	72.4	74.3	80.7
7.48	-49.9	-36.84	-43.23	-0.18	72.5	74.4	80.5
7.49	-49.85	-36.84	-43.23	-0.18	72.6	74.3	80.6
7.49	-49.9	-36.9	-43.26	-0.18	72.5	74.4	80.6
7.48	-49.9	-36.84	-43.23	-0.18	72.6	74.4	80.6
7.49	-49.85	-36.9	-43.26	-0.18	72.6	74.5	80.6
7.49	-49.85	-36.84	-43.26	-0.18	72.6	74.5	80.6
7.49	-49.85	-36.84	-43.26	-0.18	72.7	74.5	80.6
7.49	-49.85	-36.84	-43.26	-0.15	72.7	74.5	80.6

7.49	-49.85	-36.84	-43.26	-0.18	72.7	74.5	80.5
7.49	-49.9	-36.84	-43.23	-0.18	72.7	74.5	80.5
7.49	-49.85	-36.84	-43.23	-0.18	72.7	74.5	80.6
7.49	-49.85	-36.84	-43.23	-0.18	72.7	74.5	80.6
7.49	-49.85	-36.84	-43.23	-0.18	72.7	74.5	80.4
7.49	-49.85	-36.84	-43.23	-0.18	72.8	74.5	80.5
7.49	-49.85	-36.84	-43.23	-0.18	72.7	74.5	80.5
7.49	-49.85	-36.79	-43.23	-0.18	72.9	74.5	80.5
7.49	-49.85	-36.79	-43.23	-0.18	72.8	74.5	80.4
7.49	-49.85	-36.79	-43.2	-0.18	72.8	74.5	80.3
7.49	-49.85	-36.84	-43.23	-0.18	72.8	74.6	80.1
7.49	-49.85	-36.79	-43.2	-0.18	72.9	74.6	79.9
7.49	-49.85	-36.79	-43.2	-0.18	72.8	74.5	79.9
7.48	-49.81	-36.79	-43.2	-0.18	72.9	74.5	79.9
7.47	-49.81	-36.79	-43.2	-0.18	72.9	74.5	79.6
7.48	-49.85	-36.79	-43.2	-0.18	73	74.5	79.7
7.48	-49.81	-36.74	-43.2	-0.18	73	74.5	79.4
7.47	-49.81	-36.79	-43.2	-0.18	73	74.5	79.2
7.48	-49.85	-36.79	-43.2	-0.18	73	74.5	79.1
7.47	-49.85	-36.79	-43.2	-0.18	73.1	74.5	78.8
7.48	-49.81	-36.79	-43.2	-0.15	73.1	74.5	78.7
7.47	-49.85	-36.79	-43.2	-0.15	73	74.5	78.5
7.47	-49.81	-36.79	-43.2	-0.18	73	74.5	78.3
7.48	-49.81	-36.79	-43.2	-0.18	73	74.4	77.9
7.47	-49.81	-36.79	-43.2	-0.18	72.9	74.4	77.9
7.48	-49.85	-36.79	-43.2	-0.18	73	74.4	77.7
7.48	-49.81	-36.79	-43.2	-0.18	72.9	74.3	77.5
7.48	-49.85	-36.79	-43.2	-0.18	72.9	74.3	77.4
7.48	-49.81	-36.79	-43.2	-0.18	72.9	74.3	77.3
7.48	-49.81	-36.79	-43.2	-0.18	72.9	74.2	77.1
7.48	-49.85	-36.79	-43.2	-0.18	72.9	74.2	76.9
7.47	-49.85	-36.79	-43.2	-0.18	72.9	74.1	76.7
7.47	-49.81	-36.79	-43.17	-0.18	72.9	74.1	76.6
7.48	-49.85	-36.79	-43.17	-0.18	72.8	74.1	76.4
7.47	-49.81	-36.79	-43.17	-0.18	72.9	74	76.4
7.47	-49.81	-36.79	-43.17	-0.18	72.8	74	75.9
7.48	-49.81	-36.79	-43.17	-0.18	72.8	73.9	75.9
7.47	-49.81	-36.79	-43.17	-0.18	72.8	73.9	75.7
7.48	-49.81	-36.79	-43.17	-0.18	72.8	73.7	75.5
7.48	-49.81	-36.74	-43.17	-0.18	72.7	73.7	75.4
7.48	-49.81	-36.79	-43.17	-0.18	72.7	73.6	75.2
7.47	-49.81	-36.79	-43.17	-0.18	72.6	73.6	75.2
7.48	-49.81	-36.79	-43.17	-0.18	72.5	73.5	74.8
7.48	-49.81	-36.79	-43.17	-0.18	72.5	73.4	74.7
7.47	-49.81	-36.79	-43.17	-0.18	72.5	73.4	74.5
7.46	-49.81	-36.79	-43.14	-0.18	72.5	73.4	74.5
7.46	-49.81	-36.79	-43.17	-0.18	72.4	73.4	74.4

7.46	-49.81	-36.79	-43.17	-0.21	72.4	73.3	74.3
7.46	-49.76	-36.79	-43.14	-0.18	72.3	73.2	73.8
7.47	-49.81	-36.79	-43.14	-0.18	72.3	73.2	73.7
7.46	-49.81	-36.79	-43.14	-0.18	72.3	73	73.6
7.46	-49.81	-36.79	-43.14	-0.18	72.3	73	73.4
7.47	-49.81	-36.74	-43.14	-0.18	72.2	73	73.2
7.46	-49.81	-36.79	-43.14	-0.18	72.2	72.9	73.3
7.46	-49.81	-36.79	-43.14	-0.18	72.2	72.9	73
7.46	-49.81	-36.74	-43.14	-0.18	72.2	72.8	72.9
7.46	-49.81	-36.79	-43.14	-0.18	72.1	72.7	72.6
7.47	-49.76	-36.79	-43.14	-0.18	72	72.7	72.4
7.46	-49.81	-36.79	-43.14	-0.18	72	72.7	72.5
7.47	-49.81	-36.79	-43.14	-0.21	72	72.6	72.3
7.47	-49.81	-36.79	-43.14	-0.18	71.9	72.5	72
7.46	-49.81	-36.79	-43.14	-0.18	71.9	72.5	71.7
7.47	-49.81	-36.74	-43.14	-0.18	71.8	72.4	71.5
7.46	-49.76	-36.79	-43.11	-0.18	71.6	72.4	71.7
7.47	-49.81	-36.74	-43.11	-0.18	71.5	72.3	71.4
7.47	-49.76	-36.79	-43.11	-0.18	71.5	72.3	71.3
7.47	-49.81	-36.79	-43.11	-0.21	71.4	72.3	71.2
7.46	-49.76	-36.74	-43.11	-0.18	71.3	72.3	71.3
7.46	-49.76	-36.74	-43.11	-0.18	71.3	72.2	71
7.47	-49.76	-36.74	-43.11	-0.21	71.2	72.2	70.8
7.46	-49.76	-36.74	-43.11	-0.18	71	72.1	70.8
7.46	-49.76	-36.74	-43.11	-0.18	71	72.1	70.5
7.46	-49.76	-36.74	-43.11	-0.18	70.9	72	70.5
7.46	-49.76	-36.74	-43.11	-0.18	70.8	71.9	70.5
7.47	-49.76	-36.74	-43.11	-0.18	70.9	71.9	70.3
7.46	-49.76	-36.74	-43.11	-0.18	70.9	71.8	70.3
7.46	-49.76	-36.74	-43.08	-0.18	70.7	71.8	70.1
7.45	-49.72	-36.74	-43.11	-0.18	70.7	71.7	70
7.45	-49.76	-36.74	-43.08	-0.18	70.6	71.7	70
7.45	-49.76	-36.74	-43.08	-0.18	70.5	71.6	69.8
7.46	-49.76	-36.74	-43.08	-0.18	70.6	71.6	69.9
7.46	-49.76	-36.74	-43.11	-0.18	70.5	71.4	69.6
7.45	-49.76	-36.74	-43.11	-0.18	70.5	71.6	69.5
7.45	-49.72	-36.74	-43.08	-0.18	70.4	71.4	69.6
7.45	-49.72	-36.74	-43.08	-0.21	70.3	71.4	69.6
7.46	-49.76	-36.74	-43.08	-0.18	70.5	71.4	69.6
7.46	-49.76	-36.74	-43.08	-0.21	70.5	71.4	69.6
7.45	-49.72	-36.69	-43.05	-0.21	70.6	71.3	69.8
7.46	-49.76	-36.74	-43.05	-0.18	70.6	71.3	69.8
7.46	-49.72	-36.69	-43.05	-0.21	70.6	71.3	70
7.46	-49.76	-36.74	-43.05	-0.21	70.7	71.3	69.9
7.46	-49.72	-36.74	-43.05	-0.21	70.8	71.3	70
7.45	-49.72	-36.74	-43.08	-0.21	70.8	71.3	70.1
7.46	-49.72	-36.74	-43.08	-0.18	70.8	71.3	70.2

7.45	-49.72	-36.74	-43.08	-0.18	70.8	71.3	70.3
7.46	-49.72	-36.74	-43.05	-0.18	70.7	71.4	70.5
7.46	-49.72	-36.74	-43.05	-0.18	70.4	71.7	70.7
7.46	-49.72	-36.69	-43.05	-0.21	70.6	72	70.8
7.45	-49.72	-36.69	-43.05	-0.21	70.7	71.6	71.2
7.46	-49.72	-36.69	-43.05	-0.21	70.8	71.4	71.3
7.46	-49.72	-36.74	-43.05	-0.21	70.9	71.8	71.4
7.46	-49.72	-36.69	-43.05	-0.21	70.9	71.7	71.7
7.46	-49.72	-36.74	-43.02	-0.21	70.8	71.7	72
7.45	-49.67	-36.69	-43.05	-0.21	71	71.7	72.4
7.46	-49.67	-36.69	-43.05	-0.21	71	71.8	72.6
7.45	-49.72	-36.69	-43.02	-0.24	71.1	71.8	72.8
7.46	-49.67	-36.69	-43.02	-0.21	71	71.8	73.2
7.46	-49.67	-36.69	-43.02	-0.21	71	71.9	73.4
7.46	-49.67	-36.69	-43.02	-0.21	71	71.9	73.4
7.46	-49.67	-36.69	-43.02	-0.21	71	72	73.7
7.46	-49.67	-36.69	-43.02	-0.21	71	72	74.2
7.46	-49.67	-36.69	-42.99	-0.21	71	72	74.5
7.45	-49.67	-36.69	-42.99	-0.21	71.1	72	74.6
7.46	-49.67	-36.64	-43.02	-0.24	71.1	72.2	74.7
7.46	-49.67	-36.64	-42.99	-0.21	71	72.2	75.3
7.46	-49.67	-36.64	-42.99	-0.24	71.1	72.2	75.5
7.46	-49.67	-36.64	-42.99	-0.21	71	72.3	75.7
7.46	-49.67	-36.64	-42.95	-0.21	71.1	72.3	76.1
7.46	-49.67	-36.64	-42.95	-0.24	71	72.3	76.4
7.46	-49.62	-36.64	-42.95	-0.21	71.1	72.3	76.6
7.46	-49.67	-36.64	-42.95	-0.24	71	72.3	76.8
7.46	-49.62	-36.64	-42.95	-0.24	71	72.4	77.2
7.45	-49.67	-36.64	-42.95	-0.24	71.1	72.4	77.3
7.46	-49.62	-36.58	-42.95	-0.24	71.1	72.5	77.5
7.46	-49.67	-36.64	-42.95	-0.24	71.2	72.5	77.8
7.46	-49.62	-36.64	-42.92	-0.24	71.2	72.6	78.2
7.46	-49.62	-36.64	-42.92	-0.24	71.2	72.6	78.3
7.46	-49.62	-36.64	-42.92	-0.21	71.2	72.6	78.5
7.46	-49.62	-36.64	-42.92	-0.24	71.2	72.7	78.8
7.46	-49.62	-36.58	-42.89	-0.24	71.2	72.7	79
7.47	-49.58	-36.58	-42.89	-0.24	71.3	72.7	78.9
7.46	-49.58	-36.58	-42.92	-0.24	71.3	72.7	79.1
7.46	-49.62	-36.64	-42.89	-0.24	71.4	72.8	79.1
7.47	-49.58	-36.58	-42.89	-0.27	71.4	72.9	79.4
7.46	-49.58	-36.58	-42.89	-0.24	71.4	72.9	79.5
7.47	-49.58	-36.58	-42.89	-0.24	71.4	72.8	79.6
7.46	-49.58	-36.58	-42.89	-0.24	71.4	72.9	79.7
7.46	-49.53	-36.58	-42.89	-0.24	71.5	72.9	79.8
7.47	-49.58	-36.58	-42.89	-0.24	71.5	73	79.8
7.47	-49.58	-36.58	-42.92	-0.24	71.5	72.9	79.9
7.47	-49.58	-36.58	-42.92	-0.24	71.5	73	79.9

7.47	-49.58	-36.48	-42.92	-0.24	71.6	73	80
7.46	-49.58	-36.48	-42.92	-0.24	71.6	73	79.8
7.46	-49.58	-36.48	-42.89	-0.24	71.6	73	79.9
7.46	-49.58	-36.58	-42.92	-0.27	71.6	73	79.9
7.47	-49.58	-36.48	-42.92	-0.24	71.6	73	79.9
7.47	-49.53	-36.48	-42.92	-0.27	71.8	73	79.9
7.47	-49.58	-36.43	-42.92	-0.27	71.8	73	79.8
7.47	-49.53	-36.48	-42.92	-0.27	71.8	73.1	79.6
7.46	-49.53	-36.48	-42.92	-0.24	71.9	73.1	79.8
7.46	-49.53	-36.48	-42.92	-0.27	71.9	73.1	79.6
7.47	-49.53	-36.43	-42.89	-0.24	71.9	73.1	79.4
7.46	-49.53	-36.43	-42.92	-0.24	71.9	73.1	79.3
7.47	-49.53	-36.43	-42.89	-0.27	72	73.1	79.1
7.47	-49.53	-36.43	-42.89	-0.27	71.9	73.1	79
7.46	-49.53	-36.43	-42.89	-0.24	72	73	79
7.46	-49.53	-36.43	-42.89	-0.24	72	73.1	78.9
7.46	-49.53	-36.43	-42.89	-0.27	72	73.1	78.7
7.45	-49.53	-36.43	-42.89	-0.27	72	73.1	78.7
7.46	-49.53	-36.43	-42.86	-0.24	72	73	78.3
7.46	-49.44	-36.43	-42.86	-0.27	72	73	78.3
7.45	-49.53	-36.43	-42.86	-0.27	72	73	78
7.46	-49.53	-36.43	-42.86	-0.27	72	73	77.7
7.46	-49.44	-36.43	-42.86	-0.27	72	72.9	77.7
7.46	-49.44	-36.43	-42.86	-0.27	72	72.9	77.4
7.46	-49.44	-36.43	-42.86	-0.27	72	72.9	77.1
7.45	-49.53	-36.43	-42.86	-0.27	72	72.9	77
7.46	-49.53	-36.43	-42.86	-0.27	72	72.8	76.7
7.45	-49.53	-36.43	-42.86	-0.27	72	72.8	76.6
7.46	-49.44	-36.43	-42.86	-0.24	72	72.8	76.3
7.46	-49.44	-36.43	-42.86	-0.27	72	72.8	75.9
7.46	-49.44	-36.43	-42.86	-0.27	72	72.7	75.7
7.46	-49.44	-36.43	-42.83	-0.27	71.9	72.6	75.5
7.46	-49.44	-36.43	-42.83	-0.27	71.9	72.6	75.3
7.46	-49.44	-36.43	-42.83	-0.27	71.8	72.5	75
7.46	-49.44	-36.43	-42.83	-0.27	71.8	72.5	74.8
7.45	-49.44	-36.43	-42.83	-0.27	71.8	72.4	74.5
7.46	-49.44	-36.43	-42.83	-0.27	71.6	72.4	74.5
7.46	-49.44	-36.43	-42.83	-0.27	71.6	72.3	74.2
7.46	-49.44	-36.43	-42.83	-0.27	71.6	72.3	73.7
7.45	-49.44	-36.43	-42.83	-0.27	71.5	72.3	73.7
7.46	-49.44	-36.43	-42.83	-0.27	71.4	72.3	73.4
7.46	-49.44	-36.43	-42.83	-0.24	71.3	72.3	73.1
7.45	-49.44	-36.43	-42.8	-0.27	71.4	72.2	73
7.44	-49.44	-36.43	-42.83	-0.24	71.3	72.2	72.8
7.44	-49.44	-36.43	-42.83	-0.27	71.3	72.1	72.7
7.44	-49.44	-36.43	-42.8	-0.27	71.2	72.1	72.4
7.44	-49.44	-36.38	-42.83	-0.27	71.2	72	72.3

7.44	-49.44	-36.43	-42.8	-0.27	71.2	72	72
7.44	-49.44	-36.38	-42.8	-0.27	71.2	71.8	71.7
7.44	-49.44	-36.38	-42.8	-0.24	71.1	71.8	71.6
7.44	-49.4	-36.43	-42.77	-0.24	71.1	71.8	71.4
7.44	-49.44	-36.38	-42.8	-0.24	71	71.7	71.2
7.44	-49.4	-36.38	-42.77	-0.27	71	71.6	71.2
7.44	-49.4	-36.38	-42.8	-0.24	70.7	71.6	71
7.44	-49.4	-36.38	-42.8	-0.24	70.7	71.6	70.8
7.44	-49.4	-36.38	-42.77	-0.24	70.6	71.4	70.5
7.44	-49.4	-36.38	-42.77	-0.24	70.4	71.4	70.4
7.44	-49.4	-36.38	-42.77	-0.27	70.4	71.3	70.2
7.44	-49.4	-36.38	-42.77	-0.24	70.3	71.3	70.2
7.44	-49.4	-36.38	-42.77	-0.24	70.4	71.2	70.1
7.44	-49.4	-36.38	-42.77	-0.27	70.4	71.2	70.1
7.44	-49.4	-36.38	-42.77	-0.24	70.2	71.2	69.9
7.44	-49.35	-36.38	-42.77	-0.24	70.2	71.2	69.8
7.44	-49.4	-36.38	-42.77	-0.24	70.2	71.2	69.4
7.44	-49.4	-36.38	-42.77	-0.24	70.1	71.1	69.5
7.44	-49.4	-36.32	-42.74	-0.24	70.1	71.1	69.3
7.44	-49.4	-36.38	-42.77	-0.24	70.1	71.1	69
7.44	-49.4	-36.38	-42.74	-0.24	70.1	71	69.1
7.44	-49.4	-36.32	-42.74	-0.24	70.1	71	69
7.44	-49.4	-36.38	-42.74	-0.27	70.1	70.9	68.7
7.44	-49.35	-36.32	-42.74	-0.24	70.1	70.9	68.7
7.44	-49.35	-36.38	-42.74	-0.24	70.1	70.8	68.7
7.44	-49.35	-36.38	-42.74	-0.24	70.1	70.8	68.6
7.44	-49.35	-36.32	-42.71	-0.24	70.2	70.8	68.4
7.44	-49.35	-36.32	-42.74	-0.27	70.2	70.8	68.3
7.44	-49.35	-36.38	-42.71	-0.24	70.1	70.8	68.2
7.44	-49.35	-36.32	-42.74	-0.24	70.1	70.7	68.2
7.44	-49.35	-36.32	-42.71	-0.24	70.1	70.7	68.2
7.44	-49.35	-36.32	-42.71	-0.24	70.1	70.6	68
7.44	-49.35	-36.32	-42.71	-0.24	70.1	70.6	67.9
7.44	-49.35	-36.32	-42.71	-0.24	70.1	70.6	68.1
7.44	-49.35	-36.32	-42.71	-0.24	70.1	70.7	67.9
7.44	-49.35	-36.32	-42.71	-0.24	70.1	70.7	67.7
7.44	-49.35	-36.32	-42.65	-0.24	70	70.6	67.9
7.44	-49.35	-36.32	-42.71	-0.24	70	70.6	67.8
7.44	-49.35	-36.32	-42.65	-0.24	70.1	70.6	67.8
7.44	-49.35	-36.32	-42.65	-0.24	70	70.6	67.9
7.44	-49.35	-36.32	-42.65	-0.24	70	70.7	67.9
7.44	-49.35	-36.32	-42.65	-0.24	70	70.6	68.1
7.44	-49.3	-36.32	-42.65	-0.24	70	70.6	68.3
7.43	-49.3	-36.27	-42.65	-0.24	70.1	70.6	68.2
7.44	-49.3	-36.27	-42.62	-0.24	70.1	70.6	68.4
7.44	-49.3	-36.32	-42.65	-0.24	70.1	70.6	68.8
7.44	-49.3	-36.27	-42.65	-0.24	70.1	70.6	68.8

7.44	-49.3	-36.32	-42.62	-0.21	70.2	70.7	69
7.44	-49.3	-36.32	-42.62	-0.24	70.1	70.7	69.2
7.44	-49.3	-36.27	-42.62	-0.21	70.1	70.7	69.5
7.44	-49.3	-36.32	-42.62	-0.21	70.1	70.8	69.9
7.44	-49.3	-36.32	-42.62	-0.24	70.2	70.9	70.3
7.44	-49.3	-36.32	-42.62	-0.24	70.1	71	70.5
7.44	-49.3	-36.27	-42.62	-0.21	70.1	71	71
7.43	-49.3	-36.27	-42.62	-0.24	70.1	71.1	71.1
7.44	-49.3	-36.27	-42.62	-0.24	70.1	71.2	71.2
7.44	-49.3	-36.27	-42.59	-0.21	70.1	71.2	71.7
7.44	-49.26	-36.27	-42.59	-0.21	70.1	71.2	72.1
7.44	-49.26	-36.27	-42.59	-0.21	70.2	71.2	72.5
7.44	-49.26	-36.27	-42.59	-0.21	70.2	71.3	72.9
7.44	-49.3	-36.27	-42.62	-0.24	70.2	71.3	73.1
7.44	-49.26	-36.27	-42.59	-0.24	70.2	71.4	73.6
7.44	-49.26	-36.27	-42.59	-0.21	70.3	71.4	74.1
7.44	-49.26	-36.22	-42.59	-0.24	70.4	71.6	74.5
7.44	-49.26	-36.22	-42.59	-0.24	70.3	71.7	74.7
7.44	-49.26	-36.22	-42.56	-0.21	70.4	71.8	75.4
7.44	-49.26	-36.22	-42.56	-0.21	70.4	71.9	75.7
7.44	-49.21	-36.22	-42.56	-0.21	70.6	71.9	76.1
7.44	-49.21	-36.22	-42.56	-0.24	70.6	72	76.5
7.44	-49.21	-36.22	-42.53	-0.21	70.7	72.1	76.6
7.44	-49.26	-36.22	-42.53	-0.21	70.8	72.2	77.1
7.44	-49.21	-36.22	-42.53	-0.24	70.8	72.3	77.3
7.44	-49.21	-36.22	-42.53	-0.21	70.8	72.3	77.4
7.44	-49.21	-36.22	-42.53	-0.21	70.9	72.3	77.7
7.44	-49.26	-36.17	-42.53	-0.21	70.9	72.4	77.9
7.44	-49.21	-36.17	-42.53	-0.21	71	72.4	78
7.44	-49.21	-36.17	-42.53	-0.21	71	72.5	77.9
7.44	-49.21	-36.17	-42.53	-0.21	71.1	72.6	78.5
7.44	-49.21	-36.17	-42.5	-0.18	71.1	72.6	78.4
7.44	-49.21	-36.17	-42.53	-0.21	71.2	72.7	78.4
7.44	-49.21	-36.17	-42.5	-0.21	71.2	72.8	78.5
7.44	-49.21	-36.17	-42.5	-0.21	71.2	72.8	78.5
7.44	-49.21	-36.17	-42.5	-0.21	71.2	72.8	78.6
7.44	-49.17	-36.17	-42.5	-0.21	71.3	72.9	78.6
7.44	-49.17	-36.17	-42.5	-0.21	71.4	73	78.6
7.44	-49.17	-36.17	-42.5	-0.21	71.3	73	78.5
7.44	-49.21	-36.17	-42.5	-0.18	71.4	73	78.3
7.44	-49.17	-36.17	-42.5	-0.21	71.4	73.1	78.3
7.44	-49.17	-36.12	-42.47	-0.18	71.4	73.1	78.4
7.44	-49.21	-36.12	-42.47	-0.21	71.5	73.2	78.4
7.44	-49.21	-36.12	-42.47	-0.18	71.5	73.2	78.3
7.44	-49.17	-36.17	-42.5	-0.18	71.6	73.3	78.3
7.44	-49.17	-36.17	-42.5	-0.18	71.9	73.3	78.3
7.44	-49.17	-36.17	-42.5	-0.21	71.6	73.3	78.2

7.44	-49.17	-36.12	-42.5	-0.18	71.8	73.4	78.3
7.44	-49.17	-36.12	-42.47	-0.18	71.8	73.4	78.4
7.44	-49.17	-36.12	-42.47	-0.18	71.8	73.4	78.4
7.44	-49.12	-36.07	-42.5	-0.18	71.9	73.4	78.4
7.44	-49.17	-36.12	-42.47	-0.18	71.8	73.4	78.6
7.44	-49.17	-36.12	-42.47	-0.18	71.8	73.4	78.3
7.44	-49.12	-36.12	-42.47	-0.18	71.9	73.4	78.4
7.44	-49.12	-36.07	-42.47	-0.21	71.9	73.5	78.3
7.44	-49.12	-36.07	-42.47	-0.18	72	73.5	78.5
7.44	-49.12	-36.12	-42.47	-0.18	72	73.5	78.2
7.44	-49.12	-36.07	-42.47	-0.18	72.1	73.5	78.2
7.44	-49.12	-36.12	-42.47	-0.18	72.1	73.5	78
7.44	-49.12	-36.07	-42.47	-0.18	72	73.4	77.9
7.44	-49.12	-36.07	-42.47	-0.21	72	73.5	77.8
7.45	-49.12	-36.07	-42.47	-0.18	72.1	73.5	77.7
7.44	-49.12	-36.07	-42.47	-0.18	72.1	73.4	77.5
7.44	-49.12	-36.07	-42.47	-0.18	72.1	73.4	77.6
7.44	-49.12	-36.12	-42.47	-0.18	72	73.4	77.4
7.44	-49.12	-36.07	-42.47	-0.21	72.1	73.4	77.3
7.44	-49.12	-36.07	-42.47	-0.18	72.1	73.4	77.1
7.44	-49.12	-36.07	-42.44	-0.18	72.2	73.4	76.9
7.44	-49.12	-36.07	-42.44	-0.21	72.2	73.4	77
7.44	-49.12	-36.12	-42.44	-0.18	72.2	73.4	76.9
7.44	-49.12	-36.12	-42.44	-0.18	72.2	73.4	76.6
7.44	-49.12	-36.07	-42.44	-0.18	72.2	73.4	76.5
7.44	-49.12	-36.07	-42.44	-0.18	72.2	73.4	76.5
7.44	-49.12	-36.07	-42.44	-0.18	72.2	73.4	76.1
7.44	-49.12	-36.07	-42.44	-0.18	72.1	73.4	76.3
7.44	-49.12	-36.07	-42.44	-0.21	72.2	73.3	75.9
7.44	-49.12	-36.07	-42.44	-0.21	72.1	73.3	75.7
7.44	-49.12	-36.07	-42.44	-0.18	72.1	73.4	75.5
7.44	-49.12	-36.07	-42.44	-0.18	72.1	73.3	75.4
7.44	-49.08	-36.07	-42.44	-0.18	72.1	73.3	75.5
7.44	-49.12	-36.07	-42.44	-0.18	72.1	73.3	75.2
7.44	-49.08	-36.12	-42.44	-0.18	72	73.2	75.3
7.44	-49.12	-36.07	-42.44	-0.18	71.9	73.2	74.9
7.44	-49.12	-36.07	-42.41	-0.18	71.9	73.2	74.9
7.44	-49.08	-36.07	-42.41	-0.21	71.8	73.1	74.8
7.44	-49.12	-36.01	-42.41	-0.18	71.9	73.1	74.5
7.44	-49.08	-36.07	-42.44	-0.18	71.9	73	74.5
7.43	-49.08	-36.07	-42.41	-0.18	71.9	73.1	74.4
7.43	-49.08	-36.07	-42.41	-0.18	71.9	73	74.4
7.44	-49.08	-36.01	-42.37	-0.18	71.8	73	74.2
7.43	-49.08	-36.01	-42.41	-0.18	71.9	72.9	74
7.44	-49.08	-36.07	-42.37	-0.18	71.9	72.9	74
7.44	-49.08	-36.07	-42.37	-0.21	71.9	72.8	73.6
7.44	-49.08	-36.01	-42.37	-0.21	71.9	72.8	73.8

7.43	-49.08	-36.01	-42.37	-0.21	71.8	72.7	73.5
7.43	-49.08	-36.01	-42.37	-0.21	71.8	72.7	73.5
7.44	-49.08	-36.01	-42.37	-0.21	71.6	72.6	73.3
7.44	-49.08	-36.01	-42.37	-0.18	71.6	72.7	73.2
7.44	-49.08	-36.01	-42.37	-0.18	71.6	72.6	73
7.44	-49.03	-36.01	-42.37	-0.18	71.5	72.6	73.1
7.44	-49.08	-36.01	-42.37	-0.18	71.5	72.5	73
7.44	-49.08	-36.01	-42.37	-0.21	71.5	72.5	72.8
7.43	-49.08	-36.01	-42.34	-0.21	71.4	72.4	72.7
7.44	-49.08	-36.01	-42.37	-0.18	71.4	72.4	72.6
7.44	-49.08	-36.01	-42.34	-0.21	71.4	72.3	72.5
7.44	-49.08	-35.96	-42.34	-0.21	71.3	72.3	72.3
7.44	-49.03	-35.96	-42.34	-0.21	71.4	72.3	72.3
7.44	-49.03	-35.96	-42.34	-0.21	71.3	72.3	72.1
7.44	-49.03	-36.01	-42.31	-0.21	71.3	72.3	72.2
7.44	-49.03	-35.96	-42.34	-0.21	71.2	72.3	72.1
7.43	-49.03	-36.01	-42.31	-0.21	71.3	72.2	71.7
7.44	-49.03	-36.01	-42.34	-0.21	71.2	72.2	71.7
7.44	-49.03	-36.01	-42.34	-0.21	71.2	72.2	71.6
7.44	-49.03	-35.96	-42.31	-0.21	71.2	72.2	71.6
7.44	-49.03	-35.96	-42.31	-0.21	71.2	72.2	71.3
7.44	-49.03	-35.96	-42.31	-0.21	71.2	72.2	71.3
7.44	-49.03	-35.96	-42.31	-0.18	71.2	72.2	71.2
7.44	-49.03	-35.96	-42.31	-0.18	71.2	72.1	71.2
7.44	-49.03	-35.96	-42.31	-0.21	71.2	72.1	71.2
7.44	-49.03	-35.96	-42.31	-0.18	71.2	72.1	71.1
7.44	-49.03	-35.96	-42.31	-0.18	71.1	72	71.2
7.44	-49.03	-35.96	-42.28	-0.18	71.1	72	71
7.44	-49.03	-36.01	-42.31	-0.21	71.1	72	70.9
7.43	-49.03	-35.96	-42.31	-0.21	71.1	72	70.9
7.44	-48.98	-35.96	-42.31	-0.21	71.1	72	70.7
7.44	-49.03	-35.96	-42.28	-0.18	71	72	70.9
7.44	-49.03	-35.96	-42.31	-0.21	71	71.9	70.7
7.43	-49.03	-35.96	-42.31	-0.21	71	71.9	70.7
7.44	-49.03	-35.96	-42.28	-0.21	71	71.9	70.7
7.44	-48.98	-35.96	-42.28	-0.18	71	71.9	70.7
7.44	-49.03	-35.96	-42.28	-0.21	71	71.9	70.5
7.44	-48.98	-35.96	-42.28	-0.21	71	71.9	70.7
7.43	-49.03	-35.96	-42.28	-0.18	70.9	71.8	70.7
7.43	-48.98	-35.96	-42.28	-0.18	70.9	71.8	70.6
7.43	-48.98	-35.96	-42.28	-0.21	70.9	71.8	70.6
7.43	-49.03	-35.96	-42.28	-0.18	70.9	71.8	70.5
7.43	-49.03	-35.96	-42.28	-0.21	70.9	71.8	70.3
7.43	-48.98	-35.96	-42.28	-0.18	70.8	71.8	70.5

7.42	-48.98	-35.96	-42.28	-0.18	70.8	71.8	70.5
7.43	-48.98	-35.91	-42.28	-0.21	70.8	71.7	70.6
7.43	-48.98	-35.96	-42.25	-0.18	70.8	71.7	70.6
7.42	-48.98	-35.96	-42.28	-0.18	70.8	71.7	70.8
7.43	-48.98	-35.96	-42.28	-0.18	70.9	71.7	70.7
7.43	-48.98	-35.96	-42.28	-0.21	70.8	71.8	70.9
7.42	-48.98	-35.96	-42.28	-0.21	70.8	71.8	71
7.43	-48.98	-35.96	-42.28	-0.21	70.8	71.7	71.2
7.42	-48.98	-35.91	-42.28	-0.18	70.8	71.8	71.3
7.42	-48.98	-35.91	-42.25	-0.18	70.8	71.8	71.5
7.43	-48.98	-35.91	-42.25	-0.21	70.8	71.8	71.9
7.42	-48.98	-35.96	-42.25	-0.21	70.8	71.9	72.3
7.43	-48.98	-35.91	-42.28	-0.18	70.8	71.9	72.2
7.43	-48.98	-35.91	-42.25	-0.21	70.8	72	72.5
7.42	-48.94	-35.91	-42.25	-0.21	70.8	72	72.7
7.43	-48.94	-35.91	-42.25	-0.18	70.8	72.1	73
7.43	-48.94	-35.91	-42.25	-0.21	70.8	72.1	73.4
7.43	-48.94	-35.91	-42.25	-0.21	70.9	72.2	73.5
7.43	-48.94	-35.91	-42.25	-0.18	70.9	72.2	74.2
7.43	-48.94	-35.91	-42.25	-0.18	70.9	72.3	74.5
7.43	-48.94	-35.91	-42.22	-0.18	70.9	72.3	74.7
7.43	-48.94	-35.96	-42.22	-0.21	70.9	72.3	75.1
7.44	-48.94	-35.91	-42.22	-0.18	71	72.4	75.1
7.44	-48.94	-35.86	-42.22	-0.18	71.1	72.5	75.7
7.44	-48.94	-35.86	-42.22	-0.18	71.1	72.5	75.8
7.44	-48.94	-35.86	-42.22	-0.18	71.1	72.5	76.2
7.44	-48.94	-35.86	-42.22	-0.21	71.2	72.6	76.6
7.44	-48.89	-35.91	-42.22	-0.18	71.2	72.7	76.8
7.44	-48.89	-35.91	-42.19	-0.18	71.2	72.8	77
7.44	-48.89	-35.91	-42.19	-0.18	71.3	72.9	77.4
7.43	-48.89	-35.86	-42.19	-0.18	71.2	72.9	77.7
7.44	-48.89	-35.91	-42.19	-0.18	71.3	73	78
7.43	-48.89	-35.86	-42.19	-0.18	71.3	73	78.4
7.44	-48.89	-35.86	-42.16	-0.18	71.3	73.1	78.7
7.44	-48.89	-35.86	-42.16	-0.21	71.4	73.2	78.8
7.44	-48.89	-35.86	-42.19	-0.18	71.6	73.3	79.2

7.44	-48.89	-35.86	-42.16	-0.18	71.8	73.4	79.4
7.43	-48.89	-35.86	-42.16	-0.18	71.6	73.4	79.9
7.44	-48.85	-35.86	-42.16	-0.18	71.8	73.5	80.3
7.44	-48.85	-35.81	-42.13	-0.18	71.6	73.5	80.4
7.44	-48.85	-35.81	-42.13	-0.18	71.8	73.6	80.7
7.44	-48.85	-35.81	-42.13	-0.15	71.9	73.7	80.8
7.43	-48.85	-35.81	-42.13	-0.15	72	73.9	81.1
7.44	-48.85	-35.81	-42.13	-0.18	72.1	74	81.4
7.44	-48.85	-35.81	-42.1	-0.18	72.1	74	81.5
7.44	-48.85	-35.81	-42.13	-0.18	72.2	74.1	81.6
7.44	-48.85	-35.75	-42.13	-0.18	72.2	74.2	82
7.44	-48.8	-35.81	-42.13	-0.18	72.3	74.2	82.1
7.44	-48.8	-35.75	-42.1	-0.18	72.3	74.3	82.2
7.44	-48.8	-35.75	-42.13	-0.18	72.3	74.3	82.1
7.44	-48.8	-35.75	-42.1	-0.18	72.4	74.3	82.1
7.44	-48.85	-35.75	-42.1	-0.18	72.4	74.3	82.2
7.44	-48.8	-35.75	-42.1	-0.18	72.3	74.2	82.1
7.44	-48.8	-35.75	-42.1	-0.18	72.4	74.2	81.9
7.44	-48.8	-35.75	-42.1	-0.18	72.5	74.2	81.6
7.44	-48.8	-35.75	-42.1	-0.18	72.4	74.3	81.3
7.44	-48.8	-35.7	-42.1	-0.18	72.6	74.3	81.1
7.44	-48.8	-35.75	-42.1	-0.21	72.7	74.2	81
7.44	-48.8	-35.75	-42.1	-0.18	72.6	74.3	80.9
7.44	-48.8	-35.75	-42.07	-0.18	72.7	74.2	80.4
7.43	-48.8	-35.75	-42.1	-0.18	72.7	74.2	80.3
7.44	-48.8	-35.75	-42.1	-0.18	72.6	74.2	79.9
7.44	-48.8	-35.75	-42.1	-0.18	72.8	74.1	79.8
7.44	-48.8	-35.75	-42.07	-0.18	72.7	74.1	79.4
7.44	-48.75	-35.75	-42.07	-0.18	72.7	74.1	79.3
7.44	-48.8	-35.7	-42.07	-0.18	72.6	74.1	79.1
7.43	-48.8	-35.7	-42.07	-0.18	72.6	74	79.1
7.44	-48.8	-35.75	-42.07	-0.18	72.6	74	78.7
7.44	-48.75	-35.7	-42.04	-0.15	72.5	74	78.4
7.44	-48.75	-35.7	-42.04	-0.18	72.5	74	78.2
7.44	-48.75	-35.7	-42.04	-0.18	72.4	73.9	78
7.43	-48.75	-35.7	-42.04	-0.21	72.4	73.9	77.7
7.44	-48.75	-35.7	-42.07	-0.18	72.5	73.9	77.7
7.44	-48.75	-35.75	-42.04	-0.21	72.5	73.9	77.4
7.44	-48.75	-35.7	-42.04	-0.18	72.5	73.9	77.2
7.44	-48.75	-35.7	-42.04	-0.18	72.5	73.7	77
7.44	-48.75	-35.7	-42.04	-0.18	72.5	73.7	76.7
7.44	-48.75	-35.7	-42.04	-0.21	72.5	73.6	76.6
7.44	-48.75	-35.7	-42.04	-0.18	72.4	73.6	76.6
7.44	-48.75	-35.7	-42.04	-0.18	72.4	73.6	76.4
7.44	-48.75	-35.7	-42.04	-0.18	72.4	73.5	76.3
7.43	-48.75	-35.7	-42.01	-0.18	72.4	73.5	75.9
7.44	-48.75	-35.7	-42.04	-0.18	72.4	73.5	75.8

7.44	-48.75	-35.7	-42.01	-0.18	72.3	73.4	75.5
7.44	-48.71	-35.7	-42.01	-0.18	72.3	73.4	75.5
7.44	-48.71	-35.65	-42.01	-0.18	72.3	73.4	75.2
7.43	-48.75	-35.65	-42.01	-0.21	72.3	73.4	75.4
7.43	-48.71	-35.65	-42.01	-0.18	72.3	73.4	75.1
7.43	-48.71	-35.7	-42.01	-0.21	72.3	73.4	75
7.43	-48.71	-35.65	-42.01	-0.18	72.3	73.4	74.8
7.43	-48.71	-35.7	-41.98	-0.21	72.3	73.3	74.8
7.43	-48.71	-35.7	-42.01	-0.18	72.2	73.3	74.7
7.43	-48.71	-35.65	-42.01	-0.21	72.2	73.3	74.5
7.42	-48.71	-35.7	-42.01	-0.21	72.2	73.2	74.5
7.42	-48.71	-35.65	-41.98	-0.18	72.2	73.2	74.4
7.43	-48.71	-35.65	-42.01	-0.21	72.2	73.2	74.3
7.43	-48.66	-35.65	-41.98	-0.18	72.2	73.2	74.1
7.43	-48.71	-35.65	-41.98	-0.18	72.1	73.1	73.8
7.43	-48.71	-35.65	-41.98	-0.18	72.1	73.1	74
7.43	-48.71	-35.65	-41.98	-0.18	72	73.1	73.8
7.43	-48.71	-35.65	-41.98	-0.21	72.1	73	73.7
7.43	-48.71	-35.6	-41.95	-0.18	72	73	73.5
7.43	-48.66	-35.6	-41.95	-0.18	72	73	73.5
7.43	-48.66	-35.65	-41.95	-0.18	72	73	73.4
7.43	-48.66	-35.6	-41.95	-0.18	71.8	72.9	73.4
7.43	-48.66	-35.6	-41.95	-0.18	71.8	72.9	73.2
7.43	-48.71	-35.65	-41.95	-0.18	71.8	72.9	73.1
7.43	-48.66	-35.65	-41.95	-0.18	71.8	72.9	73
7.43	-48.66	-35.6	-41.92	-0.21	71.8	72.8	73.1
7.43	-48.66	-35.6	-41.95	-0.18	71.8	72.8	73.1
7.43	-48.66	-35.6	-41.92	-0.18	71.8	72.7	72.9
7.43	-48.66	-35.6	-41.92	-0.18	71.8	72.7	73
7.43	-48.66	-35.6	-41.92	-0.18	71.6	72.7	73
7.43	-48.66	-35.6	-41.92	-0.18	71.6	72.7	72.6
7.43	-48.66	-35.6	-41.92	-0.18	71.6	72.7	72.5
7.43	-48.66	-35.6	-41.92	-0.18	71.6	72.6	72.6
7.43	-48.66	-35.55	-41.92	-0.18	71.5	72.6	72.5
7.43	-48.66	-35.6	-41.92	-0.18	71.6	72.6	72.5
7.43	-48.66	-35.6	-41.86	-0.21	71.5	72.6	72.6
7.43	-48.62	-35.6	-41.86	-0.21	71.5	72.6	72.3
7.43	-48.66	-35.55	-41.86	-0.18	71.5	72.5	72.3
7.42	-48.62	-35.6	-41.86	-0.18	71.5	72.5	72.4
7.42	-48.62	-35.55	-41.86	-0.18	71.5	72.5	72.2
7.43	-48.62	-35.55	-41.86	-0.18	71.4	72.5	72.1
7.43	-48.62	-35.55	-41.86	-0.18	71.4	72.4	72.1
7.43	-48.62	-35.6	-41.86	-0.18	71.4	72.4	72.3
7.42	-48.62	-35.55	-41.86	-0.18	71.3	72.4	72.1
7.43	-48.62	-35.6	-41.86	-0.18	71.3	72.4	72.1
7.42	-48.62	-35.55	-41.83	-0.18	71.3	72.4	72
7.43	-48.62	-35.55	-41.86	-0.18	71.3	72.3	71.7

7.42	-48.62	-35.55	-41.83	-0.18	71.3	72.3	71.9
7.42	-48.62	-35.55	-41.83	-0.18	71.3	72.3	71.7
7.43	-48.62	-35.55	-41.83	-0.18	71.2	72.3	71.6
7.43	-48.62	-35.55	-41.83	-0.18	71.3	72.3	71.6
7.43	-48.62	-35.55	-41.83	-0.21	71.2	72.3	71.2
7.43	-48.62	-35.55	-41.83	-0.18	71.3	72.3	71.4
7.43	-48.62	-35.55	-41.83	-0.21	71.2	72.3	71.2
7.43	-48.62	-35.55	-41.79	-0.18	71.2	72.2	71.5
7.43	-48.62	-35.55	-41.83	-0.18	71.2	72.3	71.2
7.43	-48.57	-35.55	-41.83	-0.18	71.2	72.2	71.5
7.42	-48.57	-35.55	-41.79	-0.18	71.2	72.2	71.3
7.42	-48.57	-35.55	-41.79	-0.18	71.2	72.2	71.3
7.41	-48.62	-35.55	-41.79	-0.18	71.2	72.2	71.4
7.41	-48.57	-35.55	-41.79	-0.18	71.2	72.2	71.4
7.41	-48.57	-35.55	-41.79	-0.21	71.1	72.2	71.5
7.41	-48.57	-35.49	-41.79	-0.18	71.1	72.2	71.9
7.41	-48.57	-35.55	-41.79	-0.18	71.1	72.2	72
7.41	-48.57	-35.55	-41.76	-0.18	71.2	72.2	72.2
7.41	-48.57	-35.55	-41.79	-0.18	71.1	72.2	72.3
7.41	-48.57	-35.49	-41.76	-0.21	71.1	72.2	72.3
7.41	-48.57	-35.55	-41.79	-0.18	71.1	72.3	72.5
7.42	-48.57	-35.49	-41.76	-0.21	71.1	72.3	72.9
7.41	-48.57	-35.49	-41.79	-0.21	71.2	72.3	73.1
7.41	-48.57	-35.49	-41.76	-0.18	71.1	72.3	73.2
7.41	-48.57	-35.49	-41.76	-0.18	71.1	72.3	73.5
7.41	-48.57	-35.49	-41.76	-0.18	71.1	72.4	73.7
7.42	-48.53	-35.49	-41.76	-0.18	71.2	72.4	74.1
7.42	-48.53	-35.49	-41.76	-0.18	71.2	72.5	74.3
7.43	-48.53	-35.49	-41.76	-0.21	71.2	72.5	74.7
7.43	-48.53	-35.49	-41.76	-0.18	71.2	72.6	74.8
7.43	-48.53	-35.49	-41.76	-0.18	71.2	72.6	75
7.43	-48.53	-35.49	-41.73	-0.18	71.3	72.6	75.4
7.43	-48.53	-35.49	-41.73	-0.21	71.3	72.7	75.6
7.43	-48.53	-35.49	-41.76	-0.18	71.2	72.8	75.7
7.43	-48.53	-35.49	-41.73	-0.18	71.3	72.9	75.8
7.43	-48.53	-35.49	-41.73	-0.18	71.3	72.9	76.3
7.43	-48.53	-35.44	-41.73	-0.18	71.3	73	76.6
7.43	-48.53	-35.44	-41.73	-0.18	71.4	73.1	76.9
7.43	-48.53	-35.44	-41.73	-0.18	71.4	73.1	77.2
7.43	-48.53	-35.44	-41.73	-0.18	71.5	73.2	77.5
7.43	-48.53	-35.44	-41.7	-0.18	71.5	73.3	77.7
7.43	-48.53	-35.44	-41.7	-0.18	71.6	73.3	78
7.43	-48.48	-35.44	-41.7	-0.18	71.6	73.4	78
7.43	-48.48	-35.44	-41.7	-0.18	71.6	73.4	78.6
7.43	-48.48	-35.44	-41.7	-0.18	71.8	73.4	78.7
7.43	-48.48	-35.44	-41.7	-0.18	71.8	73.5	79.1
7.43	-48.48	-35.39	-41.67	-0.21	71.9	73.6	79.2

7.43	-48.48	-35.44	-41.67	-0.18	71.9	73.6	79.6
7.43	-48.48	-35.44	-41.67	-0.21	72	73.7	79.8
7.43	-48.43	-35.44	-41.64	-0.21	72.1	73.7	79.9
7.42	-48.48	-35.39	-41.64	-0.21	72.1	73.9	80.3
7.43	-48.43	-35.39	-41.64	-0.21	72.1	74	80.5
7.43	-48.43	-35.39	-41.64	-0.18	72.2	74.1	80.5
7.43	-48.43	-35.39	-41.67	-0.21	72.2	74.1	81
7.43	-48.43	-35.39	-41.64	-0.18	72.3	74.2	81
7.43	-48.43	-35.39	-41.64	-0.21	72.3	74.3	81.2
7.43	-48.43	-35.34	-41.64	-0.18	72.3	74.3	81.3
7.43	-48.43	-35.39	-41.67	-0.18	72.3	74.4	81.6
7.43	-48.43	-35.34	-41.67	-0.18	72.3	74.4	81.6
7.43	-48.43	-35.34	-41.67	-0.21	72.3	74.4	81.9
7.43	-48.43	-35.39	-41.67	-0.18	72.3	74.5	81.9
7.43	-48.43	-35.39	-41.67	-0.21	72.3	74.5	82
7.43	-48.39	-35.34	-41.7	-0.18	72.4	74.5	81.9
7.43	-48.39	-35.34	-41.7	-0.21	72.5	74.6	82.1
7.43	-48.43	-35.34	-41.7	-0.18	72.5	74.6	82.1
7.43	-48.39	-35.39	-41.67	-0.18	72.6	74.5	82.2
7.43	-48.39	-35.34	-41.7	-0.21	72.6	74.6	82.2
7.43	-48.43	-35.34	-41.73	-0.21	72.7	74.7	82.1
7.43	-48.39	-35.34	-41.73	-0.21	72.7	74.7	82.4
7.42	-48.43	-35.34	-41.73	-0.21	72.7	74.7	82.2
7.43	-48.39	-35.34	-41.73	-0.21	72.7	74.8	82.2
7.42	-48.39	-35.34	-41.73	-0.21	72.7	74.8	82.1
7.43	-48.43	-35.34	-41.76	-0.21	72.8	74.8	82.1
7.43	-48.43	-35.34	-41.76	-0.18	72.8	74.8	82.2
7.43	-48.39	-35.34	-41.76	-0.21	72.8	74.8	82.1
7.43	-48.39	-35.34	-41.76	-0.18	72.9	74.6	81.7
7.43	-48.43	-35.34	-41.73	-0.21	73	74.6	81.7
7.43	-48.43	-35.34	-41.7	-0.21	73	74.5	81.5
7.43	-48.39	-35.34	-41.73	-0.24	72.9	74.5	81.2
7.43	-48.43	-35.34	-41.73	-0.24	72.9	74.5	80.9
7.43	-48.39	-35.34	-41.7	-0.21	72.9	74.5	80.6
7.42	-48.39	-35.34	-41.7	-0.24	73	74.4	80.1
7.42	-48.43	-35.34	-41.7	-0.21	73.1	74.3	79.9
7.43	-48.43	-35.34	-41.73	-0.21	73.1	74.3	79.6
7.43	-48.39	-35.34	-41.7	-0.21	73	74.2	79.4
7.43	-48.39	-35.34	-41.7	-0.21	73	74.1	79.1
7.43	-48.43	-35.34	-41.7	-0.21	72.9	74.1	78.8
7.43	-48.43	-35.34	-41.7	-0.21	72.9	74	78.6
7.43	-48.39	-35.39	-41.7	-0.24	72.8	73.9	78.2
7.43	-48.43	-35.34	-41.67	-0.21	72.7	73.7	77.9
7.43	-48.39	-35.34	-41.67	-0.24	72.7	73.6	77.7
7.42	-48.39	-35.34	-41.67	-0.24	72.7	73.7	77.4
7.43	-48.39	-35.34	-41.67	-0.24	72.7	73.6	77.1
7.41	-48.39	-35.34	-41.67	-0.24	72.7	73.5	76.8

7.42	-48.39	-35.24	-41.67	-0.24	72.6	73.4	76.6
7.43	-48.39	-35.34	-41.67	-0.24	72.5	73.4	76.2
7.43	-48.39	-35.34	-41.67	-0.24	72.5	73.4	76.1
7.42	-48.39	-35.34	-41.64	-0.24	72.4	73.4	75.7
7.43	-48.39	-35.34	-41.64	-0.24	72.3	73.3	75.5
7.42	-48.39	-35.34	-41.67	-0.24	72.3	73.2	75.1
7.41	-48.39	-35.34	-41.64	-0.24	72.3	73.2	75
7.42	-48.39	-35.34	-41.64	-0.24	72.3	73.1	74.8
7.41	-48.39	-35.34	-41.64	-0.24	72.2	73	74.5
7.41	-48.39	-35.34	-41.64	-0.24	72.1	72.9	74.5
7.42	-48.39	-35.34	-41.64	-0.21	72.1	72.9	74.1
7.41	-48.3	-35.34	-41.64	-0.24	72	72.8	74
7.41	-48.39	-35.34	-41.61	-0.24	72	72.8	73.5
7.41	-48.3	-35.34	-41.64	-0.24	72	72.8	73.4
7.41	-48.3	-35.34	-41.61	-0.24	72	72.7	73.3
7.41	-48.3	-35.34	-41.61	-0.24	71.9	72.6	73.1
7.42	-48.3	-35.24	-41.64	-0.24	71.9	72.6	72.8
7.42	-48.3	-35.24	-41.61	-0.24	71.8	72.5	72.7
7.41	-48.3	-35.24	-41.58	-0.24	71.8	72.5	72.6
7.41	-48.3	-35.34	-41.61	-0.24	71.6	72.4	72.4
7.41	-48.3	-35.24	-41.58	-0.24	71.5	72.4	72.3
7.41	-48.3	-35.24	-41.58	-0.24	71.5	72.4	72.2
7.41	-48.3	-35.24	-41.58	-0.24	71.5	72.3	72.1
7.41	-48.3	-35.24	-41.61	-0.24	71.4	72.3	71.7
7.41	-48.3	-35.24	-41.61	-0.24	71.4	72.3	71.9
7.41	-48.25	-35.24	-41.58	-0.24	71.4	72.3	71.4
7.41	-48.3	-35.24	-41.58	-0.24	71.4	72.2	71.3
7.41	-48.3	-35.24	-41.58	-0.24	71.3	72.2	71.3
7.41	-48.3	-35.18	-41.58	-0.24	71.3	72.2	71.2
7.41	-48.3	-35.24	-41.58	-0.24	71.3	72.1	71.1
7.41	-48.3	-35.18	-41.55	-0.24	71.2	72.1	71
7.41	-48.3	-35.24	-41.55	-0.24	71.2	72.1	70.8
7.41	-48.3	-35.18	-41.58	-0.24	71.2	72	70.8
7.41	-48.3	-35.18	-41.58	-0.24	71.2	72	70.8
7.41	-48.3	-35.24	-41.55	-0.24	71.1	71.9	70.6
7.41	-48.25	-35.18	-41.55	-0.24	71	71.9	70.4
7.41	-48.3	-35.18	-41.55	-0.24	70.9	71.8	70.2
7.41	-48.25	-35.18	-41.55	-0.24	70.8	71.8	70.1
7.41	-48.3	-35.18	-41.55	-0.24	70.9	71.8	70.2
7.41	-48.3	-35.18	-41.55	-0.24	70.8	71.7	70.2
7.41	-48.3	-35.18	-41.55	-0.24	70.8	71.7	70.1
7.41	-48.25	-35.18	-41.55	-0.24	70.8	71.7	69.9
7.41	-48.3	-35.18	-41.55	-0.24	70.7	71.7	69.9
7.41	-48.25	-35.18	-41.55	-0.24	70.6	71.6	69.8
7.41	-48.3	-35.18	-41.55	-0.24	70.6	71.6	69.5
7.41	-48.3	-35.18	-41.55	-0.21	70.5	71.4	69.6
7.41	-48.25	-35.18	-41.52	-0.24	70.5	71.4	69.6

7.41	-48.25	-35.18	-41.52	-0.24	70.4	71.4	69.5
7.41	-48.25	-35.13	-41.52	-0.24	70.4	71.3	69.2
7.41	-48.25	-35.18	-41.52	-0.24	70.4	71.2	69.2
7.41	-48.25	-35.18	-41.52	-0.24	70.3	71.3	69.1
7.41	-48.25	-35.18	-41.52	-0.24	70.3	71.3	69
7.41	-48.3	-35.13	-41.55	-0.24	70.3	71.2	69
7.41	-48.25	-35.13	-41.52	-0.21	70.4	71.2	69
7.41	-48.25	-35.18	-41.52	-0.21	70.3	71.2	69
7.41	-48.3	-35.18	-41.52	-0.24	70.3	71.2	68.8
7.41	-48.25	-35.13	-41.55	-0.24	70.3	71.1	68.8
7.41	-48.25	-35.18	-41.52	-0.24	70.2	71.2	68.7
7.41	-48.3	-35.18	-41.52	-0.21	70.3	71.1	68.4
7.41	-48.25	-35.18	-41.52	-0.24	70.3	71.1	68.6
7.41	-48.25	-35.18	-41.52	-0.24	70.3	71.1	68.7
7.41	-48.25	-35.18	-41.52	-0.24	70.4	71.1	68.5
7.41	-48.25	-35.24	-41.52	-0.24	70.5	71.1	68.5
7.41	-48.25	-35.18	-41.52	-0.24	70.4	71.1	68.8
7.41	-48.25	-35.18	-41.52	-0.21	70.5	71.1	68.7
7.41	-48.25	-35.18	-41.49	-0.21	70.4	71.1	68.8
7.41	-48.25	-35.18	-41.49	-0.21	70.4	71.1	68.9
7.41	-48.25	-35.18	-41.49	-0.21	70.4	71.1	69.1
7.41	-48.25	-35.13	-41.49	-0.24	70.4	71.1	69.2
7.41	-48.25	-35.13	-41.49	-0.24	70.4	71.1	69.4
7.41	-48.21	-35.18	-41.49	-0.24	70.4	71.1	69.8
7.41	-48.21	-35.18	-41.49	-0.21	70.4	71.2	70
7.41	-48.21	-35.13	-41.49	-0.21	70.4	71.2	70.1
7.41	-48.25	-35.18	-41.49	-0.24	70.3	71.2	70.3
7.41	-48.21	-35.13	-41.49	-0.21	70.4	71.2	70.5
7.41	-48.21	-35.13	-41.49	-0.24	70.4	71.2	70.9
7.41	-48.21	-35.13	-41.46	-0.21	70.4	71.3	71
7.41	-48.21	-35.13	-41.46	-0.24	70.3	71.3	71.3
7.41	-48.21	-35.13	-41.46	-0.24	70.4	71.3	71.5
7.41	-48.21	-35.13	-41.46	-0.27	70.3	71.4	71.6
7.41	-48.21	-35.13	-41.46	-0.24	70.4	71.4	72.1
7.41	-48.25	-35.13	-41.46	-0.24	70.4	71.4	72.3
7.41	-48.21	-35.13	-41.46	-0.24	70.4	71.7	72.6
7.41	-48.21	-35.08	-41.46	-0.24	70.4	71.7	72.9
7.41	-48.21	-35.13	-41.46	-0.24	70.4	71.7	73.2
7.41	-48.21	-35.13	-41.46	-0.24	70.4	71.8	73.2
7.41	-48.16	-35.08	-41.46	-0.24	70.4	71.8	73.8
7.41	-48.16	-35.13	-41.46	-0.24	70.5	71.9	74.2
7.41	-48.16	-35.08	-41.46	-0.24	70.5	71.9	74.3
7.41	-48.16	-35.08	-41.46	-0.24	70.4	71.9	74.7
7.41	-48.16	-35.08	-41.46	-0.24	70.5	72	75.1
7.41	-48.16	-35.08	-41.46	-0.27	70.4	72.1	75.3
7.41	-48.16	-35.08	-41.46	-0.24	70.5	72.1	75.5
7.41	-48.11	-35.13	-41.46	-0.24	70.5	72.2	75.9

7.41	-48.11	-35.08	-41.46	-0.24	70.5	72.2	76.2
7.41	-48.11	-35.08	-41.46	-0.24	70.7	72.3	76.6
7.41	-48.11	-35.08	-41.46	-0.24	70.7	72.3	77
7.41	-48.11	-35.08	-41.46	-0.24	70.7	72.3	77.3
7.41	-48.16	-35.08	-41.46	-0.24	70.8	72.4	77.7
7.41	-48.11	-35.08	-41.46	-0.24	70.8	72.4	77.9
7.41	-48.11	-35.08	-41.46	-0.24	70.8	72.5	78.2
7.41	-48.11	-35.08	-41.46	-0.24	71	72.6	78.6
7.41	-48.11	-35.08	-41.46	-0.27	71	72.7	78.8
7.41	-48.11	-35.08	-41.46	-0.27	71	72.6	79
7.41	-48.11	-35.03	-41.46	-0.27	71	72.7	79.2
7.41	-48.11	-35.08	-41.46	-0.27	71	72.7	79.2
7.41	-48.11	-35.08	-41.46	-0.24	71	72.8	79.3
7.41	-48.11	-35.08	-41.46	-0.27	71.2	72.8	79.5
7.41	-48.07	-35.03	-41.43	-0.27	71.2	72.9	79.8
7.41	-48.11	-35.03	-41.46	-0.27	71.1	72.9	79.9
7.41	-48.11	-35.03	-41.46	-0.27	71.1	72.9	79.9
7.41	-48.07	-35.03	-41.43	-0.27	71.2	72.9	80.3
7.41	-48.11	-35.08	-41.43	-0.27	71.3	72.9	80.3
7.41	-48.07	-35.03	-41.43	-0.27	71.3	72.9	80.4
7.41	-48.07	-35.08	-41.43	-0.27	71.2	73	80.5
7.41	-48.11	-35.03	-41.43	-0.27	71.4	73	80.3
7.41	-48.07	-35.03	-41.43	-0.27	71.4	73	80.4
7.41	-48.07	-35.03	-41.43	-0.27	71.4	73	80.5
7.41	-48.07	-35.03	-41.4	-0.27	71.5	73.1	80.6
7.41	-48.11	-35.03	-41.43	-0.31	71.5	73	80.5
7.41	-48.07	-35.03	-41.4	-0.31	71.5	73.1	80.4
7.41	-48.07	-35.03	-41.43	-0.27	71.4	73.1	80.4
7.41	-48.11	-35.03	-41.43	-0.27	71.5	73.1	80.4
7.41	-48.07	-34.98	-41.43	-0.27	71.6	73	80.3
7.41	-48.07	-34.98	-41.43	-0.27	71.5	73	80.1
7.41	-48.07	-34.98	-41.4	-0.31	71.6	73.1	80
7.41	-48.07	-35.03	-41.4	-0.27	71.6	73	79.9
7.41	-48.07	-34.98	-41.4	-0.31	71.6	73	79.9
7.41	-48.07	-34.98	-41.4	-0.27	71.8	73	79.6
7.41	-48.07	-35.03	-41.4	-0.27	71.8	73	79.5
7.41	-48.07	-34.98	-41.4	-0.27	71.8	73	79.4
7.41	-48.07	-34.98	-41.4	-0.31	71.6	73	79.2
7.41	-48.07	-34.98	-41.37	-0.31	71.8	73	79
7.41	-48.07	-34.98	-41.4	-0.31	71.6	73	79
7.41	-48.07	-34.98	-41.37	-0.31	71.8	72.9	78.7
7.41	-48.07	-34.98	-41.37	-0.27	71.8	72.9	78.6
7.41	-48.07	-34.98	-41.37	-0.27	71.8	72.9	78.4
7.41	-48.07	-34.98	-41.4	-0.31	71.8	72.9	78.2
7.41	-48.07	-34.98	-41.37	-0.31	71.8	72.9	77.9
7.41	-48.07	-34.98	-41.37	-0.31	71.8	72.9	77.7
7.41	-48.07	-34.98	-41.37	-0.27	71.9	72.8	77.5

7.41	-48.07	-34.98	-41.37	-0.31	71.9	72.7	77.3
7.41	-48.07	-34.98	-41.37	-0.31	71.9	72.7	76.9
7.41	-48.07	-34.98	-41.37	-0.31	71.9	72.6	76.6
7.41	-48.07	-34.98	-41.37	-0.31	71.8	72.6	76.5
7.41	-48.07	-34.98	-41.37	-0.31	71.8	72.5	76.3
7.41	-48.07	-34.98	-41.37	-0.31	71.6	72.4	75.9
7.41	-48.07	-35.03	-41.37	-0.31	71.6	72.4	75.6
7.41	-48.07	-34.98	-41.37	-0.31	71.6	72.4	75.3
7.41	-48.07	-34.98	-41.37	-0.27	71.5	72.3	75.2
7.41	-48.07	-34.92	-41.37	-0.27	71.5	72.3	74.8
7.4	-48.07	-34.98	-41.34	-0.31	71.4	72.3	74.5
7.4	-48.07	-34.98	-41.37	-0.31	71.4	72.3	74.4
7.4	-48.07	-34.98	-41.34	-0.31	71.3	72.2	74.1
7.4	-48.07	-34.98	-41.34	-0.31	71.3	72.2	73.8
7.4	-48.07	-34.98	-41.34	-0.31	71.2	72.2	73.7
7.4	-48.07	-34.98	-41.34	-0.31	71.2	72.1	73.4
7.4	-48.02	-34.98	-41.34	-0.27	71.2	72.1	73.3
7.4	-48.07	-34.98	-41.34	-0.27	71.1	72.1	72.9
7.4	-48.02	-34.98	-41.34	-0.31	71.1	72.2	72.8
7.4	-48.02	-34.98	-41.34	-0.31	71.1	72	72.4
7.4	-48.02	-34.98	-41.34	-0.31	71.1	71.9	72.3
7.4	-48.07	-34.98	-41.34	-0.31	71.1	71.8	72.2
7.4	-48.07	-34.98	-41.34	-0.31	71.1	71.7	71.9
7.4	-48.02	-34.98	-41.34	-0.31	71	71.7	71.6
7.4	-48.02	-34.98	-41.31	-0.31	70.9	71.6	71.5
7.4	-48.02	-34.98	-41.31	-0.31	70.9	71.6	71.2
7.4	-48.02	-34.92	-41.31	-0.31	70.8	71.4	71
7.4	-48.02	-34.98	-41.31	-0.31	70.8	71.4	71
7.4	-48.02	-34.98	-41.28	-0.31	70.8	71.3	71
7.4	-48.02	-34.98	-41.28	-0.27	70.7	71.3	70.7
7.4	-48.02	-34.92	-41.31	-0.27	70.7	71.3	70.6
7.4	-48.02	-34.92	-41.28	-0.31	70.6	71.2	70.5
7.4	-48.02	-34.92	-41.28	-0.31	70.6	71.2	70.2
7.4	-48.02	-34.92	-41.28	-0.27	70.5	71.2	70.2
7.4	-48.02	-34.92	-41.28	-0.27	70.5	71.2	70
7.4	-48.02	-34.92	-41.28	-0.27	70.3	71.2	69.9
7.4	-48.02	-34.92	-41.28	-0.27	70.2	71.1	69.8
7.4	-48.02	-34.92	-41.28	-0.27	70.2	71	69.5
7.4	-48.02	-34.92	-41.25	-0.27	70.1	71	69.4
7.4	-47.98	-34.92	-41.25	-0.27	70.1	70.9	69.2
7.4	-47.98	-34.92	-41.28	-0.31	70	70.9	69
7.4	-47.98	-34.92	-41.25	-0.31	69.8	70.9	69
7.4	-47.98	-34.92	-41.25	-0.27	69.7	70.8	68.9
7.4	-47.98	-34.92	-41.25	-0.27	69.7	70.8	68.6
7.39	-47.98	-34.92	-41.25	-0.27	69.6	70.8	68.6
7.39	-47.98	-34.87	-41.25	-0.27	69.6	70.7	68.4
7.38	-47.98	-34.92	-41.25	-0.27	69.4	70.7	68.5

7.38	-47.98	-34.92	-41.21	-0.27	69.7	70.6	68.3
7.38	-47.98	-34.87	-41.25	-0.27	69.6	70.6	68.2
7.39	-48.02	-34.92	-41.21	-0.31	69.7	70.6	68.2
7.38	-47.98	-34.87	-41.25	-0.31	69.8	70.6	67.9
7.38	-47.98	-34.92	-41.25	-0.31	69.7	70.5	68.1
7.38	-47.98	-34.87	-41.25	-0.31	69.8	70.5	67.9
7.38	-47.98	-34.92	-41.21	-0.31	69.6	70.5	67.9
7.39	-47.98	-34.92	-41.21	-0.31	69.6	70.4	67.5
7.38	-47.98	-34.87	-41.21	-0.27	69.6	70.4	67.4
7.38	-47.93	-34.87	-41.21	-0.31	69.6	70.4	67.4
7.38	-47.98	-34.92	-41.21	-0.27	69.6	70.3	67.3
7.38	-47.98	-34.87	-41.21	-0.27	69.6	70.3	67.2
7.38	-47.93	-34.87	-41.21	-0.31	69.6	70.3	67.1
7.38	-47.98	-34.87	-41.21	-0.31	69.6	70.2	67
7.39	-47.98	-34.87	-41.21	-0.27	69.4	70.3	66.9
7.38	-47.93	-34.87	-41.21	-0.31	69.4	70.2	67
7.38	-47.98	-34.87	-41.21	-0.27	69.3	70.2	66.8
7.38	-47.93	-34.87	-41.21	-0.31	69.4	70.2	66.9
7.38	-47.98	-34.87	-41.18	-0.27	69.3	70.2	66.9
7.39	-47.98	-34.92	-41.18	-0.31	69.2	70.1	66.8
7.38	-47.98	-34.87	-41.21	-0.31	69.3	70.2	66.9
7.38	-47.93	-34.87	-41.21	-0.27	69.3	70.2	67.2
7.38	-47.93	-34.87	-41.18	-0.31	69.7	70.1	67.3
7.38	-47.98	-34.87	-41.18	-0.27	69.7	70.1	67.3
7.38	-47.93	-34.87	-41.18	-0.27	69.7	70.1	67.9
7.38	-47.93	-34.87	-41.18	-0.27	69.6	70.2	67.8
7.38	-47.93	-34.87	-41.18	-0.27	69.7	70.1	68
7.38	-47.93	-34.87	-41.18	-0.27	69.7	70.2	68.2
7.38	-47.93	-34.87	-41.15	-0.31	69.6	70.3	68.2
7.39	-47.93	-34.87	-41.15	-0.31	69.6	70.3	68.5
7.39	-47.93	-34.87	-41.15	-0.27	69.7	70.4	68.8
7.39	-47.88	-34.87	-41.15	-0.27	69.7	70.5	69
7.39	-47.93	-34.87	-41.15	-0.31	69.7	70.5	69.2
7.38	-47.93	-34.87	-41.15	-0.31	69.7	70.6	69.8
7.38	-47.93	-34.87	-41.15	-0.27	69.6	70.6	70
7.38	-47.93	-34.82	-41.15	-0.27	69.7	70.6	70.2
7.38	-47.93	-34.82	-41.15	-0.27	69.6	70.7	70.5
7.38	-47.93	-34.82	-41.15	-0.31	69.7	70.7	70.9
7.38	-47.88	-34.82	-41.15	-0.27	69.7	70.7	71.1
7.39	-47.93	-34.82	-41.15	-0.27	69.8	70.8	71.4
7.39	-47.93	-34.82	-41.15	-0.27	69.8	70.8	71.7
7.39	-47.88	-34.82	-41.09	-0.27	69.8	70.8	72
7.38	-47.88	-34.82	-41.09	-0.31	69.8	70.9	72.3
7.39	-47.93	-34.82	-41.09	-0.27	69.8	70.9	72.5
7.38	-47.88	-34.82	-41.09	-0.31	69.8	70.9	72.6
7.39	-47.88	-34.82	-41.09	-0.31	69.8	70.9	72.9
7.39	-47.88	-34.82	-41.09	-0.27	69.9	71	73.1

7.39	-47.88	-34.77	-41.06	-0.31	69.8	71	73.3
7.39	-47.88	-34.82	-41.09	-0.31	69.9	71.1	73.4
7.39	-47.88	-34.77	-41.06	-0.31	70	71.1	73.6
7.39	-47.88	-34.77	-41.06	-0.27	69.9	71.1	73.6
7.38	-47.84	-34.82	-41.06	-0.31	69.9	71.2	74
7.38	-47.88	-34.77	-41.06	-0.27	70	71.2	74.3
7.39	-47.88	-34.77	-41.06	-0.31	70	71.2	74.5
7.39	-47.84	-34.77	-41.06	-0.27	70	71.2	74.5
7.39	-47.84	-34.77	-41.06	-0.27	70	71.2	74.8
7.39	-47.84	-34.77	-41.03	-0.31	70	71.2	74.6
7.4	-47.84	-34.77	-41.03	-0.27	70.1	71.2	74.9
7.39	-47.84	-34.77	-41.03	-0.27	70	71.3	75
7.4	-47.84	-34.77	-41.03	-0.31	70.1	71.3	74.8
7.4	-47.84	-34.77	-41.03	-0.31	70	71.3	75.2
7.4	-47.84	-34.72	-41.03	-0.31	70.1	71.4	75.3
7.4	-47.84	-34.77	-41	-0.31	70	71.4	75.5
7.4	-47.79	-34.72	-41	-0.31	70.1	71.4	75.5
7.4	-47.84	-34.72	-41	-0.31	70.1	71.4	75.5
7.4	-47.79	-34.72	-41	-0.31	70.1	71.6	75.5
7.4	-47.79	-34.66	-41	-0.27	70.1	71.6	75.6
7.4	-47.79	-34.72	-41	-0.31	70.1	71.7	75.9
7.4	-47.79	-34.72	-41	-0.27	70.1	71.7	76.1
7.4	-47.79	-34.72	-41	-0.31	70.2	71.7	75.9
7.4	-47.79	-34.72	-41	-0.31	70.3	71.8	76.3
7.4	-47.79	-34.72	-40.97	-0.31	70.2	71.6	76.3
7.4	-47.75	-34.72	-41	-0.31	70.2	71.6	76.3
7.4	-47.79	-34.66	-41	-0.31	70.3	71.6	76.3
7.4	-47.79	-34.66	-40.97	-0.31	70.2	71.6	76.6
7.39	-47.79	-34.66	-40.97	-0.31	70.3	71.6	76.5
7.39	-47.79	-34.66	-41	-0.31	70.4	71.6	76.6
7.39	-47.75	-34.72	-40.97	-0.31	70.3	71.6	76.6
7.39	-47.79	-34.72	-40.97	-0.31	70.4	71.6	76.6
7.38	-47.79	-34.66	-41	-0.31	70.3	71.6	76.6
7.39	-47.79	-34.72	-41	-0.31	70.4	71.6	76.5
7.38	-47.79	-34.72	-40.97	-0.31	70.4	71.6	76.3
7.39	-47.75	-34.72	-40.97	-0.31	70.4	71.6	76.3
7.38	-47.75	-34.72	-40.97	-0.31	70.5	71.6	76.1
7.39	-47.79	-34.72	-40.97	-0.31	70.4	71.6	75.9
7.39	-47.75	-34.72	-40.97	-0.31	70.5	71.6	75.9
7.38	-47.79	-34.66	-40.97	-0.31	70.4	71.6	75.9
7.39	-47.75	-34.66	-40.97	-0.31	70.5	71.4	75.8
7.38	-47.75	-34.72	-40.97	-0.31	70.6	71.4	75.5
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.4	75.5
7.39	-47.79	-34.66	-40.97	-0.31	70.6	71.4	75.4
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.4	75.3
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.4	75.1
7.39	-47.75	-34.66	-40.97	-0.31	70.6	71.4	74.9

7.38	-47.79	-34.72	-40.97	-0.31	70.6	71.4	74.9
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.4	74.6
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.4	74.5
7.39	-47.79	-34.66	-40.97	-0.31	70.6	71.4	74.5
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.3	74.2
7.38	-47.79	-34.72	-40.97	-0.31	70.5	71.3	74.1
7.38	-47.75	-34.66	-40.97	-0.34	70.5	71.2	73.6
7.39	-47.75	-34.66	-40.97	-0.34	70.5	71.2	73.5
7.39	-47.79	-34.66	-40.97	-0.31	70.5	71.2	73.3
7.38	-47.79	-34.66	-40.97	-0.31	70.4	71.1	73.1
7.39	-47.75	-34.66	-40.97	-0.31	70.4	71	73
7.39	-47.79	-34.66	-40.97	-0.34	70.4	71	72.7
7.39	-47.75	-34.66	-40.97	-0.31	70.3	70.9	72.6
7.39	-47.75	-34.66	-40.94	-0.31	70.2	70.9	72.3
7.38	-47.75	-34.66	-40.97	-0.31	70.2	70.9	72.2
7.39	-47.75	-34.66	-40.97	-0.34	70.2	70.8	72
7.38	-47.75	-34.66	-40.97	-0.31	70.2	70.8	71.7
7.39	-47.79	-34.66	-40.94	-0.31	70.2	70.7	71.5
7.38	-47.75	-34.66	-40.94	-0.34	70.1	70.7	71.2
7.38	-47.75	-34.66	-40.94	-0.31	70.1	70.7	71.1
7.38	-47.79	-34.66	-40.94	-0.31	70.1	70.6	70.9
7.38	-47.75	-34.66	-40.94	-0.31	70.1	70.6	70.6
7.38	-47.75	-34.66	-40.94	-0.31	70	70.6	70.4
7.38	-47.75	-34.66	-40.94	-0.31	70	70.5	70.2
7.38	-47.75	-34.66	-40.94	-0.31	69.8	70.5	70.2
7.38	-47.75	-34.66	-40.94	-0.31	69.7	70.4	69.9
7.38	-47.75	-34.66	-40.94	-0.31	69.1	70.4	69.6
7.38	-47.75	-34.66	-40.91	-0.34	69.1	70.4	69.6
7.38	-47.75	-34.66	-40.94	-0.31	69	70.3	69.2
7.38	-47.75	-34.66	-40.94	-0.31	69	70.3	69.2
7.38	-47.75	-34.61	-40.91	-0.31	69	70.2	68.9
7.38	-47.75	-34.66	-40.94	-0.31	69	70.2	68.7
7.38	-47.75	-34.66	-40.91	-0.31	68.8	70.2	68.5
7.38	-47.75	-34.66	-40.91	-0.31	68.8	70.2	68.4
7.38	-47.75	-34.61	-40.91	-0.31	68.8	70.1	68.2
7.38	-47.75	-34.66	-40.91	-0.31	68.7	70.1	68
7.38	-47.75	-34.66	-40.91	-0.31	68.7	70.1	67.9
7.38	-47.7	-34.61	-40.91	-0.31	68.7	70	67.8
7.38	-47.7	-34.66	-40.91	-0.31	69	70	67.5
7.38	-47.7	-34.66	-40.88	-0.31	69	69.9	67.2
7.38	-47.7	-34.61	-40.91	-0.31	69	69.9	67.1
7.38	-47.75	-34.61	-40.88	-0.31	69	69.9	66.9
7.38	-47.7	-34.61	-40.88	-0.31	69	69.8	66.8
7.38	-47.7	-34.61	-40.91	-0.31	68.9	69.8	66.7
7.38	-47.7	-34.61	-40.88	-0.31	68.8	69.7	66.6
7.38	-47.75	-34.61	-40.88	-0.31	68.8	69.7	66.5
7.38	-47.7	-34.61	-40.88	-0.31	68.9	69.6	66.3

7.38	-47.7	-34.61	-40.88	-0.31	68.8	69.5	66.1
7.38	-47.7	-34.61	-40.88	-0.31	68.8	69.6	65.9
7.38	-47.7	-34.61	-40.88	-0.31	68.7	69.5	65.8
7.38	-47.7	-34.61	-40.88	-0.34	68.8	69.5	65.8
7.38	-47.7	-34.61	-40.88	-0.31	68.7	69.4	65.8
7.38	-47.7	-34.61	-40.88	-0.31	68.7	69.4	65.3
7.38	-47.7	-34.61	-40.88	-0.31	68.6	69.3	65.4
7.38	-47.7	-34.61	-40.88	-0.31	68.6	69.3	65.1
7.38	-47.7	-34.61	-40.88	-0.31	68.6	69.3	65.2
7.38	-47.7	-34.61	-40.88	-0.31	68.5	69.3	65
7.38	-47.7	-34.61	-40.88	-0.31	68.5	69.1	64.9
7.38	-47.7	-34.61	-40.88	-0.31	68.5	69.1	64.7
7.38	-47.75	-34.56	-40.88	-0.31	68.4	69.1	64.8
7.36	-47.7	-34.61	-40.88	-0.31	68.3	69	64.7
7.36	-47.75	-34.56	-40.88	-0.31	68.3	69	64.6
7.38	-47.7	-34.61	-40.88	-0.31	68.3	69	64.5
7.38	-47.7	-34.61	-40.88	-0.31	68.3	69	64.4
7.38	-47.75	-34.61	-40.88	-0.31	68.2	69	64.1
7.38	-47.75	-34.61	-40.88	-0.31	68.2	69	64.4
7.38	-47.7	-34.61	-40.88	-0.31	68.1	69	64.2
7.38	-47.7	-34.61	-40.88	-0.31	68.1	69	64.3
7.38	-47.75	-34.61	-40.88	-0.31	68	69	64.4
7.38	-47.75	-34.61	-40.88	-0.31	68.1	69	64.6
7.38	-47.7	-34.61	-40.88	-0.27	68.1	69	64.3
7.38	-47.7	-34.61	-40.88	-0.34	68	68.9	64.6
7.38	-47.7	-34.61	-40.88	-0.31	68	69	64.8
7.38	-47.7	-34.61	-40.88	-0.31	68.1	69	64.8
7.38	-47.7	-34.61	-40.88	-0.31	68.1	69	65
7.38	-47.7	-34.61	-40.85	-0.31	68.2	68.9	65.3
7.38	-47.7	-34.61	-40.85	-0.31	68.4	69	65.7
7.38	-47.7	-34.61	-40.85	-0.31	68.3	69	65.8
7.38	-47.7	-34.61	-40.85	-0.31	68.4	69	66
7.38	-47.66	-34.61	-40.85	-0.31	68.4	69.1	66.2
7.38	-47.66	-34.61	-40.85	-0.31	68.4	69.1	66.4
7.38	-47.7	-34.61	-40.85	-0.31	68.5	69.3	66.8
7.38	-47.7	-34.56	-40.85	-0.31	68.5	69.3	66.9
7.38	-47.66	-34.61	-40.85	-0.31	68.5	69.3	67.3
7.38	-47.7	-34.61	-40.85	-0.31	68.5	69.4	67.5
7.38	-47.7	-34.56	-40.85	-0.31	68.4	69.4	67.9
7.38	-47.7	-34.56	-40.82	-0.31	68.5	69.5	68.4
7.38	-47.66	-34.61	-40.82	-0.31	68.4	69.5	68.8
7.38	-47.7	-34.61	-40.85	-0.31	68.5	69.5	69
7.38	-47.66	-34.61	-40.85	-0.31	68.6	69.6	69.5
7.38	-47.7	-34.56	-40.85	-0.31	68.6	69.6	69.9
7.38	-47.66	-34.61	-40.82	-0.34	68.6	69.6	70.2
7.38	-47.66	-34.56	-40.82	-0.31	68.7	69.7	70.5
7.38	-47.66	-34.56	-40.82	-0.31	68.7	69.8	71.1

7.38	-47.66	-34.56	-40.82	-0.31	68.6	69.9	71.4
7.38	-47.61	-34.56	-40.82	-0.31	68.7	69.9	71.6
7.38	-47.66	-34.56	-40.85	-0.31	68.8	70	72.3
7.38	-47.66	-34.56	-40.85	-0.31	68.8	70	72.6
7.38	-47.61	-34.56	-40.85	-0.31	68.9	70.1	72.9
7.38	-47.66	-34.56	-40.82	-0.31	68.9	70.1	73.3
7.38	-47.61	-34.56	-40.85	-0.31	69	70.1	73.4
7.38	-47.61	-34.51	-40.85	-0.31	68.9	70.2	73.7
7.38	-47.61	-34.51	-40.82	-0.31	69	70.2	74.2
7.38	-47.61	-34.56	-40.85	-0.31	69	70.3	74.4
7.38	-47.61	-34.51	-40.85	-0.31	69	70.3	74.7
7.38	-47.61	-34.51	-40.85	-0.31	69	70.4	74.9
7.38	-47.61	-34.56	-40.85	-0.31	69	70.4	75.2
7.38	-47.61	-34.56	-40.85	-0.31	69	70.5	75.4
7.38	-47.61	-34.51	-40.85	-0.31	69	70.6	75.5
7.38	-47.61	-34.51	-40.85	-0.31	69.1	70.6	75.9
7.38	-47.61	-34.51	-40.85	-0.31	69.1	70.7	76.2
7.38	-47.61	-34.51	-40.85	-0.31	69.2	70.8	76.6
7.38	-47.61	-34.51	-40.85	-0.31	69.2	70.8	76.6
7.38	-47.61	-34.51	-40.85	-0.31	69.2	70.9	76.9
7.38	-47.56	-34.51	-40.85	-0.31	69.3	70.9	77.2
7.38	-47.56	-34.51	-40.85	-0.31	69.3	71	77.3
7.38	-47.56	-34.51	-40.85	-0.31	69.4	71.1	77.7
7.38	-47.56	-34.51	-40.82	-0.31	69.4	71.1	77.7
7.38	-47.56	-34.46	-40.85	-0.31	69.6	71.2	77.7
7.38	-47.56	-34.51	-40.82	-0.31	69.7	71.2	77.9
7.38	-47.56	-34.51	-40.82	-0.31	69.6	71.2	78
7.38	-47.56	-34.51	-40.82	-0.34	69.7	71.3	78
7.38	-47.56	-34.46	-40.79	-0.31	69.7	71.3	78.2
7.38	-47.56	-34.46	-40.82	-0.31	69.8	71.4	78.3
7.38	-47.56	-34.46	-40.82	-0.34	69.8	71.4	78.4
7.38	-47.56	-34.51	-40.82	-0.31	69.8	71.6	78.5
7.38	-47.56	-34.46	-40.85	-0.31	69.9	71.6	78.4
7.38	-47.52	-34.51	-40.85	-0.31	69.9	71.7	78.5
7.38	-47.52	-34.51	-40.82	-0.34	70	71.7	78.5
7.38	-47.56	-34.46	-40.82	-0.31	70	71.8	78.4
7.38	-47.56	-34.51	-40.82	-0.31	70.1	71.8	78.4
7.38	-47.52	-34.46	-40.79	-0.31	70.1	71.8	78.3
7.38	-47.56	-34.46	-40.82	-0.31	70.1	71.9	78.4
7.38	-47.56	-34.46	-40.79	-0.31	70.1	71.9	78.4
7.38	-47.56	-34.46	-40.79	-0.31	70.1	71.9	78.3
7.38	-47.56	-34.46	-40.79	-0.31	70.1	71.9	78.3
7.38	-47.52	-34.46	-40.76	-0.31	70.2	71.9	78.2
7.38	-47.52	-34.4	-40.76	-0.31	70.2	72	77.9
7.38	-47.56	-34.4	-40.76	-0.34	70.2	71.9	77.9
7.38	-47.52	-34.46	-40.76	-0.31	70.2	72	77.6
7.38	-47.56	-34.46	-40.76	-0.34	70.2	72	77.7

7.38	-47.56	-34.46	-40.76	-0.31	70.3	72	77.6
7.38	-47.52	-34.4	-40.76	-0.34	70.3	72	77.4
7.38	-47.52	-34.46	-40.76	-0.34	70.4	72	77.3
7.38	-47.52	-34.46	-40.76	-0.31	70.4	71.9	77
7.38	-47.52	-34.4	-40.76	-0.31	70.5	71.9	76.8
7.38	-47.52	-34.4	-40.76	-0.31	70.4	71.9	76.6
7.38	-47.56	-34.4	-40.76	-0.31	70.5	71.9	76.5
7.38	-47.52	-34.46	-40.76	-0.34	70.5	71.8	76.1
7.38	-47.52	-34.46	-40.76	-0.31	70.5	71.8	75.9
7.38	-47.56	-34.46	-40.76	-0.34	70.6	71.7	75.7
7.38	-47.52	-34.46	-40.76	-0.34	70.6	71.7	75.4
7.38	-47.52	-34.4	-40.76	-0.31	70.6	71.6	75.3
7.38	-47.52	-34.4	-40.76	-0.31	70.6	71.6	74.9
7.38	-47.52	-34.46	-40.76	-0.31	70.5	71.4	74.8
7.38	-47.52	-34.4	-40.73	-0.31	70.5	71.4	74.6
7.38	-47.52	-34.4	-40.73	-0.34	70.5	71.3	74.4
7.38	-47.52	-34.4	-40.73	-0.31	70.5	71.3	74.1
7.37	-47.52	-34.46	-40.73	-0.31	70.5	71.2	73.7
7.37	-47.52	-34.46	-40.73	-0.34	70.4	71.2	73.4
7.37	-47.52	-34.46	-40.73	-0.31	70.4	71.2	73.2
7.36	-47.52	-34.46	-40.73	-0.31	70.3	71.1	72.8
7.36	-47.52	-34.4	-40.73	-0.31	70.3	71	72.8
7.36	-47.52	-34.4	-40.73	-0.31	70.2	71	72.5
7.36	-47.52	-34.4	-40.73	-0.31	70.2	71	72.3
7.36	-47.52	-34.4	-40.73	-0.31	70.2	70.9	72.2
7.36	-47.52	-34.4	-40.73	-0.31	70.1	70.8	72
7.36	-47.47	-34.4	-40.7	-0.31	70.1	70.8	71.6
7.36	-47.47	-34.4	-40.73	-0.34	70.1	70.7	71.5
7.37	-47.52	-34.46	-40.7	-0.31	70.1	70.7	71.2
7.36	-47.47	-34.4	-40.73	-0.34	70	70.6	71
7.37	-47.47	-34.46	-40.7	-0.31	69.9	70.6	70.8
7.36	-47.52	-34.4	-40.7	-0.31	69.9	70.5	70.5
7.36	-47.47	-34.46	-40.7	-0.31	69.8	70.5	70.1
7.36	-47.52	-34.4	-40.67	-0.31	69.7	70.5	70.2
7.37	-47.47	-34.4	-40.7	-0.31	69.3	70.3	70
7.36	-47.52	-34.4	-40.7	-0.34	69.2	70.3	69.9
7.36	-47.47	-34.4	-40.67	-0.31	69.2	70.3	69.3
7.36	-47.52	-34.4	-40.67	-0.31	69	70.2	69.3
7.37	-47.43	-34.4	-40.67	-0.31	69	70.2	69.2
7.36	-47.47	-34.4	-40.67	-0.27	68.9	70.1	69
7.37	-47.47	-34.4	-40.67	-0.31	68.9	70.1	68.9
7.36	-47.47	-34.4	-40.67	-0.31	69	70.1	68.6
7.36	-47.47	-34.35	-40.63	-0.31	69	70.1	68.5
7.37	-47.47	-34.35	-40.67	-0.31	69.1	70.1	68.3
7.36	-47.47	-34.4	-40.67	-0.31	69.1	70	68.1
7.36	-47.47	-34.35	-40.67	-0.31	69.1	70	68
7.36	-47.43	-34.35	-40.63	-0.31	69.1	69.9	67.9

7.37	-47.47	-34.4	-40.67	-0.31	69	69.9	67.7
7.36	-47.47	-34.35	-40.63	-0.31	69	69.8	67.5
7.36	-47.47	-34.4	-40.63	-0.31	69	69.8	67.4
7.35	-47.47	-34.4	-40.63	-0.31	69	69.7	67
7.35	-47.47	-34.35	-40.63	-0.31	69	69.7	67
7.35	-47.47	-34.4	-40.63	-0.31	68.9	69.7	66.9
7.35	-47.47	-34.35	-40.63	-0.27	69	69.6	66.8
7.35	-47.43	-34.4	-40.63	-0.31	68.9	69.5	66.5
7.35	-47.43	-34.35	-40.63	-0.31	68.8	69.6	66.7
7.35	-47.43	-34.35	-40.63	-0.31	68.7	69.5	66.5
7.35	-47.43	-34.35	-40.63	-0.31	68.7	69.5	66.2
7.35	-47.43	-34.35	-40.63	-0.31	68.7	69.5	66.2
7.35	-47.43	-34.35	-40.63	-0.31	68.6	69.4	66.1
7.35	-47.43	-34.4	-40.63	-0.31	68.6	69.4	66
7.35	-47.43	-34.35	-40.63	-0.31	68.6	69.3	65.8
7.35	-47.43	-34.35	-40.63	-0.27	68.6	69.3	65.8
7.35	-47.43	-34.35	-40.63	-0.31	68.6	69.3	65.7
7.35	-47.43	-34.35	-40.63	-0.31	68.6	69.3	65.7
7.35	-47.43	-34.35	-40.63	-0.31	68.5	69.3	65.6
7.35	-47.43	-34.35	-40.6	-0.31	68.5	69.1	65.2
7.35	-47.43	-34.35	-40.6	-0.31	68.4	69.3	65.4
7.35	-47.43	-34.35	-40.6	-0.31	68.4	69.1	65.4
7.35	-47.43	-34.35	-40.6	-0.31	68.4	69.1	65.3
7.35	-47.43	-34.35	-40.6	-0.31	68.4	69.1	65.6
7.35	-47.43	-34.4	-40.6	-0.31	68.3	69.1	65.4
7.35	-47.43	-34.35	-40.6	-0.31	68.3	69	65.3
7.35	-47.43	-34.35	-40.6	-0.31	68.3	69	65.6
7.35	-47.43	-34.35	-40.57	-0.31	68.3	69	65.8
7.35	-47.38	-34.35	-40.6	-0.31	68.5	69.1	65.8
7.35	-47.43	-34.35	-40.6	-0.31	68.4	69.1	65.9
7.35	-47.43	-34.35	-40.57	-0.31	68.6	69.1	66.2
7.35	-47.43	-34.3	-40.6	-0.31	68.5	69.1	66.4
7.35	-47.38	-34.35	-40.57	-0.31	68.6	69.3	66.5
7.35	-47.38	-34.3	-40.6	-0.31	68.5	69.3	66.8
7.35	-47.43	-34.35	-40.57	-0.31	68.5	69.4	66.8
7.35	-47.38	-34.35	-40.57	-0.31	68.5	69.4	67.2
7.35	-47.43	-34.35	-40.57	-0.31	68.5	69.5	67.7
7.35	-47.38	-34.35	-40.57	-0.31	68.5	69.5	67.9
7.35	-47.38	-34.35	-40.57	-0.31	68.5	69.5	68.1
7.35	-47.38	-34.3	-40.57	-0.31	68.5	69.6	68.6
7.35	-47.38	-34.3	-40.54	-0.31	68.5	69.6	68.8
7.35	-47.43	-34.3	-40.57	-0.31	68.5	69.6	69.1
7.35	-47.38	-34.3	-40.54	-0.31	68.5	69.7	69.6
7.35	-47.38	-34.3	-40.54	-0.31	68.5	69.7	70.1
7.35	-47.38	-34.25	-40.54	-0.27	68.5	69.8	70.6
7.35	-47.38	-34.25	-40.54	-0.31	68.6	69.9	70.9
7.35	-47.38	-34.3	-40.54	-0.31	68.6	69.9	71.3

7.35	-47.38	-34.25	-40.54	-0.31	68.6	70	71.9
7.35	-47.38	-34.25	-40.54	-0.31	68.6	70.1	72.4
7.36	-47.38	-34.25	-40.54	-0.31	68.7	70.1	72.8
7.36	-47.34	-34.25	-40.54	-0.31	68.7	70.1	73.4
7.37	-47.34	-34.25	-40.54	-0.31	68.7	70.2	73.8
7.37	-47.38	-34.25	-40.51	-0.31	68.8	70.2	74.3
7.36	-47.34	-34.25	-40.51	-0.31	68.9	70.4	74.6
7.37	-47.34	-34.25	-40.51	-0.31	68.9	70.4	75.1
7.37	-47.34	-34.25	-40.51	-0.31	69	70.5	75.5
7.37	-47.34	-34.25	-40.51	-0.31	68.9	70.6	76.1
7.36	-47.34	-34.25	-40.48	-0.31	69	70.7	76.3
7.36	-47.34	-34.25	-40.51	-0.31	69	70.8	76.8
7.37	-47.34	-34.25	-40.48	-0.31	69	70.9	77.2
7.37	-47.29	-34.25	-40.48	-0.31	69	71	77.7
7.36	-47.29	-34.2	-40.48	-0.31	69.1	71	77.8
7.36	-47.29	-34.25	-40.48	-0.31	69.2	71.2	78.4
7.37	-47.29	-34.2	-40.45	-0.31	69.3	71.2	78.6
7.37	-47.29	-34.2	-40.45	-0.31	69.4	71.3	79
7.37	-47.29	-34.25	-40.45	-0.31	69.6	71.4	79.3
7.36	-47.29	-34.2	-40.45	-0.31	69.4	71.6	79.6
7.37	-47.29	-34.2	-40.45	-0.31	69.7	71.7	79.9
7.37	-47.2	-34.15	-40.42	-0.31	69.8	71.7	80.1
7.37	-47.29	-34.2	-40.42	-0.31	69.8	71.9	80.3
7.36	-47.29	-34.15	-40.42	-0.31	69.8	71.9	80.7
7.36	-47.2	-34.2	-40.42	-0.31	69.9	72	80.8
7.36	-47.2	-34.15	-40.39	-0.31	70	72.1	80.8
7.36	-47.2	-34.15	-40.39	-0.31	70	72.2	81.1
7.36	-47.2	-34.15	-40.42	-0.31	70.1	72.2	81.2
7.37	-47.2	-34.15	-40.39	-0.31	70.2	72.3	81.3
7.38	-47.2	-34.15	-40.39	-0.31	70.2	72.3	81.5
7.38	-47.2	-34.15	-40.39	-0.31	70.2	72.4	81.5
7.38	-47.2	-34.15	-40.39	-0.34	70.4	72.5	81.7
7.38	-47.15	-34.15	-40.39	-0.31	70.4	72.5	81.8
7.38	-47.2	-34.15	-40.39	-0.31	70.4	72.6	81.8
7.38	-47.15	-34.15	-40.39	-0.31	70.5	72.6	81.9
7.38	-47.15	-34.15	-40.39	-0.31	70.6	72.7	82
7.38	-47.2	-34.15	-40.39	-0.31	70.6	72.8	81.9
7.38	-47.15	-34.15	-40.39	-0.31	70.7	72.9	82.1
7.38	-47.15	-34.15	-40.39	-0.31	70.7	72.8	81.9
7.38	-47.15	-34.09	-40.39	-0.31	70.8	72.9	82
7.38	-47.15	-34.15	-40.39	-0.31	70.8	73	81.8
7.38	-47.15	-34.15	-40.39	-0.31	70.9	73	82
7.38	-47.15	-34.09	-40.39	-0.31	70.9	73	82
7.38	-47.15	-34.09	-40.39	-0.31	71	73.1	81.9
7.38	-47.15	-34.09	-40.39	-0.31	71.1	73.1	81.8
7.38	-47.15	-34.09	-40.42	-0.34	71.2	73.2	81.7
7.38	-47.15	-34.09	-40.42	-0.31	71.2	73.2	81.6

7.38	-47.15	-33.99	-40.42	-0.31	71.2	73.2	81.5
7.38	-47.15	-34.09	-40.42	-0.31	71.3	73.2	81.4
7.38	-47.15	-34.09	-40.42	-0.34	71.3	73.2	81.3
7.38	-47.15	-34.09	-40.42	-0.31	71.3	73.2	81
7.38	-47.15	-34.09	-40.42	-0.31	71.4	73.2	81
7.38	-47.15	-34.09	-40.42	-0.31	71.4	73.2	80.7
7.38	-47.15	-34.09	-40.42	-0.31	71.5	73.2	80.6
7.38	-47.11	-34.09	-40.42	-0.31	71.5	73.2	80.4
7.38	-47.15	-34.09	-40.42	-0.31	71.6	73.2	80.3
7.38	-47.15	-34.09	-40.42	-0.31	71.5	73.1	79.9
7.38	-47.15	-34.09	-40.42	-0.31	71.6	73.2	79.8
7.38	-47.15	-34.09	-40.42	-0.31	71.6	73.2	79.6
7.38	-47.15	-34.09	-40.39	-0.31	71.6	73.2	79.3
7.37	-47.15	-34.15	-40.39	-0.34	71.6	73.2	79.2
7.37	-47.15	-33.99	-40.39	-0.34	71.5	73.1	78.9
7.36	-47.15	-34.09	-40.39	-0.31	71.5	73.1	78.8
7.36	-47.15	-34.09	-40.39	-0.34	71.5	73.1	78.4
7.36	-47.11	-34.09	-40.39	-0.31	71.5	73.1	78.3
7.37	-47.15	-34.09	-40.39	-0.34	71.5	73	78.3
7.37	-47.15	-34.09	-40.39	-0.31	71.6	73	78
7.37	-47.15	-34.09	-40.39	-0.31	71.6	73	77.7
7.36	-47.15	-34.09	-40.39	-0.31	71.6	73	77.7
7.36	-47.15	-34.09	-40.39	-0.34	71.6	73	77.4
7.36	-47.15	-33.99	-40.39	-0.31	71.6	73	77.3
7.36	-47.15	-34.09	-40.39	-0.31	71.6	72.9	76.9
7.36	-47.15	-34.09	-40.39	-0.31	71.5	72.9	76.9
7.37	-47.15	-34.09	-40.39	-0.31	71.5	72.9	76.7
7.36	-47.11	-34.09	-40.36	-0.34	71.4	72.9	76.6
7.37	-47.11	-33.99	-40.36	-0.31	71.3	72.8	76.6
7.36	-47.11	-33.99	-40.36	-0.31	71.4	72.8	76.4
7.36	-47.11	-34.09	-40.36	-0.34	71.4	72.8	76.1
7.36	-47.11	-33.99	-40.36	-0.31	71.3	72.7	75.9
7.36	-47.11	-33.99	-40.36	-0.31	71.4	72.7	75.8
7.36	-47.11	-33.99	-40.36	-0.31	71.4	72.7	75.6
7.37	-47.11	-34.09	-40.36	-0.31	71.4	72.6	75.5
7.36	-47.11	-33.99	-40.36	-0.31	71.4	72.6	75.4
7.36	-47.06	-33.99	-40.3	-0.31	71.3	72.5	75.1
7.36	-47.11	-33.99	-40.36	-0.31	71.4	72.5	75.1
7.37	-47.11	-33.99	-40.3	-0.31	71.4	72.5	74.8
7.36	-47.11	-33.99	-40.3	-0.31	71.3	72.5	74.9
7.36	-47.11	-34.09	-40.3	-0.31	71.3	72.4	74.8
7.36	-47.11	-33.99	-40.27	-0.31	71.3	72.4	74.5
7.37	-47.11	-33.99	-40.3	-0.31	71.3	72.4	74.4
7.37	-47.06	-33.99	-40.27	-0.31	71.2	72.3	74.3
7.36	-47.06	-34.09	-40.27	-0.31	71.2	72.3	74.1
7.36	-47.06	-33.99	-40.27	-0.31	71.2	72.3	74.1
7.36	-47.06	-33.99	-40.27	-0.31	71.2	72.3	74.1

7.36	-47.06	-33.99	-40.27	-0.31	71.2	72.3	74
7.37	-47.06	-33.94	-40.24	-0.31	71.2	72.3	73.6
7.36	-47.06	-33.99	-40.24	-0.31	71.2	72.3	73.6
7.36	-47.06	-33.94	-40.24	-0.31	71.2	72.2	73.4
7.36	-47.06	-33.99	-40.24	-0.31	71.2	72.2	73.3
7.35	-47.06	-33.99	-40.24	-0.31	71.2	72.2	73.3
7.35	-47.06	-33.94	-40.24	-0.31	71.2	72.2	73.2
7.35	-47.01	-33.94	-40.24	-0.31	71.1	72.1	73
7.35	-47.06	-33.94	-40.24	-0.31	71	72.1	73
7.35	-47.06	-33.94	-40.24	-0.31	71	72.1	73
7.35	-47.01	-33.94	-40.24	-0.31	71	72.1	72.8
7.35	-47.01	-33.94	-40.24	-0.31	71	72.1	72.8
7.35	-47.01	-33.94	-40.24	-0.31	71	72	72.6
7.35	-47.01	-33.94	-40.24	-0.27	71	72	72.6
7.35	-47.06	-33.94	-40.24	-0.31	71	72	72.6
7.35	-47.01	-33.94	-40.24	-0.31	70.9	72	72.5
7.35	-47.01	-33.94	-40.24	-0.31	70.9	71.9	72.5
7.35	-47.06	-33.94	-40.24	-0.31	70.9	71.9	72.3
7.35	-47.01	-33.94	-40.21	-0.31	70.9	71.9	72.3
7.35	-47.01	-33.94	-40.24	-0.31	70.8	71.9	72.3
7.35	-47.01	-33.94	-40.21	-0.31	70.8	71.9	72.2
7.35	-47.01	-33.94	-40.21	-0.31	70.7	71.8	72.2
7.35	-47.01	-33.94	-40.21	-0.31	70.7	71.8	72.3
7.35	-47.01	-33.94	-40.21	-0.31	70.7	71.8	72.1
7.35	-47.01	-33.94	-40.21	-0.31	70.6	71.8	72
7.35	-47.01	-33.94	-40.21	-0.31	70.6	71.8	71.9
7.35	-47.01	-33.94	-40.21	-0.31	70.6	71.7	71.9
7.35	-47.01	-33.89	-40.21	-0.27	70.6	71.8	71.9
7.35	-47.01	-33.94	-40.21	-0.31	70.6	71.7	71.9
7.35	-47.01	-33.94	-40.21	-0.31	70.6	71.7	71.7
7.35	-47.01	-33.94	-40.21	-0.31	70.5	71.7	71.9
7.35	-47.01	-33.94	-40.21	-0.31	70.5	71.7	71.9
7.35	-47.01	-33.89	-40.21	-0.31	70.5	71.6	72
7.35	-47.01	-33.89	-40.21	-0.31	70.5	71.6	72
7.35	-47.01	-33.94	-40.21	-0.31	70.5	71.6	71.7
7.35	-47.01	-33.94	-40.21	-0.31	70.5	71.6	71.9
7.35	-47.01	-33.94	-40.21	-0.31	70.5	71.7	71.9
7.35	-47.01	-33.89	-40.21	-0.31	70.5	71.7	71.7
7.35	-47.01	-33.94	-40.21	-0.27	70.5	71.7	71.9
7.35	-47.01	-33.94	-40.21	-0.31	70.5	71.7	71.7
7.35	-47.01	-33.94	-40.21	-0.27	70.5	71.6	71.7
7.35	-47.01	-33.94	-40.18	-0.31	70.5	71.6	71.9
7.35	-47.01	-33.94	-40.18	-0.31	70.5	71.6	71.9
7.35	-47.01	-33.94	-40.18	-0.31	70.4	71.6	71.9
7.35	-47.01	-33.89	-40.21	-0.31	70.4	71.7	71.7
7.35	-46.97	-33.94	-40.21	-0.31	70.5	71.6	72
7.35	-47.01	-33.89	-40.18	-0.34	70.4	71.7	72

7.35	-47.01	-33.94	-40.21	-0.31	70.4	71.6	72
7.35	-47.01	-33.94	-40.21	-0.31	70.4	71.7	72
7.35	-47.01	-33.89	-40.18	-0.31	70.5	71.7	72.1
7.35	-47.01	-33.94	-40.21	-0.31	70.4	71.7	72.1
7.35	-47.01	-33.94	-40.21	-0.27	70.5	71.7	72.1
7.35	-46.97	-33.89	-40.18	-0.31	70.5	71.7	72.1
7.35	-47.01	-33.94	-40.18	-0.31	70.5	71.6	72.3
7.35	-47.01	-33.89	-40.18	-0.31	70.5	71.7	72
7.35	-47.01	-33.94	-40.18	-0.31	70.4	71.7	72.3
7.35	-47.01	-33.89	-40.18	-0.31	70.4	71.7	72.1
7.35	-47.01	-33.94	-40.18	-0.31	70.4	71.7	72.3
7.35	-47.01	-33.94	-40.18	-0.31	70.4	71.7	72.1
7.35	-47.01	-33.89	-40.18	-0.27	70.4	71.7	72.3
7.35	-46.97	-33.89	-40.15	-0.31	70.4	71.7	72.3
7.35	-47.01	-33.83	-40.15	-0.31	70.4	71.7	72.3
7.35	-47.01	-33.89	-40.15	-0.31	70.4	71.8	72.4
7.35	-46.97	-33.94	-40.15	-0.31	70.4	71.8	72.5
7.35	-46.97	-33.89	-40.15	-0.31	70.4	71.7	72.7
7.35	-46.97	-33.89	-40.15	-0.31	70.5	71.8	72.9
7.35	-46.97	-33.89	-40.15	-0.31	70.5	71.8	73.1
7.35	-46.97	-33.89	-40.12	-0.31	70.4	71.8	73.4
7.35	-46.97	-33.83	-40.12	-0.31	70.4	71.9	73.4
7.35	-46.92	-33.83	-40.12	-0.31	70.4	71.8	73.6
7.35	-46.92	-33.83	-40.12	-0.27	70.4	71.9	74
7.35	-46.92	-33.83	-40.12	-0.31	70.5	71.9	74
7.35	-46.92	-33.83	-40.12	-0.31	70.4	71.9	74.4
7.35	-46.92	-33.83	-40.09	-0.31	70.4	72	74.5
7.35	-46.92	-33.83	-40.09	-0.27	70.4	72	74.6
7.35	-46.92	-33.83	-40.09	-0.31	70.5	72.1	74.9
7.35	-46.92	-33.78	-40.09	-0.31	70.5	72.1	75.1
7.35	-46.92	-33.83	-40.09	-0.31	70.5	72.1	75.5
7.35	-46.92	-33.83	-40.09	-0.31	70.6	72.2	75.6
7.35	-46.88	-33.78	-40.09	-0.31	70.6	72.2	75.8
7.35	-46.92	-33.83	-40.05	-0.31	70.7	72.2	76.1
7.35	-46.92	-33.83	-40.09	-0.31	70.7	72.3	76.4
7.35	-46.92	-33.83	-40.05	-0.27	70.7	72.3	76.6
7.35	-46.92	-33.83	-40.05	-0.31	70.8	72.3	76.7
7.35	-46.88	-33.78	-40.05	-0.31	70.8	72.3	77
7.35	-46.92	-33.78	-40.05	-0.31	70.8	72.3	77.1
7.35	-46.88	-33.78	-40.05	-0.31	70.8	72.4	77.1
7.35	-46.88	-33.83	-40.05	-0.27	70.9	72.4	77.2
7.35	-46.88	-33.78	-40.05	-0.31	70.9	72.4	77.3
7.35	-46.88	-33.78	-40.05	-0.31	70.9	72.5	77.4
7.35	-46.88	-33.78	-40.05	-0.27	71	72.5	77.6
7.35	-46.88	-33.78	-40.05	-0.31	71	72.5	77.6
7.35	-46.88	-33.78	-40.05	-0.31	71.1	72.6	77.7
7.35	-46.88	-33.78	-40.02	-0.31	71.2	72.6	77.7

7.35	-46.88	-33.73	-40.05	-0.31	71.2	72.7	77.6
7.35	-46.88	-33.78	-40.02	-0.31	71.2	72.7	77.7
7.35	-46.88	-33.78	-40.05	-0.31	71.2	72.7	77.7
7.35	-46.88	-33.78	-40.05	-0.31	71.2	72.7	77.7
7.35	-46.88	-33.78	-40.05	-0.31	71.2	72.7	77.7
7.35	-46.88	-33.73	-40.05	-0.31	71.2	72.8	77.7
7.35	-46.88	-33.78	-40.02	-0.31	71.2	72.8	77.7
7.35	-46.88	-33.73	-40.05	-0.31	71.3	72.8	77.6
7.35	-46.88	-33.73	-40.02	-0.31	71.2	72.8	77.5
7.35	-46.88	-33.78	-40.02	-0.31	71.3	72.8	77.4
7.35	-46.88	-33.78	-40.05	-0.31	71.3	72.8	77.3
7.35	-46.88	-33.78	-40.05	-0.27	71.4	72.8	77
7.35	-46.88	-33.73	-40.05	-0.31	71.3	72.8	77
7.35	-46.88	-33.78	-40.05	-0.31	71.3	72.8	76.9
7.35	-46.88	-33.78	-40.05	-0.31	71.4	72.8	76.8
7.35	-46.88	-33.73	-40.05	-0.31	71.3	72.8	76.7
7.35	-46.88	-33.78	-40.05	-0.31	71.3	72.8	76.6
7.35	-46.88	-33.78	-40.05	-0.31	71.4	72.8	76.6
7.35	-46.88	-33.78	-40.05	-0.31	71.4	72.8	76.6
7.35	-46.88	-33.78	-40.05	-0.31	71.4	72.8	76.4
7.35	-46.88	-33.78	-40.02	-0.31	71.4	72.8	76.2
7.35	-46.88	-33.78	-40.02	-0.31	71.4	72.8	76.1
7.35	-46.88	-33.73	-40.05	-0.27	71.4	72.8	75.8
7.35	-46.88	-33.78	-40.02	-0.31	71.4	72.8	75.9
7.35	-46.88	-33.78	-40.02	-0.31	71.4	72.7	75.7
7.35	-46.88	-33.78	-40.02	-0.27	71.4	72.8	75.6
7.35	-46.88	-33.73	-40.02	-0.31	71.4	72.7	75.5
7.35	-46.88	-33.78	-40.02	-0.31	71.4	72.7	75.4
7.35	-46.88	-33.73	-40.02	-0.31	71.4	72.7	75.3
7.35	-46.88	-33.78	-40.02	-0.31	71.3	72.6	75.1
7.35	-46.88	-33.73	-40.02	-0.31	71.4	72.6	75.1
7.35	-46.88	-33.78	-40.02	-0.27	71.4	72.6	75
7.35	-46.83	-33.78	-40.02	-0.31	71.3	72.6	74.8
7.35	-46.88	-33.73	-40.02	-0.31	71.4	72.6	74.6
7.35	-46.83	-33.78	-40.02	-0.27	71.3	72.6	74.7
7.35	-46.83	-33.73	-40.02	-0.31	71.4	72.6	74.5
7.35	-46.83	-33.73	-40.02	-0.31	71.4	72.6	74.5
7.35	-46.88	-33.73	-40.02	-0.31	71.3	72.6	74.5
7.35	-46.83	-33.73	-39.99	-0.31	71.3	72.6	74.4
7.35	-46.83	-33.73	-40.02	-0.31	71.3	72.6	74.5
7.35	-46.83	-33.73	-39.99	-0.31	71.3	72.5	74.1
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.5	74.2
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.5	74.1
7.34	-46.83	-33.73	-39.99	-0.27	71.2	72.4	73.8
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.5	73.8
7.35	-46.83	-33.73	-39.99	-0.27	71.2	72.5	73.4
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.4	73.5

7.35	-46.83	-33.68	-39.99	-0.31	71.2	72.4	73.5
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.4	73.4
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.4	73.3
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.4	73.4
7.34	-46.79	-33.73	-39.99	-0.31	71.2	72.3	73.3
7.34	-46.83	-33.73	-39.99	-0.31	71.2	72.3	73.1
7.35	-46.83	-33.68	-39.99	-0.31	71.2	72.3	73.1
7.34	-46.83	-33.73	-39.99	-0.31	71.2	72.3	73.2
7.35	-46.83	-33.73	-39.99	-0.31	71.2	72.3	73
7.35	-46.83	-33.68	-39.96	-0.27	71.2	72.3	72.9
7.34	-46.79	-33.73	-39.96	-0.31	71.2	72.3	72.8
7.35	-46.83	-33.73	-39.96	-0.31	71.2	72.3	72.8
7.35	-46.79	-33.73	-39.96	-0.31	71.1	72.3	72.8
7.35	-46.83	-33.73	-39.96	-0.27	71.1	72.3	72.8
7.35	-46.79	-33.73	-39.99	-0.31	71.1	72.2	72.7
7.35	-46.83	-33.68	-39.99	-0.27	71.1	72.3	72.6
7.35	-46.83	-33.68	-39.99	-0.27	71.1	72.2	72.4
7.35	-46.83	-33.73	-39.96	-0.31	71.1	72.2	72.6
7.34	-46.79	-33.68	-39.99	-0.31	71	72.2	72.5
7.34	-46.79	-33.73	-39.99	-0.31	71.1	72.2	72.3
7.34	-46.79	-33.68	-39.99	-0.27	71	72.2	72.4
7.35	-46.83	-33.68	-39.99	-0.27	71	72.1	72.3
7.35	-46.79	-33.68	-39.96	-0.27	71	72.1	72.2
7.34	-46.79	-33.68	-39.99	-0.31	71	72.1	72.3
7.34	-46.83	-33.73	-39.99	-0.31	71	72.1	72.3
7.35	-46.83	-33.73	-39.96	-0.27	71	72	72.2
7.35	-46.83	-33.73	-39.99	-0.31	71	72	72.1
7.35	-46.83	-33.68	-39.96	-0.31	71	72	72
7.34	-46.79	-33.73	-39.96	-0.31	70.9	72	72
7.35	-46.83	-33.73	-39.99	-0.31	70.9	72	72.1
7.35	-46.83	-33.73	-39.96	-0.27	70.9	71.9	71.9
7.34	-46.83	-33.73	-39.99	-0.27	70.8	71.9	71.7
7.35	-46.83	-33.68	-39.99	-0.31	70.8	72	71.7
7.35	-46.83	-33.73	-39.99	-0.31	70.8	71.9	71.9
7.35	-46.83	-33.68	-39.99	-0.31	70.6	71.9	71.9
7.35	-46.83	-33.73	-39.96	-0.27	70.8	71.9	71.9
7.35	-46.83	-33.73	-39.96	-0.31	70.7	71.9	71.9
7.34	-46.79	-33.73	-39.99	-0.27	70.8	71.9	71.9
7.35	-46.83	-33.73	-39.99	-0.31	70.7	71.8	72.1
7.34	-46.83	-33.73	-39.99	-0.31	70.7	71.8	72.1
7.35	-46.83	-33.73	-39.99	-0.31	70.7	71.9	72.2
7.35	-46.83	-33.73	-39.99	-0.31	70.7	71.8	72.3
7.34	-46.83	-33.73	-39.99	-0.31	70.6	71.8	72.3
7.34	-46.83	-33.73	-39.99	-0.31	70.7	71.9	72.3
7.35	-46.83	-33.68	-39.99	-0.31	70.7	71.8	72.5
7.35	-46.83	-33.73	-39.99	-0.31	70.6	71.8	72.6
7.34	-46.83	-33.73	-39.99	-0.31	70.7	71.8	72.6

7.34	-46.83	-33.73	-39.99	-0.31	70.7	71.8	72.7
7.34	-46.83	-33.73	-39.99	-0.31	70.8	71.8	72.7
7.34	-46.83	-33.73	-39.99	-0.31	70.8	71.8	72.7
7.35	-46.83	-33.73	-39.99	-0.31	70.8	71.8	72.8
7.35	-46.83	-33.73	-39.99	-0.31	70.8	71.8	72.8
7.35	-46.83	-33.68	-39.99	-0.27	70.8	71.8	72.7
7.35	-46.83	-33.73	-39.99	-0.31	70.7	71.8	72.9
7.34	-46.83	-33.68	-39.99	-0.31	70.7	71.8	73
7.35	-46.83	-33.73	-39.96	-0.31	70.6	71.8	72.9
7.35	-46.83	-33.73	-39.99	-0.31	70.6	71.8	73.1
7.35	-46.83	-33.73	-39.96	-0.31	70.7	71.8	73.2
7.35	-46.83	-33.68	-39.99	-0.31	70.7	71.9	73.3
7.35	-46.79	-33.73	-39.96	-0.31	70.6	71.8	73.2
7.35	-46.83	-33.73	-39.96	-0.31	70.6	71.8	73.4
7.35	-46.83	-33.73	-39.96	-0.31	70.7	71.9	73.6
7.35	-46.83	-33.68	-39.96	-0.27	70.7	71.9	73.7
7.35	-46.83	-33.73	-39.99	-0.31	70.7	72	74
7.35	-46.79	-33.73	-39.96	-0.31	70.7	72	74.3
7.34	-46.79	-33.68	-39.96	-0.31	70.7	72.1	74.4
7.35	-46.83	-33.73	-39.99	-0.31	70.7	72.1	74.6
7.34	-46.83	-33.73	-39.96	-0.31	70.7	72.1	74.8
7.35	-46.79	-33.73	-39.96	-0.31	70.8	72.2	75
7.34	-46.79	-33.73	-39.96	-0.27	70.7	72.1	75.2
7.35	-46.83	-33.68	-39.96	-0.31	70.8	72.2	75.4
7.35	-46.79	-33.68	-39.93	-0.31	70.8	72.2	75.6
7.35	-46.79	-33.68	-39.96	-0.31	70.9	72.3	75.7
7.35	-46.79	-33.68	-39.96	-0.31	70.8	72.3	76.1
7.35	-46.79	-33.73	-39.96	-0.27	70.9	72.3	76.3
7.34	-46.79	-33.68	-39.96	-0.31	70.8	72.3	76.3
7.35	-46.79	-33.73	-39.96	-0.31	70.9	72.4	76.7
7.35	-46.79	-33.73	-39.93	-0.31	70.9	72.4	76.8
7.35	-46.79	-33.68	-39.93	-0.31	70.9	72.4	76.9
7.35	-46.79	-33.68	-39.93	-0.31	71	72.4	77.2
7.35	-46.79	-33.68	-39.93	-0.31	71	72.5	77.2
7.35	-46.79	-33.68	-39.93	-0.34	71.1	72.5	77.5
7.35	-46.79	-33.68	-39.9	-0.31	71	72.5	77.3
7.35	-46.79	-33.68	-39.93	-0.31	71.1	72.5	77.5
7.35	-46.74	-33.68	-39.96	-0.31	71.1	72.6	77.7
7.35	-46.74	-33.68	-39.96	-0.31	71.2	72.6	77.7
7.35	-46.79	-33.68	-39.96	-0.31	71.1	72.6	77.8
7.35	-46.79	-33.68	-39.99	-0.31	71.2	72.6	77.8
7.35	-46.79	-33.68	-39.99	-0.31	71.2	72.7	77.7
7.35	-46.74	-33.63	-39.99	-0.31	71.2	72.7	77.9
7.35	-46.79	-33.68	-39.99	-0.31	71.2	72.7	77.8
7.34	-46.79	-33.68	-39.99	-0.31	71.1	72.8	78
7.35	-46.79	-33.63	-39.99	-0.31	71.2	72.8	77.9
7.35	-46.74	-33.68	-39.99	-0.31	71.2	72.8	77.9

7.35	-46.74	-33.68	-39.99	-0.31	71.2	72.8	77.8
7.35	-46.74	-33.63	-39.99	-0.31	71.2	72.8	77.9
7.35	-46.74	-33.68	-39.99	-0.31	71.2	72.8	77.7
7.35	-46.79	-33.63	-39.99	-0.31	71.2	72.8	77.9
7.35	-46.79	-33.63	-39.99	-0.31	71.2	72.8	77.7
7.35	-46.74	-33.68	-40.02	-0.31	71.2	72.8	77.8
7.35	-46.74	-33.63	-40.02	-0.31	71.2	72.8	77.7
7.35	-46.74	-33.63	-40.02	-0.34	71.2	72.9	77.7
7.35	-46.74	-33.63	-40.02	-0.31	71.2	72.8	77.6
7.35	-46.74	-33.68	-40.02	-0.31	71.2	72.9	77.4
7.35	-46.79	-33.63	-40.05	-0.31	71.2	72.8	77.2
7.35	-46.74	-33.63	-40.02	-0.31	71.3	72.8	77.2
7.35	-46.74	-33.63	-40.02	-0.31	71.3	72.7	77.1
7.35	-46.79	-33.68	-40.02	-0.31	71.4	72.7	76.9
7.35	-46.79	-33.68	-40.02	-0.31	71.4	72.7	76.7
7.35	-46.74	-33.68	-40.02	-0.31	71.4	72.6	76.7
7.35	-46.74	-33.68	-40.02	-0.31	71.4	72.6	76.5
7.35	-46.74	-33.68	-40.02	-0.31	71.4	72.6	76.2
7.34	-46.79	-33.68	-39.99	-0.31	71.4	72.6	76.1
7.35	-46.79	-33.68	-40.02	-0.31	71.3	72.6	75.8
7.35	-46.79	-33.68	-39.99	-0.31	71.4	72.5	75.5
7.35	-46.79	-33.68	-40.02	-0.31	71.4	72.5	75.5
7.35	-46.79	-33.68	-40.02	-0.31	71.4	72.5	75.4
7.35	-46.79	-33.68	-40.02	-0.31	71.3	72.5	75.2
7.35	-46.79	-33.68	-40.02	-0.31	71.3	72.4	75
7.35	-46.79	-33.68	-40.02	-0.31	71.3	72.3	74.9
7.35	-46.79	-33.73	-40.02	-0.31	71.3	72.3	74.6
7.34	-46.79	-33.68	-40.02	-0.31	71.3	72.3	74.5
7.34	-46.79	-33.73	-40.02	-0.31	71.2	72.3	74.4
7.34	-46.79	-33.73	-40.02	-0.31	71.3	72.3	73.8
7.34	-46.79	-33.68	-40.02	-0.31	71.2	72.2	73.8
7.33	-46.79	-33.68	-40.02	-0.31	71.2	72.2	73.5
7.33	-46.83	-33.68	-40.02	-0.31	71.2	72.2	73.4
7.34	-46.79	-33.68	-39.99	-0.31	71.2	72.1	73.3
7.33	-46.79	-33.73	-40.02	-0.31	71.2	72	73.1
7.34	-46.79	-33.73	-40.02	-0.31	71.2	71.9	72.9
7.34	-46.79	-33.73	-40.02	-0.31	71.1	71.9	72.6
7.34	-46.79	-33.68	-40.02	-0.27	71.1	71.9	72.5
7.34	-46.79	-33.73	-39.99	-0.31	71	71.8	72.5
7.34	-46.79	-33.68	-39.99	-0.31	71	71.8	72.3
7.34	-46.79	-33.73	-40.02	-0.31	71	71.7	72.3
7.34	-46.79	-33.68	-39.99	-0.31	70.9	71.7	72.1
7.34	-46.79	-33.73	-39.99	-0.31	70.9	71.7	71.9
7.34	-46.79	-33.68	-39.99	-0.31	70.8	71.7	71.6
7.33	-46.79	-33.68	-39.99	-0.31	70.8	71.6	71.3
7.33	-46.79	-33.73	-39.99	-0.31	70.7	71.4	71.4
7.34	-46.79	-33.73	-39.99	-0.31	70.7	71.4	71.3

7.33	-46.79	-33.68	-40.02	-0.31	70.6	71.3	70.9
7.33	-46.79	-33.73	-39.99	-0.31	70.6	71.3	70.8
7.33	-46.79	-33.68	-39.99	-0.31	70.5	71.2	70.7
7.33	-46.79	-33.73	-39.99	-0.31	70.5	71.2	70.8
7.34	-46.79	-33.68	-39.99	-0.31	70.5	71.2	70.4
7.34	-46.79	-33.73	-40.02	-0.31	70.5	71.2	70.4
7.33	-46.79	-33.68	-39.99	-0.31	70.4	71.2	70.2
7.34	-46.79	-33.68	-39.99	-0.31	70.4	71.1	70.1
7.33	-46.79	-33.68	-39.99	-0.31	70.4	71.1	70.1
7.34	-46.79	-33.73	-39.99	-0.31	70.3	71.1	70
7.33	-46.79	-33.73	-39.99	-0.31	70.3	71.1	70
7.33	-46.79	-33.68	-39.99	-0.31	70.2	71	69.6
7.34	-46.79	-33.68	-39.99	-0.27	70.2	71	69.6
7.34	-46.79	-33.68	-39.99	-0.31	70.1	70.9	69.5
7.34	-46.79	-33.68	-39.99	-0.31	70.1	70.9	69.4
7.33	-46.79	-33.68	-39.99	-0.31	70	70.9	69.3
7.34	-46.79	-33.68	-39.99	-0.34	70.1	70.9	69.2
7.34	-46.74	-33.68	-39.99	-0.31	69.9	70.8	69.2
7.33	-46.79	-33.68	-39.99	-0.31	69.9	70.8	69
7.33	-46.79	-33.68	-39.99	-0.34	70	70.8	69
7.33	-46.79	-33.73	-39.96	-0.31	69.8	70.7	68.9
7.34	-46.79	-33.68	-39.96	-0.31	69.8	70.7	69
7.33	-46.79	-33.68	-39.99	-0.31	69.7	70.7	68.9
7.33	-46.79	-33.68	-39.99	-0.31	69.7	70.7	68.7
7.34	-46.79	-33.68	-39.96	-0.31	69.7	70.6	68.8
7.33	-46.79	-33.68	-39.99	-0.31	69.6	70.6	68.5
7.33	-46.79	-33.68	-39.99	-0.31	69.7	70.6	68.4
7.32	-46.79	-33.68	-39.99	-0.31	69.6	70.5	68.5
7.32	-46.79	-33.68	-39.96	-0.31	69.4	70.5	68.4
7.32	-46.79	-33.73	-39.99	-0.31	69.4	70.5	68.3
7.32	-46.79	-33.73	-39.99	-0.31	69.4	70.5	68.3
7.32	-46.79	-33.68	-39.99	-0.31	69.6	70.5	68.3
7.32	-46.79	-33.68	-39.99	-0.31	69.4	70.5	68.1
7.32	-46.83	-33.68	-39.99	-0.31	69.7	70.5	68.3
7.32	-46.79	-33.73	-39.99	-0.31	69.4	70.5	68
7.32	-46.79	-33.68	-39.99	-0.31	69.4	70.5	68.2
7.32	-46.74	-33.73	-39.99	-0.34	69.6	70.5	68.3
7.32	-46.79	-33.73	-39.99	-0.31	69.6	70.5	68.3
7.32	-46.79	-33.73	-39.99	-0.31	69.7	70.5	68.6
7.32	-46.79	-33.68	-39.99	-0.31	69.7	70.5	68.7
7.32	-46.79	-33.73	-39.96	-0.31	69.6	70.5	68.9
7.32	-46.79	-33.73	-39.99	-0.31	69.8	70.5	69.1
7.32	-46.79	-33.68	-39.99	-0.31	69.8	70.6	69.2
7.32	-46.79	-33.73	-39.99	-0.31	69.8	70.6	69.2
7.32	-46.79	-33.68	-39.99	-0.31	69.8	70.6	69.6
7.32	-46.79	-33.73	-39.96	-0.31	69.8	70.7	69.8
7.32	-46.79	-33.73	-39.99	-0.31	69.8	70.7	70.1

7.32	-46.79	-33.73	-39.99	-0.31	69.8	70.7	70.2
7.32	-46.79	-33.73	-39.99	-0.31	69.9	70.8	70.4
7.32	-46.79	-33.68	-39.99	-0.31	69.9	70.9	70.8
7.32	-46.79	-33.73	-39.99	-0.31	70	70.8	71.1
7.32	-46.79	-33.73	-39.99	-0.31	69.9	70.9	71.4
7.32	-46.79	-33.73	-39.99	-0.31	70	70.9	71.6
7.32	-46.79	-33.73	-39.99	-0.31	69.9	71	71.9
7.32	-46.79	-33.73	-39.99	-0.31	70	71	72.3
7.33	-46.79	-33.73	-39.99	-0.31	70.1	71	72.3
7.34	-46.79	-33.73	-39.99	-0.31	70	71	72.6
7.34	-46.79	-33.68	-39.99	-0.31	70.1	71.1	72.9
7.34	-46.79	-33.68	-39.99	-0.31	70.1	71.2	73.2
7.34	-46.79	-33.73	-39.99	-0.31	70.1	71.2	73.5
7.34	-46.79	-33.73	-39.99	-0.31	70.1	71.2	74
7.34	-46.79	-33.73	-40.02	-0.31	70.1	71.2	74.2
7.34	-46.79	-33.73	-40.02	-0.31	70.1	71.3	74.5
7.34	-46.79	-33.73	-39.99	-0.31	70.1	71.3	74.6
7.34	-46.79	-33.73	-40.02	-0.31	70.1	71.3	75.1
7.34	-46.79	-33.68	-40.02	-0.31	70.1	71.4	75.4
7.34	-46.79	-33.68	-40.02	-0.31	70.1	71.6	75.4
7.33	-46.79	-33.68	-39.99	-0.31	70.2	71.6	75.9
7.34	-46.79	-33.73	-39.99	-0.31	70.2	71.7	76.3
7.34	-46.79	-33.68	-40.02	-0.31	70.3	71.8	76.6
7.33	-46.79	-33.68	-40.02	-0.31	70.3	71.8	76.8
7.34	-46.79	-33.68	-40.02	-0.31	70.3	71.9	77.4
7.34	-46.74	-33.68	-40.02	-0.34	70.4	72	77.7
7.34	-46.74	-33.68	-40.02	-0.34	70.4	72.1	77.9
7.33	-46.79	-33.68	-39.99	-0.31	70.5	72.2	78.2
7.34	-46.74	-33.63	-40.02	-0.34	70.6	72.3	78.4
7.34	-46.74	-33.63	-40.02	-0.31	70.6	72.3	78.8
7.34	-46.69	-33.68	-40.02	-0.31	70.5	72.3	78.8
7.34	-46.74	-33.68	-40.02	-0.34	70.7	72.4	79.2
7.34	-46.74	-33.68	-40.02	-0.31	70.6	72.5	79.4
7.34	-46.74	-33.68	-40.02	-0.31	70.8	72.5	79.6
7.34	-46.74	-33.63	-40.02	-0.31	70.8	72.6	79.8
7.34	-46.74	-33.68	-40.02	-0.31	71	72.7	79.9
7.34	-46.74	-33.68	-40.02	-0.31	71	72.8	80
7.34	-46.74	-33.63	-40.02	-0.31	70.9	72.8	80.3
7.34	-46.69	-33.63	-40.02	-0.31	71	72.9	80.5
7.33	-46.74	-33.63	-40.02	-0.34	71.1	72.9	80.6
7.34	-46.69	-33.68	-40.02	-0.34	71.1	72.9	80.7
7.34	-46.69	-33.68	-39.99	-0.34	71.2	73	80.6
7.34	-46.69	-33.68	-40.02	-0.31	71.2	73.1	80.8
7.34	-46.74	-33.63	-40.02	-0.34	71.2	73.1	80.9
7.34	-46.74	-33.63	-40.02	-0.34	71.2	73.2	80.8
7.34	-46.69	-33.68	-39.99	-0.34	71.2	73.2	81
7.33	-46.69	-33.63	-39.99	-0.34	71.4	73.3	80.7

7.34	-46.74	-33.68	-40.02	-0.31	71.4	73.3	81
7.34	-46.69	-33.68	-39.99	-0.34	71.4	73.4	81
7.33	-46.74	-33.63	-39.99	-0.31	71.5	73.4	81
7.34	-46.69	-33.68	-39.99	-0.31	71.4	73.4	80.9
7.34	-46.69	-33.68	-39.99	-0.31	71.6	73.4	81
7.34	-46.69	-33.68	-39.99	-0.31	71.6	73.4	80.9
7.34	-46.69	-33.63	-39.99	-0.31	71.6	73.4	80.8
7.34	-46.74	-33.63	-39.99	-0.31	71.6	73.4	80.6
7.34	-46.69	-33.63	-39.99	-0.31	71.5	73.4	80.4
7.33	-46.69	-33.63	-39.99	-0.31	71.8	73.4	80.4
7.33	-46.74	-33.63	-39.99	-0.31	71.9	73.4	80.4
7.34	-46.69	-33.63	-39.99	-0.31	71.8	73.4	80.3
7.33	-46.69	-33.63	-39.99	-0.34	71.9	73.4	79.9
7.33	-46.74	-33.63	-39.99	-0.31	72	73.4	79.7
7.34	-46.74	-33.63	-39.99	-0.31	71.9	73.4	79.6
7.34	-46.74	-33.63	-39.99	-0.31	72	73.4	79.4
7.34	-46.69	-33.63	-39.99	-0.31	72	73.3	79.3
7.33	-46.69	-33.63	-39.99	-0.34	72	73.3	79.1
7.34	-46.74	-33.63	-39.99	-0.31	72	73.3	78.8
7.34	-46.74	-33.63	-39.99	-0.34	72	73.3	78.7
7.34	-46.74	-33.68	-39.99	-0.34	72	73.2	78.3
7.34	-46.74	-33.68	-39.99	-0.31	72	73.2	78.2
7.34	-46.74	-33.63	-39.99	-0.34	72	73.2	77.8
7.34	-46.74	-33.63	-39.99	-0.31	72	73.1	77.8
7.34	-46.74	-33.68	-39.99	-0.31	71.9	73.1	77.5
7.33	-46.74	-33.63	-39.99	-0.34	71.8	73.2	77.3
7.34	-46.74	-33.68	-39.99	-0.31	71.9	73.1	77.2
7.34	-46.74	-33.63	-39.99	-0.34	71.8	73.1	77.1
7.34	-46.79	-33.63	-39.99	-0.34	71.9	73	76.8
7.33	-46.74	-33.63	-39.99	-0.31	71.9	73.1	76.6
7.34	-46.74	-33.63	-39.99	-0.31	72	73	76.6
7.34	-46.74	-33.63	-39.99	-0.34	71.9	73	76.6
7.34	-46.74	-33.68	-39.99	-0.31	71.9	73	76.5
7.34	-46.74	-33.68	-39.99	-0.31	71.8	73	76.3
7.34	-46.74	-33.68	-39.99	-0.34	71.8	72.9	75.9
7.34	-46.74	-33.68	-39.99	-0.34	71.9	72.9	75.8
7.34	-46.74	-33.68	-39.99	-0.31	71.8	72.9	75.8
7.34	-46.79	-33.68	-39.99	-0.31	71.6	72.9	75.5
7.32	-46.79	-33.68	-39.99	-0.34	71.6	72.9	75.5
7.32	-46.79	-33.68	-39.99	-0.31	71.6	72.8	75.4
7.32	-46.79	-33.68	-39.99	-0.31	71.6	72.8	75.2
7.32	-46.74	-33.68	-39.99	-0.31	71.6	72.7	75
7.32	-46.74	-33.63	-39.99	-0.31	71.6	72.7	75
7.32	-46.74	-33.63	-39.99	-0.31	71.6	72.7	74.9
7.32	-46.74	-33.68	-39.96	-0.31	71.6	72.6	74.7
7.32	-46.74	-33.68	-39.96	-0.31	71.5	72.7	74.6
7.33	-46.74	-33.63	-39.96	-0.31	71.6	72.6	74.5

7.32	-46.74	-33.68	-39.96	-0.31	71.5	72.6	74.3
7.32	-46.74	-33.68	-39.96	-0.31	71.5	72.6	74.2
7.32	-46.74	-33.68	-39.96	-0.31	71.5	72.5	74.1
7.32	-46.74	-33.63	-39.96	-0.31	71.4	72.5	73.8
7.32	-46.69	-33.63	-39.93	-0.31	71.4	72.5	73.8
7.32	-46.69	-33.68	-39.96	-0.31	71.4	72.4	73.6
7.33	-46.74	-33.63	-39.93	-0.31	71.4	72.4	73.5
7.32	-46.74	-33.63	-39.93	-0.31	71.3	72.4	73.2
7.32	-46.69	-33.63	-39.93	-0.31	71.3	72.3	73.3
7.32	-46.69	-33.63	-39.93	-0.31	71.3	72.3	73.1
7.32	-46.69	-33.63	-39.93	-0.31	71.2	72.3	73
7.32	-46.69	-33.63	-39.93	-0.31	71.2	72.3	72.9
7.32	-46.74	-33.63	-39.93	-0.31	71.2	72.2	72.8
7.32	-46.69	-33.63	-39.93	-0.31	71.2	72.2	72.6
7.32	-46.69	-33.63	-39.93	-0.31	71.2	72.1	72.4
7.32	-46.69	-33.63	-39.93	-0.31	71.2	72	72.3
7.32	-46.69	-33.63	-39.93	-0.31	71.1	72	72
7.32	-46.69	-33.63	-39.93	-0.34	71.1	71.9	72
7.32	-46.69	-33.63	-39.93	-0.31	71	71.9	71.7
7.32	-46.69	-33.63	-39.93	-0.31	71	71.9	71.7
7.32	-46.69	-33.63	-39.93	-0.31	71	71.8	71.4
7.32	-46.69	-33.63	-39.93	-0.31	70.9	71.8	71.4
7.32	-46.69	-33.63	-39.93	-0.31	70.9	71.8	71.3
7.32	-46.69	-33.63	-39.9	-0.31	70.9	71.8	71.2
7.32	-46.69	-33.63	-39.93	-0.31	70.9	71.7	71
7.32	-46.69	-33.63	-39.93	-0.31	70.9	71.7	71.2
7.32	-46.69	-33.63	-39.9	-0.31	70.8	71.7	71.1
7.32	-46.74	-33.63	-39.93	-0.31	70.8	71.6	70.9
7.33	-46.69	-33.63	-39.9	-0.31	70.8	71.6	70.8
7.32	-46.69	-33.63	-39.93	-0.31	70.7	71.4	70.6
7.32	-46.69	-33.63	-39.93	-0.31	70.7	71.3	70.7
7.32	-46.69	-33.63	-39.9	-0.31	70.6	71.3	70.4
7.32	-46.69	-33.63	-39.9	-0.31	70.6	71.3	70.5
7.32	-46.69	-33.63	-39.93	-0.31	70.6	71.3	70.5
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.3	70.4
7.32	-46.69	-33.63	-39.9	-0.31	70.6	71.3	70.4
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.3	70.1
7.32	-46.74	-33.63	-39.9	-0.31	70.5	71.2	70.2
7.32	-46.74	-33.63	-39.9	-0.31	70.5	71.3	70.1
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.2	70.3
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.3	70.1
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	70.3
7.32	-46.69	-33.63	-39.93	-0.31	70.4	71.2	70.3
7.32	-46.74	-33.63	-39.9	-0.31	70.4	71.3	70.1
7.32	-46.69	-33.63	-39.93	-0.31	70.4	71.3	70.2
7.32	-46.74	-33.63	-39.9	-0.31	70.5	71.3	70.3
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	70.4

7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	70.6
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	70.4
7.32	-46.74	-33.63	-39.9	-0.31	70.4	71.2	70.7
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.2	70.8
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	71
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	71.2
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	71.4
7.32	-46.74	-33.63	-39.9	-0.31	70.4	71.3	71.4
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.3	71.6
7.32	-46.69	-33.63	-39.9	-0.31	70.3	71.3	71.9
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.4	72.2
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.4	72.4
7.32	-46.74	-33.63	-39.9	-0.31	70.4	71.6	72.5
7.32	-46.69	-33.63	-39.9	-0.31	70.4	71.6	72.9
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.7	73.2
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.7	73.4
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.8	73.6
7.33	-46.69	-33.57	-39.9	-0.31	70.5	71.8	74.1
7.32	-46.69	-33.63	-39.87	-0.34	70.5	71.9	74.3
7.32	-46.69	-33.63	-39.9	-0.31	70.5	71.9	74.5
7.32	-46.69	-33.63	-39.87	-0.31	70.6	71.9	74.9
7.32	-46.69	-33.63	-39.9	-0.31	70.6	72	75.2
7.33	-46.69	-33.57	-39.87	-0.31	70.5	72.1	75.3
7.32	-46.69	-33.63	-39.9	-0.31	70.6	72.1	75.5
7.32	-46.69	-33.63	-39.87	-0.31	70.6	72.2	75.9
7.32	-46.65	-33.57	-39.9	-0.31	70.7	72.2	76.4
7.32	-46.65	-33.63	-39.9	-0.31	70.7	72.3	76.5
7.33	-46.69	-33.57	-39.87	-0.31	70.8	72.3	76.7
7.33	-46.65	-33.57	-39.87	-0.31	70.8	72.3	76.9
7.32	-46.69	-33.57	-39.9	-0.31	70.8	72.4	77.2
7.32	-46.65	-33.57	-39.87	-0.31	70.9	72.4	77.4
7.33	-46.69	-33.63	-39.87	-0.31	71	72.5	77.6
7.32	-46.69	-33.57	-39.87	-0.31	71	72.5	77.7
7.32	-46.65	-33.57	-39.87	-0.31	71	72.6	78.2
7.32	-46.65	-33.57	-39.87	-0.27	71.1	72.7	78.3
7.32	-46.65	-33.57	-39.87	-0.31	71.1	72.7	78.5
7.32	-46.65	-33.57	-39.87	-0.31	71.2	72.8	78.7
7.32	-46.65	-33.57	-39.87	-0.31	71.1	72.8	78.9
7.33	-46.65	-33.57	-39.87	-0.31	71.2	72.9	78.9
7.32	-46.6	-33.57	-39.9	-0.31	71.2	72.9	79.2
7.32	-46.6	-33.57	-39.9	-0.31	71.2	73	79.2
7.32	-46.65	-33.57	-39.87	-0.31	71.2	73	79.3
7.32	-46.65	-33.57	-39.87	-0.27	71.3	73.1	79.3
7.32	-46.65	-33.57	-39.9	-0.31	71.2	73.1	79.5
7.32	-46.65	-33.57	-39.9	-0.31	71.3	73.2	79.5
7.32	-46.6	-33.57	-39.9	-0.31	71.3	73.2	79.8
7.32	-46.65	-33.57	-39.9	-0.31	71.4	73.3	79.7

7.32	-46.6	-33.57	-39.9	-0.31	71.5	73.3	79.7
7.33	-46.6	-33.57	-39.9	-0.31	71.5	73.4	79.7
7.32	-46.6	-33.57	-39.9	-0.31	71.6	73.4	79.8
7.32	-46.65	-33.57	-39.9	-0.31	71.6	73.4	79.7
7.32	-46.6	-33.57	-39.9	-0.31	71.6	73.4	79.8
7.32	-46.65	-33.57	-39.9	-0.31	71.6	73.4	79.8
7.32	-46.6	-33.57	-39.9	-0.31	71.8	73.4	79.8
7.32	-46.6	-33.57	-39.9	-0.31	71.9	73.4	79.8
7.32	-46.6	-33.57	-39.9	-0.31	71.9	73.4	79.6
7.32	-46.6	-33.52	-39.9	-0.31	71.9	73.5	79.7
7.33	-46.6	-33.57	-39.9	-0.31	71.9	73.5	79.7
7.32	-46.65	-33.52	-39.9	-0.31	72	73.5	79.5
7.32	-46.6	-33.52	-39.87	-0.31	72.1	73.5	79.3
7.32	-46.6	-33.52	-39.87	-0.31	72	73.5	79.5
7.32	-46.65	-33.57	-39.87	-0.31	72	73.5	79.4
7.32	-46.6	-33.52	-39.87	-0.31	72.1	73.6	79.2
7.33	-46.6	-33.57	-39.87	-0.31	72.2	73.6	78.9
7.32	-46.6	-33.52	-39.87	-0.31	72.1	73.6	78.9
7.32	-46.6	-33.52	-39.87	-0.27	72.2	73.5	78.8
7.32	-46.6	-33.57	-39.87	-0.31	72.2	73.5	78.8
7.33	-46.6	-33.57	-39.87	-0.31	72.2	73.5	78.5
7.32	-46.6	-33.57	-39.87	-0.31	72.2	73.5	78.5
7.32	-46.6	-33.52	-39.87	-0.31	72.2	73.5	78.3
7.32	-46.6	-33.57	-39.87	-0.31	72.2	73.5	78
7.32	-46.6	-33.57	-39.87	-0.31	72.2	73.5	77.9
7.32	-46.6	-33.57	-39.87	-0.31	72.1	73.5	77.7
7.32	-46.6	-33.57	-39.87	-0.27	72.1	73.5	77.7
7.32	-46.6	-33.57	-39.87	-0.31	72.2	73.4	77.4
7.32	-46.6	-33.57	-39.87	-0.31	72.2	73.4	77.3
7.32	-46.65	-33.57	-39.9	-0.31	72.1	73.4	76.9
7.32	-46.65	-33.57	-39.87	-0.31	72.2	73.4	77
7.32	-46.6	-33.57	-39.87	-0.27	72.1	73.4	76.8
7.32	-46.65	-33.57	-39.87	-0.31	72.2	73.4	76.8
7.32	-46.65	-33.57	-39.87	-0.31	72	73.4	76.6
7.32	-46.6	-33.57	-39.87	-0.31	72	73.4	76.6
7.32	-46.6	-33.57	-39.9	-0.31	72.1	73.4	76.4
7.32	-46.65	-33.57	-39.87	-0.31	72.1	73.4	76.3
7.32	-46.6	-33.57	-39.87	-0.31	72.1	73.4	76.1
7.32	-46.6	-33.57	-39.87	-0.31	72.1	73.4	76.2
7.32	-46.6	-33.57	-39.87	-0.31	72	73.4	75.9
7.32	-46.6	-33.57	-39.87	-0.31	72	73.4	75.8
7.32	-46.6	-33.57	-39.87	-0.31	72	73.3	75.7
7.32	-46.6	-33.57	-39.87	-0.31	72	73.3	75.5
7.32	-46.6	-33.57	-39.87	-0.31	72	73.3	75.3
7.32	-46.65	-33.57	-39.87	-0.31	72	73.2	75.3
7.32	-46.65	-33.57	-39.87	-0.31	72	73.2	75.4
7.32	-46.6	-33.57	-39.87	-0.31	72	73.2	75.2

7.32	-46.6	-33.57	-39.87	-0.31	72	73.2	75.1
7.32	-46.6	-33.57	-39.87	-0.27	72	73.2	75.1
7.32	-46.6	-33.57	-39.87	-0.31	72	73.2	75
7.32	-46.6	-33.57	-39.84	-0.31	72	73.1	75
7.32	-46.65	-33.57	-39.87	-0.27	71.9	73.1	74.8
7.32	-46.6	-33.57	-39.84	-0.31	71.9	73.1	74.8
7.32	-46.65	-33.57	-39.87	-0.31	71.9	73.1	74.8
7.32	-46.65	-33.57	-39.87	-0.27	71.9	73.1	74.6
7.32	-46.65	-33.57	-39.87	-0.27	71.9	73.1	74.6
7.32	-46.6	-33.52	-39.87	-0.31	72	73	74.4
7.32	-46.6	-33.57	-39.87	-0.31	71.9	73	74.5
7.32	-46.6	-33.52	-39.84	-0.31	71.9	73	74.5
7.32	-46.6	-33.57	-39.84	-0.31	71.9	73	74.4
7.32	-46.65	-33.57	-39.84	-0.31	71.9	73	74.4
7.32	-46.6	-33.57	-39.84	-0.31	71.9	73	74.3
7.32	-46.6	-33.57	-39.87	-0.31	71.9	72.9	74.2
7.32	-46.6	-33.57	-39.84	-0.31	71.8	72.9	74.1
7.32	-46.6	-33.52	-39.84	-0.31	71.8	72.9	74.1
7.32	-46.6	-33.57	-39.84	-0.27	71.8	72.8	74.1
7.32	-46.6	-33.52	-39.87	-0.31	71.8	72.8	73.8
7.32	-46.6	-33.52	-39.84	-0.31	71.8	72.8	74
7.32	-46.6	-33.52	-39.84	-0.31	71.6	72.8	73.8
7.32	-46.65	-33.52	-39.84	-0.31	71.8	72.8	73.7
7.32	-46.6	-33.52	-39.81	-0.31	71.6	72.8	73.8
7.32	-46.6	-33.52	-39.84	-0.31	71.8	72.8	73.7
7.32	-46.6	-33.52	-39.84	-0.31	71.6	72.8	73.5
7.32	-46.6	-33.52	-39.81	-0.31	71.6	72.7	73.6
7.32	-46.6	-33.52	-39.84	-0.31	71.6	72.7	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.6	72.7	73.6
7.32	-46.6	-33.52	-39.81	-0.31	71.6	72.7	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.6	72.7	73.4
7.32	-46.6	-33.52	-39.84	-0.31	71.5	72.6	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.5	72.7	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.5	72.7	73.3
7.32	-46.6	-33.52	-39.81	-0.31	71.5	72.7	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.5	72.6	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.5	72.6	73.2
7.32	-46.6	-33.52	-39.81	-0.31	71.5	72.6	73.2
7.32	-46.6	-33.52	-39.81	-0.27	71.4	72.6	73.3
7.32	-46.6	-33.52	-39.84	-0.31	71.5	72.6	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.6	73.3
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.5	73.3
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.5	73.3
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.5	73.3
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.5	73.3
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.5	73.3
7.32	-46.6	-33.52	-39.81	-0.27	71.3	72.5	73.3

7.32	-46.6	-33.52	-39.81	-0.27	71.3	72.5	73.3
7.32	-46.6	-33.52	-39.84	-0.27	71.3	72.5	73.4
7.32	-46.6	-33.52	-39.81	-0.27	71.4	72.6	73.4
7.32	-46.6	-33.52	-39.81	-0.31	71.4	72.6	73.6
7.32	-46.6	-33.52	-39.81	-0.31	71.3	72.6	73.5
7.32	-46.6	-33.52	-39.78	-0.27	71.2	72.6	73.5
7.32	-46.56	-33.52	-39.81	-0.27	71.3	72.6	73.6
7.32	-46.6	-33.52	-39.81	-0.31	71.3	72.6	73.7
7.32	-46.6	-33.52	-39.78	-0.27	71.3	72.6	73.8
7.32	-46.6	-33.52	-39.81	-0.31	71.3	72.7	74
7.32	-46.6	-33.52	-39.81	-0.27	71.2	72.7	74.2
7.32	-46.6	-33.57	-39.81	-0.31	71.4	72.7	74.4
7.32	-46.6	-33.52	-39.81	-0.31	71.3	72.7	74.5
7.32	-46.6	-33.52	-39.81	-0.31	71.3	72.7	74.5
7.32	-46.6	-33.57	-39.81	-0.31	71.3	72.8	74.7
7.32	-46.6	-33.52	-39.78	-0.31	71.3	72.8	75.1
7.32	-46.6	-33.52	-39.81	-0.31	71.2	72.8	75.3
7.32	-46.6	-33.52	-39.81	-0.27	71.3	72.9	75.5
7.32	-46.6	-33.52	-39.78	-0.27	71.3	72.9	76.1
7.32	-46.6	-33.52	-39.81	-0.27	71.3	73	76.4
7.32	-46.6	-33.52	-39.81	-0.31	71.4	73	76.6
7.32	-46.6	-33.52	-39.78	-0.27	71.4	73.1	76.9
7.32	-46.6	-33.52	-39.78	-0.31	71.4	73.1	77.1
7.32	-46.6	-33.52	-39.78	-0.31	71.4	73.2	77.6
7.32	-46.6	-33.52	-39.78	-0.31	71.5	73.3	77.6
7.32	-46.6	-33.57	-39.78	-0.27	71.5	73.3	77.9
7.32	-46.6	-33.52	-39.81	-0.27	71.5	73.4	78.3
7.32	-46.6	-33.52	-39.81	-0.31	71.6	73.4	78.7
7.32	-46.6	-33.52	-39.84	-0.27	71.8	73.4	78.9
7.32	-46.6	-33.52	-39.84	-0.31	71.8	73.5	79.1
7.32	-46.6	-33.52	-39.84	-0.27	71.8	73.6	79.5
7.32	-46.6	-33.52	-39.84	-0.27	71.9	73.6	79.9
7.33	-46.6	-33.47	-39.84	-0.31	72	73.7	80
7.32	-46.56	-33.52	-39.84	-0.27	72	73.9	80.4
7.32	-46.6	-33.52	-39.81	-0.31	72.1	73.9	80.5
7.32	-46.56	-33.47	-39.84	-0.27	72.1	74	80.8
7.32	-46.56	-33.52	-39.84	-0.27	72.1	74.1	81
7.32	-46.56	-33.47	-39.84	-0.27	72.2	74.1	81.3
7.32	-46.56	-33.47	-39.84	-0.27	72.3	74.2	81.5
7.32	-46.56	-33.52	-39.84	-0.27	72.3	74.2	81.4
7.32	-46.56	-33.52	-39.81	-0.27	72.3	74.3	81.7
7.32	-46.56	-33.47	-39.84	-0.27	72.3	74.4	81.9
7.32	-46.56	-33.47	-39.84	-0.31	72.4	74.5	82
7.32	-46.56	-33.47	-39.84	-0.27	72.5	74.5	82.1
7.32	-46.56	-33.52	-39.84	-0.31	72.5	74.5	82.2
7.32	-46.56	-33.52	-39.84	-0.27	72.5	74.5	82.5
7.32	-46.51	-33.47	-39.84	-0.31	72.6	74.5	82.6

7.32	-46.51	-33.52	-39.84	-0.27	72.7	74.6	82.7
7.32	-46.56	-33.47	-39.84	-0.27	72.7	74.6	82.7
7.32	-46.56	-33.52	-39.84	-0.27	72.7	74.7	82.7
7.32	-46.51	-33.47	-39.84	-0.27	72.7	74.7	82.9
7.32	-46.56	-33.47	-39.87	-0.27	72.8	74.8	82.9
7.33	-46.51	-33.47	-39.87	-0.27	72.8	74.8	82.9
7.34	-46.56	-33.52	-39.87	-0.27	72.9	74.8	82.9
7.34	-46.51	-33.47	-39.84	-0.27	72.9	74.8	82.8
7.33	-46.56	-33.47	-39.87	-0.27	73	74.9	82.8
7.34	-46.56	-33.47	-39.84	-0.27	73	74.9	82.9
7.34	-46.56	-33.47	-39.87	-0.27	73.1	75	82.9
7.34	-46.56	-33.42	-39.84	-0.27	73.1	75	82.9
7.34	-46.51	-33.47	-39.87	-0.31	73.1	75	82.7
7.33	-46.51	-33.47	-39.87	-0.31	73.1	75.1	82.8
7.34	-46.51	-33.47	-39.87	-0.27	73.2	75.1	82.8
7.33	-46.51	-33.47	-39.87	-0.27	73.2	75.1	82.6
7.33	-46.51	-33.47	-39.87	-0.31	73.3	75.1	82.4
7.34	-46.51	-33.52	-39.87	-0.27	73.2	75.1	82.5
7.33	-46.56	-33.47	-39.87	-0.31	73.3	75.1	82.2
7.34	-46.56	-33.47	-39.87	-0.27	73.3	75.1	82.2
7.34	-46.56	-33.47	-39.84	-0.27	73.3	75.1	82.1
7.34	-46.56	-33.47	-39.87	-0.27	73.4	75.1	82.1
7.33	-46.56	-33.47	-39.87	-0.27	73.4	75	81.7
7.34	-46.56	-33.47	-39.87	-0.27	73.4	74.9	81.7
7.33	-46.56	-33.47	-39.87	-0.27	73.3	75	81.5
7.34	-46.56	-33.47	-39.87	-0.27	73.3	75	81.2
7.34	-46.56	-33.47	-39.87	-0.27	73.4	74.9	81
7.33	-46.56	-33.47	-39.84	-0.27	73.4	74.8	81
7.33	-46.56	-33.47	-39.87	-0.27	73.4	74.8	80.8
7.33	-46.56	-33.47	-39.87	-0.27	73.4	74.8	80.5
7.33	-46.56	-33.47	-39.87	-0.27	73.3	74.7	80.4
7.33	-46.56	-33.47	-39.84	-0.27	73.4	74.7	80
7.33	-46.56	-33.47	-39.84	-0.27	73.4	74.7	79.8
7.33	-46.56	-33.47	-39.84	-0.31	73.4	74.7	79.6
7.32	-46.56	-33.47	-39.84	-0.27	73.3	74.6	79.4
7.32	-46.56	-33.47	-39.87	-0.31	73.3	74.6	79.2
7.32	-46.56	-33.47	-39.84	-0.31	73.2	74.5	78.9
7.32	-46.56	-33.52	-39.84	-0.27	73.2	74.5	78.8
7.32	-46.56	-33.47	-39.87	-0.31	73.3	74.5	78.3
7.32	-46.56	-33.47	-39.84	-0.27	73.2	74.5	78.2
7.32	-46.56	-33.47	-39.87	-0.31	73.2	74.5	77.7
7.32	-46.56	-33.47	-39.84	-0.27	73.2	74.4	77.7
7.32	-46.6	-33.47	-39.87	-0.27	73.1	74.5	77.6
7.32	-46.56	-33.52	-39.84	-0.27	73.1	74.3	77.2
7.32	-46.6	-33.52	-39.84	-0.27	73.1	74.3	76.9
7.33	-46.6	-33.47	-39.87	-0.31	73	74.2	76.9
7.32	-46.6	-33.52	-39.84	-0.27	73	74.2	76.7

7.32	-46.6	-33.52	-39.84	-0.27	72.9	74.2	76.5
7.32	-46.56	-33.52	-39.84	-0.27	72.9	74.1	76.4
7.32	-46.56	-33.52	-39.84	-0.31	72.9	74.1	76.1
7.32	-46.6	-33.47	-39.84	-0.27	72.9	74	75.9
7.32	-46.6	-33.52	-39.84	-0.31	72.8	74	75.9
7.32	-46.56	-33.47	-39.84	-0.31	72.7	73.9	75.7
7.32	-46.56	-33.52	-39.84	-0.27	72.7	73.9	75.5
7.32	-46.6	-33.47	-39.84	-0.31	72.7	73.7	75.4
7.32	-46.56	-33.52	-39.84	-0.27	72.6	73.7	75.3
7.32	-46.56	-33.52	-39.84	-0.31	72.7	73.6	75.2
7.32	-46.56	-33.52	-39.84	-0.27	72.6	73.6	74.9
7.32	-46.56	-33.47	-39.84	-0.27	72.5	73.6	74.8
7.32	-46.6	-33.52	-39.81	-0.27	72.5	73.5	74.7
7.32	-46.56	-33.47	-39.84	-0.27	72.5	73.5	74.6
7.32	-46.56	-33.47	-39.84	-0.31	72.4	73.5	74.5
7.32	-46.56	-33.47	-39.81	-0.31	72.4	73.4	74.3
7.32	-46.56	-33.47	-39.81	-0.31	72.4	73.4	74.3
7.32	-46.56	-33.52	-39.81	-0.31	72.4	73.4	74.1
7.32	-46.6	-33.47	-39.81	-0.31	72.3	73.4	74.1
7.32	-46.56	-33.47	-39.81	-0.31	72.3	73.3	74
7.31	-46.56	-33.47	-39.81	-0.31	72.3	73.3	73.8
7.32	-46.56	-33.52	-39.81	-0.27	72.3	73.2	73.7
7.32	-46.56	-33.47	-39.81	-0.31	72.3	73.2	73.6
7.32	-46.56	-33.52	-39.81	-0.27	72.3	73.1	73.5
7.32	-46.56	-33.52	-39.81	-0.27	72.2	73.1	73.5
7.32	-46.56	-33.52	-39.81	-0.27	72.2	73.1	73.4
7.32	-46.56	-33.47	-39.81	-0.31	72.2	73.1	73.1
7.32	-46.56	-33.47	-39.81	-0.27	72.1	73	73
7.32	-46.56	-33.47	-39.81	-0.27	72.1	73	73
7.32	-46.56	-33.47	-39.78	-0.27	72.1	73	72.7
7.32	-46.56	-33.47	-39.81	-0.27	72	72.9	73
7.32	-46.6	-33.52	-39.81	-0.27	72	72.9	72.8
7.32	-46.56	-33.47	-39.81	-0.31	72	72.8	72.6
7.31	-46.56	-33.47	-39.81	-0.31	71.9	72.8	72.6
7.31	-46.56	-33.47	-39.81	-0.31	72	72.8	72.6
7.31	-46.6	-33.47	-39.81	-0.31	71.9	72.8	72.4
7.31	-46.56	-33.52	-39.81	-0.27	71.9	72.7	72.3
7.31	-46.56	-33.52	-39.78	-0.27	71.9	72.7	72.3
7.31	-46.56	-33.52	-39.78	-0.31	71.8	72.7	72.4
7.31	-46.56	-33.52	-39.78	-0.27	71.8	72.6	72.2
7.31	-46.56	-33.52	-39.78	-0.31	71.8	72.7	72.3
7.3	-46.56	-33.47	-39.78	-0.31	71.8	72.7	72.2
7.31	-46.56	-33.47	-39.81	-0.31	71.6	72.6	72.2
7.31	-46.56	-33.47	-39.81	-0.27	71.6	72.6	72.1
7.31	-46.56	-33.52	-39.78	-0.27	71.6	72.6	72
7.31	-46.56	-33.47	-39.81	-0.27	71.6	72.5	72
7.31	-46.56	-33.47	-39.81	-0.31	71.5	72.6	72.1

7.31	-46.56	-33.47	-39.78	-0.31	71.5	72.5	72
7.3	-46.56	-33.47	-39.81	-0.27	71.5	72.5	72.1
7.31	-46.56	-33.47	-39.81	-0.31	71.5	72.5	72
7.31	-46.56	-33.47	-39.78	-0.31	71.5	72.5	72
7.31	-46.56	-33.47	-39.81	-0.31	71.5	72.5	72.1
7.31	-46.56	-33.52	-39.78	-0.31	71.5	72.5	72.2
7.31	-46.56	-33.47	-39.78	-0.31	71.5	72.5	72.2
7.31	-46.56	-33.52	-39.81	-0.27	71.4	72.5	72.3
7.31	-46.6	-33.52	-39.78	-0.27	71.4	72.5	72.4
7.31	-46.56	-33.52	-39.81	-0.31	71.5	72.6	72.6
7.31	-46.56	-33.47	-39.78	-0.31	71.4	72.5	72.9
7.31	-46.56	-33.47	-39.81	-0.27	71.4	72.5	73
7.31	-46.6	-33.52	-39.81	-0.31	71.4	72.6	73.3
7.31	-46.56	-33.52	-39.78	-0.27	71.4	72.6	73.3
7.31	-46.6	-33.52	-39.81	-0.31	71.5	72.7	73.6
7.31	-46.56	-33.52	-39.78	-0.27	71.5	72.7	73.6
7.3	-46.56	-33.47	-39.78	-0.31	71.5	72.7	74.2
7.31	-46.56	-33.47	-39.78	-0.31	71.5	72.7	74.2
7.31	-46.56	-33.47	-39.78	-0.31	71.6	72.8	74.5
7.31	-46.56	-33.47	-39.78	-0.31	71.5	72.8	74.8
7.31	-46.56	-33.47	-39.78	-0.31	71.5	72.9	74.9
7.31	-46.56	-33.47	-39.78	-0.27	71.5	72.9	75.3
7.3	-46.6	-33.47	-39.78	-0.31	71.5	72.9	75.6
7.31	-46.56	-33.47	-39.78	-0.31	71.6	73	76.1
7.31	-46.56	-33.47	-39.78	-0.27	71.6	73	76.4
7.31	-46.56	-33.47	-39.78	-0.31	71.8	73.1	76.8
7.31	-46.56	-33.47	-39.78	-0.31	71.6	73.2	77.1
7.31	-46.56	-33.47	-39.78	-0.27	71.6	73.3	77.4
7.31	-46.56	-33.47	-39.75	-0.27	71.8	73.4	77.9
7.32	-46.56	-33.47	-39.75	-0.27	71.9	73.4	78.3
7.32	-46.56	-33.52	-39.75	-0.27	71.9	73.4	78.7
7.32	-46.56	-33.47	-39.75	-0.31	72	73.5	79.2
7.32	-46.56	-33.47	-39.75	-0.31	72	73.6	79.5
7.32	-46.51	-33.47	-39.75	-0.27	72	73.7	79.9
7.32	-46.51	-33.47	-39.75	-0.27	72.1	73.9	80.1
7.32	-46.56	-33.47	-39.75	-0.27	72.3	74	80.7
7.32	-46.56	-33.47	-39.75	-0.27	72.3	74.1	81
7.32	-46.51	-33.47	-39.75	-0.27	72.3	74.2	81.4
7.32	-46.51	-33.47	-39.75	-0.27	72.3	74.3	81.7
7.32	-46.51	-33.47	-39.75	-0.27	72.5	74.4	82
7.32	-46.51	-33.47	-39.75	-0.27	72.5	74.5	82.1
7.32	-46.51	-33.42	-39.75	-0.27	72.5	74.5	82.5
7.32	-46.47	-33.42	-39.75	-0.27	72.6	74.6	82.8
7.32	-46.51	-33.47	-39.75	-0.27	72.7	74.7	83
7.32	-46.51	-33.47	-39.75	-0.27	72.7	74.8	83.2
7.32	-46.51	-33.42	-39.75	-0.27	72.9	74.8	83.2
7.32	-46.51	-33.42	-39.78	-0.27	72.9	74.9	83.5

7.32	-46.51	-33.47	-39.78	-0.27	73	75	83.6
7.32	-46.51	-33.47	-39.78	-0.27	73.1	75.1	83.7
7.32	-46.51	-33.47	-39.78	-0.24	73.1	75.2	84
7.32	-46.51	-33.42	-39.78	-0.27	73.2	75.2	84.2
7.32	-46.51	-33.42	-39.78	-0.24	73.2	75.3	84.2
7.32	-46.47	-33.42	-39.78	-0.27	73.3	75.3	84.2
7.32	-46.47	-33.42	-39.81	-0.27	73.3	75.4	84.2
7.32	-46.51	-33.42	-39.81	-0.27	73.4	75.4	84.2
7.32	-46.51	-33.42	-39.84	-0.27	73.4	75.5	84.5
7.32	-46.47	-33.42	-39.81	-0.27	73.4	75.5	84.6
7.32	-46.51	-33.42	-39.81	-0.27	73.5	75.5	84.5
7.32	-46.47	-33.42	-39.78	-0.27	73.5	75.6	84.6
7.33	-46.47	-33.42	-39.78	-0.27	73.6	75.6	84.5
7.33	-46.51	-33.42	-39.81	-0.24	73.6	75.6	84.5
7.33	-46.47	-33.37	-39.81	-0.27	73.6	75.7	84.3
7.34	-46.51	-33.42	-39.81	-0.24	73.4	75.7	84.2
7.34	-46.47	-33.42	-39.81	-0.27	73.5	75.7	84.1
7.33	-46.47	-33.42	-39.81	-0.27	73.7	75.6	84
7.34	-46.51	-33.37	-39.81	-0.27	73.7	75.6	84
7.34	-46.51	-33.37	-39.81	-0.27	73.8	75.6	83.8
7.34	-46.47	-33.42	-39.81	-0.27	73.8	75.5	83.4
7.34	-46.51	-33.42	-39.81	-0.27	74	75.5	83.2
7.34	-46.51	-33.42	-39.84	-0.27	74	75.5	82.9
7.34	-46.51	-33.42	-39.81	-0.27	74	75.5	82.6
7.34	-46.51	-33.42	-39.84	-0.27	73.8	75.4	82.4
7.33	-46.51	-33.42	-39.81	-0.27	73.7	75.4	82
7.32	-46.51	-33.42	-39.81	-0.27	73.7	75.3	81.9
7.32	-46.51	-33.47	-39.84	-0.27	73.6	75.3	81.5
7.32	-46.51	-33.47	-39.84	-0.27	73.6	75.2	81.1
7.32	-46.51	-33.47	-39.84	-0.27	73.7	75.2	80.9
7.32	-46.51	-33.47	-39.84	-0.31	73.7	75.1	80.4
7.32	-46.56	-33.47	-39.84	-0.27	73.7	75.1	80.3
7.32	-46.56	-33.42	-39.81	-0.31	73.7	75	79.9
7.32	-46.51	-33.47	-39.81	-0.27	73.6	75	79.8
7.32	-46.51	-33.47	-39.81	-0.27	73.6	74.9	79.4
7.32	-46.56	-33.47	-39.81	-0.31	73.5	74.8	79.1
7.32	-46.51	-33.47	-39.81	-0.27	73.4	74.8	78.8
7.32	-46.56	-33.47	-39.81	-0.27	73.4	74.7	78.7
7.32	-46.51	-33.47	-39.78	-0.27	73.4	74.7	78.5
7.32	-46.56	-33.47	-39.78	-0.27	73.4	74.7	78
7.32	-46.51	-33.47	-39.78	-0.31	73.4	74.6	77.7
7.32	-46.51	-33.47	-39.78	-0.27	73.3	74.5	77.6
7.32	-46.51	-33.47	-39.75	-0.27	73.3	74.5	77.4
7.32	-46.51	-33.47	-39.75	-0.31	73.2	74.5	77.2
7.32	-46.51	-33.42	-39.75	-0.27	73.2	74.4	76.9
7.32	-46.51	-33.42	-39.78	-0.27	73.2	74.4	76.6
7.32	-46.51	-33.42	-39.78	-0.31	73.1	74.3	76.6

7.32	-46.51	-33.42	-39.78	-0.31	73.1	74.2	76.4
7.32	-46.51	-33.42	-39.75	-0.27	73.1	74.2	76.3
7.32	-46.51	-33.42	-39.75	-0.31	73	74.1	75.9
7.32	-46.51	-33.42	-39.75	-0.27	73	74.1	75.7
7.32	-46.51	-33.42	-39.78	-0.31	72.9	74	75.6
7.32	-46.51	-33.42	-39.75	-0.31	72.9	73.9	75.5
7.32	-46.51	-33.42	-39.75	-0.31	72.9	73.9	75.2
7.32	-46.51	-33.42	-39.75	-0.27	72.8	73.7	75
7.32	-46.51	-33.42	-39.75	-0.31	72.7	73.6	74.7
7.32	-46.51	-33.42	-39.75	-0.31	72.7	73.6	74.7
7.32	-46.51	-33.42	-39.75	-0.27	72.6	73.5	74.5
7.31	-46.51	-33.42	-39.75	-0.27	72.6	73.5	74.3
7.31	-46.51	-33.42	-39.75	-0.31	72.6	73.5	74.3
7.31	-46.51	-33.42	-39.75	-0.27	72.5	73.4	74.1
7.3	-46.51	-33.42	-39.75	-0.27	72.5	73.4	74.1
7.31	-46.51	-33.42	-39.75	-0.27	72.5	73.4	73.6
7.31	-46.51	-33.42	-39.75	-0.27	72.5	73.3	73.6
7.31	-46.51	-33.42	-39.75	-0.31	72.4	73.3	73.5
7.31	-46.51	-33.42	-39.75	-0.27	72.3	73.2	73.4
7.31	-46.51	-33.42	-39.75	-0.27	72.3	73.2	73.3
7.31	-46.51	-33.42	-39.75	-0.27	72.3	73.1	73.2
7.31	-46.51	-33.42	-39.75	-0.31	72.3	73.1	72.8
7.31	-46.51	-33.42	-39.75	-0.31	72.2	73.1	73
7.31	-46.51	-33.42	-39.75	-0.31	72.2	72.9	72.8
7.31	-46.51	-33.42	-39.75	-0.27	72.1	72.9	72.6
7.31	-46.51	-33.42	-39.75	-0.31	72.1	72.9	72.5
7.31	-46.51	-33.42	-39.75	-0.31	72	72.8	72.3
7.31	-46.47	-33.42	-39.72	-0.27	72	72.8	72.3
7.31	-46.51	-33.42	-39.75	-0.27	72	72.8	72.2
7.31	-46.51	-33.42	-39.75	-0.31	71.9	72.8	72
7.31	-46.47	-33.42	-39.75	-0.27	71.8	72.7	72
7.31	-46.51	-33.42	-39.75	-0.31	71.9	72.7	71.9
7.31	-46.51	-33.37	-39.75	-0.31	71.8	72.6	71.9
7.3	-46.51	-33.42	-39.75	-0.27	71.6	72.6	71.6
7.31	-46.51	-33.42	-39.75	-0.31	71.6	72.6	71.6
7.31	-46.51	-33.42	-39.75	-0.31	71.6	72.5	71.4
7.31	-46.51	-33.42	-39.75	-0.31	71.6	72.5	71.4
7.31	-46.51	-33.42	-39.75	-0.27	71.5	72.5	71.2
7.31	-46.51	-33.42	-39.75	-0.27	71.6	72.4	71.2
7.3	-46.51	-33.42	-39.75	-0.31	71.4	72.4	71.2
7.3	-46.51	-33.42	-39.72	-0.31	71.5	72.4	71.2
7.29	-46.51	-33.42	-39.72	-0.27	71.5	72.4	71.2
7.29	-46.51	-33.42	-39.75	-0.31	71.4	72.4	71
7.3	-46.47	-33.42	-39.72	-0.27	71.5	72.4	71.2
7.29	-46.51	-33.42	-39.75	-0.31	71.4	72.4	71.1
7.3	-46.51	-33.42	-39.72	-0.27	71.4	72.4	71.1
7.29	-46.51	-33.42	-39.75	-0.31	71.4	72.4	71.2

7.29	-46.51	-33.42	-39.72	-0.27	71.4	72.3	71.2
7.29	-46.51	-33.42	-39.72	-0.27	71.4	72.3	71.1
7.29	-46.51	-33.42	-39.72	-0.31	71.4	72.3	71.2
7.3	-46.51	-33.42	-39.72	-0.27	71.4	72.3	71.2
7.29	-46.47	-33.42	-39.72	-0.31	71.4	72.3	71.6
7.29	-46.51	-33.42	-39.72	-0.31	71.3	72.4	71.6
7.29	-46.47	-33.42	-39.72	-0.31	71.4	72.3	71.7
7.3	-46.47	-33.42	-39.72	-0.27	71.4	72.4	72.1
7.3	-46.51	-33.42	-39.72	-0.31	71.4	72.4	72.4
7.29	-46.47	-33.42	-39.72	-0.31	71.4	72.5	72.4
7.29	-46.47	-33.42	-39.72	-0.27	71.4	72.5	72.9
7.29	-46.51	-33.42	-39.72	-0.31	71.4	72.5	73.1
7.29	-46.47	-33.42	-39.72	-0.31	71.3	72.5	73.3
7.29	-46.47	-33.42	-39.69	-0.31	71.4	72.6	73.7
7.29	-46.47	-33.42	-39.72	-0.31	71.4	72.7	74.1
7.29	-46.47	-33.37	-39.69	-0.31	71.4	72.7	74.4
7.3	-46.47	-33.42	-39.69	-0.31	71.5	72.8	74.8
7.29	-46.47	-33.42	-39.72	-0.31	71.5	72.9	74.9
7.3	-46.47	-33.42	-39.72	-0.27	71.5	72.9	75.4
7.31	-46.47	-33.42	-39.69	-0.34	71.5	73	75.8
7.31	-46.47	-33.37	-39.69	-0.31	71.5	73	76.4
7.31	-46.51	-33.42	-39.72	-0.27	71.6	73.1	76.6
7.31	-46.47	-33.42	-39.72	-0.31	71.6	73.2	77.1
7.31	-46.47	-33.42	-39.69	-0.31	71.8	73.3	77.5
7.31	-46.47	-33.42	-39.72	-0.27	71.9	73.3	77.7
7.31	-46.47	-33.42	-39.69	-0.31	71.9	73.4	78.3
7.31	-46.51	-33.42	-39.69	-0.27	71.9	73.4	78.7
7.31	-46.47	-33.42	-39.69	-0.27	72	73.6	79.1
7.31	-46.47	-33.37	-39.69	-0.31	72.1	73.6	79.6
7.31	-46.47	-33.37	-39.69	-0.31	72.1	73.7	79.8
7.31	-46.47	-33.37	-39.72	-0.27	72.2	73.9	80
7.31	-46.47	-33.42	-39.72	-0.27	72.3	74	80.7
7.31	-46.47	-33.42	-39.69	-0.31	72.3	74.2	81
7.31	-46.47	-33.37	-39.69	-0.31	72.3	74.2	81.2
7.31	-46.47	-33.37	-39.69	-0.31	72.4	74.4	81.7
7.31	-46.47	-33.37	-39.69	-0.27	72.5	74.5	82
7.32	-46.47	-33.37	-39.69	-0.27	72.5	74.5	82.4
7.32	-46.47	-33.37	-39.66	-0.31	72.6	74.6	82.9
7.32	-46.47	-33.37	-39.66	-0.27	72.7	74.7	83
7.32	-46.47	-33.37	-39.66	-0.27	72.7	74.8	83.2
7.32	-46.42	-33.37	-39.66	-0.31	72.8	74.8	83.3
7.32	-46.47	-33.37	-39.66	-0.31	72.9	74.9	83.5
7.32	-46.47	-33.42	-39.66	-0.27	72.9	75	83.8
7.32	-46.47	-33.42	-39.66	-0.31	73.1	75	83.9
7.32	-46.47	-33.37	-39.66	-0.31	73.1	75.1	84.1
7.32	-46.47	-33.37	-39.66	-0.27	73.1	75.1	84.2
7.32	-46.42	-33.37	-39.66	-0.31	73.1	75.3	84.2

7.32	-46.42	-33.37	-39.66	-0.27	73.3	75.3	84.2
7.32	-46.47	-33.37	-39.66	-0.31	73.2	75.3	84.3
7.32	-46.47	-33.37	-39.66	-0.31	73.3	75.4	84.5
7.32	-46.42	-33.37	-39.63	-0.31	73.3	75.4	84.6
7.33	-46.42	-33.37	-39.63	-0.31	73.4	75.5	84.7
7.32	-46.42	-33.37	-39.63	-0.31	73.4	75.5	84.8
7.32	-46.42	-33.37	-39.66	-0.27	73.4	75.5	84.7
7.32	-46.42	-33.37	-39.66	-0.27	73.4	75.5	84.7
7.32	-46.42	-33.37	-39.63	-0.31	73.4	75.5	84.7
7.32	-46.42	-33.37	-39.63	-0.27	73.5	75.5	84.7
7.33	-46.42	-33.37	-39.66	-0.27	73.5	75.6	84.7
7.33	-46.42	-33.42	-39.66	-0.31	73.5	75.6	84.5
7.32	-46.42	-33.37	-39.66	-0.27	73.6	75.6	84.3
7.32	-46.42	-33.37	-39.66	-0.31	73.7	75.7	84.5
7.32	-46.42	-33.32	-39.66	-0.31	73.7	75.7	84.2
7.33	-46.42	-33.37	-39.69	-0.31	73.7	75.7	84.2
7.32	-46.42	-33.32	-39.69	-0.27	73.8	75.8	84.2
7.32	-46.42	-33.37	-39.69	-0.27	73.7	75.8	84.1
7.32	-46.42	-33.32	-39.69	-0.31	73.8	75.8	83.9
7.33	-46.42	-33.37	-39.72	-0.31	73.8	75.8	83.9
7.32	-46.47	-33.37	-39.69	-0.31	74	75.8	83.7
7.33	-46.42	-33.37	-39.72	-0.31	73.8	75.8	83.8
7.32	-46.42	-33.37	-39.72	-0.27	74	75.8	83.6
7.32	-46.42	-33.37	-39.72	-0.31	73.8	75.8	83.4
7.32	-46.42	-33.32	-39.72	-0.31	74	75.7	83.4
7.32	-46.47	-33.32	-39.75	-0.31	74.1	75.7	83.3
7.32	-46.42	-33.37	-39.75	-0.31	74.1	75.7	83.2
7.32	-46.47	-33.37	-39.75	-0.31	74.1	75.7	83
7.32	-46.47	-33.37	-39.75	-0.31	74.1	75.6	82.7
7.32	-46.47	-33.37	-39.75	-0.31	74	75.7	82.7
7.32	-46.42	-33.37	-39.75	-0.31	74.2	75.6	82.6
7.32	-46.47	-33.37	-39.75	-0.31	74.2	75.6	82.1
7.32	-46.47	-33.37	-39.75	-0.27	74.2	75.5	82
7.32	-46.47	-33.37	-39.75	-0.31	74.2	75.5	81.7
7.32	-46.47	-33.42	-39.75	-0.31	74.2	75.5	81.6
7.33	-46.47	-33.37	-39.75	-0.31	74.2	75.5	81.3
7.33	-46.47	-33.37	-39.75	-0.31	74.1	75.5	81
7.32	-46.47	-33.37	-39.75	-0.31	74.1	75.5	80.9
7.32	-46.47	-33.37	-39.75	-0.31	74.1	75.4	80.7
7.32	-46.47	-33.37	-39.75	-0.31	74	75.4	80.6
7.32	-46.47	-33.37	-39.75	-0.31	74	75.4	80
7.32	-46.51	-33.37	-39.75	-0.31	74	75.3	79.9
7.32	-46.47	-33.37	-39.75	-0.31	74	75.3	79.7
7.32	-46.47	-33.37	-39.75	-0.31	74	75.3	79.5
7.32	-46.47	-33.37	-39.75	-0.31	73.8	75.2	79.3
7.32	-46.47	-33.42	-39.75	-0.31	73.8	75.2	79
7.32	-46.47	-33.37	-39.75	-0.31	73.8	75.1	78.9

7.32	-46.47	-33.37	-39.75	-0.31	73.8	75.1	78.6
7.32	-46.47	-33.37	-39.75	-0.31	73.8	75.1	78.4
7.32	-46.47	-33.42	-39.75	-0.31	73.7	75	78
7.32	-46.51	-33.37	-39.75	-0.31	73.7	75	78
7.32	-46.51	-33.42	-39.72	-0.31	73.6	74.9	77.7
7.32	-46.51	-33.42	-39.75	-0.31	73.6	74.8	77.7
7.32	-46.51	-33.42	-39.75	-0.31	73.5	74.8	77.5
7.32	-46.51	-33.42	-39.75	-0.27	73.5	74.7	77.2
7.32	-46.51	-33.37	-39.75	-0.31	73.4	74.7	76.9
7.32	-46.51	-33.42	-39.75	-0.31	73.4	74.6	77.1
7.32	-46.51	-33.37	-39.75	-0.31	73.4	74.5	76.7
7.31	-46.51	-33.42	-39.75	-0.27	73.4	74.5	76.5
7.31	-46.51	-33.42	-39.75	-0.31	73.4	74.5	76.4
7.31	-46.51	-33.42	-39.75	-0.31	73.4	74.5	76.3
7.31	-46.51	-33.42	-39.75	-0.31	73.3	74.4	75.8
7.31	-46.51	-33.42	-39.75	-0.31	73.3	74.5	75.8
7.31	-46.51	-33.42	-39.75	-0.31	73.2	74.4	75.5
7.31	-46.51	-33.42	-39.75	-0.31	73.2	74.3	75.5
7.31	-46.51	-33.42	-39.75	-0.31	73.1	74.2	75.4
7.31	-46.51	-33.42	-39.75	-0.31	73.2	74.2	75.2
7.31	-46.51	-33.42	-39.75	-0.31	73.1	74.1	75
7.31	-46.51	-33.42	-39.75	-0.31	73.1	74.1	74.8
7.31	-46.51	-33.42	-39.75	-0.31	73	74	74.8
7.31	-46.47	-33.37	-39.75	-0.31	72.9	73.9	74.5
7.31	-46.51	-33.42	-39.75	-0.31	72.9	73.9	74.4
7.31	-46.51	-33.37	-39.72	-0.31	72.9	73.7	74.4
7.31	-46.51	-33.42	-39.75	-0.31	72.8	73.7	74.2
7.31	-46.51	-33.42	-39.75	-0.31	72.8	73.6	74.2
7.31	-46.51	-33.42	-39.75	-0.31	72.7	73.6	73.8
7.31	-46.51	-33.42	-39.75	-0.31	72.7	73.5	73.5
7.31	-46.51	-33.42	-39.75	-0.31	72.7	73.5	73.6
7.31	-46.51	-33.47	-39.75	-0.31	72.6	73.4	73.5
7.29	-46.51	-33.42	-39.75	-0.31	72.6	73.4	73.2
7.3	-46.51	-33.42	-39.75	-0.31	72.5	73.4	73.2
7.29	-46.51	-33.42	-39.75	-0.27	72.5	73.4	73.2
7.29	-46.51	-33.42	-39.75	-0.31	72.5	73.3	73
7.29	-46.51	-33.42	-39.75	-0.31	72.4	73.3	72.7
7.29	-46.51	-33.42	-39.75	-0.31	72.3	73.2	72.6
7.29	-46.51	-33.42	-39.75	-0.31	72.3	73.2	72.4
7.29	-46.47	-33.42	-39.75	-0.31	72.3	73.1	72.4
7.29	-46.51	-33.47	-39.75	-0.31	72.3	73	72.4
7.29	-46.51	-33.42	-39.75	-0.31	72.2	73	72.3
7.29	-46.51	-33.42	-39.75	-0.31	72.2	72.9	72.3
7.3	-46.56	-33.47	-39.75	-0.31	72.2	73	72
7.29	-46.51	-33.42	-39.75	-0.31	72.1	72.9	71.9
7.29	-46.51	-33.42	-39.75	-0.31	72.1	72.9	72
7.29	-46.51	-33.47	-39.75	-0.31	72.1	72.9	71.9

7.3	-46.56	-33.47	-39.75	-0.27	72.2	72.9	71.9
7.29	-46.56	-33.47	-39.75	-0.31	72.1	72.8	72
7.29	-46.56	-33.42	-39.75	-0.31	72	72.9	72
7.29	-46.51	-33.47	-39.75	-0.31	72	72.9	72
7.3	-46.56	-33.47	-39.75	-0.31	72	72.9	72
7.29	-46.51	-33.47	-39.75	-0.31	72	72.9	72.2
7.29	-46.56	-33.47	-39.75	-0.31	72	72.8	72.3
7.29	-46.51	-33.47	-39.75	-0.31	72	72.8	72.3
7.3	-46.56	-33.47	-39.75	-0.31	71.9	72.9	72.5
7.29	-46.51	-33.47	-39.75	-0.31	72	72.9	72.6
7.29	-46.56	-33.47	-39.75	-0.31	72	72.9	72.9
7.29	-46.56	-33.47	-39.75	-0.31	72	72.9	72.8
7.29	-46.56	-33.47	-39.75	-0.31	72	72.9	73.2
7.3	-46.56	-33.52	-39.75	-0.27	72	72.9	73.3
7.29	-46.51	-33.42	-39.75	-0.31	72	72.9	73.7
7.29	-46.56	-33.47	-39.75	-0.31	72	72.9	73.7
7.3	-46.51	-33.47	-39.75	-0.31	72	73	74.1
7.29	-46.51	-33.47	-39.75	-0.31	72	73.1	74.5
7.29	-46.51	-33.42	-39.75	-0.31	72	73.1	74.9
7.29	-46.51	-33.47	-39.75	-0.31	72	73.2	75.1
7.29	-46.51	-33.47	-39.75	-0.31	72	73.3	75.3
7.29	-46.56	-33.47	-39.75	-0.31	72.1	73.3	75.8
7.29	-46.56	-33.47	-39.75	-0.31	72.1	73.3	76.1
7.29	-46.51	-33.47	-39.75	-0.31	72.1	73.4	76.4
7.29	-46.51	-33.42	-39.75	-0.31	72.2	73.4	76.6
7.3	-46.51	-33.47	-39.75	-0.31	72.1	73.4	76.9
7.29	-46.51	-33.42	-39.75	-0.31	72.2	73.5	77.4
7.29	-46.51	-33.42	-39.75	-0.34	72.2	73.5	77.6
7.29	-46.51	-33.47	-39.72	-0.31	72.3	73.6	77.9
7.29	-46.51	-33.42	-39.72	-0.31	72.3	73.7	78.3
7.29	-46.51	-33.42	-39.72	-0.31	72.3	73.7	78.7
7.29	-46.51	-33.42	-39.72	-0.34	72.3	73.9	78.9
7.3	-46.51	-33.42	-39.72	-0.31	72.3	74	79.2
7.29	-46.47	-33.42	-39.72	-0.31	72.4	74.1	79.6
7.3	-46.51	-33.42	-39.72	-0.31	72.4	74.2	80
7.31	-46.51	-33.42	-39.72	-0.31	72.5	74.2	80.3
7.31	-46.51	-33.42	-39.72	-0.31	72.6	74.3	80.7
7.31	-46.51	-33.47	-39.72	-0.31	72.6	74.4	80.9
7.31	-46.51	-33.42	-39.72	-0.31	72.6	74.4	81
7.31	-46.51	-33.42	-39.72	-0.31	72.7	74.5	81.3
7.31	-46.51	-33.42	-39.72	-0.31	72.7	74.5	81.7
7.31	-46.51	-33.42	-39.69	-0.31	72.8	74.5	81.9
7.31	-46.51	-33.42	-39.69	-0.31	72.8	74.6	82.1
7.31	-46.51	-33.42	-39.69	-0.31	72.9	74.7	82.6
7.31	-46.51	-33.42	-39.69	-0.31	73	74.8	82.7
7.31	-46.51	-33.42	-39.69	-0.31	73	74.8	82.8
7.31	-46.47	-33.37	-39.69	-0.31	73	74.8	83

7.31	-46.47	-33.42	-39.69	-0.31	73	75	83.2
7.31	-46.47	-33.37	-39.66	-0.31	73.1	75	83.2
7.31	-46.47	-33.37	-39.66	-0.31	73.1	75.1	83.2
7.31	-46.47	-33.42	-39.66	-0.31	73.1	75.1	83.3
7.32	-46.47	-33.42	-39.66	-0.31	73.3	75.1	83.5
7.32	-46.47	-33.37	-39.66	-0.31	73.2	75.2	83.4
7.32	-46.47	-33.37	-39.66	-0.31	73.3	75.3	83.6
7.32	-46.47	-33.37	-39.69	-0.31	73.3	75.3	83.7
7.32	-46.47	-33.37	-39.69	-0.31	73.3	75.3	83.7
7.32	-46.47	-33.42	-39.69	-0.31	73.4	75.4	83.6
7.32	-46.47	-33.37	-39.72	-0.31	73.4	75.4	83.9
7.32	-46.47	-33.42	-39.72	-0.31	73.4	75.4	83.7
7.32	-46.47	-33.37	-39.72	-0.31	73.4	75.5	83.8
7.32	-46.47	-33.37	-39.72	-0.31	73.4	75.5	83.8
7.32	-46.47	-33.37	-39.72	-0.31	73.4	75.5	83.8
7.32	-46.47	-33.37	-39.72	-0.31	73.4	75.5	83.7
7.32	-46.47	-33.37	-39.75	-0.31	73.4	75.5	83.8
7.32	-46.47	-33.37	-39.72	-0.31	73.5	75.5	83.6
7.32	-46.47	-33.37	-39.72	-0.31	73.6	75.5	83.5
7.32	-46.42	-33.37	-39.72	-0.31	73.7	75.5	83.6
7.32	-46.42	-33.37	-39.75	-0.31	73.7	75.5	83.5
7.32	-46.47	-33.37	-39.72	-0.31	73.6	75.5	83.3
7.32	-46.42	-33.37	-39.75	-0.31	73.8	75.5	83.1
7.32	-46.47	-33.37	-39.72	-0.31	73.7	75.5	82.9
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.5	82.9
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.5	82.7
7.32	-46.47	-33.37	-39.72	-0.31	73.7	75.5	82.7
7.32	-46.42	-33.37	-39.72	-0.31	73.7	75.5	82.6
7.32	-46.47	-33.37	-39.72	-0.31	73.7	75.5	82.4
7.32	-46.42	-33.37	-39.72	-0.31	73.8	75.5	82
7.32	-46.47	-33.37	-39.72	-0.34	73.8	75.5	82.1
7.32	-46.47	-33.37	-39.72	-0.34	73.8	75.5	81.7
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.5	81.6
7.32	-46.47	-33.37	-39.72	-0.34	74	75.5	81.2
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.5	81.2
7.32	-46.47	-33.37	-39.72	-0.31	74	75.4	81
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.4	80.7
7.32	-46.42	-33.42	-39.72	-0.31	73.8	75.4	80.5
7.32	-46.47	-33.37	-39.72	-0.34	74	75.3	80.1
7.32	-46.47	-33.37	-39.72	-0.31	74	75.2	80
7.32	-46.47	-33.37	-39.72	-0.31	74	75.2	79.9
7.32	-46.47	-33.42	-39.72	-0.34	73.8	75.2	79.5
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.2	79.6
7.32	-46.47	-33.37	-39.75	-0.34	73.8	75.1	79.1
7.32	-46.47	-33.37	-39.72	-0.31	73.8	75.1	79
7.31	-46.47	-33.37	-39.72	-0.31	73.7	75	78.8
7.31	-46.47	-33.42	-39.72	-0.31	73.7	75	78.7

7.31	-46.47	-33.37	-39.72	-0.31	73.6	75	78.4
7.3	-46.47	-33.42	-39.69	-0.31	73.6	74.9	78.3
7.31	-46.47	-33.37	-39.72	-0.31	73.6	74.9	78
7.31	-46.47	-33.37	-39.69	-0.31	73.6	74.8	77.7
7.31	-46.47	-33.37	-39.72	-0.31	73.6	74.8	77.5
7.31	-46.47	-33.37	-39.72	-0.31	73.5	74.8	77.4
7.31	-46.42	-33.37	-39.69	-0.31	73.5	74.7	77.3
7.31	-46.47	-33.37	-39.72	-0.31	73.4	74.7	77.3
7.31	-46.47	-33.37	-39.72	-0.34	73.4	74.6	77
7.31	-46.47	-33.37	-39.69	-0.31	73.4	74.6	76.9
7.31	-46.47	-33.42	-39.69	-0.34	73.4	74.6	76.7
7.31	-46.47	-33.37	-39.69	-0.31	73.4	74.5	76.5
7.31	-46.47	-33.37	-39.72	-0.31	73.4	74.5	76.3
7.31	-46.47	-33.37	-39.72	-0.31	73.4	74.5	76.3
7.31	-46.47	-33.42	-39.69	-0.31	73.4	74.5	75.9
7.31	-46.47	-33.37	-39.69	-0.31	73.3	74.4	75.8
7.31	-46.47	-33.37	-39.69	-0.34	73.3	74.4	75.7
7.31	-46.47	-33.37	-39.69	-0.31	73.2	74.4	75.6
7.31	-46.47	-33.37	-39.69	-0.34	73.2	74.3	75.5
7.29	-46.47	-33.37	-39.69	-0.31	73.2	74.2	75.4
7.29	-46.47	-33.42	-39.69	-0.31	73.1	74.2	75.2
7.29	-46.47	-33.42	-39.69	-0.31	73.1	74.1	75
7.3	-46.42	-33.37	-39.69	-0.31	73.1	74.1	74.9
7.3	-46.42	-33.37	-39.66	-0.31	73	74.1	75
7.29	-46.42	-33.37	-39.66	-0.31	73	74	74.7
7.29	-46.42	-33.37	-39.66	-0.31	72.9	74	74.6
7.3	-46.42	-33.37	-39.66	-0.34	72.9	74	74.5
7.29	-46.42	-33.37	-39.66	-0.31	72.9	74	74.5
7.29	-46.42	-33.37	-39.66	-0.31	72.9	73.9	74.4
7.29	-46.42	-33.37	-39.66	-0.31	72.8	73.9	74.3
7.29	-46.42	-33.37	-39.66	-0.31	72.8	73.9	74.3
7.29	-46.42	-33.37	-39.66	-0.34	72.8	73.7	74.1
7.29	-46.42	-33.37	-39.66	-0.31	72.8	73.7	74
7.29	-46.42	-33.37	-39.66	-0.31	72.7	73.6	73.8
7.29	-46.42	-33.37	-39.66	-0.31	72.6	73.6	73.8
7.3	-46.42	-33.37	-39.63	-0.31	72.7	73.6	73.7
7.29	-46.42	-33.37	-39.66	-0.31	72.7	73.6	73.6
7.29	-46.42	-33.37	-39.63	-0.31	72.7	73.6	73.4
7.29	-46.42	-33.37	-39.63	-0.31	72.7	73.5	73.4
7.3	-46.42	-33.37	-39.63	-0.31	72.7	73.5	73.4
7.29	-46.42	-33.37	-39.66	-0.31	72.6	73.5	73.4
7.29	-46.42	-33.37	-39.63	-0.34	72.6	73.5	73.2
7.29	-46.42	-33.37	-39.63	-0.31	72.5	73.5	73.2
7.29	-46.42	-33.37	-39.66	-0.31	72.5	73.4	73.2
7.29	-46.42	-33.37	-39.63	-0.31	72.5	73.4	73.2
7.29	-46.42	-33.37	-39.63	-0.31	72.4	73.4	72.9
7.29	-46.42	-33.32	-39.63	-0.31	72.4	73.4	73

7.3	-46.42	-33.37	-39.63	-0.31	72.4	73.4	73
7.29	-46.42	-33.37	-39.63	-0.31	72.4	73.4	72.9
7.29	-46.42	-33.32	-39.63	-0.31	72.4	73.4	73.1
7.29	-46.42	-33.32	-39.63	-0.31	72.3	73.4	73
7.29	-46.42	-33.37	-39.63	-0.31	72.3	73.3	73
7.29	-46.42	-33.37	-39.63	-0.31	72.3	73.3	73
7.29	-46.42	-33.32	-39.63	-0.27	72.3	73.3	72.9
7.29	-46.42	-33.37	-39.63	-0.31	72.3	73.3	72.9
7.29	-46.37	-33.32	-39.63	-0.31	72.3	73.3	72.8
7.29	-46.42	-33.32	-39.6	-0.31	72.3	73.3	73
7.29	-46.42	-33.32	-39.63	-0.31	72.3	73.3	73
7.29	-46.42	-33.32	-39.63	-0.34	72.3	73.2	72.9
7.29	-46.42	-33.32	-39.6	-0.31	72.3	73.2	73
7.3	-46.42	-33.32	-39.6	-0.31	72.2	73.3	73
7.29	-46.42	-33.26	-39.6	-0.31	72.3	73.2	73.4
7.29	-46.42	-33.32	-39.6	-0.31	72.3	73.3	73.4
7.29	-46.37	-33.32	-39.6	-0.31	72.3	73.3	73.4
7.29	-46.42	-33.32	-39.6	-0.31	72.2	73.2	73.4
7.29	-46.37	-33.32	-39.6	-0.31	72.3	73.3	74
7.29	-46.37	-33.32	-39.6	-0.31	72.2	73.3	74.1
7.29	-46.37	-33.32	-39.6	-0.31	72.1	73.3	74.1
7.29	-46.37	-33.32	-39.6	-0.34	72.2	73.4	74.5
7.29	-46.37	-33.32	-39.6	-0.31	72.3	73.4	74.6
7.29	-46.37	-33.26	-39.6	-0.31	72.3	73.4	74.7
7.29	-46.37	-33.26	-39.6	-0.31	72.3	73.4	75
7.29	-46.37	-33.32	-39.6	-0.31	72.3	73.4	75.2
7.29	-46.37	-33.32	-39.57	-0.31	72.3	73.4	75.1
7.29	-46.37	-33.32	-39.6	-0.34	72.3	73.4	75.2
7.3	-46.37	-33.32	-39.57	-0.31	72.3	73.5	75.2
7.29	-46.37	-33.26	-39.57	-0.31	72.3	73.5	75.5
7.29	-46.37	-33.32	-39.57	-0.27	72.3	73.5	75.5
7.29	-46.37	-33.32	-39.57	-0.34	72.3	73.5	75.6
7.29	-46.37	-33.32	-39.57	-0.31	72.3	73.6	75.8
7.29	-46.37	-33.32	-39.57	-0.31	72.3	73.6	76.1
7.29	-46.37	-33.32	-39.57	-0.31	72.3	73.6	75.9
7.29	-46.37	-33.32	-39.57	-0.31	72.3	73.6	76.4
7.29	-46.37	-33.26	-39.51	-0.27	72.4	73.6	76.6
7.29	-46.37	-33.32	-39.57	-0.31	72.4	73.7	76.9
7.29	-46.37	-33.32	-39.51	-0.27	72.3	73.9	77
7.29	-46.37	-33.26	-39.57	-0.31	72.4	73.9	77
7.29	-46.33	-33.32	-39.51	-0.31	72.4	74	77.4
7.29	-46.33	-33.32	-39.51	-0.31	72.4	74	77.6
7.29	-46.33	-33.26	-39.51	-0.31	72.4	74	77.7
7.3	-46.33	-33.26	-39.51	-0.31	72.4	74.1	77.8
7.29	-46.33	-33.32	-39.51	-0.31	72.5	74.2	78.2
7.29	-46.33	-33.26	-39.51	-0.31	72.5	74.2	78.2
7.29	-46.33	-33.26	-39.51	-0.31	72.6	74.2	78.7

7.29	-46.33	-33.26	-39.51	-0.31	72.6	74.3	78.8
7.29	-46.33	-33.32	-39.51	-0.31	72.7	74.4	79
7.3	-46.33	-33.26	-39.47	-0.31	72.7	74.4	79
7.29	-46.33	-33.26	-39.47	-0.31	72.7	74.4	79.2
7.29	-46.33	-33.26	-39.51	-0.27	72.7	74.5	79.5
7.29	-46.33	-33.26	-39.47	-0.27	72.8	74.5	79.5
7.29	-46.33	-33.26	-39.47	-0.31	72.9	74.5	79.8
7.3	-46.28	-33.21	-39.47	-0.27	72.9	74.5	79.9
7.31	-46.33	-33.21	-39.47	-0.27	72.9	74.5	80.1
7.31	-46.33	-33.21	-39.47	-0.31	73.1	74.6	80
7.31	-46.28	-33.21	-39.47	-0.27	73	74.6	80
7.31	-46.28	-33.21	-39.47	-0.27	73	74.6	80.3
7.31	-46.28	-33.21	-39.47	-0.27	73.1	74.6	79.9
7.31	-46.28	-33.21	-39.47	-0.31	73.1	74.6	79.9
7.3	-46.28	-33.21	-39.47	-0.27	73.1	74.7	80
7.31	-46.33	-33.21	-39.47	-0.27	73.2	74.7	80
7.31	-46.28	-33.21	-39.47	-0.27	73.2	74.7	79.9
7.31	-46.28	-33.21	-39.44	-0.27	73.3	74.7	79.9
7.31	-46.28	-33.21	-39.44	-0.31	73.3	74.8	79.9
7.31	-46.28	-33.21	-39.47	-0.27	73.2	74.8	79.7
7.31	-46.28	-33.21	-39.44	-0.27	73.2	74.8	79.9
7.31	-46.28	-33.21	-39.47	-0.31	73.2	74.8	79.6
7.31	-46.33	-33.21	-39.44	-0.27	73.4	74.8	79.7
7.31	-46.28	-33.21	-39.47	-0.27	73.3	74.8	79.7
7.31	-46.28	-33.21	-39.47	-0.31	73.3	74.8	79.5
7.31	-46.28	-33.21	-39.47	-0.31	73.4	74.8	79.5
7.31	-46.28	-33.16	-39.47	-0.31	73.2	74.9	79.5
7.31	-46.28	-33.21	-39.47	-0.27	73.2	74.8	79.2
7.31	-46.24	-33.16	-39.44	-0.27	73.3	74.8	79.1
7.31	-46.28	-33.21	-39.44	-0.27	73.4	74.8	79.1
7.31	-46.28	-33.16	-39.47	-0.31	73.4	74.8	78.9
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.8	79
7.3	-46.28	-33.21	-39.44	-0.31	73.3	74.8	78.7
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.8	78.6
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.8	78.5
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.7	78.3
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.7	78
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.7	77.9
7.31	-46.28	-33.16	-39.44	-0.31	73.4	74.7	77.7
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.7	77.7
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.6	77.6
7.31	-46.28	-33.21	-39.44	-0.31	73.4	74.6	77.5
7.3	-46.28	-33.21	-39.44	-0.27	73.4	74.6	77.2
7.29	-46.28	-33.21	-39.44	-0.31	73.3	74.6	77.1
7.29	-46.28	-33.21	-39.44	-0.27	73.3	74.5	77.2
7.3	-46.28	-33.21	-39.44	-0.31	73.3	74.5	77
7.29	-46.28	-33.21	-39.44	-0.31	73.3	74.5	76.6

7.29	-46.28	-33.21	-39.44	-0.31	73.3	74.5	76.6
7.29	-46.28	-33.21	-39.44	-0.27	73.3	74.5	76.6
7.29	-46.28	-33.21	-39.44	-0.31	73.2	74.5	76.3
7.29	-46.28	-33.21	-39.44	-0.31	73.2	74.5	76.3
7.29	-46.28	-33.21	-39.44	-0.31	73.2	74.5	76.2
7.29	-46.28	-33.16	-39.44	-0.31	73.2	74.5	76.1
7.29	-46.28	-33.21	-39.44	-0.31	73.1	74.4	75.9
7.29	-46.28	-33.21	-39.44	-0.27	73.1	74.4	75.8
7.3	-46.28	-33.16	-39.44	-0.31	73.1	74.4	75.5
7.29	-46.28	-33.21	-39.44	-0.31	73	74.3	75.5
7.3	-46.28	-33.21	-39.44	-0.34	73.1	74.3	75.5
7.29	-46.28	-33.21	-39.44	-0.31	73.1	74.2	75.5
7.29	-46.28	-33.16	-39.44	-0.31	73.1	74.3	75.4
7.29	-46.28	-33.16	-39.44	-0.31	73	74.2	75.3
7.3	-46.24	-33.21	-39.44	-0.31	73	74.2	75
7.29	-46.28	-33.21	-39.44	-0.31	72.9	74.2	74.9
7.29	-46.28	-33.21	-39.41	-0.31	72.9	74.1	74.9
7.29	-46.28	-33.16	-39.44	-0.31	72.9	74.1	74.8
7.29	-46.24	-33.21	-39.41	-0.31	72.9	74	74.8
7.29	-46.24	-33.21	-39.41	-0.31	72.9	74.1	74.6
7.29	-46.24	-33.16	-39.41	-0.27	72.9	74	74.5
7.29	-46.24	-33.21	-39.41	-0.31	72.8	74	74.5
7.29	-46.28	-33.16	-39.41	-0.31	72.8	74	74.5
7.29	-46.24	-33.21	-39.41	-0.31	72.8	73.9	74.3
7.29	-46.24	-33.16	-39.41	-0.31	72.8	73.9	74.3
7.29	-46.24	-33.21	-39.41	-0.27	72.7	73.7	74.3
7.29	-46.24	-33.21	-39.41	-0.31	72.7	73.7	74.1
7.29	-46.24	-33.16	-39.38	-0.31	72.7	73.7	74
7.29	-46.24	-33.16	-39.38	-0.31	72.7	73.6	73.8
7.3	-46.24	-33.16	-39.38	-0.31	72.7	73.6	73.6
7.29	-46.24	-33.21	-39.41	-0.27	72.7	73.6	73.6
7.29	-46.24	-33.16	-39.38	-0.31	72.6	73.5	73.5
7.29	-46.24	-33.16	-39.38	-0.31	72.6	73.5	73.4
7.29	-46.24	-33.16	-39.38	-0.27	72.6	73.5	73.3
7.29	-46.24	-33.11	-39.38	-0.31	72.5	73.4	73.2
7.29	-46.24	-33.21	-39.38	-0.31	72.5	73.4	73.4
7.29	-46.24	-33.16	-39.38	-0.31	72.5	73.4	73.1
7.29	-46.24	-33.16	-39.38	-0.31	72.4	73.4	73.1
7.29	-46.24	-33.16	-39.38	-0.31	72.4	73.4	73
7.29	-46.24	-33.16	-39.38	-0.27	72.5	73.4	72.8
7.29	-46.24	-33.16	-39.38	-0.31	72.4	73.4	72.7
7.29	-46.24	-33.16	-39.38	-0.31	72.4	73.4	72.7
7.29	-46.24	-33.16	-39.38	-0.31	72.4	73.3	72.8
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.3	72.6
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.3	72.6
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.2	72.5
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.2	72.4

7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.2	72.3
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.2	72.2
7.29	-46.24	-33.16	-39.41	-0.31	72.3	73.2	72.3
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.1	72.2
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.1	71.9
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.1	72.1
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.1	72.2
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.1	72.3
7.29	-46.28	-33.16	-39.38	-0.31	72.2	73.1	72.2
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.1	72.1
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.1	72.3
7.29	-46.28	-33.16	-39.38	-0.31	72.1	73.1	72.4
7.29	-46.24	-33.16	-39.38	-0.31	72.1	73.1	72.4
7.29	-46.24	-33.16	-39.38	-0.27	72	73.1	72.6
7.29	-46.24	-33.16	-39.38	-0.27	72.1	73.1	72.8
7.29	-46.24	-33.16	-39.38	-0.31	72.1	73.1	73
7.29	-46.24	-33.16	-39.38	-0.27	72.1	73.2	73.2
7.29	-46.24	-33.16	-39.38	-0.31	72	73.2	73.4
7.29	-46.24	-33.16	-39.38	-0.31	72.1	73.2	73.5
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.3	73.7
7.29	-46.24	-33.16	-39.38	-0.31	72.1	73.3	74.2
7.29	-46.24	-33.16	-39.38	-0.31	72.1	73.4	74.3
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.4	74.7
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.4	75.1
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.4	75.5
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.5	75.5
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.5	75.7
7.29	-46.24	-33.16	-39.38	-0.31	72.2	73.6	76.3
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.7	76.5
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.7	77
7.29	-46.24	-33.16	-39.38	-0.31	72.3	73.7	77.2
7.29	-46.24	-33.16	-39.35	-0.27	72.4	73.9	77.7
7.29	-46.24	-33.16	-39.38	-0.31	72.4	74	78.2
7.29	-46.24	-33.16	-39.35	-0.31	72.4	74.1	78.3
7.3	-46.24	-33.16	-39.35	-0.27	72.4	74.2	78.6
7.3	-46.24	-33.16	-39.35	-0.31	72.5	74.2	79
7.29	-46.24	-33.11	-39.35	-0.31	72.6	74.4	79.5
7.29	-46.24	-33.11	-39.35	-0.31	72.6	74.4	79.7
7.29	-46.24	-33.16	-39.35	-0.31	72.6	74.5	79.9
7.29	-46.24	-33.11	-39.35	-0.31	72.7	74.5	80.4
7.3	-46.24	-33.11	-39.35	-0.31	72.8	74.6	80.7
7.3	-46.19	-33.11	-39.35	-0.31	72.8	74.6	80.9
7.29	-46.24	-33.11	-39.35	-0.31	72.9	74.7	81.1
7.29	-46.19	-33.16	-39.32	-0.31	72.9	74.8	81.5
7.29	-46.19	-33.11	-39.32	-0.31	73	74.9	81.8
7.3	-46.24	-33.11	-39.35	-0.31	73	75	82
7.29	-46.24	-33.11	-39.35	-0.31	73.1	75	82.2

7.29	-46.19	-33.11	-39.32	-0.31	73.2	75.1	82.6
7.31	-46.19	-33.06	-39.35	-0.31	73.2	75.2	82.8
7.31	-46.24	-33.11	-39.32	-0.31	73.3	75.3	82.9
7.31	-46.19	-33.11	-39.32	-0.31	73.3	75.3	83
7.31	-46.19	-33.11	-39.32	-0.27	73.4	75.4	83.2
7.31	-46.19	-33.06	-39.32	-0.31	73.5	75.4	83.3
7.31	-46.19	-33.11	-39.32	-0.31	73.4	75.5	83.3
7.31	-46.19	-33.06	-39.32	-0.31	73.4	75.5	83.4
7.31	-46.19	-33.11	-39.32	-0.31	73.5	75.5	83.3
7.31	-46.19	-33.11	-39.32	-0.31	73.5	75.5	83.2
7.31	-46.19	-33.11	-39.32	-0.31	73.5	75.5	83.3
7.31	-46.19	-33.11	-39.32	-0.31	73.6	75.5	83.2
7.31	-46.19	-33.11	-39.32	-0.31	73.6	75.5	83.2
7.31	-46.19	-33.06	-39.32	-0.31	73.6	75.6	83.2
7.31	-46.19	-33.11	-39.32	-0.31	73.6	75.6	83.2
7.31	-46.19	-33.06	-39.32	-0.31	73.7	75.6	83.1
7.31	-46.19	-33.11	-39.29	-0.31	73.7	75.6	83.1
7.31	-46.19	-33.11	-39.32	-0.31	73.7	75.6	83
7.31	-46.19	-33.11	-39.32	-0.31	73.8	75.6	82.9
7.31	-46.19	-33.06	-39.32	-0.31	74	75.6	82.8
7.3	-46.19	-33.06	-39.29	-0.31	74	75.6	82.8
7.31	-46.19	-33.11	-39.29	-0.31	73.8	75.6	82.6
7.31	-46.19	-33.06	-39.29	-0.31	73.8	75.6	82.6
7.31	-46.19	-33.06	-39.32	-0.31	74	75.7	82.6
7.31	-46.19	-33.06	-39.32	-0.31	74	75.7	82.6
7.31	-46.19	-33.06	-39.32	-0.31	74	75.7	82.1
7.31	-46.19	-33.06	-39.32	-0.31	74	75.7	82.1
7.31	-46.19	-33.06	-39.32	-0.31	74.1	75.6	82.1
7.31	-46.19	-33.06	-39.32	-0.31	74.1	75.7	82
7.3	-46.19	-33.06	-39.32	-0.31	74.1	75.7	81.9
7.31	-46.19	-33.06	-39.35	-0.31	74.1	75.7	81.8
7.31	-46.19	-33.06	-39.38	-0.31	74.1	75.6	81.7
7.31	-46.19	-33.06	-39.35	-0.31	74.2	75.6	81.5
7.31	-46.19	-33.06	-39.35	-0.31	74.2	75.7	81.3
7.31	-46.19	-33.06	-39.38	-0.31	74.2	75.7	81.1
7.31	-46.1	-33.11	-39.38	-0.31	74.2	75.6	81
7.31	-46.1	-33.06	-39.38	-0.31	74.2	75.6	80.9
7.31	-46.19	-33.06	-39.38	-0.31	74.2	75.6	81
7.31	-46.19	-33.11	-39.38	-0.31	74.2	75.6	80.8
7.31	-46.19	-33.06	-39.38	-0.31	74.2	75.6	80.5
7.31	-46.19	-33.06	-39.38	-0.34	74.1	75.6	80.1
7.31	-46.19	-33.11	-39.38	-0.34	74.2	75.5	80
7.31	-46.19	-33.06	-39.38	-0.31	74.1	75.5	79.9
7.31	-46.19	-33.11	-39.38	-0.31	74.1	75.5	79.9
7.31	-46.19	-33.11	-39.38	-0.31	74	75.5	79.7
7.31	-46.19	-33.06	-39.38	-0.31	74	75.5	79.6
7.3	-46.19	-33.06	-39.38	-0.31	73.8	75.5	79.5

7.31	-46.19	-33.11	-39.38	-0.31	73.8	75.5	79.4
7.31	-46.19	-33.11	-39.38	-0.31	74	75.5	79.1
7.31	-46.19	-33.11	-39.38	-0.34	74	75.4	78.8
7.31	-46.19	-33.06	-39.38	-0.34	74	75.4	78.8
7.31	-46.19	-33.11	-39.38	-0.31	73.8	75.4	78.7
7.31	-46.19	-33.11	-39.38	-0.31	74	75.3	78.7
7.31	-46.19	-33.11	-39.38	-0.31	74	75.3	78.5
7.3	-46.19	-33.11	-39.38	-0.34	73.8	75.3	78.3
7.31	-46.24	-33.11	-39.38	-0.31	73.8	75.2	78.2
7.3	-46.24	-33.11	-39.38	-0.34	73.8	75.2	77.8
7.29	-46.19	-33.11	-39.38	-0.31	73.8	75.1	77.7
7.29	-46.24	-33.11	-39.38	-0.31	73.8	75.1	77.7
7.3	-46.19	-33.11	-39.35	-0.31	73.8	75	77.5
7.29	-46.24	-33.11	-39.35	-0.31	73.7	74.9	77.4
7.29	-46.19	-33.11	-39.35	-0.31	73.7	74.9	77.4
7.29	-46.24	-33.11	-39.35	-0.31	73.6	74.9	77.3
7.29	-46.24	-33.11	-39.35	-0.34	73.6	74.8	77.1
7.3	-46.19	-33.11	-39.35	-0.31	73.7	74.7	76.9
7.29	-46.24	-33.11	-39.35	-0.31	73.5	74.7	76.7
7.29	-46.19	-33.06	-39.35	-0.31	73.5	74.7	76.6
7.29	-46.19	-33.11	-39.38	-0.31	73.5	74.6	76.5
7.3	-46.24	-33.11	-39.35	-0.31	73.4	74.5	76.2
7.29	-46.19	-33.11	-39.38	-0.34	73.4	74.5	76.2
7.29	-46.24	-33.11	-39.35	-0.31	73.4	74.5	76.1
7.29	-46.19	-33.11	-39.35	-0.31	73.4	74.5	75.8
7.29	-46.24	-33.11	-39.35	-0.31	73.4	74.5	75.7
7.29	-46.24	-33.11	-39.35	-0.31	73.4	74.5	75.4
7.29	-46.24	-33.11	-39.35	-0.31	73.4	74.4	75.4
7.29	-46.24	-33.11	-39.35	-0.31	73.4	74.3	75.3
7.29	-46.19	-33.11	-39.38	-0.34	73.3	74.2	75.2
7.29	-46.24	-33.11	-39.35	-0.31	73.3	74.2	75.2
7.29	-46.19	-33.11	-39.35	-0.34	73.2	74.2	75
7.29	-46.24	-33.11	-39.35	-0.31	73.2	74.1	74.8
7.29	-46.19	-33.11	-39.35	-0.31	73.1	74	74.7
7.29	-46.24	-33.11	-39.35	-0.31	73.1	74	74.5
7.29	-46.24	-33.11	-39.35	-0.34	73.1	73.9	74.3
7.29	-46.19	-33.11	-39.35	-0.31	73	73.9	74.3
7.29	-46.24	-33.11	-39.35	-0.31	72.9	73.9	74.2
7.29	-46.24	-33.11	-39.35	-0.34	72.9	73.7	74
7.29	-46.24	-33.06	-39.35	-0.34	72.8	73.7	73.6
7.29	-46.24	-33.11	-39.35	-0.34	72.8	73.6	73.7
7.29	-46.19	-33.11	-39.35	-0.34	72.8	73.5	73.6
7.29	-46.19	-33.11	-39.35	-0.34	72.7	73.5	73.6
7.29	-46.19	-33.11	-39.35	-0.31	72.7	73.5	73.3
7.29	-46.19	-33.11	-39.35	-0.34	72.5	73.4	73.1
7.29	-46.24	-33.11	-39.32	-0.34	72.6	73.4	73.2
7.29	-46.24	-33.11	-39.35	-0.34	72.5	73.3	73.1

7.29	-46.19	-33.11	-39.35	-0.34	72.5	73.3	72.9
7.29	-46.19	-33.11	-39.35	-0.34	72.4	73.2	72.7
7.29	-46.24	-33.11	-39.35	-0.34	72.4	73.1	72.6
7.29	-46.19	-33.11	-39.35	-0.34	72.3	73.1	72.4
7.29	-46.19	-33.11	-39.35	-0.34	72.3	73.1	72.5
7.29	-46.19	-33.11	-39.35	-0.34	72.2	73	72.3
7.29	-46.24	-33.11	-39.35	-0.34	72	73	72
7.29	-46.24	-33.11	-39.35	-0.34	71.9	73	72.1
7.29	-46.24	-33.16	-39.35	-0.34	71.9	72.9	72
7.27	-46.24	-33.11	-39.35	-0.34	71.8	72.9	71.6
7.27	-46.24	-33.11	-39.35	-0.37	71.5	72.9	71.6
7.27	-46.24	-33.11	-39.35	-0.34	71.8	72.8	71.5
7.27	-46.24	-33.11	-39.35	-0.34	71.6	72.8	71.6
7.28	-46.24	-33.11	-39.35	-0.34	71.6	72.7	71.6
7.27	-46.24	-33.11	-39.35	-0.34	71.9	72.7	71.7
7.27	-46.24	-33.11	-39.32	-0.34	71.6	72.7	71.5
7.27	-46.24	-33.11	-39.35	-0.34	71.6	72.7	71.5
7.27	-46.24	-33.16	-39.35	-0.34	71.8	72.7	71.4
7.27	-46.24	-33.11	-39.32	-0.34	71.6	72.7	71.3
7.27	-46.24	-33.11	-39.35	-0.34	71.6	72.6	71.5
7.27	-46.24	-33.11	-39.35	-0.34	71.6	72.6	71.5
7.27	-46.19	-33.11	-39.35	-0.34	71.6	72.6	71.4
7.28	-46.24	-33.11	-39.35	-0.34	71.8	72.6	71.5
7.27	-46.24	-33.11	-39.32	-0.34	71.8	72.6	71.6
7.27	-46.24	-33.11	-39.35	-0.34	71.8	72.6	71.6
7.27	-46.24	-33.11	-39.35	-0.34	71.8	72.6	71.9
7.27	-46.24	-33.11	-39.32	-0.34	71.6	72.6	71.9
7.27	-46.24	-33.11	-39.35	-0.34	72	72.7	72
7.27	-46.24	-33.11	-39.32	-0.34	71.8	72.7	72.2
7.27	-46.24	-33.11	-39.35	-0.34	71.9	72.7	72.3
7.27	-46.24	-33.11	-39.32	-0.34	71.8	72.6	72.4
7.27	-46.19	-33.11	-39.32	-0.34	71.9	72.6	72.6
7.27	-46.24	-33.11	-39.32	-0.34	71.8	72.6	72.7
7.27	-46.24	-33.11	-39.32	-0.34	71.9	72.6	72.8
7.27	-46.19	-33.11	-39.32	-0.34	72	72.7	72.7
7.27	-46.19	-33.11	-39.32	-0.34	72	72.7	73.2
7.27	-46.19	-33.06	-39.32	-0.34	71.9	72.7	73.3
7.27	-46.19	-33.11	-39.29	-0.34	72	72.7	73.4
7.27	-46.19	-33.11	-39.29	-0.34	72	72.7	73.4
7.27	-46.19	-33.06	-39.29	-0.34	72	72.7	73.7
7.27	-46.19	-33.06	-39.32	-0.34	72	72.7	73.7
7.27	-46.19	-33.11	-39.29	-0.34	72	72.7	74
7.27	-46.19	-33.06	-39.29	-0.34	72	72.7	74.1
7.27	-46.19	-33.11	-39.29	-0.34	71.9	72.7	74.2
7.27	-46.19	-33.11	-39.29	-0.34	72	72.8	74.4
7.27	-46.19	-33.11	-39.29	-0.34	71.9	72.9	74.5
7.27	-46.19	-33.06	-39.32	-0.37	72	72.9	74.5

7.27	-46.19	-33.11	-39.29	-0.34	72	72.9	74.5
7.27	-46.19	-33.11	-39.29	-0.34	72	72.9	74.9
7.27	-46.19	-33.06	-39.29	-0.34	72	72.9	75.1
7.27	-46.19	-33.11	-39.29	-0.34	72	72.9	75.3
7.27	-46.19	-33.06	-39.29	-0.37	72.1	72.9	75.3
7.27	-46.19	-33.06	-39.32	-0.34	72.1	72.9	75.5
7.27	-46.19	-33.06	-39.32	-0.34	72.1	72.9	75.5
7.27	-46.19	-33.06	-39.29	-0.37	72.1	73	75.6
7.27	-46.19	-33.06	-39.32	-0.34	72.1	72.9	75.6
7.27	-46.19	-33.06	-39.32	-0.37	72.1	72.9	75.7
7.27	-46.19	-33.06	-39.32	-0.34	72.1	73	75.8
7.28	-46.19	-33.06	-39.32	-0.34	72.1	73	75.8
7.27	-46.19	-33.06	-39.32	-0.34	72.1	72.9	76.1
7.27	-46.1	-33.06	-39.35	-0.34	72.1	73	75.9
7.28	-46.1	-33.11	-39.35	-0.34	72.1	73	76.1
7.27	-46.19	-33.11	-39.35	-0.34	72.1	73	76.2
7.27	-46.1	-33.11	-39.35	-0.37	72.1	73	75.9
7.27	-46.19	-33.06	-39.35	-0.37	72.1	73.1	76.1
7.27	-46.19	-33.06	-39.35	-0.34	72.1	73.1	76.1
7.27	-46.19	-33.06	-39.35	-0.34	72.1	73	76.1
7.27	-46.1	-33.11	-39.35	-0.34	72.1	73.1	76.1
7.28	-46.19	-33.11	-39.35	-0.37	72.1	73.1	75.8
7.27	-46.19	-33.06	-39.38	-0.34	72.2	73	76.1
7.27	-46.19	-33.11	-39.38	-0.34	72.1	73.1	75.9
7.27	-46.19	-33.06	-39.38	-0.34	72.1	73.1	75.9
7.27	-46.1	-33.06	-39.35	-0.34	72.1	73.1	75.7
7.27	-46.19	-33.06	-39.35	-0.34	72.1	73.1	75.7
7.28	-46.19	-33.06	-39.35	-0.37	72.2	73.1	75.8
7.27	-46.19	-33.11	-39.35	-0.34	72.2	73.1	75.8
7.27	-46.19	-33.11	-39.35	-0.37	72.2	73.1	75.5
7.27	-46.19	-33.11	-39.35	-0.34	72.1	73.1	75.5
7.27	-46.19	-33.06	-39.35	-0.37	72.1	73	75.4
7.28	-46.19	-33.06	-39.35	-0.34	72.1	73	75.4
7.27	-46.1	-33.11	-39.35	-0.37	72.2	73	75.4
7.27	-46.19	-33.11	-39.35	-0.34	72.2	72.9	75.2
7.27	-46.19	-33.11	-39.32	-0.34	72.1	72.9	75.2
7.27	-46.19	-33.06	-39.35	-0.34	72.1	72.8	75
7.27	-46.19	-33.06	-39.35	-0.37	72	72.8	74.8
7.27	-46.19	-33.06	-39.32	-0.34	72	72.7	74.6
7.27	-46.19	-33.06	-39.35	-0.34	72	72.6	74.4
7.27	-46.19	-33.06	-39.35	-0.34	72	72.6	74.2
7.27	-46.19	-33.06	-39.35	-0.37	71.9	72.6	74
7.27	-46.19	-33.06	-39.35	-0.34	71.9	72.5	74
7.27	-46.19	-33.06	-39.35	-0.37	71.8	72.5	73.6
7.27	-46.19	-33.06	-39.35	-0.37	71.8	72.4	73.2
7.27	-46.19	-33.11	-39.35	-0.34	71.8	72.5	73.2
7.27	-46.19	-33.06	-39.35	-0.37	71.6	72.3	72.9

7.27	-46.19	-33.11	-39.32	-0.34	71.6	72.3	72.9
7.27	-46.19	-33.06	-39.32	-0.34	71.5	72.3	72.7
7.27	-46.19	-33.06	-39.32	-0.34	71.5	72.2	72.4
7.27	-46.19	-33.06	-39.32	-0.34	71.5	72.2	72.1
7.27	-46.19	-33.06	-39.32	-0.37	71.4	72.2	72
7.27	-46.19	-33.06	-39.35	-0.37	71.3	72.2	71.7
7.27	-46.19	-33.11	-39.32	-0.37	71.2	72.1	71.4
7.27	-46.19	-33.06	-39.32	-0.34	71.2	72	71.2
7.27	-46.19	-33.11	-39.35	-0.34	71	72	71.3
7.27	-46.19	-33.06	-39.35	-0.37	70.7	72	71
7.26	-46.19	-33.06	-39.35	-0.37	70.4	71.9	70.9
7.26	-46.19	-33.11	-39.32	-0.37	70.4	71.8	70.6
7.26	-46.19	-33.06	-39.32	-0.37	70.3	71.8	70.3
7.26	-46.24	-33.11	-39.35	-0.34	70.3	71.8	70.1
7.26	-46.19	-33.11	-39.32	-0.37	70.1	71.7	70
7.26	-46.19	-33.06	-39.35	-0.34	70.1	71.7	69.8
7.26	-46.24	-33.11	-39.35	-0.37	70.1	71.4	69.6
7.26	-46.19	-33.11	-39.35	-0.37	70.1	71.4	69.4
7.26	-46.24	-33.06	-39.32	-0.34	70.1	71.4	69.1
7.26	-46.19	-33.06	-39.32	-0.37	70.3	71.3	69.1
7.26	-46.19	-33.06	-39.35	-0.34	70.4	71.3	69
7.26	-46.19	-33.11	-39.35	-0.37	70.5	71.2	68.8
7.26	-46.19	-33.06	-39.32	-0.37	70.5	71.2	68.7
7.26	-46.24	-33.11	-39.35	-0.37	70.5	71.2	68.5
7.26	-46.24	-33.11	-39.32	-0.34	70.5	71.2	68.3
7.26	-46.24	-33.11	-39.32	-0.34	70.4	71.1	68.1
7.26	-46.19	-33.11	-39.32	-0.34	70.4	71.1	67.9
7.26	-46.19	-33.11	-39.32	-0.37	70.3	71	67.8
7.26	-46.19	-33.11	-39.32	-0.34	70.2	71	67.8
7.26	-46.19	-33.06	-39.32	-0.37	70.3	71	67.5
7.26	-46.24	-33.11	-39.32	-0.37	70.2	70.9	67.3
7.26	-46.24	-33.11	-39.32	-0.34	70.1	70.9	67.1
7.26	-46.24	-33.06	-39.32	-0.34	70.1	70.8	66.9
7.26	-46.24	-33.11	-39.32	-0.34	70.1	70.8	66.8
7.26	-46.19	-33.11	-39.32	-0.37	70.1	70.7	66.8
7.26	-46.19	-33.11	-39.32	-0.34	70	70.7	66.7
7.26	-46.19	-33.11	-39.32	-0.34	70	70.6	66.6
7.26	-46.19	-33.11	-39.32	-0.37	70	70.6	66.4
7.26	-46.19	-33.11	-39.32	-0.34	69.9	70.6	66.3
7.26	-46.19	-33.06	-39.32	-0.37	69.9	70.5	66.1
7.26	-46.24	-33.11	-39.32	-0.34	69.8	70.5	66.2
7.26	-46.24	-33.11	-39.32	-0.34	69.8	70.5	65.9
7.26	-46.24	-33.11	-39.32	-0.34	69.7	70.4	65.8
7.26	-46.19	-33.11	-39.32	-0.34	69.7	70.3	65.8
7.26	-46.24	-33.11	-39.32	-0.37	69.6	70.3	65.7
7.26	-46.24	-33.11	-39.32	-0.37	69.4	70.3	65.4
7.26	-46.24	-33.06	-39.32	-0.37	69.6	70.2	65.1

7.26	-46.24	-33.11	-39.32	-0.37	69.6	70.2	65.1
7.26	-46.24	-33.11	-39.32	-0.34	69.3	70.1	64.9
7.26	-46.24	-33.11	-39.32	-0.37	69.3	70.2	65
7.26	-46.24	-33.11	-39.32	-0.37	69.3	70.1	65
7.26	-46.24	-33.11	-39.32	-0.37	69.2	70.1	64.7
7.26	-46.24	-33.11	-39.35	-0.34	69.2	70.1	64.7
7.26	-46.24	-33.11	-39.32	-0.34	69.1	70.1	64.5
7.26	-46.24	-33.11	-39.32	-0.37	69.1	70	64.4
7.25	-46.24	-33.11	-39.32	-0.34	69.1	70	64.4
7.25	-46.24	-33.06	-39.35	-0.37	69.1	70	64.3
7.26	-46.24	-33.11	-39.35	-0.37	69	69.9	64.3
7.25	-46.24	-33.16	-39.35	-0.37	69	69.9	64.1
7.25	-46.24	-33.11	-39.32	-0.37	69	69.9	64.2
7.25	-46.24	-33.11	-39.35	-0.37	68.9	69.9	64.3
7.25	-46.24	-33.11	-39.35	-0.37	69	69.9	64.3
7.26	-46.24	-33.11	-39.35	-0.34	69	69.9	64.3
7.25	-46.24	-33.11	-39.35	-0.37	68.9	69.9	64.3
7.25	-46.24	-33.16	-39.35	-0.37	68.9	69.8	64.6
7.25	-46.24	-33.16	-39.35	-0.37	68.9	69.9	64.7
7.25	-46.24	-33.11	-39.32	-0.34	68.9	69.8	64.7
7.25	-46.24	-33.11	-39.32	-0.34	68.9	69.9	64.7
7.25	-46.24	-33.16	-39.35	-0.34	68.9	69.9	64.9
7.25	-46.24	-33.11	-39.35	-0.37	68.9	69.9	65.2
7.26	-46.24	-33.16	-39.35	-0.34	68.9	69.9	65.3
7.26	-46.24	-33.16	-39.32	-0.34	68.9	69.9	65.7
7.26	-46.24	-33.11	-39.32	-0.34	68.9	69.9	65.7
7.25	-46.24	-33.11	-39.32	-0.37	69	69.9	66
7.25	-46.24	-33.11	-39.35	-0.34	69	69.9	66.2
7.25	-46.24	-33.16	-39.32	-0.34	68.9	70	66.3
7.26	-46.24	-33.11	-39.32	-0.34	69	70	66.4
7.26	-46.24	-33.11	-39.32	-0.37	69	70	66.8
7.26	-46.24	-33.11	-39.32	-0.34	69.2	70	67.1
7.26	-46.24	-33.11	-39.32	-0.37	69.3	70.1	67.2
7.26	-46.19	-33.11	-39.32	-0.37	69.2	70.1	67.8
7.26	-46.24	-33.11	-39.32	-0.34	69.2	70.1	68.1
7.26	-46.19	-33.11	-39.32	-0.34	69.2	70.1	68
7.26	-46.24	-33.11	-39.32	-0.34	69.4	70.1	68.4
7.26	-46.24	-33.11	-39.32	-0.34	69.3	70.1	68.7
7.26	-46.19	-33.06	-39.32	-0.37	69.4	70.2	69
7.26	-46.19	-33.11	-39.32	-0.37	69.3	70.2	69.3
7.26	-46.19	-33.11	-39.29	-0.34	69.2	70.2	69.6
7.26	-46.19	-33.11	-39.29	-0.37	69.3	70.3	70
7.26	-46.19	-33.11	-39.29	-0.34	69.4	70.4	70.1
7.26	-46.19	-33.11	-39.29	-0.37	69.4	70.4	70.3
7.26	-46.19	-33.11	-39.26	-0.37	69.6	70.4	70.5
7.26	-46.19	-33.06	-39.29	-0.37	69.4	70.4	70.6
7.26	-46.19	-33.11	-39.29	-0.37	69.6	70.5	71.1

7.26	-46.19	-33.06	-39.29	-0.34	69.6	70.5	71.2
7.26	-46.19	-33.11	-39.29	-0.37	69.6	70.5	71.3
7.26	-46.19	-33.11	-39.29	-0.34	69.7	70.6	71.6
7.26	-46.1	-33.06	-39.29	-0.37	69.7	70.6	71.9
7.26	-46.19	-33.06	-39.29	-0.37	69.7	70.7	72.2
7.26	-46.19	-33.06	-39.29	-0.34	69.7	70.7	72.3
7.26	-46.19	-33.06	-39.26	-0.34	69.8	70.8	72.3
7.26	-46.19	-33.06	-39.26	-0.34	69.7	70.8	72.5
7.26	-46.19	-33.06	-39.26	-0.34	69.8	70.8	72.5
7.26	-46.19	-33.06	-39.26	-0.37	69.8	70.9	72.8
7.26	-46.19	-33.11	-39.26	-0.37	69.8	70.9	72.9
7.26	-46.19	-33.06	-39.26	-0.37	69.9	71	72.9
7.26	-46.19	-33.06	-39.26	-0.37	69.9	71	73.1
7.26	-46.19	-33.06	-39.23	-0.34	69.9	71	73.1
7.26	-46.1	-33.11	-39.23	-0.37	70	71	73.1
7.26	-46.19	-33.06	-39.23	-0.37	69.9	71	73.3
7.26	-46.1	-33.06	-39.26	-0.37	69.9	71	73.4
7.26	-46.19	-33.06	-39.26	-0.37	70	71.1	73.4
7.26	-46.1	-33.06	-39.23	-0.37	70	71.1	73.5
7.26	-46.1	-33.06	-39.23	-0.37	69.9	71.1	73.4
7.26	-46.19	-33.06	-39.23	-0.37	70	71.1	73.4
7.26	-46.1	-33.06	-39.23	-0.37	69.9	71.1	73.5
7.26	-46.1	-33.06	-39.26	-0.37	70	71.1	73.4
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71.1	73.4
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71.2	73.4
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71.2	73.4
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71.2	73.3
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71.2	73.4
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71.2	73.4
7.26	-46.19	-33	-39.23	-0.37	70.1	71.2	73.4
7.26	-46.1	-33.06	-39.26	-0.37	70.1	71.2	73.3
7.26	-46.1	-33	-39.26	-0.37	70.1	71.2	73.3
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	73.2
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	73.1
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	73.2
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	73.1
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	73
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	72.8
7.26	-46.19	-33	-39.23	-0.37	70.1	71.2	72.5
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	72.7
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	72.7
7.26	-46.1	-33	-39.23	-0.37	70.1	71.2	72.4
7.26	-46.1	-33	-39.23	-0.37	70.2	71.2	72.3
7.26	-46.1	-33	-39.26	-0.4	70.1	71.2	72.4
7.26	-46.1	-33	-39.23	-0.37	70.1	71.1	72.3
7.26	-46.1	-33	-39.23	-0.37	70.2	71.1	72.2
7.26	-46.19	-33	-39.23	-0.37	70.1	71	71.9

7.26	-46.1	-33	-39.23	-0.37	70.1	71	71.4
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71	71.6
7.26	-46.1	-33.06	-39.23	-0.37	70.1	71	71.2
7.26	-46.19	-33	-39.23	-0.37	70.1	70.9	71.2
7.26	-46.19	-33.06	-39.23	-0.34	70.1	70.9	70.9
7.26	-46.19	-33.06	-39.23	-0.37	70.1	70.9	70.9
7.26	-46.1	-33.06	-39.26	-0.34	70	70.9	70.8
7.26	-46.1	-33.06	-39.23	-0.37	70	70.9	70.5
7.26	-46.19	-33	-39.26	-0.37	70	70.8	70.5
7.26	-46.19	-33.06	-39.26	-0.37	70.1	70.8	70.3
7.26	-46.19	-33	-39.26	-0.37	70	70.8	70.1
7.26	-46.1	-33.06	-39.23	-0.37	70	70.8	70
7.26	-46.1	-33	-39.23	-0.34	70	70.7	69.9
7.26	-46.19	-33.06	-39.23	-0.37	69.9	70.7	69.8
7.26	-46.1	-33	-39.23	-0.37	69.9	70.7	69.8
7.26	-46.1	-33.06	-39.23	-0.37	69.9	70.7	69.8
7.26	-46.19	-33.06	-39.23	-0.37	69.9	70.7	69.4
7.26	-46.19	-33.06	-39.23	-0.37	69.9	70.7	69.2
7.26	-46.1	-33.06	-39.23	-0.37	69.8	70.6	69.2
7.26	-46.19	-33	-39.26	-0.37	69.8	70.6	69
7.26	-46.1	-33.06	-39.23	-0.37	69.8	70.6	69
7.25	-46.1	-33.06	-39.23	-0.37	69.8	70.6	68.9
7.26	-46.19	-33.06	-39.23	-0.37	69.7	70.5	69
7.25	-46.1	-33	-39.23	-0.37	69.7	70.5	68.8
7.26	-46.1	-33.06	-39.23	-0.37	69.6	70.5	68.6
7.26	-46.1	-33.06	-39.23	-0.37	69.4	70.5	68.4
7.26	-46.19	-33.06	-39.23	-0.37	69.3	70.5	68.4
7.26	-46.1	-33.06	-39.23	-0.37	69.3	70.5	68.1
7.25	-46.1	-33	-39.23	-0.37	69.2	70.4	68.1
7.25	-46.1	-33	-39.23	-0.37	69	70.4	68.3
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.4	68.2
7.26	-46.1	-33	-39.2	-0.34	69	70.4	68.1
7.26	-46.1	-33	-39.23	-0.34	69.1	70.4	68.1
7.25	-46.1	-33	-39.2	-0.34	69	70.4	68.1
7.25	-46.1	-33.06	-39.2	-0.34	69	70.3	67.9
7.25	-46.1	-33	-39.2	-0.34	69	70.3	67.9
7.25	-46.1	-33	-39.2	-0.34	69	70.3	68
7.25	-46.1	-33	-39.23	-0.34	69	70.3	67.9
7.25	-46.1	-33	-39.23	-0.37	69	70.2	67.9
7.25	-46.1	-33	-39.23	-0.37	69.1	70.2	67.8
7.25	-46.1	-33	-39.2	-0.34	69.1	70.2	67.7
7.25	-46.1	-33	-39.23	-0.37	69.1	70.1	67.7
7.25	-46.1	-33.06	-39.23	-0.37	69.2	70.2	67.9
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.2	67.7
7.26	-46.19	-33	-39.23	-0.37	69.3	70.2	67.3
7.25	-46.19	-33	-39.2	-0.37	69.3	70.2	67.4
7.25	-46.1	-33.06	-39.23	-0.34	69.4	70.2	67.5

7.25	-46.1	-33.06	-39.2	-0.37	69.4	70.2	67.4
7.25	-46.1	-33.06	-39.2	-0.34	69.4	70.1	67.4
7.25	-46.1	-33.06	-39.2	-0.34	69.4	70.1	67.3
7.25	-46.1	-33	-39.23	-0.37	69.4	70.1	67.2
7.25	-46.1	-33.06	-39.23	-0.34	69.3	70.1	67.2
7.26	-46.19	-33	-39.23	-0.34	69.4	70.1	67.2
7.25	-46.1	-33	-39.23	-0.37	69.3	70.1	67.2
7.25	-46.1	-33	-39.2	-0.34	69.3	70.1	67.1
7.25	-46.19	-33.06	-39.23	-0.37	69.3	70.1	67.2
7.25	-46.1	-33	-39.23	-0.34	69.3	70.1	67
7.25	-46.1	-33	-39.23	-0.34	69.3	70.1	66.9
7.25	-46.1	-33.06	-39.23	-0.34	69.3	70.1	67.1
7.25	-46.1	-33	-39.23	-0.34	69.2	70.1	66.9
7.25	-46.19	-33	-39.23	-0.34	69.2	70.1	66.8
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.1	67
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.1	66.9
7.25	-46.19	-33.06	-39.23	-0.34	69.2	70.1	66.8
7.25	-46.19	-33	-39.23	-0.34	69.2	70.1	66.8
7.25	-46.19	-33.06	-39.23	-0.37	69.2	70.1	66.8
7.25	-46.1	-33.06	-39.23	-0.34	69.1	70.1	67.1
7.26	-46.19	-33.06	-39.23	-0.34	69.2	70.1	67
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.1	67.1
7.25	-46.19	-33.06	-39.23	-0.34	69.3	70.1	67.2
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.1	67.4
7.25	-46.1	-33.06	-39.23	-0.37	69.2	70.1	67.7
7.25	-46.19	-33.06	-39.23	-0.34	69	70.1	67.4
7.26	-46.1	-33.06	-39.2	-0.34	69.1	70.2	67.8
7.26	-46.19	-33.06	-39.2	-0.34	69.3	70.2	67.9
7.25	-46.1	-33.06	-39.23	-0.34	69.2	70.2	68.1
7.25	-46.1	-33.06	-39.2	-0.34	69.3	70.2	68.1
7.25	-46.19	-33.06	-39.23	-0.34	69.2	70.2	68.4
7.26	-46.19	-33.06	-39.23	-0.34	69.3	70.3	68.4
7.25	-46.1	-33	-39.23	-0.34	69.3	70.3	68.5
7.26	-46.1	-33	-39.23	-0.34	69.4	70.3	68.8
7.26	-46.1	-33	-39.23	-0.34	69.3	70.3	68.9
7.25	-46.1	-33	-39.23	-0.34	69.2	70.3	69.1
7.25	-46.1	-33	-39.23	-0.34	69.3	70.3	69.2
7.25	-46.1	-33	-39.26	-0.37	69.3	70.4	69.3
7.25	-46.1	-33.06	-39.26	-0.37	69.3	70.4	69.6
7.25	-46.1	-33.06	-39.26	-0.37	69.4	70.4	70
7.26	-46.1	-33	-39.26	-0.34	69.3	70.4	70.1
7.26	-46.1	-33	-39.26	-0.34	69.3	70.5	70.2
7.26	-46.1	-33	-39.26	-0.34	69.4	70.5	70.5
7.26	-46.05	-33	-39.26	-0.37	69.3	70.6	70.5
7.26	-46.1	-33	-39.23	-0.37	69.4	70.5	70.9
7.25	-46.1	-33.06	-39.26	-0.34	69.4	70.6	71.1
7.26	-46.1	-33	-39.26	-0.34	69.4	70.6	71.2

7.26	-46.1	-33	-39.26	-0.34	69.6	70.7	71.4
7.26	-46.1	-33	-39.26	-0.37	69.4	70.8	71.7
7.26	-46.05	-33.06	-39.26	-0.34	69.6	70.8	72
7.26	-46.05	-33	-39.26	-0.37	69.6	70.9	72.1
7.25	-46.05	-33	-39.29	-0.37	69.6	70.9	72.2
7.26	-46.05	-33	-39.29	-0.34	69.7	70.9	72.3
7.26	-46.05	-33	-39.26	-0.37	69.6	70.9	72.7
7.26	-46.05	-33	-39.29	-0.37	69.7	70.9	72.9
7.26	-46.05	-33	-39.29	-0.37	69.7	70.9	72.9
7.26	-46.05	-33	-39.29	-0.37	69.7	70.9	73
7.26	-46.05	-33	-39.26	-0.34	69.7	71	73.4
7.26	-46.05	-33	-39.26	-0.37	69.7	71	73.4
7.26	-46.05	-33	-39.29	-0.34	69.8	71	73.5
7.26	-46.05	-33	-39.26	-0.34	69.8	71.1	73.7
7.26	-46.05	-33	-39.29	-0.37	69.8	71.1	73.8
7.26	-46.05	-33	-39.26	-0.37	69.8	71.1	74.1
7.26	-46.05	-33	-39.26	-0.34	69.7	71.2	74.2
7.26	-46.05	-33	-39.26	-0.37	69.9	71.2	74.2
7.26	-46.05	-33.06	-39.26	-0.34	69.9	71.2	74.2
7.26	-46.05	-33	-39.26	-0.37	69.9	71.2	74.4
7.26	-46.05	-32.95	-39.26	-0.37	69.9	71.2	74.4
7.26	-46.05	-32.95	-39.26	-0.37	69.9	71.2	74.4
7.26	-46.05	-33	-39.29	-0.37	69.9	71.2	74.3
7.26	-46.05	-33	-39.26	-0.37	70	71.2	74.5
7.26	-46.01	-33	-39.26	-0.37	70	71.2	74.5
7.26	-46.05	-32.95	-39.26	-0.37	70	71.3	74.6
7.26	-46.01	-33	-39.26	-0.37	70.1	71.3	74.5
7.26	-46.05	-32.95	-39.26	-0.34	70.1	71.3	74.5
7.26	-46.01	-33	-39.26	-0.37	70.1	71.3	74.5
7.26	-46.01	-32.95	-39.23	-0.37	70.1	71.3	74.6
7.26	-46.01	-33	-39.26	-0.34	70.1	71.2	74.5
7.26	-46.05	-33	-39.26	-0.37	70.1	71.2	74.4
7.26	-46.01	-32.95	-39.26	-0.34	70.1	71.2	74.5
7.26	-46.05	-32.95	-39.26	-0.34	70.1	71.2	74.5
7.26	-46.01	-33	-39.26	-0.37	70.1	71.2	74.5
7.26	-46.05	-32.95	-39.26	-0.37	70.1	71.2	74.5
7.26	-46.05	-32.95	-39.26	-0.37	70.1	71.2	74.3
7.26	-46.05	-32.95	-39.23	-0.37	70.1	71.2	74.1
7.26	-46.05	-32.95	-39.23	-0.37	70.1	71.2	74
7.26	-46.01	-32.95	-39.26	-0.37	70.1	71.2	74
7.26	-46.01	-32.95	-39.23	-0.37	70.1	71.2	73.8
7.26	-46.01	-32.95	-39.23	-0.37	70.2	71.2	73.8
7.26	-46.01	-32.95	-39.23	-0.37	70.2	71.2	73.8
7.26	-46.01	-32.95	-39.23	-0.37	70.3	71.2	73.5
7.26	-46.05	-33	-39.23	-0.37	70.3	71.2	73.4
7.26	-46.01	-32.95	-39.23	-0.37	70.2	71.2	73.3
7.26	-46.01	-32.95	-39.26	-0.37	70.2	71.1	73.1

7.26	-46.01	-32.95	-39.23	-0.34	70.3	71.1	72.9
7.26	-46.01	-32.95	-39.23	-0.37	70.2	71	72.7
7.26	-46.01	-32.95	-39.23	-0.37	70.2	71	72.7
7.25	-46.05	-32.95	-39.23	-0.37	70.2	71	72.4
7.26	-46.01	-33	-39.23	-0.37	70.2	70.9	72.3
7.26	-46.05	-33	-39.23	-0.34	70.1	70.9	72
7.26	-46.01	-32.95	-39.23	-0.34	70.1	70.8	71.7
7.25	-46.01	-33	-39.26	-0.37	70.1	70.7	71.5
7.25	-46.05	-32.95	-39.23	-0.37	70.1	70.7	71.2
7.25	-46.05	-32.95	-39.23	-0.37	70.1	70.7	71.2
7.26	-46.05	-32.95	-39.23	-0.34	70.1	70.7	71
7.25	-46.05	-32.95	-39.23	-0.37	70	70.7	70.6
7.25	-46.01	-33	-39.23	-0.37	70	70.7	70.7
7.26	-46.01	-33	-39.23	-0.37	69.9	70.6	70.1
7.25	-46.05	-32.95	-39.23	-0.37	69.9	70.6	70.2
7.26	-46.01	-32.95	-39.23	-0.37	69.8	70.5	70.1
7.25	-46.05	-32.95	-39.23	-0.37	69.9	70.5	69.5
7.25	-46.05	-32.95	-39.23	-0.34	69.8	70.4	69.6
7.25	-46.05	-33	-39.23	-0.37	69.7	70.4	69.2
7.25	-46.01	-33	-39.23	-0.34	69.3	70.4	69.1
7.26	-46.05	-32.95	-39.23	-0.34	69.4	70.3	68.9
7.25	-46.01	-33	-39.23	-0.34	69	70.2	68.8
7.25	-46.01	-32.95	-39.2	-0.34	69.1	70.2	68.8
7.26	-46.05	-32.95	-39.23	-0.34	69	70.2	68.5
7.25	-46.01	-33	-39.23	-0.34	68.9	70.1	68.2
7.26	-46.05	-32.95	-39.2	-0.34	68.8	70.1	68.1
7.25	-46.01	-32.95	-39.2	-0.34	68.6	70.1	68
7.26	-46.05	-32.95	-39.2	-0.37	68.6	70	67.4
7.25	-46.01	-32.95	-39.23	-0.34	68.5	69.9	67.5
7.26	-46.01	-32.95	-39.2	-0.34	68.6	69.8	67.1
7.26	-46.05	-32.95	-39.2	-0.34	68.7	69.8	67.2
7.25	-46.05	-32.95	-39.2	-0.34	68.8	69.8	66.9
7.25	-46.01	-32.95	-39.2	-0.34	68.9	69.7	66.8
7.25	-46.05	-32.95	-39.2	-0.37	68.9	69.6	66.5
7.26	-46.01	-32.95	-39.17	-0.34	68.9	69.5	66.4
7.25	-46.01	-32.95	-39.2	-0.34	68.8	69.5	66.1
7.26	-46.01	-32.95	-39.2	-0.34	68.8	69.5	65.9
7.25	-46.01	-32.95	-39.2	-0.34	68.7	69.4	65.8
7.26	-46.01	-33	-39.2	-0.34	68.7	69.4	65.6
7.25	-46.05	-32.95	-39.2	-0.37	68.6	69.3	65.2
7.25	-46.01	-33	-39.2	-0.34	68.5	69.1	65.2
7.25	-46.01	-33	-39.2	-0.34	68.5	69.1	64.7
7.24	-46.05	-32.95	-39.2	-0.34	68.4	69	64.7
7.25	-46.01	-32.95	-39.2	-0.34	68.4	69	64.5
7.24	-46.01	-32.95	-39.17	-0.34	68.3	69	64.2
7.24	-46.05	-32.95	-39.17	-0.34	68.2	69	64.2
7.24	-46.05	-32.95	-39.17	-0.34	68.2	68.9	63.8

7.25	-46.01	-32.95	-39.2	-0.34	68.1	68.8	63.7
7.24	-46.01	-33	-39.17	-0.34	68	68.8	63.6
7.25	-46.01	-32.95	-39.17	-0.34	68	68.8	63.6
7.24	-46.01	-32.95	-39.2	-0.34	67.9	68.8	63.3
7.24	-46.01	-32.95	-39.17	-0.34	67.9	68.7	63.1
7.24	-46.01	-32.95	-39.17	-0.34	67.9	68.6	63.1
7.24	-46.01	-32.95	-39.17	-0.34	67.8	68.6	63
7.24	-46.01	-33	-39.17	-0.34	67.7	68.5	62.7
7.25	-46.01	-32.95	-39.17	-0.34	67.7	68.5	62.5
7.25	-46.01	-32.95	-39.17	-0.34	67.6	68.4	62.4
7.24	-46.05	-32.95	-39.17	-0.31	67.6	68.4	62.4
7.25	-46.01	-32.95	-39.17	-0.34	67.5	68.4	62.2
7.24	-46.01	21.25	-39.17	-0.34	67.4	68.3	62.1
7.24	-46.05	21.25	-39.17	-0.34	67.2	68.2	61.8
7.25	-46.05	21.25	-39.2	-0.31	67.2	68.1	61.8
7.24	-46.05	21.2	-39.17	-0.34	67.2	68	61.5
7.24	-46.05	21.2	-39.2	-0.31	67.2	68.1	61.6
7.24	-46.05	21.2	-39.2	-0.34	67.1	68.1	61.5
7.25	-46.05	21.2	-39.2	-0.31	67.2	68.1	61.4
7.25	-46.01	21.2	-39.2	-0.31	67.1	68.1	61.6
7.25	-46.05	21.25	-39.17	-0.31	67.2	68	61.5
7.24	-46.05	21.2	-39.17	-0.31	67.1	68	61.5
7.25	-46.05	21.2	-39.17	-0.31	67	67.9	61.5
7.25	-46.05	21.2	-39.17	-0.31	67.1	68	61.6
7.25	-46.05	21.2	-39.2	-0.31	67	67.9	61.7
7.24	-46.05	21.25	-39.2	-0.34	67	68.1	61.8
7.24	-46.05	21.25	-39.2	-0.34	67.1	68.1	62.1
7.24	-46.05	21.25	-39.17	-0.31	66.8	67	62.1
7.25	-46.05	21.25	-39.17	-0.27	65.6	65.5	62.3
7.24	-46.01	16.01	-39.17	-0.27	65.6	67.1	62.5
7.25	-46.01	-116.16	-39.17	-0.31	66.1	67.6	62.7
7.24	-46.05	-116.11	-39.17	-0.31	66.5	67.9	63
7.25	-46.01	-116.16	-39.14	-0.31	66.8	68	63.6
7.24	-46.01	-116.27	-39.17	-0.31	66.9	68.2	63.7
7.25	-46.01	-116.27	-39.17	-0.31	67.4	68.5	64.1
7.24	-46.01	-116.32	-39.17	-0.31	67.7	68.7	64.4
7.24	-46.01	-116.37	-39.17	-0.31	67.8	68.9	64.9
7.25	-46.01	-116.47	-39.17	-0.34	67.8	69.1	65.3
7.25	-46.01	-116.16	-39.17	-0.34	67.9	69.5	66
7.25	-46.01	-116.37	-39.17	-0.31	68.2	69.6	66.5
7.26	-46.05	-116.32	-39.17	-0.34	68.4	69.8	66.8
7.25	-46.01	-116.32	-39.17	-0.31	68.5	69.8	67
7.26	-46.05	-116.37	-39.17	-0.31	68.6	70	67.9
7.25	-46.01	-116.37	-39.17	-0.34	68.8	70.1	68.1
7.26	-46.01	-116.37	-39.17	-0.31	68.9	70.3	68.7
7.25	-46.01	-116.37	-39.17	-0.31	68.9	70.4	69
7.25	-46.01	-116.42	-39.17	-0.31	69.1	70.5	69.4

7.26	-46.01	-116.42	-39.14	-0.34	69.2	70.8	70.1
7.26	-46.01	-116.42	-39.14	-0.31	69.4	70.9	70.3
7.26	-46.01	-116.27	-39.14	-0.34	69.7	70.9	70.6
7.26	-46.01	-116.37	-39.14	-0.34	69.7	71.1	71.2
7.26	-45.96	-116.37	-39.11	-0.34	69.8	71.2	71.3
7.26	-46.01	-116.37	-39.11	-0.34	69.9	71.2	72
7.26	-46.01	-116.42	-39.11	-0.34	70.1	71.3	72.3
7.26	-46.01	-116.32	-39.11	-0.34	70.1	71.4	72.6
7.26	-45.96	-116.27	-39.11	-0.34	70.2	71.6	72.9
7.26	-46.01	-116.32	-39.11	-0.34	70.1	71.7	73.4
7.26	-45.96	-116.32	-39.11	-0.34	70.4	71.8	73.8
7.26	-45.96	-116.27	-39.11	-0.34	70.4	71.9	74.1
7.26	-45.96	-116.27	-39.11	-0.34	70.4	72	74.4
7.26	-46.01	-41.8	-39.11	-0.34	70.5	72.1	74.7
7.26	-45.96	-41.65	-39.11	-0.34	70.6	72.2	74.8
7.26	-45.92	-35.37	-39.08	-0.34	70.5	72.2	75.1
7.26	-45.96	-35.42	-39.08	-0.34	70.7	72.3	75.5
7.26	-45.92	-35.47	-39.08	-0.34	71.2	71.9	75.7
8.47	-46.05	-39.47	-39.11	22.19	81.8	72	74
8.42	-46.24	-39.93	-39.08	22.07	91.9	71.3	54.8
8.34	-46.01	-41.02	-39.14	18.35	93.1	72.3	53.3
8.41	-46.24	-41.49	-39.2	-0.43	83	72.6	54.3
8.41	-46.24	-42.16	-39.26	-0.37	78.9	72.7	53.5
8.4	-46.47	-42.27	-39.23	16.79	84.2	72.5	51.5
8.49	-46.19	-43.05	-39.29	19.32	93.2	71.6	52.4
8.68	-46.51	-42.68	-39.32	-0.37	91.5	72.8	54.2
8.5	-46.47	-43.36	-39.44	-0.4	81.8	72.8	54.5
8.47	-46.69	-43.31	-39.38	19.57	87.9	72.7	53.5
8.46	-46.74	-43.57	-39.29	18.47	92.9	72.1	54.1
8.54	-46.69	-43.62	-39.47	-0.37	85.5	72.4	53
8.53	-46.83	-43.88	-39.44	21.89	92.2	71.7	54.4
8.49	-46.92	-43.93	-39.6	18.32	93.1	72.5	53.7
8.72	-46.92	-44.14	-39.47	19.69	91.8	72.3	53.4
8.52	-46.69	-44.29	-39.57	20.18	93	71	52.4
8.69	-47.01	-44.45	-39.69	2.99	91	72.2	55.8
8.54	-46.6	-44.34	-39.78	18.68	91.1	71.2	51.3
8.36	-46.74	-44.34	-39.81	18.77	92.2	70.5	53.8
8.57	-46.97	-44.5	-39.81	-0.37	87.4	71.4	53.4
8.55	-47.34	-44.19	-39.81	18.59	90.2	71.1	53.9
8.56	-47.47	-44.34	-39.87	20.57	91.4	70.1	52.9
8.59	-47.29	-44.76	-39.81	5.37	89.2	71.3	53.7
8.62	-46.83	-44.29	-39.99	-0.34	79.6	70.6	54.4
8.57	-47.38	-45.23	-39.93	19.41	89	69.6	53
8.74	-47.56	-44.76	-39.84	-0.24	87.1	70.7	54.7
8.63	-47.34	-44.76	-39.99	16	83.5	70.2	54.6
8.57	-47.38	-44.71	-39.99	18.44	87.8	70.3	54.2
8.63	-47.34	-44.97	-40.05	-0.34	81	70.3	53.5

8.6	-47.52	-45.02	-40.09	18.47	87	70.4	54.1
8.57	-47.52	-45.17	-40.12	18.41	87.1	70.1	52.2
8.61	-47.56	-45.12	-40.21	-0.31	80.5	70.1	53.1
8.62	-47.52	-45.54	-40.05	20.7	86.4	70	53.3
8.57	-47.34	-45.38	-40.18	18.44	86.5	69.7	55.4
8.63	-47.34	-45.38	-40.39	-0.31	80.3	69.8	54.1
8.59	-47.56	-45.38	-40.12	22.07	85.7	68.7	54
8.6	-47.66	-45.49	-40.27	18.35	85.3	69.9	53
8.59	-47.43	-45.64	-40.3	22.1	85.3	68.7	54.5
8.58	-47.56	-46	-40.45	18.28	85.2	69.7	53.5
8.72	-47.56	-45.54	-40.42	22.04	83.7	69.1	54.8
8.59	-47.84	-45.54	-40.3	22.07	85.7	68.3	48.8
8.6	-47.88	-45.69	-40.39	18.35	84.5	69.4	53.5
8.65	-48.02	-45.64	-40.36	-0.31	76.6	68.7	53.7
8.51	-47.61	-45.59	-40.48	18.86	84.3	68	54.5
8.62	-48.11	-45.8	-40.45	-0.27	81.1	68.9	53.4
8.77	-47.93	-45.9	-40.48	22.1	83.1	68.4	53.9
8.6	-48.07	-45.75	-40.48	18.44	84.2	68.7	53.9
8.66	-48.02	-45.43	-40.51	-0.31	77.6	68.4	53.1
8.58	-47.88	-46.06	-40.57	21.28	83.7	67.5	53.7
8.6	-47.88	-45.54	-40.54	7.39	82.5	68.8	53.5
8.67	-47.98	-45.9	-40.6	22.16	82.8	67.9	54
8.61	-48.02	-45.69	-40.67	18.44	83.2	68.5	53.5
8.66	-47.79	-46.06	-40.63	-0.27	76.2	67.9	54.2
8.74	-47.93	-45.8	-40.63	22.19	83.3	68.1	53.1
8.6	-48.11	-45.9	-40.57	18.44	82.7	68.1	53.1
8.65	-47.98	-45.49	-40.67	-0.31	76.4	67.9	53.4
8.61	-48.07	-45.64	-40.63	20.18	82	67.9	52.9
8.59	-48.25	-46.21	-40.76	18.56	82.3	67.9	55.5
8.65	-47.75	-45.9	-40.76	-0.27	76.6	67.8	53.8
8.41	-48.11	-45.69	-40.88	19.14	82.5	66.8	54.5
8.65	-48.21	-46.37	-40.7	-0.27	79.4	67.7	53.3
8.59	-48.21	-46	-40.76	22.19	82.2	67	55.6
8.62	-48.21	-45.9	-40.76	18.47	81.7	67.8	53.8
8.68	-48.11	-46.26	-40.82	22.41	80	67.3	53.3
8.61	-48.16	-45.9	-40.85	22.25	82.2	66.9	54.1
8.61	-48.71	-46.52	-40.79	18.53	81.2	67.3	54.6
8.68	-48.3	-46.32	-40.79	14.59	75.6	67.1	54
8.62	-48.11	-46.73	-40.85	22.19	82	66.8	52.5
8.62	-48.48	-45.64	-40.97	18.53	81.5	67.3	53.5
8.67	-48.43	-46.06	-40.94	-0.27	75.3	67.1	53.8
8.58	-48.3	-46.32	-40.85	22.28	81.1	66.4	53.7
8.62	-48.71	-46.37	-40.88	18.56	81.4	67.2	53.6
8.67	-48.16	-46.16	-40.94	-0.27	74.4	66.9	53.1
8.61	-48.39	-46.26	-40.97	22.28	81.5	66.2	52.6
8.62	-48.48	-46.37	-40.88	18.5	80.7	67.2	53.6
8.67	-48.39	-46.78	-40.94	-0.24	73.4	66.5	53.5

8.59	-48.21	-46.63	-41	18.77	80.7	66.5	53.8
8.66	-48.43	-46.78	-41.03	-0.24	76.4	66.8	52.2
8.65	-48.53	-46.37	-41	18.68	80.3	66.9	53.8
8.53	-48.07	-46.63	-41	19.02	81.4	66	53.5
8.65	-48.53	-46.47	-41	-0.27	77.8	66.6	52.5
8.68	-48.39	-46.73	-41.21	-0.24	72.8	66.2	52.9
8.6	-48.53	-46.21	-41.18	20.42	80.3	66.7	53.5
8.6	-48.71	-46.06	-41.18	18.71	80.7	66.4	53.7
8.67	-48.57	-46.73	-41.06	-0.24	75.1	66.4	52.8
8.63	-48.62	-46.42	-41.15	22.28	80.6	65.8	52.9
8.63	-48.75	-46.26	-41.09	18.59	80.5	66.4	54.1
8.69	-48.53	-46.47	-41.18	-0.21	73.8	66.2	54.2
8.6	-48.94	-46.94	-41.06	22.25	80.5	65.7	46.6
8.62	-48.39	-46.89	-41.25	18.62	80.5	66.1	53
8.68	-48.71	-46.68	-41.03	-0.24	74.9	66.1	53.4
8.68	-48.57	-46.83	-41.31	-0.21	71.3	65.8	53.8
8.63	-48.48	-46.52	-41.43	22.25	80.5	65.5	53.7
8.63	-49.08	-46.68	-41.18	18.56	81	66.3	54.4
8.68	-48.98	-46.06	-41.28	-0.24	74.3	66	54.5
8.67	-48.71	-46.68	-41.34	-0.18	71.2	65.3	53.3
8.59	-49.12	-46.68	-41.37	21.46	81.9	64.4	54.2
8.63	-49.08	-46.94	-41.21	8.09	80.6	64.8	52.2
8.68	-48.85	-46.68	-41.37	-0.18	72.4	64.5	52.6
8.67	-48.75	-46.89	-41.43	22.07	78.1	64.7	56.6
8.56	-48.8	-47.25	-41.4	18.89	81.9	64.4	53.4
8.68	-49.03	-47.72	-41.43	-0.21	78.4	65.8	53.9
8.69	-48.75	-48.18	-41.4	-0.18	72.4	65.6	52.6
8.39	-49.12	-50.73	-41.31	19.02	82.9	65.1	52.1
8.67	-49.08	-52.13	-41.49	-0.21	79.6	65.6	52.9
8.62	-49.17	-53.01	-41.55	18.56	84	65.9	52.7
8.61	-49.21	-53.27	-41.55	18.62	84.5	65.8	52.2
8.6	-49.35	-53.48	-41.64	22.07	85.8	65.8	52
8.65	-49.44	-53.74	-41.7	18.86	85.3	66.7	53.1
8.62	-49.53	-54.26	-41.73	19.14	86.3	65.6	52.8
8.69	-49.67	-55.6	-41.79	15.63	84.3	66.8	52.9
8.61	-49.58	-58.04	-41.79	18.62	86.3	66.1	51.7
8.59	-49.81	-60.53	-41.83	18.74	86.5	66	53.3
8.65	-49.95	-64.95	-42.07	22.07	87.3	65.9	52.7
8.61	-50.22	-65.78	-42.07	20.24	87.4	65.8	52.3
8.65	-50.17	-47.3	-42.13	18.41	86.7	66.6	54.8
8.76	-50.22	-56.95	-42.1	22.07	85.6	66.9	54
8.65	-50.36	-58.87	-42.16	18.47	87.2	66.7	52.4
8.61	-50.13	-59.81	-42.28	18.62	87.8	66.5	52.8
8.62	-50.17	-60.07	-42.37	18.56	88.7	66.6	53.1
8.63	-50.49	-60.85	-42.31	18.59	88.6	66.8	52.6
8.6	-50.86	-60.38	-42.34	18.68	88.7	66.6	52.8
8.63	-50.49	-61.11	-42.53	19.29	89.7	66.4	52.5

8.62	-50.72	-61.21	-42.47	22.07	89.7	66.4	53.6
8.68	-50.82	-61.57	-42.47	22.04	89.2	67	51.7
8.7	-50.72	-61.88	-42.62	18.5	88.4	67.3	52.6
8.62	-50.86	-61.78	-42.74	18.59	88.2	66.9	52.7
8.56	-51	-61.78	-42.77	19.11	88.6	66.4	53.8
8.62	-51.04	-62.09	-42.86	21.06	89.3	66.4	52
8.64	-51.23	-61.62	-42.95	22.04	89.5	66.4	52.8
8.63	-51.27	-62.19	-42.89	22.01	89.6	66.7	52.8
8.75	-51.32	-62.14	-42.92	22.04	89.6	67.4	53
8.63	-51.18	-62.45	-43.11	18.44	89.2	67.3	53.1
8.58	-51.32	-62.51	-42.92	18.71	89.4	66.9	51.7
8.62	-51.18	-62.14	-43.2	20.12	89.7	66.7	53.4
8.64	-51.32	-62.51	-43.17	22.04	89.9	66.9	51.9
8.62	-51.41	-62.61	-43.23	22.01	90.3	67.1	52.8
8.68	-51.55	-62.4	-43.23	21.98	90.7	67.3	52.2
8.74	-51.5	-62.4	-43.32	21.95	90.8	67.7	51.6
8.65	-51.59	-62.66	-43.38	18.44	90.3	67.6	52.9
8.61	-51.36	-62.87	-43.41	18.62	90.8	67.3	52.5
8.61	-51.64	-62.87	-43.47	21.31	91.4	67	52.6
8.64	-51.91	-62.97	-43.35	21.95	91.6	67.2	53.3
8.67	-51.82	-62.97	-43.47	21.86	91.5	67.8	51.5
8.65	-51.82	-62.87	-43.5	21.76	91	68	52.3
8.64	-51.96	-63.03	-43.66	18.41	90.8	67.9	52.4
8.59	-51.96	-63.08	-43.75	18.71	91	67.4	52.2
8.64	-51.91	-63.18	-43.75	22.04	91.5	67.4	54.9
8.62	-52.05	-63.13	-43.75	21.95	91.2	67.5	52.6
8.76	-52.05	-63.23	-43.75	21.95	91.1	67.9	52.7
8.66	-51.91	-63.28	-43.84	19.41	90.9	68.2	52.1
8.64	-52.1	-63.49	-43.87	18.47	90.8	67.9	53
8.57	-52.33	-62.87	-43.93	18.99	90.9	67.4	52.4
8.62	-52.37	-63.49	-43.96	21.92	91.7	67.2	53.3
8.64	-52.23	-63.8	-43.96	21.89	91.8	67.4	52.6
8.74	-52.28	-64.06	-44.02	21.92	91.5	67.9	52.3
8.65	-52.28	-63.8	-44.15	18.41	90.9	67.9	52.6
8.6	-52.23	-63.96	-44.11	18.56	90.8	67.7	52
8.62	-52.37	-63.6	-44.21	19.2	91.1	67.3	52.8
8.63	-52.33	-63.54	-44.21	21.95	91.5	67.1	52.7
8.63	-52.51	-63.65	-44.27	21.95	91.1	67.3	53.3
8.78	-52.46	-63.91	-44.33	21.98	90.9	67.8	53.2
8.64	-52.51	-63.91	-44.3	18.41	90.3	67.8	53.1
8.62	-52.42	-63.75	-44.3	18.93	90.6	67.2	51.8
8.65	-52.55	-64.32	-44.45	21.98	90.7	67.3	52.9
8.65	-52.83	-63.75	-44.45	21.89	90.5	67.7	52.5
8.74	-52.51	-64.43	-44.48	21.95	89.8	67.9	51.4
8.66	-52.74	-64.48	-44.57	18.35	89.2	67.9	53.3
8.63	-52.74	-64.37	-44.54	18.38	89.2	67.9	51.6
8.62	-52.65	-64.27	-44.54	18.44	88.9	67.6	52.7

8.6	-52.97	-64.43	-44.6	18.56	88.8	67.5	53.2
8.56	-52.92	-64.74	-44.63	18.96	88.7	67.3	52
8.63	-52.97	-64.53	-44.73	20.02	88.8	67.2	52
8.64	-53.15	-64.53	-44.66	21.98	88.8	67.2	53.2
8.62	-53.1	-64.63	-44.79	21.89	88.6	67.3	52.1
8.67	-53.15	-64.95	-44.73	21.98	88.3	67.5	52.4
8.77	-53.24	-64.63	-44.85	21.92	87.7	67.9	51.9
8.65	-53.15	-64.63	-44.91	18.41	87.3	67.6	52.1
8.59	-53.29	-64.84	-44.91	18.56	87.3	67.2	53.1
8.63	-53.15	-64.74	-45	20.02	87.7	67	52.6
8.62	-53.33	-64.84	-44.94	22.04	87.6	67	51.5
8.64	-53.33	-64.79	-44.97	21.98	87.8	67.2	52.7
8.76	-53.24	-64.69	-45.09	21.95	87.7	67.5	54.7
8.65	-53.1	-65	-45.15	20.7	87	67.7	52.3
8.63	-53.47	-64.89	-45.18	18.35	86.6	67.4	52.9
8.58	-53.61	-65.05	-45.15	18.68	87	67	52.9
8.64	-53.42	-64.95	-45.18	21.95	87.7	66.6	52.2
8.63	-53.56	-65.2	-45.24	21.92	87.5	67	48.6
8.74	-53.42	-65.05	-45.24	21.89	87.4	67.1	51.7
8.66	-53.61	-65.57	-45.21	18.32	87.1	67.5	52.7
8.62	-53.7	-65.1	-45.34	18.44	87.2	67.3	53
8.34	-53.52	-65.36	-45.4	18.86	87.9	66.9	52.6
8.63	-53.7	-65.31	-45.34	22.01	88.3	66.7	52.2
8.62	-53.65	-65.52	-45.4	22.01	88.3	67	53.7
8.65	-53.84	-65.52	-45.43	21.64	87.7	67.6	51.9
8.63	-53.52	-65.52	-45.49	18.41	87.5	67.2	51.9
8.57	-53.79	-65.26	-45.52	18.71	87.9	66.8	53.3
8.58	-53.75	-65.83	-45.46	22.01	88.4	66.7	51.4
8.61	-53.79	-65.67	-45.52	21.95	88.4	66.8	51.8
8.68	-54.11	-65.72	-45.43	21.92	88.2	67	51.1
8.64	-54.11	-65.36	-45.52	19.29	87.4	67.5	53.6
8.62	-54.02	-65.78	-45.61	18.41	87.4	67.2	52.7
8.51	-54.29	-65.83	-45.61	18.99	87.5	66.6	52.9
8.63	-54.02	-65.93	-45.61	22.01	88.2	66.8	47.6
8.63	-54.11	-65.93	-45.7	22.01	87.8	66.8	53.1
8.68	-54.48	-65.72	-45.61	21.98	87.6	67.1	55.5
8.65	-54.25	-65.72	-45.73	21.06	87.3	67.4	51.8
8.62	-54.07	-66.24	-45.76	18.41	87.1	67.1	53.5
8.57	-54.39	-66.14	-45.76	18.74	87.4	66.7	53.4
8.61	-54.16	-65.98	-45.82	20.3	87.8	66.4	54.4
8.64	-54.39	-66.19	-45.85	22.07	87.9	66.7	52.4
8.65	-54.25	-65.98	-45.89	21.98	87.9	66.7	52.8
8.69	-54.29	-65.78	-46.01	21.98	87.5	66.8	53.4
8.65	-54.25	-65.83	-46.01	20.42	87.1	67.2	53.1
8.62	-54.29	-66.09	-45.92	18.47	86.8	66.9	53.3
8.62	-54.39	-66.5	-46.01	21.95	87.6	66.6	51.9
8.65	-54.52	-65.98	-45.98	21.95	87.3	66.7	51.3

8.65	-54.52	-66.19	-46.04	18.35	86.4	67.1	53.2
8.64	-54.34	-66.29	-46.1	21.95	87.1	66.4	52.3
8.71	-54.52	-65.98	-46.13	21.95	86.8	66.8	52.9
8.63	-54.75	-66.24	-46.13	18.32	86.2	67.2	52.7
8.34	-54.57	-66.35	-46.16	18.89	86.6	66.4	51.4
8.64	-54.43	-66.29	-46.16	22.01	87.1	66.4	52.8
8.62	-54.89	-66.61	-46.22	22.01	87	66.5	53.8
8.62	-54.66	-66.19	-46.31	22.1	87.1	66.4	52.1
8.63	-54.52	-66.55	-46.37	21.89	87.1	66.5	52.4
8.72	-54.71	-66.61	-46.22	22.01	86.8	66.8	52.4
8.65	-54.66	-66.45	-46.31	21.86	86.6	67	53
8.63	-54.89	-66.87	-46.34	18.32	86.4	66.9	54.6
8.58	-54.94	-66.55	-46.31	18.56	86.3	66.4	52.6
8.63	-54.66	-66.87	-46.28	21.95	86.6	66.3	52.4
8.65	-54.98	-66.61	-46.37	21.95	86.4	66.4	52.8
8.66	-55.12	-66.55	-46.34	19.54	85.6	67	53.1
8.62	-54.94	-66.92	-46.43	18.41	85.6	66.6	52.6
8.55	-54.84	-66.81	-46.47	18.96	85.7	66	53.3
8.61	-55.16	-67.23	-46.47	21.98	86.1	66	51.6
8.6	-54.98	-66.97	-46.56	21.98	86.2	66.1	52.9
8.64	-55.3	-67.18	-46.5	21.95	86	66.3	50.1
8.75	-55.21	-67.28	-46.65	21.89	86	66.9	52.8
8.64	-55.07	-67.02	-46.62	18.32	85.9	66.6	52.3
8.59	-55.26	-66.97	-46.5	18.53	86.4	66.1	52.6
8.62	-55.12	-67.23	-46.68	20.51	87.2	66.2	52.7
8.62	-55.3	-66.97	-46.74	21.89	87.7	66.5	52.6
8.67	-55.16	-67.33	-46.62	21.89	87.9	66.8	52.4
8.66	-55.16	-67.12	-46.77	21.52	87.6	67.4	53.8
8.63	-55.26	-67.38	-46.86	18.28	88	67.3	53.1
8.53	-55.35	-67.07	-46.74	18.89	88.5	66.8	52.8
8.65	-55.62	-67.49	-46.74	21.79	89.2	67.5	53
8.65	-55.3	-67.23	-46.74	21.83	89.5	67.8	53.2
8.67	-55.21	-66.97	-46.86	21.76	90.1	67.9	53.3
8.79	-55.49	-67.59	-46.98	21.76	90.6	68.2	53.3
8.65	-55.44	-67.28	-46.98	19.14	90.8	68.7	52.9
8.61	-55.39	-67.54	-46.95	18.35	91.1	68.3	52.2
8.65	-55.53	-67.28	-46.86	19.23	92	68	53.1
8.64	-55.39	-67.54	-46.98	21.86	92.6	68.3	52.5
8.66	-55.39	-67.54	-46.95	21.76	92.8	68.6	52.5
8.77	-55.62	-67.38	-46.89	21.76	93.3	69	51
8.65	-55.62	-67.7	-46.92	20.09	93.3	69.1	53.6
8.63	-55.62	-67.44	-47.05	18.16	93.5	69.1	52.2
8.62	-55.81	-67.75	-47.08	18.22	93.7	69	52.5
8.55	-55.81	-67.64	-47.05	18.47	94	68.8	52
8.64	-55.62	-67.85	-47.23	20.85	95.1	69.5	51.5
8.65	-55.58	-67.85	-47.17	21.73	95.5	68.8	51.8
8.67	-55.81	-67.59	-47.2	21.76	95.7	69	51.6

8.65	-55.76	-67.33	-47.2	19.35	94.9	69.4	52.7
8.61	-55.76	-67.64	-47.23	18.25	95.3	69	52.6
8.66	-55.67	-67.85	-47.29	18.71	96.3	68.5	53.3
8.64	-55.85	-67.64	-47.23	21.73	96.8	68.5	53.8
8.65	-55.76	-67.9	-47.38	21.64	97.1	68.8	50.4
8.67	-55.9	-67.85	-47.32	21.7	97.3	69.1	53.2
8.66	-55.76	-68.21	-47.38	21.21	97.7	69.8	52.4
8.64	-55.85	-67.9	-47.41	18.16	97.3	69.6	53.3
8.58	-55.85	-68.58	-47.32	18.71	97.6	68.9	52.4
8.67	-56.03	-67.9	-47.32	21.64	98	69	54.6
8.66	-55.99	-67.7	-47.47	21.55	97.9	69.3	54.1
8.78	-56.17	-68.27	-47.47	21.58	98.2	69.9	52
8.65	-55.99	-68.63	-47.47	18.07	96.5	70.1	52.5
8.61	-56.03	-68.32	-47.44	18.16	96.3	69.8	52.7
8.11	-55.99	-68.42	-47.5	18.5	96.8	69.4	52.9
8.65	-55.99	-68.21	-47.56	21.73	97.2	69.4	52.8
8.65	-56.03	-68.11	-47.59	21.64	97.1	69.6	52.5
8.67	-56.22	-67.9	-47.59	21.7	96.9	70	51.5
8.65	-56.03	-68.06	-47.63	21.4	96.6	70.4	53
8.63	-56.08	-68.16	-47.59	18.16	96.4	70.2	52.9
8.59	-56.17	-68.37	-47.63	18.25	96.4	70.1	52.5
8.65	-56.17	-68.58	-47.63	18.68	96.2	69.6	51.8
8.64	-56.03	-68.42	-47.56	21.67	96.2	69.7	53.3
8.66	-56.17	-68.21	-47.66	21.67	96.2	69.8	53.8
8.65	-56.49	-65.98	-47.59	21.67	96.1	69.9	52.1
8.65	-56.22	-58.77	-47.66	17.95	95.4	70.9	53.1
9.67	-56.49	-57.47	-47.53	21.55	93.2	70.8	50.7
8.66	-56.17	-56.75	-47.56	18.77	95.4	69.7	53.1
8.75	-55.85	-56.23	-47.59	-0.31	92.8	71	53.7
8.72	-55.67	-55.76	-47.53	-0.27	81.1	70.9	53.5
8.71	-55.58	-55.5	-47.5	14.07	81.4	70.9	53.2
8.66	-55.62	-55.24	-47.5	20.6	93.1	69.7	52.2
8.65	-55.53	-55.03	-47.44	7.23	92.5	71.2	53.3
8.71	-55.62	-54.98	-47.32	-0.27	80.3	71	53.4
8.7	-55.58	-54.88	-47.32	21.79	88.7	70.9	52.6
8.62	-55.53	-54.72	-47.26	18.07	92.8	70.1	52.8
8.7	-55.26	-54.88	-47.38	-0.27	86.4	70.9	53.3
8.71	-55.21	-54.51	-47.41	-0.27	78.8	70.8	52.9
8.76	-55.39	-54.46	-47.38	21.58	92.6	70.6	50.8
8.65	-55.35	-54.62	-47.29	17.86	92.8	70.8	54.1
8.71	-55.26	-54.31	-47.14	-0.27	82.5	70.8	53.1
8.7	-55.26	-54.31	-47.17	21.67	92.5	70.1	54
8.65	-55.16	-54.41	-47.23	17.7	92.3	70.8	52.7
8.9	-55.21	-53.89	-47.38	21.73	90.6	70.8	52
8.64	-55.12	-54.05	-47.17	21.55	92.6	69.8	52.2
8.66	-55.21	-54.05	-47.11	17.74	91.9	70.9	53.2
8.71	-55.16	-53.94	-47.14	19.11	88.5	70.7	52.1

8.64	-54.94	-54.05	-47.08	21.55	92	69.9	49.8
8.65	-55.07	-53.84	-47.08	17.74	91.8	70.7	52.9
8.68	-55.16	-53.94	-47.11	16.85	87.4	69.9	52.8
8.64	-54.94	-53.84	-47.08	17.92	91	70.1	52.6
8.71	-54.89	-53.74	-47.11	-0.24	84.2	70.6	53.8
8.64	-54.94	-53.74	-47.01	21.55	90.3	69.7	53.1
8.66	-54.89	-53.74	-47.14	17.74	91	70.5	53.8
8.71	-55.12	-53.74	-47.05	-0.27	81.1	70.4	53.6
8.65	-55.12	-53.79	-46.95	21.55	90.8	69.4	53.9
8.66	-55.16	-53.89	-46.98	17.8	90.8	70.4	52.5
8.71	-54.94	-53.53	-46.95	-0.27	79.9	70.1	53.2
8.65	-54.71	-53.58	-46.98	21.67	89.9	69.1	52.9
8.66	-54.66	-53.63	-46.92	17.95	90	70.3	53.1
8.71	-54.71	-54.15	-46.92	-0.24	80	70.1	52.9
8.65	-54.75	-53.53	-47.01	21.73	88.3	69.3	52.8
8.66	-54.84	-53.74	-46.86	18.01	89.6	70.1	52.9
8.71	-54.94	-53.89	-46.83	-0.21	80.9	70	52.9
8.66	-54.8	-53.79	-46.92	21.76	88	69.1	53.8
8.65	-55.07	-53.63	-46.86	18.01	89.6	69.8	52.7
8.71	-54.8	-53.63	-46.83	-0.24	81	69.9	54.3
8.65	-54.84	-53.89	-46.92	21.73	88.3	69	52.6
8.65	-54.84	-53.63	-46.86	18.07	89.3	69.7	53.2
8.71	-54.8	-53.43	-46.77	-0.27	80.6	69.8	53
8.73	-54.89	-53.27	-46.86	21.76	87.1	69.1	53.5
8.66	-54.94	-53.48	-46.83	18.07	88.6	69.5	53.4
8.71	-54.71	-53.48	-46.92	-0.21	81.1	69.7	53.2
8.66	-54.84	-53.48	-46.86	21.76	87.4	68.8	53.1
8.66	-54.89	-53.32	-46.8	18.07	88.5	69.3	53.5
8.71	-54.8	-53.27	-46.89	-0.24	80.2	69.5	53.1
8.63	-54.84	-53.37	-46.8	21.83	87.5	68.7	53.7
8.66	-54.62	-53.37	-46.83	18.07	88.1	69.3	53.6
8.71	-54.8	-53.37	-46.86	-0.24	79.8	69.3	53.5
8.67	-54.62	-53.32	-46.95	21.76	86.7	68.6	53.1
8.66	-54.66	-53.68	-46.77	18.07	87.8	69.1	54.5
8.71	-54.94	-53.63	-46.83	-0.21	79.5	69.1	53.6
8.65	-54.75	-53.01	-46.83	21.79	87.3	68.2	52.6
8.66	-54.71	-53.22	-46.83	18.07	87.4	69.3	53.5
8.71	-54.71	-53.48	-46.68	-0.24	78	69	53.3
8.66	-54.75	-53.37	-46.83	20.79	86.4	68.9	53.5
8.65	-54.66	-53.48	-46.74	18.19	87	68.7	54
8.71	-54.75	-53.32	-46.74	-0.21	79.6	68.9	54.4
8.79	-54.8	-53.58	-46.74	17.98	86.1	68.9	52.7
8.64	-54.66	-53.37	-46.77	18.25	86.5	68.5	53.2
8.69	-54.75	-53.48	-46.74	-0.21	79.9	68.8	53.7
8.76	-54.8	-53.53	-46.65	21.89	86.4	68.5	53.4
8.65	-54.71	-53.22	-46.77	18.25	86.2	68.3	53.8
8.71	-54.66	-53.27	-46.8	-0.21	79.7	68.6	53.5

8.65	-54.71	-53.06	-46.74	21.89	85.1	67.8	55.4
8.65	-54.52	-53.37	-46.8	18.19	85.7	68.3	52.4
8.71	-54.62	-53.32	-46.77	-0.21	78.5	68.4	52.9
8.64	-54.84	-53.22	-46.71	21.92	84.6	67.7	53.3
8.65	-54.52	-53.43	-46.86	18.22	85.4	68.2	53.6
8.71	-54.75	-53.27	-46.68	-0.21	77.7	68.1	53.6
8.63	-54.89	-53.58	-46.71	21.95	84.9	67.3	53.2
8.66	-54.71	-53.43	-46.74	18.22	84.9	68.1	53.8
8.71	-54.57	-53.32	-46.74	-0.21	77.3	68	53.4
8.5	-54.52	-53.32	-46.74	18.93	83.2	67.4	53.6
8.62	-54.48	-53.06	-46.74	20.63	85.5	67	50.4
8.56	-54.62	-53.37	-46.74	6.17	83.5	67.9	53
8.74	-54.66	-53.48	-46.77	19.29	83.4	67.3	53.7
8.63	-54.57	-53.43	-46.83	22.01	85.2	66.9	52.7
8.65	-54.62	-53.53	-46.68	18.19	84.2	67.9	53.3
8.71	-54.71	-53.27	-46.77	-0.18	75.5	67.5	53.6
8.62	-54.71	-53.32	-46.74	18.5	84.2	67.1	54.4
8.7	-54.52	-53.48	-46.77	-0.21	79.3	67.6	52.5
8.65	-54.66	-53.37	-46.71	22.04	83.9	66.6	53.2
8.66	-54.62	-53.48	-46.65	18.25	83.7	67.9	54.2
8.54	-54.94	-53.32	-46.74	19.08	83.1	66.8	53.3
8.63	-54.57	-53.27	-46.71	22.04	84.6	66.4	53.9
8.66	-54.71	-53.22	-46.74	17.52	83.7	67.7	52.1
8.71	-54.52	-53.32	-46.74	18.47	80.6	67.1	53.1
8.63	-55.07	-53.37	-46.74	18.47	83.8	66.9	52.8
8.7	-54.48	-53.63	-46.8	-0.21	78.8	67.5	53
8.68	-54.52	-53.32	-46.8	22.01	83.3	66.3	52.6
8.65	-54.66	-53.27	-46.68	18.38	84.2	66.7	53.2
8.71	-54.39	-53.11	-46.77	-0.18	77.5	66.6	53.3
8.67	-54.71	-53.27	-46.53	21.92	83.2	66.5	53.1
8.65	-54.39	-53.43	-46.8	18.44	84.9	66.8	51.6
8.72	-54.71	-53.53	-46.77	-0.21	78	66.9	53.7
8.68	-54.57	-53.48	-46.68	22.01	84.2	66.7	52.9
8.65	-54.62	-53.43	-46.74	18.38	86	66.8	53.6
8.72	-54.57	-53.17	-46.71	-0.24	79.5	67.4	53.3
8.79	-54.66	-53.32	-46.74	0.15	74.5	67.9	53.2
8.6	-54.62	-53.32	-46.83	18.59	87.7	66.8	53.4
8.7	-54.57	-52.91	-46.8	-0.24	83.9	67.9	53.3
8.72	-54.25	-53.06	-46.89	15.23	82	68.3	52.9
8.63	-54.48	-53.32	-46.8	18.38	89.5	67.7	53.2
8.71	-54.52	-53.48	-46.86	-0.27	84	68.5	52.9
8.76	-54.57	-52.91	-46.86	21.92	88.5	68.5	52.1
8.65	-54.71	-53.01	-46.8	18.32	91.1	68.4	53
8.71	-54.75	-53.37	-46.77	-0.27	83.7	69	53
8.72	-54.75	-53.43	-46.74	15.78	84.8	69.6	52.7
8.61	-54.66	-52.7	-46.86	18.41	92.9	68.9	52.8
8.7	-54.66	-53.27	-46.83	-0.31	87.6	69.7	52.7

8.74	-54.71	-53.53	-46.8	14.38	81.8	68.9	51.6
8.62	-54.66	-53.48	-46.8	18.44	92.6	68.1	52.4
8.71	-54.62	-53.37	-46.8	-0.24	86.6	68.9	53.7
8.81	-54.66	-53.27	-46.86	21.89	90.4	68.6	53.2
8.65	-54.89	-53.11	-46.77	18.32	93.2	68.5	53.1
8.71	-54.8	-53.74	-46.77	-0.27	84	68.9	53
8.66	-54.71	-53.17	-46.83	18.62	92.3	69.6	52.7
8.65	-54.62	-53.22	-46.8	19.32	94.5	69.1	54.1
8.68	-54.57	-53.32	-46.86	0.31	94	70.2	53.2
8.76	-54.71	-53.27	-46.89	19.11	94	69.7	53.9
8.58	-54.52	-53.37	-46.8	18.83	95.8	68.5	53.4
8.72	-54.8	-53.37	-46.74	-0.27	90.4	69.5	53.3
9.38	-54.75	-53.22	-46.83	21.58	95.4	69.6	53.8
8.66	-54.66	-53.37	-46.77	18.41	95.1	69	53.2
8.72	-54.62	-53.11	-46.74	-0.24	86.1	69.4	53.4
8.66	-54.62	-53.22	-46.89	21.89	93.2	68.3	55
8.67	-54.62	-53.43	-46.89	18.25	94.1	69.3	52.8
8.72	-54.62	-53.37	-46.8	-0.24	82.1	69.1	53.8
8.65	-54.71	-53.06	-46.77	21.92	93.1	67.9	51.7
8.68	-54.71	-53.43	-46.83	18.19	94.2	69.4	53.4
8.73	-54.84	-53.37	-46.8	15.11	86.5	69	50.4
8.63	-54.98	-52.49	-46.77	18.47	93.9	68.5	54
8.71	-54.84	-53.43	-46.71	-0.27	87.5	69.3	54.1
8.76	-54.66	-53.17	-46.8	21.95	91.8	68.8	52.7
8.67	-54.57	-53.06	-46.89	18.38	94	69	54
8.73	-54.8	-53.22	-46.8	-0.27	83.7	69.3	53.2
8.65	-54.8	-53.37	-46.74	21.92	92.9	68.3	54.3
8.67	-54.62	-53.37	-46.8	18.28	94.3	69.4	53.9
8.69	-54.57	-46.89	-46.77	-0.24	81.7	69.4	55.9
8.68	-54.48	-45.8	-46.74	-0.21	76.6	69	60.1
8.68	-54.39	-45.43	-46.68	-0.18	73.4	69.1	62.8
8.67	-54.25	-45.02	-46.65	-0.18	71.4	69.1	64.8
8.66	-54.16	-44.76	-46.56	-0.15	70.2	69.1	66.8
8.66	-54.11	-44.6	-46.53	-0.18	69.4	69.3	68.5
8.65	-54.07	-44.4	-46.47	-0.18	69	69.3	70
8.65	-53.97	-44.24	-46.43	-0.18	68.7	69.3	71.1
8.65	-53.84	-44.19	-46.4	-0.18	68.4	69.1	72.1
8.65	-53.84	-43.98	-46.37	-0.18	68.2	69.3	72.8
8.65	-53.75	-43.88	-46.34	-0.18	68	69.3	73.5
8.64	-53.75	-43.77	-46.31	-0.15	67.9	69.3	74
8.64	-53.65	-43.72	-46.28	-0.18	67.9	69.3	74.7
8.64	-53.65	-43.62	-46.25	-0.18	67.9	69.3	75.1
8.63	-53.61	-43.57	-46.22	-0.18	67.9	69.3	75.4
8.63	-53.56	-43.51	-46.19	-0.18	67.9	69.4	75.9
8.63	-53.52	-43.51	-46.16	-0.18	67.9	69.4	76.3
8.63	-53.47	-43.36	-46.16	-0.18	67.9	69.4	76.6
8.62	-53.47	-43.31	-46.13	-0.18	67.9	69.4	76.8

8.62	-53.42	-43.31	-46.13	-0.18	67.9	69.4	77
8.62	-53.38	-43.2	-46.1	-0.18	67.9	69.4	77.2
8.62	-53.33	-43.2	-46.04	-0.18	67.9	69.4	77.5
8.61	-53.33	-43.15	-46.04	-0.18	67.9	69.4	77.7
8.6	-53.29	-43.05	-46.04	-0.18	67.9	69.5	77.9
8.61	-53.24	-43.05	-46.01	-0.18	67.9	69.5	78.2
8.61	-53.24	-42.99	-45.98	-0.18	67.9	69.5	78.4
8.61	-53.2	-42.94	-45.98	-0.18	67.9	69.4	78.5
8.6	-53.2	-42.89	-45.95	-0.18	67.9	69.3	78.4
8.6	-53.15	-42.89	-45.92	-0.18	67.9	69.3	78.4
8.59	-53.1	-42.89	-45.92	-0.18	67.9	69.3	78.2
8.6	-53.1	-42.84	-45.89	-0.18	67.9	69.3	78.2
8.6	-53.06	-42.74	-45.85	-0.18	67.9	69.3	78.2
8.59	-53.06	-42.74	-45.85	-0.18	67.9	69.1	77.8
8.59	-53.06	-42.68	-45.82	-0.18	67.9	69	77.8
8.59	-53.01	-42.63	-45.76	-0.18	67.9	69	77.6
8.58	-53.01	-42.63	-45.76	-0.18	67.9	69	77.5
8.57	-52.97	-42.58	-45.73	-0.18	67.9	69	77.2
8.58	-52.92	-42.58	-45.73	-0.18	67.9	68.9	77
8.57	-52.92	-42.58	-45.7	-0.18	67.9	68.9	76.8
8.56	-52.88	-42.53	-45.67	-0.18	67.9	68.9	76.6
8.56	-52.88	-42.48	-45.67	-0.18	67.8	68.8	76.5
8.56	-52.88	-42.48	-45.64	-0.18	67.8	68.7	76.4
8.56	-52.83	-42.48	-45.61	-0.18	67.8	68.7	75.9
8.56	-52.83	-42.42	-45.58	-0.18	67.7	68.6	75.8
8.56	-52.74	-42.42	-45.58	-0.21	67.7	68.6	75.5
8.56	-52.74	-42.42	-45.55	-0.18	67.7	68.6	75.4
8.55	-52.69	-42.42	-45.55	-0.18	67.6	68.5	75.4
8.56	-52.69	-42.37	-45.52	-0.18	67.5	68.5	75.2
8.56	-52.69	-42.32	-45.49	-0.18	67.5	68.5	75
8.56	-52.65	-42.32	-45.46	-0.18	67.5	68.4	74.8
8.54	-52.65	-42.32	-45.46	-0.18	67.5	68.3	74.6
8.54	-52.6	-42.27	-45.46	-0.18	67.5	68.3	74.3
8.54	-52.6	-42.27	-45.43	-0.18	67.5	68.3	74.2
8.54	-52.55	-42.27	-45.4	-0.21	67.5	68.2	74.2
8.55	-52.55	-42.27	-45.37	-0.21	67.5	68.2	73.8
8.53	-52.55	-42.22	-45.34	-0.18	67.5	68.1	73.8
8.53	-52.51	-42.16	-45.34	-0.18	67.5	68.1	73.7
8.53	-52.51	-42.16	-45.34	-0.18	67.4	68	73.4
8.53	-52.46	-42.16	-45.31	-0.18	67.4	68	73.3
8.53	-52.46	-42.16	-45.31	-0.18	67.4	67.9	73.2
8.53	-52.46	-42.16	-45.27	-0.18	67.2	67.9	72.9
8.53	-52.42	-42.11	-45.24	-0.18	67.4	67.9	72.9
8.53	-52.42	-42.11	-45.24	-0.18	67.2	67.8	72.5
8.53	-52.37	-42.06	-45.21	-0.18	67.1	67.8	72.4
8.53	-52.37	-42.06	-45.21	-0.18	67.1	67.7	72.3
8.51	-52.37	-42.06	-45.18	-0.18	67	67.6	72.2

8.51	-52.33	-42.01	-45.15	-0.18	67	67.6	72
8.51	-52.28	-41.96	-45.15	-0.18	66.9	67.5	71.7
8.52	-52.28	-41.96	-45.12	-0.18	66.9	67.4	71.6
8.52	-52.28	-41.96	-45.12	-0.18	66.8	67.4	71.4
8.51	-52.23	-41.96	-45.09	-0.18	66.8	67.4	71.3
8.5	-52.23	-41.96	-45.09	-0.18	66.8	67.4	71.2
8.51	-52.23	-41.96	-45.06	-0.18	66.8	67.3	71.1
8.51	-52.19	-41.91	-45.06	-0.18	66.7	67.3	71
8.51	-52.19	-41.85	-45	-0.18	66.7	67.2	70.9
8.5	-52.19	-41.85	-45	-0.18	66.7	67.2	70.6
8.5	-52.19	-41.85	-44.97	-0.18	66.7	67.2	70.6
8.5	-52.14	-41.8	-44.97	-0.15	66.7	67.2	70.5
8.5	-52.14	-41.8	-44.94	-0.18	66.6	67.1	70.3
8.5	-52.1	-41.75	-44.94	-0.18	66.6	67.1	70.3
8.5	-52.1	-41.8	-44.94	-0.18	66.5	67.1	70.2
8.5	-52.1	-41.75	-44.91	-0.18	66.5	67.1	70
8.49	-52.05	-41.75	-44.88	-0.18	66.5	67	70.1
8.48	-52.1	-41.75	-44.88	-0.18	66.4	67	70
8.48	-52.05	-41.75	-44.88	-0.18	66.4	67	69.6
8.48	-52.05	-41.7	-44.85	-0.18	66.4	66.9	69.5
8.48	-52.01	-41.7	-44.85	-0.18	66.4	66.9	69.4
8.48	-52.01	-41.7	-44.82	-0.18	66.3	66.9	69.6
8.48	-51.96	-41.7	-44.82	-0.18	66.3	66.8	69.3
8.48	-52.01	-41.65	-44.82	-0.18	66.3	66.9	69.3
8.47	-51.96	-41.65	-44.79	-0.18	66.2	67	69.2
8.47	-51.96	-41.65	-44.79	-0.21	66.1	66.9	69.1
8.47	-51.91	-41.59	-44.76	-0.18	66.1	66.9	69
8.47	-51.96	-41.59	-44.76	-0.18	66	66.8	69.1
8.47	-51.91	-41.59	-44.73	-0.18	65.8	66.8	69
8.47	-51.91	-41.59	-44.73	-0.18	65.9	66.9	68.9
8.47	-51.91	-41.59	-44.73	-0.18	65.9	67	69
8.47	-51.87	-41.49	-44.73	-0.18	66	67	68.8
8.47	-51.87	-41.49	-44.73	-0.18	66	67	68.7
8.47	-51.87	-41.49	-44.69	-0.18	66	67.1	68.8
8.47	-51.87	-41.49	-44.69	-0.18	66.2	67.2	68.7
8.47	-51.82	-41.49	-44.66	-0.18	66.2	67.2	68.8
8.47	-51.82	-41.49	-44.66	-0.18	66.3	67.2	68.9
8.47	-51.82	-41.49	-44.63	-0.18	66.4	67.3	68.9
8.47	-51.82	-41.44	-44.63	-0.21	66.5	67.4	69
8.47	-51.78	-41.44	-44.63	-0.18	66.6	67.5	69.1
8.45	-51.78	-41.39	-44.6	-0.18	66.6	67.6	69.1
8.45	-51.78	-116.11	-44.6	-0.21	66.6	67.7	69.4
8.45	-51.78	-116.11	-44.6	-0.21	66.5	67.8	69.9
8.45	-51.78	-116.16	-44.57	-0.21	66.7	67.9	70.1
8.45	-51.73	-116.06	-44.57	-0.21	66.6	68	70.2
8.45	-51.73	-116.27	-44.57	-0.21	66.6	68.1	70.6
8.45	-51.73	-116.32	-44.54	-0.21	66.7	68.3	71

8.45	-51.64	-38.06	-44.54	-0.21	66.8	68.4	71.1
8.45	-51.64	-38.22	-44.54	-0.21	66.8	68.5	71.6
8.45	-51.64	-38.22	-44.48	-0.21	66.8	68.7	72.2
8.45	-51.64	-38.17	-96.56	-0.21	66.8	68.8	72.6
8.45	-51.59	-38.17	-95.98	-0.21	66.9	69	73.1
8.45	-51.59	-38.17	-95.4	-0.24	67	69.1	73.4
8.44	-51.55	-38.17	-119.97	-0.24	67.1	69.1	74
8.45	-51.55	-38.17	-119.97	-0.24	67.4	69.4	74.5
8.45	-51.55	-38.12	-119.97	-0.24	67.4	69.5	75
8.45	-51.55	-38.17	-119.97	-0.24	67.5	69.7	75.3
8.45	-51.55	-38.12	-119.97	-0.24	67.8	69.8	75.7
8.44	-51.55	-38.12	-119.97	-0.24	67.9	70	76.3
8.44	-51.5	-38.12	-119.97	-0.24	67.9	70.1	76.6
8.44	-51.5	-38.06	-119.97	-0.24	67.9	70.1	76.9
8.44	-51.5	-38.12	-119.97	-0.24	68.1	70.3	77.3
8.44	-51.5	-38.12	-119.97	-0.24	68.3	70.4	77.7
8.44	-51.46	-41.23	-119.97	-0.27	68.4	70.6	78.2
8.44	-51.46	-41.23	-119.97	-0.27	68.5	70.6	78.6
8.45	-51.46	-41.18	-119.97	-0.27	68.7	70.8	78.8
8.44	-51.46	-41.18	-119.97	-0.27	68.8	70.8	79.2
8.44	-51.41	-41.18	-119.97	-0.27	68.7	70.9	79.4
8.45	-51.41	-41.18	-119.97	-0.27	68.9	71.1	79.8
8.44	-51.41	-41.13	-77.02	-0.27	69.1	71.2	80
8.44	-51.41	-41.13	-87.28	-0.27	69.2	71.2	80.1
8.44	-51.36	-41.13	-92.62	-0.27	69.3	71.7	80.7
8.45	-51.36	-41.18	-92.04	-0.27	69.9	72.8	80.7
8.44	-51.36	-41.07	-85.84	-0.31	69.8	72.2	81
8.44	-51.32	-41.07	-119.97	-0.31	69.9	71.9	81.2
8.44	-51.32	-41.07	-119.97	-0.27	69.8	71.9	81.3
8.62	-51.32	-41.07	-84.74	-0.31	70	71.4	81.5
8.62	-51.32	-41.07	-119.97	-0.31	69.6	71.8	81.6
8.59	-51.27	-41.07	-119.97	-0.27	69.4	71.7	81.7
8.59	-51.23	-41.07	-119.97	-0.31	69.6	71.7	81.8
8.6	-51.27	-41.07	-119.97	-0.31	69.3	71.7	81.7
8.61	-51.23	-41.02	-119.97	-0.31	69.4	71.7	81.7
8.61	-51.23	-41.02	-119.97	-0.31	69.6	71.6	81.8
8.61	-51.23	-41.02	-119.97	-0.31	69.7	71.7	81.8
8.61	-51.23	-41.02	-119.97	-0.31	69.8	71.7	81.7
8.61	-51.23	-41.02	-119.97	-0.31	69.8	71.7	81.7
8.61	-51.23	-41.02	-119.97	-0.27	69.8	71.7	81.5
8.61	-51.23	-41.02	-119.97	-0.27	69.8	71.7	81.5
8.61	-51.18	-40.97	-119.97	-0.31	69.8	71.7	81.5
8.61	-51.18	-40.97	-119.97	-0.27	69.8	71.7	81.4
8.6	-51.18	-40.97	-119.97	-0.31	69.9	71.7	81.4
8.61	-51.14	-40.97	-119.97	-0.31	69.9	71.7	81.3
8.61	-51.14	-40.97	-119.97	-0.31	69.9	71.7	81.3
8.61	-51.14	-40.92	-119.97	-0.31	69.9	71.7	81

8.6	-51.18	-40.92	-119.97	-0.31	70	71.7	81.1
8.6	-51.09	-40.92	-119.97	-0.31	70	71.6	81
8.59	-51.14	-40.92	-119.97	-0.31	70	71.7	81
8.59	-51.14	-40.92	-119.97	-0.31	70.1	71.7	81
8.6	-51.14	-40.87	-119.97	-0.31	70	71.6	80.7
8.6	-51.14	-40.87	-119.97	-0.31	70	71.6	80.8
8.6	-51.14	-40.87	-119.97	-0.31	69.9	71.6	80.7
8.59	-51.09	-40.87	-119.97	-0.31	70	71.4	80.4
8.59	-51.09	-40.87	-119.97	-0.27	70	71.6	80.4
8.58	-51.09	-40.87	-119.97	-0.31	70	71.6	80
8.58	-51.09	-40.87	-119.97	-0.27	70	71.4	79.9
8.58	-51.09	-40.87	-119.97	-0.31	70.1	71.4	79.7
8.57	-51.09	-40.82	-119.97	-0.31	70.1	71.4	79.5
8.57	-51.09	-40.82	-119.97	-0.31	70	71.4	79.5
8.57	-51.04	-40.82	-119.97	-0.31	70.1	71.3	79.1
8.57	-51.09	-40.87	-119.97	-0.31	70	71.3	78.8
8.56	-51.04	-40.82	-119.97	-0.31	70	71.2	78.9
8.56	-51.04	-40.82	-119.97	-0.31	70	71.2	78.7
8.56	-51.04	-40.82	-119.97	-0.31	70	71.2	78.3
8.56	-51.04	-40.87	-119.97	-0.31	70	71.2	78.2
8.56	-51.04	-40.82	-119.97	-0.27	70	71.1	77.9
8.56	-51.04	-40.87	-119.97	-0.31	69.9	71.1	77.7
8.55	-51.04	-40.82	-119.97	-0.31	69.8	71	77.6
8.56	-51.04	-40.82	-119.97	-0.31	69.8	71	77.3
8.56	-51.04	-40.87	-119.97	-0.31	69.9	70.9	77.1
8.56	-51.04	-40.82	-119.97	-0.31	69.7	70.9	76.9
8.56	-51	-40.82	-119.97	-0.31	69.7	70.9	76.9
8.56	-51.04	-40.82	-119.97	-0.31	69.7	70.8	76.7
8.54	-51	-40.82	-119.97	-0.31	69.7	70.8	76.5
8.54	-51	-40.82	-119.97	-0.27	69.7	70.8	76.1
8.54	-51	-40.82	-119.97	-0.31	69.6	70.7	76.1
8.54	-51	-40.76	-119.97	-0.31	69.6	70.7	75.8
8.54	-51	-40.76	-119.97	-0.31	69.6	70.6	75.6
8.54	-51	-40.82	-119.97	-0.31	69.4	70.6	75.5
8.53	-50.95	-40.76	-119.97	-0.31	69.4	70.6	75.4
8.54	-51	-40.76	-119.97	-0.31	69.4	70.5	75.1
8.53	-51	-40.76	-119.97	-0.31	69.3	70.5	74.8
8.53	-50.95	-40.71	-119.97	-0.31	69.3	70.4	74.9
8.53	-50.95	-40.71	-119.97	-0.31	69.2	70.4	74.5
8.53	-50.95	-40.76	-119.97	-0.31	69.2	70.3	74.5
8.53	-50.95	-40.71	-119.97	-0.31	69.1	70.3	74.3
8.53	-50.95	-40.71	-119.97	-0.31	69.1	70.2	74.2
8.53	-50.95	-40.71	-119.97	-0.31	69.1	70.2	74
8.53	-50.91	-40.71	-119.97	-0.27	69.1	70.1	73.8
8.53	-50.95	-40.71	-119.97	-0.31	69.1	70.1	73.8
8.52	-50.91	-40.71	-119.97	-0.31	69.1	70.1	73.5
8.52	-50.91	-40.71	-119.97	-0.31	69	70	73.6

8.52	-50.91	-40.66	-119.97	-0.31	69	70	73.4
8.52	-50.91	-40.66	-119.97	-0.34	69	70	73.3
8.51	-50.91	-40.66	-119.97	-0.31	69	70	73.1
8.52	-50.91	-40.71	-119.97	-0.27	69	69.9	72.9
8.51	-50.86	-40.66	-119.97	-0.27	68.9	69.8	72.9
8.51	-50.86	-40.66	-119.97	-0.31	68.9	69.8	72.8
8.51	-50.86	-40.66	-119.97	-0.31	68.9	69.7	72.6
8.51	-50.86	-40.61	-119.97	-0.31	68.8	69.7	72.4
8.5	-50.86	-40.66	-119.97	-0.31	68.8	69.6	72.3
8.51	-50.82	-40.66	-119.97	-0.31	68.8	69.6	72.3
8.51	-50.82	-40.66	-119.97	-0.31	68.8	69.6	72.2
8.5	-50.86	-40.66	-119.97	-0.31	68.7	69.5	71.9
8.5	-50.82	-40.66	-119.97	-0.31	68.7	69.5	71.7
8.5	-50.82	-40.61	-119.97	-0.31	68.7	69.4	71.5
8.5	-50.82	-40.61	-119.97	-0.31	68.5	69.4	71.5
8.5	-50.82	-40.61	-119.97	-0.31	68.5	69.4	71.3
8.5	-50.82	-40.56	-119.97	-0.31	68.4	69.3	71.2
8.5	-50.82	-40.61	-119.97	-0.31	68.4	69.3	71.2
8.5	-50.82	-40.61	-119.97	-0.31	68.4	69.1	71
8.5	-50.77	-40.61	-119.97	-0.31	68.3	69.1	70.9
8.5	-50.77	-40.61	-119.97	-0.27	68.3	69	70.7
8.5	-50.77	-40.56	-119.97	-0.31	68.3	69	70.6
8.5	-50.77	-40.56	-119.97	-0.31	68.2	69	70.5
8.49	-50.82	-40.56	-119.97	-0.31	68.2	69	70.3
8.48	-50.77	-40.56	-119.97	-0.31	68.2	68.9	70.1
8.48	-50.77	-40.56	-119.97	-0.31	68.2	68.9	70.2
8.48	-50.77	-40.56	-119.97	-0.31	68.1	68.9	70
8.48	-50.77	-40.56	-119.97	-0.31	68.1	68.8	69.9
8.48	-50.72	-40.56	-119.97	-0.31	68.1	68.8	69.8
8.48	-50.77	-40.56	-119.97	-0.31	68	68.7	69.6
8.48	-50.72	-40.56	-119.97	-0.31	68	68.7	69.4
8.48	-50.72	-40.5	-119.97	-0.31	67.9	68.6	69.3
8.47	-50.72	-40.5	-119.97	-0.27	67.9	68.6	69.3
8.47	-50.77	-40.56	-119.97	-0.27	67.9	68.6	69.3
8.47	-50.77	-40.56	-119.97	-0.31	67.9	68.6	69.2
8.47	-50.72	-40.5	-119.97	-0.27	67.9	68.6	69.2
8.47	-50.72	-40.5	-119.97	-0.31	67.9	68.6	69.2
8.47	-50.72	-40.5	-119.97	-0.31	67.8	68.6	69.2
8.47	-50.72	-40.5	-119.97	-0.27	67.8	68.5	69.1
8.47	-50.72	-40.5	-119.97	-0.27	67.8	68.5	69.1
8.47	-50.72	-40.5	-119.97	-0.31	67.8	68.5	69.2
8.47	-50.72	-40.45	-119.97	-0.31	67.8	68.5	69.1
8.47	-50.72	-40.5	-119.97	-0.31	67.7	68.4	69.2
8.47	-50.72	-40.5	-119.97	-0.27	67.7	68.4	69.4
8.47	-50.68	-40.5	-119.97	-0.31	67.7	68.4	69.2
8.47	-50.68	-40.45	-119.97	-0.27	67.6	68.4	69.4
8.47	-50.68	-40.45	-119.97	-0.27	67.6	68.4	69.6

8.47	-50.72	-40.45	-119.97	-0.31	67.6	68.5	70
8.47	-50.68	-40.45	-119.97	-0.31	67.6	68.4	70.1
8.47	-50.68	-40.45	-119.97	-0.31	67.6	68.5	70.2
8.47	-50.68	-40.45	-119.97	-0.31	67.6	68.4	70.4
8.47	-50.63	-40.45	-119.97	-0.31	67.6	68.5	70.6
8.47	-50.68	-40.45	-119.97	-0.31	67.6	68.5	70.9
8.47	-50.68	-40.45	-119.97	-0.31	67.6	68.5	71
8.47	-50.63	-40.45	-119.97	-0.31	67.6	68.6	71.1
8.45	-50.63	-40.45	-119.97	-0.31	67.6	68.5	71.4
8.45	-50.63	-40.45	-119.97	-0.31	67.6	68.6	71.4
8.45	-50.63	-40.45	-119.97	-0.27	67.6	68.6	71.6
8.45	-50.63	-40.45	-119.97	-0.31	67.6	68.6	71.7
8.46	-50.63	-40.45	-119.97	-0.27	67.6	68.6	72.1
8.45	-50.63	-40.45	-119.97	-0.31	67.6	68.7	72.5
8.45	-50.63	-40.45	-119.97	-0.31	67.6	68.7	72.6
8.45	-50.63	-40.45	-119.97	-0.34	67.6	68.7	72.7
8.45	-50.54	-40.45	-119.97	-0.31	67.6	68.7	73.1
8.45	-50.54	-40.4	-119.97	-0.31	67.6	68.8	73.4
8.45	-50.54	-40.35	-119.97	-0.31	67.6	68.9	73.6
8.45	-50.54	-40.4	-119.97	-0.31	67.7	68.9	73.7
8.45	-50.54	-40.4	-119.97	-0.31	67.7	69	74
8.45	-50.54	-40.35	-119.97	-0.31	67.8	69	74.4
8.44	-50.54	-40.4	-119.97	-0.31	67.8	69	74.7
8.45	-50.54	-40.4	-119.97	-0.31	67.9	69	74.9
8.44	-50.49	-40.35	-119.97	-0.31	67.8	69	75.2
8.44	-50.49	-40.35	-119.97	-0.31	67.9	69.1	75.1
8.44	-50.49	-40.35	-119.97	-0.31	67.9	69.1	75.4
8.44	-50.49	-40.35	-119.97	-0.31	67.9	69.3	75.5
8.44	-50.49	-40.3	-119.97	-0.31	67.9	69.3	75.8
8.44	-50.45	-40.3	-119.97	-0.31	67.9	69.4	76.1
8.44	-50.45	-40.3	-119.97	-0.31	67.9	69.4	76.3
8.44	-50.45	-40.3	-119.97	-0.31	67.9	69.4	76.5
8.44	-50.45	-40.3	-119.97	-0.31	68	69.4	76.6
8.44	-50.45	-40.3	-119.97	-0.31	68.1	69.5	76.7
8.44	-50.45	-40.3	-119.97	-0.34	68.1	69.5	76.8
8.44	-50.4	-40.3	-119.97	-0.31	68.1	69.6	77
8.44	-50.4	-40.3	-119.97	-0.31	68.1	69.6	77
8.44	-50.4	-40.3	-119.97	-0.31	68.1	69.6	77.1
8.44	-50.4	-40.19	-119.97	-0.31	68.1	69.7	77
8.44	-50.4	-40.19	-119.97	-0.34	68.1	69.6	77.2
8.44	-50.4	-40.19	-119.97	-0.31	68.2	69.7	77.1
8.44	-50.4	-40.19	-119.97	-0.31	68.2	69.7	77.4
8.44	-50.4	-40.19	-119.97	-0.31	68.2	69.8	77.3
8.44	-50.4	-40.19	-119.97	-0.34	68.2	69.8	77.3
8.44	-50.4	-40.19	-119.97	-0.31	68.3	69.8	77.5
8.44	-50.36	-40.19	-119.97	-0.31	68.3	69.9	77.3
8.44	-50.4	-40.19	-119.97	-0.31	68.3	69.8	77.3

8.44	-50.36	-40.14	-119.97	-0.31	68.3	69.9	77.2
8.44	-50.4	-40.14	-119.97	-0.31	68.3	69.9	77.3
8.44	-50.36	-40.14	-119.97	-0.31	68.3	69.9	77.2
8.44	-50.36	-40.14	-119.97	-0.31	68.3	69.9	77.3
8.44	-50.36	-40.19	-119.97	-0.31	68.4	69.9	77.2
8.44	-50.36	-40.19	-119.97	-0.31	68.4	69.9	76.9
8.44	-50.36	-40.14	-119.97	-0.27	68.4	70	77
8.44	-50.36	-40.19	-119.97	-0.31	68.5	69.9	76.7
8.44	-50.36	-40.14	-119.97	-0.31	68.5	70	76.7
8.44	-50.36	-40.19	-119.97	-0.34	68.5	70	76.6
8.44	-50.36	-40.14	-119.97	-0.34	68.5	70	76.7
8.44	-50.36	-40.19	-119.97	-0.31	68.7	69.9	76.4
8.44	-50.36	-40.14	-119.97	-0.31	68.6	69.9	76.2
8.44	-50.31	-40.14	-119.97	-0.31	68.6	69.9	76.2
8.44	-50.36	-40.14	-119.97	-0.31	68.5	69.9	76.1
8.44	-50.36	-40.14	-119.97	-0.31	68.6	69.8	75.8
8.43	-50.36	-40.19	-119.97	-0.31	68.7	69.8	75.5
8.44	-50.31	-40.14	-119.97	-0.34	68.7	69.8	75.2
8.44	-50.31	-40.19	-119.97	-0.31	68.7	69.7	75.1
8.44	-50.31	-40.14	-119.97	-0.31	68.7	69.6	74.8
8.43	-50.31	-40.14	-119.97	-0.31	68.7	69.6	74.8
8.44	-50.36	-40.19	-119.97	-0.34	68.5	69.6	74.5
8.43	-50.36	-40.19	-119.97	-0.31	68.6	69.5	74.4
8.43	-50.36	-40.19	-119.97	-0.31	68.6	69.5	74
8.42	-50.36	-40.19	-119.97	-0.34	68.6	69.4	73.7
8.42	-50.36	-40.14	-119.97	-0.31	68.5	69.3	73.4
8.43	-50.31	-40.19	-119.97	-0.31	68.5	69.3	73.3
8.43	-50.31	-40.14	-119.97	-0.31	68.5	69.1	73
8.43	-50.31	-40.14	-119.97	-0.31	68.5	69	72.9
8.43	-50.36	-40.14	-119.97	-0.31	68.4	69	72.6
8.42	-50.36	-40.14	-119.97	-0.31	68.3	69	72.3
8.42	-50.31	-40.14	-119.97	-0.31	68.3	68.9	72.3
8.42	-50.31	-40.14	-119.97	-0.31	68.3	68.9	71.7
8.42	-50.31	-40.14	-119.97	-0.31	68.2	68.8	71.5
8.42	-50.31	-40.14	-119.97	-0.31	68.1	68.7	71.4
8.42	-50.31	-40.14	-119.97	-0.31	68.1	68.6	71.1
8.42	-50.31	-40.14	-119.97	-0.31	68	68.6	70.9
8.43	-50.31	-40.14	-119.97	-0.31	67.9	68.5	70.7
8.42	-50.31	-40.14	-119.97	-0.31	67.9	68.4	70.3
8.42	-50.31	-40.14	-119.97	-0.31	67.9	68.3	70.2
8.42	-50.31	-40.14	-119.97	-0.31	67.9	68.3	70.1
8.41	-50.31	-40.14	-119.97	-0.31	67.7	68.2	69.8
8.41	-50.31	-40.09	-119.97	-0.31	67.5	68.1	69.3
8.43	-50.31	-40.14	-119.97	-0.31	67.2	68.1	69.2
8.42	-50.27	-40.09	-119.97	-0.31	67.2	68	69.1
8.43	-50.31	-40.09	-119.97	-0.31	67	68	68.8
8.43	-50.27	-40.14	-119.97	-0.31	67	68	68.5

8.42	-50.31	-40.09	-119.97	-0.31	66.9	67.9	68.4
8.41	-50.27	-40.09	-119.97	-0.31	66.8	67.9	68.4
8.41	-50.27	-40.09	-119.97	-0.27	66.8	67.9	68.4
8.42	-50.27	-40.09	-119.97	-0.27	66.8	67.9	67.9
8.41	-50.27	-40.14	-119.97	-0.27	66.8	67.9	67.9
8.41	-50.27	-40.09	-119.97	-0.27	66.8	67.8	67.8
8.41	-50.27	-40.09	-119.97	-0.31	66.9	67.8	67.5
8.41	-50.27	-40.09	-119.97	-0.31	66.9	67.7	67.2
8.41	-50.27	-40.09	-119.97	-0.27	66.9	67.7	67.1
8.41	-50.27	-40.09	-119.97	-0.31	66.9	67.6	66.9
8.41	-50.22	-40.04	-119.97	-0.31	66.8	67.6	66.7
8.41	-50.22	-40.09	-119.97	-0.31	66.8	67.5	66.7
8.41	-50.22	-40.09	-119.97	-0.27	66.8	67.4	66.3
8.41	-50.27	-40.09	-119.97	-0.27	66.8	67.4	66.4
8.41	-50.22	-40.09	-119.97	-0.27	66.7	67.3	66.2
8.41	-50.22	-40.04	-119.97	-0.31	66.6	67.2	65.9
8.41	-50.22	-40.04	-119.97	-0.27	66.6	67.2	65.8
8.41	-50.22	-40.04	-119.97	-0.27	66.6	67.1	65.6
8.41	-50.22	-40.04	-119.97	-0.27	66.5	67.1	65.6
8.41	-50.27	-40.04	-119.97	-0.31	66.5	67	65.3
8.41	-50.22	-40.04	-119.97	-0.27	66.4	67	65.2
8.41	-50.22	-40.04	-119.97	-0.27	66.4	66.9	64.8
8.41	-50.22	-40.04	-119.97	-0.27	66.3	66.9	64.8
8.41	-50.22	-40.04	-119.97	-0.27	66.3	66.9	64.6
8.41	-50.17	-40.04	-119.97	-0.31	66.2	66.8	64.7
8.41	-50.17	-40.04	-119.97	-0.27	66.2	66.8	64.5
8.41	-50.17	-40.04	-119.97	-0.31	66.1	66.7	64.3
8.41	-50.17	-39.98	-119.97	-0.27	66.1	66.7	64.2
8.41	-50.17	-39.98	-119.97	-0.31	66.1	66.7	64
8.41	-50.22	-39.98	-119.97	-0.27	66.1	66.6	64.2
8.41	-50.17	-39.98	-119.97	-0.27	66	66.6	63.8
8.41	-50.17	-39.98	-119.97	-0.27	66	66.5	63.9
8.41	-50.17	-39.98	-119.97	-0.27	66	66.6	63.7
8.41	-50.17	-39.98	-119.97	-0.27	66	66.5	63.7
8.41	-50.17	-39.98	-119.97	-0.27	65.9	66.5	63.7
8.41	-50.13	-40.04	-119.97	-0.27	65.9	66.4	63.6
8.41	-50.17	-39.98	-119.97	-0.27	65.9	66.5	63.5
8.41	-50.17	-39.98	-119.97	-0.27	65.9	66.4	63.6
8.41	-50.13	-39.98	-119.97	-0.27	65.9	66.4	63.2
8.41	-50.17	-39.98	-119.97	-0.27	65.8	66.3	63.6
8.42	-50.13	-39.98	-119.97	-0.31	65.8	66.3	63.7
8.41	-50.17	-39.98	-119.97	-0.27	65.8	66.3	63.6
8.41	-50.13	-39.98	-119.97	-0.27	65.8	66.3	63.6
8.41	-50.17	-39.98	-119.97	-0.27	65.8	66.3	63.6
8.41	-50.13	-39.98	-119.97	-0.27	65.8	66.4	64
8.41	-50.13	-39.98	-119.97	-0.27	65.8	66.4	64.3
8.41	-50.17	-39.98	-119.97	-0.27	65.8	66.4	64.1

8.41	-50.13	-39.98	-119.97	-0.27	65.8	66.4	64.5
8.41	-50.13	-39.98	-119.97	-0.31	65.8	66.5	64.5
8.41	-50.13	-39.98	-119.97	-0.27	65.8	66.5	64.6
8.41	-50.13	-39.98	-119.97	-0.27	65.9	66.5	64.8
8.41	-50.13	-39.98	-119.97	-0.31	65.8	66.4	65
8.41	-50.13	-39.93	-119.97	-0.27	65.8	66.5	65
8.41	-50.13	-39.93	-119.97	-0.27	65.8	66.5	65.6
8.41	-50.13	-39.93	-119.97	-0.27	65.8	66.6	65.8
8.41	-50.13	-39.93	-119.97	-0.31	65.9	66.6	65.9
8.41	-50.08	-39.93	-119.97	-0.31	65.9	66.7	66.1
8.41	-50.08	-39.93	-119.97	-0.27	66	66.7	66.2
8.41	-50.08	-39.93	-119.97	-0.27	66	66.8	66.5
8.41	-50.08	-39.93	-119.97	-0.27	65.9	66.8	66.9
8.41	-50.08	-39.93	-119.97	-0.31	66	66.8	67.2
8.41	-50.08	-39.93	-119.97	-0.31	66	66.9	67.8
8.41	-50.08	-39.93	-119.97	-0.31	66.1	66.9	68
8.41	-50.08	-39.93	-119.97	-0.31	66.1	67	68.3
8.41	-50.08	-39.88	-119.97	-0.27	66.1	67	68.7
8.41	-50.04	-39.93	-119.97	-0.31	66.2	67	69.1
8.41	-50.08	-39.83	-119.97	-0.31	66.2	67	69.3
8.41	-50.04	-39.93	-119.97	-0.31	66.2	67.1	69.5
8.41	-50.04	-39.88	-119.97	-0.31	66.2	67.2	69.6
8.41	-50.04	-39.88	-119.97	-0.31	66.2	67.2	70
8.41	-50.08	-39.88	-119.97	-0.31	66.2	67.3	70.2
8.41	-50.04	-39.88	-119.97	-0.31	66.2	67.3	70.5
8.41	-50.04	-39.83	-119.97	-0.31	66.3	67.3	70.7
8.41	-50.04	-39.88	-119.97	-0.31	66.3	67.4	70.9
8.41	-50.04	-39.83	-119.97	-0.31	66.4	67.5	71
8.41	-50.04	-39.83	-119.97	-0.31	66.4	67.5	71.1
8.41	-49.99	-39.83	-119.97	-0.31	66.4	67.6	71.3
8.41	-49.99	-39.83	-119.97	-0.27	66.5	67.6	71.6
8.41	-49.99	-39.83	-119.97	-0.31	66.5	67.7	71.9
8.41	-50.04	-39.83	-119.97	-0.31	66.6	67.7	72
8.41	-49.99	-39.83	-119.97	-0.27	66.6	67.8	72.2
8.41	-49.99	-39.83	-119.97	-0.31	66.6	67.8	72.3
8.41	-49.99	-39.83	-119.97	-0.31	66.6	67.9	72.4
8.41	-49.99	-39.78	-119.97	-0.31	66.7	67.9	72.4
8.41	-49.99	-39.78	-119.97	-0.31	66.7	67.9	72.8
8.41	-49.95	-39.83	-119.97	-0.31	66.7	68	72.8
8.41	-49.99	-39.83	-119.97	-0.34	66.7	68	72.9
8.41	-49.95	-39.78	-119.97	-0.31	66.8	68.1	73.2
8.41	-49.95	-39.78	-119.97	-0.31	66.8	68.1	73.3
8.41	-49.95	-39.78	-119.97	-0.31	66.8	68.1	73.4
8.39	-49.95	-39.78	-119.97	-0.31	66.8	68.2	73.5
8.39	-49.95	-39.78	-119.97	-0.31	66.8	68.2	73.5
8.39	-49.95	-39.78	-119.97	-0.31	66.8	68.3	73.6
8.39	-49.9	-39.78	-119.97	-0.31	66.9	68.3	73.7

8.39	-49.95	-39.73	-119.97	-0.31	66.9	68.4	73.7
8.39	-49.95	-39.73	-119.97	-0.31	67	68.4	73.8
8.39	-49.9	-39.73	-119.97	-0.31	67	68.4	74
8.39	-49.9	-39.73	-119.97	-0.31	67	68.5	74.1
8.39	-49.9	-39.73	-119.97	-0.31	67	68.5	73.8
8.39	-49.9	-39.73	-119.97	-0.31	67.1	68.5	74.2
8.39	-49.9	-39.73	-119.97	-0.31	67.1	68.5	74.3
8.39	-49.9	-39.73	-119.97	-0.31	67.1	68.6	74
8.39	-49.9	-39.73	-119.97	-0.31	67.1	68.6	74.1
8.39	-49.9	-39.73	-119.97	-0.31	67.2	68.6	74.2
8.4	-49.9	-39.73	-119.97	-0.34	67.2	68.7	74.3
8.39	-49.9	-39.73	-119.97	-0.31	67.4	68.7	74.1
8.39	-49.9	-39.73	-119.97	-0.31	67.4	68.7	74.1
8.39	-49.9	-39.73	-119.97	-0.31	67.6	68.8	74.2
8.39	-49.9	-39.73	-119.97	-0.31	67.5	68.8	74.1
8.39	-49.9	-39.73	-119.97	-0.34	67.5	68.7	74
8.39	-49.85	-39.73	-119.97	-0.34	67.5	68.8	73.8
8.39	-49.85	-39.73	-119.97	-0.31	67.4	68.8	73.8
8.39	-49.85	-39.73	-119.97	-0.34	67.5	68.8	73.7
8.39	-49.85	-39.67	-119.97	-0.31	67.6	68.8	73.6
8.39	-49.85	-39.73	-119.97	-0.31	67.5	68.8	73.5
8.4	-49.85	-39.67	-119.97	-0.31	67.5	68.8	73.4
8.4	-49.85	-39.67	-119.97	-0.31	67.6	68.8	73.4
8.39	-49.85	-39.73	-119.97	-0.34	67.6	68.8	73.4
8.39	-49.85	-39.73	-119.97	-0.34	67.7	68.8	73.2
8.39	-49.85	-39.73	-119.97	-0.31	67.7	68.8	73.3
8.39	-49.85	-39.67	-119.97	-0.31	67.6	68.8	73.1
8.39	-49.85	-39.73	-119.97	-0.31	67.7	68.8	72.9
8.39	-49.85	-39.67	-119.97	-0.31	67.6	68.8	73
8.39	-49.85	-39.67	-119.97	-0.31	67.6	68.8	72.8
8.39	-49.85	-39.67	-119.97	-0.31	67.7	68.8	72.6
8.39	-49.85	-39.67	-119.97	-0.31	67.7	68.8	72.5
8.39	-49.85	-39.67	-119.97	-0.31	67.7	68.8	72.4
8.39	-49.85	-39.67	-119.97	-0.31	67.6	68.8	72.4
8.39	-49.81	-39.67	-119.97	-0.34	67.7	68.8	72.3
8.39	-49.85	-39.67	-119.97	-0.31	67.7	68.8	72.2
8.4	-49.85	-39.62	-119.97	-0.31	67.6	68.7	72.3
8.4	-49.85	-39.67	-119.97	-0.31	67.7	68.8	72.1
8.39	-49.81	-39.67	-119.97	-0.31	67.7	68.8	72
8.39	-49.81	-39.62	-119.97	-0.31	67.7	68.8	72
8.39	-49.81	-39.62	-119.97	-0.31	67.7	68.7	71.7
8.39	-49.81	-39.62	-119.97	-0.31	67.7	68.7	71.6
8.39	-49.81	-39.62	-119.97	-0.34	67.7	68.8	71.5
8.39	-49.81	-39.62	-119.97	-0.31	67.7	68.7	71.5
8.38	-49.81	-39.67	-119.97	-0.31	67.7	68.7	71.6
8.38	-49.81	-39.67	-119.97	-0.31	67.7	68.7	71.2
8.38	-49.81	-39.62	-119.97	-0.31	67.7	68.7	71.2

8.38	-49.76	-39.67	-119.97	-0.31	67.7	68.7	71
8.38	-49.81	-39.62	-119.97	-0.31	67.8	68.7	71.2
8.38	-49.76	-39.62	-119.97	-0.27	67.7	68.7	71.1
8.38	-49.76	-39.62	-119.97	-0.31	67.7	68.6	70.8
8.38	-49.81	-39.62	-119.97	-0.34	67.7	68.6	71
8.38	-49.76	-39.62	-119.97	-0.31	67.7	68.6	70.9
8.38	-49.81	-39.62	-119.97	-0.31	67.7	68.6	70.7
8.38	-49.76	-39.62	-119.97	-0.34	67.7	68.6	70.7
8.38	-49.76	-39.57	-119.97	-0.34	67.7	68.6	70.5
8.38	-49.76	-39.57	-119.97	-0.34	67.7	68.6	70.6
8.38	-49.76	-39.57	-119.97	-0.31	67.7	68.6	70.4
8.38	-49.76	-39.57	-119.97	-0.31	67.6	68.6	70.6
8.38	-49.76	-39.57	-119.97	-0.31	67.6	68.6	70.3
8.38	-49.72	-39.57	-119.97	-0.31	67.7	68.6	70.2
8.38	-49.72	-39.57	-119.97	-0.31	67.6	68.5	70.1
8.38	-49.72	-39.57	-119.97	-0.34	67.6	68.5	70.2
8.38	-49.72	-39.57	-119.97	-0.31	67.6	68.6	70.1
8.38	-49.72	-39.57	-119.97	-0.31	67.6	68.5	70.1
8.38	-49.72	-39.57	-119.97	-0.31	67.6	68.5	70.1
8.38	-49.67	-39.57	-119.97	-0.34	67.6	68.5	70.1
8.38	-49.72	-39.57	-119.97	-0.34	67.6	68.5	69.9
8.38	-49.67	-39.57	-119.97	-0.34	67.6	68.5	69.9
8.38	-49.72	-39.52	-119.97	-0.31	67.6	68.4	70
8.38	-49.67	-39.52	-119.97	-0.31	67.6	68.5	70.1
8.38	-49.67	-39.52	-119.97	-0.31	67.5	68.4	69.9
8.38	-49.67	-39.52	-119.97	-0.31	67.5	68.4	70
8.38	-49.67	-39.52	-119.97	-0.34	67.5	68.4	69.6
8.38	-49.67	-39.47	-119.97	-0.31	67.5	68.4	69.6
8.38	-49.67	-39.52	-119.97	-0.31	67.5	68.4	69.5
8.38	-49.67	-39.47	-119.97	-0.34	67.5	68.4	69.6
8.37	-49.67	-39.52	-119.97	-0.31	67.5	68.4	69.5
8.38	-49.67	-39.52	-119.97	-0.31	67.5	68.3	69.4
8.37	-49.62	-39.47	-119.97	-0.31	67.5	68.3	69.3
8.37	-49.62	-39.47	-119.97	-0.34	67.4	68.3	69.4
8.38	-49.62	-39.47	-119.97	-0.34	67.4	68.3	69.1
8.37	-49.62	-39.47	-119.97	-0.31	67.4	68.3	69.3
8.37	-49.62	-39.41	-119.97	-0.31	67.5	68.3	69.2
8.38	-49.62	-39.47	-119.97	-0.31	67.4	68.3	69.2
8.38	-49.62	-39.47	-119.97	-0.34	67.4	68.3	69.3
8.38	-49.58	-39.47	-119.97	-0.31	67.4	68.3	69
8.38	-49.62	-39.47	-119.97	-0.34	67.4	68.2	69.1
8.38	-49.58	-39.41	-119.97	-0.31	67.2	68.2	69.1
8.37	-49.62	-39.41	-119.97	-0.34	67.4	68.2	69.1
8.38	-49.58	-39.41	-119.97	-0.34	67.4	68.2	69.2
8.38	-49.58	-39.47	-119.97	-0.34	67.4	68.2	69
8.38	-49.58	-39.41	-119.97	-0.34	67.2	68.2	69
8.37	-49.62	-39.41	-119.97	-0.31	67.2	68.2	69

8.38	-49.58	-39.41	-119.97	-0.31	67.2	68.2	69.1
8.38	-49.58	-39.41	-119.97	-0.31	67.4	68.2	69
8.37	-49.58	-39.36	-119.97	-0.31	67.2	68.2	69
8.37	-49.53	-39.36	-119.97	-0.31	67.2	68.2	69
8.37	-49.53	-39.36	-119.97	-0.31	67.2	68.2	69
8.38	-49.58	-39.41	-119.97	-0.34	67.2	68.1	69
8.38	-49.53	-39.36	-119.97	-0.34	67.2	68.2	69.1
8.37	-49.53	-39.36	-119.97	-0.31	67.2	68.1	69
8.38	-49.53	-39.36	-119.97	-0.34	67.2	68.2	68.9
8.37	-49.53	-39.36	-119.97	-0.31	67.2	68.2	69.1
8.37	-49.53	-39.36	-119.97	-0.34	67.2	68.2	69.2
8.38	-49.53	-39.36	-119.97	-0.31	67.1	68.2	69.1
8.37	-49.53	-39.36	-119.97	-0.34	67.2	68.2	69.2
8.37	-49.53	-39.36	-119.97	-0.34	67.2	68.2	69.1
8.38	-49.44	-39.36	-119.97	-0.31	67.2	68.2	69
8.38	-49.44	-39.36	-119.97	-0.31	67.1	68.2	69.2
8.37	-49.53	-39.36	-119.97	-0.34	67.2	68.3	69.2
8.37	-49.44	-39.36	-119.97	-0.34	67.1	68.2	69.4
8.38	-49.44	-39.31	-119.97	-0.34	67.1	68.3	69.4
8.37	-49.44	-39.36	-119.97	-0.31	67.1	68.3	69.3
8.37	-49.53	-39.36	-119.97	-0.31	67.1	68.3	69.5
8.37	-49.44	-39.31	-119.97	-0.34	67.1	68.3	69.3
8.37	-49.44	-39.36	-119.97	-0.34	67.1	68.3	69.4
8.36	-49.44	-39.31	-119.97	-0.31	67	68.3	69.6
8.36	-49.44	-39.31	-119.97	-0.31	67.2	68.3	69.5
8.37	-49.4	-39.31	-119.97	-0.34	67.2	68.3	69.5
8.36	-49.44	-39.31	-119.97	-0.31	67.2	68.4	69.4
8.36	-49.4	-39.26	-119.97	-0.37	67.4	68.4	69.8
8.37	-49.4	-39.31	-119.97	-0.34	67.4	68.4	69.6
8.37	-49.44	-39.31	-119.97	-0.34	67.4	68.4	69.8
8.36	-49.4	-39.31	-119.97	-0.34	67.2	68.4	69.9
8.37	-49.4	-39.31	-119.97	-0.34	67.2	68.4	70.1
8.36	-49.4	-39.26	-119.97	-0.34	67.2	68.4	70.2
8.37	-49.4	-39.31	-119.97	-0.34	67.4	68.5	70.2
8.36	-49.4	-39.31	-119.97	-0.31	67.2	68.5	70.4
8.36	-49.4	-39.31	-119.97	-0.34	67.4	68.6	70.5
8.36	-49.4	-39.31	-119.97	-0.34	67.4	68.6	70.7
8.36	-49.4	-39.31	-119.97	-0.31	67.4	68.7	71
8.36	-49.35	-39.31	-119.97	-0.34	67.4	68.7	71.2
8.37	-49.35	-39.31	-119.97	-0.34	67.4	68.8	71.2
8.37	-49.35	-39.31	-119.97	-0.34	67.5	68.8	71.7
8.36	-49.35	-39.26	-119.97	-0.34	67.5	68.9	72.1
8.36	-49.35	-39.26	-119.97	-0.31	67.7	68.9	72.3
8.36	-49.35	-39.21	-119.97	-0.34	67.6	69	72.3
8.36	-49.35	-39.26	-119.97	-0.34	67.7	69	72.4
8.36	-49.35	-39.26	-119.97	-0.34	67.7	69	72.8
8.36	-49.35	-39.26	-119.97	-0.34	67.7	69	72.9

8.37	-49.3	-39.26	-119.97	-0.34	67.7	69.1	73.1
8.36	-49.3	-39.21	-119.97	-0.34	67.8	69.1	73.3
8.37	-49.3	-39.21	-119.97	-0.34	67.8	69.3	73.4
8.37	-49.3	-39.21	-119.97	-0.34	67.8	69.3	73.4
8.37	-49.3	-39.21	-119.97	-0.34	67.9	69.3	73.4
8.36	-49.3	-39.15	-119.97	-0.34	67.9	69.4	73.6
8.37	-49.3	-39.21	-119.97	-0.34	67.9	69.4	73.7
8.36	-49.3	-39.15	-119.97	-0.34	67.9	69.5	74
8.37	-49.3	-39.15	-119.97	-0.34	67.9	69.5	73.7
8.36	-49.3	-39.15	-119.97	-0.34	68	69.5	74
8.36	-49.3	-39.15	-119.97	-0.34	68	69.6	74.1
8.36	-49.3	-39.15	-119.97	-0.34	68	69.6	74.3
8.36	-49.26	-39.15	-119.97	-0.34	68.1	69.6	74.4
8.35	-49.26	-39.15	-119.97	-0.34	68	69.7	74.3
8.35	-49.3	-39.1	-119.97	-0.34	68.1	69.7	74.2
8.35	-49.26	-39.15	-119.97	-0.34	68.1	69.7	74.4
8.35	-49.3	-39.15	-119.97	-0.34	68.2	69.7	74.3
8.35	-49.26	-39.15	-119.97	-0.34	68.1	69.7	74.1
8.35	-49.3	-39.1	-119.97	-0.34	68.2	69.8	74.1
8.35	-49.26	-39.15	-119.97	-0.34	68.2	69.8	74.2
8.35	-49.3	-39.15	-119.97	-0.34	68.3	69.8	74.1
8.35	-49.26	-39.15	-119.97	-0.34	68.3	69.8	74.3
8.35	-49.26	-39.15	-119.97	-0.34	68.3	69.8	73.8
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.8	74
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.8	73.7
8.35	-49.26	-39.15	-119.97	-0.37	68.3	69.8	73.5
8.35	-49.26	-39.1	-119.97	-0.34	68.2	69.8	73.6
8.35	-49.3	-39.15	-119.97	-0.34	68.4	69.8	73.4
8.35	-49.26	-39.15	-119.97	-0.34	68.3	69.8	73.4
8.35	-49.26	-39.15	-119.97	-0.34	68.4	69.8	73.3
8.35	-49.26	-39.15	-119.97	-0.34	68.4	69.8	73.1
8.35	-49.26	-39.15	-119.97	-0.34	68.4	69.8	72.8
8.35	-49.3	-39.1	-119.97	-0.34	68.4	69.7	73
8.35	-49.26	-39.15	-119.97	-0.34	68.4	69.7	73
8.35	-49.26	-39.15	-119.97	-0.37	68.4	69.7	72.4
8.35	-49.3	-39.15	-119.97	-0.34	68.4	69.7	72.3
8.35	-49.26	-39.15	-119.97	-0.34	68.4	69.7	72.4
8.35	-49.26	-39.15	-119.97	-0.37	68.4	69.7	72.3
8.35	-49.26	-39.1	-119.97	-0.34	68.4	69.6	72.3
8.35	-49.3	-39.15	-119.97	-0.34	68.4	69.6	72.2
8.35	-49.26	-39.1	-119.97	-0.34	68.4	69.6	72.1
8.35	-49.26	-39.15	-119.97	-0.34	68.4	69.6	72.1
8.35	-49.3	-39.1	-119.97	-0.34	68.4	69.5	71.7
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.5	71.6
8.34	-49.26	-39.1	-119.97	-0.34	68.2	69.5	71.5
8.34	-49.3	-39.1	-119.97	-0.34	68.3	69.5	71.3
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.5	71.3

8.35	-49.26	-39.1	-119.97	-0.34	68.2	69.4	71.2
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.5	71.2
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.4	71.2
8.35	-49.3	-39.15	-119.97	-0.34	68.2	69.4	71
8.34	-49.26	-39.1	-119.97	-0.34	68.2	69.3	71
8.35	-49.26	-39.1	-119.97	-0.34	68.3	69.3	70.8
8.35	-49.26	-39.1	-119.97	-0.34	68.2	69.4	70.7
8.34	-49.26	-39.1	-119.97	-0.34	68.2	69.3	70.6
8.35	-49.26	-39.1	-119.97	-0.31	68.2	69.1	70.8
8.35	-49.21	-39.1	-119.97	-0.34	68.2	69.1	70.3
8.35	-49.26	-39.1	-119.97	-0.34	68.2	69	70.4
8.35	-49.26	-39.1	-119.97	-0.34	68.1	69	70.4
8.35	-49.26	-39.1	-119.97	-0.34	68.1	69	70.1
8.35	-49.26	-39.1	-119.97	-0.34	68.1	69	70
8.35	-49.26	-39.05	-119.97	-0.34	68.1	69	70
8.35	-49.21	-39.05	-119.97	-0.34	68.1	68.9	69.9
8.35	-49.26	-39.1	-119.97	-0.31	68.1	68.9	69.9
8.35	-49.21	-39.05	-119.97	-0.34	68	68.9	69.5
8.34	-49.21	-39.05	-119.97	-0.37	68	68.8	69.4
8.35	-49.21	-39.05	-119.97	-0.31	68	68.8	69.5
8.33	-49.21	-39.05	-119.97	-0.34	68	68.7	69.1
8.34	-49.21	-39.05	-119.97	-0.34	68	68.7	69.1
8.34	-49.21	-38.95	-119.97	-0.34	67.9	68.7	69
8.33	-49.21	-39.05	-119.97	-0.34	67.9	68.6	69
8.33	-49.26	-39.05	-119.97	-0.34	67.9	68.5	68.9
8.34	-49.21	-39.05	-119.97	-0.34	67.9	68.5	68.6
8.34	-49.21	-39.05	-119.97	-0.34	67.9	68.4	68.4
8.34	-49.21	-39.05	-119.97	-0.34	67.9	68.5	68.5
8.33	-49.21	-39.05	-119.97	-0.34	67.9	68.4	68.5
8.33	-49.17	-39.05	-119.97	-0.34	67.8	68.3	68.2
8.33	-49.21	-39.05	-119.97	-0.37	67.8	68.3	68.2
8.34	-49.21	-39.05	-119.97	-0.34	67.7	68.2	68
8.34	-49.21	-39.05	-119.97	-0.34	67.6	68.2	67.9
8.34	-49.17	-39.05	-119.97	-0.34	67.6	68.2	67.8
8.34	-49.21	-39.05	-119.97	-0.37	67.6	68.1	67.7
8.34	-49.17	-39.05	-119.97	-0.34	67.6	68.1	67.8
8.34	-49.21	-39.05	-119.97	-0.34	67.5	68	67.3
8.33	-49.21	-39.05	-119.97	-0.34	67.5	68	67.2
8.34	-49.21	-38.95	-119.97	-0.34	67.4	68	67.2
8.34	-49.21	-38.95	-119.97	-0.34	67.4	67.9	67
8.34	-49.21	-39.05	-119.97	-0.34	67.4	67.9	66.9
8.34	-49.21	-39.05	-119.97	-0.34	67.4	67.9	67
8.34	-49.17	-39.05	-119.97	-0.34	67.2	67.9	66.8
8.34	-49.21	-39.05	-119.97	-0.34	67.2	67.9	66.9
8.34	-49.21	-39.05	-119.97	-0.34	67.2	67.9	66.7
8.33	-49.21	-39.05	-119.97	-0.34	67.1	67.9	67
8.32	-49.21	-39.05	-119.97	-0.34	67.1	67.9	66.9

8.32	-49.17	-39.05	-119.97	-0.34	67.1	67.9	66.8
8.33	-49.21	-38.95	-119.97	-0.34	67.2	67.9	66.9
8.32	-49.21	-38.95	-119.97	-0.34	67.1	67.9	67.2
8.32	-49.17	-39.05	-119.97	-0.34	67.1	67.9	67.3
8.32	-49.17	-39.05	-119.97	-0.34	67.1	67.9	67.2
8.32	-49.17	-39.05	-119.97	-0.34	67.1	67.9	67.4
8.32	-49.17	-39.05	-119.97	-0.34	67.1	68	67.9
8.32	-49.17	-39.05	-119.97	-0.34	67	68.6	67.9
8.32	-49.17	-39.05	-119.97	-0.34	67.2	68.8	68.3
8.32	-49.17	-39.05	-119.97	-0.37	67.2	68.9	68.4
8.32	-49.17	-39.05	-119.97	-0.37	67.7	69.1	68.6
8.32	-49.17	-38.95	-119.97	-0.34	67.7	69.3	68.9
8.32	-49.17	-38.95	-119.97	-0.37	67.9	69.6	69.5
8.32	-49.17	-38.95	-96.83	-0.37	68	69.9	69.6
8.32	-49.17	-38.95	-119.97	-0.34	68.1	70	70.1
8.32	-49.17	-38.95	-87.03	-0.37	68.5	70.2	70.6
8.32	-49.17	-38.95	-90.6	-0.37	68.6	70.5	71.1
8.32	-49.17	-38.95	-48.63	-0.37	68.7	70.8	71.3
8.32	-49.17	-38.95	-48.63	-0.37	68.9	71.1	72.1
8.32	-49.17	-38.95	-48.6	-0.37	69.6	71.2	72.3
8.33	-49.17	-38.95	-48.6	-0.37	70	71.4	72.8
8.32	-49.17	-38.95	-48.6	-0.37	70.3	72	73.3
8.57	-49.12	-38.95	-48.6	-0.37	70.6	72.3	73.6
8.56	-49.12	-39.05	-49.3	-0.4	71.2	72.3	65.7
8.56	-49.3	-39.31	-50.4	13.86	71	72.1	57.6
8.66	-49.08	-39.21	-50.62	21.73	93.1	71.2	55.1
8.62	-49.12	-39.47	-50.8	18.04	96.6	72.7	55.1
8.61	-49.26	-39.47	-50.74	18.22	96.6	72.5	52.9
8.56	-49.26	-39.52	-51.07	18.19	97.2	72.4	53.8
8.67	-49.3	-39.52	-51.2	-0.52	90.9	73.4	54.5
8.62	-49.08	-39.52	-51.5	18.07	97.3	73	54.3
8.74	-49.03	-39.52	-51.72	21.28	96.6	73.5	53.1
8.66	-49.17	-39.52	-51.47	19.23	97.2	72.2	55.5
8.69	-49.3	-39.67	-51.59	0.67	95.8	73.6	53.7
8.67	-49.21	-39.67	-51.65	19.84	96.8	72.3	53.3
8.83	-49.3	-39.78	-51.78	2.99	95.5	73.7	55.7
8.66	-49.3	-39.88	-51.96	18.8	96.4	72.3	54
8.84	-49.3	-39.93	-52.02	-0.52	92.7	73.6	53.5
8.65	-49.35	-39.88	-51.9	18.13	96	72.6	53.8
8.69	-49.3	-39.88	-51.99	12.33	87.6	72.6	53.9
8.66	-49.53	-39.93	-51.99	21.58	96.1	72.1	53.1
8.67	-49.67	-40.04	-52.17	17.95	96	73.2	53.4
9.15	-49.35	-39.98	-52.23	21.73	94.5	73.5	54.6
8.68	-49.62	-40.19	-52.26	21.67	97.1	72.6	51.7
8.67	-49.44	-40.19	-52.33	17.95	96.5	73.7	54
8.73	-49.53	-39.93	-52.36	-0.49	85.1	73.7	54.2
8.66	-49.53	-40.04	-52.42	19.08	95.9	72.2	52.6

8.85	-49.53	-40.09	-52.51	0.34	93.9	73.4	53.2
8.81	-49.67	-40.3	-52.66	21.55	93.3	73.3	54
8.71	-49.62	-40.5	-52.6	19.72	96.3	72	53
8.66	-49.53	-40.19	-52.72	2.59	94.8	73.2	53.3
8.79	-49.72	-40.61	-52.91	21.67	95.8	72.9	53.2
8.65	-49.72	-40.5	-52.72	18.07	95.7	72.3	54.1
8.71	-49.62	-40.5	-52.69	16.24	91.9	72.6	53.8
8.7	-49.72	-40.35	-52.91	21.67	96	71.2	53.2
8.67	-49.72	-40.66	-52.94	17.95	95.3	72.5	52.6
8.65	-49.85	-40.4	-52.97	18.47	94.4	71.7	53.8
8.67	-49.72	-40.45	-52.88	18.68	95.2	70.6	54.9
8.6	-49.85	-40.66	-52.91	-0.4	91.8	72	53.2
8.69	-49.62	-40.4	-53.24	21.76	94.2	70.8	54.9
8.71	-49.81	-40.61	-53.03	17.92	94.3	72.1	53.2
8.64	-49.81	-40.56	-53.36	18.32	93.6	71.4	53.7
8.62	-49.85	-40.66	-53.24	18.35	93.9	70.7	52.7
8.68	-49.85	-40.71	-53.21	-0.43	88.2	71.4	53.2
8.77	-49.95	-40.82	-53.24	21.7	92.7	71.4	53.3
8.64	-50.04	-40.61	-53.24	18.25	92.5	70.7	52.3
8.71	-50.04	-40.82	-53.42	-0.37	85.8	71.2	54.4
8.67	-49.85	-40.66	-53.33	21.79	91.5	70.1	52.7
8.67	-49.99	-40.76	-53.42	18.04	91.8	71.2	54.1
8.06	-50.08	-40.87	-53.52	18.77	90.8	70.4	52.8
8.68	-50.04	-40.76	-53.7	19.17	91.7	69.8	52.8
8.8	-50.08	-40.97	-53.52	-0.09	89.3	71	51.8
8.67	-50.08	-40.82	-53.67	21.83	90.7	69.9	53.4
8.69	-50.04	-40.97	-53.67	18.04	90.8	70.9	52.8
8.64	-50.08	-40.82	-53.55	18.38	90	70.3	53.9
8.57	-50.13	-40.87	-53.85	18.77	91	69.3	52.7
8.67	-50.27	-40.92	-53.79	-0.4	87.2	70.4	52.9
8.67	-49.99	-41.07	-53.82	18.41	89.8	70.1	53
8.58	-50.36	-41.02	-53.58	18.77	90.4	69	53
8.69	-50.13	-41.18	-53.79	-0.4	86.8	70.1	53
8.65	-50.4	-40.97	-53.82	18.32	89.3	70	53.5
8.61	-50.27	-41.28	-53.79	18.32	90	69.4	53.8
8.69	-50.22	-41.18	-54.04	-0.37	84.3	70.1	54.4
8.74	-50.08	-41.07	-53.94	21.79	89.8	69.5	52.5
8.66	-50.13	-41.18	-53.79	18.19	89.6	69.9	53
8.76	-50.31	-41.18	-53.94	14.22	82.5	69.8	52.5
8.67	-50.22	-41.18	-53.97	18.22	88.7	69.3	51.5
8.7	-50.45	-41.28	-53.88	2.14	82.2	69.8	54
8.65	-50.4	-41.44	-53.88	21.83	89.3	68.8	54.3
8.66	-50.36	-41.28	-53.94	18.16	88.3	69.7	52.3
8.71	-50.31	-41.28	-54.13	16.88	84.9	69.5	53.7
8.65	-50.45	-41.65	-54.1	21.89	88.9	68.4	53.3
8.66	-50.31	-41.44	-54.19	18.13	88.3	69.6	52.3
8.73	-50.36	-41.44	-54.22	22.04	86.4	69.4	53.9

8.67	-50.54	-41.39	-53.94	18.28	88	69	52.8
8.72	-50.4	-41.44	-54.19	-0.34	80.6	69.4	53.1
8.62	-50.68	-41.7	-54.25	18.35	87.9	68.6	53.3
8.71	-50.4	-41.49	-54.16	-0.37	81.9	69	53.4
8.69	-50.22	-41.44	-54.25	21.89	88.2	68.3	53.7
8.7	-50.63	-41.39	-54.19	18.22	87.5	69	51.6
8.85	-50.4	-41.65	-54.22	21.95	86.2	68.9	50.9
8.69	-50.72	-41.59	-53.97	18.25	87.4	68.8	51.1
8.71	-50.54	-41.65	-54.43	18.71	86.8	68.3	53.2
8.66	-50.49	-41.59	-54.25	18.83	87.5	67.9	52.6
8.65	-50.72	-41.7	-54.43	-0.34	84.8	68.7	52.3
8.62	-50.82	-41.65	-54.25	21.86	87.3	67.7	52.8
8.71	-50.82	-41.49	-54.34	15.2	87.1	68.9	53.7
8.69	-50.77	-41.85	-54.19	18.53	86.4	68.6	53.1
8.61	-50.77	-41.75	-54.34	18.35	86.6	67.9	53.6
8.72	-50.82	-41.96	-54.28	-0.34	81.4	68.5	53.5
8.65	-50.86	-41.8	-54.52	21.95	86.4	67.3	55
8.7	-50.95	-41.65	-54.31	18.13	85.9	68.6	54.7
8.66	-50.68	-41.7	-54.52	21.98	85.3	67.8	54
8.67	-50.68	-41.59	-54.46	18.19	85.5	68.1	53
8.73	-50.77	-42.11	-54.49	-0.31	77.7	68.1	53.1
8.6	-50.82	-41.65	-54.46	18.38	85.2	67.5	53.5
8.68	-50.72	-41.8	-54.25	-0.34	80.6	68	53.5
8.61	-50.82	-41.85	-54.46	18.53	85	67.3	52.9
8.65	-50.82	-41.85	-54.46	14.38	82.3	68	52.5
8.69	-50.95	-41.96	-54.62	21.86	85.7	67.1	53.7
8.65	-50.77	-41.75	-54.46	18.1	84.9	67.9	53.5
8.62	-50.54	-41.96	-54.62	18.53	84.2	67.5	52.7
8.55	-50.95	-42.01	-54.71	18.68	85	66.7	52.5
8.68	-50.91	-41.96	-54.68	-0.31	81.2	67.7	53.4
8.66	-50.91	-41.65	-54.68	21.92	84.6	66.7	53.3
8.67	-51.04	-41.96	-54.62	18.22	84.4	67.8	53.4
8.71	-50.91	-42.01	-54.92	21.49	82.2	67.6	50.5
8.62	-50.95	-41.91	-54.68	18.35	84.2	67	54
8.68	-51	-41.96	-54.92	-0.31	78.8	67.5	53.8
8.65	-51.14	-42.06	-54.83	21.92	84.3	66.5	54.5
8.68	-50.95	-42.11	-54.58	18.25	84.5	67.5	51.6
8.72	-51	-42.11	-54.77	-0.34	76.5	67.3	53.5
8.7	-51.04	-42.16	-54.83	21.89	85.5	66.8	51.6
8.68	-51.09	-42.11	-54.8	18.25	85.5	67.4	53.2
8.73	-51	-42.06	-54.95	14.32	80.1	67.3	52.9
8.65	-51	-42.22	-54.83	21.89	86.4	66.4	53.3
8.66	-50.91	-42.11	-54.83	18.22	85.9	67.1	52.8
8.82	-51.14	-42.37	-54.89	21.86	85.1	66.7	51.2
8.67	-51.14	-41.85	-55.01	18.13	86.3	67.4	53.1
8.69	-51.14	-42.16	-54.89	21.86	87.5	66.6	52.7
8.67	-51.18	-42.16	-54.83	18.04	87.5	67.6	53.5

8.59	-51.09	-42.27	-54.89	18.44	87.3	66.8	53.6
8.66	-51.14	-42.27	-54.92	17.03	85.3	67.5	53.2
8.64	-51.23	-41.7	-54.86	21.86	88	66.8	53.1
8.66	-51.09	-42.37	-55.13	18.1	87.5	67.7	52.9
8.63	-51.23	-42.16	-54.8	18.35	87.1	67.5	53.4
8.62	-51	-42.06	-55.1	18.32	87.8	67.1	52.8
8.72	-51.27	-42.16	-54.95	-0.34	82	67.5	53.4
8.74	-51.18	-42.22	-54.95	21.83	88.1	67.1	54.2
8.67	-51.27	-42.16	-55.01	18.13	88	67.4	53
8.71	-51.23	-42.32	-54.89	-0.27	79.9	67.9	53
8.65	-51.36	-42.22	-54.74	18.74	88.4	66.9	52.4
8.15	-51.27	-42.27	-54.95	-0.31	85.8	67.9	53.1
8.67	-51.23	-42.27	-55.07	18.25	87.9	67.9	53.4
8.62	-51.23	-42.06	-55.01	18.25	88.9	67.4	51.4
8.67	-51.18	-42.27	-55.04	-0.34	82.5	68.1	53.1
8.75	-51.41	-42.48	-55.1	21.73	89.7	67.9	52.2
8.69	-51.14	-42.48	-54.86	17.98	89.7	68.4	53.5
8.74	-51.14	-42.42	-55.13	16.73	86.4	68.8	53.8
8.67	-51.23	-42.42	-55.07	18.07	90.3	68.3	53.7
8.71	-51.32	-42.37	-55.1	-0.34	82.9	69	53.3
8.67	-51.18	-42.42	-55.01	21.64	91.8	68.4	56.1
8.69	-51.46	-42.58	-55.13	17.92	92.7	69.3	54.1
8.72	-51.14	-42.22	-55.1	-0.37	82.2	69.9	53.4
8.6	-51.36	-42.16	-55.1	18.16	93.2	69.5	51.7
8.69	-51.36	-42.48	-55.23	-0.37	88.5	70.2	53.8
8.67	-51.32	-42.37	-56.2	19.63	93.9	69	52.7
8.55	-51.41	-42.48	-56.94	21.46	95.3	68.7	52
8.67	-51.36	-42.37	-57.06	19.63	95.9	68.7	51.6
8.66	-51.41	-42.74	-57.42	18.53	96.1	68.8	52
8.22	-51.55	-42.63	-57.58	18.5	96.1	68.5	53.6
8.64	-51.46	-42.63	-57.76	18.47	95.5	68.4	52.3
8.65	-51.59	-42.74	-58.25	21.52	95.2	68.3	53.4
8.67	-51.55	-42.74	-57.82	21.55	95.1	68.3	53.7
8.79	-51.5	-42.74	-58.03	21.52	95	69	52.9
8.68	-51.59	-42.89	-58.37	17.98	95.3	69	51.9
8.44	-51.59	-42.94	-58.28	18.38	95.3	68.5	53
8.65	-51.64	-43.2	-58.37	21.52	95.2	68.4	51.8
8.63	-51.64	-42.94	-58.68	21.46	94.9	68.5	53
8.65	-51.73	-43.15	-58.61	21.55	95	68.6	52.3
8.65	-51.87	-43.25	-58.64	21.49	95.3	68.6	52.6
8.69	-51.78	-43.31	-58.77	21.49	95.7	69	52.4
8.79	-51.91	-43.25	-58.89	21.43	96.1	69	52
8.87	-51.87	-43.25	-58.77	21.46	96.2	69.6	52
8.66	-51.87	-43.31	-59.16	18.68	96.3	69.4	52.7
8.66	-51.96	-43.41	-59.1	17.92	96.6	69.4	50.7
8.66	-51.91	-43.46	-59.13	17.86	96.8	69.4	52.6
8.63	-51.87	-43.36	-59.16	18.04	97	69.3	52.7

8.47	-51.96	-43.41	-59.22	18.32	96.5	69	52.5
8.65	-51.91	-43.46	-59.32	19.2	96.2	68.9	52.7
8.66	-52.01	-43.77	-59.47	21.58	96.1	69	52.3
8.67	-52.01	-43.67	-59.35	21.64	96.2	69.1	52.5
8.78	-52.14	-43.62	-59.47	21.49	96.4	69.8	51.6
8.7	-51.96	-43.72	-59.65	19.87	96.6	70.3	51.7
8.66	-52.14	-43.83	-59.59	18.04	96.4	70.1	52.5
8.31	-52.14	-43.77	-59.62	18.5	96.2	69.1	52.7
8.65	-52.19	-43.93	-59.77	21.58	96.5	69.1	53.1
8.68	-52.23	-43.83	-59.77	21.67	96.6	69.4	53.2
8.74	-52.23	-43.93	-60.05	21.58	96.4	69.5	54.3
8.69	-52.28	-43.93	-59.84	19.23	96	70	50.7
8.68	-52.42	-44.14	-59.84	18.1	95.8	69.7	53.1
8.64	-52.37	-44.08	-59.96	18.28	95.5	69.3	52.2
8.67	-52.46	-44.14	-60.08	18.99	95.3	68.9	51.7
8.66	-52.42	-44.14	-60.11	21.67	95.7	68.8	52.2
8.7	-52.55	-44.14	-59.99	21.76	95.3	69.1	51.7
8.69	-52.51	-44.19	-60.14	18.13	94.3	69.7	52.9
8.65	-52.55	-44.14	-60.17	18.25	94.2	69.3	52.5
8.61	-52.55	-44.29	-60.26	18.44	93.7	68.7	51.9
8.68	-52.69	-44.5	-60.23	18.86	93.5	68.5	51
8.65	-52.6	-44.29	-60.23	19.72	93	68.5	53
8.67	-52.55	-44.29	-60.45	21.7	93	68.4	52.9
8.68	-52.69	-44.5	-60.38	21.86	92.5	68.4	53
8.68	-52.65	-44.45	-60.54	21.76	92	68.6	51.9
8.76	-52.65	-44.5	-60.57	21.79	91.4	69.1	52.1
8.65	-52.97	-44.5	-60.51	18.13	90.4	69	53.1
8.65	-52.88	-44.66	-60.57	18.28	90.1	68.7	50.8
8.57	-52.74	-44.6	-60.87	18.89	90.1	68.2	52.7
8.65	-52.74	-44.66	-60.81	21.86	90.2	67.9	53.5
8.69	-52.83	-44.71	-60.72	21.95	89.7	68.1	51.1
8.78	-53.06	-44.71	-60.81	21.86	89.7	68.4	50.7
8.73	-52.92	-44.71	-60.87	18.19	89.2	68.6	53
8.64	-53.06	-44.81	-60.84	18.38	89.2	68.1	50.8
8.65	-53.1	-44.71	-60.87	18.99	89.2	67.7	51.7
8.65	-53.01	-44.81	-60.9	21.92	89.6	67.7	52.6
8.66	-52.97	-44.97	-60.9	21.95	90	67.8	52.1
8.74	-53.2	-44.91	-61.06	21.89	89.9	67.9	52.6
8.68	-53.24	-44.97	-61.09	19.81	89.2	68.3	52.1
8.65	-53.2	-44.86	-61.15	18.38	88.8	67.9	52.9
8.57	-53.2	-44.91	-61.12	18.8	88.7	67.4	51.7
8.68	-53.15	-44.97	-61.06	21.98	89	67.3	51.9
8.69	-53.24	-45.12	-61.06	21.83	88.7	67.5	53.6
8.78	-53.29	-44.97	-61.24	21.92	87.9	68	55.6
8.71	-53.38	-45.07	-61.3	18.28	87.8	67.9	53.2
8.65	-53.33	-45.12	-61.24	18.35	87.3	67.6	51.8
8.57	-53.29	-45.17	-61.15	18.89	87.4	67	52.2

8.56	-53.47	-45.12	-61.39	21.89	88.1	67.1	52
8.71	-53.47	-45.28	-61.48	21.98	87.9	66.9	51.2
8.69	-53.42	-45.43	-61.45	22.04	88	67.2	52.2
8.68	-53.56	-45.28	-61.54	19.57	87.5	67.9	52.6
8.65	-53.56	-45.28	-61.21	18.56	87.8	67.4	52
8.68	-53.52	-45.23	-61.7	18.93	88	66.6	52.8
8.7	-53.65	-45.43	-61.73	22.07	88.3	66.6	51.2
8.71	-53.61	-45.43	-61.45	22.1	88	66.7	51.6
8.7	-53.47	-45.54	-61.67	22.07	87.9	67	51.1
9.21	-53.61	-45.49	-61.64	21.98	87.3	67.1	43.5
8.65	-53.61	-45.49	-61.73	18.62	86.7	67	53
8.67	-53.7	-45.59	-61.76	19.47	87	66.3	52.7
8.66	-53.65	-45.54	-61.7	22.13	87	66.4	52
8.78	-53.65	-45.64	-61.82	22.1	86.4	67.1	53.8
8.66	-53.7	-45.9	-61.88	18.59	85.8	66.9	52.6
8.65	-53.75	-45.75	-61.7	18.71	85.8	66.6	53.1
8.61	-53.97	-45.69	-61.73	18.8	86	66.3	52.1
8.56	-53.75	-45.85	-61.82	19.14	85.4	66.2	52.8
8.64	-53.84	-45.69	-61.91	20.7	85.3	66	51.7
8.67	-53.84	-45.54	-61.82	22.19	85.3	65.9	51.9
8.67	-53.75	-45.69	-62	22.16	84.9	66.2	48.3
8.68	-53.97	-45.85	-61.97	20.76	83.6	66.6	51.1
8.67	-53.88	-45.9	-62	18.68	83.4	66.3	52.3
8.6	-54.07	-45.69	-62.03	18.86	83.4	65.8	52.2
8.66	-54.16	-45.9	-62.06	19.66	83.7	65.6	53
8.65	-54.02	-45.95	-61.94	22.19	83.5	65.6	53.9
8.65	-54.16	-46.16	-62.03	22.19	83.5	65.6	51.1
8.76	-54.07	-45.85	-62.12	22.16	83	65.8	51.3
8.69	-54.2	-45.9	-62.12	18.59	81.9	66	52.5
8.63	-54.16	-46	-62.25	18.71	82	65.6	52.1
8.7	-54.07	-46.11	-62.28	19.35	82.5	65.1	50.4
8.63	-54.16	-46.11	-62.12	22.19	82.4	65.2	51.7
8.65	-54.25	-46.16	-62.25	22.25	82.1	65	51.6
8.76	-54.16	-46.21	-62.12	22.19	81.7	65.4	52.6
8.66	-54.25	-46	-62.19	18.68	81	65.8	52.3
8.65	-54.02	-46.11	-62.34	18.74	81	65.1	55.5
8.7	-54.25	-46.21	-62.31	19.23	81.3	64.7	51.6
8.65	-54.29	-46.21	-62.31	22.22	81.8	64.7	52
8.68	-54.25	-46.26	-62.4	22.19	81.5	64.9	51.9
8.76	-54.34	-46.37	-62.43	22.19	81.1	65.5	52.8
8.66	-54.43	-46.21	-62.49	18.56	80.6	65.3	51.9
8.64	-54.48	-46.26	-62.49	18.62	80.6	64.9	52.8
8.49	-54.43	-46.32	-62.55	19.29	80.8	64.4	52.5
8.57	-54.34	-46.47	-62.4	22.22	81.2	64.3	54.1
8.66	-54.43	-46.47	-62.52	22.28	81.3	64.3	51.6
8.69	-54.57	-46.42	-62.43	22.25	81	64	53.1
8.66	-54.66	-46.52	-62.52	18.59	80.6	64.5	52.4

8.6	-54.52	-46.21	-62.34	19.2	81.2	63.8	52.6
8.66	-54.43	-46.37	-62.8	22.28	82.1	64.2	55.1
8.69	-54.57	-46.47	-62.74	19.23	81.5	64.8	50.8
8.61	-54.66	-46.52	-62.67	18.96	82	63.9	52.3
8.66	-54.66	-46.68	-62.67	22.25	83.1	63.8	51.5
8.81	-54.66	-46.63	-62.86	22.22	83.3	64.5	51.8
8.67	-54.66	-46.68	-62.83	18.59	83.1	64.5	53.1
8.68	-54.62	-46.68	-62.89	18.71	83.3	64.7	51.5
8.62	-54.62	-46.89	-62.86	18.83	83.7	64.3	52.3
8.67	-55.07	-46.83	-62.95	19.29	84.6	64.3	52.9
8.63	-54.75	-46.68	-62.95	22.25	85.3	64.5	50.4
8.67	-54.75	-46.78	-63.1	22.19	85.7	64.7	51.8
8.72	-54.75	-46.83	-63.01	22.25	86.3	65	52.6
8.68	-54.75	-46.83	-63.07	18.71	85.8	65.4	51.7
8.65	-54.89	-46.89	-63.16	18.83	86.2	65	51.7
8.65	-54.75	-46.94	-62.77	20.12	86.8	64.7	52.3
8.68	-54.84	-46.83	-63.41	22.28	87.1	64.8	50.4
8.7	-54.8	-46.89	-63.25	22.25	87.1	65	53.9
8.79	-54.84	-46.99	-63.19	22.25	86.7	65.4	53.3
8.66	-54.94	-46.83	-63.47	18.74	87.1	65.7	53.1
8.64	-54.75	-47.04	-63.28	18.8	87.1	65.4	51.8
8.65	-54.89	-46.94	-63.41	19.32	87.5	64.9	52.6
8.67	-54.94	-46.99	-63.22	22.16	87.9	65.1	52.8
8.68	-54.98	-47.04	-63.25	22.13	88.1	65.3	51.6
8.7	-54.98	-46.94	-63.53	22.19	87.8	65.8	49.5
8.65	-55.12	-47.25	-63.53	18.71	88.2	65.8	52.1
8.65	-55.21	-47.04	-63.56	18.68	88.6	65.7	53.1
8.62	-54.98	-47.2	-63.28	18.93	89	65.5	52.7
8.67	-55.21	-47.09	-63.5	21.64	90	65.3	51.6
8.64	-54.98	-47.25	-62.19	22.13	90.1	65.8	52.3
8.65	-55.07	-46.99	-61.97	18.74	89.5	65.9	52.7
8.74	-55.16	-47.04	-61.36	-0.27	82.3	66.4	53.7
8.76	-55.26	-46.99	-61.36	-0.27	75.3	66.4	53.2
8.71	-55.21	-47.15	-61.06	22.1	89	65.5	51.8
8.68	-55.21	-46.99	-61.03	18.53	90.3	66.4	53.4
8.75	-55.26	-46.89	-60.87	-0.24	80.3	66.6	53.6
8.76	-55.26	-46.83	-60.81	-0.21	74.5	66.3	53.5
8.65	-55.3	-46.89	-60.81	22.07	87.5	66.1	52.5
8.67	-55.12	-46.89	-60.75	18.68	89.5	66.5	51.4
8.74	-55.3	-46.83	-60.6	-0.27	81.9	67.2	53.5
8.74	-55.16	-46.94	-60.57	-0.21	75.3	67.2	53.9
8.71	-55.16	-46.78	-60.48	22.13	89.6	66.7	52.6
8.7	-55.12	-46.78	-60.48	18.41	90.1	68	52.6
8.75	-55.16	-46.78	-60.42	-0.27	77.9	68.3	54.2
8.64	-55.16	-46.68	-60.26	18.96	89.7	67.3	52.5
8.53	-55.12	-46.63	-60.35	-0.27	87.2	68	53.3
8.69	-55.12	-46.78	-60.54	22.13	89.2	67.4	54.2

8.7	-55.12	-46.73	-60.35	18.5	89.7	67.8	52.9
8.74	-55.16	-46.68	-60.2	-0.31	79.5	67.6	53.5
8.7	-54.98	-46.37	-60.2	19.02	89.6	66.5	52.9
8.59	-55.21	-46.83	-60.14	-0.27	86.8	67.9	53.6
8.81	-55.16	-46.63	-60.2	22.13	87.6	68	52.2
8.69	-55.07	-46.63	-60.23	18.59	89.8	67.7	53.4
8.74	-55.12	-46.52	-60.11	-0.24	82.1	68.1	52.6
8.68	-55.3	-46.73	-60.11	18.77	88.5	67.7	53.3
8.51	-55.16	-46.63	-60.14	18.93	89.8	67	53.6
8.69	-55.21	-46.68	-60.08	-0.27	84.1	67.8	53.2
8.71	-55.16	-46.52	-60.2	18.53	89	67.9	53.2
8.65	-55.12	-46.37	-60.05	18.59	89.6	67.4	52.2
8.73	-55.16	-46.47	-59.99	-0.27	82.9	67.9	53.8
8.71	-55.21	-46.47	-60.14	22.1	89.3	66.7	53.2
8.7	-55.3	-46.73	-60.02	18.41	89.4	67.9	52.1
9.23	-55.3	-46.42	-59.99	22.25	87.1	67.8	53.8
8.69	-55.44	-46.68	-60.08	22.07	89.5	66.9	53.6
8.69	-55.16	-46.47	-59.99	18.41	88.8	67.9	52.8
8.74	-55.16	-46.47	-60.02	-0.24	78.1	67.6	53.2
8.7	-55.16	-46.47	-59.9	22.1	88.5	67.1	54.1
8.67	-55.26	-46.26	-59.93	18.41	87.7	67.9	52.8
9.23	-55.07	-46.52	-59.9	22.25	86	67.7	52.5
8.68	-55.12	-46.42	-59.9	22.16	87.8	66.7	53.9
8.71	-55.07	-46.47	-59.74	18.32	86.7	67.8	53.3
8.81	-55.16	-46.42	-59.96	22.13	85.1	67.4	52.8
8.7	-54.98	-46.26	-59.99	18.44	86.2	67.5	53.8
8.74	-55.07	-46.47	-59.74	17.52	83.1	67.6	52.7
8.63	-55.35	-46.47	-59.68	22.07	86.4	66.9	53.3
8.69	-55.26	-46.37	-59.99	18.32	85.4	67.5	53.2
8.75	-55.07	-46.42	-59.9	-0.18	76.8	67.2	52.6
8.68	-55.16	-46.37	-59.93	18.5	85	66.9	53.2
8.73	-55.3	-46.42	-59.74	16.48	82.1	67.2	53.8
8.65	-55.21	-46.42	-59.77	22.07	85.4	66.4	52.4
8.69	-55.16	-46.52	-59.77	18.32	84.6	67.2	53.5
8.74	-55.3	-46.63	-59.62	15.42	79.9	66.9	51.7
8.7	-55.26	-46.21	-60.2	22.07	84.9	66.3	53.8
8.69	-54.98	-46.42	-59.65	18.41	84.2	67	53.1
8.74	-55.16	-46.37	-59.74	-0.21	76.1	66.8	52.8
8.65	-55.16	-46.42	-59.84	18.59	83.5	66.4	53.1
8.73	-55.21	-46.42	-59.68	-0.18	78.4	66.7	53.8
8.78	-55.16	-46.47	-59.59	22.19	83.5	66.7	52.9
8.67	-55.16	-46.37	-59.71	18.47	83.3	66.4	53.8
8.71	-55.26	-46.42	-59.5	-0.18	77.1	66.6	53.1
8.62	-55.16	-46.52	-59.77	20.6	83.2	65.8	53
8.76	-55.3	-46.42	-59.62	4.88	81.8	66.9	49.5
8.69	-55.26	-46.37	-59.71	18.62	82.2	66.3	53.1
8.64	-55.21	-46.47	-59.59	18.56	83	66.1	51.5

8.7	-55.21	-46.32	-59.47	-0.21	77.4	66.5	53.3
8.76	-55.3	-46.37	-59.53	22.13	82.7	65.8	53.5
8.66	-55.3	-46.42	-59.8	18.5	82.2	66.1	52.9
8.73	-55.21	-46.37	-59.62	-0.21	75.6	66.1	52.4
8.69	-55.3	-46.47	-59.68	19.63	82.3	65.2	50.5
8.84	-55.12	-46.21	-59.56	0.27	80.2	66.4	52.4
8.84	-55.3	-46.32	-59.47	22.25	80.8	65.8	53.2
8.65	-55.16	-46.32	-59.56	18.59	81.6	65.8	52.4
8.71	-55.21	-46.42	-59.77	-0.18	76.3	65.9	52.4
8.78	-55.35	-46.37	-59.41	22.25	80.1	65.6	52.6
8.66	-55.26	-46.37	-59.62	18.59	81.8	65.7	53.5
8.71	-55.16	-46.26	-59.5	-0.18	75.7	65.8	53.6
8.71	-55.26	-46.37	-59.74	22.16	81.1	64.9	53
8.68	-55.21	-46.37	-59.56	18.56	81.2	65.7	53.1
8.74	-55.21	-46.32	-59.65	-0.15	74.5	65.6	53.1
8.64	-55.21	-46.47	-59.9	22.22	81	64.8	55.4
8.67	-55.35	-46.37	-59.65	18.53	81	65.6	53.4
8.72	-55.16	-46.32	-59.74	-0.18	74.2	65.5	53.9
8.71	-55.16	-46.26	-59.53	22.22	79.6	64.9	53.5
8.67	-55.3	-46.37	-59.62	18.59	80.7	65.3	53.6
8.72	-55.26	-46.37	-59.53	-0.18	74.5	65.4	53
8.63	-55.21	-46.47	-59.47	22.22	79.9	64.7	53.4
8.68	-55.26	-46.47	-59.53	18.53	80.1	65.3	53.2
8.72	-55.26	-46.37	-59.56	-0.18	73.4	65	53.8
8.68	-55.35	-46.32	-59.71	22.28	80.3	64.2	52.2
8.69	-55.44	-46.42	-59.53	18.5	79.8	65.3	53.1
8.72	-55.12	-46.32	-59.74	-0.15	72.7	64.9	53
8.65	-55.12	-46.21	-59.59	22.31	79	64.3	52.3
8.67	-55.21	-46.37	-59.44	18.62	79.4	64.8	53.6
8.72	-55.26	-46.47	-59.65	-0.18	73.4	64.8	52.6
8.69	-55.35	-46.47	-59.56	22.28	78.8	64.2	53.5
8.67	-55.3	-46.42	-59.56	18.62	79.4	64.8	53.5
8.72	-55.3	-46.52	-59.5	-0.15	72.9	64.7	53.3
8.69	-55.39	-46.47	-59.5	22.31	80	63.8	52.7
8.66	-55.3	-46.37	-59.53	18.5	79.3	64.9	53.6
8.73	-55.07	-46.47	-59.29	-0.18	72	64.7	52.5
8.62	-55.26	-46.47	-59.56	21.73	79.8	63.8	53.5
8.67	-55.3	-46.42	-59.47	9.1	78.5	64.7	52.7
8.72	-55.3	-46.47	-59.56	-0.18	71.3	64.4	53.6
8.59	-55.39	-46.52	-59.65	19.26	79.2	63.7	53.7
8.67	-55.26	-46.47	-59.41	-0.15	76.4	64.5	53.1
8.72	-55.26	-46.42	-59.41	22.53	76.9	64.2	52.9
8.65	-55.3	-46.32	-59.47	18.74	78.8	64.2	53.3
8.71	-55.16	-46.32	-59.56	-0.18	73.8	64.4	53.8
8.69	-55.26	-46.26	-59.59	22.44	78.7	63.8	52.9
8.66	-55.58	-46.42	-59.65	18.59	78.8	64.5	52.4
8.72	-55.39	-46.42	-59.5	-0.18	72.3	64.2	53

8.71	-55.12	-46.42	-59.5	22.28	79.7	63.6	52.7
8.67	-55.26	-46.32	-59.32	18.47	79.3	64.7	53.2
8.74	-55.3	-46.37	-59.41	14.62	74	64.2	51.6
8.59	-55.39	-46.37	-59.56	18.99	79.9	63.7	53.5
8.65	-55.58	-46.47	-59.29	-0.18	76.4	64.5	53.1
8.72	-55.3	-46.37	-59.5	20.82	77.4	64.1	52.7
8.63	-55.16	-46.16	-59.62	18.77	80.2	64.1	53.8
8.7	-55.35	-46.47	-59.53	-0.18	75.1	64.7	53.4
8.68	-55.3	-46.32	-59.47	22.19	80.3	63.8	52.6
8.66	-55.39	-46.42	-59.5	18.53	80.5	64.9	53.2
8.72	-55.49	-46.47	-59.56	-0.18	73.3	64.7	53
8.69	-55.39	-46.37	-59.47	19.2	81.4	63.8	49.6
7.89	-55.35	-46.52	-59.74	-0.18	78.9	64.8	53.4
8.71	-55.35	-46.42	-59.35	20.54	78.8	64.5	52.2
8.65	-55.35	-46.73	-59.5	18.59	81.9	64.7	52.5
8.71	-55.39	-46.37	-59.47	-0.18	75.7	64.9	53.2
8.8	-55.21	-46.47	-59.47	22.19	82.3	65.1	53.7
8.63	-55.3	-46.47	-59.5	18.71	83	64.7	53
8.71	-55.3	-46.63	-59.65	-0.21	77.3	65.1	54.2
8.68	-55.35	-46.52	-59.59	22.16	83	64.4	53.4
8.68	-55.3	-46.42	-59.47	18.5	83.8	65.2	53.3
8.73	-55.35	-46.52	-59.5	-0.18	75.2	65.2	53.1
8.63	-55.3	-46.52	-59.32	18.77	84.9	65	52.7
8.71	-55.35	-46.42	-59.68	-0.21	79	65.4	52.8
8.76	-55.21	-46.47	-59.41	22.04	86.1	65.3	53.7
8.66	-55.49	-46.32	-59.47	18.56	86.4	65.5	52.4
8.71	-55.39	-46.52	-59.53	-0.24	78.6	65.8	53.6
8.69	-55.26	-46.26	-59.44	22.13	86.5	65	54.6
8.68	-55.39	-46.63	-59.65	18.44	86.6	66.2	54
8.74	-55.53	-46.42	-59.56	20.18	83.6	66	53.3
8.69	-55.26	-46.52	-59.62	22.13	87.3	65.4	52.9
8.67	-55.3	-46.37	-59.68	18.47	86.8	66.2	53.3
8.73	-55.39	-46.47	-59.62	-0.21	77.3	66.5	53.4
8.71	-55.35	-46.68	-59.22	19.41	87.3	65.7	53
8.69	-55.35	-46.26	-58.25	-0.21	81.3	66.8	53.5
8.7	-55.35	-46.26	-57.64	-0.18	74.8	66.7	56
8.7	-55.3	-46.16	-57.3	-0.18	71.5	66.2	58
8.69	-55.3	-46.11	-57.12	-0.18	69.3	66.1	59.7
8.69	-55.3	-46.06	-57	-0.18	68	66.1	61.1
8.69	-55.3	-46	-56.87	-0.15	67	66.1	62.3
8.68	-55.26	-45.95	-56.75	-0.15	66.4	66	63.2
8.68	-55.26	-45.9	-56.63	-0.15	66	66	64
8.68	-55.21	-45.9	-56.54	-0.15	65.7	66	64.9
8.68	-55.21	-45.8	-56.48	-0.15	65.5	66	65.8
8.68	-55.21	-45.8	-56.39	-0.15	65.3	66	66.2
8.66	-55.16	-45.75	-56.32	-0.15	65.3	66	66.6
8.66	-55.16	-45.69	-56.29	-0.15	65	66	66.9

8.66	-55.16	-45.69	-56.23	-0.15	64.9	65.9	67.5
8.66	-55.12	-45.64	-56.17	-0.12	64.8	65.9	67.8
8.65	-55.12	-45.59	-56.11	-0.15	64.8	65.9	67.9
8.65	-55.07	-45.59	-56.05	-0.15	64.7	65.9	68.3
8.65	-54.98	-45.59	-56.02	-0.15	64.8	65.9	68.5
8.65	-55.07	-45.54	-55.93	-0.15	64.7	65.9	68.5
8.65	-54.98	-45.49	-55.9	-0.15	64.8	65.9	68.9
8.65	-54.98	-45.43	-55.87	-0.15	64.8	65.9	69
8.65	-54.98	-45.43	-55.84	-0.15	64.7	65.9	69.1
8.65	-54.94	-45.43	-55.78	-0.12	64.7	65.8	69.4
8.65	-54.94	-45.38	-55.74	-0.15	64.7	65.9	69.2
8.65	-54.94	-45.38	-55.71	-0.15	64.7	65.9	69.5
8.65	-54.94	-45.28	-55.68	-0.15	64.6	65.9	69.5
8.65	-54.89	-45.23	-55.62	-0.18	64.7	65.9	69.9
8.63	-54.89	-45.23	-55.59	-0.15	64.7	65.8	69.6
8.63	-54.84	-45.23	-55.56	-0.15	64.7	65.8	69.6
8.63	-54.84	-45.17	-55.53	-0.15	64.7	65.9	69.8
8.63	-54.84	-45.17	-55.5	-0.15	64.7	65.8	69.9
8.63	-54.84	-45.12	-55.47	-0.15	64.7	65.9	69.8
8.62	-54.8	-45.12	-55.44	-0.15	64.7	65.9	70.1
8.63	-54.8	-45.07	-55.44	-0.15	64.7	65.9	69.9
8.63	-54.8	-45.07	-55.41	-0.18	64.7	65.9	69.9
8.62	-54.75	-45.02	-55.38	-0.15	64.7	65.8	70
8.62	-54.75	-45.02	-55.32	-0.18	64.7	65.8	69.8
8.62	-54.75	-44.97	-55.32	-0.15	64.7	65.9	69.9
8.62	-54.71	-45.02	-55.26	-0.15	64.7	65.9	69.9
8.62	-54.75	-44.97	-55.26	-0.15	64.7	65.9	69.6
8.62	-54.71	-44.97	-55.2	-0.18	64.7	65.9	69.8
8.6	-54.71	-44.91	-55.2	-0.18	64.7	65.9	69.6
8.61	-54.66	-44.91	-55.13	-0.15	64.7	65.9	69.6
8.61	-54.66	-44.91	-55.1	-0.15	64.7	65.9	69.5
8.61	-54.62	-44.91	-55.07	-0.15	64.7	65.9	69.4
8.61	-54.62	-44.86	-55.07	-0.18	64.7	65.9	69.8
8.59	-54.62	-44.86	-55.04	-0.18	64.7	65.8	69.3
8.6	-54.57	-44.81	-55.01	-0.18	64.7	65.8	69.5
8.6	-54.57	-44.76	-54.98	-0.18	64.7	65.8	69.2
8.6	-54.57	-44.76	-54.95	-0.15	64.7	65.8	69.2
8.6	-54.57	-44.76	-54.95	-0.18	64.7	65.8	69.2
8.58	-54.57	-44.76	-54.92	-0.15	64.7	65.8	69
8.59	-54.57	-44.71	-54.89	-0.15	64.7	65.8	69
8.59	-54.52	-44.71	-54.86	-0.18	64.7	65.8	68.9
8.59	-54.52	-44.71	-54.8	-0.18	64.7	65.8	68.6
8.58	-54.52	-44.66	-54.8	-0.18	64.7	65.8	68.5
8.57	-54.52	-44.66	-54.77	-0.18	64.7	65.8	68.4
8.57	-54.52	-44.66	-54.74	-0.18	64.7	65.8	68.2
8.57	-54.48	-44.66	-54.74	-0.18	64.7	65.8	68.1
8.57	-54.48	-44.6	-54.71	-0.18	64.7	65.8	68

8.57	-54.48	-44.6	-54.68	-0.15	64.7	65.7	67.9
8.57	-54.48	-44.6	-54.68	-0.15	64.7	65.7	67.5
8.56	-54.43	-44.6	-54.65	-0.18	64.6	65.7	67.8
8.56	-54.43	-44.55	-54.62	-0.18	64.6	65.7	67.3
8.56	-54.43	-44.55	-54.58	-0.18	64.7	65.6	67.1
8.56	-54.39	-44.5	-54.55	-0.18	64.6	65.6	67
8.56	-54.39	-44.5	-54.52	-0.15	64.4	65.6	66.9
8.56	-54.39	-44.5	-54.52	-0.18	64.5	65.5	66.7
8.56	-54.39	-44.5	-54.49	-0.18	64.6	65.5	66.6
8.56	-54.34	-44.45	-54.46	-0.18	64.5	65.5	66.6
8.56	-54.39	-44.45	-54.43	-0.18	64.6	65.4	66.2
8.55	-54.29	-44.45	-54.43	-0.15	64.6	65.4	66.4
8.55	-54.29	-44.4	-54.37	-0.15	64.5	65.4	66.3
8.55	-54.29	-44.4	-54.34	-0.18	64.5	65.4	65.9
8.54	-54.29	-44.4	-54.34	-0.18	64.6	65.4	65.9
8.54	-54.29	-44.4	-54.31	-0.18	64.5	65.3	65.8
8.54	-54.25	-44.4	-54.31	-0.18	64.5	65.3	65.6
8.54	-54.25	-44.34	-54.28	-0.18	64.5	65.3	65.7
8.54	-54.25	-44.34	-54.25	-0.18	64.5	65.2	65.6
8.54	-54.25	-44.29	-54.25	-0.18	64.5	65.2	65.1
8.53	-54.2	-44.29	-54.22	-0.18	64.4	65.2	65.2
8.53	-54.2	-44.29	-54.19	-0.18	64.4	65.1	64.9
8.54	-54.2	-44.29	-54.19	-0.18	64.4	65.1	64.8
8.54	-54.16	-44.24	-54.16	-0.18	64.3	65	64.7
8.54	-54.16	-44.24	-54.16	-0.18	64.3	65	64.7
8.53	-54.16	-44.24	-54.13	-0.18	64.2	64.9	64.6
8.53	-54.16	-44.19	-54.1	-0.18	64.2	64.9	64.7
8.53	-54.16	-44.19	-54.1	-0.18	64.3	64.9	64.4
8.53	-54.11	-44.19	-54.07	-0.18	64.2	64.8	64.3
8.53	-54.11	-44.14	-54.04	-0.15	64.1	64.8	63.9
8.53	-54.11	-44.19	-54	-0.18	64.1	64.7	63.8
8.53	-54.11	-44.14	-54	-0.15	64.1	64.7	64
8.53	-54.11	-44.14	-54	-0.15	64	64.5	63.8
8.53	-54.07	-44.14	-53.97	-0.18	63.9	64.5	63.6
8.53	-54.07	-44.08	-53.94	-0.18	63.9	64.4	63.6
8.52	-54.02	-44.08	-53.94	-0.18	63.8	64.3	63.3
8.52	-54.07	-44.08	-53.91	-0.18	63.8	64.4	63.3
8.52	-54.02	-44.08	-53.91	-0.18	63.6	64.3	62.9
8.52	-54.02	-43.98	-53.91	-0.18	63.6	64.2	63
8.51	-54.02	-44.08	-53.88	-0.15	63.6	64.2	62.7
8.52	-54.02	-43.98	-53.88	-0.18	63.6	64.1	62.8
8.52	-54.02	-43.98	-53.85	-0.18	63.5	64.1	62.6
8.51	-53.97	-43.98	-53.85	-0.18	63.5	64.1	62.3
8.5	-53.97	-43.93	-53.82	-0.18	63.5	64.1	62.4
8.5	-53.97	-43.93	-53.82	-0.18	63.4	64	62.1
8.5	-53.97	-43.93	-53.82	-0.15	63.5	64	61.9
8.51	-53.88	-43.93	-53.82	-0.15	63.5	63.9	61.9

8.5	-53.97	-43.93	-53.79	-0.18	63.5	63.9	62
8.5	-53.88	-43.88	-53.79	-0.18	63.5	63.9	61.8
8.51	-53.88	-43.88	-53.76	-0.18	63.5	63.8	61.7
8.51	-53.88	-43.88	-53.76	-0.18	63.5	63.8	61.6
8.5	-53.88	-43.88	-53.73	-0.15	63.5	63.8	61.2
8.5	-53.88	-43.88	-53.73	-0.15	63.5	63.8	61.4
8.5	-53.84	-43.88	-53.73	-0.18	63.4	63.8	61.4
8.5	-53.84	-43.83	-53.73	-0.15	63.4	63.8	61.1
8.5	-53.84	-43.83	-53.7	-0.18	63.5	63.8	61.1
8.5	-53.79	-43.83	-53.67	-0.15	63.4	63.8	61.2
8.5	-53.84	-43.83	-53.67	-0.18	63.4	63.8	60.9
8.5	-53.79	-43.83	-53.64	-0.18	63.4	63.8	61.1
8.5	-53.79	-43.77	-53.64	-0.18	63.4	63.8	61.2
8.5	-53.79	-43.77	-53.64	-0.15	63.4	63.8	61.1
8.5	-53.75	-43.77	-53.58	-0.18	63.3	63.8	61.1
8.5	-53.75	-43.77	-53.58	-0.18	63.3	63.7	61.4
8.48	-53.75	-43.77	-53.58	-0.18	63.3	63.7	61.4
8.48	-53.75	-43.77	-53.55	-0.18	63.4	63.8	61.5
8.48	-53.75	-43.72	-53.58	-0.18	63.4	63.8	62
8.48	-53.7	-43.72	-53.55	-0.18	63.4	63.8	62.1
8.48	-53.7	-43.67	-53.52	-0.18	63.3	63.9	62.3
8.48	-53.7	-43.72	-53.52	-0.15	63.3	63.9	62.4
8.48	-53.7	-43.67	-53.49	-0.18	63.3	63.9	62.8
8.48	-53.7	-43.67	-53.49	-0.15	63.2	64	62.9
8.48	-53.7	-43.67	-53.49	-0.18	63.3	64	63.3
8.48	-53.65	-43.72	-53.49	-0.18	63.3	64.1	63.5
8.48	-53.65	-43.67	-53.46	-0.18	63.3	64.2	63.9
8.48	-53.65	-43.67	-53.46	-0.18	63.4	64.3	64.4
8.48	-53.65	-43.67	-53.46	-0.18	63.4	64.4	64.7
8.47	-53.65	-43.62	-53.42	-0.18	63.5	64.5	65.1
8.47	-53.61	-43.62	-53.42	-0.18	63.4	64.5	65.4
8.47	-53.61	-43.62	-53.39	-0.18	63.4	64.7	65.9
8.47	-53.61	-43.62	-53.39	-0.18	63.4	64.7	66.2
8.47	-53.56	-43.57	-53.36	-0.18	63.4	64.7	66.7
8.47	-53.61	-43.62	-53.36	-0.18	63.5	64.7	66.9
8.47	-53.56	-43.57	-53.36	-0.18	63.5	64.8	67.2
8.47	-53.56	-43.57	-53.36	-0.18	63.5	64.9	67.8
8.47	-53.56	-43.57	-53.33	-0.21	63.5	64.9	67.9
8.47	-53.52	-43.57	-53.33	-0.18	63.6	65	68.2
8.47	-53.52	-43.51	-53.33	-0.18	63.6	65	68.5
8.47	-53.52	-43.57	-53.33	-0.18	63.6	65.1	68.8
8.47	-53.52	-43.51	-53.3	-0.18	63.6	65.2	69.1
8.47	-53.47	-43.51	-53.3	-0.21	63.6	65.3	69.3
8.47	-53.47	-43.46	-53.27	-0.18	63.7	65.3	69.8
8.47	-53.47	-43.46	-53.3	-0.18	63.8	65.4	69.9
8.47	-53.47	-43.46	-53.27	-0.21	63.8	65.4	70.1
8.47	-53.47	-43.46	-53.3	-0.18	64	65.5	70.1

8.47	-53.47	-43.46	-53.3	-0.21	64	65.6	70.5
8.47	-53.47	-43.41	-53.27	-0.21	63.9	65.6	70.6
8.47	-53.47	-43.41	-53.3	-0.21	64	65.7	71
8.46	-53.42	-43.41	-53.27	-0.21	64.2	65.7	70.9
8.47	-53.42	-43.41	-53.27	-0.21	64.2	65.8	71
8.47	-53.42	-43.41	-53.27	-0.21	64.3	65.8	71.2
8.47	-53.42	-43.36	-53.27	-0.21	64.3	65.8	71.4
8.47	-53.42	-43.41	-53.27	-0.21	64.3	65.9	71.5
8.47	-53.38	-43.41	-53.27	-0.21	64.3	66	71.5
8.47	-53.38	-43.41	-53.24	-0.21	64.3	66	71.9
8.47	-53.42	-43.36	-53.24	-0.21	64.3	66.1	71.9
8.47	-53.42	-43.36	-53.24	-0.21	64.4	66.1	72
8.47	-53.38	-43.36	-53.24	-0.21	64.5	66.1	72.2
8.46	-53.38	-43.36	-53.24	-0.24	64.5	66.2	72.1
8.47	-53.38	-43.36	-53.24	-0.21	64.6	66.2	72.2
8.47	-53.38	-43.31	-53.21	-0.21	64.7	66.3	72.2
8.47	-53.38	-43.36	-53.24	-0.24	64.7	66.4	72.3
8.47	-53.38	-43.31	-53.21	-0.24	64.7	66.4	72.3
8.47	-53.33	-43.31	-53.24	-0.24	64.7	66.4	72.4
8.47	-53.33	-43.31	-53.21	-0.24	64.8	66.4	72.5
8.46	-53.33	-43.31	-53.21	-0.21	64.9	66.4	72.4
8.47	-53.33	-43.31	-53.21	-0.24	65	66.5	72.5
8.46	-53.33	-43.31	-53.21	-0.24	65	66.5	72.4
8.47	-53.33	-43.31	-53.21	-0.24	65	66.5	72.3
8.47	-53.29	-43.25	-53.21	-0.24	65	66.5	72.3
8.47	-53.33	-43.25	-53.21	-0.24	65	66.6	72.3
8.46	-53.33	-43.25	-53.21	-0.24	65.1	66.6	72.4
8.45	-53.29	-43.25	-53.21	-0.24	65.1	66.7	72.1
8.45	-53.29	-43.25	-53.21	-0.24	65.1	66.7	72.1
8.45	-53.29	-43.25	-53.21	-0.24	65.3	66.7	72.2
8.45	-53.29	-43.25	-53.21	-0.24	65.3	66.7	72.1
8.45	-53.29	-43.25	-53.18	-0.24	65.3	66.7	71.9
8.45	-53.29	-43.25	-53.21	-0.24	65.4	66.7	72
8.45	-53.29	-43.25	-53.18	-0.24	65.4	66.7	71.6
8.46	-53.29	-43.25	-53.18	-0.24	65.5	66.7	71.9
8.46	-53.29	-43.2	-53.18	-0.24	65.5	66.7	71.4
8.45	-53.29	-43.25	-53.18	-0.24	65.5	66.7	71.3
8.45	-53.24	-43.25	-53.18	-0.24	65.5	66.6	71.3
8.45	-53.29	-43.25	-53.18	-0.24	65.6	66.6	71
8.45	-53.29	-43.25	-53.18	-0.24	65.6	66.6	70.9
8.44	-53.29	-43.2	-53.18	-0.24	65.6	66.6	70.9
8.44	-53.29	-43.25	-53.18	-0.24	65.6	66.6	70.5
8.45	-53.29	-43.25	-53.18	-0.24	65.6	66.5	70.6
8.45	-53.24	-43.2	-53.18	-0.24	65.6	66.5	70.3
8.44	-53.24	-43.2	-53.18	-0.24	65.6	66.4	70.2
8.44	-53.24	-43.2	-53.15	-0.24	65.5	66.4	70
8.44	-53.24	-43.2	-53.18	-0.24	65.6	66.4	69.8

8.44	-53.24	-43.2	-53.15	-0.24	65.5	66.3	69.6
8.44	-53.24	-43.25	-53.15	-0.24	65.5	66.3	69.5
8.44	-53.2	-43.2	-53.15	-0.24	65.5	66.2	69.2
8.44	-53.24	-43.25	-53.15	-0.24	65.5	66.2	69
8.44	-53.24	-43.2	-53.15	-0.24	65.4	66.2	68.9
8.44	-53.24	-43.2	-53.15	-0.24	65.4	66.1	68.8
8.44	-53.2	-43.2	-53.15	-0.24	65.4	66.1	68.4
8.44	-53.2	-43.2	-53.15	-0.24	65.4	66	68.3
8.45	-53.2	-43.2	-53.15	-0.24	65.3	66	68.1
8.44	-53.2	-43.2	-53.15	-0.24	65.3	66	67.9
8.44	-53.2	-43.2	-53.15	-0.24	65.3	65.9	67.9
8.44	-53.2	-43.2	-53.12	-0.24	65.1	65.9	67.8
8.44	-53.2	-43.15	-53.12	-0.24	65	65.8	67.3
8.44	-53.2	-43.2	-53.12	-0.24	65	65.8	67.1
8.44	-53.2	-43.15	-53.15	-0.21	65	65.8	67.2
8.44	-53.15	-43.15	-53.12	-0.24	64.9	65.8	67
8.44	-53.2	-43.15	-53.12	-0.24	64.8	65.8	66.8
8.44	-53.2	-43.15	-53.12	-0.21	64.9	65.8	66.7
8.44	-53.2	-43.15	-53.12	-0.24	64.9	65.8	66.5
8.44	-53.15	-43.15	-53.12	-0.21	64.9	65.7	66.3
8.44	-53.15	-43.15	-53.12	-0.24	64.8	65.7	66.2
8.44	-53.15	-43.15	-53.09	-0.24	64.8	65.7	66.1
8.44	-53.15	-43.15	-53.12	-0.24	64.8	65.6	66.1
8.43	-53.15	-43.15	-53.12	-0.24	64.7	65.6	65.8
8.43	-53.15	-43.15	-53.09	-0.24	64.7	65.6	65.8
8.43	-53.15	-43.15	-53.12	-0.24	64.7	65.6	65.8
8.42	-53.15	-43.15	-53.09	-0.21	64.7	65.5	65.6
8.43	-53.1	-43.15	-53.12	-0.24	64.7	65.5	65.3
8.42	-53.15	-43.15	-53.09	-0.24	64.7	65.5	65.2
8.42	-53.1	-43.1	-53.09	-0.21	64.7	65.4	65.1
8.42	-53.1	-43.1	-53.09	-0.24	64.6	65.4	64.9
8.43	-53.1	-43.1	-53.09	-0.24	64.6	65.4	64.9
8.42	-53.1	-43.1	-53.09	-0.21	64.6	65.3	64.8
8.42	-53.15	-43.15	-53.09	-0.24	64.6	65.3	64.8
8.43	-53.1	-43.15	-53.06	-0.21	64.5	65.3	64.7
8.42	-53.1	-43.1	-53.09	-0.24	64.5	65.3	64.7
8.42	-53.1	-43.1	-53.09	-0.24	64.5	65.2	64.6
8.42	-53.1	-43.1	-53.06	-0.24	64.4	65.2	64.6
8.43	-53.1	-43.1	-53.09	-0.21	64.4	65.2	64.3
8.41	-53.1	-43.05	-53.06	-0.24	64.4	65.2	64.1
8.42	-53.1	-43.1	-53.09	-0.21	64.4	65.2	64.2
8.41	-53.1	-43.1	-53.09	-0.21	64.4	65.1	64
8.41	-53.06	-43.05	-53.06	-0.21	64.3	65	64.1
8.41	-53.1	-43.1	-53.06	-0.24	64.3	65	63.8
8.41	-53.06	-43.05	-53.06	-0.21	64.2	65	63.6
8.41	-53.1	-43.1	-53.06	-0.21	64.2	65	63.6
8.41	-53.1	-43.1	-53.09	-0.24	64.2	65	63.7

8.41	-53.1	-43.1	-53.06	-0.21	64.2	65	63.6
8.41	-53.06	-43.05	-53.06	-0.21	64.2	65	63.6
8.41	-53.1	-43.05	-53.06	-0.24	64	65	63.1
8.41	-53.06	-43.1	-53.06	-0.24	64	65	63.3
8.41	-53.1	-43.05	-53.06	-0.21	64	65	63.2
8.41	-53.1	-43.1	-53.06	-0.24	64	65	63
8.41	-53.1	-43.1	-53.06	-0.21	63.8	65	62.8
8.41	-53.1	-43.1	-53.06	-0.24	63.9	65	62.9
8.41	-53.1	-43.1	-53.06	-0.24	63.9	65	62.9
8.41	-53.1	-43.1	-53.06	-0.24	63.9	64.9	62.8
8.41	-53.1	-43.1	-53.06	-0.24	63.9	64.9	62.9
8.41	-53.06	-43.1	-53.09	-0.21	63.8	64.9	63.1
8.41	-53.06	-43.05	-53.06	-0.21	63.9	64.8	62.9
8.41	-53.1	-43.1	-53.09	-0.24	63.9	64.8	63
8.41	-53.1	-43.1	-53.09	-0.24	63.9	64.8	63
8.41	-53.06	-43.1	-53.09	-0.24	64	64.8	63.1
8.41	-53.06	-43.05	-53.06	-0.24	63.8	64.8	63.2
8.41	-53.1	-43.1	-53.06	-0.24	64	64.8	63.2
8.41	-53.1	-43.1	-53.06	-0.24	63.9	64.9	63.3
8.41	-53.06	-43.05	-53.06	-0.24	64	64.9	63.7
8.41	-53.1	-43.1	-53.06	-0.24	64	64.9	64
8.41	-53.1	-43.05	-53.06	-0.24	64	64.9	64.3
8.41	-53.06	-43.05	-53.06	-0.24	64	65	64.3
8.41	-53.06	-43.05	-53.06	-0.24	64	64.9	64.5
8.41	-53.06	-43.05	-53.03	-0.24	63.9	65	64.9
8.41	-53.06	-43.05	-53.03	-0.24	64	65	65.2
8.41	-53.06	-43.05	-53.03	-0.24	64.1	65	65.4
8.41	-53.06	-43.05	-53	-0.24	64	65.1	65.7
8.41	-53.06	-43.05	-53	-0.24	64	65.1	66
8.41	-53.06	-43.05	-53	-0.24	64	65.2	66.3
8.41	-53.06	-43.05	-53	-0.24	64.1	65.2	66.5
8.41	-53.06	-43.05	-53	-0.24	64.1	65.3	67
8.41	-53.01	-43.05	-53	-0.27	64.2	65.3	67.3
8.41	-53.06	-43.05	-52.97	-0.27	64.2	65.4	67.5
8.41	-53.01	-43.05	-52.97	-0.27	64.3	65.5	68
8.41	-53.01	-43.05	-52.94	-0.27	64.2	65.5	68.3
8.41	-53.01	-43.05	-52.94	-0.27	64.3	65.6	68.7
8.41	-53.01	-42.99	-52.94	-0.24	64.3	65.6	68.8
8.41	-53.01	-42.99	-52.94	-0.27	64.3	65.7	69.1
8.41	-53.01	-42.99	-52.91	-0.27	64.4	65.8	69.8
8.41	-53.01	-42.99	-52.91	-0.27	64.4	65.8	69.9
8.41	-52.97	-42.99	-52.91	-0.27	64.4	65.8	70.1
8.41	-52.97	-42.94	-52.88	-0.27	64.5	65.9	70.4
8.41	-52.97	-42.99	-52.88	-0.27	64.6	65.9	70.8
8.41	-52.97	-42.99	-52.84	-0.27	64.6	66	71.1
8.41	-52.97	-42.94	-52.88	-0.27	64.6	66.1	71.1
8.41	-52.97	-42.99	-52.88	-0.27	64.7	66.1	71.2

8.41	-52.92	-42.94	-52.78	-0.27	64.6	66.2	71.6
8.41	-52.97	-42.99	-52.84	-0.27	64.7	66.3	71.7
8.41	-52.92	-42.99	-52.84	-0.27	64.7	66.3	72
8.41	-52.97	-42.94	-52.84	-0.27	64.8	66.4	72.4
8.41	-52.92	-42.94	-52.78	-0.27	64.8	66.4	72.5
8.41	-52.92	-42.94	-52.78	-0.31	64.8	66.5	72.7
8.41	-52.92	-42.89	-52.75	-0.27	64.8	66.6	73
8.41	-52.92	-42.89	-52.72	-0.27	64.9	66.6	73.1
8.41	-52.92	-42.89	-52.72	-0.27	65	66.6	73.3
8.41	-52.92	-42.89	-52.72	-0.27	64.9	66.7	73.4
8.41	-52.92	-42.84	-52.72	-0.27	65	66.8	73.4
8.41	-52.88	-42.89	-52.72	-0.27	65	66.8	73.5
8.41	-52.92	-42.89	-52.72	-0.31	65	66.9	73.5
8.41	-52.88	-42.84	-52.69	-0.27	65.1	66.9	73.8
8.41	-52.88	-42.84	-52.66	-0.27	65.3	66.9	74
8.41	-52.88	-42.84	-52.69	-0.27	65.1	67	73.8
8.41	-52.88	-42.84	-52.66	-0.27	65.1	67.1	74.2
8.41	-52.88	-42.84	-52.66	-0.31	65.3	67.1	74.3
8.41	-52.88	-42.84	-52.66	-0.27	65.3	67.1	74.3
8.41	-52.88	-42.84	-52.66	-0.31	65.4	67.2	74.3
8.41	-52.83	-42.84	-52.66	-0.27	65.5	67.2	74.4
8.41	-52.88	-42.84	-52.66	-0.31	65.6	67.2	74.4
8.41	-52.83	-42.84	-52.63	-0.31	65.6	67.3	74.4
8.41	-52.88	-42.84	-52.63	-0.31	65.6	67.3	74.4
8.41	-52.83	-42.84	-52.63	-0.31	65.7	67.4	74.4
8.41	-52.83	-42.74	-52.63	-0.27	65.7	67.4	74.5
8.41	-52.83	-42.74	-52.63	-0.27	65.7	67.4	74.5
8.41	-52.83	-42.74	-52.63	-0.31	65.8	67.4	74.4
8.41	-52.74	-42.74	-52.6	-0.27	65.8	67.4	74.4
8.41	-52.74	-42.74	-52.6	-0.31	65.8	67.4	74.1
8.41	-52.83	-42.74	-52.63	-0.31	65.8	67.5	74.2
8.41	-52.83	-42.74	-52.6	-0.27	65.8	67.5	74.2
8.41	-52.83	-42.68	-52.6	-0.31	65.9	67.5	73.8
8.41	-52.83	-42.68	-52.6	-0.31	65.8	67.5	73.8
8.41	-52.83	-42.68	-52.57	-0.31	65.9	67.5	73.8
8.41	-52.74	-42.68	-52.6	-0.27	66	67.6	73.6
8.4	-52.83	-42.68	-52.6	-0.31	66	67.6	73.6
8.39	-52.83	-42.68	-52.6	-0.31	66.1	67.5	73.4
8.39	-52.74	-42.68	-52.57	-0.31	66.1	67.5	73.2
8.39	-52.74	-42.68	-52.57	-0.31	66.2	67.5	72.9
8.39	-52.74	-42.68	-52.57	-0.27	66.2	67.4	72.9
8.39	-52.74	-42.68	-52.57	-0.31	66.2	67.4	72.6
8.39	-52.83	-42.68	-52.57	-0.31	66.2	67.4	72.4
8.39	-52.74	-42.68	-52.54	-0.27	66.2	67.3	72.3
8.39	-52.74	-42.68	-52.57	-0.27	66.2	67.3	72.2
8.39	-52.74	-42.63	-52.54	-0.27	66.2	67.2	72.1
8.39	-52.74	-42.63	-52.54	-0.27	66.2	67.2	71.6

8.39	-52.74	-42.68	-52.54	-0.31	66.1	67.2	71.6
8.39	-52.74	-42.63	-52.54	-0.31	66.2	67.2	71.4
8.39	-52.74	-42.68	-52.51	-0.27	66.1	67.1	71.3
8.39	-52.74	-42.68	-52.54	-0.31	66.1	67.1	71.1
8.39	-52.74	-42.68	-52.54	-0.31	66.1	67.2	70.9
8.39	-52.74	-42.68	-52.54	-0.31	66.1	67.1	70.7
8.39	-52.69	-42.68	-52.54	-0.27	66.1	67.1	70.7
8.39	-52.74	-42.63	-52.51	-0.31	66.1	67	70.3
8.39	-52.74	-42.68	-52.51	-0.27	66	67	70.3
8.4	-52.69	-42.63	-52.51	-0.31	66.1	66.9	70
8.38	-52.74	-42.63	-52.51	-0.27	66	67	70
8.38	-52.69	-42.63	-52.51	-0.27	66	66.9	69.6
8.38	-52.69	-42.63	-52.48	-0.27	65.9	66.9	69.5
8.38	-52.69	-42.68	-52.48	-0.31	66	66.9	69.2
8.38	-52.69	-42.63	-52.45	-0.27	66	66.8	69.1
8.38	-52.69	-42.63	-52.48	-0.31	65.9	66.8	69
8.39	-52.69	-42.63	-52.45	-0.31	65.9	66.7	68.9
8.38	-52.69	-42.63	-52.45	-0.27	65.9	66.6	68.7
8.38	-52.69	-42.63	-52.45	-0.27	65.9	66.6	68.7
8.38	-52.69	-42.63	-52.45	-0.27	65.8	66.6	68.5
8.38	-52.69	-42.58	-52.45	-0.27	65.8	66.5	68.3
8.38	-52.69	-42.58	-52.45	-0.31	65.8	66.5	68.1
8.38	-52.69	-42.58	-52.45	-0.31	65.8	66.5	68.1
8.38	-52.69	-42.58	-52.42	-0.31	65.8	66.4	67.9
8.38	-52.69	-42.58	-52.42	-0.27	65.8	66.3	67.9
8.38	-52.69	-42.58	-52.42	-0.27	65.7	66.3	67.5
8.38	-52.65	-42.53	-52.42	-0.27	65.7	66.3	67.3
8.38	-52.65	-42.58	-52.42	-0.31	65.7	66.2	67.3
8.38	-52.65	-42.58	-52.42	-0.27	65.6	66.2	67.3
8.38	-52.65	-42.58	-52.39	-0.27	65.6	66.1	66.9
8.38	-52.65	-42.53	-52.39	-0.27	65.6	66.1	66.8
8.38	-52.65	-42.53	-52.39	-0.27	65.5	66.1	66.6
8.38	-52.65	-42.53	-52.39	-0.27	65.5	66	66.7
8.38	-52.65	-42.53	-52.39	-0.27	65.5	66	66.6
8.38	-52.65	-42.53	-52.36	-0.27	65.4	66	66.3
8.37	-52.65	-42.58	-52.36	-0.27	65.4	66	66.3
8.38	-52.65	-42.53	-52.36	-0.27	65.3	65.9	66.3
8.38	-52.6	-42.53	-52.33	-0.27	65.1	65.9	66
8.37	-52.6	-42.53	-52.36	-0.31	65	65.8	65.8
8.37	-52.6	-42.53	-52.36	-0.27	65	65.8	65.8
8.38	-52.6	-42.53	-52.36	-0.27	64.7	65.8	65.8
8.38	-52.6	-42.53	-52.33	-0.27	64.7	65.8	65.3
8.38	-52.6	-42.53	-52.33	-0.27	64.8	65.8	65.7
8.38	-52.6	-42.53	-52.33	-0.31	64.8	65.7	65.2
8.38	-52.6	-42.53	-52.33	-0.31	64.7	65.7	64.9
8.37	-52.6	-42.53	-52.33	-0.27	64.7	65.7	65.1
8.38	-52.6	-42.53	-52.33	-0.27	64.6	65.7	65

8.37	-52.6	-42.53	-52.33	-0.27	64.6	65.6	64.8
8.38	-52.6	-42.48	-52.33	-0.27	64.6	65.6	64.8
8.37	-52.6	-42.48	-52.3	-0.27	64.6	65.6	64.6
8.38	-52.6	-42.48	-52.3	-0.27	64.6	65.5	64.5
8.38	-52.6	-42.48	-52.33	-0.27	64.6	65.5	64.6
8.38	-52.6	-42.48	-52.3	-0.27	64.6	65.5	64.4
8.38	-52.55	-42.48	-52.3	-0.27	64.7	65.5	64.1
8.38	-7.6	-42.48	-52.3	-0.27	64.7	65.5	64.1
8.38	-7.55	-42.48	-52.3	-0.27	64.7	65.5	64
8.38	-7.6	-42.48	-52.3	-0.27	64.7	65.4	64
8.38	-7.55	-42.48	-52.3	-0.27	64.6	65.4	63.6
8.38	-7.55	-42.42	-52.3	-0.27	64.7	65.4	63.7
8.38	-7.55	-42.42	-52.3	-0.27	64.6	65.3	63.5
8.38	-7.55	-42.48	-52.3	-0.27	64.6	65.3	63.5
8.37	-7.6	-42.48	-52.3	-0.27	64.6	65.3	63.3
8.38	-7.55	-42.48	-52.26	-0.24	64.6	65.2	63.3
8.38	-7.55	-42.48	-52.26	-0.27	64.6	65.2	63.5
8.38	-7.55	-42.48	-52.26	-0.27	64.5	65.2	63.5
8.38	-7.55	-42.48	-52.26	-0.27	64.5	65.2	63.5
8.37	-7.55	-42.48	-52.26	-0.27	64.5	65.2	63.3
8.37	-7.55	-42.42	-52.23	-0.27	64.5	65.1	63.6
8.38	-7.55	-42.42	-52.23	-0.27	64.4	65.2	63.6
8.37	-7.51	-42.48	-52.23	-0.27	64.4	65.2	63.5
8.37	-7.55	-42.48	-52.23	-0.27	64.3	65.2	63.6
8.37	-7.51	-42.48	-52.23	-0.24	64.3	65.3	63.8
8.37	-7.55	-42.42	-52.23	-0.24	64.2	65.2	63.8
8.37	-7.51	-42.42	-95.21	-0.27	64.4	65.8	64
8.38	-7.55	-42.42	-95.21	-0.24	64.6	65.9	63.9
8.36	-7.51	-42.42	-95.18	-0.27	64.8	66	64
8.37	-7.55	-42.42	-95.18	-0.27	64.9	66.2	64.2
8.36	-7.51	-42.42	-95.15	-0.27	64.9	66.2	64.6
8.36	-7.51	-42.42	-95.12	-0.27	65.1	66.4	64.7
8.37	-7.51	-42.42	-95.15	-0.31	65.3	66.4	64.7
8.36	-7.51	-42.42	-52.11	-0.27	65.1	66.5	64.9
8.36	-7.51	-42.42	-52.23	-0.27	65.4	66.7	65.3
8.36	-7.51	-42.42	-52.11	-0.31	65.5	66.8	65.7
8.36	-7.51	-42.42	-52.11	-0.27	65.7	67	65.8
8.37	-7.51	-42.42	-52.11	-0.27	65.7	67.1	65.8
8.37	-7.51	-42.42	-52.08	-0.27	65.9	67.2	66.1
8.36	-99.95	-42.42	-52.08	-0.31	65.9	67	66.5
8.36	-100.09	-42.37	-52.08	-0.31	65.9	67.3	66.9
8.36	-100.09	-42.37	-52.08	-0.27	65.9	67.6	67
8.37	-100.09	-42.37	-52.02	-0.31	66.1	67.7	67.4
8.37	-100.09	-42.42	-52.02	-0.31	66.2	67.7	67.8
8.37	-100.09	-42.42	-52.02	-0.27	66	68	68.2
8.37	-100.09	-42.37	-52.02	-0.31	66.4	68.2	68.5
8.38	-100.14	-42.37	-52.02	-0.31	66.6	68.4	69

8.37	-100.09	-42.37	-51.99	-0.31	66.8	68.5	69.5
8.37	-100.09	-42.32	-51.99	-0.31	66.9	68.7	69.8
8.37	-100.09	-42.37	-51.99	-0.31	67	68.8	70.1
8.37	-100.09	-42.37	-51.99	-0.31	66.9	69	70.4
8.37	-100.14	-42.37	-51.96	-0.31	66.9	69	70.8
8.37	-100.14	-42.32	-51.93	-0.31	67	69.1	71.3
8.38	-100.14	-42.32	-51.96	-0.31	67.2	69.3	71.5
8.37	-100.14	-42.32	-51.93	-0.31	67.5	69.4	71.7
8.38	-100.09	-42.32	-51.93	-0.31	67.7	69.4	72.1
8.38	-100.14	-42.32	-51.93	-0.31	67.8	69.5	72.3
8.37	-100.09	-42.32	-51.93	-0.27	67.7	69.7	72.6
8.38	-100.09	-42.32	-51.93	-0.31	68.1	69.4	72.9
8.37	-100.09	-42.27	-51.9	-0.31	68.4	69.8	73.1
8.38	-100.14	-42.27	-51.9	-0.31	68.3	69.9	73.3
8.38	-54.9	-42.27	-51.9	-0.31	68.7	70	73.5
8.38	-51.83	-42.27	-51.93	-0.31	68.4	70.1	73.7
8.38	-51.92	-42.27	-51.93	-0.27	68.7	70.1	73.7
8.38	-52.47	-42.27	-51.93	-0.31	68.5	70.1	69.2
8.59	-63.51	-42.37	-51.9	-0.31	68.5	69.7	54.2
8.62	-71.02	-42.37	-51.93	19.41	87	68.8	53.1
8.57	-74.95	-42.48	-51.9	18.68	90.3	68.8	52.9
8.65	-77.24	-42.53	-51.9	-0.37	84.5	69.9	53.6
8.66	-79.35	-42.58	-51.93	19.17	90.7	68.6	54.2
8.69	-80.13	-42.58	-51.93	-0.37	88.6	69.6	52.9
8.65	-82.14	-42.53	-51.93	18.62	90.2	69.7	52.5
8.57	-84.66	-42.68	-51.96	19.08	91.1	68.4	52.8
8.66	-86.81	-42.58	-51.93	-0.37	87.7	69.7	51.7
8.72	-94.6	-42.68	-51.99	14.5	82.3	70.1	52.2
8.67	-98.86	-42.53	-51.96	21.95	90.9	69	52.7
8.67	-94.96	-42.74	-51.99	18.47	90.7	69.4	53.2
8.74	-91.99	-42.58	-51.96	-0.37	82.5	69.7	53
8.74	-98.67	-42.74	-51.99	-0.37	77.1	69.7	52.8
8.68	-94.51	-42.84	-52.08	21.89	89.2	68	53.6
8.7	-90.66	-42.84	-52.02	18.38	89.5	69.3	52.4
8.75	-95.79	-42.68	-52.02	-0.31	78.6	68.9	52.8
8.75	-99.36	-42.84	-52.08	16.82	82.2	68.6	52.9
8.77	-96.47	-42.94	-52.17	21.95	87.7	68.8	54.4
8.68	-94.6	-42.89	-52.14	18.5	87.5	68.3	53
8.74	-91.85	-42.94	-52.14	-0.31	79.9	68.5	53.3
8.74	-89.97	-42.84	-52.11	-0.31	75.1	68.1	52.9
8.74	-93.32	-42.89	-52.14	21.92	85.8	68.3	52.8
8.68	-96.34	-42.89	-52.14	18.53	85.9	67.8	52.8
8.75	-99.95	-42.99	-52.2	-0.31	79.8	68	52.8
8.76	-98.53	-43.1	-52.17	-0.34	74.5	67.7	53.1
8.69	-97.07	-42.99	-52.17	22.01	84.2	66.9	53.4
8.71	-94.6	-43.1	-52.17	18.5	85.2	67.6	52.6
8.76	-93.68	-43.05	-52.23	-0.31	77	67.5	53.1

8.76	-92.44	-43.05	-52.23	-0.31	73.1	67.2	53
8.71	-91.53	-43.2	-52.26	22.01	82.5	66.3	53.1
8.72	-90.43	-43.15	-52.2	18.5	83.9	67.1	52.8
8.76	-90.29	-43.15	-52.26	-0.31	76.6	67.1	53.2
8.78	-90.16	-43.15	-52.23	-0.27	72.7	66.7	52.8
8.84	-90.16	-43.2	-52.3	22.07	80.3	66.8	52.6
8.68	-90.16	-43.15	-52.26	18.71	83.2	66.2	52.6
8.75	-90.38	-43.15	-52.23	-0.27	78.1	66.7	53.1
8.76	-89.93	-43.1	-52.26	-0.27	72.9	66.4	52.9
8.76	-90.16	-43.15	-52.26	-0.27	70.5	66.2	52.9
8.69	-90.61	-43.1	-52.26	22.25	80.8	65.8	53.1
8.71	-90.38	-43.15	-52.26	18.68	82.8	66.2	53
8.76	-90.89	-43.15	-52.3	-0.27	76.5	66.3	52.8
8.78	-90.84	-43.15	-52.3	-0.27	72.2	65.9	53
8.76	-89.88	-43.2	-52.3	-0.24	69.9	65.8	52.9
9.26	-89.84	-43.36	-52.33	22.16	79.9	65.4	52.7
8.71	-90.11	-43.2	-52.3	18.71	82.1	65.8	53.1
8.76	-90.38	-43.41	-52.33	-0.27	76.2	65.9	52.6
8.79	-90.2	-43.36	-52.39	-0.24	71.8	65.6	52.8
8.77	-90.06	-43.25	-52.33	-0.24	69.4	65.5	52.9
8.77	-90.61	-43.51	-52.36	22.13	79	65.3	53.8
8.7	-91.76	-43.41	-52.36	18.71	81.6	65.2	53.4
8.75	-92.35	-43.2	-52.39	-0.27	76.6	65.7	53.1
8.78	-92.72	-43.36	-52.36	-0.27	71.8	65.3	52.8
8.77	-93.45	-43.46	-52.39	-0.24	69.3	65.3	53.1
8.76	-94.6	-43.41	-52.39	-0.21	67.9	65.2	52.6
8.74	-94.92	-43.41	-52.36	18.62	80.6	65.6	53.5
8.71	-95.97	-43.41	-52.39	19.47	81.9	64.5	52.9
8.72	-97.3	-43.46	-52.42	-0.24	79.7	65.5	52.8
8.78	-97.62	-43.51	-52.39	-0.27	72.6	65.2	53
8.77	-98.31	-43.46	-52.39	-0.21	69.9	65.1	53
8.76	-99.77	-43.46	-52.36	21.83	76.9	64.9	52.5
8.64	-99.82	-43.51	-52.42	18.99	81.1	64.3	53.1
8.71	-100.05	-43.36	-52.42	-0.24	77.7	65.1	52.6
8.75	-99.95	-43.36	-52.42	-0.24	71.8	64.9	52.9
8.78	-98.26	-43.41	-52.42	-0.24	69.3	64.8	52.7
8.77	-95.92	-43.41	-52.42	-0.21	67.8	64.7	52.9
8.69	-94.87	-43.36	-52.42	22.25	79.7	64	52.7
8.71	-93.73	-43.41	-52.45	18.68	80.5	64.9	52.9
8.78	-91.71	-43.46	-52.42	-0.24	73.1	64.8	52.8
8.78	-92.4	-43.46	-52.42	-0.24	70	64.7	53
8.76	-90.48	-43.41	-52.45	-0.21	68	64.5	53
8.8	-90.43	-43.41	-52.42	22.28	77.2	64.4	53.8
8.68	-91.62	-43.62	-52.45	18.8	80.6	64.2	52.3
8.75	-92.9	-43.57	-52.48	-0.27	76.1	64.7	52.9
8.78	-94.51	-43.62	-52.48	-0.24	71	64.5	53
8.78	-95.47	-43.62	-52.48	-0.21	68.8	64.4	52.6

8.76	-97.07	-43.77	-52.57	-0.21	67.1	64.3	52.8
8.7	-98.31	-43.62	-52.57	22.22	79.5	63.6	52.2
8.71	-99.82	-43.62	-52.48	18.62	81	64.5	52.8
8.76	-98.12	-43.51	-52.48	-0.24	73.7	64.4	53
8.76	-95.33	-43.51	-52.51	-0.21	70.2	64.2	52.8
8.76	-93.91	-43.51	-52.51	-0.21	68.1	64.2	52.8
8.76	-91.67	-43.57	-52.51	22.19	75.9	64.1	52.9
8.65	-90.16	-43.57	-52.54	19.08	80.5	63.6	52.9
8.74	-90.52	-43.77	-52.51	-0.24	77.1	64.4	53
8.78	-91.48	-43.67	-52.54	-0.21	71.2	64.2	52.5
8.78	-91.85	-43.72	-52.57	-0.24	68.7	64.1	53.1
8.76	-94	-43.67	-52.54	-0.21	67.1	64	53
8.71	-94.92	-43.93	-52.51	22.25	78	63.7	52.7
8.67	-96.89	-43.72	-52.63	18.77	80.8	63.9	53.1
8.73	-98.53	-43.72	-52.57	-0.24	75.5	64.5	52.7
8.76	-99.36	-43.67	-52.6	-0.21	70.9	64.2	53.2
8.76	-98.67	-43.67	-52.57	-0.21	68.6	64.3	52.8
8.76	-97.07	-43.67	-52.6	-0.24	67.1	64.1	53.2
8.81	-95.42	-43.67	-52.57	22.25	77.8	63.7	53.2
8.57	-93.68	-43.62	-52.57	19.08	81.8	63.7	52.3
8.71	-92.95	-43.67	-52.6	-0.24	78.5	64.5	52.8
8.78	-92.9	-43.67	-52.6	-0.24	72	64.4	53.1
8.78	-90.71	-43.67	-52.63	-0.21	69.2	64.4	53.1
8.77	-90.48	-43.93	-52.66	-0.21	67.6	64.4	53.5
8.76	-92.49	-43.83	-52.63	-0.21	66.3	64.4	53.3
8.72	-93.41	-43.98	-52.63	22.19	82.4	63.7	52.1
8.71	-95.1	-43.77	-52.66	18.59	83.3	65	52.8
8.77	-97.12	-43.88	-52.66	-0.24	74	65	53.1
8.78	-99.22	-43.77	-52.63	-0.24	70.6	64.7	52.8
8.76	-99.27	-43.72	-52.63	-0.24	68.5	64.7	52.9
8.76	-97.12	-43.72	-52.63	-0.24	67.1	64.9	52.8
8.73	-94.28	-43.72	-52.69	18.77	82.2	65.1	52.8
8.71	-93.04	-43.72	-52.66	22.19	84.8	64.4	53.7
8.71	-91.71	-43.77	-52.63	18.59	84.4	65.6	52.8
8.79	-90.06	-43.83	-52.66	-0.31	75.1	65.6	53.1
8.77	-90.98	-43.93	-52.63	-0.27	71.4	65.4	53
8.78	-92.95	-43.88	-52.69	-0.27	69.3	65.5	53
8.71	-95.24	-43.88	-52.69	22.1	82.4	64.3	51.5
8.71	-96.84	-43.88	-52.66	18.59	84.1	65.4	52.4
8.78	-98.35	-43.88	-52.66	-0.27	76.1	65.5	52.9
8.78	-99.04	-43.88	-52.69	-0.24	71.8	65.2	52.6
8.76	-99.22	-43.77	-52.69	-0.24	69.3	65.2	52.8
8.78	-96.8	-43.77	-52.69	-0.24	67.9	65.2	52.9
8.7	-94.78	-43.83	-52.66	22.1	83.8	64.5	52.9
8.71	-92.67	-43.77	-52.69	18.53	86.1	65.4	53.1
8.76	-89.93	-43.83	-52.69	-0.31	77.1	65.8	53.3
8.78	-92.17	-43.83	-52.69	-0.27	72.6	66.3	53.3

8.77	-93.73	-43.93	-52.69	-0.27	70.5	66.7	52.5
8.77	-95.42	-43.88	-52.69	-0.24	69	66.2	52.8
8.74	-97.53	-43.98	-52.69	14.59	69.1	65.9	52.8
8.71	-98.72	-44.08	-52.66	22.01	87.7	64.9	52.2
8.71	-98.72	-43.83	-52.72	18.28	89.5	66.3	53
8.78	-96.47	-43.83	-52.69	-0.31	76.4	66.3	52.9
8.78	-96.8	-43.83	-52.69	-0.27	72.5	66.9	53
8.78	-95.1	-43.83	-52.69	-0.27	70.3	66.6	53.1
8.78	-92.44	-43.83	-52.69	-0.27	68.8	66.5	53
8.73	-89.79	-43.98	-52.75	22.01	85.8	65.8	53.5
8.71	-90.8	-43.98	-52.69	18.41	90.2	66.7	53.4
8.76	-92.86	-43.88	-52.72	-0.34	80.6	66.9	53.3
8.78	-94.73	-43.98	-52.72	-0.27	74.7	66.8	52.7
8.77	-97.25	-43.93	-52.69	-0.31	71.8	66.9	52.9
8.76	-98.03	-44.14	-52.72	-0.27	69.8	67	53.1
8.45	-100.05	-43.83	-52.69	18.74	90.2	66.1	52.7
8.7	-97.44	-43.83	-52.69	-0.31	86	67.1	52.9
8.78	-95.7	-43.83	-52.69	-0.31	76.5	67.2	53.3
8.77	-93.41	-43.88	-52.69	-0.31	73	67.6	53
8.77	-91.07	-43.83	-52.72	-0.31	70.9	67.7	53.3
8.68	-91.07	-44.08	-52.72	18.28	91	67.9	53.6
8.26	-93.32	-43.93	-52.72	18.77	92.5	66.9	53.3
8.71	-95.01	-43.93	-52.75	-0.34	86.7	67.9	53
8.77	-96.84	-43.93	-52.72	-0.31	77.8	68.7	53.1
8.77	-99.13	-43.88	-52.72	-0.34	74.7	69.3	53.3
8.71	-100.05	-43.88	-52.72	18.41	90.5	69.1	53.1
8.81	-97.57	-43.83	-52.69	21.83	92.7	69.9	52.9
8.71	-94.78	-43.83	-52.72	18.25	92.8	69.4	52.9
8.78	-92.4	-43.83	-52.69	-0.34	82.1	69	53.3
8.78	-91.62	-43.83	-52.72	-0.34	76.8	68.9	53.5
8.79	-90.98	-44.08	-52.72	19.14	88.2	68.3	51.6
8.74	-93.18	-43.98	-52.75	17.46	90.3	69	53.1
8.71	-94.73	-43.83	-52.69	18.41	91.7	68	52.7
8.76	-95.7	-43.93	-52.75	-0.34	85	68.6	53.1
8.78	-98.4	-43.98	-52.78	-0.31	77.3	68.4	53.1
8.77	-99.68	-43.88	-52.75	-0.31	73.7	68.4	52.8
8.74	-96.89	-43.93	-52.75	18.47	88.6	68.1	52.6
8.76	-95.28	-43.88	-52.78	21.89	90.1	67.9	52.6
8.72	-94.09	-43.83	-52.78	18.28	90.2	68.1	52.8
8.76	-93.04	-43.88	-52.84	-0.34	80.3	68.2	53.3
8.78	-90.93	-43.88	-52.84	-0.31	75.4	68	53.1
8.77	-90.93	-44.08	-52.84	-0.31	72.5	68	53.2
8.72	-93.41	-43.98	-52.78	18.25	88.4	67.9	53.4
8.68	-95.28	-44.08	-52.84	18.56	89.7	67.1	53
8.74	-97.66	-44.14	-52.88	-0.34	84.1	67.9	52.9
8.76	-98.81	-43.98	-52.88	-0.31	76.6	67.9	53.2
8.75	-99.13	-43.93	-52.88	-0.31	73.2	67.8	52.8

8.7	-96.34	-43.88	-52.91	20.54	87.5	66.7	53.4
8.83	-96.29	-43.98	-52.91	5.34	88.1	67.8	52.3
8.78	-94.37	-43.93	-52.88	-0.31	76.7	67.7	53.2
8.78	-92.54	-43.93	-52.88	-0.27	73.1	67.6	53.4
8.64	-90.25	-43.93	-52.88	18.38	88.1	67.7	53
8.73	-90.52	-44.29	-52.91	18.96	89.3	66.6	51.8
8.69	-91.99	-44.14	-52.84	-0.34	85.5	67.6	53
8.78	-92.31	-44.14	-52.88	-0.31	75.9	67.3	53
8.79	-93.86	-43.98	-52.91	-0.31	72.5	67.4	53
8.7	-93.82	-44.08	-52.84	21.95	85.5	66.7	53.4
8.72	-95.92	-44.08	-52.88	18.35	88.6	67.2	52
8.78	-98.35	-44.08	-52.84	-0.31	79.9	67.5	52.9
8.78	-98.86	-43.93	-52.91	-0.27	74.5	67.3	53
8.78	-97.76	-43.98	-52.91	-0.27	71.6	67.2	53
8.78	-95.65	-43.98	-52.91	-0.27	69.9	67.2	53.2
8.71	-95.79	-43.98	-52.88	21.95	87.5	66.1	53.3
8.72	-94.23	-43.98	-52.91	18.22	89	67.4	52.6
8.78	-91.8	-43.98	-52.91	-0.31	77.1	67.2	53.3
8.79	-90.2	-44.14	-52.88	-0.31	73.1	67.1	53.5
8.78	-92.35	-44.19	-52.91	-0.31	70.7	67	53.2
8.78	-90.93	-44.14	-52.91	-0.27	69.1	66.9	53.1
8.72	-90.98	-44.19	-52.88	21.86	87.3	65.9	52.7
8.72	-93.18	-44.14	-52.94	18.19	88.5	67.2	53
8.78	-96.02	-44.19	-52.94	-0.31	77	67	53
8.78	-98.35	-44.19	-52.94	-0.31	73	66.9	53
8.78	-100.09	-44.19	-52.91	-0.27	70.6	66.8	52.7
8.76	-97.25	-43.98	-52.91	-0.27	69	66.8	52.8
8.76	-95.47	-43.98	-52.94	21.92	82.7	66.1	52.5
8.69	-92.99	-43.93	-52.91	18.47	87.5	66.1	52.9
8.76	-91.67	-44.08	-52.91	-0.31	82.1	66.9	53.1
8.79	-90.61	-44.19	-52.94	-0.31	74.7	66.8	53.3
8.77	-93.18	-44.24	-52.97	-0.27	71.5	66.6	53.1
8.77	-94.6	-44.14	-52.97	-0.27	69.6	66.5	52.8
8.76	-96.47	-44.24	-52.88	-0.24	68.3	66.6	52.7
8.71	-98.95	-44.29	-52.88	21.92	86.3	65.8	51.5
8.71	-98.72	-43.98	-52.91	18.28	87.7	66.7	52.8
8.78	-98.95	-43.98	-52.94	-0.31	77.2	66.7	53
8.78	-96.75	-43.98	-52.91	-0.27	72.9	66.4	52.8
8.78	-95.01	-43.98	-52.91	-0.27	70.4	66.4	52.8
8.76	-92.63	-43.98	-52.91	-0.27	68.9	66.4	53
8.79	-91.67	-44.14	-52.91	14.41	72.6	66.4	52
8.74	-90.43	-44.14	-52.94	19.57	86.3	65.4	54
8.72	-91.71	-44.08	-52.94	1.13	85.3	66.7	52.5
8.77	-93.13	-44.14	-52.94	-0.27	75.1	66.4	53
8.78	-95.92	-44.19	-52.97	-0.31	71.8	66.2	52.8
8.76	-96.84	-44.19	-52.91	-0.31	69.7	66.1	52.8
8.76	-98.67	-44.14	-52.94	-0.24	68.2	66.2	53

8.66	-99.4	-44.08	-52.94	21.98	84.2	65.5	52.4
8.71	-97.34	-44.08	-52.94	18.25	85.9	66.3	53.1
8.76	-98.4	-44.08	-52.94	-0.27	77	66.3	53
8.78	-96.38	-44.08	-52.94	-0.31	72.6	65.9	53
8.78	-93.86	-44.08	-52.94	-0.27	70.1	66	53.1
8.76	-93.22	-44.08	-52.94	-0.24	68.5	65.9	52.8
8.79	-91.94	-44.14	-52.91	22.01	80.6	65.8	53.8
8.7	-90.16	-44.19	-52.94	18.53	85.7	65.4	52.5
8.74	-91.85	-44.19	-52.97	-0.27	80.9	66.1	52.5
8.78	-94.32	-44.19	-52.94	-0.27	73.7	65.9	53.4
8.77	-97.16	-44.24	-52.94	-0.24	70.8	65.8	52.3
8.77	-98.58	-44.19	-52.94	-0.24	68.9	65.8	52.3
8.76	-99.91	-44.24	-52.94	-0.27	67.7	65.7	51.8
8.68	-97.85	-44.14	-53	21.98	84.4	65	52.7
8.72	-94.73	-44.14	-52.94	18.28	86.4	65.9	52.7
8.76	-91.9	-44.14	-52.97	-0.31	76.7	65.9	53.1
8.81	-89.93	-44.19	-53	-0.27	72.6	66.3	53.5
8.77	-92.35	-44.34	-53.03	-0.27	70.1	66	53.2
8.76	-94.73	-44.29	-52.97	-0.24	68.5	65.9	53.5
8.76	-96.89	-44.34	-52.94	21.98	82	65.8	50.1
8.66	-98.35	-44.19	-53	18.44	86.6	65.7	52.8
8.65	-100.05	-44.14	-52.97	-0.31	80.8	66.4	52.9
8.76	-97.25	-44.14	-52.97	-0.31	74.1	66.3	52.9
8.76	-95.6	-44.14	-53	-0.27	71.1	66.8	52.6
8.76	-92.86	-44.14	-52.97	-0.27	69.2	66.6	53.2
8.76	-91.67	-44.14	-53	-0.24	68.1	66.6	53.1
8.72	-90.61	-44.29	-53	21.86	87	65.6	53.9
8.71	-92.44	-44.24	-53.03	18.16	88.6	66.8	53.4
8.76	-95.1	-44.29	-52.97	-0.31	77.4	66.9	52.7
8.77	-97.57	-44.24	-53	-0.27	73.2	66.8	53.1
8.77	-99.95	-44.45	-53.06	-0.34	70.7	66.9	53.1
8.76	-99.08	-44.14	-53	-0.27	69.1	66.9	52.7
8.76	-97.62	-44.14	-53	22.16	81.8	67	52.6
8.82	-94.96	-44.19	-53	18.83	89.7	65.9	53
8.74	-93.09	-44.19	-53	-0.31	86.8	67.2	53.1
8.77	-90.2	-44.19	-52.97	-0.31	76.6	67.9	53.3
8.78	-92.08	-44.34	-53	-0.31	73.4	68.2	53.3
8.76	-94.96	-44.34	-53	-0.31	71.2	68.5	52.9
8.76	-96.38	-44.34	-53.03	-0.31	70.1	68	52.3
8.72	-98.44	-44.29	-53.03	21.73	88.5	67.1	54.1
8.68	-99.04	-44.19	-53	18.22	93.3	67.6	52.4
8.75	-96.06	-44.19	-53	-0.34	84.4	68.1	53.2
8.78	-93.68	-44.19	-53	-0.34	76.8	68.2	53.4
8.77	-91.44	-44.19	-53	-0.31	73.5	68.3	53.4
8.78	-91.21	-44.34	-53.06	-0.31	71.3	68.4	53.2
8.76	-94	-44.29	-53.06	-0.31	70.1	68.6	53.1
8.72	-95.97	-44.29	-53	21.64	90.5	69.1	54.1

8.64	-98.26	-44.34	-53	18.25	97	68.8	52.6
8.62	-99.95	-44.19	-52.97	-0.37	89.8	69.5	53.1
8.76	-97.48	-44.19	-53	-0.37	79.6	69.5	53.2
8.77	-95.83	-44.14	-53	-0.34	75.5	69.6	53.3
8.76	-94.18	-44.19	-52.97	-0.31	73.1	69.7	53.3
8.75	-91.67	-44.19	-53	-0.31	71.5	70.1	53.7
8.76	-90.48	-44.4	-53	-0.34	70.7	70.4	53.6
8.72	-93.45	-44.19	-53	21.49	96.3	68.6	52.7
8.72	-95.7	-44.24	-53	17.86	99.2	70.1	53.6
8.76	-97.21	-44.34	-53	-0.37	82.8	70.2	52.7
8.78	-99.08	-44.34	-53	-0.34	77.6	70.3	53.2
8.76	-98.31	-44.19	-52.97	-0.37	74.7	70.5	52.9
8.76	-96.06	-44.19	-52.97	-0.34	72.7	70.5	53.1
8.86	-93.13	-44.14	-53	19.69	90.8	70.2	53.6
8.74	-90.71	-44.19	-52.94	20.73	98.6	71	53.8
8.7	-91.8	-44.24	-53	18.04	99.8	70.4	53
8.75	-93.91	-44.29	-53.03	-0.37	89.6	71.1	52.7
8.76	-94.78	-44.29	-53.06	-0.37	81	71.2	52.6
8.76	-96.34	-44.34	-53	-0.37	77.1	71.2	52.6
8.69	-98.35	-44.34	-52.97	18.19	95.9	70.8	52.2
8.9	-99.18	-44.14	-52.97	21.46	99	71.4	53.6
8.71	-98.21	-44.14	-52.97	17.95	100.1	71.2	53.3
8.77	-95.79	-44.14	-52.97	-0.4	88.3	71.7	53.3
8.79	-93.27	-44.14	-52.97	-0.37	81	71.8	53.4
8.78	-91.8	-44.19	-52.97	-0.37	77.3	71.9	53.7
8.75	-94.05	-44.14	-52.94	17.98	97.6	71.8	53.7
8.66	-92.67	-44.19	-52.97	18.71	99.3	71.3	53.5
8.85	-89.93	-44.19	-52.94	21.4	101.4	73.4	53.7
8.72	-92.17	-44.34	-52.97	17.8	102.4	74.1	53.3
8.78	-94.64	-44.29	-52.97	-0.4	89.4	74.6	53.3
8.79	-96.34	-44.29	-52.94	-0.4	83.3	75	52.9
8.8	-98.81	-44.34	-52.97	14.01	83.7	74.7	53.2
8.73	-99.95	-44.19	-52.97	17.86	100.4	73.7	52.8
8.8	-97.34	-44.14	-52.97	-0.43	90.2	74.4	53.1
8.79	-94.64	-44.14	-52.97	-0.4	82.7	74.5	53.2
8.79	-92.44	-44.19	-53.03	20.57	95	74.5	53.8
8.76	-90.16	-44.24	-53	7.36	98.4	74.4	53.4
8.75	-92.44	-44.29	-53.03	17.86	99	74.2	52.9
8.71	-94.92	-44.24	-53.03	18.13	98.5	72.9	53
8.76	-94.73	-44.24	-53.06	-0.4	90.8	73.7	52.7
8.79	-96.29	-44.29	-53.06	-0.37	82.7	74	52.4
8.76	-98.72	-44.34	-53.03	14.07	83.5	73.9	53.4
8.72	-99.04	-44.14	-53.06	17.92	95.3	73.5	52.9
8.72	-96.98	-44.24	-53.12	18.96	95.8	71.8	52.9
8.76	-93.68	-44.19	-53.09	-0.21	91.5	73.1	54
8.79	-91.71	-44.19	-53.09	-0.37	82.1	73.3	53.3
8.79	-90.61	-44.34	-53.12	-0.4	78.5	73.2	54

8.74	-92.49	-44.34	-53.15	21.7	91.2	71.7	53.8
8.74	-94.32	-44.4	-53.18	17.98	93.1	72.5	51.6
8.79	-96.52	-44.4	-53.09	-0.34	82.1	72.6	53.2
8.78	-98.44	-44.34	-53.12	-0.37	78	72.6	52.8
8.74	-99.95	-44.24	-53.12	20.02	86.6	72.5	53.1
8.74	-99.63	-44.24	-53.15	18.89	91.8	72.4	52.3
8.72	-98.99	-44.14	-53.12	18.07	92	71.4	52.9
8.76	-97.12	-44.24	-53.15	-0.37	84.2	71.9	52.9
8.78	-96.15	-44.24	-53.15	-0.37	78.7	72	53
8.78	-93.59	-44.29	-53.15	-0.31	75.7	72	53.3
8.71	-92.12	-44.24	-53.12	20.97	89.8	70.1	53
8.75	-89.84	-44.4	-53.15	7.81	90	71.6	54.2
8.78	-93.13	-44.34	-53.15	-0.31	79.1	71.4	53.2
8.78	-93.13	-44.4	-53.18	-0.31	75.8	71.4	53.1
8.73	-95.28	-44.45	-53.15	18.44	87.9	70.7	52.9
8.75	-97.76	-44.4	-53.15	18.28	88.6	71.2	52.9
8.67	-100.05	-44.29	-53.12	17.98	89.9	70.9	52.3
8.69	-99.77	-44.29	-53.15	18.1	90	70.3	52.8
8.75	-96.93	-44.29	-53.18	-0.34	82.4	70.7	52.8
8.78	-94.6	-44.29	-53.15	-0.34	77.2	70.8	53
8.76	-91.99	-44.29	-53.15	-0.31	74.5	70.7	53.5
8.74	-90.71	-44.29	-53.15	18.07	88.5	70.6	53.5
8.62	-91.62	-44.5	-53.15	18.56	89.4	69	52.5
8.72	-93.13	-44.4	-53.24	-0.31	84.5	70.1	52.9
8.76	-96.06	-44.4	-53.18	-0.31	77.6	70.3	52.9
8.76	-98.17	-44.4	-53.15	-0.34	74.5	70.2	53
8.71	-99.91	-44.29	-53.15	18.25	87	69.9	52.3
8.75	-97.02	-44.29	-53.15	21.76	88.5	69.9	53.1
8.7	-94.37	-44.34	-53.15	18.07	88.6	69.8	52.7
8.76	-92.58	-44.34	-53.15	-0.31	79.9	69.9	53.1
8.76	-89.74	-44.4	-53.18	-0.31	75.6	69.9	53.7
8.78	-91.85	-44.4	-53.21	19.63	85.1	69.5	53.2
8.73	-95.01	-44.5	-53.09	2.01	86.3	69.9	51.7
8.68	-97.21	-44.55	-53.09	18.16	88.1	68.9	52.5
8.72	-99.04	-44.45	-53.18	-0.27	81.6	69.3	52.9
8.74	-99.68	-44.29	-53.18	-0.31	76.1	69.5	53
8.75	-97.62	-44.34	-53.15	-0.31	73.4	69.4	53.2
8.71	-95.05	-44.34	-53.21	18.13	86.4	69.1	52.8
8.69	-92.95	-44.29	-53.21	21.76	88.2	68.5	53.4
8.7	-90.16	-44.24	-53.15	18.01	87.8	69.1	53.4
8.75	-91.44	-44.45	-53.12	-0.31	78.3	69	52.8
8.74	-92.86	-44.45	-53.15	-0.31	74.5	69	52.9
8.7	-95.51	-44.6	-53.15	21.83	85.3	68	51.6
8.71	-98.08	-44.34	-53.21	18.07	87.4	68.7	53
8.73	-99.77	-44.34	-53.18	-0.31	79.3	68.8	52.9
8.74	-98.4	-44.34	-53.15	-0.31	74.8	68.8	53
8.75	-98.17	-44.34	-53.18	-0.27	72.3	68.8	53.1

8.74	-95.92	-44.34	-53.15	-0.27	70.7	68.8	53.1
8.69	-94	-44.34	-53.15	21.79	86.3	67.5	52.7
8.71	-92.95	-44.34	-53.18	18.07	87.4	68.4	53.3
8.75	-91.58	-44.29	-53.18	-0.31	78.5	68.6	53.2
8.76	-90.11	-44.55	-53.18	-0.27	74.4	68.5	53.8
8.74	-92.9	-44.5	-53.18	-0.27	71.9	68.5	53.3
8.74	-95.7	-44.45	-53.21	-0.27	70.2	68.5	53.1
8.74	-97.48	-44.45	-53.21	-0.27	69.3	68.5	52.5
8.7	-97.62	-44.5	-53.18	21.86	83.8	67.5	52.7
8.7	-99.82	-44.4	-53.18	18.1	87	67.9	52.9
8.74	-98.31	-44.34	-53.18	-0.31	79.9	68.2	52.9
8.75	-95.88	-44.34	-53.18	-0.31	74.5	68.3	53
8.75	-93.45	-44.4	-53.18	-0.27	72.1	68.2	53.2
8.74	-90.8	-44.34	-53.18	-0.27	70.4	68.2	53.2
8.74	-91.67	-44.5	-53.18	-0.27	69.2	68.2	52.8
8.7	-94.69	-44.45	-53.18	21.79	84.6	67.2	52.1
8.71	-97.07	-44.55	-53.18	18.04	87	67.9	53
8.75	-99.22	-44.55	-53.18	-0.34	79	68	53.3
8.74	-99.5	-44.4	-53.21	-0.31	74.3	68	52.9
8.74	-97.25	-44.34	-53.21	-0.31	71.9	68.1	52.9
8.75	-94.23	-44.4	-53.21	-0.27	70.2	67.9	53.1
8.74	-92.58	-44.4	-53.21	-0.27	69	67.8	53.4
8.69	-90.25	-44.45	-53.27	21.76	85.7	66.8	52.8
8.71	-90.11	-44.34	-53.21	18.16	86.5	67.9	53
8.76	-92.08	-44.5	-53.21	-0.31	77.2	68.3	53.8
8.76	-93.77	-44.5	-53.24	-0.31	73.5	68.1	52.4
8.75	-95.7	-44.5	-53.21	-0.34	71.2	68	52.8
8.75	-97.94	-44.55	-53.21	-0.31	69.8	68	53
8.73	-99.91	-44.45	-53.21	-0.27	68.9	67.9	52.9
8.71	-97.3	-44.55	-53.27	21.92	83.7	67	52.9
8.69	-95.24	-44.45	-53.24	18.32	87	67.6	52.7
8.75	-93.09	-44.45	-53.24	-0.31	78.9	67.9	53.2
8.76	-90.48	-44.45	-53.27	-0.31	74.2	67.7	53.6
8.76	-91.85	-44.5	-53.24	-0.31	71.5	67.6	53
8.76	-92.72	-44.55	-53.27	-0.27	69.9	67.7	53.4
8.75	-95.74	-44.45	-53.24	14.44	73.1	67.7	52.4
8.7	-97.85	-44.6	-53.3	21.92	86.5	66.6	52.8
8.71	-98.81	-44.55	-53.27	18.25	86.8	68	52.3
8.76	-99.27	-44.45	-53.27	-0.31	76.6	67.9	53
8.76	-98.21	-44.45	-53.27	-0.31	73.1	67.9	53
8.75	-97.62	-44.45	-53.27	-0.31	70.9	67.7	53
8.75	-97.07	-44.45	-53.27	-0.27	69.4	67.9	53
8.75	-94.14	-44.5	-53.3	-0.27	68.6	68.4	53
9.08	-92.9	-44.45	-53.3	22.1	80.6	68.5	52.6
8.71	-90.75	-44.5	-53.3	19.14	86.5	67	52.9
8.89	-89.93	-44.5	-53.33	-0.27	84.4	68.1	53.8
8.78	-91.99	-44.6	-53.3	-0.31	75.7	68.4	53

8.77	-93.82	-44.6	-53.33	-0.31	72.8	68.6	52.9
8.76	-96.47	-44.66	-53.3	-0.27	71	68.6	52.9
8.76	-99.45	-44.55	-53.33	-0.31	69.8	68.6	52.5
8.75	-98.35	-44.5	-53.3	-0.27	68.9	68.5	52.9
8.71	-97.07	-44.5	-53.33	22.04	83	67.3	52.9
8.68	-95.42	-44.45	-53.3	18.59	84.6	67.7	52.9
8.75	-96.25	-44.45	-53.3	-0.31	78.8	67.9	53
8.77	-94.28	-44.5	-53.33	-0.31	73.8	67.7	53.1
8.76	-93.09	-44.5	-53.3	-0.31	71.2	67.6	53.1
8.76	-90.89	-44.45	-53.3	-0.27	69.8	67.5	53.3
8.77	-90.29	-44.71	-53.33	-0.27	68.7	68.2	53.7
8.76	-92.49	-44.55	-53.33	-0.27	68.1	67.9	52.7
8.71	-94.92	-44.6	-53.36	22.1	83.4	66.3	53.1
8.71	-96.02	-44.66	-53.33	18.41	84.2	67.4	48.6
8.76	-98.53	-44.55	-53.36	-0.31	76.4	67.9	52.5
8.77	-98.17	-44.76	-53.33	-0.31	72.8	67.9	53
8.75	-99.63	-44.5	-53.33	-0.27	70.8	67.5	52.8
8.75	-97.07	-44.5	-53.33	-0.27	69.3	67.1	53
8.75	-95.42	-44.5	-53.33	-0.27	68	67.1	53.1
8.75	-93.54	-44.55	-53.33	-0.24	67.5	67.2	52.9
8.74	-91.67	-44.55	-53.3	18.47	84	67.5	53.1
8.72	-90.06	-44.5	-53.33	19.47	85.7	66.2	53.1
8.85	-91.58	-44.66	-53.36	-0.18	83.1	67.3	52.5
8.76	-94.32	-44.66	-53.33	-0.27	73.3	66	53.2
8.77	-97.02	-44.6	-53.36	-0.27	70.2	66.9	52.8
8.84	-99.13	-44.66	-53.36	-0.27	69.2	66.7	52.7
8.6	-98.86	-44.5	-53.3	19.2	85	65.7	53.3
8.71	-96.29	-44.55	-53.33	-0.31	82	66.7	52.8
8.78	-73.12	-44.55	-53.33	-0.31	74.3	67	55.8
8.78	-68.41	-44.55	-53.33	-0.27	71.4	67.2	57.9
8.78	-66.25	-44.5	-53.33	-0.27	69.9	66.6	59.4
8.78	-64.56	-44.5	-53.33	-0.24	68.4	66.8	60.9
8.76	-63.1	-44.5	-53.33	-0.27	67.6	66.8	61.9
8.76	-62	-44.45	-53.33	-0.24	66.9	66.8	63.1
8.75	-61.22	-44.45	-53.36	-0.24	66.7	66.8	64.2
8.75	-60.49	-44.45	-53.36	-0.24	66.4	66.8	64.7
8.75	-59.84	-44.45	-53.33	-0.24	66.2	66.8	65.6
8.75	-59.39	-44.4	-53.33	-0.24	66	66.8	65.8
8.74	-59.07	-44.4	-53.33	-0.24	65.9	66.7	66.3
8.74	-58.65	-44.4	-53.33	-0.21	65.8	66.7	66.8
8.74	-58.42	-44.4	-53.33	-0.24	65.8	66.6	66.9
8.74	-58.2	-44.34	-53.33	-0.24	65.8	66.7	67.1
8.74	-58.01	-44.34	-53.33	-0.24	65.8	66.6	67.4
8.74	-57.83	-44.29	-53.33	-0.24	65.7	66.6	67.5
8.74	-57.65	-44.29	-53.36	-0.24	65.7	66.6	67.9
8.74	-57.46	-44.29	-53.36	-0.24	65.6	66.5	68
8.74	-57.28	-44.29	-53.33	-0.24	65.5	66.5	68.1

8.74	-57.14	-44.29	-53.36	-0.24	65.6	66.5	68.1
8.73	-57.01	-44.29	-53.36	-0.24	65.6	66.5	68.4
8.73	-56.87	-44.29	-53.36	-0.24	65.5	66.4	68.3
8.73	-56.73	-44.24	-53.36	-0.24	65.4	66.4	68.3
8.73	-56.59	-44.19	-53.36	-0.24	65.4	66.4	68.3
8.72	-56.5	-44.19	-53.36	-0.24	65.4	66.3	68.3
8.72	-56.36	-44.19	-53.36	-0.24	65.4	66.3	68.2
8.72	-56.27	-44.19	-53.33	-0.24	65.4	66.3	68.5
8.71	-56.18	-44.14	-53.33	-0.24	65.3	66.3	68.5
8.71	-56.09	-44.14	-53.33	-0.24	65.1	66.2	68.4
8.71	-56	-44.14	-53.33	-0.24	65.3	66.2	68.4
8.71	-55.91	-44.14	-53.33	-0.24	65.3	66.1	68.2
8.71	-55.86	-44.14	-53.3	-0.24	65.1	66.1	68.1
8.71	-55.77	-44.14	-53.27	-0.24	65.1	66.1	68.1
8.7	-55.72	-44.14	-53.3	-0.27	65.1	66	68
8.7	-55.68	-44.08	-53.27	-0.24	65	66	68
8.69	-55.54	-44.08	-53.3	-0.24	65	66	67.8
8.7	-55.49	-44.08	-53.27	-0.24	65	66	67.9
8.7	-55.4	-44.08	-53.3	-0.27	65	66	67.9
8.68	-55.36	-44.08	-53.27	-0.24	65	65.9	67.5
8.69	-55.31	-43.98	-53.24	-0.24	65	65.9	67.4
8.68	-55.27	-43.98	-53.27	-0.24	65	65.8	67.5
8.69	-55.22	-43.98	-53.27	-0.24	65	65.8	67.5
8.69	-55.13	-43.98	-53.24	-0.27	64.9	65.8	67.3
8.68	-55.08	-43.98	-53.24	-0.24	65	65.8	67.2
8.68	-55.08	-43.98	-53.24	-0.24	64.9	65.7	67.1
8.68	-55.04	-43.93	-53.21	-0.24	64.9	65.7	66.8
8.67	-54.95	-43.93	-53.21	-0.24	64.8	65.6	66.8
8.68	-54.95	-43.93	-53.21	-0.24	64.9	65.7	66.7
8.66	-54.9	-43.88	-53.21	-0.24	64.8	65.5	66.4
8.66	-54.85	-43.88	-53.21	-0.24	64.8	65.5	66.3
8.66	-54.81	-43.88	-53.18	-0.24	64.8	65.5	66.3
8.66	-54.76	-43.88	-53.18	-0.24	64.7	65.5	66.2
8.66	-54.76	-43.88	-53.18	-0.24	64.7	65.4	66
8.65	-54.72	-43.88	-53.18	-0.21	64.7	65.4	65.8
8.65	-54.72	-43.88	-53.18	-0.24	64.7	65.3	66
8.65	-54.67	-43.83	-53.18	-0.24	64.6	65.3	65.7
8.65	-54.62	-43.88	-53.18	-0.24	64.6	65.2	65.4
8.65	-54.62	-43.83	-53.18	-0.24	64.6	65.1	65.2
8.65	-54.58	-43.83	-53.15	-0.24	64.5	65	64.9
8.65	-54.53	-43.83	-53.15	-0.21	64.5	64.9	65
8.65	-54.53	-43.77	-53.15	-0.21	64.4	64.9	64.8
8.65	-54.44	-43.83	-53.12	-0.24	64.4	64.9	64.5
8.65	-54.4	-43.77	-53.15	-0.24	64.3	64.9	64.7
8.65	-54.4	-43.77	-53.12	-0.24	64.3	64.8	64.2
8.65	-54.35	-43.77	-53.12	-0.24	64.3	64.7	64.2
8.63	-54.35	-43.77	-53.12	-0.24	64.2	64.7	63.9

8.63	-54.3	-43.77	-53.09	-0.24	64.2	64.7	63.9
8.63	-54.26	-43.72	-53.09	-0.21	64	64.7	63.6
8.63	-54.26	-43.72	-53.09	-0.24	63.9	64.5	63.6
8.63	-54.26	-43.72	-53.09	-0.24	63.8	64.4	63.2
8.64	-54.21	-43.72	-53.09	-0.21	63.7	64.5	63
8.63	-54.21	-43.72	-53.06	-0.18	63.7	64.4	63
8.62	-54.17	-43.72	-53.06	-0.24	63.6	64.4	62.6
8.62	-54.17	-43.67	-53.06	-0.21	63.6	64.3	62.6
8.62	-54.12	-43.67	-53.06	-0.21	63.6	64.2	62.4
8.63	-54.12	-43.67	-53.03	-0.21	63.6	64.3	62.4
8.62	-54.08	-43.67	-53.03	-0.21	63.6	64.1	62.3
8.62	-54.08	-43.67	-53.03	-0.24	63.6	64.1	62.1
8.62	-54.03	-43.67	-53.03	-0.21	63.6	64	61.9
8.63	-54.03	-43.67	-53.03	-0.21	63.6	64	61.7
8.62	-54.03	-43.67	-53.03	-0.21	63.6	63.9	61.7
8.62	-54.03	-43.62	-53.03	-0.21	63.6	63.9	61.2
8.62	-53.94	-43.62	-53	-0.21	63.6	63.9	60.9
8.62	-53.94	-43.62	-53	-0.21	63.5	63.9	60.9
8.62	-53.94	-43.62	-52.97	-0.21	63.5	63.8	60.8
8.62	-53.94	-43.62	-53	-0.21	63.5	63.7	60.5
8.62	-53.94	-43.62	-53	-0.21	63.4	63.7	60.4
8.62	-53.89	-43.57	-53	-0.21	63.4	63.7	60.2
8.62	-53.89	-43.62	-52.97	-0.21	63.4	63.7	60.1
8.62	-53.89	-43.62	-52.97	-0.21	63.3	63.7	59.9
8.61	-53.89	-43.57	-52.97	-0.21	63.3	63.6	60.1
8.61	-53.85	-43.57	-52.97	-0.21	63.3	63.6	59.9
8.61	-53.85	-43.57	-52.97	-0.21	63.3	63.6	59.8
8.61	-53.85	-43.62	-52.97	-0.24	63.3	63.6	59.7
8.61	-53.8	-43.62	-52.97	-0.21	63.3	63.6	60.1
8.61	-53.8	-43.57	-52.97	-0.21	63.3	63.6	59.8
8.61	-53.8	-43.57	-52.97	-0.21	63.3	63.7	60.3
8.61	-53.8	-43.57	-52.94	-0.21	63.2	63.6	60.3
8.59	-53.75	-43.57	-52.94	-0.21	63.2	63.6	60.3
8.6	-53.75	-43.57	-52.97	-0.21	63.2	63.6	60.4
8.59	-53.75	-43.57	-52.97	-0.24	63.2	63.6	60.7
8.59	-53.75	-43.57	-52.94	-0.21	63.2	63.7	61.2
8.59	-53.71	-43.57	-52.94	-0.21	63.1	63.6	61.4
8.6	-53.71	-43.51	-52.94	-0.21	63.2	63.7	61.4
8.59	-53.66	-43.57	-52.94	-0.21	63.3	63.7	61.4
8.6	-53.66	-43.51	-52.94	-0.24	63.2	63.7	61.9
8.6	-53.66	-43.57	-52.94	-0.21	63.3	63.7	62
8.6	-53.66	-43.51	-52.91	-0.21	63.3	63.8	62.1
8.59	-53.62	-43.51	-52.91	-0.24	63.3	63.8	62.7
8.59	-53.62	-43.51	-52.94	-0.24	63.3	63.8	62.7
8.58	-53.57	-43.51	-52.91	-0.24	63.4	63.9	63.1
8.58	-53.57	-43.46	-52.91	-0.21	63.3	64	63.3
8.58	-53.57	-43.46	-52.91	-0.24	63.3	64	63.6

8.59	-53.57	-43.46	-52.88	-0.24	63.3	64	64.2
8.58	-53.57	-43.46	-52.88	-0.24	63.4	64.1	64.4
8.59	-53.53	-43.46	-52.88	-0.24	63.3	64.2	64.7
8.57	-53.53	-43.46	-52.84	-0.21	63.4	64.3	65
8.57	-53.53	-43.46	-52.84	-0.24	63.4	64.4	65.3
8.57	-53.48	-43.46	-52.84	-0.24	63.5	64.5	65.8
8.57	-53.48	-43.41	-52.84	-0.24	63.5	64.5	66.1
8.57	-53.48	-43.41	-52.78	-0.24	63.5	64.7	66.3
8.57	-53.48	-43.41	-52.78	-0.24	63.5	64.7	66.7
8.57	-53.43	-43.41	-52.78	-0.24	63.5	64.7	67
8.57	-53.43	-43.41	-52.75	-0.24	63.6	64.7	67.2
8.57	-53.39	-43.41	-52.75	-0.24	63.6	64.7	67.4
8.57	-53.39	-43.36	-52.75	-0.24	63.6	64.8	67.8
8.57	-53.39	-43.36	-52.75	-0.24	63.6	64.9	68.1
8.57	-53.39	-43.36	-52.75	-0.24	63.7	65	68.4
8.57	-53.3	-43.36	-52.75	-0.27	63.7	65	68.6
8.57	-53.3	-43.36	-52.72	-0.24	63.8	65	68.6
8.56	-53.3	-43.36	-52.72	-0.24	63.8	65.1	68.8
8.56	-53.25	-43.36	-52.72	-0.24	63.8	65.2	69.2
8.56	-53.3	-43.31	-52.72	-0.27	63.9	65.2	69.2
8.56	-53.25	-43.31	-52.69	-0.27	63.9	65.3	69.6
8.56	-53.25	-43.31	-52.69	-0.27	64	65.3	69.6
8.56	-53.21	-43.31	-52.69	-0.27	64	65.4	70.1
8.56	-53.21	-43.25	-52.69	-0.27	64.1	65.4	70.1
8.56	-53.21	-43.25	-52.69	-0.27	64	65.4	70.2
8.56	-53.16	-43.31	-52.66	-0.27	64.3	65.5	70.4
8.56	-53.16	-43.25	-52.66	-0.27	64.3	65.5	70.4
8.56	-53.16	-43.25	-52.66	-0.27	64.3	65.6	70.6
8.56	-53.16	-43.25	-52.63	-0.27	64.5	65.6	70.7
8.56	-53.16	-43.2	-52.63	-0.27	64.5	65.7	71
8.56	-53.11	-43.2	-52.6	-0.27	64.5	65.7	70.9
8.56	-53.11	-43.25	-52.6	-0.27	64.5	65.7	71
8.56	-53.11	-43.2	-52.63	-0.24	64.6	65.8	71
8.56	-53.11	-43.25	-52.6	-0.31	64.6	65.8	71.2
8.56	-53.11	-43.2	-52.6	-0.27	64.5	65.8	71.2
8.56	-53.07	-43.2	-52.6	-0.27	64.6	65.8	71.2
8.56	-53.07	-43.2	-52.6	-0.27	64.5	65.8	71.3
8.56	-53.07	-43.2	-52.6	-0.27	64.6	65.8	71.2
8.56	-53.02	-43.15	-52.6	-0.24	64.7	65.8	71.3
8.56	-53.02	-43.15	-52.57	-0.27	64.7	65.8	71.2
8.55	-53.02	-43.1	-52.57	-0.27	64.7	65.8	71.1
8.54	-53.02	-43.1	-52.57	-0.27	64.7	65.8	71.1
8.55	-53.02	-43.15	-52.57	-0.27	64.7	65.8	71
8.54	-52.98	-43.1	-52.54	-0.27	64.8	65.8	71.1
8.54	-52.98	-43.1	-52.54	-0.27	64.7	65.8	71
8.54	-52.98	-43.1	-52.54	-0.27	64.7	65.8	70.9
8.55	-52.98	-43.1	-52.54	-0.27	64.7	65.8	70.8

8.54	-52.98	-43.1	-52.54	-0.27	64.7	65.8	70.8
8.54	-52.98	-43.1	-52.54	-0.27	64.7	65.8	70.6
8.55	-52.93	-43.1	-52.54	-0.27	64.7	65.8	70.7
8.54	-52.93	-43.1	-52.51	-0.27	64.7	65.8	70.4
8.54	-52.93	-43.1	-52.51	-0.27	64.7	65.8	70.4
8.54	-52.93	-43.05	-52.51	-0.24	64.8	65.8	70.4
8.54	-52.88	-43.05	-52.51	-0.27	64.8	65.8	70.2
8.55	-52.88	-43.05	-52.48	-0.27	64.8	65.8	70.3
8.54	-52.88	-43.05	-52.48	-0.27	64.8	65.8	70.1
8.54	-52.88	-43.05	-52.48	-0.27	64.8	65.8	70
8.53	-52.88	-43.05	-52.48	-0.27	64.7	65.8	69.6
8.53	-52.88	-42.99	-52.48	-0.27	64.8	65.8	69.5
8.53	-52.88	-43.05	-52.48	-0.27	64.8	65.8	69.6
8.54	-52.84	-42.99	-52.48	-0.24	64.8	65.8	69.4
8.53	-52.84	-43.05	-52.48	-0.27	64.8	65.8	69.2
8.54	-52.84	-42.99	-52.45	-0.27	64.8	65.8	69.1
8.54	-52.84	-43.05	-52.45	-0.27	64.8	65.7	69.2
8.53	-52.84	-42.99	-52.45	-0.24	64.7	65.7	69
8.53	-52.79	-42.99	-52.45	-0.27	64.7	65.7	68.9
8.54	-52.84	-42.99	-52.45	-0.27	64.7	65.7	68.7
8.53	-52.84	-42.99	-52.45	-0.27	64.7	65.7	68.8
8.53	-52.79	-42.99	-52.45	-0.27	64.7	65.7	68.6
8.53	-52.79	-42.99	-52.42	-0.24	64.7	65.7	68.5
8.53	-52.79	-42.99	-52.45	-0.24	64.7	65.6	68.5
8.53	-52.75	-42.94	-52.42	-0.24	64.7	65.6	68.4
8.53	-52.79	-42.94	-52.42	-0.24	64.7	65.7	68.2
8.53	-52.75	-42.94	-52.42	-0.27	64.7	65.6	68
8.53	-52.75	-42.94	-52.42	-0.24	64.7	65.6	68
8.53	-52.75	-42.94	-52.42	-0.24	64.7	65.6	67.9
8.53	-52.75	-42.94	-52.42	-0.27	64.7	65.6	67.9
8.53	-52.75	-42.94	-52.42	-0.27	64.7	65.5	67.7
8.53	-52.75	-42.94	-52.36	-0.27	64.7	65.5	67.9
8.53	-52.75	-42.89	-52.39	-0.27	64.7	65.5	67.7
8.53	-52.7	-42.94	-52.36	-0.24	64.7	65.5	67.4
8.53	-52.7	-42.89	-52.36	-0.24	64.7	65.5	67.7
8.53	-52.7	-42.89	-52.36	-0.27	64.7	65.4	67.3
8.52	-52.66	-42.89	-52.36	-0.27	64.6	65.4	67.1
8.52	-52.66	-42.89	-52.33	-0.27	64.6	65.4	67.1
8.52	-52.61	-42.89	-52.36	-0.27	64.6	65.4	67.1
8.52	-52.61	-42.89	-52.36	-0.27	64.6	65.4	66.9
8.52	-52.66	-42.84	-52.33	-0.27	64.6	65.3	66.9
8.52	-52.61	-42.89	-52.33	-0.27	64.6	65.3	66.9
8.52	-52.61	-42.84	-52.33	-0.27	64.6	65.3	66.7
8.51	-52.61	-42.89	-52.3	-0.24	64.5	65.3	66.8
8.51	-52.61	-42.84	-52.3	-0.24	64.5	65.3	66.8
8.52	-52.56	-42.74	-52.26	-0.27	64.5	65.3	66.5
8.51	-52.56	-42.74	-52.3	-0.27	64.5	65.3	66.5

8.51	-52.56	-42.84	-52.26	-0.27	64.5	65.2	66.4
8.52	-52.56	-42.84	-52.26	-0.24	64.4	65.2	66.5
8.51	-52.56	-42.84	-52.26	-0.27	64.4	65.2	66.4
8.51	-52.56	-42.84	-52.26	-0.27	64.4	65.2	66.4
8.52	-52.52	-42.74	-52.23	-0.27	64.4	65.2	66
8.51	-52.52	-42.74	-52.23	-0.27	64.3	65.1	66.1
8.51	-52.52	-42.68	-52.23	-0.27	64.4	65.1	66.1
8.51	-52.47	-42.74	-52.23	-0.27	64.3	65.1	66
8.5	-52.47	-42.74	-52.2	-0.27	64.3	65.1	66.1
8.5	-52.47	-42.68	-52.2	-0.27	64.3	65.1	66
8.5	-52.47	-42.74	-52.2	-0.27	64.3	65.1	65.9
8.5	-52.47	-42.74	-52.2	-0.27	64.3	65.1	65.8
8.51	-52.47	-42.68	-52.2	-0.27	64.3	65.1	65.8
8.5	-52.47	-42.68	-52.2	-0.27	64.3	65.1	65.7
8.5	-52.47	-42.68	-52.2	-0.27	64.3	65.1	65.7
8.5	-52.43	-42.68	-52.17	-0.24	64.3	65.1	65.6
8.51	-52.43	-42.68	-52.2	-0.24	64.2	65	65.8
8.5	-52.43	-42.68	-52.17	-0.27	64.2	65	65.6
8.5	-52.43	-42.68	-52.17	-0.27	64.2	65	65.6
8.51	-52.38	-42.68	-52.17	-0.24	64.2	65	65.4
8.51	-52.43	-42.68	-52.17	-0.27	64.2	65	65.4
8.51	-52.38	-42.63	-52.14	-0.27	64.2	65	65.4
8.51	-52.38	-42.63	-52.14	-0.27	64.2	65	65.1
8.5	-52.43	-42.63	-52.14	-0.27	64.2	65	65.4
8.5	-52.43	-42.63	-52.17	-0.27	64.1	64.9	65.1
8.51	-52.43	-42.63	-52.14	-0.27	64.1	64.9	65.2
8.5	-52.38	-42.63	-52.14	-0.24	64.2	65	65.2
8.5	-52.38	-42.63	-52.14	-0.27	64.2	65	65.1
8.5	-52.38	-42.58	-52.14	-0.27	64.2	65	65.1
8.5	-52.34	-42.63	-52.14	-0.27	64.2	65	65.2
8.5	-52.38	-42.63	-52.14	-0.27	64.2	64.9	65.2
8.5	-52.38	-42.63	-52.11	-0.27	64.2	65	65.1
8.5	-52.38	-42.63	-52.11	-0.27	64.2	65	65.2
8.5	-52.34	-42.58	-52.11	-0.27	64.2	65	65.1
8.5	-52.38	-42.58	-52.11	-0.27	64.2	65	65.3
8.5	-52.38	-42.58	-52.11	-0.27	64.1	65	65.3
8.5	-52.43	-42.58	-52.11	-0.27	64.3	65	65.2
8.5	-52.43	-42.58	-52.08	-0.27	64.2	65	65.3
8.5	-52.43	-42.58	-52.08	-0.27	64.2	64.9	65.3
8.5	-52.43	-42.58	-52.08	-0.27	64.2	65.1	65.3
8.5	-52.43	-42.58	-52.08	-0.27	64.2	65	65.2
8.5	-52.47	-42.58	-52.08	-0.27	64.2	65	65.3
8.5	-52.47	-42.53	-52.08	-0.27	64.2	65	65.6
8.5	-52.47	-42.53	-52.08	-0.27	64.1	65.1	65.4
8.48	-52.47	-42.53	-52.02	-0.27	64.1	65	65.3
8.48	-52.52	-42.58	-52.02	-0.27	64.2	65	65.6
8.48	-52.52	-42.53	-52.02	-0.27	64.2	65	65.8

8.48	-52.52	-42.53	-52.02	-0.31	64.2	65.1	65.7
8.48	-52.52	-42.53	-52.02	-0.31	64.2	65.1	65.6
8.48	-52.52	-42.53	-52.02	-0.31	64.2	65	65.7
8.48	-52.56	-42.53	-52.02	-0.27	64.2	65.1	65.8
8.48	-52.52	-42.53	-52.02	-0.31	64.2	65.2	65.8
8.48	-52.56	-42.48	-52.02	-0.31	64.2	65.1	65.8
8.48	-52.52	-42.53	-51.99	-0.27	64.1	65.1	65.9
8.48	-52.52	-42.53	-51.99	-0.27	64.1	65.1	65.8
8.48	-52.52	-42.48	-51.99	-0.27	64.1	65.1	66.1
8.48	-52.52	-42.48	-51.99	-0.27	64.2	65.1	66.1
8.48	-52.52	-42.48	-51.99	-0.27	64.2	65.2	66.1
8.48	-52.47	-42.48	-51.96	-0.27	64.2	65.3	66.1
8.48	-52.47	-42.48	-51.96	-0.31	64.2	65.2	66.3
8.48	-52.52	-42.42	-51.96	-0.27	64.2	65.2	66.5
8.48	-52.52	-42.42	-51.96	-0.27	64.2	65.2	66.4
8.48	-52.47	-42.42	-51.96	-0.27	64.2	65.2	66.5
8.48	-52.47	-42.42	-51.96	-0.27	64.2	65.3	66.6
8.48	-52.47	-42.37	-51.93	-0.27	64.3	65.2	66.6
8.48	-52.47	-42.48	-51.93	-0.27	64.2	65.3	66.8
8.48	-52.43	-42.42	-51.93	-0.31	64.3	65.3	66.9
8.48	-52.47	-42.42	-51.9	-0.31	64.3	65.3	67
8.48	-52.43	-42.37	-51.9	-0.27	64.3	65.4	67
8.48	-52.43	-42.42	-51.9	-0.27	64.2	65.4	67.2
8.48	-52.43	-42.37	-51.9	-0.27	64.3	65.4	67.3
8.48	-52.43	-42.37	-51.9	-0.27	64.3	65.4	67.4
8.47	-52.43	-42.37	-51.9	-0.31	64.3	65.4	67.4
8.47	-52.43	-42.37	-51.9	-0.27	64.3	65.5	67.7
8.47	-52.43	-42.37	-51.87	-0.27	64.4	65.5	67.5
8.47	-52.43	-42.37	-51.87	-0.27	64.4	65.6	67.9
8.47	-52.38	-42.32	-51.87	-0.27	64.4	65.5	67.8
8.47	-52.38	-42.32	-51.87	-0.31	64.4	65.6	67.9
8.47	-52.38	-42.32	-51.87	-0.31	64.5	65.6	67.7
8.47	-52.38	-42.32	-51.84	-0.31	64.4	65.7	68
8.47	-52.38	-42.32	-51.84	-0.27	64.5	65.7	68.2
8.47	-52.38	-42.32	-51.84	-0.27	64.5	65.7	68.1
8.47	-52.38	-42.32	-51.84	-0.31	64.6	65.7	68.3
8.47	-52.34	-42.32	-51.84	-0.27	64.6	65.8	68.2
8.47	-52.38	-42.32	-51.81	-0.31	64.6	65.8	68.2
8.47	-52.34	-42.32	-51.81	-0.31	64.6	65.8	68.3
8.47	-52.34	-42.27	-51.81	-0.31	64.7	65.8	68.5
8.47	-52.34	-42.27	-51.84	-0.31	64.6	65.8	68.2
8.47	-52.34	-42.27	-51.81	-0.31	64.6	65.8	68.3
8.47	-52.34	-42.27	-51.81	-0.34	64.7	65.8	68.2
8.47	-52.29	-42.27	-51.81	-0.31	64.7	65.8	68.5
8.47	-52.34	-42.27	-51.81	-0.31	64.7	65.9	68.5
8.47	-52.29	-42.27	-51.78	-0.31	64.7	65.9	68.5
8.47	-52.29	-42.27	-51.81	-0.31	64.7	65.9	68.2

8.47	-52.29	-42.22	-51.78	-0.31	64.7	65.9	68.3
8.47	-52.29	-42.27	-51.78	-0.31	64.7	66	68.5
8.47	-52.29	-42.22	-51.75	-0.31	64.7	65.9	68.5
8.47	-52.29	-42.22	-51.78	-0.31	64.8	66	68.2
8.47	-52.29	-42.27	-51.78	-0.31	64.8	66	68.3
8.47	-52.29	-42.22	-51.78	-0.31	64.7	66	68.5
8.47	-52.29	-42.22	-51.75	-0.31	64.8	66	68.3
8.47	-52.2	-42.27	-51.75	-0.31	64.8	66	68.5
8.47	-52.29	-42.22	-51.75	-0.31	64.8	66	68.5
8.47	-52.29	-42.22	-51.75	-0.31	64.8	66	68.4
8.47	-52.2	-42.27	-51.75	-0.31	64.9	66	68.4
8.47	-52.2	-42.22	-51.75	-0.31	64.9	66	68.5
8.47	-52.2	-42.22	-51.75	-0.31	64.8	66.1	68.4
8.47	-52.2	-42.22	-51.72	-0.31	64.9	66.1	68.4
8.46	-52.2	-42.22	-51.75	-0.34	64.9	66.2	68.4
8.47	-52.2	-42.22	-51.75	-0.31	64.9	66.1	68.3
8.47	-52.29	-42.22	-51.75	-0.31	64.9	66.1	68.4
8.47	-52.2	-42.22	-51.72	-0.31	64.9	66.1	68.1
8.47	-52.2	-42.22	-51.72	-0.31	64.9	66.1	68.4
8.46	-52.2	-42.22	-51.72	-0.31	64.9	66.1	68.3
8.47	-52.2	-42.22	-51.72	-0.34	64.9	66.1	68
8.47	-52.15	-42.16	-51.72	-0.34	64.9	66.1	68.3
8.46	-52.2	-42.16	-51.72	-0.34	65	66.1	68
8.47	-52.2	-42.16	-51.68	-0.34	64.9	66.1	67.9
8.47	-52.2	-42.22	-51.72	-0.34	64.8	66.1	68.1
8.47	-52.15	-42.16	-51.72	-0.34	64.9	66.1	68.1
8.47	-52.15	-42.16	-51.68	-0.31	64.8	66.2	68.2
8.47	-52.15	-42.16	-51.68	-0.31	64.9	66.2	67.9
8.47	-52.15	-42.16	-51.68	-0.31	65	66.1	68
8.45	-52.15	-42.16	-51.68	-0.31	65.1	66.1	67.9
8.45	-52.15	-42.16	-51.68	-0.31	65	66.1	67.9
8.45	-52.15	-42.16	-51.68	-0.31	64.9	66.1	68
8.45	-52.15	-42.11	-51.68	-0.31	65	66.1	67.9
8.45	-52.15	-42.16	-51.68	-0.31	65	66.2	68
8.45	-52.15	-42.11	-51.68	-0.31	65	66.1	67.8
8.45	-52.15	-42.11	-51.68	-0.31	65	66.1	67.9
8.45	-52.11	-42.11	-51.68	-0.31	65	66.2	67.7
8.45	-52.11	-42.11	-51.65	-0.31	65	66.2	67.5
8.45	-52.11	-42.11	-51.65	-0.31	65	66.2	67.5
8.45	-52.11	-42.16	-51.65	-0.34	65	66.1	67.4
8.45	-52.11	-42.11	-51.65	-0.31	65	66.1	67.5
8.45	-52.11	-42.11	-51.65	-0.31	65.1	66.1	67.5
8.45	-52.11	-42.06	-51.65	-0.31	65	66.1	67.4
8.45	-52.11	-42.06	-51.62	-0.34	65	66.1	67.4
8.46	-52.11	-42.11	-51.62	-0.31	65	66.1	67.3
8.45	-52.11	-42.11	-51.62	-0.31	65	66	67.1
8.45	-52.11	-42.11	-51.62	-0.31	65	66.1	67.3

8.45	-52.06	-42.06	-51.62	-0.34	65	66	67.3
8.45	-52.06	-42.11	-51.62	-0.31	65.1	66	66.9
8.45	-52.06	-42.11	-51.62	-0.31	65.1	66	66.9
8.45	-52.06	-42.11	-51.62	-0.34	65	66	66.9
8.45	-52.11	-42.06	-51.59	-0.31	65	66	66.9
8.45	-52.06	-42.06	-51.59	-0.31	65	66	66.8
8.45	-52.06	-42.06	-51.62	-0.31	65	66	66.9
8.44	-52.06	-42.06	-51.59	-0.34	65	66	66.8
8.44	-52.01	-42.11	-51.59	-0.31	65.1	66	66.8
8.44	-52.06	-42.11	-51.59	-0.34	65	65.9	66.7
8.44	-52.06	-42.06	-51.59	-0.31	65	66	66.7
8.44	-52.06	-42.06	-51.59	-0.34	65	65.9	66.7
8.44	-52.01	-42.06	-51.59	-0.34	65	66	66.4
8.44	-52.06	-42.06	-51.59	-0.31	65	65.9	66.5
8.44	-52.06	-42.06	-51.56	-0.31	65	65.9	66.5
8.44	-52.01	-42.06	-51.59	-0.31	65	65.9	66.4
8.44	-52.01	-42.06	-51.59	-0.31	65	65.9	66.3
8.44	-52.06	-42.01	-51.56	-0.31	65	65.9	66.3
8.44	-52.01	-42.06	-51.56	-0.34	65	65.9	66.3
8.44	-52.01	-42.01	-51.56	-0.31	64.9	65.8	66.2
8.44	-52.01	-42.01	-51.56	-0.31	65	65.8	66.3
8.44	-52.01	-42.06	-51.59	-0.31	65	65.8	66.3
8.44	-52.01	-42.01	-51.56	-0.31	64.9	65.8	66.2
8.44	-52.01	-42.01	-51.56	-0.31	65	65.8	66
8.44	-51.97	-42.01	-51.56	-0.31	64.9	65.8	66.1
8.44	-52.01	-41.96	-51.56	-0.34	64.9	65.9	66
8.44	-52.01	-41.96	-51.56	-0.31	64.9	65.8	66
8.44	-52.01	-42.01	-51.53	-0.34	64.9	65.8	66
8.44	-51.97	-42.01	-51.53	-0.34	64.9	65.8	66
8.44	-52.01	-41.96	-51.56	-0.34	64.9	65.8	65.9
8.44	-52.01	-42.01	-51.53	-0.31	64.8	65.8	65.8
8.44	-52.01	-41.96	-51.53	-0.31	64.8	65.8	65.9
8.44	-52.01	-42.01	-51.53	-0.34	64.8	65.8	66.1
8.44	-51.97	-42.01	-51.53	-0.31	64.8	65.8	66.1
8.44	-52.01	-42.01	-51.53	-0.34	64.8	65.8	66.1
8.44	-51.97	-42.01	-51.53	-0.34	64.8	65.7	65.9
8.44	-52.01	-41.96	-51.5	-0.31	64.7	65.8	65.9
8.44	-51.97	-42.01	-51.53	-0.31	64.8	65.8	65.9
8.44	-51.97	-41.96	-51.5	-0.31	64.8	65.7	66.1
8.44	-51.97	-41.96	-51.53	-0.31	64.7	65.8	65.8
8.44	-51.97	-42.01	-51.53	-0.31	64.7	65.8	65.9
8.44	-51.97	-42.01	-51.53	-0.31	64.7	65.8	65.9
8.44	-51.97	-41.96	-51.53	-0.31	64.7	65.8	66.3
8.44	-51.97	-42.01	-51.5	-0.31	64.7	65.8	66.1
8.43	-51.97	-42.01	-51.5	-0.34	64.7	65.8	66.3
8.43	-51.97	-41.96	-51.5	-0.34	64.7	65.8	66.5
8.44	-51.97	-41.96	-51.53	-0.34	64.7	65.8	66.5

8.44	-51.97	-41.96	-51.5	-0.34	64.7	65.8	66.8
8.44	-51.97	-42.01	-51.5	-0.31	64.7	65.8	66.9
8.44	-51.97	-41.96	-51.5	-0.31	64.7	65.9	67
8.44	-51.97	-41.96	-51.5	-0.34	64.7	65.9	67.5
8.44	-51.97	-41.96	-51.5	-0.34	64.7	66	67.5
8.44	-51.92	-41.96	-51.5	-0.31	64.8	66	68
8.44	-51.92	-41.96	-51.5	-0.31	64.7	66	68.1
8.44	-51.92	-41.96	-51.5	-0.31	64.7	66.1	68.8
8.44	-51.97	-41.96	-51.5	-0.34	64.8	66.1	69
8.44	-51.92	-41.96	-51.47	-0.34	64.8	66.2	69.1
8.44	-51.92	-41.96	-51.47	-0.31	64.8	66.3	69.4
8.44	-51.92	-41.96	-51.44	-0.34	64.9	66.3	69.9
8.44	-51.92	-41.96	-51.47	-0.34	64.9	66.4	70.1
8.44	-51.92	-41.96	-51.44	-0.34	65	66.4	70.6
8.43	-51.92	-41.96	-51.44	-0.34	65	66.6	71
8.43	-51.88	-41.96	-51.44	-0.34	65	66.6	71.3
8.43	-51.88	-41.96	-51.44	-0.34	65.1	66.7	71.7
8.42	-51.88	-41.96	-51.44	-0.34	65.1	66.8	72.1
8.43	-51.88	-41.96	-51.41	-0.34	65.3	66.9	72.3
8.44	-51.88	-41.96	-51.41	-0.34	65.3	66.9	72.6
8.44	-51.88	-41.91	-51.41	-0.34	65.4	67	73
8.44	-51.88	-41.91	-51.41	-0.34	65.4	67.1	73.4
8.44	-51.83	-41.91	-51.41	-0.34	65.4	67.2	73.6
8.44	-51.88	-41.91	-51.41	-0.34	65.6	67.3	73.7
8.44	-51.83	-41.91	-51.41	-0.34	65.6	67.3	74.2
8.44	-51.83	-41.91	-51.41	-0.34	65.7	67.4	74.5
8.43	-51.83	-41.91	-51.41	-0.37	65.7	67.5	74.5
8.43	-51.83	-41.91	-51.41	-0.34	65.7	67.6	74.8
8.42	-51.83	-41.85	-51.41	-0.34	65.8	67.6	74.8
8.43	-51.83	-41.85	-51.41	-0.34	65.8	67.6	74.9
8.43	-51.79	-41.85	-51.41	-0.34	65.8	67.7	75.3
8.43	-51.83	-41.85	-51.41	-0.34	65.9	67.8	75.4
8.44	-51.79	-41.85	-51.41	-0.34	66	67.8	75.5
8.44	-51.79	-41.85	-51.41	-0.37	65.9	67.9	75.5
8.44	-51.79	-41.8	-51.41	-0.34	65.9	67.9	75.5
8.44	-51.79	-41.8	-51.41	-0.34	66	67.9	75.7
8.44	-51.79	-41.8	-51.41	-0.37	66.1	68	75.7
8.44	-51.79	-41.85	-51.41	-0.37	66.1	68	75.8
8.44	-51.79	-41.8	-51.41	-0.37	66.1	68	75.9
8.44	-51.79	-41.85	-51.41	-0.37	66.2	68.2	76.1
8.44	-51.79	-41.85	-51.41	-0.34	66.2	68.2	76.2
8.44	-51.79	-41.8	-51.41	-0.37	66.2	68.3	76.2
8.44	-51.79	-41.8	-51.44	-0.37	66.3	68.3	76.4
8.44	-51.79	-41.85	-51.44	-0.34	66.4	68.4	76.3
8.44	-51.79	-41.8	-51.44	-0.34	66.4	68.4	76.4
8.44	-51.79	-41.8	-51.47	-0.37	66.5	68.4	76.5
8.44	-51.74	-41.8	-51.44	-0.37	66.5	68.5	76.6

8.44	-51.79	-41.8	-51.44	-0.34	66.6	68.5	76.4
8.43	-51.74	-41.8	-51.44	-0.37	66.6	68.5	76.5
8.43	-51.74	-41.8	-51.44	-0.37	66.6	68.5	76.3
8.44	-51.74	-41.8	-51.44	-0.34	66.7	68.6	76.4
8.44	-51.74	-41.8	-51.41	-0.37	66.8	68.6	76.3
8.44	-51.74	-41.8	-51.41	-0.37	66.8	68.6	76.3
8.44	-51.74	-41.8	-51.41	-0.34	66.8	68.6	76.1
8.44	-51.74	-41.75	-51.41	-0.37	66.8	68.7	76.1
8.44	-51.74	-41.8	-51.41	-0.34	66.9	68.7	75.8
8.44	-51.74	-41.8	-51.41	-0.37	66.9	68.6	75.6
8.43	-51.74	-41.75	-51.41	-0.37	67	68.6	75.5
8.42	-51.74	-41.8	-51.41	-0.37	67	68.6	75.5
8.42	-51.74	-41.8	-51.41	-0.37	67	68.6	75.4
8.42	-51.74	-41.8	-51.41	-0.37	67	68.6	75.1
8.43	-51.74	-41.75	-51.38	-0.37	67	68.6	75
8.43	-51.74	-41.8	-51.41	-0.37	67	68.5	74.8
8.43	-51.74	-41.8	-51.38	-0.34	67.1	68.5	74.5
8.43	-51.74	-41.8	-51.38	-0.37	67	68.4	74.5
8.42	-51.74	-41.75	-51.38	-0.37	67	68.4	74.3
8.42	-51.74	-41.75	-51.38	-0.37	67.1	68.4	74
8.44	-51.74	-41.75	-51.38	-0.37	67.1	68.3	73.7
8.43	-51.74	-41.8	-51.38	-0.37	67	68.3	73.7
8.43	-51.74	-41.8	-51.38	-0.37	67	68.3	73.3
8.42	-51.74	-41.8	-51.38	-0.37	66.9	68.3	73.4
8.42	-51.74	-41.8	-51.38	-0.34	66.9	68.2	73.2
8.42	-51.74	-41.75	-51.38	-0.37	66.9	68.2	73
8.42	-51.69	-41.75	-51.35	-0.37	66.9	68.2	73
8.43	-51.74	-41.8	-51.38	-0.37	66.8	68.1	72.7
8.43	-51.74	-41.75	-51.35	-0.34	66.8	68.1	72.6
8.43	-51.69	-41.75	-51.38	-0.37	66.8	68.1	72.3
8.43	-51.69	-41.75	-51.35	-0.37	66.8	68.1	72.2
8.42	-51.69	-41.75	-51.35	-0.34	66.8	68	72.1
8.42	-51.74	-41.75	-51.35	-0.37	66.8	68	71.9
8.43	-51.69	-41.75	-51.35	-0.34	66.8	67.9	71.6
8.42	-51.69	-41.75	-51.35	-0.37	66.8	67.9	71.3
8.42	-51.69	-41.75	-51.32	-0.37	66.8	67.9	71.2
8.42	-51.69	-41.75	-51.32	-0.37	66.8	67.9	71.1
8.43	-51.69	-41.75	-51.32	-0.37	66.8	67.9	71.1
8.42	-51.69	-41.75	-51.32	-0.34	66.8	67.8	71
8.41	-51.69	-41.75	-51.35	-0.37	66.8	67.8	70.8
8.41	-51.69	-41.7	-51.35	-0.37	66.7	67.8	70.4
8.41	-51.69	-41.75	-51.32	-0.34	66.7	67.7	70.5
8.42	-51.69	-41.75	-51.32	-0.37	66.7	67.6	70.4
8.42	-51.69	-41.75	-51.32	-0.37	66.7	67.6	70.1
8.42	-51.69	-41.75	-51.32	-0.37	66.6	67.6	70
8.41	-51.69	-41.75	-51.32	-0.37	66.6	67.5	70.1
8.41	-51.69	-41.7	-51.32	-0.37	66.6	67.5	69.8

8.41	-51.65	-41.7	-51.32	-0.37	66.6	67.5	69.8
8.41	-51.69	-41.75	-51.32	-0.34	66.6	67.4	69.4
8.41	-51.65	-41.7	-51.32	-0.34	66.6	67.4	69.4
8.42	-51.65	-41.7	-51.29	-0.34	66.5	67.3	69.2
8.41	-51.65	-41.7	-51.29	-0.37	66.5	67.3	69.2
8.41	-51.65	-41.75	-51.29	-0.34	66.5	67.3	69
8.42	-51.65	-41.7	-51.29	-0.37	66.4	67.2	69
8.41	-51.65	-41.7	-51.29	-0.37	66.4	67.2	68.9
8.41	-51.65	-41.7	-51.29	-0.34	66.4	67.2	68.8
8.41	-51.65	-41.7	-51.29	-0.37	66.4	67.2	68.7
8.41	-51.65	-41.7	-51.29	-0.34	66.3	67.1	68.6
8.41	-51.65	-41.7	-51.23	-0.37	66.3	67.1	68.5
8.41	-51.65	-41.7	-51.23	-0.34	66.3	67	68.4
8.41	-51.65	-41.7	-51.23	-0.37	66.2	67	68.3
8.41	-51.65	-41.7	-51.29	-0.34	66.2	66.9	68
8.41	-51.65	-41.7	-51.23	-0.34	66.1	66.8	67.9
8.41	-51.65	-41.7	-51.23	-0.34	66.1	66.9	67.9
8.41	-51.6	-41.65	-51.29	-0.34	66.1	66.8	67.9
8.41	-51.65	-41.65	-51.23	-0.37	66.1	66.8	67.8
8.41	-51.65	-41.7	-51.23	-0.34	66	66.8	67.7
8.41	-51.65	-41.7	-51.29	-0.37	66	66.7	67.4
8.4	-51.65	-41.65	-51.23	-0.34	66	66.7	67.5
8.41	-51.65	-41.65	-51.23	-0.37	66	66.6	67.3
8.41	-51.65	-41.65	-51.23	-0.34	65.9	66.6	67.1
8.41	-51.65	-41.65	-51.23	-0.34	65.9	66.6	67
8.41	-51.65	-41.65	-51.23	-0.37	65.9	66.6	66.9
8.41	-51.6	-41.65	-51.23	-0.34	65.8	66.6	67.1
8.41	-51.65	-41.7	-51.23	-0.37	65.8	66.6	66.9
8.41	-51.65	-41.65	-51.23	-0.37	65.9	66.6	66.8
8.41	-51.6	-41.7	-51.2	-0.34	65.8	66.6	66.8
8.41	-51.6	-41.65	-51.2	-0.34	65.8	66.6	66.8
8.41	-51.65	-41.65	-51.2	-0.37	65.8	66.5	66.7
8.41	-51.6	-41.65	-51.2	-0.37	65.8	66.5	66.6
8.41	-51.65	-41.7	-51.2	-0.34	65.8	66.5	66.7
8.41	-51.6	-41.65	-51.2	-0.34	65.8	66.5	66.6
8.41	-51.65	-41.65	-51.2	-0.37	65.8	66.5	66.6
8.41	-51.6	-41.65	-51.2	-0.34	65.7	66.4	66.6
8.41	-51.6	-41.65	-51.2	-0.37	65.7	66.4	66.5
8.41	-51.6	-41.65	-51.2	-0.37	65.7	66.5	66.6
8.41	-51.6	-41.65	-51.17	-0.34	65.7	66.4	66.6
8.41	-51.6	-41.65	-51.2	-0.34	65.6	66.4	66.7
8.41	-51.6	-41.7	-51.2	-0.34	65.7	66.4	66.5
8.4	-51.6	-41.65	-51.2	-0.34	65.7	66.4	66.4
8.39	-51.6	-41.65	-51.2	-0.37	65.6	66.4	66.4
8.39	-51.6	-41.65	-51.2	-0.34	65.7	66.4	66.6
8.39	-51.6	-41.65	-51.17	-0.34	65.6	66.4	66.8
8.39	-51.6	-41.65	-51.17	-0.34	65.6	66.3	66.8

8.39	-51.6	-41.65	-51.17	-0.34	65.6	66.4	66.6
8.39	-51.6	-41.65	-51.17	-0.34	65.6	66.4	66.8
8.39	-51.6	-41.65	-51.17	-0.37	65.6	66.3	66.8
8.4	-51.6	-41.65	-51.17	-0.34	65.5	66.3	66.8
8.39	-51.6	-41.65	-51.17	-0.37	65.5	66.3	66.9
8.39	-51.56	-41.65	-51.17	-0.37	65.5	66.3	66.8
8.39	-51.6	-41.65	-51.2	-0.34	65.5	66.3	67
8.39	-51.6	-41.65	-51.17	-0.37	65.5	66.3	66.8
8.39	-51.56	-41.65	-51.17	-0.34	65.5	66.3	66.9
8.39	-51.56	-41.65	-51.17	-0.37	65.5	66.3	67.1
8.39	-51.6	-41.65	-51.17	-0.34	65.5	66.3	67
8.39	-51.6	-41.65	-51.17	-0.34	65.5	66.4	67.1
8.39	-51.56	-41.65	-51.17	-0.34	65.4	66.4	67.2
8.39	-51.6	-41.65	-51.17	-0.34	65.5	66.4	67.7
8.4	-51.56	-41.65	-51.14	-0.34	65.5	66.3	67.8
8.39	-51.56	-41.65	-51.14	-0.34	65.5	66.4	67.9
8.39	-51.56	-41.65	-51.14	-0.37	65.5	66.4	67.9
8.39	-51.56	-41.59	-51.14	-0.34	65.5	66.4	68.2
8.39	-51.56	-41.59	-51.14	-0.37	65.4	66.4	68.3
8.39	-51.56	-41.59	-51.14	-0.37	65.4	66.4	68.4
8.4	-51.56	-41.59	-51.14	-0.37	65.5	66.5	68.8
8.39	-51.56	-41.59	-51.11	-0.37	65.5	66.5	68.9
8.4	-51.56	-41.59	-51.14	-0.37	65.5	66.5	69
8.39	-51.56	-41.59	-51.14	-0.34	65.5	66.6	69.1
8.39	-51.51	-41.59	-51.11	-0.34	65.5	66.6	69.5
8.39	-51.56	-41.59	-51.11	-0.37	65.6	66.6	69.6
8.4	-51.51	-41.59	-51.11	-0.34	65.6	66.6	70
8.39	-51.51	-41.49	-51.11	-0.37	65.6	66.7	70.1
8.39	-51.51	-41.49	-51.07	-0.37	65.6	66.8	70.3
8.39	-51.51	-41.49	-51.07	-0.34	65.6	66.8	70.5
8.39	-51.51	-41.49	-51.07	-0.37	65.7	66.8	70.6
8.39	-51.51	-41.59	-51.07	-0.34	65.7	66.9	70.8
8.39	-51.51	-41.49	-51.07	-0.37	65.7	67	71
8.39	-51.47	-41.59	-51.07	-0.37	65.7	67	71.2
8.39	-51.47	-41.59	-51.07	-0.37	65.8	67	71.2
8.39	-51.47	-41.59	-51.07	-0.37	65.8	67.1	71.4
8.39	-51.47	-41.49	-51.07	-0.37	65.8	67.1	71.7
8.39	-51.51	-41.49	-51.04	-0.37	65.9	67.2	71.5
8.4	-51.47	-41.49	-51.04	-0.37	65.8	67.2	71.6
8.39	-51.47	-41.49	-51.04	-0.37	65.8	67.2	71.7
8.39	-51.47	-41.49	-51.01	-0.37	65.9	67.2	71.6
8.4	-51.47	-41.49	-51.01	-0.37	65.9	67.2	72.1
8.4	-51.47	-41.44	-51.01	-0.37	65.9	67.2	72.1
8.39	-51.47	-41.44	-51.01	-0.37	66	67.3	72.1
8.39	-51.42	-41.44	-51.01	-0.34	65.9	67.3	72.1
8.39	-51.47	-41.44	-51.01	-0.37	66	67.4	72.1
8.39	-51.47	-41.44	-51.04	-0.34	66	67.4	72.1

8.39	-51.42	-41.44	-51.01	-0.37	66	67.4	72.1
8.4	-51.47	-41.44	-51.01	-0.37	66	67.4	72.1
8.39	-51.47	-41.44	-51.04	-0.37	66.1	67.4	72.2
8.39	-51.42	-41.44	-51.04	-0.37	66	67.4	72.1
8.39	-51.47	-41.39	-51.04	-0.37	66.1	67.4	72.2
8.4	-51.42	-41.39	-51.04	-0.37	66.1	67.5	72.2
8.39	-51.42	-41.39	-51.01	-0.37	66.1	67.5	72.2
8.39	-51.42	-41.39	-51.01	-0.37	66.1	67.4	72.1
8.39	-51.42	-41.44	-51.04	-0.34	66.1	67.5	71.9
8.39	-51.42	-41.39	-51.04	-0.37	66.1	67.5	71.7
8.39	-51.42	-41.39	-51.04	-0.37	66.1	67.5	71.6
8.39	-51.42	-41.39	-51.04	-0.37	66.2	67.5	71.9
8.39	-51.42	-41.39	-51.04	-0.37	66.3	67.5	71.5
8.4	-51.42	-41.39	-51.04	-0.37	66.2	67.5	71.5
8.39	-51.42	-41.44	-51.04	-0.37	66.2	67.4	71.3
8.39	-51.42	-41.39	-51.07	-0.37	66.3	67.4	71.2
8.39	-51.42	-41.39	-51.07	-0.37	66.3	67.4	71.2
8.39	-51.42	-41.39	-51.04	-0.34	66.3	67.4	71.1
8.39	-51.42	-41.44	-51.07	-0.37	66.3	67.3	70.9
8.39	-51.42	-41.44	-51.07	-0.37	66.3	67.3	70.7
8.39	-51.42	-41.44	-51.04	-0.37	66.3	67.2	70.4
8.39	-51.42	-41.44	-51.07	-0.37	66.3	67.2	70.3
8.39	-51.42	-41.39	-51.04	-0.37	66.3	67.2	70.1
8.39	-51.42	-41.44	-51.04	-0.37	66.2	67.1	70.1
8.39	-51.47	-41.44	-51.04	-0.37	66.2	67.1	70
8.39	-51.42	-41.39	-51.04	-0.37	66.2	67	69.9
8.38	-51.42	-41.44	-51.04	-0.37	66.2	66.9	69.6
8.38	-51.47	-41.39	-51.04	-0.37	66.2	66.9	69.3
8.38	-51.42	-41.44	-51.04	-0.37	66.1	66.8	69
8.38	-51.42	-41.44	-51.04	-0.37	66.1	66.8	68.9
8.38	-51.47	-41.44	-51.04	-0.37	66.1	66.7	68.8
8.38	-51.47	-41.44	-51.04	-0.37	66.1	66.7	68.6
8.38	-51.47	-41.44	-51.04	-0.34	66	66.6	68.5
8.38	-51.42	-41.44	-51.04	-0.37	66	66.6	68.2
8.38	-51.42	-41.44	-51.04	-0.37	65.9	66.5	67.9
8.38	-51.42	-41.39	-51.04	-0.37	65.9	66.4	68.1
8.38	-51.47	-41.39	-51.04	-0.37	65.8	66.4	67.9
8.38	-51.42	-41.39	-51.04	-0.37	65.8	66.4	67.5
8.38	-51.42	-41.44	-51.04	-0.37	65.8	66.3	67.4
8.38	-51.42	-41.39	-51.04	-0.34	65.8	66.2	67.3
8.38	-51.42	-41.44	-51.04	-0.37	65.8	66.2	67.1
8.38	-51.42	-41.44	-51.04	-0.34	65.8	66.1	66.9
8.38	-51.42	-41.39	-51.04	-0.34	65.7	66.2	66.6
8.38	-51.42	-41.44	-51.04	-0.37	65.7	66.1	66.6
8.38	-51.42	-41.44	-51.04	-0.37	65.5	66	66.5
8.38	-51.47	-41.44	-51.04	-0.37	65.5	66.1	66.4
8.38	-51.42	-41.44	-51.04	-0.37	65.4	66	66

8.38	-51.47	-41.39	-51.04	-0.37	65.1	66	65.9
8.38	-51.42	-41.39	-51.04	-0.37	64.8	66	65.8
8.38	-51.42	-41.44	-51.01	-0.37	64.8	65.9	65.8
8.38	-51.42	-41.44	-51.04	-0.37	64.8	65.9	65.3
8.38	-51.42	-41.39	-51.01	-0.37	64.7	65.8	65.4
8.38	-51.42	-41.44	-51.01	-0.37	64.6	65.8	65.2
8.38	-51.47	-41.44	-51.01	-0.37	64.5	65.8	65.1
8.38	-51.42	-41.44	-51.01	-0.37	64.5	65.7	64.9
8.38	-51.42	-41.39	-51.01	-0.34	64.4	65.7	64.8
8.38	-51.42	-41.44	-51.01	-0.34	64.5	65.6	64.5
8.38	-51.42	-41.44	-51.01	-0.37	64.5	65.5	64.6
8.38	-51.42	-41.39	-51.01	-0.34	64.5	65.5	64.2
8.38	-51.37	-41.39	-51.01	-0.34	64.6	65.5	64.2
8.37	-51.42	-41.39	-51.01	-0.37	64.5	65.4	63.9
8.37	-51.42	-41.39	-51.01	-0.34	64.5	65.3	63.8
8.38	-51.42	-41.39	-51.01	-0.31	64.6	65.3	63.6
8.37	-51.37	-41.44	-51.01	-0.34	64.6	65.2	63.6
8.38	-51.37	-41.39	-51.01	-0.37	64.5	65.2	63.3
8.38	-51.37	-41.39	-51.01	-0.37	64.5	65.1	63.3
8.38	-51.37	-41.39	-50.98	-0.37	64.5	65	63.2
8.38	-51.37	-41.39	-50.98	-0.34	64.5	65	62.7
8.38	-51.42	-41.39	-50.98	-0.37	64.4	64.9	62.7
8.37	-51.37	-41.44	-50.98	-0.34	64.4	64.9	62.6
8.38	-51.37	-41.44	-50.98	-0.34	64.4	64.9	62.5
8.38	-51.37	-41.39	-50.98	-0.37	64.3	64.8	62.5
8.38	-51.37	-41.39	-50.98	-0.34	64.3	64.8	62.4
8.37	-51.37	-41.39	-50.98	-0.34	64.2	64.7	62.3
8.38	-51.37	-41.39	-50.98	-0.34	64.2	64.7	62.2
8.38	-51.37	-41.39	-50.98	-0.34	64.1	64.7	61.8
8.37	-51.37	-41.39	-50.98	-0.34	64	64.7	61.8
8.37	-51.37	-41.39	-50.98	-0.34	64	64.7	61.6
8.38	-51.37	-41.39	-50.98	-0.34	63.9	64.5	61.5
8.38	-51.37	-41.39	-50.98	-0.34	63.8	64.5	61.6
8.38	-51.37	-41.39	-50.95	-0.31	63.9	64.4	61.1
8.37	-51.37	-41.39	-50.98	-0.34	63.8	64.4	61
8.38	-51.37	-41.39	-50.98	-0.34	63.7	64.3	61
8.38	-51.37	-41.39	-50.98	-0.34	63.7	64.4	61
8.38	-51.37	-41.33	-50.95	-0.34	63.7	64.3	60.8
8.37	-51.37	-41.39	-50.98	-0.34	63.7	64.3	60.9
8.38	-51.37	-41.39	-50.98	-0.31	63.6	64.3	60.7
8.37	-51.37	-41.39	-50.98	-0.34	63.6	64.3	60.6
8.37	-51.37	-41.39	-50.98	-0.31	63.6	64.3	60.8
8.38	-51.37	-41.39	-50.98	-0.34	63.7	64.3	60.7
8.37	-51.37	-41.39	-50.95	-0.34	63.6	64.3	61.1
8.38	-51.37	-41.39	-50.95	-0.34	63.6	64.3	61.4
8.38	-51.37	-41.39	-50.95	-0.31	63.7	64.3	61.2
8.38	-51.37	-41.39	-50.95	-0.34	63.6	64.3	61.4

8.38	-51.37	-41.39	-50.95	-0.34	63.6	64.3	61.5
8.37	-51.37	-41.39	-50.95	-0.34	63.9	64.3	61.5
8.37	-51.37	-41.39	-50.95	-0.34	63.7	64.4	62.1
8.38	-51.37	-41.39	-50.95	-0.34	63.7	64.4	62.2
8.37	-51.37	-41.39	-50.95	-0.31	63.7	64.5	62.3
8.38	-51.37	-41.39	-50.95	-0.34	63.9	64.7	62.5
8.37	-51.37	-41.39	-50.98	-0.34	63.8	64.7	62.9
8.38	-51.37	-41.39	-50.98	-0.34	63.9	64.7	62.8
8.37	-51.42	-41.39	-50.95	-0.34	63.9	64.7	63.6
8.38	-51.37	-41.39	-50.95	-0.34	63.9	64.7	63.8
8.37	-51.42	-41.39	-50.95	-0.34	63.8	64.8	64
8.38	-51.37	-41.39	-50.95	-0.34	63.9	64.8	64.5
8.37	-51.37	-41.39	-50.95	-0.31	64	64.9	64.8
8.38	-51.37	-41.39	-50.95	-0.37	64	64.9	65.1
8.37	-51.42	-41.39	-50.95	-0.34	64	64.9	65.7
8.38	-51.37	-41.39	-50.92	-0.37	64	65	66
8.37	-51.37	-41.39	-50.92	-0.37	64	65.1	66.4
8.37	-51.37	-41.39	-50.92	-0.34	64.1	65.1	66.9
8.38	-51.33	-41.39	-50.92	-0.37	64.1	65.1	67
8.37	-51.33	-41.39	-50.92	-0.34	64.1	65.2	67.7
8.38	-51.33	-41.39	-50.92	-0.34	64.2	65.3	68
8.38	-51.33	-41.39	-50.92	-0.34	64.2	65.3	68.4
8.38	-51.33	-41.33	-50.92	-0.34	64.2	65.4	68.8
8.38	-51.33	-41.39	-50.92	-0.37	64.2	65.5	69.1
8.38	-51.33	-41.39	-50.92	-0.34	64.3	65.5	69.6
8.38	-51.33	-41.39	-50.92	-0.34	64.3	65.6	69.8
8.38	-51.33	-41.33	-50.92	-0.34	64.3	65.7	70.1
8.38	-51.28	-41.39	-50.89	-0.37	64.4	65.7	70.4
8.37	-51.33	-41.33	-50.89	-0.37	64.4	65.8	70.4
8.37	-51.28	-41.33	-50.89	-0.34	64.5	65.8	71
8.37	-51.33	-41.33	-50.89	-0.37	64.5	65.8	71.1
8.36	-51.33	-41.28	-50.89	-0.34	64.6	65.9	71.5
8.36	-51.33	-41.33	-50.89	-0.37	64.7	66	71.4
8.37	-51.28	-41.33	-50.89	-0.34	64.6	66	71.9
8.36	-51.28	-41.28	-50.89	-0.37	64.7	66.1	71.9
8.37	-51.28	-41.33	-50.86	-0.37	64.7	66.2	72.1
8.36	-51.28	-41.28	-50.86	-0.37	64.8	66.2	72.3
8.36	-51.28	-41.28	-50.86	-0.37	64.8	66.3	72.3
8.37	-51.28	-41.28	-50.86	-0.37	64.9	66.4	72.4
8.37	-51.28	-41.28	-50.86	-0.37	64.9	66.3	72.4
8.36	-51.24	-41.28	-50.86	-0.34	64.9	66.4	72.4
8.37	-51.28	-41.23	-50.83	-0.34	65	66.4	72.5
8.37	-51.24	-41.28	-50.83	-0.37	65	66.4	72.5
8.36	-51.24	-41.28	-50.83	-0.37	65.1	66.4	72.7
8.37	-51.28	-41.23	-50.83	-0.37	65	66.5	72.6
8.37	-51.24	-41.28	-50.83	-0.34	65.1	66.5	72.6
8.37	-51.24	-41.23	-50.83	-0.37	65.3	66.5	72.6

8.37	-51.24	-41.23	-50.83	-0.37	65.1	66.5	72.4
8.37	-51.24	-41.23	-50.83	-0.37	65.3	66.5	72.6
8.37	-51.24	-41.23	-50.83	-0.37	65.1	66.5	72.3
8.37	-51.24	-41.23	-50.8	-0.37	65.3	66.5	72.5
8.37	-51.24	-41.23	-50.83	-0.37	65.3	66.5	72.4
8.37	-51.24	-41.23	-50.8	-0.34	65.3	66.4	72.3
8.36	-51.24	-41.23	-50.83	-0.37	65.3	66.5	72.3
8.37	-51.24	-41.23	-50.83	-0.34	65.3	66.5	72.2
8.37	-51.24	-41.23	-50.83	-0.37	65.3	66.5	72.1
8.37	-51.24	-41.18	-50.83	-0.37	65.4	66.5	72.1
8.36	-51.24	-41.23	-50.83	-0.34	65.5	66.5	71.9
8.37	-51.24	-41.18	-50.83	-0.34	65.4	66.5	71.6
8.37	-51.24	-41.18	-50.83	-0.34	65.5	66.5	71.6
8.36	-51.24	-41.18	-50.83	-0.34	65.5	66.5	71.2
8.37	-51.24	-41.18	-50.83	-0.37	65.5	66.4	71.2
8.37	-51.24	-41.18	-50.83	-0.34	65.5	66.4	71.1
8.36	-51.19	-41.23	-50.83	-0.34	65.5	66.4	70.7
8.36	-51.19	-41.23	-50.83	-0.37	65.6	66.3	70.6
8.37	-51.24	-41.18	-50.83	-0.34	65.5	66.3	70.4
8.36	-51.24	-41.23	-50.83	-0.34	65.6	66.3	70.2
8.37	-51.24	-41.23	-50.83	-0.34	65.6	66.2	70.1
8.36	-51.24	-41.23	-50.86	-0.34	65.6	66.2	70
8.36	-51.24	-41.23	-50.83	-0.34	65.5	66.2	69.5
8.36	-51.24	-41.23	-50.83	-0.31	65.5	66.1	69.4
8.37	-51.24	-41.23	-50.83	-0.34	65.5	66.1	69.2
8.35	-51.24	-41.23	-50.83	-0.34	65.5	66	69
8.36	-51.24	-41.23	-50.83	-0.34	65.4	65.9	68.8
8.37	-51.19	-41.23	-50.83	-0.34	65.4	65.9	68.3
8.36	-51.24	-41.18	-50.83	-0.34	65.4	65.8	68.2
8.36	-51.24	-41.23	-50.83	-0.34	65.3	65.8	68
8.37	-51.24	-41.18	-50.86	-0.31	65.1	65.8	67.8
8.36	-51.24	-41.18	-50.86	-0.34	65.1	65.8	67.7
8.35	-51.24	-41.23	-50.86	-0.34	65	65.8	67.5
8.35	-51.24	-41.23	-50.86	-0.34	65	65.7	67.1
8.35	-51.24	-41.23	-50.83	-0.31	65	65.7	66.8
8.35	-51.24	-41.23	-50.83	-0.31	64.8	65.6	66.6
8.35	-51.24	-41.23	-50.83	-0.34	64.7	65.6	66.7
8.35	-51.24	-41.23	-50.86	-0.34	64.6	65.6	66.1
8.35	-51.24	-41.23	-50.86	-0.34	64.3	65.5	65.9
8.35	-51.24	-41.23	-50.83	-0.34	64.4	65.4	65.9
8.35	-51.24	-41.23	-50.83	-0.34	64.3	65.4	65.6
8.35	-51.24	-41.23	-50.83	-0.34	64.2	65.3	65.6
8.35	-51.24	-41.23	-50.83	-0.34	64.1	65.3	65
8.35	-51.24	-41.23	-50.83	-0.31	64	65.3	64.9
8.35	-51.24	-41.23	-50.83	-0.31	64	65.2	64.7
8.35	-51.24	-41.23	-50.83	-0.31	64	65.1	64.5
8.35	-51.24	-41.23	-50.83	-0.31	64.1	65.1	64.3

8.35	-51.24	-41.23	-50.83	-0.31	64.2	65	64.1
8.35	-51.24	-41.23	-50.83	-0.34	64.3	65	63.9
8.35	-51.28	-41.18	-50.83	-0.34	64.2	64.9	63.8
8.35	-51.24	-41.23	-50.83	-0.31	64.2	64.9	63.6
8.35	-51.24	-41.23	-50.83	-0.31	64.2	64.8	63.7
8.35	-51.24	-41.23	-50.83	-0.34	64.2	64.8	63.2
8.35	-51.24	-41.23	-50.83	-0.31	64.1	64.8	63.1
8.35	-51.24	-41.18	-50.83	-0.31	64.1	64.7	63.1
8.35	-51.24	-41.28	-50.83	-0.31	64.1	64.7	62.9
8.35	-51.24	-41.23	-50.83	-0.31	64	64.7	62.7
8.35	-51.24	-41.23	-50.8	-0.31	63.9	64.7	62.5
8.35	-51.24	-41.23	-50.8	-0.31	63.9	64.5	62.4
8.35	-51.19	-41.23	-50.83	-0.34	63.8	64.4	62.4
8.35	-51.24	-41.23	-50.83	-0.31	63.8	64.4	62.1
8.35	-51.24	-41.23	-50.8	-0.34	63.8	64.3	62
8.35	-51.24	-41.23	-50.83	-0.31	63.8	64.3	61.9
8.35	-51.24	-41.18	-50.83	-0.31	63.7	64.2	61.6
8.35	-51.19	-41.23	-50.8	-0.34	63.7	64.2	61.5
8.35	-51.24	-41.23	-50.8	-0.31	63.6	64.1	61.4
8.34	-51.19	-41.18	-50.8	-0.27	63.6	64.1	61
8.35	-51.24	-41.18	-50.8	-0.31	63.6	64	61.1
8.35	-51.24	-41.18	-50.8	-0.31	63.5	64	60.7
8.34	-51.19	-41.18	-50.8	-0.31	63.5	63.9	60.7
8.34	-51.19	-41.23	-50.8	-0.31	63.4	63.9	60.6
8.35	-51.19	-41.18	-50.8	-0.31	63.4	63.8	60.6
8.34	-51.19	-41.18	-50.8	-0.31	63.3	63.8	60.4
8.35	-51.19	-41.23	-50.8	-0.27	63.3	63.7	60.3
8.35	-51.24	-41.18	-50.8	-0.31	63.3	63.8	60.2
8.35	-51.19	-41.23	-50.8	-0.31	63.2	63.7	60
8.35	-51.24	-41.18	-50.8	-0.31	63.2	63.7	60
8.35	-51.19	-41.18	-50.8	-0.31	63.1	63.7	59.7
8.35	-51.24	-41.18	-50.8	-0.31	63.1	63.6	59.6
8.35	-51.24	-41.23	-50.8	-0.31	62.9	63.6	59.6
8.35	-51.19	-41.23	-50.8	-0.31	62.9	63.6	59.4
8.35	-51.19	-41.18	-50.8	-0.27	62.9	63.6	59.2
8.35	-51.19	-41.23	-50.8	-0.31	62.8	63.5	59.2
8.35	-51.19	-41.23	-50.8	-0.31	62.8	63.5	59
8.35	-51.19	-41.18	-50.8	-0.27	62.7	63.4	58.7
8.35	-51.19	-41.23	-50.8	-0.31	62.7	63.4	58.9
8.35	-51.19	-41.18	-50.8	-0.27	62.6	63.3	58.7
8.35	-51.24	-41.23	-50.8	-0.27	62.6	63.3	58.7
8.35	-51.24	-41.23	-50.77	-0.27	62.5	63.3	58.4
8.34	-51.24	-41.23	-50.8	-0.27	62.5	63.3	58.6
8.35	-51.19	-41.23	-50.8	-0.27	62.5	63.2	58.7
8.35	-51.19	-41.18	-50.77	-0.27	62.5	63.2	58.7
8.35	-51.24	-41.18	-50.8	-0.27	62.5	63.2	58.6
8.34	-51.19	-41.23	-50.8	-0.31	62.5	63.3	58.6

8.35	-51.19	-41.23	-50.77	-0.27	62.5	63.3	58.8
8.35	-51.24	-41.23	-50.8	-0.31	62.5	63.3	58.8
8.35	-51.24	-41.23	-50.8	-0.31	62.5	63.3	58.9
8.35	-51.24	-41.23	-50.8	-0.31	62.5	63.4	59.4
8.34	-51.24	-41.23	-50.77	-0.27	62.6	63.4	59.2
8.34	-51.19	-41.18	-50.8	-0.31	62.6	63.4	59.6
8.34	-51.24	-41.23	-50.8	-0.27	62.7	63.5	59.7
8.34	-51.19	-41.23	-50.8	-0.31	62.7	63.6	60.2
8.34	-51.19	-41.23	-50.8	-0.31	62.9	63.6	60.3
8.34	-51.19	-41.23	-50.8	-0.27	62.5	63.6	60.7
8.35	-51.19	-41.23	-50.8	-0.27	62.6	64.1	61
8.35	-100.09	-41.23	-50.77	-0.31	63.1	63.9	61.4
8.35	-100.09	-41.18	-50.77	-0.31	63.1	64.2	61.4
8.35	-100.14	-41.23	-50.8	-0.31	62.9	64.5	61.7
8.35	-100.09	-41.23	-50.77	-0.31	63.2	64.8	62.1
8.35	-100.09	-41.23	-50.8	-0.27	63.3	64.9	62.5
8.35	-100.09	-41.23	-50.77	-0.31	63.7	65.3	62.8
8.34	-100.09	-41.18	-50.77	-0.31	63.8	65.5	63.5
8.34	-100.09	-41.23	-50.77	-0.31	64	65.7	63.6
8.35	-100.09	-41.23	-50.77	-0.31	64.2	65.8	64.2
8.35	-100.09	-41.18	-50.77	-0.31	64.4	66	64.6
8.35	-100.09	-41.23	-50.77	-0.31	64.5	66.2	65.1
8.34	-100.09	-41.23	-50.77	-0.27	64.6	66.4	65.6
8.35	-100.05	-41.18	-50.77	-0.31	65	66.5	66.1
8.34	-51.42	-41.23	-50.77	-0.31	64.8	66.8	66.5
8.34	-51.33	-41.23	-50.74	-0.31	65	66.8	67
8.34	-51.37	-41.18	-50.74	-0.31	65.3	66.9	67.3
8.34	-51.33	-41.18	-50.74	-0.31	65.3	67.1	67.9
8.34	-51.33	-41.18	-50.74	-0.34	65.3	67.2	68.1
8.34	-50.96	-41.18	-50.74	-0.31	65.7	67.2	68.3
8.34	-51.05	-41.18	-50.74	-0.31	65.7	66.9	68.8
8.34	-51.33	-41.18	-50.74	-0.31	65.5	66.8	68.9
8.34	-51.28	-41.18	-50.71	-0.31	65.5	66.9	69.1
8.34	-51.28	-41.18	-50.71	-0.31	65.5	66.9	69.2
8.34	-51.28	-41.18	-50.71	-0.31	65.5	67.1	69.4
8.45	-55.45	-42.58	-51.41	-0.27	65.7	67	58.7
8.34	-52.06	-42.42	-50.98	-0.31	65.7	67.1	60.6
8.69	-57.55	-45.17	-52.94	22.34	81.3	66.1	53.7
8.83	-57.33	-45.9	-53.21	22.31	87	66.2	52.5
8.81	-57.69	-46.16	-53.64	19.44	87.7	65.9	53.6
8.76	-58.01	-46.16	-53.3	22.31	88.2	66.1	51.1
8.49	-58.38	-46.37	-54.1	19.35	88	65.9	52.4
8.76	-58.24	-46.78	-53.85	22.31	88.4	66	57.1
8.56	-58.7	-47.56	-53.79	22.13	88.6	65.9	53.3
8.62	-58.84	-47.04	-54.1	19.02	87.8	66.1	52.1
8.7	-58.97	-47.56	-53.88	22.31	88.3	66.1	51.4
8.64	-58.56	-47.46	-54.19	22.41	88.3	65.8	53.5

8.51	-59.07	-47.61	-54.65	22.41	88.1	65.7	54.2
8.56	-59.34	-48.03	-54.83	19.69	87.8	65.6	51
8.58	-59.57	-47.98	-54.71	19.08	87.6	65.8	52.1
8.65	-59.66	-48.55	-55.1	19.2	87.4	66.1	51.6
8.69	-59.34	-48.65	-54.95	21.55	87.4	66.1	50.3
8.71	-59.39	-48.13	-55.07	21.73	87.5	66.1	52.5
8.98	-59.62	-48.39	-54.89	22.28	87.5	66.1	52.5
8.91	-59.94	-48.7	-55.38	22.34	87.5	65.9	54.8
8.62	-59.8	-48.65	-55.23	22.44	87.4	65.7	52.4
8.85	-59.89	-48.6	-55.41	22.41	87.3	65.5	53.3
8.83	-60.16	-48.7	-55.32	21.55	87	65.4	51.4
8.82	-60.16	-48.91	-55.68	19.32	86.3	65.4	53.1
8.55	-60.44	-49.12	-55.84	19.11	85.8	65.5	54.5
8.6	-60.67	-49.12	-55.5	19.08	85.6	65.7	50.7
8.63	-60.21	-48.86	-55.81	21.52	85.3	65.8	52.3
8.85	-60.44	-49.33	-55.78	22.44	85.2	65.7	52.7
8.6	-60.44	-49.48	-56.02	22.34	84.4	65.4	53.3
8.52	-60.81	-49.48	-56.08	22.5	84.4	65.1	52.6
8.8	-60.94	-49.38	-55.93	22.56	84.3	65.1	50.2
8.64	-61.17	-49.59	-56.08	19.75	84.1	65.2	53
8.17	-60.81	-49.53	-56.08	19.35	82.9	64.8	51.7
8.61	-61.17	-49.74	-56.08	19.08	82.2	64.9	53.4
8.6	-60.94	-49.74	-56.29	20.36	81.4	65.2	54.7
8.7	-60.71	-50	-56.26	22.16	81.4	65.2	52.8
8.72	-61.4	-49.95	-56.69	22.56	81.4	65.3	51.5
8.63	-61.08	-50.31	-56.57	22.47	81.4	64.8	54
8.82	-61.45	-50.1	-56.42	22.56	81	64.7	45.9
8.63	-61.22	-50.1	-56.54	22.59	80.9	64.5	52.1
8.69	-61.54	-50.21	-56.81	22.62	80.9	64.2	53.7
8.57	-61.77	-50.31	-56.9	22.53	80.5	64.3	50.8
8.64	-61.36	-50.47	-57.03	22.62	80.1	64.3	50.3
8.55	-61.86	-50.52	-57.27	22.53	80.2	64.1	48.6
8.63	-62.32	-50.93	-57.18	22.59	80	64.1	53.1
8.72	-62.13	-50.78	-57.12	20.6	79.7	64.2	52.7
8.78	-61.72	-50.16	-57	19.51	79.1	64	54.3
7.76	-61.9	-50.78	-57.48	19.47	78.8	63.9	52
8.67	-61.68	-50.78	-57.48	19.17	78.8	64	54.9
8.68	-62.13	-50.67	-57.27	19.17	78.4	64.3	52.4
8.71	-62.13	-50.78	-57.55	22.16	78.1	64.3	53
8.67	-61.81	-50.57	-57.73	22.65	78.3	64.2	53.1
8.62	-62.09	-51.56	-57.33	22.65	78.1	63.7	53.1
8.62	-62.27	-51.35	-57.7	22.62	78.3	63.6	53
8.55	-62.45	-51.66	-57.58	22.65	78.3	63.6	52.5
8.76	-62.55	-51.04	-57.7	22.68	78	63.6	52.3
8.54	-62.77	-51.19	-58.03	22.74	77.6	63.3	52.2
8.55	-62.41	-51.76	-57.94	22.74	77.7	63.2	52.7
8.65	-62.87	-51.4	-57.64	22.65	77.4	63.1	52.7

8.86	-62.68	-51.09	-57.7	20.02	77.2	63.1	52.7
8.12	-62.41	-51.4	-57.82	19.47	76.6	63.2	53.2
8.64	-62.96	-50.99	-57.85	19.26	76.2	63.5	52.2
8.73	-62.45	-51.66	-58.16	20.3	75.9	63.6	52.4
8.73	-62.68	-51.35	-57.76	22.53	76.6	63.5	54.5
8.95	-63.28	-51.87	-58.34	22.59	76.6	63.5	54
8.91	-62.36	-51.4	-58.06	22.8	76.6	63.5	51.6
8.6	-62.27	-52.34	-58.25	22.74	76.4	63.2	60.1
8.9	-63.55	-51.66	-58.49	22.68	76.4	63.1	52.7
8.87	-62.91	-52.02	-58	22.77	75.9	62.8	53
8.62	-62.68	-52.44	-58.37	22.8	76.4	62.8	51.2
8.84	-63.23	-51.45	-58.28	22.86	75.8	62.5	52.8
8.64	-63.55	-51.87	-58.46	22.8	75.8	62.5	50.1
8.88	-63.19	-52.18	-58.19	22.8	75.7	62.5	53.9
8.85	-63.23	-51.92	-58.8	21.67	75.8	62.5	51.2
8.62	-63.14	-52.54	-58.61	20.82	75.6	62.4	53.5
8.58	-63.46	-51.87	-58.68	20.33	75.5	62.4	57.8
8.73	-63.32	-51.97	-58.58	20.51	75.1	62.2	53.2
8.61	-63.32	-52.28	-58.77	21.46	75	62.2	52.9
8.78	-63.69	-52.28	-58.55	22.41	74.7	62	52.6
8.74	-63.69	-52.39	-58.46	21.92	74.6	62	51.6
8.73	-63.32	-51.87	-58.74	20.3	74.5	61.8	52
8.54	-63.97	-52.13	-58.83	19.84	74.1	61.9	56.1
8.65	-63.69	-52.59	-59.04	19.54	73.6	61.9	52.6
8.64	-63.28	-52.7	-59.35	19.47	73.4	62.1	53.7
8.65	-63.74	-52.34	-58.86	19.35	73.2	62.2	52.5
8.71	-64.61	-52.23	-59.04	19.44	73.1	62	53
8.65	-63.42	-52.96	-58.61	19.35	73.6	62.1	53.2
8.65	-64.19	-52.75	-59.1	19.44	73.6	62	52.8
8.66	-64.33	-52.49	-59.29	20.76	73.5	61.9	56.3
10	-64.24	-51.66	-59.01	22.65	73.7	62	48.6
8.69	-64.19	-53.27	-59.22	22.89	73.8	62	51.7
8.61	-64.1	-53.22	-59.26	22.89	74	61.8	52.5
8.7	-63.97	-53.01	-59.26	22.8	74.3	61.7	53.2
8.85	-63.83	-52.49	-58.95	22.95	74.3	61.5	53.6
8.88	-63.83	-52.75	-59.38	22.92	74.3	61.6	47.1
8.66	-64.24	-52.54	-59.29	22.95	74.3	61.5	55.8
8.75	-64.33	-52.13	-59.32	22.8	74.1	61.6	55.3
8.87	-63.92	-52.7	-59.26	22.89	74	61.4	51.7
8.85	-64.61	-52.96	-58.92	23.02	73.6	61.4	55.7
8.6	-64.38	-53.17	-59.22	22.95	73.8	61.4	53.9
8.53	-64.74	-52.23	-59.8	22.92	74.2	61.4	51.6
8.53	-64.7	-53.32	-59.47	22.95	74.5	61.4	52.7
8.59	-64.15	-52.96	-59.74	22.86	74.6	61.2	52.2
8.62	-64.19	-53.06	-59.71	22.83	75	61.3	53.2
8.72	-64.38	-52.75	-59.62	22.92	75.2	61.3	50.5
8.88	-64.51	-52.7	-59.68	20.45	75.4	61.4	51.8

8.63	-64.65	-53.43	-59.84	19.69	75.3	61.3	53.9
8.58	-64.56	-52.96	-59.71	19.6	75	61.4	51.3
8.64	-64.74	-52.8	-59.9	19.51	75.6	61.5	51.3
8.63	-64.79	-53.01	-60.05	19.44	76.4	61.7	53.5
8.64	-65.06	-53.63	-60.23	19.35	76.7	61.6	53.3
8.73	-64.29	-53.27	-59.77	19.29	77.3	61.9	52.2
8.68	-64.88	-53.37	-59.96	22.01	77.6	61.9	52.9
8.8	-64.93	-53.84	-59.96	22.65	78.4	62	47.2
8.63	-64.93	-53.17	-60.05	22.74	79	62.4	53.4
8.69	-64.7	-54	-59.99	22.68	80	62.1	51.3
8.94	-65.16	-53.74	-60.02	22.65	80.3	62.2	50.7
8.85	-64.84	-53.68	-59.44	22.65	80.7	62.5	53.3
8.96	-65.61	-53.43	-59.9	22.53	81.5	62.4	51.8
8.92	-65.11	-53.79	-60.11	22.65	82	62.4	54.9
8.62	-65.84	-53.84	-60.26	22.59	83	62.2	50.7
8.88	-65.48	-53.32	-60.23	22.65	83.3	62.5	53.6
8.91	-65.11	-53.27	-60.14	22.53	84.2	62.5	51
8.57	-65.11	-53.68	-60.42	22.53	84.9	62.5	51.6
8.61	-65.52	-54.41	-60.29	22.65	85.1	62.7	51.9
8.88	-65.43	-53.74	-60.17	22.53	85.7	62.7	52.5
8.78	-65.34	-53.79	-60.38	22.62	86.3	62.7	52.5
8.56	-65.29	-53.63	-60.48	22.56	86.4	63.1	54.9
8.53	-64.88	-53.84	-60.14	22.62	86.6	62.9	54
8.82	-65.06	-53.74	-60.45	22.53	86.6	63	49.8
8.77	-65.61	-53.89	-60.66	22.53	87.1	63.2	53
8.61	-65.52	-53.89	-60.6	22.62	87.4	63.3	50.5
8.7	-65.29	-53.84	-60.35	22.59	87.6	63.2	53.1
8.7	-65.25	-54.2	-60.48	22.56	87.6	63.4	55.2
8.58	-65.89	-54.62	-60.72	22.56	88.2	63.6	55.7
8.83	-65.71	-53.74	-60.32	22.47	88	63.6	53.8
8.77	-65.43	-54.67	-60.96	22.44	88.5	63.8	51.7
8.96	-65.61	-54	-60.54	22.47	88.2	64	51.6
8.72	-65.52	-53.84	-60.81	21.31	88.1	64.3	52
8.76	-65.34	-54.31	-60.72	19.05	87.2	64.3	51.8
8.72	-65.52	-54.46	-60.54	19.14	87.1	64	52.7
8.68	-65.66	-54.05	-60.75	19.29	86.4	64	52.1
8.62	-65.29	-54.62	-60.45	19.35	86.2	63.9	53
7.93	-65.29	-54.15	-60.72	19.51	86.4	63.9	52
8.76	-65.84	-54.51	-60.84	19.72	86.5	63.7	52.6
8.6	-65.16	-54.57	-60.87	21.86	87	63.7	51.5
8.62	-66.03	-54.26	-60.87	22.65	87	64	52.5
8.66	-65.84	-54.57	-60.9	22.65	87	63.8	52.9
8.79	-65.75	-54.57	-61.09	22.62	87.3	63.9	50.8
8.7	-65.38	-54.98	-60.48	22.65	87.4	63.9	52.3
8.88	-65.93	-54.83	-60.87	22.62	87.5	64.1	54.2
8.65	-66.21	-54.31	-61	22.56	87.2	64.1	55
8.55	-65.93	-54.88	-61.12	22.59	87.4	64.2	51

8.75	-66.07	-54.51	-61.06	22.56	87.5	64.7	53.2
8.89	-66.07	-54.77	-61.24	22.56	87.4	64.7	52.3
8.73	-65.8	-54.31	-61.09	22.16	87.3	64.8	51.6
8.72	-66.07	-54.83	-60.93	21.18	87.3	64.7	51.9
9.41	-66.12	-55.03	-61.33	22.47	87.6	64.8	51.6
8.8	-65.75	-54.77	-61.03	22.5	87.5	64.7	53.7
8.72	-65.98	-55.29	-61.27	22.56	87.5	64.7	50.7
8.8	-66.03	-54.62	-60.96	22.5	87.5	64.7	50.5
8.87	-66.03	-54.36	-61.15	22.56	87.4	64.5	52.9
8.92	-66.16	-54.67	-61.24	22.56	87.3	64.7	53.4
8.92	-66.3	-54.88	-60.96	22.59	87.1	64.5	50.3
8.93	-66.16	-54.77	-61.36	22.56	86.6	64.7	52.7
8.79	-66.94	-55.19	-61.09	22.41	86.5	64.7	51
8.69	-66.12	-54.98	-61.48	22.68	86.2	64.7	54.4
8.93	-66.25	-55.14	-61.61	22.59	85.4	64.5	51.6
9.01	-66.21	-54.36	-61.36	22.53	84.8	64.8	51.4
8.76	-66.44	-54.88	-61.33	19.11	84.1	64.9	52.2
8.62	-66.58	-54.98	-61.33	19.41	83.6	64.2	52.3
8.82	-66.25	-54.88	-61.3	20.54	83.8	64.2	53
8.57	-66.16	-54.88	-61.61	22.68	83.2	64.1	51.7
8.64	-66.44	-55.03	-61.7	22.68	82.8	64	53.2
8.75	-66.62	-55.76	-61.48	22.74	82.1	64.1	54.9
8.71	-66.44	-54.83	-61.45	22.68	81.9	64	53.8
8.56	-66.9	-55.45	-61.48	22.68	81.2	64	51.2
8.74	-66.53	-55.24	-61.45	22.68	81	64	52.1
8.78	-66.21	-55.03	-61.73	22.71	80.8	63.8	52.7
8.85	-66.76	-55.29	-61.73	22.74	80.6	63.7	56.9
8.64	-66.62	-55.35	-61.73	22.68	79.9	63.6	51.8
8.64	-66.44	-54.93	-61.73	22.68	79.7	63.7	52.9
8.68	-66.8	-55.45	-61.85	22.71	79.4	63.6	51.8
8.7	-66.99	-55.55	-61.51	22.74	79.4	63.6	52.7
8.66	-66.58	-55.55	-61.58	22.68	79.4	63.6	53
8.63	-66.48	-54.98	-62.06	22.74	79.4	63.5	52.4
8.76	-66.94	-55.71	-61.48	22.71	79.1	63.5	52.9
8.72	-67.31	-55.66	-61.73	22.71	79	63.5	53.4
8.88	-66.53	-55.55	-61.58	22.77	78.7	63.3	50.8
8.75	-66.94	-55.6	-61.76	22.8	78.7	63.1	50.7
8.83	-66.71	-55.35	-61.91	22.77	77.9	63.2	51.2
8.64	-66.9	-55.97	-62.03	22.74	77.9	62.9	49.4
8.84	-67.35	-55.03	-62.37	22.77	77.6	63	52
8.85	-67.31	-55.35	-61.7	22.8	77.5	63.1	53.2
8.82	-66.99	-55.71	-62.19	22.8	77.6	62.9	51.5
8.6	-66.76	-55.97	-62.09	22.77	77.5	63.1	50.3
8.94	-66.99	-55.55	-61.82	22.68	77.3	63	50.7
8.97	-67.45	-55.66	-62.37	22.62	76.8	63.5	53.6
8.75	-66.76	-56.02	-62.12	21.58	75.7	63.4	50.9
8.67	-67.35	-56.33	-62.19	19.23	75.5	63.1	51.5

8.71	-67.63	-55.55	-62.46	19.32	75.7	62.9	52.5
8.58	-67.12	-55.66	-61.88	19.54	75.5	62.5	52.5
8.5	-67.31	-55.92	-62.09	19.87	75.5	62.5	53
8.87	-67.31	-55.86	-62.4	19.93	75.9	62.5	51
8.69	-67.26	-55.45	-62.03	19.96	75.8	62.2	53.6
8.61	-67.17	-56.23	-62.37	20.27	75.6	62.1	52.4
8.83	-67.4	-56.28	-61.94	21.34	75.7	62	52.3
8.65	-67.31	-55.86	-62.19	22.86	75.7	62.4	52.7
8.58	-67.58	-55.71	-62.67	22.89	75.6	62.1	53.2
8.81	-67.77	-55.97	-62.19	22.86	75.6	62	51.6
8.83	-67.31	-55.81	-62.49	22.86	75.2	62.1	50.3
8.82	-67.22	-56.02	-62.25	22.77	75.1	62.4	52.2
8.69	-67.58	-56.18	-62.12	22.68	74.6	62.6	52.9
8.69	-67.4	-56.43	-62.46	20.91	74.5	62.5	49
8.69	-67.58	-56.54	-62.49	22.28	74.5	62.4	52.5
8.74	-67.77	-56.12	-62.58	22.77	74.8	62.4	52
8.82	-67.26	-56.23	-62.74	22.86	74.9	62.5	49.4
8.72	-67.86	-56.69	-62.74	22.86	75	62.4	47.9
8.83	-67.54	-56.69	-62.52	22.89	75.4	62.4	52.7
8.79	-67.35	-56.23	-62.58	22.83	74.8	61.9	47.7
8.67	-66.9	-55.92	-62.89	22.83	74.5	62	52.5
8.89	-67.54	-55.81	-62.64	22.89	74.2	62	51.4
8.64	-67.63	-55.92	-62.61	21.89	73.5	62	53.1
8.68	-67.77	-56.69	-62.83	19.41	73.3	61.8	51.7
8.65	-67.95	-56.75	-62.4	19.44	73.2	61.7	52.8
8.68	-67.45	-56.23	-62.64	19.6	73.4	61.4	53.2
8.6	-67.95	-56.28	-62.7	19.72	73.4	61.3	50.5
8.66	-67.63	-56.07	-62.43	22.19	74.3	61.2	50.8
8.52	-67.4	-56.23	-63.13	22.92	74.2	61.1	57.1
8.87	-68.09	-56.69	-62.64	22.95	74.2	61.1	52.1
8.79	-67.58	-56.69	-63.04	22.99	74.2	61.2	53.7
8.86	-67.9	-56.07	-62.89	22.95	73.7	61	52.5
8.68	-68.27	-56.9	-62.7	22.99	73.7	61.1	51.4
8.91	-68.18	-56.38	-62.86	22.77	73.2	61.6	53.8
8.76	-67.95	-56.43	-62.83	22.16	72.9	61.4	52
8.73	-68.22	-56.54	-62.92	19.84	72.8	61.4	53.5
8.6	-67.31	-57.01	-62.92	19.87	72.8	61.4	52.6
8.67	-67.9	-57.06	-63.35	19.63	72.7	61.4	52.1
8.73	-68.13	-56.95	-62.83	19.44	72.6	61.4	50.5
8.62	-68.18	-56.85	-63.04	19.47	72.9	61.2	51.3
8.6	-67.9	-56.69	-63.04	19.69	73	61	53.8
8.71	-67.72	-56.8	-62.92	19.81	73.8	60.9	52.8
8.74	-68.18	-57.16	-63.59	20.33	74.6	60.9	52.1
8.64	-68.36	-57.06	-63.19	22.13	74.7	60.7	52.8
8.72	-67.35	-55.97	-63.22	22.95	75.1	60.8	49.2
8.58	-68.54	-56.75	-63.35	22.95	75.3	61.2	53
8.82	-68.59	-57.11	-63.22	22.86	75.7	61	52.5

8.78	-68.36	-57.11	-63.04	22.86	76.2	61.2	51.7
8.87	-68.41	-57.47	-63.22	22.89	76.4	61.3	49.9
8.87	-68.54	-56.33	-63.04	22.86	76.7	61.4	53.1
8.72	-68.36	-57.32	-63.28	22.83	77.1	61.5	52.1
8.97	-68.5	-56.85	-63.28	22.71	77.5	61.7	51.4
8.62	-68.36	-56.85	-63.5	22.19	77.7	61.8	51.9
8.75	-68.68	-57.37	-63.13	19.66	78	61.8	53
8.67	-67.95	-57.11	-63.19	19.23	78.5	61.8	50.3
8.62	-68.54	-57.01	-63.56	19.35	79.3	61.9	52.8
8.66	-68.22	-57.11	-63.38	19.47	79.8	61.9	51.3
7.72	-68.59	-57.37	-63.59	19.66	80.6	61.7	53.7
8.72	-68.86	-56.85	-63.35	19.66	81.1	61.7	51.4
8.6	-68.22	-57.16	-63.59	19.99	81.8	61.9	52.1
8.54	-68.32	-57.01	-63.8	21.25	82.2	61.9	53.4
8.63	-69	-57.52	-63.41	22.62	83.3	61.8	53.1
8.59	-68.41	-57.11	-63.68	22.62	83.7	62	51.6
8.66	-68.86	-57.68	-63.13	22.62	84.2	62.2	52.4
8.62	-68.45	-56.69	-63.41	22.53	84.8	62.5	52
8.59	-68.54	-57.06	-63.68	22.53	85.4	62.4	48.4
8.7	-68.36	-57.27	-63.44	22.5	86.2	63	52.8
8.67	-69.05	-57.16	-64.05	22.47	86	63.2	46.3
8.91	-68.86	-57.21	-63.56	22.5	86.5	63.2	52.5
8.63	-68.36	-57.42	-63.47	22.47	87.1	63.2	53
8.68	-68.45	-57.32	-63.5	22.44	87.7	63.2	55.2
8.8	-69	-57.21	-63.59	22.28	88.5	63.5	54.9
8.73	-68.68	-57.52	-63.5	22.44	88.8	63.6	49.8
8.97	-68.73	-57.21	-63.53	22.28	89.4	63.6	53.5
8.77	-68.32	-57.16	-64.02	22.41	90	63.4	50.5
8.71	-68.82	-57.52	-63.74	22.25	90.6	63.6	58.1
8.6	-68.59	-57.47	-64.2	22.28	90.8	63.6	53.4
8.6	-68.59	-57.47	-63.71	22.28	91	63.7	52.7
8.78	-68.73	-57.68	-63.71	22.28	91.6	63.8	51.5
8.6	-68.96	-57.42	-63.86	22.28	91.8	63.8	53.3
8.69	-68.54	-57.32	-63.96	22.28	91.9	64.1	52.4
8.83	-68.41	-57.32	-63.89	22.28	91.8	64.3	47.2
8.62	-68.82	-57.58	-63.89	22.25	91.7	64.5	52.7
8.68	-68.82	-57.42	-64.14	22.28	91.4	64.5	52
8.9	-68.96	-57.68	-64.14	22.22	91.8	64.7	52.5
8.7	-69.18	-58.04	-63.71	22.34	90.9	64.8	53
8.94	-69.32	-57.47	-64.05	22.25	91	64.9	50.3
8.72	-69.05	-57.52	-64.05	22.28	90.7	65	51.9
8.62	-69.09	-57.32	-64.05	22.25	90.9	65	52.5
8.71	-69.23	-57.68	-64.14	22.31	90.8	65	51.3
8.91	-69	-57.84	-63.99	22.25	91.2	65	52.2
8.82	-68.59	-58.2	-64.05	22.31	91.5	65.1	51.7
8.7	-69.05	-57.78	-64.14	22.22	91.7	65.1	52.3
8.71	-68.86	-57.63	-63.86	22.22	91.4	65.1	54.3

8.81	-69.55	-57.84	-63.83	22.22	91.5	65.2	51.5
8.67	-68.77	-57.63	-63.93	22.22	91.7	65.2	55.3
8.61	-69	-57.78	-64.05	22.25	91.8	65.2	52.4
8.79	-69.18	-57.32	-63.96	22.28	91.7	65.1	52.2
8.71	-69.14	-57.78	-64.47	22.31	91.8	65.1	53.5
8.66	-68.96	-57.78	-63.96	22.13	91.8	65.3	47.2
8.84	-69.18	-57.68	-64.17	22.28	91.8	65.4	53.8
8.62	-69.14	-58.41	-64.57	22.22	91.8	65.4	50.3
8.87	-69.23	-58.04	-64.29	22.19	91.8	65.4	52.2
8.63	-69.69	-57.73	-64.23	22.19	92	65.5	51.6
8.68	-69.18	-57.99	-64.02	22.19	91.7	65.6	55.9
8.82	-69.37	-57.63	-64.44	22.25	91.8	65.7	52.2
8.89	-69	-58.15	-63.93	22.16	91.6	65.8	50.7
9	-69.18	-58.1	-64.26	22.16	91.6	65.8	51
9.16	-69.46	-58.04	-64.66	22.25	90.9	66.2	52.2
8.7	-69.46	-58.04	-64.47	18.8	90.5	66.1	52.8
8.62	-69.18	-58.1	-64.2	18.93	90	65.8	53.5
8.84	-69.55	-57.68	-64.35	19.35	89.5	65.6	54.8
8.68	-69.51	-58.15	-64.32	20.24	89.2	65.5	55.5
8.66	-69.37	-58.2	-64.47	20.02	88.7	65.5	53.1
8.78	-69.6	-57.84	-64.41	19.54	88.1	65.5	55.2
8.74	-69.51	-58.04	-64.2	19.32	87.3	65.5	52.9
8.22	-69.64	-57.78	-64.51	19.2	86.7	65.3	52.8
8.43	-69.32	-58.2	-64.32	19.32	86.2	65.4	52.9
8.79	-69.64	-57.99	-64.47	19.26	85.8	65.3	52.5
8.85	-69.23	-57.78	-64.63	19.54	85.6	65.2	51.4
8.57	-69.73	-58.3	-64.47	19.9	85.4	65.3	52.8
8.88	-69.46	-57.73	-64.63	20.24	85.3	65.3	53.8
8.88	-69.46	-57.84	-64.69	20.7	85.1	65.2	51.7
8.78	-69.41	-57.63	-64.6	22.19	84.8	65.2	52.8
8.55	-69.51	-57.99	-64.81	22.34	84.4	65.1	50.9
8.83	-69.32	-58.25	-64.75	22.34	84.4	65	53.2
8.69	-69.6	-58.2	-64.6	22.41	84.2	65.2	54.4
8.56	-69.6	-58.1	-64.66	22.44	84	65.2	52.2
8.76	-69.78	-58.1	-65.02	22.44	83.8	65	52.1
8.65	-69.55	-58.46	-64.84	22.44	83.4	65	52.6
8.63	-69.83	-58.77	-64.69	22.41	83.5	64.8	52.3
8.71	-69.6	-58.35	-64.47	22.34	83.1	65	55.2
8.87	-69.41	-58.1	-64.93	22.28	82.9	64.8	52.5
8.75	-69.78	-58.15	-64.63	22.44	82.9	64.9	53.8
8.76	-69.78	-58.72	-64.75	22.31	82.4	65.1	52.6
8.64	-70.05	-58.04	-64.9	21.95	81.7	65.2	52.4
8.74	-70.1	-59.03	-64.6	19.54	81.4	65.1	52
8.71	-69.69	-58.15	-64.63	18.89	81.4	64.8	50.5
8.67	-69.41	-57.99	-65.18	18.99	81.4	64.7	50.9
8.62	-69.69	-58.25	-65.02	19.11	81.3	64.7	51.8
8.86	-70.19	-58.72	-65.05	19.26	81.3	64.1	48.7

8.78	-69.87	-58.25	-64.9	20.54	81.4	64.3	53.6
8.59	-70.05	-58.67	-65.18	22.53	81.3	64.2	52.7
8.81	-69.87	-58.61	-64.87	22.53	81.4	64.1	51.1
8.7	-69.78	-58.98	-64.96	22.53	81.5	64.2	52.5
8.78	-70.15	-58.56	-65.12	22.5	81.5	64.2	46.8
8.69	-70.1	-58.51	-65.12	22.5	81.6	64	49
8.66	-69.92	-58.67	-65.18	22.59	81.3	63.9	52.4
8.87	-69.87	-58.82	-65.09	22.53	80.9	63.7	53.2
8.57	-70.15	-58.77	-65.36	22.56	80.8	63.8	51.7
8.73	-70.24	-58.98	-64.72	22.59	80.9	63.8	52.4
8.84	-69.83	-58.56	-64.93	22.56	80.7	63.9	53.5
8.83	-69.87	-58.93	-64.99	22.59	80.3	63.6	53.3
8.88	-70.19	-58.61	-65.15	22.56	80.1	63.8	52.2
8.65	-70.19	-58.35	-65.73	22.5	80.2	63.7	50.5
8.68	-69.92	-58.98	-65.36	22.53	80.3	63.6	51.6
8.71	-69.87	-58.77	-65.18	22.59	79.9	63.7	51.9
8.64	-70.05	-59.08	-65.15	22.59	79.7	63.7	49.8
8.73	-70.47	-58.56	-65.63	22.56	79.5	63.6	54
8.88	-70.47	-58.67	-65.09	22.5	79.5	63.7	52.7
8.89	-70.19	-58.67	-65.51	22.59	79.3	63.6	50.7
8.71	-70.15	-58.46	-65.36	22.59	79.4	63.6	52.6
8.6	-70.15	-58.77	-65.3	22.56	79.3	63.6	53.2
8.7	-70.47	-58.98	-65.42	22.62	79.2	63.6	51.4
8.96	-70.28	-58.41	-65.15	22.59	79.1	63.4	52.7
8.86	-70.6	-59.24	-65.24	22.53	79	63.6	54.4
10.06	-70.51	-58.77	-64.96	22.34	78.8	63.8	51.6
8.7	-70.92	-59.08	-65.27	19.02	78.5	63.8	53
8.62	-70.42	-58.67	-65.39	19.23	78.5	63.3	54.7
8.75	-70.28	-58.56	-65.18	21.21	79	63	50.8
8.86	-70.79	-59.08	-65.21	22.68	79	63.1	53.3
8.57	-70.19	-59.24	-65.45	22.62	78.7	63	53.8
8.87	-70.1	-58.41	-65.12	22.71	78.7	63.2	51.3
8.61	-70.47	-58.98	-65.48	22.77	78.6	63	53.2
8.56	-69.87	-58.87	-65.27	22.68	78.7	62.9	51.7
8.58	-70.56	-59.39	-65.7	22.65	78.6	62.8	52.6
8.67	-70.38	-59.03	-65.45	22.65	78.7	62.6	50.3
8.56	-70.33	-58.72	-65.76	22.56	78.6	62.9	55
8.85	-70.47	-59.08	-65.3	22.71	78.4	62.8	54.6
8.62	-70.65	-59.29	-65.76	22.68	78.3	62.8	50.7
8.76	-70.51	-59.29	-65.73	22.65	78.4	62.7	52
8.54	-70.51	-59.44	-65.82	22.71	78.3	62.7	53.9
8.89	-70.28	-59.5	-65.54	22.68	77.9	62.8	51.6
8.83	-70.6	-58.98	-65.73	22.62	77.4	63.1	52.4
8.74	-70.74	-58.98	-65.67	19.99	76.7	63.1	53.1
8.74	-70.65	-59.76	-65.7	19.11	76.8	63	52.7
8.65	-70.24	-58.98	-65.73	19.32	77	62.8	52.4
8.08	-70.79	-59.34	-65.21	19.41	76.9	62.5	53

8.62	-71.02	-59.19	-65.63	19.87	77.7	62.6	54.4
8.75	-70.79	-59.03	-65.45	21.86	78.5	62.5	49.9
8.56	-70.56	-59.65	-65.36	22.77	78.8	62.5	52.1
8.78	-70.65	-59.19	-65.57	22.68	79.4	62.6	55.3
8.85	-70.83	-59.24	-65.79	22.62	79.9	62.8	50.5
8.66	-70.56	-59.34	-65.63	22.59	79.9	63	54.3
9.06	-70.92	-59.55	-65.88	22.56	79.9	63.5	53.7
8.64	-70.6	-59.7	-66.15	21.95	80.1	63.3	51
8.63	-71.06	-59.24	-66.28	21.64	80.7	63.5	53.1
8.62	-71.25	-59.65	-66.09	21.79	81	63.4	52.7
8.74	-70.47	-59.39	-65.67	22.31	81.6	63.6	54.1
8.71	-70.79	-59.65	-65.7	22.25	82.1	63.4	53
8.64	-71.2	-59.6	-65.88	21.21	82.2	63.6	52.2
8.72	-71.02	-59.76	-65.88	19.29	82.4	63.6	51.6
8.72	-70.83	-59.44	-66.06	18.93	83.2	63.5	53.2
8.71	-71.2	-59.65	-65.79	18.96	84.1	63.6	54.3
8.74	-70.7	-59.55	-65.94	19.05	84.2	63.6	51
8.66	-70.79	-59.7	-65.85	19.11	85.2	63.6	53.4
8.76	-71.11	-59.81	-65.85	19.54	85.9	63.3	53.7
8.6	-71.2	-59.44	-66.09	21.34	87.2	63.3	56.1
8.62	-70.74	-59.6	-66.21	22.41	88.2	63.6	52.5
8.9	-71.06	-59.34	-66	22.41	88.6	63.7	53.9
8.59	-71.25	-59.34	-66.64	22.34	89.2	63.6	52.3
8.63	-71.29	-59.86	-66.25	22.44	89.5	63.8	50.4
8.8	-70.79	-59.39	-66.21	22.41	89.9	63.9	51.5
8.57	-70.83	-59.81	-65.73	22.34	90.6	64	48.4
8.6	-71.25	-59.55	-66.18	22.22	90.8	64.2	52.2
8.8	-71.2	-59.76	-66	22.22	91.5	64.3	53
8.56	-71.02	-60.22	-66.03	22.22	92.1	64.4	52.6
8.67	-71.11	-59.96	-65.79	22.19	92.4	64.5	51.1
8.76	-71.34	-59.96	-66.03	22.16	92.6	64.9	53.4
8.57	-71.02	-59.6	-66.18	22.16	92.9	64.7	52.2
8.87	-71.11	-59.86	-66	22.22	93.3	64.9	51.9
8.82	-70.88	-60.02	-66.37	22.22	93.3	65	53.6
8.85	-71.75	-59.76	-66.09	22.19	93.9	65	53.6
8.62	-71.06	-59.96	-66.31	22.19	94.2	65.3	51.1
8.75	-71.84	-59.91	-66.4	22.19	94.4	65.3	51.7
8.63	-71.38	-60.02	-66.37	20.67	94.4	65.3	52.9
8.81	-71.25	-59.76	-66.34	19.66	94.3	65.4	51.6
8.68	-71.29	-59.6	-66.34	19.35	94.1	65.5	50.4
8.82	-71.52	-59.65	-66.25	19.26	94.1	65.5	52.8
8.68	-71.29	-59.55	-66.61	19.26	93	65.6	51.7
8.79	-70.97	-59.65	-66.25	19.6	93.2	65.5	53.4
8.85	-71.38	-59.96	-66.43	21.06	93.2	65.7	52.2
8.85	-71.38	-59.91	-66.46	22.25	93.3	65.8	53.6
8.8	-70.97	-59.86	-66.55	22.28	93.6	65.9	53.7
8.86	-71.38	-59.96	-65.91	22.25	93.9	65.8	52.5

8.64	-71.25	-60.02	-66.83	22.22	93.7	65.8	54.9
8.62	-71.2	-59.96	-66.34	22.1	93.8	65.9	51.9
8.83	-71.52	-59.86	-66.4	22.19	94	65.9	52.8
8.79	-71.38	-59.76	-66.61	22.13	93.8	66	51.4
8.59	-71.66	-60.53	-66.55	22.22	94	66.1	53.4
8.8	-71.38	-59.44	-66.37	22.19	94.1	66	53.8
8.62	-71.7	-60.22	-66.61	22.22	94	66.1	55.3
8.88	-71.7	-60.22	-66.55	22.16	94.2	66	53.4
8.71	-71.38	-59.86	-66.46	22.16	94	66.2	52.8
8.62	-71.47	-60.07	-66.64	22.16	94.3	66.2	52.8
8.85	-71.61	-60.07	-66.28	22.19	94	66	53.6
8.83	-71.43	-60.07	-66.73	22.34	93.9	66.2	50.7
8.79	-71.57	-60.22	-66.67	22.19	93.7	66.2	51.4
8.88	-71.47	-60.07	-66.46	22.22	93.9	66.1	53.9
8.59	-71.43	-60.38	-66.86	22.19	93.8	66.2	52.4
8.84	-71.93	-60.33	-67.04	22.19	93.5	66.2	51.8
8.88	-71.47	-60.07	-66.92	22.25	93.3	66.2	51.7
8.85	-71.89	-60.33	-67.01	22.28	93	66	52
8.63	-71.66	-60.38	-66.76	22.22	92.7	66.3	52.7
8.87	-71.84	-60.38	-66.79	22.28	92.3	66.1	52.7
8.88	-71.79	-60.59	-66.64	22.28	92	66.2	51.4
8.83	-71.47	-59.5	-66.67	22.28	91.7	66.2	52.3
8.71	-71.7	-60.33	-66.92	22.34	91.1	65.9	52.8
8.84	-71.93	-60.07	-66.73	22.28	90.2	66.1	51.8
8.76	-71.93	-60.12	-66.73	22.25	89.9	66.1	52.7
8.82	-71.75	-60.07	-66.92	22.28	89	66.1	49.1
8.74	-71.98	-60.33	-67.19	22.28	88.5	65.9	47.2
8.82	-72.02	-60.33	-66.61	22.31	88.4	66	49.5
8.74	-71.79	-60.38	-67.01	21.86	87.7	66	51.6
8.8	-71.93	-60.07	-66.86	19.99	87.3	65.8	56.9
8.72	-71.75	-60.22	-66.92	19.41	86.4	65.6	50.5
8.73	-71.7	-60.22	-67.16	19.32	85.8	65.8	52.7
8.68	-71.93	-60.85	-66.98	19.26	85.7	65.6	54.2
8.59	-72.02	-60.85	-66.92	19.26	85.8	65.6	53.2
8.87	-71.98	-61.11	-67.34	20.02	85.9	65.5	52.9
8.87	-71.84	-60.27	-67.07	22.34	85.5	65.4	52.7
8.65	-72.16	-60.9	-66.98	22.34	85.3	65.5	52.2
8.83	-71.57	-60.38	-67.01	22.41	84.8	65.5	52.1
8.87	-72.12	-60.74	-67.16	22.41	84.8	65.4	52.2
8.7	-72.07	-60.9	-67.1	22.41	84.4	65.5	53.1
8.76	-72.21	-60.38	-67.07	22.5	84.1	65.5	50.9
8.63	-72.07	-60.9	-67.22	22.31	83.8	65.5	54.1
8.73	-72.3	-60.9	-67.07	22.44	83.9	65.3	52.6
8.81	-72.02	-60.64	-67.07	22.34	83.6	65.3	52.9
8.79	-71.75	-60.33	-67.28	22.41	83.6	65.2	53.9
8.88	-71.84	-60.22	-67.22	22.5	83.6	65.2	50.4
8.53	-72.21	-61.05	-67.16	22.41	83.3	64.9	53.2

8.9	-72.02	-60.9	-67.5	22.44	83.2	65	52.1
8.92	-71.93	-60.69	-67.44	22.41	83.1	65.2	52.7
8.85	-72.16	-60.85	-67.22	22.44	82.8	64.8	49.3
8.77	-71.93	-60.9	-67.34	21.67	82.1	65.4	56.7
8.75	-71.84	-60.59	-67.44	18.86	82.1	65.1	52.4
8.62	-72.02	-60.33	-67.07	19.14	82.1	64.8	53.6
8.58	-72.02	-60.74	-67.37	19.84	82.8	64.5	50.8
8.87	-72.39	-60.85	-67.65	22.5	82.8	64.4	51.6
8.85	-72.39	-60.79	-67.22	22.5	82.4	64.4	52.4
8.85	-72.48	-60.69	-67.71	22.47	82.5	64.4	52.8
8.86	-72.07	-60.85	-67.34	22.5	82.5	64.5	56
8.59	-72.48	-61.26	-67.13	22.5	83.1	64.4	50.3
8.89	-72.12	-60.85	-67.59	21.79	82.5	64.3	52.7
8.65	-72.21	-60.64	-67.41	20.09	82.1	64.2	52.1
8.82	-72.3	-60.74	-67.59	19.47	81.9	64.1	51.9
8.87	-72.44	-60.64	-67.28	19.66	81.9	64.1	52.5
8.59	-72.16	-61	-67.41	20.09	81.8	64	53.2
8.89	-72.39	-60.59	-67.5	22.5	81.6	64	54.5
8.79	-72.3	-61	-67.22	22.5	81.2	63.9	52.5
8.7	-72.48	-60.95	-67.5	22.5	81.5	63.9	51.9
8.65	-72.57	-60.69	-67.53	22.5	81.4	64	53.4
8.78	-72.53	-61.11	-67.74	22.47	81.1	63.9	52.7
8.65	-72.39	-60.9	-67.28	22.53	80.8	64	53
8.65	-73.26	-60.79	-67.34	22.47	80.7	64.1	55.2
8.77	-72.02	-60.85	-67.92	22.44	80.1	64.1	51.5
8.7	-71.75	-61.21	-67.59	22.44	79.9	64.3	53
8.71	-72.85	-61.16	-67.83	18.83	79.8	64.2	55.4
8.74	-72.34	-61.16	-67.44	18.96	79.8	63.9	53
8.6	-72.48	-60.79	-67.77	19.2	80	63.6	53.2
8.73	-72.12	-60.95	-67.65	19.63	80.3	63.6	54.2
8.58	-72.62	-60.9	-67.37	21.12	80.2	63.6	52.9
8.65	-72.3	-61.42	-67.89	21.52	80.1	63.5	51.6
8.61	-72.21	-60.69	-67.8	20.76	79.9	63.3	53
8.66	-72.57	-61.26	-67.59	20.82	80.2	63.4	51.6
8.88	-72.21	-61.21	-67.53	21.79	80.5	63.5	52
8.57	-72.99	-61.57	-67.62	22.22	80.2	63.3	53.1
8.64	-72.76	-61.31	-67.71	22.5	80.1	63.4	52
8.54	-72.71	-61.26	-67.99	22.59	80.1	63.4	52.5
8.59	-72.71	-61.42	-67.41	22.56	80.3	63.3	48.9
8.57	-72.44	-60.95	-67.83	22.59	80.3	63.5	52.3
8.65	-72.57	-61.05	-67.95	22.53	80.1	63.4	50.8
8.89	-72.71	-61.36	-67.99	22.59	79.8	63.3	52.5
8.61	-72.53	-61.05	-67.8	22.53	79.9	63.4	53.8
8.69	-72.76	-61.36	-68.02	22.59	79.9	63.3	50.1
8.88	-72.62	-61.11	-67.89	22.56	79.8	63.4	50
8.61	-72.76	-61.42	-67.95	22.59	79.5	63.3	49.7
8.78	-72.99	-61.52	-67.95	22.56	79.5	63.3	51.5

8.85	-73.03	-61.52	-67.99	22.65	79.5	63.2	52
8.86	-72.71	-60.27	-67.77	22.65	80.2	63.3	51.8
8.58	-72.99	-61.78	-68.14	22.56	80.2	63.2	52.2
8.56	-72.76	-61.36	-68.2	22.62	80.1	63.2	47.9
8.62	-72.8	-61.16	-67.92	22.59	79.9	63.3	51.5
8.81	-73.12	-61.73	-67.86	22.56	80.3	63.2	52.5
8.86	-72.99	-61.47	-67.89	22.5	80.7	63.2	49.8
8.62	-72.66	-61.16	-67.86	22.5	81.4	63.4	51.1
8.66	-72.76	-61.88	-68.17	22.44	81.9	63.3	51.9
8.63	-72.85	-61.31	-68.05	22.5	82.1	63.3	51.3
8.82	-72.76	-61.47	-67.83	22.47	82.8	63.4	53.3
8.77	-73.08	-61.57	-68.32	22.44	83.1	63.3	52.3
8.65	-72.99	-61.78	-68.38	22.44	83.4	63.6	53.5
8.62	-73.17	-61.57	-68.57	22.41	84	63.6	53.8
8.67	-73.17	-61.73	-67.89	22.34	84.4	63.6	53.3
8.63	-73.08	-61.47	-68.32	22.31	85.1	63.7	51.4
8.61	-72.89	-61.52	-67.92	22.41	85.4	63.6	51.6
8.64	-73.03	-61.99	-68.2	22.44	86.1	63.7	52.8
8.77	-72.66	-61.94	-68.32	22.25	86.5	63.7	54
8.69	-73.03	-61.73	-68.05	22.31	87.3	63.8	49.5
8.72	-73.76	-62.04	-68.23	22.28	88.3	63.8	52.8
8.62	-73.4	-61.83	-67.92	22.19	88.8	64	52.5
8.54	-72.48	-61.73	-68.11	22.13	89.3	64.1	52.7
8.63	-73.03	-61.62	-68.08	22.25	90	64.2	52.6
8.74	-73.12	-61.52	-68.08	22.13	90.8	64.3	51.9
8.8	-72.8	-61.62	-68.32	22.13	91.7	64.2	52.2
8.62	-73.03	-61.78	-68.26	22.04	92.1	64.5	52.7
8.73	-73.03	-61.42	-68.32	22.07	93.1	64.7	50.4
8.66	-73.4	-61.78	-68.53	22.01	93.8	64.7	51.6
8.65	-73.17	-61.88	-68.17	20.73	94.3	64.9	51.2
8.78	-73.08	-61.36	-68.41	20.09	95.2	65.1	51.1
8.55	-72.99	-61.99	-68.38	20.24	95.5	65.3	55.4
8.8	-73.31	-61.73	-68.02	20.85	95.5	65.3	52.9
8.62	-73.17	-62.04	-68.08	21.7	96.2	65.5	54.1
8.69	-73.44	-61.83	-68.2	21.98	96.6	65.5	49.9
8.75	-73.49	-61.16	-68.32	21.86	97	65.8	50.7
8.82	-73.08	-61.62	-68.23	21.98	97	65.9	52.4
8.62	-73.31	-61.62	-68.69	21.92	97.3	65.9	54
8.83	-73.12	-61.94	-68.23	21.83	98	66.2	52.5
8.6	-72.99	-62.4	-68.29	21.92	98.4	66.2	52.1
8.88	-73.26	-62.09	-68.57	21.92	98.6	66.4	52.4
8.64	-73.44	-61.83	-68.41	21.67	98.5	66.5	53.6
8.57	-73.03	-62.04	-68.2	20.18	98.3	66.6	52.2
8.83	-73.26	-61.78	-68.53	19.69	98	66.7	53.8
8.62	-73.31	-61.73	-68.41	19.72	98	66.7	53.8
8.65	-73.31	-61.73	-68.57	20.36	97.9	66.8	52.7
8.59	-73.86	-62.09	-68.29	21.86	97.7	67	52.9

8.81	-73.44	-61.57	-68.72	21.89	97.6	67.1	56.3
8.85	-73.49	-61.62	-68.53	21.86	97.9	67.1	52.9
8.59	-73.44	-62.04	-68.47	21.89	97.6	67.3	50.8
8.82	-73.26	-61.99	-68.6	21.83	97.7	67.4	55.4
8.67	-73.26	-62.14	-68.81	21.79	97.9	67.5	54.6
8.89	-73.44	-61.94	-68.69	21.86	97.5	67.6	52.6
8.74	-73.12	-62.14	-68.57	21.86	97.5	67.6	53.1
8.69	-73.58	-62.35	-69.11	21.83	97.7	67.9	55
8.72	-73.49	-62.25	-68.69	21.83	97.6	68.1	54.7
8.83	-73.67	-62.09	-68.66	21.7	97.5	68.4	53
8.77	-73.4	-62.19	-68.93	19.93	97.1	68.4	51.3
8.8	-73.53	-62.04	-68.6	18.13	97.2	68.4	49.8
8.73	-73.44	-61.94	-68.9	18.25	97.3	68.3	50.5
8.75	-73.49	-62.14	-68.78	18.28	97.1	68.4	52.5
8.76	-73.86	-61.99	-68.87	18.28	97.3	68.3	51.5
8.71	-73.31	-62.14	-68.72	18.28	97	68.3	53.5
8.75	-73.67	-61.88	-68.78	18.32	96.6	68.1	51.6
8.71	-73.72	-62.14	-68.84	18.44	96.4	68.1	52.9
8.67	-73.49	-61.99	-68.96	18.47	96.4	68	52
8.72	-73.86	-62.4	-68.84	18.47	96.5	68.1	53.2
8.59	-73.63	-62.25	-68.78	18.41	96.3	68.2	52.6
8.66	-73.72	-62.04	-68.93	18.41	96.1	68.2	53
8.6	-73.26	-62.09	-68.66	18.47	95.5	68.1	52.3
8.74	-73.53	-61.88	-69.05	18.5	95.4	68.2	50.7
8.67	-73.44	-61.99	-68.93	18.56	95.3	68.1	53.7
8.63	-73.58	-61.88	-69.15	18.47	95	68.1	51.9
8.74	-73.72	-61.99	-68.93	18.41	94.9	68.2	53.2
8.65	-73.67	-62.3	-68.99	18.41	94.5	68.3	54.5
8.75	-73.9	-62.35	-69.05	18.32	94.7	68.4	51.5
8.69	-73.72	-62.4	-68.93	18.35	94.7	68.3	50.9
8.68	-73.76	-62.25	-69.11	18.32	94.3	68.5	52.9
8.68	-74.08	-62.35	-69.27	18.32	93.9	68.3	53.5
8.72	-73.63	-62.09	-69.21	18.38	93.6	68.2	56.3
8.55	-73.63	-61.99	-68.93	18.5	93.7	68	51.6
8.51	-73.67	-62.51	-69.05	18.99	93.7	67.7	53.6
8.59	-74.31	-62.3	-69.33	21.49	94	67.8	53.5
8.75	-73.63	-62.45	-69.18	21.92	94	67.8	53.1
8.79	-73.81	-62.35	-69.11	21.95	93.8	67.9	52.2
8.6	-73.99	-62.35	-68.75	21.89	93.6	67.9	51.4
8.74	-73.72	-62.35	-68.93	21.89	93.3	68	53.1
8.84	-73.81	-62.56	-69.11	21.86	93.1	67.9	50.4
8.81	-73.67	-62.19	-69.08	21.95	93.1	68.3	51.3
8.76	-74.08	-62.61	-69.08	21.89	92.9	68.4	51.2
8.85	-73.72	-62.45	-69.51	21.92	92.5	68.4	53.7
9.75	-73.72	-62.25	-69.36	21.7	91.8	68.3	50.1
8.67	-73.67	-62.66	-69.08	21.52	91.1	68.2	53
8.76	-74.22	-62.3	-69.36	21.73	90.9	68.2	51.9

9.92	-74.31	-62.87	-68.96	21.76	90.8	68.1	52.3
8.99	-74.27	-62.66	-69.27	21.89	90.8	68.1	52.4
8.76	-73.95	-62.87	-69.33	21.89	90.8	67.8	51.9
8.97	-73.95	-63.13	-69.33	21.89	90.8	67.8	51.2
8.76	-74.13	-62.71	-69.18	21.89	90.4	67.6	54.6
8.65	-74.04	-62.09	-69.69	21.86	90.4	67.5	52.4
8.62	-74.27	-62.77	-69.42	21.89	90.4	67.4	53.8
8.94	-73.9	-62.71	-69.6	21.95	90	67.7	52.6
8.74	-74.08	-62.87	-69.21	21.92	90.1	67.5	54.5
8.67	-74.22	-62.77	-69.36	21.92	89.8	67.4	51.4
8.95	-73.81	-62.35	-69.54	21.89	89.9	67.2	52.4
8.79	-73.99	-62.51	-69.27	21.95	89.7	67.3	52.1
8.88	-74.59	-62.45	-69.33	21.92	89.7	67.1	53.7
8.69	-74.13	-63.39	-69.51	21.92	89.7	67	51.1
8.74	-74.18	-62.97	-69.21	21.95	89.8	66.9	52.3
8.76	-73.95	-62.71	-69.21	21.89	89.8	66.9	53.1
8.62	-74.08	-62.71	-69.54	21.95	89.7	66.8	50
8.64	-74.08	-63.03	-69.42	21.98	89.7	66.8	50.7
8.59	-74.31	-63.28	-69.85	21.95	89.7	66.8	52.7
8.78	-74.31	-62.61	-69.15	21.95	89.5	66.7	51.5
8.58	-74.22	-62.66	-69.45	21.92	89.2	66.9	52.6
8.71	-74.13	-63.13	-69.54	21.98	88.7	66.9	52.9
8.9	-74.18	-62.77	-69.3	21.92	88.5	66.8	52.8
8.62	-74.27	-62.71	-69.54	21.95	88.5	66.8	50.2
8.94	-74.5	-62.97	-69.57	21.92	88.5	67	52
8.94	-73.63	-62.71	-69.73	21.92	88.5	67.1	54.8
9	-74.13	-62.51	-69.27	21.92	88.6	67	52.9
8.71	-74.08	-62.61	-69.54	21.95	88.5	67.1	55.8
8.95	-74.18	-62.82	-69.39	21.92	88.1	67	49.8
8.98	-74.82	-62.82	-69.36	21.89	88.1	66.8	51.4
8.94	-73.95	-62.71	-69.57	21.92	88.1	66.8	52.6
8.92	-74.22	-62.66	-69.21	21.86	87.9	66.9	51.6
8.82	-74.08	-62.97	-69.57	21.89	87.7	66.7	48.9
8.93	-73.99	-62.82	-69.73	21.92	87.9	66.8	51.7
9.26	-74.27	-63.13	-69.57	21.92	87.8	66.9	50.2
8.71	-74.4	-62.97	-69.54	21.76	87.6	67	51.8
8.76	-74.59	-62.77	-69.79	18.22	87.7	66.6	50.5
8.71	-74.63	-62.61	-69.69	18.35	87.5	66.6	50.7
8.61	-74.54	-63.34	-69.57	18.38	87.5	66.3	50.5
8.33	-74.59	-62.77	-69.66	18.68	87.4	66.1	53.7
8.6	-73.99	-62.61	-69.54	18.8	87.3	66.1	50.4
8.6	-74.54	-63.13	-69.36	19.6	87.4	65.9	53.1
8.56	-74.36	-63.23	-69.85	21.28	87.3	65.9	53.5
8.56	-74.08	-63.23	-69.73	22.01	87.3	66	52.8
8.76	-74.36	-63.03	-69.88	22.01	87.5	66	49.3
8.74	-74.04	-63.13	-69.66	21.86	87.5	66.1	53.7
8.95	-74.22	-63.08	-69.88	21.98	87.5	66.4	51.6

8.7	-74.36	-63.08	-69.6	19.87	86.8	66.6	53.6
8.73	-74.36	-62.87	-69.76	18.32	86.6	66.3	52.3
8.69	-74.68	-63.13	-69.94	18.35	86.8	66.1	53.8
8.56	-74.36	-63.34	-69.69	18.32	86.8	66	56.7
8.71	-74.82	-63.08	-69.51	18.35	86.6	66	51.8
8.62	-74.31	-63.18	-69.69	18.41	86.5	65.9	52.7
8.65	-74.59	-63.18	-69.79	18.53	86.7	65.8	54.1
8.53	-74.59	-63.18	-69.79	18.83	86.7	65.7	52
8.62	-74.59	-62.97	-69.76	18.86	87.2	65.6	50.8
8.87	-74.68	-63.28	-69.76	19.47	87.6	65.7	50
8.85	-74.63	-63.39	-69.63	21.52	88	65.7	53.4
8.62	-74.91	-62.87	-69.88	21.92	88.4	65.6	53.4
8.81	-74.59	-62.82	-69.45	21.92	88.5	65.8	51.8
8.62	-74.86	-63.34	-69.76	21.92	89.2	65.6	53.1
8.75	-75	-63.18	-69.85	21.92	89.3	65.8	53.1
8.6	-75.18	-63.6	-69.82	21.92	89.6	65.7	51.6
8.85	-74.68	-63.13	-69.85	21.92	90	65.8	52.8
8.71	-74.77	-63.34	-69.63	21.86	90.7	65.8	52.5
8.82	-75	-63.28	-70.06	21.83	90.9	65.8	50.5
8.58	-74.86	-63.13	-70.24	21.79	91.1	65.9	50.9
8.59	-74.73	-62.97	-69.94	21.86	91.7	65.8	52.2
8.79	-74.59	-63.28	-69.88	21.89	92	66	56.5
8.78	-75	-63.18	-69.94	21.89	92.3	66.1	55.3
8.88	-74.91	-63.34	-70.09	21.92	92.5	66	51.7
8.91	-75.09	-63.28	-70.12	21.83	93.2	66.1	54.6
8.74	-74.86	-63.08	-70.15	21.76	94.2	66.2	51.6
8.78	-74.77	-63.13	-69.63	21.79	94.4	66.2	49.5
8.86	-75	-63.65	-69.97	21.83	94.9	66.4	52.8
8.72	-74.91	-63.34	-70.34	21.7	95.7	66.6	57.4
8.76	-74.86	-63.18	-70.06	21.79	96.1	66.7	53
8.86	-74.86	-63.44	-69.91	21.79	96.6	66.9	55.9
8.76	-74.91	-63.54	-70	21.67	97.1	67.2	51.3
8.62	-74.95	-63.54	-70.09	21.73	97.6	67.4	47.1
8.91	-74.73	-63.18	-70.12	21.7	98.3	67.7	52.9
8.78	-74.82	-63.86	-70.18	21.7	99	67.9	54.5
8.72	-74.82	-63.8	-69.97	20.18	99.3	68	49.5
8.75	-74.68	-63.23	-70.18	18.04	99.4	68	52.4
8.69	-75.09	-63.6	-69.79	18.32	99.5	67.9	52.8
8.48	-74.91	-63.39	-70.4	18.74	100.1	67.7	51.2
8.85	-74.86	-63.34	-70.18	19.02	100.5	67.8	53.3
8.76	-75	-63.8	-70.34	19.11	100.8	67.9	53.8
8.88	-74.86	-63.44	-70	18.96	101	68	52.5
8.68	-75.18	-63.34	-70.24	19.47	100.5	68.2	49.5
8.84	-75.23	-63.23	-69.88	20.79	99.8	68.1	53
8.65	-74.73	-63.44	-70.31	21.73	99.4	68.3	58.5
8.7	-74.73	-63.39	-70.21	21.67	99.1	68.3	54
8.63	-75.05	-63.6	-70.43	21.7	99.4	68.4	53

8.73	-74.95	-63.65	-70.37	21.64	99.5	68.6	52.7
8.73	-75.09	-63.86	-70.27	21.7	99.5	68.8	51.6
8.63	-75	-63.6	-70.09	21.73	99.3	68.8	52.7
8.94	-74.91	-63.44	-70.06	21.67	99	68.9	54.4
8.74	-75.41	-63.96	-70.18	21.73	99.1	69	54.3
8.88	-75.14	-63.34	-70.27	21.67	99.2	69.4	51.1
8.86	-75.18	-63.7	-70.27	21.67	99	69.3	55.2
8.92	-75.05	-63.91	-70.09	21.67	98.7	69.5	52.2
8.72	-74.91	-63.13	-70.31	21.7	98.4	69.5	54.5
8.71	-75	-63.54	-70.27	18.96	98.4	69.5	52.6
8.72	-74.91	-63.49	-69.91	18.13	98	69.4	51.9
8.74	-75.14	-63.86	-70.49	18.16	98.2	69.1	51.5
8.66	-74.91	-63.28	-70.24	18.38	97.7	68.9	52.9
8.85	-75.05	-63.6	-70.12	18.8	97.7	68.8	51.2
8.84	-75.05	-63.39	-70.43	21.73	98	68.9	53
8.74	-75.32	-64.06	-70.18	21.67	97.9	69	53.1
8.65	-74.82	-63.7	-70.34	21.7	97.6	69.1	51.3
8.77	-75.18	-63.54	-70.61	21.67	97.9	69.4	55.2
8.94	-75.14	-63.6	-70.34	21.67	97.5	69.7	51
8.94	-75.37	-63.13	-70.12	21.7	97.6	69.5	52.4
8.79	-74.95	-63.75	-70.46	21.67	97.2	69.8	54.5
8.76	-75.09	-63.7	-70.46	21.55	96.9	69.9	51.5
8.72	-75.69	-63.91	-70.34	18.13	96.5	69.7	55.1
8.71	-75.18	-63.8	-70.34	18.13	96.5	69.4	53.7
8.66	-75.18	-63.75	-70.24	18.32	96.4	69	53
8.59	-75.37	-64.01	-70.09	18.8	96.7	68.8	51.5
8.65	-75.46	-63.96	-70.34	19.47	96.8	68.8	55.3
8.77	-75.46	-63.65	-70.4	21.76	97	68.6	51.6
8.65	-75.64	-63.6	-70.55	21.76	96.7	68.8	51.5
8.83	-75.37	-63.8	-70.4	21.67	96.8	68.8	52.1
8.87	-75.37	-63.54	-70.58	21.7	96.8	69	53.7
8.79	-75.64	-64.12	-70.49	21.58	96.7	69	54.1
8.82	-75.23	-64.06	-70.82	21.76	96.7	69.4	52.7
8.75	-75.5	-63.7	-70.27	21.31	96.3	69.8	52.2
8.74	-75.27	-63.75	-70.52	18.04	96.2	69.4	51.6
8.71	-75.64	-63.91	-70.64	18.19	96.2	69.1	51.5
8.7	-75.41	-63.44	-70.49	18.44	96.2	68.8	54.7
8.71	-75.32	-64.01	-70.67	18.74	96.1	68.5	50.9
8.84	-75.27	-63.96	-70.7	21.58	96.1	68.6	54.4
8.73	-75.5	-64.12	-71.07	21.79	96	68.6	54.3
8.91	-75.27	-63.86	-70.95	21.73	95.7	68.7	47.2
8.84	-75.5	-63.8	-70.92	21.73	95.5	68.7	52.8
8.64	-75.32	-63.96	-70.95	21.73	95.2	68.8	52.4
8.91	-75.41	-63.86	-70.61	21.76	95	68.9	51.2
8.96	-75.55	-63.96	-70.61	21.76	94.3	69	51.6
8.81	-75.18	-63.86	-70.89	21.7	94	69.4	49.1
8.75	-75.55	-63.91	-70.61	18.99	93.6	69.1	50.2

8.76	-75.5	-64.12	-70.89	18.16	93.1	69	55.2
8.73	-75.46	-63.86	-71.01	18.22	93.3	68.8	52.3
8.65	-75.46	-63.91	-70.98	18.28	93.2	68.5	50.5
8.69	-75.92	-63.96	-70.92	18.22	91.9	68.5	51.3
8.69	-75.55	-64.06	-70.76	18.25	91.4	68.5	51.5
8.64	-75.5	-64.06	-70.76	18.35	91.6	68.1	53.7
8.74	-75.69	-64.12	-71.07	18.5	92	68.3	52.1
8.65	-75.5	-63.96	-70.73	18.44	92.3	68.3	52.4
8.64	-75.5	-64.37	-71.04	18.38	91.8	68.3	53.6
8.68	-75.55	-64.58	-71.04	18.41	91.6	68.3	51.8
8.75	-75.87	-64.32	-71.07	18.44	91.2	68.4	48.8
8.72	-75.5	-63.75	-70.85	18.32	90.5	68.3	51.6
8.69	-75.55	-63.96	-71.01	18.28	89.7	68.3	51.8
8.7	-75.64	-64.12	-71.1	18.28	89.4	68.3	51.4
8.71	-75.5	-64.17	-71.07	18.35	89.2	68.3	51.7
8.74	-75.82	-64.37	-71.04	18.25	88.8	68.1	52.1
8.73	-75.73	-64.06	-70.98	18.28	88.5	68	52
8.74	-75.87	-63.96	-70.95	18.28	88.5	68	53.1
8.71	-75.64	-64.58	-71.16	18.35	88.6	67.8	52.7
8.75	-75.82	-64.43	-71.01	18.35	88.3	67.9	55.3
8.62	-75.87	-64.06	-70.95	18.28	88.3	67.8	50.9
8.65	-76.1	-63.96	-71.13	18.28	88.1	67.9	50.1
8.77	-75.73	-64.53	-71.04	20.05	87.9	67.8	53.6
8.95	-75.78	-63.96	-71.19	21.89	87.9	67.9	52.5
8.97	-75.64	-64.48	-71.07	21.95	87.8	67.7	52.8
9	-76.01	-64.32	-71.04	21.92	87.4	67.7	53
8.77	-75.92	-64.06	-71.19	21.92	87.3	67.8	53.3
8.93	-75.73	-64.01	-70.85	21.92	87.3	67.6	53.8
8.85	-76.1	-64.43	-71.13	21.89	87.2	67.6	51.9
9.05	-75.92	-64.17	-71.28	21.89	86.7	67.4	52
8.77	-75.73	-64.17	-71.13	21.86	86.4	67.6	51.6
8.84	-75.78	-64.69	-71.5	21.73	86.3	67.5	53.9
9.14	-75.69	-64.43	-71.13	21.89	86	67.3	49
8.97	-75.92	-64.17	-71.19	21.92	85.9	67.3	52.4
9.67	-76.37	-64.63	-71.34	21.83	85.6	67.2	52.7
8.74	-76.1	-64.06	-71.28	21.95	85.9	66.9	52.5
8.78	-76.05	-64.53	-71.22	21.18	85.9	67.1	51.9
8.75	-75.96	-64.37	-71.25	21.58	85.7	66.9	55.9
8.74	-76.33	-64.79	-71.4	21.83	85.6	67	52.4
8.72	-75.78	-64.58	-71.4	20.97	85.5	66.8	51.6
8.71	-76.01	-64.89	-71.22	19.9	85.3	66.8	52.1
8.72	-76.05	-64.43	-71.31	19.93	84.9	66.7	50.4
8.79	-76.33	-64.37	-71.07	20.42	84.8	66.7	53.7
8.74	-76.05	-64.43	-71.5	21	84.5	66.7	51.5
8.72	-76.01	-64.53	-71.62	19.44	84.2	66.5	53
8.72	-76.14	-64.84	-71.01	18.74	84.1	66.4	51.9
8.75	-75.82	-64.69	-71.13	18.93	84.2	66.5	50.9

8.79	-75.73	-64.43	-71.4	18.32	84.1	66.3	51.2
8.72	-76.1	-64.63	-71.28	18.32	83.8	66.1	51.9
8.71	-76.05	-64.48	-71.25	18.35	83.7	66	52.3
8.75	-76.24	-64.32	-71.68	18.35	83.4	66	56
8.73	-76.37	-64.63	-71.37	18.35	83.5	65.9	52.9
8.72	-76.01	-64.74	-71.25	18.47	83.4	65.8	51.9
8.6	-76.1	-64.43	-71.31	18.62	83.2	65.5	51.6
8.77	-76.24	-64.89	-71.31	18.89	83.4	65.3	50.8
8.68	-76.28	-64.89	-71.56	20.09	84	65.3	53.9
8.62	-75.92	-64.48	-71.4	22.04	84.2	65.3	52.4
8.61	-76.01	-64.53	-71.37	22.04	84.5	65.3	53.9
8.84	-76.33	-64.84	-71.43	22.1	84.8	65.3	52.6
8.63	-76.05	-65.1	-71.65	22.04	84.9	65.4	51.5
8.81	-76.1	-64.53	-71.62	22.04	85	65.5	51.1
8.7	-76.14	-64.95	-71.53	22.04	85.3	65.5	55.2
8.88	-76.37	-64.84	-71.25	22.1	85.5	65.8	52.9
8.79	-76.33	-64.74	-71.34	19.47	85.5	65.8	53.6
8.71	-76.28	-64.37	-71.31	18.41	86.1	65.7	51.9
8.7	-76.51	-64.74	-71.43	18.71	86.6	65.3	51.6
8.74	-76.42	-64.95	-71.22	19.08	87.4	65.1	53.8
8.56	-76.01	-65.05	-71.62	21.7	87.4	65.3	53.8
8.68	-76.01	-64.58	-71.71	22.13	87.5	65.4	53.3
8.82	-76.1	-64.79	-71.68	22.1	87.3	65.3	53
8.7	-75.73	-64.69	-71.43	22.13	87.3	65.4	52.6
8.71	-76.28	-64.43	-71.74	22.13	87.2	65.4	53.5
8.79	-76.65	-64.74	-71.65	21.98	87.3	65.6	51
8.78	-76.42	-64.95	-71.5	22.04	87.5	65.5	52.3
8.8	-76.42	-64.89	-71.68	22.07	87.6	65.7	52.1
8.8	-76.14	-64.69	-71.56	22.04	87.4	65.8	51
9.41	-76.37	-64.43	-71.43	22.04	87.6	66	50.9
8.76	-76.79	-64.95	-71.8	20.6	88.2	65.9	52.1
8.76	-76.6	-64.95	-71.74	18.5	88.5	65.9	52.3
8.71	-76.65	-64.58	-71.68	18.47	88.5	65.8	52.6
8.68	-76.51	-64.84	-71.77	18.5	88.4	65.8	52.2
8.74	-76.37	-64.53	-71.71	18.62	88.6	65.7	52.2
8.35	-76.28	-65.05	-71.71	18.8	89.7	65.4	51.5
8.66	-76.19	-65.1	-71.92	19.35	90.7	65.3	54.3
8.72	-76.56	-65.57	-71.68	21.95	91.7	65.6	52.9
8.59	-76.65	-64.84	-71.86	22.01	91	65.7	52.5
8.59	-76.79	-65.36	-71.65	22.01	90.4	65.7	52.5
8.88	-76.79	-64.95	-71.95	22.01	90.5	65.8	51
8.63	-76.51	-65.26	-71.92	22.04	90	65.8	53.4
8.65	-76.92	-65.05	-71.77	21.98	90.5	65.8	51.5
8.62	-76.28	-64.43	-71.62	22.04	91.5	65.9	55.9
8.82	-76.6	-65.15	-72.17	21.92	92.3	65.9	50.8
8.68	-76.65	-65.05	-72.05	22.01	91.9	66	54
8.59	-76.88	-65.1	-71.95	22.01	92.3	65.8	51.5

8.87	-76.24	-64.79	-71.89	22.04	92.2	65.8	52.3
8.65	-76.33	-64.79	-72.08	22.01	92	65.8	56
8.68	-76.37	-65.1	-71.89	22.01	91.6	65.9	51.5
8.84	-76.33	-64.79	-71.92	21.98	90.8	65.8	51.1
8.88	-76.74	-65	-71.62	21.98	90.8	65.8	50.5
8.89	-76.47	-65.15	-71.62	22.04	90.6	65.8	52.6
8.6	-76.79	-64.89	-71.8	22.04	90.8	66.1	52.5
8.89	-76.51	-65.15	-71.8	22.04	90.9	65.9	53
8.62	-76.51	-65	-72.38	21.98	90.8	66	51.4
8.68	-76.79	-65.05	-71.98	21.98	90.7	66	52.4
8.88	-76.79	-64.95	-72.01	22.01	90.4	66	51.3
8.6	-76.6	-65.57	-71.86	22.1	89.2	66	51.4
8.61	-76.97	-65.52	-71.68	22.13	89.2	66	54.9
8.79	-76.51	-64.79	-71.71	22.16	89.2	66	53.3
8.65	-76.83	-65.57	-72.23	22.07	88.8	66	52.4
8.85	-76.79	-65.1	-71.92	22.07	88.9	65.9	49.5
8.58	-76.88	-65.26	-71.92	22.07	89	66	51.6
8.66	-76.6	-65.31	-72.05	21.98	89.2	65.8	52.3
8.85	-76.88	-64.74	-72.05	22.1	89.5	66	51.8
8.88	-76.47	-64.95	-72.08	22.13	89.3	65.9	50.8
8.65	-76.56	-64.95	-72.11	22.1	88.9	65.9	52.4
8.85	-76.51	-64.89	-72.11	22.13	89.3	65.8	52.4
8.81	-76.65	-65.36	-71.92	22.22	89.2	65.8	52.9
8.79	-76.65	-65.05	-71.95	22.19	88.7	65.8	53
8.87	-77.06	-65.2	-72.01	22.19	88.6	65.8	51.7
8.61	-77.11	-65.57	-72.29	22.25	88.5	65.8	54.9
8.85	-76.6	-65.78	-72.47	22.25	88.3	65.8	52.8
8.8	-76.83	-65.15	-71.98	22.22	88	65.5	52.1
8.57	-76.97	-65.31	-72.32	22.19	87.8	65.8	52.9
8.87	-76.83	-65.31	-72.05	22.25	87.7	65.7	51.7
8.71	-76.92	-65.26	-72.38	22.28	87.2	65.5	53.2
8.78	-76.74	-65.31	-72.11	22.19	86.6	65.7	50.9
8.82	-76.6	-65.41	-72.11	22.28	86.4	65.5	51.1
8.8	-76.88	-65.31	-72.38	22.25	86.1	65.5	53.6
8.76	-76.65	-65	-72.05	22.28	85.8	65.3	50.5
8.82	-76.79	-65.2	-72.11	22.28	85.6	65.4	53.7
8.68	-76.79	-65.62	-72.32	22.25	85.2	65.3	61
8.85	-76.6	-65.36	-72.2	22.28	85.1	65.3	54.1
8.85	-77.52	-65.15	-72.26	22.25	85.1	65.4	51.6
8.64	-76.83	-65.36	-72.08	22.25	84.6	65.2	54.1
8.85	-76.88	-65.78	-72.14	22.28	84.8	65.2	53
8.7	-76.74	-65.31	-72.75	22.31	84.4	64.9	50.5
8.88	-77.11	-64.95	-72.23	22.25	84.2	65.2	55.9
8.88	-77.06	-65.2	-72.29	22.25	84.1	65.1	51.9
8.62	-76.83	-65.41	-72.17	22.31	83.8	65	51.5
8.64	-77.06	-65.78	-72.66	22.34	83.6	65	50.5
8.64	-77.06	-65	-72.14	22.25	83.6	65	51.8

8.87	-76.51	-65.57	-72.5	22.28	83.5	64.8	52.5
8.88	-76.88	-65.57	-72.14	22.25	83.1	64.9	50.7
8.84	-77.29	-65.67	-72.66	22.31	82.2	64.8	49.1
8.61	-77.06	-65.31	-72.72	22.28	82.9	64.8	53
8.8	-76.97	-65.57	-72.14	22.34	82.7	64.7	54.4
8.86	-77.15	-65.98	-72.08	22.34	82.8	64.5	52.9
8.76	-76.88	-65.41	-72.47	22.34	82.7	64.7	51
8.56	-76.74	-65.52	-72.53	22.41	82.2	64.5	52.2
8.76	-77.06	-65.2	-72.47	22.28	82.1	64.4	52.2
8.75	-76.92	-65.2	-72.47	22.34	81.6	64.5	52
8.79	-77.06	-65.67	-72.17	22.41	81.2	64.4	52.1
8.91	-77.11	-65.78	-72.32	22.34	81.1	64.4	51.6
8.85	-77.2	-65.67	-72.38	22.28	80.9	64.1	49.5
8.59	-77.2	-65.88	-72.75	22.34	80.8	64.1	53.6
8.87	-77.38	-65.62	-72.53	22.31	80.8	64	52.6
8.73	-77.11	-65.57	-72.69	22.44	80.6	64	53
8.59	-77.01	-65.52	-72.53	22.47	80.6	63.9	51.7
8.64	-77.34	-65.57	-72.17	22.44	80.2	63.9	54
8.85	-77.43	-65.78	-72.56	22.44	80.3	63.9	53.4
8.8	-77.15	-66.04	-72.63	22.41	79.9	63.6	56.2
8.73	-77.24	-66.19	-72.44	22.34	79.8	63.8	50.3
8.9	-77.29	-65.72	-72.59	22.34	79.8	63.8	51.6
8.94	-77.15	-65.98	-72.59	22.34	79.9	63.8	51.8
8.67	-77.15	-65.57	-72.2	22.34	79.9	63.8	52.8
8.82	-77.11	-66.19	-72.23	22.41	80	63.7	52.6
8.79	-76.97	-65.78	-72.75	22.31	79.9	63.7	52.6
8.91	-77.47	-66.09	-72.72	22.34	79.8	63.6	52.5
8.9	-77.47	-66.4	-72.66	22.34	79	63.6	53.2
8.9	-77.29	-65.72	-72.59	22.34	79.1	63.7	52.3
8.76	-77.15	-65.78	-72.66	22.31	79.5	63.9	53.2
9.01	-77.47	-66.19	-72.32	22.34	79.4	64	58.2
8.89	-77.2	-65.31	-72.47	22.44	79.4	64	50.9
8.9	-77.2	-65.88	-72.63	22.34	79.1	63.8	52.3
8.77	-77.01	-65.31	-72.5	22.34	78.7	63.7	51.2
9	-77.66	-65.67	-72.96	22.34	78.8	63.6	51.3
8.95	-77.43	-66.19	-72.56	22.41	78.8	63.6	52.9
8.74	-77.34	-65.2	-72.38	22.41	78.8	63.7	53.1
8.71	-77.15	-66.19	-72.75	22.44	78.5	63.6	55.7
8.8	-77.11	-66.09	-72.66	22.41	78	63.6	51.7
8.93	-77.11	-66.19	-72.87	22.41	77.8	63.6	53.2
9.56	-77.52	-65.83	-72.66	22.34	77.9	63.6	51.8
8.77	-77.66	-66.24	-72.69	22.31	77.9	63.6	54.5
8.79	-77.2	-65.67	-72.75	22.07	78.4	63.6	52
8.73	-77.52	-65.36	-72.75	20.36	78.1	63.6	50.5
8.71	-77.34	-65.67	-72.75	18.8	77.8	63.4	51.7
8.7	-77.7	-65.72	-72.38	18.86	77.9	63.4	52.7
8.74	-77.06	-65.83	-72.93	18.83	78.3	63.3	52.7

8.57	-77.61	-66.09	-72.93	18.93	77.8	63.2	53.8
8.68	-77.7	-65.83	-72.47	18.89	77.4	63.2	52.7
8.7	-77.66	-65.72	-72.87	18.8	77.8	63.2	51.3
8.71	-77.52	-65.2	-72.9	18.89	78	63.2	52.1
8.7	-77.52	-65.72	-72.66	18.83	78	63.1	54
8.74	-77.7	-66.14	-72.69	18.86	77.8	63.1	52
8.75	-77.43	-65.83	-72.84	18.93	77.5	63.1	53.5
8.58	-77.52	-66.14	-72.9	18.96	77.3	63	55.1
8.71	-77.75	-66.04	-72.66	19.02	77.2	62.9	52.8
8.64	-77.47	-66.5	-72.93	19.05	76.9	62.7	52.8
8.52	-77.66	-65.98	-72.99	19.11	76.7	62.7	52.4
8.65	-77.29	-66.24	-72.81	19.08	76.8	62.5	49.9
8.67	-77.15	-66.04	-72.56	19.11	76.8	62.5	52.6
8.26	-77.66	-65.67	-72.84	19.17	77.3	62.5	52.7
8.78	-77.52	-66.19	-72.59	19.41	77.8	62.4	51.5
8.9	-77.38	-66.29	-72.9	19.32	78.4	62.5	50.8
8.71	-77.52	-65.67	-72.81	19.2	78.8	62.5	52.9
8.66	-77.47	-65.72	-73.39	19.32	78.9	62.5	51.8
8.56	-77.75	-66.09	-73.17	19.44	79.6	62.5	52.2
8.88	-77.88	-66.55	-73.02	19.44	79.8	62.5	52.8
8.54	-78.39	-66.24	-73.11	19.6	80.3	62.5	48.8
8.7	-77.66	-65.98	-72.9	19.69	81	62.5	54.7
8.71	-77.56	-66.4	-73.21	20.33	81.5	62.5	52.4
8.87	-77.52	-65.98	-72.99	21.49	81.7	62.5	51
8.69	-77.75	-66.19	-72.75	22.41	82.1	62.9	51
8.83	-77.84	-66.09	-72.99	22.34	82.8	62.6	53
8.54	-77.56	-66.19	-72.93	22.44	83.2	62.7	53.3
8.58	-78.02	-65.88	-72.99	21.37	83.9	63	51.4
8.74	-77.61	-66.97	-73.17	20.67	84.6	63	52.1
8.85	-77.56	-66.29	-73.08	20.54	85.3	63	53.6
8.56	-77.66	-66.19	-72.99	20.3	86.1	63.1	52.9
8.75	-77.88	-66.24	-72.9	20.36	86.5	63.1	51.1
8.59	-77.61	-66.45	-73.27	20.21	87.3	63.2	52
8.79	-78.48	-66.19	-73.51	20.7	87.7	63.4	53.8
8.58	-77.43	-66.04	-72.96	22.22	88.4	63.4	52.5
8.71	-77.75	-65.98	-73.33	22.28	88.8	63.5	51.3
8.56	-78.16	-66.4	-73.08	22.28	88.9	63.7	52.7
8.78	-77.75	-66.45	-73.27	22.13	89.7	63.7	54.8
8.86	-77.88	-66.35	-73.27	22.16	89.6	63.9	52.4
8.78	-77.93	-66.19	-72.9	21.98	89.9	63.8	54.9
8.88	-78.02	-66.19	-73.27	22.13	90.2	64	51.5
8.6	-77.98	-66.4	-73.17	22.1	90.9	63.8	53.8
8.62	-77.7	-66.19	-73.08	22.16	91	64.1	53.8
8.77	-77.43	-66.66	-73.11	22.13	90.9	64.2	52.1
8.61	-77.88	-66.5	-73.33	22.13	91.5	64.4	51.8
8.81	-78.11	-66.92	-73.3	22.13	91.6	64.5	49.1
8.82	-77.56	-66.29	-73.39	22.13	91.8	64.7	51.3

8.82	-77.88	-66.66	-73.17	22.07	91.9	64.7	53.4
8.68	-77.84	-66.04	-73.3	22.07	92.2	64.7	51
8.87	-78.02	-66.29	-73.02	21.98	92.9	64.8	53.7
8.88	-77.84	-66.81	-73.39	22.01	92.9	64.9	52.9
8.84	-77.98	-66.45	-73.42	22.01	92.7	65	53.8
8.75	-77.7	-66.66	-73.05	22.01	91.9	65.2	51.5
8.75	-77.61	-66.61	-73.02	22.07	92	65.4	51.6
9.01	-78.21	-65.83	-73.54	22.07	91.2	65.6	50.8
9.37	-78.07	-66.55	-73.11	21.98	90.7	65.9	51.4
8.75	-78.11	-66.45	-73.45	21.46	91	65.8	51.9
8.78	-77.7	-66.29	-73.24	20.51	91.1	65.8	54.2
8.76	-77.38	-66.55	-73.39	21.55	91.2	65.9	51.3
8.78	-77.7	-66.29	-73.11	21.92	90.9	66	53
8.72	-77.93	-66.87	-73.24	22.04	91	66	52.9
8.73	-77.93	-66.92	-72.96	20.6	90.8	65.9	52.6
8.73	-78.11	-66.09	-73.27	18.96	90.9	65.8	52.3
8.78	-77.84	-66.5	-73.27	18.47	91.1	66	52.4
8.65	-78.02	-66.76	-73.02	18.53	91.1	66	51.7
8.77	-78.16	-66.09	-73.39	18.53	91.7	65.8	50.5
8.7	-77.7	-66.24	-73.17	18.56	91.4	65.8	51.8
8.67	-77.98	-66.76	-73.36	18.53	91.2	65.8	52.1
8.65	-78.25	-66.61	-73.27	18.56	91.6	65.9	53.8
8.68	-77.84	-65.88	-73.21	18.56	91.5	65.9	51.6
8.74	-78.21	-66.76	-73.6	18.56	91.4	66.1	51
8.72	-77.93	-66.19	-73.48	18.53	91.4	66	52.8
8.64	-77.84	-66.76	-73.27	18.71	91.6	65.9	54
8.7	-78.25	-66.29	-73.6	18.68	91.6	65.8	55
8.06	-77.98	-66.09	-73.21	18.96	91.4	65.7	52
8.58	-78.21	-67.18	-73.48	19.14	91.1	65.6	51.2
8.81	-78.16	-66.29	-73.48	19.05	91.1	65.6	53.2
8.63	-78.21	-66.45	-73.33	19.17	90.8	65.6	50.1
8.69	-78.21	-66.92	-73.45	19.35	90.7	65.5	54.6
8.67	-78.39	-66.76	-73.36	19.96	90.4	65.7	54.1
8.59	-78.21	-66.5	-73.3	20.12	89.9	65.7	50.5
8.84	-78.3	-66.76	-73.27	21.28	89.4	65.7	52.6
8.82	-78.3	-66.5	-73.54	22.01	88.7	65.5	55.4
8.83	-77.93	-66.24	-73.72	22.13	87.9	65.4	52.6
8.62	-78.16	-66.45	-73.54	22.19	87.9	65.6	45.7
8.66	-78.25	-67.12	-73.66	22.19	87.5	65.5	48.4
8.76	-78.3	-66.76	-73.42	22.25	87.2	65.5	56.3
8.66	-78.34	-67.28	-73.57	22.16	86.5	65.5	53.5
8.57	-77.88	-67.02	-73.69	22.22	86.4	65.5	51.3
8.59	-78.39	-66.24	-73.72	22.19	86	65.4	54.7
8.92	-78.3	-66.87	-73.54	22.22	85.8	65.4	54.2
8.78	-78.39	-66.76	-73.24	22.19	85.6	65.2	52.1
8.9	-78.34	-66.92	-73.79	22.19	85.2	65.4	55
8.88	-78.25	-66.29	-73.51	22.13	85.3	65.3	53.5

8.62	-78.3	-66.5	-73.94	22.25	85	65.2	52.9
8.86	-78.48	-66.81	-73.82	22.25	84.4	65.2	52.3
8.89	-78.25	-66.92	-73.66	22.19	83.9	65.2	51.4
8.69	-78.21	-67.02	-73.82	22.22	83.8	65.2	52.7
8.84	-78.66	-66.66	-73.54	22.19	83.9	65.3	48.8
8.72	-78.02	-67.18	-73.94	22.13	83.5	65.4	50.5
8.81	-78.39	-66.97	-73.63	22.13	83.2	65.6	50.2
8.69	-77.98	-66.87	-73.79	22.22	82.5	65.6	52.6
8.77	-78.43	-66.61	-73.88	21.89	82.5	65.4	51.5
8.64	-78.43	-67.18	-73.6	20.51	82.4	65.3	52.8
8.7	-78.48	-66.81	-73.97	19.66	81.9	65.3	53.5
8.65	-78.16	-67.44	-73.48	19.35	82.3	65.3	50.5
8.71	-78.3	-67.02	-73.69	18.99	82.4	65.1	49.9
8.72	-78.48	-67.07	-73.63	18.62	82.3	65.1	53.8
8.72	-78.3	-66.76	-73.94	18.59	82.4	65	52.8
8.59	-78.43	-67.12	-73.72	18.56	82.9	65	53.9
8.61	-78.25	-66.97	-73.48	18.62	83.2	64.9	51.9
8.53	-78.48	-67.07	-73.72	18.74	83.1	64.8	51.4
8.74	-78.43	-66.55	-73.85	18.86	83.1	64.5	53.1
8.11	-78.57	-66.92	-73.97	18.99	83.5	64.3	53.9
8.65	-78.75	-66.97	-73.66	19.23	83.1	64.3	50.3
8.65	-78.75	-67.18	-74.3	19.02	82.8	64.2	50.9
8.62	-78.71	-66.81	-74.18	19.11	82.4	64.2	52.8
8.56	-78.11	-67.07	-74	19.17	82.2	64.1	52
8.82	-78.62	-66.87	-73.85	19.32	82	64.2	50.8
8.66	-78.39	-67.12	-73.69	19.54	81.9	64.2	52.2
8.66	-78.16	-66.97	-74.03	19.99	81.9	64.1	51.5
8.78	-78.66	-67.23	-74.3	21.55	81.7	64	53.8
8.81	-78.75	-67.54	-73.82	22.22	81.7	64	52.1
8.63	-78.8	-66.97	-73.85	22.22	81.8	64	52.3
8.88	-78.8	-66.87	-73.82	22.28	81.6	64	50.2
8.58	-78.62	-66.97	-74.09	22.28	81.8	64	51.3
8.74	-78.75	-67.23	-74.18	22.34	81.5	63.9	52.9
8.85	-78.8	-67.28	-73.88	22.31	81	63.6	53
8.86	-78.71	-67.28	-73.75	22.31	80.9	63.6	47.6
8.6	-78.85	-67.18	-73.97	22.31	80.9	63.7	52.3
8.6	-78.62	-67.23	-74.12	22.22	81.3	63.7	52
8.79	-78.57	-67.18	-73.94	22.34	81.4	63.6	52.5
8.56	-78.48	-67.64	-74.15	22.25	81.3	63.8	52.9
8.71	-78.43	-66.97	-73.85	22.31	81.3	63.7	49.5
9	-78.57	-67.02	-74.03	22.25	81.1	64	51
8.97	-78.71	-67.02	-73.97	22.22	80.7	64	51.1
8.86	-78.39	-66.87	-74.24	22.25	80.6	63.9	53.8
8.87	-78.34	-66.5	-73.94	22.31	80.8	64.2	47.6
8.77	-78.75	-67.54	-74	22.07	80.8	64.2	52.7
8.67	-79.12	-67.7	-73.97	19.78	80.5	64.1	51.1
8.68	-78.62	-67.38	-74.15	18.8	80.5	64	54.3

8.72	-78.57	-67.12	-73.97	18.59	80.5	64	56.4
8.68	-78.48	-66.92	-74.21	18.62	80.7	63.8	54.4
8.66	-79.08	-67.23	-74.09	18.71	80.8	63.7	52.2
8.72	-78.62	-67.59	-74.4	18.53	81.1	63.8	53.9
8.75	-78.8	-67.18	-74	18.59	80.9	63.7	53
8.7	-78.43	-67.44	-74.06	18.62	80.7	63.8	53.7
8.7	-78.85	-66.97	-74.06	18.62	80.7	63.8	52.2
8.66	-78.94	-67.33	-73.88	18.71	80.3	63.7	51.6
8.56	-78.98	-67.23	-73.82	18.68	80.3	63.6	51.2
8.66	-78.8	-66.97	-74	18.77	80	63.6	54.6
8.65	-78.8	-67.54	-73.72	18.8	80	63.5	51.9
8.69	-78.48	-67.12	-73.63	18.96	79.9	63.5	50.7
7.89	-78.43	-67.12	-73.94	19.11	80	63.3	52.6
8.72	-79.21	-67.33	-73.94	19.23	79.9	63.3	53.3
8.58	-78.71	-68.01	-74.15	19.08	80	63.2	52.5
8.82	-78.75	-67.07	-73.94	19.2	80.1	63.1	51.3
8.57	-78.66	-67.49	-74.12	19.72	80.9	63.2	51.4
8.88	-78.75	-67.28	-74.12	20.67	81.5	63.2	51.9
8.88	-78.85	-67.12	-74.33	22.16	81.8	63.3	50.7
8.71	-78.85	-67.28	-74.06	22.28	82.3	63.3	52.9
8.81	-79.21	-66.97	-74.06	22.22	82.7	63.4	52.8
8.61	-78.62	-67.59	-74.27	22.22	83.4	63.6	53.5
8.92	-78.8	-67.49	-74	22.19	83.5	63.7	48.2
8.94	-79.3	-67.49	-74.06	22.22	83.6	63.9	49.2
8.75	-78.53	-67.49	-74.37	22.16	83.9	64.2	51.8
8.75	-79.21	-67.54	-74.33	18.74	83.7	64	53.8
8.73	-79.03	-67.54	-73.82	18.47	84.3	64	52.1
8.7	-79.3	-66.61	-74.09	18.5	84.8	63.9	52.6
8.72	-78.98	-67.49	-74.09	18.53	85.1	63.9	52.8
8.61	-78.8	-67.64	-74.4	18.71	86.4	63.7	51.6
8.71	-78.57	-67.02	-74.37	18.74	86.7	63.8	51.9
8.54	-78.75	-67.44	-74.58	18.74	87.2	63.8	51.6
8.71	-79.08	-67.49	-74.33	18.83	87.6	63.8	52.6
8.67	-79.12	-67.75	-74.27	18.93	87.4	63.7	52.1
8.55	-78.85	-67.49	-74.46	18.99	87.3	63.9	53.9
8.83	-78.71	-67.28	-74.24	19.05	88.3	63.7	51.6
8.64	-79.26	-67.59	-74.46	19.05	88.3	64.1	49.8
8.71	-78.94	-67.59	-74.24	19.32	88.9	63.8	52.5
8.82	-79.4	-68.21	-74.4	19.96	89.6	64.1	52
8.84	-78.66	-67.12	-74.67	21.06	89.7	64.3	51
8.65	-78.43	-67.59	-74.12	21.98	89.7	64.1	52.3
8.79	-78.85	-67.33	-74.06	22.01	88.7	64.3	52.3
8.64	-78.85	-68.11	-74.58	22.01	88.5	64.4	51.8
8.78	-79.08	-67.44	-74.43	22.07	87.9	64.7	52.9
8.85	-79.3	-67.8	-74.64	22.04	87.6	64.5	53.3
8.81	-78.8	-67.7	-74.37	22.07	87.4	64.5	52.2
8.62	-79.21	-67.54	-74.4	22.01	87.1	64.4	51.2

8.85	-79.08	-67.7	-74.15	21.92	87.2	64.4	52.9
8.82	-78.98	-67.23	-74.55	21.95	87	64.4	51.4
8.81	-79.12	-67.54	-74.46	21.89	86.8	64.7	52.9
8.65	-79.17	-67.85	-74.27	21.95	86.4	64.7	51.7
8.64	-79.26	-67.54	-74.73	21.95	86.2	64.4	53.4
8.66	-78.85	-67.44	-74.58	21.95	85.9	64.7	46.6
8.76	-79.08	-67.54	-74.4	21.98	86.1	64.7	53
8.71	-79.44	-67.33	-74.4	22.01	85.9	64.7	47.8
8.71	-79.21	-67.75	-74.43	21.92	86	64.9	51.9
8.79	-78.98	-67.33	-74.55	21.86	85.7	65.1	52.7
9	-79.26	-67.64	-74.3	21.89	86	65.1	53.6
8.98	-79.17	-67.8	-74.37	21.89	85.6	65.1	51.9
8.88	-79.08	-67.44	-74.82	21.92	85.5	65.2	50.1
10.31	-79.26	-67.54	-74.43	21.79	85.1	65.2	48.8
8.74	-79.49	-67.75	-74.43	21	85.1	65.3	50.5
8.69	-79.21	-68.01	-74.55	19.54	84.9	65.2	53
8.72	-79.12	-67.54	-74.73	18.22	84.8	65.2	53.8
8.69	-79.44	-67.59	-74.58	18.19	84.9	65.1	52.8
8.7	-79.3	-67.49	-74.61	18.28	84.5	65.1	52.3
8.78	-79.35	-67.85	-74.49	18.28	85.1	65	53.4
8.74	-79.76	-68.11	-74.43	18.19	85.1	65.1	53.8
8.65	-79.17	-68.27	-74.33	18.35	85	64.9	52.6
8.68	-79.17	-67.85	-74.15	18.38	85.1	64.8	53
8.68	-79.3	-67.8	-74.73	18.47	85.2	64.7	52.9
8.62	-79.76	-67.49	-74.73	18.5	85.1	64.7	52.9
8.67	-79.21	-68.06	-74.58	18.5	85.2	64.7	51.6
8.49	-79.21	-67.8	-74.64	18.59	85	64.7	51.6
8.78	-79.03	-67.64	-74.67	18.8	84.9	64.5	51.6
8.67	-79.03	-67.85	-74.27	18.77	85.1	64.7	52.4
8.62	-79.62	-68.37	-74.67	19.26	85.3	64.5	52.7
8.78	-79.08	-67.75	-74.43	21.95	85.3	64.5	51.6
8.89	-79.26	-67.64	-74.64	21.95	85.3	64.7	52.2
8.84	-79.58	-67.7	-74.46	21.98	85.3	64.7	53.6
8.88	-79.4	-68.11	-74.85	21.95	85.1	64.8	55.5
8.68	-79.26	-67.49	-74.58	21.98	85.2	64.7	53.1
8.71	-79.53	-67.75	-74.85	21.92	84.6	64.7	51.2
8.86	-79.4	-67.49	-74.58	22.01	84.5	64.7	52.5
8.91	-79.44	-67.9	-74.61	21.95	84.3	64.7	51.6
8.69	-78.94	-68.27	-74.76	21.95	84.2	64.7	52.5
8.69	-79.3	-68.01	-74.55	22.07	84	64.7	50.5
8.74	-79.26	-68.11	-74.76	22.01	83.6	64.7	53.5
8.98	-79.49	-67.75	-74.61	22.01	83.5	64.7	52.9
8.91	-79.35	-68.06	-74.76	22.13	83.2	64.7	47.2
8.68	-79.4	-67.8	-74.58	22.07	83.2	64.9	51.9
9	-80.31	-67.75	-74.95	22.07	83.1	64.9	52.6
8.77	-79.53	-68.16	-74.82	22.07	82.9	64.7	51.7
8.73	-79.53	-68.16	-74.82	22.16	82.2	64.8	53.7

8.78	-79.62	-68.01	-74.73	19.9	82	64.7	54.9
8.72	-80.13	-68.06	-75.31	18.41	81.9	64.5	53.3
8.67	-79.53	-67.75	-74.82	18.44	81.8	64.7	52.5
8.71	-79.53	-67.9	-74.82	18.5	81.6	64.7	52.3
8.74	-79.49	-68.11	-74.67	18.44	81.7	64.7	52.6
8.62	-79.3	-67.44	-74.91	18.77	82	64.5	49.6
8.73	-79.4	-67.54	-74.55	19.54	81.8	64.7	51.8
8.73	-79.85	-68.11	-74.76	19.9	81.3	64.5	51.7
8.76	-79.4	-67.7	-75.01	18.99	81.2	64.4	51.3
8.7	-79.35	-67.8	-74.82	18.5	81.3	64.3	52.7
8.77	-79.58	-67.7	-74.85	18.53	81.5	64.3	53.7
8.54	-79.44	-68.11	-74.67	18.59	81.8	64	51.3
8.69	-79.62	-68.11	-74.82	18.74	82	64	53.9
8.7	-79.67	-68.01	-75.01	18.77	82	63.8	53.4
8.61	-79.85	-67.75	-75.13	18.77	82	63.7	51.7
8.09	-79.9	-67.8	-74.79	18.93	81.7	63.7	53.4
8.8	-79.81	-68.21	-74.91	19.14	81.5	63.7	50.2
8.52	-79.95	-67.75	-75.01	18.99	81.3	63.6	51.3
8.85	-79.76	-68.16	-74.82	19.2	81.3	63.6	52.9
8.74	-79.58	-67.8	-74.95	19.44	81.5	63.5	52.5
8.65	-79.9	-68.21	-74.76	19.81	81.5	63.6	53
8.76	-79.44	-67.7	-74.61	21.4	81.8	63.6	50.1
8.87	-80.08	-68.37	-75.25	22.25	81.7	63.5	53.1
8.6	-79.62	-68.42	-74.98	22.22	81.8	63.5	53
8.88	-79.62	-67.85	-75.25	22.28	81.6	63.5	50.5
8.57	-79.35	-67.64	-74.91	22.25	81.5	63.6	51.8
8.9	-79.62	-68.16	-75.16	22.25	81.5	63.5	51.4
8.88	-79.9	-68.21	-75.07	22.28	81.2	63.4	51.3
8.74	-79.99	-68.37	-75.1	22.34	80.8	63.6	52.8
8.55	-79.99	-68.42	-75.04	22.25	80.5	63.4	49.2
8.77	-79.62	-68.27	-75.07	22.34	80.3	63.4	52.8
8.79	-80.4	-68.27	-75.04	22.41	80.3	63.4	53.7
8.76	-79.81	-68.16	-75.34	22.44	80.5	63.4	53.4
8.63	-79.67	-68.06	-75.25	22.22	80.8	63.2	53.4
8.76	-79.53	-67.9	-75.07	22.25	80.6	63.3	52.4
8.91	-79.49	-67.9	-75.16	22.28	80.6	63.5	50.5
8.71	-79.85	-68.58	-75.1	22.19	79.9	63.6	51.3
8.79	-79.99	-68.42	-74.98	22.31	79.5	63.6	54.7
8.74	-79.85	-68.06	-75.16	20.76	78.8	63.6	51.5
8.78	-79.72	-68.42	-74.88	18.62	78.8	63.6	48.7
8.78	-80.54	-67.75	-75.22	18.74	78.7	63.4	50.7
8.66	-79.76	-68.47	-74.95	18.74	78.5	63.3	53.5
8.67	-79.53	-68.37	-75.28	18.83	78.4	63.2	52.8
8.72	-79.58	-68.79	-75.25	18.89	78	63.3	53.2
8.69	-79.81	-68.47	-75.04	18.83	78.3	63	52.9
8.66	-79.81	-68.37	-75.25	18.86	78.1	62.9	52.3
8.58	-79.99	-68.21	-75.01	18.93	77.9	63	52.6

8.69	-79.95	-68.42	-75.25	18.96	77.8	62.8	53.2
8.56	-79.62	-68.89	-74.95	19.02	77.9	62.7	51.3
8.71	-79.99	-68.21	-75.13	19.02	77.9	62.8	52.9
8.65	-79.58	-67.9	-75.25	19.11	77.8	62.6	52.4
8.5	-80.13	-68.42	-75.34	19.32	77.7	62.5	50.2
8.69	-79.85	-69.04	-75.01	19.32	77.6	62.5	52.6
8.88	-80.13	-68.47	-74.95	19.78	77.6	62.5	54.6
8.81	-80.22	-68.42	-75.4	20.27	77.6	62.5	53.8
8.64	-80.08	-68.79	-75.43	20.51	77.6	62.4	53.6
8.66	-80.13	-68.32	-75.43	20.39	77.7	62.5	51.6
8.63	-80.22	-68.32	-75.25	20.42	77.7	62.6	53.2
8.85	-79.85	-67.85	-75.22	21.15	77.5	62.5	52.3
8.55	-79.9	-68.42	-75.34	22.62	77.4	62.5	50.4
8.68	-79.76	-68.73	-75.13	22.53	77.7	62.5	51.1
8.91	-79.99	-68.68	-75.13	22.59	77.6	62.4	50.2
8.82	-79.99	-68.73	-75.07	22.56	77.7	62.5	52.8
8.77	-79.81	-68.94	-75.68	22.59	77.6	62.6	53
8.94	-79.85	-68.01	-75.34	22.56	77.5	62.6	50.9
8.81	-79.95	-68.94	-75.4	22.53	77.3	62.7	52.7
8.97	-80.31	-68.47	-75.53	22.5	77	63	51
10.2	-79.58	-68.47	-75.46	22.34	77.1	63	52
8.79	-80.27	-68.06	-75.28	20.73	77	63	54.5
8.77	-80.13	-68.84	-75.19	20.33	76.9	62.8	50.4
8.62	-79.95	-68.73	-75.31	19.9	77.2	62.8	52.1
8.62	-79.95	-68.42	-75.71	20.42	77.4	62.9	52.7
8.76	-79.76	-68.47	-75.37	19.44	77.7	62.9	52.4
8.66	-80.22	-68.27	-75.46	18.86	77.7	63	52.6
8.65	-80.31	-68.47	-75.34	18.83	78	63	52.6
8.71	-80.54	-68.73	-75.62	18.77	78.7	62.9	52.4
8.6	-80.45	-68.42	-75.56	18.83	78.9	62.8	51.6
8.72	-80.13	-68.79	-75.56	18.83	79.4	62.9	53.1
8.68	-79.95	-68.94	-75.62	19.02	79.8	62.7	51.8
8.18	-80.22	-68.79	-75.28	19.17	80.6	62.7	52.5
8.82	-80.13	-68.53	-75.19	19.41	81.2	62.5	52.3
8.2	-80.31	-68.58	-75.19	19.23	81.8	62.6	50.2
8.56	-79.95	-68.63	-75.71	19.05	81.9	62.8	52
8.69	-80.31	-69.04	-75.46	18.93	82.2	62.8	53.7
8.71	-80.54	-68.47	-75.59	18.89	83.2	63.1	47.3
8.61	-79.9	-68.84	-75.86	18.96	83.5	63.2	52.7
8.65	-80.63	-68.89	-75.16	19.05	83.9	63.1	53.1
8.71	-79.62	-68.58	-75.46	19.02	84.4	63.1	50.4
8.78	-80.17	-69.04	-75.71	19.26	85.2	63.1	53.6
8.77	-80.4	-68.89	-75.8	19.26	85.6	63.1	53.4
8.65	-80.4	-68.58	-75.59	20.73	86.2	63.3	53
8.9	-80.17	-68.73	-75.65	22.41	86.7	63.3	51.7
8.7	-80.59	-68.63	-75.59	22.44	87.3	63.4	52.6
8.89	-80.17	-69.1	-75.59	22.25	87.8	63.7	51.9

8.99	-80.27	-68.73	-75.68	22.13	88	63.8	53.5
8.88	-79.99	-68.73	-75.68	22.13	88.1	64.3	53
8.75	-80.22	-68.53	-75.74	19.51	88	64.3	51.6
8.66	-80.22	-68.94	-75.77	18.68	88.3	64.3	54
8.71	-79.9	-69.15	-75.46	18.62	88.7	64.4	49.7
8.74	-80.22	-68.79	-75.83	18.74	89.4	64.4	53.5
8.67	-80.82	-68.99	-76.32	18.71	89.7	64.4	52.7
8.59	-80.4	-68.94	-75.65	18.71	89.9	64.4	51.9
8.69	-80.17	-68.53	-75.56	18.77	89.8	64.3	52.8
8.66	-80.13	-68.53	-75.56	18.74	89.6	64.7	52.7
8.66	-80.59	-69.15	-75.53	18.74	89.4	64.7	51.9
8.71	-80.68	-69.3	-75.43	18.77	89.2	64.9	52.5
8.6	-80.45	-68.47	-75.92	18.74	88.6	64.8	52
8.66	-80.31	-68.89	-75.77	18.83	88.6	64.7	52.7
8.73	-80.49	-68.79	-75.71	18.89	88.6	64.7	51.4
8.63	-80.68	-68.73	-75.77	18.89	88.6	64.7	52.2
8.66	-80.54	-69.04	-75.71	18.96	88.6	64.7	52.3
8.64	-80.59	-68.73	-75.68	18.93	88.9	64.7	51.8
8.71	-80.72	-68.79	-75.89	19.02	88.8	64.7	52.6
8.61	-80.68	-68.68	-75.68	19.02	88.6	64.7	52.6
8.14	-80.59	-68.63	-75.92	19.05	88.7	64.7	52.3
8.88	-80.27	-68.89	-75.68	19.17	88.9	64.7	53
8.56	-80.63	-69.3	-75.68	20.27	89.5	64.8	53.1
8.85	-80.54	-68.63	-75.56	22.31	89.5	64.7	51.4
8.62	-80.4	-69.41	-76.11	22.34	89.4	64.7	52.8
8.81	-80.4	-68.94	-75.83	22.25	89.2	64.8	53.4
8.75	-80.31	-68.68	-75.43	21.73	89.5	64.7	52.1
8.86	-80.49	-69.2	-76.11	19.96	89.4	64.7	51.2
8.78	-80.72	-68.73	-75.53	19.57	89.3	64.8	47.6
8.58	-80.49	-68.89	-75.46	19.72	89.3	64.8	52.5
8.9	-80.63	-69.04	-75.59	20.21	89.2	64.7	53
8.7	-80.4	-68.94	-75.92	22.31	89.2	64.8	50.7
8.82	-80.4	-68.79	-75.98	22.41	88.8	64.9	52.6
8.87	-80.45	-68.73	-76.01	22.34	88.6	64.9	50.7
8.89	-80.45	-68.47	-75.74	22.22	88.5	65.1	52.8
8.99	-80.59	-68.84	-75.62	22.22	88.2	65.5	48
8.81	-80.27	-68.94	-75.95	22.19	88	65.5	52
8.85	-80.49	-69.15	-75.95	22.25	87.5	65.7	52.9
8.75	-80.45	-68.84	-76.2	20.85	87	65.5	51.9
8.78	-80.27	-68.73	-75.89	19.08	86.5	65.5	49.2
8.71	-80.82	-68.84	-75.86	18.77	86.2	65.3	52.6
8.77	-80.72	-68.68	-75.92	18.74	86.1	65.4	53.2
8.71	-80.49	-68.63	-75.92	18.8	85.6	65.2	53.5
8.75	-80.17	-68.63	-75.92	18.86	85.6	65.2	55.9
8.63	-80.45	-68.94	-75.86	18.8	85	65.3	51.1
8.75	-80.59	-69.3	-75.77	18.86	84.6	65.2	49
8.71	-80.4	-68.84	-75.71	18.83	84.2	65.2	52.8

8.74	-80.82	-69.15	-76.01	18.77	84	65.1	53.3
8.71	-80.77	-68.79	-76.04	18.77	83.7	65	52.9
8.63	-80.77	-69.41	-75.89	18.89	83.5	64.9	50
8.61	-81.04	-69.04	-76.56	18.99	83.3	64.7	52.4
8.63	-80.4	-69.41	-76.29	19.08	83.1	64.4	52.1
8.47	-80.82	-68.89	-76.29	19.11	82.8	64.2	52.7
8.54	-80.31	-68.89	-75.95	19.11	82.1	64.3	52.2
8.41	-80.59	-69.1	-76.01	19.23	82.1	64.3	52.2
8.45	-80.49	-69.51	-76.11	19.32	82	64.2	51.3
8.59	-80.95	-69.62	-76.04	19.41	82.3	64	52.4
8.86	-80.82	-68.68	-76.44	20.33	82.4	64.1	52.3
8.64	-80.59	-69.15	-76.17	20.67	82.2	63.9	52.6
8.81	-80.68	-68.63	-76.41	20.12	82.2	63.9	54
8.79	-80.82	-69.04	-76.29	20.36	82.1	64	54.8
8.68	-80.63	-69.3	-76.29	21.46	82.1	63.9	52
8.89	-80.77	-68.99	-75.89	22.44	81.9	63.9	52.1
8.59	-80.31	-68.99	-76.32	22.53	81.7	63.9	51.7
8.83	-80.68	-69.56	-76.44	22.41	81.7	63.8	51.9
8.61	-81.36	-69.41	-76.2	22.41	81.7	63.8	52.5
8.88	-80.68	-69.1	-76.2	22.34	81.6	64	50.7
8.75	-80.77	-69.51	-76.32	22.41	81.2	63.9	53.2
8.7	-80.54	-69.56	-76.35	22.47	81.1	64	55.4
8.99	-80.91	-68.89	-76.14	22.44	80.7	64.1	51.3
8.69	-81	-69.1	-76.17	22.31	80.9	64.1	53.2
8.7	-81.36	-69.77	-76.44	22.31	80.5	64.1	52.6
8.88	-80.95	-69.2	-76.56	22.41	80.7	64	51.4
8.9	-81	-69.15	-76.01	22.41	80.6	63.9	52.4
8.84	-80.77	-69.62	-76.2	22.34	80.5	64.3	51.6
8.76	-80.86	-69.56	-76.35	21	80.3	64.1	52.2
8.64	-80.22	-69.51	-76.35	18.77	79.9	64	52.2
8.68	-80.72	-69.2	-76.53	18.77	79.9	63.8	52.6
8.65	-81.55	-69.15	-76.65	18.93	80	63.7	52.5
8.66	-80.91	-69.1	-76.23	19.05	80.1	63.5	53.2
8.5	-80.59	-69.72	-76.04	19.11	80.3	63.5	53.5
7.76	-81.23	-69.3	-76.35	19.23	80.6	63.3	52.9
8.79	-80.54	-68.89	-76.62	19.29	80.5	63.4	52.3
8.55	-80.82	-69.56	-76.62	19.32	80.2	63.3	53.4
7.79	-80.82	-69.62	-76.44	19.17	80.2	63.3	53.7
8.58	-80.31	-69.67	-76.47	19.41	80.3	63.2	53.3
8.64	-81.27	-70.03	-76.65	19.35	80.2	63.3	53.8
8.87	-81.04	-69.2	-76.87	19.87	80.5	63.2	52.4
8.76	-81.32	-69.62	-76.65	22.16	80.1	63.1	52.1
8.73	-80.95	-69.46	-76.35	22.47	80	63.3	52.8
8.6	-80.82	-69.51	-76.62	22.47	80.1	63.1	52.9
8.63	-80.63	-69.41	-76.56	22.47	80.1	63.2	55.1
8.73	-80.95	-69.46	-76.53	22.47	80.3	63.1	53.3
8.92	-81	-69.98	-76.59	22.44	80.1	63.1	53.4

8.93	-81.18	-69.72	-76.56	22.44	79.8	63.3	52.2
8.96	-80.82	-69.15	-76.47	22.44	79.8	63.2	51.3
8.78	-80.86	-70.19	-76.53	22.41	79.7	63.1	54.3
8.87	-80.72	-69.46	-76.96	22.47	79.9	63.3	52.9
8.67	-80.77	-69.62	-76.72	22.44	80.1	63.4	51.9
8.71	-81.23	-69.77	-76.65	22.41	80.5	63.5	48.4
9.94	-80.86	-69.36	-76.59	22.22	80.1	63.6	51.4
8.71	-80.68	-69.46	-76.78	21.43	79.8	63.5	54.3
8.69	-81.46	-69.93	-76.87	19.69	79.3	63.5	51.4
8.7	-81.23	-69.67	-76.81	18.71	79.7	63.5	50.7
8.71	-80.95	-69.51	-76.65	18.83	79.6	63.4	52
8.74	-81	-70.34	-76.32	18.8	79.6	63.2	51.5
8.66	-80.82	-69.67	-76.59	18.8	79.4	63.4	52.6
8.76	-81.18	-69.82	-76.75	18.8	79.3	63.2	51.6
8.69	-81.46	-69.67	-76.59	18.86	79.6	63.3	51.9
8.64	-81.18	-69.67	-76.68	18.86	79.7	63	50.1
7.97	-81.23	-69.82	-76.38	19.14	79.8	62.7	51.5
8.67	-81.23	-69.93	-76.84	19.35	80.2	62.8	52.4
8.87	-81.18	-69.93	-76.75	20.73	80.7	62.9	51.8
8.55	-81.04	-69.93	-76.59	22.44	80.3	62.7	52.4
8.6	-81.09	-69.62	-76.5	22.44	80.8	62.7	53.8
8.72	-81.09	-69.77	-76.47	22.47	81	62.7	51.7
8.58	-81.09	-70.08	-76.9	21.31	81.2	62.9	50.9
8.76	-81.04	-69.72	-76.5	21.79	80.8	62.8	53.1
8.72	-81.32	-69.51	-76.53	22.1	81.2	62.9	52.2
8.62	-81.18	-69.72	-77.02	22.41	81.6	63	52.2
8.59	-81.18	-69.77	-76.75	22.34	82.2	62.9	51.7
8.62	-80.95	-69.67	-76.53	22.19	82.8	63	51.6
8.58	-80.95	-69.41	-76.72	22.25	83.2	63.1	52.8
8.75	-81.04	-69.72	-76.78	22.25	83.8	63.2	50.2
8.91	-81.32	-69.56	-76.72	22.22	84.3	63.3	52.4
8.88	-81.04	-69.72	-76.9	22.25	85	63.3	52.9
8.88	-81.27	-69.93	-76.78	22.31	85.2	63.3	51.6
8.85	-81.27	-69.62	-76.75	22.25	85.8	63.5	52.7
8.68	-81.36	-69.82	-76.84	22.25	86	63.4	53.4
8.72	-81.5	-70.13	-76.59	22.22	86.4	63.8	51.2
8.74	-81.36	-69.82	-76.78	21.28	86.3	64.1	53.3
8.7	-80.86	-69.62	-76.65	18.68	86.5	64	53.7
8.66	-81.09	-69.72	-76.81	18.74	87.4	63.9	50.5
8.61	-81.41	-70.03	-76.72	18.77	87.7	63.8	50.2
8.64	-81.23	-69.77	-76.78	19.05	88.2	63.5	52.8
8.9	-81.18	-68.99	-76.99	19.93	89.4	63.7	54.2
8.87	-81.5	-69.46	-77.02	20.54	89.9	64	52.6
8.66	-81.32	-69.51	-76.78	21.18	90.3	63.9	52.2
8.6	-81.59	-70.03	-76.62	22.1	90.8	64.3	53.1
8.71	-81.32	-69.98	-76.59	22.13	90.9	64.3	44.1
8.85	-81.41	-69.88	-76.81	22.07	91.5	64.3	52.5

8.59	-81.5	-69.56	-76.81	22.04	91.8	64.5	49.5
8.6	-81.46	-69.93	-76.96	21.95	92.5	64.8	53.1
8.71	-81.64	-70.08	-76.96	22.01	92.9	64.7	50.5
8.83	-81.69	-69.77	-76.84	21.95	93.1	64.8	53
8.62	-81.41	-70.34	-76.81	21.95	93.7	65	55.9
8.76	-81.59	-70.55	-76.84	21.98	94.1	65.1	52.3
8.78	-81.41	-69.72	-77.02	21.89	94.1	65	52.1
8.62	-81.87	-69.72	-77.23	21.98	94.3	65.3	53.2
8.88	-81.64	-69.82	-77.11	21.89	94.6	65.4	52.2
8.87	-81.04	-70.19	-76.84	21.92	94.9	65.7	52.9
8.86	-81.59	-69.93	-76.47	21.92	95.1	65.7	53.1
8.63	-81.82	-70.29	-77.02	21.86	95.4	65.9	53
8.8	-81.23	-69.51	-76.87	21.89	95.4	65.9	52.5
8.88	-81.55	-70.24	-76.75	21.89	95	66.2	54.1
8.92	-81.78	-69.93	-76.9	21.86	94.7	66.2	48
8.88	-81.69	-69.93	-76.75	21.92	94.8	66.3	50.9
8.79	-81.73	-70.13	-76.93	21.86	94.5	66.5	52.5
8.98	-81.69	-69.62	-77.11	21.86	94.5	66.5	53
8.96	-81.32	-70.03	-77.2	21.79	94.4	66.6	53.7
8.82	-81.73	-70.19	-77.14	21.79	94.1	67	54.1
8.88	-80.95	-70.13	-76.96	21.67	94.3	67.1	50.1
8.68	-81.73	-69.93	-76.9	19.99	94	67.2	52.4
8.78	-81.64	-70.03	-77.08	18.19	94	67	52.6
8.75	-81.5	-69.77	-76.99	18.19	94.1	67.1	52.4
8.76	-81.64	-69.98	-77.02	18.25	94	67	51.6
8.72	-81.64	-70.19	-77.11	18.32	94	67.2	53.8
8.6	-81.73	-70.08	-77.17	18.32	94	67	51.8
8.66	-81.91	-70.13	-76.99	18.5	94	66.9	52.8
8.73	-81.55	-69.93	-76.93	18.77	94.1	66.7	51.6
8.63	-81.87	-69.72	-77.17	19.51	94.3	66.7	50.9
8.88	-81.69	-69.82	-77.02	21.21	94.4	66.8	51.9
8.73	-81.59	-69.82	-76.84	21.89	94.1	66.8	53.1
8.65	-81.78	-69.98	-77.08	21.79	94.2	66.7	52.8
8.73	-81.69	-70.03	-77.23	21.79	94.2	67	52.4
8.85	-81.73	-70.34	-77.11	21.83	94.2	66.8	47.8
8.79	-81.78	-70.19	-76.96	21.86	94.1	66.9	53.2
8.88	-81.64	-69.93	-77.08	21.92	94	66.9	52.3
8.88	-82.14	-70.03	-77.26	21.89	93.8	67.2	50.7
8.62	-81.69	-70.13	-77.2	21.89	94	67	53.1
8.91	-81.91	-70.24	-77.2	21.89	93.8	67.2	53.1
8.7	-81.78	-69.77	-77.26	21.89	93.6	67.2	53.5
8.65	-81.69	-69.98	-77.33	21.89	93.2	67.4	52.5
8.7	-82.1	-69.72	-77.14	21.92	93.1	67.4	51.6
9.01	-82.01	-70.08	-77.3	21.86	92.9	67.5	53.4
8.8	-81.59	-69.98	-77.14	21.4	92.4	67.8	51.3
8.79	-81.87	-70.24	-77.14	18.19	91.9	67.6	51.6
8.75	-81.59	-70.29	-76.99	18.1	91.6	67.6	51.2

8.7	-81.87	-69.82	-77.36	18.25	91.1	67.4	52.1
8.56	-81.73	-70.34	-77.17	18.28	91.4	67.3	54.5
8.65	-81.91	-70.03	-77.3	18.35	91.1	67.1	52.2
8.61	-81.78	-70.19	-77.17	18.44	90.9	67.1	51.7
8.63	-81.82	-70.45	-77.14	18.5	90.8	66.9	52.4
8.63	-81.69	-70.03	-77.54	18.38	91.4	67	49.1
8.64	-81.78	-70.45	-77.51	18.5	91.4	66.9	48.8
8.71	-82.01	-70.24	-77.26	18.53	91.4	66.9	51.9
8.7	-81.82	-70.45	-77.26	18.53	90.8	66.8	53.8
8	-81.96	-69.93	-77.48	18.68	90.8	66.8	53.7
8.64	-81.82	-70.29	-77.6	18.62	90.8	66.6	54.9
8.63	-81.78	-70.45	-77.3	18.89	90.9	66.7	51.3
8.75	-82.14	-70.76	-77.45	19.72	91	66.7	52.1
8.73	-82.05	-70.34	-77.39	21.92	91.2	66.7	53.8
8.88	-82.33	-70.24	-77.23	21.89	91.4	66.8	51.8
8.86	-81.91	-70.13	-77.54	21.89	91.2	66.7	50.5
8.87	-81.96	-70.6	-77.36	21.79	91	67.3	52.1
8.73	-82.05	-70.55	-77.54	19.93	90.3	67.5	52.5
8.75	-81.96	-70.65	-77.57	18.25	89.8	67.2	51.1
8.73	-81.91	-70.29	-77.6	18.32	89.8	67	53.8
8.69	-82.37	-70.34	-77.48	18.41	89.7	66.8	52.9
8.13	-81.73	-70.24	-77.33	18.62	89.6	66.5	51.1
8.86	-81.82	-69.98	-77.48	18.77	89.7	66.5	52.5
8.81	-82.1	-70.81	-77.51	19.63	89.9	66.3	53.8
8.64	-82.05	-70.55	-77.54	21.89	89.8	66.6	51.6
8.61	-81.73	-70.24	-77.54	21.86	89.7	66.6	53.7
8.62	-82.14	-70.19	-77.66	21.89	89.7	66.7	52.4
9	-82.01	-69.93	-77.42	21.83	89.3	66.9	49.9
8.66	-81.91	-70.39	-77.51	18.22	88.7	67.4	52.1
8.74	-82.05	-70.65	-77.51	18.19	88.6	66.9	51.5
8.76	-82.37	-70.45	-77.63	18.77	88.6	66.3	48
8.74	-81.96	-70.65	-77.36	19.69	88.7	66.2	51.9
8.52	-81.96	-70.6	-77.42	20.24	88.8	66.2	53.3
8.86	-81.91	-70.39	-77.45	19.9	88.7	66.3	53.6
8.7	-82.1	-70.24	-77.6	20.24	88.9	66.3	51.6
8.58	-81.82	-70.71	-77.36	20.45	88.9	66.2	52.4
8.56	-82.42	-70.34	-77.78	21.58	88.8	66.1	52.4
8.65	-82.1	-70.81	-77.6	21.92	88.5	66.2	53
8.85	-82.37	-70.45	-77.51	21.92	88.5	66.1	54.5
8.56	-81.96	-70.34	-77.6	21.92	88.1	66.2	54.3
8.64	-81.87	-70.55	-77.51	21.95	88	66.1	53
8.69	-82.28	-70.81	-77.51	21.95	87.8	66.4	54.6
8.88	-82.1	-71.07	-77.45	21.86	87.5	66.9	53
8.71	-82.28	-70.65	-77.69	18.1	87.2	66.6	53.1
8.58	-82.6	-70.81	-77.63	18.53	87.4	65.9	52.6
8.87	-82.14	-70.34	-77.54	21.34	87.6	66	51.5
8.71	-82.05	-70.6	-77.6	21.92	87.4	65.8	51.5

8.68	-82.1	-70.24	-77.63	21.95	87.3	66	53.6
8.65	-82.28	-70.6	-77.51	21.95	87.2	66.1	52.2
8.87	-82.19	-70.76	-77.63	22.01	86.8	66.2	49
8.76	-81.82	-70.76	-77.51	21.52	86.4	66.6	53.2
8.7	-82.19	-70.96	-77.88	18.28	86.1	66.3	53.6
8.57	-82.01	-70.71	-78.12	18.56	86.3	65.8	52.1
8.54	-81.91	-71.07	-77.42	21.46	86.6	65.6	51.6
8.65	-82.05	-70.39	-77.54	22.01	86.3	65.8	52.6
8.8	-81.78	-70.71	-77.63	22.04	86.4	65.8	52.2
8.66	-82.37	-70.81	-77.72	22.04	86.4	66	52.2
8.93	-82.14	-70.34	-77.48	22.01	86.5	65.8	54.8
8.89	-82.14	-70.81	-77.97	21.98	86.5	65.9	53.7
8.95	-82.51	-70.65	-78.03	22.01	86.4	65.9	49.8
8.81	-82.05	-70.76	-77.78	22.07	86.4	65.8	51.5
8.89	-82.14	-70.55	-77.63	22.01	86.4	66	52.8
8.72	-82.74	-70.91	-77.94	20.94	86	66.1	53.4
8.76	-82.28	-70.34	-77.57	18.25	85.9	66	52.1
8.6	-82.1	-70.91	-77.84	18.28	85.9	65.8	52.8
8.67	-82.33	-70.81	-77.66	18.47	86.1	65.8	52.6
8.31	-82.46	-70.45	-77.94	18.68	86.2	65.5	51.1
8.56	-82.19	-71.22	-77.78	19.11	86.3	65.3	53.2
8.74	-82.65	-70.6	-77.88	21.12	86.4	65.3	51.3
8.87	-82.19	-70.6	-77.88	22.1	86.4	65.3	49.5
8.72	-82.37	-71.12	-77.84	22.1	86.4	65.1	52.5
8.68	-82.69	-70.91	-77.63	22.07	86.4	65.4	52.1
8.85	-82.42	-70.71	-77.88	22.04	86.6	65.4	51.6
8.85	-82.69	-70.86	-77.72	22.16	86.7	65.5	50.9
8.84	-82.37	-70.91	-77.48	22.16	86.7	65.5	55.7
8.85	-82.46	-71.07	-77.36	22.25	87	65.7	53.1
8.98	-82.6	-70.81	-77.66	22.22	86.8	65.8	56.2
8.89	-82.46	-71.07	-77.88	22.22	86.7	65.9	57.3
8.72	-82.37	-70.96	-78	20.94	87.3	65.9	52.8
8.68	-82.74	-71.12	-77.94	18.68	87.3	65.8	53.2
8.73	-82.55	-70.91	-77.63	18.74	87.5	65.8	52.5
8.7	-82.42	-71.22	-77.91	18.74	87.7	65.7	51.3
8.7	-82.55	-70.96	-78.03	18.74	88	65.7	53.4
8.67	-82.51	-70.76	-77.78	18.74	88	65.8	53.3
8.69	-82.78	-71.02	-77.66	18.8	88.1	65.8	53.7
8.69	-82.19	-70.34	-77.94	18.8	88.6	65.8	53.5
8.56	-82.51	-71.07	-78	18.93	88.8	65.5	51.2
8.76	-82.55	-70.96	-77.78	19.23	89.5	65.4	51.8
8.91	-82.55	-70.6	-78.18	19.63	89.5	65.4	52.5
8.69	-82.6	-71.38	-77.78	22.22	89.7	65.4	52.4
8.62	-82.88	-71.33	-78.21	22.34	89.7	65.5	50.1
8.89	-82.51	-71.33	-77.91	22.31	90	65.6	52.2
8.85	-82.51	-71.12	-77.97	22.28	90	65.7	53.7
8.77	-82.69	-71.07	-77.72	22.22	90.5	65.8	53.3

9	-82.92	-70.96	-77.94	22.19	90.5	66	55
8.79	-82.6	-71.02	-78	22.22	90.4	66.3	53.7
8.73	-82.42	-70.91	-78.12	21.21	90.3	66.3	53.5
8.73	-82.6	-70.6	-77.72	18.62	90.2	66.4	52.6
8.78	-82.78	-71.28	-78.15	18.71	90.4	66.5	51.1
8.67	-82.6	-70.96	-78.27	18.74	90.6	66.2	53.4
8.73	-82.14	-71.02	-78	18.77	90.3	66.2	52
8.73	-82.46	-71.07	-78.03	18.8	90.6	66.2	53
8.63	-82.6	-71.22	-77.78	18.83	90.6	66.2	51.6
8.7	-82.78	-70.86	-77.97	18.89	90.7	66.1	53
8.03	-82.37	-70.86	-78.36	19.08	90.8	66	52
8.88	-82.65	-71.02	-77.88	19.51	91.2	65.8	53.1
8.76	-82.78	-70.76	-78.3	22.16	91.7	66	53.6
8.69	-82.74	-71.12	-78.15	22.25	91.5	66.3	52.3
8.89	-82.78	-71.02	-78.03	22.25	91.4	66.2	51.6
8.94	-82.69	-71.64	-78.24	22.19	91.5	66.3	52.8
8.82	-82.92	-71.07	-78.06	22.19	90.7	66.8	53.4
8.93	-82.69	-70.76	-78.12	22.28	90.6	66.8	53.6
8.66	-82.78	-70.91	-78.12	19.54	89.6	66.7	51.2
8.74	-82.42	-70.76	-78.15	18.77	89.6	66.7	51.9
8.65	-82.74	-70.96	-78.21	18.96	89.3	66.4	52.5
8.82	-82.6	-71.28	-78.03	19.17	89.4	65.8	53.4
8.62	-82.65	-70.76	-78.15	22.41	89.7	66	53
8.81	-82.51	-70.91	-78.12	22.34	89.7	66	56
8.89	-82.69	-71.02	-78.39	22.41	89.7	66.2	51.4
9	-82.33	-71.48	-77.88	22.44	89.5	66.6	50.4
8.75	-82.55	-71.17	-78.09	20.51	88.9	66.7	53.5
8.74	-82.65	-71.02	-78.33	18.86	88.7	66.5	52.9
8.77	-82.65	-70.71	-78.24	18.99	88.6	66.2	49.5
8.89	-82.74	-71.02	-78.36	19.41	88.8	65.8	54.9
8.67	-82.83	-71.48	-78.21	22.5	89.3	65.8	54.3
8.69	-82.69	-71.22	-78.18	22.44	89.3	65.8	51.3
8.99	-82.55	-71.33	-78.3	22.34	88.8	66.5	49.6
8.81	-82.65	-71.02	-78.27	20.05	88	66.5	51.7
8.77	-82.92	-71.33	-78.39	18.89	87.7	66.2	52.6
8.7	-82.74	-71.48	-78.64	18.99	87.7	66	51.8
8.68	-82.88	-71.33	-78.3	19.02	87.5	65.8	51.5
8.62	-82.97	-71.59	-78.21	19.02	87.4	65.9	52.7
8.67	-82.74	-70.96	-78.55	19.17	87.5	65.7	51.5
8.44	-82.97	-71.59	-78.33	19.32	87.3	65.4	51.7
8.64	-82.88	-70.96	-78.7	19.44	87.2	65.4	53.9
8.72	-83.15	-71.54	-78.46	19.84	86.7	65.3	50.5
8.76	-82.88	-71.28	-78.58	21.86	86.6	65.5	52.2
8.89	-83.1	-71.8	-78.39	22.68	86.3	65.3	56.1
8.62	-82.78	-71.02	-78.52	22.59	86.1	65.3	53.2
8.78	-82.97	-71.9	-78.36	22.62	85.9	65.3	52.5
8.87	-82.6	-71.07	-78.64	22.65	85.4	65.3	51.7

8.71	-83.01	-71.9	-78.52	22.56	84.8	65.4	53.2
8.71	-83.01	-71.69	-78.58	22.65	83.6	65.6	52.9
8.89	-82.83	-71.17	-78.3	22.59	83.3	65.8	51.1
8.77	-82.88	-71.59	-78.36	19.11	83.3	65.7	55.4
8.79	-82.69	-70.86	-77.91	19.14	83.3	65.3	51.1
8.68	-82.88	-71.12	-78.42	19.26	82.9	65.1	53
8.64	-83.06	-71.43	-78.64	19.63	82.5	64.7	52.2
8.65	-83.24	-71.64	-78.64	22.71	82.9	64.7	50.5
8.63	-82.83	-71.17	-78.55	22.65	82.8	64.7	51.3
8.91	-82.83	-71.43	-78.85	22.65	82.7	64.9	49.7
9.5	-82.88	-71.48	-78.52	22.59	82.2	65.3	50.2
8.75	-82.88	-71.38	-78.7	19.05	82.1	65.2	52.5
8.71	-83.29	-71.48	-78.58	19.17	82.2	64.8	52.1
8.71	-83.15	-71.17	-78.42	19.35	82.2	64.4	51.8
8.74	-82.97	-71.48	-78.42	19.69	82.3	64.2	52.9
8.83	-83.15	-71.33	-78.52	20.79	82.5	64.3	50.8
8.91	-83.2	-71.85	-79	22.71	82.5	64.2	54.3
8.82	-82.92	-71.54	-78.79	22.71	82.2	64.2	52.9
8.65	-83.1	-71.64	-78.7	22.74	81.9	64	50.5
8.59	-83.47	-71.54	-78.39	22.68	81.6	64.2	49
8.65	-82.88	-71.8	-78.76	22.71	81	64.3	52.8
8.82	-82.92	-71.8	-78.58	22.68	80.8	64.5	52.4
10.05	-83.06	-71.59	-78.91	22.65	80.6	64.7	53.5
8.73	-82.97	-71.33	-78.42	19.96	80.1	64.7	52.9
8.75	-83.06	-71.22	-78.79	19.14	79.9	64.4	51.9
8.79	-83.06	-71.85	-78.73	19.11	79.9	64.3	54.7
8.63	-83.01	-71.33	-78.42	19.2	80	64.2	52
8.63	-82.92	-71.33	-78.79	19.26	80.2	64	53.9
8.71	-82.83	-71.43	-78.46	19.78	80.3	63.5	51.9
8.89	-83.1	-72	-78.3	22.74	80.6	63.7	54.9
8.89	-82.78	-71.38	-78.82	22.71	80.5	63.7	55.2
8.83	-83.06	-71.69	-78.67	22.77	80.3	63.7	52.4
8.71	-83.06	-71.28	-78.58	22.77	80.7	63.8	52.5
8.96	-83.84	-71.54	-78.58	22.71	80.2	63.9	52.2
8.91	-83.38	-71.69	-78.67	22.71	79.8	64	53.8
8.66	-83.42	-71.69	-78.55	20.18	79.3	64.1	52.1
8.74	-82.97	-71.69	-78.64	19.14	79.2	64	49.1
8.62	-83.42	-72.05	-78.49	19.14	79.2	63.6	52.4
8.53	-82.88	-72	-78.52	19.54	79.7	63.5	53.6
8.79	-83.1	-71.38	-79.19	20.45	80.2	63.3	52.2
8.74	-83.06	-71.59	-78.46	22.77	80.2	63.3	52.2
8.85	-83.24	-71.59	-78.85	22.8	79.8	63.4	52.2
8.79	-82.74	-71.38	-78.79	22.65	79.7	63.3	52.4
8.66	-83.42	-71.8	-78.79	22.77	79.5	63.4	51.4
8.66	-83.29	-71.33	-78.88	22.74	79.6	63.6	46.5
8.94	-83.24	-71.54	-78.46	22.74	79.3	63.7	52.3
8.74	-83.29	-72.21	-78.79	22.65	79.1	63.6	53.9

9.06	-83.1	-71.07	-78.49	22.74	78.8	63.8	51.3
8.73	-83.29	-71.54	-78.85	20.73	78.5	63.7	52.9
8.65	-83.29	-71.85	-79.1	19.17	78.3	63.6	50.3
8.73	-83.52	-71.38	-78.76	19.26	78.1	63.2	52.9
8.76	-83.29	-71.54	-78.52	19.75	78.7	63.1	52.4
8.75	-83.24	-71.85	-78.79	21	79.1	62.9	52.6
8.76	-83.47	-71.59	-78.82	22.8	79	62.9	51.6
8.82	-83.01	-71.85	-78.88	22.83	78.9	63.1	51.9
8.89	-83.15	-72	-78.73	22.65	78.9	63	51.8
8.76	-82.88	-71.95	-78.76	20.3	77.9	63.5	53.5
8.73	-83.42	-71.64	-78.7	19.2	78	63.2	54.3
8.72	-83.38	-71.64	-78.67	19.26	78	62.9	52.2
8.79	-83.1	-71.22	-78.64	19.66	78	62.6	53
8.61	-83.2	-71.59	-78.79	19.51	77.8	62.7	52.5
8.84	-83.1	-71.69	-78.88	20.09	77.7	62.6	53.2
8.89	-82.92	-71.28	-78.64	21.95	77.8	62.5	52
8.67	-83.56	-72.11	-79.07	22.86	77.6	62.5	52.4
8.73	-83.42	-71.48	-78.79	22.89	77.6	62.8	54.2
8.63	-83.2	-71.33	-79.19	22.86	77.1	62.6	50.4
8.62	-83.52	-71.64	-79.13	22.89	77.4	62.6	50.9
8.85	-83.15	-71.64	-78.7	22.8	77	62.6	50.1
8.84	-83.2	-71.54	-78.67	22.89	76.8	62.6	50
8.8	-83.06	-71.85	-79	22.83	76.6	62.6	53.4
8.69	-83.2	-71.8	-79	22.83	76.6	62.7	52
8.99	-83.79	-71.59	-78.97	22.77	76.6	62.7	55.2
8.65	-83.24	-71.69	-78.91	22.77	76.3	63	52.7
8.7	-83.84	-72.11	-78.82	19.14	76.1	62.9	53.2
8.61	-83.61	-71.69	-78.79	19.29	76.1	62.5	52.7
8.78	-83.38	-72.16	-78.64	19.66	76.6	62.2	54.6
8.6	-83.47	-72	-79.1	22.86	77.5	62.1	52.4
8.8	-83.38	-71.59	-78.97	22.8	77.6	62.2	52.2
9.03	-83.56	-71.8	-78.73	22.8	77.4	62.7	48.4
8.76	-83.42	-71.9	-78.7	19.11	77	62.7	51.8
8.71	-83.2	-71.48	-79.04	19.35	77.5	62.4	52.4
8.79	-83.52	-71.48	-78.39	19.96	78.6	62	51.7
8.72	-83.52	-71.9	-78.97	22.74	79.3	62.2	53.8
8.6	-83.42	-72	-78.67	22.83	79.7	62.4	54.9
8.65	-83.65	-71.59	-78.88	22.83	79.9	62.4	53.5
8.76	-83.29	-71.8	-79.04	22.8	80.5	62.5	52.6
8.78	-83.42	-71.38	-78.76	22.77	81	62.7	48.7
8.92	-83.65	-71.85	-78.91	22.71	81.3	62.8	54.4
8.95	-83.24	-71.59	-79.07	22.71	81.4	62.8	51.3
8.74	-83.2	-72.42	-78.88	22.65	81.6	63	52.1
8.76	-83.29	-71.59	-78.88	20.27	81.7	63.2	54
8.71	-83.56	-72.42	-79.16	19.14	82.3	63.2	55.8
8.75	-83.84	-72.21	-79.19	19.2	82.9	63	53
8.71	-83.38	-72.16	-78.88	19.41	83	62.9	52.4

8.74	-83.52	-72.11	-79.19	19.63	82.8	62.8	51.6
8.65	-83.15	-72.37	-78.94	19.99	82.9	62.9	52.9
8.9	-83.47	-71.95	-79.19	20.51	83.3	62.9	51.4
8.57	-83.15	-72	-78.91	22.74	83.5	62.7	52.4
8.88	-83.79	-72.05	-78.7	22.62	84.2	63	52.5
8.63	-83.52	-71.85	-79.19	22.62	84.6	62.9	52.5
8.88	-83.29	-71.9	-79	22.65	85.1	63.2	51.3
8.8	-83.7	-71.8	-79.04	22.56	85.3	63.3	50.5
8.64	-83.52	-72.16	-79.16	22.65	85.3	63.6	52.8
8.94	-83.52	-72.31	-78.85	22.53	85.3	63.5	50.5
8.81	-83.65	-71.69	-78.91	22.53	85.2	63.6	53.8
8.76	-83.75	-72.42	-79.1	22.53	85.5	63.8	52.9
9.45	-83.47	-72	-78.58	22.31	85.4	64	52.7
8.76	-84.11	-72.21	-78.64	20.18	86.1	64.1	50.1
8.66	-83.65	-72.26	-78.88	18.96	86	64.1	52.8
8.72	-83.56	-71.64	-78.91	18.96	87.2	64	52.8
8.75	-83.24	-71.59	-78.79	18.96	87	64.1	52.8
8.74	-83.56	-71.85	-79.13	18.93	87.1	64.3	50.3
8.68	-83.61	-72.31	-79.1	19.05	86.7	64.1	53.3
8.7	-83.79	-71.95	-79.07	19.02	86.5	64.1	53.6
8.64	-83.47	-71.64	-78.67	19.14	86.5	63.8	52.1
8.74	-83.38	-72	-79.13	19.47	86.4	63.8	52.7
8.91	-83.88	-72.21	-78.97	20.05	86.2	63.8	53.1
8.77	-83.47	-72.05	-78.94	22.13	86.4	63.8	51.3
8.91	-83.65	-72.05	-78.97	22.47	86.4	63.9	53.9
8.77	-83.24	-71.69	-79.19	22.53	86.5	64.1	54.3
8.89	-83.47	-72.26	-79.16	22.53	86.4	64	53.4
8.91	-83.56	-71.59	-79.28	22.56	86.5	64.2	51.6
8.75	-83.7	-71.59	-79.19	22.53	86.4	64.2	50.2
8.91	-83.65	-72.31	-78.85	22.53	86.1	64.4	52.6
8.74	-83.79	-72.16	-79.16	22.5	85.9	64.4	58.4
8.99	-83.47	-72.16	-79.04	22.47	85.9	64.7	53.3
8.95	-83.47	-72.05	-78.91	22.47	85.8	64.7	48
8.82	-83.79	-72	-79.22	22.5	85.4	65	52.9
8.69	-83.84	-72.57	-78.97	20.18	85.1	64.9	57.1
8.72	-83.56	-71.9	-79.25	18.83	84.8	64.9	51.3
8.62	-83.7	-71.85	-79.37	18.89	84.8	64.7	51.2
8.62	-83.79	-71.69	-79.28	19.08	84.3	64.3	52.1
8.6	-83.56	-72.05	-79.43	19.51	84.2	64	49.7
8.74	-83.61	-72.31	-79.16	19.35	84.2	64	47.5
8.76	-83.97	-71.85	-78.94	19.44	84.2	64.2	50.9
8.88	-83.42	-72.21	-79.13	20.05	84.2	64.2	54.2
8.53	-83.47	-72.11	-79.04	22.56	84.2	64.2	54.9
8.88	-83.65	-72.16	-79.37	22.53	84.2	64.2	52.7
8.83	-84.39	-71.95	-78.73	22.47	83.9	64.3	52.3
8.93	-83.75	-72.21	-79.22	22.44	83.8	64.7	53.1
9.01	-83.79	-72.16	-79.31	22.47	83.4	64.9	51.9

8.79	-83.56	-72.11	-79.28	21.7	82.9	64.7	53.8
8.65	-83.61	-72.21	-79.28	18.86	82.4	64.9	53.3
8.79	-83.47	-71.85	-78.82	18.77	82.2	64.8	51.7
8.7	-83.2	-72.31	-79.28	18.8	81.8	64.7	54.1
8.73	-83.75	-72.21	-79.04	18.8	81.8	64.5	52.6
8.62	-83.29	-72.05	-79.28	18.8	81.5	64.5	52
8.61	-83.7	-72.21	-79.1	18.99	81.6	64.1	51.8
8.84	-83.75	-72.16	-79.07	19.23	81.9	63.9	49.7
8.73	-83.52	-72.52	-79.13	21.25	82.4	63.9	49.4
8.6	-83.88	-72.31	-79.25	22.47	82.2	63.9	53
8.82	-83.61	-72.37	-79.25	22.5	82.2	64.1	52.3
8.75	-83.75	-72.26	-78.91	22.44	82.2	64	50.4
8.83	-83.61	-72.47	-79.28	22.44	82	63.9	52.5
8.59	-84.07	-72.47	-79.13	22.41	82.1	63.9	52.3
8.58	-83.38	-72.42	-79.19	22.44	82.1	63.9	52.9
8.65	-83.29	-72.42	-79.65	22.47	82.1	64.1	56.5
8.76	-83.38	-72.11	-79.37	22.41	81.9	64.2	51.9
9.49	-83.52	-72.11	-79.28	22.28	81.6	64.7	52.7
8.71	-83.75	-72.37	-79.34	18.68	81.3	64.7	51.9
8.71	-84.25	-71.95	-79.31	18.68	81.3	64.3	52
8.73	-84.02	-72.31	-79.49	18.83	81.4	64	52.8
8.51	-83.38	-72.26	-79.22	19.05	81.4	63.9	53.6
8.67	-83.93	-71.9	-79.31	19.72	82	63.6	51.8
8.56	-83.84	-72.26	-79.46	22.47	82.2	63.7	54.3
8.6	-83.7	-71.95	-79.25	22.44	82.1	63.8	52.1
8.8	-83.93	-71.95	-79.25	22.31	82.2	63.6	53.1
8.72	-84.07	-72.37	-79.07	22.47	82.2	63.7	54.9
8.84	-84.11	-72.11	-79.13	22.41	82.1	63.7	52.8
8.85	-83.79	-71.85	-79.43	22.34	82.1	63.8	53.1
8.59	-83.75	-72.21	-79.25	22.31	82.2	63.9	52.6
8.74	-83.75	-72.21	-79.46	22.31	82.1	63.9	52.9
8.99	-84.29	-72.31	-79.65	22.31	81.9	64.1	53.6
8.78	-83.47	-72.11	-79.25	22.34	81.9	64.3	50.9
8.71	-83.93	-72.94	-79.31	21.73	81.7	64.4	53.7
8.8	-83.84	-71.9	-79.22	20.63	81.6	64.3	51.8
8.77	-83.97	-71.64	-79.55	19.51	81.7	64.2	51.6
8.64	-83.47	-72.47	-79.62	18.59	81.6	64	53.2
8.64	-83.47	-71.95	-79.31	18.71	81.8	64.1	51.6
8.75	-84.16	-72.47	-79.25	18.74	81.7	63.9	53
8.58	-84.16	-72.42	-79.28	18.96	81.9	63.6	52.2
8.73	-84.07	-71.85	-79.34	19.75	82.4	63.5	53.3
8.72	-83.84	-72.26	-79.25	22.31	82.4	63.6	53.1
8.78	-83.75	-72.11	-79.68	22.25	82.5	63.6	50.8
8.9	-84.11	-72.47	-79.58	22.25	82.5	63.8	50.5
9.02	-83.88	-72.21	-79.68	22.22	82.3	64	53
8.65	-83.97	-72.11	-79.34	18.56	81.8	64.2	52
8.63	-83.88	-72.63	-79.46	18.62	81.9	64	51.2

8.59	-84.02	-72.68	-79.16	18.77	82.1	63.6	52.2
8.83	-84.2	-72.37	-79.28	19.23	82.3	63.6	52.1
8.79	-84.29	-72.26	-79.25	22.31	82.9	63.6	52.7
8.7	-83.75	-72.78	-79.62	22.28	82.8	63.6	49.6
8.58	-83.79	-72.88	-79.28	22.34	82.7	63.6	54.7
8.62	-83.7	-72.57	-79.52	22.47	82.5	63.5	52
8.85	-84.02	-72.21	-79.25	22.25	82.8	63.6	54.1
8.54	-83.93	-72.47	-79.49	22.22	82.7	63.5	52.1
8.78	-83.65	-72.52	-79.16	22.34	83	63.6	53
8.73	-84.07	-72.37	-79.55	22.28	82.9	63.5	52.5
8.95	-83.88	-72.57	-79.43	22.34	83	63.8	51.7
8.97	-84.02	-72.47	-79.19	22.22	82.9	64.1	53.7
8.76	-83.79	-72.68	-79.62	22.1	82.3	64	55.3
8.76	-84.02	-72.73	-79.49	20.39	82.2	64.2	48.9
8.72	-84.25	-73.35	-79.55	18.56	82.2	64.1	51.6
8.71	-83.75	-72.37	-79.68	18.56	82.3	64	50.5
8.76	-83.88	-72.73	-79.43	18.56	82.3	63.9	51.8
8.74	-83.88	-72.16	-79.31	18.62	82.5	63.7	53.2
8.63	-83.97	-72.37	-79.34	18.86	82.4	63.6	50.7
8.6	-83.97	-72.11	-79.31	19.05	82.8	63.3	52.1
8.65	-84.11	-73.14	-79.65	19.93	83.1	63.6	55.2
8.83	-84.57	-71.95	-79.65	21.92	83.2	63.4	48.2
8.76	-83.84	-73.04	-79.58	22.28	83.2	63.5	51.7
8.7	-83.97	-72.31	-79.77	22.19	83.2	63.5	56.7
8.86	-83.88	-72.16	-79.71	22.13	83.2	63.6	48.8
8.72	-84.16	-71.95	-79.46	22.19	83.2	63.6	51.4
8.73	-83.97	-72.94	-79.49	22.19	83.2	63.7	52.3
8.67	-84.89	-72.47	-79.86	22.25	83.1	63.7	52.4
8.97	-83.79	-72.78	-79.83	22.25	83.2	63.8	53.3
8.74	-83.97	-72.52	-80.07	22.16	83.2	63.8	52.1
8.7	-83.97	-72.16	-79.8	22.22	83.2	64	52.8
8.74	-83.93	-72.78	-79.86	22.16	82.9	64.1	52.8
8.73	-84.02	-72.16	-79.68	18.59	82.8	64	56
8.7	-84.07	-72.68	-79.34	18.53	83	64	52.4
8.6	-84.16	-72.88	-79.65	18.68	83.1	63.8	49
8.53	-84.11	-72.37	-79.25	19.14	83.3	63.4	53.4
8.83	-84.07	-72.83	-79.31	21.98	83.8	63.4	51.2
8.79	-84.29	-72.21	-79.16	22.19	83.9	63.6	49.3
8.92	-84.2	-72.52	-79.31	22.22	83.9	63.6	52.5
9.03	-84.25	-72.52	-79.58	22.13	83.9	63.8	54.9
8.74	-83.97	-72.52	-79.37	20.33	83.8	64.1	51.6
8.74	-84.02	-72.42	-79.77	18.47	84	63.8	52.3
8.76	-84.11	-72.47	-79.52	18.56	84.2	63.9	53.8
8.67	-83.93	-72.47	-79.49	18.77	84.3	63.6	53.3
8.73	-84.16	-72.31	-79.68	18.93	85	63.6	52.4
8.69	-84.2	-72.57	-80.04	19.75	85.7	63.6	52.3
8.73	-84.2	-72.52	-79.86	22.16	85.9	63.6	51.4

8.89	-84.29	-72.73	-79.8	22.1	86.3	63.6	52.2
8.82	-84.02	-72.52	-79.8	22.13	86.3	63.7	53.3
8.62	-84.39	-72.83	-79.71	22.16	86.4	63.9	51.3
8.67	-84.2	-72.21	-79.49	22.13	87.1	64.2	53.2
8.85	-84.07	-72.42	-79.83	22.07	87.5	64.5	51.2
8.76	-84.11	-72.63	-79.46	18.44	87.6	64.4	50.5
8.73	-84.2	-72.52	-79.74	18.41	88.3	64.4	52
8.7	-84.25	-72.83	-79.77	18.47	87.8	64.4	52.3
8.57	-84.43	-72.88	-79.83	18.59	87.9	64.2	52.8
8.53	-84.71	-73.3	-79.28	18.83	88.3	64.1	52.8
8.74	-84.34	-72.94	-79.83	19.44	89.4	63.8	47.4
8.74	-84.25	-72.68	-79.89	22.1	90.2	64.1	48.9
8.62	-84.75	-72.88	-79.98	22.07	90.4	64.5	52.7
8.64	-84.2	-73.14	-79.65	21.98	90.8	64.5	53.2
8.88	-84.16	-72.88	-79.65	21.98	90.9	64.7	51.6
8.65	-84.43	-72.88	-79.89	21.95	91.4	64.7	55
8.85	-84.57	-72.42	-79.55	22.01	91.2	65	53.6
8.65	-84.2	-72.47	-79.68	22.01	91.8	64.9	54.4
8.77	-84.34	-72.57	-80.04	21.95	91.8	65.1	53
9	-84.25	-72.47	-79.83	21.92	91.6	65.5	52.8
8.76	-83.52	-73.09	-79.68	21.92	91.7	65.5	51.1
8.72	-83.93	-72.63	-79.98	18.32	91.7	65.8	50.4
8.69	-84.2	-73.09	-79.92	18.35	91.5	65.6	52.9
8.73	-84.02	-72.78	-79.77	18.53	91.1	65.3	50.9
8.83	-84.8	-72.47	-79.77	18.89	90.8	65.1	52.5
8.83	-84.11	-72.73	-79.62	18.86	91	65.2	52.1
8.88	-84.11	-72.37	-79.83	18.8	90.8	65.3	53.1
8.78	-84.34	-72.73	-79.86	18.99	91	65.3	52.6
8.76	-84.57	-72.88	-79.68	19.32	91.4	65.4	52.4
8.9	-84.39	-72.37	-79.77	19.72	91.6	65.5	53.9
8.62	-84.52	-72.42	-79.55	20.82	91.9	65.6	53.4
8.87	-84.43	-72.37	-79.74	21.86	92.1	65.6	50.1
8.65	-84.25	-72.52	-79.89	21.92	92.3	65.7	51.7
8.9	-84.52	-72.73	-79.71	21.86	92.6	65.8	53.6
8.85	-84.89	-72.63	-79.86	21.86	92.9	65.8	51.2
8.76	-84.25	-72.63	-79.55	21.89	92.8	65.9	51.5
8.91	-84.34	-72.83	-79.8	21.86	92.9	65.9	57.3
8.83	-84.52	-73.04	-79.65	21.79	92.9	66.1	49.5
8.95	-84.34	-72.63	-80.23	21.79	93.2	66.2	53.5
9.03	-84.52	-72.42	-79.98	21.76	93.1	66.3	51.3
8.75	-84.52	-72.78	-80.07	21.58	93	66.8	52.1
8.75	-84.2	-72.78	-79.8	18.07	92.7	66.7	52.8
8.76	-84.16	-72.83	-79.8	18.19	92.9	66.6	50.1
8.62	-84.52	-73.09	-79.77	18.32	92.9	66.5	54.2
8.69	-84.39	-72.37	-79.95	18.77	92.9	66.1	51.9
8.69	-84.43	-73.46	-79.95	19.6	93.1	66.1	52.5
8.59	-84.2	-73.2	-79.74	21.83	93.2	66.3	51.6

8.84	-84.25	-72.88	-79.89	21.79	93	66.2	52.9
8.91	-84.11	-72.63	-79.83	21.83	92.7	66.5	53
8.78	-84.2	-72.47	-79.98	21.79	92.3	66.3	52.3
8.89	-84.25	-72.42	-80.26	21.83	92.1	66.6	52.2
8.9	-84.43	-72.78	-79.92	21.79	91.9	66.4	53.3
8.93	-84.62	-72.42	-79.83	21.73	91.8	66.5	54.2
8.91	-84.34	-72.88	-79.89	21.79	91.8	66.5	52.6
8.68	-84.75	-72.78	-80.01	21.79	91.8	66.8	51.8
8.99	-84.29	-72.83	-79.89	21.73	91.9	66.9	54.5
8.69	-84.11	-72.73	-80.23	21.86	91.8	67	51.7
8.74	-84.29	-72.83	-79.92	21.12	91.8	67.3	53.1
8.79	-84.57	-72.88	-79.86	18.38	91.2	67.1	51.5
8.8	-84.57	-72.68	-79.98	18.13	90.8	67	52.6
8.74	-84.62	-72.37	-79.8	18.13	90.7	66.8	53
8.73	-84.75	-73.46	-80.13	18.19	90.8	66.7	51.6
8.65	-84.29	-73.25	-80.04	18.19	91	66.7	53.2
8.71	-84.34	-72.83	-80.2	18.1	90.9	66.7	50.5
8.68	-84.29	-72.73	-79.98	18.32	90.9	66.6	52.7
8.54	-84.62	-72.57	-80.13	18.5	91	66.4	51.7
8.69	-84.62	-72.73	-79.86	18.71	91.4	66.3	53.1
8.7	-84.8	-72.78	-80.2	19.23	91.8	66.2	50.2
8.89	-84.71	-72.88	-80.07	20.18	91.9	66.3	51.5
8.58	-84.66	-73.2	-80.35	21.83	91.9	66.2	52.6
8.91	-84.71	-72.88	-79.83	21.86	91.9	66.4	53.2
8.61	-84.29	-73.25	-80.29	21.83	91.9	66.2	53.9
8.89	-84.89	-72.73	-79.95	21.89	91.8	66.4	53.8
8.86	-84.39	-73.2	-79.95	21.86	91.6	66.7	51.6
8.78	-84.43	-72.68	-80.35	21.86	91.1	66.7	50.3
9.07	-84.71	-72.88	-79.98	21.76	91.1	67.1	52.5
8.76	-84.29	-72.94	-80.32	18.1	91	67.1	53.9
8.79	-84.43	-73.14	-80.38	18.19	90.8	66.8	50.5
8.66	-84.75	-72.88	-80.04	18.41	90.6	65.8	52.9
8.7	-84.29	-73.04	-79.98	21.37	91	66	50.5
8.89	-84.75	-73.2	-80.23	21.79	90.8	66.4	50.9
8.64	-84.66	-73.3	-80.07	21.73	90.8	66.6	49.6
9	-84.52	-72.47	-80.13	21.76	90.8	67	48.2
8.73	-84.62	-73.35	-80.5	18.07	90.5	67	55
8.72	-84.89	-73.04	-80.01	18.1	90.5	66.6	51.2
8.62	-84.39	-73.3	-80.35	18.35	90.7	66.3	52.1
8.84	-84.57	-72.73	-80.2	18.5	90.5	66.1	54.6
8.63	-84.62	-73.2	-80.29	19.69	90.9	66.1	52.1
8.8	-84.66	-73.09	-80.38	21.83	91.2	66.3	49.6
8.89	-84.62	-72.83	-80.32	21.83	91.1	66.2	54.2
8.9	-84.62	-73.09	-80.38	21.76	90.9	66.5	54.1
8.98	-84.66	-72.94	-80.23	21.76	90.9	66.7	52.7
9.03	-84.71	-72.88	-80.01	21.67	90.6	67	53
8.74	-84.66	-73.3	-80.07	18.04	90.5	66.9	51.1

8.72	-84.52	-72.57	-80.38	18.22	90.7	66.4	53.3
8.58	-84.66	-73.04	-80.23	19.05	90.8	66	52
8.88	-84.62	-73.3	-79.98	21.79	91	66	51.9
8.83	-84.62	-72.73	-80.23	21.76	90.8	66.3	53.5
8.67	-84.89	-73.35	-80.13	21.7	90.8	66.5	54.1
8.75	-84.75	-72.88	-80.35	21.83	90.7	66.7	53.6
8.94	-84.71	-73.14	-80.32	21.79	90.5	67	52.8
8.78	-84.57	-73.51	-80.04	21.49	90.3	66.9	51.9
8.72	-84.75	-72.94	-80.26	20.48	90.4	66.9	53.4
8.76	-84.66	-73.61	-80.1	19.9	90.3	66.8	52.8
8.79	-84.52	-73.14	-80.1	18.1	90.2	66.9	52.5
8.73	-84.43	-72.94	-80.41	18.07	90.2	66.7	53
8.77	-84.8	-73.09	-80.26	18.07	90.1	66.5	54.3
8.64	-84.75	-73.51	-80.23	18.16	90	66.4	53.4
8.71	-84.57	-73.72	-80.13	18.62	90.1	66	52.1
8.85	-84.57	-72.94	-80.35	20.3	90.6	66	53.2
8.79	-84.62	-73.25	-79.98	21.76	90.7	66.1	51.7
8.76	-84.62	-73.61	-80.26	21.7	90.8	66.3	52.4
8.63	-84.89	-73.09	-80.62	21.76	90.7	66.1	51.1
8.92	-84.39	-73.04	-79.98	21.76	90.7	66.4	52.3
8.97	-84.66	-72.94	-80.23	21.7	90.7	66.5	54.2
8.84	-84.57	-72.78	-80.26	21.73	90.4	66.8	53.8
9.25	-84.66	-73.09	-80.41	21.55	90.4	66.9	54.8
8.74	-85.12	-73.04	-80.29	19.87	90.2	66.9	52
8.69	-84.94	-73.51	-80.1	18.07	90.2	66.7	53
8.71	-84.57	-73.46	-80.07	18.04	90.1	66.6	53.1
8.74	-84.8	-73.2	-80.38	18.13	90.2	66.2	52.4
8.62	-84.62	-73.56	-80.44	18.28	90.3	66.2	53.8
8.78	-84.71	-72.68	-80.2	18.59	90.4	65.9	53.8
8.65	-84.52	-72.73	-80.29	18.62	90.6	66	50.5
8.79	-84.75	-73.04	-80.23	18.93	90.7	65.9	52.4
8.7	-84.52	-73.25	-80.13	19.23	90.7	66	51.5
8.82	-84.8	-73.09	-80.29	20.91	90.7	65.8	49.9
8.9	-84.89	-73.04	-80.59	21.76	90.8	66.2	52.3
8.65	-84.84	-72.63	-80.62	21.79	90.8	66.1	55
8.04	-84.62	-73.3	-80.32	21.73	90.8	66.2	54
8.66	-84.66	-73.46	-80.53	21.7	90.8	66.5	52
8.74	-84.71	-73.2	-80.44	21.76	90.8	66.7	51.3
8.92	-84.62	-73.14	-80.59	21.76	90.8	66.9	52.8
8.8	-85.07	-72.88	-80.2	19.9	90.8	66.8	51.9
8.79	-84.62	-73.2	-80.62	17.98	91.5	66.7	52.1
8.66	-85.3	-73.35	-80.68	18.07	91.9	66.7	50.8
8.69	-84.98	-73.3	-80.32	18.1	92.1	66.5	53.5
8.67	-84.62	-73.51	-80.68	18.25	92.2	66.4	53.7
8.37	-84.84	-73.14	-80.26	18.5	92.2	66.2	52.7
8.58	-84.66	-73.66	-80.41	18.8	92.3	66.1	53
8.57	-85.26	-73.3	-80.2	20.63	92.8	66.4	53.4

8.85	-84.43	-73.14	-80.5	21.73	92.9	66.4	53.2
8.66	-84.8	-73.61	-80.35	21.73	93.7	66.4	52.3
8.7	-85.07	-73.3	-80.26	21.73	93.9	66.7	53.3
8.83	-84.66	-73.4	-80.44	21.76	94	66.8	53.8
8.91	-84.94	-73.4	-80.44	21.7	94.2	66.9	52.9
8.66	-84.84	-73.04	-80.44	21.67	94.1	67	51.7
8.73	-85.03	-73.46	-80.23	21.73	94	67.3	53
8.93	-84.8	-73.61	-80.5	21.73	94.7	67.4	52.5
8.93	-84.66	-72.94	-80.38	21.67	94.7	67.8	53.3
8.73	-84.66	-73.09	-80.29	19.35	94.5	67.7	54.1
8.76	-85.21	-73.4	-80.62	18.01	94.9	67.7	52.8
8.69	-84.71	-73.35	-80.41	18.16	95.3	67.5	54.2
8.59	-84.89	-73.72	-80.38	18.59	96.7	67.1	50.8
8.88	-84.94	-73.3	-80.2	20.97	97.3	67.3	51.6
8.71	-84.84	-73.4	-80.38	21.67	96.9	67.5	52.2
8.62	-85.03	-73.4	-80.41	21.7	97.2	67.8	54.6
8.8	-84.8	-73.4	-80.62	21.67	97.1	68	49.4
8.79	-84.89	-73.3	-80.47	19.72	96.8	68.3	51.9
8.75	-84.71	-73.14	-80.32	17.98	97.1	68.3	53.8
8.65	-84.52	-73.4	-80.29	18.07	98.3	67.8	53.2
8.8	-84.66	-73.4	-80.35	18.59	98.5	67.8	52.8
8.84	-84.8	-73.46	-80.35	18.71	98	67.8	53
8.82	-84.94	-73.25	-80.29	19.26	97.9	67.9	52.2
8.7	-84.89	-73.77	-80.29	21.58	98.5	68	52
8.88	-84.94	-73.87	-80.68	21.58	98.6	68	52.9
8.85	-84.94	-73.2	-80.23	21.58	98.6	68.2	55.4
8.8	-85.12	-73.2	-80.41	21.64	98.4	68.4	53.8
8.83	-85.16	-73.25	-80.47	21.55	98.4	68.4	52.7
8.66	-84.89	-73.35	-80.5	21.58	98.3	68.6	52.9
8.97	-85.26	-73.46	-80.5	21.67	98.2	68.7	51.7
8.83	-85.16	-73.92	-80.68	21.64	98	68.8	55
8.97	-84.98	-73.35	-80.71	21.58	97.6	69	56.5
8.74	-85.16	-73.35	-80.53	18.47	97.3	69.3	51.7
8.78	-84.89	-73.2	-80.23	18.04	97.3	68.9	53.7
8.68	-84.89	-73.3	-80.65	18.32	97.3	68.5	52.2
8.65	-85.07	-73.51	-80.68	20.18	98.1	68.3	53.6
8.89	-84.98	-73.51	-80.47	21.67	97.9	68.6	52.2
8.71	-85.16	-73.4	-80.59	21.7	97.5	68.6	52.2
8.76	-85.35	-73.66	-80.44	21.64	96.4	68.9	52.8
8.79	-85.16	-73.46	-80.5	21.73	93.5	69	53.6
8.8	-84.98	-73.14	-80.71	19.75	91.5	69.1	52.3
8.8	-84.84	-73.3	-80.56	18.19	90.6	69	55.1
8.72	-84.94	-73.3	-80.5	18.28	90.3	68.5	49.7
8.67	-84.84	-73.51	-80.41	18.53	89.8	68.2	51.4
8.88	-84.98	-73.2	-80.41	19.11	89.6	67.9	52.3
8.88	-85.03	-73.4	-80.53	21.95	89.2	67.9	51
8.88	-85.26	-73.4	-80.74	21.89	88.4	67.9	52.4

8.92	-85.26	-73.72	-80.41	21.86	88	68	53.3
9.03	-85.16	-73.46	-80.62	21.76	87.5	68	53.5
8.8	-85.16	-73.66	-80.71	21.92	87.3	68.3	51.6
8.73	-85.49	-73.77	-80.53	20.82	86.7	68.3	52.6
8.74	-85.16	-73.46	-80.68	18.59	86.5	67.9	51.4
8.79	-85.12	-73.35	-80.56	18.22	86.4	68	52.2
8.73	-84.98	-73.51	-80.78	18.19	86.4	67.8	50.9
8.74	-85.35	-73.46	-80.62	18.25	86.1	67.5	52
8.6	-84.89	-73.3	-80.62	18.41	86.2	67.2	50.7
8.63	-85.39	-73.77	-80.56	18.86	86.3	66.7	51.6
8.83	-85.12	-73.25	-80.53	22.04	86.4	66.8	51.6
8.62	-85.21	-73.87	-80.78	22.01	86.2	66.8	54.4
8.71	-84.89	-73.56	-80.47	22.01	85.7	67.3	51.9
8.74	-85.44	-73.77	-80.68	18.35	85.1	67.3	52
8.69	-85.07	-73.87	-80.93	18.47	84.9	66.9	54.1
8.64	-85.12	-74.03	-80.5	18.62	84.8	66.5	51.2
8.65	-85.35	-73.61	-80.68	18.8	84.3	66.2	51.7
8.47	-85.21	-74.08	-80.71	18.83	84.4	66.2	51.2
8.89	-84.98	-73.61	-80.5	19.02	84.2	66	51
8.91	-85.03	-73.51	-80.65	19.75	84.4	66	55.7
8.63	-85.16	-73.87	-81.08	22.28	84.4	66	52
8.6	-85.21	-73.77	-80.78	22.16	84	65.8	55.3
8.91	-85.35	-73.61	-80.74	22.25	83.7	65.9	51.5
8.78	-85.12	-73.66	-80.9	22.25	83.3	65.9	52.2
8.79	-85.3	-73.56	-81.02	22.16	82.5	66.5	51.5
8.78	-85.21	-73.46	-80.53	18.68	82.2	66.2	53.7
8.59	-85.35	-73.56	-80.74	18.77	82.2	65.8	51.6
8.92	-85.53	-73.56	-80.56	19.54	82.4	65.1	52.9
8.89	-85.35	-74.03	-80.93	22.31	82.5	65.3	52.3
8.92	-85.39	-73.35	-80.59	22.41	82.5	65.4	49.9
9	-85.21	-73.51	-80.53	22.44	81.8	65.6	52.8
8.73	-85.07	-73.77	-80.68	18.68	81	65.7	52.7
8.79	-85.3	-73.72	-80.62	18.8	81.1	65.4	51.9
8.75	-85.16	-73.82	-80.71	19.02	81	64.9	53.6
8.93	-85.49	-73.87	-80.62	19.57	81.5	64.5	52.1
8.64	-85.21	-73.87	-80.87	22.5	81.8	64.5	50.1
8.86	-85.44	-74.34	-80.78	22.5	81.6	64.7	51.4
8.92	-85.44	-73.72	-80.71	22.56	81.7	64.7	51.7
8.92	-85.3	-74.08	-80.81	22.53	81.5	64.7	53.7
8.74	-85.16	-73.66	-81.23	22.5	81.1	64.8	51
8.94	-85.21	-73.72	-81.14	22.44	81	64.9	51.6
8.79	-85.3	-74.03	-80.81	22.47	80.5	65	53.3
8.8	-84.8	-73.87	-80.5	19.23	80	64.8	52.5
8.75	-85.44	-73.82	-81.02	18.86	79.9	64.7	52.3
8.73	-85.21	-73.56	-80.78	18.99	79.9	64.4	53.2
8.58	-85.39	-73.61	-81.14	19.14	80	64	56.8
8.91	-85.39	-73.72	-80.59	19.44	80.1	63.6	53.1

8.92	-85.21	-73.66	-81.11	22.62	80.7	63.6	53.2
8.64	-85.03	-73.72	-80.9	22.62	80.2	63.6	51.3
8.65	-85.26	-74.23	-80.81	22.59	80.3	63.8	53.3
8.65	-85.21	-73.87	-81.14	22.53	80.1	63.8	51.9
8.76	-85.26	-73.46	-80.84	22.53	80	63.8	53.1
9.02	-85.26	-74.6	-81.14	22.56	79.9	64	50.3
8.75	-85.35	-73.72	-80.87	21.12	79.2	64.1	50.8
8.73	-85.44	-73.97	-81.26	19.08	79.1	63.9	52.6
8.61	-85.76	-74.18	-80.87	19.2	79.2	63.6	52.5
8.71	-85.3	-73.66	-80.78	20.12	79.7	63.3	52.1
8.76	-85.12	-74.03	-80.84	22.65	79.9	63.3	51.4
8.82	-85.49	-73.61	-80.99	22.71	79.7	63.2	52.2
8.72	-85.35	-73.66	-81.11	22.65	79.2	63.4	51.1
8.94	-85.62	-74.13	-81.05	22.56	78.8	63.8	53.3
8.75	-85.39	-73.92	-80.74	20.24	78.5	63.8	50.5
8.71	-85.26	-74.08	-81.23	19.11	78.5	63.5	50.7
8.34	-85.26	-73.4	-80.84	19.51	78.8	63	51.4
8.86	-85.67	-73.77	-81.08	22.65	79.2	62.9	53.4
8.74	-85.62	-73.87	-80.99	22.71	79	62.9	51.4
8.75	-85.44	-74.7	-81.05	22.74	78.9	63.3	51.7
8.87	-85.39	-74.39	-80.87	22.68	78.3	63.6	50.1
8.74	-85.3	-74.13	-80.99	20.67	77.6	63.5	52.9
8.64	-85.67	-74.55	-81.17	19.11	77.7	63.4	52.6
8.74	-85.62	-73.66	-80.93	19.17	77.7	63	52.2
8.63	-84.98	-73.97	-80.71	19.35	77.8	62.8	50.5
8.87	-85.21	-73.92	-81.11	20.45	78.5	62.6	53.8
8.73	-85.39	-73.87	-80.84	22.77	78.4	62.5	51.3
8.79	-85.26	-74.08	-81.05	22.68	78.3	62.5	50.5
8.91	-85.67	-74.39	-80.65	22.71	78.1	62.7	53
8.97	-85.99	-73.66	-81.05	22.65	78	63	53.8
9.24	-85.81	-74.7	-80.78	22.65	77.5	63.1	52.7
8.73	-85.49	-73.66	-80.87	19.08	77.1	62.8	52.2
8.74	-85.62	-73.82	-80.87	19.08	77	62.7	53.8
8.72	-85.76	-74.18	-81.11	19.2	76.9	62.5	54
8.5	-85.71	-73.72	-81.02	19.44	76.9	62.4	51.8
8.84	-85.49	-74.03	-81.02	19.66	77	62.5	50.7
8.82	-85.76	-74.03	-80.93	21.18	77.5	62.4	52.8
8.84	-85.71	-73.4	-81.02	22.71	77.4	62.4	53
8.65	-85.9	-74.65	-81.05	22.71	77.4	62.5	53.1
8.91	-85.71	-74.18	-81.39	22.74	77	62.2	51.8
8.93	-85.53	-74.44	-81.05	22.77	77	62.5	50.7
8.99	-85.16	-73.97	-81.42	22.65	76.7	62.7	51
10.24	-85.49	-73.92	-81.17	22.47	76.3	62.8	54.9
8.75	-85.26	-73.82	-81.23	20.02	76.1	62.6	52.6
8.67	-85.3	-73.92	-81.26	19.02	76.1	62.7	53.3
8.74	-85.53	-73.97	-81.2	19.05	76.1	62.5	52.4
8.7	-85.07	-73.97	-81.23	19.05	75.9	62.5	52.7

8.65	-86.26	-73.77	-81.29	19.17	76.4	62.4	51.4
8.79	-85.53	-73.61	-81.02	19.47	76.7	62	53
8.75	-85.16	-73.82	-81.14	22.68	77.2	61.7	52
8.74	-85.49	-74.65	-80.84	22.68	77	61.5	53.5
8.97	-85.39	-73.61	-81.08	22.62	76.8	62.4	51.2
8.76	-85.81	-73.66	-81.23	19.02	75.9	62.4	54.7
8.59	-85.76	-74.08	-80.93	19.29	76.5	62	53.4
8.6	-82.19	-70.65	-79.92	-0.06	71	61.4	53.1
8.71	-81.23	-73.09	-79.68	0	66.9	61.2	52.8
8.75	-80.63	-72.73	-79.49	22.59	76.2	59.6	51.8
8.75	-80.63	-72.63	-79.34	18.93	75.4	60.2	52.8
8.81	-83.65	-73.4	-79.28	0.03	68.2	61.1	52.8
9.29	-84.16	-73.35	-79.19	22.74	73.4	61.4	51.7
8.72	-84.94	-73.56	-79.1	19.05	75.7	61.8	52.6
8.79	-84.66	-73.4	-78.94	18.93	74.2	62.2	51.3
8.76	-84.98	-73.97	-78.76	20.18	76.9	61.4	53.1
8.88	-85.3	-73.56	-78.79	22.56	76.6	62.2	51.6
8.71	-85.26	-73.4	-78.85	18.89	76.3	62.2	51.8
8.82	-85.9	-73.97	-78.88	22.65	76.6	62	50.3
9.18	-85.67	-73.35	-78.55	22.56	76.5	62.7	52.7
8.68	-85.71	-73.77	-78.42	18.96	76.6	62.5	51.6
8.87	-85.76	-73.92	-78.36	22.65	76.2	61.2	51.6
8.78	-85.62	-73.92	-78.42	18.8	76.1	62.5	50.7
8.71	-85.99	-73.56	-78.3	18.99	76.6	62	52.6
8.85	-85.76	-73.82	-78.21	22.62	76.5	62.5	53.8
8.74	-85.76	-73.66	-78.33	18.86	76.6	62.5	52.7
8.75	-86.03	-73.25	-78.18	22.62	77.7	61.7	51.1
8.76	-85.62	-73.51	-77.97	18.68	76.5	62.7	53
8.73	-85.76	-73.56	-78.18	22.01	77.6	61.7	51.6
8.75	-85.85	-73.35	-78.15	9.37	75.9	62.5	52.1
8.65	-85.81	-73.56	-77.94	19.05	76.8	61.9	52.2
8.75	-85.76	-73.46	-78.03	22.53	77.6	61.8	52.3
8.74	-85.9	-73.3	-77.91	18.77	76.8	62.5	52
8.76	-86.17	-73.2	-78	21.55	77.6	61.7	52.1
8.84	-85.9	-73.92	-77.84	22.5	77.7	62	51
8.74	-85.44	-73.14	-78	18.8	77.2	62.6	50.2
8.68	-85.94	-73.35	-78.06	19.2	76.8	62.2	52.1
8.71	-85.9	-73.4	-77.84	18.89	77	62.2	52.4
8.74	-85.67	-73.3	-77.91	22.5	77.9	61.8	52.7
8.75	-86.08	-73.14	-77.78	18.74	76.9	62.5	52.9
8.75	-85.81	-73.56	-77.78	21.46	77.8	61.7	54
8.76	-85.53	-73.61	-77.72	21.06	77	62.8	52.5
8.72	-85.49	-73.56	-77.72	18.89	77	62.2	51.3
8.85	-86.13	-73.46	-77.63	22.56	77	62.2	50.7
8.74	-85.62	-73.56	-77.63	18.8	76.9	62.6	51.6
8.76	-85.76	-73.72	-77.66	22.62	77.2	61.9	50.7
8.75	-85.49	-73.04	-77.69	18.74	76.7	62.7	51.9

8.66	-85.76	-73.3	-77.69	18.99	77.2	61.9	50.9
8.78	-85.62	-73.3	-77.75	18.99	75.5	62.5	52.4
8.74	-85.76	-73.35	-77.6	18.83	76.7	62.5	53.2
8.74	-85.76	-73.09	-77.51	22.53	77.7	61.7	52.8
8.76	-85.39	-73.25	-77.69	18.62	76.6	62.7	51.6
8.8	-85.49	-73.51	-77.54	22.5	77.3	61.8	51.4
8.74	-85.76	-73.46	-77.39	18.77	76.6	62.5	54.2
8.76	-85.99	-73.2	-77.39	22.56	77.8	61.7	52
8.76	-85.16	-73.61	-77.48	17.58	76.5	62.7	53
8.63	-85.81	-73.61	-77.45	19.44	76.9	61.6	54.6
8.89	-85.94	-73.72	-77.48	22.47	77.2	62.4	53.3
8.74	-85.76	-73.56	-77.54	18.8	76.8	62.4	51.9
8.76	-86.03	-73.4	-77.45	22.5	77.3	61.7	53
8.75	-85.94	-73.04	-77.72	18.71	76.5	62.5	52.9
8.76	-86.08	-72.83	-77.26	19.41	77.3	61.5	52.4
8.32	-85.62	-73.04	-77.39	-0.06	74.5	62.2	49.8
8.65	-85.67	-73.2	-77.36	19.17	76.9	61.5	51.3
8.76	-85.53	-72.94	-77.33	20.7	75.7	62.1	51.7
8.74	-85.99	-73.25	-77.36	18.8	76.6	62	52.9
8.75	-85.44	-73.4	-77.02	22.53	77.4	61.4	51.1
8.76	-85.67	-73.25	-77.36	18.74	76.6	62.2	51.4
8.74	-85.76	-73.04	-77.3	22.59	77.1	61.5	51.6
8.76	-85.3	-73.56	-77.42	18.74	76.6	62.4	52
8.69	-85.67	-73.2	-77.2	19.6	76.1	61.7	52
8.66	-85.76	-72.78	-77.36	18.93	76.6	61.7	53.2
8.75	-85.35	-73.56	-77.2	22.53	77.4	61.6	53.7
8.75	-85.99	-73.14	-77.2	18.74	76.6	62.1	50.5
8.75	-85.53	-72.94	-77.45	22.56	77	61.4	52.4
8.76	-85.44	-73.3	-77.36	18.62	76.5	62.4	52.6
8.66	-85.44	-73.14	-77.08	19.02	76.9	61.6	50.4
8.76	-85.53	-72.68	-77.08	18.25	75.2	62	52.4
8.73	-85.71	-73.09	-77.26	18.74	76.7	61.9	52.4
8.75	-86.13	-72.83	-77.3	22.5	77.6	61.5	52
8.76	-85.81	-73.72	-77.17	18.68	76.6	62.1	51.4
8.76	-85.71	-73.2	-77.3	19.81	77.2	61.3	53.1
8.86	-85.44	-73.35	-77.08	22.44	76.8	62.1	51.6
8.73	-85.76	-72.83	-76.99	18.83	76.7	61.8	52.3
8.92	-85.16	-72.88	-77.11	22.53	76.4	61.9	50.9
8.76	-85.39	-73.72	-77.17	18.68	76.5	62.1	51.6
8.68	-85.67	-73.35	-76.93	18.96	76.8	61.4	51.3
8.95	-85.67	-73.35	-76.99	22.47	76.6	61.8	50.9
8.73	-85.26	-73.46	-77.2	18.71	76.7	61.9	53.5
8.75	-86.13	-72.83	-76.99	22.5	77.6	61.3	53.1
8.76	-85.07	-73.09	-76.99	18.68	76.7	62.1	50.5
8.72	-85.49	-73.2	-76.93	22.47	77.6	61.4	51.8
8.76	-85.53	-72.78	-77.14	18.59	76.8	62.2	52.6
8.76	-85.71	-73.3	-76.96	20.02	77.5	61.3	55.4

8.87	-85.71	-73.14	-77.14	22.44	77.2	62	51.1
8.73	-85.26	-72.94	-77.14	18.71	77.1	61.6	51.6
8.8	-85.67	-73.46	-77.17	22.47	77.2	61.5	51.6
8.75	-85.67	-72.94	-77.02	18.68	77	61.9	52.3
8.74	-85.39	-73.04	-77.08	20.3	78	61.4	53
9.29	-85.35	-73.09	-76.93	2.87	75.9	62.1	48.6
8.76	-85.12	-73.2	-77.02	19.63	77.7	61.3	52.1
8.86	-85.53	-72.57	-76.93	0	75.6	62	52.6
8.74	-85.81	-73.25	-76.93	22.44	78	61.4	52.3
8.74	-85.94	-73.25	-76.96	18.56	77.4	62.1	52.3
8.65	-86.03	-72.88	-76.96	18.96	77.7	61.4	51.9
8.75	-85.76	-72.68	-76.9	14.99	75.2	61.9	51.2
8.74	-85.03	-73.09	-76.84	18.74	77.6	62.1	53.9
8.73	-85.35	-72.63	-76.81	22.34	78.8	61.1	52.4
8.76	-85.21	-73.51	-76.87	18.47	77.7	62.2	52.6
8.79	-85.39	-73.14	-76.99	22.31	78.5	61.5	50.7
8.74	-85.3	-73.25	-76.78	18.56	77.7	62.2	51.8
8.76	-85.16	-73.09	-76.93	20.12	78.7	61.3	55.9
9.06	-85.16	-72.57	-76.87	2.26	75.8	62	50.2
8.71	-85.71	-72.31	-76.78	18.77	77.2	61.7	50.3
8.74	-85.71	-73.2	-76.75	22.34	78.1	61.4	54
8.76	-85.71	-72.68	-76.9	18.53	77	62.1	51.3
8.62	-85.39	-73.25	-76.93	19.41	77.3	61.4	53.1
8.89	-85.81	-72.88	-76.93	22.41	77.4	61.9	54.1
8.72	-85.53	-73.04	-76.75	18.71	77.2	61.7	53.4
8.87	-85.16	-73.66	-76.9	22.47	76.8	61.8	51.4
8.73	-85.71	-73.09	-76.93	18.68	77.1	61.8	52.8
8.85	-85.3	-72.83	-76.93	19.66	76.9	61.6	51.6
8.62	-86.03	-73.14	-76.68	18.93	77.7	61.4	50
8.74	-85.39	-72.88	-76.84	22.34	78.1	61.5	52
8.75	-85.44	-72.68	-76.75	18.62	77.5	62	52.3
8.76	-85.44	-72.73	-76.68	22.44	77.7	61.5	51.9
8.74	-86.03	-72.47	-76.81	18.68	77.3	62	49.4
8.67	-85.81	-73.46	-76.68	19.2	77.2	61.6	52.8
8.68	-85.39	-72.83	-76.9	18.74	77.7	61.6	51.7
8.76	-85.71	-72.57	-76.78	22.34	78.5	61.6	52.2
8.75	-85.67	-73.14	-76.65	18.62	77.7	62.1	51.9
8.77	-85.53	-73.2	-76.78	22.41	78.1	61.5	50.4
8.75	-85.16	-72.68	-76.9	18.53	77.5	61.9	52.5
8.68	-85.62	-72.88	-76.68	18.83	77.7	61.7	53
8.78	-85.81	-72.83	-76.72	22.13	76.7	62.1	52.6
8.74	-85.67	-73.04	-76.81	18.68	77.7	62	49.5
8.76	-85.12	-73.14	-76.68	22.25	78.9	61.5	45.7
8.75	-85.39	-72.78	-76.75	18.5	78.4	62.4	53
9.85	-85.85	-72.88	-76.75	22.19	78.5	62.1	51.5
8.73	-85.49	-72.68	-76.75	18.59	78.9	62.2	48.4
8.77	-85.71	-72.57	-76.81	22.34	80	61.6	51.6

8.75	-85.49	-73.4	-76.72	18.5	79.5	62.6	52.2
8.76	-85.67	-73.09	-76.68	19.05	80.8	61.6	53.7
8.87	-85.71	-73.14	-76.68	22.28	81.3	62.5	53.8
8.74	-85.44	-72.88	-76.72	18.77	81.4	62.4	53.5
8.78	-85.71	-72.42	-76.81	22.41	81.6	62.4	52.7
8.76	-86.03	-72.42	-76.75	18.8	81.4	62.5	52.3
8.75	-86.08	-72.26	-76.68	22.5	82.1	62	53.1
8.76	-85.39	-72.88	-76.81	18.74	81.7	62.9	50.5
8.21	-85.53	-72.68	-76.75	19.29	82	61.8	51.9
8.85	-85.53	-73.04	-76.93	22.5	82.4	62.4	52.6
8.74	-85.49	-72.94	-76.72	18.83	82	62.8	54.5
8.69	-85.44	-73.09	-76.87	19.6	81.9	62.5	51.9
8.68	-86.03	-73.09	-76.65	19.11	82.1	62.2	52.6
8.89	-85.81	-72.63	-76.72	22.44	82.7	62.5	52.4
8.75	-85.12	-72.68	-76.93	18.89	82.1	62.8	51.2
8.79	-85.62	-72.78	-76.75	22.56	82.1	62.5	50.1
8.76	-85.39	-73.14	-76.65	18.89	81.8	63	52.8
8.28	-85.35	-73.4	-76.72	19.41	82.1	62.2	53.2
8.77	-85.49	-72.88	-76.65	15.35	79	62.8	51.9
8.74	-85.67	-73.14	-76.72	19.08	81.2	62.8	54.3
8.76	-85.53	-72.94	-76.68	22.65	82.1	61.8	51.5
8.77	-85.35	-73.2	-76.75	18.93	81.1	63.1	53.4
8.83	-85.44	-72.52	-76.78	22.53	81.6	62.2	52.4
8.76	-85.49	-73.51	-76.68	19.05	80.8	62.8	52.7
8.76	-85.71	-72.94	-76.59	22.68	81.7	62	53.3
8.76	-85.26	-72.88	-76.65	18.93	81.5	63	52.9
8.84	-85.62	-73.14	-76.59	22.62	81.8	62.5	51.2
8.75	-86.03	-73.4	-76.62	19.08	80.6	62.8	52.7
8.76	-85.3	-73.09	-76.72	22.68	81.3	62.1	53.9
8.78	-85.49	-72.78	-76.78	18.99	79.9	63.1	52.4
8.67	-85.26	-72.94	-76.75	19.29	80.1	62.4	51.6
8.8	-85.26	-72.94	-76.56	22.01	78.8	62.8	54.6
8.74	-85.71	-72.94	-76.78	19.14	79.6	62.7	52
8.76	-85.71	-72.78	-76.72	22.8	80.7	61.9	47.7
8.76	-85.67	-73.04	-76.62	19.05	79.7	62.9	53.8
8.76	-85.85	-72.73	-76.62	22.74	80.7	62	52.7
8.76	-85.44	-73.35	-76.68	18.99	79.9	63	52.8
8.71	-85.39	-72.63	-76.47	19.32	80.3	62.5	52.6
8.8	-85.81	-72.68	-76.59	22.86	79.7	62.8	53.2
8.75	-85.62	-72.83	-76.5	19.14	80.1	62.8	52.5
8.76	-85.53	-72.94	-76.53	22.77	81.2	61.9	48.6
8.76	-85.71	-73.09	-76.59	19.05	80.1	62.9	52.1
8.63	-85.81	-72.83	-76.56	19.81	80.6	62	52.5
8.83	-85.39	-72.94	-76.56	22.65	81	62.5	55.9
8.75	-85.71	-72.78	-76.56	19.17	80.6	62.9	53.5
8.79	-85.67	-73.04	-76.68	22.74	80.5	62.4	53.9
8.76	-85.53	-73.14	-76.59	19.72	79.9	63.1	52.7

8.72	-85.67	-72.73	-76.5	19.29	80	62.5	50.5
8.88	-85.85	-73.2	-76.62	22.77	79.9	62.6	48.8
8.75	-85.35	-72.94	-76.68	19.08	80	62.9	50
8.78	-85.49	-73.35	-76.53	22.77	81	62	49.9
8.76	-85.62	-72.68	-76.62	19.02	80	63.1	50.3
8.76	-85.53	-72.21	-76.68	22.8	80.8	61.6	51.9
8.77	-85.76	-73.14	-76.68	19.11	79.7	63	50.4
8.78	-85.44	-73.25	-76.59	22.8	79.8	61.9	52.2
8.87	-85.49	-73.14	-76.62	22.77	79.8	63.1	53.5
8.74	-86.08	-73.04	-76.65	19.23	79.4	62.6	47.6
8.82	-85.53	-72.88	-76.44	22.86	79.2	62.5	52.5
8.76	-85.67	-72.68	-76.59	19.14	78.8	62.9	52
8.66	-85.62	-72.68	-76.68	19.54	78.9	62.1	50.8
8.78	-85.53	-73.04	-76.44	16.06	76.2	62.5	52.7
8.74	-85.67	-72.57	-76.56	19.29	78.4	62.5	52.3
8.75	-85.62	-72.42	-76.62	22.83	79.1	62.2	52.1
8.76	-85.67	-72.83	-76.65	19.11	77.9	62.9	51.6
8.34	-85.67	-72.68	-76.59	19.69	77.9	61.9	52.2
8.82	-84.94	-72.57	-76.68	22.83	78.5	62.2	51.1
8.75	-85.39	-73.14	-76.41	19.29	77.3	62.5	53.4
8.76	-85.67	-73.04	-76.59	22.86	77.6	61.8	54.3
8.76	-85.67	-72.88	-76.62	19.2	76.6	62.5	50
8.75	-85.76	-72.68	-76.62	22.13	77.3	61.4	52.2
8.76	-85.81	-72.94	-76.65	7.57	75.3	62.5	51.6
8.66	-85.76	-72.83	-76.56	19.6	76.4	61.4	51.7
8.8	-85.26	-72.57	-76.56	22.89	76.8	61.7	52.6
8.75	-86.13	-73.4	-76.5	19.41	75.6	62.1	54
8.79	-85.99	-72.47	-76.56	22.99	75.7	61.4	53.2
8.75	-85.49	-73.3	-76.53	19.41	75.2	62	53.1
8.75	-85.71	-72.78	-76.72	23.05	75.7	61.1	45.1
8.75	-85.26	-72.88	-76.53	19.26	74.7	62	52.2
8.66	-85.85	-72.52	-76.65	19.63	75.6	61.3	52
8.77	-85.76	-72.83	-76.5	15.42	72.3	61.6	52.8
8.74	-85.39	-72.94	-76.65	23.08	75	60.9	50.5
8.76	-85.49	-72.68	-76.59	19.26	73.4	61.8	53
8.67	-85.39	-72.78	-76.53	19.69	73.8	61.1	53.3
8.77	-85.94	-72.83	-76.53	20.54	72.3	61.4	52.6
8.74	-85.3	-73.14	-76.47	19.47	73.2	61.4	52.5
8.75	-85.26	-73.09	-76.47	23.05	74.2	60.7	50.8
8.76	-85.71	-73.09	-76.59	19.35	72.8	61.4	53.1
8.77	-85.94	-72.94	-76.59	23.2	73.8	60.5	53.3
8.76	-85.3	-72.73	-76.47	19.35	72.6	61.4	52.7
8.66	-85.53	-72.78	-76.65	19.75	73.4	60.7	52.2
8.77	-85.53	-72.42	-76.56	23.02	74.4	60.6	53
8.76	-85.99	-73.04	-76.53	19.51	73.4	61.3	52.7
8.72	-85.44	-72.47	-76.62	19.75	72.5	60.6	52.2
8.71	-85.67	-72.73	-76.68	19.63	72.5	60.8	51.8

8.77	-86.4	-72.88	-76.65	23.08	73	60.4	50.3
8.75	-85.62	-73.2	-76.56	19.51	73.2	60.9	51.2
8.71	-85.62	-72.73	-76.62	19.78	73.3	60.7	52.9
8.71	-85.94	-72.88	-76.65	19.63	73.4	60.6	51.9
8.76	-85.26	-73.14	-76.59	23.17	74.5	60.2	52.1
8.76	-86.22	-73.35	-76.56	19.47	72	60.8	52.5
8.76	-85.62	-72.26	-76.47	23.23	72.4	59.9	50.5
8.76	-85.21	-73.2	-76.5	19.51	71.2	61	51.1
8.67	-85.85	-72.88	-76.75	19.72	71.3	60.3	51.7
8.76	-85.71	-72.78	-76.53	20.57	69.8	60.3	49.7
8.74	-85.26	-72.57	-76.53	19.57	70.4	60.5	54
8.76	-85.53	-72.68	-76.59	20.54	71.2	59.7	49.4
8.99	-85.53	-72.63	-76.65	0.18	69	60.4	53.8
8.68	-85.67	-72	-76.5	19.72	70.5	59.9	51.9
8.87	-85.71	-72.94	-76.41	23.32	70.5	60.2	53.1
8.74	-85.3	-73.2	-76.5	19.57	70.1	60.1	52.5
8.76	-85.39	-72.57	-76.62	23.26	71.3	59.5	50.8
8.76	-85.53	-73.25	-76.5	19.51	69.4	60.2	52.6
8.58	-85.21	-72.57	-76.75	19.9	70.1	59.2	51.1
8.94	-85.53	-73.09	-76.5	23.32	69.7	60.1	51.8
8.73	-84.75	-73.25	-76.5	19.69	69.4	59.9	51.6
8.77	-86.13	-73.04	-76.65	23.2	70.5	59.1	50.8
8.75	-85.26	-72.68	-76.62	19.51	69.1	59.8	52.7
8.74	-86.03	-72.78	-76.59	20.27	69.9	59	52.6
8.87	-85.35	-72.88	-76.68	23.23	69.8	59.4	52.5
8.74	-85.16	-72.73	-76.72	19.69	69.2	59.5	53.4
8.79	-85.67	-73.46	-76.47	23.41	69.7	58.9	52.3
8.74	-85.71	-72.42	-76.56	19.63	68.6	59.6	52
8.74	-85.67	-73.35	-76.47	21.83	69.9	59.1	52.4
8.78	-85.35	-72.73	-76.62	4.73	67.6	59.6	50.5
8.51	-85.53	-72.73	-76.59	20.02	69	58.5	52.4
8.75	-85.62	-72.26	-76.53	19.17	67.1	59.2	53.6
8.72	-85.9	-72.31	-76.47	19.75	68.3	59.1	51.9
8.74	-86.31	-73.4	-76.65	23.29	69	58.5	51.5
8.75	-85.35	-72.57	-76.62	19.63	68.2	59.2	51
8.76	-85.67	-73.4	-76.41	23.35	68.8	58.6	51
8.76	-85.12	-72.57	-76.53	19.69	67.7	59.2	52
8.71	-86.26	-73.04	-76.65	19.99	67.6	58.8	52
8.71	-85.3	-72.88	-76.23	19.84	67.9	58.7	52.3
8.73	-85.3	-73.3	-76.62	23.38	68.7	58.4	55.6
8.75	-86.22	-73.04	-76.5	19.72	67.6	59.1	51.3
8.76	-86.49	-72.83	-76.53	20.63	68	58.2	54.2
8.82	-85.85	-72.78	-76.53	23.32	67.9	58.4	52.1
8.74	-85.67	-72.68	-76.59	19.81	67.2	58.6	52.3
8.75	-85.49	-72.83	-76.5	23.47	68.2	58.2	53.9
8.75	-85.39	-72.88	-76.62	19.75	67.7	58.9	52.2
8.63	-85.44	-72.16	-76.47	20.33	68.7	58.2	52.5

8.76	-85.99	-73.04	-76.5	0.09	66.2	58.7	53.1
8.7	-85.81	-73.25	-76.53	19.93	69	58.5	51.7
8.77	-85.53	-73.2	-76.68	23.23	70	58.7	51.2
8.75	-85.62	-73.25	-76.5	19.63	70	59.1	52.9
8.75	-85.49	-72.83	-76.62	23.26	71.6	58.6	51.1
8.75	-85.21	-73.04	-76.78	20.85	71.2	59.2	49.7
8.7	-85.81	-72.78	-76.5	19.69	72.1	59	52.9
8.91	-85.9	-73.04	-76.5	23.26	72.2	59.2	52.4
8.74	-85.71	-72.83	-76.56	19.6	72.7	59.2	53.5
8.75	-85.3	-73.14	-76.59	23.23	74.5	58.9	47.6
8.76	-85.62	-73.09	-76.47	19.44	74.3	59.7	52.3
8.74	-86.13	-73.25	-76.56	20.3	75.5	59	52.3
8.95	-85.81	-73.3	-76.47	22.99	75.5	59.9	53.3
8.72	-85.21	-72.57	-76.75	19.66	75.6	59.4	51.6
8.81	-85.39	-72.05	-76.56	23.29	75.5	59.8	52.2
8.75	-86.03	-73.14	-76.38	20.33	77.3	59.3	51.9
8.89	-85.67	-72.57	-76.56	23.02	77.5	60.2	55.5
8.73	-85.49	-72.83	-76.5	19.57	77.6	60.2	51.9
8.81	-85.26	-72.63	-76.38	23.14	77.9	60.1	51.7
8.74	-85.76	-73.25	-76.47	19.44	77.9	60.5	55.8
8.75	-85.67	-73.14	-76.53	19.96	78.8	59.8	51.3
8.67	-85.53	-72.47	-76.68	0.09	75.5	60.5	52.6
8.7	-85.99	-73.09	-76.41	19.66	78.8	60.3	53.8
8.76	-85.53	-72.78	-76.47	22.95	79.5	60.3	50.5
8.75	-85.71	-73.04	-76.5	19.51	79.2	60.7	48.8
8.71	-85.49	-73.2	-76.5	19.75	79.1	60.4	51.6
8.69	-85.62	-72.37	-76.59	19.69	79.6	60.7	53
8.76	-85.39	-72.73	-76.5	22.95	80	60.3	52.5
8.75	-85.71	-72.88	-76.5	19.35	79.8	61	50.8
8.79	-85.26	-72.73	-76.56	22.92	80.8	60.4	52.2
8.76	-85.67	-72.83	-76.53	19.41	80.7	61.2	52
8.74	-85.35	-72.73	-76.65	20.73	82	60.3	50.1
9	-85.9	-72.63	-76.38	1.53	79.4	61.3	47.9
8.67	-85.44	-72.63	-76.53	19.63	80.1	60.7	51.4
8.87	-85.76	-73.2	-76.44	22.99	80.5	60.9	50.5
8.74	-85.99	-72.94	-76.5	19.54	79.5	61.2	52
8.82	-85.44	-72.83	-76.5	23.05	79.2	60.8	52.7
8.76	-85.62	-72.73	-76.5	21.58	79.5	61.4	50.4
8.72	-85.71	-72.88	-76.62	19.57	79.5	61.1	54
8.76	-85.71	-73.4	-76.47	23.02	79.8	60.6	53.3
8.74	-85.67	-73.2	-76.5	19.44	79	61.5	52.5
8.75	-85.35	-72.78	-76.35	21.09	79.9	60.6	53.2
9.56	-86.08	-72.68	-76.56	2.9	77.8	61.5	52.3
8.68	-85.35	-73.04	-76.5	19.69	79.3	60.9	53.5
8.77	-85.85	-72.63	-76.44	22.99	80.5	61.1	53
8.76	-85.44	-72.57	-76.41	19.41	79.7	61.6	54.1
8.75	-85.16	-72.47	-76.38	23.02	80.3	60.7	52.2

8.75	-85.67	-72.88	-76.44	19.29	79.8	61.8	51.1
8.65	-85.85	-72.88	-76.44	19.75	80	61.2	52
8.76	-85.26	-72.63	-76.5	0.03	75.6	61.7	52.5
8.62	-85.62	-72.94	-76.5	20.09	80.2	60.9	52.2
8.76	-85.16	-72.21	-76.5	0.03	76.8	61.6	52.2
8.18	-85.26	-73.14	-76.38	19.9	79.9	61	53.6
8.88	-85.9	-73.04	-76.44	22.92	79.9	61.8	50.5
8.74	-85.35	-72.73	-76.38	19.57	79.7	61.5	51.9
8.85	-85.62	-73.2	-76.59	22.92	79.7	61.4	49.2
8.76	-85.9	-72.73	-76.62	19.44	79.6	61.9	52.1
8.75	-85.76	-73.09	-76.41	23.05	80.1	61.2	51.9
8.76	-85.71	-73.04	-76.47	19.32	78.8	62	53
8.67	-85.03	-72.42	-76.5	19.54	78.9	61.4	53.1
8.76	-85.53	-72.83	-76.44	23.14	79.2	61.2	52.6
8.76	-85.67	-72.47	-76.41	19.41	77.7	61.7	51.4
8.54	-85.35	-72.31	-76.44	19.96	77.7	61.1	52.2
8.88	-85.44	-73.09	-76.41	23.05	77.7	61.5	51.9
8.74	-85.71	-72.21	-76.41	19.47	76.5	61.6	51.6
8.83	-85.76	-72.88	-76.38	23.08	75.9	61.4	48.3
8.75	-85.62	-72.73	-76.14	19.41	75.5	61.7	51.5
8.76	-85.21	-72.83	-76.5	23.14	75.8	60.9	51.4
8.75	-85.12	-72.63	-76.47	19.29	74.3	61.6	54
8.65	-85.44	-73.14	-76.56	19.75	74.5	60.9	53.3
8.76	-85.44	-72.63	-76.72	15.51	71.6	61.3	50.9
8.69	-86.08	-72.68	-76.29	19.6	74.4	61	53.2
8.79	-85.76	-72.78	-76.32	19.05	72.4	61.2	51.5
8.76	-85.71	-72.68	-76.62	20.39	74.3	60.5	52.3
8.9	-85.9	-73.3	-76.35	23.08	74	61.1	52
8.74	-85.76	-72.73	-76.38	19.51	73.4	61.1	51.6
8.76	-85.35	-72.57	-76.59	23.08	73.6	60.3	55
8.75	-85.39	-72.42	-76.5	19.32	72.9	61	49.8
8.74	-85.76	-72.42	-76.44	20.18	73.3	60.3	51.2
8.87	-85.67	-72.88	-76.44	23.05	72.9	60.9	53.8
8.73	-85.71	-72.73	-76.5	19.6	72.3	60.8	51.7
8.76	-85.71	-72.83	-76.35	23.17	72.5	60.3	53.5
8.75	-85.44	-72.83	-76.38	19.41	71.5	60.6	52.7
8.76	-85.39	-72.88	-76.32	23.2	72.6	59.9	52.5
8.76	-85.21	-72.63	-76.29	19.54	71.2	60.8	51.7
8.77	-85.76	-72.21	-76.53	23.2	72.4	59.7	48.2
8.76	-85.71	-73.25	-76.44	19.41	71.1	60.7	53.7
8.59	-85.62	-73.09	-76.47	19.93	71.5	59.7	50.3
8.78	-85.39	-73.04	-76.44	23.2	72.3	59.8	52.9
8.75	-85.44	-72.88	-76.29	19.57	71.4	60.3	50.7
8.77	-85.81	-72.78	-76.41	23.23	72.2	59.3	49.5
8.75	-85.35	-72.52	-76.5	19.35	71	60.3	50.9
8.63	-85.21	-73.04	-76.62	19.87	71.8	59.5	53.6
8.78	-85.44	-72.94	-76.59	16.24	69.3	60.3	52.4

8.72	-85.49	-72.52	-76.41	19.6	71.4	59.8	51.6
8.74	-85.44	-72.88	-76.47	23.2	72.3	59.2	52.3
8.75	-85.49	-72.94	-76.44	19.47	71.2	59.9	49.4
8.75	-85.81	-73.2	-76.5	21.15	72	59.2	52.9
8.74	-85.21	-72.68	-76.41	21.18	71.2	59.9	51.6
8.7	-85.81	-72.42	-76.32	19.69	71.6	59.6	51.8
8.8	-85.62	-72.94	-76.32	22.95	70.5	59.7	53.4
8.71	-85.21	-72.52	-76.56	19.6	71.8	59.5	53.1
8.83	-85.62	-73.2	-76.47	23.2	71.1	59.7	52.4
8.65	-85.44	-72.42	-76.35	20.05	72.3	59.1	52.4
8.82	-85.53	-73.4	-76.38	23.14	72.9	59.3	52.7
8.74	-85.62	-73.09	-76.38	19.54	72.1	59.9	51.2
8.72	-85.16	-72.52	-76.5	23.2	72.7	59.2	53.4
9.03	-85.3	-72.47	-76.53	23.05	72	59.9	51.2
8.72	-85.21	-72.83	-76.41	19.6	72.3	59.6	51.7
8.8	-85.21	-72.52	-76.5	23.14	72.3	59.4	52
8.74	-85.21	-72.73	-76.35	19.51	71.6	59.6	51
8.77	-85.12	-72.47	-76.44	23.17	72.6	59	52.3
8.77	-85.62	-72.31	-76.59	19.41	71.2	59.7	51.2
8.74	-85.35	-72.52	-76.38	23.14	72.3	59	52.6
8.76	-85.3	-73.04	-76.44	19.35	70.8	59.4	51.9
8.82	-85.71	-72.94	-76.44	23.17	71.4	59.2	50.1
8.74	-85.44	-73.14	-76.5	19.51	70.8	59.5	52
8.75	-85.49	-72.63	-76.5	21.86	72	59	50.5
8.78	-85.81	-73.04	-76.17	5.83	69.6	59.5	51.6
8.65	-85.12	-72.16	-76.44	19.72	71.2	59	51.7
8.88	-86.31	-72.73	-76.47	23.08	71.6	59.2	52.3
8.74	-85.39	-72.88	-76.44	19.44	71.2	59.5	51.6
8.75	-85.3	-72.94	-76.38	23.14	71.9	58.8	52.2
8.75	-85.26	-72.57	-76.5	19.41	71.1	59.5	52.2
8.74	-85.26	-72.47	-76.5	20.21	72	58.8	51.5
8.75	-85.67	-73.3	-76.29	0.15	69.7	59.2	51.1
8.69	-85.49	-72.21	-76.35	19.6	71.9	59.2	52.9
8.78	-85.39	-72.31	-76.5	23.02	72.3	59.1	52.3
8.74	-85.53	-73.2	-76.23	19.35	72	59.2	52
9	-85.39	-72.11	-76.47	23.05	71.5	59.6	51.7
8.71	-85.26	-72.88	-76.38	19.54	72.3	59.2	53
8.79	-85.81	-72.78	-76.56	3.54	68.2	59.5	49.5
8.72	-85.35	-72.73	-76.47	19.51	72.4	59.2	55.4
8.73	-85.49	-72.47	-76.44	23.08	73.4	58.9	52.5
8.76	-85.49	-73.14	-76.38	19.26	72.4	59.7	52.5
8.62	-85.62	-72.88	-76.41	19.78	72.8	59.1	52.7
8.74	-85.49	-72.68	-76.35	23.05	73.6	59.2	53.1
8.75	-85.67	-72.68	-76.5	19.29	72.7	59.7	51.1
8.74	-84.57	-72.63	-76.32	22.25	73.5	59	53.5
8.75	-85.62	-72.37	-76.41	20.09	73	59.8	53.7
8.69	-85.76	-72.78	-76.35	19.57	73.4	59.3	50.3

8.79	-85.62	-73.14	-76.32	21.58	72.2	59.6	52.5
8.71	-85.49	-72.52	-76.35	19.35	73.5	59.3	50.9
8.8	-86.08	-72.94	-76.47	22.34	72.4	59.9	54.2
8.77	-85.62	-72.21	-76.44	19.81	74.1	59	52.2
8.81	-85.44	-72.47	-76.35	22.95	74.4	59.6	51.5
8.74	-85.76	-73.09	-76.38	19.35	74	59.5	52.5
8.75	-85.39	-72.63	-76.47	23.02	74.7	59.4	49.5
8.75	-85.16	-72.16	-76.53	19.23	74.5	59.9	52.5
8.75	-85.62	-72.31	-76.41	19.93	75.4	59.4	51.7
8.76	-85.12	-72.52	-76.41	15.42	72.4	59.9	52.6
8.7	-85.71	-73.51	-76.38	19.44	74.9	59.8	51.2
8.77	-85.76	-72.88	-76.38	22.83	75.5	59.7	52.8
8.74	-85.62	-72.37	-76.41	19.29	75.1	60.1	50.5
8.79	-85.53	-72.83	-76.2	22.89	75.5	59.4	51.9
8.78	-85.76	-72.63	-76.35	19.2	75.1	60.3	52.7
8.68	-86.03	-73.14	-76.41	19.47	75.4	59.7	53.7
9.99	-85.39	-73.09	-76.47	22.8	75.1	60.3	54
8.74	-85.62	-72.37	-76.38	19.23	75.7	60.2	51.1
8.76	-85.67	-73.04	-76.56	22.89	76.9	59.8	52.6
8.76	-85.67	-73.2	-76.56	19.11	75.9	60.4	50.2
8.85	-85.67	-72.47	-76.38	22.77	76.6	59.9	49
8.74	-85.53	-72.88	-76.23	19.11	76.5	60.3	52.1
8.74	-85.76	-72.68	-76.41	22.83	77.6	59.8	53.3
8.75	-85.67	-72.52	-76.62	18.99	76.8	60.7	52.3
8.85	-86.22	-73.14	-76.23	22.77	77.2	60.4	54
8.74	-85.26	-72.88	-76.47	19.08	77	60.5	52.3
8.74	-85.62	-72.94	-76.35	22.8	77.7	60.2	50.2
8.75	-85.44	-72.73	-76.5	18.99	77	60.8	53.8
8.63	-84.98	-72.63	-76.38	19.51	77.5	60.2	51.7
8.74	-85.67	-72.73	-76.41	15.02	73.8	60.7	52.4
8.72	-85.71	-72.37	-76.38	19.08	77.3	60.5	53.1
8.76	-85.35	-72.78	-76.41	22.68	78.5	60.2	52.6
8.75	-85.44	-73.2	-76.35	18.93	77.7	61	52.8
8.9	-86.03	-72.94	-76.41	22.68	77.9	61	50.8
8.72	-85.35	-72.73	-76.44	19.02	77.9	60.8	52.6
8.74	-85.07	-72.63	-76.38	22.68	78.9	60.4	52.6
8.75	-85.35	-72.63	-76.35	18.83	78.5	61.2	53.3
8.6	-85.49	-72.63	-76.44	19.51	78.9	60.4	51.6
8.76	-85.16	-72.57	-76.5	0.09	75.3	61.2	52.4
8.64	-85.53	-72.83	-76.47	19.29	78.8	60.6	51.8
8.76	-85.16	-72.83	-76.38	14.77	75.3	61.2	50.5
8.74	-85.62	-72.68	-76.44	22.22	79.4	60.4	51.7
8.9	-85.35	-72.63	-76.47	22.56	79.3	61.2	52.8
8.72	-85.94	-72.94	-76.29	18.99	78.9	61.1	52.4
8.9	-85.44	-72.78	-76.47	20.91	78.8	61.2	52.3
8.62	-85.53	-72.47	-76.47	19.54	79.6	60.7	51.3
8.93	-85.07	-73.35	-76.29	22.53	79.3	61.5	55.3

8.73	-85.39	-73.4	-76.38	18.93	79.5	61.3	51.2
8.85	-85.94	-72.68	-76.32	22.62	79.7	61.2	52.6
8.76	-85.81	-72.78	-76.32	21.73	79.5	61.7	51.3
8.71	-85.44	-72.68	-76.35	18.93	79.6	61.3	52.7
8.82	-85.67	-72.78	-76.29	22.47	79.6	61.4	52.1
8.75	-85.3	-72.47	-76.41	18.77	79.6	61.7	51.5
8.75	-85.35	-72.83	-76.2	22.47	80.6	60.9	51
8.77	-85.53	-72.73	-76.44	18.71	79.8	61.8	52.6
8.8	-85.3	-72.52	-76.35	22.56	80	61.3	49.4
8.74	-85.3	-72.73	-76.41	18.77	79.9	61.8	52.1
8.74	-85.39	-72.52	-76.32	22.53	81	61.3	51.6
8.76	-85.53	-72.88	-76.41	18.68	80	61.9	52.9
8.76	-85.49	-73.04	-76.41	19.29	80.2	61.2	50.2
8.85	-85.3	-72.68	-76.41	22.5	81.1	61.8	53.1
8.73	-84.84	-72.31	-76.56	18.74	80.3	61.6	53.3
8.75	-85.85	-72.57	-76.38	22.44	80.6	61.4	49.5
8.74	-85.94	-72.42	-76.35	18.68	80.1	62.1	50.2
8.75	-85.12	-72.83	-76.41	21.43	81	61.2	49.5
8.76	-85.9	-72.88	-76.32	7.33	79.6	62.2	51.6
8.66	-85.35	-72.68	-76.44	19.02	80.5	61.4	52.1
8.75	-86.22	-72.42	-76.41	22.41	81.1	61.5	51.8
8.75	-85.85	-72.42	-76.5	18.68	80.6	62	51.3
8.76	-86.13	-72.57	-76.47	22.53	81	61.4	53.6
8.75	-85.39	-72.68	-76.5	18.59	80.1	62.2	52
8.76	-85.71	-73.2	-76.35	19.23	80.9	61.2	50.5
8.67	-85.71	-72.31	-76.5	0.03	77.5	61.9	53.3
8.77	-85.71	-72.47	-76.44	22.5	80.9	61.4	50.9
8.76	-85.85	-72.37	-76.38	18.56	80.2	62.2	51.8
8.69	-85.35	-72.83	-76.35	18.86	80.1	61.8	51.8
8.77	-85.12	-72.88	-76.32	22.47	81.1	61.4	52.6
8.76	-85.67	-72.94	-76.35	18.53	80.2	62.2	52.1
8.66	-85.35	-72.47	-76.47	18.89	80.5	61.5	51.8
8.88	-86.08	-72.63	-76.29	22.47	80.7	62.1	50.4
8.74	-85.67	-73.09	-76.47	18.62	80.3	62.2	51.8
8.74	-85.85	-72.94	-76.47	22.47	81.5	61.5	52.2
8.76	-85.49	-72.73	-76.5	18.53	81.1	62.5	52.8
8.75	-85.76	-72.52	-76.5	22.25	82.2	61.6	51
8.74	-85.94	-72.94	-76.32	18.38	82.4	62.2	53.2
8.65	-85.49	-72.63	-76.53	19.02	82.9	61.7	54
8.76	-85.53	-73.14	-76.44	14.47	79.8	62.5	53.8
8.72	-85.67	-72.57	-76.35	18.59	82.3	62.4	52.1
8.74	-85.39	-72.52	-76.41	22.31	83.2	61.6	51.6
8.76	-85.53	-72.68	-76.41	18.5	82.7	62.6	53.3
8.76	-85.21	-72.88	-76.38	21	83.1	61.8	53.9
8.76	-85.26	-72.88	-76.41	18.53	82.4	62.8	50.4
8.68	-85.9	-72.63	-76.5	18.77	83	62	52.6
8.79	-85.39	-72.63	-76.29	16.76	80.8	62.6	51.6

8.67	-85.81	-72.16	-76.35	18.8	83	62	52.5
8.89	-85.49	-72.68	-76.32	0.03	77.8	62.5	50.1
8.72	-84.8	-72.73	-76.44	18.62	83	62.4	52
8.75	-85.9	-73.2	-76.23	22.22	83.8	62.2	52
8.74	-85.35	-72.88	-76.41	18.56	83.2	62.6	52.7
8.81	-85.53	-73.2	-76.41	18.56	80.3	62.7	51.6
8.75	-85.81	-72.37	-76.41	18.53	83	62.6	52.3
8.78	-85.39	-72.68	-76.29	22.28	84.1	62	52.4
8.76	-85.21	-72.52	-76.32	18.41	83	63.1	53.5
8.67	-85.71	-72.94	-76.38	18.83	83.2	62.1	52.9
8.81	-85.53	-72.52	-76.44	22.1	83.7	62.5	51.9
8.74	-85.26	-72.31	-76.41	18.5	83.4	62.9	52.7
8.83	-85.81	-72.52	-76.47	19.2	82.9	62.5	51.8
8.67	-85.39	-73.09	-76.41	18.74	83.3	62.5	52.3
8.8	-85.21	-73.25	-76.17	22.16	84.2	62.6	53.9
8.74	-85.62	-72.88	-76.5	18.38	83.3	63.2	52.7
8.66	-85.53	-72.88	-76.41	18.62	83.6	62.6	51.9
8.79	-85.94	-72.73	-76.32	22.22	83.9	62.5	53.7
8.75	-85.49	-72.21	-76.38	18.44	83.3	63.2	52.2
8.64	-85.16	-73.09	-76.29	19.14	83.8	62.2	53
8.76	-85.44	-73.04	-76.32	0.03	80	63	52.9
8.76	-85.49	-72.78	-76.29	22.16	83.9	62.4	52.4
8.75	-85.62	-73.09	-76.23	18.35	83.3	63.3	53.8
8.06	-85.85	-72.47	-76.17	19.02	83.6	62.5	51.6
8.75	-85.49	-72.63	-76.44	0.03	79.8	63.2	53.8
8.72	-85.94	-72.47	-76.23	18.53	83.2	62.8	51.5
8.76	-85.53	-72.42	-76.56	22.16	84	62.4	53.7
8.76	-85.53	-72.94	-76.44	18.38	83.4	63.4	50.8
8.84	-85.26	-72.57	-76.29	22.19	83.6	63.1	53.1
8.74	-85.49	-73.04	-76.47	18.38	83.4	63.2	52.4
8.75	-85.39	-72.26	-76.35	22.19	84.3	62.5	51.2
8.76	-85.71	-72.47	-76.32	18.32	83.6	63.3	52.8
8.77	-85.9	-72.47	-76.35	22.16	83.4	62.7	52.7
8.74	-85.81	-72.63	-76.35	18.38	83.5	63.1	53.3
8.82	-85.67	-73.04	-76.29	22.34	82	63.3	52.3
8.76	-85.67	-72.68	-76.41	19.02	83.8	62.4	52
8.84	-85.26	-72.78	-76.29	22.13	84	63	51.2
8.73	-85.67	-72.73	-76.44	18.53	83.6	63	51.4
8.8	-85.44	-72.88	-76.5	22.31	82.5	63.4	50.5
8.76	-86.13	-72.94	-76.44	19.41	84	62.5	52.1
8.77	-85.12	-72.57	-76.41	20.82	83.4	63.6	52.3
8.72	-85.49	-73.25	-76.41	18.53	83.7	63.2	52.3
8.92	-85.44	-72.57	-76.47	22.28	83.2	63.6	52.2
8.74	-85.76	-72.31	-76.29	18.44	83.5	63.5	51.6
8.75	-85.81	-72.57	-76.47	22.16	84.3	62.5	51.1
8.76	-85.49	-72.47	-76.41	18.28	83.6	63.6	52.5
8.76	-85.81	-72.78	-76.44	22.16	83.7	62.6	51.1

8.76	-84.98	-72.47	-76.35	18.32	83.5	63.6	52.4
8.76	-85.53	-73.04	-76.41	19.57	84.1	62.8	51.6
8.61	-85.85	-72.83	-76.38	22.34	84.2	63.6	51.3
8.74	-85.62	-72.47	-76.29	18.47	83.9	63.4	51.9
8.75	-85.44	-72.47	-76.38	19.96	84.5	62.8	51.9
8.94	-85.62	-72.26	-76.38	22.16	84.2	63.6	51.9
8.74	-85.21	-71.95	-76.44	18.47	84.1	63.5	53.3
8.76	-85.85	-72.52	-76.53	22.1	84.8	62.8	53.8
8.76	-85.62	-72.68	-76.47	18.41	84.5	63.7	52.5
8.76	-85.67	-73.14	-76.35	22.22	84.4	62.8	52.1
8.77	-85.85	-72.88	-76.38	20.82	84.2	63.7	52.2
8.73	-85.44	-72.78	-76.41	18.59	84.4	63.4	51.3
8.8	-85.85	-72.63	-76.44	22.16	84.5	63.4	52.6
8.74	-85.71	-72.31	-76.44	18.47	84.9	63.6	53.2
8.73	-85.53	-72.68	-76.29	22.22	85.6	62.9	56
8.76	-84.94	-72.68	-76.41	18.47	84.9	63.7	52
8.76	-85.94	-73.3	-76.32	22.22	85	63	51
8.76	-85.76	-72.42	-76.47	18.38	85	63.7	51.6
8.65	-85.44	-72.37	-76.41	19.14	85.4	63	53.3
8.87	-85.53	-72.63	-76.53	22.19	85.6	63.6	51.6
8.74	-85.49	-72.26	-76.29	18.56	85.2	63.6	54
8.97	-85.53	-72.68	-76.5	22.31	84.2	63.8	52.1
8.65	-85.85	-72.73	-76.32	19.08	85.2	63	52.5
8.89	-85.26	-72.78	-76.5	22.13	85.5	63.6	49.8
8.74	-85.81	-73.09	-76.35	18.47	85	63.6	51.9
8.9	-85.94	-73.14	-76.35	20.18	84.2	63.5	51.4
8.66	-85.53	-72.63	-76.35	18.71	84.9	63.2	52.2
8.79	-85.67	-73.35	-76.44	22.19	85.6	63.5	52.4
8.76	-85.3	-72.63	-76.56	18.35	84.8	63.8	51.6
8.78	-85.49	-72.83	-76.47	22.16	85.3	63	51.6
8.75	-85.07	-72.52	-76.35	19.23	84.8	63.7	53.1
8.66	-85.44	-72.68	-76.47	18.56	85	63.3	52.6
8.76	-85.53	-72.47	-76.44	14.38	79.9	63.9	50.1
8.74	-85.81	-72.94	-76.35	18.41	84.9	63.7	52.5
8.76	-85.62	-72.78	-76.41	20.02	85.7	63	51.5
9.14	-85.39	-73.04	-76.35	2.72	84.1	64	50.3
8.71	-85.53	-72.83	-76.38	18.56	85.4	63.6	51.4
8.76	-86.03	-73.51	-76.32	22.07	86.3	63.3	50.3
8.76	-85.39	-72.57	-76.38	18.41	85.5	64	52.2
8.8	-85.49	-73.14	-76.38	22.07	85.3	63.6	53.9
8.75	-85.53	-72.31	-76.38	18.47	85.8	63.8	52.3
9.47	-85.62	-72.83	-76.32	22.44	84.8	64	54.5
8.64	-85.21	-72.57	-76.47	19.02	86	63.2	52.8
8.86	-85.85	-72.78	-76.41	22.1	86.5	63.7	54.2
8.74	-85.53	-71.95	-76.35	18.38	86.1	63.9	50
8.8	-85.35	-71.9	-76.5	19.14	85.6	63.6	51.9
8.67	-85.44	-72.47	-76.5	18.59	85.9	63.6	52

8.76	-85.62	-72.88	-76.5	22.07	86.4	63.5	52.9
8.75	-85.44	-72.52	-76.35	18.38	85.8	64	49.4
8.71	-85.16	-72.47	-76.47	18.8	85.3	63.8	51.9
8.71	-85.39	-72.57	-76.32	18.41	85.7	63.8	52.1
8.76	-85.53	-72.88	-76.35	22.07	86.4	63.5	51.6
8.74	-85.62	-72.52	-76.47	18.22	85.7	64.3	53.8
8.76	-85.99	-72.16	-76.44	18.83	86	63.2	51.2
8.54	-85.62	-72.63	-76.38	0	82.8	64.1	52.8
8.66	-85.94	-72.47	-76.35	18.71	85.3	63.5	51.4
8.78	-85.49	-72.57	-76.41	22.13	85.6	63.7	52.2
8.76	-85.35	-72.57	-76.38	18.38	83.8	64.1	53.5
8.73	-85.81	-72.78	-76.35	21.67	84	63.5	52.6
8.99	-85.39	-72.47	-76.5	21.67	83.1	64	53.6
8.71	-85.35	-73.04	-76.41	18.62	82.7	63.6	52.2
8.79	-85.71	-72.73	-76.38	19.17	80.7	64	52.1
8.76	-85.85	-72.73	-76.47	18.5	82.1	63.7	51.8
8.78	-85.39	-72.83	-76.44	19.2	82.7	63.1	52.2
8.75	-85.67	-72.73	-76.5	4.24	79.7	63.6	52
8.72	-85.85	-72.68	-76.41	18.62	82	63.6	49
8.76	-85.3	-72.94	-76.38	22.1	82.7	63.1	53.4
8.76	-85.71	-73.25	-76.38	18.53	81.8	63.7	53.8
8.78	-85.76	-72.37	-76.32	22.28	81.9	63.1	50.8
8.76	-85.76	-72.78	-76.44	18.53	81.6	63.8	51.6
8.78	-85.85	-72.57	-76.5	19.41	82.3	62.9	52.1
8.85	-85.49	-72.42	-76.47	1.89	79.5	63.6	51.9
8.72	-85.85	-72.68	-76.44	18.68	81.7	63.3	51.4
8.74	-85.53	-72.52	-76.5	22.28	82.3	63.1	50.5
8.76	-85.44	-73.04	-76.38	18.53	81.6	63.6	53.8
8.77	-85.76	-72.52	-76.5	22.31	81.7	63.2	50.7
8.76	-85.44	-72.63	-76.47	18.47	81.5	63.6	51.8
8.65	-85.71	-72.57	-76.41	19.14	81.9	62.8	53.3
8.78	-85.53	-72.37	-76.32	16.48	79.9	63.5	51.3
8.72	-85.71	-72.31	-76.44	18.59	81.4	63.3	52.2
8.76	-85.99	-72.73	-76.41	22.28	82.3	62.7	52.9
8.76	-85.71	-72.68	-76.38	18.56	81.4	63.6	52.8
8.78	-85.62	-73.09	-76.47	22.34	81.7	62.8	52.7
8.76	-85.62	-73.04	-76.29	18.53	81.2	63.4	51.7
8.66	-85.99	-73.09	-76.44	19.11	80.9	63	51.7
8.71	-85.62	-72.94	-76.62	18.68	81.2	63.1	52.1
8.73	-85.35	-72.88	-76.47	22.25	81.7	62.6	53.4
8.77	-85.81	-72.63	-76.56	18.5	81.1	63.4	50.5
8.74	-86.22	-72.68	-76.62	20.36	80.9	63.1	52.5
8.72	-85.44	-72.88	-76.47	18.68	81.2	63.1	52.3
8.76	-85.94	-72.83	-76.59	22.25	81.5	62.9	51.9
8.75	-85.35	-73.25	-76.44	18.53	81.1	63.5	52
8.76	-85.44	-72.26	-76.62	19.72	81.8	62.6	51.9
8.88	-85.99	-72.52	-76.5	0.4	79.4	63.1	51.9

8.74	-85.71	-73.14	-76.44	22.41	81.6	62.6	50.5
8.75	-85.81	-72.68	-76.44	18.47	81.1	63.4	50.5
8.63	-85.49	-72.73	-76.5	19.02	81.4	62.7	52.4
8.78	-85.81	-72.68	-76.41	14.62	78.1	63.2	50.2
8.76	-85.71	-72.88	-76.47	22.31	81.3	62.5	53.2
8.75	-85.44	-73.04	-76.47	19.11	80.7	63.4	52.3
8.68	-85.3	-72.73	-76.5	18.83	81	62.8	52.9
8.79	-85.76	-72.83	-76.5	17.31	78.8	63.1	53.2
8.75	-85.26	-73.2	-76.56	20.6	81.3	62.5	51.3
9.47	-85.9	-73.25	-76.53	22.04	80.9	63.2	51.7
8.72	-85.44	-72.26	-76.62	18.74	80.8	62.9	51.8
9.02	-86.54	-72.31	-76.41	22.56	80	63	50.3
8.25	-85.3	-72.52	-76.53	19.11	80.9	62.4	52.6
8.78	-85.44	-72.57	-76.29	22.25	81	62.7	52
8.74	-86.13	-72.63	-76.56	18.71	80.7	63	51.8
8.84	-85.44	-72.57	-76.29	22.44	80.5	62.7	52.3
8.76	-85.71	-73.2	-76.56	18.62	80.3	62.9	51
8.65	-85.94	-73.09	-76.5	18.96	80.7	62.5	48.8
8.74	-85.67	-72.52	-76.65	20.39	79.5	63.1	50.5
8.74	-85.35	-72.68	-76.62	18.62	80.3	62.9	52.6
8.76	-85.9	-72.94	-76.56	22.41	81.3	62.4	51.2
8.76	-85.76	-72.83	-76.41	18.5	80.2	63.2	53.2
8.76	-85.62	-72.68	-76.38	20.24	80.6	62.1	52.4
8.91	-85.67	-72.63	-76.5	22.31	80.7	63.1	53.8
8.73	-85.12	-73.25	-76.5	18.71	80.5	62.7	51.2
8.85	-85.53	-72.83	-76.56	22.31	80.1	62.5	51.9
8.75	-85.49	-72.63	-76.44	18.62	80.1	63.1	53
8.76	-85.12	-73.04	-76.75	22.44	80.9	62.1	47.1
8.76	-85.44	-73.04	-76.65	18.5	80.1	63.2	51.6
8.66	-85.53	-72.52	-76.53	18.99	80.3	62.4	49
8.77	-85.53	-72.88	-76.59	15.93	77.7	62.7	52.2
8.76	-85.39	-72.68	-76.38	21.28	80.6	62.1	51.4
9.01	-85.76	-72.52	-76.38	22.22	79.9	62.8	51.4
8.7	-85.67	-72.83	-76.5	18.86	79.7	62.5	52.2
8.79	-86.22	-73.04	-76.41	15.45	76.6	62.5	52.1
8.74	-85.85	-72.68	-76.47	18.74	79.2	62.5	52.3
8.74	-86.03	-73.04	-76.56	22.47	80.3	61.9	53.1
8.76	-85.21	-72.31	-76.59	18.35	79.3	63	52.8
8.67	-85.62	-72.88	-76.38	18.89	79	62.4	52.3
8.75	-85.16	-72.47	-76.59	22.5	80	62.2	52.3
8.76	-85.71	-73.2	-76.53	18.71	79.2	62.7	52.4
8.7	-85.76	-72.63	-76.5	19.05	78.8	62.5	51.3
8.69	-85.67	-72.68	-76.47	18.86	79.2	62.2	52
8.79	-85.3	-73.09	-76.56	22.53	79.6	62.5	50.4
8.75	-85.39	-72.68	-76.56	18.71	79	62.7	51.8
8.75	-85.62	-72.78	-76.65	22.53	80	61.9	51.1
8.76	-85.71	-72.83	-76.68	18.68	79.1	62.7	51.9

8.75	-85.49	-72.94	-76.56	22.56	79.6	61.7	49.3
8.76	-85.49	-72.83	-76.59	18.74	78.7	62.6	50.5
8.71	-85.99	-72.78	-76.44	19.08	78.4	62.2	51.5
8.72	-85.81	-73.14	-76.62	18.8	78.8	62.4	52.7
8.74	-85.49	-72.57	-76.65	22.5	79.4	61.8	51.9
8.76	-85.49	-72.68	-76.53	18.74	78.7	62.4	51.1
8.84	-85.81	-73.51	-76.59	22.53	79	62.1	53.7
8.74	-85.71	-72.94	-76.41	18.77	78.8	62.5	51.3
8.75	-85.35	-72.88	-76.47	22.56	79.6	61.6	52
8.76	-85.67	-72.73	-76.5	18.68	78.5	62.5	51.9
8.65	-85.81	-72.83	-76.47	19.14	78.8	61.7	51.3
8.89	-85.53	-73.3	-76.62	22.5	79.5	62.2	52.3
8.74	-85.62	-73.09	-76.5	18.71	79	62.4	51.6
8.76	-85.35	-72.78	-76.68	22.41	79.3	61.8	55.6
8.76	-85.26	-73.14	-76.56	18.71	79.1	62.5	52.2
8.75	-85.62	-73.25	-76.59	20.18	80.2	61.7	50.9
9.03	-85.67	-72.88	-76.62	1.65	77.9	62.5	51.6
8.7	-85.81	-72.88	-76.59	18.99	79.7	62	55.9
8.92	-85.67	-73.25	-77.78	22.56	80.6	61.8	54
8.95	-85.26	-73.56	-78.18	22.53	80.5	62.5	53.9
9.56	-85.07	-73.4	-78.64	22.41	80.9	62.5	52.5
8.99	-85.71	-72.73	-78.52	22.62	81.4	62.4	52.3
8.83	-85.49	-73.14	-78.79	22.5	82	62.5	51.8
8.65	-86.08	-73.92	-78.88	21.43	82.4	62.6	52.6
8.7	-85.03	-74.03	-78.85	18.93	82.3	62.5	52.5
8.67	-85.71	-73.87	-78.97	19.08	81.9	62.5	53.6
8.5	-85.81	-73.97	-79.13	19.29	82.5	62	50.8
8.6	-85.9	-73.61	-78.91	20.85	83.1	61.9	54
8.73	-85.26	-73.4	-79.31	22.56	83.4	61.9	53.1
8.63	-85.49	-73.97	-79.28	22.56	83.8	62.4	53.5
8.83	-85.03	-72.83	-79.65	22.53	84	62.4	52
8.81	-85.85	-73.66	-79.83	22.56	83.9	62.6	51.2
8.97	-85.76	-73.09	-79.31	22.56	83.5	62.8	52.8
8.73	-85.49	-73.2	-79.43	22.13	83.4	62.6	51.8
8.72	-85.94	-73.92	-79.55	20.05	83.5	63	54.9
8.74	-85.99	-73.3	-79.49	18.99	83.7	62.8	50.5
8.77	-85.71	-73.82	-79.86	19.08	84	62.9	53.2
8.74	-85.94	-73.35	-79.49	19.08	84.4	62.7	52.2
8.05	-85.44	-73.72	-79.83	19.47	85	62.5	51
8.84	-85.71	-73.97	-79.52	20.09	84.9	62.5	52.3
8.78	-85.39	-74.49	-79.71	22.59	85.3	62.5	52
8.74	-86.31	-74.13	-79.34	22.62	85.3	62.5	51.8
8.65	-85.49	-73.87	-80.01	22.62	85	62.5	52.8
8.65	-85.9	-73.61	-79.71	22.47	85.3	62.6	53.8
8.87	-86.13	-73.87	-79.77	22.53	85.4	62.9	50.7
8.78	-86.26	-73.92	-79.86	22.59	85.2	63.1	53.2
8.76	-85.71	-74.13	-79.83	21.67	84.5	63.4	51.6

8.73	-85.94	-74.18	-79.71	19.02	84.4	63.1	51.7
8.58	-86.26	-73.92	-80.26	19.14	85	62.8	51.7
8.53	-86.26	-73.97	-80.29	19.6	85.2	62.6	51.4
8.65	-85.71	-74.18	-80.35	21.89	85.4	62.5	48.3
8.72	-85.12	-74.23	-80.1	22.53	85.4	62.8	51.8
8.86	-86.36	-73.66	-80.07	22.53	85.4	62.8	51.5
8.78	-86.22	-73.87	-80.2	22.56	85.3	63.2	51.1
8.74	-86.31	-74.75	-80.29	22.25	85	63.6	53.1
8.65	-86.08	-74.39	-80.13	18.96	85.1	63.4	54
8.7	-85.81	-73.97	-80.41	18.99	84.8	63.3	53.2
8.69	-85.99	-73.77	-80.38	19.02	84.5	63.2	53.3
8.55	-86.17	-74.03	-80.35	19.23	84.6	62.9	50.7
8.7	-86.95	-73.87	-80.41	19.57	84.9	62.8	52.4
8.88	-85.99	-73.87	-80.01	20.33	85.2	63	53
8.82	-85.81	-73.92	-80.26	22.59	85.2	62.9	49.9
8.7	-86.17	-74.08	-80.1	22.56	85	63.1	54.7
8.62	-85.94	-73.77	-80.56	22.59	84.6	63.4	52.7
9.22	-86.26	-74.03	-80.68	22.47	84.2	63.6	52.2
8.67	-86.22	-74.55	-80.32	18.83	83.6	63.4	51.8
8.69	-86.22	-74.44	-80.59	19.05	83.7	63.3	52.8
8.63	-86.49	-74.03	-80.23	19.54	83.5	62.9	53.8
8.79	-85.85	-73.66	-80.56	22.28	83.8	62.9	52.5
8.75	-86.45	-74.44	-80.59	22.59	83.2	62.6	49.7
8.67	-86.54	-74.55	-80.62	22.56	83.3	63	53.8
9	-86.49	-74.6	-80.38	22.53	82.9	63.3	56.2
8.74	-86.13	-73.77	-80.44	18.89	82.1	63.4	53.8
8.68	-86.31	-74.91	-80.84	19.08	81.9	63.1	57.6
8.6	-86.13	-74.18	-80.5	19.29	82	62.7	51.6
8.69	-85.71	-74.44	-80.81	19.63	81.9	62.5	53.1
8.84	-86.49	-74.03	-80.65	20.76	82.2	62.5	49.8
8.88	-86.03	-74.08	-80.81	22.68	82.1	62.6	53.6
8.62	-86.63	-74.18	-80.65	22.71	81.7	62.5	51.9
8.9	-86.26	-73.92	-80.41	22.68	81.7	62.7	53.3
8.79	-86.26	-74.23	-80.53	22.68	81.5	62.9	54
8.74	-86.22	-73.92	-80.81	22.59	81.2	63	53.8
8.72	-86.13	-74.8	-80.84	22.28	80.9	63.2	52.4
8.79	-86.22	-74.03	-80.68	19.05	80.5	63.1	52.1
8.76	-86.54	-74.8	-80.71	19.2	80.6	62.9	53.3
8.63	-86.08	-74.65	-80.99	19.29	80.5	62.6	47.1
8.74	-86.36	-74.23	-80.87	19.69	80.3	62.5	53.8
8.65	-86.45	-74.86	-80.74	20.24	80.6	62.4	49.8
8.61	-86.49	-75.01	-80.93	22.74	81	62.1	53.3
8.58	-86.49	-74.39	-81.05	22.77	81	62.4	51.6
8.6	-86.58	-74.6	-80.84	22.8	80.6	62.1	51.2
8.79	-86.45	-74.23	-80.53	22.71	80.2	62.4	52.5
8.88	-86.63	-74.65	-80.44	22.65	79.7	62.6	49.6
8.79	-86.63	-74.49	-80.87	19.08	79.2	62.8	52.5

8.73	-86.63	-74.13	-81.05	19.2	79.2	62.6	52.9
8.68	-86.26	-75.27	-80.74	19.29	78.8	62.5	52.2
8.6	-87.18	-74.13	-81.14	19.51	79	62	49.9
8.88	-86.54	-74.44	-80.81	19.78	79.3	62	52.1
8.6	-86.13	-74.13	-81.05	20.97	78.9	61.8	52.5
8.65	-87	-75.01	-80.81	22.74	78.5	61.8	44.6
8.91	-86.81	-74.7	-81.42	22.83	77.7	62	52.4
8.8	-86.31	-74.49	-81.48	22.83	77.3	61.8	51.1
8.78	-86.49	-74.8	-81.14	22.77	77.4	61.9	53.8
8.69	-86.45	-74.6	-81.23	22.8	77.6	61.9	53.2
8.9	-87.04	-74.49	-80.93	22.65	77.4	62.5	48.1
8.74	-86.17	-74.39	-81.17	20.27	76.4	62.4	51.5
8.76	-86.26	-74.44	-81.23	19.17	75.9	61.9	49.7
8.58	-85.76	-74.18	-81.2	19.26	76.2	61.7	50.4
8.88	-86.49	-74.75	-80.84	19.75	76.4	61.4	54.2
8.88	-86.45	-74.65	-80.9	22.77	77	61.4	51.9
8.83	-86.26	-75.01	-81.17	22.8	76.7	61.3	53.2
8.91	-86.9	-74.7	-81.14	22.8	76.6	61.4	51.6
8.88	-86.31	-74.65	-81.32	22.74	76.6	61.5	54.1
9.01	-86.9	-74.44	-80.78	22.77	75.8	61.9	53.6
8.72	-86.77	-75.27	-80.93	19.2	75.5	61.8	52.1
8.76	-86.45	-75.01	-81.32	19.29	75.6	61.5	50.1
8.8	-86.49	-74.86	-80.9	19.72	75.9	61.2	53.9
8.84	-86.54	-74.8	-80.9	22.53	76.5	61.1	49.6
8.64	-86.86	-74.44	-81.02	22.8	76.2	61.2	51.4
8.81	-85.94	-74.6	-80.9	22.77	75.5	61.1	51.8
8.9	-86.58	-74.49	-81.6	22.8	75.4	61.5	52
8.77	-86.4	-74.8	-81.39	21.49	74.7	61.6	53
8.65	-86.63	-74.86	-80.93	19.14	74.5	61.4	50.7
8.73	-86.22	-75.58	-81.26	19.29	74.5	61.1	53.8
8.66	-86.26	-73.92	-81.42	19.44	74.6	61.1	52
8.54	-86.77	-74.96	-81.32	19.84	74.6	60.7	51.6
8.64	-86.49	-74.8	-81.42	21.95	75.1	60.7	49.2
8.68	-86.31	-74.96	-81.39	22.77	75.2	60.8	52.3
8.73	-86.77	-74.96	-81.84	22.92	75	60.9	52.2
8.75	-86.9	-75.43	-81.45	22.8	75.3	61.1	51.8
8.73	-86.86	-75.06	-81.45	22.86	74.6	61.2	50.4
8.65	-87.04	-74.96	-81.6	19.2	74.5	61.2	50.8
8.73	-86.31	-74.65	-81.69	19.26	74.9	60.7	52.9
8.6	-86.36	-74.96	-81.29	19.47	75.3	60.6	48
8.9	-87	-74.91	-81.48	20.12	75.6	60.4	55.2
8.72	-86.26	-75.74	-81.94	22.86	76.2	60.5	53.8
8.65	-86.9	-74.96	-81.54	22.92	75.7	60.6	52.5
8.85	-86.81	-74.7	-81.6	22.92	75.6	60.6	56.2
8.9	-86.81	-74.75	-81.08	22.74	75.6	60.7	53.5
8.84	-86.72	-74.8	-81.45	22.83	75.5	61	52.4
8.74	-86.81	-75.12	-81.48	21.25	75.3	60.9	51.4

8.76	-86.36	-74.65	-81.48	19.23	75.3	61	53
8.68	-86.26	-75.17	-81.6	19.29	75.5	60.7	50.5
8.58	-86.77	-75.12	-81.57	19.44	75.6	60.6	52.9
8.54	-86.49	-74.6	-81.17	19.87	75.7	60.3	53.1
8.64	-86.77	-75.43	-81.78	21	76.4	60.4	53.7
8.66	-86.95	-74.91	-81.48	22.89	76.4	60.3	49.9
8.89	-86.49	-74.8	-81.36	22.89	76.3	60.4	51.2
8.64	-87.13	-75.27	-81.39	22.77	76.3	60.5	51.4
8.88	-86.81	-74.75	-81.57	22.86	76.2	60.6	53.8
8.75	-87.68	-75.01	-81.66	22.86	76.1	60.7	52.2
8.73	-87.18	-75.06	-81.39	22.56	75.5	61.1	53.5
8.77	-86.77	-74.86	-81.9	19.2	75.3	61	51.7
8.62	-87.27	-75.17	-81.87	19.29	75.7	60.8	56.3
8.73	-86.31	-75.48	-81.57	19.32	76.2	60.8	52.3
8.53	-86.54	-74.91	-81.81	19.78	76.6	60.3	53.9
8.76	-87	-74.65	-81.75	22.56	77.1	60.3	52.7
8.82	-87	-74.49	-81.6	22.8	77.3	60.4	51.7
8.7	-86.58	-75.69	-81.51	22.77	77.6	60.8	52.3
8.89	-87.36	-74.7	-81.57	22.71	78.3	61.1	53.2
8.79	-86.81	-75.17	-81.69	21.46	79	61.3	50.4
8.7	-86.45	-74.75	-81.84	19.2	79.4	61.3	52.2
8.64	-86.9	-75.74	-81.69	19.23	79.3	61.1	52.7
8.55	-86.86	-75.43	-81.66	19.51	79.3	60.8	47.6
8.88	-87.13	-75.17	-81.78	19.6	79.9	60.7	51.5
8.78	-87.32	-75.12	-81.39	20.67	80.8	60.7	52
8.78	-87.23	-75.27	-81.66	22.83	80.7	60.9	50.1
8.91	-86.77	-74.8	-81.78	22.77	81.3	60.9	50.8
8.67	-86.36	-74.96	-81.84	22.83	81.5	61.1	51.9
9	-87.04	-75.27	-81.57	22.74	81.2	61.4	54.7
8.72	-86.77	-75.64	-82.09	22.01	81.3	61.5	52.3
8.64	-86.22	-75.01	-81.9	19.17	81.2	61.5	54.4
8.66	-86.49	-74.49	-81.97	19.23	81.8	61.4	51.2
8.72	-86.63	-75.17	-81.9	19.26	82.1	61.4	52.7
8.77	-86.63	-75.38	-81.6	19.69	82.7	61.1	53.1
8.82	-87.23	-75.22	-81.87	21.25	83	61.1	54.2
8.88	-87.04	-75.12	-81.45	22.77	83	61	52.9
8.63	-87.77	-75.06	-81.78	22.68	82.4	61	53.5
8.9	-86.63	-75.17	-81.78	22.65	82.3	61.6	55.7
8.99	-87.55	-75.32	-81.81	22.65	82	62	50.1
8.79	-87.04	-74.86	-81.97	19.11	81.5	61.9	53.4
8.63	-86.26	-75.48	-81.97	19.29	81.6	61.5	53.2
8.62	-87.04	-75.69	-81.75	20.09	82	61.5	53.3
8.87	-86.81	-75.17	-81.69	22.77	82.1	61.4	52
8.9	-86.95	-75.27	-81.63	22.68	82.1	61.9	58.2
8.69	-86.81	-75.58	-81.78	22.1	81.9	61.9	52
8.79	-86.9	-74.55	-82.15	19.11	81.8	61.9	53.8
8.06	-87.45	-75.27	-81.84	19.47	82.1	61.4	52.3

8.88	-87.59	-75.12	-82	22.74	82.9	61.5	52.1
8.62	-87	-75.58	-82.15	22.71	82.5	61.6	52.3
9.01	-86.9	-75.64	-81.9	22.59	82.5	62	51.6
8.74	-87.13	-75.17	-81.9	21.73	81.9	62.5	52.3
8.78	-87.09	-75.22	-81.97	19.11	81.7	62.2	52.1
8.7	-87.23	-75.38	-82.09	19.11	81.8	62.1	50.1
8.63	-87.09	-75.48	-82.21	19.23	81.8	61.9	49
8.51	-86.81	-75.74	-81.97	19.72	82	61.6	51.5
8.71	-87.68	-75.64	-81.9	21.55	82.1	61.6	49.2
8.83	-87.27	-75.22	-82.03	22.74	82.1	61.7	51.3
8.91	-87.36	-75.74	-82.09	22.77	82.1	61.8	53.5
8.72	-87.41	-75.69	-82.12	22.71	82.1	62	52.2
8.77	-87.32	-75.22	-81.69	20.6	81.6	62.5	53.9
8.74	-87	-75.48	-81.97	19.14	81.5	62.1	55.5
8.56	-87.45	-75.27	-81.94	19.44	81.5	61.9	54
8.8	-87.18	-75.48	-82.09	22.71	81.8	61.6	46.7
8.87	-87.32	-75.38	-82.3	22.74	81.7	61.6	52.7
8.7	-86.26	-75.12	-82.39	22.77	81.3	61.7	51.8
9.1	-87.32	-74.96	-81.84	22.71	80.9	62.4	50.4
8.73	-87.23	-75.48	-82.24	19.14	80.2	62.2	54.6
8.57	-87.18	-75.58	-82.12	19.54	80.6	61.7	52.3
8.85	-87.18	-75.01	-81.97	22.77	81	61.7	44.1
8.62	-86.81	-75.79	-82.15	22.65	80.6	61.9	51.2
8.89	-87.68	-75.22	-82.15	22.68	80.1	62.2	50.5
8.8	-87.27	-74.6	-82.15	20.82	79.9	62.6	55.4
8.71	-87.32	-75.58	-82.39	19.05	79.4	62.2	50.8
8.69	-86.95	-75.17	-81.66	19.17	79.1	62.2	51.9
8.63	-86.95	-75.79	-82.06	19.26	78.9	61.9	53.5
8.77	-87.45	-75.32	-82.06	19.81	79.2	61.7	50.9
8.85	-87.23	-75.79	-82.15	22.68	78.9	61.5	53.1
8.63	-87.32	-75.43	-82.09	22.65	78.9	61.7	52.6
8.99	-87.45	-75.43	-82.18	22.83	78.5	62	52.6
8.71	-87.09	-75.64	-82.27	19.08	77.9	62.1	50
8.6	-87.5	-75.74	-82.21	19.14	78.4	61.8	53.6
8.79	-86.77	-75.64	-82.24	20.36	79.1	61.4	49.9
8.83	-87.27	-75.38	-82.06	22.68	79.1	61.5	52.6
8.99	-87.13	-75.27	-82.15	22.65	78.8	62	53.1
8.65	-87.04	-75.22	-82.55	19.05	78.3	62	52.5
8.62	-87.36	-75.58	-82.03	19.57	78.7	61.4	53.5
8.73	-87.73	-75.22	-82.12	22.77	79	61.4	52.3
8.65	-87.23	-76	-82.24	22.77	79	61.4	53
8.64	-87.27	-75.64	-82.24	22.8	79.3	61.4	50.5
8.7	-86.86	-76.47	-82.42	22.8	79	61.5	49.1
8.86	-86.77	-75.12	-82.15	22.65	78.9	61.8	54
8.78	-87.36	-75.69	-82.33	19.14	78.6	61.8	54.4
8.61	-87.55	-75.69	-82.42	19.29	78.8	61.6	51.8
8.85	-87	-74.91	-82.45	20.6	79.4	61.2	50.9

8.83	-87.32	-75.79	-82.55	22.74	79.6	61.2	53.1
8.8	-87.45	-74.65	-82.45	22.74	79.4	61.5	50.1
8.82	-87.23	-76.21	-82.48	22.74	79.3	62	49.3
8.76	-87	-75.27	-82.39	19.69	78.9	62	53
8.72	-87.55	-75.48	-82.09	19.23	79.1	61.7	54.8
8.63	-87.04	-76.15	-82.39	19.35	79.2	61.5	52.8
8.68	-87.91	-75.95	-82.3	19.66	79.2	61.3	53.1
8.66	-87.27	-76.15	-82.21	22.86	79.9	61.4	51.8
8.85	-87.32	-75.01	-82.39	22.8	79.8	61.3	53
8.85	-87.64	-76.26	-82.24	22.74	79.4	61.7	56.5
8.77	-87.18	-75.69	-82.09	19.17	78.4	61.9	51.9
8.72	-87.64	-76	-82.24	19.29	78.5	61.6	52.5
8.59	-87.64	-75.89	-82.09	20.33	78.5	61.2	52
8.86	-87.32	-75.58	-82.3	22.83	78.5	61.3	51.6
8.92	-87.41	-75.84	-82.42	22.74	78	61.5	51.6
8.73	-88	-76.05	-82.67	21.4	77.3	61.8	53
8.69	-87.04	-75.84	-82.21	19.17	77.1	61.5	50.5
8.62	-87.23	-76.21	-82.15	19.47	77.4	61.3	51.3
8.88	-87.13	-75.74	-82.27	20.85	77.9	61.3	52.1
8.89	-87.55	-74.96	-82.55	22.77	77.9	61	52.5
8.85	-87.68	-75.64	-82.48	22.77	77.6	61.4	49
8.75	-87.59	-76	-82.55	22.62	77.2	61.4	56
8.78	-86.86	-75.95	-82.45	19.08	76.6	61.4	52.8
8.74	-87.59	-75.79	-82.64	19.11	76.6	61.2	51.1
8.54	-87.55	-75.48	-82.61	19.32	76.8	61.1	50.5
8.89	-87.09	-75.38	-82.33	20.45	77.3	61.1	51.9
8.71	-87.59	-76.36	-82.73	22.83	77.6	61	54.2
8.57	-87.73	-76	-82.55	22.86	77.7	61	52.8
8.85	-87.23	-76	-82.58	22.77	77.3	61.3	50.7
8.76	-86.95	-75.79	-82.24	21.89	77.3	61.5	52.3
8.75	-87.23	-75.79	-81.97	19.17	77.2	61.4	54.8
8.74	-87.73	-76	-82.45	19.2	77.5	61.3	54.3
8.8	-87.5	-76.21	-81.97	19.75	77.7	60.6	54.5
8.83	-87.55	-76.05	-82.33	22.77	78.1	60.9	51.7
8.78	-87.91	-76.15	-82.58	22.8	78	60.9	52.2
8.78	-87.5	-75.84	-82.58	22.77	77.9	61.6	52.1
8.67	-87.64	-76.41	-82.61	19.11	77.5	61.4	52.5
8.66	-87.55	-75.84	-82.18	19.41	77.7	61.2	53.2
8.66	-87.68	-76	-82.64	22.19	78.3	61	51.6
8.75	-87.5	-75.79	-82.64	22.8	77.9	61.1	48
8.65	-87.5	-76.31	-82.58	22.83	77.6	61	55.3
8.67	-88.1	-75.79	-82.85	22.68	77.7	61.1	53.4
9.27	-88	-76.1	-82.36	22.56	77.1	61.4	52.5
8.73	-87.91	-75.84	-82.18	19.05	76.9	61.4	53.2
8.66	-87.32	-75.89	-82.33	19.35	77.1	61	55.1
8.85	-87.59	-75.27	-82.21	21.73	77.7	60.8	53
8.61	-87.27	-75.79	-82.61	22.8	77.6	60.8	54.2

8.75	-87.68	-75.89	-82.58	22.8	77.7	61.1	55.4
8.98	-87.59	-75.58	-82.67	22.74	77.6	61.2	50
9.22	-87.5	-75.48	-82.42	22.65	77.3	61.4	51.2
8.76	-87.09	-76.21	-82.3	19.2	77.2	61.2	53.1
8.75	-87.32	-75.06	-82.33	19.23	77.2	61.3	49.6
8.69	-87.96	-75.89	-82.36	19.32	77.2	60.9	54.9
8.74	-87.64	-76.05	-82.61	19.72	76.9	60.7	51.6
8.89	-87.64	-76.36	-82.12	22.83	77.5	60.8	51.3
8.85	-87.77	-76.67	-82.7	22.68	77.3	60.6	51.6
8.68	-87.55	-75.95	-82.64	22.83	77.2	61	48.7
8.98	-88.05	-75.43	-82.91	22.77	77.1	61.3	50.3
8.8	-87.96	-75.48	-82.7	21.4	76.5	61.4	54.4
8.75	-87.68	-76.15	-82.45	19.05	76.8	61.4	54.2
8.65	-86.77	-76.26	-82.73	19.26	77.2	61.1	51.3
8.68	-87.68	-76.52	-82.58	19.84	77.8	60.9	51.3
8.65	-87.55	-76.26	-82.42	22.77	78.3	60.9	51.4
8.74	-87.55	-76.26	-82.64	22.71	78.4	61	51.4
8.99	-87.45	-75.48	-82.48	22.68	78.3	61.2	54
8.75	-87.5	-75.89	-82.58	20.82	77.9	61.5	54.4
8.76	-87.68	-76.15	-82.48	19.2	78.3	61.4	53.2
8.7	-87.18	-75.43	-82.79	19.17	79	61.3	51.6
8.47	-87.77	-76.21	-82.76	19.47	79.9	61.1	52.1
8.64	-87.73	-76	-82.58	19.96	81	61	61.1
8.85	-87.96	-75.64	-82.76	22.71	81.5	61.1	52.6
8.82	-88	-76.15	-82.45	22.77	81.7	61.4	50.5
8.79	-87.59	-75.74	-82.97	22.77	82.1	61.6	55
8.79	-87.5	-75.95	-82.48	19.08	82.1	61.7	52.2
8.7	-87.36	-76.1	-82.73	19.23	82.1	61.6	51.4
8.61	-87.68	-76.15	-82.79	19.6	83	61.4	53.8
8.77	-88.14	-76.83	-82.73	22.71	83.7	61.2	52.1
8.73	-87.68	-76.05	-82.88	22.68	84.2	61.6	50.7
8.94	-87.96	-75.64	-82.7	22.56	84	62.2	49.3
8.76	-88	-76.36	-82.7	19.08	83.7	62.1	51.5
8.67	-87.73	-75.95	-82.61	19.29	84.2	61.8	54.1
8.62	-87.32	-75.58	-82.67	19.93	85	61.6	52.2
8.78	-87.59	-76.26	-83.25	22.65	85.1	61.6	46.2
8.9	-87.73	-76.1	-82.82	22.68	85.4	62	53.5
8.71	-87.68	-77.19	-82.91	22.65	85.3	62.1	53.2
8.75	-87.45	-76.21	-82.97	21.43	85.3	62.6	50.3
8.71	-88	-76.52	-83.03	19.02	85.6	62.5	51.1
8.63	-88.32	-76.31	-82.55	19.41	85.8	62.1	51.4
8.8	-87.87	-76.1	-82.76	22.59	86.1	62	55.6
8.7	-87.73	-76.72	-82.88	22.62	86.3	62.4	50.1
9.08	-87.64	-76.15	-82.85	22.56	86.3	63	52.3
8.78	-88	-76.26	-82.82	19.02	85.9	62.9	48.9
8.65	-87.77	-76.21	-82.64	19.14	86.1	62.6	53.2
8.66	-87.77	-76.83	-82.45	19.32	86.7	62.5	49.6

8.68	-88.14	-76.31	-82.7	19.72	86.7	62.5	51.9
8.83	-88.32	-76.21	-82.94	21.89	87.2	62.4	55.4
8.74	-87.77	-75.58	-83.19	22.62	86.6	62.7	53.7
8.83	-87.77	-75.48	-82.88	22.59	86.1	62.5	56.8
8.62	-87.91	-76.15	-82.85	22.56	85.8	62.7	49.6
8.82	-87.64	-76.26	-82.97	22.62	85.6	63.1	50.5
8.74	-88.1	-76.31	-82.55	19.69	85.5	63.5	57.9
8.71	-88	-76.41	-83.16	19.08	85.5	63.2	49.6
8.59	-88	-76.41	-82.85	19.23	85.6	63.1	51.6
8.52	-87.59	-75.58	-82.97	19.63	85.9	62.6	47.5
8.91	-87.73	-76.57	-82.85	20.7	86.3	62.7	52.5
8.6	-87.73	-76.88	-82.91	22.62	86.5	62.7	55.7
8.83	-87.64	-76.47	-82.73	22.71	86.2	62.7	51.9
8.82	-87.91	-76.1	-82.94	22.62	86.2	63	52.1
8.8	-87.91	-75.95	-82.97	22.56	86.1	63.1	46.2
8.79	-87.73	-75.58	-82.97	21.34	85.8	63.4	52.5
8.71	-88.28	-76.62	-83.19	19.08	85.8	63.2	52.1
8.62	-87.64	-76.52	-82.67	19.29	85.7	62.9	50.7
8.53	-88.05	-76.1	-83	19.69	86.1	62.6	49
8.74	-88.14	-76.31	-83.22	21.58	86.4	62.9	52.3
8.81	-88	-76.31	-83.16	22.71	86.3	62.7	50.8
8.9	-88.23	-76.15	-83.37	22.65	86.3	62.9	53.8
8.93	-88.05	-76.62	-83.03	22.65	86.1	63.2	52.4
8.79	-87.68	-76.21	-82.82	22.59	85.7	63.2	50.9
8.79	-87.87	-76.1	-82.94	19.05	85.3	63.5	52.3
8.74	-88.19	-76.31	-83.16	19.2	85.4	63.2	51.8
8.64	-88.19	-76.47	-83.06	19.29	85.3	62.9	53.3
8.76	-87.64	-75.89	-83.49	19.99	85.6	62.7	52
8.82	-87.87	-76.15	-82.76	22.68	85.5	62.7	51.6
8.76	-87.87	-76.26	-83.13	22.71	85.2	62.9	55.1
8.88	-88.23	-76.15	-82.97	22.68	84.8	62.9	52.9
8.76	-88.19	-76.57	-82.82	22.62	84.8	63.1	47.3
8.8	-87.68	-76.62	-83.25	22.65	84.2	63.6	52.6
8.73	-87.96	-76.52	-83.34	19.08	83.9	63.5	52.2
8.68	-87.96	-75.48	-83.19	19.11	83.9	63.2	52.7
8.62	-87.5	-76.31	-83.1	19.6	83.9	62.6	50.5
8.81	-88.19	-76.52	-83.19	22.71	84.4	62.7	53
8.81	-88.1	-75.95	-83	22.71	84.3	62.7	47.6
8.82	-88.28	-76.57	-82.97	22.65	84	63.2	50.9
8.71	-88.23	-76.72	-83.06	19.11	83.6	63.3	52.8
8.57	-87.68	-76.57	-83.58	19.35	83.6	62.5	52.2
8.72	-88.28	-76.1	-83.25	22.77	84.1	62.7	50.5
8.81	-88.05	-76.05	-83.34	22.71	84	62.9	48
8.77	-88.1	-76.31	-83.55	19.66	83.2	63.4	49.6
8.69	-87.77	-76.62	-83.06	19.14	83.1	63.1	51.5
8.14	-88	-76.52	-83.1	19.63	83	62.6	52.7
8.76	-87.96	-76.72	-82.94	20.73	83.1	62.5	50.5

8.88	-88.05	-75.89	-83.25	22.71	83	62.6	50.5
8.69	-87.96	-76.67	-83.03	22.68	83	62.6	55.4
8.73	-88.23	-76.72	-83	22.74	82.5	62.9	51.7
8.88	-88.14	-76.57	-83.4	22.74	81.9	63.3	52.2
8.71	-88.1	-76.83	-82.97	19.23	81.3	63	51.3
8.66	-88.46	-76.47	-83.43	19.32	81	62.6	51
8.9	-88.51	-76.52	-83.64	20.09	81	62.4	51.5
8.83	-88.19	-76.31	-83	22.83	81.2	62.4	51
8.93	-88.19	-76.1	-83.25	22.8	81.2	62.6	54.1
8.78	-87.77	-76.21	-83.03	21.03	80.5	63	50.4
8.75	-88.14	-75.79	-83.06	19.29	81	62.7	50.9
8.51	-89.15	-76.93	-82.94	19.75	81.4	62.1	53.8
8.81	-88.14	-76.41	-83.22	22.86	81.9	62.2	52.7
8.7	-87.91	-75.79	-83.1	22.86	81.6	62.5	49.7
8.77	-88.46	-76.15	-83	21.55	80.6	63	51.8
8.71	-88.23	-76.83	-83.28	19.29	80.3	62.6	51.6
7.82	-88.19	-77.14	-83.1	19.78	80.2	62.1	52.5
8.66	-88.19	-76.36	-83.55	22.89	80.6	62	50
8.9	-88.37	-77.09	-83.46	22.86	80.7	62.1	50.5
8.69	-88.28	-76.57	-83.28	22.86	80.5	62.5	51.1
10.1	-88.6	-76.1	-83.61	22.71	79.9	62.7	50.3
8.78	-88.19	-76.67	-82.91	19.29	79.7	62.5	53.1
8.6	-88.28	-76.52	-83.64	19.35	79.8	62.4	53.3
8.93	-88.19	-76.21	-83.49	20.09	80.1	61.7	45
8.75	-88.05	-76.15	-83.37	22.92	80.3	61.7	50.9
8.65	-88.51	-76.88	-83.28	22.92	80.5	62	52.4
8.79	-87.91	-77.14	-83.43	22.92	79.9	62.5	53.6
8.71	-87.77	-77.24	-83.1	19.26	79.5	62.5	50.7
8.69	-88.37	-76.93	-83.52	19.32	79.6	62.4	51.5
8.51	-88.28	-76.72	-83.22	19.63	79.5	61.7	55.3
8.83	-87.87	-76.67	-83.19	20.79	79.9	61.6	51.1
8.79	-87.55	-76.47	-83.43	22.92	79.9	61.7	53.1
8.66	-87.68	-76.26	-83.98	22.8	79.9	61.7	52.9
8.92	-88.46	-76.72	-83.34	22.86	79.8	61.8	53.6
8.91	-87.77	-76	-83.49	22.8	79	62.1	54
8.65	-88.19	-76.67	-83.13	19.29	78.6	62	51.2
8.65	-88.1	-76.15	-83.61	19.47	78.4	61.7	51.5
8.63	-87.91	-76.36	-83.34	21.67	79	61.4	50.9
8.64	-87.96	-76.47	-83.13	22.89	78.9	61.4	53.8
8.79	-88.42	-76.88	-83.46	22.89	78.4	61.6	49.1
8.79	-88.23	-76.88	-83.4	21.4	78	62	50.5
8.63	-88	-76.67	-84.01	19.29	77.1	61.9	51.6
8.68	-88.51	-76.47	-83.34	19.6	77.4	61.4	52.1
8.74	-88.19	-76.72	-83.46	21.15	78.5	61.1	52.2
8.65	-88.32	-76.26	-83.86	22.92	78	61.3	49.6
8.92	-88.28	-76.83	-83.22	22.92	78	61.4	52.6
8.73	-88.78	-76.67	-83.49	19.99	77.2	61.7	50.7

8.77	-88.28	-76.47	-83.22	19.47	77.1	61.4	51.9
8.83	-88.14	-76.31	-83.43	20.39	77.5	61.1	51.9
8.63	-89.1	-77.09	-83.19	22.86	78	61.2	49.7
8.79	-88.14	-76.21	-83.58	22.89	76.2	61.3	52.6
8.78	-88.83	-76.72	-83.64	21.15	75.5	61.6	53.1
8.74	-88.32	-76.57	-83.71	19.41	76.4	61.4	49
8.82	-88.14	-76.88	-83.49	19.9	77	61	52.6
8.9	-88.37	-76.41	-83.4	22.95	77.6	61.1	54.1
8.7	-88.23	-76.88	-83.46	22.92	76.3	61.2	53.8
8.75	-88.05	-76.52	-83.4	22.13	74.6	61.5	51.1
8.7	-87.91	-76.98	-83.52	19.41	75.3	61.4	52.8
8.29	-88.28	-76.31	-83.61	19.75	76.2	60.9	52.2
8.88	-88.14	-76.72	-83.43	22.95	77	60.8	50.9
8.67	-88.23	-76.47	-83.74	22.89	76.6	60.8	53.5
8.77	-88.37	-76.26	-83.46	20.57	75.7	61.5	52.4
8.77	-88.6	-76.57	-83.58	19.32	76.5	61.2	51.5
8.86	-88.87	-76.62	-83.52	20.09	77	60.8	52.7
8.67	-88.37	-76.67	-83.43	22.99	76.9	60.8	52.8
8.92	-88.69	-76.98	-83.43	22.92	76.4	61.2	50.9
8.74	-88.51	-77.45	-83.68	22.25	75	61.5	51.6
8.74	-88.74	-76.57	-83.37	19.32	75.4	61.3	52.3
8.62	-88.74	-77.09	-83.55	19.72	76.6	61	51.9
8.88	-88.83	-76.36	-83.46	22.89	78.3	61	52.6
8.65	-88.37	-77.09	-83.46	22.86	79.2	61.1	52.4
8.83	-87.45	-77.14	-83.71	22.74	79.5	61.5	54.3
8.65	-88.37	-77.45	-83.4	19.2	79.9	61.6	54.7
8.67	-88.55	-76.83	-83.83	19.44	80.7	61.4	51.6
8.65	-88.32	-77.19	-83.46	22.8	82.1	61.3	52.2
8.92	-88.69	-76.93	-83.71	22.83	82.4	61.4	51.8
8.93	-88.78	-76.88	-83.71	22.65	82.5	61.9	48.9
8.74	-88.14	-76.88	-83.4	19.17	82.9	62	52.2
8.73	-88.46	-76.26	-83.68	19.44	82.7	61.6	51.6
8.88	-88.6	-76.88	-83.1	21.09	83.3	61.5	48.7
8.84	-88.37	-76.57	-83.71	22.77	83.5	61.5	52.5
8.8	-88.6	-76.31	-83.61	22.74	84.2	62	52.8
8.75	-88.42	-77.56	-83.52	20.33	83.5	62.5	57.2
8.69	-87.96	-76.62	-84.16	19.17	83.7	62.2	52.4
8.57	-88.51	-77.5	-83.68	19.47	83.9	61.8	49.8
8.65	-88.51	-77.45	-83.98	21.21	85.1	61.9	52.4
8.91	-88	-76.88	-83.92	22.83	85.1	62.1	51.8
8.73	-88.6	-76.57	-83.43	22.62	84.8	62.2	52.3
8.73	-88.64	-76.52	-83.68	21.73	84.2	62.8	51.5
8.77	-88.51	-76.72	-83.55	19.14	84.2	62.5	49.7
8.73	-88.64	-76.88	-83.74	19.63	84.9	62.1	54.7
8.83	-88.51	-76.98	-83.89	22.8	85.3	61.8	51.1
8.99	-88.42	-76.72	-83.37	22.65	85.1	62.5	47.3
8.74	-88.69	-76.62	-83.83	20.79	84.5	62.9	53.4

8.65	-88.64	-76.83	-83.74	19.11	84.8	62.5	50.4
8.67	-88.55	-76.62	-83.61	19.26	84.6	62.5	52.3
8.86	-87.87	-76.57	-83.68	19.81	85.1	62.2	52.8
8.91	-88.37	-76.88	-83.49	22.68	85.4	62.4	48.2
8.72	-88.14	-76.98	-83.8	22.68	85.1	62.5	50.9
10.35	-88.74	-76.52	-83.4	22.53	84.6	63.2	52.9
8.72	-88.28	-77.24	-83.74	19.08	84.4	62.9	52.7
8.62	-88.32	-76.83	-83.61	19.35	84.5	62.5	50.5
8.73	-89.15	-77.14	-83.49	21.98	85.2	62.5	48.1
8.65	-88.51	-77.45	-83.52	22.71	85.2	62.6	55.7
8.85	-88.28	-76.98	-83.86	22.62	84.9	62.9	50.2
8.75	-88.64	-76.93	-83.46	20.6	84.2	63.5	55.1
8.71	-88.6	-77.3	-83.68	19.08	84.5	63	54.8
8.5	-89.06	-76.57	-83.8	19.29	84.9	62.6	53.1
8.71	-88.55	-76.83	-84.04	22.65	85.3	62.6	48.9
8.62	-88.55	-77.4	-83.83	22.68	85.3	62.5	51.3
9.04	-88.46	-77.56	-83.92	22.65	84.6	63.6	52.1
8.73	-88.14	-76.93	-83.61	19.02	84.5	63.2	53.5
8.62	-88.69	-76.52	-83.55	19.41	84.6	62.7	53.4
8.66	-88.37	-76.98	-83.61	21.89	85.1	62.5	51.9
8.69	-88.78	-77.35	-83.86	22.65	85.1	62.7	47.1
8.76	-88.78	-76.93	-83.77	22.62	85.1	62.8	51.6
8.76	-88.51	-77.35	-84.04	22.59	84.8	63.1	52.6
8.73	-88.69	-77.14	-83.68	19.11	84.2	63.4	52.4
8.76	-88.51	-76.72	-83.77	19.14	84.2	63.3	53.8
8.72	-88.83	-76.47	-83.95	19.29	84.4	62.7	53.2
8.92	-88.51	-77.24	-83.98	20.94	84.9	62.5	52.6
8.85	-88.97	-76.57	-83.98	22.65	85.1	62.9	52.7
8.71	-88.51	-76.98	-83.8	22.65	84.9	63	53.1
8.87	-88.28	-76.41	-83.98	22.65	84.4	63.6	54.1
8.77	-88.97	-77.71	-83.83	19.05	83.9	63.2	53
8.74	-88.55	-76.72	-83.95	19.17	83.8	63.2	53.5
8.5	-88.42	-77.09	-83.83	19.69	84.1	62.7	50.9
8.88	-87.96	-76.47	-83.92	22.68	84.4	62.6	53.3
8.85	-88.37	-76.83	-83.77	22.68	84.2	62.9	52.5
8.89	-88.97	-76.98	-84.04	22.62	83.8	63.4	52.5
8.72	-88.69	-76.88	-83.86	19.02	83.3	63.4	51.3
8.65	-88.46	-77.04	-83.95	19.17	83.3	63	53.5
8.62	-88.97	-76.72	-83.58	19.6	83.5	62.8	51.7
8.61	-89.33	-77.3	-83.71	22.71	83.5	62.7	51.6
8.79	-88.74	-76.83	-84.19	22.71	83.7	62.7	54.2
8.95	-88.64	-76.67	-84.26	22.65	83.4	63.1	51.8
9.9	-89.01	-77.19	-84.04	22.5	83.1	63.6	51.8
8.8	-88.69	-76.83	-84.16	19.05	82.7	63.4	53.9
8.72	-88.69	-77.19	-83.92	19.11	82.7	63.1	48.9
8.64	-88.74	-77.14	-83.92	19.29	82.7	62.8	52.5
8.62	-88.97	-77.14	-84.13	21.37	83.3	62.6	53.8

8.73	-88.78	-77.19	-84.1	22.68	83.2	62.7	52.5
8.82	-88.69	-76.88	-83.98	22.65	82.9	63	54.2
8.73	-88.78	-77.56	-83.83	19.05	82	63.4	55.8
8.67	-87.96	-77.19	-83.95	19.41	82.1	62.8	52
8.6	-89.29	-77.3	-83.77	22.68	82.4	62.6	52.5
8.71	-88.42	-77.56	-83.92	22.68	82.1	63.2	53.8
8.75	-88.74	-76.62	-83.89	19.05	81.4	63.1	50.8
8.74	-88.69	-77.24	-83.86	19.2	81.3	63	53.3
8.72	-88.69	-76.88	-84.01	19.29	81.3	62.8	52.4
8.92	-89.06	-76.83	-83.98	19.6	81.2	62.5	51.6
8.88	-88.37	-76.72	-83.95	22.74	81.8	62.5	52.5
8.66	-88.87	-77.4	-84.04	22.68	81.6	62.6	50.5
8.76	-88.6	-76.72	-84.1	22.19	80.7	63.2	51.8
8.77	-88.97	-77.24	-84.16	19.17	80.5	62.9	53.2
8.59	-88.64	-77.4	-83.83	19.72	80.9	62.4	53
8.71	-88.97	-77.35	-83.95	22.71	81.1	62.2	53.8
8.88	-89.47	-77.19	-83.92	22.77	81	62.4	51.3
8.89	-88.97	-77.19	-83.98	22.74	80.9	62.2	49.2
9.08	-88.87	-77.09	-83.74	22.71	79.9	63	53.5
8.65	-89.1	-77.66	-83.89	19.2	79.2	62.8	53.2
8.65	-88.23	-77.61	-83.71	19.32	79.4	62.4	52.2
8.67	-88.87	-77.35	-84.16	20.39	79.7	62	52.4
8.76	-88.87	-77.81	-83.89	22.8	79.7	62.2	52.8
8.95	-88.83	-76.83	-83.8	22.74	79.6	62.5	52.9
8.81	-88.87	-76.83	-83.98	19.14	78.6	62.7	52.3
8.67	-88.78	-77.14	-83.89	19.32	78.3	62.1	51.6
8.87	-89.24	-77.3	-84.1	20.09	79.1	61.8	53.1
8.62	-88.69	-77.3	-83.95	22.83	78.8	61.7	54.4
8.67	-88.74	-77.56	-84.13	22.74	78.3	62.2	51
8.8	-89.01	-77.09	-83.92	19.9	77.5	62.5	50.2
8.6	-89.06	-76.72	-84.32	19.23	77.3	62	54
8.88	-88.51	-77.66	-84.47	20.73	77.9	61.5	54.1
8.88	-88.83	-77.4	-84.13	22.8	77.6	61.6	53.6
8.79	-88.6	-76.98	-84.01	22.77	76.8	61.8	52.9
8.79	-89.29	-77.19	-83.95	19.54	76.1	62.2	52.9
8.68	-88.64	-77.35	-83.71	19.11	76.3	61.8	51.9
8.6	-89.19	-77.35	-84.26	19.41	76.3	61.5	51.5
8.66	-89.01	-77.71	-84.13	20.57	76.8	61.3	49.9
8.86	-88.74	-77.19	-83.77	22.89	76.6	61.4	51
8.7	-88.83	-77.56	-83.83	22.83	76.1	61.4	51.2
8.98	-88.42	-77.5	-84.32	22.74	75.5	62	51.6
8.72	-89.33	-77.71	-84.16	19.11	75	61.9	52.5
8.64	-88.6	-76.98	-84.29	19.29	75.2	61.4	52.6
8.82	-89.24	-77.04	-83.98	20.6	75.8	61.1	50.9
8.89	-89.06	-76.72	-84.5	22.8	75.7	61	52
8.67	-88.46	-77.66	-84.22	22.8	75.4	61.3	51.8
8.73	-88.97	-77.24	-84.32	19.05	74.9	61.6	53.6

8.68	-88.55	-77.14	-84.16	19.17	75.3	61.4	51.9
8.62	-89.24	-77.45	-84.19	19.72	75.4	60.9	51.1
8.6	-89.1	-77.71	-83.83	22.41	75.9	61	47.4
8.83	-89.19	-77.3	-84.1	22.8	76.3	60.9	51.6
8.76	-89.51	-77.45	-83.86	22.83	76.2	61.2	51.2
9.04	-89.7	-77.45	-84.19	22.77	75.7	61.4	52.3
8.74	-88.87	-77.56	-83.89	19.17	75.2	61.4	45.1
8.6	-89.01	-77.09	-84.22	19.17	75.3	61.1	52.5
8.44	-89.29	-77.61	-83.74	19.47	75.2	60.8	52.7
8.54	-89.51	-78.18	-84.32	22.62	75.6	60.7	51.5
8.63	-88.51	-77.24	-84.74	22.83	75.6	60.7	53.4
8.97	-89.06	-76.67	-83.77	22.83	75.2	60.8	53.8
8.8	-89.01	-77.09	-84.35	22.59	74.4	61.4	51.8
8.75	-88.87	-77.35	-84.1	19.11	74.2	61.4	51.6
8.7	-89.01	-77.61	-84.22	19.17	74.3	61.2	50.9
8.65	-89.47	-77.3	-84.35	19.26	74.3	60.8	48.6
8.89	-89.1	-77.35	-84.19	20.18	74.6	60.5	52.3
8.67	-88.46	-77.76	-84.13	22.77	75.1	60.5	53.1
8.89	-89.29	-78.23	-84.47	22.8	75	60.6	51.9
8.66	-89.15	-77.71	-84.1	22.77	75.2	60.9	51.6
8.67	-89.19	-77.76	-84.38	22.5	75	61.3	53.2
8.74	-88.97	-77.56	-84.1	19.08	75.2	61.1	51
8.72	-89.24	-77.35	-83.95	19.2	75.7	61.1	53.2
8.65	-88.87	-77.24	-84.5	19.78	76.8	60.7	51.9
8.76	-89.01	-77.35	-84.35	22.77	77.5	60.9	50.8
8.64	-88.69	-77.5	-84.38	22.77	77.9	61	47.3
8.74	-88.74	-77.61	-84.13	22.04	77.7	61.5	51.4
8.64	-89.06	-77.45	-84.38	19.08	78.4	61.1	55.8
8.62	-88.97	-77.87	-84.47	19.32	79.1	61.1	51.3
8.75	-89.06	-77.97	-84.04	22.65	80.2	61	53.7
8.74	-89.15	-77.61	-84.47	22.59	81	61.3	50.8
9.04	-88.97	-77.45	-83.95	22.53	81	61.7	50
8.71	-88.69	-77.3	-84.44	18.96	80.6	61.6	53.5
8.69	-89.19	-77.56	-84.04	19.14	81.1	61.5	56
8.58	-89.24	-77.81	-84.38	22.07	82	61.4	51.5
8.59	-89.19	-77.3	-84.5	22.62	82	61.5	45.2
8.8	-89.01	-77.71	-84.41	22.53	81.8	61.7	53.3
8.79	-89.51	-76.88	-84.41	18.83	81.8	62.4	53.4
8.7	-88.97	-77.76	-84.35	19.05	81.7	61.9	52.6
8.58	-89.24	-77.5	-84.04	20.12	83.2	61.6	54
8.88	-89.1	-77.76	-84.35	22.53	83.5	61.8	52.5
8.76	-89.06	-77.56	-84.59	22.53	83.6	62.1	54.3
8.7	-89.06	-77.76	-84.29	18.83	82.9	62.6	49.6
8.63	-89.51	-77.5	-84.38	18.93	83.6	62.5	47.7
8.6	-89.06	-77.19	-83.92	19.2	83.2	62	54.3
8.6	-89.19	-77.66	-84.22	22.34	83.5	62.2	54.9
8.67	-89.15	-77.81	-84.65	22.59	83.5	62.1	53.4

8.94	-89.42	-77.87	-84.44	22.47	84	62.5	54.6
8.68	-89.19	-77.56	-84.32	18.74	84.2	62.9	51.5
8.74	-89.19	-77.45	-84.29	18.86	85	62.6	52.2
8.62	-89.1	-78.64	-84.38	20.63	86.4	62.4	46.9
8.88	-89.15	-77.3	-84.26	22.31	86	62.4	51.9
9	-89.61	-77.76	-84.26	22.31	85.9	62.9	50.3
8.76	-88.97	-77.24	-84.38	18.8	85.5	63	50.7
8.68	-89.06	-77.61	-84.56	18.99	85.3	62.8	51.5
8.82	-89.24	-77.61	-84.47	21.98	85.7	62.5	49.2
8.76	-89.24	-78.13	-84.59	22.34	85.7	62.5	54
8.81	-88.97	-77.61	-84.1	22.31	85.9	63.2	60.7
8.75	-89.33	-77.04	-84.5	18.68	85.2	63.3	53
8.71	-89.19	-77.81	-84.19	18.83	85.1	63.2	50.4
7.96	-89.24	-77.3	-84.44	19.23	85.3	62.7	51.8
8.73	-89.01	-77.87	-84.04	22.44	85.6	62.6	50.5
8.82	-89.61	-77.45	-84.41	22.44	85.6	63.1	53.8
8.79	-89.15	-77.09	-84.22	18.71	85.1	63.6	54.4
8.61	-89.19	-77.56	-84.56	18.83	85.2	63.4	51.8
8.64	-89.1	-78.07	-84.38	19.72	85.8	62.8	51.6
8.63	-89.33	-77.24	-84.32	22.44	86.1	63.1	53.5
8.9	-89.15	-77.56	-84.35	22.28	86.2	63.3	52
8.74	-88.74	-77.45	-84.19	20.36	85.7	63.6	51.1
8.75	-89.1	-77.66	-84.71	18.8	85.8	63.6	50.2
8.74	-89.47	-77.66	-84.29	19.23	86	63.2	52.7
8.67	-89.1	-77.76	-84.29	22.34	86.2	63.1	52.6
8.71	-88.83	-77.71	-84.38	22.31	86.3	63.5	51.2
8.78	-89.24	-77.3	-84.32	20.7	85.8	64	51.2
8.71	-89.06	-77.87	-84.71	18.71	85.4	63.7	51.6
8.7	-89.29	-77.45	-84.38	18.86	85.3	63.5	54.5
8.65	-88.74	-77.81	-84.1	19.41	85.6	63.2	52.9
8.84	-89.01	-77.09	-84.68	22.47	85.6	63.3	51.9
8.87	-89.51	-77.45	-84.38	22.28	85.3	63.6	54.3
8.75	-89.29	-77.4	-84.22	22.04	84.6	64	54.3
8.72	-89.38	-77.61	-84.65	18.71	84.4	63.8	50.5
8.62	-89.24	-77.71	-84.38	19.47	84.8	63.4	50.7
8.74	-89.7	-77.66	-84.47	22.31	84.9	63.5	47.1
8.94	-89.33	-77.81	-84.26	22.34	84.5	63.6	50.8
8.79	-89.33	-77.97	-84.41	22.31	84.2	63.8	54
8.68	-89.15	-77.92	-84.47	19.14	83.4	64	51.7
8.77	-89.24	-77.81	-84.1	18.77	83.3	63.8	53.6
8.72	-89.42	-77.87	-84.5	18.86	83.2	63.6	52.8
8.79	-89.33	-77.71	-84.38	19.32	83.2	63.2	51
8.66	-89.29	-77.76	-84.59	22.31	83.6	63	52.1
8.65	-89.19	-77.71	-84.71	22.41	83.3	63.4	53.5
9.24	-89.7	-77.76	-84.59	22.28	83	63.9	51
8.78	-89.15	-77.61	-84.74	18.68	82.5	63.8	52.5
8.64	-89.65	-77.87	-84.38	19.2	83	63.2	53.9

8.71	-89.1	-77.56	-84.53	22.28	83.3	63.2	51.3
8.76	-89.47	-78.39	-84.44	22.31	83.2	63.3	52
8.99	-89.88	-77.81	-84.65	22.31	82.9	63.7	47.1
8.64	-89.97	-77.66	-84.53	18.59	82.3	63.7	51.8
8.7	-89.29	-77.71	-84.16	18.74	82.3	63.6	51.7
8.38	-89.38	-77.19	-84.44	19.08	82.7	63.2	53.1
8.7	-89.19	-77.76	-84.22	22.41	83.2	63.2	49.8
8.6	-89.19	-78.07	-84.53	22.31	83	63.2	51.2
8.87	-89.7	-77.4	-84.5	22.47	82.8	63.6	52.7
8.77	-89.06	-78.13	-84.9	18.62	82.1	63.6	56.1
8.74	-89.56	-77.61	-84.5	18.74	82.1	63.5	54.2
8.61	-89.65	-78.07	-84.71	19.14	82.5	63	52.8
8.65	-89.15	-77.3	-84.74	22.34	82.8	62.9	49.5
8.65	-89.29	-78.23	-84.62	22.34	82.8	63.2	50.1
10.18	-88.97	-77.56	-84.65	22.04	82	63.7	49.5
8.75	-89.33	-77.76	-84.59	18.59	81.9	63.6	52.5
8.7	-89.33	-77.61	-84.41	18.99	82.1	63.1	50.5
8.82	-89.29	-77.76	-84.65	19.72	82.4	63	49.5
8.9	-89.33	-77.5	-84.8	22.31	82.8	62.8	51.9
8.88	-89.93	-77.87	-84.44	22.31	82.3	63.1	52.7
8.71	-89.51	-78.64	-84.8	22.41	82.5	63.2	51.8
8.79	-89.38	-77.71	-84.74	19.35	82.1	63.7	51
8.72	-89.51	-78.13	-84.71	18.83	82.1	63.5	53.6
8.53	-89.84	-77.66	-84.56	19.23	82.1	62.9	51.2
8.88	-89.56	-78.13	-84.5	22.47	82.5	63	54.5
8.65	-89.47	-77.66	-84.74	22.41	81.8	63.1	54.2
8.74	-89.51	-78.33	-84.84	19.47	81.2	63.6	48.9
8.74	-89.84	-77.87	-84.74	18.77	81.3	63.4	55.6
8.77	-89.33	-77.71	-84.53	19.29	81.9	62.8	55.8
8.77	-89.42	-77.5	-84.77	22.44	82.1	62.8	52.7
8.8	-89.65	-77.71	-84.59	22.31	82	63.1	57.7
9.03	-89.79	-78.28	-84.65	22.44	82.1	63.4	48.4
8.67	-88.83	-77.87	-84.53	18.62	81.4	63.5	53.3
8.69	-89.38	-77.71	-84.47	18.8	81.5	63.2	49.2
8.37	-89.61	-77.81	-84.56	19.23	81.7	62.7	52.8
8.68	-89.79	-78.33	-85.02	22.5	82.1	62.8	52.3
8.62	-89.38	-77.5	-84.77	22.44	82	62.8	52
8.72	-89.88	-78.07	-84.71	22.47	81.7	63.1	57.4
9.06	-89.65	-77.66	-84.53	22.44	81.3	63.2	52.8
8.71	-89.33	-78.28	-84.9	18.8	80.9	63.4	54.8
8.66	-89.38	-78.18	-84.59	18.89	81	63.1	50.4
8.76	-89.38	-77.97	-84.65	19.29	81.2	62.6	52.6
8.74	-89.56	-77.81	-84.29	22.59	81.4	62.5	50.8
8.91	-89.51	-77.35	-84.99	22.44	81.1	62.8	52.1
8.87	-89.56	-78.28	-84.99	22.47	80.9	62.7	53.7
8.72	-89.38	-77.92	-84.77	21.98	80.3	63.2	52.8
8.78	-89.29	-77.87	-84.65	18.86	80	63.2	53

8.69	-89.47	-77.71	-84.62	18.99	79.9	62.7	52.7
8.71	-89.51	-78.23	-84.65	19.51	79.9	62.5	53.8
8.87	-89.7	-78.18	-84.84	22.59	80.3	62.4	52.1
8.83	-89.51	-78.13	-84.71	22.59	80.5	62.6	56.8
8.68	-89.7	-78.54	-84.93	22.56	79.9	62.7	52.7
8.78	-89.74	-77.3	-84.9	18.93	78.8	63.1	54.5
8.68	-89.1	-77.97	-84.99	18.99	78.8	62.7	53.7
8.61	-89.65	-78.33	-84.65	19.63	79.1	62.1	50.9
8.62	-89.38	-78.23	-84.59	22.71	79.2	62.2	52.7
8.9	-89.88	-77.81	-84.84	22.59	78.8	62.4	53
8.76	-89.47	-77.97	-85.14	20.76	77.7	62.9	52.6
8.76	-89.29	-77.56	-84.8	19.08	77.6	62.5	53.8
8.88	-89.84	-78.23	-84.8	19.47	78	61.9	51.1
8.68	-89.1	-77.92	-84.77	22.74	78.3	62	52.3
8.83	-90.06	-77.66	-84.77	22.74	77.7	62.1	47.9
9	-89.65	-78.07	-84.84	22.68	77.2	62.6	49.5
8.68	-89.29	-78.13	-84.99	18.99	76.8	62.5	53.1
8.71	-89.97	-77.81	-84.93	19.11	76.9	62.4	53
8.52	-89.93	-78.33	-84.99	19.47	76.9	61.8	52.1
8.68	-89.74	-78.23	-84.65	21.58	77.3	61.7	54.1
8.82	-89.15	-77.81	-84.47	22.77	77.4	61.6	52
8.91	-89.74	-78.07	-84.84	22.83	77.3	61.8	51.6
8.74	-89.79	-77.81	-85.02	22.74	77.1	62	52.8
8.72	-90.29	-78.39	-85.02	20.36	76.4	62	52.4
8.72	-90.16	-77.92	-84.65	19.11	76.4	62.1	53.4
8.62	-89.7	-78.18	-85.2	19.32	76.4	61.9	49.9
8.88	-89.93	-78.13	-84.9	19.51	77	61.4	52.2
8.85	-89.84	-78.49	-84.65	22.8	77.4	61.6	50.5
8.85	-89.61	-78.54	-84.47	22.68	77.7	61.5	52.8
8.94	-89.47	-77.76	-85.26	22.8	77.7	61.7	52.7
8.73	-89.51	-77.97	-85.02	20.18	77.2	61.9	52.3
8.69	-89.19	-78.39	-84.68	19.08	77.5	61.9	51.5
8.56	-89.42	-78.96	-84.99	19.44	77.8	61.5	51.2
8.71	-90.11	-77.76	-85.08	22.71	78.8	61.5	49.5
8.64	-89.84	-78.23	-84.84	22.65	79.5	61.7	51.9
8.76	-89.93	-77.97	-85.05	22.65	79.2	62	53
8.73	-89.93	-78.39	-84.9	19.05	78.3	62.2	55.2
8.69	-89.93	-78.54	-84.68	19.14	78.8	61.8	50.5
8.75	-90.16	-78.13	-84.9	19.72	79.4	61.5	52.7
8.88	-89.56	-78.33	-84.99	22.65	80.3	61.6	53.9
8.7	-89.56	-77.87	-85.05	22.65	80.9	61.7	48.2
8.78	-89.29	-77.97	-84.99	21.64	80	62.4	53.1
8.74	-89.65	-77.92	-85.02	19.05	80.3	62.1	51.5
8.63	-90.16	-78.07	-84.9	19.47	80.9	61.7	50.9
8.85	-90.29	-77.87	-85.05	22.71	81.3	61.8	55.7
8.89	-89.61	-78.23	-84.93	22.71	81.8	61.9	53.4
8.72	-89.65	-78.8	-85.26	21.55	81.6	62.6	50.2

8.78	-89.79	-77.76	-84.96	18.96	81.9	62.5	50.7
8.64	-89.47	-77.81	-84.93	19.05	82.1	62.2	53.8
8.76	-89.93	-78.44	-85.42	19.81	82.9	61.9	53.7
8.91	-90.06	-78.18	-84.99	22.56	83.4	61.9	51.2
8.71	-89.19	-77.66	-84.84	22.53	83.5	62.2	51
8.81	-89.42	-77.97	-84.96	21.83	83.2	62.9	53.8
8.78	-89.56	-77.56	-84.47	18.93	83.2	62.5	51.5
8.66	-89.56	-78.28	-84.77	19.26	83.8	62.1	51.2
8.9	-89.56	-78.13	-84.84	22.56	84.8	62.2	50.7
8.89	-89.74	-78.13	-85.05	22.62	84.1	62.5	56
8.78	-90.75	-77.76	-85.11	22.53	84.2	62.9	52.3
8.79	-90.29	-77.87	-84.99	18.93	83.5	62.9	52.1
8.7	-89.61	-78.49	-85.2	18.99	83.2	62.7	50.5
8.6	-89.56	-78.13	-85.26	19.41	83.3	62.4	51.2
8.82	-90.16	-78.13	-85.02	22.62	83.7	62.5	50.5
8.87	-90.34	-78.49	-84.9	22.59	83.5	62.5	52.8
8.89	-89.74	-78.59	-84.96	22.56	83.2	63.1	52.9
8.72	-89.79	-78.28	-84.9	18.89	83.2	63	48.1
8.58	-89.56	-77.87	-85.02	19.08	83.2	62.8	51.4
8.61	-89.65	-78.64	-84.93	21.12	84.2	62.5	53.3
8.62	-89.79	-78.28	-85.48	22.5	84	62.5	52.2
8.73	-89.97	-77.76	-84.99	22.56	83.5	63.3	50.3
8.76	-90.38	-78.33	-84.68	18.89	83.2	63.1	52.3
8.69	-89.74	-78.07	-84.56	19.23	83.3	62.5	52.9
8.87	-89.74	-78.18	-84.93	22.65	83.8	62.5	50.7
8.81	-89.97	-77.66	-85.14	22.59	83.8	62.6	49.9
8.79	-89.51	-78.54	-85.02	22.56	83.4	63.2	54.6
8.79	-89.56	-78.33	-85.05	18.89	82.9	63.1	50.4
8.72	-90.06	-78.07	-84.71	19.2	83.1	62.7	53.4
8.7	-89.65	-78.33	-85.05	22.47	83.3	62.5	48.9
8.68	-89.88	-78.59	-84.96	22.53	83.2	62.8	49.5
8.74	-90.16	-78.13	-85.29	21	82.4	63.3	52.2
8.63	-89.24	-78.13	-84.9	18.96	82.1	63.2	55.3
8.57	-90.06	-78.18	-84.99	19.26	82.1	62.6	51.6
8.61	-89.79	-78.28	-85.11	20.63	82.1	62.6	51.1
8.69	-89.42	-77.76	-85.11	22.65	82.1	62.5	53.1
8.85	-89.79	-78.28	-85.11	22.62	81.7	62.6	51.6
8.72	-89.88	-78.59	-85.02	22.56	81.2	62.9	53.4
8.64	-89.88	-78.23	-85.05	18.89	80.3	63.1	51.5
8.65	-89.56	-78.07	-85.38	18.99	79.9	62.8	49.9
8.69	-89.7	-78.13	-85.08	19.23	79.9	62.1	53.2
8.8	-89.93	-78.28	-84.9	21.28	80.3	62.2	51.9
8.67	-89.79	-78.18	-85.2	22.65	80.1	62.5	52.3
8.85	-89.79	-78.9	-85.35	22.59	79.6	62.5	50
8.74	-89.7	-78.23	-84.9	21.89	78.8	62.8	52.3
8.76	-89.61	-77.87	-85.45	18.93	78.8	62.7	52.6
8.64	-89.56	-78.18	-85.26	19.57	79	62.1	50.3

8.6	-89.38	-78.13	-85.2	22.68	79	62.2	51.1
8.95	-90.06	-78.13	-85.35	22.65	78.7	62.5	53.2
8.76	-90.11	-78.33	-84.99	19.75	77.6	62.7	52.2
8.71	-89.74	-78.18	-85.2	18.96	77.5	62.5	52.2
8.66	-89.56	-78.18	-85.29	19.05	77.5	62.4	53.8
8.25	-89.7	-78.07	-85.14	19.35	77.9	61.8	51.8
8.9	-89.74	-78.75	-84.99	22.59	78.8	61.7	52.3
8.71	-89.93	-78.13	-85.48	22.68	78.6	61.8	54.2
8.77	-89.97	-78.28	-85.2	20.91	77.4	62.6	53.2
8.74	-89.79	-78.59	-85.29	18.93	77.1	62.2	51.7
8.64	-89.93	-78.59	-85.29	19.75	77.7	61.6	51.3
8.87	-89.84	-77.56	-84.99	22.68	77.8	61.5	51.7
8.91	-90.34	-78.07	-85.08	22.59	77.3	61.9	54.2
8.78	-90.25	-78.39	-85.42	22.47	76.5	62.2	52.5
8.69	-89.65	-78.8	-85.08	18.89	76.3	61.9	53.5
8.58	-90.38	-78.23	-84.99	19.23	76.5	61.7	48.8
8.68	-90.25	-77.97	-85.11	21.92	77	61.4	51.7
8.76	-89.79	-78.07	-85.14	22.71	76.7	61.4	51.6
8.9	-89.93	-78.49	-85.17	22.68	76.3	61.8	51.7
8.65	-89.97	-78.9	-85.05	19.05	75.5	61.9	49.7
8.02	-90.11	-78.44	-84.93	19.44	75.7	61.3	50.9
8.8	-90.06	-78.33	-85.54	22.68	76.3	61.2	50.3
8.7	-90.2	-78.49	-85.23	22.74	76.2	61.4	54.2
8.74	-90.06	-78.44	-85.02	21.79	75.1	61.9	49.6
8.75	-90.11	-78.33	-85.17	19.05	75.1	61.5	52.2
8.72	-90.16	-78.28	-85.05	19.2	75.4	61.3	50.2
8.67	-89.79	-78.23	-85.32	20.45	75.8	61	54.8
8.82	-89.79	-78.23	-84.96	22.74	76.1	61	50.8
8.9	-90.34	-77.87	-85.05	22.65	76.1	61.1	51.2
8.94	-89.84	-78.07	-85.11	22.68	75.6	61.4	51.4
8.72	-90.2	-78.18	-85.38	18.99	74.9	61.6	49.9
8.62	-90.38	-78.44	-85.26	19.08	75	61.3	53.1
8.62	-90.29	-78.9	-85.35	19.63	75.3	60.8	50.5
8.73	-90.11	-78.7	-85.14	22.77	75.7	60.8	51.6
8.68	-90.16	-78.28	-85.32	22.71	75.4	61	52
8.79	-89.88	-78.33	-84.8	19.9	74.5	61.4	53.2
8.61	-89.97	-79.53	-85.48	19.17	74.5	61.2	51.1
8.48	-89.97	-78.54	-85.26	19.63	74.7	60.6	52.7
8.72	-90.43	-78.49	-85.26	22.71	75.2	60.3	49.4
8.88	-90.38	-78.18	-85.23	22.8	75.5	60.7	56.2
8.73	-89.93	-78.8	-85.9	22.74	74.4	61	50.5
8.76	-90.43	-78.18	-84.96	18.99	73.6	61	52.6
8.66	-90.25	-78.44	-85.26	19.29	74	60.6	50.1
8.81	-90.16	-78.33	-85.45	22.77	75	60.5	52.2
8.75	-89.74	-77.97	-85.69	22.74	74.5	60.6	50
8.73	-90.66	-78.85	-85.54	20.91	73.3	60.9	52.5
8.67	-90.16	-77.97	-85.45	19.11	73.2	60.7	50.5

8.63	-90.43	-78.28	-84.8	19.23	73.4	60.5	52.6
8.89	-90.2	-79.01	-85.17	19.81	73.8	60.3	52.5
8.71	-90.38	-78.75	-85.17	22.83	74.5	60.3	51.8
8.71	-90.2	-78.44	-85.29	22.74	73.8	60.3	54
8.72	-90.2	-78.8	-85.81	18.96	73	60.7	53.5
8.64	-90.57	-78.8	-85.35	19.23	73.5	60.3	49.2
8.93	-89.74	-78.7	-85.23	22.71	74.5	59.9	51
8.78	-89.97	-78.64	-85.54	22.89	74	60.3	54
8.73	-89.88	-78.8	-84.99	22.16	72.8	60.7	49.9
8.62	-90.34	-78.54	-85.35	19.11	72.6	60.5	51.6
8.71	-90.29	-78.39	-85.17	19.23	73.1	60.2	52.8
8.68	-90.43	-77.81	-85.48	19.69	74	59.8	51.6
8.63	-90.43	-78.13	-85.48	22.22	74.5	59.8	52.4
8.8	-90.48	-78.28	-85.38	22.77	74.7	60.1	50
8.71	-89.97	-78.49	-85.17	22.77	74.7	60.3	51.4
8.75	-90.2	-78.28	-85.42	21.37	74.3	60.7	52.3
8.76	-90.71	-78.39	-85.42	18.99	74.5	60.5	52.9
8.62	-90.29	-78.75	-85.69	19.63	74.9	60.1	50.9
8.62	-90.61	-78.7	-85.42	22.68	75.5	60.1	47.9
8.91	-90.34	-78.54	-85.45	22.71	75.5	60.4	52
8.64	-89.47	-78.85	-85.57	19.29	74.5	60.7	55
8.67	-89.74	-78.75	-85.42	19.02	74.4	60.5	49.3
8.61	-90.61	-78.8	-85.17	19.69	74.6	59.9	51.5
8.79	-90.2	-78.75	-85.54	22.77	75.2	60.3	51.3
8.85	-90.52	-78.75	-85.45	22.77	75.1	60.1	53.8
8.92	-90.38	-78.28	-85.35	22.74	75.1	60.3	53.1
8.73	-90.11	-79.11	-85.69	20.48	74.6	60.6	52.3
8.65	-89.97	-78.64	-85.23	18.96	74.9	60.4	52
7.96	-89.93	-78.75	-85.48	19.44	75.5	60.2	48.4
8.89	-90.16	-78.54	-85.23	22.68	77.1	60.3	47.9
8.63	-89.84	-78.9	-85.75	22.59	77.6	60.3	53.9
8.77	-90.11	-77.97	-85.23	21.83	77.8	60.8	50.5
8.71	-90.57	-78.44	-85.45	18.96	78.4	60.8	50.4
8.84	-90.25	-78.9	-85.54	19.6	79.1	60.4	50.8
8.88	-89.74	-78.49	-85.54	22.62	79.9	60.4	51.5
8.69	-90.48	-78.18	-85.38	22.59	79.9	61.1	53
8.67	-90.43	-78.13	-85.54	18.83	79.9	61	54.3
8.74	-90.25	-79.11	-85.32	18.93	80.6	61.2	53.3
8.59	-90.48	-79.01	-85.75	19.14	81	60.8	53.8
8.61	-90.25	-78.96	-85.42	21.28	82.1	61	51.5
8.7	-90.38	-78.39	-85.57	22.56	82.2	61	52.1
8.73	-90.57	-78.54	-85.57	22.47	82.1	61.3	51.8
8.72	-90.2	-78.64	-85.05	18.74	82.4	61.4	52.2
8.7	-90.57	-79.06	-85.23	18.96	82.8	61.4	52.1
8.85	-90.43	-78.39	-85.57	20.39	83.7	61.2	51.1
8.64	-90.66	-79.22	-85.26	22.47	84.1	61.2	51.6
8.86	-90.16	-78.75	-85.51	22.5	84	61.5	55.4

8.69	-90.34	-78.64	-85.72	22.41	84.1	61.8	51.6
8.76	-90.57	-78.23	-85.66	18.71	84.3	62.1	53.9
8.67	-90.16	-79.11	-85.2	18.83	84.9	61.8	53
8.76	-90.16	-78.39	-85.23	19.99	85.9	61.6	51.7
8.88	-90.29	-78.59	-85.69	22.41	86.4	61.8	51.3
8.66	-90.43	-78.44	-85.48	22.16	86.4	62.5	53
8.74	-90.06	-78.9	-85.51	18.77	86.4	62.4	52.2
8.57	-90.34	-78.85	-85.32	19.29	87	61.8	53
8.8	-90.25	-78.85	-85.57	22.34	88	62.1	50.5
8.65	-89.84	-78.9	-85.78	22.28	88.4	62.2	53.2
8.79	-90.29	-78.54	-85.54	22.28	88.7	62.4	52.4
9.45	-90.29	-78.54	-85.51	22.16	88.6	63.1	53.3
8.76	-90.29	-78.64	-85.35	18.68	88.6	63	52.1
8.51	-90.38	-78.33	-85.23	19.32	88.7	62.5	53.5
8.88	-90.2	-78.54	-85.38	22.28	88.6	62.6	51.4
8.85	-90.2	-79.22	-85.23	22.28	88	63	53.7
8.7	-90.29	-79.06	-85.48	19.29	87.6	63.4	52.6
8.76	-89.97	-78.54	-85.66	18.59	87.7	63.1	51
8.72	-90.52	-78.8	-85.38	18.8	87.7	63.1	52.9
8.35	-90.34	-78.39	-85.51	19.11	87.8	62.8	53.8
8.71	-90.34	-78.54	-85.54	22.44	88.2	62.7	47.8
8.85	-90.75	-78.75	-85.54	22.19	88.6	62.9	52.2
8.9	-90.61	-78.75	-85.66	22.28	88.5	63.6	47.5
8.64	-90.06	-78.75	-85.29	18.71	88.3	63.6	47.1
8.65	-90.52	-78.75	-85.78	18.96	88.3	63.1	53.4
8.88	-90.43	-78.39	-85.32	21.06	88.9	62.9	53.8
8.82	-89.97	-78.75	-85.48	22.41	88.8	63.2	50.5
8.9	-90.11	-78.9	-85.66	22.28	88.7	63.4	52.4
8.94	-90.57	-78.54	-85.51	22.28	88.3	63.7	53.1
8.76	-90.52	-78.54	-85.38	18.68	87.9	63.9	53.1
8.71	-90.29	-78.39	-85.38	18.8	87.7	63.7	52.1
8.68	-90.61	-78.49	-85.72	19.02	87.7	63.1	51.2
8.89	-90.16	-78.59	-85.42	19.78	88	63.1	49.9
8.84	-90.61	-78.75	-85.72	22.44	87.9	63.3	51.5
8.63	-90.43	-78.8	-85.51	22.28	87.7	63.5	52
8.99	-90.29	-79.01	-85.6	22.31	87.5	63.9	47.2
8.74	-90.43	-78.7	-85.9	18.74	86.8	63.9	52.6
8.67	-90.48	-78.64	-85.45	18.89	86.5	63.6	55.3
8.85	-90.52	-78.96	-85.69	19.47	86.5	63.1	52.4
8.86	-90.48	-78.59	-85.45	22.41	86.7	63.3	54.5
8.88	-90.43	-78.49	-85.69	22.28	86.3	63.6	50.5
8.78	-90.43	-78.8	-85.72	20.33	84.6	63.9	52.2
8.67	-90.61	-78.7	-86.12	18.89	83.8	63.6	51.1
8.82	-90.2	-78.7	-85.51	19.57	83.8	63	50.1
8.68	-90.2	-78.75	-85.81	22.41	83.9	62.9	52.4
8.71	-90.48	-78.96	-85.57	22.41	84.4	63.3	51.5
8.76	-90.38	-78.75	-86.09	22.47	84.4	63.7	50.5

8.72	-90.43	-78.59	-85.75	18.8	84	63.6	52.4
8.71	-90.43	-78.8	-85.75	18.86	83.1	63.4	51.4
8.5	-90.57	-78.96	-85.78	19.44	82.2	63	52.5
8.89	-90.43	-78.9	-85.87	22.59	82.2	62.8	47.5
8.76	-90.75	-78.96	-85.66	22.53	82.3	63	55.1
8.79	-90.52	-78.64	-85.81	22.56	82	63.2	53
8.72	-90.43	-78.8	-85.54	19.96	81.4	63.6	53.6
8.75	-90.66	-78.33	-86.06	18.93	81	63.2	52.8
8.58	-90.61	-79.11	-85.93	19.6	81.6	62.7	52
8.62	-90.29	-78.7	-85.84	22.65	82.1	62.5	52.7
8.75	-90.8	-79.16	-85.75	22.59	81.8	62.9	51
8.97	-90.52	-79.01	-86	22.59	81.2	63.5	55.2
8.75	-90.48	-78.33	-85.75	18.93	80.8	63.2	52.4
8.66	-90.89	-79.11	-85.87	19.26	80.8	62.4	52.6
8.81	-90.52	-78.96	-85.84	22.68	81.3	62.5	53.4
8.63	-90.61	-78.75	-85.84	22.56	80.9	62.9	54.6
8.76	-90.75	-78.85	-85.84	22.07	80	63.2	49.5
8.66	-90.48	-78.96	-85.9	18.99	79.9	62.6	46.5
8.81	-90.75	-78.64	-85.69	19.81	80.1	62.1	50.8
8.75	-90.29	-78.54	-85.84	22.68	80.1	62.2	54.2
8.91	-90.48	-79.11	-85.66	22.56	79.9	62.7	49.5
8.78	-90.75	-78.8	-86.12	19.66	78.9	62.9	50.4
8.71	-91.21	-79.11	-85.78	19.08	78.9	62.7	52.4
8.62	-90.2	-78.9	-85.93	19.17	78.8	62.2	50.4
8.86	-90.89	-79.06	-85.81	20.73	79.3	62	52.7
8.9	-90.89	-78.54	-85.9	22.77	79.1	61.9	54.3
8.88	-90.71	-79.27	-85.72	22.68	78.6	62.5	50.7
8.79	-90.34	-78.96	-85.32	19.05	77.6	62.5	52
8.73	-90.57	-79.01	-85.81	19.11	77.7	62.2	51.4
8.74	-90.11	-79.37	-85.84	19.75	77.9	61.6	53.4
8.63	-90.29	-79.42	-86.12	22.77	78.5	61.5	54.6
8.73	-90.75	-79.22	-85.96	22.77	78.1	61.7	53.1
8.88	-90.52	-78.28	-85.69	22.68	77	62.5	55.4
8.79	-90.57	-79.11	-85.9	18.99	76.3	62.1	52.2
8.64	-90.34	-79.11	-85.93	19.35	76.2	61.5	52.4
8.67	-90.52	-78.85	-85.72	22.8	76.6	61.4	54.2
8.71	-90.38	-79.37	-85.81	22.8	76.2	61.4	46.7
8.97	-90.48	-78.49	-85.93	22.68	75.4	62.2	52.4
8.75	-90.48	-78.96	-85.66	19.08	74.5	61.7	53
8.62	-90.61	-78.75	-86.09	19.23	74.5	61.4	53
8.67	-91.16	-78.96	-85.57	20.27	75.1	61	52
8.53	-90.8	-79.22	-85.9	22.92	75	61.1	51.2
8.93	-91.07	-79.48	-85.45	22.86	74.2	61.1	51.8
8.73	-90.75	-78.64	-85.84	19.87	73.5	61.7	53.8
8.68	-90.89	-79.11	-86	19.26	73.6	61.3	51.2
8.71	-90.48	-78.75	-85.81	19.81	73.8	60.7	50.2
8.74	-89.84	-79.01	-86.12	22.89	74	60.6	48.7

8.65	-90.75	-79.68	-86.06	22.89	73.7	61	49.7
8.68	-90.75	-78.44	-86.24	19.93	72.5	61.2	51.1
8.72	-90.8	-78.75	-85.9	19.26	72.6	60.8	53.6
8.63	-90.84	-79.01	-85.81	19.99	73.2	60.4	48
8.75	-90.52	-79.22	-85.57	22.92	73.4	60.3	54.5
8.97	-90.71	-79.16	-85.87	22.86	72.8	60.8	52.5
8.79	-90.61	-78.9	-86.21	19.23	72.3	61	51.5
8.75	-90.89	-79.11	-86.06	19.26	72.3	60.6	55.4
8.61	-90.75	-79.11	-86.12	19.47	72.3	60.3	50
8.85	-90.89	-79.22	-86.09	20.02	72.5	59.9	52.4
8.86	-90.93	-78.8	-85.78	22.99	73	59.8	52.4
8.87	-90.61	-78.59	-86.12	22.92	72.3	60.3	51.5
10.12	-90.75	-79.11	-86	22.68	72	60.5	50.7
8.72	-90.48	-79.01	-86.06	19.29	71.8	60.4	53.4
8.74	-90.71	-79.42	-85.9	19.66	72.2	59.7	58.6
8.78	-90.71	-78.9	-85.87	23.08	72.2	59.7	54.1
8.7	-90.57	-79.53	-86.09	23.02	71.5	60.2	51.2
8.7	-90.52	-79.37	-85.81	19.32	70.9	60.2	54
8.61	-90.75	-79.06	-86.21	19.35	71	60.1	52.5
8.43	-90.89	-79.63	-86.15	19.66	71.2	59.6	52.1
8.85	-90.8	-79.11	-86.27	21.46	71.5	59.4	50.5
8.62	-91.16	-79.27	-86.15	23.05	71.4	59.6	53.6
8.7	-90.8	-79.94	-85.96	23.08	70.8	59.6	52.3
8.64	-90.71	-78.9	-85.72	19.29	69.9	59.9	52.3
8.61	-89.88	-78.75	-86.15	19.44	70.1	59.7	51.6
8.81	-90.52	-78.59	-85.81	19.93	70.6	59.1	54.5
8.57	-90.52	-79.11	-86.06	23.02	71.1	59.2	47.5
8.66	-90.71	-79.42	-85.96	23.05	71	59.2	49.2
8.64	-90.66	-79.27	-86	19.41	70.4	59.6	49.2
8.66	-90.75	-79.11	-85.93	19.44	71	59.3	49.2
8.66	-91.39	-79.58	-86.21	20.02	72.1	59.1	53.7
8.83	-91.03	-79.73	-86.06	23.05	72.6	59.1	52.7
8.68	-90.84	-78.59	-86.27	22.99	72.5	59.3	50.5
8.77	-90.75	-78.8	-86.06	19.26	72.3	59.8	52.9
8.65	-90.84	-79.53	-86.09	19.57	73.2	59.3	53.1
8.64	-90.8	-78.54	-86.03	23.02	74.3	59.2	48.1
8.82	-90.52	-79.42	-86.48	22.99	74.6	59.4	52.4
8.72	-90.48	-79.16	-86	21.95	74	60.2	51.2
8.68	-90.75	-78.9	-85.96	19.26	74.4	60.1	52.4
8.51	-90.8	-79.06	-85.87	19.69	75.5	59.3	55.2
8.63	-91.03	-79.63	-86.15	22.89	76.6	59.4	52.4
8.84	-91.35	-78.7	-86.15	22.89	77.2	59.4	53.4
8.79	-90.61	-78.59	-86.61	22.89	77.4	60.3	51.1
8.74	-90.89	-78.59	-86.24	19.2	78	60.2	51.8
8.62	-90.89	-79.01	-85.96	19.57	78.9	59.7	54.3
8.63	-90.93	-79.22	-86.24	22.86	80.3	59.9	52.3
8.74	-91.8	-79.84	-86.03	22.77	80.2	60.3	53

8.73	-91.21	-79.06	-86.12	20.79	79.5	60.6	46.7
8.64	-90.43	-79.22	-86.3	19.2	80	60.6	51.8
8.37	-90.84	-79.16	-86.12	19.54	80.2	60.2	52
8.88	-90.98	-79.06	-86.06	22.83	81	60.3	53.2
8.72	-91.07	-78.9	-85.78	22.74	81.1	60.3	50.7
8.97	-90.75	-78.9	-86.27	22.74	81.3	60.8	50.5
8.64	-90.57	-79.01	-86.21	19.14	81	60.8	51.2
8.64	-90.98	-79.37	-86.27	19.41	81.4	60.6	53.3
8.56	-90.98	-79.58	-86.27	22.28	82.4	60.6	51.6
8.8	-91.07	-79.94	-86.15	22.77	82.1	60.6	51.5
8.82	-91.48	-79.37	-86.27	22.68	82.1	61.1	51.5
8.71	-91.21	-79.73	-86.18	22.62	82.4	61.3	54.2
8.7	-90.93	-79.53	-86	19.08	82.8	61.1	54.6
8.67	-90.93	-79.58	-86.36	19.2	83.3	61	47.2
8.76	-90.98	-79.11	-85.96	20.48	83.8	60.9	51.5
8.91	-91.03	-79.06	-86.15	22.74	83.8	61	51.6
8.9	-90.52	-78.96	-86.09	22.62	83.7	61.3	50.9
8.68	-91.21	-79.11	-86.24	19.54	82.1	61.7	49.2
8.73	-90.84	-79.16	-86.03	19.17	82.1	61.5	52
8.09	-91.03	-79.16	-86.24	19.57	82.1	61.2	52
8.73	-91.16	-79.63	-86.12	22.83	82.3	61.1	49.4
8.79	-90.75	-79.01	-86.06	22.74	82.3	61.4	53.4
8.66	-91.35	-79.89	-85.93	18.99	81.6	61.8	50.5
8.64	-91.03	-79.01	-86.3	19.2	81.9	61.5	51.8
8.75	-90.84	-79.48	-86.06	20.42	82	61.3	53.7
8.7	-91.07	-79.11	-85.87	22.71	82.3	61.3	52.6
8.64	-90.75	-79.06	-86.33	22.65	82.3	61.5	51.9
8.73	-90.93	-79.68	-86.27	20.36	81.8	62	51.2
8.75	-90.71	-79.16	-86.21	19.17	81.8	61.7	54.7
8.6	-91.03	-79.48	-86.18	19.69	82.1	61.2	53.4
8.85	-91.44	-78.7	-86.12	22.74	82.7	61.4	51.7
8.65	-90.89	-78.9	-86.45	22.74	82.5	61.4	51.2
8.93	-90.61	-79.73	-86.06	22.65	82.5	61.6	55.1
8.67	-90.66	-79.42	-86.18	20.09	81.9	61.9	50.8
8.74	-91.3	-79.37	-86.15	19.14	82.1	61.7	50.5
8.7	-90.89	-79.48	-86.09	19.66	82.2	61.4	52.7
8.63	-90.71	-79.27	-86.12	22.74	82.5	61.5	50.3
8.88	-91.21	-79.84	-86.48	22.68	82.1	62	50.7
8.72	-91.07	-79.42	-86.15	19.02	81.4	62.1	56.5
8.65	-90.8	-79.22	-86.12	19.2	81.5	61.6	51.2
8.78	-90.71	-79.37	-85.9	20.51	81.9	61.4	51.2
8.81	-90.93	-79.01	-86.18	22.8	81.6	61.3	48.2
8.71	-91.44	-79.84	-86.15	22.68	81.2	61.9	51.6
8.72	-91.44	-79.01	-86	19.08	80.2	62	51.2
8.64	-91.16	-79.84	-86.12	19.29	80	61.5	54.9
8.79	-90.75	-79.06	-86.15	22.83	80.8	61.3	50.9
8.91	-90.61	-79.27	-86.24	22.74	80.3	61.4	51.6

8.82	-90.93	-79.58	-86.15	22.74	79.2	62	52.5
8.67	-90.57	-79.84	-86	19.23	78.6	61.8	55.5
8.67	-90.84	-79.27	-86.18	19.29	78.5	61.6	55.5
8.65	-91.07	-79.48	-86.03	20.42	78.9	60.8	52.3
8.69	-90.8	-79.53	-86.21	22.83	78.5	61.4	51
8.73	-90.75	-79.22	-86.36	22.77	77.2	61.8	53.9
8.73	-91.21	-79.22	-86.21	19.29	77	61.6	52.5
8.81	-90.71	-79.06	-86.18	20.09	77.4	61.1	49.5
8.89	-90.84	-79.27	-86.33	22.83	76.8	60.9	51.9
8.77	-91.25	-79.73	-86.58	22.86	76.6	61.2	51.1
8.73	-91.48	-79.48	-86.33	22.13	75.6	61.6	52.8
8.69	-90.98	-79.37	-86.21	19.2	75.6	61.3	51.8
8.58	-90.71	-79.94	-86.45	19.41	75.3	60.9	53.3
8.66	-91.44	-79.68	-86.67	20.18	76.3	60.5	50.4
8.84	-91.39	-79.89	-86.21	22.86	75.9	60.8	49.7
8.63	-90.98	-79.73	-86.21	22.86	75	60.8	49
8.72	-90.71	-79.27	-86	22.22	74.1	60.9	50.3
8.69	-91.58	-79.16	-86.12	19.26	74	60.8	52.9
8.67	-90.93	-80.05	-86	19.57	74.1	60.4	52
8.78	-90.84	-79.27	-86.15	22.95	74.5	60.5	51.5
8.59	-91.16	-79.53	-86.51	22.95	74.3	60.3	51.3
8.8	-91.25	-79.27	-86.48	22.65	73.2	60.9	49.9
8.74	-90.61	-79.22	-86.45	19.32	73	60.6	51.9
8.16	-91.35	-80.51	-86.73	19.69	73.2	60.2	51.9
8.91	-90.8	-79.79	-86.64	23.02	73.8	60.1	55.6
8.85	-91.21	-80.05	-86.12	22.99	73.6	60.2	53.7
8.93	-91.07	-79.58	-86.24	22.89	73.2	60.3	48.9
8.71	-91.48	-79.22	-86.39	19.17	72.1	60.5	50.5
8.67	-91.16	-79.16	-86.3	19.47	72.2	60.3	53.2
8.8	-91.16	-79.53	-86.45	21.73	72.7	59.7	55
8.89	-91.21	-79.73	-86.45	22.99	72.7	59.6	48.9
8.97	-91.25	-79.63	-86.27	22.89	72.4	60.3	52.2
8.69	-90.61	-79.11	-86.21	19.29	71.9	60.1	51.5
8.43	-91.03	-79.37	-86.3	19.69	72.2	59.6	53.8
8.61	-91.16	-79.58	-86.21	23.05	72.8	59.4	53.1
8.85	-91.48	-79.73	-86.48	22.92	72.6	59.4	52
8.74	-90.84	-79.01	-86.54	20.09	71.5	60.1	51.9
8.75	-90.98	-79.58	-86.45	19.32	71.6	59.8	51
8.76	-91.3	-79.48	-86.58	19.87	71.9	59.2	54.2
8.79	-91.16	-79.42	-86.3	22.99	71.9	59.2	50.9
8.71	-91.35	-79.84	-86.61	22.92	71.3	59.4	53.4
8.74	-90.93	-79.53	-86.21	19.29	70.3	59.6	49.1
8.62	-91.44	-79.63	-86.45	19.47	70.8	59.4	52.8
8.87	-91.07	-79.48	-86.15	20.24	71.2	59.1	52.7
8.65	-91.03	-80.1	-86.33	23.05	71.2	59.1	50.3
8.61	-91.21	-79.37	-86.27	22.95	71	59.2	53.8
8.71	-91.3	-80.15	-86.18	20.7	70.1	59.4	53.9

8.65	-91.94	-79.68	-86.24	19.29	70	59.3	52.5
8.67	-91.35	-79.58	-86.51	19.6	70.4	58.8	50.5
8.65	-91.44	-79.27	-86.39	23.02	71.1	58.8	52.8
8.64	-91.16	-78.64	-86.58	23.02	70.9	58.8	50.8
8.99	-91.53	-79.84	-86.45	23.08	70.5	59.2	52.8
8.76	-90.93	-79.53	-86.3	19.29	70.1	59.3	51.5
8.7	-90.98	-79.58	-86.48	19.63	69.9	58.8	50.5
8.85	-90.43	-79.68	-86.15	23.14	70.5	58.8	51.4
8.67	-91.48	-79.53	-86.18	23.02	70.2	58.7	50.4
8.72	-91.16	-79.84	-86.3	19.93	69.2	59.1	50.7
8.65	-91.62	-79.89	-86.58	19.29	69.8	58.8	51.4
8.61	-90.71	-80.31	-86.76	19.9	69.7	58.3	53.3
8.56	-91.76	-79.68	-86.24	23.08	70.4	58.3	52.5
8.95	-91.58	-79.16	-86.45	23.08	69.8	58.6	49.9
9.07	-91.35	-79.99	-86.24	23.02	69.3	58.9	47.9
8.61	-91.25	-79.99	-86.67	19.41	68.9	58.8	51.1
8.71	-91.07	-79.22	-86.3	19.54	69	58.3	53.3
8.75	-91.58	-79.37	-86.67	22.13	69.8	58.2	50.4
8.72	-91.3	-79.73	-86.64	23.14	69.7	58.2	47.6
8.78	-90.84	-80.15	-86.51	23.05	69	58.4	50.8
8.7	-91.16	-79.84	-86.64	19.35	68.4	58.5	52.9
8.63	-90.93	-79.53	-86.64	19.47	68.9	58.6	52.7
8.76	-90.93	-79.73	-86.54	20.82	69.8	58.2	51.3
8.73	-91.35	-79.89	-86.45	23.08	69.8	58.2	49.5
8.91	-91.16	-79.84	-86.39	23.02	69.1	58.7	49
8.79	-91.39	-79.63	-86.12	19.47	68.9	58.5	52.9
8.57	-90.48	-79.68	-86.45	19.69	69.2	58.1	52.6
8.68	-91.62	-80.15	-86.85	23.08	70.4	58	53
8.91	-91.21	-79.48	-86.12	22.86	70.1	58.2	48.8
8.97	-91.71	-80.05	-86.24	22.65	70	58.6	50.1
8.73	-91.03	-79.58	-86.39	19.29	69.9	58.7	52.3
8.53	-90.93	-78.96	-86.54	19.44	70.4	58.2	49.3
8.9	-91.48	-78.85	-86.39	21.55	71.2	58.2	50.1
8.79	-91.85	-79.63	-86.24	22.95	71.3	58.2	50.8
8.97	-91.21	-79.63	-86.91	23.05	71.5	58.5	52.1
8.66	-91.53	-79.79	-86.18	19.2	70.9	58.7	54.2
8.66	-91.53	-79.58	-86.88	19.41	71.6	58.5	49.3
8.84	-90.93	-79.79	-86.76	22.83	72.3	58.3	51.7
8.76	-91.03	-79.53	-86.51	22.8	72.3	58.4	51.1
8.65	-91.58	-80.41	-86.39	21.49	72	59	53
8.69	-91.21	-79.68	-86.54	19.2	72.4	58.6	50.7
8.91	-91.67	-79.01	-86.36	20.09	73.5	58.5	52.5
8.61	-91.48	-79.99	-86.61	22.74	74.3	58.6	52.5
8.68	-90.89	-79.94	-86.79	22.74	74.3	58.9	52
8.71	-91.07	-80.05	-86.61	19.02	74.3	59.1	53
8.54	-91.21	-79.42	-86.58	19.26	74.6	58.6	53.7
8.61	-91.21	-79.63	-86.82	22.34	75.7	58.5	52.3

8.62	-91.03	-79.73	-86.64	22.77	75.9	59.1	49.8
8.67	-91.16	-79.84	-86.85	22.68	75.5	59.1	54.7
8.62	-91.3	-79.11	-86.54	18.99	75.4	59.3	51.6
8.6	-91.71	-79.79	-86.85	19.17	76.1	59.1	51
8.9	-91.25	-79.06	-86.51	22.65	76.7	58.9	50.1
8.69	-91.16	-80.05	-86.82	22.59	76.8	59.2	52.7
8.66	-90.98	-80.15	-86.39	18.86	76.6	59.7	52.4
8.64	-91.35	-80.36	-86.7	19.02	77.3	59.5	50.3
8.58	-91.62	-80.1	-86.76	19.47	77.9	59.3	53.7
8.85	-91.35	-79.58	-86.48	22.62	78.8	59.2	51.8
8.67	-91.25	-79.94	-86.58	22.53	78.8	59.5	54.6
8.82	-91.3	-79.84	-86.73	22.53	78.8	59.9	51
8.75	-91.48	-79.48	-86.82	18.8	78.7	59.9	51.5
8.64	-91.16	-79.48	-86.76	18.99	79	59.7	52.7
8.84	-91.44	-80.1	-86.79	22.34	79.9	59.7	53.5
8.72	-91.44	-79.99	-86.61	22.5	79.6	59.6	52.1
8.73	-91.21	-80.05	-86.48	22.44	79.3	60.3	51.2
8.68	-91.67	-80.15	-86.85	18.83	79.2	60.3	52.5
8.75	-91.3	-79.22	-86.88	19.44	79.8	59.7	51.7
8.57	-91.03	-79.53	-86.48	22.53	80	59.8	47.7
8.9	-91.58	-80.1	-86.73	22.47	79.9	59.7	49.3
9.03	-91.07	-79.73	-86.79	22.16	79.1	60.6	51.9
8.72	-91.48	-79.84	-86.76	18.86	78.9	60.5	50.5
8.05	-91.67	-79.01	-86.67	19.26	78.8	59.8	50.8
8.55	-91.03	-79.22	-86.91	22.5	79.1	59.9	53.8
8.6	-91.67	-79.94	-86.39	22.34	78.7	60.4	52.2
8.66	-91.35	-79.53	-86.85	18.53	77.7	60.6	52.6
8.64	-91.48	-79.89	-86.73	18.8	78	60.3	52
8.85	-91.16	-79.63	-86.45	22.31	78.8	60.1	50.2
8.81	-91.39	-79.89	-86.91	22.25	78.6	60.3	50.5
8.89	-91.8	-80.1	-86.64	22.41	78.1	60.8	51.6
8.7	-92.03	-80.46	-86.54	18.59	77.6	60.8	50.8
8.6	-91.21	-80.2	-86.24	18.77	77.7	60.4	51.1
8.65	-92.22	-79.73	-86.61	21.03	78.7	60.3	50.5
8.62	-91.35	-80.1	-86.67	22.34	78.7	60.3	50.5
8.69	-90.98	-79.84	-86.64	22.25	78.6	60.6	50.5
8.71	-91.25	-79.48	-86.51	18.53	78.3	61	52.5
8.65	-91.67	-79.42	-86.85	19.08	78.9	60.3	52.9
8.8	-91.58	-80.05	-86.3	22.25	79.4	60.3	51.4
8.79	-91.58	-79.63	-86.51	22.22	79.3	60.7	52.9
8.69	-91.07	-80.1	-86.61	18.32	79.2	61.3	50.4
8.67	-91.44	-80.41	-86.61	18.41	79.3	60.9	51.5
8.72	-91.25	-79.89	-86.24	18.44	79.6	61	53.3
8.53	-91.35	-79.53	-86.45	18.71	79.8	60.5	53.4
8.8	-90.98	-78.85	-86.45	19.69	80.2	60.5	50.9
8.74	-91.16	-80.41	-86.36	22.25	80.5	60.6	49.8
8.67	-91.21	-79.89	-86.7	22.1	80.2	60.7	51.2

8.71	-91.48	-79.53	-86.67	20.21	79.6	61.3	54.6
8.71	-90.75	-79.63	-86.67	18.44	79.9	60.9	53.5
8.79	-91.07	-79.94	-86.67	19.51	80.2	60.6	52.7
8.77	-91.85	-79.48	-86.54	22.1	80.5	60.8	50.2
8.73	-91.3	-79.58	-87.06	22.1	79.9	61.2	49
8.78	-91.39	-79.73	-86.3	18.35	79.7	61.3	51.4
8.67	-90.89	-80.36	-86.36	18.38	79.4	61.1	53
8.64	-91.07	-79.37	-86.58	18.71	79.8	60.8	53.5
8.6	-91.25	-79.73	-86.73	20.67	80.5	60.7	52.6
8.75	-90.8	-79.94	-86.51	22.13	80.2	60.8	52.3
8.72	-91.48	-79.58	-86.39	22.01	79.9	61.2	51.2
8.72	-91.39	-79.84	-86.54	18.28	79.5	61.2	52.2
8.56	-91.21	-80.05	-86.85	18.62	79.7	61	52.4
8.88	-91.94	-80.1	-86.54	22.07	80	60.8	53
8.74	-91.99	-79.99	-86.7	22.04	80.1	60.8	52.7
9.03	-90.75	-79.68	-86.39	21.95	79.6	61.5	51.4
8.74	-91.44	-79.53	-86.7	18.25	79.3	61.4	51.5
8.64	-91.3	-79.84	-86.64	18.35	79.4	61.3	49.3
8.9	-91.53	-79.06	-86.36	18.89	79.9	60.8	52.3
8.88	-91.44	-79.94	-86.3	22.13	80	61	53.8
8.89	-91.53	-79.58	-86.67	22.01	79.9	61	49.9
9.09	-91.67	-79.68	-86.79	22.01	79.6	61.5	51.3
8.74	-91.16	-79.16	-86.85	18.22	79.2	61.5	51.1
8.6	-91.25	-80.31	-86.45	18.47	79.5	60.8	51.1
8.63	-91.3	-79.27	-86.54	22.13	80.1	60.9	51.8
8.67	-91.25	-79.58	-86.18	21.95	79.9	61.3	52.8
8.73	-91.25	-79.89	-86.61	18.19	79.1	61.6	53.4
8.62	-91.39	-79.58	-86.79	18.28	79.3	61.3	53.8
8.67	-91.44	-79.89	-86.76	19.54	80	60.7	50.5
8.9	-91.16	-79.79	-86.67	22.07	80.1	61.1	53
8.92	-90.93	-79.89	-86.21	22.04	79.7	61.4	53.1
8.71	-91.03	-79.73	-86.33	18.22	78.8	61.7	52.1
8.65	-91.16	-79.68	-86.64	18.28	79.1	61.4	56
8.63	-91.48	-80.2	-86.79	18.83	78.8	60.8	51.4
8.82	-90.98	-79.73	-86.67	22.13	78.8	60.9	50.4
8.95	-91.3	-79.16	-86.94	22.19	78.3	61.1	52.8
8.79	-91.3	-79.79	-86.27	18.53	77.1	61.4	52.4
8.71	-91.35	-79.84	-86.67	18.47	77.1	61.4	54.3
8.85	-91.25	-79.89	-86.54	18.99	77.3	60.8	54.3
8.63	-91.3	-79.63	-86.51	22.22	77.5	60.9	50.9
8.89	-91.85	-79.42	-86.7	22.13	76.9	60.9	51.5
8.79	-91.25	-79.58	-86.54	18.38	76.5	61.4	47.4
8.63	-91.48	-79.27	-86.94	18.62	76.4	60.9	47.3
8.64	-91.35	-79.94	-86.54	21.58	77	60.5	54
8.79	-91.39	-80.31	-86.79	22.25	77	60.7	50.5
8.91	-91.21	-79.42	-86.39	22.13	76.6	60.8	51.4
8.78	-91.44	-79.79	-86.36	19.93	75.8	61.2	50.9

8.7	-91.85	-79.63	-86.85	18.53	75.9	60.9	51.5
8.57	-91.76	-80.25	-86.39	18.8	76.3	60.5	50.2
8.69	-91.16	-79.68	-86.39	22.28	76.9	60.5	51.3
8.76	-91.07	-80.1	-86.33	22.16	76.4	60.6	47.6
8.98	-91.25	-79.53	-86.54	22.19	75.5	61.1	53.7
8.71	-91.71	-79.73	-86.64	18.5	75.1	61.1	51.9
8.62	-91.71	-79.68	-86.61	18.74	75.3	60.6	52.9
8.58	-91.39	-79.84	-86.45	21.46	75.7	59.9	55.9
8.87	-90.98	-79.42	-86.51	22.28	75.6	60.4	47.5
8.73	-91.58	-80.2	-86.64	22.22	75.2	60.8	52.2
8.75	-91.71	-79.84	-86.58	18.59	74.9	60.5	52.4
8.56	-91.35	-79.58	-86.21	18.71	74.8	60.3	51.8
8.63	-91.62	-80.1	-86.27	20.42	75.4	60.1	52.7
8.65	-91.44	-79.63	-86.36	22.31	75.6	60.2	55
8.93	-91.48	-79.42	-86.58	22.25	75.3	60.4	52.5
8.71	-91.58	-79.58	-86.58	18.5	74.9	60.6	54.7
8.7	-91.48	-79.99	-86.3	18.62	75.2	60.3	48.8
8.85	-91.21	-80.36	-86.27	21.06	76.4	60.2	51.2
8.82	-91.58	-79.89	-86.39	22.28	76.2	60.2	53.9
9	-91.39	-79.58	-86.3	22.25	76.1	60.8	51
8.73	-91.39	-79.68	-86.3	18.53	75.7	60.6	52
8.58	-91.39	-80.2	-86.64	18.83	76.1	60.3	53.7
8.76	-91.85	-79.73	-86.39	22.34	76.9	59.8	50.2
8.7	-91.71	-79.58	-86.58	22.16	76.7	60.3	53.5
8.65	-90.8	-79.89	-86.67	18.5	75.7	60.6	47.8
8.56	-91.44	-79.99	-86.51	18.89	76.3	60.2	51.5
8.88	-90.93	-79.27	-86.36	22.31	76.8	60.1	53.9
8.78	-91.3	-79.48	-86.61	22.22	76.6	60.3	53.2
8.78	-91.21	-79.06	-86	18.56	75.7	60.6	53.7
8.62	-91.16	-79.73	-86.18	18.71	75.9	60.4	48.9
8.82	-91.25	-79.79	-86.33	19.51	76.4	60.1	55
8.79	-90.98	-79.63	-86.21	22.28	76.6	60.2	50.9
8.85	-91.44	-78.96	-86.09	22.22	76.2	60.6	48.4
8.67	-91.44	-79.63	-86.36	18.56	75.5	60.7	52.5
8.66	-91.25	-78.8	-85.96	18.89	75.9	60.2	51.6
8.72	-90.93	-79.42	-86.97	21.64	77	60.1	52
8.89	-91.39	-80.05	-86.21	22.41	77	60.1	56
8.98	-91.62	-80.15	-86.15	22.31	76.9	60.4	51.5
8.66	-91.16	-79.73	-86.51	18.56	76.4	60.7	51.3
8.75	-90.98	-79.48	-86.06	18.74	76.6	60.4	54.4
8.85	-90.93	-79.79	-86.27	19.44	77.3	59.9	53.1
8.78	-91.53	-80.25	-86.12	22.34	77.7	59.9	53.7
8.98	-90.98	-79.53	-86.21	22.13	77.5	60.3	50.9
8.68	-91.39	-79.73	-86.15	18.5	77	60.7	53.1
8.64	-91.16	-79.79	-86.48	18.59	77.5	60.4	51.6
8.74	-91.62	-79.73	-86.48	18.96	78	60.1	50.8
8.88	-91.48	-79.94	-85.93	22.31	78.6	59.9	49.6

8.7	-91.85	-79.53	-86.21	22.34	78.1	60.3	54.8
9.02	-91.3	-79.63	-86.12	22.16	77.6	60.7	53.8
8.66	-91.25	-79.63	-86.03	18.59	77.2	60.6	51.1
8.58	-91.62	-79.99	-85.96	18.77	77.4	60.3	49.9
8.73	-91.48	-79.99	-86.06	22.34	77.9	60.3	49.7
8.69	-91.53	-79.89	-86	22.25	77.7	60.4	54.2
8.69	-91.48	-80.15	-86.03	20.24	77.2	61	53.8
8.75	-91.35	-79.48	-86.18	18.56	77.5	60.7	54.6
8.71	-90.8	-79.01	-85.81	22.28	78.5	60.3	53.1
8.88	-91.53	-79.53	-86.06	22.19	78.1	60.6	50.5
8.69	-91.85	-79.94	-86.12	21.15	77.8	61	51.4
8.64	-91.58	-79.58	-85.93	18.5	78	61	51.2
8.74	-91.39	-79.27	-85.9	18.62	78.3	60.6	52.7
8.73	-91.25	-79.53	-86.06	19.02	79.1	60.4	48.7
8.78	-90.89	-79.99	-85.87	22.28	80.2	60.4	50.3
8.59	-89.65	-76.62	-85.02	2.47	76.5	60.8	52.5
8.75	-86.77	-75.48	-84.29	0.18	69	60.8	53.2
8.74	-86.17	-75.12	-83.95	0.18	66.2	60.6	53.8
8.74	-85.81	-74.91	-83.68	0.18	64.3	60.5	54.2
-3.49	-137.5	-158.3	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-137.5	-158.3	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-137.5	-158.3	-119.97	-25	-74.8	-74.9	-72.6
-3.49	-137.5	-158.3	-119.97	-25	-74.8	-74.9	-72.6
8.72	-84.89	-74.13	-82.82	0.27	59.2	58.6	56
8.71	-84.75	-74.03	-82.7	0.27	59.4	59.1	56.1
8.71	-84.66	-73.92	-82.58	0.24	59.6	59.5	56.5
8.7	-84.57	-73.82	-82.42	0.24	59.7	59.9	56.8
8.7	-84.43	-73.72	-82.33	0.27	59.7	60.1	56.8
8.69	-84.34	-73.66	-82.24	0.24	59.6	60.2	57.1
8.69	-84.25	-73.56	-82.18	0.27	59.6	60.2	57.1
8.69	-84.16	-73.46	-82.09	0.21	59.6	60.3	57.2
8.68	-84.07	-73.4	-81.97	0.21	59.5	60.3	57.4
8.68	-83.97	-73.3	-81.87	0.24	59.5	60.3	57.5
8.68	-83.88	-73.25	-81.81	0.24	59.4	60.3	57.5
8.68	-83.84	-73.14	-81.69	0.24	59.4	60.2	57.6
8.66	-83.79	-73.14	-81.66	0.24	59.3	60.2	57.8
8.66	-83.7	-73.04	-81.6	0.24	59.3	60.2	57.8
8.66	-83.65	-72.94	-81.51	0.24	59.2	60.2	57.9
8.65	-83.56	-72.88	-81.45	0.24	59.3	60.2	57.9
8.65	-83.52	-72.78	-81.39	0.24	59.3	60.2	57.8
8.61	-87.77	-77.04	-83	22.62	70.3	59.6	53.6
8.69	-88.64	-76.26	-83.06	18.56	75.8	59.8	49.7
8.65	-88.78	-76.72	-83.37	18.71	77.2	59.8	52.2
8.61	-88.74	-76.93	-83.61	18.77	77.7	59.9	54
8.62	-89.19	-77.76	-83.64	19.17	78.5	59.7	49.4
8.81	-89.29	-77.45	-84.19	22.34	78.8	60.1	53.1
8.89	-89.88	-77.87	-83.43	22.22	78.8	60.3	51.7

8.74	-89.61	-78.18	-84.13	19.23	78.1	60.6	52.1
8.61	-89.88	-77.3	-84.22	18.74	78.3	60.5	50.4
8.87	-89.47	-77.81	-84.35	20.73	78.9	60.4	51.5
8.65	-89.97	-78.44	-84.26	22.34	78.8	60.5	50.8
8.79	-90.25	-78.33	-84.32	22.22	78.7	60.8	53.4
8.71	-89.84	-78.13	-84.5	22.19	78.1	61.2	52.4
8.62	-89.84	-78.39	-84.38	18.68	77.9	61	52.1
8.35	-90.11	-78.49	-84.01	19.08	78.4	60.5	55.9
8.62	-89.7	-78.39	-84.77	22.31	78.9	60.6	50.5
8.88	-89.88	-77.97	-84.32	22.41	78.7	60.8	50.4
8.74	-90.52	-78.13	-84.59	21.25	77.9	61.2	51.6
8.67	-89.93	-78.59	-84.56	18.62	77.9	61	52.6
8.62	-90.11	-78.39	-84.77	18.86	77.9	60.9	53.2
8.86	-90.66	-78.49	-84.53	20.54	78.5	60.6	45.9
8.87	-90.06	-77.92	-84.35	22.44	78.1	60.6	52.5
8.91	-90.52	-78.54	-84.65	22.28	77.7	60.8	51.5
8.74	-90.43	-78.18	-84.44	18.62	77	61.1	53.8
8.68	-90.06	-78.39	-84.99	18.83	77.4	60.9	52.5
8.73	-86.45	-78.18	-83.25	22.47	78.1	60.4	53.7
8.75	-85.12	-77.76	-82.82	18.56	76.8	61.4	52.6
8.81	-85.16	-77.45	-82.42	0.21	69.1	60.9	53
8.82	-85.07	-77.76	-82.45	22.65	74	60.7	51.9
8.76	-84.71	-77.45	-82.15	22.44	77.8	60.3	52.7
8.76	-84.39	-77.5	-82.06	17.92	77.1	61.1	54.3
8.82	-84.34	-77.19	-81.97	0.15	68.8	60.8	53.3
8.82	-84.2	-77.71	-81.9	0.21	65.8	60.5	52.8
8.81	-84.39	-77.4	-81.78	0.15	64.2	60.4	51.8
8.81	-84.02	-77.04	-81.84	0.18	62.8	60.4	53.5
8.78	-83.93	-77.19	-81.78	22.53	76.6	59.8	52.5
8.74	-83.75	-76.88	-81.57	18.68	77	60.7	52.7
8.81	-83.84	-77.09	-81.45	0.18	69.2	60.6	53.4
8.81	-83.61	-76.72	-81.48	0.18	66.2	60.3	53.3
8.81	-83.88	-76.67	-81.45	0.18	64.2	60.3	53.3
8.94	-83.84	-76.62	-81.54	22.53	72.8	60.3	52.1
8.59	-83.93	-76.67	-81.45	19.51	77	59.6	52.8
8.67	-83.7	-76.26	-81.36	0.18	74.1	60.5	53.9
8.81	-83.42	-76.41	-81.29	0.15	67.8	60.3	52
8.81	-83.24	-76.57	-81.23	0.18	65.1	60.1	53.4
8.8	-83.65	-76.67	-81.26	0.18	63.5	60.1	53
8.78	-83.47	-77.14	-81.14	22.56	74.6	59.4	53.3
8.74	-83.2	-76.47	-81.17	18.74	76.1	60.3	52.8
8.8	-83.52	-76.52	-81.11	0.18	69.3	60.3	52.6
8.81	-83.38	-76.15	-81.05	0.18	65.9	60.1	53.1
8.81	-83.15	-76.36	-80.93	0.12	64	59.9	52.8
8.76	-83.47	-76.31	-80.84	22.53	75.5	59.3	50.7
8.75	-83.1	-76.41	-80.87	18.74	76.1	60.3	51.2
8.81	-83.15	-76.52	-80.99	0.18	68.7	60.3	52.3

8.82	-83.15	-76.36	-80.87	0.12	65.7	59.8	52.9
8.81	-83.24	-76.83	-80.78	0.18	63.8	59.8	52.6
8.74	-83.06	-76	-80.65	22.53	74.3	59.3	53.5
8.74	-83.38	-76.41	-80.71	18.86	75.9	60.1	52.8
8.79	-83.15	-76.52	-80.71	0.18	70	60.2	51.8
8.81	-82.88	-76.26	-80.71	0.15	66.2	59.8	52.5
8.81	-83.01	-76.1	-80.74	0.15	64.2	59.7	52.4
8.84	-82.88	-76.72	-80.71	22.59	72.7	59.5	53.3
8.66	-83.1	-76.1	-80.71	19.02	75.2	59.5	53.7
8.78	-82.74	-75.74	-80.65	0.15	71.2	60.1	53.1
8.81	-82.97	-76.36	-80.5	0.18	66.5	59.7	52.9
8.81	-82.65	-76	-80.59	0.15	64.3	59.6	53.8
8.81	-82.92	-76.31	-80.56	0.18	62.8	59.5	52.7
8.76	-82.83	-75.89	-80.65	22.62	75	59.1	52.6
8.75	-82.88	-76.05	-80.53	18.83	75.3	59.9	51.4
8.81	-82.55	-75.79	-80.47	0.12	68.6	59.8	54.2
8.82	-82.51	-75.89	-80.38	0.21	65.4	59.5	52.6
8.81	-82.46	-75.79	-80.44	0.21	63.6	59.5	54.1
8.81	-82.46	-76.21	-80.47	0.18	62.2	59.5	52.6
8.76	-82.65	-75.64	-80.41	22.65	74.5	59	52
8.75	-82.6	-75.79	-80.32	18.93	74.7	59.8	54.7
8.81	-82.6	-75.84	-80.2	0.18	67.7	59.6	53
8.82	-82.19	-75.48	-80.32	0.18	64.8	59.5	52.8
8.81	-82.6	-76.1	-80.13	0.21	63.1	59.5	52.8
9.02	-82.46	-76	-80.29	22.71	70.2	59.6	53
8.65	-82.46	-75.69	-80.2	19.32	74.5	59	52.8
8.76	-82.46	-75.58	-80.07	0.15	71.1	59.7	52.9
8.82	-82.33	-75.43	-80.2	0.21	66.2	59.5	53.2
8.82	-82.37	-75.79	-80.13	0.21	63.9	59.5	53.3
8.82	-82.1	-75.48	-80.23	0.18	62.4	59.5	52
8.77	-82.46	-75.74	-80.13	22.71	73.7	59	52.2
8.74	-82.28	-75.12	-80.13	18.93	74.5	59.6	52.2
8.8	-82.33	-75.01	-80.2	0.18	68.4	59.7	53.8
8.82	-82.37	-75.17	-80.04	0.15	65.3	59.5	53.5
8.82	-82.1	-75.48	-80.07	0.21	63.4	59.4	52.5
8.82	-82.28	-75.48	-79.98	0.21	61.9	59.4	53.1
8.74	-82.1	-75.69	-79.83	22.74	73.6	58.8	54.3
8.75	-82.37	-75.84	-79.98	18.86	74.1	59.7	53.1
8.81	-82.33	-75.22	-79.77	0.18	67.8	59.7	52.7
8.82	-82.14	-75.48	-79.98	0.21	64.8	59.5	52.1
8.82	-81.96	-75.64	-79.86	0.18	63.1	59.5	53.3
8.82	-82.05	-75.95	-79.89	0.21	61.8	59.4	52.5
8.74	-82.01	-74.91	-79.77	22.77	75	59.1	51.7
8.76	-81.96	-75.06	-79.86	18.83	75.1	59.9	53.4
8.81	-82.05	-75.38	-79.77	0.15	67.4	59.8	52.1
8.82	-81.82	-74.75	-79.86	0.15	64.7	59.7	52.6
8.82	-81.87	-75.27	-79.8	0.18	62.9	59.6	52.7

8.82	-81.82	-75.27	-79.83	15.54	66.7	59.6	54.5
8.72	-81.73	-75.06	-79.74	22.68	76.2	59	52
8.76	-82.05	-75.38	-79.74	18.89	75.8	60.2	53.1
8.82	-82.01	-74.7	-79.8	0.18	67.7	59.9	52.8
8.82	-81.96	-75.17	-79.74	0.15	64.8	59.9	53.4
8.82	-81.91	-75.43	-79.55	0.15	63.3	59.8	53.4
8.82	-81.87	-75.17	-79.71	15.08	65.8	59.9	52.6
8.75	-81.91	-75.27	-79.52	19.87	77	59.2	49.9
8.85	-81.78	-74.6	-79.74	0.15	74.9	60.3	51
8.82	-81.69	-74.96	-79.74	0.15	67.8	60.2	53
8.82	-81.55	-74.65	-79.68	0.21	65.1	60.1	53.5
8.82	-81.78	-75.22	-79.58	0.18	63.4	60.1	52.8
8.75	-81.78	-75.17	-79.46	22.74	76.8	59.2	52.5
8.76	-81.64	-74.86	-79.52	18.93	77.7	60.3	52.6
8.82	-81.55	-74.91	-79.65	0.15	70.1	60.3	52.5
8.82	-81.82	-74.91	-79.46	0.18	66.5	60.2	53.7
8.83	-81.73	-75.32	-79.37	0.15	64.4	60.2	52.5
8.82	-81.59	-74.7	-79.55	0.15	62.8	60.3	53.5
8.76	-81.59	-74.23	-79.49	19.69	77.4	59.3	52.1
8.76	-81.55	-75.01	-79.25	0.15	75.3	60.2	52.1
8.82	-81.5	-74.18	-79.55	0.21	68	60.3	52.4
8.83	-81.41	-74.8	-79.43	0.15	65.4	60.3	52.9
8.79	-81.59	-74.91	-79.49	22.68	75.6	59.8	50.5
8.72	-81.41	-75.06	-79.46	19.08	77.6	60.2	52.7
8.8	-81.64	-74.8	-79.43	0.18	71.9	60.4	52.8
8.82	-81.5	-75.01	-79.31	0.15	67.4	60.4	52.9
8.82	-81.32	-74.8	-79.34	0.18	64.7	60.4	52.3
8.82	-81.36	-74.8	-79.34	0.18	63.4	60.3	52.5
8.76	-81.27	-75.06	-79.34	22.8	77.6	59.6	53.1
8.77	-81.32	-74.91	-79.19	18.93	77.5	60.7	53
8.83	-81.18	-74.65	-79.28	0.15	68.8	60.5	53.1
8.83	-81.64	-74.91	-79.25	0.18	65.8	60.4	53.8
8.82	-81.23	-74.55	-79.16	0.18	63.9	60.4	52.7
8.82	-81.41	-74.75	-79.19	18.71	70.7	60.4	54.3
8.76	-81.32	-74.65	-79.22	20.7	77.8	59.7	52.4
9.27	-81.09	-74.7	-79.19	2.93	76.2	60.7	53.4
8.82	-81.23	-74.75	-79.07	0.15	68.4	60.6	52.8
8.83	-81.23	-74.7	-79.19	0.18	65.8	60.5	53.4
8.82	-81.23	-74.23	-79.16	0.18	63.9	60.4	52.6
8.91	-81.18	-74.34	-79.1	22.74	73.3	60.3	49.7
8.65	-81.09	-73.97	-79.16	19.47	77	59.8	52.1
8.76	-81.09	-74.18	-79.04	0.18	73.3	60.5	52
8.83	-81.23	-74.39	-78.94	0.15	67.6	60.5	53.2
8.83	-81.04	-74.18	-79.07	0.15	65.1	60.4	52
8.82	-81.09	-74.49	-78.91	0.15	63.5	60.3	52.1
8.8	-81.18	-74.08	-78.94	22.68	74.5	59.6	49.7
8.74	-80.95	-74.03	-78.94	19.14	75.6	60.3	52.3

8.82	-80.91	-73.92	-79	0.15	69.9	60.5	53.7
8.82	-81	-74.55	-78.94	0.18	66.2	60.3	53.3
8.83	-80.95	-74.8	-78.97	0.15	64.2	60.3	52.7
8.82	-81.18	-74.49	-78.79	23.02	71.5	60.3	52.9
8.59	-80.86	-74.13	-78.88	19.87	75.3	59.4	51.7
8.74	-80.95	-74.34	-78.82	0.18	72.3	60.3	53.3
8.82	-80.82	-74.44	-78.82	0.15	66.8	60.3	53
8.83	-80.82	-73.72	-78.82	0.18	64.6	60.1	49.1
8.82	-80.82	-74.49	-78.79	0.18	63.1	60.1	53.1
8.76	-80.77	-74.13	-78.85	22.92	72.3	59.6	53.1
8.74	-80.95	-74.34	-78.76	19.2	73.6	60.1	52.6
8.8	-80.86	-74.55	-78.76	0.18	68.6	60.3	52
8.82	-80.59	-74.23	-78.82	0.18	65.4	59.9	52.5
8.82	-80.68	-73.92	-78.82	0.18	63.5	59.6	52.7
8.82	-80.95	-74.34	-78.7	17.12	67.2	59.6	51.6
8.76	-80.77	-73.72	-78.79	21.52	73.7	59.1	53.6
8.8	-80.72	-73.66	-78.73	5.86	71.5	60.2	51.7
8.83	-81	-74.44	-78.55	0.18	66	59.6	52.9
8.82	-80.72	-73.46	-78.7	0.15	63.9	59.5	52.8
8.82	-80.49	-73.72	-78.67	0.15	62.4	59.3	53.2
8.84	-80.27	-74.13	-78.67	22.89	70.6	59.1	52.3
8.71	-80.68	-74.08	-78.39	19.44	72.6	59.2	54
8.8	-80.59	-74.03	-78.52	0.18	68.6	59.6	52.2
8.82	-80.45	-73.82	-78.49	0.18	64.8	59.2	52.4
8.83	-80.54	-74.08	-78.42	0.18	63.1	59.2	53
8.82	-80.49	-74.03	-78.55	0.18	61.7	59.1	53.4
8.74	-80.59	-73.77	-78.58	22.99	73.4	58.5	51.7
8.76	-80.49	-73.82	-78.33	19.17	73	59.6	52.7
8.82	-80.27	-73.51	-78.73	0.15	66.3	59.2	51.6
8.82	-80.49	-74.13	-78.39	0.18	63.9	59.1	53.2
8.83	-80.49	-73.77	-78.46	0.18	62.3	59	52.9
8.82	-80.45	-74.18	-78.42	21.21	68.4	58.8	52
8.43	-80.68	-73.25	-78.33	19.72	72.9	58.5	53.8
8.76	-80.68	-73.66	-78.33	0.21	69.6	59.2	53.2
8.82	-80.59	-73.61	-78.3	0.18	65	59	52.9
8.82	-80.4	-73.77	-78.49	0.21	63.2	58.9	52.8
8.83	-80.4	-73.77	-78.3	0.21	61.6	58.9	53
8.76	-80.49	-73.51	-78.27	23.02	71.2	58.2	51.9
8.76	-80.59	-74.08	-78.12	19.2	70.6	59	53
8.82	-80.31	-74.03	-78.3	0.18	64.8	58.7	52.8
8.82	-80.22	-73.46	-78.3	0.21	62.6	58.5	53
8.82	-80.22	-73.3	-78.21	0.21	61.2	58.3	52.6
8.88	-80.36	-73.82	-78.24	22.99	67.9	58.2	52.2
8.67	-80.49	-73.82	-78.24	19.66	69.3	58.2	53.1
8.76	-80.27	-73.87	-78.09	0.18	66.2	58.6	54
8.83	-80.36	-73.51	-78.15	0.21	63.3	58.3	53.1
8.83	-80.13	-73.3	-78.18	0.21	61.4	58.2	53.8

8.83	-80.4	-73.87	-78	0.27	60.1	58	52.7
8.74	-80.17	-73.35	-78.33	23.17	68.5	57.4	54.1
8.75	-80.08	-73.97	-78.18	19.41	68.1	58.3	52.4
8.81	-80.4	-73.09	-78.18	0.24	63.8	58.2	53
8.83	-79.81	-73.72	-78.09	0.21	61.8	58	53.2
8.82	-80.22	-73.46	-78.18	0.21	60.3	57.8	53
8.76	-80.27	-73.97	-78.18	23.2	67.1	57.3	51.7
8.73	-80.13	-73.66	-78.09	19.57	67.7	57.9	55.6
8.81	-80.13	-74.13	-78	0.24	63.9	58.1	52.2
8.83	-79.67	-73.66	-78.03	0.21	61.7	57.6	52.7
8.82	-79.95	-73.4	-78.03	0.24	60.3	57.4	53
8.83	-80.22	-73.61	-77.97	0.27	59.3	57.3	52.8
8.75	-80.27	-73.35	-78.15	23.14	68.1	57	51.6
8.76	-79.99	-73.82	-77.91	19.32	67.1	57.9	52.9
8.82	-80.13	-73.77	-77.91	0.24	62.5	57.5	53.1
8.82	-80.13	-73.97	-77.91	0.24	60.9	57.2	52.8
8.83	-79.85	-73.72	-78	0.27	59.5	57.1	53.8
8.78	-79.76	-73.56	-77.78	23.2	66.5	56.6	52.9
8.72	-80.13	-73.04	-77.88	19.57	66.7	57.1	51.7
8.8	-79.81	-72.83	-77.84	0.24	63.2	57.3	53.5
8.82	-79.72	-72.88	-77.84	0.24	61	57	52.8
8.82	-79.72	-73.2	-77.91	0.24	59.7	56.9	53.1
8.82	-79.99	-73.35	-77.66	0.27	58.8	56.8	52.9
8.78	-79.85	-73.66	-77.78	23.23	67.2	56.6	52.2
8.76	-79.81	-72	-77.84	19.44	66.1	57.2	53.3
8.82	-79.53	-73.25	-77.84	0.24	61.8	56.9	53.6
8.83	-79.67	-73.2	-77.84	0.27	60.2	56.8	53.5
8.82	-80.13	-73.35	-77.72	0.27	59.1	56.8	52
8.8	-79.62	-72.52	-77.63	23.35	65.1	56.5	53
8.71	-79.72	-73.2	-77.75	19.69	65.8	56.7	52.5
8.8	-79.81	-73.56	-77.88	0.24	62.6	56.9	52.8
8.83	-79.58	-73.97	-77.78	0.24	60.4	56.5	52
8.83	-79.76	-73.46	-77.63	0.31	59.2	56.4	52.8
8.83	-79.9	-73.14	-77.57	0.27	58.2	56.4	53.3
8.76	-79.49	-72.88	-77.66	23.26	66.4	56.1	49.5
8.76	-79.58	-73.3	-77.6	19.47	65.4	56.6	52
8.82	-79.49	-72.94	-77.57	0.24	61.2	56.5	51.6
8.83	-79.49	-72.73	-77.63	0.27	59.6	56.3	51.9
8.83	-79.58	-72.88	-77.51	0.31	58.4	56.3	51.5
8.76	-79.62	-73.46	-77.6	23.26	66	56	51.5
8.74	-79.62	-72.63	-77.42	19.63	66.5	56.5	52.6
8.82	-79.3	-72.78	-77.72	0.24	62.7	56.6	53.1
8.82	-79.44	-73.14	-77.57	0.27	60.4	56.4	52.6
8.83	-79.21	-73.2	-77.63	0.24	59.2	56.4	52.1
8.82	-79.53	-73.46	-77.54	1.74	58.2	56.4	52
8.75	-79.35	-73.09	-77.48	23.2	68.4	56.2	53.2
8.77	-79.49	-72.88	-77.48	19.32	68.4	57.1	51.7

8.82	-79.44	-72.63	-77.51	0.24	62.5	56.9	52.8
8.83	-79.35	-72.83	-77.54	0.27	60.7	56.7	52.4
8.84	-79.49	-73.04	-77.51	0.24	59.4	56.7	52.8
8.83	-78.71	-72.73	-77.51	23.14	68.2	56.5	54.2
8.72	-79.26	-72.78	-77.33	19.51	71.1	57	52.4
8.8	-79.3	-72.52	-77.48	0.21	66.4	57.2	52.7
8.82	-79.35	-72.52	-77.54	0.21	62.9	57.1	53.5
8.82	-79.26	-72.31	-77.45	0.24	61.1	57.1	52.4
8.79	-79.21	-72.68	-77.36	22.95	70.9	56.9	51
8.72	-79.12	-72.57	-77.48	19.44	74.2	57.3	51.9
8.79	-79.17	-72.78	-77.36	0.21	69.1	57.5	52.5
8.82	-79.17	-72.42	-77.39	0.21	64.7	57.5	52.6
8.83	-79.12	-72.31	-77.42	0.21	62.4	57.5	52.8
8.82	-79.12	-73.04	-77.3	19.26	69	57.5	52.5
8.76	-78.98	-72.78	-77.23	19.99	76.3	57.5	53.3
8.85	-79.08	-72.26	-77.33	0.21	74.5	58.2	52
8.82	-79.08	-72.37	-77.33	0.18	66.8	58.2	52.3
8.83	-79.3	-72.68	-77.36	0.18	63.9	58.2	52.8
8.83	-79.08	-73.09	-77.33	0.21	62	58.2	52.4
8.76	-79.17	-72.57	-77.48	22.89	76.6	57.6	48.9
8.75	-79.26	-72.26	-77.14	19.14	78.4	58.6	52.9
8.81	-79.21	-72.68	-77.17	0.12	70.1	58.7	52.4
8.82	-79.12	-72.26	-77.17	0.21	66	58.6	52
8.82	-79.08	-72.16	-77.14	0.18	63.6	58.7	52.6
8.82	-78.98	-72.63	-77.23	18.44	70.9	58.8	54.2
8.75	-79.21	-72.47	-77.33	19.78	79.9	58.3	52.5
8.75	-79.12	-72.16	-77.11	0.15	77.7	59.1	53
8.82	-79.03	-72.37	-77.17	0.18	68.8	59.2	52.3
8.82	-79.21	-72.68	-77.08	0.18	65.7	59.1	52.9
8.82	-79.12	-72.73	-77.08	0.18	63.5	59.2	52.7
8.76	-78.8	-72.52	-77.11	22.8	78.8	58.6	50.5
8.76	-79.08	-72.52	-77.14	19.08	79.5	59.5	50.8
8.82	-78.85	-72.21	-77.02	0.18	70	59.5	51.8
8.82	-78.75	-72.16	-77.11	0.18	66.4	59.4	52.8
8.82	-78.85	-72.05	-76.99	0.18	64.1	59.3	54.2
8.82	-78.8	-72.47	-76.93	22.77	75.8	59.2	53.2
8.68	-78.66	-72.37	-77.14	19.32	79.5	59.2	52.2
8.78	-78.75	-72.52	-77.14	0.18	74.5	59.7	51.9
8.82	-78.66	-71.95	-76.93	0.15	68.2	59.7	52.1
8.82	-78.57	-72.21	-76.96	0.18	65.5	59.6	52.5
8.82	-78.8	-72.31	-76.93	0.15	63.6	59.6	52.5
8.76	-78.8	-72.37	-77.14	22.71	78.9	59	51.6
8.76	-78.94	-72.21	-76.87	19.05	79.9	59.9	52.9
8.82	-78.57	-72.37	-76.93	0.18	70.9	60.2	52.8
8.82	-78.66	-72.26	-76.87	0.18	66.9	59.9	53.6
8.82	-78.66	-71.9	-76.87	0.18	64.7	59.9	51.9
8.91	-78.57	-72.31	-76.87	22.83	75.3	59.8	53.7

8.71	-78.53	-71.85	-76.9	19.17	79.6	59.8	47
8.79	-78.85	-72.37	-76.78	0.15	73.6	60.3	52.5
8.82	-78.71	-71.54	-76.81	0.15	68.1	60.2	52.8
8.82	-78.53	-72.26	-76.87	0.18	65.5	60.2	53.4
8.76	-78.3	-72.16	-76.84	22.71	77.8	59.6	54.6
8.74	-78.53	-71.59	-76.9	19.14	79.2	60.3	52.6
8.81	-78.57	-72.16	-76.72	0.18	71.9	60.4	52.7
8.82	-78.53	-72	-76.9	0.18	67.6	60.3	52.4
8.83	-78.62	-72.37	-76.75	0.18	65	60.3	53
8.94	-78.39	-72.31	-76.81	22.83	74.3	60.1	52.8
8.67	-78.62	-72.57	-76.75	19.44	77.6	59.7	52.5
8.76	-78.34	-71.95	-76.81	0.15	73.5	60.2	52.8
8.82	-78.48	-71.9	-76.68	0.18	67.9	60.3	52.7
8.82	-78.34	-71.95	-76.59	0.18	65.3	60.3	52.3
8.82	-78.43	-72.16	-76.62	0.18	63.6	60.2	52.8
8.74	-78.62	-72.31	-76.62	22.77	76.5	59.5	49.7
8.76	-78.21	-71.64	-76.75	19.05	75.5	60.3	52.1
8.82	-78.34	-71.43	-76.72	0.18	68	60.2	53
8.82	-78.39	-71.69	-76.56	0.18	65.3	59.8	52.6
8.82	-78.3	-72.31	-76.65	0.18	63.5	59.7	51.3
8.75	-78.43	-72.68	-76.65	22.8	72.9	59.2	51.3
8.74	-78.48	-71.95	-76.56	19.23	73.7	59.6	53.3
8.8	-78.25	-71.69	-76.65	0.18	68.8	59.9	52
8.82	-78.53	-71.9	-76.68	0.15	65.4	59.6	54.1
8.82	-78.39	-71.64	-76.62	0.18	63.5	59.3	52.9
8.82	-78.39	-71.9	-76.53	0.21	62.1	59.3	51.6
8.75	-78.3	-72.21	-76.68	22.83	73.2	58.8	53.4
8.76	-78.16	-71.59	-76.44	19.17	72.7	59.8	52.7
8.82	-78.11	-71.95	-76.59	0.18	66.5	59.4	52.2
8.82	-78.43	-72.16	-76.5	0.21	64.1	59.2	52.8
8.82	-78.21	-72.05	-76.56	0.21	62.4	59.2	53.5
8.84	-78.39	-71.69	-76.59	22.89	70.1	58.8	52.1
8.67	-78.25	-72.42	-76.59	19.54	72.3	58.8	52.1
8.76	-78.16	-71.59	-76.5	0.18	68.7	59.3	53.1
8.82	-78.21	-71.64	-76.53	0.18	64.8	59.1	52.9
8.82	-78.11	-71.95	-76.47	0.18	62.8	58.9	53.1
8.82	-78.3	-71.9	-76.59	0.21	61.4	58.8	53.1
8.78	-78.16	-71.54	-76.65	22.83	71.3	58.2	55.5
8.75	-78.02	-71.69	-76.41	19.32	70.9	59	53.1
8.81	-78.16	-72.16	-76.47	0.18	65.7	58.9	52.8
8.83	-78.11	-71.9	-76.47	0.21	63.4	58.7	52.2
8.82	-78.02	-71.48	-76.44	0.21	61.7	58.4	52.5
8.85	-78.02	-71.85	-76.32	23.02	68.6	58.2	56
8.68	-78.3	-72.21	-76.5	19.6	70.3	58.4	52.9
8.78	-77.98	-71.9	-76.56	0.21	66.8	58.7	53.1
8.82	-77.93	-71.33	-76.5	0.21	63.6	58.6	53.9
8.82	-78.11	-71.38	-76.59	0.18	61.7	58.3	51.9

8.82	-78.3	-71.69	-76.35	0.27	60.4	58.2	52.7
8.74	-77.7	-71.59	-76.44	22.99	70.8	57.8	49.3
8.76	-77.93	-71.69	-76.35	19.2	69.8	58.5	52.1
8.83	-77.98	-72	-76.5	0.18	64	58.3	52.9
8.82	-78.02	-71.43	-76.32	0.21	62	58.2	52.7
8.82	-78.07	-72	-76.38	0.24	60.6	58	52.4
8.75	-78.02	-71.64	-76.38	23.14	69.8	57.5	53.6
8.76	-77.93	-71.8	-76.44	19.23	68.9	58.2	54
8.82	-78.07	-71.69	-76.41	0.21	63.6	58.1	53.4
8.83	-77.7	-71.64	-76.35	0.24	61.6	58	53.5
8.82	-78.07	-71.48	-76.35	0.24	60.3	57.8	52.6
8.75	-77.56	-71.43	-76.44	22.99	68.9	57.1	51.3
8.75	-77.75	-71.8	-76.35	19.44	68.6	57.9	52.4
8.81	-77.88	-71.33	-76.32	0.21	64.2	58	53.1
8.82	-78.02	-71.38	-76.29	0.24	61.9	57.5	52.2
8.82	-77.93	-70.86	-76.23	0.24	60.3	57.4	52.8
8.91	-78.07	-71.9	-76.38	23.17	66.2	57.4	52.8
8.67	-77.75	-71.64	-76.29	19.57	69	57.2	52.2
8.78	-77.84	-71.28	-76.29	0.21	65.4	57.8	53.2
8.82	-77.88	-71.54	-76.29	0.21	62.4	57.3	51.9
8.82	-77.84	-71.59	-76.04	0.27	60.6	57.3	53
8.82	-78.25	-71.95	-76.07	17.03	63.3	57.1	51.7
8.76	-77.66	-71.38	-76.32	20.48	68.4	56.8	51.6
8.86	-77.7	-71.85	-76.17	0.31	66	57.4	52.8
8.82	-77.56	-71.22	-76.23	0.24	62.2	57.2	53
8.83	-77.93	-71.69	-76.14	0.21	60.5	57.1	52.6
8.82	-77.7	-71.38	-76.17	0.27	59.3	57.1	53.9
8.74	-77.56	-71.22	-76.17	23.17	68.4	56.7	52
8.76	-77.56	-71.22	-76.23	19.35	67.7	57.2	53
8.82	-77.66	-71.28	-76.07	0.24	63.1	57.1	52.6
8.83	-77.52	-71.07	-76.11	0.21	61	57	52.3
8.82	-77.34	-71.33	-76.17	0.21	59.6	57	52.5
8.94	-77.47	-71.22	-76.29	0.46	58.9	56.9	51.4
8.75	-77.43	-71.07	-76.14	21.79	68.2	56.5	52.2
8.79	-77.56	-71.48	-75.95	5.98	66.1	57.3	52.4
8.82	-77.61	-71.02	-76.04	0.24	61.9	56.8	53.4
8.82	-77.61	-70.91	-76.01	0.24	60.2	56.9	52.5
8.82	-77.47	-71.22	-75.98	0.27	59	56.8	54.4
8.77	-77.56	-71.17	-76.07	23.14	67.8	56.3	52.4
8.75	-77.56	-71.28	-76.04	19.41	67.2	57.1	51.8
8.82	-77.56	-71.48	-75.98	0.24	62.5	56.9	52.4
8.83	-77.43	-71.07	-75.95	0.24	60.4	56.6	52.3
8.82	-77.66	-71.22	-75.95	0.24	59.3	56.7	53.2
8.76	-77.52	-71.38	-75.95	23.17	67.7	56.3	54.6
8.75	-77.47	-71.17	-76.01	19.47	68	57.1	52.2
8.81	-77.52	-70.91	-76.01	0.24	63.5	57.1	53.2
8.82	-77.47	-71.48	-75.98	0.24	61.4	56.9	52.4

8.82	-77.52	-70.76	-75.89	0.24	59.8	56.9	52.7
8.78	-77.47	-71.38	-76.01	23.08	68.2	56.5	53.4
8.73	-77.88	-70.76	-75.86	19.41	69.9	57	52.4
8.8	-77.34	-71.12	-76.04	0.21	65.1	57.3	52.4
8.82	-77.47	-70.96	-75.95	0.21	62.3	57.2	52.2
8.83	-77.52	-70.96	-76.01	0.24	60.5	57.1	52.8
8.83	-77.29	-71.02	-76.04	21.73	66.6	57.1	52.9
8.52	-77.38	-70.96	-76.11	19.75	71.8	56.9	48.4
8.75	-77.52	-70.96	-75.89	0.18	69	57.3	53.2
8.82	-77.43	-71.22	-75.95	0.21	64.1	57.4	53.7
8.82	-77.15	-71.17	-75.92	0.21	61.9	57.3	52.7
8.82	-77.47	-70.91	-76.23	16.45	65.8	57.1	52.9
8.77	-77.38	-70.76	-75.86	20.05	73.5	57.1	50.5
8.85	-77.38	-71.33	-75.83	0.18	71.8	58	52.2
8.82	-77.2	-70.86	-75.86	0.21	65	57.8	52.6
8.83	-77.15	-70.34	-75.95	0.21	62.7	57.6	52.7
8.83	-77.2	-70.91	-75.8	0.21	61.1	57.6	52.9
8.76	-77.29	-70.76	-75.98	20.02	74.3	57.2	54.2
8.85	-77.06	-70.65	-75.95	0.21	71.9	58	51.6
8.82	-77.15	-70.71	-75.92	0.21	65.5	58.1	52.1
8.82	-77.06	-70.71	-75.92	0.24	62.9	57.9	52.8
8.78	-77.29	-71.17	-75.86	22.92	73.6	57.3	51.4
8.75	-77.47	-70.55	-75.65	19.14	74.6	58.3	51.8
8.82	-77.15	-70.81	-75.98	0.21	67.7	58.2	52
8.82	-77.11	-71.02	-75.77	0.18	64.4	58.2	52.7
8.82	-77.2	-70.65	-75.74	0.18	62.4	58.2	52.3
8.76	-77.15	-70.76	-75.74	22.8	74.1	57.5	53.9
8.74	-77.06	-70.55	-75.74	19.11	74.8	58.4	53.3
8.81	-77.15	-70.65	-75.71	0.15	68.3	58.5	52.1
8.82	-77.11	-70.76	-75.71	0.21	64.8	58.4	52.9
8.82	-77.24	-70.55	-75.83	0.18	62.7	58.5	52.2
8.82	-77.06	-71.12	-75.65	23.02	70.2	58.4	51
8.67	-77.2	-70.81	-75.65	19.26	74.5	58.2	52.2
8.77	-77.11	-70.86	-75.56	0.15	70.3	58.8	52.2
8.83	-77.01	-70.86	-75.77	0.15	65.6	58.7	52.9
8.82	-77.11	-71.12	-75.68	0.21	63.4	58.6	53.4
8.76	-76.97	-70.65	-75.74	22.77	72.5	58	52.7
8.73	-77.11	-70.76	-75.62	19.02	74.5	58.5	52.9
8.8	-76.88	-70.86	-75.62	0.21	69	59	52.9
8.82	-77.15	-70.76	-75.46	0.15	65	58.8	52.3
8.82	-77.15	-70.91	-75.56	0.24	63.1	58.8	53.2
8.77	-76.83	-70.13	-75.74	22.62	72.9	58.2	51.9
8.73	-77.11	-70.71	-75.59	18.99	75.2	58.7	53.6
8.8	-77.01	-70.71	-75.62	0.15	69.3	59	52.4
8.82	-76.83	-70.29	-75.65	0.18	65.5	59	51.3
8.83	-76.83	-70.96	-75.59	0.21	63.3	59	52.7
8.81	-76.74	-70.96	-75.65	22.71	72.7	58.5	53.4

8.71	-77.06	-71.02	-75.46	19.11	75.1	58.8	51.6
8.79	-76.88	-70.39	-75.53	0.15	70.3	59.2	52.8
8.82	-76.88	-70.08	-75.4	0.15	65.8	59.1	52.4
8.82	-77.01	-70.55	-75.53	0.21	63.7	59.1	52.6
9.7	-76.83	-70.08	-75.56	22.62	71.3	59.1	51
8.67	-77.01	-70.13	-75.43	19.23	75.2	58.6	53.2
8.77	-76.6	-70.81	-75.43	0.15	71.5	59.2	53.1
8.82	-76.74	-70.39	-75.46	0.15	66.3	59.2	53.3
8.82	-76.6	-70.29	-75.34	0.18	64	59.2	52.9
8.83	-76.74	-70.71	-75.37	18.32	69.1	59.2	51.9
8.63	-76.56	-70.39	-75.43	19.66	75.3	58.4	51.7
8.68	-76.79	-70.6	-75.46	0.18	72.3	59.2	53.4
8.82	-77.06	-70.76	-75.43	0.18	66.5	59.2	53.1
8.82	-76.65	-70.45	-75.4	0.15	64.1	59	52.4
8.82	-76.83	-71.02	-75.28	19.99	70	59	53.7
8.59	-76.74	-70.08	-75.37	19.6	75.2	58.5	51.6
8.69	-76.74	-70.45	-75.37	0.15	72.5	59.2	52.9
8.82	-76.79	-70.76	-75.4	0.18	66.5	59.1	52.8
8.82	-76.74	-70.65	-75.34	0.18	64.1	59	51.5
8.82	-76.74	-70.45	-75.31	0.21	62.5	59	52.6
8.76	-76.51	-70.03	-75.37	22.65	75.5	58.5	53
8.76	-76.83	-70.13	-75.37	18.77	75.1	59.3	52.1
8.82	-76.65	-70.71	-75.31	0.15	66.9	59.2	53.3
8.82	-76.47	-70.24	-75.46	0.18	64.4	59	53.1
8.82	-76.56	-70.55	-75.16	0.21	62.5	59	52.2
8.75	-76.74	-70.29	-75.43	22.68	75	58.4	51.6
8.76	-76.74	-70.39	-75.46	18.74	75.2	59.3	52.1
8.81	-76.56	-70.34	-75.19	0.18	67.6	59.2	52.7
8.82	-76.51	-70.81	-75.25	0.18	64.7	59.1	53.5
8.82	-76.51	-70.55	-75.31	0.18	62.8	58.8	52.9
8.76	-76.56	-70.03	-75.31	22.77	73.8	58.5	52.4
8.74	-76.47	-70.03	-75.34	18.86	75	59.1	52.3
8.8	-76.51	-70.13	-75.25	0.18	68.5	59.3	52.6
8.82	-76.56	-70.6	-75.28	0.18	65.1	59.1	53.3
8.81	-76.56	-69.72	-75.16	0.18	63.3	58.9	52.5
8.78	-76.51	-69.72	-75.22	22.59	74.1	58.5	54.4
8.74	-76.42	-69.93	-75.28	18.93	74.9	59.2	51.6
8.81	-76.51	-69.88	-75.16	0.18	68.9	59.2	52.3
8.82	-76.56	-70.39	-75.19	0.18	65.5	59.1	50.5
8.82	-76.74	-70.55	-75.19	0.18	63.4	59	52.8
8.82	-76.79	-70.19	-75.04	0.18	61.9	58.9	52.2
8.76	-76.79	-70.08	-75.13	22.68	74.9	58.4	52.7
8.76	-76.37	-70.19	-75.19	17.92	74.5	59.2	53.7
8.81	-76.33	-70.03	-75.28	0.15	66.7	59	52.7
8.82	-76.37	-70.19	-75.16	0.15	64.2	58.9	52.6
8.82	-76.42	-70.08	-75.04	0.18	62.5	58.8	53.9
8.76	-76.65	-70.6	-74.91	22.68	74.5	58.4	53.8

8.76	-76.28	-70.03	-75.13	18.8	74.2	59.2	54.9
8.82	-76.24	-69.93	-75.13	0.15	66.7	59	53.6
8.82	-76.33	-69.93	-75.13	0.18	64.2	58.9	52.6
8.82	-76.19	-70.08	-75.07	0.15	62.4	58.8	52.9
8.77	-76.79	-70.6	-75.13	22.77	73.3	58.3	53.9
8.75	-76.65	-70.39	-74.98	18.96	73.5	59.1	53.1
8.8	-76.6	-69.93	-75.01	0.15	67.2	59	52.4
8.82	-76.42	-70.08	-74.91	0.15	64.4	58.8	52
8.81	-76.6	-70.34	-74.98	0.18	62.6	58.6	52.4
8.76	-76.37	-69.62	-75.13	22.74	73.1	58.2	52.5
8.74	-76.28	-70.39	-75.04	19.02	73.5	58.9	54.2
8.81	-76.19	-70.65	-75.04	0.18	67.5	58.9	53
8.82	-76.47	-70.6	-74.95	0.18	64.5	58.7	52.6
8.82	-76.6	-70.45	-74.98	0.15	62.6	58.6	52.6
9.15	-76.14	-70.08	-74.98	22.8	70.1	58.6	52.2
8.66	-76.19	-69.98	-75.01	19.2	73.5	58.5	52.5
8.76	-76.42	-70.24	-74.95	0.15	69.7	58.9	53
8.82	-76.28	-70.55	-74.98	0.21	65.3	58.7	52
8.82	-76.28	-69.67	-74.85	0.15	63.2	58.5	52.8
8.84	-76.1	-69.98	-75.04	22.74	70.9	58.3	53.3
8.69	-76.28	-69.62	-74.95	19.17	73.7	58.5	53
8.79	-76.28	-69.93	-74.85	0.15	69.7	58.9	53.3
8.82	-76.24	-69.77	-74.95	0.18	65.4	58.7	52.5
8.82	-76.05	-69.3	-74.98	0.15	63.3	58.6	52.4
8.83	-76.33	-70.71	-74.82	16.09	66.6	58.4	52.2
8.75	-76.42	-69.88	-74.85	19.75	74	58.1	50.7
8.86	-76.33	-69.46	-74.79	0.18	72	58.9	51.9
8.82	-76.47	-69.46	-74.85	0.18	65.9	58.7	52.6
8.82	-76.14	-70.24	-74.82	0.21	63.5	58.5	52.2
8.83	-76.6	-70.19	-74.82	6.99	62.2	58.5	52.1
8.72	-76.01	-69.67	-74.82	22.44	74.5	58.2	52
8.77	-76.19	-69.82	-74.82	11.69	73.5	59.2	52.4
8.83	-76.1	-70.19	-74.85	0.15	66.2	58.9	51.4
8.82	-76.33	-70.39	-74.76	0.18	63.8	58.8	53.2
8.82	-76.28	-70.13	-74.76	0.21	62.2	58.8	52.5
8.76	-75.92	-69.72	-74.76	22.77	73.5	58.2	50.8
8.76	-75.87	-69.72	-74.79	18.93	73.6	59	52.2
8.81	-76.14	-69.77	-74.58	0.21	66.7	59	51.7
8.83	-75.96	-69.62	-74.88	0.18	64	58.9	53.3
8.83	-76.14	-69.77	-74.64	0.18	62.3	58.8	52.8
8.76	-75.78	-70.08	-74.79	22.68	73.8	58.2	51.8
8.76	-76.14	-69.67	-74.76	18.93	73.4	59.2	52.7
8.82	-76.05	-69.82	-74.58	0.21	66.3	59	53.1
8.83	-76.01	-68.99	-74.79	0.18	63.7	58.8	52.7
8.83	-76.01	-69.41	-74.73	0.18	62.2	58.7	53.4
8.76	-75.96	-69.36	-74.64	22.83	73.1	58.2	53.6
8.76	-76.05	-69.67	-74.61	18.96	72.8	59	51.6

8.82	-75.92	-69.36	-74.67	0.18	66.3	58.8	52.7
8.83	-76.05	-69.56	-74.76	0.18	63.8	58.7	52.8
8.83	-75.96	-69.72	-74.76	16.03	66.6	58.8	52.8
8.18	-76.05	-69.56	-74.73	19.63	73.3	58.3	53.2
8.78	-76.05	-69.67	-74.73	0.18	70.3	59	52.5
8.82	-76.01	-69.1	-74.49	0.15	65.4	58.9	52.3
8.82	-76.01	-69.51	-74.58	0.18	63.2	58.9	52.3
8.76	-76.1	-69.41	-74.52	22.77	72.2	58.4	51.9
8.74	-75.96	-70.03	-74.55	19.11	73.3	58.8	52
8.82	-80.22	-70.13	-75.8	0.12	66.5	59.2	54
8.88	-81	-70.29	-76.2	22.71	73.4	58.4	51
8.98	-81	-70.65	-76.35	22.77	74.3	59	52.1
8.72	-81.64	-71.33	-76.68	22.74	74.5	59.1	53
8.81	-82.19	-70.96	-76.87	22.77	74.6	59	49.5
8.75	-82.14	-71.33	-77.54	22.68	74.7	59.2	49.2
8.72	-82.33	-70.34	-76.9	19.26	74.5	59.4	54.8
8.65	-82.46	-71.28	-77.6	19.14	74.9	59.2	52.3
8.65	-82.51	-71.22	-77.78	20.97	75.8	58.8	55.4
8.75	-82.37	-71.38	-77.2	22.8	75.8	59.1	53.5
8.7	-82.55	-71.22	-77.94	22.77	76.1	59.3	54.8
10.46	-82.74	-71.33	-77.42	22.47	75.8	59.7	51.7
8.71	-82.37	-71.69	-77.45	19.02	75.8	59.7	52.5
8.75	-83.15	-71.54	-77.97	19.11	76.4	59.5	51.6
8.58	-83.2	-71.54	-78	19.2	76.6	59.5	51.6
8.52	-83.15	-72.42	-77.72	19.26	76.9	59.5	49.1
8.67	-82.92	-71.02	-77.48	19.63	77.8	59.4	53.1
8.9	-83.15	-71.59	-78.15	20.79	78	59.4	52.2
8.68	-83.38	-71.85	-77.72	22.65	78.8	59.6	52.9
8.7	-83.2	-71.48	-77.88	22.62	79.8	59.5	53.1
8.73	-83.01	-72.26	-77.84	22.62	80.6	59.5	53.5
8.89	-83.52	-71.54	-78.03	22.5	81	59.7	50.9
8.65	-83.2	-72.21	-78.15	22.5	81.1	60.2	53.5
8.75	-83.38	-72.05	-78.64	22.5	80.9	60.3	49.4
9.03	-83.84	-72.21	-78.18	22.53	80.8	60.5	53.4
8.73	-83.42	-71.54	-78.03	19.54	80.1	60.5	51.7
8.65	-83.2	-72.31	-78.27	18.96	80.3	60.4	53.6
8.66	-83.65	-72.37	-78.27	18.99	80.3	60.3	51.3
8.67	-83.38	-71.43	-78.24	19.11	80.6	60.3	51.4
8.76	-84.25	-71.85	-78.55	19.47	81.2	60.1	52.5
8.64	-84.07	-72.16	-78.42	20.09	81.4	60.3	55
8.84	-83.65	-72.37	-78.27	22.59	81.3	60.3	53.3
8.64	-83.79	-72.31	-78.52	22.53	81.4	60.2	50
8.56	-83.7	-72.16	-78.58	22.44	81.5	60.7	52.9
8.91	-84.07	-72.21	-78.46	22.56	81.4	60.5	52.5
8.93	-82.88	-72.63	-78.67	22.53	81.6	60.8	51
8.71	-84.02	-72.78	-78.82	22.47	81.7	61.1	49.9
8.73	-83.52	-71.8	-78.52	19.26	81.3	61	51.6

8.75	-84.29	-72.47	-78.67	18.89	81.5	61	52
8.56	-84.16	-73.04	-78.67	19.11	81.5	60.8	52.4
8.23	-83.93	-71.64	-78.76	19.26	81.6	60.7	54.3
8.86	-83.84	-72.88	-78.49	19.6	82	60.6	53.9
8.85	-83.65	-72.94	-78.97	21.18	82.1	60.8	51.6
8.75	-84.2	-72.16	-78.82	22.5	82.1	60.6	50.7
8.65	-83.79	-72.52	-79	22.59	82.2	60.7	53.5
8.62	-84.29	-72.31	-78.85	22.59	81.9	60.9	52.3
8.87	-84.11	-72.57	-78.88	22.56	82	61	54.8
8.75	-84.52	-72.11	-78.79	22.5	81.6	60.8	53.2
8.76	-83.29	-72.47	-78.88	22.25	81.6	61.4	52.4
8.71	-84.2	-72.47	-78.64	18.86	81.1	61.4	52.5
8.7	-83.84	-72.05	-78.67	18.89	80.9	61.2	52.3
8.56	-84.16	-72.94	-79.1	19.08	80.7	61.1	53.1
8.79	-84.43	-72.05	-78.7	19.35	80.7	60.7	52.6
8.74	-84.02	-72.88	-79.07	20.82	80.7	60.7	52
8.87	-84.29	-72.05	-79.25	22.59	80.5	60.7	50.9
8.77	-84.52	-72.16	-79	22.59	79.8	60.8	50.1
8.7	-84.07	-72.63	-79.22	22.53	79.7	60.9	47.8
8.71	-84.39	-72.83	-78.94	22.56	79.4	61	54
8.8	-84.52	-72.88	-79.28	22.59	78.9	61.2	48.9
8.67	-84.57	-72.78	-79.22	20.45	78.4	61.2	51.6
8.71	-84.11	-73.04	-79.1	18.83	77.9	61	53.3
8.77	-84.34	-72.57	-79.25	18.99	77.7	60.9	53.7
8.58	-84.34	-72.68	-79.52	19.05	77.7	60.7	51.8
8.88	-83.97	-72.78	-78.97	19.29	77.7	60.4	54.2
8.88	-84.02	-72.83	-79.25	22.68	77.7	60.3	47.3
8.89	-84.43	-72.78	-79.25	22.59	77.6	60.3	52.5
8.85	-84.62	-73.04	-79.13	22.62	77.2	60.6	51.6
8.96	-84.57	-72.94	-79.49	22.62	76.5	60.7	53.9
9.06	-84.16	-72.94	-79.65	22.59	75.7	60.9	51.6
8.7	-84.62	-72.73	-79.07	18.96	75.2	60.5	50.3
8.62	-84.57	-72.42	-79.34	19.05	75.1	60.5	51.4
8.62	-84.57	-73.3	-79.43	19.05	75.1	60.6	51.7
8.57	-84.57	-73.35	-79.49	19.29	75.1	60.2	52.3
8.88	-84.75	-72.47	-79.43	19.47	75.4	59.9	53.2
8.79	-84.98	-72.57	-79.19	20.63	75.5	59.9	50.8
8.78	-84.94	-72.94	-79.83	22.59	75.7	60.1	52.3
8.85	-84.11	-73.09	-79	22.77	75.4	59.9	54.2
8.82	-84.8	-72.94	-79.71	22.71	75.3	60.1	49.9
8.81	-84.39	-72.88	-79.46	22.74	74.9	60.3	51.4
8.74	-84.71	-72.52	-79.65	21.52	74.5	60.5	52.9
8.76	-84.94	-72.63	-79.52	19.05	73.8	60.3	52.5
8.55	-84.75	-73.35	-79.55	19.2	74.1	60.1	53
8.51	-84.8	-73.25	-79.8	19.66	74.1	59.5	50.9
8.62	-84.62	-72.57	-79.68	20.94	74.6	59.2	50.3
8.87	-84.25	-72.83	-79.74	22.83	74.8	59.5	51.8

8.67	-85.21	-73.2	-79.52	22.8	74.8	59.6	47.6
8.81	-84.66	-72.88	-79.62	22.83	74.7	59.7	50.9
8.89	-84.75	-72.88	-79.55	22.74	74.4	59.5	50.2
8.72	-84.34	-73.51	-79.74	22.77	74.2	59.8	50.2
8.72	-84.29	-72.52	-79.92	22.19	73.7	60.2	49.3
8.75	-84.94	-73.77	-79.8	19.02	73.8	59.9	50.9
8.75	-84.29	-73.3	-79.52	19.14	74.1	59.7	49.5
8.71	-84.52	-72.52	-79.65	19.66	74.3	59.2	50.5
8.74	-85.03	-73.4	-79.52	22.83	74.6	59.3	54
8.66	-84.94	-73.25	-79.86	22.83	74.6	59.3	53.4
8.67	-84.66	-73.4	-80.04	22.71	74.3	59.5	50
9.09	-84.84	-72.83	-79.89	22.74	73.7	59.7	53.2
8.65	-85.12	-73.35	-79.68	19.11	73.4	59.7	51.5
8.71	-84.71	-73.3	-80.26	19.11	73.4	59.4	50.5
8.8	-85.3	-73.56	-79.83	19.54	73.8	59.2	50.3
8.71	-84.84	-72.83	-79.83	22.77	74.3	59.2	57.5
8.65	-84.8	-73.4	-79.95	22.83	74.4	59.1	52.2
8.74	-84.98	-73.25	-79.8	22.77	74.2	59.4	52.7
8.65	-84.84	-73.72	-79.83	19.05	73.3	59.5	49.3
8.7	-84.84	-73.04	-79.95	19.14	73.4	59.4	52.1
8.68	-84.66	-73.35	-79.71	19.6	73.8	59	44.6
8.82	-84.57	-73.66	-80.01	22.89	74.2	59	49.6
8.61	-84.89	-73.09	-80.07	22.77	74	59.1	52.7
8.88	-85.03	-73.66	-79.83	22.8	73.8	59.2	52.1
8.97	-85.3	-73.25	-79.8	22.77	73.5	59.3	52.4
8.7	-84.71	-73.92	-79.8	21.52	73.3	59.4	50.3
8.72	-85.21	-72.94	-79.65	19.05	73.1	59.4	51.7
8.59	-85.3	-73.3	-80.23	19.2	73.4	59.2	51.6
7.96	-84.98	-73.66	-80.41	19.54	73.4	58.9	49.5
8.61	-85.21	-73.04	-80.04	21.58	74.1	58.8	54.1
8.88	-85.3	-74.08	-80.1	22.8	74.3	58.5	47.3
8.68	-85.12	-73.3	-80.04	22.74	74.5	59	50.3
8.76	-85.67	-73.66	-79.95	22.68	74.4	59.2	50.9
8.76	-85.44	-73.46	-79.89	19.63	73.7	59.3	52.2
8.61	-85.67	-73.56	-80.23	19.05	73.7	59.2	51
8.68	-84.16	-73.3	-79.98	19.17	73.8	59	51.1
8.68	-85.3	-73.25	-79.89	19.72	74.4	59	54.7
8.76	-85.12	-73.72	-80.32	22.74	74.8	58.8	53.1
8.74	-85.16	-73.25	-80.26	22.71	74.9	59	51.9
8.8	-85.3	-73.09	-80.41	22.65	74.7	59.2	51
8.65	-84.89	-73.3	-79.77	19.44	74	59.4	49.2
8.74	-84.89	-73.56	-79.92	19.02	74.5	59.3	53.4
7.97	-84.98	-127.24	-80.1	19.32	74.6	58.9	51.9
8.81	-85.62	-127.66	-80.1	22.74	75.2	59	51.3
8.72	-85.26	-128.33	-80.04	22.62	75.3	59.1	52.4
8.82	-84.71	-127.34	-80.32	22.62	75	59.2	50.9
8.76	-85.35	-127.5	-80.41	18.93	74.5	59.5	48

8.72	-85.26	-127.45	-80.32	19.02	74.4	59.3	51.9
8.62	-85.39	-127.29	-80.44	19.14	74.6	59.1	51.5
8.87	-85.53	-127.71	-79.83	19.75	75.1	58.9	50.4
8.79	-85.35	-127.66	-80.04	22.68	75.3	58.9	50.2
8.79	-85.16	-127.24	-80.5	22.68	75.7	58.9	47.1
8.72	-85.26	-128.28	-80.26	22.71	75.5	59.2	55.3
9	-85.67	-127.71	-80.41	22.59	75.5	59.5	52.1
8.66	-85.9	-127.97	-80.53	19.11	75.2	59.6	53.1
8.69	-85.53	-128.33	-80.13	18.89	75.4	59.4	50.1
8.69	-85.16	-127.76	-80.07	18.96	75.6	59.2	51.3
7.85	-85.12	-128.59	-80.13	19.44	75.8	59.1	50.8
8.73	-85.26	-127.34	-80.38	20.6	76.6	59	54.3
8.74	-85.26	-127.76	-80.38	22.68	76.5	59.1	53.8
8.85	-85.3	-127.81	-79.65	22.65	76.6	58.5	54.9
8.77	-85.81	-128.17	-80.47	22.56	76.6	58.7	49.9
8.68	-85.35	-128.33	-80.5	18.83	76.1	58.7	52.5
8.65	-85.26	-127.66	-80.44	19.02	76.6	58.4	51.9
8.61	-85.39	-127.66	-80.47	19.44	76.6	57	53.4
8.65	-84.98	-127.91	-80.47	22.62	77	57.4	55.1
8.78	-85.76	-128.43	-80.5	22.62	78.4	58.5	54.7
8.65	-85.62	-127.86	-80.26	22.56	78.8	58.8	51.5
8.92	-85.49	-127.66	-80.41	22.56	78.9	59	53.4
9.93	-85.26	-128.23	-80.62	22.41	78.5	59.5	47.6
8.7	-85.26	-128.64	-80.62	18.93	78.8	59.5	52.3
8.66	-85.3	-127.81	-79.98	18.99	79.1	59.3	49.4
8.89	-85.16	-128.54	-80.62	20.79	79.9	59.2	50.5
8.69	-85.16	-128.43	-80.26	22.56	79.8	59.3	52.6
8.74	-85.67	-170.67	-80.13	18.74	79	60.2	52.4
8.73	-84.94	-170.93	-80.07	22.47	80	59.4	53.9
8.76	-85.71	-170.83	-79.92	18.71	79	60.2	53.4
8.82	-81.09	-170.26	-78.85	0.12	70	60.2	52.9
8.82	-79.95	-170.26	-78.42	0.12	66.7	59.9	53.6
8.81	-79.44	-170.26	-78.18	0.15	64.6	59.9	54.4
8.81	-79.17	-170.21	-77.97	0.18	63.2	60.1	55
8.81	-78.85	-170.31	-77.72	0.15	62	59.9	55.4
8.8	-78.66	-170.26	-77.54	0.15	61.3	59.9	55.9
8.79	-78.48	-170.26	-77.45	0.18	60.7	59.9	56.5
8.79	-78.34	-170.26	-77.33	0.18	60.3	59.9	56.8
8.79	-78.21	-71.2	-77.2	0.18	60	59.9	57.3
8.78	-78.07	-71.09	-77.11	0.18	59.8	59.8	57.7
8.75	-77.93	-67.93	-76.96	0.15	59.6	59.8	54.7
8.76	-77.84	-67.36	-76.9	0.18	59.4	59.8	56.9
8.76	-77.7	-67.25	-76.78	0.18	59.3	59.8	57.2
8.75	-77.61	-67.15	-76.72	0.21	59.2	59	57.5
8.75	-77.52	-67.05	-76.62	0.18	58.9	59.3	57.9
8.74	-77.43	-66.99	-76.56	0.18	58.9	59.5	58.1
8.74	-77.38	-66.89	-76.5	0.21	58.9	59.5	58.6

8.74	-77.29	-66.84	-76.44	0.18	58.9	59.5	58.5
8.74	-77.2	-66.73	-76.35	0.18	58.8	59.6	58.7
8.74	-77.15	-66.63	-76.29	0.18	58.8	59.5	58.7
8.73	-77.11	-66.58	-76.2	0.18	58.8	59.5	58.8
8.73	-77.01	-66.53	-76.14	0.18	58.8	59.5	59.2
8.73	-76.97	-66.47	-76.07	0.18	58.8	59.5	59
8.73	-76.88	-66.42	-76.04	0.18	58.8	59.5	58.9
8.72	-76.83	-66.32	-75.98	0.18	58.7	59.4	58.9
8.97	-80.63	-72.18	-77.14	22.59	71.1	59.1	54.6
8.74	-81.96	-72.96	-78.27	19.35	77.7	58.6	53
8.77	-82.55	-73.12	-78.52	22.22	78.8	59.2	55.5
8.86	-82.6	-72.23	-78.09	22.28	79.1	59.4	51.4
8.8	-82.97	-73.32	-78.3	22.16	79	59.7	51.7
8.94	-83.52	-73.48	-78.67	22.13	79	59.9	50.5
8.78	-83.24	-73.48	-78.79	22.19	79.1	60.2	51.7
8.78	-83.1	-73.58	-78.58	19.72	78.6	60.2	53.1
8.71	-83.79	-73.48	-79	18.53	78.5	60.3	51.5
8.6	-83.61	-74	-79.1	18.56	78.6	60.3	50.9
8.71	-83.79	-73.22	-79.1	18.71	78.8	59.9	51.7
8.76	-84.07	-74.05	-78.3	19.02	79.1	59.7	48.7
8.62	-83.97	-74.47	-79.25	22.07	79.6	59.9	51.6
8.71	-83.84	-73.89	-79.13	22.28	79.6	60.1	53.2
8.82	-84.11	-73.74	-79.31	22.28	79.7	60.3	55.4
8.72	-83.75	-74.36	-79.07	22.22	79.6	60.3	51.5
8.97	-84.02	-73.79	-79.31	22.22	79.3	60.7	52.7
8.76	-84.16	-74.47	-78.97	18.8	78.9	60.8	53.2
8.7	-84.2	-73.95	-79.19	18.5	78.9	60.7	51.1
8.68	-83.93	-74.67	-79.34	18.59	79	60.6	51.7
8.62	-84.71	-74.41	-79.58	18.71	79.2	60.3	52.2
8.66	-84.07	-75.24	-79.68	19.02	79.3	60.2	51.2
8.66	-84.11	-75.5	-79.46	20.6	79.7	60.3	48.4
8.69	-84.43	-74.93	-79.07	22.25	79.8	60.3	49.9
8.65	-84.66	-74.62	-79.8	22.28	79.4	60.3	54.6
8.74	-84.39	-75.14	-79.49	22.22	79.6	60.4	54.4
8.9	-84.29	-73.84	-79.28	22.28	79.5	60.8	52.2
8.91	-84.62	-74.21	-79.68	22.19	79.3	60.8	49.1
8.72	-84.16	-74.41	-79.62	18.47	79.1	61	49.2
8.72	-84.66	-74.1	-79.34	18.5	79.1	60.7	51.9
8.67	-84.62	-74.21	-79.52	18.56	79.2	60.6	56
8.71	-84.25	-74.1	-79.37	18.8	79.4	60.5	53.8
8.89	-84.29	-75.04	-79.77	19.17	79.7	60.7	51.6
8.72	-84.2	-74.88	-79.62	22.25	79.9	60.4	51.5
8.75	-84.34	-75.14	-79.77	22.25	79.9	60.5	49.5
8.7	-84.43	-75.19	-79.49	22.19	79.9	60.6	53.8
8.69	-84.52	-74.98	-79.92	22.16	79.6	60.9	52.8
8.71	-84.16	-74.05	-79.74	19.84	79.2	61.2	50.5
8.76	-84.98	-74.52	-79.74	18.47	79	61	49.9

8.76	-84.98	-74.78	-79.58	18.53	79.1	60.8	52.5
8.65	-84.98	-74.1	-79.74	18.59	79.3	60.8	51.4
8.55	-84.75	-74.52	-79.83	18.77	79.4	60.5	50.9
8.59	-85.35	-74.41	-79.68	18.96	79.6	60.4	52
8.65	-84.71	-74.1	-79.83	19.69	79.8	60.5	52.6
8.61	-84.75	-74.93	-79.8	22.19	79.9	60.4	53.3
8.62	-84.71	-74.36	-79.92	22.16	79.9	60.5	50.9
8.76	-85.16	-75.09	-79.74	22.13	79.8	60.6	55.3
8.9	-84.62	-75.35	-80.04	22.22	79.8	60.9	51
9.43	-85.16	-75.19	-79.65	22.13	79.6	61.4	53.2
8.72	-85.03	-75.66	-80.13	18.35	79.4	61.2	53.9
8.7	-84.98	-75.5	-80.23	18.44	79.4	60.9	52.5
8.64	-84.84	-76.07	-80.01	18.71	79.5	60.6	50.1
8.67	-85.21	-75.66	-80.23	19.29	79.9	60.5	51.3
8.63	-85.16	-75.14	-79.77	22.13	80.1	60.6	52.5
8.62	-84.98	-74.78	-79.77	22.16	80	60.8	52.6
8.67	-85.35	-75.4	-79.92	22.16	79.9	61	44
8.83	-85.16	-75.66	-80.04	22.13	79.9	61.1	53.3
8.76	-85.12	-75.71	-80.01	19.17	79.2	61.3	49.8
8.76	-85.49	-74.88	-79.71	18.44	79.4	61.1	52.2
8.69	-85.07	-75.35	-79.95	18.47	79.6	60.9	53.4
8.56	-84.57	-75.19	-80.23	18.74	79.6	60.6	53.8
8.81	-85.12	-74.98	-79.8	19.35	80.1	60.6	53
8.82	-85.21	-75.24	-80.32	22.22	80.2	60.6	54.8
8.9	-85.35	-75.3	-80.07	22.19	80.3	60.9	51
8.87	-85.07	-74.26	-80.32	22.13	80.2	60.8	52.1
9.38	-84.98	-74.93	-79.95	22.19	79.8	61.2	50.2
8.73	-85.49	-74.41	-80.29	18.38	79.3	61.3	50.4
8.69	-85.85	-74.36	-80.35	18.41	79.4	61.1	52.4
8.59	-85.07	-75.19	-80.07	18.71	79.6	60.8	52
8.82	-84.98	-75.71	-79.86	18.86	79.7	60.6	50.3
8.6	-85.07	-74.62	-79.37	20.12	79.8	60.7	51.8
8.84	-85.21	-74.83	-79.77	22.19	79.6	60.7	48.4
8.72	-84.94	-74.47	-80.01	22.25	79.9	60.7	48.1
8.66	-85.21	-75.87	-80.41	22.34	79.7	60.9	49.1
8.75	-85.07	-74.98	-80.1	22.16	79.3	61	52.4
8.74	-85.53	-74.62	-79.92	20.82	78.9	61.1	56.5
8.75	-85.67	-74.62	-80.13	18.38	78.9	61.3	50.5
8.72	-85.21	-75.61	-80.23	18.53	78.8	60.9	52.8
8.71	-85.07	-75.76	-79.49	18.83	78.9	60.7	51.6
8.79	-84.84	-75.5	-79.86	20.02	79.1	60.4	49.5
8.83	-85.67	-75.76	-79.77	22.31	79.1	60.6	51.1
8.76	-85.21	-75.71	-80.13	22.19	78.8	60.7	52.6
8.76	-85.26	-75.09	-80.13	22.28	78.4	61.1	51.7
8.76	-85.53	-75.3	-79.92	22.16	77.8	61.2	51.3
8.66	-125.81	-75.14	-80.01	18.5	77.5	60.9	51.9
8.72	-125.3	-74.52	-79.89	18.71	77.6	60.5	50.7

8.75	-125.12	-75.04	-79.98	19.57	77.9	60.3	53.5
8.69	-125.53	-75.76	-79.74	22.44	78.1	60.5	49.2
8.69	-125.76	-74.93	-80.41	22.28	77.8	60.7	48.7
8.85	-125.35	-74.47	-80.23	22.25	77.5	60.8	53.2
8.78	-125.62	-75.14	-80.23	18.59	76.7	61.1	53.3
8.66	-125.53	-75.61	-79.86	18.59	76.6	60.6	51.8
8.71	-125.26	-74.93	-80.04	19.26	77.2	60.3	51.6
8.71	-121.87	-69.8	-79.89	0.09	71.3	61	52.5
8.74	-120.63	-69.12	-95.15	0.09	67	60.7	53
8.74	-119.81	-68.76	-95.18	0.09	64.8	60.7	53.5
8.74	-119.44	-68.45	-95.18	0.12	63.4	60.6	53.9
8.74	-119.17	-68.24	-95.18	0.12	62.3	60.6	54.3
8.74	-118.94	-68.08	-95.21	0.12	61.6	60.7	55.2
8.73	-118.71	-67.88	-95.21	0.15	61.1	60.7	55.6
8.72	-118.53	-67.77	-95.18	0.15	60.7	60.6	56.1
8.72	-118.39	-67.62	-95.18	0.15	60.4	60.6	56.7
8.72	-118.25	-67.51	-95.18	0.15	60.3	60.7	57.1
8.71	-118.11	-67.41	-95.18	0.15	60.2	60.7	57.4
8.71	-117.98	-67.3	-95.18	0.15	60.2	60.7	57.8
8.7	-117.88	-67.15	-95.18	0.15	60.1	60.8	58.3
8.7	-117.75	-67.1	-95.18	0.15	60	60.8	58.8
8.7	-117.66	-66.99	-95.18	0.18	60.1	60.9	59.2
8.69	-117.56	-66.94	-76.23	0.15	60.2	61.4	59.6
8.68	-117.47	-66.84	-76.04	0.15	60.3	61.6	59.8
8.68	-117.38	-66.73	-75.98	0.15	60.4	61.8	60.3
8.68	-117.38	-68.13	-76.62	0.15	60.6	62	60.6
8.46	-117.24	-66.58	-76.07	0.15	60.9	62.4	55.2
8.66	-117.2	-66.53	-75.83	0.15	61.1	62.5	58
8.66	-117.11	-66.47	-75.74	0.15	61.3	62.7	59.2
8.67	-117.06	-66.37	-75.71	0.15	61.4	62.8	59.8
8.66	-116.97	-66.32	-75.62	0.12	61.5	62.9	60.3
8.66	-116.92	-66.27	-75.56	0.12	61.6	63	60.6
8.66	-116.79	-66.21	-75.46	0.12	61.7	63.1	61.4
8.65	-140.14	-66.16	-75.37	0.09	61.8	63.2	61.9
8.65	-140.14	-66.06	-75.34	0.12	61.9	63.2	62.5
8.65	-140.18	-66.06	-75.28	0.12	62	63.2	62.7
8.65	-140.14	-65.96	-75.22	0.12	62	63.3	63.2
8.65	-140.18	-65.96	-75.19	0.12	62.1	63.3	63.5
8.65	-140.18	-65.9	-75.13	0.12	62.1	63.3	63.9
8.65	-140.14	-65.85	-75.07	0.12	62.1	63.4	64.4
8.65	-140.14	-65.8	-75.04	0.12	62.1	63.4	64.7
8.64	-140.18	-65.75	-74.95	0.12	62.2	63.4	64.7
8.64	-140.18	-65.7	-74.95	0.12	62.2	63.4	65
8.63	-140.14	-65.64	-74.88	0.12	62.2	63.4	65.3
8.63	-140.09	-65.59	-74.82	0.09	62.2	63.4	65.4
8.63	-140.14	-65.59	-74.79	0.12	62.2	63.4	65.6
8.62	-140.23	-65.44	-74.73	0.12	62.2	63.4	65.8

8.62	-66.88	-65.38	-74.67	0.12	62.2	63.4	65.9
8.63	-67.06	-65.38	-74.58	0.12	62.2	63.4	66.1
8.62	-76.54	-65.33	-74.52	0.12	62.2	63.4	66.3
8.62	-77.09	-65.28	-74.49	0.12	62.2	63.3	55.1
8.8	-79.88	-70.68	-75.77	22.56	79.1	61.7	52.8
8.74	-81.44	-71.56	-75.59	22.59	83.3	62.2	52.3
8.74	-81.85	-71.97	-76.04	22.56	84.2	62.2	53.5
8.71	-82.67	-72.03	-76.29	22.5	84.2	61.9	54.1
8.64	-83.59	-71.56	-76.81	19.47	84.2	62.1	51.9
8.81	-83.82	-71.51	-76.75	22.47	84.3	62.5	50.5
8.8	-83.5	-71.77	-76.65	22.53	84.4	62.1	51.8
8.15	-84	-72.03	-76.99	19.41	84	61.8	51.7
8.91	-84.18	-72.44	-76.99	22.47	84	62.4	52.6
8.8	-84.18	-72.29	-76.96	22.47	84	62.4	53.1
8.81	-84.23	-72.65	-77.02	22.62	83.8	62.2	53.3
8.76	-84.78	-72.6	-77.23	20.24	83.5	61.9	53.1
8.65	-84.28	-72.55	-77.48	19.29	82.5	62.1	53
8.68	-84.28	-72.7	-77.63	19.32	82.1	62.5	51.4
8.85	-85.15	-72.44	-77.54	22.62	82.2	62.5	52.2
8.89	-84.96	-73.48	-77.75	22.53	82.2	62.2	51.7
8.8	-84.96	-72.91	-77.88	22.65	81.8	62	51.7
8.71	-84.69	-72.86	-77.75	22.71	81	61.8	52.8
8.72	-85.01	-73.17	-77.6	22.68	81	61.7	51.6
8.72	-85.33	-72.86	-77.91	22.74	80.5	61.7	51.6
8.7	-84.92	-73.64	-77.78	22.8	80	61.5	51.8
8.76	-85.51	-73.17	-77.66	22.74	79.4	61.6	53.9
8.75	-85.38	-73.22	-78	22.86	79	61.4	53.4
8.8	-85.19	-73.27	-78	22.77	78.7	60.9	51.9
8.76	-85.33	-73.32	-78.09	21.49	78.4	61.3	48.1
8.78	-85.24	-73.53	-78.21	20.09	77.9	61.1	52.8
8.79	-85.42	-73.22	-78.3	19.57	77.7	61.2	50.3
8.66	-84.96	-73.95	-77.88	19.44	77.2	61.2	52.9
8.71	-85.79	-73.32	-78.39	19.26	77	61.4	52
8.71	-85.92	-73.12	-78.15	21.46	76.5	61.4	53.1
8.89	-85.6	-73.32	-78.12	22.8	76.6	61.4	51.6
8.82	-85.79	-73.64	-78.36	22.83	76.5	61.3	51.6
8.87	-85.74	-72.96	-78.27	22.8	76.2	61.1	50.9
8.89	-85.92	-73.43	-78.58	22.77	75.6	60.8	52.5
8.82	-85.92	-73.48	-78.46	22.65	75.4	61	49.4
8.79	-86.38	-74.21	-78.39	22.8	75.5	61	52.4
8.78	-86.06	-73.79	-78.36	22.89	75.5	60.6	52
8.79	-85.88	-73.43	-78.46	22.86	75.4	60.5	51.4
8.75	-85.65	-73.74	-78.7	22.86	75.6	60.7	52.3
8.78	-86.06	-73.95	-78.76	22.83	75.5	60.5	53.2
8.75	-85.92	-73.38	-78.67	22.86	75.7	60.3	51.6
8.7	-85.7	-74.05	-78.67	22.86	75.7	60.3	50
8.77	-85.92	-73.95	-78.79	22.41	75.5	60.3	51.5

8.82	-86.11	-73.95	-78.82	20.48	75.4	60.1	56.3
8.79	-85.47	-73.27	-78.42	19.75	75.1	60.1	49.9
8.65	-85.97	-73.95	-78.73	19.47	74.9	60.2	53.1
8.65	-86.06	-73.84	-78.94	19.29	74.5	60.2	53.5
8.71	-86.06	-73.69	-78.55	19.29	74	60.3	52.4
8.71	-86.2	-74	-78.64	19.32	73.4	60.3	52.1
8.69	-86.15	-73.58	-78.7	19.29	73.5	60.2	52.6
8.73	-86.06	-73.74	-78.91	19.66	73.2	60.2	50.1
8.73	-86.34	-74.1	-78.79	22.71	73.4	60.3	51.7
8.76	-86.29	-73.58	-78.73	22.86	73.5	59.9	52.6
8.76	-86.15	-74.21	-78.76	22.99	73.4	59.8	51.2
8.71	-86.66	-74.21	-78.7	22.99	73.4	59.7	52.8
8.73	-86.38	-74.36	-78.85	23.02	73.5	59.2	51.9
8.73	-86.61	-74.36	-78.91	22.95	73.3	59.4	52.5
8.7	-86.25	-73.58	-79.19	23.02	73.6	59.4	54.1
8.7	-86.02	-74.1	-78.73	22.92	73.4	59.3	52
8.72	-85.92	-74.41	-79.13	22.95	73.5	59.3	51.5
8.79	-86.43	-73.84	-78.91	22.95	73.2	59.2	51.6
8.82	-86.11	-74.88	-78.73	23.05	72.8	59.2	51.3
8.71	-87.34	-74.36	-78.82	23.05	72.1	59	50.5
8.83	-86.15	-74.05	-79.22	22.25	72	59	53
8.74	-86.15	-74.62	-79.1	20.3	71.4	59	51.4
8.65	-86.52	-74.52	-79	19.99	71.2	58.9	53
8.65	-86.84	-74.47	-79.04	19.6	70.6	59	52.5
8.7	-86.89	-74.36	-78.94	19.51	70.2	59.2	53
8.74	-87.25	-74.36	-79.19	21.89	71.2	59.2	54.6
9.49	-86.43	-74.83	-79.1	22.92	72.8	59.2	51.5
8.75	-86.66	-74.15	-78.91	23.05	72.9	59.1	51.9
8.76	-86.34	-74.41	-79.07	23.08	72.4	59.1	49.5
8.65	-86.34	-74.52	-79.34	23.02	72	58.7	53.2
8.72	-87.07	-73.95	-79.04	23.05	72	58.9	53.8
8.76	-86.66	-74.52	-79.49	23.02	72.5	58.7	54.4
8.71	-87.3	-74	-79.19	23.02	72.7	58.7	50.8
8.77	-86.93	-74.62	-79.46	23.08	72.3	58.6	52.6
8.72	-86.52	-74.62	-79.28	23.05	72.2	58.4	52
8.74	-86.52	-74.21	-79.16	23.14	71.8	58.5	50.5
8.78	-86.47	-74.41	-79.49	23.2	71.4	58.4	51.4
8.75	-86.34	-74.93	-79.58	23.14	71.2	58.4	53
8.78	-87.12	-74.15	-79.46	21.98	71.2	58.4	51
8.83	-87.25	-74.21	-79.31	20.67	70.8	58.3	52.2
8.73	-86.89	-74.88	-79.22	20.42	70.3	58.4	53.2
8.79	-86.57	-74.78	-79.52	20.09	70.1	58.3	52.7
8.57	-86.66	-74.52	-79.55	20.05	69.9	58.2	51.9
8.38	-86.79	-74.21	-79.49	19.84	69.9	57.9	51.7
8.67	-86.89	-74.05	-79.37	19.72	69.4	58.3	50.4
8.71	-86.93	-75.19	-79.37	19.63	69.2	58.3	51.4
8.71	-87.07	-74.26	-79.46	20.51	69.2	58.4	52

8.73	-87.62	-74.57	-79.71	22.71	69.2	58.4	50
8.85	-87.48	-73.89	-79.62	22.74	69.6	58.5	51
8.69	-87.02	-74.15	-79.55	22.59	69.2	58.4	50.1
8.7	-86.79	-74	-79.55	23.05	69.6	58.4	51.5
8.91	-86.89	-74.93	-79.34	23.08	69.9	58.5	53.1
8.85	-86.98	-74.98	-79.62	23.14	69.9	58.2	50.5
8.8	-86.75	-74.73	-79.86	23.2	69.9	58.2	52.1
8.75	-87.07	-74.78	-79.65	23.17	69.8	57.9	49.5
8.72	-87.34	-74.41	-79.68	23.2	70.1	58	48.8
8.74	-87.21	-74.88	-79.86	23.14	70.5	57.9	52.1
8.72	-86.98	-74.36	-79.74	23.17	71.3	57.9	49.6
8.68	-86.98	-74.78	-79.83	23.14	71.9	58	48.4
8.84	-86.93	-75.09	-79.74	23.05	72.3	58	50.7
8.73	-87.12	-74.62	-79.83	22.5	72.7	58.1	52.3
8.71	-87.48	-74.83	-79.71	20.82	73.1	58.2	57.4
8.76	-86.79	-75.35	-79.52	20.09	73.3	58.1	53.3
8.65	-86.84	-74.78	-79.86	20.02	73.6	58.4	51.9
8.62	-86.84	-75.19	-79.68	19.66	73.5	58.5	51.8
8.67	-87.02	-74.88	-79.65	19.57	74.6	58.5	51.6
8.66	-87.07	-75.14	-79.65	19.54	75.1	58.8	53.3
8.71	-87.34	-75.19	-79.89	19.44	76.1	58.9	52
8.65	-87.21	-75.4	-79.62	19.44	76.8	59.1	51.9
8.7	-87.12	-75.19	-79.58	19.35	77.7	58.9	50.8
8.7	-87.07	-74.47	-79.52	20.21	78.5	59.2	53.8
8.7	-87.02	-75.04	-79.89	22.31	79	59.3	51.5
8.88	-86.57	-75.19	-79.58	22.68	79.9	59.3	51.2
8.86	-87.39	-74.57	-80.23	22.89	80.5	59.3	53.4
8.81	-87.34	-74.93	-79.71	22.86	81	59.2	50.9
8.78	-87.3	-75.3	-79.86	22.68	81.3	59.3	48.4
8.76	-87.62	-74.88	-79.86	22.74	81.8	59.2	49.6
8.64	-87.12	-74.57	-79.98	22.77	82	59.6	48.9
8.75	-87.53	-74.93	-80.01	22.77	82.4	59.3	55
8.71	-87.16	-75.4	-79.8	22.77	82.3	59.6	51.4
8.79	-87.12	-74.93	-79.83	22.77	83	59.6	51.1
8.8	-87.48	-75.35	-80.07	22.74	83.4	59.7	52.5
8.82	-86.93	-75.45	-79.83	19.99	83.7	59.7	50.9
8.68	-87.21	-74.98	-79.8	19.63	83.9	59.8	51.1
8.65	-87.53	-75.14	-80.04	19.23	84.5	60.2	51.2
8.71	-87.39	-75.09	-79.89	19.14	85.1	60.5	51.9
8.72	-87.57	-74.73	-79.95	19.02	85	60.5	52.2
8.75	-87.25	-75.5	-79.86	19.93	85.3	60.8	50.8
8.74	-87.07	-75.19	-79.95	20.6	85.2	60.7	52.5
8.68	-86.98	-74.67	-80.1	21.34	85.2	60.8	51.3
9.6	-87.02	-75.4	-79.74	22.5	85.4	61	52.8
8.87	-87.12	-75.24	-80.1	22.59	85.4	61.1	52.7
8.88	-87.39	-74.88	-79.77	22.59	85.4	61	49.1
8.76	-87.25	-75.09	-80.1	22.62	85.5	60.9	51

8.78	-87.21	-75.04	-80.07	22.62	85.6	61	50.5
8.82	-87.53	-75.09	-79.89	22.62	85.7	60.9	52.3
8.74	-87.62	-75.3	-80.04	22.53	85.7	61	47.4
8.68	-87.39	-75.24	-80.07	22.65	86	61.2	52.5
8.81	-87.16	-75.04	-79.86	22.65	86.1	61	51.6
8.72	-86.79	-75.61	-80.04	22.62	86.4	61.1	52
8.71	-87.16	-75.35	-80.1	22.59	86.4	61.2	54.9
8.72	-87.53	-75.3	-80.01	20.76	86.4	61.2	50.5
8.72	-87.89	-75.45	-80.13	19.81	86.3	61.4	51.7
8.84	-87.89	-74.98	-80.13	19.41	86.2	61.4	52.5
8.7	-87.12	-76.02	-79.95	19.51	86	61.3	51.9
8.65	-87.85	-75.45	-80.01	19.35	86	61.4	51.6
8.71	-87.44	-74.93	-80.1	19.17	85.8	61.5	51.4
8.74	-87.66	-75.24	-80.1	19.08	85.9	61.8	52.1
8.73	-87.53	-75.24	-80.29	20.12	85.6	61.8	51.6
8.74	-87.53	-75.92	-79.98	22.28	85.7	62	50.7
9.18	-87.48	-74.98	-80.1	22.53	85.8	62	51.6
8.97	-88.03	-74.93	-80.41	22.59	85.6	62.1	50.5
8.85	-87.94	-75.66	-80.26	22.59	85.4	62	51.4
8.83	-87.48	-75.66	-80.07	22.68	85.3	62.2	52.1
8.86	-87.94	-75.19	-79.98	22.56	85	62.2	51.6
8.82	-87.44	-75.61	-80.32	22.62	84.8	62	51.5
8.85	-87.3	-75.82	-80.13	22.62	84.6	61.9	51.6
8.76	-87.34	-75.14	-80.41	22.62	84.6	61.7	51.9
8.79	-88.17	-75.3	-80.38	22.65	84.3	61.7	51.5
8.79	-87.89	-75.66	-80.1	22.68	84.1	61.5	53.5
8.79	-87.16	-75.19	-80.38	22.74	83.7	61.6	49.9
8.69	-87.48	-74.93	-80.35	22.68	83.2	61.5	51.5
8.73	-87.34	-75.76	-80.29	22.71	83.3	61.4	52.2
8.78	-87.44	-74.83	-80.26	22.74	83.1	61.5	52.7
8.69	-87.39	-75.14	-80.32	22.77	83	61.5	51.8
8.72	-87.85	-75.04	-80.13	22.77	82.7	61.4	50.5
8.78	-87.62	-75.76	-80.38	22.77	82.2	61.4	52.9
8.72	-87.53	-75.66	-80.47	22.31	82.9	61.3	50.3
8.76	-87.25	-75.19	-80.23	21.98	82.7	61.4	51.9
8.79	-87.85	-76.39	-80.04	20.76	82.2	61.4	52.6
8.73	-87.21	-75.66	-80.32	19.87	82.2	61.4	53.4
8.57	-87.71	-75.61	-80.38	19.69	81.9	61.4	52
8.71	-87.57	-75.5	-80.5	19.32	81.3	61.5	51.6
8.72	-87.76	-75.5	-80.44	19.47	80.7	61.7	51.4
8.71	-87.34	-75.45	-80.44	22.5	80.8	61.8	50.2
8.94	-88.03	-75.87	-80.44	22.71	80.5	61.8	51
8.85	-87.89	-75.76	-80.23	22.77	79.9	61.5	53.3
8.88	-87.66	-75.71	-80.35	22.8	79.8	61.5	47.8
8.87	-88.08	-75.5	-80.56	22.86	79.3	61.3	53.6
8.65	-87.21	-75.5	-80.53	22.89	79.3	61.3	52.3
8.74	-87.94	-76.07	-80.35	22.86	79.7	61.2	51.5

8.75	-87.62	-75.4	-80.26	22.86	78.8	61	52.1
8.77	-88.12	-75.19	-80.41	22.86	78.4	60.9	52.4
8.68	-87.57	-75.24	-80.44	23.02	77.9	60.9	50.8
8.81	-87.71	-75.5	-80.23	22.95	77.3	60.8	53.2
8.76	-87.94	-75.61	-80.5	22.89	77.4	60.7	52.5
8.74	-87.62	-75.92	-80.62	22.86	77.3	60.5	50.3
8.74	-87.62	-75.35	-80.59	22.95	76.9	60.6	49.5
8.69	-87.62	-76.13	-80.44	22.62	76.7	60.5	51.2
8.7	-87.53	-75.92	-80.59	21.12	76.5	60.5	51.2
8.76	-88.17	-75.35	-80.68	20.36	75.9	60.3	49.9
8.8	-87.76	-75.45	-80.29	20.05	75.8	60.3	51.1
8.64	-87.76	-75.92	-80.65	19.96	75.7	60.3	52
8.65	-88.03	-75.87	-80.59	19.6	75.5	60.4	51.6
8.67	-88.17	-75.4	-80.53	19.41	74.9	60.6	49.2
8.74	-87.76	-76.02	-80.47	21.34	75	60.7	52.1
8.94	-87.02	-75.92	-80.78	22.95	75	60.8	52.2
8.8	-88.53	-76.07	-80.59	22.89	75.4	60.4	50.9
8.88	-87.48	-75.61	-80.68	22.92	75.2	60.4	52.3
8.89	-87.66	-75.5	-80.35	22.99	75.2	60.3	51.6
8.79	-88.81	-75.92	-80.68	23.02	75	60.2	53.2
8.82	-87.89	-75.82	-80.44	22.92	75.3	60.1	52.2
8.84	-87.89	-75.87	-80.81	22.95	75	60.2	47.8
8.83	-88.31	-75.3	-80.65	22.86	74.8	59.9	50.8
8.76	-87.44	-76.23	-80.71	22.95	75	60.1	50
8.75	-87.71	-76.65	-80.59	23.02	74.9	59.9	51.7
8.79	-87.89	-76.13	-80.65	22.99	74.8	59.7	52.9
8.78	-87.66	-75.61	-80.84	22.99	74.5	59.7	54.5
8.76	-87.94	-75.61	-80.78	22.99	74.3	59.5	48.4
8.69	-87.94	-75.61	-80.38	23.02	73.8	59.5	52.9
8.78	-87.89	-75.35	-80.53	22.95	73.7	59.3	50.3
8.71	-87.94	-76.39	-80.87	23.02	73.6	59.5	49.3
8.76	-87.99	-75.61	-80.74	23.05	73.5	59.3	50.9
8.66	-87.89	-75.61	-81.02	22.95	74.1	59.3	51.6
8.78	-88.12	-75.61	-80.78	22.99	73.4	59.2	50.3
8.81	-88.08	-76.13	-80.65	22.92	73.2	59.3	49.4
8.78	-88.26	-75.3	-80.71	23.05	73.1	59	47.6
8.76	-88.08	-76.02	-80.87	23.02	72.8	59	53.2
8.71	-87.66	-76.13	-81.02	23.02	72.7	59.1	50.4
8.79	-88.17	-75.61	-80.71	23.08	72.7	59.1	52.5
8.76	-88.21	-75.4	-80.65	22.53	72.8	59.1	51.9
8.78	-87.71	-76.18	-81.05	21.92	72.6	58.9	51.6
8.73	-87.99	-75.82	-80.71	22.53	72.7	59.2	50.9
8.76	-88.12	-75.66	-80.81	22.99	72.3	58.8	51.7
8.74	-88.26	-76.02	-81.02	21.28	72.4	58.9	51.9
8.8	-88.26	-75.66	-80.71	20.05	72.2	58.9	50.1
8.46	-88.35	-76.44	-80.9	19.72	72.1	58.9	49.8
8.66	-88.53	-75.92	-81.05	19.44	71.6	59.1	52.3

8.65	-87.99	-76.49	-80.93	22.28	71.3	58.9	52.1
8.83	-88.08	-75.92	-80.93	22.99	71.4	59.2	50.5
8.91	-88.17	-75.61	-81.26	23.08	71.6	58.9	50.7
8.72	-88.17	-76.33	-81.02	23.08	71.2	59.1	53.5
8.76	-88.53	-75.92	-80.84	23.08	71.5	59	51.3
8.91	-87.89	-75.66	-80.71	23.08	72	59.1	51.6
8.85	-88.53	-76.59	-80.62	23.05	71.6	59.1	49.5
8.89	-88.26	-76.7	-80.78	23.05	71.3	59.1	52.4
8.91	-88.44	-75.82	-80.9	23.05	71	59.1	49.7
8.81	-87.48	-76.65	-81.32	22.95	71.2	59.1	51.6
8.8	-88.26	-76.18	-80.87	23.08	71.2	59	52.4
8.75	-88.49	-76.13	-80.99	23.08	71.3	58.9	52.9
8.74	-87.89	-75.87	-80.93	23.17	71.5	58.9	52.7
8.74	-88.17	-75.4	-80.9	23.08	71.9	58.6	51
8.72	-88.35	-76.23	-80.74	22.99	72.3	58.7	52.4
8.74	-88.44	-76.7	-81.08	21.7	72.3	58.6	53.7
8.74	-88.12	-76.02	-80.93	20.85	72.2	58.7	50.8
8.81	-88.03	-76.02	-81.08	20.97	72.7	58.6	51.1
8.78	-88.35	-76.02	-81.26	22.01	73.3	58.6	49.5
8.78	-88.12	-76.07	-80.99	23.08	73.4	58.9	50.9
8.78	-88.63	-76.33	-81.26	22.99	74.2	58.9	50.7
8.74	-88.21	-76.39	-81.2	22.95	74.7	58.9	51.2
8.82	-88.35	-75.66	-81.11	23.05	74.9	59	51.5
8.85	-88.21	-76.23	-80.93	22.95	75.5	58.9	51.7
8.63	-88.08	-76.33	-81.26	20.39	75.9	59.1	51.8
8.66	-88.31	-76.33	-81.11	19.9	76.2	59.2	52.7
8.67	-88.26	-76.13	-81.39	19.47	76.1	59.4	50.2
8.77	-88.86	-76.23	-81.02	19.32	76.5	59.5	53.9
8.76	-88.58	-76.54	-80.93	21.73	76.8	59.8	55.9
8.95	-88.12	-76.23	-81.2	22.86	77	60.1	53.5
8.71	-88.4	-76.23	-81.2	22.83	77.6	59.6	51.4
8.8	-88.35	-76.65	-81.17	22.77	77.7	60.1	52.3
8.76	-88.08	-76.54	-81.23	22.77	77.8	60.2	52
8.82	-88.72	-76.23	-81.08	22.8	77.9	60.1	52.1
8.87	-88.26	-76.02	-81.11	22.74	78.4	60.2	52.7
8.82	-88.12	-76.28	-81.32	22.71	78.7	60.2	50.5
8.85	-88.67	-76.02	-81.08	22.8	78.8	60.2	49.4
8.88	-88.12	-76.59	-81.2	22.77	78.8	60.1	50.1
8.81	-88.12	-76.44	-81.02	22.8	79	60.2	50.9
8.81	-88.49	-76.44	-81.11	22.74	79	60.3	51.5
8.77	-88.12	-75.61	-81.45	22.77	79.3	60.3	51.7
8.75	-87.85	-76.54	-81.17	22.77	79.6	60.2	51.7
8.78	-88.17	-75.66	-81.32	22.74	79.9	60.3	53.6
8.79	-88.72	-76.28	-81.14	22.68	80.1	60.3	52.1
8.76	-88.35	-75.92	-81.2	20.73	80.3	60.3	52
8.76	-88.63	-76.28	-81.39	19.96	80.2	60.3	51.3
8.78	-87.94	-75.87	-81.29	19.66	80.2	60.4	50

8.75	-88.49	-75.76	-81.2	19.57	80.3	60.4	50.5
8.78	-88.21	-76.02	-81.42	19.41	80	60.6	53.1
8.61	-88.44	-77.01	-81.26	19.69	80.2	60.6	52.6
8.37	-88.49	-75.87	-81.36	19.41	80.5	60.5	51.1
8.57	-88.49	-76.13	-81.26	19.26	80.6	60.8	48.7
8.7	-88.08	-76.28	-81.2	19.11	80.7	61	51.6
8.72	-88.49	-76.8	-81.2	20.02	80.7	61.1	52.5
10.03	-87.94	-76.33	-81.32	22.47	81	61.4	51.1
8.85	-88.4	-76.28	-81.29	22.62	81	61.3	51.5
8.85	-88.63	-76.07	-81.23	22.5	81.2	61.1	48.4
8.87	-88.4	-76.33	-81.11	22.65	81	61.3	51
8.78	-88.35	-76.28	-81.42	22.62	81.2	61.4	52.5
8.9	-88.49	-76.13	-81.42	22.65	81.1	61.3	52.5
8.78	-88.49	-76.23	-81.48	22.62	81.2	61.4	51
8.83	-88.63	-76.54	-81.32	22.59	81	61.1	50.5
8.82	-88.49	-75.92	-81.48	22.65	81	61.4	51.1
8.78	-88.44	-75.92	-81.23	22.62	81	61.2	53.8
8.82	-88.17	-76.44	-81.17	22.59	81	61.2	51.8
8.77	-89.13	-76.49	-81.57	22.68	80.8	61.3	50.2
8.77	-88.72	-76.13	-81.48	22.65	80.8	61.2	54.5
8.81	-88.99	-76.23	-81.2	22.71	80.7	61.3	54.9
8.81	-88.81	-76.28	-81.42	22.68	80.3	61.2	53
8.65	-88.58	-75.71	-81.39	22.59	80.3	61.2	52.1
8.75	-88.12	-76.9	-81.6	22.65	80.3	61.2	51.6
8.76	-88.4	-76.13	-81.17	22.65	80	61.1	51.5
8.77	-88.53	-76.23	-81.2	22.71	79.9	61.2	52.3
8.76	-88.26	-76.28	-81.42	22.71	79.6	61.3	50.9
8.78	-88.86	-75.97	-81.45	21.58	79.7	61.1	53.9
8.76	-88.58	-76.7	-81.54	19.69	79.1	61.1	51.1
8.63	-88.21	-76.44	-81.45	19.29	78.7	61.3	49.2
8.73	-88.4	-76.28	-81.48	19.08	78.4	61.4	53.7
8.7	-88.67	-76.65	-81.39	19.23	78.4	61.5	50.2
8.74	-88.72	-76.18	-81.32	22.22	78	61.6	52.1
8.82	-88.44	-76.54	-81.26	22.56	78.3	61.6	53
8.82	-88.35	-76.54	-81.54	22.68	78.4	61.4	50.9
8.85	-88.76	-76.65	-81.6	22.59	78.3	61.4	54.1
8.8	-88.86	-76.59	-81.45	22.65	77.9	61.4	47.3
8.85	-88.44	-76.65	-81.51	22.74	77.7	61.3	52.6
8.76	-88.95	-76.59	-81.23	22.65	77.5	61.3	52.4
8.74	-88.72	-76.65	-81.45	22.65	77.5	61.3	54.5
8.71	-88.53	-76.13	-81.6	22.8	77.3	61	51.7
8.74	-88.67	-75.92	-81.51	22.68	77.5	60.9	50.3
8.74	-88.08	-76.23	-81.36	22.74	77.5	60.8	52
8.71	-88.26	-77.06	-81.69	22.71	77.4	60.9	50.1
8.78	-88.86	-76.49	-81.57	22.71	77.4	60.6	51
8.86	-88.99	-76.33	-81.6	22.77	77.3	60.6	49.5
8.69	-88.86	-76.9	-81.6	22.71	77.2	60.3	50.5

8.81	-89.13	-76.7	-81.63	22.77	77.4	60.6	53
8.74	-88.58	-75.71	-81.78	22.77	77.3	60.8	49.9
8.74	-88.86	-76.96	-81.39	19.75	77	60.4	53.1
8.65	-88.58	-76.75	-81.69	19.23	76.6	60.7	50.3
8.71	-88.86	-76.44	-81.63	19.87	76.4	60.8	52.5
8.85	-88.08	-77.16	-81.78	22.65	76.8	61	52.6
8.78	-88.49	-77.11	-81.57	22.71	76.9	60.8	49.7
8.78	-88.63	-76.49	-81.57	22.68	76.9	60.7	53
8.63	-88.53	-76.96	-81.69	22.68	77	60.6	51.6
8.75	-88.31	-76.65	-81.75	22.74	77	60.4	48.1
8.71	-88.99	-77.01	-81.66	22.71	77.1	60.4	52.6
8.76	-88.53	-76.13	-81.57	22.74	77.1	60.5	56.5
8.72	-88.31	-76.59	-81.69	22.74	77.1	60.3	51
8.75	-88.81	-76.65	-81.78	22.74	77.1	60.4	51.7
8.69	-88.58	-76.33	-81.75	22.71	77.1	60.3	51.6
8.74	-88.99	-76.54	-81.54	22.8	77	60.4	51.8
8.8	-88.76	-77.16	-81.75	22.74	77	60.4	52
8.71	-88.99	-76.49	-81.63	22.71	77.2	60.3	55
8.76	-88.86	-76.75	-81.69	22.71	76.9	60.3	51.1
8.81	-88.86	-76.49	-81.75	22.74	77.2	60.3	56
8.74	-88.72	-76.49	-81.6	22.25	76.8	60.3	51.5
8.75	-88.53	-76.9	-81.81	20.18	76.6	60.3	52.5
8.8	-88.81	-77.06	-81.57	19.69	76.3	60.2	53.5
8.81	-88.72	-76.44	-81.66	19.69	76.4	60.2	49.4
8.81	-88.53	-76.7	-81.75	20.12	76.5	60.1	51
8.77	-89.31	-76.33	-81.78	20.67	76.1	60.2	50.9
8.76	-89.08	-76.33	-81.57	21	76.4	60.2	51.9
8.79	-88.44	-76.28	-81.57	20.24	76.3	60.1	52.2
8.64	-88.95	-77.27	-81.75	19.81	76.3	60.1	51.5
8.82	-88.53	-76.39	-81.97	19.41	75.4	60.2	46.5
8.17	-88.63	-77.16	-81.66	19.47	75.4	59.9	52.5
8.67	-89.4	-76.33	-81.66	19.32	75.2	60.2	50.7
8.68	-89.04	-76.96	-81.78	19.32	74.8	60.1	53.2
8.66	-88.72	-76.59	-81.97	19.26	74.8	60.1	51.4
8.66	-88.86	-76.8	-81.84	19.26	74.5	59.9	52.6
8.62	-88.95	-76.7	-81.6	19.32	74.2	59.8	52.7
8.68	-88.26	-77.42	-81.6	19.29	73.8	60.1	53.2
8.65	-88.95	-77.27	-81.9	19.2	73.6	60.1	51.2
8.71	-89.04	-76.7	-81.84	19.17	73.4	60.1	52.5
8.72	-89.04	-77.01	-81.94	21.55	73.2	60.1	52.4
8.88	-88.63	-76.7	-81.75	22.68	73.4	60.1	51.2
8.82	-88.95	-76.75	-81.9	22.8	73.5	59.9	52.5
8.79	-88.76	-76.9	-81.63	22.8	73.5	59.6	54
8.82	-88.35	-77.16	-81.78	22.8	73.6	59.5	53.5
8.79	-88.72	-76.7	-81.94	22.83	73.8	59.3	52.5
8.79	-88.58	-76.44	-81.84	22.77	73.8	59.4	54.1
8.79	-89.22	-77.22	-82	22.77	74	59.6	49.1

8.85	-89.36	-77.11	-82.06	22.86	74.1	59.4	54.8
8.83	-88.76	-76.96	-81.84	22.89	74.3	59.5	51.2
8.81	-88.58	-77.32	-81.84	22.86	74.5	59.3	50.5
8.75	-89.31	-77.01	-82.12	22.83	74.4	59.2	54
8.79	-88.86	-76.8	-82	22.89	74.4	59.2	50.2
8.73	-89.04	-77.01	-81.87	20.67	74.3	59.2	52.3
8.82	-88.86	-76.28	-81.97	19.87	74.1	59.2	52
8.82	-89.08	-76.49	-81.97	19.72	73.7	59.3	53
8.62	-88.99	-76.59	-81.94	19.75	73.5	59.1	51.1
8.32	-89.13	-76.49	-82.21	19.54	73.3	59.2	52.2
8.69	-89.08	-76.8	-81.81	19.51	73.1	59.2	52.3
8.68	-88.63	-76.9	-81.94	19.35	72.8	59.1	52.6
8.69	-88.53	-77.11	-82.21	19.41	72.7	59.3	51.2
8.68	-88.81	-76.8	-81.94	19.32	72.7	59.2	48.4
8.66	-88.49	-76.75	-82.18	19.29	72.4	59.4	50.3
8.74	-88.99	-76.9	-81.81	19.26	72.4	59.5	53.4
8.74	-88.44	-77.11	-82.12	19.84	72.3	59.4	52.3
9.96	-89.4	-76.54	-81.97	22.65	73	59.7	50.7
8.85	-88.81	-77.27	-82.12	22.8	73.3	59.6	52
8.87	-88.76	-77.01	-81.97	22.8	74.1	59.5	50.4
8.79	-88.72	-76.75	-82.09	22.8	74.7	59.7	52.1
8.8	-89.13	-77.32	-81.9	22.83	74.6	59.7	52.8
8.81	-89.13	-77.16	-82.21	22.71	74.9	59.8	50.4
8.87	-89.04	-77.01	-82.18	22.68	75.6	60.1	56.1
8.88	-89.04	-76.8	-82.15	22.74	76.3	60.2	52.7
8.88	-88.95	-77.01	-82.15	22.71	76.8	59.9	51.8
8.82	-89.22	-76.9	-82.03	22.65	77.7	59.8	53.1
8.86	-89.4	-77.01	-82.39	22.71	78.3	60.1	53.5
8.81	-89.59	-77.06	-82.06	22.71	78.9	60.1	51.6
8.8	-89.04	-77.22	-82.3	22.71	79.8	60.2	53.4
8.78	-89.36	-76.8	-82.21	22.68	80.3	60.3	50.8
8.79	-89.36	-76.96	-82.27	22.8	81	60.3	52.6
8.75	-88.95	-76.75	-82.24	22.74	81.2	60.3	53.3
8.78	-89.22	-76.75	-82.12	22.77	81.6	60.3	53.8
8.73	-88.95	-77.58	-82.18	22.86	81.8	60.3	49.8
8.75	-89.4	-77.16	-82.18	22.53	81.9	60.3	52
8.73	-89.27	-76.54	-82.27	20.97	81.9	60.3	51.9
8.74	-89.13	-77.58	-82.27	20.45	81.8	60.4	47.9
8.68	-89.22	-77.27	-82.33	20.67	81.7	60.3	51.6
8.79	-89.13	-76.7	-82.18	20.57	81.9	60.4	52.4
8.82	-89.45	-77.37	-82.24	20.42	82.5	60.5	51.4
8.85	-89.4	-77.22	-82.33	19.99	82.2	60.5	49.1
8.76	-89.45	-76.75	-82.36	19.69	82	60.7	52.8
8.71	-88.81	-76.7	-82.27	19.6	82.1	60.6	52.3
8.67	-89.59	-76.96	-82.09	19.32	82.1	60.6	52.3
8.71	-89.54	-77.42	-82.39	19.14	82.2	61	53.4
8.74	-89.27	-77.27	-82.12	19.11	82	61.3	53.7

8.77	-89.45	-77.32	-82.21	20.51	81.9	61.5	51.6
8.77	-89.08	-76.9	-82.18	22.07	81.8	61.4	52.2
9.21	-88.95	-77.27	-82.03	22.53	82	61.4	51.6
8.91	-89.4	-77.16	-82.3	22.62	81.6	61.4	50.4
8.81	-89.63	-77.22	-82.27	22.71	81.9	61.4	52.4
8.86	-88.99	-77.16	-82.3	22.71	81.9	61.3	52.4
8.86	-88.76	-77.11	-82.18	22.77	81.8	61.3	52.8
8.89	-89.22	-76.28	-82.33	22.65	81.9	61.4	55.4
8.82	-89.08	-76.65	-82.36	22.71	81.8	61.6	52.4
8.75	-89.18	-77.58	-82.27	22.71	81.8	61.4	51.3
8.81	-89.54	-77.53	-82.27	22.77	81.9	61.4	50
8.76	-89.5	-77.11	-82.3	22.71	82.1	61.4	52.2
8.83	-89.27	-77.37	-82.21	22.71	82.1	61.4	52.7
8.85	-89.63	-77.06	-82.09	22.74	82.1	61.4	52
8.74	-89.45	-77.16	-82.21	22.71	82.4	61.2	51.7
8.81	-89.13	-77.37	-82.45	22.8	82.5	61.3	51.6
8.75	-89.4	-77.32	-82.61	22.68	82.8	61.2	51.8
8.73	-89.68	-77.11	-82.33	22.16	82.5	61.4	53
8.82	-89.22	-77.06	-82.15	20.85	82.1	61.4	52.8
8.71	-89.45	-77.27	-82.3	20.05	82.1	61.4	53.7
8.79	-89.36	-77.53	-82.36	19.75	82	61.4	53
8.78	-89.77	-77.58	-82.27	19.63	81.6	61.4	52
8.81	-89.5	-77.84	-82.45	19.81	81.8	61.4	51.6
8.79	-89.36	-77.22	-82.15	20.45	81.8	61.4	51.5
8.8	-89.54	-77.32	-82.42	20.82	81.6	61.4	52.9
8.79	-89.13	-77.06	-82.24	20.57	81.1	61.5	51.4
8.75	-89.54	-77.58	-82.39	19.81	80.9	61.4	50.5
8.8	-89.22	-77.06	-82.36	19.6	80.7	61.4	50.8
8.67	-89.68	-76.9	-82.58	19.72	80	61.4	53
8.43	-89.5	-77.16	-82.61	19.63	79.9	61.3	53.2
8.68	-89.45	-77.37	-82.42	19.47	79.3	61.4	52.1
8.71	-89.54	-77.16	-82.42	19.23	78.8	61.6	51.7
8.71	-89.13	-76.8	-82.55	19.26	78.5	61.5	49.9
8.73	-89.13	-77.06	-82.48	19.2	78.5	61.5	53.6
8.74	-89.59	-77.06	-82.36	19.2	78.1	61.7	53.9
8.79	-89.45	-77.37	-82.45	19.23	78	61.5	49.4
8.71	-89.13	-77.58	-82.39	19.78	78.1	61.6	52.9
8.75	-89.68	-77.32	-82.55	21.25	77.8	61.6	53.3
9.36	-89.22	-76.96	-82.42	22.68	77.9	61.4	48.8
8.87	-89.59	-76.96	-82.55	22.83	78.3	61.4	51.8
8.83	-89.73	-77.22	-82.33	22.83	78.1	61.2	51.4
8.85	-89.45	-77.48	-82.64	22.89	78.1	61.2	53.6
8.81	-89.54	-77.01	-82.64	22.86	77.9	61	52
8.85	-89.45	-77.42	-82.48	22.83	78.3	61.1	53
8.76	-89.63	-77.48	-82.58	22.8	78	61.1	51.4
8.83	-89.45	-77.42	-82.36	22.83	77.9	60.9	49.8
8.79	-89.86	-77.22	-82.67	22.83	77.9	60.8	53.1

8.83	-89.73	-77.16	-82.39	22.83	77.6	60.8	51.7
8.75	-88.67	-77.84	-82.7	22.86	77.7	60.7	51.7
8.74	-90.18	-77.84	-82.55	22.83	77.8	60.8	52.3
8.85	-89.63	-77.53	-82.39	22.89	77.7	60.5	49.5
8.74	-89.73	-77.68	-82.45	22.8	77.7	60.7	51.7
8.82	-89.95	-77.06	-82.61	22.83	77.5	60.6	52.3
8.82	-89.31	-77.37	-82.79	22.8	77.4	60.4	52.4
8.73	-89.54	-77.22	-82.79	21.15	77.3	60.6	50.8
8.73	-89.77	-77.74	-82.42	19.9	77.1	60.6	50.9
8.68	-89.27	-77.58	-82.73	19.57	76.6	60.6	52.1
8.68	-89.31	-77.37	-82.64	19.2	76.5	60.7	50
8.72	-89.73	-77.06	-82.64	19.11	76.3	61	53.4
8.76	-89.95	-77.27	-82.64	21.46	76.4	61	52.8
8.94	-89.86	-77.94	-82.39	22.53	76.6	60.8	51.6
8.76	-89.91	-77.58	-82.76	22.74	76.6	60.9	51.6
8.85	-90.09	-77.68	-82.73	22.71	76.7	60.7	51.6
8.82	-89.45	-77.94	-82.58	22.74	77.1	60.8	50.4
8.85	-89.59	-77.68	-82.7	22.74	76.8	60.7	53.2
8.84	-89.95	-77.37	-82.7	22.68	76.7	60.9	53.3
8.85	-90.23	-77.58	-82.45	22.65	76.5	60.7	52.8
8.89	-89.68	-77.79	-82.67	22.74	76.4	60.4	50.2
8.79	-89.68	-77.79	-82.61	22.68	75.9	60.6	51
8.87	-89.5	-77.58	-82.76	22.74	76.3	60.6	52
8.81	-89.59	-77.48	-82.7	22.74	76.5	60.5	52.4
8.76	-89.4	-77.37	-82.73	22.68	76.1	60.3	51.7
8.82	-89.63	-77.74	-82.67	22.71	76.3	60.3	51.9
8.84	-89.95	-77.48	-82.55	22.68	76.1	60.3	51
8.85	-89.4	-77.68	-82.67	22.62	76.2	60.5	53
8.84	-89.63	-77.42	-82.55	22.68	76.1	60.3	52
8.8	-89.4	-77.27	-82.73	22.62	75.9	60.4	53.2
8.85	-89.59	-77.68	-82.64	22.59	75.8	60.6	49.4
8.8	-89.4	-77.06	-82.79	22.71	75.8	60.5	52.9
8.84	-89.68	-77.42	-82.73	22.68	75.8	60.3	52.1
8.88	-89.91	-77.01	-83.06	22.74	76.1	60.3	53.3
8.68	-89.77	-77.74	-82.76	22.68	76.1	60.3	53.5
8.74	-89.95	-78.31	-82.82	22.65	76.1	60.2	53.6
8.82	-89.68	-77.89	-82.79	22.71	75.9	60.2	52.3
8.79	-89.91	-77.84	-82.7	22.71	75.8	60.2	51.3
8.76	-89.22	-78.05	-82.67	22.65	76.1	60.2	49.8
8.79	-89.5	-77.84	-82.64	22.56	75.9	60.3	51.3
8.82	-89.27	-78.2	-82.61	22.68	75.9	60.2	52
8.94	-89.63	-77.53	-82.55	22.71	75.8	60.3	51.3
8.69	-90.09	-77.53	-82.76	22.65	75.5	60.4	51.5
8.78	-89.82	-77.37	-82.79	18.89	75.4	60.3	49.5
8.71	-89.77	-77.11	-82.55	19.02	75.5	60.3	51.8
8.69	-89.95	-77.94	-82.67	19.17	75.5	59.8	50.8
8.73	-89.63	-77.94	-82.64	19.32	75.6	59.8	52.3

8.77	-89.59	-77.63	-82.85	19.93	76.2	59.8	52.9
8.76	-89.5	-77.48	-82.88	22.53	76.3	59.7	52.3
8.68	-89.77	-77.99	-82.82	22.68	76.5	59.9	51.5
8.82	-89.59	-77.53	-82.58	22.56	76.2	59.9	52.6
8.88	-89.63	-77.68	-82.55	22.53	76.4	60.3	50.3
8.76	-89.5	-77.84	-82.67	22.65	76.2	60.3	53.8
8.89	-89.82	-77.74	-82.94	22.56	76.2	60.3	53.4
8.88	-89.95	-77.63	-82.82	22.59	76.2	60.3	51.3
8.91	-89.68	-77.89	-82.7	22.59	76.2	60.3	51.6
8.79	-89.77	-77.32	-82.82	22.62	76.2	60.4	51.9
8.92	-90.14	-76.96	-82.73	22.56	76.1	60.5	53.6
9.04	-89.45	-77.84	-82.73	22.31	76.1	60.5	51.6
8.74	-89.63	-77.37	-83	18.89	75.9	60.4	54.1
8.73	-89.73	-77.99	-82.67	18.93	76.1	60.4	53.2
8.72	-88.86	-77.79	-82.48	18.93	76.4	60.3	51.5
8.15	-89.59	-77.63	-82.85	19.35	76.5	59.9	51.9
8.79	-89.5	-77.68	-82.94	20.79	77.3	59.9	49.6
8.82	-89.82	-77.27	-82.85	22.59	77.4	59.9	53.3
8.78	-90.27	-77.79	-82.94	22.53	77.4	60.3	53.1
8.77	-89.68	-77.68	-82.82	22.56	77.4	60.3	52.6
8.79	-89.95	-77.53	-82.58	22.56	77.6	60.3	52
8.83	-90.14	-77.63	-82.85	22.5	77.5	60.3	44
8.81	-89.77	-77.63	-82.76	22.5	77.5	60.5	48.6
8.98	-90.32	-77.84	-82.48	22.44	77.1	60.8	51.7
8.8	-89.91	-77.27	-82.88	18.74	76.7	60.4	53.6
8.73	-90.23	-77.63	-82.76	18.93	77	60.6	52.9
8.03	-89.63	-77.42	-82.88	19.17	77.2	60.2	52.1
8.72	-89.63	-77.74	-82.97	20.51	77.7	60.3	50.8
8.78	-89.63	-77.68	-82.91	22.56	77.7	60.3	51.9
8.78	-89.95	-77.84	-82.97	22.53	77.8	60.3	54.4
8.77	-89.86	-77.27	-82.88	22.53	77.8	60.3	51.2
8.79	-89.86	-77.94	-82.82	22.47	77.7	60.3	52.5
8.79	-90.09	-78.2	-83.16	22.47	77.8	60.3	50.8
8.76	-89.77	-77.42	-82.76	22.31	77.7	60.5	52.6
8.88	-89.95	-77.68	-82.73	22.41	77.8	60.6	53.3
8.75	-90.14	-77.99	-82.64	20.97	77.2	60.9	51.5
8.7	-90.14	-77.22	-82.79	18.71	76.9	60.5	51.6
8.66	-89.5	-77.58	-82.82	18.93	77.4	60.4	52.2
8.65	-89.82	-77.58	-82.73	18.99	77.5	60.4	51.6
8.35	-89.95	-78.72	-82.67	19.08	77.5	60.3	50.5
8.73	-89.31	-77.84	-82.67	19.23	77.7	60.3	50.7
8.68	-89.77	-77.89	-82.76	21.28	77.9	60.3	52
8.79	-90.32	-77.89	-82.76	22.47	78.4	60.3	50.3
8.83	-89.95	-77.68	-82.76	22.34	78.4	60.4	51.6
8.8	-89.82	-77.53	-82.82	22.34	78.4	60.3	50.7
8.81	-89.86	-78.05	-82.61	22.34	78.7	60.4	52.4
8.81	-89.86	-77.32	-82.82	22.41	78.5	60.7	52.1

8.9	-89.86	-77.48	-82.91	22.28	78.7	60.8	50.3
8.83	-90.05	-77.53	-82.73	22.28	78.5	61	50.9
8.7	-89.54	-77.94	-82.55	21.83	78.3	61.2	50.2
8.72	-90.05	-77.58	-82.88	18.53	78.4	60.9	52.9
8.68	-89.91	-77.48	-82.85	18.74	78.7	60.8	51.8
8.68	-89.77	-77.42	-82.61	19.14	78.9	60.5	52.4
8.73	-89.91	-77.42	-82.64	19.6	79.2	60.6	54.7
8.8	-89.77	-77.53	-82.58	22.01	79.6	60.5	51.3
8.79	-89.22	-78.31	-82.85	22.22	79.7	60.7	52.3
8.72	-90.05	-77.74	-82.64	22.25	79.8	60.6	52.4
8.69	-89.68	-77.58	-82.64	22.22	79.8	60.6	52
8.75	-89.5	-78.25	-82.7	22.19	79.8	60.8	52
8.81	-89.86	-77.84	-82.64	22.16	79.7	61.2	52.5
8.9	-89.95	-77.53	-82.64	22.25	79.7	61.1	50
8.88	-90.18	-77.48	-82.82	22.16	79.5	61.2	53.1
8.89	-90.14	-77.48	-82.39	22.16	79.5	61	51.2
8.85	-90.09	-77.42	-82.82	22.19	79.7	61.2	52.2
8.83	-89.91	-77.42	-82.55	22.25	79.5	61.4	48.3
8.74	-90.32	-77.74	-82.45	21.95	79.4	61.4	52.5
8.75	-89.82	-77.68	-82.3	18.44	79.2	61.4	52.5
8.72	-89.54	-77.32	-82.61	18.44	79.5	61.3	52.1
8.73	-89.91	-77.27	-82.7	18.5	79.3	61.4	50.9
8.71	-89.82	-77.58	-82.42	18.59	79.4	61.3	52.3
8.66	-90.37	-77.68	-82.36	18.77	79.5	61	50.1
8.76	-89.31	-77.89	-82.76	19.23	79.9	60.9	51.5
8.77	-90.05	-77.63	-82.42	22.28	79.9	60.7	54.7
8.73	-90.23	-77.89	-82.3	22.28	80	61	50.7
8.79	-89.63	-77.48	-82.48	22.19	79.9	61	53.7
8.77	-89.95	-77.37	-82.36	22.31	79.9	61	53.4
8.77	-89.86	-77.79	-82.45	22.22	80	60.9	49.4
8.79	-90.23	-77.89	-82.3	22.19	79.9	61	58.4
8.82	-90.14	-77.89	-82.67	22.25	79.9	61	52.9
8.77	-90.41	-77.48	-82.48	22.25	79.9	61.1	55.6
8.82	-89.95	-77.27	-82.85	22.19	79.9	61.1	53.2
8.78	-89.95	-77.48	-82.67	22.28	79.8	61.1	53.3
8.74	-89.95	-77.11	-82.42	22.22	79.7	61	50.9
8.85	-90.23	-78.2	-82.39	22.25	79.5	61.3	50.5
8.9	-89.86	-77.84	-82.45	22.22	79.4	61.4	50.2
8.73	-89.82	-77.94	-82.58	18.47	78.8	61.4	52.5
8.74	-89.86	-78.36	-82.42	18.47	78.8	61.1	52.4
8.71	-90.05	-77.53	-82.39	18.59	78.8	61.3	51.1
8.69	-89.91	-78.05	-82.67	18.56	78.8	61.2	52.7
8.62	-89.68	-77.58	-82.42	18.59	78.8	61.2	52.1
8.71	-90.32	-77.84	-82.27	18.53	78.8	61.3	52.4
8.62	-90.41	-78.31	-81.87	18.68	78.8	61.3	51.6
8.71	-89.95	-77.42	-82.42	18.74	78.8	61.2	51.2
8.59	-89.95	-77.84	-82.42	18.86	78.9	61.1	51.1

8.68	-90.18	-77.37	-82.48	19.17	78.8	60.9	51
8.69	-89.95	-77.94	-82.58	19.14	79.1	60.9	52.2
8.71	-89.95	-78.46	-82.09	20.02	79.2	60.9	55.3
8.64	-89.86	-78.2	-82.36	22.41	79.5	60.8	51.4
8.81	-89.82	-77.79	-82.21	22.25	79.3	61	53.3
8.74	-89.73	-78.2	-82.33	22.31	79	60.8	51.6
8.77	-90.23	-77.84	-82.45	22.28	79.4	60.9	49.3
8.83	-90.37	-77.58	-82.33	22.31	78.9	61.2	53.4
8.88	-89.91	-77.68	-82.39	22.22	78.8	61.1	53.7
8.79	-90.27	-77.48	-82.61	22.22	78.8	61.2	51.2
8.81	-89.68	-77.42	-82.39	22.31	78.8	61.2	53.7
8.93	-90.46	-77.48	-82.12	22.41	78.8	61.4	51
8.79	-89.95	-77.79	-82.21	22.28	78.4	61.4	52.6
8.73	-90.6	-77.63	-82.36	18.53	78.1	61.3	52.7
8.64	-89.82	-77.63	-82.61	18.74	78.3	61.1	51.9
8.41	-89.82	-77.68	-82.33	18.96	78.4	60.7	50
8.73	-90.78	-77.27	-82.36	19.11	78.4	60.8	51.7
8.75	-89.54	-77.53	-82.3	19.26	78.6	60.7	50.9
8.78	-89.63	-77.79	-82.42	19.41	78.5	60.7	52.5
8.8	-90.14	-78.15	-82.12	19.41	78.8	60.8	52.2
8.8	-90.09	-77.74	-82.18	19.72	78.1	60.6	51.4
8.73	-89.91	-77.84	-82.12	20.82	78.7	60.6	53.4
8.76	-89.95	-77.63	-82.61	22.47	78.8	60.7	49.5
8.69	-89.45	-77.58	-82.36	22.34	78.8	60.7	54.4
8.76	-89.68	-77.99	-82.42	22.41	78.7	60.8	51.6
8.82	-90.32	-77.37	-82.48	22.31	78.6	60.7	48.7
8.84	-89.95	-77.48	-82.42	22.31	78.5	61	52.7
8.85	-90.09	-77.94	-82.39	22.31	78.1	61.2	49.2
8.91	-89.91	-78.15	-82.33	22.34	78.3	61.3	52.3
8.91	-89.91	-77.74	-82.36	22.31	78	61.3	49.7
9.44	-90.09	-77.42	-82.36	22.28	77.7	61.2	52.6
8.75	-90.23	-77.79	-82.48	21.64	77.7	61.3	51.8
8.71	-90.37	-77.89	-82.12	18.96	77.7	61.2	52.7
8.69	-90.18	-77.68	-82.33	18.74	77.7	60.9	50.2
8.65	-90.23	-77.06	-82.18	18.83	77.6	60.9	51.4
8.64	-90.23	-77.42	-82.18	19.29	78	60.6	52.1
8.75	-90.18	-77.48	-82.09	19.93	78.5	60.6	53.1
8.78	-89.77	-77.22	-82.18	21.89	78.3	60.6	48.9
8.79	-90.23	-77.53	-82	20.51	78.3	60.4	50.9
8.72	-90.23	-77.32	-82.39	19.47	77.9	60.5	51.7
8.82	-90.41	-77.74	-82.27	19.08	77.8	60.7	48.9
8.79	-90.14	-77.68	-82.21	19.08	77.7	60.6	48.9
8.76	-90.23	-78.15	-82.36	19.08	77.7	60.3	50.8
8.78	-90.64	-77.63	-82.18	19.54	78	60.5	51
8.74	-90.14	-77.53	-82.3	21.37	78.3	60.4	52.3
8.82	-89.77	-78.31	-82.39	22.53	78	60.4	51.5
8.81	-90.14	-77.53	-82.09	22.5	78.1	60.6	49.4

8.76	-90.18	-77.89	-82.24	22.44	78.1	60.6	52.9
8.74	-90.14	-77.74	-82.12	22.44	78.3	60.6	51.8
8.9	-90.32	-77.58	-82.24	22.41	77.9	60.8	53.5
8.88	-90.37	-77.68	-82.27	22.34	77.7	61	52.4
8.73	-90.64	-77.89	-82.27	20.6	77.5	61	51.5
8.66	-90.32	-77.94	-82.24	18.71	77.3	60.9	49.4
8.71	-89.95	-77.48	-82.15	18.74	77.2	60.7	51.4
8.64	-89.91	-77.99	-82.45	18.86	77.5	60.7	51.6
8.73	-90.09	-77.68	-82.12	19.26	77.6	60.3	51.6
8.71	-90.23	-77.32	-82.48	21.18	78.1	60.5	51.6
8.71	-89.91	-77.22	-82.3	22.53	77.9	60.5	52.6
8.83	-89.95	-78.05	-82.27	22.44	78.1	60.5	51.8
8.77	-90.05	-77.27	-82.15	22.44	77.7	60.7	52
8.79	-90.14	-77.22	-82.09	22.47	77.8	60.6	50.4
8.84	-90.55	-78.36	-82.12	22.47	77.9	60.8	51.7
8.87	-89.77	-77.01	-82.15	22.47	77.6	61.1	52.4
8.75	-90.18	-77.53	-82.24	21.73	77.2	61.2	51.6
8.71	-89.22	-78.2	-82.24	18.68	77	61	50.8
8.7	-89.86	-78.15	-82.12	18.77	77	60.9	49.9
8.7	-89.77	-77.58	-82.36	18.8	77.2	60.8	51.7
8.73	-89.91	-77.37	-82.42	18.8	77.1	60.7	52.4
8.71	-90.27	-77.68	-82.09	18.8	76.9	60.7	51.8
8.67	-89.4	-78.25	-82.03	18.86	77.1	60.7	51.8
8.73	-90.5	-77.42	-82.27	18.93	77.2	60.6	49.5
8.67	-89.95	-77.99	-82.15	18.96	77	60.6	53.5
8.69	-90.87	-77.68	-82.18	18.96	77.1	60.8	51.8
8.68	-89.73	-78.2	-82.24	19.05	77.5	60.6	52.7
8.31	-90.05	-77.99	-82.3	19.11	78	60.7	50.9
8.81	-89.73	-77.11	-82.45	19.2	78.5	60.6	51.1
8.74	-90.46	-77.42	-82.12	19.75	78.8	60.5	51.2
8.79	-90.05	-77.48	-82.03	20.94	79.2	60.6	50.8
8.68	-90.23	-77.99	-82.24	22.44	79.8	60.6	54.5
8.82	-90.23	-77.94	-82.06	22.5	79.9	60.8	51.6
8.79	-89.95	-77.94	-81.97	22.47	80.6	60.5	50.5
8.78	-90.14	-77.22	-82.15	22.34	80.8	60.9	48.9
8.81	-89.86	-77.63	-82.03	22.53	81.2	60.8	51
8.76	-89.91	-77.79	-81.94	22.5	81.6	60.8	51.7
8.7	-90.05	-77.63	-82.27	22.47	82.3	60.9	51.6
8.76	-90.18	-77.94	-82.09	22.47	83.1	61.3	52.2
8.85	-90.18	-77.27	-81.97	22.34	82.3	61.1	52.9
8.74	-90.18	-77.99	-82.21	22.44	82.1	61.2	49.3
8.83	-90.46	-78.2	-82.15	22.41	81.9	61.4	52
8.76	-90.05	-78.36	-82.24	22.34	81.7	61.4	52.1
8.94	-89.86	-77.74	-82.27	22.44	81.6	61.6	51.7
8.75	-89.82	-78.51	-81.87	22.28	81.6	61.7	51.6
8.74	-89.82	-77.84	-82.15	22.41	82.1	61.5	51.9
8.71	-90.14	-78.2	-81.87	22.41	82.1	61.5	51.6

8.74	-90.05	-77.94	-82.58	22.01	82.1	61.8	52.2
8.74	-89.31	-77.94	-81.97	18.93	81.8	61.5	52.1
8.73	-90.18	-78.15	-82.24	18.77	81.9	61.7	52.5
8.67	-90.05	-77.27	-82.33	18.89	82	61.5	51.9
8.71	-89.73	-77.63	-82.09	19.23	83.2	61.4	51.6
8.77	-90.41	-77.42	-82.27	20.12	83.5	61.4	50.2
8.82	-89.95	-77.84	-82.18	22.44	83.3	61.4	53.4
8.81	-89.5	-77.89	-82.21	22.44	83.3	61.5	53.4
8.68	-90.05	-77.58	-82.42	22.44	83.2	61.5	52.3
8.7	-89.86	-77.42	-82.03	22.41	83.2	61.6	52.1
8.68	-90.09	-77.74	-82.15	22.41	83.2	61.5	50.4
8.69	-90.18	-77.58	-82.09	22.44	83.4	61.5	51.1
8.79	-89.82	-77.42	-82.06	22.44	83.4	61.5	54.3
8.76	-90.23	-77.94	-82.03	22.34	83.5	61.5	51.6
8.81	-90.27	-77.48	-82.12	22.31	83.3	61.7	51.9
8.74	-89.73	-78.15	-82	22.34	83.5	61.8	51
8.81	-90.27	-77.42	-82.06	22.31	83.3	62	52.8
8.83	-90.23	-77.68	-82.03	22.41	83	61.8	51.4
8.85	-89.59	-78.15	-82	22.22	83	62	50.5
8.85	-89.82	-77.74	-82	22.44	82.8	62.1	52.9
8.93	-90.14	-77.42	-82.06	22.28	82.9	62.2	50.1
8.74	-90.27	-77.99	-82.15	21.83	82.4	62.4	51.2
8.74	-89.59	-77.94	-82.15	19.08	82.2	62.5	56.3
8.67	-90.23	-77.58	-82.18	18.77	82.4	62.2	51.4
8.74	-90.05	-77.68	-82.12	18.77	82.1	62.2	53.2
8.72	-90.27	-77.48	-82.12	18.83	82.2	62.1	52.4
8.72	-90.09	-77.74	-82.12	18.74	81.9	62.2	52
8.67	-90.23	-76.65	-81.87	18.83	82.1	62.2	53.1
8.69	-90.37	-77.27	-82	18.77	82	62.2	52
8.71	-90.18	-77.89	-81.97	18.86	81.5	62.1	51.8
8.69	-90.27	-77.27	-82.09	18.8	81.7	62.1	51.2
8.68	-89.95	-77.84	-81.9	18.83	81.6	62.1	52.1
8.66	-90.18	-77.94	-81.94	18.86	81.5	62.1	45.4
8.68	-90.05	-77.48	-82.18	18.83	81.5	62.1	51.2
8.64	-89.63	-77.63	-82.3	18.89	81.4	62	51.6
8.71	-90.05	-77.53	-82.06	18.93	81.3	61.8	49.8
8.66	-90.41	-77.89	-81.94	19.11	81.3	61.7	51.2
8.67	-90.09	-77.11	-81.97	19.08	81.1	61.5	51.8
8.32	-89.95	-77.27	-82.24	19.11	80.9	61.8	51.1
8.29	-89.91	-77.58	-82.15	19.14	80.3	61.7	52.4
8.59	-90.23	-77.63	-82.12	19.26	80	61.6	53.6
8.71	-90.14	-77.63	-82.18	19.26	79.9	61.5	52.3
8.76	-90.05	-77.37	-82.03	20.18	79.6	61.5	51.6
8.69	-89.91	-77.94	-81.81	22.56	79.6	61.4	50.9
8.8	-89.95	-77.84	-81.9	22.47	79.2	61.4	52
8.78	-89.86	-77.58	-81.87	22.56	79.1	61.3	52.5
8.85	-89.77	-77.53	-81.97	22.62	78.5	61.4	52.5

8.67	-90.05	-77.53	-81.84	22.62	78.6	61.4	52.5
8.79	-90.23	-77.16	-82.03	22.62	78.1	61.4	52.1
8.74	-89.86	-77.48	-82.09	22.53	78	61.2	52.7
8.82	-90.05	-77.58	-82.03	22.53	77.7	61.4	52.7
8.84	-90.05	-77.58	-82.06	22.59	77.4	61.2	52.3
8.81	-90.32	-78.15	-82.12	22.44	77.2	61.4	50.5
8.86	-90.18	-77.63	-81.97	22.56	76.8	61.2	47.3
8.91	-90.23	-77.74	-82	22.59	76.5	61.4	53.8
8.76	-89.77	-77.79	-82.09	22.19	76.2	61.4	49.1
8.69	-89.95	-77.11	-82	18.86	76.2	61.3	44.9
8.73	-89.54	-77.16	-82.03	18.86	76.2	61.1	51.6
8.67	-90.46	-77.48	-81.97	19.02	76.5	61	53
8.63	-89.91	-77.68	-81.9	18.99	76.6	60.9	51.1
8.63	-89.86	-77.99	-82.03	18.99	76.6	61	53.4
8.7	-90.18	-77.53	-82.03	18.8	76.6	61	52.4
8.73	-90.46	-77.79	-82.06	18.86	76.6	61.2	52.9
8.72	-89.45	-77.79	-81.84	18.8	76.6	61.1	53.3
8.71	-90.14	-77.89	-81.97	18.89	76.2	61.2	52.2
8.71	-90.14	-77.63	-82.21	18.86	76.3	61.1	51.7
8.65	-89.86	-77.53	-81.87	19.02	76.2	60.9	51.5
8.37	-89.77	-77.37	-82.03	19.23	76.6	60.6	50.1
8.74	-90.64	-78.15	-81.94	19.44	76.6	60.5	53.3
8.71	-90.09	-77.53	-81.97	19.81	76.8	60.6	52.5
8.72	-89.86	-77.68	-81.9	19.84	76.9	60.3	52.7
8.76	-90.37	-77.48	-81.9	19.93	76.9	60.4	51
8.76	-89.82	-77.58	-82.06	20.82	77	60.5	54.9
8.79	-89.63	-77.58	-82	22.59	77.2	60.5	51.2
8.73	-89.22	-77.32	-82.09	22.62	77.4	60.3	51.2
8.8	-89.73	-77.48	-82.09	22.68	77.4	60.3	51.3
8.79	-89.95	-78.2	-82.09	22.68	77.4	60.4	52.5
8.69	-90.5	-77.84	-82.12	22.62	77.2	60.4	51.2
8.74	-90.14	-77.37	-82.09	22.62	77.2	60.4	52.8
8.74	-89.91	-77.68	-81.97	22.62	77.7	60.3	52
8.7	-90.09	-77.42	-81.84	22.59	77.8	60.3	50.8
8.71	-90.14	-77.79	-82.15	22.56	78.1	60.3	51.5
8.71	-90.05	-77.84	-81.97	22.56	78.9	60.5	53
8.73	-90.14	-77.84	-81.84	22.56	79.3	60.5	52.5
8.79	-90.69	-77.68	-82	22.56	79.2	60.5	52.4
8.8	-90.18	-77.58	-82.09	22.53	79.2	60.6	54
8.78	-90.32	-77.48	-82.06	22.53	79.1	60.7	51.6
8.88	-89.91	-77.53	-81.66	22.53	79	61	52.4
8.85	-89.95	-77.42	-82.24	22.56	78.7	61	51.9
8.73	-90.64	-78.05	-82.03	22.28	78.7	61	52.9
8.75	-90.09	-77.53	-82.09	19.32	78.5	60.9	50.2
8.66	-90.18	-77.68	-82	18.77	78.5	60.8	50.8
8.69	-89.95	-77.99	-81.81	18.89	78.7	60.6	52.7
8.65	-89.77	-78.2	-81.9	19.35	78.9	60.4	51.9

8.71	-90.09	-77.32	-81.94	19.81	79.1	60.4	50.4
8.69	-89.95	-77.37	-81.9	21.31	79.4	60.4	51.9
8.71	-89.77	-77.89	-81.87	22.19	79.3	60.5	52.6
8.76	-89.91	-77.94	-82	20.63	79.4	60.5	48.4
8.78	-89.86	-77.84	-81.9	19.87	79.1	60.3	51.2
8.75	-90.09	-77.11	-81.94	19.69	78.8	60.5	49.9
8.71	-90.32	-77.89	-81.78	20.24	78.7	60.4	54.7
8.78	-90.09	-77.37	-82.06	20.54	78.7	60.4	51.8
8.79	-89.82	-77.94	-82.09	20.79	78.9	60.5	46.2
8.79	-90.18	-77.68	-81.75	21.37	79	60.4	53.1
8.63	-89.63	-77.27	-82.12	22.19	79	60.4	51.7
8.71	-90.14	-77.48	-81.94	22.62	78.9	60.5	52.8
8.65	-90.14	-77.89	-81.69	22.59	79	60.7	50.9
8.76	-90.32	-77.22	-81.84	22.62	78.8	60.4	51.1
8.74	-89.73	-77.16	-81.9	22.53	78.8	60.6	53.3
8.77	-90.14	-77.42	-82	22.53	78.6	60.7	50.3
8.83	-90.05	-77.11	-81.84	22.56	78.4	60.7	51.5
8.82	-89.86	-76.33	-81.9	22.53	78.4	60.5	50.7
8.69	-90.18	-77.74	-82	22.59	78.1	60.5	49.5
8.74	-89.95	-77.27	-81.97	22.44	78.5	60.4	53.9
8.8	-90.37	-78.15	-81.69	22.5	78.5	60.6	51.6
8.79	-89.63	-77.68	-82.03	22.44	78.3	60.7	51
8.78	-90.14	-78.15	-81.78	22.53	78.4	60.7	51.5
8.9	-90.05	-77.32	-82	22.53	78.5	60.8	50.1
8.93	-90.09	-77.48	-81.81	22.44	78.3	61	53.8
8.71	-89.95	-77.68	-81.78	20.73	77.9	60.9	51.7
8.68	-89.68	-77.89	-82.21	18.8	77.8	60.9	48.2
8.7	-89.63	-78.25	-81.81	18.8	77.9	60.8	51.2
8.71	-90.23	-77.32	-81.84	18.93	78.1	60.6	52.2
8.66	-90.69	-76.8	-81.9	18.99	78.5	60.5	51.3
8.6	-90.32	-77.42	-81.75	19.41	78.8	60.4	50.5
8.79	-90.46	-77.79	-81.69	20.12	79.3	60.3	50.9
8.78	-90.41	-77.37	-81.84	22.59	79.3	60.4	52.2
8.8	-89.86	-77.74	-82.15	22.56	79.3	60.3	52.6
8.8	-90.14	-77.42	-82.09	22.59	79.5	60.5	51.7
8.79	-90.14	-77.53	-82.06	22.59	79.7	60.7	51.9
8.79	-89.73	-77.22	-82.06	22.56	79.9	60.5	53.8
8.79	-89.95	-77.22	-81.9	22.53	79.9	60.6	48.7
8.7	-89.91	-77.68	-82	22.53	80	60.7	51.7
8.81	-90.23	-77.89	-82.12	22.47	79.8	60.8	52.4
8.92	-90.05	-77.74	-82.06	22.25	79.4	61.3	51.9
8.67	-90.09	-77.48	-81.81	21.46	79.7	61.2	50.8
8.74	-89.63	-77.22	-81.75	21.55	79.6	61	52.9
9.06	-90.14	-77.16	-81.9	22.5	79.6	61.3	51
8.85	-89.82	-77.68	-82.09	22.44	79.9	61.1	52.3
8.79	-89.77	-77.42	-81.87	22.44	79.9	60.8	51.8
8.78	-89.63	-76.75	-81.87	22.47	80.1	60.8	53.5

8.75	-90.05	-76.9	-81.9	22.47	80.1	60.8	52.2
8.72	-90.14	-77.58	-82	22.53	80.3	60.8	49.8
8.78	-89.86	-77.22	-81.78	22.5	80.3	60.8	47.1
8.82	-89.73	-77.27	-81.9	22.47	80.7	60.6	52.3
8.75	-90.37	-77.06	-81.9	22.41	80.9	60.8	52.5
8.78	-90.18	-77.48	-81.81	22.34	81	60.9	50.4
8.76	-90.23	-78.31	-81.84	22.31	81.1	61.1	50.7
8.73	-89.77	-78.31	-82.12	22.34	81.2	60.9	52.3
8.81	-89.73	-77.06	-81.84	22.31	81.1	61.1	52.2
8.84	-90.09	-77.37	-82.06	22.31	81.6	61.1	51.3
8.91	-90.05	-76.96	-81.9	22.34	81.7	61.2	52.1
8.72	-89.13	-77.94	-81.87	22.44	81.7	61.6	51.7
9.2	-89.5	-77.79	-81.9	22.25	81.8	61.6	49.7
8.71	-90.09	-78.2	-81.75	20.39	81.7	61.4	51.8
8.71	-90.09	-77.48	-82.03	18.71	81.9	61.4	51.5
8.71	-89.86	-77.53	-81.9	18.77	82	61.4	51.9
8.62	-89.77	-77.74	-81.97	18.99	82.1	61.2	52.9
8.69	-89.86	-77.63	-81.75	19.23	82.2	61.1	52.1
8.6	-89.91	-77.27	-81.97	19.17	82.2	61.3	52.3
8.57	-89.68	-77.63	-81.87	19.02	82.3	61.2	52.7
8.6	-90.14	-77.22	-81.84	19.05	82.2	61.3	51.9
8.57	-90.41	-77.42	-81.94	18.99	82.2	61.3	52.3
8.56	-90.27	-77.06	-81.9	18.99	82.1	61.4	51.9
8.26	-89.86	-77.48	-81.78	19.02	82.2	61.3	51.7
8.65	-90.18	-77.48	-82.06	19.17	82.2	61.3	53.7
8.71	-89.86	-77.63	-81.9	19.23	82.2	61.4	51.6
8.75	-90.05	-77.42	-81.87	19.35	82.1	61.4	50.2
8.82	-90.37	-77.63	-81.81	19.9	82.4	61.5	52.8
8.63	-90.27	-77.89	-82.03	21.09	82.4	61.4	49.5
8.75	-90.14	-77.37	-81.84	22.31	82.4	61.4	52.3
8.72	-89.31	-78.25	-81.45	22.31	82.2	61.4	52
8.71	-90.18	-77.79	-81.63	22.41	82.1	61.4	51.6
8.74	-90.23	-77.11	-81.97	22.28	82	61.5	51.7
8.71	-90.05	-77.48	-81.63	22.28	81.9	61.4	52.1
8.72	-90.23	-77.32	-81.63	22.25	81.5	61.5	51
8.74	-89.59	-77.01	-81.97	22.25	81.6	61.6	51.7
8.79	-90.05	-77.37	-81.94	22.25	81.3	61.5	52.1
8.72	-90.23	-77.63	-81.54	22.28	81.2	61.6	57.7
8.84	-89.86	-77.68	-81.75	22.22	81.1	61.7	52.1
8.71	-89.59	-77.89	-81.97	22.07	80.8	62	53.1
8.68	-89.73	-77.48	-81.97	18.77	80.3	61.8	53.3
8.72	-89.77	-77.42	-81.97	18.53	80.3	61.8	53.1
8.74	-90.05	-77.63	-81.75	18.53	80.3	61.8	46.8
8.72	-90.05	-77.89	-81.63	19.35	80.3	61.8	50.8
8.72	-89.82	-77.06	-81.94	20.48	80.3	62	52.2
8.69	-89.86	-77.42	-82	20.54	80.3	61.9	53
8.7	-90.09	-77.48	-81.97	18.53	80.2	61.7	52.5

8.69	-89.82	-77.48	-81.63	18.53	80.1	61.8	50.9
8.71	-89.86	-77.22	-81.75	18.44	80	61.8	51.6
8.74	-89.91	-77.48	-81.87	18.53	80.1	61.9	51.9
8.69	-89.73	-77.42	-81.84	18.56	80	61.7	52.4
8.69	-89.5	-78.15	-81.81	18.59	80.2	61.7	53.4
8.54	-89.91	-77.27	-81.9	18.89	80.5	61.4	51.4
8.74	-89.95	-77.58	-81.9	19.29	80.7	61.4	51.3
8.79	-89.59	-77.42	-81.81	20.63	81	61.4	51.2
8.71	-89.95	-77.63	-81.78	21.25	81	61.3	51.5
8.73	-89.59	-77.48	-81.69	20.09	80.9	61.4	52
8.76	-90.05	-77.68	-81.75	19.41	80.7	61.3	51.9
8.8	-89.77	-77.48	-81.81	19.32	80.5	61.4	51.3
8.76	-90.05	-78.41	-81.57	19.44	80.6	61.4	54.8
8.79	-90.05	-77.74	-81.97	20.05	81	61.3	51.5
8.8	-89.77	-77.63	-81.75	21.28	81.1	61.3	52.7
8.79	-89.77	-77.84	-81.78	22.34	81.3	61.4	51.3
8.71	-90.05	-77.42	-81.87	22.34	81.3	61.4	53.8
8.79	-90.14	-77.48	-81.87	22.28	81.1	61.6	53.9
8.69	-89.86	-77.32	-81.87	22.31	81.1	61.4	56.8
8.78	-90.05	-77.48	-81.87	22.28	81	61.5	46.1
8.77	-90.18	-77.01	-82	22.22	81	61.4	52.3
8.78	-89.4	-77.42	-81.66	22.22	81	61.5	48.6
8.87	-90.09	-77.53	-81.84	22.28	81.1	61.8	50.5
8.85	-89.63	-77.27	-81.97	22.19	80.6	61.8	49.5
8.72	-90.09	-77.53	-81.78	22.04	80.5	62	53.9
8.69	-89.73	-77.74	-81.75	21.58	80.6	62	52.1
8.69	-89.86	-77.37	-82	18.5	80.3	61.9	53.2
8.69	-90.05	-77.48	-81.78	18.59	80.3	61.7	51.4
8.7	-89.36	-77.94	-81.94	18.74	80.6	61.7	53.8
8.52	-90.18	-77.06	-81.9	18.96	80.6	61.4	51.4
8.67	-89.77	-77.16	-81.9	19.17	80.5	61.4	52.1
8.76	-89.73	-77.37	-81.87	19.14	80.9	61.2	52.4
8.72	-90.32	-77.99	-81.81	19.2	80.8	61.4	50
8.79	-89.59	-76.96	-81.97	19.66	81	61.3	50.3
8.72	-89.95	-77.63	-81.75	22.25	80.9	61.3	52.9
8.78	-89.54	-77.58	-81.94	22.25	81.1	61.4	55.1
8.73	-90.18	-76.96	-81.69	22.31	81	61.3	54.7
8.78	-89.59	-77.89	-81.84	22.22	81	61.4	50.9
8.82	-89.82	-77.99	-81.9	22.34	80.9	61.4	53.6
8.78	-89.91	-76.96	-81.97	22.31	80.9	61.4	49.5
8.65	-89.95	-77.37	-81.69	22.31	80.8	61.4	51.2
8.72	-90.41	-77.37	-81.9	22.28	81.1	61.3	50.5
8.71	-90.14	-77.68	-82	22.31	81	61.4	51.6
8.75	-89.73	-77.06	-82	22.22	81	61.3	52.4
8.74	-89.91	-78.05	-82.03	22.31	81	61.4	51.8
8.82	-90.14	-77.48	-81.97	22.31	80.8	61.3	51.6
8.7	-90.14	-77.48	-81.66	22.28	80.9	61.4	50.7

8.74	-89.82	-77.79	-81.87	22.34	80.8	61.4	49.8
8.72	-89.68	-76.96	-81.75	22.28	80.8	61.4	51.5
8.79	-89.77	-77.79	-81.81	22.22	80.8	61.4	54.5
8.84	-89.63	-77.89	-81.94	22.25	80.6	61.6	51.9
8.82	-89.95	-77.16	-81.63	22.28	80.7	61.7	52.4
8.72	-89.77	-77.74	-81.57	22.28	80.7	61.6	50.9
8.78	-89.82	-77.37	-82.09	22.22	80.7	61.5	52.4
8.75	-90.27	-77.11	-81.66	22.25	80.8	61.6	48.7
8.74	-89.59	-77.37	-81.81	22.28	80.7	61.4	52.5
8.78	-89.95	-77.63	-82.21	22.25	80.6	61.5	53
8.76	-89.91	-77.63	-81.57	22.19	80.8	61.4	52.6
8.82	-89.5	-77.68	-81.97	22.28	80.7	61.5	53.5
8.83	-90.09	-77.42	-81.57	22.16	80.3	61.7	48.4
8.93	-90.05	-77.11	-81.78	22.25	80.1	61.8	50.7
8.71	-89.59	-77.48	-81.75	19.87	79.9	61.8	49.7
8.71	-89.86	-77.63	-81.97	18.41	79.9	61.7	52.7
8.7	-90.05	-77.27	-81.87	18.59	80	61.4	51.9
8.56	-89.86	-77.53	-81.81	18.86	80.1	61.3	52.7
8.82	-90.23	-77.68	-81.78	18.99	80.5	61.3	51.7
8.83	-90.5	-77.89	-81.75	19.51	80.6	61.2	51.6
8.73	-89.59	-77.06	-81.78	19.87	80.3	61.3	50.5
8.81	-89.45	-77.68	-81.84	21.15	80.7	61.2	53
8.83	-89.22	-77.32	-81.51	22.22	80.9	61.3	51.5
8.74	-89.73	-77.42	-82.03	22.25	80.7	61.3	52
8.79	-89.63	-76.9	-81.66	22.22	81	61.3	52.1
8.8	-89.95	-77.01	-81.84	22.28	80.6	61.3	52.6
8.71	-90.14	-77.48	-82.06	22.25	80.6	61.4	52.9
8.78	-89.82	-77.11	-81.87	22.25	80.8	61.4	52.8
8.79	-90.14	-77.53	-81.97	22.41	80.5	61.5	51.1
8.85	-89.82	-77.22	-81.84	22.22	80.6	61.8	53.1
8.87	-90.27	-77.32	-81.84	22.19	80.2	62	50.5
8.75	-90.05	-77.16	-81.84	21.58	80.1	61.9	51
8.72	-90.09	-77.16	-81.75	21.28	80.3	61.8	51.3
8.72	-89.91	-77.63	-81.75	20.21	80.3	61.8	51.8
8.74	-90.23	-77.16	-81.78	21.21	80.6	61.9	52.2
8.71	-89.91	-77.06	-81.87	21.18	80.8	61.9	51.7
8.72	-89.82	-77.58	-82	20.27	80.9	61.7	51.3
8.73	-89.86	-77.48	-81.81	19.69	80.9	61.9	50.7
8.7	-90.23	-77.79	-82.06	18.83	81	61.9	50.5
8.72	-90.05	-77.63	-81.75	18.41	81.3	61.9	51.7
8.71	-89.95	-77.27	-81.78	18.71	81.4	61.9	53.1
8.72	-89.68	-77.53	-81.84	19.26	81.5	61.8	52.8
8.68	-89.82	-77.53	-81.69	18.5	81.7	62	52.2
8.66	-89.86	-77.22	-81.69	18.59	81.8	61.9	50.1
8.66	-89.86	-77.11	-81.87	18.71	82.1	61.7	51.2
8.69	-89.77	-77.48	-81.94	18.62	82.3	61.8	50.5
8.54	-89.4	-77.27	-81.94	18.89	82.5	61.5	51.6

8.76	-89.82	-77.74	-81.84	19.41	83.1	61.4	51.7
8.71	-89.95	-77.27	-81.94	21.06	83.2	61.5	51
8.76	-90.14	-76.9	-82.09	22.31	83.3	61.6	53
8.79	-89.68	-77.48	-81.84	22.31	83.2	61.3	46.7
8.72	-89.82	-77.89	-81.75	22.34	83.5	61.6	52.7
8.8	-90.05	-77.42	-81.66	22.28	83.3	61.6	53.3
8.66	-89.86	-77.79	-81.63	22.31	83.6	61.4	49.8
8.72	-89.45	-77.48	-81.81	22.22	83.8	61.8	52.5
8.67	-90.27	-76.65	-82.06	21.73	83.8	61.5	50.5
8.69	-89.91	-77.16	-81.84	20.42	83.9	61.7	52.7
8.81	-89.5	-77.01	-81.9	19.6	83.8	61.8	51.5
8.83	-89.86	-77.11	-81.84	19.11	83.7	61.7	51.4
8.03	-89.68	-77.63	-81.84	18.99	83.4	61.7	52.1
8.57	-90.14	-77.74	-81.9	18.68	83.5	62	51.4
8.68	-89.54	-76.75	-81.87	18.59	83.4	62.1	53.7
8.7	-89.63	-77.58	-82	20.21	83.6	62.1	50.2
8.89	-89.86	-77.01	-81.75	22.13	84	62.5	50.8
8.84	-89.36	-77.06	-81.94	22.13	84.1	62.2	47.5
8.79	-89.63	-77.63	-81.78	22.25	84.2	62.2	52.4
8.77	-89.68	-77.22	-81.94	22.16	84.2	62	47.7
8.72	-90.14	-77.53	-81.87	22.25	84.3	62	51.4
8.7	-89.68	-77.99	-81.9	22.16	84	62	52
8.74	-90.18	-77.22	-81.84	20.3	84.2	62.1	52.9
8.79	-90.14	-77.37	-81.78	18.99	83.9	61.9	53.8
8.67	-89.54	-77.27	-81.63	18.68	84	62.1	51.5
8.7	-89.95	-77.27	-81.66	18.53	84	62.5	51.9
8.95	-89.91	-77.79	-81.87	22.13	84.1	62.8	52.5
8.87	-89.77	-77.06	-81.66	22.19	84.4	62.5	53.1
8.69	-90.05	-77.42	-81.48	22.16	84.3	62.4	52.2
8.73	-89.86	-77.01	-82.18	22.16	84.3	62.2	55.1
8.81	-90.14	-77.22	-81.81	22.16	84.2	61.9	48.7
8.79	-90.18	-77.06	-81.69	22.19	84.2	62.1	48.9
8.74	-89.86	-77.48	-81.81	20.54	84.2	62.1	52.7
8.76	-89.77	-77.06	-81.9	18.8	83.8	62.1	52.2
8.67	-89.45	-77.22	-81.63	18.62	83.5	62.4	52.9
8.73	-90.09	-77.74	-81.75	18.5	83.2	62.6	49.3
8.91	-90.18	-76.8	-81.57	22.1	83.4	62.7	50.1
8.78	-89.73	-77.32	-81.6	22.22	83.8	62.5	52.4
8.69	-90.09	-77.99	-81.84	22.13	83.7	62.2	51.6
8.77	-89.77	-77.22	-81.69	22.13	83.8	62.2	51.5
8.74	-89.73	-77.58	-81.75	21.64	83.7	62.1	50.4
8.81	-89.45	-77.11	-81.87	18.99	83.2	62.1	52.3
8.66	-89.82	-77.01	-81.87	18.59	83	62.2	51.4
8.69	-89.86	-77.16	-81.81	18.47	82.7	62.6	52.3
8.75	-89.86	-77.42	-81.69	21.49	82.8	62.7	52.1
8.82	-89.86	-77.48	-81.57	22.19	83.2	62.5	52.2
8.66	-90.05	-77.48	-81.84	22.1	83.3	62.4	52

8.74	-89.86	-77.27	-81.84	22.07	83.2	62	48.1
8.62	-89.36	-77.53	-81.78	22.22	83.3	62.2	53.2
8.75	-89.95	-77.68	-82.03	19.69	83.2	62	50.7
8.73	-89.73	-77.37	-81.87	18.93	82.7	62.1	52.4
8.69	-89.5	-77.16	-81.57	18.5	82.2	62.2	50.7
8.71	-90.05	-77.37	-81.87	18.38	82.3	62.5	53.2
9.01	-89.59	-77.27	-81.87	22.04	82.4	62.7	52.4
8.87	-89.86	-77.11	-81.63	22.13	82.7	62.5	50.9
8.71	-90.05	-77.06	-81.75	22.04	82.7	62.4	51.1
8.77	-89.86	-76.96	-81.9	22.13	82.7	62.1	48.8
8.78	-89.77	-77.16	-81.84	22.1	82.7	62.1	52.6
8.8	-89.68	-76.65	-81.63	22.13	82.8	61.7	50.2
8.72	-89.82	-77.42	-81.87	19.93	82.4	62	51.8
8.66	-89.4	-77.53	-81.87	18.83	82.1	61.8	51.8
8.65	-89.95	-77.11	-81.84	18.5	81.9	62.1	52.2
8.67	-89.45	-77.37	-82.09	18.35	81.8	62.2	50.8
8.68	-89.77	-77.06	-81.51	21.98	82	62.5	51.9
8.82	-89.63	-77.74	-81.87	22.07	82.1	62.4	49.8
8.75	-89.45	-77.27	-81.66	22.07	82.3	62	52.7
8.69	-89.73	-77.48	-81.87	22.1	82.3	62	53.1
8.77	-90.09	-77.48	-81.51	22.07	82.3	61.9	51.2
8.74	-89.31	-77.06	-81.69	22.04	82.2	61.8	51.6
8.79	-89.77	-77.42	-81.75	22.1	82.3	62	52.3
8.76	-89.73	-77.58	-81.97	20.24	82.2	61.6	52
8.78	-89.68	-77.42	-81.87	18.93	82	61.7	54.2
8.57	-89.5	-77.63	-81.94	18.74	81.7	61.8	51
8.7	-89.45	-77.32	-81.81	18.5	81.7	62	51.4
8.65	-89.68	-76.75	-82	18.35	81.7	62.1	52
8.68	-89.5	-77.42	-81.9	18.35	81.6	62	51.2
8.74	-89.77	-77.27	-81.63	18.32	81.6	62.2	50.5
8.73	-89.4	-77.11	-81.75	19.99	81.6	62.4	51.6
8.68	-89.82	-77.99	-81.81	21.83	81.7	62.4	52.8
8.98	-89.63	-77.32	-81.87	22.1	81.8	62.5	51.6
8.88	-89.54	-77.32	-81.97	22.01	82	62.2	52.1
8.8	-89.95	-76.96	-81.63	22.07	82.1	62.2	51.2
8.8	-89.77	-76.96	-81.97	22.07	82.3	62.1	51.8
8.79	-90.23	-77.22	-81.84	22.01	82.1	61.9	49.5
8.75	-90.05	-77.74	-81.87	22.01	82.3	61.8	51.6
8.75	-89.68	-77.32	-81.6	22.01	82.1	61.9	51.6
8.79	-90.05	-77.27	-81.66	22.04	82.1	61.9	53
8.81	-89.73	-76.9	-82	22.01	82.2	61.7	49.2
8.68	-90.32	-77.42	-81.69	22.04	82.1	61.8	51.1
8.75	-89.4	-77.48	-81.81	22.04	82.1	61.9	53.2
8.79	-89.77	-77.53	-81.84	22.01	82.1	61.7	51
8.72	-89.73	-77.32	-81.87	22.04	81.9	61.8	55.3
8.7	-89.82	-77.37	-81.78	22.01	82.1	61.7	53.3
8.76	-89.68	-77.63	-82.12	22.04	82.3	61.9	52.9

8.75	-89.63	-77.48	-82.06	22.16	82.1	61.6	52.6
8.75	-90.09	-76.75	-81.81	21.98	82.5	61.8	49.2
8.79	-89.63	-76.9	-81.94	22.04	82.9	61.7	53.1
8.78	-89.68	-77.53	-81.39	22.01	82.9	61.7	51.7
8.74	-89.63	-77.16	-81.63	21.98	83	61.6	51.6
8.67	-89.68	-77.42	-81.57	22.04	83.2	61.8	52.1
8.8	-89.5	-77.68	-81.81	21.98	83.1	61.9	52.4
8.8	-89.68	-77.42	-81.94	21.98	83	62.2	51.7
8.82	-89.82	-76.8	-81.51	21.95	83.1	62.4	51.5
8.85	-89.91	-77.68	-81.75	21.92	83.2	62.1	51.5
8.79	-89.63	-77.53	-81.78	21.92	83.3	61.9	51.7
8.88	-90.18	-76.75	-81.81	21.98	83.2	61.9	52.7
8.82	-90.09	-77.48	-81.6	21.98	83.2	62.4	51.6
8.81	-89.63	-77.37	-81.6	21.92	83.2	62.1	53.5
8.78	-89.82	-76.7	-81.78	22.01	83.2	62.1	52.8
8.84	-89.63	-77.79	-81.66	21.95	83.1	62.2	49.7
8.89	-89.68	-76.96	-81.84	21.95	83.2	62.5	51.1
8.83	-89.36	-77.16	-81.81	21.89	83.2	62.4	54.1
8.73	-89.59	-77.32	-81.9	21.73	83	62.5	50.8
8.71	-89.86	-76.8	-81.69	18.71	82.7	62.5	52.4
8.69	-89.82	-77.27	-81.81	18.19	82.8	62.4	51.6
8.63	-90.23	-77.11	-81.81	18.25	82.9	62.1	53.1
8.52	-75.49	-64.4	-72.53	0.12	57.3	57.3	55
8.52	-75.49	-64.4	-72.47	0.09	57.7	58.1	55
8.52	-75.44	-64.35	-72.41	0.06	57.7	58.5	55.4
8.52	-75.39	-64.29	-72.38	0.06	58	58.8	55.4
8.52	-75.39	-64.19	-72.32	0.06	58	58.9	55.2
8.51	-75.35	-64.14	-72.26	0.06	58.2	59.2	55.5
8.51	-75.3	-64.09	-72.23	0.06	58.1	59.2	55.5
8.51	-75.21	-64.09	-72.2	0.06	58.2	59.2	55.5
8.51	-75.21	-64.09	-72.17	0.06	58.2	59.3	55.3
8.5	-75.16	-64.04	-72.11	0.09	58.3	59.3	55.6
8.5	-75.16	-63.98	-72.08	0.06	58.3	59.2	55.6
8.5	-75.12	-63.93	-72.05	0.06	58.3	59.2	55.6
8.5	-75.07	-63.93	-72.01	0.06	58.3	59.2	55.6
8.5	-75.03	-63.83	-71.95	0.09	58.4	59.2	55.7
8.48	-75.03	-63.83	-71.92	0.06	58.4	59.3	55.8
8.48	-74.98	-63.78	-71.89	0.06	58.4	59.3	55.6
8.48	-74.94	-63.72	-71.86	0.06	58.3	59.3	55.9
8.48	-74.89	-63.67	-71.83	0.06	58.5	59.3	55.7
8.48	-74.84	-63.67	-71.8	0.06	58.3	59.4	55.7
8.47	-74.84	-63.62	-71.74	0.09	58.4	59.4	55.4
8.47	-74.8	-63.62	-71.71	0.06	58.2	59.4	55.4
8.47	-74.8	-63.57	-71.68	0.06	58.1	59.4	55.3
8.47	-74.71	-63.52	-71.65	0.06	57.8	59.3	55.2
8.47	-74.71	-63.46	-71.62	0.06	58.1	59.3	55.1
8.47	-74.66	-63.46	-71.56	0.06	57.7	59.4	54.9

8.47	-74.66	-63.46	-71.53	0.06	58	59.3	55
8.47	-74.62	-63.41	-71.47	0.06	57.7	59.3	54.9
8.47	-74.57	-63.36	-71.43	0.06	57.6	59.3	54.8
8.47	-74.52	-63.31	-71.4	0.06	57.5	59.1	54.4
8.47	-74.43	-63.31	-71.37	0.09	57.3	59	54.5
8.45	-74.43	-63.26	-71.34	0.09	57.4	58.9	54.5
8.45	-74.39	-63.21	-71.31	0.09	57.8	58.8	54.4
8.45	-74.34	-63.21	-71.25	0.06	58	58.8	54.1
8.45	-74.34	-63.15	-71.22	0.09	58	58.7	53.8
8.44	-74.29	-63.1	-71.22	0.09	58.1	58.6	53.9
8.45	-74.25	-63.1	-71.16	0.09	58	58.6	53.8
8.44	-74.25	-63.05	-71.13	0.09	58	58.5	53.4
8.45	-74.2	-63.05	-71.1	0.09	58	58.4	53.3
8.44	-74.16	-62.95	-71.07	0.06	58	58.3	53.3
8.44	-74.11	-62.89	-71.04	0.09	57.9	58.3	53.2
8.44	-74.11	-62.89	-71.01	0.09	57.8	58.2	52.8
8.44	-74.07	-62.84	-70.98	0.09	57.7	58.2	52.8
8.44	-74.07	-62.79	-70.95	0.09	57.6	58.2	52.7
8.44	-74.02	-62.79	-70.89	0.09	57.6	58.2	52.5
8.44	-73.97	-62.79	-70.85	0.09	57.5	58	52.2
8.44	-73.97	-62.74	-70.82	0.09	57.4	58	51.9
8.44	-73.88	-62.69	-70.76	0.09	57.4	58	51.6
8.42	-73.88	-62.63	-70.73	0.09	57.4	57.9	51.6
8.43	-73.88	-62.63	-70.67	0.09	57.2	57.9	51.5
8.43	-73.84	-62.58	-70.64	0.12	57.2	57.8	51.3
8.43	-73.79	-62.53	-70.61	0.09	57.1	57.8	51.2
8.43	-73.75	-62.53	-70.58	0.12	57.1	57.6	51.1
8.43	-73.7	-62.48	-70.55	0.12	57.1	57.6	50.7
8.42	-73.7	-62.43	-70.52	0.12	57	57.5	50.5
8.42	-73.65	-62.43	-70.49	0.12	57	57.5	50.3
8.41	-73.61	-62.37	-70.46	0.12	56.9	57.4	50.3
8.42	-73.61	-62.32	-70.43	0.12	56.8	57.3	50.2
8.41	-73.56	-62.32	-70.4	0.12	56.7	57.2	49.8
8.42	-73.56	-62.27	-70.37	0.12	56.7	57.2	49.6
8.42	-73.52	-62.22	-70.34	0.12	56.6	57.1	49.6
8.41	-73.47	-62.22	-70.27	0.12	56.4	57.1	49.7
8.41	-73.42	-62.17	-70.24	0.12	56.3	57.1	49.2
8.41	-73.42	-62.17	-70.21	0.12	56.2	57	49.1
8.41	-73.38	-62.12	-70.21	0.12	56.2	57	49.2
8.41	-73.29	-62.06	-70.18	0.15	56.1	56.9	48.9
8.41	-73.24	-62.01	-70.15	0.12	56	56.8	49
8.41	-73.29	-62.01	-70.12	0.12	56	56.8	48.6
8.4	-73.2	-61.96	-70.09	0.15	56	56.7	48.4
8.39	-73.15	-61.96	-70.06	0.15	55.9	56.7	48.2
8.4	-73.15	-61.96	-69.97	0.15	55.9	56.6	48
8.4	-73.1	-61.91	-69.97	0.15	55.9	56.6	48.2
8.39	-73.06	-61.8	-69.91	0.12	55.7	56.6	47.9

8.39	-73.06	-61.8	-69.91	0.15	55.8	56.5	47.7
8.4	-73.01	-61.7	-69.85	0.12	55.7	56.4	47.3
8.4	-72.97	-61.7	-69.85	0.15	55.7	56.4	47.7
8.4	-72.97	-61.65	-69.79	0.12	55.6	56.4	47.4
8.39	-72.92	-61.65	-69.79	0.15	55.6	56.3	47.6
8.38	-72.88	-61.6	-69.73	0.15	55.6	56.2	47.2
8.38	-72.83	-61.6	-69.73	0.15	55.5	56.2	47.3
8.38	-72.83	-61.54	-69.69	0.15	55.4	56.1	47.2
8.38	-72.78	-61.49	-69.66	0.15	55.4	56.1	47
8.38	-72.74	-61.49	-69.63	0.15	55.3	56	47.1
8.38	-72.74	-61.49	-69.6	0.15	55.3	56.1	46.9
8.38	-72.69	-61.44	-69.57	0.15	55.1	56	47
8.38	-72.65	-61.39	-69.54	0.15	55.2	56	46.8
8.38	-72.65	-61.39	-69.51	0.15	55.1	56	46.5
8.38	-72.6	-61.34	-69.51	0.18	55.1	55.9	46.6
8.38	-72.6	-61.34	-69.45	0.15	55	55.9	46.5
8.38	-72.55	-61.34	-69.42	0.15	54.9	55.8	46.6
8.38	-72.51	-61.29	-69.42	0.15	54.9	55.8	46.3
8.38	-72.51	-61.23	-69.36	0.15	54.9	55.7	46.6
8.37	-72.46	-61.18	-69.36	0.15	54.9	55.7	46.3
8.37	-72.42	-61.18	-69.33	0.15	54.9	55.6	46.2
8.37	-72.37	-61.13	-69.3	0.18	54.9	55.6	46.2
8.37	-72.37	-61.13	-69.27	0.15	54.8	55.6	46.2
8.37	-72.33	-61.08	-69.27	0.15	54.8	55.5	46.2
8.37	-72.33	-61.08	-69.21	0.18	54.8	55.5	46.2
8.37	-72.28	-61.08	-69.18	0.18	54.7	55.5	46.2
8.36	-72.28	-61.03	-69.15	0.18	54.7	55.5	46.2
8.36	-72.19	-60.97	-69.11	0.18	54.7	55.4	46.2
8.35	-72.14	-60.97	-69.08	0.15	54.6	55.4	46.1
8.35	-72.14	-60.92	-69.08	0.18	54.5	55.2	46
8.36	-72.1	-60.87	-69.05	0.18	54.4	55.2	46.2
8.36	-72.1	-60.87	-69.02	0.18	54.5	55.2	46.1
8.36	-72.05	-60.87	-68.99	0.15	54.4	55.2	46.1
8.35	-72.01	-60.87	-68.96	0.15	54.4	55.1	46.5
8.35	-72.01	-60.82	-68.96	0.15	54.4	55.1	46.3
8.35	-71.96	-60.77	-68.93	0.18	54.5	55.1	46.5
8.35	-71.91	-60.77	-68.93	0.18	54.4	55.2	46.8
8.35	-71.91	-60.71	-68.9	0.15	54.5	55.1	46.6
8.35	-71.91	-60.71	-68.87	0.18	54.5	55	47
8.35	-71.87	-60.71	-68.84	0.15	54.6	55.1	47.3
8.35	-71.82	-60.66	-68.81	0.18	54.6	55.1	47.2
8.35	-71.78	-60.61	-68.78	0.18	54.5	55.1	47.3
8.35	-71.78	-60.61	-68.75	0.18	54.6	55.4	47.6
8.34	-71.73	-60.56	-68.72	0.18	54.6	55.2	48
8.34	-71.73	-60.56	-68.69	0.15	54.7	55.4	48.4
8.34	-71.68	-60.51	-68.66	0.18	54.7	55.6	48.7
8.34	-71.68	-60.51	-68.63	0.15	54.8	55.7	49

8.34	-71.64	-60.51	-68.63	0.15	54.9	55.8	49.4
8.34	-71.59	-60.4	-68.6	0.15	54.9	55.7	49.5
8.34	-71.59	-60.35	-68.57	0.15	54.9	55.8	49.9
8.34	-71.55	-60.35	-68.53	0.15	54.9	55.9	50.3
8.34	-71.5	-60.3	-68.5	0.18	55.1	56.1	50.5
8.34	-71.46	-60.25	-68.47	0.15	55.2	56.1	50.9
8.34	-71.46	-60.25	-68.41	0.15	55.2	56.2	51.2
8.34	-71.41	-60.2	-68.41	0.15	55.3	56.2	51.6
8.33	-71.41	-60.2	-68.35	0.15	55.3	56.3	51.7
8.33	-71.36	-60.14	-68.32	0.15	55.7	56.3	51.9
8.33	-71.32	-60.14	-68.32	0.15	55.7	56.4	52.5
8.33	-71.32	-60.09	-68.26	0.15	55.6	56.4	52.6
8.33	-71.27	-60.09	-68.23	0.15	55.5	56.6	52.9
8.33	-71.23	-60.09	-68.2	0.15	55.8	56.7	53.2
8.33	-71.23	-60.04	-68.17	0.15	55.9	56.7	53.6
8.33	-71.18	-60.04	-68.14	0.12	55.8	56.7	53.5
8.33	-71.09	-59.99	-68.14	0.15	56	56.8	54
8.32	-71.09	-59.94	-68.08	0.12	55.8	56.9	54.2
8.32	-71.04	-59.88	-68.05	0.15	56	56.9	54.5
8.32	-71	-59.88	-68.05	0.15	56.1	57	54.8
8.32	-71	-59.83	-68.02	0.15	56	57	55
8.32	-70.95	-59.83	-67.99	0.12	56	57	55.1
8.32	-70.95	-59.83	-67.99	0.15	56.1	57.1	55.3
8.32	-70.95	-59.78	-67.95	0.15	56	57.1	55.4
8.32	-70.86	-59.73	-67.89	0.15	56.1	57.1	55.7
8.32	-70.86	-59.73	-67.86	0.15	56.2	57.1	55.8
8.32	-70.82	-59.68	-67.83	0.12	56.1	57.2	55.8
8.32	-70.82	-59.68	-67.8	0.15	56.1	57.2	56
8.32	-70.77	-59.62	-67.77	0.15	56.2	57.3	56.1
8.32	-70.77	-59.62	-67.74	0.15	56.1	57.3	56.2
8.32	-70.72	-59.57	-67.71	0.15	56.3	57.3	56.1
8.31	-70.68	-59.57	-67.71	0.15	56.3	57.5	56.2
8.31	-70.63	-59.52	-67.65	0.15	56.3	57.4	56.2
8.31	-70.63	-59.52	-67.65	0.15	56.3	57.4	56.2
8.31	-70.59	-59.47	-67.62	0.15	56.4	57.5	56.6
8.31	-70.59	-59.42	-67.59	0.12	56.6	57.5	56.6
8.31	-70.54	-59.42	-67.56	0.12	56.6	57.6	56.8
8.31	-70.54	-59.37	-67.56	0.15	56.6	57.6	56.7
8.31	-70.49	-59.37	-67.5	0.15	56.7	57.6	56.7
8.31	-70.49	-59.31	-67.47	0.15	56.7	57.6	56.8
8.3	-70.45	-59.31	-67.44	0.15	56.8	57.8	56.7
8.29	-70.4	-59.26	-67.44	0.15	56.7	57.8	56.9
8.29	-70.4	-59.26	-67.41	0.15	56.8	57.8	57.2
8.29	-70.36	-59.16	-67.41	0.15	56.8	57.8	57.1
8.29	-70.31	-59.11	-67.37	0.12	56.8	57.9	57.1
8.29	-70.27	-59.16	-67.31	0.15	56.9	57.8	56.9
8.29	-70.27	-59.11	-67.28	0.15	56.9	57.8	56.8

8.29	-70.27	-59.05	-67.28	0.15	56.8	57.8	57.1
8.29	-70.22	-59.05	-67.25	0.15	56.2	57.9	56.9
8.29	-70.17	-59	-67.22	0.18	56.2	57.9	56.9
8.29	-70.17	-59	-67.22	0.15	56.1	57.8	56.7
8.29	-70.17	-58.95	-67.22	0.15	56.1	57.8	56.8
8.29	-70.13	-58.95	-67.19	0.15	56.2	57.6	56.5
8.29	-70.08	-58.9	-67.19	0.15	56.1	57.3	56.4
8.28	-70.08	-58.9	-67.13	0.15	56.3	57.2	56.3
8.29	-70.08	-58.85	-67.13	0.15	56.4	57.2	56.1
8.29	-69.99	-58.85	-67.1	0.15	56.4	57.2	56
8.29	-69.95	-58.79	-67.1	0.15	56.6	57.1	56
8.29	-69.95	-58.79	-67.07	0.15	56.6	57.1	55.6
8.29	-69.9	-58.79	-67.04	0.15	56.4	57.1	55.5
8.29	-69.85	-58.74	-67.04	0.15	56.4	57.1	55.1
8.29	-69.85	-58.74	-67.01	0.15	56.4	57.1	55.2
8.29	-69.81	-58.69	-66.98	0.15	56.3	57	54.9
8.29	-69.81	-58.64	-66.95	0.15	56.3	56.9	54.7
8.28	-69.76	-58.64	-66.95	0.15	56.2	56.9	54.7
8.27	-69.76	-58.59	-66.92	0.15	56.2	56.8	54.3
8.27	-69.72	-58.59	-66.92	0.15	56.2	56.7	53.8
8.28	-69.72	-58.59	-66.86	0.15	56.1	56.7	53.7
8.27	-69.67	-58.53	-66.83	0.15	56.1	56.7	53.6
8.28	-69.62	-58.48	-66.79	0.15	56	56.6	53.4
8.28	-69.62	-58.48	-66.79	0.15	56	56.5	52.9
8.28	-69.58	-58.48	-66.76	0.18	55.9	56.5	53
8.28	-69.58	-58.43	-66.76	0.15	55.9	56.5	52.4
8.27	-69.53	-58.43	-66.73	0.18	55.8	56.4	52.3
8.27	-69.53	-58.38	-66.7	0.15	55.7	56.4	52.1
8.26	-69.49	-58.38	-66.67	0.18	55.6	56.3	51.6
8.26	-69.49	-58.33	-66.67	0.15	55.5	56.3	51.5
8.26	-69.44	-58.33	-66.64	0.18	55.5	56.2	51.3
8.26	-69.4	-58.28	-66.64	0.15	55.6	56.2	51.3
8.26	-69.4	-58.22	-66.61	0.18	55.5	56.1	51
8.27	-69.35	-58.28	-66.58	0.15	55.4	56	50.5
8.26	-69.3	-58.28	-66.58	0.15	55.3	56	50.5
8.26	-69.3	-58.22	-66.55	0.18	55.3	56	50.3
8.26	-69.3	-58.12	-66.52	0.18	55.3	55.9	50.2
8.26	-69.26	-58.12	-66.52	0.15	55.2	55.9	49.7
8.26	-69.21	-58.12	-66.49	0.18	55.1	55.9	49.7
8.26	-69.21	-58.07	-66.46	0.18	55	55.8	49.5
8.26	-69.17	-58.07	-66.43	0.18	55	55.8	49.2
8.26	-69.12	-58.02	-66.4	0.18	54.9	55.8	48.9
8.26	-69.12	-58.02	-66.4	0.18	55	55.7	48.9
8.26	-69.12	-57.91	-66.4	0.15	54.9	55.7	48.4
8.26	-69.08	-57.91	-66.34	0.18	54.9	55.6	48.3
8.26	-69.03	-57.91	-66.34	0.15	54.9	55.6	48.2
8.26	-69.03	-57.86	-66.31	0.18	54.8	55.6	48.2

8.26	-68.98	-57.86	-66.31	0.18	54.8	55.5	48
8.26	-68.94	-57.81	-66.28	0.21	54.8	55.5	47.9
8.26	-68.94	-57.81	-66.25	0.18	54.7	55.5	47.7
8.26	-68.85	-57.76	-66.21	0.18	54.6	55.5	47.4
8.26	-68.85	-57.76	-66.18	0.18	54.6	55.4	47.5
8.26	-68.85	-57.7	-66.18	0.18	54.6	55.4	47.1
8.26	-68.8	-57.7	-66.15	0.18	54.6	55.2	47.1
8.26	-68.75	-57.65	-66.15	0.18	54.6	55.1	47.2
8.25	-68.75	-57.65	-66.09	0.18	54.5	55.1	46.9
8.25	-68.75	-57.6	-66.06	0.18	54.4	55.1	46.8
8.25	-68.71	-57.6	-66.06	0.18	54.4	55.1	46.6
8.25	-68.66	-57.55	-66.03	0.18	54.4	55	46.6
8.25	-68.66	-57.55	-66	0.18	54.6	55	46.7
8.25	-68.62	-57.5	-65.97	0.21	54.2	54.9	46.6
8.25	-68.62	-57.5	-65.97	0.18	54.2	54.9	46.3
8.25	-68.57	-57.45	-65.94	0.18	54.4	54.9	46.2
8.25	-68.57	-57.45	-65.91	0.18	54	54.9	46.2
8.25	-68.53	-57.45	-65.88	0.21	54.1	54.9	46.1
8.25	-68.48	-57.39	-65.88	0.21	54	54.8	46.1
8.25	-68.48	-57.39	-65.85	0.18	54	54.8	46.2
8.24	-68.43	-57.39	-65.85	0.18	54	54.8	46.1
8.24	-68.43	-57.34	-65.82	0.18	53.9	54.8	46.1
8.24	-68.39	-57.34	-65.79	0.18	53.9	54.8	46
8.24	-68.39	-57.29	-65.76	0.21	53.9	54.7	46.1
8.24	-68.34	-57.29	-65.76	0.21	53.8	54.7	46.2
8.24	-68.34	-57.24	-65.73	0.21	53.8	54.7	46.2
8.24	-68.3	-57.24	-65.7	0.21	53.8	54.7	46.2
8.24	-68.3	-57.19	-65.67	0.21	53.8	54.6	46.3
8.24	-68.3	-57.19	-65.67	0.21	53.8	54.6	46.5
8.24	-68.25	-57.13	-65.63	0.18	53.8	54.6	46.5
8.24	-68.25	-57.13	-65.63	0.21	53.8	54.6	46.5
8.24	-68.21	-57.13	-65.6	0.21	53.8	54.6	46.5
8.24	-68.16	-57.08	-65.57	0.21	53.8	54.6	46.8
8.24	-68.16	-57.08	-65.57	0.18	53.8	54.6	46.6
8.24	-68.11	-57.03	-65.54	0.21	53.8	54.6	46.6
8.23	-68.16	-57.03	-65.54	0.18	53.8	54.5	46.7
8.23	-68.11	-57.03	-65.51	0.21	53.8	54.5	46.6
8.23	-68.07	-57.03	-65.51	0.18	53.8	54.5	46.8
8.23	-68.07	-56.98	-65.48	0.21	53.8	54.6	46.9
8.23	-68.07	-56.93	-65.45	0.21	53.8	54.5	46.8
8.23	-68.02	-56.93	-65.48	0.21	53.8	54.6	47
8.23	-68.02	-56.93	-65.45	0.21	53.8	54.6	47.5
8.23	-67.98	-56.87	-65.42	0.21	53.8	54.7	47.5
8.23	-67.98	-56.87	-65.39	0.21	53.9	54.8	48
8.23	-67.93	-56.82	-65.36	0.21	53.9	54.7	48
8.23	-67.93	-56.82	-65.36	0.21	53.9	54.9	48.1
8.23	-67.88	-56.82	-65.3	0.18	54	54.9	48.3

8.23	-67.88	-56.82	-65.27	0.18	53.9	54.9	48.4
8.23	-67.84	-56.77	-65.24	0.18	54.2	55.1	48.7
8.23	-67.84	-56.77	-65.24	0.21	54.1	55	48.7
8.23	-67.75	-56.72	-65.21	0.18	54.4	55.1	49.1
8.22	-67.75	-56.72	-65.18	0.21	54.6	55.1	49.5
8.22	-67.7	-56.72	-65.18	0.18	54.1	55.2	49.5
8.22	-67.7	-56.72	-65.15	0.18	54.6	55.2	49.7
8.22	-67.66	-56.61	-65.15	0.18	54.5	55.1	50
8.22	-67.66	-56.61	-65.12	0.18	54.6	55.1	50.2
8.22	-67.66	-56.56	-65.12	0.18	54.6	55.1	50.5
8.22	-67.61	-56.56	-65.09	0.18	54.4	55.1	50.9
8.22	-67.56	-56.56	-65.05	0.18	54.6	55.2	51.2
8.22	-67.56	-56.51	-64.99	0.18	54.6	55.2	51.5
8.22	-67.52	-56.46	-64.99	0.18	54.5	55.4	51.8
8.22	-67.52	-56.46	-64.96	0.21	54.6	55.5	51.9
8.22	-67.52	-56.46	-64.93	0.18	54.4	55.4	52.1
8.22	-67.47	-56.41	-64.93	0.21	54.7	55.5	52.2
8.22	-67.47	-56.36	-64.9	0.18	54.8	55.5	52.7
8.22	-67.43	-56.36	-64.87	0.18	54.8	55.5	52.7
8.21	-67.38	-56.36	-64.84	0.18	54.9	55.6	53.1
8.2	-67.38	-56.3	-64.84	0.18	54.9	55.6	53.2
8.21	-67.38	-56.3	-64.78	0.18	54.9	55.7	53.4
8.2	-67.34	-56.3	-64.78	0.21	54.9	55.8	53.6
8.21	-67.29	-56.25	-64.75	0.18	54.9	56	53.7
8.21	-67.29	-56.25	-64.75	0.18	54.9	56	53.6
8.21	-67.29	-56.2	-64.72	0.18	55.1	56.1	53.7
8.21	-67.24	-56.2	-64.69	0.18	55.1	56.1	53.8
8.21	-67.2	-56.15	-64.69	0.15	55	56.2	53.9
8.21	-67.24	-56.15	-64.66	0.18	55.1	56.2	54
8.21	-67.2	-56.1	-64.63	0.18	55.2	56.2	54.1
8.21	-67.15	-56.1	-64.63	0.15	55.3	56.3	54.2
8.21	-67.15	-56.1	-64.6	0.18	55.2	56.3	54.2
8.21	-67.11	-56.04	-64.57	0.18	55.3	56.4	54.2
8.21	-67.11	-56.04	-64.57	0.18	55.2	56.4	54.5
8.21	-67.11	-56.04	-64.51	0.18	55.3	56.4	54.4
8.21	-67.06	-55.99	-64.51	0.18	55.2	56.5	54.4
8.2	-67.01	-55.99	-64.47	0.18	55.3	56.5	54.4
8.2	-67.01	-55.94	-64.44	0.15	55.4	56.5	54.6
8.19	-67.01	-55.94	-64.44	0.18	55.3	56.5	54.9
8.19	-66.97	-55.94	-64.41	0.18	55.4	56.5	55
8.19	-66.92	-55.89	-64.41	0.18	55.4	56.6	54.9
8.2	-66.92	-55.89	-64.38	0.18	55.5	56.6	54.9
8.19	-66.88	-55.84	-64.38	0.18	55.6	56.6	54.9
8.2	-66.88	-55.84	-64.38	0.18	55.5	56.7	54.7
8.2	-66.88	-55.84	-64.32	0.15	55.6	56.7	54.8
8.2	-66.88	-55.78	-64.32	0.18	55.6	56.7	54.7
8.2	-66.83	-55.78	-64.32	0.18	55.6	56.8	54.9

8.2	-66.83	-55.78	-64.29	0.18	55.7	56.8	54.6
8.2	-66.79	-55.73	-64.29	0.18	55.8	56.8	54.8
8.2	-66.79	-55.68	-64.26	0.18	55.8	56.7	54.9
8.2	-66.74	-55.73	-64.26	0.18	55.7	56.6	54.7
8.2	-66.74	-55.68	-64.23	0.18	55.7	56.5	54.9
8.2	-66.74	-55.68	-64.23	0.18	55.6	56.6	54.6
8.19	-66.65	-55.68	-64.2	0.18	55.6	56.6	54.5
8.19	-66.65	-55.63	-64.17	0.18	55.6	56.5	54.5
8.19	-66.6	-55.63	-64.17	0.18	55.6	56.5	54.6
8.18	-66.6	-55.63	-64.17	0.18	55.5	56.5	54.6
8.19	-66.56	-55.58	-64.14	0.18	55.5	56.5	54.1
8.19	-66.56	-55.58	-64.14	0.18	55.4	56.5	54.3
8.19	-66.51	-55.58	-64.11	0.21	55	56.4	54
8.19	-66.56	-55.53	-64.08	0.18	54.8	56.4	54
8.18	-66.51	-55.53	-64.08	0.18	54.9	56.3	53.9
8.19	-66.47	-55.53	-64.05	0.18	54.7	56.3	53.8
8.18	-66.47	-55.47	-64.05	0.18	54.8	56.2	53.7
8.18	-66.42	-55.47	-64.02	0.18	54.9	56.2	53.5
8.19	-66.42	-55.37	-63.99	0.21	55.1	56.2	53.5
8.18	-66.42	-55.37	-63.99	0.21	55.2	56.1	53.4
8.18	-66.37	-55.37	-63.99	0.18	55.3	56.1	52.8
8.18	-66.33	-55.32	-63.96	0.18	55.3	56.1	52.8
8.18	-66.37	-55.32	-63.96	0.21	55.4	56	52.8
8.18	-66.33	-55.32	-63.93	0.18	55.4	56	52.7
8.18	-66.28	-55.27	-63.89	0.18	55.3	56	52.4
8.18	-66.28	-55.27	-63.89	0.18	55.3	56	52.4
8.18	-66.28	-55.21	-63.89	0.18	55.2	55.9	52.3
8.18	-66.24	-55.21	-63.86	0.21	55.2	55.9	51.8
8.18	-66.24	-55.21	-63.86	0.18	55.2	55.8	51.8
8.18	-66.24	-55.16	-63.86	0.18	55.1	55.8	51.5
8.18	-66.19	-55.16	-63.83	0.18	55	55.8	51.4
8.18	-66.19	-55.16	-63.8	0.18	55	55.7	51
8.18	-66.14	-55.16	-63.8	0.21	54.9	55.7	50.8
8.18	-66.14	-55.11	-63.74	0.21	54.9	55.6	50.5
8.18	-66.14	-55.11	-63.71	0.21	54.9	55.6	50.3
8.17	-66.1	-55.11	-63.71	0.18	54.8	55.6	50.2
8.17	-66.1	-55.06	-63.71	0.21	54.7	55.5	50
8.17	-66.05	-55.06	-63.68	0.21	54.8	55.5	49.9
8.17	-66.05	-55.06	-63.68	0.21	54.8	55.4	49.5
8.17	-66.01	-55.01	-63.65	0.18	54.6	55.4	49.2
8.17	-66.01	-55.01	-63.65	0.21	54.6	55.4	49.3
8.17	-66.01	-55.01	-63.62	0.21	54.6	55.2	49.1
8.17	-65.96	-54.95	-63.59	0.21	54.5	55.2	48.8
8.17	-65.96	-54.95	-63.59	0.21	54.5	55.2	48.9
8.17	-65.92	-54.9	-63.59	0.21	54.5	55.1	48.6
8.16	-65.92	-54.9	-63.56	0.21	54.5	55	48.3
8.17	-65.87	-54.9	-63.56	0.21	54.4	54.9	48.2

8.17	-65.87	-54.85	-63.53	0.21	54.2	54.9	48
8.17	-65.82	-54.85	-63.5	0.21	54.1	54.9	47.8
8.17	-65.82	-54.85	-63.5	0.21	54.1	54.9	47.9
8.17	-65.82	-54.85	-63.47	0.24	54	54.9	47.4
8.16	-65.78	-54.75	-63.47	0.21	54	54.9	47.6
8.16	-65.73	-54.8	-63.44	0.21	53.9	54.8	47.4
8.16	-65.73	-54.75	-63.44	0.21	54	54.8	47.4
8.16	-65.73	-54.75	-63.44	0.21	53.9	54.7	47.3
8.16	-65.73	-54.75	-63.41	0.24	53.8	54.7	47.3
8.16	-65.69	-54.69	-63.38	0.24	53.8	54.7	47
8.16	-65.64	-54.69	-63.38	0.24	53.8	54.6	46.7
8.16	-65.64	-54.64	-63.35	0.24	53.7	54.6	46.9
8.16	-65.64	-54.64	-63.35	0.24	53.7	54.6	46.8
8.16	-65.55	-54.64	-63.32	0.24	53.8	54.5	46.8
8.16	-65.55	-54.64	-63.32	0.24	53.8	54.5	46.3
8.16	-65.55	-54.59	-63.28	0.24	53.7	54.4	46.3
8.16	-65.5	-54.59	-63.25	0.24	53.6	54.4	46.3
8.16	-65.5	-54.59	-63.28	0.21	53.5	54.3	46.2
8.16	-65.5	-54.54	-63.25	0.24	53.5	54.3	46.5
8.16	-65.46	-54.54	-63.22	0.24	53.5	54.3	46.2
8.16	-65.41	-54.49	-63.22	0.24	53.5	54.2	46.3
8.16	-65.41	-54.49	-63.19	0.24	53.4	54.3	46.3
8.16	-65.37	-54.49	-63.16	0.24	53.3	54.2	46.2
8.16	-65.37	-54.49	-63.16	0.24	53.4	54.2	46
8.16	-65.37	-54.44	-63.13	0.24	53.3	54.2	46.2
8.16	-65.37	-54.44	-63.13	0.24	53.3	54.1	46.2
8.15	-65.32	-54.44	-63.13	0.27	53.2	54.1	46.2
8.15	-65.32	-54.44	-63.1	0.24	53.2	54	46.2
8.15	-65.27	-54.38	-63.1	0.24	53.2	54	46.2
8.15	-65.27	-54.33	-63.07	0.24	53.2	54	46.2
8.15	-65.27	-54.33	-63.07	0.24	53.1	54	46
8.15	-65.23	-54.33	-63.04	0.24	53.1	53.9	46.3
8.15	-65.18	-54.33	-63.01	0.24	53	53.9	46.3
8.15	-65.18	-54.28	-63.01	0.24	53.1	53.9	46.3
8.15	-65.18	-54.28	-62.95	0.24	53.1	53.8	46.2
8.15	-65.14	-54.23	-62.95	0.24	53	53.9	46.2
8.15	-65.14	-54.23	-62.92	0.24	53	53.9	46.5
8.15	-65.09	-54.23	-62.92	0.24	53	53.8	46.7
8.15	-65.09	-54.23	-62.89	0.24	53	53.8	46.7
8.15	-65.09	-54.12	-62.92	0.27	53	53.8	46.5
8.15	-65.09	-54.12	-62.89	0.24	53	53.8	46.5
8.15	-65.05	-54.07	-62.89	0.24	53	53.8	46.6
8.15	-65.05	-54.07	-62.86	0.24	53.1	53.8	46.7
8.15	-65	-54.07	-62.86	0.24	53.1	53.8	47
8.15	-65	-54.07	-62.86	0.27	53.1	53.8	46.9
8.15	-65	-54.02	-62.83	0.24	53	53.9	47.2
8.15	-64.91	-54.02	-62.8	0.24	53.1	54.1	47.3

8.15	-64.91	-54.02	-62.77	0.24	53.1	54.2	47.3
8.14	-64.91	-54.02	-62.74	0.24	53.2	54.2	47.9
8.14	-64.91	-53.97	-62.74	0.24	53.3	54.2	47.7
8.14	-64.86	-53.97	-62.74	0.24	53.3	54.3	48.1
8.14	-64.86	-53.92	-62.7	0.24	53.4	54.3	48.2
8.14	-64.82	-53.92	-62.67	0.24	53.4	54.3	48.4
8.14	-64.82	-53.92	-62.67	0.24	53.5	54.3	48.6
8.14	-64.77	-53.86	-62.67	0.27	53.5	54.3	48.7
8.14	-64.77	-53.86	-62.64	0.21	53.6	54.4	49.2
8.14	-64.77	-53.86	-62.64	0.24	53.7	54.5	49.3
8.14	-64.73	-53.86	-62.61	0.24	53.8	54.5	49.5
8.14	-64.73	-53.81	-62.61	0.24	53.8	54.5	49.7
8.14	-64.68	-53.81	-62.61	0.21	53.8	54.6	50
8.14	-64.68	-53.76	-62.58	0.21	53.8	54.7	50
8.14	-64.63	-53.76	-62.55	0.24	53.8	54.8	50.4
8.14	-64.63	-53.71	-62.52	0.24	53.8	54.9	50.5
8.14	-64.59	-53.71	-62.52	0.21	53.9	54.9	51.1
8.14	-64.59	-53.71	-62.49	0.24	53.9	54.9	51.1
8.14	-64.54	-53.66	-62.46	0.21	54	55	51.5
8.14	-64.54	-53.66	-62.43	0.21	53.9	55	51.7
8.14	-69.49	-60.2	-63.71	0.18	54	55	53
8.14	-65.41	-54.12	-62.77	0.24	54.5	55.2	53
8.14	-65	-53.92	-62.64	0.21	54	55.4	53
8.14	-64.86	-53.86	-62.58	0.21	54.1	55.4	53.3
8.14	-64.73	-53.76	-62.52	0.21	54.1	55.4	53.5
8.14	-64.63	-53.71	-62.49	0.21	53.9	55.6	53.8
8.14	-64.54	-53.66	-62.46	0.21	54.4	55.7	53.8
8.14	-64.54	-53.66	-62.43	0.21	54.4	55.7	53.9
8.14	-64.5	-53.6	-62.4	0.24	54.1	55.7	54
8.14	-64.5	-53.55	-62.37	0.24	54.5	55.8	54.4
8.14	-64.4	-53.5	-62.34	0.21	54.4	55.9	54.5
8.14	-64.36	-53.5	-62.31	0.21	54.7	55.9	54.6
8.14	-64.31	-53.5	-62.28	0.21	54.7	56	54.6
8.14	-64.31	-53.45	-62.28	0.21	54.7	56	54.9
8.14	-64.27	-53.45	-62.25	0.21	54.8	56	54.8
8.14	-64.22	-53.45	-62.25	0.18	54.9	56.1	55.3
8.13	-64.22	-53.4	-62.19	0.21	54.9	56.1	55.3
8.13	-64.18	-53.35	-62.16	0.21	54.9	56.2	55.4
8.13	-64.18	-53.35	-62.16	0.21	54.9	56.2	55.4
8.13	-64.13	-53.35	-62.12	0.21	54.9	56.3	55.4
8.13	-64.13	-53.29	-62.09	0.21	54.9	56.3	55.5
8.13	-64.13	-53.29	-62.09	0.21	55	56.3	55.6
8.13	-64.08	-53.24	-62.06	0.21	55	56.4	55.5
8.13	-64.08	-53.24	-62.06	0.21	55.1	56.4	55.7
8.13	-64.04	-53.24	-62.03	0.18	55.1	56.5	55.8
8.13	-64.04	-53.19	-62.03	0.21	55.2	56.5	56
8.13	-64.04	-53.14	-62	0.21	55.3	56.5	55.7

8.13	-63.99	-53.14	-62	0.21	55.4	56.5	55.9
8.13	-63.99	-53.14	-61.97	0.18	55.4	56.6	55.9
8.13	-63.95	-53.14	-61.94	0.21	55.5	56.6	56
8.13	-63.9	-53.09	-61.94	0.21	55.5	56.6	55.8
8.13	-63.9	-53.09	-61.91	0.21	55.4	56.7	55.9
8.13	-63.86	-53.09	-61.91	0.18	55.5	56.6	56
8.13	-63.86	-53.03	-61.88	0.21	55.4	56.5	55.9
8.13	-63.86	-53.03	-61.88	0.21	55.6	56.5	55.7
8.12	-63.86	-53.03	-61.88	0.21	55.5	56.4	55.8
8.12	-63.81	-52.98	-61.85	0.21	55.4	56.4	56
8.12	-63.76	-52.98	-61.85	0.21	55.4	56.4	55.8
8.12	-63.76	-52.98	-61.82	0.21	55.4	56.4	55.8
8.12	-63.76	-52.98	-61.82	0.18	55.4	56.4	55.9
8.12	-63.76	-52.88	-61.79	0.21	55.4	56.4	55.6
8.12	-63.72	-52.88	-61.79	0.21	55.4	56.4	55.7
8.11	-63.72	-52.83	-61.79	0.21	55.4	56.4	55.5
8.12	-63.67	-52.83	-61.76	0.21	55.3	56.4	55.4
8.12	-63.67	-52.77	-61.76	0.21	55.4	56.4	55.5
8.11	-63.63	-52.77	-61.73	0.21	55.4	56.3	55.2
8.12	-63.63	-52.77	-61.73	0.21	55.4	56.4	55.1
8.11	-63.58	-52.77	-61.7	0.21	55.1	56.3	55
8.12	-63.58	-52.72	-61.7	0.21	54.9	56.3	54.7
8.12	-63.58	-52.72	-61.67	0.21	54.9	56.3	54.8
8.11	-63.53	-52.67	-61.64	0.21	54.9	56.3	54.5
8.12	-63.53	-52.67	-61.64	0.21	54.9	56.2	54.3
8.11	-63.53	-52.67	-61.61	0.21	55	56.2	54.4
8.11	-63.49	-52.67	-61.61	0.21	55.1	56.2	54.1
8.12	-63.49	-52.62	-61.61	0.21	55.1	56.2	54.2
8.12	-63.44	-52.62	-61.58	0.21	55.1	56.2	54.1
8.12	-63.44	-52.62	-61.54	0.21	55.2	56.1	53.8
8.12	-63.44	-52.62	-61.54	0.21	55.2	56.1	53.8
8.11	-63.44	-52.57	-61.54	0.21	55.2	56.1	53.6
8.11	-63.4	-52.52	-61.51	0.21	55.2	56.1	53.7
8.11	-63.4	-52.52	-61.48	0.21	55.1	56.1	53.7
8.11	-63.31	-52.52	-61.48	0.21	55.2	56.1	53.5
8.11	-63.26	-52.52	-61.45	0.21	55.2	56.1	53.4
8.11	-63.26	-52.46	-61.45	0.24	55.2	56.1	53.4
8.11	-63.26	-52.46	-61.45	0.21	55.2	56.1	53.2
8.1	-63.21	-52.46	-61.39	0.21	55.1	56.1	53.1
8.11	-63.21	-52.41	-61.36	0.21	55.1	56.1	53.1
8.11	-63.21	-52.41	-61.36	0.21	55.2	56.1	53
8.1	-63.17	-52.36	-61.36	0.21	55.4	56.1	53
8.11	-63.17	-52.36	-61.33	0.21	55.3	56.1	53
8.11	-63.17	-52.36	-61.33	0.24	55.2	56.1	52.6
8.11	-63.12	-52.31	-61.3	0.21	55.1	56	52.6
8.1	-63.12	-52.36	-61.27	0.24	55.1	56	52.6
8.1	-63.08	-52.36	-61.27	0.24	55	56.1	52.6

8.11	-63.08	-52.31	-61.24	0.24	55.1	56	52.6
8.11	-63.03	-52.26	-61.24	0.24	55	56	52.7
8.1	-63.03	-52.26	-61.24	0.21	55	56	52.5
8.11	-62.99	-52.26	-61.21	0.24	55	56	52.6
8.11	-62.99	-52.2	-61.18	0.21	55.1	56	52.2
8.11	-62.99	-52.2	-61.18	0.21	55.1	56	52.3
8.1	-62.94	-52.15	-61.15	0.21	55.1	56	52.2
8.11	-62.94	-52.15	-61.15	0.21	55.2	56	52.2
8.1	-62.94	-52.15	-61.12	0.24	55.1	56	52.3
8.09	-62.89	-52.15	-61.09	0.24	55.2	56	52.2
8.1	-62.89	-52.15	-61.09	0.24	55.1	56	52.2
8.09	-62.85	-52.1	-61.06	0.24	55.2	56	52
8.1	-62.85	-52.05	-61.06	0.21	55.1	56	51.9
8.09	-62.8	-52.05	-61.03	0.21	55.1	56	51.7
8.09	-62.8	-52.05	-61.03	0.24	55.1	56	51.9
8.09	-62.76	-52	-61	0.21	55.1	56	51.7
8.09	-62.76	-52	-60.96	0.21	55.1	56	51.9
8.09	-62.76	-52	-60.96	0.24	55.1	56	51.6
8.09	-62.76	-52	-60.93	0.21	55.2	56	51.6
8.09	-62.71	-51.94	-60.93	0.21	55.2	56	51.6
8.09	-62.71	-51.94	-60.9	0.24	55.2	56	51.5
8.1	-62.66	-51.89	-60.9	0.21	55.1	56	51.5
8.09	-62.71	-51.94	-60.87	0.24	55.2	56	51.4
8.09	-62.62	-51.94	-60.87	0.24	55.2	56	51.4
8.09	-62.62	-51.89	-60.84	0.21	55.2	55.9	51.2
8.1	-62.62	-51.84	-60.84	0.21	55.2	56	51
8.09	-62.62	-51.84	-60.84	0.21	55.1	55.9	51
8.09	-62.57	-51.79	-60.81	0.21	55.1	55.9	51
8.1	-62.57	-51.79	-60.78	0.21	55.1	55.9	51
8.1	-62.53	-51.79	-60.78	0.24	55.2	55.9	50.8
8.1	-62.53	-51.79	-60.78	0.24	55.1	56	50.8
8.09	-62.48	-51.79	-60.75	0.21	55.1	55.8	50.7
8.09	-62.48	-51.74	-60.72	0.24	55.1	55.9	50.7
8.09	-62.48	-51.74	-60.72	0.21	55.1	55.8	50.5
8.09	-62.44	-51.74	-60.69	0.24	55.1	55.9	50.5
8.09	-62.44	-51.68	-60.69	0.24	55.1	55.7	50.5
8.09	-62.44	-51.68	-60.69	0.21	55.1	55.7	50.7
8.09	-62.39	-51.58	-60.66	0.24	55	55.6	50.5
8.09	-62.39	-51.58	-60.66	0.24	54.9	55.6	50.5
8.09	-62.39	-51.58	-60.6	0.24	54.9	55.5	50.5
8.09	-62.39	-51.58	-60.57	0.24	54.9	55.5	50.4
8.09	-62.34	-51.53	-60.57	0.24	54.9	55.5	50.3
8.09	-62.3	-51.53	-60.57	0.21	54.8	55.5	50.4
8.09	-62.3	-51.53	-60.54	0.24	54.9	55.6	50.1
8.09	-62.3	-51.53	-60.54	0.24	54.9	55.6	50.1
8.09	-62.21	-51.53	-60.51	0.24	54.9	55.6	50.2
8.09	-62.21	-51.48	-60.51	0.21	54.9	55.6	49.9

8.09	-62.21	-51.43	-60.48	0.24	54.9	55.7	50
8.09	-62.16	-51.43	-60.48	0.24	54.9	55.7	49.8
8.09	-62.16	-51.43	-60.45	0.21	54.9	55.7	50.1
8.09	-62.16	-51.43	-60.45	0.24	54.9	55.7	50.1
8.09	-62.12	-51.43	-60.42	0.21	54.9	55.7	50
8.09	-62.12	-51.37	-60.42	0.21	54.9	55.8	49.8
8.09	-62.07	-51.37	-60.38	0.24	54.9	55.8	49.9
8.09	-62.07	-51.37	-60.38	0.21	54.9	55.8	49.9
8.09	-62.07	-51.32	-60.35	0.24	54.9	55.9	50
8.09	-62.02	-51.32	-60.32	0.24	54.9	55.9	50.1
8.08	-62.02	-51.32	-60.32	0.21	54.9	55.9	50.2
8.09	-61.98	-51.27	-60.29	0.21	55	55.9	50.1
8.08	-61.98	-51.27	-60.29	0.21	55	55.9	50.1
8.09	-61.93	-51.22	-60.26	0.21	55	56	50.2
8.08	-61.98	-51.22	-60.26	0.24	55	56	50.5
8.08	-61.93	-51.22	-60.26	0.24	55	56	50.5
8.08	-61.89	-51.17	-60.23	0.21	55	56	50.5
8.08	-61.84	-51.17	-60.2	0.21	55.1	56	50.8
8.08	-61.84	-51.17	-60.2	0.24	55.1	56	50.9
8.08	-61.84	-51.17	-60.17	0.21	55.1	56	51.3
8.08	-61.79	-51.11	-60.17	0.21	55.1	56	51.1
8.08	-61.79	-51.11	-60.11	0.21	55.1	56	51.2
8.08	-61.79	-51.11	-60.11	0.24	55.1	55.9	51.4
8.08	-61.75	-51.06	-60.08	0.21	55.1	55.9	51.5
8.08	-61.75	-51.06	-60.08	0.21	55.1	55.9	51.6
8.08	-61.75	-51.01	-60.05	0.21	55.1	56	51.9
8.08	-61.7	-51.01	-60.05	0.21	55.1	55.9	52.1
8.08	-61.7	-51.01	-60.02	0.24	55.3	56	52.2
8.08	-61.66	-51.01	-60.02	0.21	55.1	56	52.4
8.08	-61.66	-50.96	-60.02	0.21	55	56	52.5
8.2	-65.27	-55.63	-61.03	23.08	65.6	56	55.3
8.53	-67.52	-56.46	-61.54	19.41	75.1	55.9	54.2
8.64	-68.34	-57.08	-61.88	21.67	77.2	56.2	51
8.65	-69.03	-57.13	-62.09	22.53	77.9	56.4	52.6
8.67	-69.53	-57.6	-62.28	22.53	78.3	56.8	52.2
8.71	-70.31	-58.02	-62.49	19.69	78.5	56.9	52.7
8.62	-69.62	-57.81	-62.61	22.53	78.8	56.9	52.4
8.63	-70.08	-57.91	-62.74	20.39	78.4	57.4	53.5
8.72	-70.95	-59.26	-63.22	22.65	79.1	57.3	51.7
8.7	-69.81	-58.48	-63.53	19.81	78.9	57.6	52.2
8.99	-70.59	-58.69	-63.62	22.65	78.9	58.1	52.3
8.74	-70.86	-58.85	-63.53	22.68	79.4	58.1	53.8
8.7	-71.18	-59.26	-63.19	22.59	79.2	58.2	51.1
8.72	-70.91	-59.99	-63.56	22.65	79.4	58.1	49.4
8.65	-70.91	-59.11	-63.38	22.34	79.4	58.2	52.1
8.81	-71.64	-59.42	-64.08	20.18	79.5	58.3	52.3
8.7	-71.68	-59	-63.96	22.56	79.7	58.4	51.8

8.76	-71.36	-58.9	-64.26	22.71	79.6	58.4	49.2
8.73	-72.19	-59.42	-63.89	22.68	79.6	58.4	53.4
8.72	-71.78	-60.04	-63.99	22.62	79	58.3	50.2
8.73	-72.1	-60.25	-64.29	22.8	79.5	58.5	53.7
8.82	-72.28	-60.09	-64.35	19.78	79.3	58.7	53.8
8.59	-71.82	-60.2	-64.35	19.35	78.9	58.7	51.9
9.03	-72.19	-60.2	-64.44	22.5	78.7	59	50.7
8.88	-71.87	-59.78	-64.38	22.68	78.8	59	54.5
8.85	-72.6	-60.51	-64.69	22.65	78.9	58.5	49
8.8	-72.28	-60.14	-64.72	22.68	78.9	58.7	52.4
8.76	-71.87	-60.51	-64.35	22.77	78.8	58.9	48.4
8.81	-72.37	-60.4	-64.72	22.77	78.9	58.7	52.4
8.79	-72.19	-60.77	-64.69	22.77	78.8	58.8	50.8
8.72	-72.51	-60.97	-64.9	22.8	78.4	58.8	49.7
8.79	-72.55	-61.18	-64.99	22.71	78.7	58.7	50.5
8.74	-72.78	-59.83	-65.02	22.74	78.6	58.5	48.1
8.82	-72.42	-60.87	-64.84	22.8	78.3	58.7	51.1
8.77	-73.01	-60.35	-65.05	22.77	78.1	58.8	51.6
8.74	-72.92	-60.82	-65.05	22.74	77.8	58.9	52.9
8.74	-72.65	-60.77	-64.99	22.86	77.7	58.8	51.3
8.8	-72.6	-60.92	-65.27	22.83	77.6	58.7	50.5
8.74	-72.88	-61.18	-65.48	22.92	77.4	58.7	51
8.71	-73.15	-60.97	-65.3	22.83	77.2	58.6	52.6
8.79	-73.52	-60.97	-65.39	22.83	76.9	58.7	51.3
8.78	-72.74	-60.97	-65.18	22.86	76.7	58.7	51.4
8.78	-73.29	-60.82	-65.6	22.92	76.6	58.8	52.2
8.82	-73.56	-61.18	-65.48	22.83	76.3	58.6	52.5
8.82	-73.2	-60.82	-65.54	22.83	76.2	58.6	52.4
8.8	-73.47	-61.8	-65.6	22.92	75.9	58.6	52
8.73	-73.75	-60.82	-65.97	22.89	75.9	58.6	51.2
8.76	-73.47	-61.29	-65.91	22.07	75.8	58.6	51
8.72	-74.2	-61.08	-65.79	22.92	75.9	58.5	52.1
8.85	-73.15	-61.6	-65.73	22.89	76.1	58.5	51.6
8.72	-73.38	-62.01	-65.79	22.83	76.1	58.5	52.5
8.8	-73.52	-62.06	-65.97	22.92	76.2	58.5	53
8.85	-73.61	-61.91	-66	22.95	75.9	58.6	49.1
8.81	-73.75	-61.6	-66.03	22.89	75.5	58.4	50.8
8.79	-73.47	-61.96	-66.18	22.99	75.6	58.4	43.4
8.73	-73.56	-62.22	-66.15	20.57	75.3	58.4	52.2
8.6	-73.79	-61.54	-66.34	19.93	74.9	58.4	52
8.66	-73.65	-62.22	-66.09	19.63	74.5	58.4	52.6
8.69	-73.88	-61.54	-66.25	19.54	74.1	58.6	51.8
8.63	-73.61	-61.6	-66.28	19.75	73.7	58.5	50.3
8.68	-74.66	-61.91	-66.18	19.99	73.7	58.3	52.1
8.61	-73.88	-61.91	-66.28	19.93	73.4	58.3	51.5
8.69	-73.88	-61.86	-66.31	19.69	72.8	58.3	52.8
8.7	-74.07	-62.32	-66.09	20.76	72.3	58.5	51.4

8.82	-73.84	-61.34	-66.46	23.02	72.4	58.7	49.6
8.83	-73.88	-62.32	-66.18	23.08	72.6	58.5	52.3
8.85	-74.2	-62.74	-66.7	23.08	72.3	58.4	52.3
8.83	-74.89	-62.84	-66.61	23.14	72.3	58.4	47.8
8.87	-73.97	-62.01	-66.34	23.02	72.4	58.5	50
9.14	-73.79	-62.53	-66.31	23.05	72	58.3	51.6
8.73	-74.66	-62.32	-66.55	22.92	71.3	58.3	49.2
8.9	-74.39	-61.8	-66.92	23.05	71.2	58.4	49.8
8.9	-74.39	-62.63	-66.28	23.05	71.3	58.2	53.4
8.85	-73.88	-62.37	-67.01	23.08	70.9	58	50.5
8.88	-74.8	-62.32	-67.01	23.14	70.4	57.9	50.3
8.76	-74.2	-62.53	-66.92	23.08	70.4	57.8	49.7
8.76	-74.71	-62.22	-66.83	23.14	71.1	58	52.3
8.73	-74.2	-62.22	-66.73	23.2	70.9	57.8	50.4
8.78	-74.57	-62.22	-67.04	23.05	71.1	57.6	50.5
8.8	-73.65	-62.22	-66.98	23.14	71.3	57.5	51.2
8.83	-74.89	-62.53	-66.7	23.14	71.5	57.4	54.1
8.81	-74.8	-62.12	-66.83	23.05	70.9	57.8	50.5
8.8	-74.71	-62.22	-66.83	23.17	70.5	57.5	49
8.74	-75.16	-62.43	-67.01	23.26	70.7	57.3	50.4
8.81	-74.8	-62.43	-66.83	23.14	70.7	57.3	50.2
8.82	-74.8	-62.74	-67.01	23.23	70.3	57.3	52.2
8.79	-74.66	-62.95	-67.1	23.2	69.8	57.1	52.9
8.8	-74.02	-62.43	-67.22	23.23	69.6	57.2	53
8.74	-74.75	-62.79	-67.13	23.32	69.4	57.2	50.5
8.76	-75.3	-61.39	-67.1	23.2	69.6	57.1	59.2
8.79	-74.57	-63.15	-67.31	23.23	69.6	57.1	50.2
8.79	-75.07	-62.69	-67.41	23.32	69.4	56.9	49.3
8.78	-74.8	-63.05	-67.25	23.23	69.2	57.1	51.2
8.79	-75.16	-62.48	-67.5	23.26	68.6	56.9	51.5
8.84	-75.03	-62.74	-67.37	23.29	68.9	56.9	52.2
8.75	-75.39	-62.22	-67.34	23.32	68.8	57.1	51.8
8.77	-75.07	-63.1	-67.16	23.32	68.8	56.7	51.2
8.79	-75.26	-63.46	-67.37	23.23	68.8	56.8	52.8
8.83	-73.93	-63.15	-67.37	23.41	68.9	56.8	52
8.76	-74.89	-63.1	-67.53	23.29	69	56.8	54.1
8.71	-75.26	-62.89	-67.59	23.32	69	56.7	50.5
8.81	-75.07	-62.69	-67.59	23.29	68.9	56.6	53.8
8.75	-75.44	-63.1	-67.41	22.68	68.6	56.6	52.8
8.76	-75.16	-63.21	-67.56	21.92	68.2	56.7	50.5
8.8	-75.07	-63.52	-67.62	21.92	68	56.6	52
8.8	-74.8	-63.05	-67.5	22.1	67.9	56.3	50.2
8.75	-75.21	-63.57	-67.56	21.73	67.7	56.3	51.4
8.77	-75.39	-62.58	-67.86	21.21	67.9	56.3	51
8.79	-75.81	-63.31	-67.8	23.41	67.9	56.4	50.9
8.7	-75.3	-63.67	-67.83	23.35	67.9	56.3	52.4
8.67	-75.35	-64.35	-67.89	23.38	68	56.3	45.5

8.76	-75.39	-63.15	-67.71	23.35	68.5	56.5	48.7
8.76	-75.44	-63.57	-67.83	23.32	68.9	56.4	49.4
8.82	-75.16	-63.15	-67.8	22.1	69.2	56.4	49.9
8.78	-75.16	-63.15	-67.74	20.02	69.3	56.4	50.5
8.69	-75.94	-63.46	-67.86	19.75	70.2	56.7	54.3
8.68	-75.26	-63.57	-67.83	19.93	70.9	57	49.7
8.75	-75.07	-63.67	-68.02	20.27	71	57.1	49.6
8.64	-76.03	-62.95	-67.89	19.75	71.8	57	54.3
8.71	-75.26	-63.31	-68.08	20.12	72.5	56.6	53.2
8.76	-75.53	-63.67	-68.05	23.05	73.3	56.7	52
8.8	-75.49	-63.67	-68.08	23.17	74	56.8	54.1
8.81	-75.76	-63.88	-67.99	21.34	74.4	56.8	47.8
8.68	-76.08	-63.72	-68.08	20.12	74.5	56.9	52.4
8.66	-75.76	-64.61	-68.14	19.75	74.6	57.1	51.6
8.74	-75.81	-64.04	-68.35	19.81	74.7	57.2	53.5
8.74	-75.39	-63.36	-68.32	20.91	75.1	57.3	52.5
8.76	-75.53	-63.78	-68.23	20.33	75.2	57.5	52
8.73	-76.08	-64.35	-67.99	19.63	75.5	57.5	52.3
8.7	-75.39	-64.09	-68.32	19.66	75.7	57.3	53
8.72	-75.9	-63.62	-68.5	19.99	76.3	57.3	53.9
8.65	-75.53	-63.78	-68.2	20.05	76.3	57.4	52
8.62	-75.94	-64.04	-68.32	19.81	76.6	57.6	51.5
8.69	-75.76	-63.78	-68.23	19.96	76.6	57.8	49.8
8.74	-75.76	-64.29	-68.32	22.92	77.2	58.1	51
9.12	-76.08	-64.5	-68.32	22.95	77.7	58.1	49.9
8.75	-76.03	-63.98	-68.38	22.95	78.1	58.1	51.6
8.74	-76.58	-64.35	-68.14	22.77	78.3	58.1	55.7
8.74	-75.94	-64.29	-68.29	21.37	78.5	58.2	51.4
8.74	-76.03	-64.14	-68.5	20.48	78.4	58.2	52.6
8.71	-76.31	-64.19	-68.5	21.25	78.5	58.2	50.8
8.74	-76.4	-64.14	-68.17	22.34	78.8	58.4	51.8
9.09	-76.4	-63.98	-68.35	22.92	78.8	58.6	50.5
8.94	-76.31	-64.4	-68.29	22.92	78.6	58.6	53.2
8.85	-76.26	-64.4	-68.5	22.95	78.6	58.7	51.2
8.81	-76.49	-64.45	-68.57	23.02	78.6	58.7	53.1
10.06	-76.03	-63.98	-68.23	22.8	78.6	58.6	50.1
8.74	-76.49	-64.61	-68.66	21.58	77.9	58.6	51.1
8.74	-76.72	-64.55	-68.5	21.34	77.8	58.5	52.1
8.75	-75.94	-64.55	-68.57	22.31	77.7	58.7	51.2
8.89	-75.85	-63.98	-68.53	23.05	78.4	58.8	51.6
8.83	-76.22	-64.66	-68.5	22.99	78.5	58.6	52.7
8.85	-75.9	-64.14	-68.57	22.95	78.1	58.7	52.6
8.98	-75.99	-64.66	-68.38	22.99	78	59	48.2
8.73	-76.77	-64.29	-68.63	21.31	77.5	58.9	51.3
8.7	-76.36	-64.4	-68.66	19.63	77.2	58.6	52.7
8.54	-76.49	-64.76	-68.66	19.81	77.3	58.5	51.4
8.7	-76.26	-63.83	-68.5	20.09	77.3	58.4	53

8.37	-75.94	-64.29	-69.08	19.9	77.1	58.5	53.8
8.67	-76.86	-64.87	-68.81	19.66	76.9	58.6	51.9
8.69	-76.81	-64.66	-68.99	19.6	76.6	58.6	49.8
8.7	-76.63	-64.4	-68.75	20.09	76.3	58.7	54.8
8.69	-76.26	-64.92	-68.53	19.75	76.1	58.8	52.3
8.71	-76.08	-64.04	-68.75	19.99	76.2	58.4	55.1
8.76	-76.36	-64.4	-68.9	21.34	76.2	58.5	51.6
8.78	-76.54	-64.66	-68.78	21.55	75.9	58.4	52
8.72	-76.86	-64.45	-68.72	20.97	75.5	58.4	51.6
8.79	-76.58	-64.4	-68.78	19.9	74.9	58.4	52.3
8.66	-76.58	-64.5	-68.78	19.84	74.5	58.5	53
8.67	-76.95	-64.66	-68.84	19.78	73.8	58.5	51.8
8.71	-76.26	-64.19	-68.84	19.84	73.6	58.4	52.1
8.67	-76.58	-64.5	-69.08	19.93	73	58.4	51.2
8.67	-76.36	-64.5	-69.02	20.24	73	58.3	51.5
8.78	-76.9	-64.87	-68.99	20.33	72.8	58.2	51.9
8.81	-76.36	-64.5	-68.96	20.67	72.8	58.1	53.9
8.74	-76.95	-64.55	-69.02	20.45	72.4	58.2	52.6
8.79	-76.9	-64.45	-69.05	20.3	72.2	58.1	52
8.65	-76.86	-64.81	-68.75	20.3	71.9	58.2	51.7
8.63	-76.86	-65.23	-69.36	20.24	71.9	57.8	51.6
8.79	-76.9	-64.81	-69.18	20.24	71.5	57.9	52.9
8.79	-76.77	-64.19	-69.11	20.39	71.3	57.8	50.5
8.85	-77.41	-64.19	-69.48	20.48	71	57.8	51.7
8.85	-76.72	-64.4	-69.08	20.54	71	57.9	50.9
8.69	-76.9	-64.87	-69.11	20.39	70.6	57.8	51.5
8.77	-76.86	-64.92	-69.21	20.12	70.2	57.6	48.4
8.58	-76.03	-65.44	-69.27	20.27	70.2	57.6	51.6
8.76	-76.58	-65.28	-69.45	20.12	70.1	57.6	50.9
8.76	-77.09	-65.13	-69.33	20.94	70	57.5	41.9
8.76	-77.77	-64.76	-69.36	23.38	70.1	57.3	51.6
8.7	-76.31	-65.59	-69.21	23.38	69.7	57.3	51.4
8.84	-76.9	-65.13	-69.3	23.41	69.4	57.3	49.9
8.8	-77.27	-65.44	-69.21	23.32	69.2	57.3	50.1
8.83	-77.45	-64.87	-69.21	23.32	69	57.3	54.5
8.87	-76.58	-65.02	-69.57	23.32	69	57.2	50.5
8.82	-76.77	-64.76	-69.33	23.35	68.8	57.1	50.4
8.82	-76.9	-65.38	-69.36	23.44	68.8	57.1	52
8.75	-77.23	-65.64	-69.39	23.32	68.9	56.9	53.6
8.78	-77.18	-64.92	-69.54	23.41	68.7	57	52.8
8.74	-76.81	-65.38	-69.57	23.32	68.6	56.9	51.5
8.77	-76.9	-64.45	-69.27	23.38	68	56.8	51.6
8.8	-77.36	-64.61	-69.45	23.41	67.9	56.9	51.8
8.83	-76.9	-64.71	-69.51	23.41	67.7	56.7	51
8.77	-77.32	-65.28	-69.48	23.32	67.6	56.6	51.7
8.88	-77.36	-65.13	-69.48	23.44	67.5	56.9	50.2
8.87	-77.23	-65.02	-69.51	23.35	67.8	56.9	50.3

8.71	-77.41	-65.28	-69.3	23.47	67.1	56.5	49.5
8.75	-77.23	-64.97	-69.57	23.44	67.2	56.4	51.1
8.83	-77.41	-65.23	-69.66	23.38	67.5	56.5	51.7
8.85	-78.05	-65.64	-69.48	23.35	67.5	56.6	52.4
8.8	-77.09	-65.23	-69.66	23.41	67.2	56.8	50.5
8.88	-77.18	-66.11	-69.76	23.35	66.9	56.9	52.6
8.87	-77.13	-65.59	-69.57	23.38	66.8	56.7	53
8.88	-77.23	-65.54	-69.57	23.35	66.9	56.6	50.8
8.93	-77.04	-64.97	-69.88	23.32	67.2	56.6	51.7
8.75	-77.5	-64.92	-69.63	20.36	66.8	56.7	51.1
8.65	-77.32	-65.96	-69.73	19.99	67	56.4	52.8
8.62	-77.45	-66.01	-69.6	20.48	66.9	56.1	51
8.82	-77.5	-65.28	-69.79	20.45	67.1	56.2	50.9
8.75	-77.09	-65.44	-70.06	20.33	66.8	56.1	50.9
8.74	-77.64	-65.54	-69.63	20.33	66.6	56.1	53
8.63	-77.41	-65.44	-69.45	20.48	66.7	56	51.8
8.76	-77.91	-65.59	-69.48	20.82	67.1	56	52.7
8.85	-77.32	-66.06	-69.63	23.38	67.2	56	51.3
8.73	-77.32	-65.7	-69.69	23.41	67.5	56	52.3
8.76	-77.36	-65.44	-69.73	23.41	67.7	56	51.6
8.86	-77.64	-65.23	-69.91	23.41	67.6	56	52.2
8.79	-77.5	-65.64	-69.63	23.41	67.6	56.1	47
8.75	-77.59	-65.75	-69.69	23.38	67.7	56	49.7
8.78	-77.73	-65.59	-69.76	23.41	67.8	56	53.5
8.82	-78.28	-65.64	-69.76	23.35	67.5	56	53.5
8.75	-77.73	-65.23	-69.76	23.44	67.1	55.8	49.7
8.76	-77.64	-65.9	-69.76	23.38	67.2	55.9	51.2
8.76	-78.09	-65.13	-69.85	23.38	67.6	56	51.9
8.74	-77.87	-66.37	-69.85	23.38	67.6	56	50.9
8.76	-77.36	-64.87	-69.88	23.41	67.9	55.7	53.1
8.76	-77.68	-65.54	-69.91	23.38	67.8	55.9	52.3
8.83	-77.5	-65.28	-69.85	23.41	67.8	55.8	51.3
8.68	-77.45	-66.06	-69.85	23.38	67.7	55.9	53.6
8.76	-76.81	-65.64	-70	23.38	67.7	56	51.9
8.83	-77.96	-65.44	-70.09	23.41	67.9	55.8	52
8.82	-77.55	-65.7	-69.91	23.35	67.9	55.9	51.6
8.78	-77.55	-65.9	-69.85	23.44	67.9	55.9	51.5
8.79	-77.5	-65.33	-70.21	23.29	68	55.8	54.5
8.77	-77.87	-65.85	-69.97	23.38	68.1	56	50.9
8.82	-77.91	-65.59	-69.76	23.41	68.2	55.8	51.6
8.73	-77.96	-66.06	-69.91	23.29	68.3	55.8	51.8
8.73	-77.91	-65.02	-69.85	23.32	68.3	55.9	52.4
8.74	-78.05	-66.99	-70	23.26	68.5	55.9	53.1
8.81	-77.96	-65.64	-69.82	23.23	68.6	55.9	51.3
8.67	-77.91	-66.11	-70.18	23.32	68.6	56	50.4
8.74	-76.86	-66.27	-70.09	23.44	68.4	55.9	51.3
8.81	-77.73	-66.32	-70	23.26	68.6	55.9	51.8

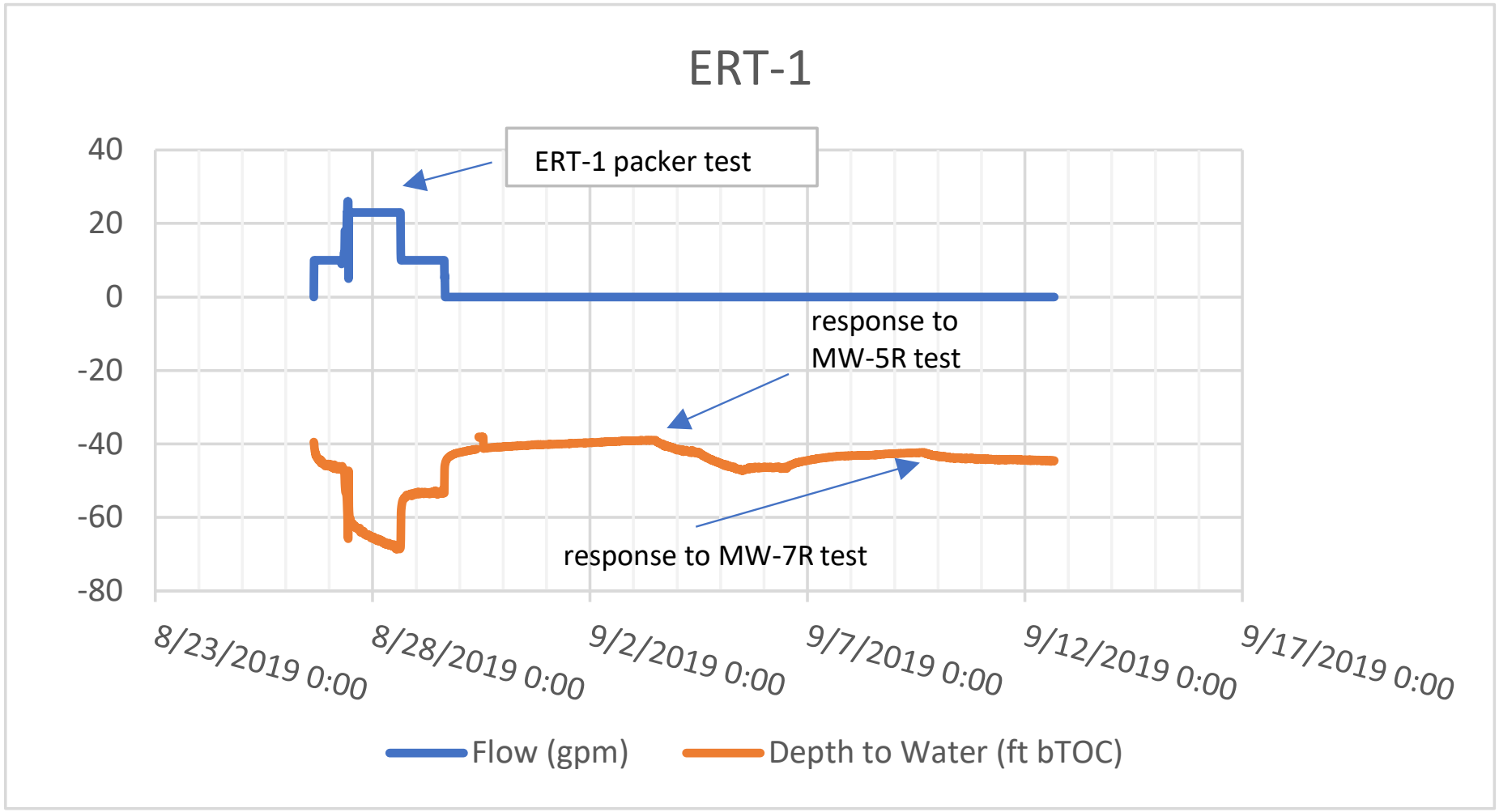
8.82	-77.64	-66.11	-69.79	23.26	68.7	56	51.4
8.72	-77.55	-65.8	-70.18	23.2	69.6	56	50.8
8.8	-78.05	-65.7	-70.09	23.23	69.3	56	50.2
8.79	-78.05	-65.9	-70.09	23.29	70	56	51.6
8.81	-78.83	-65.59	-69.88	23.2	70.2	55.9	51.3
8.76	-78.09	-65.8	-70.21	23.26	71.2	56	50.7
8.74	-77.87	-65.64	-70.31	23.17	71.6	56.2	50
8.8	-78.09	-66.27	-70.18	23.2	72	56	55.7
8.77	-78.51	-65.8	-70.24	23.14	72.1	56.2	54.7
8.77	-78	-66.01	-70.49	23.08	72.3	56.3	48.7
8.72	-78.14	-65.9	-70.27	22.01	72.2	56.2	51.2
8.79	-78	-66.21	-70.12	20.7	71.9	56.4	55.4
8.76	-77.64	-65.85	-70.49	20.36	71.6	56.5	50.4
8.8	-78.09	-65.85	-70.27	20.3	71.8	56.5	53.3
8.75	-78.32	-65.44	-70.34	21.28	72.3	56.5	51.9
8.77	-77.64	-65.54	-70.21	23.02	72.8	56.6	49.7
8.8	-77.45	-65.75	-70.52	22.99	73.1	56.7	52.9
8.8	-78.28	-66.58	-70.27	21.98	73.3	56.8	50.9
8.75	-77.77	-65.85	-70.21	20.36	73.3	56.7	50.9
8.72	-78.37	-65.8	-70.4	20.12	73.2	56.9	50.5
8.8	-77.96	-66.01	-70.55	20.05	73.2	56.8	51.6
8.65	-77.87	-65.59	-70.43	19.93	73.2	57	51.2
8.82	-78.05	-65.8	-70.55	19.87	73.1	56.9	48.9
8.84	-78.05	-65.7	-70.31	19.75	73	56.9	52
8.68	-77.68	-65.8	-70.12	19.93	73.2	57	51.3
8.78	-77.55	-66.68	-70.24	19.75	73.3	57	49.5
8.78	-78.32	-66.63	-70.4	20.05	73.8	57.1	50.1
8.82	-78.09	-66.32	-70.4	21.15	74.1	57.1	50.1
8.81	-78.14	-66.16	-70.61	22.34	74.4	57.2	53.3
8.76	-77.87	-65.64	-70.46	20.73	74.3	57.3	51.1
8.62	-78.51	-66.11	-70.46	19.81	74.1	57.3	53.6
8.68	-77.68	-66.21	-70.46	19.47	74.2	57.6	51.1
8.66	-77.41	-66.01	-70.34	19.35	74.3	57.6	52.8
8.66	-78.28	-66.32	-70.21	19.35	74.1	57.6	52.8
8.64	-78.51	-66.89	-70.73	19.47	73.8	57.6	52
8.57	-78.14	-66.58	-70.46	19.84	74.1	57.4	51.2
8.75	-78.19	-66.21	-70.67	20.27	74.3	57.8	53.5
8.74	-78.46	-65.9	-70.67	22.65	74.3	57.5	51.4
8.78	-78.55	-66.32	-70.61	22.83	74.2	57.8	48.6
8.81	-78.51	-66.37	-70.37	21.95	74	57.8	52.6
8.81	-78.74	-66.11	-70.61	21.03	73.8	57.6	51.8
8.79	-78.32	-65.75	-70.61	21.89	73.7	57.6	53.6
8.81	-78.55	-66.01	-70.61	22.86	74.1	57.9	52.4
8.78	-78.32	-66.27	-70.55	22.83	74.4	57.8	56.3
8.79	-78.42	-66.47	-70.67	22.8	74.2	57.8	51.5
8.82	-78.32	-66.16	-70.64	22.8	74.2	57.8	51.9
8.82	-78.83	-66.11	-70.76	21.34	74	57.8	51.6

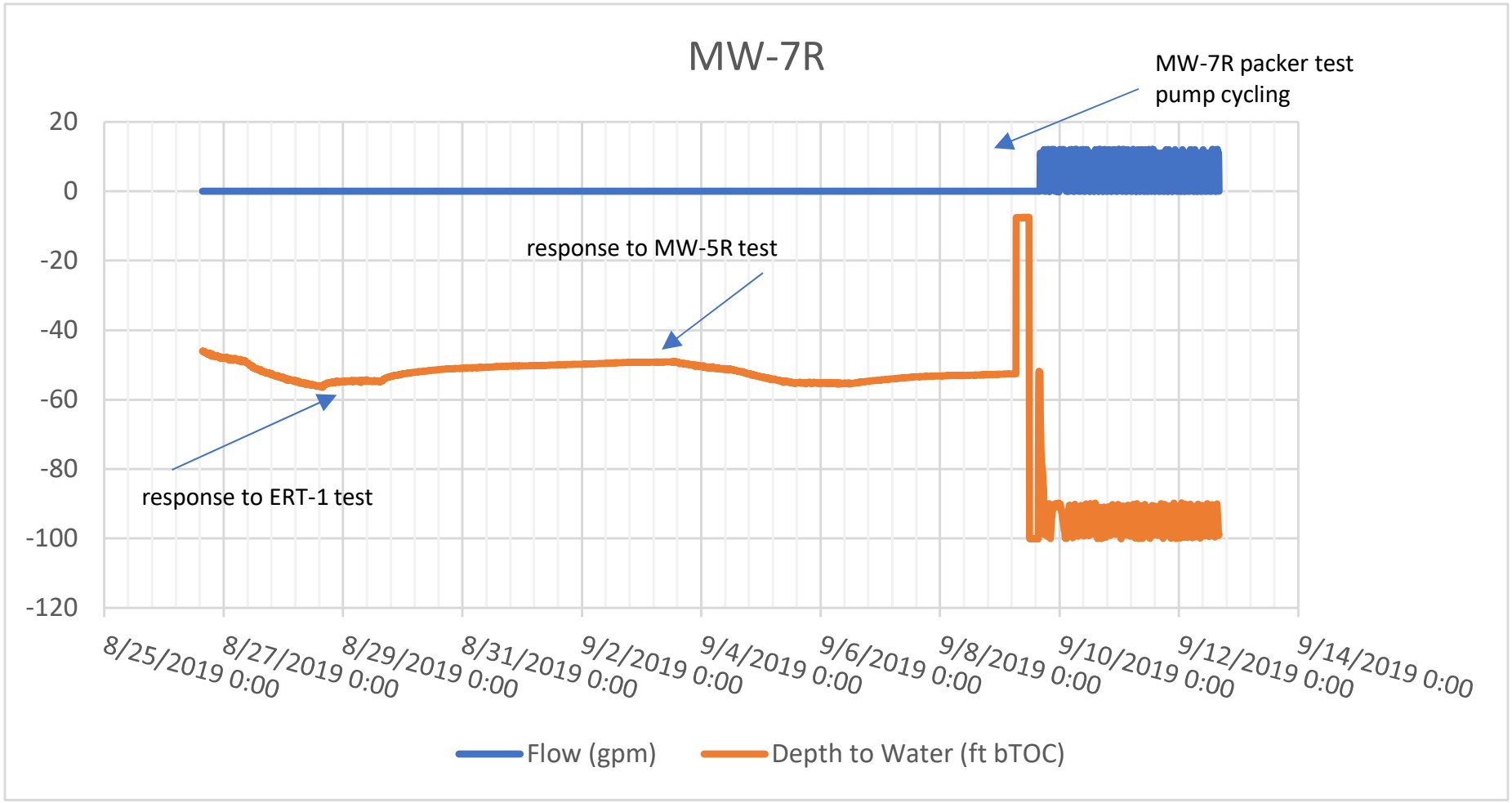
8.78	-78.28	-66.58	-70.85	21.25	74.3	57.9	51.7
8.71	-78.19	-66.27	-70.89	22.8	74.2	57.9	52.1
8.79	-78.78	-65.75	-70.64	22.74	74.2	57.9	53.3
8.75	-78.14	-66.32	-70.7	22.56	74.1	58	52.7
8.83	-78.42	-66.11	-70.61	22.74	74.3	58	50.9
8.79	-78.05	-66.06	-70.61	22.8	74.1	58	50.3
8.75	-78.32	-66.53	-70.76	21.73	74.2	58	50.7
8.76	-78.51	-66.11	-70.7	22.34	74.1	58	51.2
8.71	-78.51	-66.63	-71.04	22.71	74.1	58	49.1
8.82	-78.28	-66.27	-70.58	22.74	74.2	58.2	53
8.83	-78.37	-66.16	-70.95	22.77	74.1	58.1	50.5
8.79	-78.6	-65.8	-70.85	22.77	74.1	58	52.5
8.81	-78.6	-66.63	-70.76	22.77	74	58.1	50.8
8.78	-78.42	-66.53	-70.82	22.74	74	58	53.8
8.78	-78.69	-66.89	-71.13	22.83	73.6	58	49.5
8.78	-78.37	-67.3	-71.19	22.83	73.7	58.2	51.9
8.75	-78.55	-66.89	-70.92	22.77	73.4	58.1	51.6
8.76	-78.55	-66.27	-70.82	22.89	73	58.1	47.3
8.77	-78.42	-66.27	-71.04	22.89	72.4	58.1	52.1
8.82	-78.55	-66.01	-70.76	22.89	72	58.1	51.8
8.77	-77.91	-66.68	-70.98	22.95	71.8	57.9	51.6
8.85	-78.42	-66.47	-71.01	22.92	71.3	57.9	53.4
8.71	-78.6	-66.99	-71.01	22.95	71.2	57.9	51.2
8.8	-78.74	-66.89	-71.04	22.92	71	57.9	50.5
8.89	-78.83	-66.16	-70.82	23.02	70.7	57.8	47.7
8.94	-78.28	-66.68	-71.04	22.89	70.3	58.2	52.7
9.07	-78.97	-66.94	-71.1	22.83	70	57.9	53.6
8.95	-78.69	-66.16	-71.16	22.83	70.2	57.6	53
8.9	-78.64	-66.58	-70.95	22.89	70.1	57.8	48.4
8.89	-78.46	-66.89	-71.19	22.95	69.4	57.4	52.8
8.9	-78.46	-66.73	-71.19	23.05	69.7	57.5	50.7
8.84	-78.51	-67.15	-70.85	22.99	69.4	57.5	53.1
8.88	-78.51	-66.73	-71.07	22.95	69.1	57.8	51.3
8.74	-78.55	-66.84	-71.16	22.99	68.7	57.8	49.5
8.73	-78.14	-66.27	-71.34	20.09	68.7	57.5	52.5
8.71	-78.69	-66.32	-71.31	19.41	68.6	57.5	51.4
8.76	-78.83	-67.3	-71.13	20.45	68.7	57.4	51.2
8.74	-79.24	-66.94	-71.04	20.27	68.6	57.2	49.4
8.78	-78.78	-66.68	-71.13	20.27	68.6	57.4	49.1
8.74	-79.1	-65.28	-71.07	20.54	68.5	57.5	51.6
8.71	-78.42	-66.58	-71.4	19.44	68.7	57.3	52.3
8.72	-78.64	-66.89	-71.01	19.57	68.7	57.1	50.4
8.68	-78.55	-66.73	-71.22	19.99	69	56.9	51.5
8.79	-79.1	-66.84	-70.85	20.27	69	56.9	50.5
8.74	-78.97	-67.15	-71.28	22.34	69.4	56.8	52
8.82	-78.83	-66.84	-70.95	23.02	69.6	56.9	49.7
8.82	-78.78	-66.27	-71.19	23.17	69.4	56.9	52.3

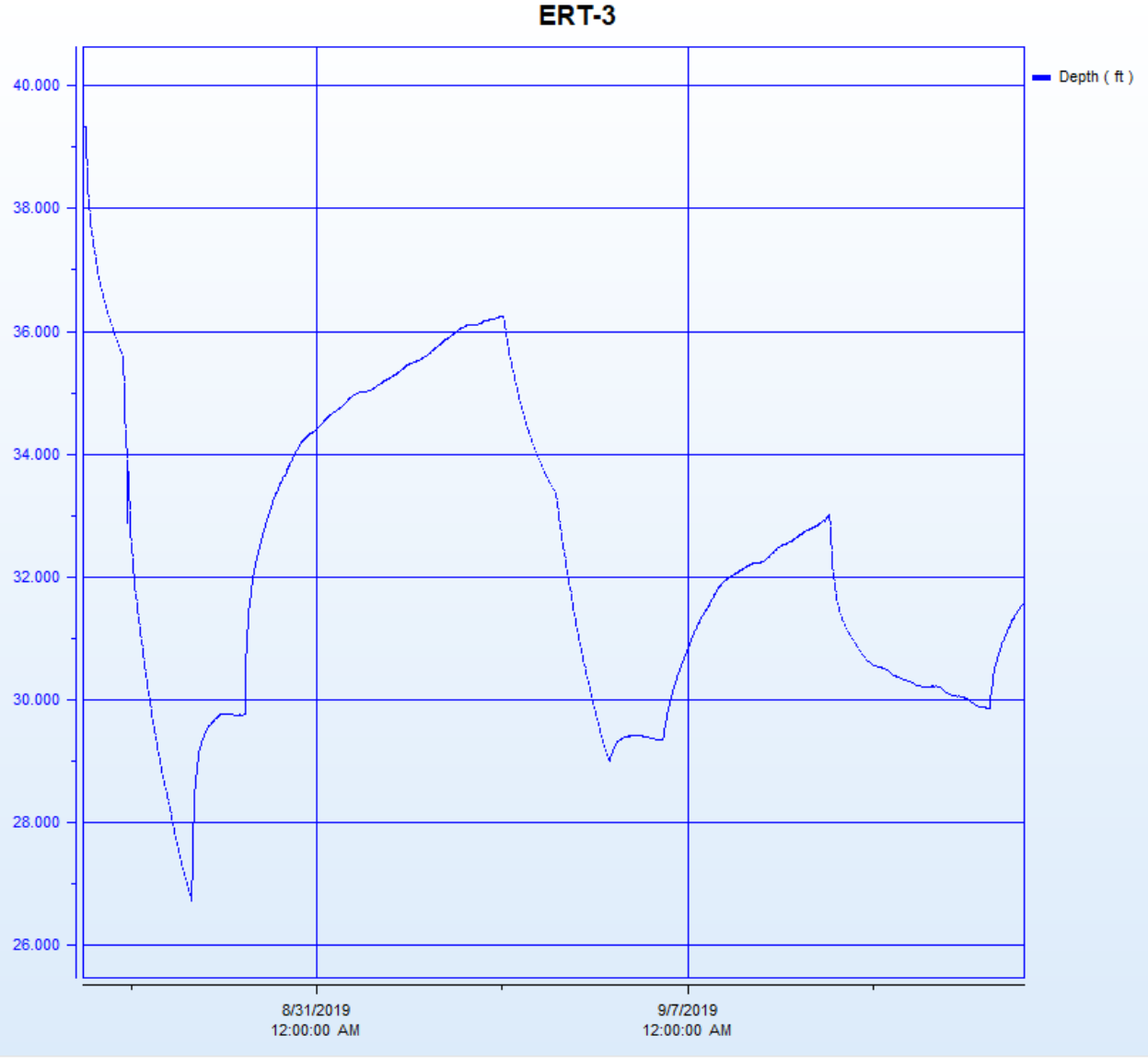
8.8	-78.69	-67.05	-71.25	23.02	69.3	56.9	52.5
8.77	-78.64	-66.58	-71.22	23.08	69.2	56.8	51.9
8.82	-79.06	-66.27	-71.1	23.02	69.1	56.9	51.9
8.84	-78.42	-66.68	-71.04	22.99	69.2	56.9	52.4
8.88	-78.51	-66.47	-71.16	22.99	69.2	56.9	47.3
8.83	-79.15	-66.42	-71.01	23.2	69	56.8	51.5
8.74	-78.97	-66.94	-71.25	23.17	68.7	57	51.6
8.85	-78.83	-67.1	-71.04	23.2	68.3	57	51.3
8.9	-78.69	-66.99	-71.22	23.05	67.9	56.9	51.9
8.89	-79.06	-67.67	-71.28	23.2	67.5	57.1	50.7
8.79	-78.51	-66.42	-71.01	23.08	67.2	57	52.9
8.78	-79.06	-66.84	-71.25	20.67	66.5	57	48.4
8.78	-78.87	-67.46	-71.25	20.94	66.5	56.8	52.2
8.72	-78.78	-66.99	-71.31	21.67	66.3	56.9	54.1
8.78	-78.51	-67.36	-71.13	19.78	66.1	56.7	50.7
8.69	-79.61	-66.32	-70.89	19.9	66.2	56.5	53.1
8.37	-79.06	-67.1	-70.89	20.09	66.3	56.3	52.9
8.84	-79.01	-66.99	-71.13	20.24	66.6	56.1	49.5
8.76	-78.14	-66.53	-71.16	20.27	66.5	56.2	51
8.61	-79.42	-66.16	-71.65	20.33	66	56.1	51.7
8.67	-78.78	-66.47	-70.82	20.3	65.8	56	51.7
8.77	-79.01	-66.99	-71.16	20.21	65.9	56	50.1
8.79	-79.24	-67.2	-71.13	21.09	66	55.9	50.7
8.81	-78.23	-67.3	-71.25	23.44	66.2	55.7	52
8.75	-79.33	-66.94	-71.07	23.44	66	55.9	53.4
8.75	-79.19	-66.58	-71.19	23.41	66.1	55.8	51.6
8.74	-78.83	-66.63	-71.43	23.14	66.2	55.8	53.4
8.75	-78.74	-67.2	-71.25	22.16	65.5	55.7	51.1
8.68	-78.6	-66.63	-71.34	23.26	65.7	55.7	50.3
8.77	-78.51	-66.42	-71.4	23.44	65.4	55.5	51.7
8.73	-78.83	-66.73	-71.31	23.38	64.7	55.4	50.5
8.8	-79.24	-67.25	-71.65	23.41	64.4	55.4	50.2
8.82	-78.97	-67.3	-71.37	23.35	64.1	55.2	52.8
8.78	-79.15	-67.41	-71.16	23.41	63.9	55.2	52.2
8.81	-79.19	-66.63	-71.4	23.47	64.5	54.9	52.5
8.79	-78.46	-67.15	-71.37	23.41	64.2	55.1	52.2
8.76	-78.97	-67.67	-71.53	23.38	64	55.1	49.1
8.79	-78.09	-66.68	-71.37	23.38	63.9	55	50.9
8.82	-78.83	-66.58	-71.43	23.44	64.1	55.1	50.7
8.83	-79.38	-67.25	-71.53	23.47	63.9	55.1	50.4
8.91	-79.1	-66.32	-71.34	23.44	63.8	55.1	53.6

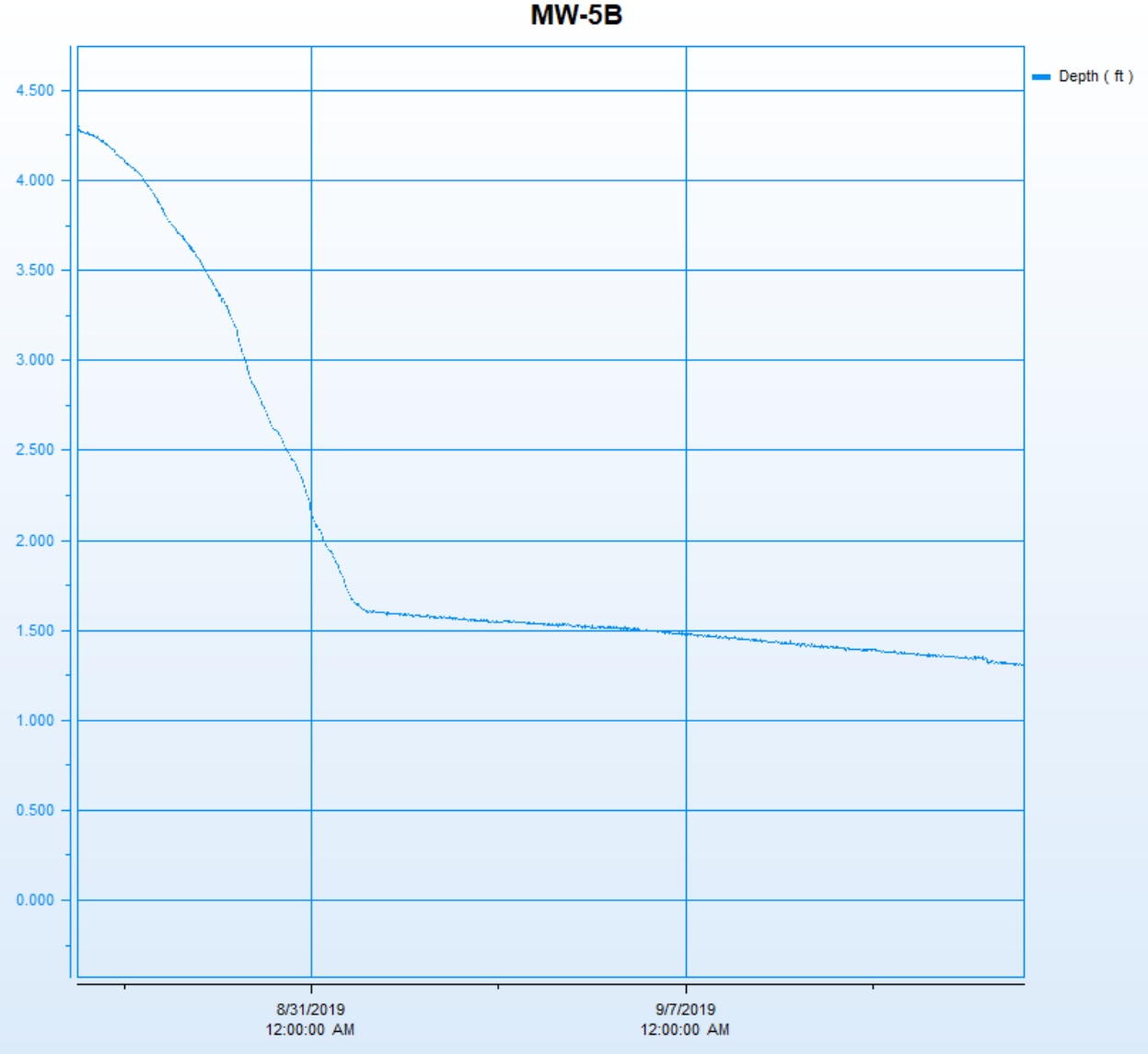
APPENDIX E

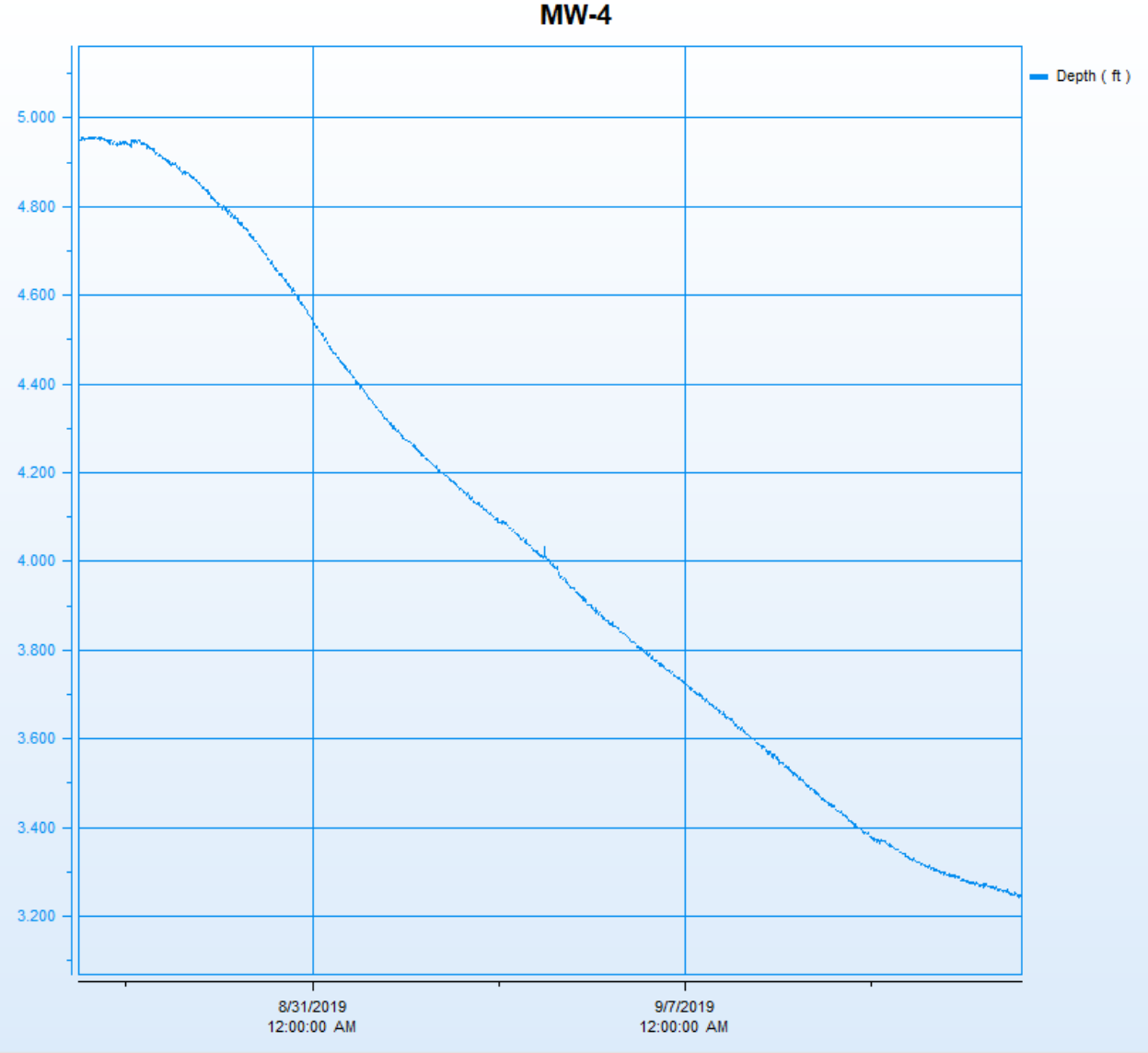
WATER LEVELS AND PLOTS OF TEST/MONITORING WELLS

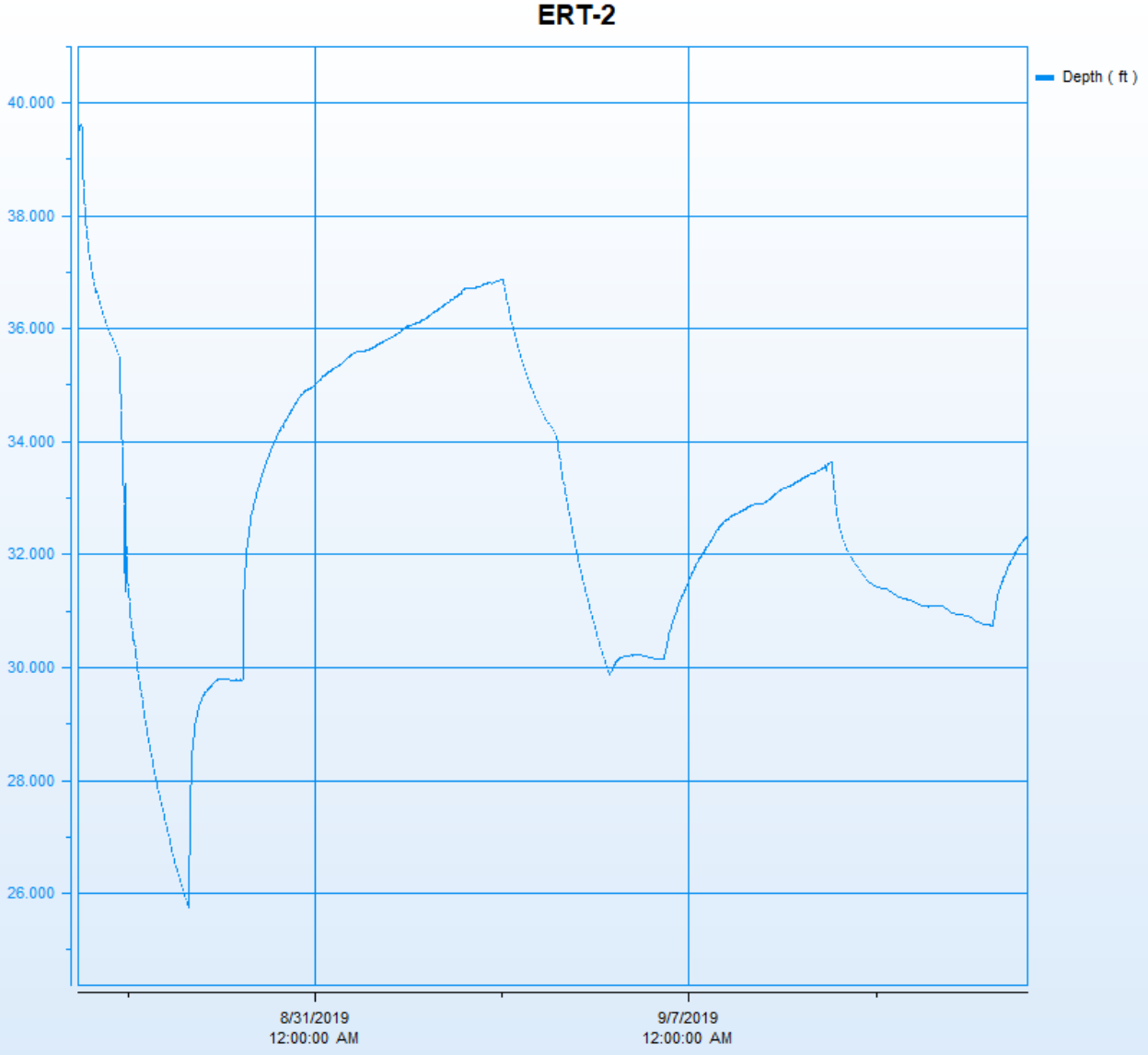

ERT-1
ERT-1 packer test
response to
MW-5R test
response to MW-7R test
40
20
0
-20
-40
-60
-80
8/23/2019 0:00
8/28/2019 0:00
9/2/2019 0:00
9/7/2019 0:00
9/12/2019 0:00
9/17/2019 0:00
Flow (gpm)
Depth to Water (ft bTOC)

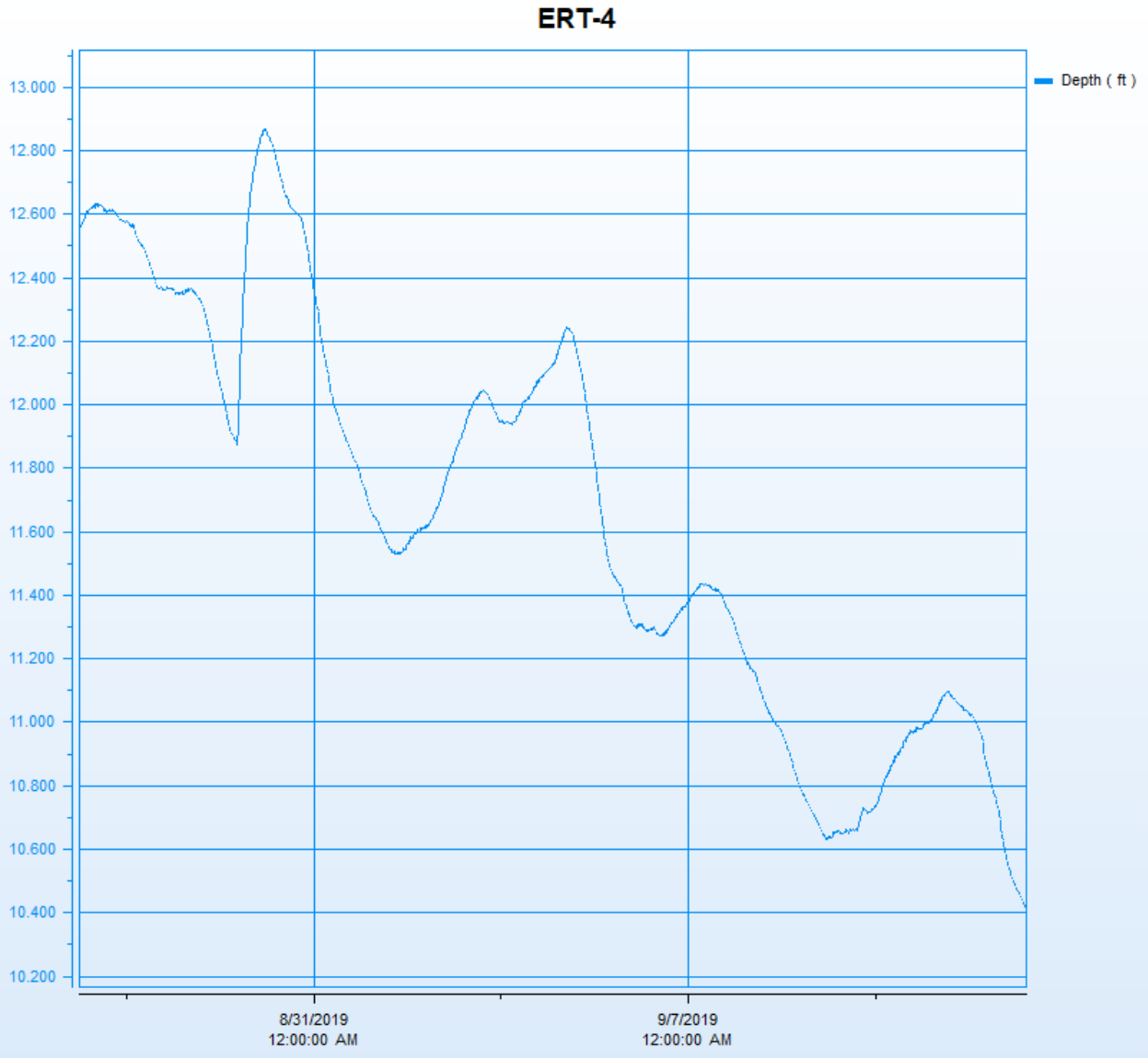

MW-7R
MW-7R packer test
pump cycling
response to MW-5R test
response to ERT-1 test
20
0
-20
-40
-60
-80
-100
-120
8/25/2019 0:00
8/27/2019 0:00
8/29/2019 0:00
8/31/2019 0:00
9/2/2019 0:00
9/4/2019 0:00
9/6/2019 0:00
9/8/2019 0:00
9/10/2019 0:00
9/12/2019 0:00
9/14/2019 0:00
Flow (gpm)
Depth to Water (ft bTOC)

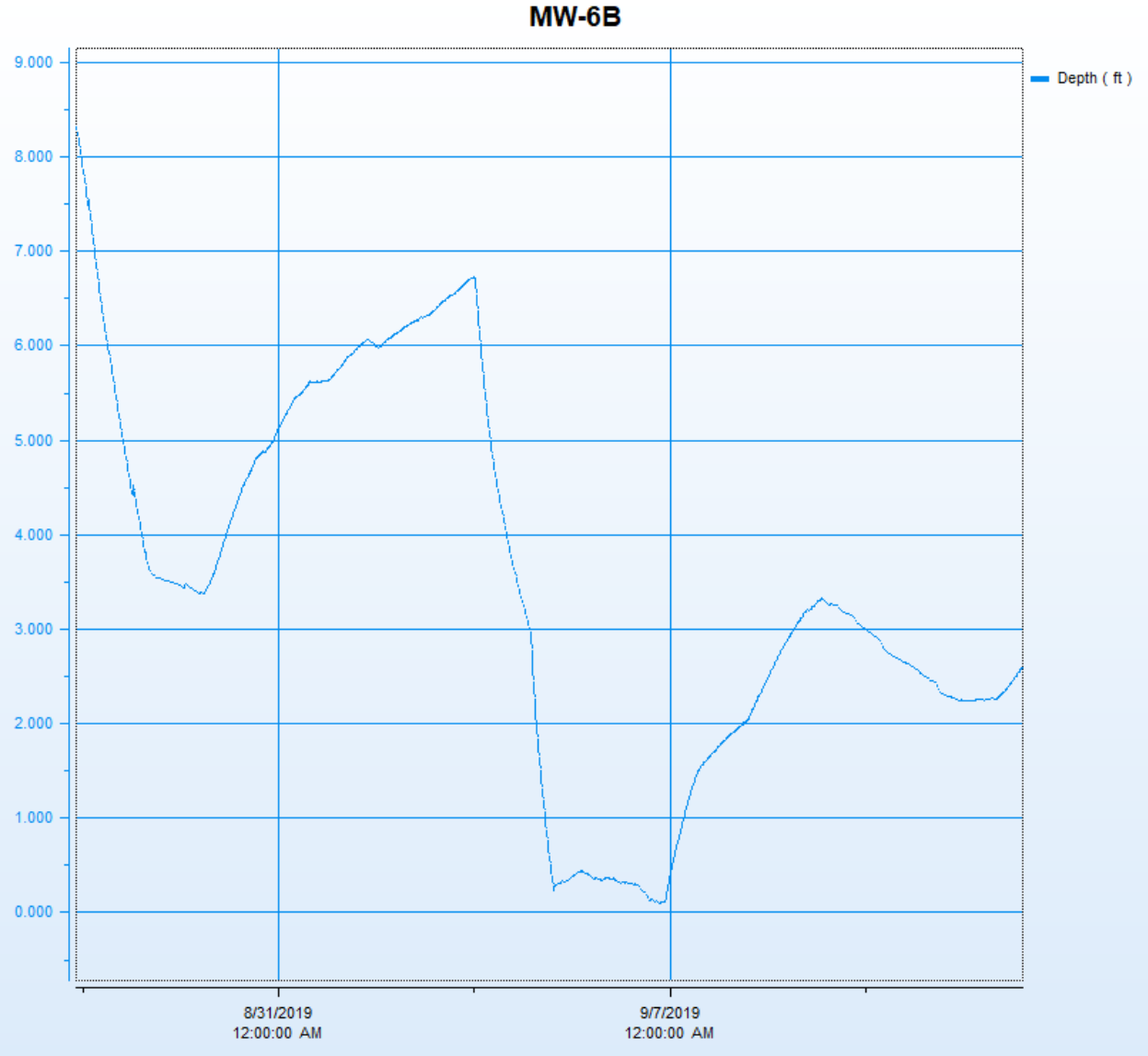

ERT-3
Depth (ft)
40.000
38.000
36.000
34.000
32.000
30.000
28.000
26.000
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM

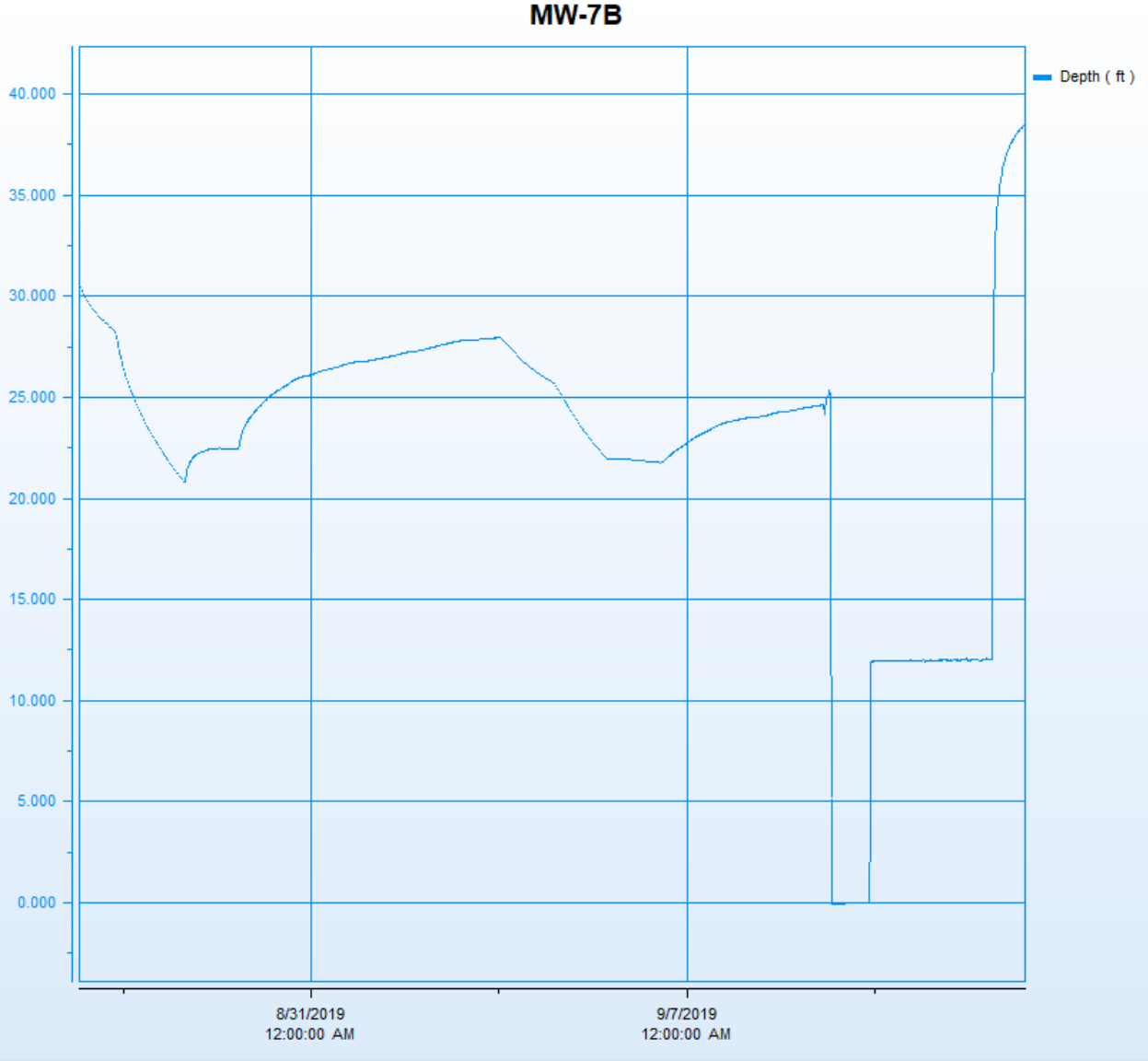

MW-5B
Depth (ft)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM

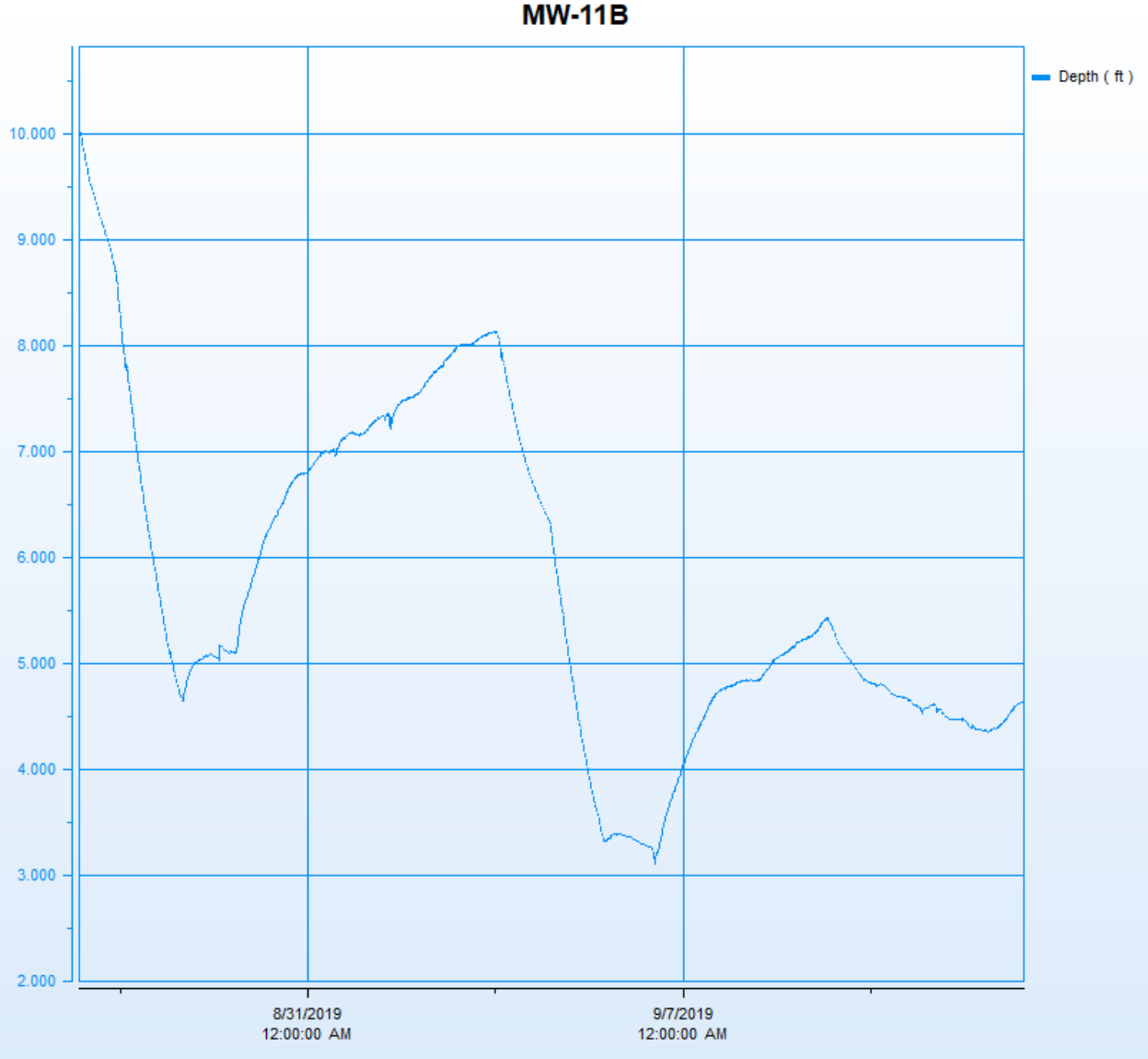

MW-4
Depth (ft)
5.000
4.800
4.600
4.400
4.200
4.000
3.800
3.600
3.400
3.200
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM

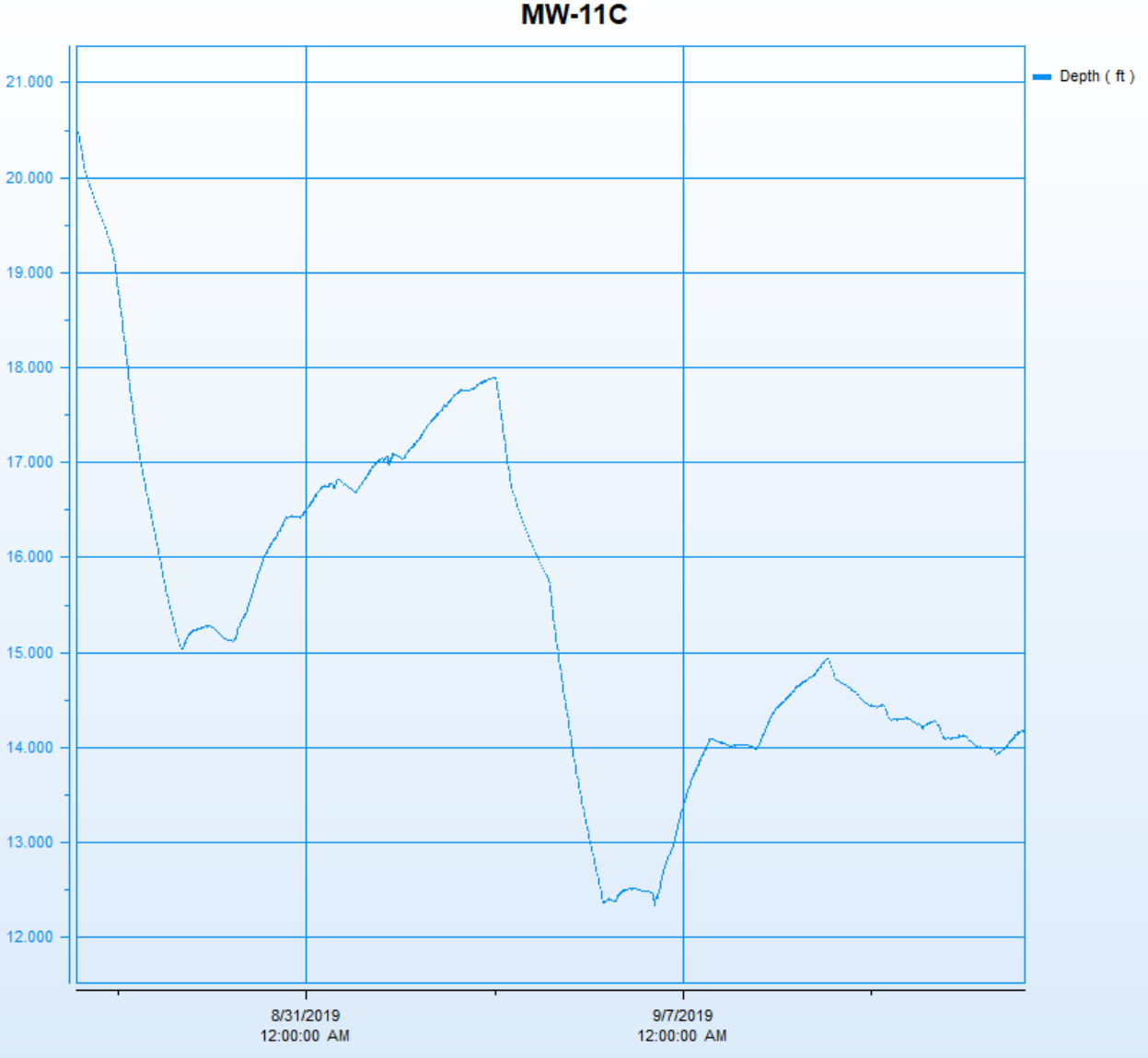

ERT-2
Depth (ft)
40.000
38.000
36.000
34.000
32.000
30.000
28.000
26.000
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM

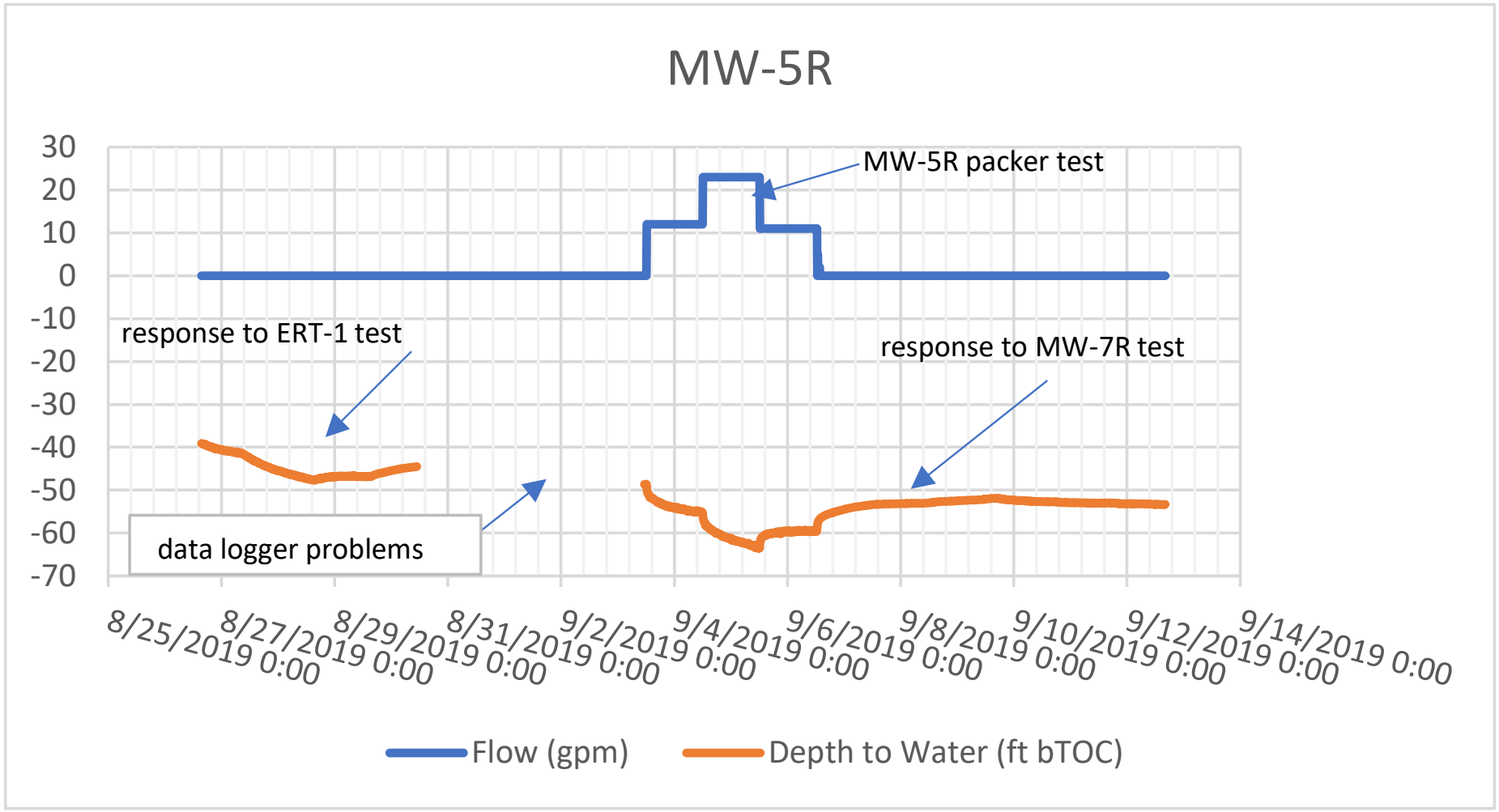

ERT-4
Depth (ft)
13.000
12.800
12.600
12.400
12.200
12.000
11.800
11.600
11.400
11.200
11.000
10.800
10.600
10.400
10.200
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM

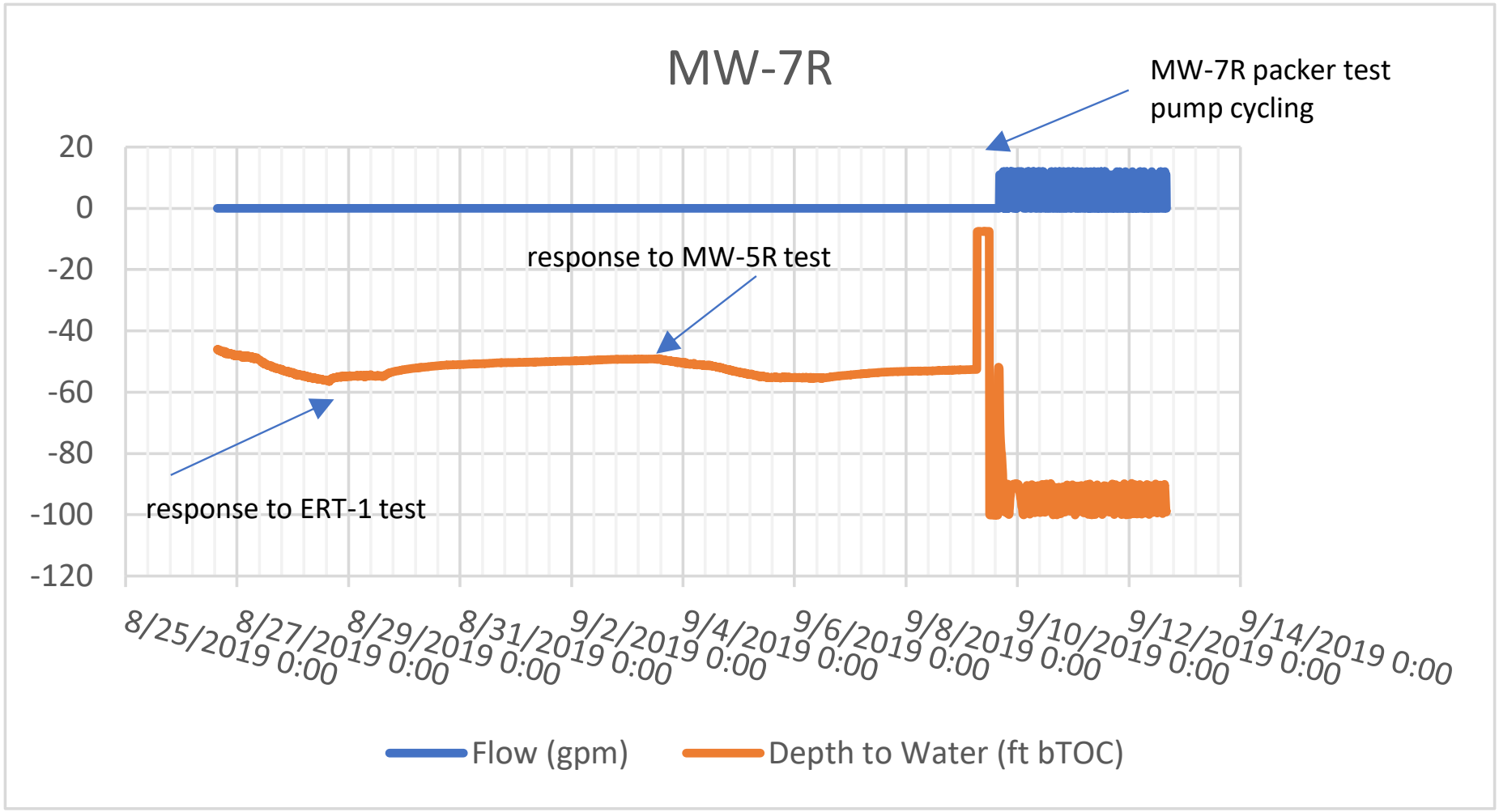

MW-6B
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Depth (ft)
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM


MW-7B
Depth (ft)
40.000
35.000
30.000
25.000
20.000
15.000
10.000
5.000
0.000
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM


MW-11B
Depth (ft)
10.000
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM


MW-11C
Depth (ft)
21.000
20.000
19.000
18.000
17.000
16.000
15.000
14.000
13.000
12.000
8/31/2019
12:00:00 AM
9/7/2019
12:00:00 AM


MW-5R
30
20
10
0
-10
-20
-30
-40
-50
-60
-70
MW-5R packer test
response to ERT-1 test
response to MW-7R test
data logger problems
8/25/2019 0:00
8/27/2019 0:00
8/29/2019 0:00
8/31/2019 0:00
9/2/2019 0:00
9/4/2019 0:00
9/6/2019 0:00
9/8/2019 0:00
9/10/2019 0:00
9/12/2019 0:00
9/14/2019 0:00
Flow (gpm)
Depth to Water (ft bTOC)


MW-7R
MW-7R packer test
pump cycling
response to MW-5R test
response to ERT-1 test
20
0
-20
-40
-60
-80
-100
-120
8/25/2019 0:00
8/27/2019 0:00
8/29/2019 0:00
8/31/2019 0:00
9/2/2019 0:00
9/4/2019 0:00
9/6/2019 0:00
9/8/2019 0:00
9/10/2019 0:00
9/12/2019 0:00
9/14/2019 0:00
Flow (gpm)
Depth to Water (ft bTOC)

APPENDIX F

HISTORICAL POTENTIOMETRIC MAPS

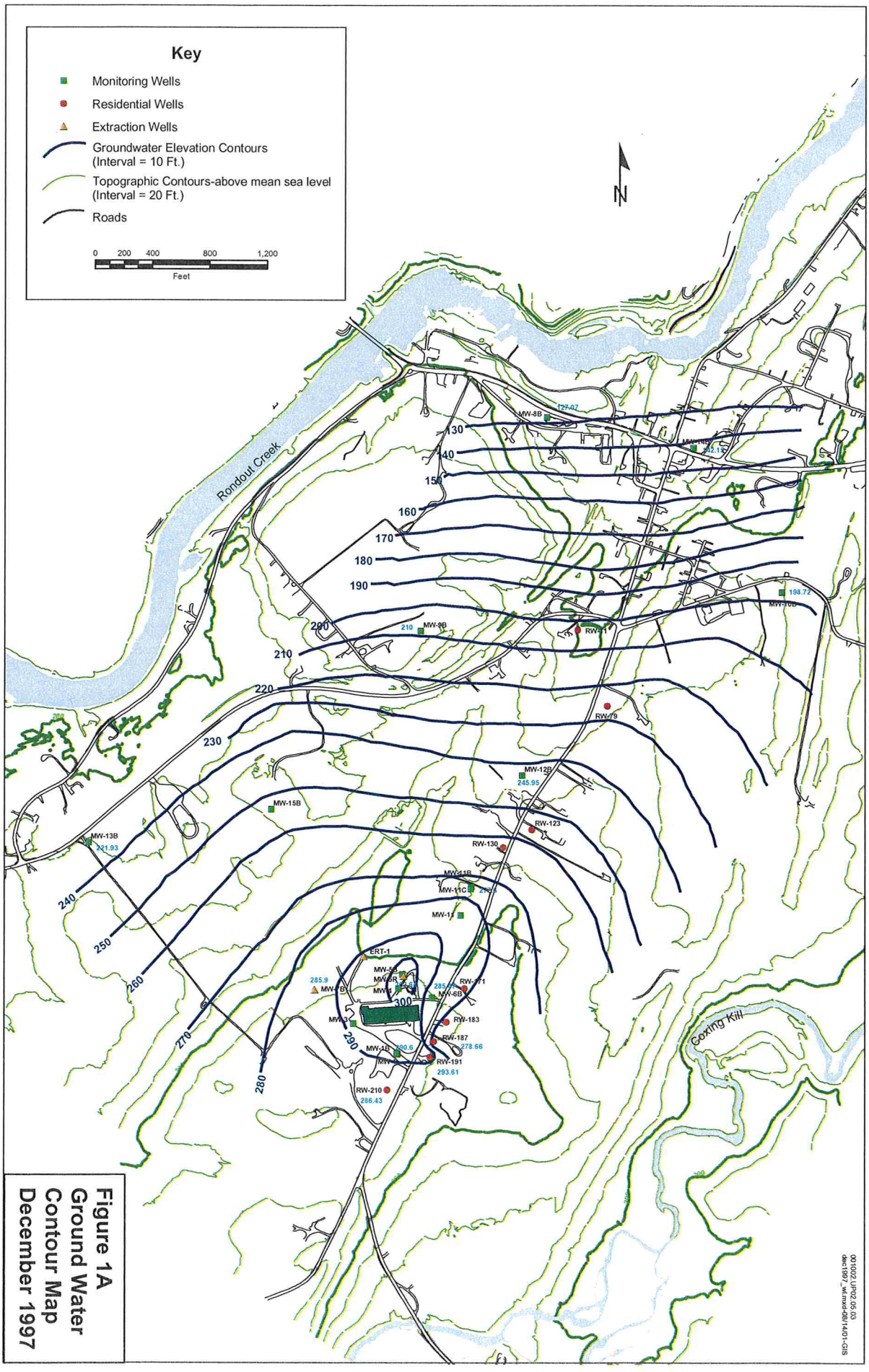
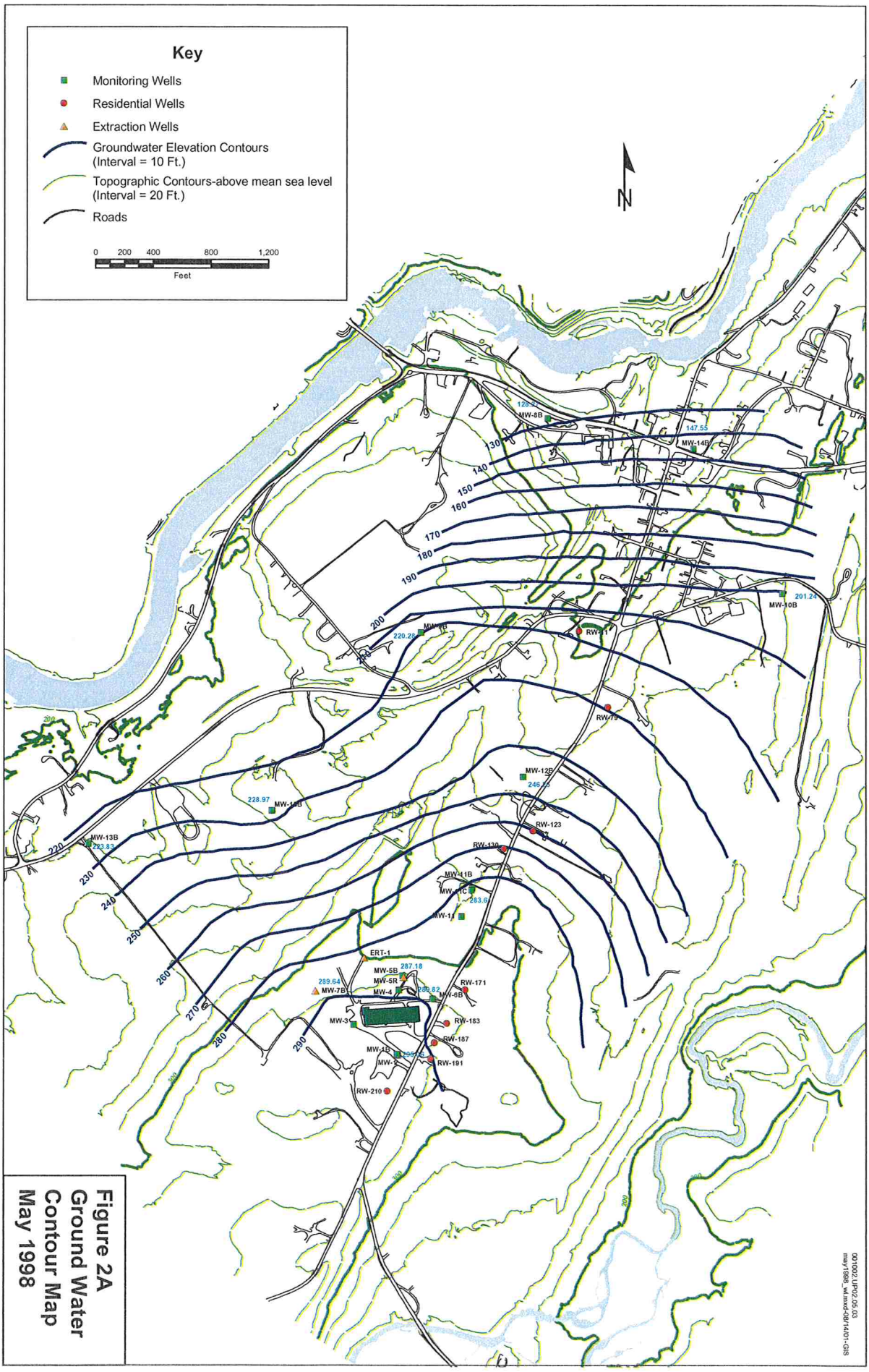


Figure 1A
Ground Water
Contour Map
December 1997


Key
Monitoring Wells
Residential Wells
Extraction Wells
Groundwater Elevation Contours (Interval = 10 Ft.)
Topographic Contours-above mean sea level (Interval = 20 Ft.)
Roads
0 200 400 800 1,200
Feet
N
MW-8B
MW-14B
MW-10B
MW-12B
MW-13B
MW-11B
MW-11C
MW-1
MW-5B
MW-5R
MW-4
MW-7B
MW-6B
MW-3
ERT-1
RW-1
RW-79
RW-123
RW-130
RW-171
RW-183
RW-187
RW-191
RW-210
130
140
150
160
170
180
190
200
220
230
240
250
260
270
280
290
300
Figure 2A
Ground Water
Contour Map
May 1998

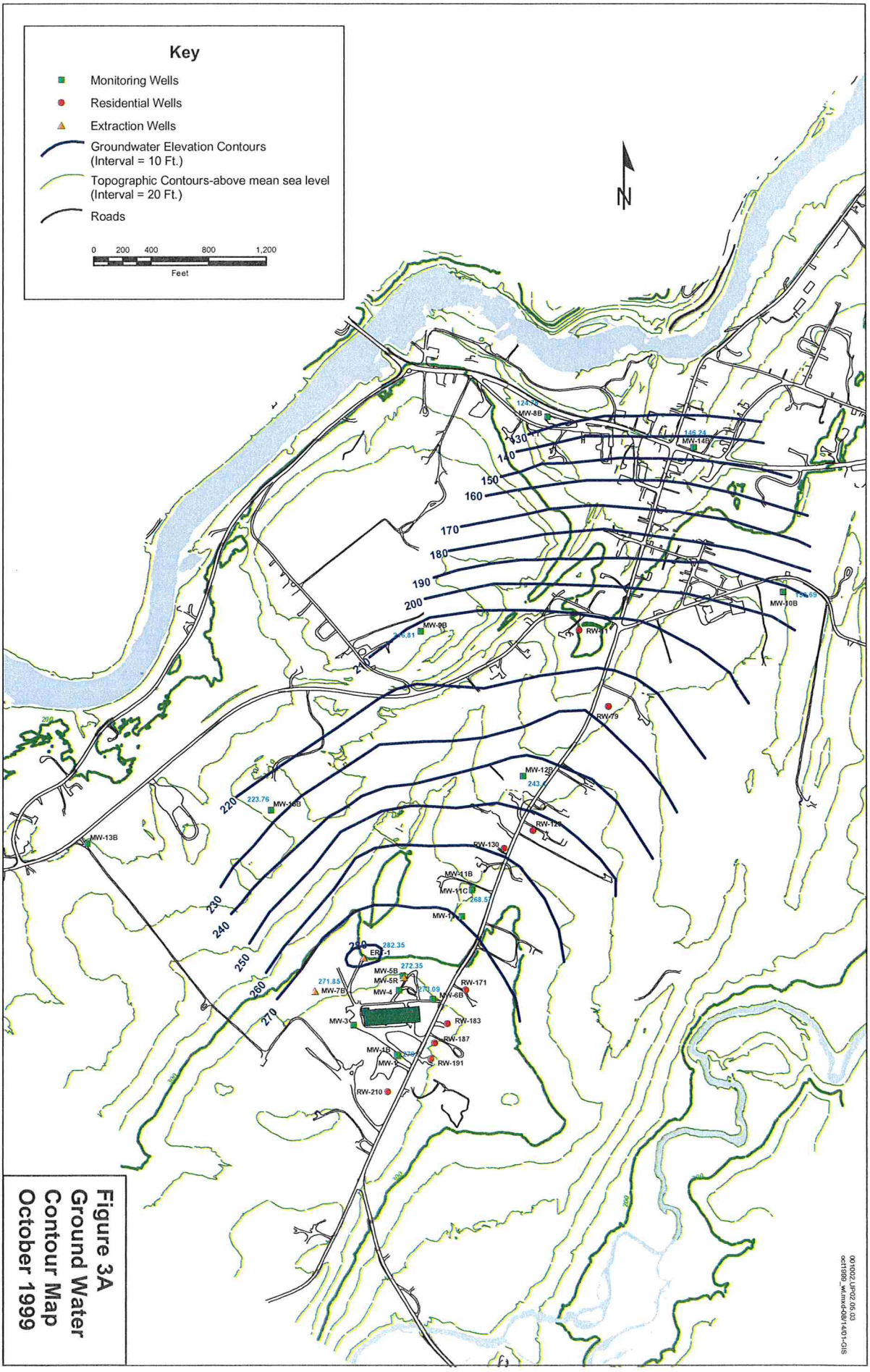


Figure 3A
Ground Water
Contour Map
October 1999

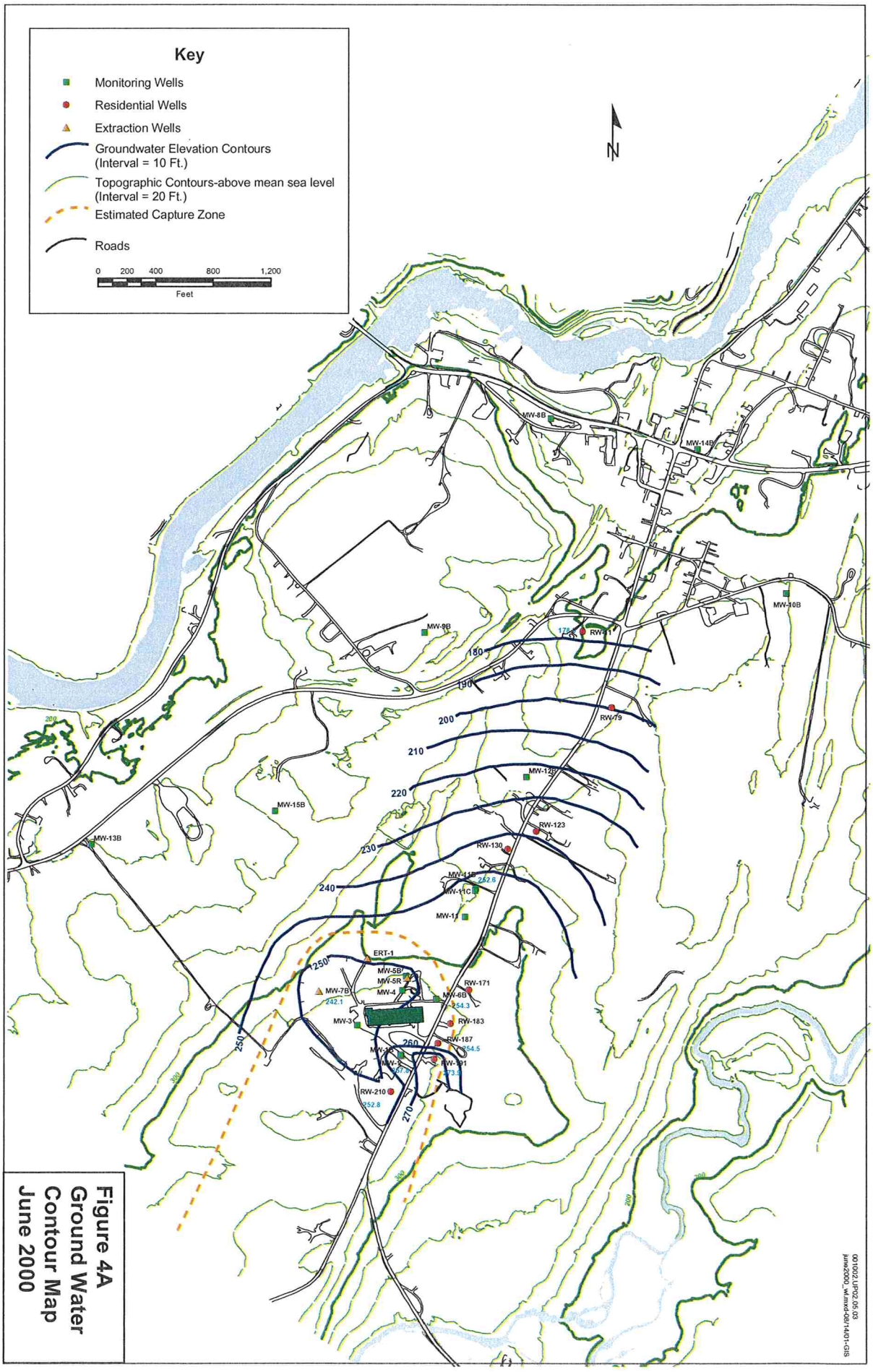
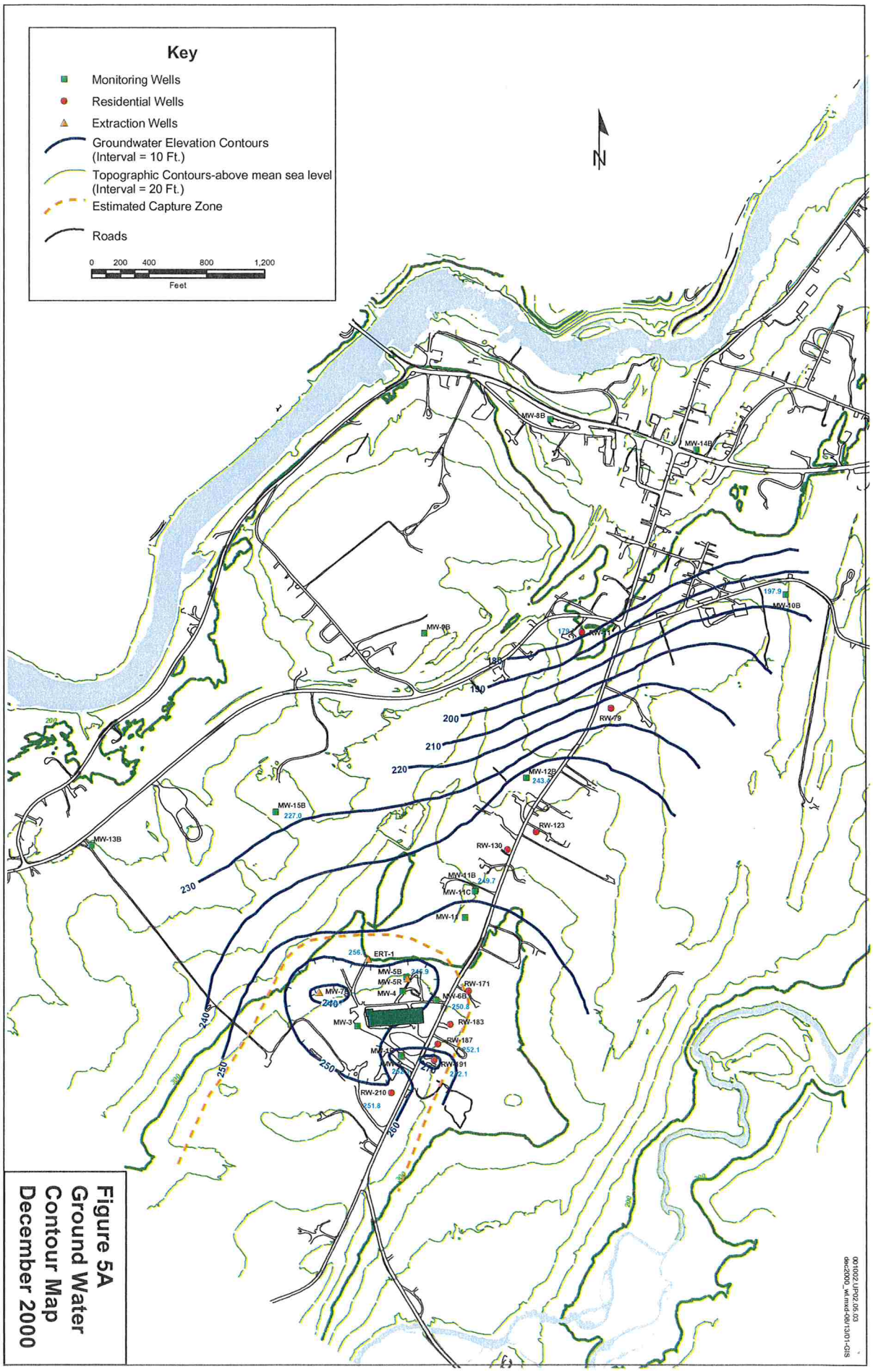


Figure 4A
Ground Water Contour Map
June 2000


Key
Monitoring Wells
Residential Wells
Extraction Wells
Groundwater Elevation Contours (Interval = 10 Ft.)
Topographic Contours-above mean sea level (Interval = 20 Ft.)
Estimated Capture Zone
Roads
0 200 400 800 1,200
Feet
N
MW-8B
MW-14B
MW-10B
197.9
MW-9B
MW-12B
243.2
RW-79
MW-15B
227.0
MW-13B
RW-123
RW-130
MW-11B
249.7
MW-11C
MW-11
ERT-1
MW-5B
MW-5R
MW-4
MW-6B
250.8
RW-171
MW-3
RW-183
RW-187
252.1
RW-191
RW-210
251.8
190
200
210
220
230
240
250
260
Figure 5A
Ground Water
Contour Map
December 2000
001002.UP02.05.03
dec2000_wl.mxd-08/13/01-GIS

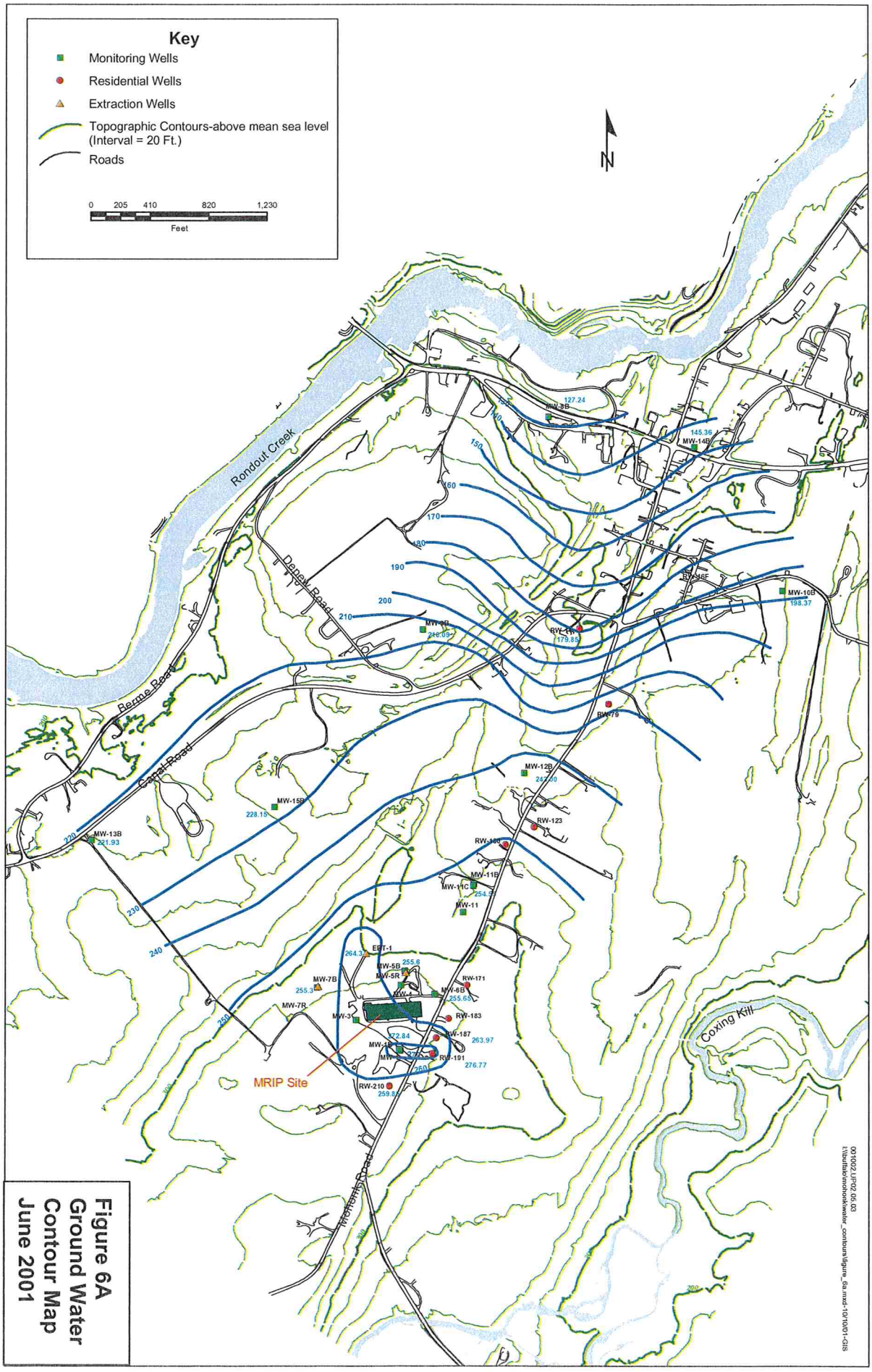
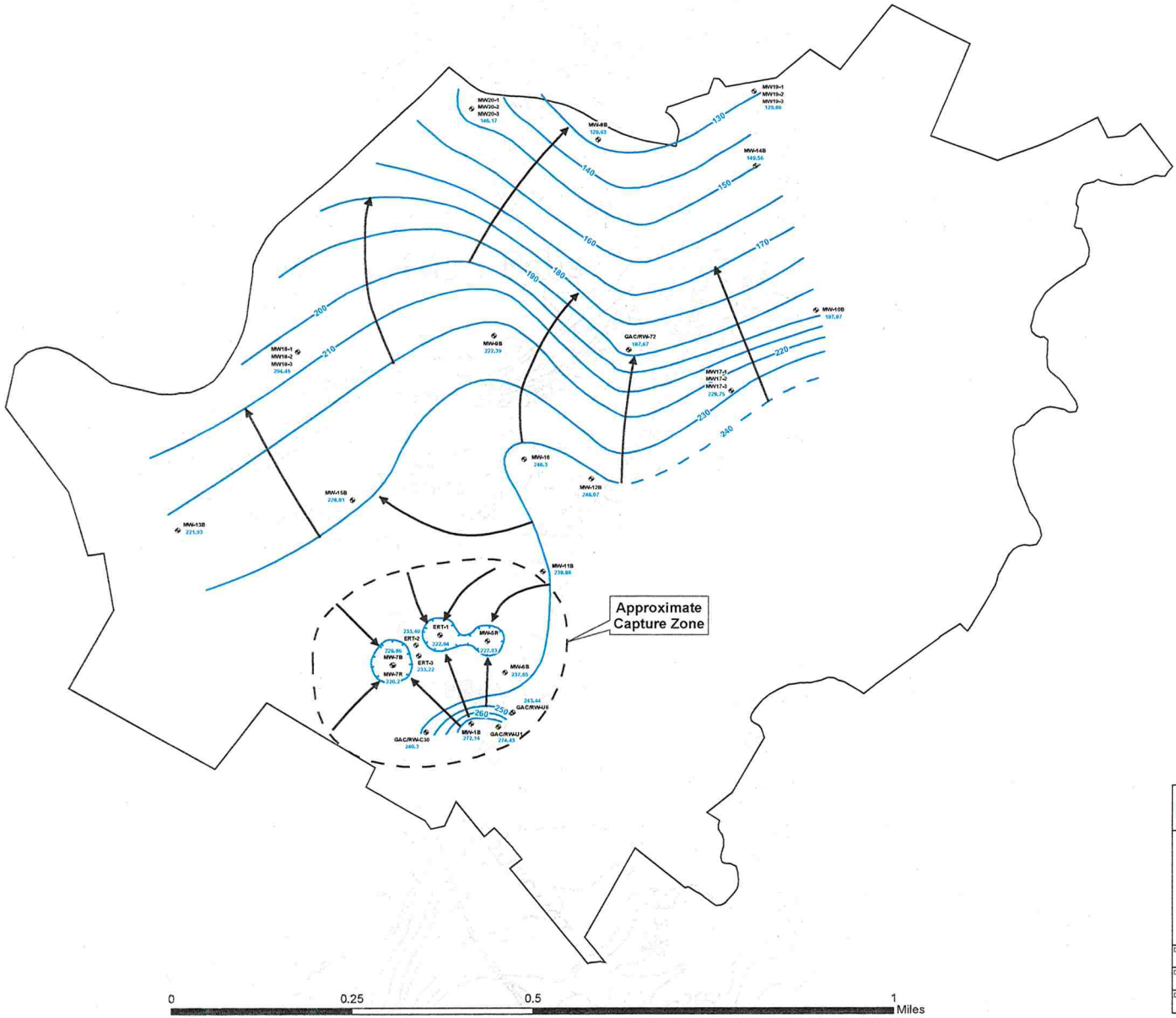


Figure 6A
Ground Water
Contour Map
June 2001

001002.UP02.06.03
I:\buffalo\nohonk\water_contours\figure_6a.mxd-10/10/01-GIS



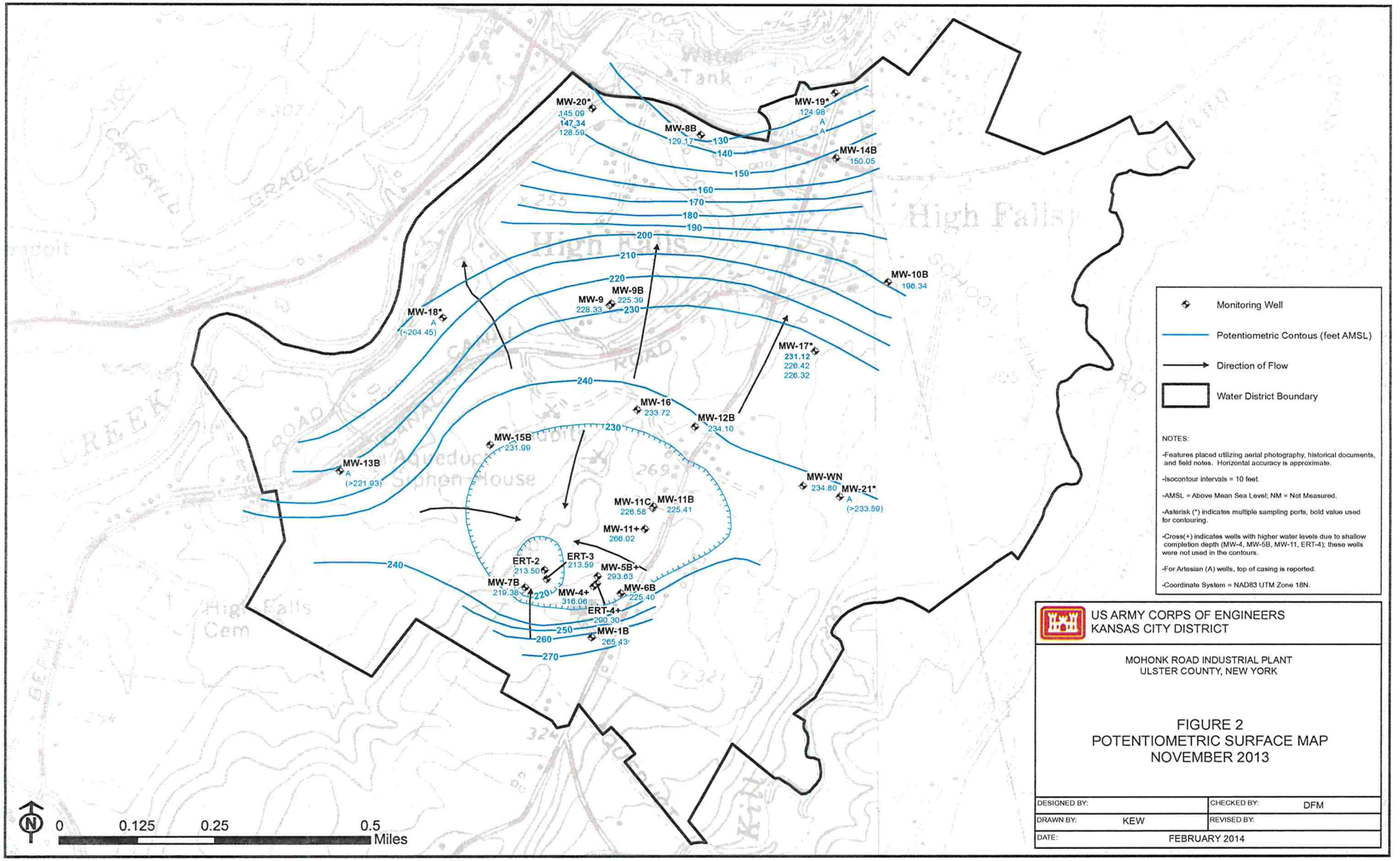
US ARMY CORPS OF ENGINEERS
KANSAS CITY DISTRICT

MOHONK ROAD INDUSTRIAL PLANT
ULSTER COUNTY, NEW YORK

FIGURE 3
POTENTIOMETRIC SURFACE MAP
14 DECEMBER 2007

DESIGNED BY:	CHECKED BY:
CEW	RMP
DRAWN BY:	REVISED BY:
JLG	
DATE:	
APRIL 2008	

K:\Mxds\Projects\Mohonk\GIS\arcgis\MXA_Exhibits\FIG3_Dec2007_WaterLevels_03APR08.mxd

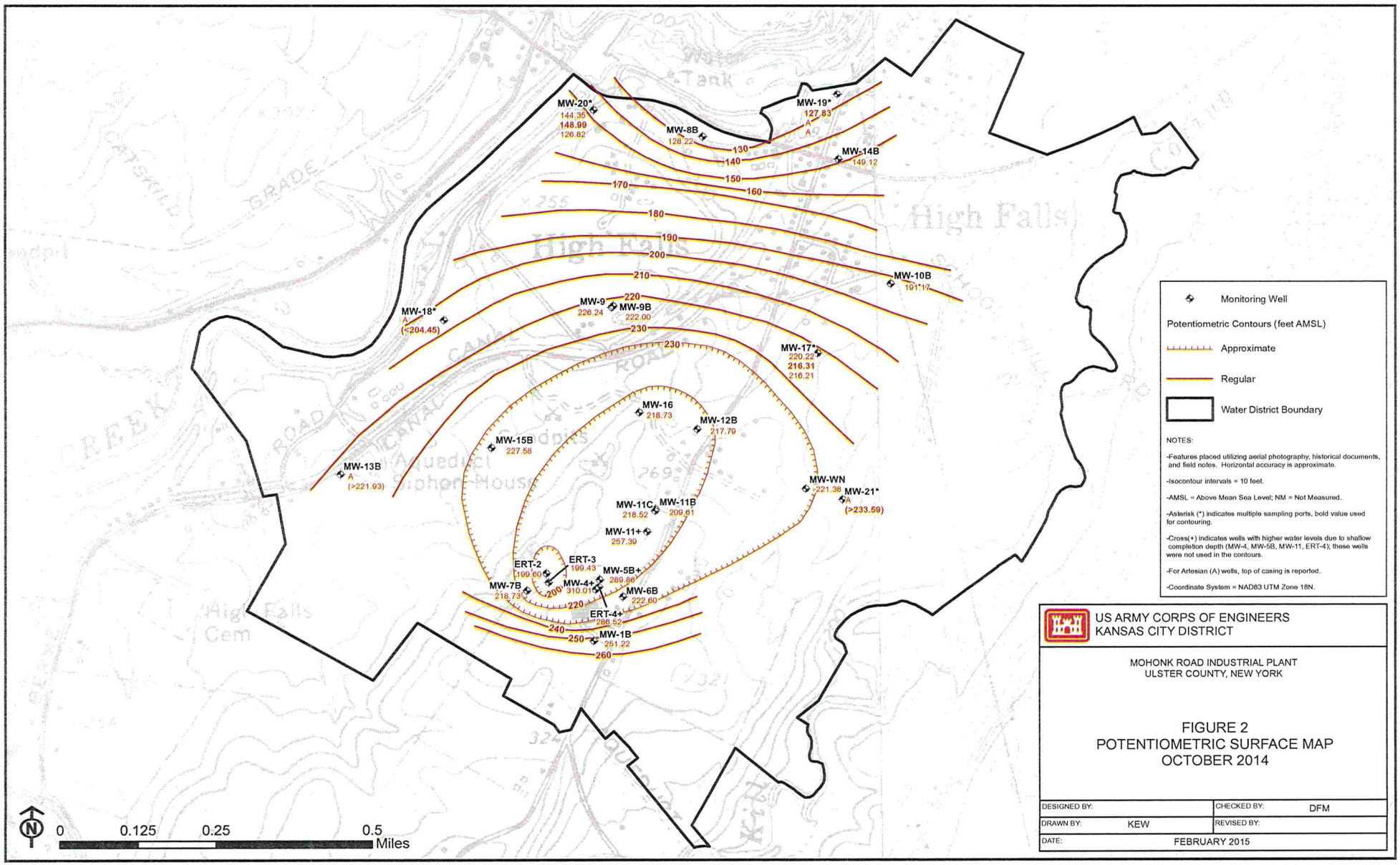


US ARMY CORPS OF ENGINEERS
KANSAS CITY DISTRICT

MOHONK ROAD INDUSTRIAL PLANT
ULSTER COUNTY, NEW YORK

FIGURE 2
POTENTIOMETRIC SURFACE MAP
NOVEMBER 2013

DESIGNED BY:		CHECKED BY:	DFM
DRAWN BY:	KEW	REVISED BY:	
DATE:	FEBRUARY 2014		

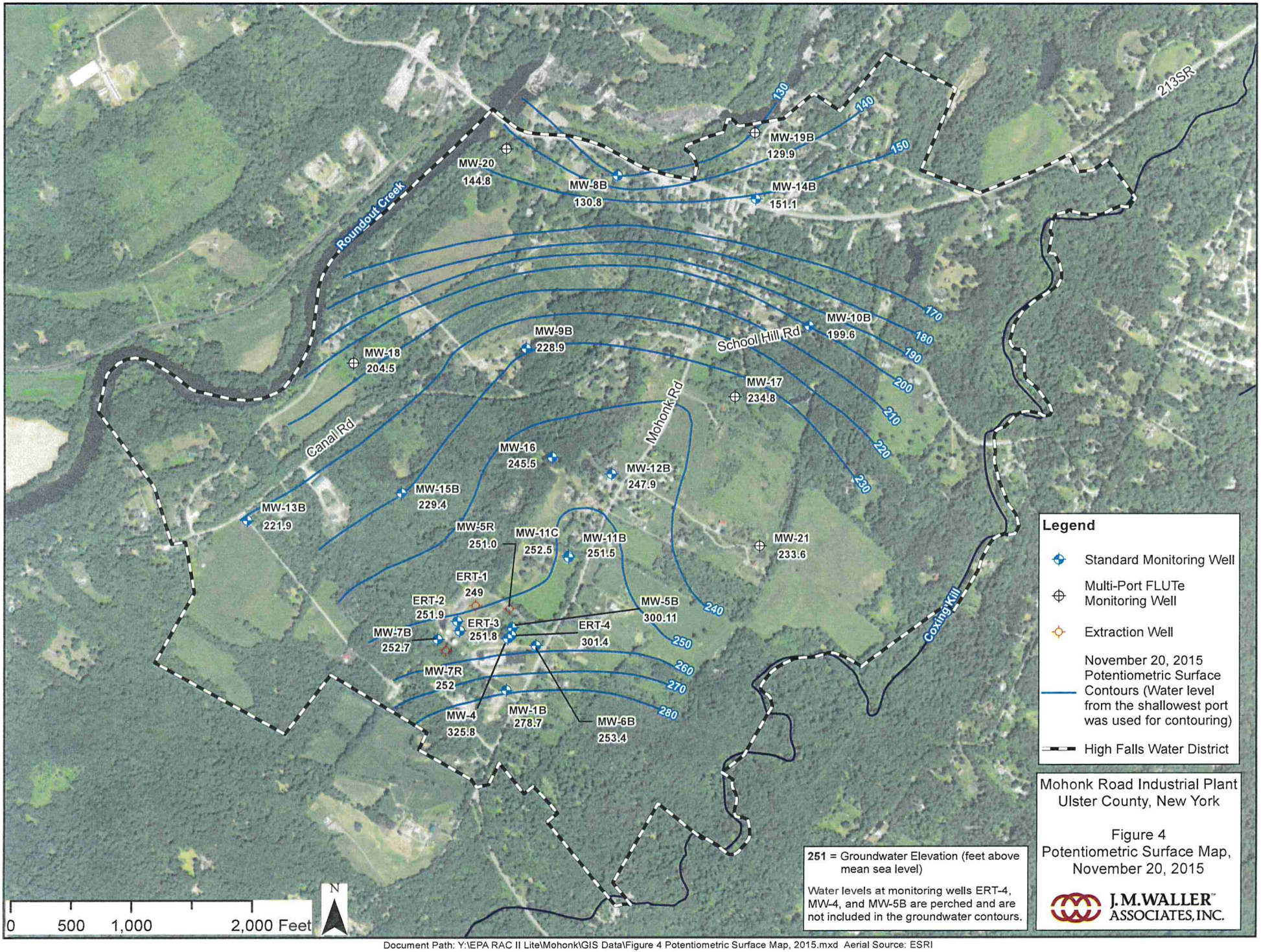


US ARMY CORPS OF ENGINEERS
KANSAS CITY DISTRICT

MOHONK ROAD INDUSTRIAL PLANT
ULSTER COUNTY, NEW YORK

FIGURE 2
POTENTIOMETRIC SURFACE MAP
OCTOBER 2014

DESIGNED BY:		CHECKED BY:	DFM
DRAWN BY:	KEW	REVISED BY:	
DATE:	FEBRUARY 2015		

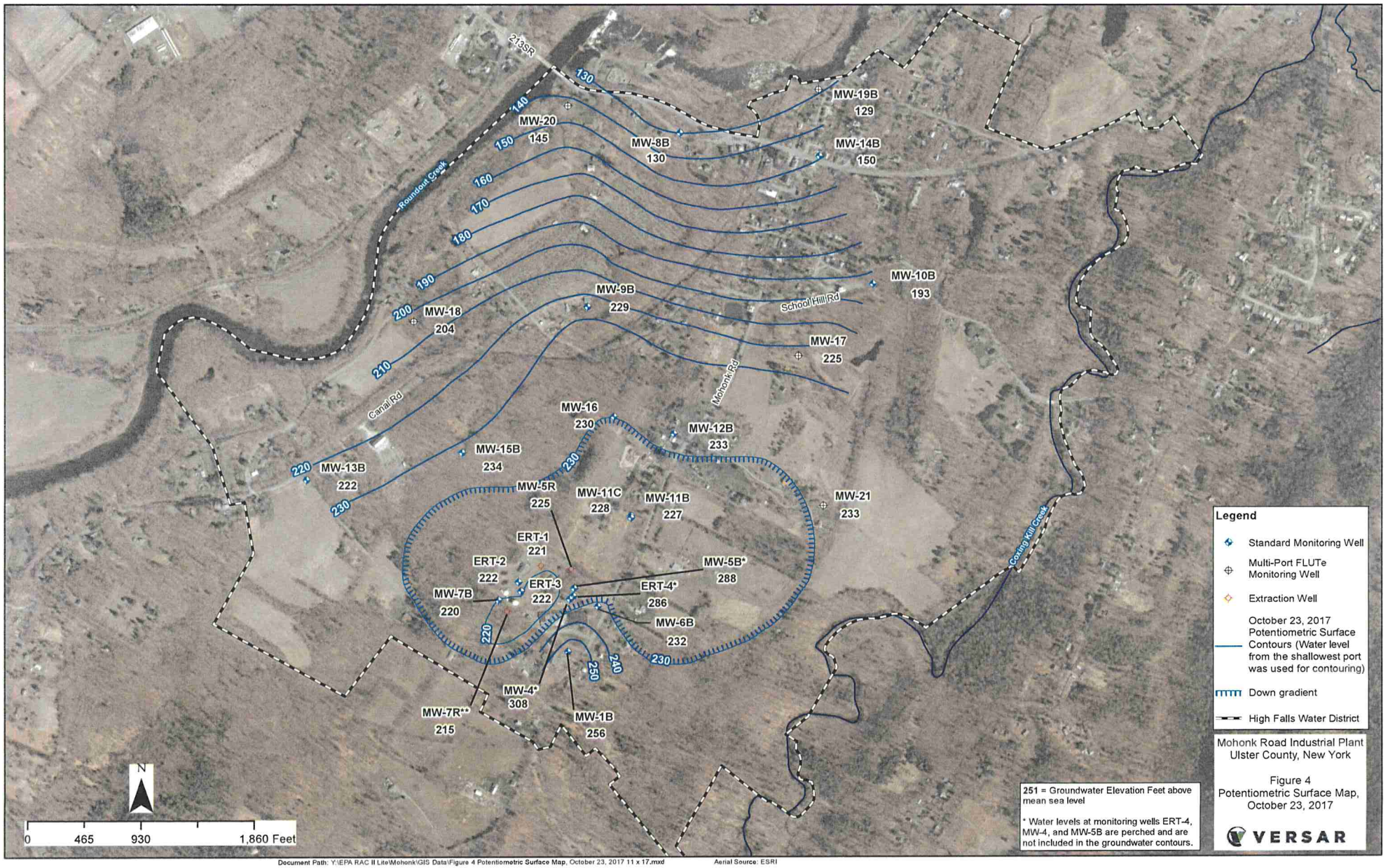


Mohonk Road Industrial Plant
Ulster County, New York

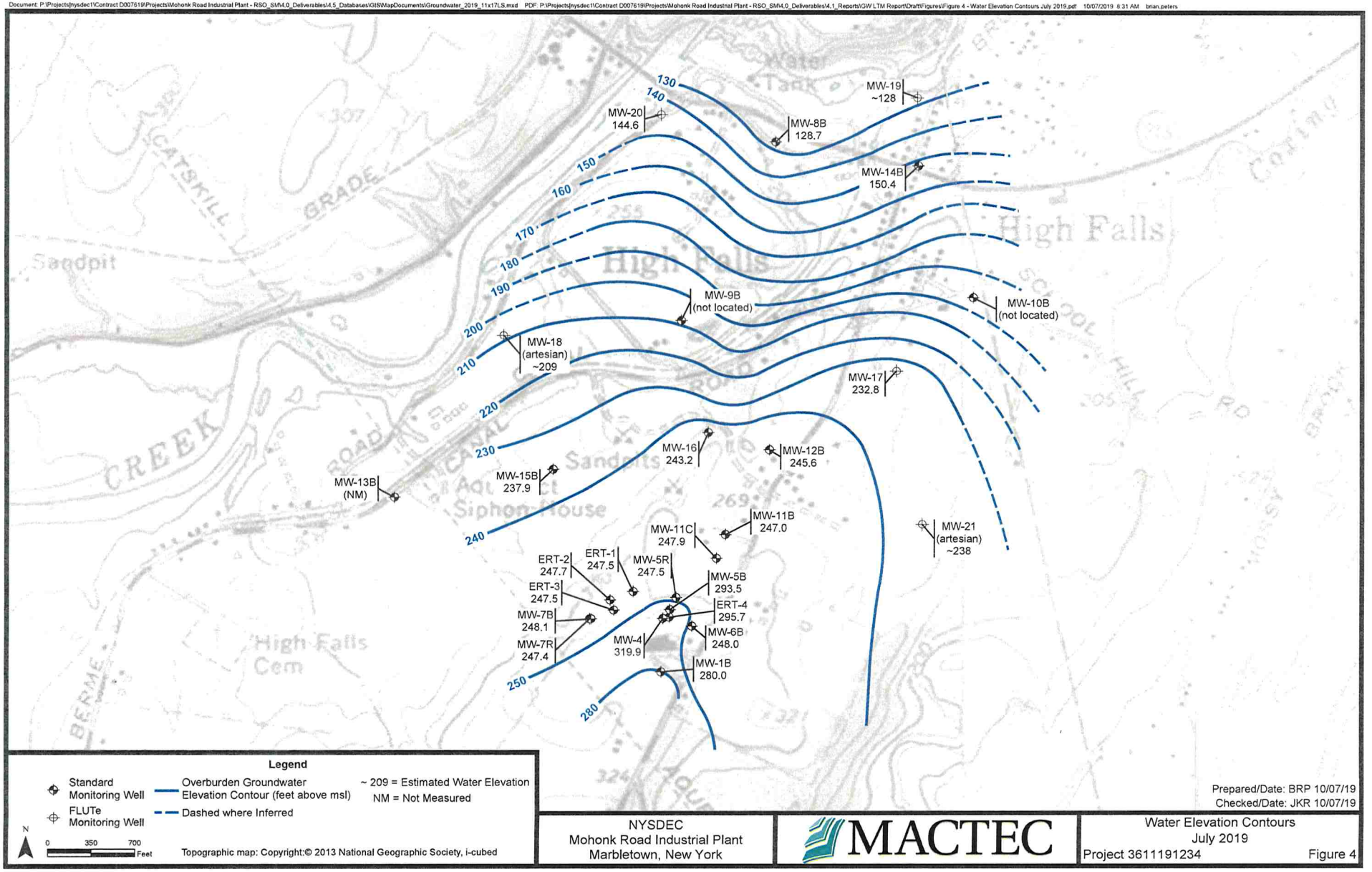
Figure 4
Potentiometric Surface Map,
November 20, 2015

J.M.WALLER ASSOCIATES, INC.

Document Path: Y:\EPA RAC II Lite\Mohonk\GIS Data\Figure 4 Potentiometric Surface Map, 2015.mxd Aerial Source: ESRI


213SR
Roundout Creek
Canal Rd
School Hill Rd
Mohonk Rd
Coring Kill Creek
130
140
150
160
170
180
190
200
210
220
230
240
250
MW-19B
129
MW-20
145
MW-8B
130
MW-14B
150
MW-10B
193
MW-9B
229
MW-18
204
MW-17
225
MW-16
230
MW-12B
233
MW-15B
234
MW-13B
222
MW-5R
225
MW-11C
228
MW-11B
227
MW-21
233
ERT-1
221
ERT-2
222
ERT-3
222
MW-5B*
288
ERT-4*
286
MW-7B
220
MW-6B
232
MW-4*
308
MW-7R**
215
MW-1B
256
N
0
465
930
1,860 Feet
Legend
Standard Monitoring Well
Multi-Port FLUTe Monitoring Well
Extraction Well
October 23, 2017 Potentiometric Surface Contours (Water level from the shallowest port was used for contouring)
Down gradient
High Falls Water District
251 = Groundwater Elevation Feet above mean sea level
* Water levels at monitoring wells ERT-4, MW-4, and MW-5B are perched and are not included in the groundwater contours.
Mohonk Road Industrial Plant
Ulster County, New York
Figure 4
Potentiometric Surface Map, October 23, 2017
VERSAR
Document Path: Y:\EPA RAC II Lite\Mohonk\GIS Data\Figure 4 Potentiometric Surface Map, October 23, 2017 11 x 17.mxd
Aerial Source: ESRI

Document: P:\Projects\nysdec1\Contract D007619\Projects\Mohonk Road Industrial Plant - RSO_SM\4.0_Deliverables\4.5_Databases\GIS\MapDocuments\Groundwater_2019_11x17LS.mxd PDF: P:\Projects\nysdec1\Contract D007619\Projects\Mohonk Road Industrial Plant - RSO_SM\4.0_Deliverables\4.1_Reports\GW LTM Report\Draft\Figures\Figure 4 - Water Elevation Contours July 2019.pdf 10/07/2019 8:31 AM brian.peters



Legend

- Standard Monitoring Well
- FLUTe Monitoring Well
- Overburden Groundwater Elevation Contour (feet above msl)
- Dashed where Inferred
- ~ 209 = Estimated Water Elevation
- NM = Not Measured

N

0 350 700 Feet

Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

Prepared/Date: BRP 10/07/19
Checked/Date: JKR 10/07/19

NYSDEC
Mohonk Road Industrial Plant
Marbletown, New York

MACTEC

Water Elevation Contours
July 2019
Project 3611191234 Figure 4